



## TRANSPORTATION CABINET

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

**Steven L. Beshear**  
Governor

**Michael W. Hancock, P.E.**  
Secretary

December 11, 2012

CALL NO. 100  
CONTRACT ID NO. 121364  
ADDENDUM # 3

Subject: Letcher County, APD 1191 (038)  
Letting December 14, 2012

Plans:

- (1) Revised - R1, R3, R5, R5a, R7, R7a, R9, R13, R14, & R14a  
Added - R5b, R7b, & R9a
- (2) Revised - for structure 25296 - S1, S1a, S2, & S20  
Added - S112
- (3) Revised - for structure 25613 - S1 & S2  
Added - S17
- (4) Revised - for structure 25355 - S1

Proposal:

- (1) Added - Note - Page 20(b) of 164
- (2) Added - Memorandum - Pages 20(c)-20(s) of 164
- (3) Revised - Bid Items - Pages 162-164 of 164

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,

A handwritten signature in blue ink that reads "Ryan Griffith".

Ryan Griffith  
Director  
Division of Construction Procurement  
RG:ks  
Enclosures



An Equal Opportunity Employer M/F/D

# Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS

## PLANS OF PROPOSED PROJECT US 119 - LETCHER COUNTY - SECTION 2 PARTRIDGE TO KY 932 APD 1191 (038) FD52 067 0119 NEW LOC



SHEET NO.	DESCRIPTION
R1	LAYOUT SHEET
R2 - R2J	TYPICAL SECTIONS-SUMMARY OF QUANTITIES
R3 - R12	PLAN AND PROFILE SHEETS
R12A - R12B	UTILITY REFERENCE SHEETS
R13	RIGHT OF WAY SUMMARY SHEETS
R14 - R14A	RIGHT OF WAY STRIP MAP SHEETS
R15 - R15D	DETAIL SHEETS
R16 - R17	TRAFFIC CONTROL SHEETS
R18 - R22A	EROSION CONTROL SHEETS
N/A	MITIGATION PLAN SHEETS
R23 - R25	COORDINATE CONTROL SHEETS
R26 - R41	SOIL PROFILE SHEETS
R42 - R44	PIPE DRAINAGE SHEETS
T	TRAFFIC PLANS
U	UTILITY RELOCATION PLANS
X1 - X55	CROSS SECTION SHEETS
S1 - S112	STRUCTURE PLANS DRAWING NO. 25296
S1 - S6	STRUCTURE PLANS DRAWING NO. 25355
S1 - S17	STRUCTURE PLANS DRAWING NO. 25613

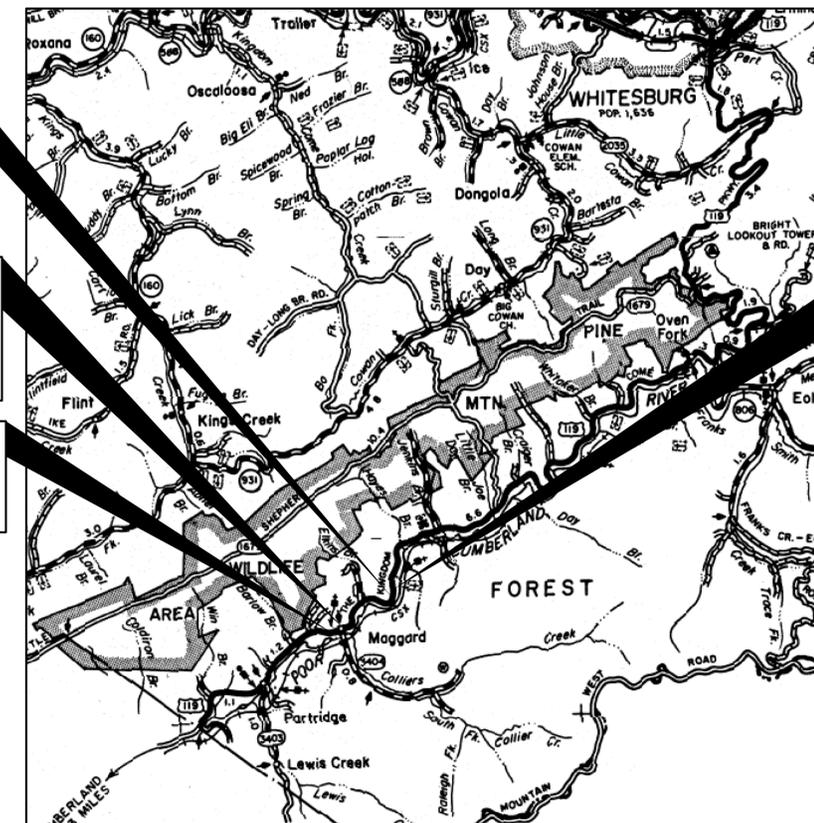
SHEETS NOT INCLUDED IN TOTAL SHEETS  
R2A - R2J, 5A, 5B, 7A, 7B, 9A, R12A, R12B  
R14A, R15A - R15D, R22A, R24A

STANDARD DRAWINGS	
NUMBER	
RBB-001-07	RDP-010-08
RBC-001-10	RDX-160-05
RBC-002-02	RDX-210-02
RBC-003-07	RDX-215
RBI-001-10	RDX-220-04
RBR-001-11	RDX-225
RBR-015-04	RDX-230
RBR-016-04	RFW-001-05
RDB-011-07	RFW-005-07
RDD-040-04	RGS-001-06
RDI-001-09	RGX-001-05
RDI-002-04	RGX-005-05
RDI-005-03	RGX-100-05
RDI-021	RGX-105-07
RDI-026	RGX-200
RDI-035-01	RPM-110-06
RDI-040	RRE-002-04
RDI-100-04	RRP-001-04
RDI-120-03	TTC-100-03
RDP-001-05	TTC-135-01
RDP-005-04	TTD-110-01
RDP-006-03	TTD-120-01
	TTD-125-01
TOTAL STANDARD DRAWINGS = 45	

STA. 45+827.594  
STA. 1457+60.75 (ENGLISH)  
CONSTRUCT 142ft P.C.I. BEAM  
TYPE 8 BRIDGE

STA. 44+427.877  
STA. 1503+53.00 (ENGLISH)  
CONSTRUCT 2x139ft+115ft+  
7x139ft+129.5ft+139ft+117ft+139ft  
P.C.I. BEAM TYPE 7 BRIDGE

**BEGIN PROJECT**  
**STA. 43 + 860**



THIS PROJECT WAS DEVELOPED IN METRIC UNITS. STATIONS, OFFSETS, ELEVATIONS AND COORDINATES ARE SHOWN IN METRIC UNITS ON THESE PLANS. BID ITEMS, PIPE SIZES, STRUCTURE DIMENSIONS, AND QUANTITIES ARE SHOWN IN ENGLISH UNITS.

**END PROJECT**  
**STA. 45 + 960**

**METRIC**

### NATIONAL HIGHWAY SYSTEM

THIS PROJECT IS A PARTIALLY CONTROLLED ACCESS HIGHWAY. ACCESS SHALL BE ALLOWED ONLY WHERE SPECIFICALLY SHOWN ON PLANS. MINIMUM SPACING IS 365 m (1200 ft)

THESE PLANS ARE FOR  
GRADE, DRAIN AND  
PARTIAL SURFACING

### DESIGN CRITERIA

CLASS OF HIGHWAY	PRINCIPAL ARTERIAL
TYPE OF TERRAIN	MOUNTAINOUS
DESIGN SPEED	100 km/hr (60 mph)
REQUIRED NPSD	185m (570 ft)
REQUIRED PSD	670m (2135 ft)
LEVEL OF SERVICE	LOS C (MINIMUM)
ADT PRESENT ( 2012 )	3200
ADT FUTURE ( 2026 )	7800
DHV	900
D %	50%
T %	8.8% DHV

### GEOGRAPHIC COORDINATES

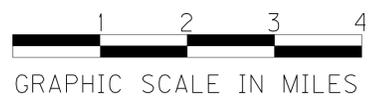
LATITUDE 37 DEGREES 00 MINUTES \_\_\_\_\_ SECONDS NORTH  
LONGITUDE 82 DEGREES 53 MINUTES \_\_\_\_\_ SECONDS WEST

### DESIGNED

% RESTRICTED SD \_\_\_\_\_  
LEVEL OF SERVICE \_\_\_\_\_  
MAX. DISTANCE W/O PASSING \_\_\_\_\_

LENGTH	LIN. FT.	MILES									
6889.8		1.305									
ADDED	FOR EQUALITIES		ADDED	FOR EQUALITIES		ADDED	FOR EQUALITIES		ADDED	FOR EQUALITIES	
DEDUCTED	NOT INCLUDED		DEDUCTED	NOT INCLUDED		DEDUCTED	NOT INCLUDED		DEDUCTED	NOT INCLUDED	
RAILROAD CROSSINGS NO.	LIN. FT.		RAILROAD CROSSINGS NO.	LIN. FT.		RAILROAD CROSSINGS NO.	LIN. FT.		RAILROAD CROSSINGS NO.	LIN. FT.	
BRIDGES	2032.5		BRIDGES			BRIDGES			BRIDGES		

### LAYOUT MAP



**Commonwealth of Kentucky  
DEPARTMENT OF HIGHWAYS  
COUNTY OF**  
**LETCHER**  
US 119 (PARTRIDGE TO KY 932)

ITEM NO. 12-311.35  
PROJECT APD 1191 (038)  
NUMBER: FD52 067 0119 NEW LOC  
LETTING DATE: \_\_\_\_\_

RECOMMENDED BY: **SAMUEL HALE, PE** 10/9/2012  
PROJECT MANAGER DATE:  
PLAN APPROVED BY: \_\_\_\_\_ 10/9/2012  
STATE HIGHWAY ENGINEER DATE:



FILE NAME: V:\1785\ACTIVE\17856\008\ROADWAY\SECTION 2\PLAN SHEETS\RD01001.S.DGN  
USER: apouso  
DATE PLOTTED: October 1, 2012  
E-SHEET NAME:  
MicroStation v8.11.7.443

△ REVISED 12-10-12



# Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS

## PLANS OF PROPOSED PROJECT US 119 – LETCHER COUNTY – SECTION 2 PARTRIDGE TO KY 932 APD 1191 (038) FD52 067 0119 NEW LOC

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R42 - R44	PIPE DRAINAGE SHEETS

— TRAFFIC PLANS —  
— UTILITY RELOCATION PLANS —

X1 - X55 CROSS SECTION SHEETS  
S1 - S12 STRUCTURE PLANS DRAWING NO. 25296  
S1 - S6 STRUCTURE PLANS DRAWING NO. 25355  
S1 - S17 STRUCTURE PLANS DRAWING NO. 25613

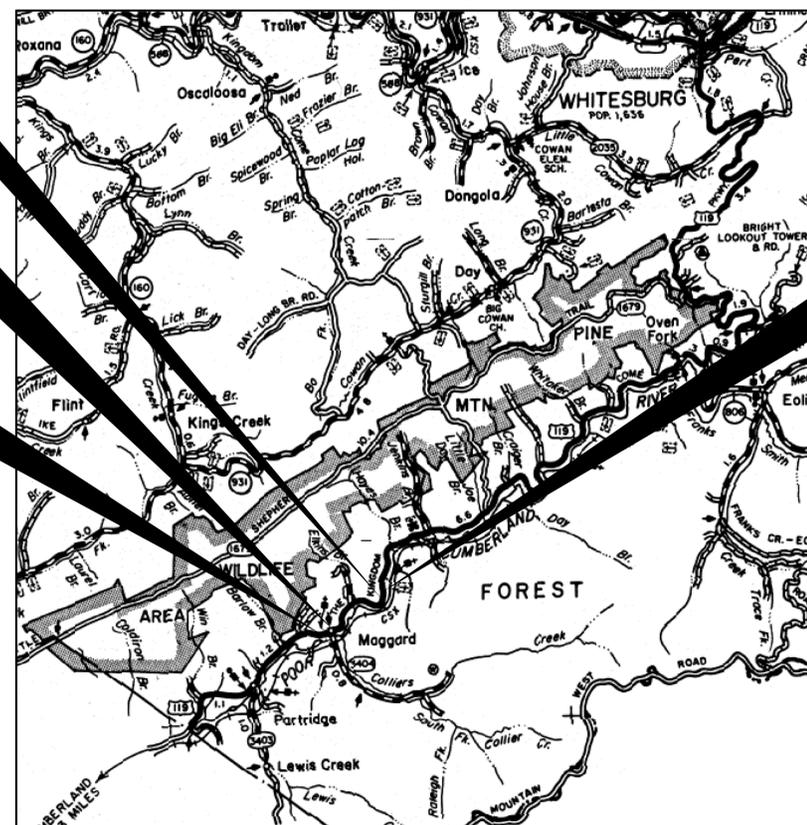
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CONSTRUCT 142ft P.C.I. BEAM  
TYPE 8 BRIDGE

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STA. 1503+53.00 (ENGLISH)  
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7x139ft+129.5ft+139ft+117ft+139ft  
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### GEOGRAPHIC COORDINATES

LATITUDE 37 DEGREES 00 MINUTES \_\_\_\_\_ SECONDS NORTH  
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DEDUCTED	NOT INCLUDED		DEDUCTED	NOT INCLUDED		DEDUCTED	NOT INCLUDED		DEDUCTED	NOT INCLUDED	
RAILROAD CROSSINGS NO.	LIN. FT.		RAILROAD CROSSINGS NO.	LIN. FT.		RAILROAD CROSSINGS NO.	LIN. FT.		RAILROAD CROSSINGS NO.	LIN. FT.	
BRIDGES	2032.5		BRIDGES			BRIDGES			BRIDGES		

### LAYOUT MAP



Commonwealth of Kentucky  
DEPARTMENT OF HIGHWAYS  
COUNTY OF

LETCHER  
US 119 (PARTRIDGE TO KY 932)

ITEM NO. 12-311.35  
PROJECT NUMBER: APD 1191 (038)  
LETTING DATE: FD52 067 0119 NEW LOC

RECOMMENDED BY: SAMUEL HALE, PE 10/9/2012  
DATE: \_\_\_\_\_  
PROJECT MANAGER  
PLAN APPROVED BY: \_\_\_\_\_ 10/9/2012  
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STATE HIGHWAY ENGINEER



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USER: apouso  
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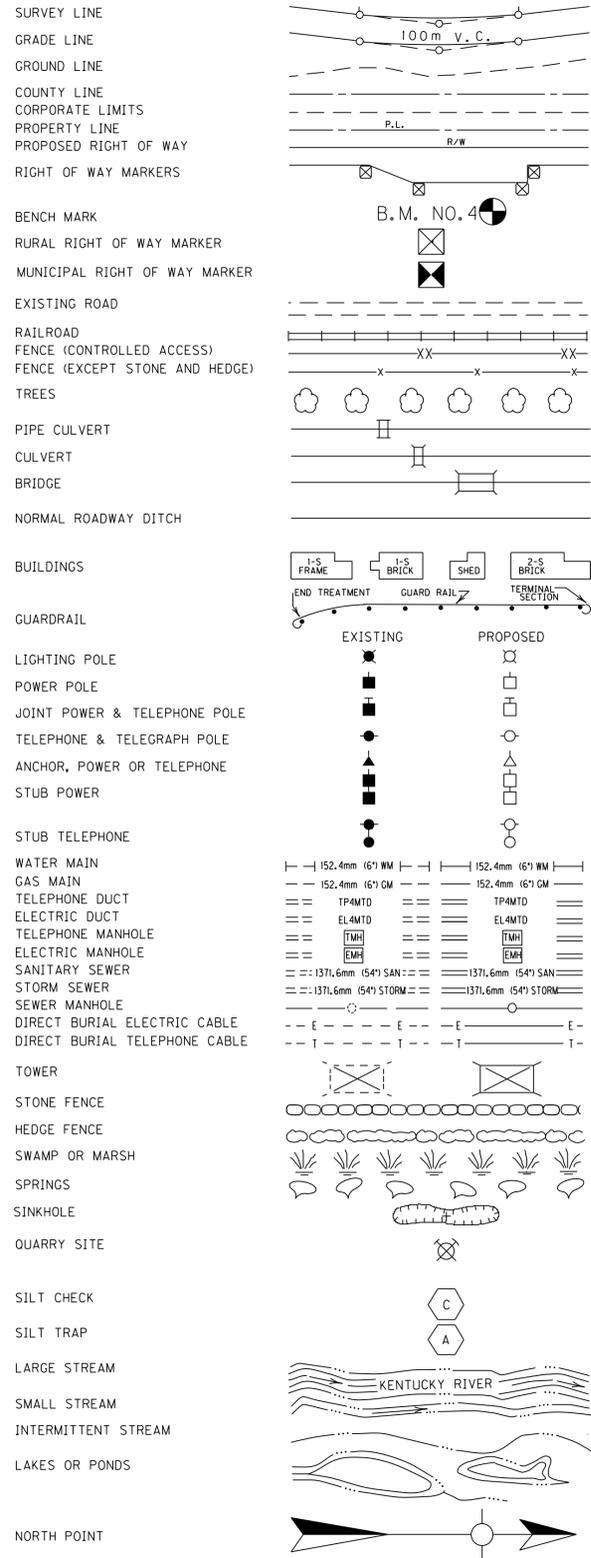
MicroStation v8.11.7.443



CP 30 - CONCRETE MONUMENT  
37.97m LT US 119 STA. 44+106.92  
ELEV. 478.368

REVISED 12-10-12

**CONVENTIONAL SIGNS**



PREPARED BY	DATE
CHECKED BY	DATE
APPROVED BY	DATE

**UTILITY OWNERS**

AT&T of KY  
20 WILLIS BRANCH RD  
PRESTONSBURG, KY 41653  
PHONE: (606) 874-2715  
CELL: (606) 424-9328  
ATTN: JACKIE SALYER

INTERMOUNTAIN CABLE COMPANY  
P.O. BOX 159  
HAROLD, KY 41653  
PHONE: (606) 478-3401 EXT. 222  
ATTN: ROY HARLOW

WINDSTREAM COMMUNICATIONS CO.  
719 NORTH MAIN STREET  
LONDON, KY 40741  
OFFICE: (606) 878-3258  
CELL: (606) 524-0058  
ATTN: BOWMAN HAIL

CUMBERLAND VALLEY RECC  
P.O. BOX 440  
GRAY, KY 40734  
606-528-2677  
ATTN: DONALD LYNCH

EAST KENTUCKY POWER COOPERATIVE  
P.O. BOX 707  
WINCHESTER, KY 40392  
OFFICE: (859) 745-9605  
ATTN: NICHOLAS ADAMS

CHESAPEAKE APPALACHIAN GAS LLC  
P.O. BOX 150  
PRESTONSBURG, KY 41653  
OFFICE: (606) 298-3400  
CELL: (606) 794-3042  
ATTN: MICHAEL FLANERY

- G N58°42'52"E 12.432m (40.79')
- H N66°14'54"E 84.295m (276.56')
- I N35°54'49"E 27.933m (91.64')
- J N26°08'19"E 17.754m (58.25')
- K N4°04'15"E 16.439m (53.93')
- L N52°47'28"W 21.193m (69.53')
- M S13°06'59"W 12.016m (39.42')
- N N38°15'54"E 15.216m (49.92')
- O S28°32'54"W 16.358m (53.67')
- P S72°16'00"W, 21.432m (70.32')
- S S17°43'56"E 20.495m (67.24')

WOVEN WIRE FENCE TYPE 1			
SIDE	BEGIN	END	LENGTH (LF)
LT	44+130	44+147.9	104

DITCH CONSTRUCTION						
STATION	SIZE - SHAPE TYPE	LINING			FABRIC SO YD	
		TYPE	THICKNESS (FT)	DEPTH (FT)		
LT. 44+130.0 TO 44+140.0	2 FT SURFACE DITCH	ECB	2.0	2.0	40.0 SQ YD	
LT. 44+140.0 TO 44+188.0	2 FT SURFACE DITCH	ACL IV	2.0	2.0	128 CU YD	

PLACE 3 RIGHT-OF-WAY MONUMENTS TYPE I AS SHOWN

STA. 43+860 CONST. 24 LF OF EDGE KEY

RT STA 43+854.06 TO STA 44+136  
INSTALL 925.0 LF OF SINGLE FACE W-BEAM GUARDRAIL WITH I CONNECTOR TO BRIDGE END TYPE A ATTACH TO EXIST. GUARDRAIL AT RT STA 43+860

24 FT. RT STA 44+128.38 TO STA 44+136  
CONSTRUCT 25 LF OF ISLAND HEADER CURB TYPE I



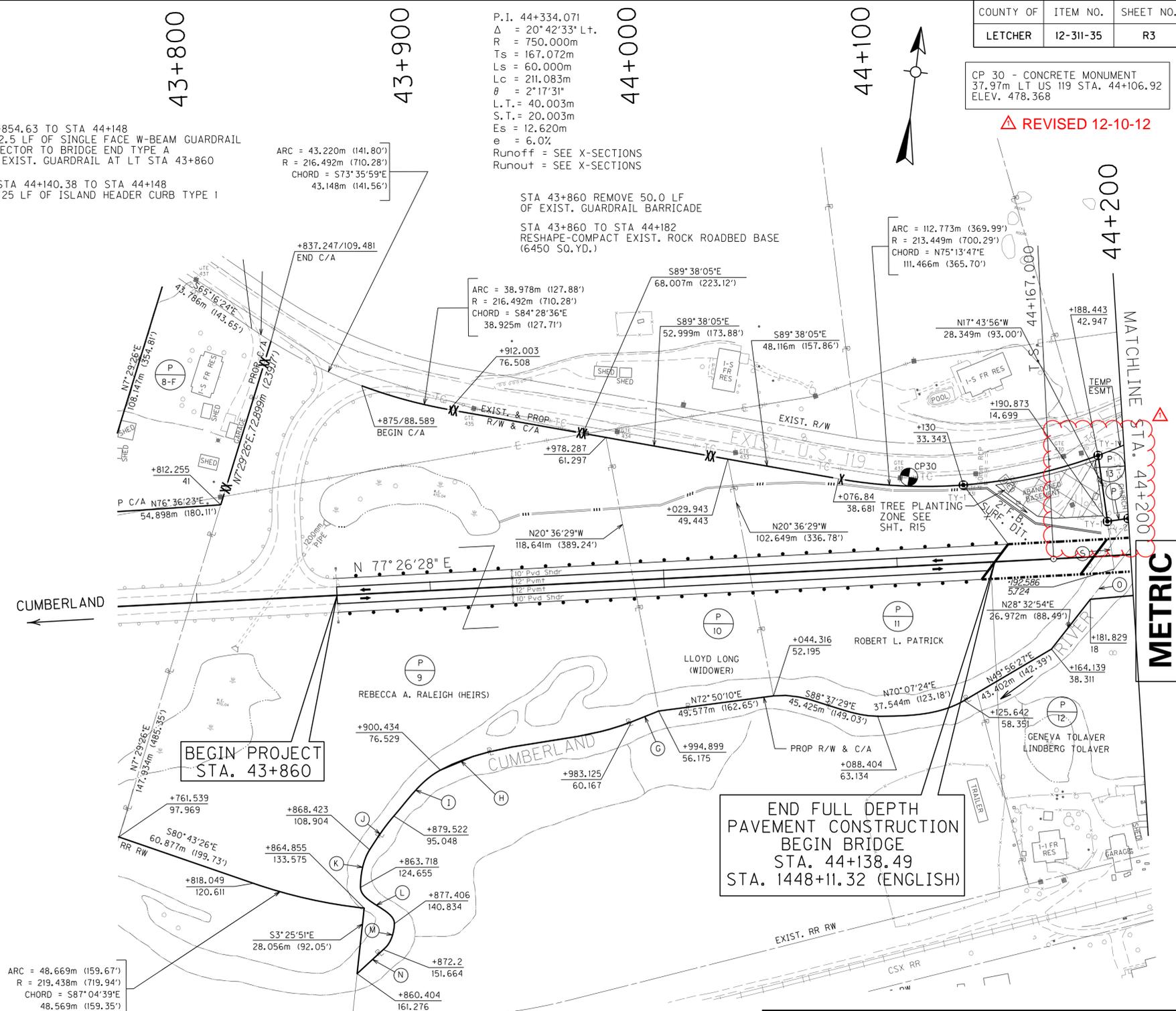
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**KENTUCKY DEPARTMENT OF HIGHWAYS**

COUNTY OF **LETCHER**

PROJECT APD 1191 (038)  
NUMBERS FD52 067 0119 NEW LOC

U.S. 119 STA. 44+130 TO STA. 44+200



METRIC

\$\$\$DATE\$\$\$

CP 133 - MAG PIN  
70.21m LT US 119 STA. 44+368.38  
ELEV. 476.298

P.I. 44+334.071  
Δ = 20°42'33" Lt.  
R = 750.000m  
Ts = 167.072m  
Ls = 60.000m  
Lc = 211.083m  
θ = 2°17'31"  
L.T. = 40.003m  
S.T. = 20.003m  
Es = 12.620m  
e = 6.0%  
Runoff = SEE X-SECT.  
Runout = SEE X-SECT.

CP 134 - IRON PIN WITH CAP  
38.71m LT US 119 STA.  
44+517.93 ELEV. 479.592

CP 31 - CONCRETE MONUMENT  
127.35m LT US 119 STA.  
44+586.06 ELEV. 478.600

CP 206 - IRON PIN WITH CAP  
30.20m LT US 119 STA.  
44+716.87 ELEV. 479.959

CP 135 - IRON PIN WITH CAP  
66.53m LT US 119 STA.  
44+568.25 ELEV. 480.368

CP 142 - IRON PIN WITH CAP  
35.06m LT US 119 STA.  
44+606.62 ELEV. 474.037

COUNTY OF	ITEM NO.	SHEET NO.
LETCHER	12-311.35	R5

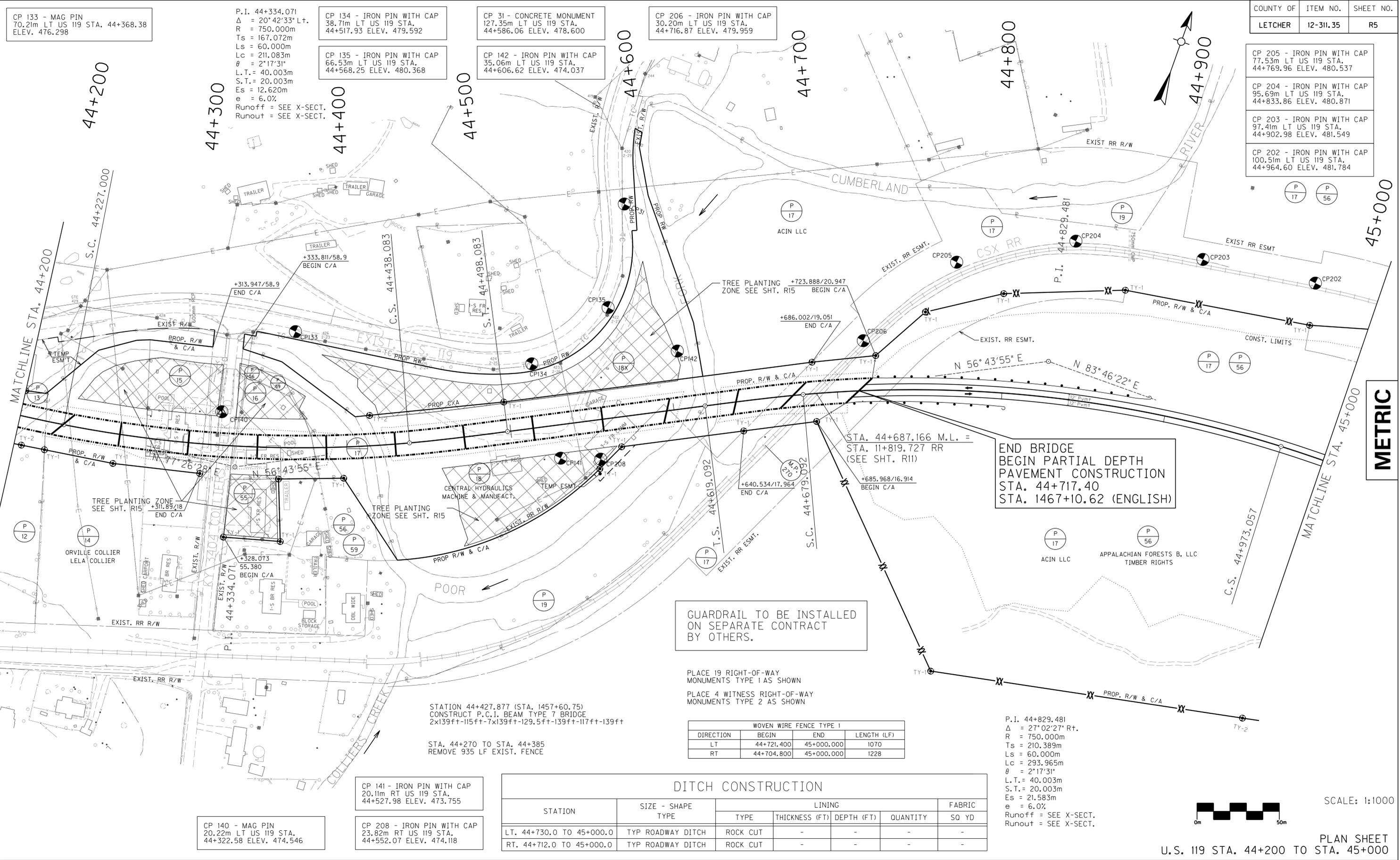
CP 205 - IRON PIN WITH CAP  
77.53m LT US 119 STA.  
44+769.96 ELEV. 480.537

CP 204 - IRON PIN WITH CAP  
95.69m LT US 119 STA.  
44+833.86 ELEV. 480.871

CP 203 - IRON PIN WITH CAP  
97.41m LT US 119 STA.  
44+902.98 ELEV. 481.549

CP 202 - IRON PIN WITH CAP  
100.51m LT US 119 STA.  
44+964.60 ELEV. 481.784

PREPARED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_



END BRIDGE  
 BEGIN PARTIAL DEPTH  
 PAVEMENT CONSTRUCTION  
 STA. 44+717.40  
 STA. 1467+10.62 (ENGLISH)

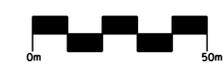
GUARDRAIL TO BE INSTALLED  
 ON SEPARATE CONTRACT  
 BY OTHERS.

PLACE 19 RIGHT-OF-WAY  
 MONUMENTS TYPE 1 AS SHOWN  
 PLACE 4 WITNESS RIGHT-OF-WAY  
 MONUMENTS TYPE 2 AS SHOWN

WOVEN WIRE FENCE TYPE 1			
DIRECTION	BEGIN	END	LENGTH (LF)
LT	44+721.400	45+000.000	1070
RT	44+704.800	45+000.000	1228

STATION	SIZE - SHAPE TYPE	LINING			FABRIC SQ YD
		TYPE	THICKNESS (FT)	DEPTH (FT)	
LT. 44+730.0 TO 45+000.0	TYP ROADWAY DITCH	ROCK CUT	-	-	-
RT. 44+712.0 TO 45+000.0	TYP ROADWAY DITCH	ROCK CUT	-	-	-

P.I. 44+829.481  
 Δ = 27°02'27" Rt.  
 R = 750.000m  
 Ts = 210.389m  
 Ls = 60.000m  
 Lc = 293.965m  
 θ = 2°17'31"  
 L.T. = 40.003m  
 S.T. = 20.003m  
 Es = 21.583m  
 e = 6.0%  
 Runoff = SEE X-SECT.  
 Runout = SEE X-SECT.



SCALE: 1:1000

\$\$\$DATE\$\$\$

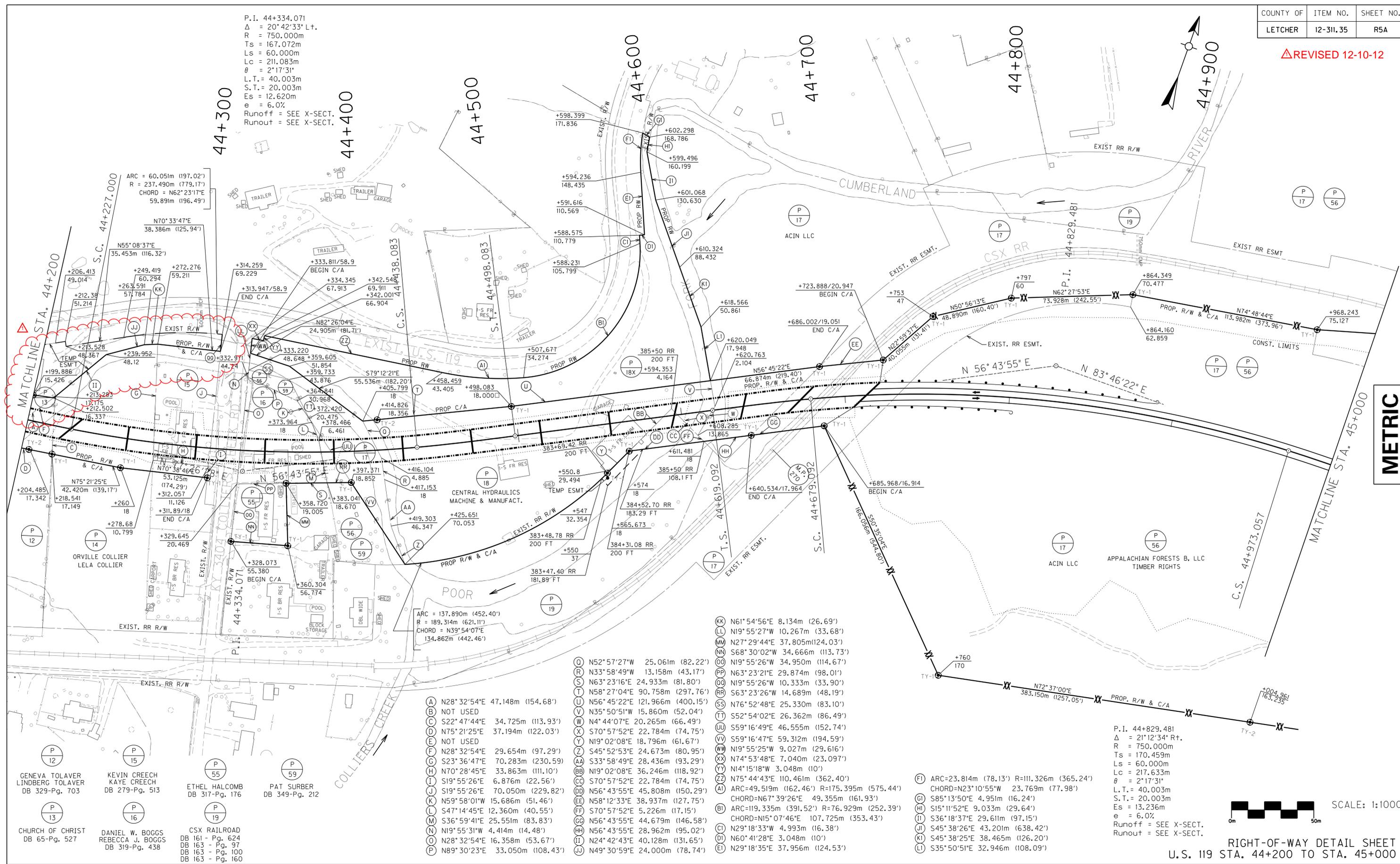




REVISION 12-10-12

P.I. 44+334.071  
 $\Delta = 20^\circ 42' 33''$  L.T.  
 $R = 750.000m$   
 $T_s = 167.072m$   
 $L_s = 60.000m$   
 $L_c = 211.083m$   
 $\theta = 2^\circ 17' 31''$   
 $L.T. = 40.003m$   
 $S.T. = 20.003m$   
 $E_s = 12.620m$   
 $e = 6.0\%$   
 Runoff = SEE X-SECT.  
 Runout = SEE X-SECT.

PREPARED BY \_\_\_\_\_ DATE \_\_\_\_\_  
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 APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_  
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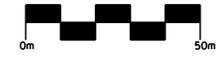
- (A) N28°32'54"E 47.148m (154.68')
- (B) NOT USED
- (C) S22°47'44"E 34.725m (113.93')
- (D) N75°21'25"E 37.194m (122.03')
- (E) NOT USED
- (F) N28°32'54"E 29.654m (97.29')
- (G) S23°36'47"E 70.283m (230.59')
- (H) N70°28'45"E 33.863m (111.10')
- (I) S19°55'26"E 6.876m (22.56')
- (J) S19°55'26"E 70.050m (229.82')
- (K) N59°58'01"W 15.686m (51.46')
- (L) S47°14'45"E 12.360m (40.55')
- (M) S36°59'41"E 25.551m (83.83')
- (N) N19°55'31"W 4.414m (14.48')
- (O) N28°32'54"E 16.358m (53.67')
- (P) N89°30'23"E 33.050m (108.43')

- (Q) N52°57'27"W 25.061m (82.22')
- (R) N33°58'49"W 13.158m (43.17')
- (S) N63°23'16"E 24.933m (81.80')
- (T) N58°27'04"E 90.758m (297.76')
- (U) N56°45'22"E 121.966m (400.15')
- (V) N35°50'51"W 15.860m (52.04')
- (W) N4°44'07"E 20.265m (66.49')
- (X) S70°57'52"E 22.784m (74.75')
- (Y) N19°02'08"E 18.796m (61.67')
- (Z) S45°52'53"E 24.673m (80.95')
- (AA) S33°58'49"E 28.436m (93.29')
- (BB) N19°02'08"E 36.246m (118.92')
- (CC) S70°57'52"E 22.784m (74.75')
- (DD) N56°43'55"E 45.808m (150.29')
- (EE) N58°12'33"E 38.937m (127.75')
- (FF) S70°57'52"E 5.226m (17.15')
- (GG) N56°43'55"E 44.679m (146.58')
- (HH) N56°43'55"E 28.962m (95.02')
- (II) N24°42'43"E 40.128m (131.65')
- (JJ) N49°30'59"E 24.000m (78.74')

- (KK) N61°54'56"E 8.134m (26.69')
- (LL) N19°55'27"W 10.267m (33.68')
- (MM) N27°29'44"E 37.805m (124.03')
- (NN) S68°30'02"W 34.666m (113.73')
- (OO) N19°55'26"W 34.950m (114.67')
- (PP) N63°23'21"E 29.874m (98.01')
- (QQ) N19°55'26"W 10.333m (33.90')
- (RR) S63°23'26"W 14.689m (48.19')
- (SS) N76°52'48"E 25.330m (83.10')
- (TT) S52°54'02"E 26.362m (86.49')
- (UU) S59°16'49"E 46.555m (152.74')
- (VV) S59°16'47"E 59.312m (194.59')
- (WW) N19°55'25"W 9.027m (29.616')
- (XX) N74°53'48"E 7.040m (23.097')
- (YY) N14°15'18"W 3.048m (10')
- (ZZ) N75°44'43"E 110.461m (362.40')
- (AA) ARC=49.519m (162.46') R=175.395m (575.44')
- (BB) CHORD=N67°39'26"E 49.355m (161.93')
- (CC) ARC=119.335m (391.52') R=76.929m (252.39')
- (DD) CHORD=N15°07'46"E 107.725m (353.43')
- (EE) N29°18'33"W 4.993m (16.38')
- (FF) N60°41'28"E 3.048m (10')
- (GG) N29°18'35"E 37.956m (124.53')

- (FI) ARC=23.814m (78.13') R=111.326m (365.24')
- (GI) CHORD=N23°10'55"W 23.769m (77.98')
- (HI) S85°13'50"E 4.951m (16.24')
- (II) S15°11'52"E 9.033m (29.64')
- (JJ) S36°18'37"E 29.611m (97.15')
- (KK) S45°38'26"E 43.201m (141.73')
- (LL) S45°38'25"E 38.465m (126.20')
- (MM) S35°50'51"E 32.946m (108.09')

P.I. 44+829.481  
 $\Delta = 21^\circ 12' 34''$  R.T.  
 $R = 750.000m$   
 $T_s = 170.459m$   
 $L_s = 60.000m$   
 $L_c = 217.633m$   
 $\theta = 2^\circ 17' 31''$   
 $L.T. = 40.003m$   
 $S.T. = 20.003m$   
 $E_s = 13.236m$   
 $e = 6.0\%$   
 Runoff = SEE X-SECT.  
 Runout = SEE X-SECT.



SCALE: 1:1000

RIGHT-OF-WAY DETAIL SHEET  
 U.S. 119 STA. 44+200 TO STA. 45+000

METRIC

\$\$\$DN\$\$\$

COUNTY OF	ITEM NO.	SHEET NO.
LETCHER	12-311.35	R7

DITCH CONSTRUCTION						
STATION	SIZE - SHAPE TYPE	LINING			FABRIC SQ YD	
		TYPE	THICKNESS (FT)	DEPTH (FT)		
LT. 45+000 TO 45+120	TYP. ROADWAY DITCH	ROCK CUT	-	-	-	
LT. 45+120 TO 45+260	SPL. 'V' DITCH	ROCK CUT	-	-	-	
LT. 45+260 TO 45+300	2 FT SPL. DITCH	ACL IV	2.0 FT	1.0 FT	63 CU YD	
LT. 45+300 TO 45+304	2 FT SURF. DITCH	ACL IV	2.0 FT	1.0 FT	6 CU YD	
LT. 45+304 TO 45+340	2 FT SPL. DITCH	ACL IV	2.0 FT	1.0 FT	67 CU YD	
LT. 45+340 TO 45+425	TYP. ROADWAY DITCH	ROCK CUT	-	-	-	
LT. 45+425 TO 45+465	TYP. ROADWAY DITCH	ECB	-	1.0 FT	111 SQ YD	

WOVEN WIRE FENCE TYPE 1			
DIRECTION	BEGIN	END	LENGTH (LF)
LT	45+000.000	45+800.000	2528
RT	45+000.000	45+283.000	1141
RT	45+315.000	45+800.000	2509

- CP 201 - IRON PIN WITH CAP  
107.20m LT US 119 STA.  
45+032.47 ELEV. 482.027
- CP 200 - IRON PIN WITH CAP  
93.09m LT US 119 STA.  
45+125.49 ELEV. 482.575
- CP 199 - IRON PIN WITH CAP  
76.30m LT US 119 STA.  
45+209.05 ELEV. 482.846
- CP 198 - IRON PIN WITH CAP  
59.29m LT US 119 STA.  
45+282.33 ELEV. 483.330
- CP 197 - IRON PIN WITH CAP  
49.06m LT US 119 STA.  
45+338.57 ELEV. 483.203

- CP 171 - IRON PIN WITH CAP  
37.90m LT US 119 STA.  
45+409.20 ELEV. 483.579
- CP 172 - IRON PIN WITH CAP  
27.92m LT US 119 STA.  
45+472.40 ELEV. 484.337
- CP 173 - IRON PIN WITH CAP  
22.53m LT US 119 STA.  
45+546.91 ELEV. 484.618
- CP 174 - IRON PIN WITH CAP  
19.46m LT US 119 STA.  
45+642.43 ELEV. 485.477

P.I. 45+461.318  
 $\Delta = 77^{\circ}02'59"$  Lt.  
 $R = 410.000m$   
 $T_s = 359.254m$   
 $L_s = 65.000m$   
 $L_c = 486.356m$   
 $\theta = 4^{\circ}32'30"$   
 $L.T. = 43.348m$   
 $S.T. = 21.680m$   
 $E_s = 114.620m$   
 $e = 8.0\%$   
 Runoff = SEE X-SECT.  
 Runout = SEE X-SECT.

PREPARED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_

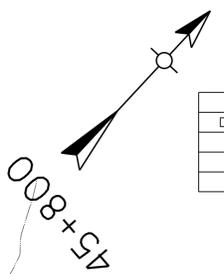
GUARDRAIL TO BE INSTALLED ON SEPARATE CONTRACT BY OTHERS.

LT. STA. 45+491  
 SAFeload 11 CY  
 EXIST. 900mm PIPE.

PLACE 20 RIGHT-OF-WAY MONUMENTS TYPE I AS SHOWN

STA. 45+260 TO STA. 45+320  
 REMOVE EXISTING SOFT SOIL AREAS AND STABILIZE EMBANKMENT FOUNDATION USING 4456 SQ. YD. OF TYPE III GEOTEXTILE AND 2970 CU YD OF CHANNEL LINING CLASS IV OR AS DIRECTED BY THE ENGINEER

WASTE AREA #1  
 (SEE WASTE AREA PLAN SHEET)

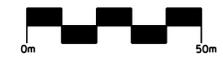


METRIC

DITCH CONSTRUCTION						
STATION	SIZE - SHAPE TYPE	LINING			FABRIC SQ YD	
		TYPE	THICKNESS (FT)	DEPTH (FT)		
RT. 45+000 TO 45+275	2 FT SPL. DITCH	ROCK CUT	-	-	-	
RT. 45+275 TO 45+285	2 FT SURF. DITCH	ACL IV	2.0	1.0	20 CU YD	
RT. 45+290 TO 45+315	2 FT SURF. DITCH	ACL IV	2.0	1.0	40 CU YD	
RT. 45+315 TO 45+320	2 FT SPL. DITCH	ACL IV	2.0	1.0	8 CU YD	
RT. 45+320 TO 45+330	TYP. ROADWAY DITCH	ACL IV	2.0	1.0	22 CU YD	
RT. 45+330 TO 45+500	TYP. ROADWAY DITCH	ROCK CUT	-	-	-	
RT. 45+500 TO 45+518	2 FT SPL. DITCH	ACL IV	2.0	1.0	28 CU YD	
RT. 45+520 TO 45+550	2 FT SPL. DITCH	ACL IV	2.0	1.0	60 CU YD	
RT. 45+550 TO 45+740	2 FT SPL. DITCH	ROCK CUT	-	-	-	
RT. 45+740 TO 45+800	TYP. ROADWAY DITCH	ROCK CUT	-	-	-	

SCALE: 1:1000

PLAN SHEET  
 U.S. 119 STA. 45+000 TO STA. 45+800



\$\$\$DINGS

- CP 201 - IRON PIN WITH CAP  
107.20m LT US 119 STA.  
45+032.47 ELEV. 482.027
- CP 200 - IRON PIN WITH CAP  
93.09m LT US 119 STA.  
45+125.49 ELEV. 482.575
- CP 199 - IRON PIN WITH CAP  
76.30m LT US 119 STA.  
45+209.05 ELEV. 482.846
- CP 198 - IRON PIN WITH CAP  
59.29m LT US 119 STA.  
45+282.33 ELEV. 483.330
- CP 197 - IRON PIN WITH CAP  
49.06m LT US 119 STA.  
45+338.57 ELEV. 483.203

DITCH CONSTRUCTION						
STATION	SIZE - SHAPE TYPE	LINING			FABRIC SQ YD	
		TYPE	THICKNESS (FT)	DEPTH (FT)		
LT. 45+000 TO 45+120	TYP. ROADWAY DITCH	ROCK CUT	-	-	-	
LT. 45+120 TO 45+260	SPL. 'V' DITCH	ROCK CUT	-	-	-	
LT. 45+260 TO 45+300	2 FT SPL. DITCH	ACL IV	2.0 FT	1.0 FT	63 CU YD 94	
LT. 45+300 TO 45+304	2 FT SURF. DITCH	ACL IV	2.0 FT	1.0 FT	6 CU YD 9	
LT. 45+304 TO 45+340	2 FT SPL. DITCH	ACL IV	2.0 FT	1.0 FT	67 CU YD 100	
LT. 45+340 TO 45+425	TYP. ROADWAY DITCH	ROCK CUT	-	-	-	
LT. 45+425 TO 45+465	TYP. ROADWAY DITCH	ECB	-	1.0 FT	111 SQ YD -	

COUNTY OF	ITEM NO.	SHEET NO.
LETCHER	12-311.35	R7

REVISD 12-10-12

WOVEN WIRE FENCE TYPE 1			
DIRECTION	BEGIN	END	LENGTH (LF)
LT	45+000.000	45+800.000	2528
RT	45+000.000	45+283.000	1141
RT	45+315.000	45+800.000	2509

- CP 171 - IRON PIN WITH CAP  
37.90m LT US 119 STA.  
45+409.20 ELEV. 483.579
- CP 172 - IRON PIN WITH CAP  
27.92m LT US 119 STA.  
45+472.40 ELEV. 484.337
- CP 173 - IRON PIN WITH CAP  
22.53m LT US 119 STA.  
45+546.91 ELEV. 484.618
- CP 174 - IRON PIN WITH CAP  
19.46m LT US 119 STA.  
45+642.43 ELEV. 485.477

P.I. 45+461.318  
 $\Delta = 77^\circ 02' 59''$  Lt.  
 $R = 410.000m$   
 $T_s = 359.254m$   
 $L_s = 65.000m$   
 $L_c = 486.356m$   
 $\theta = 4^\circ 32' 30''$   
 $L.T. = 43.348m$   
 $S.T. = 21.680m$   
 $E_s = 114.620m$   
 $e = 8.0\%$   
 Runoff = SEE X-SECT.  
 Runout = SEE X-SECT.

PREPARED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_

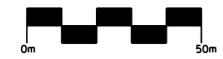
GUARDRAIL TO BE INSTALLED ON SEPARATE CONTRACT BY OTHERS.

LT. STA. 45+491  
 SAFELOAD 11 CY  
 EXIST. 900mm PIPE.

PLACE 20 RIGHT-OF-WAY MONUMENTS TYPE I AS SHOWN

STA. 45+260 TO STA. 45+320  
 REMOVE EXISTING SOFT SOIL AREAS AND STABILIZE EMBANKMENT FOUNDATION USING 4456 SQ. YD. OF TYPE III GEOTEXTILE AND 2970 CU YD OF CHANNEL LINING CLASS IV OR AS DIRECTED BY THE ENGINEER

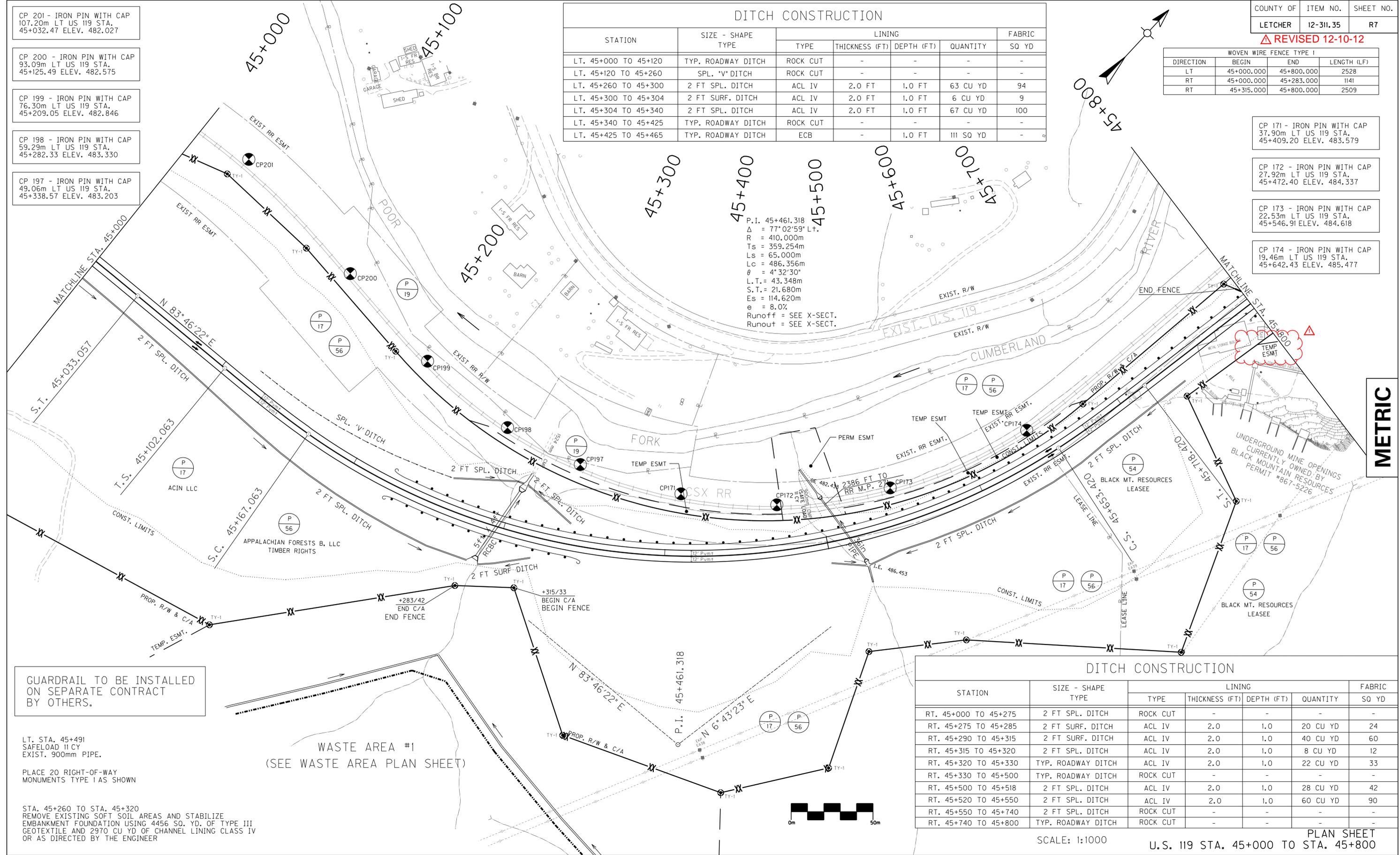
WASTE AREA #1  
 (SEE WASTE AREA PLAN SHEET)



SCALE: 1:1000

PLAN SHEET U.S. 119 STA. 45+000 TO STA. 45+800

METRIC







\$\$\$DONS\$\$\$

COUNTY OF	ITEM NO.	SHEET NO.
LETCHER	12-311.35	R9

WOVEN WIRE FENCE TYPE 1			
DIRECTION	BEGIN	END	LENGTH (LF)
LT	45+838.249	45+960.000	456
RT	45+800.000	45+812.926	99
RT	45+853.249	45+905.000	215

STATION	SIZE - SHAPE TYPE	LINING			FABRIC SQ YD
		TYPE	THICKNESS (FT)	DEPTH (FT)	
LT. 45+840 TO 45+860	2 FT SPL. DITCH	ECB	-	1	91 SQ YD
LT. 45+860 TO 45+890	2 FT SPL. DITCH	ECB	-	1	137 SQ YD
LT. 45+890 TO 45+930	2 FT SPL. DITCH	ROCK CUT	-	-	-
LT. 45+935 TO 45+960	2 FT SPL. DITCH	ROCK CUT	-	-	-

45+800

45+900

46+000

46+100

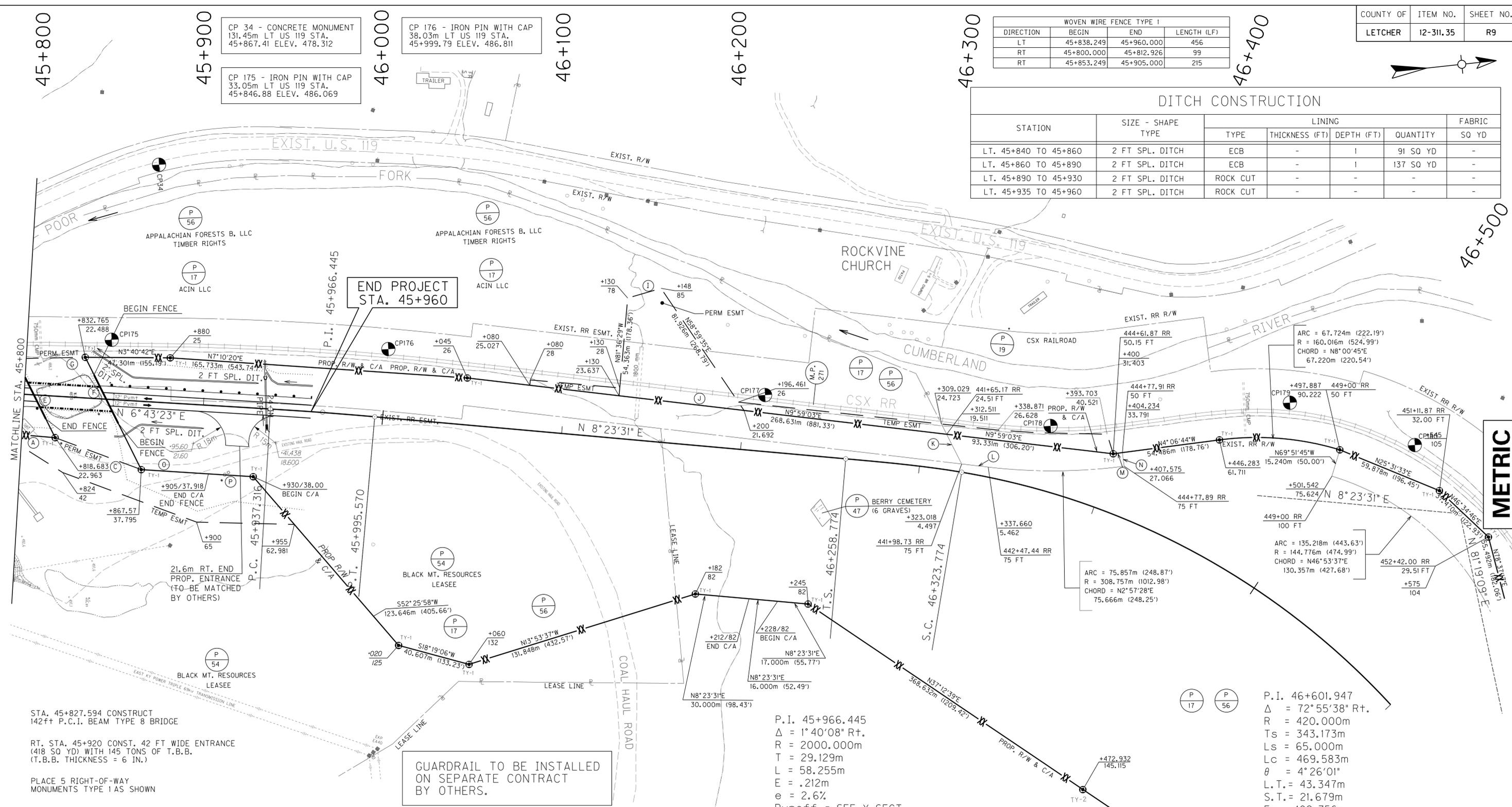
46+200

46+300

46+400

46+500

PREPARED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_



END PROJECT STA. 45+960

GUARDRAIL TO BE INSTALLED ON SEPARATE CONTRACT BY OTHERS.

STA. 45+827.594 CONSTRUCT  
 142ft P.C.I. BEAM TYPE 8 BRIDGE

RT. STA. 45+920 CONST. 42 FT WIDE ENTRANCE  
 (418 SQ YD) WITH 145 TONS OF T.B.B.  
 (T.B.B. THICKNESS = 6 IN.)

PLACE 5 RIGHT-OF-WAY MONUMENTS TYPE 1 AS SHOWN

P.I. 45+966.445  
 $\Delta = 1^{\circ}40'08''$  Rt.  
 R = 2000.000m  
 T = 29.129m  
 L = 58.255m  
 E = .212m  
 e = 2.6%  
 Runoff = SEE X-SECT.  
 Runout = SEE X-SECT.

P.I. 46+601.947  
 $\Delta = 72^{\circ}55'38''$  Rt.  
 R = 420.000m  
 Ts = 343.173m  
 Ls = 65.000m  
 Lc = 469.583m  
 $\theta = 4^{\circ}26'01''$   
 L.T. = 43.347m  
 S.T. = 21.679m  
 Es = 102.756m  
 e = 7.9%  
 Runoff = SEE X-SECT.  
 Runout = SEE X-SECT.

STATION	SIZE - SHAPE TYPE	LINING			FABRIC SQ YD
		TYPE	THICKNESS (FT)	DEPTH (FT)	
RT. 45+850 TO 45+860	2 FT SPL. DITCH	ACL IV	2	1	26 CU YD
RT. 45+860 TO 45+890	2 FT. SPL. DITCH	ACL IV	2	1	67 CU YD
RT. 45+890 TO 45+901	2 FT SPL. DITCH	ROCK CUT	-	-	-
RT. 45+935 TO 45+960	2 FT SPL. DITCH	ROCK CUT	-	-	-

- (A) N8°04'00"E 83.707m (274.63')
- (B) NOT USED
- (C) N23°36'04"E 51.087m (167.61')
- (D) NOT USED
- (E) N66°43'23"E, 48.986m (160.72')
- (F) N66°43'23"E, 69.608m (228.37')
- (G) N2°14'12"E 38.694m (126.95')
- (H) NOT USED
- (I) N12°51'31"W 19.313m (63.36')
- (J) S9°59'3"W 70.027m (229.75')
- (K) N66°23'18"E 18.479m (60.63')
- (L) N9°59'46"E 14.846m (48.71')
- (M) N4°06'44"W 5.150m (16.90')
- (N) S85°58'53"W 7.620m (25.00')
- (O) N6°54'41"E 36.000m (118.11')
- (P) N6°54'41"E 25.000m (82.02')

\$\$\$DATE\$\$\$

\$\$\$DONS\$\$\$

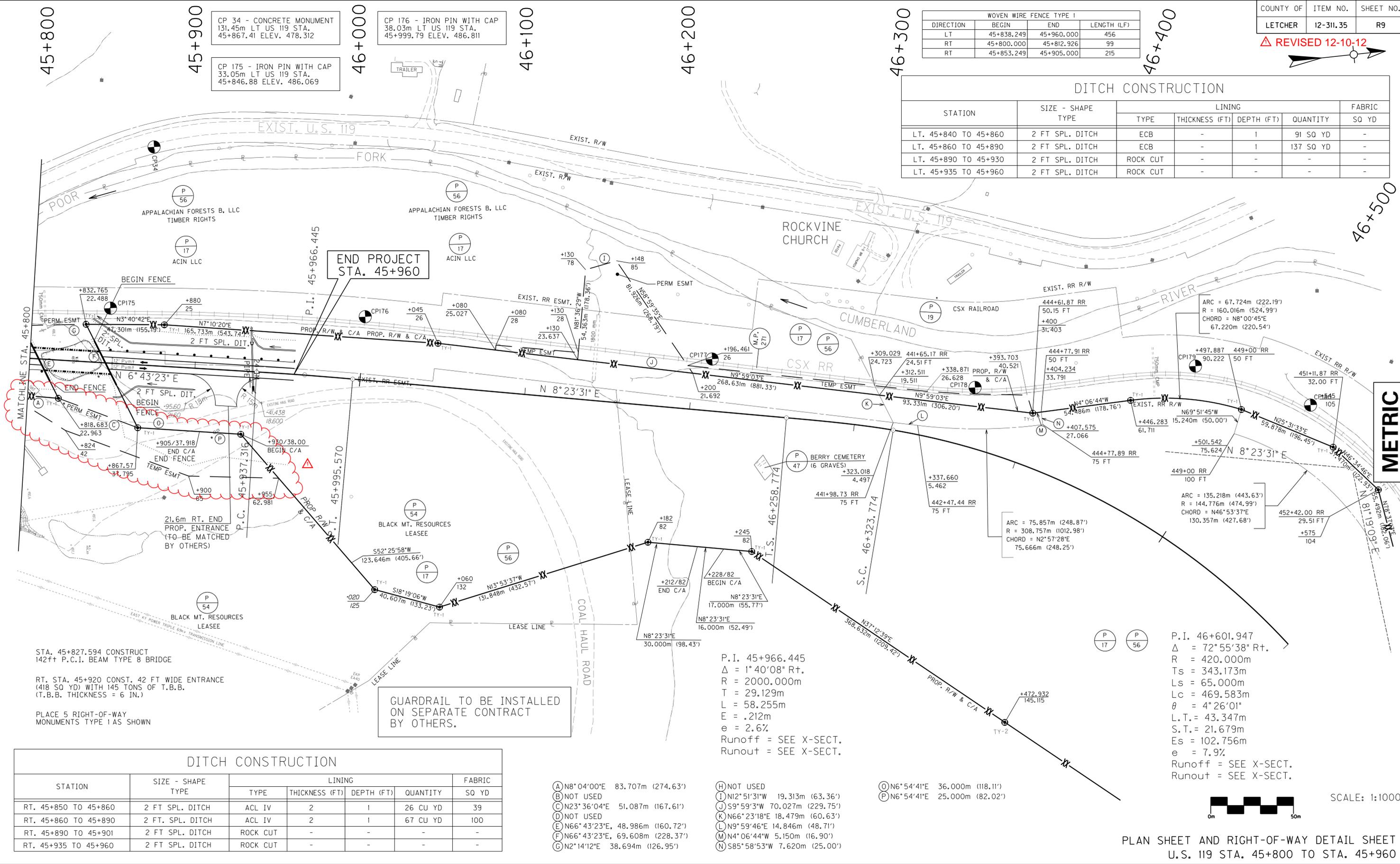
COUNTY OF	ITEM NO.	SHEET NO.
LETCHER	12-311.35	R9

REVISÉ 12-10-12



WOVEN WIRE FENCE TYPE 1			
DIRECTION	BEGIN	END	LENGTH (LF)
LT	45+838.249	45+960.000	456
RT	45+800.000	45+812.926	99
RT	45+853.249	45+905.000	215

STATION	SIZE - SHAPE TYPE	LINING			FABRIC SQ YD
		TYPE	THICKNESS (FT)	DEPTH (FT)	
LT. 45+840 TO 45+860	2 FT SPL. DITCH	ECB	-	1	91 SQ YD
LT. 45+860 TO 45+890	2 FT SPL. DITCH	ECB	-	1	137 SQ YD
LT. 45+890 TO 45+930	2 FT SPL. DITCH	ROCK CUT	-	-	-
LT. 45+935 TO 45+960	2 FT SPL. DITCH	ROCK CUT	-	-	-



PREPARED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_

STA. 45+827.594 CONSTRUCT  
 142ft P.C.I. BEAM TYPE 8 BRIDGE

RT. STA. 45+920 CONST. 42 FT WIDE ENTRANCE  
 (418 SQ YD) WITH 145 TONS OF T.B.B.  
 (T.B.B. THICKNESS = 6 IN.)

PLACE 5 RIGHT-OF-WAY  
 MONUMENTS TYPE 1 AS SHOWN

GUARDRAIL TO BE INSTALLED  
 ON SEPARATE CONTRACT  
 BY OTHERS.

P.I. 45+966.445  
 $\Delta = 1^{\circ}40'08''$  Rt.  
 R = 2000.000m  
 T = 29.129m  
 L = 58.255m  
 E = .212m  
 e = 2.6%  
 Runoff = SEE X-SECT.  
 Runout = SEE X-SECT.

P.I. 46+601.947  
 $\Delta = 72^{\circ}55'38''$  Rt.  
 R = 420.000m  
 Ts = 343.173m  
 Ls = 65.000m  
 Lc = 469.583m  
 $\theta = 4^{\circ}26'01''$   
 L.T. = 43.347m  
 S.T. = 21.679m  
 Es = 102.756m  
 e = 7.9%  
 Runoff = SEE X-SECT.  
 Runout = SEE X-SECT.

STATION	SIZE - SHAPE TYPE	LINING			FABRIC SQ YD
		TYPE	THICKNESS (FT)	DEPTH (FT)	
RT. 45+850 TO 45+860	2 FT SPL. DITCH	ACL IV	2	1	26 CU YD
RT. 45+860 TO 45+890	2 FT SPL. DITCH	ACL IV	2	1	67 CU YD
RT. 45+890 TO 45+901	2 FT SPL. DITCH	ROCK CUT	-	-	-
RT. 45+935 TO 45+960	2 FT SPL. DITCH	ROCK CUT	-	-	-

- (A) N8°04'00"E 83.707m (274.63')
- (B) NOT USED
- (C) N23°36'04"E 51.087m (167.61')
- (D) NOT USED
- (E) N66°43'23"E, 48.986m (160.72')
- (F) N66°43'23"E, 69.608m (228.37')
- (G) N2°14'12"E 38.694m (126.95')
- (H) NOT USED
- (I) N12°51'31"W 19.313m (63.36')
- (J) S9°59'3"W 70.027m (229.75')
- (K) N66°23'18"E 18.479m (60.63')
- (L) N9°59'46"E 14.846m (48.71')
- (M) N4°06'44"W 5.150m (16.90')
- (N) S85°58'53"W 7.620m (25.00')



SCALE: 1:1000

PLAN SHEET AND RIGHT-OF-WAY DETAIL SHEET  
U.S. 119 STA. 45+800 TO STA. 45+960

\$\$\$DATE\$\$\$

\$\$\$DGN\$\$\$

# RIGHT OF WAY SUMMARY

COUNTY OF	ITEM NO.	SHEET NO.
LETCHER	12-311.35	R13

PARCEL NO.	NAME	TOTAL AREA OF TRACT	PERMANENT R/W ACQUIRED	EASEMENTS		AREA SEVERED		EXCESS PURCHASED	PORTION REMAINING	SEWER SYSTEM TYPE	SEWER SYSTEM AFFECTED BY PROJECT		BUILDINGS ACQUIRED NUMBER				HAZARDOUS WASTE	REMARKS		
		HECTARE	HECTARE	PERMANENT	TEMPORARY	LEFT	RIGHT	HECTARE	HECTARE		HECTARE	HECTARE	YES	NO	C	R			F	S
		① ACRE	ACRE	sq m	sq m	HECTARE	HECTARE	ACRE	ACRE		ACRE	ACRE								
11	ROBERT L. PATRICK	1.35	1.35						TOTAL TAKING	1		X	1				3	DB 376, PG 640		
		3.32	3.32																	
12	GENEVA TOLAVER LINDBERG TOLAVER	0.98	0.064					0.92	0.92									DB 329, PG 703		
		2.42	0.158					2.26	2.26											
13	CHURCH OF CHRIST	0.20	0.022					0.18	0.18	1		X	1					DB 85, PG 627		
		0.50	0.054					0.45	0.45											
14	ORVILLE COLLIER, SR. LELA COLLIER	1.37	0.401					0.97	0.97	1		X						DB 146, PG 576 DB 318, PG 296 DB 149, PG 81 DB 154, PG 513		
		3.39	0.991					2.40	2.40											
15	KEVIN CREECH KAYE CREECH	0.25	0.25						TOTAL TAKING	1		X		1			1	DB 279, PG 513		
		0.63	0.63																	
16	DANIEL W. BOGGS REBECCA J. BOGGS	0.25	0.25						TOTAL TAKING	1		X		1			1	DB 319, PG 438		
		0.62	0.62																	
17	ACIN LLC	6372	93.528	9,940	1,670,071				6,278.472	5								DB 361 PG 786 Refer to Sheets R5A, R7A and R9 for Individual Tract Details		
		15746	231.114	106,995	17,976,490				15,514.886											
18	CENTRAL HYDRAULICS MACHINE & MANUFACTURING	2.18	2.18			TOTAL TAKE				1		X	1	1			2	DB 348, PG 321 Area also includes parcel 18X		
		5.394	5.394																	
19	CSX RAILROAD	11.09	1.005	829	1168				10.00	5								DB 161, PG 624 DB 163, PG 97 DB 163, PG 100 DB 163, PG 160		
		27.40 *	2.482	8,924	12586				24.71											
55	ETHEL HALCOMB	0.117	0.117							1	X			1			1	DB 317, PG 176		
		0.289	0.289						TOTAL TAKING											
56	Appalachian Forests B, LLC	6373	93.576	9,940	1,670,071				6,279.424	5								OWNER OF TIMBER RIGHTS FROM PARCEL 17, ACIN LLC DB 393, PG 302 AND PARCEL 59 DB 349, PG 212		
		15748	231.233	106,995	17,976,490				15,516.767											
59	PAT SURBER	0.643	0.048						0.595									DB 349, PG 212		
		1.59	0.12						1.47											

PREPARED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_

NOTE: PERMANENT R/W ACQUIRED + PERMANENT EASEMENT  
+ AREA SEVERED = TOTAL AREA OF TRACT.

① ALL AREAS CALCULATED UNLESS NOTED BY "\*\*".  
THIS AREA IS FROM THE DEED.

THIS PROJECT IS A PARTIALLY CONTROLLED  
ACCESS HIGHWAY. ACCESS SHALL BE PROVIDED  
ONLY WHERE SPECIFICALLY INDICATED ON PLANS.

TYPE SEWER SYSTEM  
 1. PRIVATE - INDIVIDUAL  
 2. PRIVATE - MULTI PARTY  
 3. PUBLIC  
 4. NONE  
 5. NOT APPLICABLE

BUILDINGS ACQUIRED CODE  
 C - COMMERCIAL  
 R - RESIDENTIAL  
 F - FARM  
 S - STORAGE

HAZARDOUS WASTE  
 UST - UNDERGROUND STORAGE TANK

\$\$\$DATE\$\$\$

\$\$\$DGN\$\$\$

# RIGHT OF WAY SUMMARY

△ REVISED 12-10-12

COUNTY OF	ITEM NO.	SHEET NO.
LETCHER	12-311.35	R13

PARCEL NO.	NAME	TOTAL AREA OF TRACT	PERMANENT R/W ACQUIRED	EASEMENTS		AREA SEVERED		EXCESS PURCHASED	PORTION REMAINING	SEWER SYSTEM TYPE	SEWER SYSTEM AFFECTED BY PROJECT		BUILDINGS ACQUIRED NUMBER				HAZARDOUS WASTE	REMARKS		
		HECTARE	HECTARE	PERMANENT	TEMPORARY	LEFT	RIGHT	HECTARE	HECTARE		HECTARE	HECTARE	YES	NO	C	R			F	S
		① ACRE	ACRE	sq m	sq m	HECTARE	HECTARE	ACRE	ACRE		ACRE	ACRE								
11	ROBERT L. PATRICK	1.35	1.35						TOTAL TAKING	1		X	1				3	DB 376, PG 640		
		3.32	3.32																	
12	GENEVA TOLAVER LINDBERG TOLAVER	0.98	0.064						0.92									DB 329, PG 703		
		2.42	0.158						2.26											
13	CHURCH OF CHRIST	0.20	0.022	△	1802				0.18	1		X	1					DB 85, PG 627		
		0.50	0.054		19392				0.45											
14	ORVILLE COLLIER, SR. LELA COLLIER	1.37	0.401						0.97	1		X						DB 146, PG 576 DB 318, PG 296 DB 149, PG 81 DB 154, PG 513		
		3.39	0.991						2.40											
15	KEVIN CREECH KAYE CREECH	0.25	0.25						TOTAL TAKING	1		X	1			1		DB 279, PG 513		
		0.63	0.63																	
16	DANIEL W. BOGGS REBECCA J. BOGGS	0.25	0.25						TOTAL TAKING	1		X	1			1		DB 319, PG 438		
		0.62	0.62																	
17	ACIN LLC	6372	93.528	9,940	1,670,071	△			6,278.472	5								DB 361 PG 786 Refer to Sheets R5A, R7A and R9 for Individual Tract Details		
		15746	231.114	106,995	17,976,490				15,514.886											
18	CENTRAL HYDRAULICS MACHINE & MANUFACTURING	2.18	2.18						TOTAL TAKE	1		X	1	1		2		DB 348, PG 321 Area also includes parcel 18X		
		5.394	5.394																	
19	CSX RAILROAD	11.09	1.005	829	1168				10.00	5								DB 161, PG 624 DB 163, PG 97 DB 163, PG 100 DB 163, PG 160		
		27.40	2.482	8,924	12586				24.71											
55	ETHEL HALCOMB	0.117	0.117						TOTAL TAKING	1	X		1			1		DB 317, PG 176		
		0.289	0.289																	
56	Appalachian Forests B, LLC	6373	93.576	9,940	1,670,071	△			6,279.424	5								OWNER OF TIMBER RIGHTS FROM PARCEL 17, ACIN LLC DB 393, PG 302 AND PARCEL 59 DB 349, PG 212		
		15748	231.233	106,995	17,976,490				15,516.767											
59	PAT SURBER	0.643	0.048						0.595									DB 349, PG 212		
		1.59	0.12						1.47											

PREPARED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_

NOTE: PERMANENT R/W ACQUIRED + PERMANENT EASEMENT  
 + AREA SEVERED = TOTAL AREA OF TRACT.

① ALL AREAS CALCULATED UNLESS NOTED BY "\*\*".  
 THIS AREA IS FROM THE DEED.

THIS PROJECT IS A PARTIALLY CONTROLLED  
 ACCESS HIGHWAY. ACCESS SHALL BE PROVIDED  
 ONLY WHERE SPECIFICALLY INDICATED ON PLANS.

TYPE SEWER SYSTEM  
 1. PRIVATE - INDIVIDUAL  
 2. PRIVATE - MULTI PARTY  
 3. PUBLIC  
 4. NONE  
 5. NOT APPLICABLE

BUILDINGS ACQUIRED CODE  
 C - COMMERCIAL  
 R - RESIDENTIAL  
 F - FARM  
 S - STORAGE

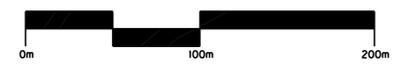
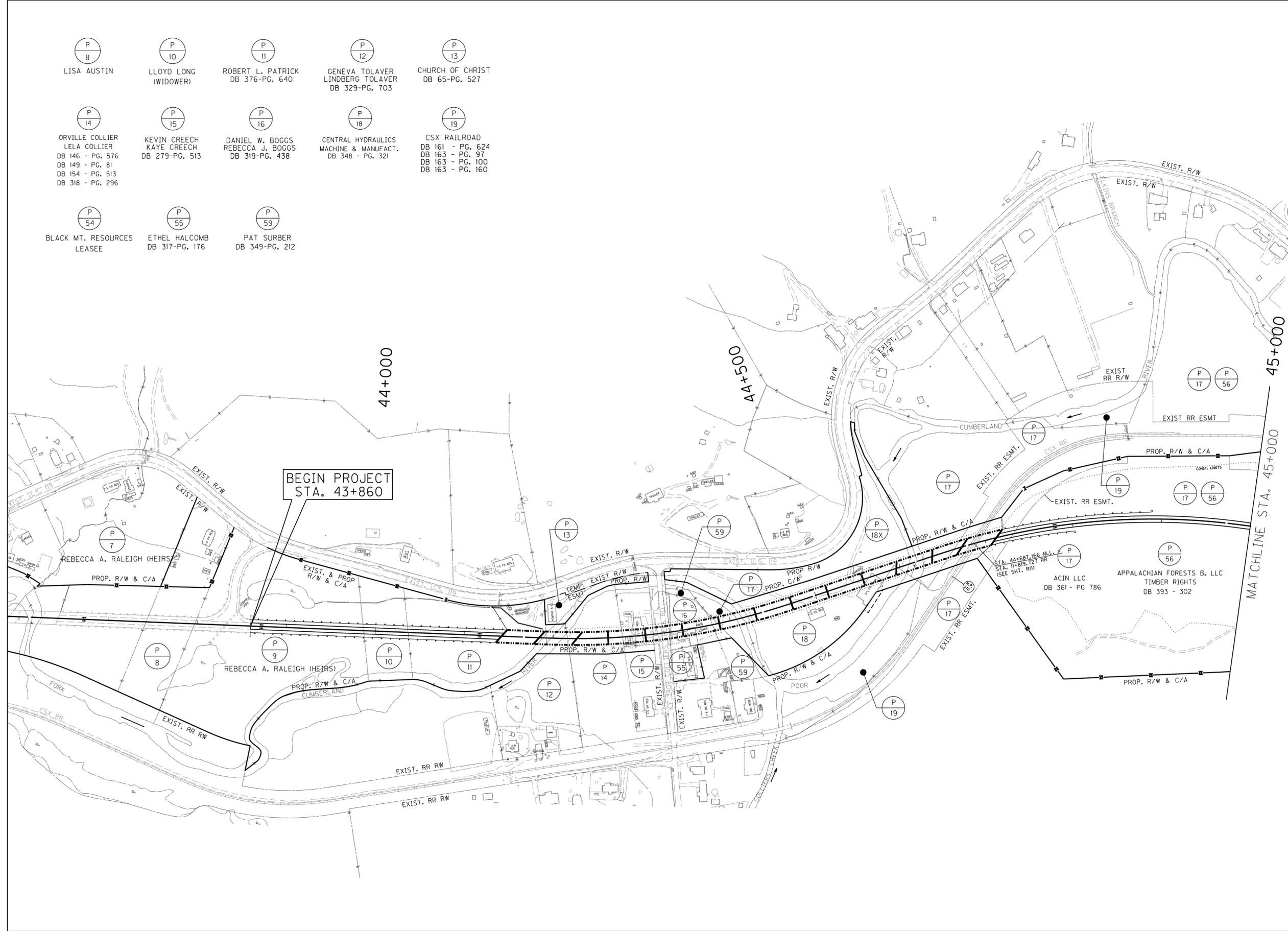
HAZARDOUS WASTE  
 UST - UNDERGROUND STORAGE TANK

\$\$\$DATE\$\$\$



- |   |  |  |  |  |
|---|--|--|--|--|
| (P)<br>8<br>LISA AUSTIN   | (P)<br>10<br>LLOYD LONG<br>(WIDOWER)                       | (P)<br>11<br>ROBERT L. PATRICK<br>DB 376-PG. 640                   | (P)<br>12<br>GENEVA TOLAVER<br>LINDBERG TOLAVER<br>DB 329-PG. 703          | (P)<br>13<br>CHURCH OF CHRIST<br>DB 65-PG. 527   |
| (P)<br>14<br>ORVILLE COLLIER<br>LELA COLLIER<br>DB 146 - PG. 576<br>DB 149 - PG. 81<br>DB 154 - PG. 513<br>DB 318 - PG. 296 | (P)<br>15<br>KEVIN CREECH<br>KAYE CREECH<br>DB 279-PG. 513 | (P)<br>16<br>DANIEL W. BOGGS<br>REBECCA J. BOGGS<br>DB 319-PG. 438 | (P)<br>18<br>CENTRAL HYDRAULICS<br>MACHINE & MANUFACT.<br>DB 348 - PG. 321 | (P)<br>19<br>CSX RAILROAD<br>DB 161 - PG. 624<br>DB 163 - PG. 97<br>DB 163 - PG. 100<br>DB 163 - PG. 160 |
| (P)<br>54<br>BLACK MT. RESOURCES<br>LEASEE  | (P)<br>55<br>ETHEL HALCOMB<br>DB 317-PG. 176               | (P)<br>59<br>PAT SURBER<br>DB 349-PG. 212                          |  |  |

PREPARED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_



SCALE: 1:2000

RIGHT OF WAY STRIP MAP

METRIC

\$\$\$DGN\$\$\$

\$\$\$DATE\$\$\$

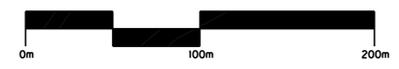
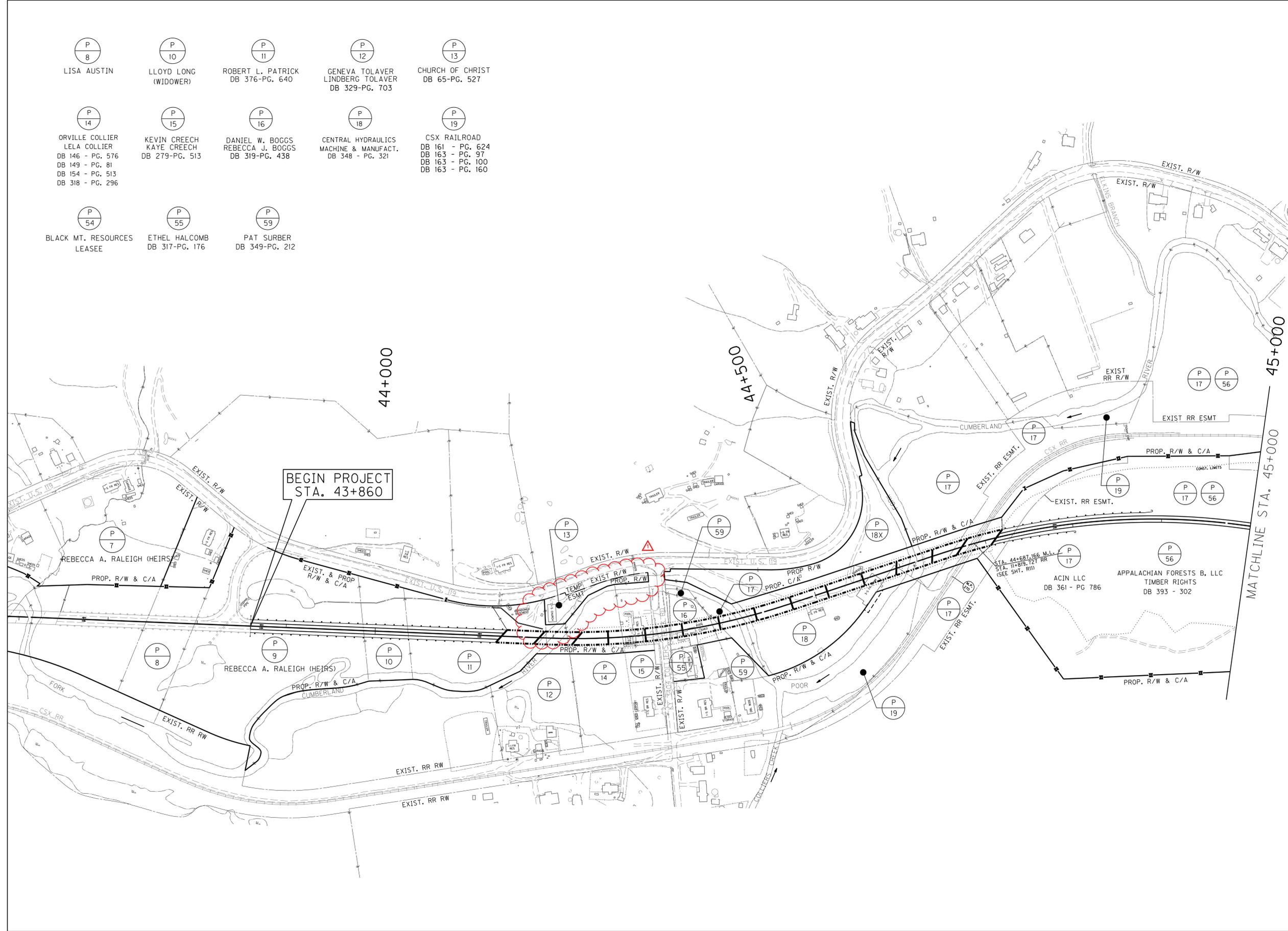
COUNTY OF	ITEM NO.	SHEET NO.
LETCHER	12-311.35	R14

△ REVISED 12-10-12



- |   |  |  |  |  |
|---|--|--|--|--|
| P<br>8<br>LISA AUSTIN   | P<br>10<br>LLOYD LONG<br>(WIDOWER)                       | P<br>11<br>ROBERT L. PATRICK<br>DB 376-PG. 640                   | P<br>12<br>GENEVA TOLAVER<br>LINDBERG TOLAVER<br>DB 329-PG. 703          | P<br>13<br>CHURCH OF CHRIST<br>DB 65-PG. 527   |
| P<br>14<br>ORVILLE COLLIER<br>LELA COLLIER<br>DB 146 - PG. 576<br>DB 149 - PG. 81<br>DB 154 - PG. 513<br>DB 318 - PG. 296 | P<br>15<br>KEVIN CREECH<br>KAYE CREECH<br>DB 279-PG. 513 | P<br>16<br>DANIEL W. BOGGS<br>REBECCA J. BOGGS<br>DB 319-PG. 438 | P<br>18<br>CENTRAL HYDRAULICS<br>MACHINE & MANUFACT.<br>DB 348 - PG. 321 | P<br>19<br>CSX RAILROAD<br>DB 161 - PG. 624<br>DB 163 - PG. 97<br>DB 163 - PG. 100<br>DB 163 - PG. 160 |
| P<br>54<br>BLACK MT. RESOURCES<br>LEASEE  | P<br>55<br>ETHEL HALCOMB<br>DB 317-PG. 176               | P<br>59<br>PAT SURBER<br>DB 349-PG. 212                          |  |  |

PREPARED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_



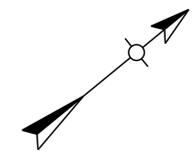
SCALE: 1:2000

RIGHT OF WAY STRIP MAP

METRIC

\$\$\$DONS\$\$\$

\$\$\$DATE\$\$\$



END PROJECT  
STA. 45+960

45+500

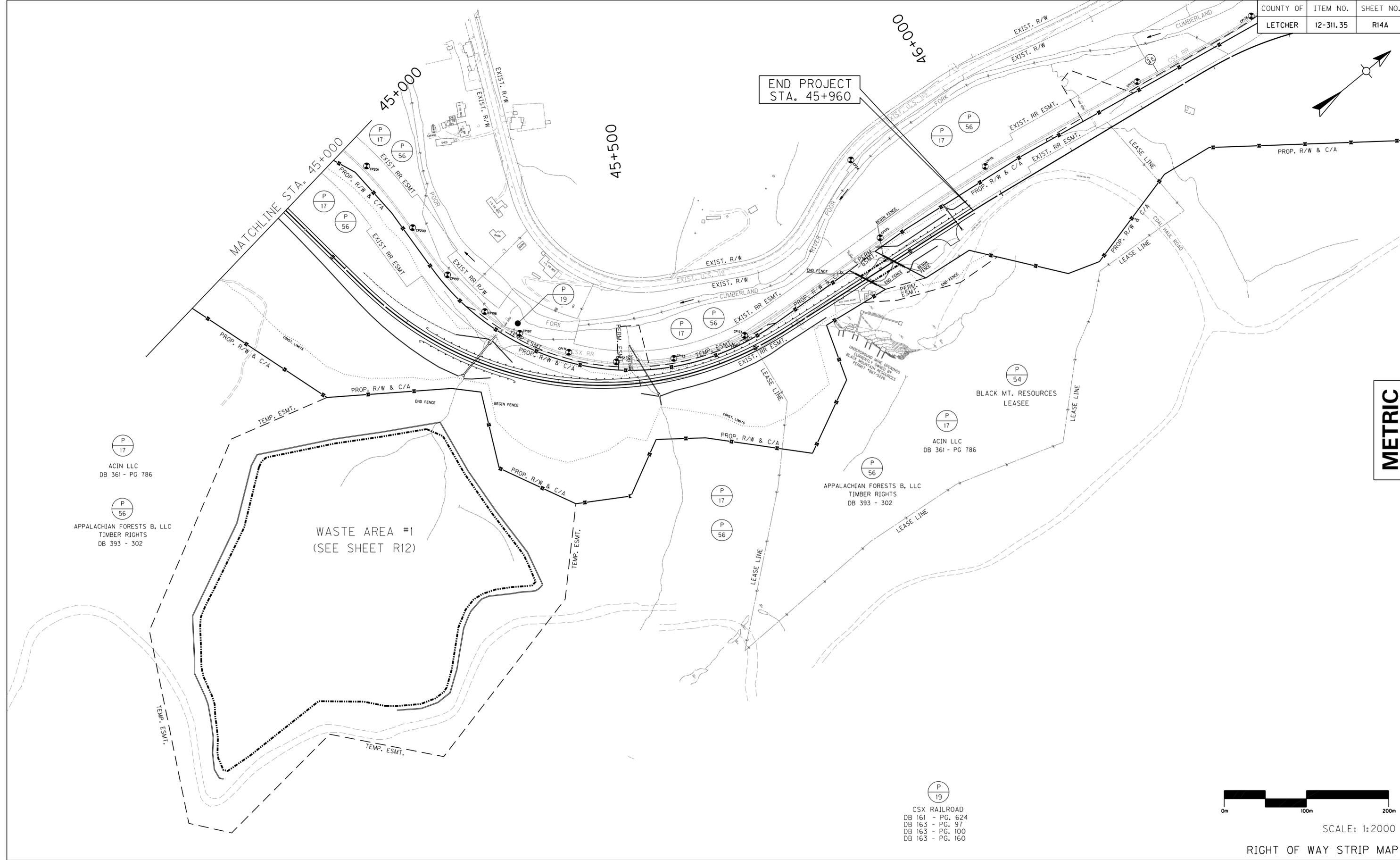
MATCHLINE STA. 45+000

46+000

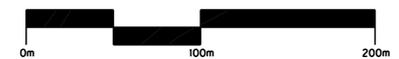
\$\$\$DONS\$\$\$

PREPARED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_

\$\$\$DATE\$\$\$



METRIC



SCALE: 1:2000

RIGHT OF WAY STRIP MAP

P 19  
 CSX RAILROAD  
 DB 161 - PG. 624  
 DB 163 - PG. 97  
 DB 163 - PG. 100  
 DB 163 - PG. 160

P 17  
 ACIN LLC  
 DB 361 - PG 786

P 56  
 APPALACHIAN FORESTS B, LLC  
 TIMBER RIGHTS  
 DB 393 - 302

WASTE AREA #1  
 (SEE SHEET R12)

P 54  
 BLACK MT. RESOURCES  
 LEASEE

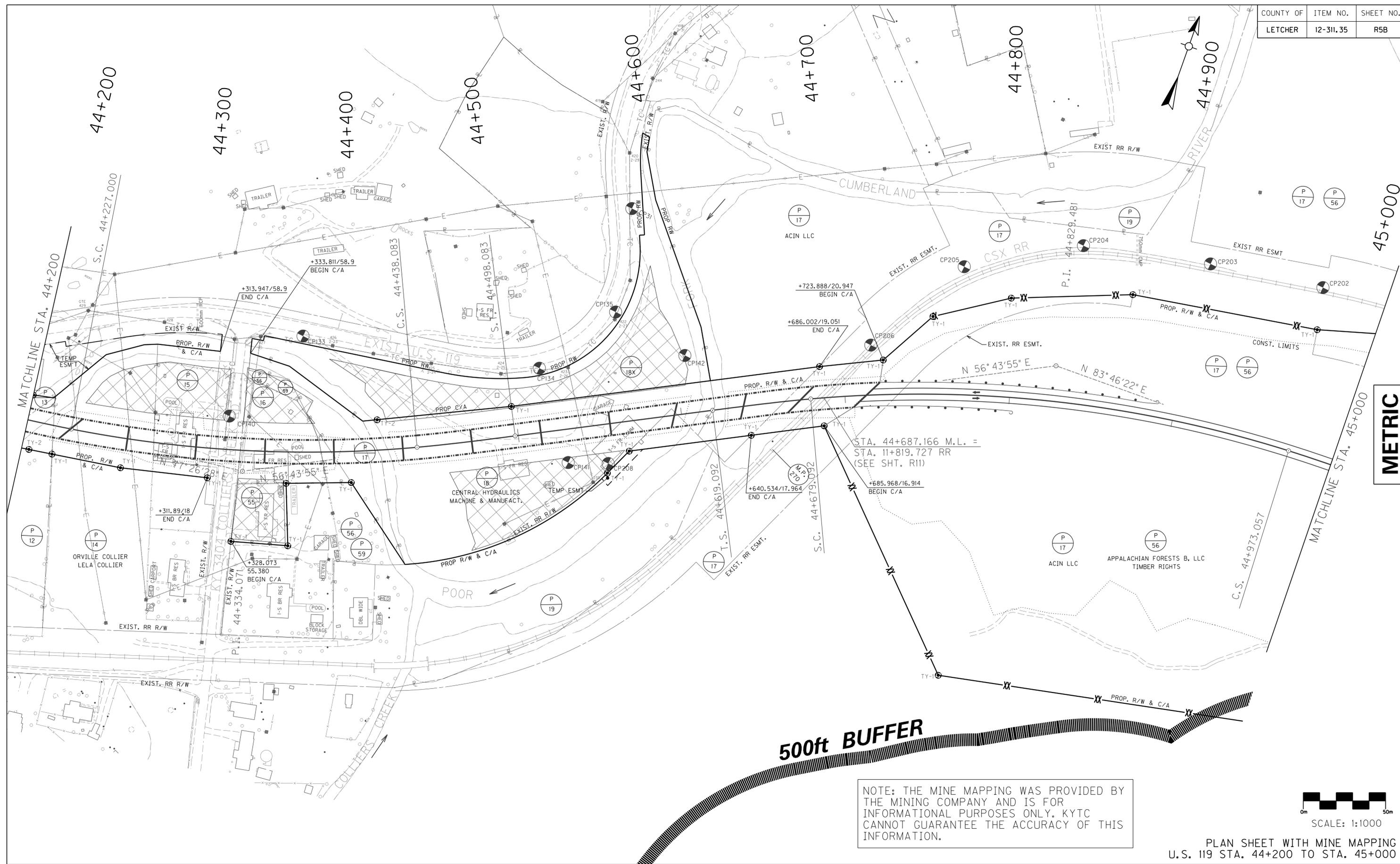
P 56  
 APPALACHIAN FORESTS B, LLC  
 TIMBER RIGHTS  
 DB 393 - 302



\$\$\$DATE\$\$\$

COUNTY OF	ITEM NO.	SHEET NO.
LETCHER	12-311.35	R5B

PREPARED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_



METRIC

\$\$\$DATE\$\$\$

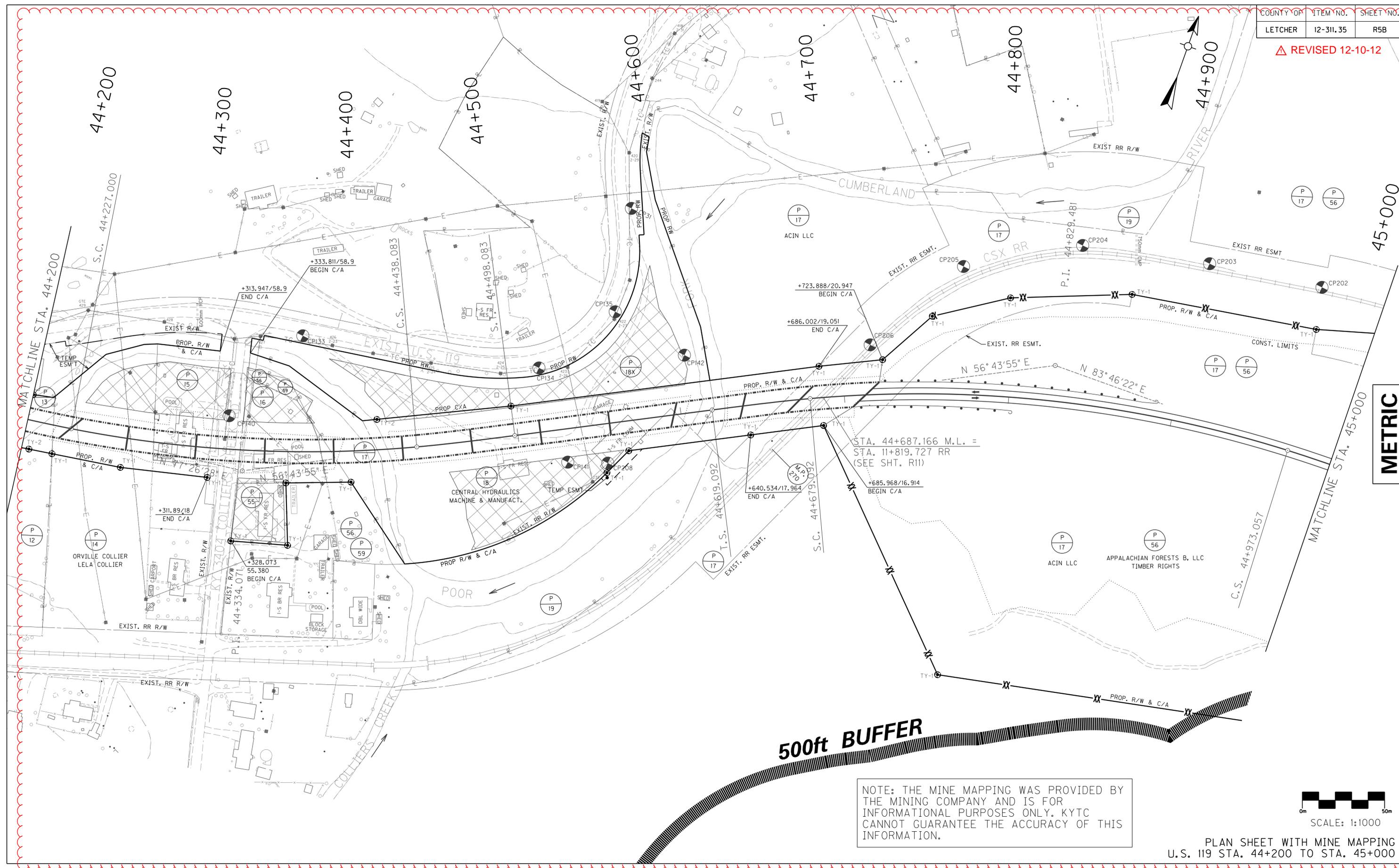


PLAN SHEET WITH MINE MAPPING  
 U.S. 119 STA. 44+200 TO STA. 45+000

\$\$\$DATE\$\$\$

▲ REVISED 12-10-12

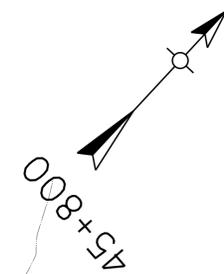
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 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_



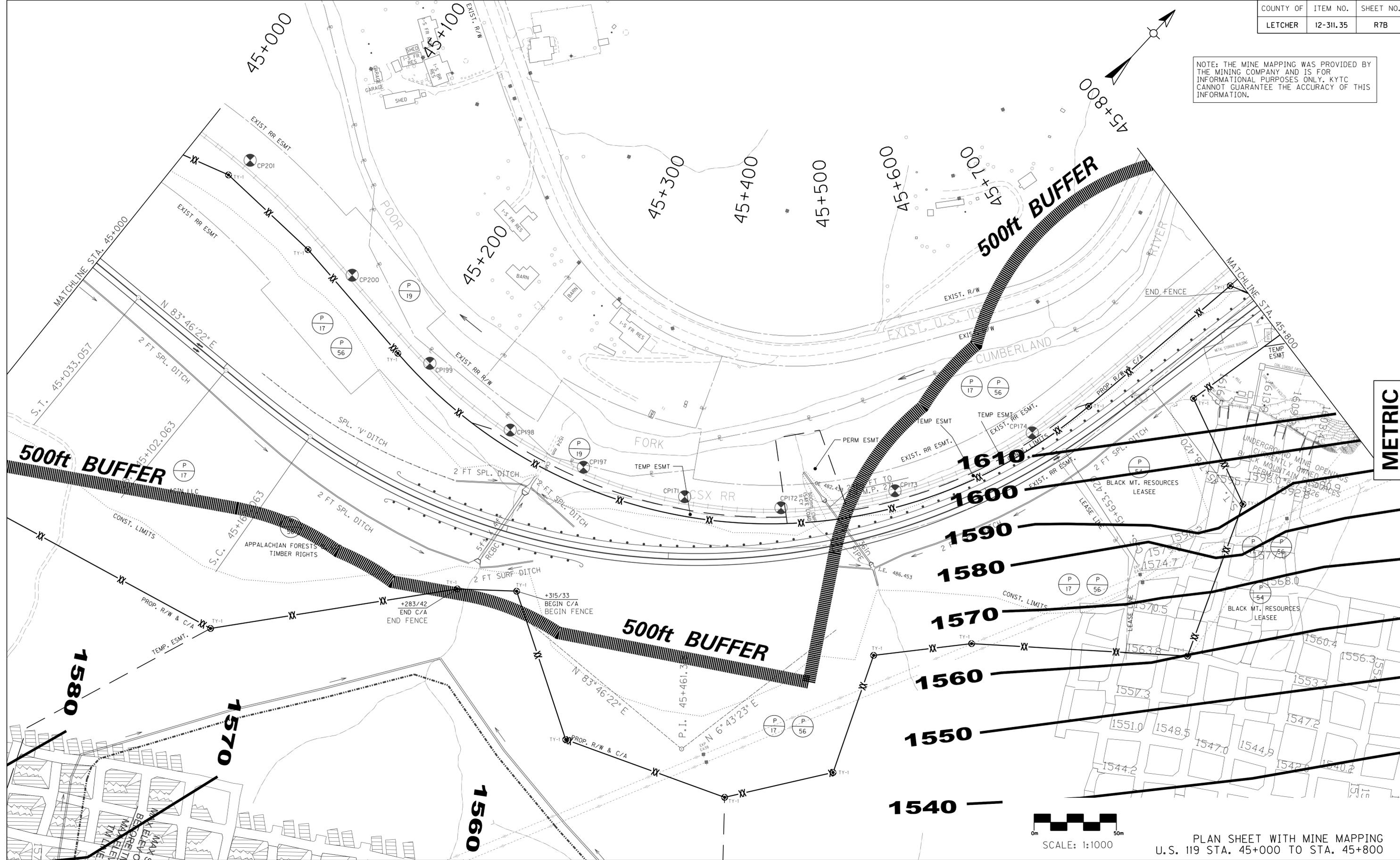
METRIC

\$\$\$DATE\$\$\$

NOTE: THE MINE MAPPING WAS PROVIDED BY THE MINING COMPANY AND IS FOR INFORMATIONAL PURPOSES ONLY. KYTC CANNOT GUARANTEE THE ACCURACY OF THIS INFORMATION.



\$\$\$DATE\$\$  
 PREPARED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 \$\$\$DATE\$\$



**METRIC**



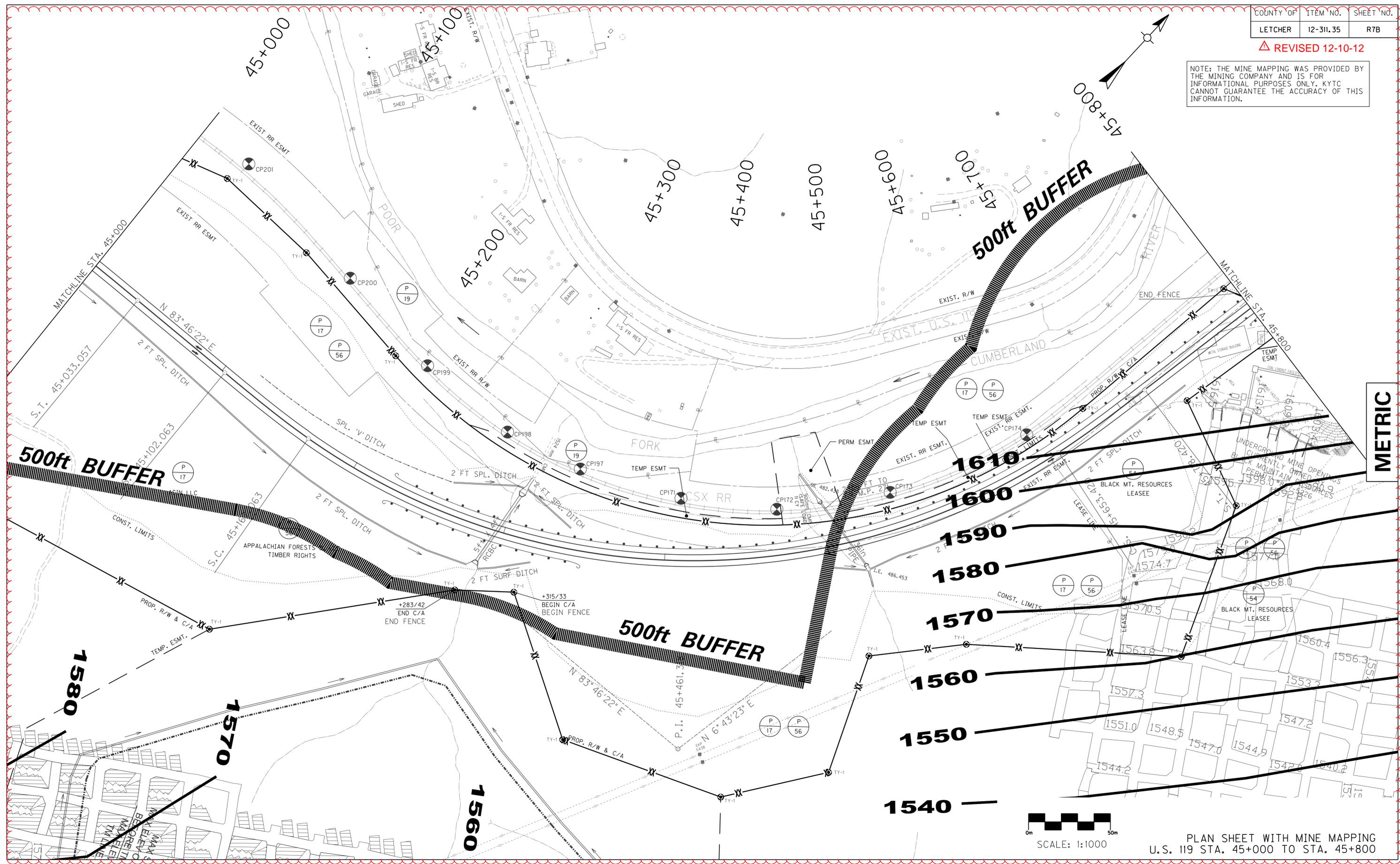
\$\$\$DATE\$\$\$

COUNTY OF	ITEM NO.	SHEET NO.
LETCHER	12-311.35	R7B

REVISD 12-10-12

NOTE: THE MINE MAPPING WAS PROVIDED BY THE MINING COMPANY AND IS FOR INFORMATIONAL PURPOSES ONLY. KYTC CANNOT GUARANTEE THE ACCURACY OF THIS INFORMATION.

PREPARED BY	DATE
CHECKED BY	DATE
APPROVED BY	DATE



METRIC

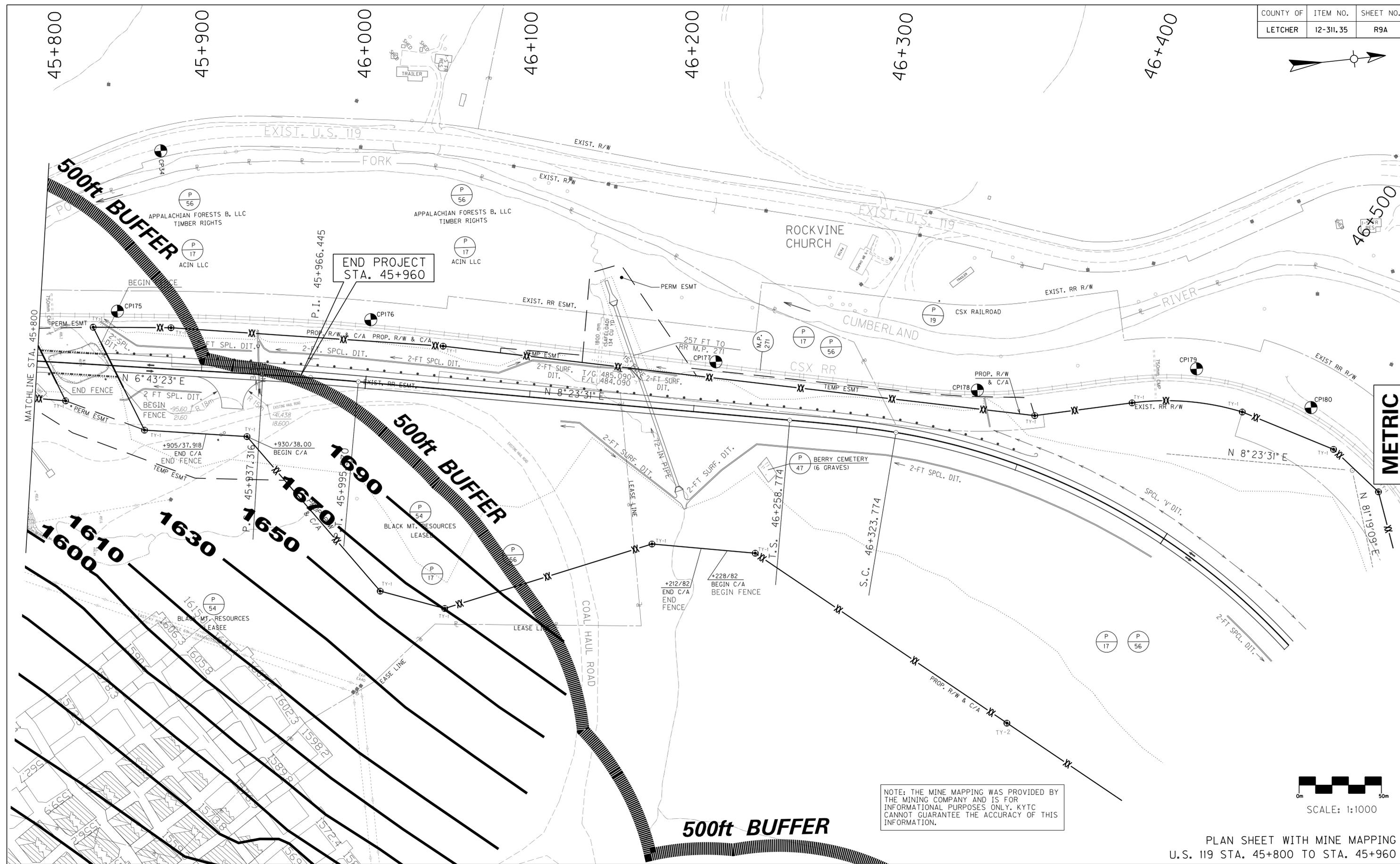


PLAN SHEET WITH MINE MAPPING  
U.S. 119 STA. 45+000 TO STA. 45+800

\$\$\$DATE\$\$\$

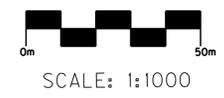


\$\$\$DATE\$\$  
 PREPARED BY \_\_\_\_\_ DATE \_\_\_\_\_  
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 APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 \$\$\$DATE\$\$



**METRIC**

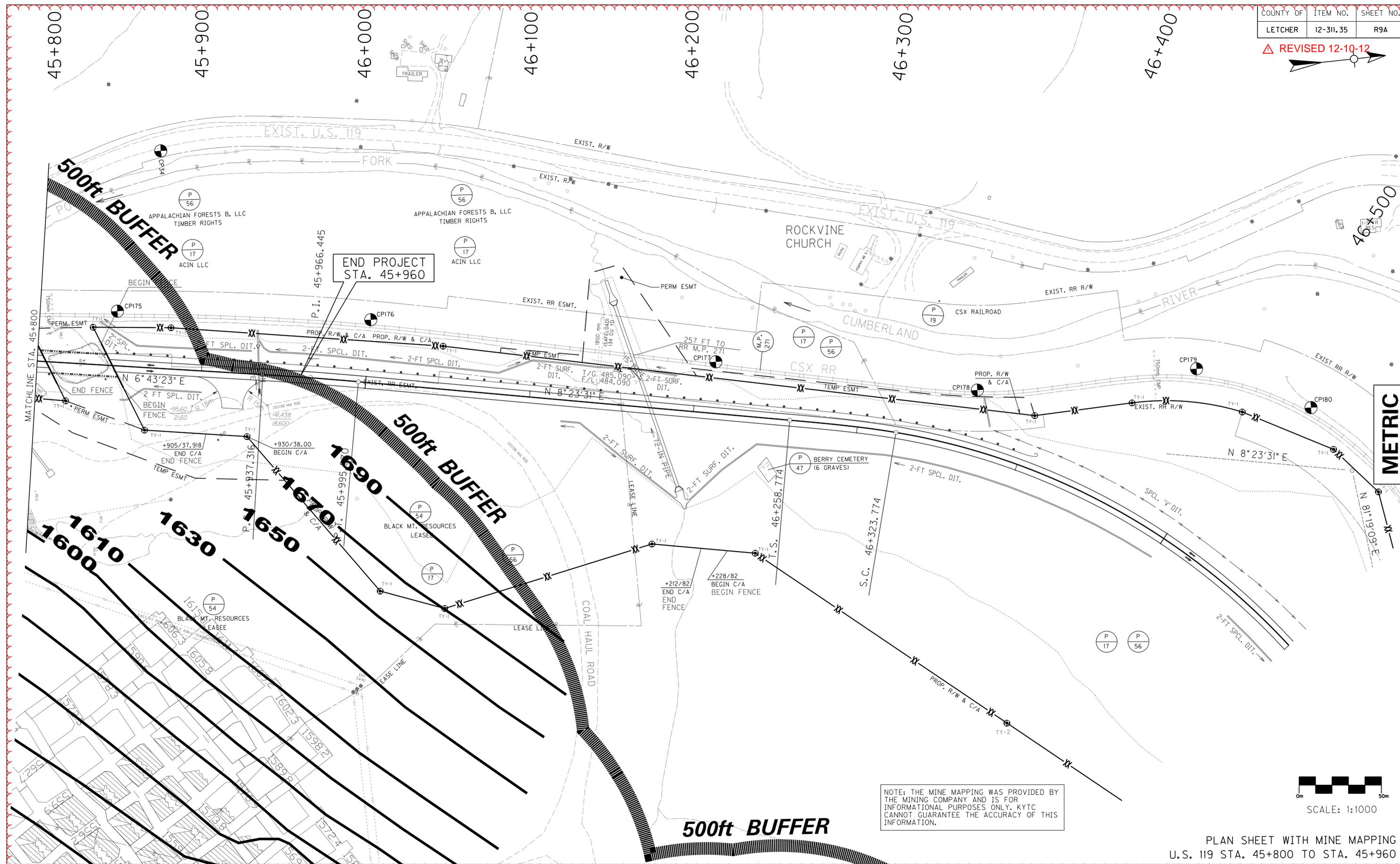
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△ REVISED 12-10-12



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PREPARED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_

\$\$\$DATE\$\$\$

METRIC

# TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

## LETCHER COUNTY

### U.S. 119 OVER

# POOR FORK CUMBERLAND RIVER & CSX RAILROAD

## STATION 1457 + 60.75

### INDEX OF SHEETS

Sheet No.	Description	Sheet No.	Description
S1-S1A	Cover Sheets	S45-S46	Pier 9
S2	General Notes	S47-S48	Pier 10
S3-S5	Layout	S49-S50	Pier 11
S6	Typical Sections	S51-S52	Pier 12
S7-S19	Boring Layout & Logs of Borings	S53-S54	Pier 13
S20	Stakeout Diagram	S55-S59	Abutment 2
S21-S23	Foundation Layout	S60-S62	Framing Plans
S24-S28	End Bent 1	S63-S65A	Prestressed Concrete I-Beam
S29-S30	Pier 1	S66-S77	Superstructure Unit 1
S31-S32	Pier 2	S78-S87	Superstructure Unit 2
S33-S34	Pier 3	S88-S100	Superstructure Unit 3
S35-S36	Pier 4	S101-S103	Curve Offsets
S37-S38	Pier 5	S104-S105	Construction Elevations Unit 1
S39-S40	Pier 6	S106-S108	Construction Elevations Unit 2
S41-S42	Pier 7	S109-S111	Construction Elevations Unit 3
S43-S44	Pier 8	S112	Rail System Type 3

### SPECIAL NOTES

For Stone Masonry Veneer

### SPECIAL PROVISIONS

69 Embankment @ Bridge End Bent Structures

### STANDARD DRAWINGS

BBP-001-12	Elastomeric Bearing Pads for Prestressed Beams
BBP-002-04	Bearing Details
BGX-006-09	Stencils for Structures
BGX-012-02	Geotechnical Legend
BGX-004-09	Concrete Slopewalls for Grade Separation Bridges
BGX-005-09	Concrete Slopewalls for Grade Separation Bridges
BGX-015-02	Bridge Drains
BJE-001-12	Neoprene Expansion Dam and Armored Edges
BPS-003-09	HP 12x53 Steel Pile

### SPECIFICATIONS

2012 Standard Specifications for Road and Bridge Construction with Current Supplemental Specifications  
2002 AASHTO Standard Specifications for Highway Bridges 17th Edition.

REVISION	DATE

DATE : 09 - 2003	CHECKED BY
DESIGNED BY: P.A.P.	W.T.B.
DETAILED BY: D.W.S.	P.F.H.

**Commonwealth of Kentucky**  
**DEPARTMENT OF HIGHWAYS**

COUNTY  
**LETCHER**

ROUTE	CROSSING
U.S. 119	POOR FORK CUMBERLAND RIVER

## COVER SHEET

PREPARED BY <b>T.H.E. ENGINEERS, INC.</b>	SHEET NO. SI of S112 DRAWING NO. 25296
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### ESTIMATE OF QUANTITIES

BID ITEM	CONCRETE CLASS 'A'	CONCRETE CLASS 'AA'	STEEL REINF.	STEEL REINF. EPOXY COATED	① STRUCTURAL STEEL	STRUCTURE EXCAVATION SOLID ROCK	STRUCTURE GRANULAR BACKFILL	MASONRY COATING	PILES-STEEL HP 12 x 53	TEST PILES	PILE POINTS 12 IN.	CYCLOPEAN STONE RIP RAP	PCI BEAMS TYPE 7	2 1/2 IN. NEOPRENE EXPANSION DAM	4 IN. NEOPRENE EXPANSION DAM	ARMORED EDGE	FOUNDATION PREPARATION	COFFERDAM PIER 12	6" CONCRETE SLOPEWALL	GEOTEXTILE FABRIC TYPE IV
UNIT	CY	CY	LBS	LBS	LUMP SUM	CY	CY	SY	LF	LF	EACH	TONS	LF	LF	LF	LF	LUMP SUM	LUMP SUM	SQ. YDS.	SQ. YDS.
END BENT 1	122.2	3.3		11406			250	63	922	54	18	818		66		63				210
PIER 1	169.0		35728	120		67		70												
PIER 2	175.8		36458	120		69		85												
PIER 3	138.1		36033	120		124		73												
PIER 4	169.8		37669			147		253												
PIER 5	164.9		36678	120		78		242												
PIER 6	163.9		36107	120		67		73												
PIER 7	171.6		36808	120		131		73												
PIER 8	166.1		36565	120		190		64												
PIER 9	163.2		36512			196		80												
PIER 10	151.7		33845	120		82		60												
PIER 11	166.3		32025	120		60		63												
PIER 12	177.9		33317	120		274		66												
PIER 13	140.4		20731	180				95	1234	57	45									
ABUTMENT 2	131.4	3.3		10118		471	265	75						73		67			355	230
SUPERSTRUCTURE UNIT 1		1035.6		311661				421					3178		51					
SUPERSTRUCTURE UNIT 2		1296.5		322068				819					4144		51					
SUPERSTRUCTURE UNIT 3		1285.1		376422				99					3961							
<b>BRIDGE TOTALS</b>	2372.3	3623.8	448476	1033055	①	1956	515	2774	2156	111	63	818	11283	139	102	130	1	LUMP SUM	355	440

① Estimated Weight of Structural Steel = 8960 lbs (Includes Deck Drains).

### BILL OF INCIDENTAL MATERIALS

Material	Location
② 1" Plastic Pipe Sleeve	Barrier Transitions
① 2" Commercial Pipe Sleeve	Piers
③ Elastomeric Bearing Pad	Piers, End Bent 1 & Abutment 2
① 3" Styrofoam	Expansion Piers
① 1/2" Cork or Styrofoam	Piers, End Bent 1 & Abutment 2
① 1 1/4" Cork or Styrofoam	Piers
③ Steel Intermediate Diaphragm	Approx. Wt. 108, 109 lbs (53621 Kg)
③ Threaded Anchor Bars	Diaphragms
③ 3/4" Threaded Inserts	PCI Beams
③ 7/8" Threaded Inserts	Intermediate Diaphragms

- ① Incidental to Class 'A' Concrete.
- ② Incidental to Class 'AA' Concrete.
- ③ Incidental to PCI Beams Type 7.

ENGLISH QUANTITIES

ITEM NUMBER

12-311.35

LETTING DATE

CONSTRUCTION PROJECT NO.

FILE NAME: \$\$\$designs\$filespecification\$\$\$

USER NAME: \$\$\$plotter\$\$\$

DATE: \$\$\$DATE\$\$\$

SHEET LOCATION:

# TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

## LETCHER COUNTY

### U.S. 119 OVER

# POOR FORK CUMBERLAND RIVER & CSX RAILROAD

## STATION 1457 + 60.75

△ REVISED 12-7-12

### INDEX OF SHEETS

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S33-S34	Pier 3	S88-S100	Superstructure Unit 3
S35-S36	Pier 4	SI01-SI03	Curve Offsets
S37-S38	Pier 5	SI04-SI05	Construction Elevations Unit 1
S39-S40	Pier 6	SI06-SI08	Construction Elevations Unit 2
S41-S42	Pier 7	SI09-SI11	Construction Elevations Unit 3
S43-S44	Pier 8	SI12	Rail System Type 3

### SPECIAL NOTES

For Stone Masonry Veneer

### SPECIAL PROVISIONS

69 Embankment @ Bridge End Bent Structures

### STANDARD DRAWINGS

- △ BBP-001-12 Elastomeric Bearing Pads for Prestressed Beams
- △ BBP-002-04 Bearing Details
- △ BGX-006-09 Stencils for Structures
- BGX-012-02 Geotechnical Legend
- BGX-004-09 Concrete Slopewalls for Grade Separation Bridges
- BGX-005-09 Concrete Slopewalls for Grade Separation Bridges
- BGX-015-02 Bridge Drains
- △ BJE-001-12 Neoprene Expansion Dam and Armored Edges
- △ BPS-003-09 HP 12x53 Steel Pile

### SPECIFICATIONS

2012 Standard Specifications for Road and Bridge Construction with Current Supplemental Specifications  
2002 AASHTO Standard Specifications for Highway Bridges 17th Edition.

### REVISION

DATE	REVISION	DATE	CHECKED BY
09 - 2003			
DESIGNED BY: P.A.P.			W.T.B.
DETAILED BY: D.W.S.			P.F.H.

**Commonwealth of Kentucky  
DEPARTMENT OF HIGHWAYS**

COUNTY  
**LETCHER**

ROUTE CROSSING  
U.S. 119 POOR FORK CUMBERLAND RIVER

## COVER SHEET

PREPARED BY <b>T.H.E. ENGINEERS, INC.</b>	SHEET NO. 1 of 112
	DRAWING NO. 25296

### ESTIMATE OF QUANTITIES

BID ITEM	CONCRETE CLASS 'A'	CONCRETE CLASS 'AA'	STEEL REINF.	STEEL REINF. EPOXY COATED	STRUCTURAL STEEL	STRUCTURE EXCAVATION SOLID ROCK	STRUCTURE GRANULAR BACKFILL	MASONRY COATING	PILES-STEEL HP 12 x 53	TEST PILES	PILE POINTS 12 IN.	CYCLOPEAN STONE RIP RAP	PCI BEAMS TYPE 7	2 1/2 IN. NEOPRENE EXPANSION DAM	4 IN. NEOPRENE EXPANSION DAM	ARMORED EDGE	FOUNDATION PREPARATION	COFFERDAM PIER 12	6" CONCRETE SLOPEWALL	GEOTEXTILE FABRIC TYPE IV	
UNIT	CY	CY	LBS	LBS	LUMP SUM	CY	CY	SY	LF	LF	EACH	TONS	LF	LF	LF	LF	LUMP SUM	LUMP SUM	SQ. YDS.	SQ. YDS.	
END BENT 1	122.2	3.3		11406			250	63	922	54	18	818		66		63				210	
PIER 1	169.0		35728	120		67		70													
PIER 2	175.8		36458	120		69		85													
PIER 3	138.1		36033	120		124		73													
PIER 4	169.8		37669			147		253													
PIER 5	164.9		36678	120		78		242													
PIER 6	163.9		36107	120		67		73													
PIER 7	171.6		36808	120		131		73													
PIER 8	166.1		36565	120		190		64													
PIER 9	163.2		36512			196		80													
PIER 10	151.7		33845	120		82		60													
PIER 11	166.3		32025	120		60		63													
PIER 12	177.9		33317	120		274		66													
PIER 13	140.4		20731	180				95	1234	57	45										
ABUTMENT 2	131.4	3.3		10118		471	265	75						73		67			355	230	
SUPERSTRUCTURE UNIT 1		1035.6		311661				421					3178		51						
SUPERSTRUCTURE UNIT 2		1296.5		322068				819					4144		51						
SUPERSTRUCTURE UNIT 3		1285.1		376422				99					3961								
<b>BRIDGE TOTALS</b>	2372.3	3623.8	448476	1033055	①	1956	515	2774	2156	111	63	818	11283	139	102	130	1	LUMP SUM	355	440	

① Estimated Weight of Structural Steel = 8960 lbs (Includes Deck Drains).

### BILL OF INCIDENTAL MATERIALS

Material	Location
② 1" Plastic Pipe Sleeve	Barrier Transitions
① 2" Commercial Pipe Sleeve	Piers
③ Elastomeric Bearing Pad	Piers, End Bent 1 & Abutment 2
① 3" Styrofoam	Expansion Piers
① 1/2" Cork or Styrofoam	Piers, End Bent 1 & Abutment 2
① 1 1/4" Cork or Styrofoam	Piers
③ Steel Intermediate Diaphragm	Approx. Wt. 108, 109 lbs (53621 Kg)
③ Threaded Anchor Bars	Diaphragms
③ 3/4" Threaded Inserts	PCI Beams
③ 7/8" Threaded Inserts	Intermediate Diaphragms

- ① Incidental to Class 'A' Concrete.
- ② Incidental to Class 'AA' Concrete.
- ③ Incidental to PCI Beams Type 7.

ENGLISH QUANTITIES

ITEM NUMBER

12-311.35

LETTING DATE

CONSTRUCTION PROJECT NO.

FILE NAME: \$\$\$designs\$file\$specification\$\$\$

USER NAME: \$\$\$plotter\$\$\$

DATE: \$\$\$DATE\$\$\$

SHEET LOCATION:

# TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS LETCHER COUNTY U.S. 119 OVER POOR FORK CUMBERLAND RIVER & CSX RAILROAD STATION 1457 + 60.75

INDEX OF SHEETS			
Sheet No.	Description	Sheet No.	Description
S1-S1A	Cover Sheets	S45-S46	Pier 9
S2	General Notes	S47-S48	Pier 10
S3-S5	Layout	S49-S50	Pier 11
S6	Typical Sections	S51-S52	Pier 12
S7-S19	Boring Layout & Logs of Borings	S53-S54	Pier 13
S20	Stakeout Diagram	S55-S59	Abutment 2
S21-S23	Foundation Layout	S60-S62	Framing Plans
S24-S28	End Bent 1	S63-S65A	Prestressed Concrete I-Beam
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S31-S32	Pier 2	S78-S87	Superstructure Unit 2
S33-S34	Pier 3	S88-S100	Superstructure Unit 3
S35-S36	Pier 4	S101-S103	Curve Offsets
S37-S38	Pier 5	S104-S105	Construction Elevations Unit 1
S39-S40	Pier 6	S106-S108	Construction Elevations Unit 2
S41-S42	Pier 7	S109-S111	Construction Elevations Unit 3
S43-S44	Pier 8	S112	Rail System Type 3

SPECIAL NOTES
For Stone Masonry Veneer

SPECIAL PROVISIONS
69 Embankment @ Bridge End Bent Structures

STANDARD DRAWINGS	
BBP-001-12	Elastomeric Bearing Pads for Prestressed Beams
BBP-002-04	Bearing Details
BGX-006-09	Stencils for Structures
BGX-012-02	Geotechnical Legend
BGX-004-09	Concrete Slopewalls for Grade Separation Bridges
BGX-005-09	Concrete Slopewalls for Grade Separation Bridges
BGX-015-02	Bridge Drains
BJE-001-12	Neoprene Expansion Dam and Armored Edges
BPS-003-09	HP 12x53 Steel Pile

SPECIFICATIONS
2012 Standard Specifications for Road and Bridge Construction with Current Supplemental Specifications
2002 AASHTO Standard Specifications for Highway Bridges 17th Edition.

REVISION	DATE
DATE : 09 - 2003	CHECKED BY
DESIGNED BY: P.A.P.	W.T.B.
DETAILED BY: D.W.S.	P.F.H.

**Commonwealth of Kentucky**  
**DEPARTMENT OF HIGHWAYS**  
COUNTY  
**LETCHER**

ROUTE CROSSING  
U.S. 119 POOR FORK CUMBERLAND RIVER

**COVER SHEET**

PREPARED BY  
**T.H.E. ENGINEERS, INC.**

SHEET NO.  
SIA of S112  
DRAWING NO.  
25296

## ESTIMATE OF QUANTITIES

BID ITEM	CONCRETE CLASS 'A'	CONCRETE CLASS 'AA'	STEEL REINF.	STEEL REINF. EPOXY COATED	① STRUCTURAL STEEL	STRUCTURE EXCAVATION SOLID ROCK	STRUCTURE GRANULAR BACKFILL	CONCRETE MASONRY COATING	PILES-STEEL HP 12 x 53	TEST PILES	PILE POINTS 12 IN.	CYCLOPEAN STONE RIP RAP	PCI BEAMS TYPE 7	2 1/2 IN. NEOPRENE EXPANSION DAM	4 IN. NEOPRENE EXPANSION DAM	ARMORED EDGE	FOUNDATION PREPARATION	COFFERDAM	6" CONCRETE SLOPEWALL	GEOTEXTILE FABRIC TYPE IV	
UNIT	CM	CM	KG	KG	LUMP SUM	CM	CM	SM	M	M	EACH	M. TONS	M	M	M	M	LUMP SUM	LUMP SUM	SM	SM	
END BENT 1	93.5	2.5		5178			191	53	281	17	18	742		20.1							176
PIER 1	129.3		16206	55		51		59													
PIER 2	134.5		16537	55		53		71													
PIER 3	105.6		16344	55		95		61													
PIER 4	129.9		17087			112		212													
PIER 5	126.1		16637	55		60		202													
PIER 6	125.4		16378	55		51		61													
PIER 7	131.3		16696	55		100		61													
PIER 8	127.1		16586	55		145		54													
PIER 9	124.8		16562			150		67													
PIER 10	116.1		15352	55		63		50													
PIER 11	127.2		14527	55		46		53													
PIER 12	136.1		15113	55		210		55													
PIER 13	107.4		9404	82				79	376	18	45										
ABUTMENT 2	100.5	2.5		4594		360	203	63						22.3		20.4				296	192
SUPERSTRUCTURE UNIT 1		792.2		141494				352					969		15.5						
SUPERSTRUCTURE UNIT 2		991.8		146219				685					1263		15.5						
SUPERSTRUCTURE UNIT 3		983.1		170896				83					1207								
<b>BRIDGE TOTALS</b>	1814.8	2772.1	203429	469013	①	1496	394	2321	657	35	63	742	3439	42.4	31.0	39.6	1	LUMP SUM	296	368	

① Estimated Weight of Structural Steel = 4068 kg (Includes Deck Drains).

BILL OF INCIDENTAL MATERIALS	
Material	Location
② 1" Plastic Pipe Sleeve	Barrier Transitions
① 2" Commercial Pipe Sleeve	Piers
③ Elastomeric Bearing Pad	Piers, End Bent 1 & Abutment 2
① 3" Styrofoam	Expansion Piers
① 1/2" Cork or Styrofoam	Piers, End Bent 1 & Abutment 2
① 1 1/4" Cork or Styrofoam	Piers
③ Steel Intermediate Diaphragm	Approx. Wt. 108, 109 lbs (53621 Kg)
③ Threaded Anchor Bars	Diaphragms
③ 3/4" Threaded Inserts	PCI Beams
③ 7/8" Threaded Inserts	Intermediate Diaphragms

- ① Incidental to Class 'A' Concrete.
- ② Incidental to Class 'AA' Concrete.
- ③ Incidental to PCI Beams Type 7.

METRIC QUANTITIES

ITEM NUMBER
12-311.35

SHEET LOCATION: DATE: \$\$\$DATE\$\$\$ USERNAME: \$\$\$plotter\$\$\$ FILE NAME: \$\$\$design\$\$\$specification\$\$\$ CONSTRUCTION PROJECT NO. LETTING DATE

# TRANSPORTATION CABINET △ REVISED 12-07-12

## DEPARTMENT OF HIGHWAYS

### LETCHER COUNTY

#### U.S. 119 OVER

# POOR FORK CUMBERLAND RIVER

# & CSX RAILROAD

## STATION 1457 + 60.75

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S43-S44	Pier 8	S112	Rail System Type 3 <span style="color: red;">△</span>

### SPECIAL NOTES

For Stone Masonry Veneer

### SPECIAL PROVISIONS

69 Embankment @ Bridge End Bent Structures

### STANDARD DRAWINGS

- △ BBP-001-12 Elastomeric Bearing Pads for Prestressed Beams
- △ BBP-002-04 Bearing Details
- △ BGX-006-09 Stencils for Structures
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- △ BJE-001-12 Neoprene Expansion Dam and Armored Edges
- △ BPS-003-09 HP 12x53 Steel Pile

### SPECIFICATIONS

2012 Standard Specifications for Road and Bridge Construction with Current Supplemental Specifications

2002 AASHTO Standard Specifications for Highway Bridges 17th Edition.

REVISION	DATE

DATE : 09 - 2003	CHECKED BY
DESIGNED BY: P.A.P.	W.T.B.
DETAILED BY: D.W.S.	P.F.H.

**Commonwealth of Kentucky**  
**DEPARTMENT OF HIGHWAYS**

COUNTY  
**LETCHER**

ROUTE U.S. 119	CROSSING POOR FORK CUMBERLAND RIVER
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## COVER SHEET △

PREPARED BY <b>T.H.E. ENGINEERS, INC.</b>	SHEET NO. SIA or S112
DRAWING NO. 25296	

### ESTIMATE OF QUANTITIES

BID ITEM	CONCRETE CLASS 'A'	CONCRETE CLASS 'AA'	STEEL REINF.	STEEL REINF. EPOXY COATED	① STRUCTURAL STEEL	STRUCTURE EXCAVATION SOLID ROCK	STRUCTURE GRANULAR BACKFILL	CONCRETE MASONRY COATING	PILES-STEEL HP 12 x 53	TEST PILES	PILE POINTS 12 IN.	CYCLOPEAN STONE RIP RAP	PCI BEAMS TYPE 7	2 1/2 IN. NEOPRENE EXPANSION DAM	4 IN. NEOPRENE EXPANSION DAM	ARMORED EDGE	FOUNDATION PREPARATION	COFFERDAM	6" CONCRETE SLOPEWALL	GEOTEXTILE FABRIC TYPE IV	
UNIT	CM	CM	KG	KG	LUMP SUM	CM	CM	SM	M	M	EACH	M. TONS	M	M	M	M	LUMP SUM	LUMP SUM	SM	SM	
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PIER 1	129.3		16206	55		51		59													
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SUPERSTRUCTURE UNIT 1		792.2		141494				352					969		15.5						
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① Estimated Weight of Structural Steel = 4068 kg (Includes Deck Drains).

BILL OF INCIDENTAL MATERIALS	
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③ 7/8"Ø Threaded Inserts	Intermediate Diaphragms

- ① Incidental to Class 'A' Concrete.
- ② Incidental to Class 'AA' Concrete.
- ③ Incidental to PCI Beams Type 7.

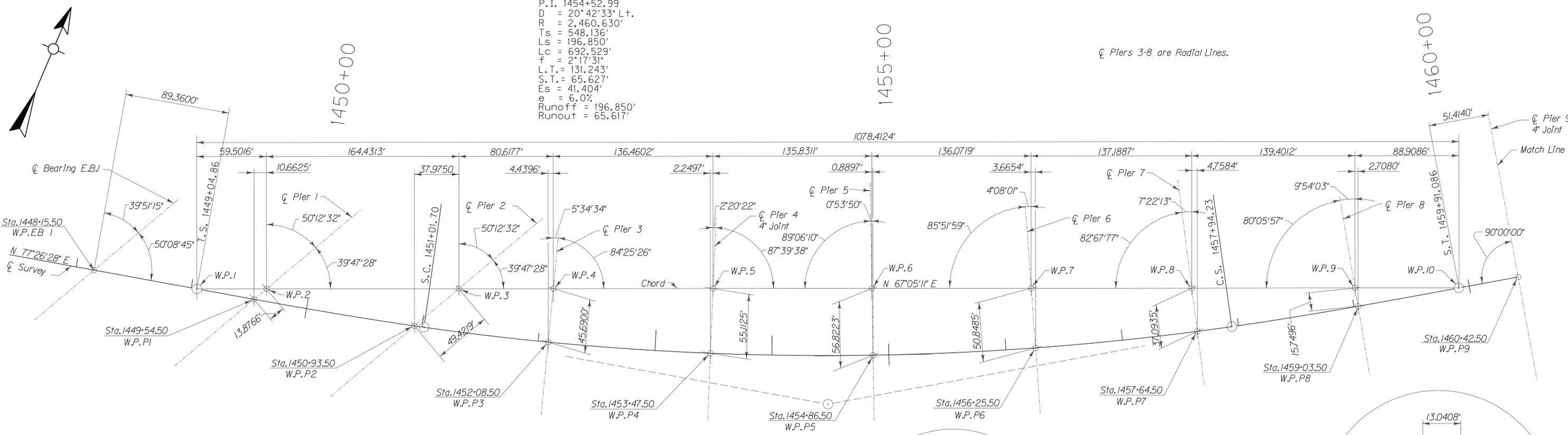
### METRIC QUANTITIES

ITEM NUMBER  
12-311.35

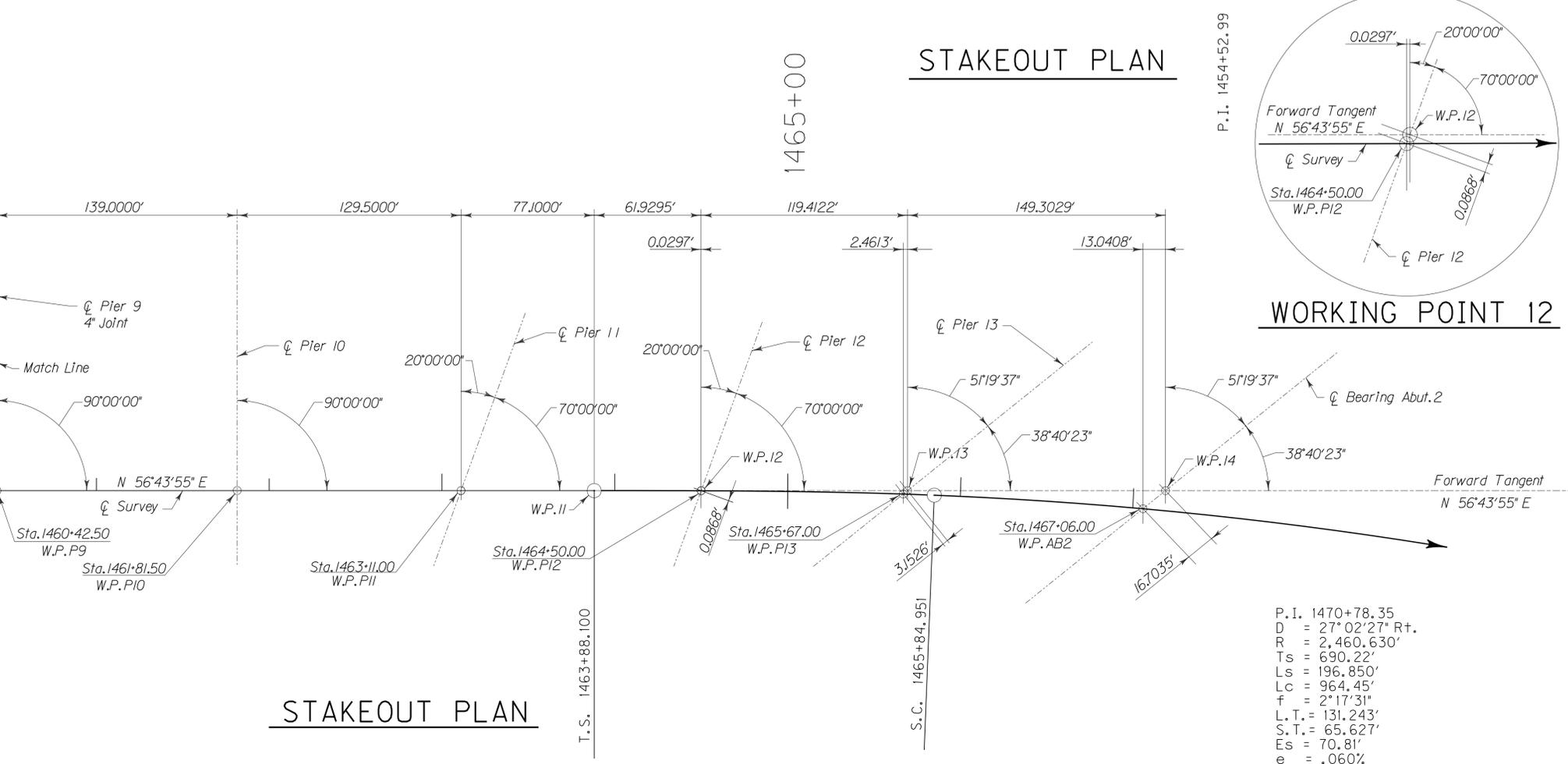
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CONSTRUCTION PROJECT NO.: \_\_\_\_\_  
FILE NAME: \$\$\$designs\$file\$specification\$\$\$  
USER NAME: \$\$\$plotter\$\$\$  
DATE: \$\$\$DATE\$\$\$  
SHEET LOCATION: \_\_\_\_\_



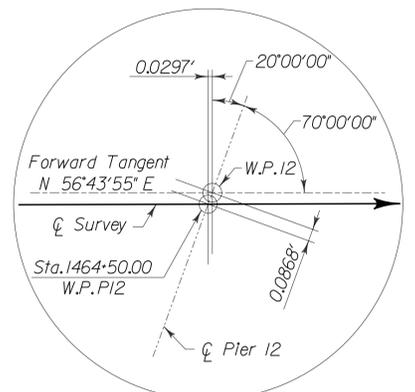




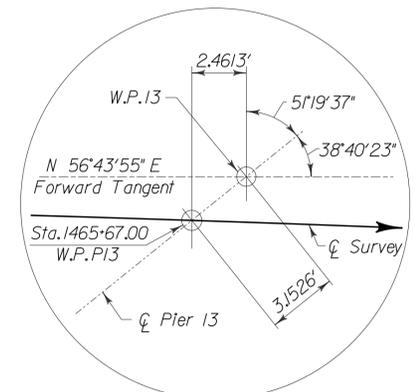
**STAKEOUT PLAN**



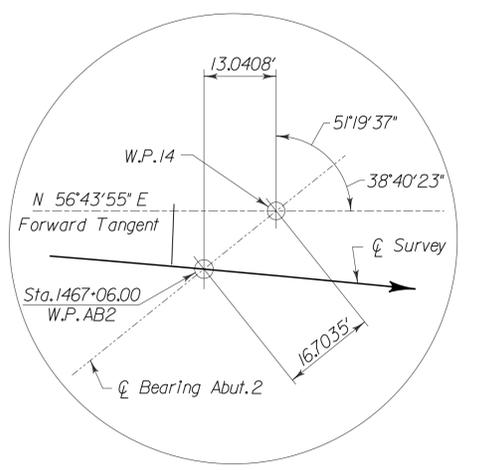
**STAKEOUT PLAN**



**WORKING POINT 12**



**WORKING POINT 13**



**WORKING POINT 14**

REVISION	DATE

DATE: 09 - 2003  
 DESIGNED BY: P. A. P.  
 CHECKED BY: W. T. B.  
 DETAILED BY: D. W. S.  
 P. F. H.

**Commonwealth of Kentucky**  
**DEPARTMENT OF HIGHWAYS**

COUNTY  
**LETCHER**

ROUTE U.S. 119 CROSSING POOR FORK CUMBERLAND RIVER

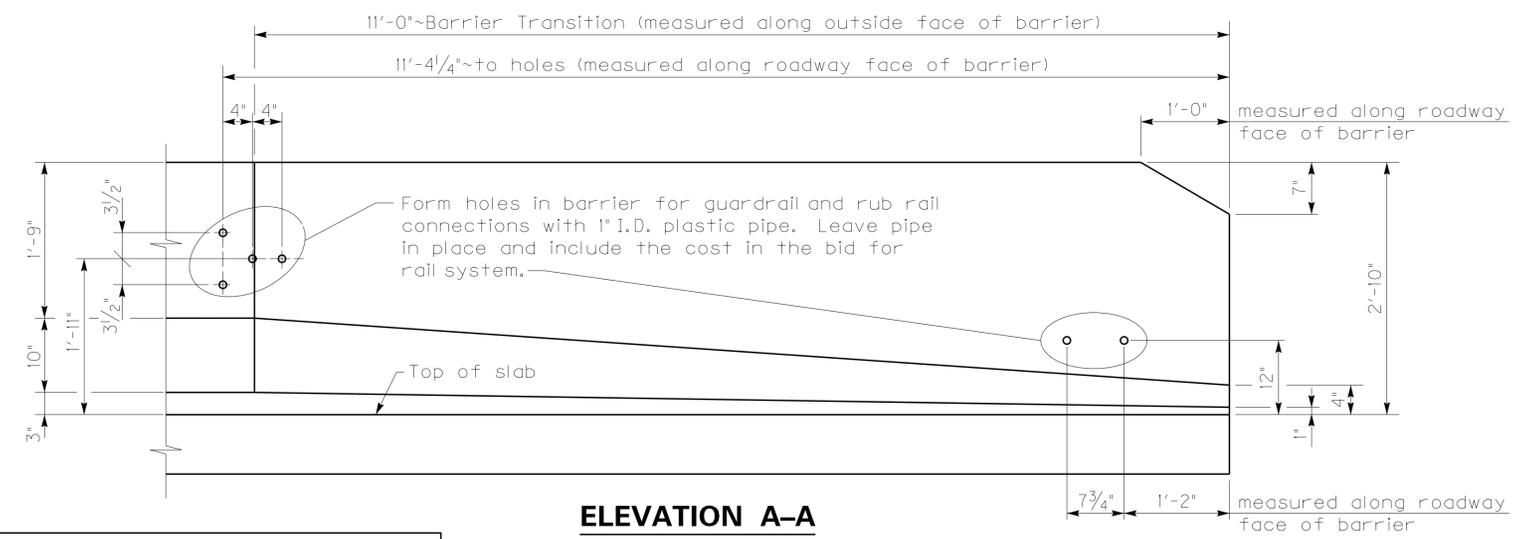
**STAKEOUT DIAGRAM**

PREPARED BY  
**T.H.E. ENGINEERS, INC.**

ITEM NUMBER  
 12-311.35

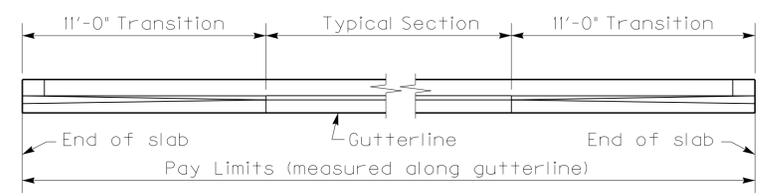
SHEET NO.  
 S20  
 DRAWING NO.  
 25296





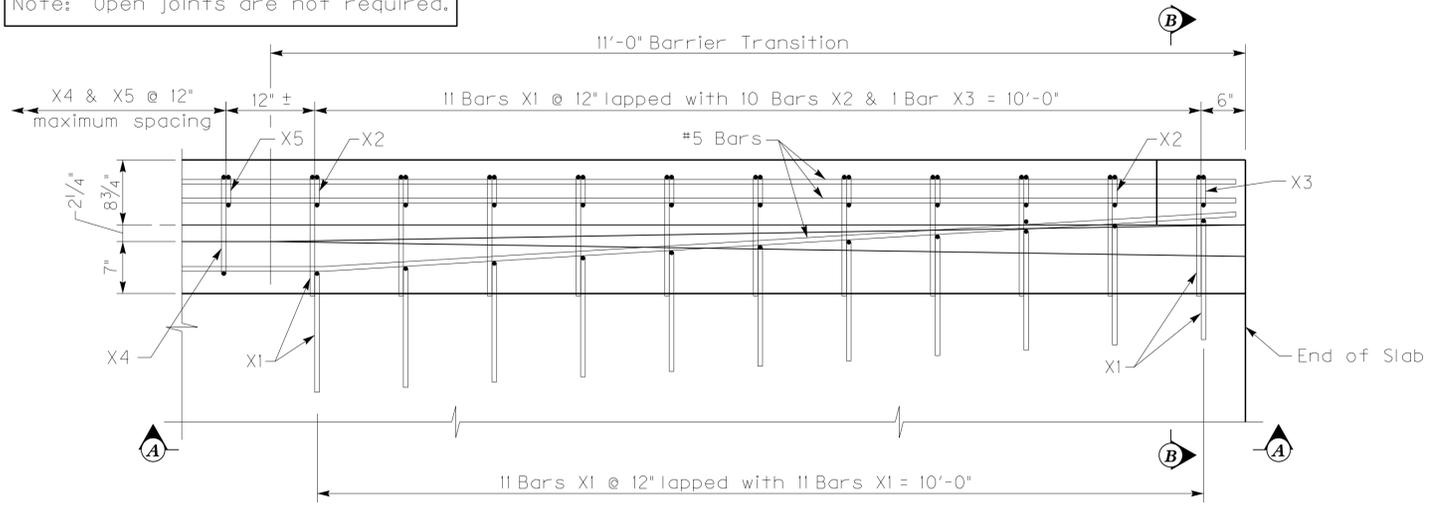
**ELEVATION A-A**

Note: Open joints are not required.

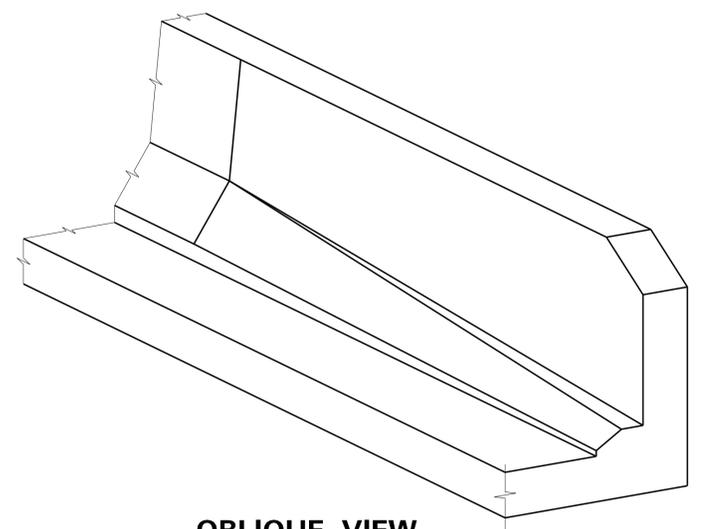


**PLAN OF BARRIER**

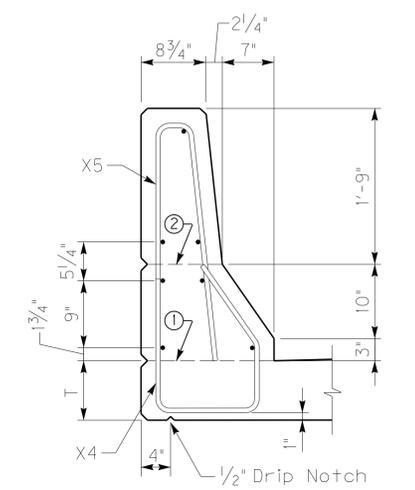
Note: X1 & X3 Bars at end of slab may be adjusted to maintain 2" minimum clearance on curved and skewed end bridges.



**PLAN OF BARRIER TRANSITION**

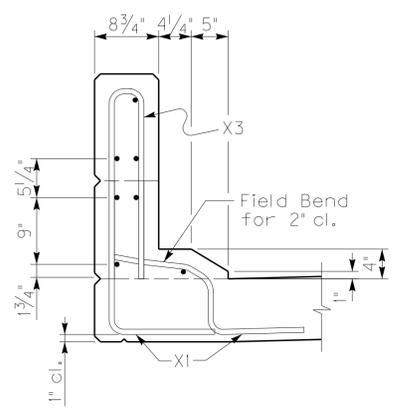


**OBLIQUE VIEW**

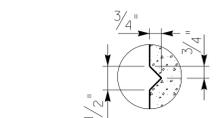


**TYPICAL BARRIER SECTION**

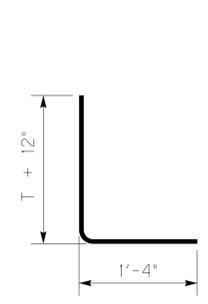
- Mandatory roughened construction joint. Concrete above this joint is to be placed after slab has been properly cured and included in the bid for Rail System, Type 3.
- Permissible construction joint. "V-Groove" rustication joint is required if construction joint is used. 1/4" Open Joints are not required.



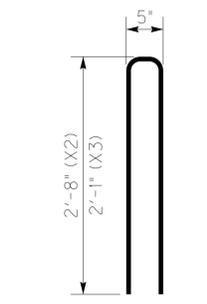
**SECTION B-B**



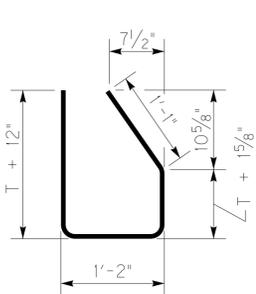
**"V-Groove" Rustication**



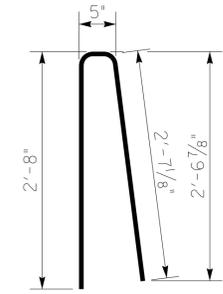
**X1(e) Bars**  
#5 Bar



**X2(e) & X3(e) Bars**  
#5 Bar



**X4(e) Bars**  
#5 Bar



**X5(e) Bars**  
#5 Bar

**General Notes**

CONCRETE: Use Class AA Concrete throughout.

**OPTIONAL WELDED WIRE REINFORCEMENT:**

As the contractor's option, deformed welded wire reinforcement (WWR) in accordance with ASTM A497 and epoxy coated in accordance with ASTM A884 may be used in place of stirrup bars X2, X3, and X5 as well as the straight or longitudinal reinforcement attached to these stirrups. Use size D31 wire for both stirrups and straight reinforcement. Locate and space the wire reinforcement the same as the conventional reinforcement except lower the top straight bar at least 2 1/2" away from the bend in the stirrup. Use a minimum 2'-8" lap for the straight reinforcement between sheets of WWR.

**MEASUREMENT:** The linear foot bid for the barrier is measured along the roadway gutterline. Include all reinforcement shown and all concrete above the top of slab in the bid item for Rail System Type 3.

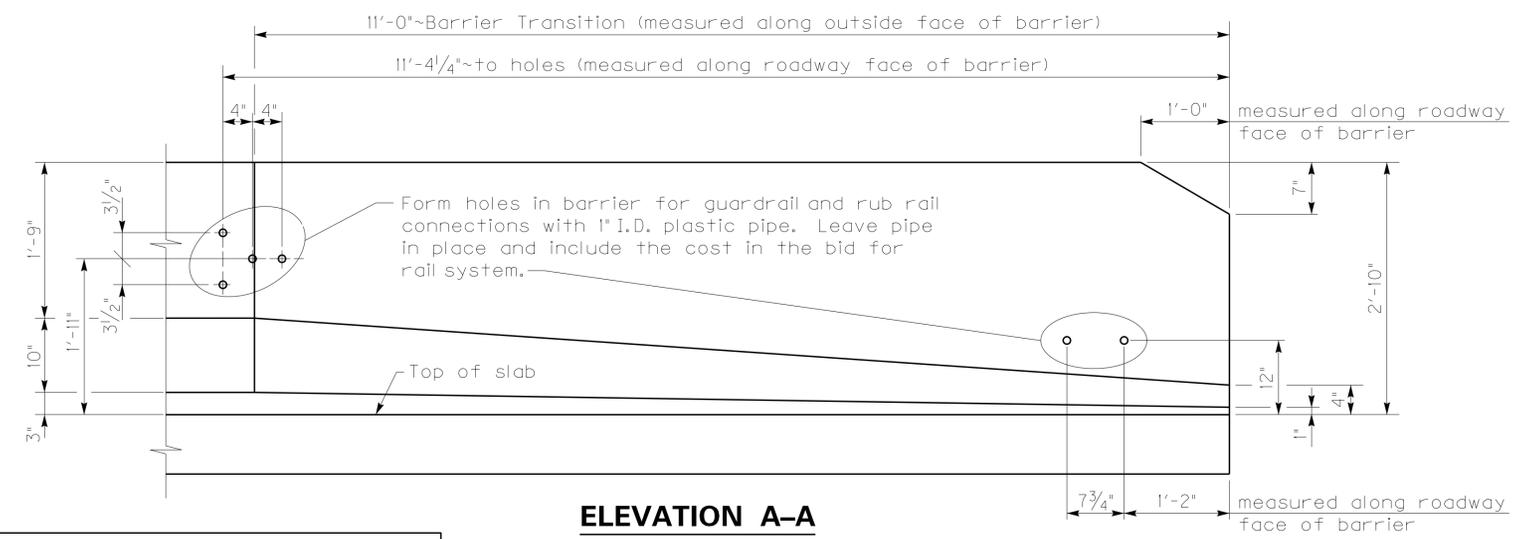
**REINFORCEMENT:** All reinforcement shown on this sheet is to be epoxy coated. Use stirrup bend diameters for all bent bars. Straight reinforcement is to be Size #5 and lapped 2'-2" when necessary.

KENTUCKY  
DEPARTMENT OF HIGHWAYS

RAIL SYSTEM TYPE 3

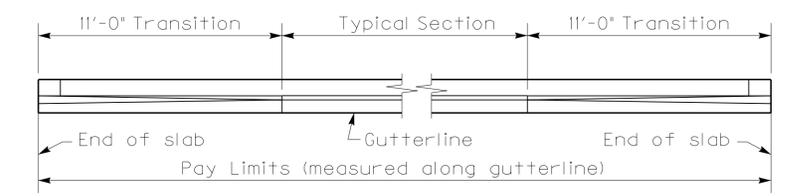
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 USER: David  
 DATE PLOTTED: October 9, 2012  
 E-SHEET NAME:  
 MicroStation v8.11.7.443

REVISSED 12-7-12



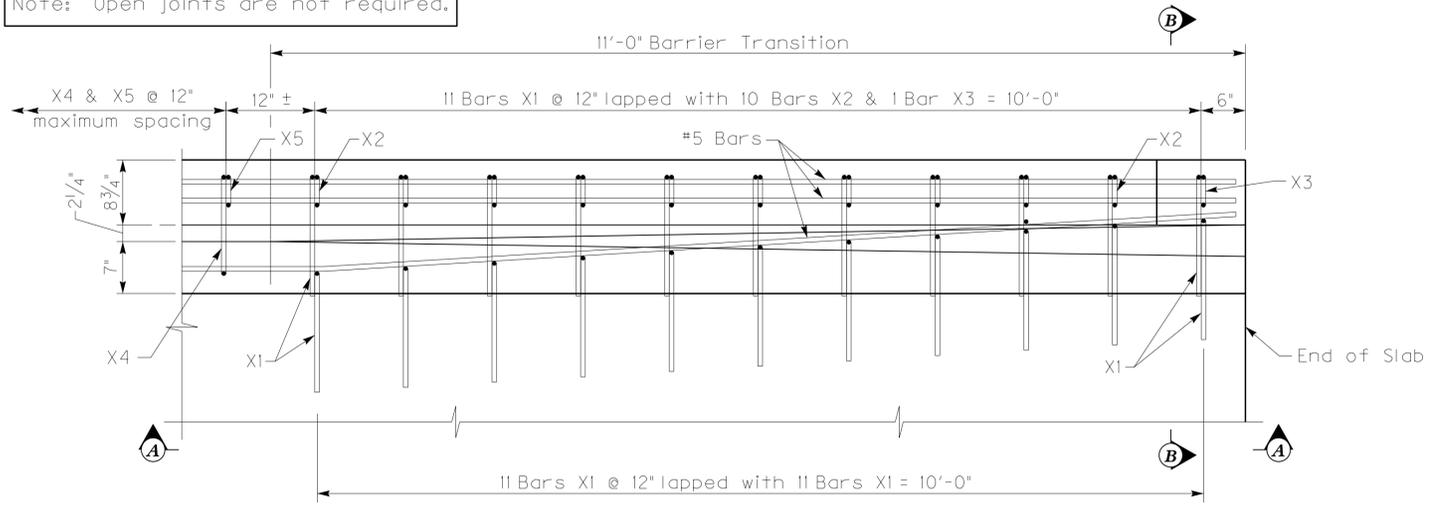
**ELEVATION A-A**

Note: Open joints are not required.

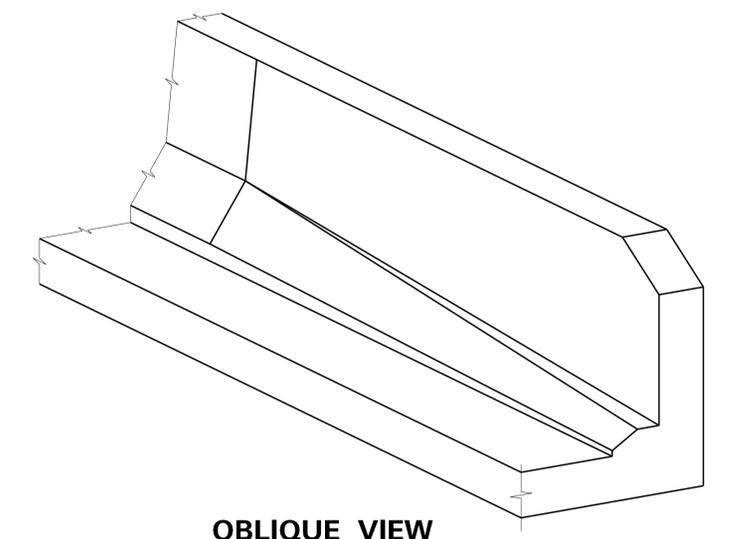


**PLAN OF BARRIER**

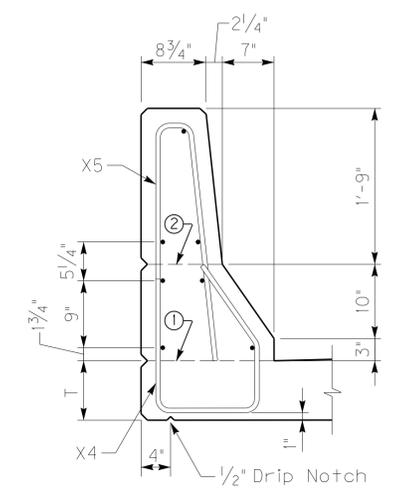
Note: X1 & X3 Bars at end of slab may be adjusted to maintain 2" minimum clearance on curved and skewed end bridges.



**PLAN OF BARRIER TRANSITION**

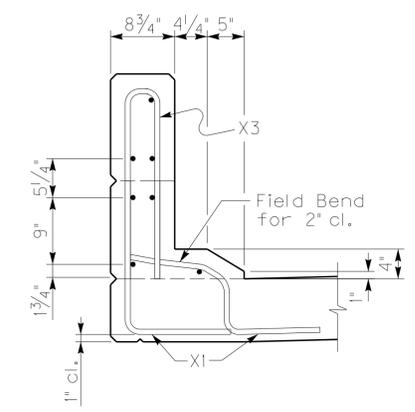


**OBLIQUE VIEW**

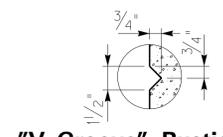


**TYPICAL BARRIER SECTION**

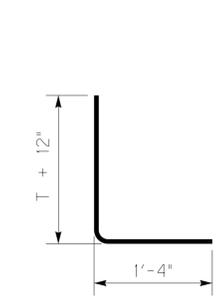
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- Permissible construction joint. "V-Groove" rustication joint is required if construction joint is used. 1/4" Open Joints are not required.



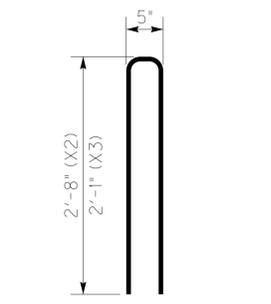
**SECTION B-B**



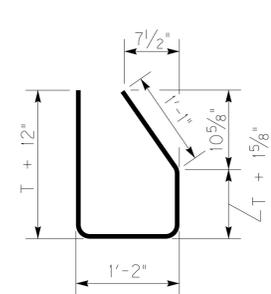
**"V-Groove" Rustication**



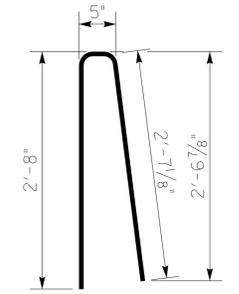
**X1(e) Bars**  
#5 Bar



**X2(e) & X3(e) Bars**  
#5 Bar



**X4(e) Bars**  
#5 Bar



**X5(e) Bars**  
#5 Bar

**General Notes**

CONCRETE: Use Class AA Concrete throughout.

**OPTIONAL WELDED WIRE REINFORCEMENT:**

As the contractor's option, deformed welded wire reinforcement (WWR) in accordance with ASTM A497 and epoxy coated in accordance with ASTM A884 may be used in place of stirrup bars X2, X3, and X5 as well as the straight or longitudinal reinforcement attached to these stirrups. Use size D31 wire for both stirrups and straight reinforcement. Locate and space the wire reinforcement the same as the conventional reinforcement except lower the top straight bar at least 2 1/2" away from the bend in the stirrup. Use a minimum 2'-8" lap for the straight reinforcement between sheets of WWR.

**MEASUREMENT:** The linear foot bid for the barrier is measured along the roadway gutterline. Include all reinforcement shown and all concrete above the top of slab in the bid item for Rail System Type 3.

**REINFORCEMENT:** All reinforcement shown on this sheet is to be epoxy coated. Use stirrup bend diameters for all bent bars. Straight reinforcement is to be Size #5 and lapped 2'-2" when necessary.

KENTUCKY  
DEPARTMENT OF HIGHWAYS

RAIL SYSTEM TYPE 3

SUBMITTED: 6-15-2012  
DIRECTOR DIVISION OF STRUCTURAL DESIGN DATE  
006

FILE NAME: Z:\STRUCTURES\FINAL STRUCTURES\LETCHER\FINAL\BR2\SI12.DGN  
 USER: David  
 DATE PLOTTED: October 9, 2012  
 E-SHEET NAME:  
 MicroStation v8.11.7.443

LETTING DATE

CONSTRUCTION PROJECT NO.

FILE NAME: \$\$\$designs\$file\$specification\$\$\$  
 USERNAME: \$\$\$plot+edby\$\$\$  
 DATE: \$\$\$DATE\$\$\$  
 SHEET LOCATION:

# TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

## LETCHER COUNTY

### US 119 OVER SEDIMENT POND STA. 1503+53.00

#### ESTIMATE OF QUANTITIES

BID ITEM	CONCRETE CLASS "A"	CONCRETE CLASS "AA"	STEEL REINF.	STEEL REINF. EPOXY COATED	PCI-BEAMS TYPE 8	FOUNDATION PREPARATION	STRUCTURE EXCAVATION SOLID ROCK	STRUCTURE GRANULAR BACKFILL	MASONRY COATING	14" PILES PRECAST PRESTRESSED CONCRETE	TEST PILES	PRE-DRILLING PILES	ARMORED EDGE	GEOTEXTILE FABRIC TYPE IV	
UNIT	CU. YDS.	CU. YDS.	LBS.	LBS.	LIN. FT.	LUMP SUM	CU. YDS.	CU. YDS.	SO. YDS.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	SO. YDS.	
INTEGRAL END BENT 1	33.1	7.5	5,744	1,746				200	45	459	27			190	
INTEGRAL END BENT 2	33.1	7.5	5,744	1,746			25	200	45	255	15	239		190	
SUBSTRUCTURE															
SUPERSTRUCTURE			336.7		864.0				235				111		
<b>BRIDGE TOTALS</b>		66.2	351.7	11,488	60,028	864.0	1	25	400	325	714	42	239	111	380

#### METRIC UNIT

BID ITEM	CONCRETE CLASS "A"	CONCRETE CLASS "AA"	STEEL REINF.	STEEL REINF. EPOXY COATED	PCI-BEAMS TYPE 8	FOUNDATION PREPARATION	STRUCTURE EXCAVATION SOLID ROCK	STRUCTURE GRANULAR BACKFILL	MASONRY COATING	355MM PILES PRECAST PRESTRESSED CONCRETE	TEST PILES	PRE-DRILLING PILES	ARMORED EDGE	GEOTEXTILE FABRIC TYPE IV	
UNIT	CU. M.	CU. M.	KG	KG	M	LUMP SUM	CU. M.	CU. M.	SO. M	M	M	M	M	SO. M	
INTEGRAL END BENT 1	25.3	5.7	2,608	793				153	38	139.9	8.2			159	
INTEGRAL END BENT 2	25.3	5.7	2,608	793			19	153	38	77.7	4.6	72.8		159	
SUBSTRUCTURE															
SUPERSTRUCTURE			257.6		263.5				196				33.8		
<b>BRIDGE TOTALS</b>		50.6	269.0	5,216	27,253	263.5	1	19	306	272	217.6	12.8	72.8	33.8	318

#### BILL OF INCIDENTAL MATERIALS

Material	Location
1" I.D. Plastic Pipe	Barrier Transitions
1/2" Cork	Integral End Bents
1/4" Cork	Integral End Bents
Lead Plates	Integral End Bents
Threaded Anchor Bars	Diaphragms
Threaded Inserts 3/4"	PCI Beams
Intermediate Diaphragms	PCI Beams

#### INDEX OF SHEETS

Sheet No.	Description
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S7-S8	Integral End Bent 2
S9	Framing Plan
S10	Prestressed Concrete I-Beam
S11-S14	Superstructure
S15-S16	Construction Elevations
S17	Roll System Type 3

#### SPECIAL NOTES

For Stone Masonry Veneer

#### SPECIAL PROVISIONS

69G Embankment @ Bridge End Bent Structures

#### STANDARD DRAWINGS

BGX-006-09	Stencil Construction Date for Bridges
BGX-012-02	Geotechnical legend
BJE-001-12	Neoprene Expansion Dam and Armored Edges
BPC-011-07	14" Precast Prestressed Concrete pile

#### SPECIFICATIONS

2012 Standard Specifications for Road and Bridge Construction with Current Supplemental Specifications  
 2002 AASHTO Standard Specifications for Highway Bridges

#### REVISION

REVISION	DATE	CHECKED BY
DATE : 09-03		
DESIGNED BY:		
DETAILED BY: C.H.		W.T.B.

**Commonwealth of Kentucky  
 DEPARTMENT OF HIGHWAYS**

COUNTY  
**LETCHER**

ROUTE US 119 CROSSING SEDIMENT POND

### COVER SHEET

PREPARED BY <b>T.H.E. ENGINEERS, INC.</b>	SHEET NO. S1 of S17
	DRAWING NO. 25613

ITEM NUMBER

12-311.35

LETTING DATE

CONSTRUCTION PROJECT NO.

FILE NAME: \$\$\$designs\$file\$specification\$\$\$

USER NAME: \$\$\$plotter\$\$\$

DATE: \$\$\$DATE\$\$\$

SHEET LOCATION:

# TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

## LETCHER COUNTY

### US 119 OVER SEDIMENT POND STA. 1503+53.00

△ REVISED 12-07-12

#### ESTIMATE OF QUANTITIES

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#### SPECIAL NOTES

For Stone Masonry Veneer

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#### SPECIFICATIONS

2012 Standard Specifications for Road and Bridge Construction with Current Supplemental Specifications

2002 AASHTO Standard Specifications for Highway Bridges

#### REVISION

DATE	CHECKED BY
09-03	
DESIGNED BY:	
DETAILED BY: C.H.	W.T.B.

**Commonwealth of Kentucky**  
**DEPARTMENT OF HIGHWAYS**

COUNTY  
**LETCHER**

ROUTE CROSSING  
US 119 SEDIMENT POND

### COVER SHEET

PREPARED BY  
**T.H.E. ENGINEERS, INC.**

SHEET NO.  
S1 of S17  
DRAWING NO.  
25613

#### ITEM NUMBER

△ 12-311.35

# GENERAL NOTES

▲ REVISED 12-07-12

## SPECIFICATIONS

REFERENCES TO THE SPECIFICATIONS ARE TO THE 2012 EDITION OF THE KENTUCKY DEPARTMENT OF HIGHWAYS STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION INCLUDING SUPPLEMENTAL SPECIFICATIONS. ALL REFERENCES TO THE AASHTO SPECIFICATIONS ARE TO THE 2002 EDITION OF THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAYS BRIDGES, WITH INTERIMS.

## DESIGN LOAD AND METHOD

THIS BRIDGE IS DESIGNED FOR HS25 LIVE LOAD OR ALTERNATE MILITARY LOADING, WHICHEVER PRODUCES THE GREATER STRESS. THE HS25 LIVE LOAD IS ARRIVED AT BY INCREASING THE STANDARD HS20-44 TRUCK AND LANE LOADS AS SPECIFIED IN THE AASHTO SPECIFICATIONS BY 25%. ALL REINFORCED CONCRETE MEMBERS ARE DESIGNED BY THE LOAD FACTOR METHOD AS SPECIFIED IN THE CURRENT AASHTO SPECIFICATIONS.

## WIND LOAD

THIS BRIDGE IS DESIGNED FOR A WIND LOAD BASED ON A WIND VELOCITY OF 100 MPH.

## MATERIALS DESIGN SPECIFICATIONS

FOR CLASS "A" REINFORCED CONCRETE  
F'C = 3,500 PSI  
FOR CLASS "AA" REINFORCED CONCRETE  
F'C = 4,000 PSI  
FOR STRUCTURAL STEEL  
FY = 36,000 PSI FOR A36 STEEL  
FOR STEEL REINFORCEMENT  
FY = 60000 PSI  
FOR PRESTRESSED BEAM CONCRETE  
F'C = 8,000 PSI  
F'S = 270,000 PSI

## FOUNDATION PRESSURE

SEE FOUNDATION LAYOUT SHEET. PILES ARE DESIGNED FOR LOADS AS SHOWN IN THE PILE RECORD.

## CONCRETE

CLASS "AA" CONCRETE IS TO BE USED THROUGHOUT THE SUPERSTRUCTURE. CLASS "A" CONCRETE IS TO BE USED IN THE PEDESTALS AND IN THE SUBSTRUCTURE BELOW THE TOP OF THE CAPS. PRESTRESSED BEAM CONCRETE SHALL BE IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.

## REINFORCEMENT

DIMENSIONS SHOWN FROM THE FACE OF CONCRETE TO BARS ARE CLEAR DISTANCES UNLESS OTHERWISE SHOWN. SPACING OF BARS IS FROM CENTER TO CENTER OF BARS. CLEAR DISTANCE TO FACE OF CONCRETE IS 2", UNLESS OTHERWISE NOTED. EPOXY COAT BARS DESIGNATED BY THE SUFFIX (E) IN ACCORDANCE WITH SECTION 811.10 OF THE STANDARD SPECIFICATIONS. USE STIRRUP BEND DIAMETERS FOR BARS DESIGNATED BY SUFFIX (S) IN A BILL OF REINFORCEMENT.

## BILL OF INCIDENTAL MATERIAL

THE QUANTITIES SHOWN IN THE BILL OF INCIDENTAL MATERIALS ARE APPROXIMATE ONLY AND THE CONTRACTOR IS RESPONSIBLE FOR FURNISHING ENOUGH MATERIAL TO COMPLETE THE WORK IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. THE COST OF THESE ITEMS IS TO BE INCLUDED IN THE UNIT PRICE BID FOR CLASS "A" CONCRETE, CLASS "AA" CONCRETE OR PRESTRESSED CONCRETE I-BEAMS AS NOTED.

## PILE DATA

PILES SHALL BE DRIVEN TO REFUSAL. TEST PILES SHALL BE DRIVEN WHERE DESIGNATED ON THE PLANS TO DETERMINE THE LENGTH OF PILE REQUIRED. ALL TEST PILES SHALL BE ACCURATELY LOCATED SO THAT THEY MAY BE USED IN THE FINISHED STRUCTURE.

A HAMMER ENERGY BETWEEN 15 and 20 KIP-FT. WILL BE NECESSARY TO DRIVE THE PILES TO BEDROCK WITHOUT ENCOUNTERING EXCESSIVE BLOW COUNTS AND OVER-STRESSING THE PILES. THE CONTRACTOR SHALL SUBMIT HIS PILE DRIVING SYSTEM TO THE DEPARTMENT FOR APPROVAL PRIOR TO THE INSTALLATION OF THE FIRST PILE. APPROVAL OF THE PILE DRIVING SYSTEM BY THE ENGINEER WILL BE SUBJECT TO SATISFACTORY FIELD PERFORMANCE OF THE PILE DRIVING PROCEDURES.

## PILE POINTS

PILE POINTS ARE REQUIRED ON ALL PILES. THE PILE POINTS SHALL BE THE TYPE FOR KEYING INTO A SLOPING ROCK SURFACE. PILE POINTS SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND STANDARD DRAWING BPC-011-07. INCLUDE THE COST OF PILE TIP IN THE UNIT PRICE BID PER LINEAR FOOT OF PILING.

## PRE-DRILLED PILES

THE END BENT 2 PILES SHALL BE PRE-DRILLED THROUGH THE EXISTING OVERBURDEN AND ROCK TO APPROXIMATE ELEVATION 1585.00. THE MINIMUM LENGTH OF A PILE SHALL BE FIFTEEN (15) FEET. PILES SHALL BE INSTALLED IN THE PRE- DRILLED HOLES AND THE HOLES BACKFILLED WITH SAND OR PEA GRAVEL. THE PILES SHALL BE DRIVEN TO REFUSAL AFTER BACKFILLING. A TEMPORARY CASING MAY BE REQUIRED TO PREVENT COLLAPSE OF THE HOLE. IF USED, THE CASING SHALL BE REMOVED ONLY AFTER THE PILE IS IN PLACE AND AS THE HOLE IS BEING BACKFILLED. THE COST OF ALL MATERIAL, LABOR AND EQUIPMENT NEEDED TO PRE-DRILL AND BACKFILL THE HOLES SHALL BE INCLUDED IN THE CONTRACT PRICE PER FOOT FOR "PRE-DRILLING FOR PILES". INCLUDE THE COST OF PILE TIP IN THE UNIT PRICE BID PER LINEAR FOOT OF PILE.

## TEMPORARY SUPPORTS

TEMPORARY SUPPORTS OR SHORING WILL NOT BE PERMITTED UNDER THE GIRDERS WHEN POURING THE CONCRETE FLOOR SLAB OR WHEN TAKING "TOP OF BEAM "ELEVATIONS.

## DIMENSIONS

DIMENSIONS ARE FOR A NORMAL TEMPERATURE OF 60 DEGREES FAHRENHEIT. LAYOUT DIMENSIONS ARE HORIZONTAL MEASUREMENTS.

## SHOP DRAWINGS

SUBMIT SHOP DRAWINGS THAT ARE REQUIRED BY THE PLANS AND SPECIFICATIONS DIRECTLY TO THE CONSULTANT. IF ANY CHANGES IN THE DESIGN PLANS ARE PROPOSED BY A FABRICATOR OR SUPPLIER, SUBMIT THOSE CHANGES TO THE CONSULTANT THROUGH THE CONTRACTOR. THE CONSULTANT SHALL PROVIDE THE DIVISION OF BRIDGES WITH ONE COPY OF THE APPROVED SHOP PLANS.

## MATERIALS

ASTM OR AASHTO SPECIFICATIONS AS DESIGNATED BELOW SHALL GOVERN THE MATERIALS FURNISHED.

MATERIAL	A. S. T. M.	AASHTO
STRUCTURAL STEEL		M-183
SHEET LEAD AND PIG LEAD	B29-79	
STEEL REINFORCEMENT, GRADE 60	A-615	
STEEL PIPE	A-500	

## BEVELED EDGES

BEVEL ALL EXPOSED EDGES 1/8" UNLESS OTHERWISE NOTED.

## ARMORED EDGE

STEEL MATERIAL SHOULD BE NEW, COMMERCIAL GRADE STEEL SUITABLE FOR WELDING. ACCEPTANCE WILL BE BASED ON VISUAL INSPECTION BY THE ENGINEER. STUD SHEAR CONNECTORS SHALL CONFORM TO ASTM A108, GRADE 1015. TECHNIQUES AND WELDING PROCEDURE SHALL COMPLY WITH CURRENT JOINT SPECIFICATION ANSI/ AASHTO/ AWS D1.5 BRIDGE WELDING CODE. CONTARY TO THE SPECIFICATIONS, ALL METAL SURFACES SHALL HAVE ONE SHOP COAT OF ORGANIC ZINC PRIMER APPLIED PRIOR TO SHIPPING THE STEEL FROM THE PLANT. NO FIELD COATING IS REQUIRED. THE COST OF FURNISHING AND PLACING THE ARMORED EDGE IN THE LOCATIONS SHOWN ON THESE PLANS SHALL BE BID PER LINEAR FOOT.

## SLAB POURING SEQUENCE

THE SUPERSTRUCTURE SLAB SHALL BE POURED CONTINUOUSLY FROM OUT TO OUT BEFORE BEING ALLOWED TO SET.

## RAIL SYSTEM TYPE 3 (NEW JERSEY BARRIER)

CONTRARY TO SHEET S17 'MEASUREMENT', THE QUANTITIES FOR RAIL SYSEM TYPE 3 ARE INCLUDED IN THE SUPERSTRUCTURE CONCRETE CLASS 'AA' AND STEEL REINFORCEMENT EPOXY COATED.

## ON-SITE INSPECTION

EACH CONTRACTOR SUBMITTING A BID FOR THIS WORK SHALL MAKE A THOROUGH INSPECTION OF THE PROJECT SITE PRIOR TO SUBMITTING A BID AND SHALL BE THOROUGHLY FAMILIARIZED WITH EXISTING CONDITIONS SO THAT 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 OF HIGHWAYS.

## CONSTRUCTION IDENTIFICATION

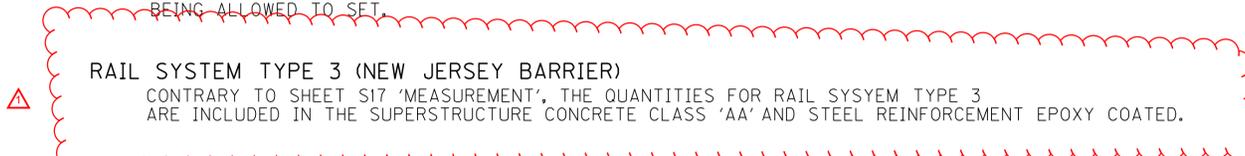
THE NAMES OF THE PRIME CONTRACTOR AND THE SUB-CONTRACTOR SHALL BE IMPRINTED IN THE CONCRETE WITH ONE INCH LETTERS AT A LOCATION DESIGNATED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISHED ALL PLANS, EQUIPMENT AND LABOR NECESSARY TO DO THE WORK FOR WHICH NO DIRECT PAYMENT WILL BE MADE.

FILE NAME: \$\$\$designs\$file\$specification\$\$\$

USER NAME: \$\$\$plotterdb\$\$\$

DATE: \$\$\$DATE\$\$\$

SHEET LOCATION:



ITEM NUMBER  
12-311.35

REVISION	DATE
DATE : 09-03	CHECKED BY
DESIGNED BY:	
DETAILED BY: C. H.	W. T. B.
<b>Commonwealth of Kentucky</b> <b>DEPARTMENT OF HIGHWAYS</b>	
COUNTY <b>LETCHER</b>	
ROUTE US 119	CROSSING SEDIMENT POND
<b>GENERAL NOTES</b>	
PREPARED BY <b>T.H.E. ENGINEERS, INC.</b>	SHEET NO. S2 DRAWING NO. 25613

# GENERAL NOTES

## SPECIFICATIONS

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## MATERIALS

ASTM OR AASHTO SPECIFICATIONS AS DESIGNATED BELOW SHALL GOVERN THE MATERIALS FURNISHED.

MATERIAL	A. S. T. M.	AASHTO
STRUCTURAL STEEL		M-183
SHEET LEAD AND PIG LEAD	B29-79	
STEEL REINFORCEMENT, GRADE 60	A-615	
STEEL PIPE	A-500	

## BEVELED EDGES

BEVEL ALL EXPOSED EDGES 1/8" UNLESS OTHERWISE NOTED.

## ARMORED EDGE

STEEL MATERIAL SHOULD BE NEW, COMMERCIAL GRADE STEEL SUITABLE FOR WELDING. ACCEPTANCE WILL BE BASED ON VISUAL INSPECTION BY THE ENGINEER. STUD SHEAR CONNECTORS SHALL CONFORM TO ASTM A108, GRADE 1015. TECHNIQUES AND WELDING PROCEDURE SHALL COMPLY WITH CURRENT JOINT SPECIFICATION ANSI/ AASHTO/ AWS D1.5 BRIDGE WELDING CODE. CONTARY TO THE SPECIFICATIONS, ALL METAL SURFACES SHALL HAVE ONE SHOP COAT OF ORGANIC ZINC PRIMER APPLIED PRIOR TO SHIPPING THE STEEL FROM THE PLANT. NO FIELD COATING IS REQUIRED. THE COST OF FURNISHING AND PLACING THE ARMORED EDGE IN THE LOCATIONS SHOWN ON THESE PLANS SHALL BE BID PER LINEAR FOOT.

## SLAB POURING SEQUENCE

THE SUPERSTRUCTURE SLAB SHALL BE POURED CONTINUOUSLY FROM OUT TO OUT BEFORE BEING ALLOWED TO SET.

## RAIL SYSTEM TYPE 3 (NEW JERSEY BARRIER)

CONTRARY TO SHEET S17 'MEASUREMENT', THE QUANTITIES FOR RAIL SYSEM TYPE 3 ARE INCLUDED IN THE SUPERSTRUCTURE CONCRETE CLASS "AA" AND STEEL REINFORCEMENT EPOXY COATED.

## ON-SITE INSPECTION

EACH CONTRACTOR SUBMITTING A BID FOR THIS WORK SHALL MAKE A THOROUGH INSPECTION OF THE PROJECT SITE PRIOR TO SUBMITTING A BID AND SHALL BE THOROUGHLY FAMILIARIZED WITH EXISTING CONDITIONS SO THAT 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 OF HIGHWAYS.

## CONSTRUCTION IDENTIFICATION

THE NAMES OF THE PRIME CONTRACTOR AND THE SUB-CONTRACTOR SHALL BE IMPRINTED IN THE CONCRETE WITH ONE INCH LETTERS AT A LOCATION DESIGNATED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ALL PLANS, EQUIPMENT AND LABOR NECESSARY TO DO THE WORK FOR WHICH NO DIRECT PAYMENT WILL BE MADE.

FILE NAME: \$\$\$designs\$file\$specification\$\$\$

USER NAME: \$\$\$plot\$to\$tdb\$by\$\$\$

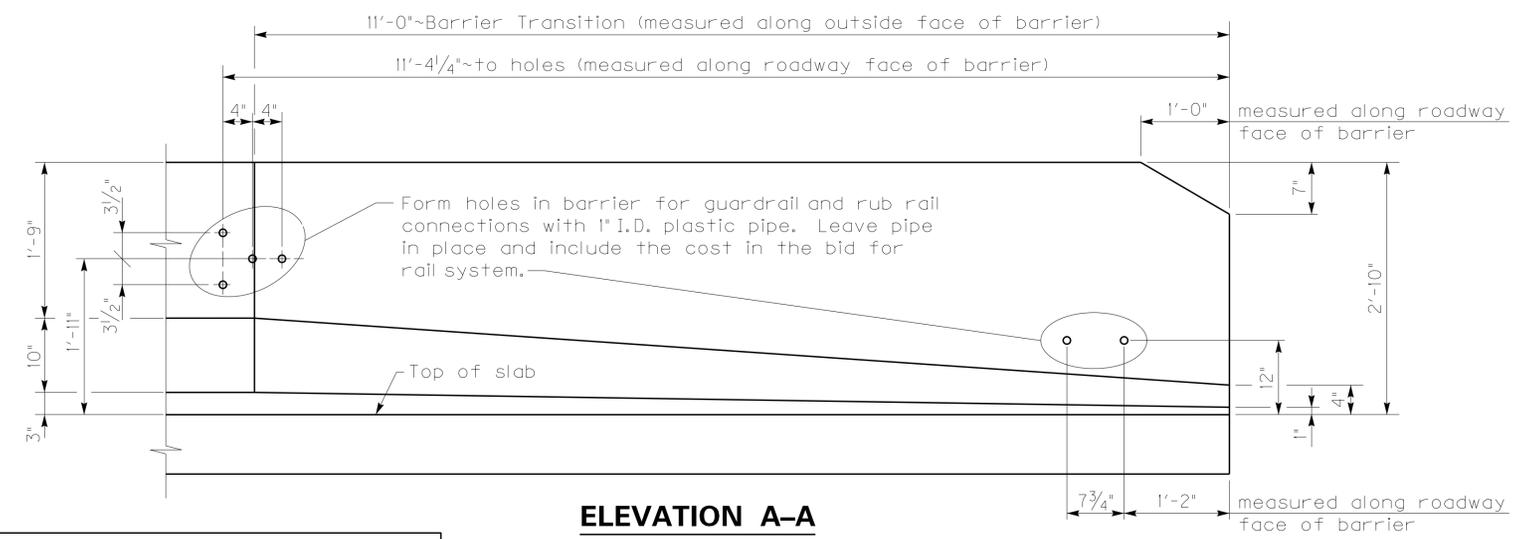
DATE: \$\$\$DATE\$\$\$

SHEET LOCATION:

REVISION		DATE	
DATE : 09-03		CHECKED BY	
DESIGNED BY:			
DETAILED BY: C. H.		W.T.B.	
<b>Commonwealth of Kentucky</b>			
<b>DEPARTMENT OF HIGHWAYS</b>			
COUNTY			
<b>LETCHER</b>			
ROUTE	CROSSING		
US 119	SEDIMENT POND		
<b>GENERAL NOTES</b>			
PREPARED BY			SHEET NO.
<b>T.H.E. ENGINEERS, INC.</b>			S2
DRAWING NO.			25613

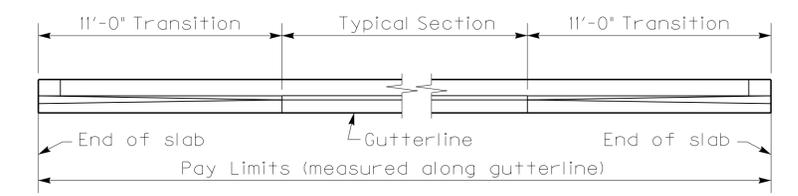
ITEM NUMBER
12-311.35

FILE NAME: Z:\STRUCTURES\FINAL STRUCTURES\LETCHER\FINALS\FINALSEDPOND\S17.DGN  
 USER: David  
 DATE PLOTTED: October 4, 2012  
 E-SHEET NAME:  
 MicroStation v8.11.7.443



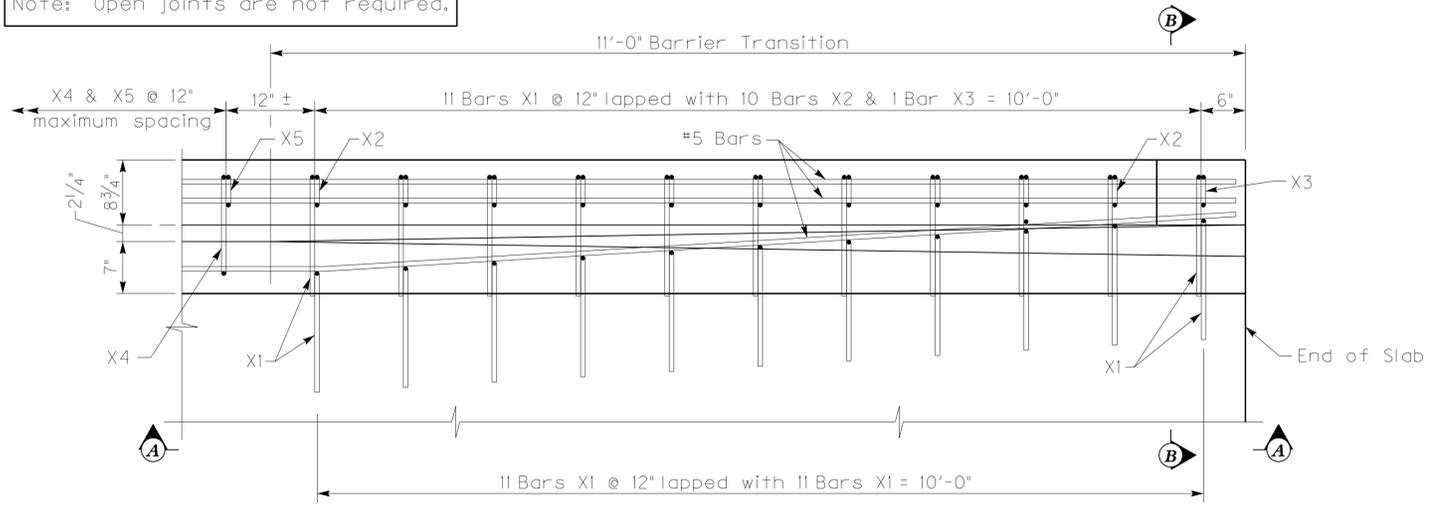
**ELEVATION A-A**

Note: Open joints are not required.

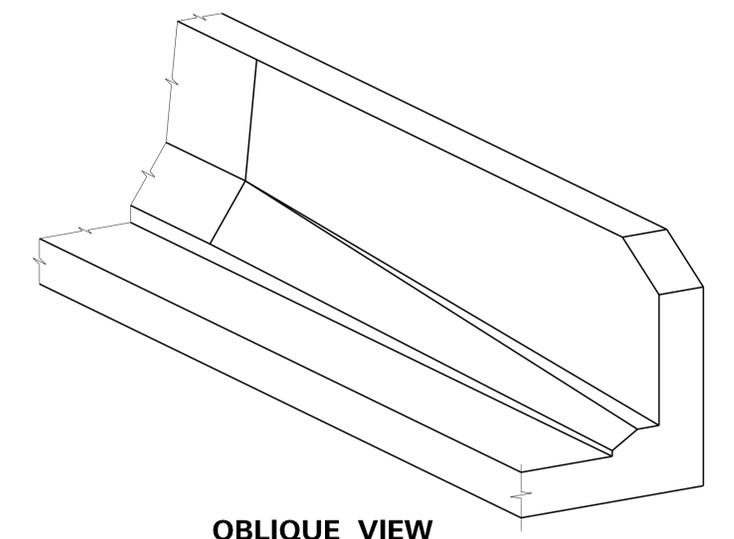


**PLAN OF BARRIER**

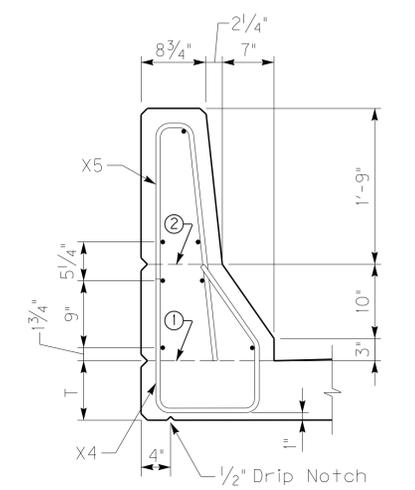
Note: X1 & X3 Bars at end of slab may be adjusted to maintain 2" minimum clearance on curved and skewed end bridges.



**PLAN OF BARRIER TRANSITION**

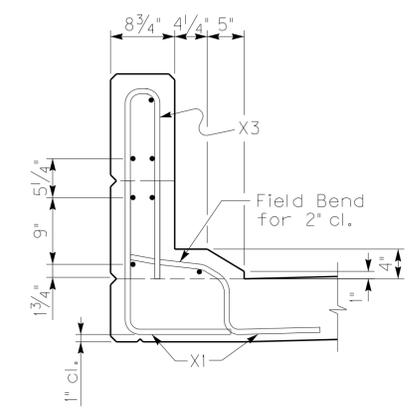


**OBLIQUE VIEW**

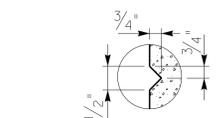


**TYPICAL BARRIER SECTION**

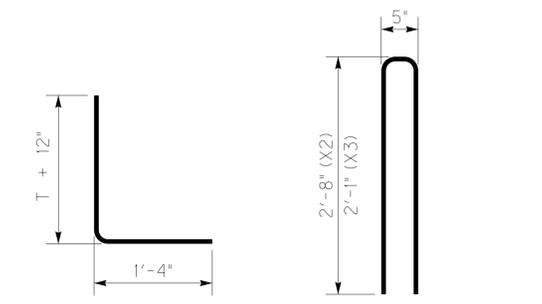
- Mandatory roughened construction joint. Concrete above this joint is to be placed after slab has been properly cured and included in the bid for Rail System, Type 3.
- Permissible construction joint. "V-Groove" rustication joint is required if construction joint is used. 1/4" Open Joints are not required.



**SECTION B-B**

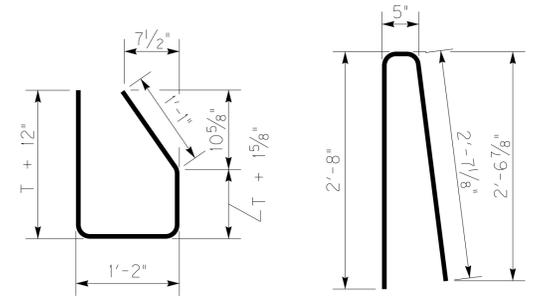


**"V-Groove" Rustication**



**X1(e) Bars**  
#5 Bar

**X2(e) & X3(e) Bars**  
#5 Bar



**X4(e) Bars**  
#5 Bar

**X5(e) Bars**  
#5 Bar

**General Notes**

CONCRETE: Use Class AA Concrete throughout.

**OPTIONAL WELDED WIRE REINFORCEMENT:**

As the contractor's option, deformed welded wire reinforcement (WWR) in accordance with ASTM A497 and epoxy coated in accordance with ASTM A884 may be used in place of stirrup bars X2, X3, and X5 as well as the straight or longitudinal reinforcement attached to these stirrups. Use size D31 wire for both stirrups and straight reinforcement. Locate and space the wire reinforcement the same as the conventional reinforcement except lower the top straight bar at least 2 1/2" away from the bend in the stirrup. Use a minimum 2'-8" lap for the straight reinforcement between sheets of WWR.

**MEASUREMENT:** The linear foot bid for the barrier is measured along the roadway gutterline. Include all reinforcement shown and all concrete above the top of slab in the bid item for Rail System Type 3.

**REINFORCEMENT:** All reinforcement shown on this sheet is to be epoxy coated. Use stirrup bend diameters for all bent bars. Straight reinforcement is to be Size #5 and lapped 2'-2" when necessary.

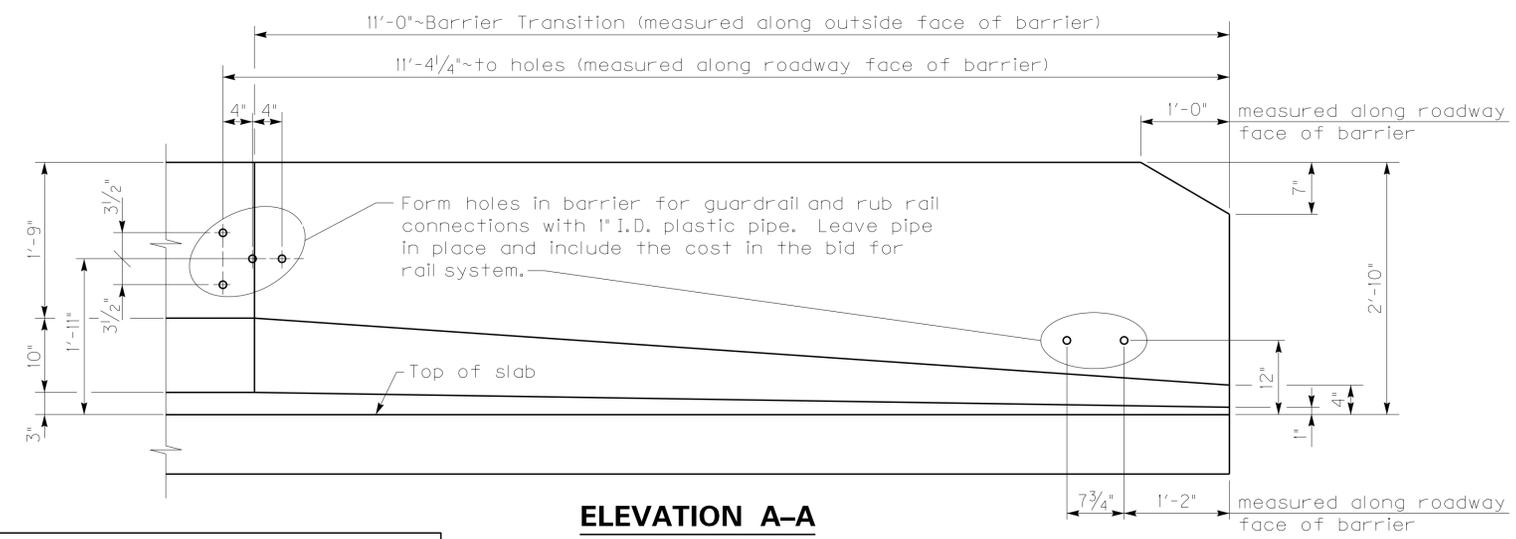
**KENTUCKY  
DEPARTMENT OF HIGHWAYS**

**RAIL SYSTEM TYPE 3**

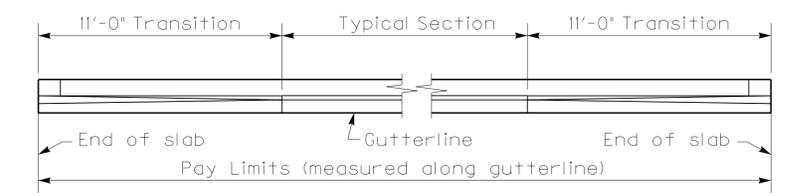
SUBMITTED: \_\_\_\_\_ DATE: 6-15-2012  
 DIRECTOR DIVISION OF STRUCTURAL DESIGN DATE

006

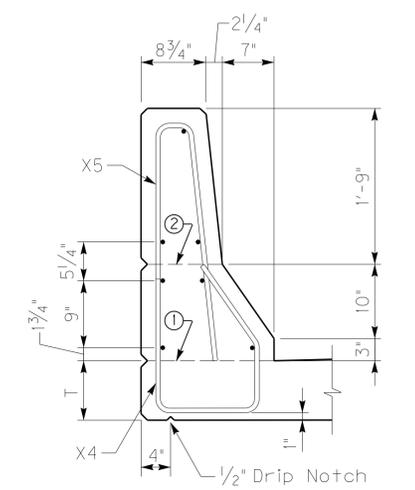
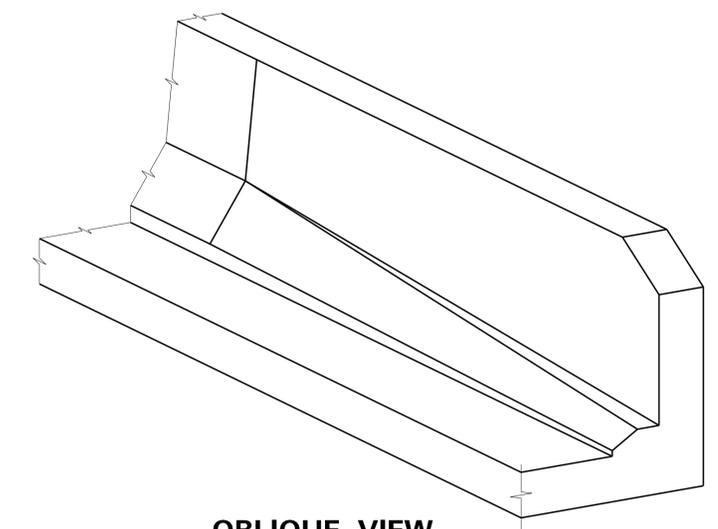
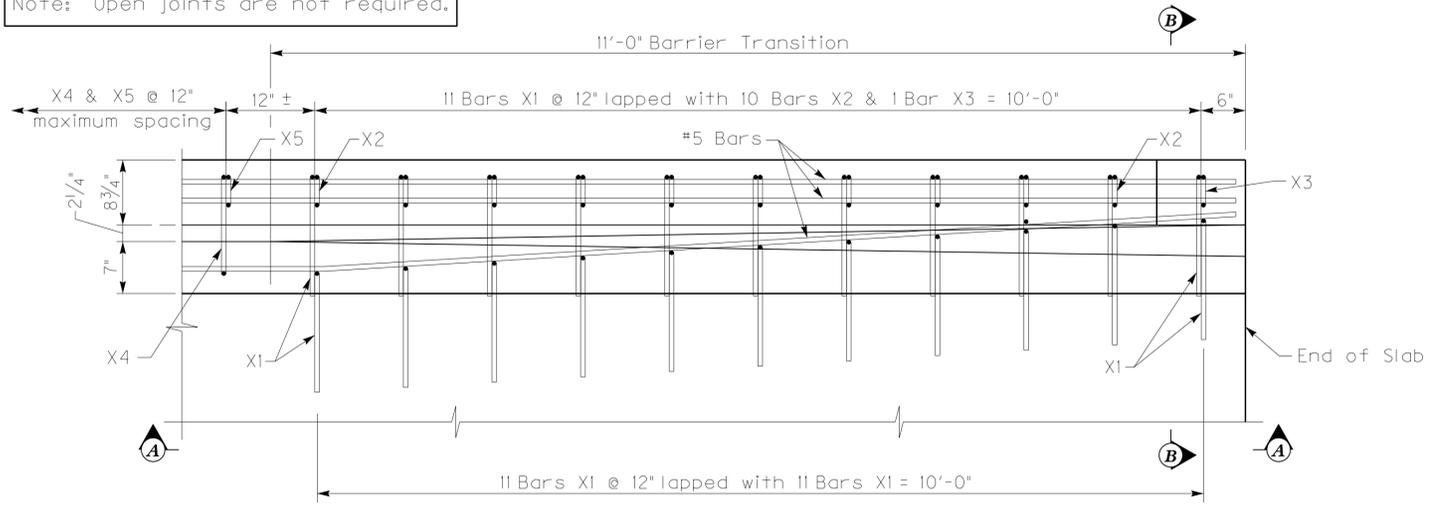
△ REVISED 12-07-12



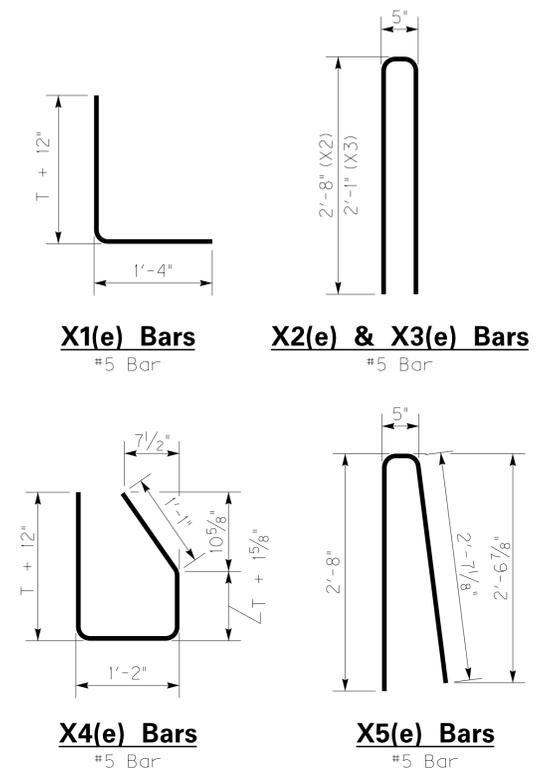
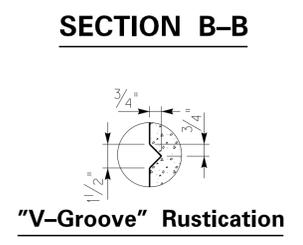
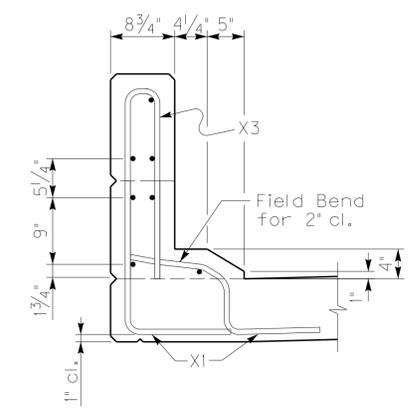
Note: Open joints are not required.



Note: X1 & X3 Bars at end of slab may be adjusted to maintain 2" minimum clearance on curved and skewed end bridges.



- TYPICAL BARRIER SECTION**
- Mandatory roughened construction joint. Concrete above this joint is to be placed after slab has been properly cured and included in the bid for Rail System, Type 3.
  - Permissible construction joint. "V-Groove" rustication joint is required if construction joint is used. 1/4" Open Joints are not required.



**General Notes**

CONCRETE: Use Class AA Concrete throughout.

**OPTIONAL WELDED WIRE REINFORCEMENT:**

As the contractor's option, deformed welded wire reinforcement (WWR) in accordance with ASTM A497 and epoxy coated in accordance with ASTM A884 may be used in place of stirrup bars X2, X3, and X5 as well as the straight or longitudinal reinforcement attached to these stirrups. Use size D31 wire for both stirrups and straight reinforcement. Locate and space the wire reinforcement the same as the conventional reinforcement except lower the top straight bar at least 2 1/2" away from the bend in the stirrup. Use a minimum 2'-8" lap for the straight reinforcement between sheets of WWR.

**MEASUREMENT:** The linear foot bid for the barrier is measured along the roadway gutterline. Include all reinforcement shown and all concrete above the top of slab in the bid item for Rail System Type 3.

**REINFORCEMENT:** All reinforcement shown on this sheet is to be epoxy coated. Use stirrup bend diameters for all bent bars. Straight reinforcement is to be Size #5 and lapped 2'-2" when necessary.

**KENTUCKY  
DEPARTMENT OF HIGHWAYS**

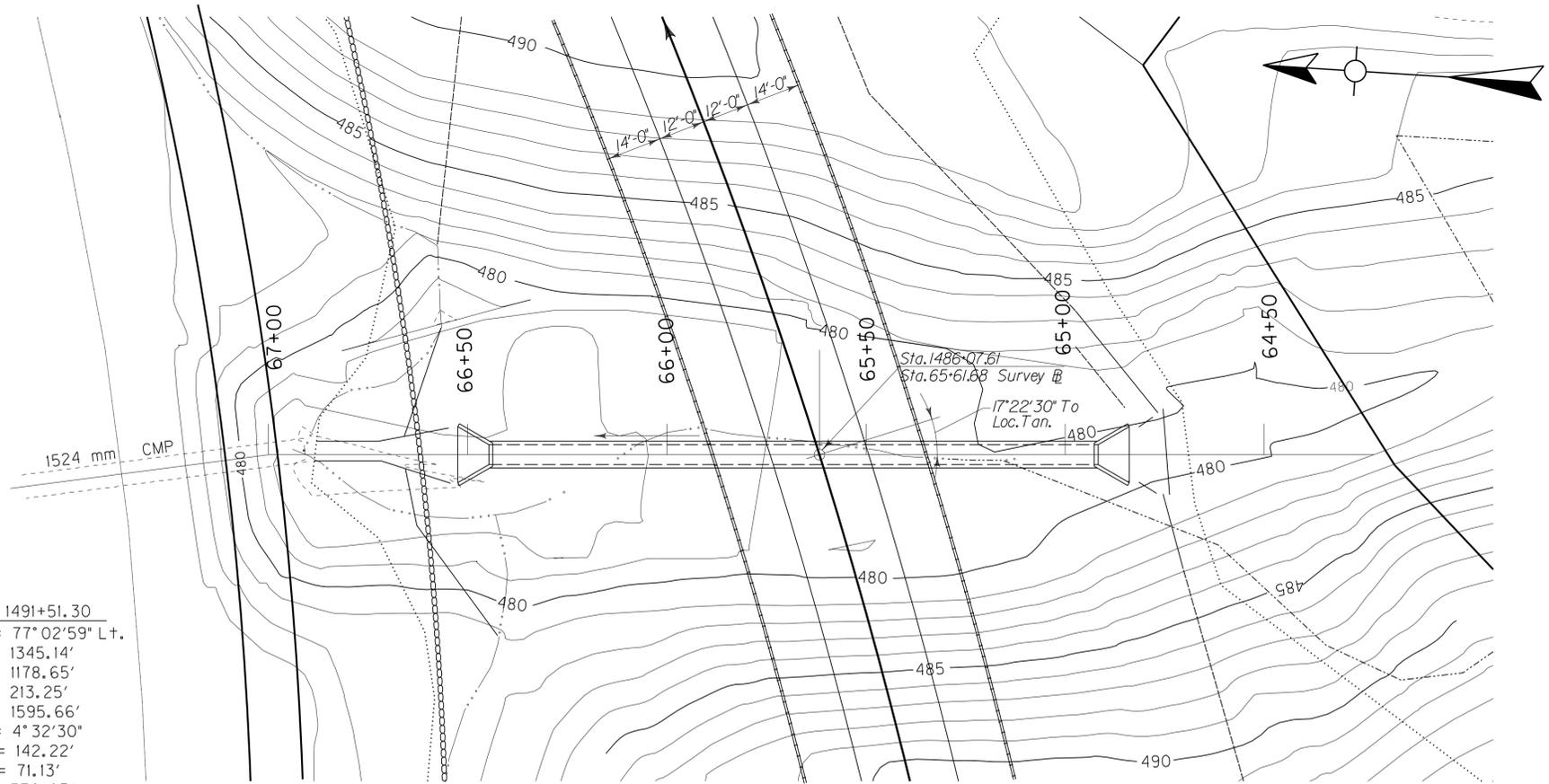
**RAIL SYSTEM TYPE 3**

SUBMITTED: \_\_\_\_\_ DATE: 6-15-2012  
 DIRECTOR DIVISION OF STRUCTURAL DESIGN

006

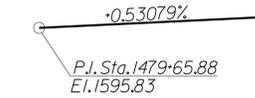
FILE NAME: Z:\STRUCTURES\FINAL STRUCTURES\LETCHER\FINALS\FINALSEDPOND\S17.DGN  
 USER: David  
 DATE PLOTTED: October 4, 2012  
 E-SHEET NAME:  
 MicroStation v8.11.7.443

FILE NAME: \$\$\$designs\$file\$specification\$\$\$  
 USER NAME: \$\$\$plotter\$by\$\$\$  
 DATE: \$\$\$DATE\$\$\$  
 SHEET LOCATION:



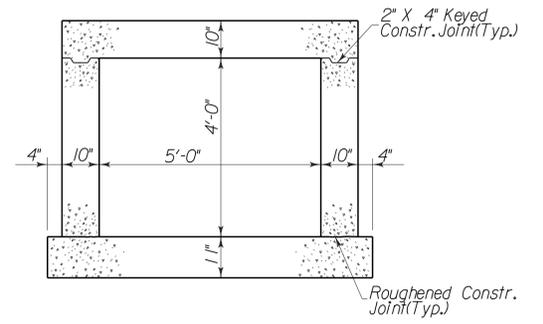
P.I. 1491+51.30  
 $\Delta = 77^{\circ}02'59''$  Lt.  
 $R = 1345.14'$   
 $T_s = 1178.65'$   
 $L_s = 213.25'$   
 $L_c = 1595.66'$   
 $\theta = 4^{\circ}32'30''$   
 $L.T. = 142.22'$   
 $S.T. = 71.13'$   
 $E_s = 376.05'$   
 $e = 8.0\%$   
 Runoff = 213.25'  
 Runout = 65.62'

**PLAN**  
 Const. 5'-0" x 4'-0" x 157'-0" RCBC @ 17°22'30" Skew Rt.,  
 2:1 Fill Slopes, 25.00' Fill Height, Yielding Foundation,  
 HS25-44 Loading, 30' Wings

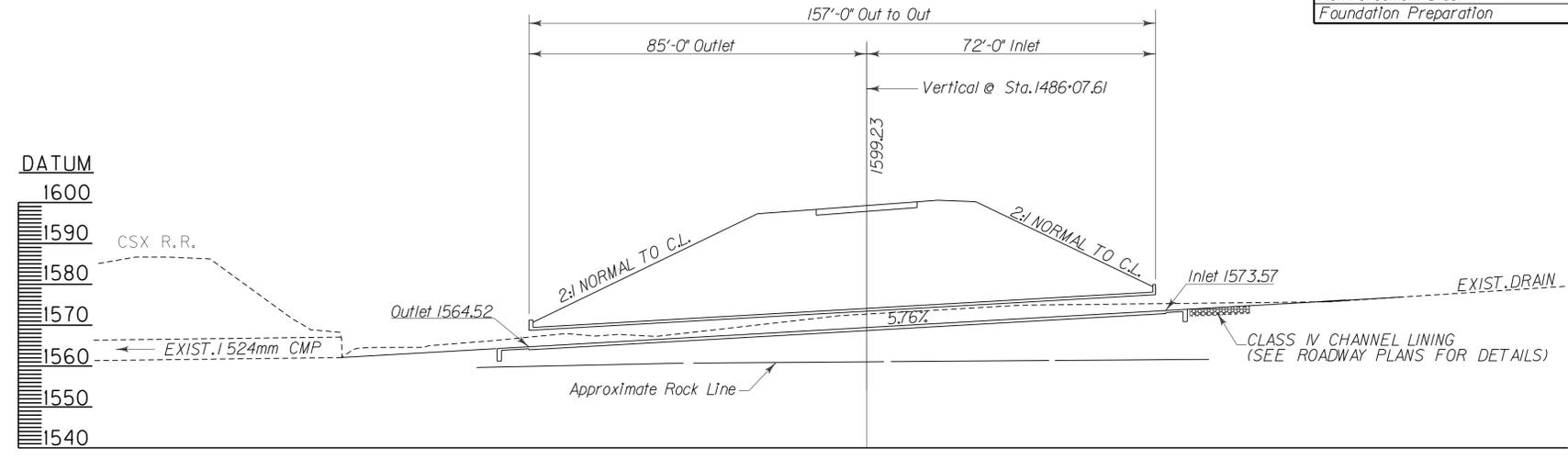


**PROFILE GRADE**

ESTIMATE OF QUANTITIES		
Class "A" Concrete	125.4	C.Y.
Reinforcement Steel	10,513	LBS.
Foundation Preparation	1	LS.
METRIC		
Class "A" Concrete	95.9	CU.M.
Reinforcement Steel	4,773	KG.
Foundation Preparation	1	LS.



**TYPICAL BARREL SECTION**



**LONGITUDINAL SECTION ALONG LC CULVERT**

**GENERAL NOTES**

- SPECIFICATIONS:** All references to the Standard Specifications are to the 2012 edition of the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction, including supplemental specifications. All References to the AASHTO Specifications are to the 2002 edition of the AASHTO Standard Specifications for Highway Bridges.
- DESIGN LOAD:** Culvert Slabs are designed for flexure in accordance with the AASHTO Specifications.
- DESIGN METHOD:** All reinforced concrete members are designed by the load factor method as specified in the AASHTO Specifications.
- DESIGN STRESSES:** For Class "A" Concrete  $F'_c = 3,500$  psi., For Steel Reinforcement  $F_y = 60,000$  psi.,  $n = 9$ .
- CONSTRUCTION JOINTS:** Vertical construction joints shall be located in the field, except that no construction joint shall be located in the barrel within six feet of ends of the culvert.
- BEVELED EDGES:** All exposed edges shall be beveled  $\frac{1}{8}$ " unless otherwise noted.
- CONCRETE:** Class "A" shall be used throughout.
- FLOWLINE REINFORCEMENT:** Construct the 6" paved Inlet and Outlet using No. 4 steel reinforcement at 18" centers in each direction or an equivalent area of welded deformed steel fabric. Extend the bars a minimum of 12" into wing footings and/or the bottom slab. The cost of reinforcement shall be incidental to the unit price bid for Class "A" Concrete.
- FOUNDATION PRESSURE:** The maximum foundation pressure is 3,500 psf.

**STANDARD DRAWING**

Standard Drawings listed below are Current Edition and to be used with these plans.  
 BGX-006-08 Stencil Construction Data for Bridges  
 BGX-012-02 Geotechnical Legend

REVISION		DATE
DATE: 01-04	CHECKED BY	
DESIGNED BY:		
DETAILED BY: CH	WTB	
<b>Commonwealth of Kentucky</b> <b>DEPARTMENT OF HIGHWAYS</b> <small>COUNTY</small> <b>LETCHER</b>		
ROUTE US 119	CROSSING STA. 1486+07.61	
<b>5'-0" X 4'-0" RCBC</b>		
ITEM NUMBER	PREPARED BY	SHEET NO.
12-311.35	T.H.E. ENGINEERS, INC.	Sl of S6
		DRAWING NO. 25355

**GENERAL NOTES**

*SPECIFICATIONS:* All references to the Standard Specifications are to the 2012 edition of the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction, including supplemental specifications. All References to the AASHTO Specifications are to the 2002 edition of the AASHTO Standard Specifications for Highway Bridges.

*DESIGN LOAD:* Culvert Slabs are designed for flexure in accordance with the AASHTO Specifications.

*DESIGN METHOD:* All reinforced concrete members are designed by the load factor method as specified in the AASHTO Specifications.

*DESIGN STRESSES:* For Class "A" Concrete  $F'c = 3,500$  psi., For Steel Reinforcement  $Fy = 60,000$  psi.,  $n = 9$ .

*CONSTRUCTION JOINTS:* Vertical construction joints shall be located in the field, except that no construction joint shall be located in the barrel within six feet of ends of the culvert.

*BEVELED EDGES:* All exposed edges shall be beveled  $7/8"$  unless otherwise noted.

*CONCRETE:* Class "A" shall be used throughout.

*FLOWLINE REINFORCEMENT:* Construct the 6" paved Inlet and Outlet using No. 4 steel reinforcement at 18" centers in each direction or an equivalent area of welded deformed steel fabric. Extend the bars a minimum of 12" into wing footings and/or the bottom slab. The cost of reinforcement shall be incidental to the unit price bid for Class "A" Concrete.

*FOUNDATION PRESSURE:* The maximum foundation pressure is 3,500 psf.

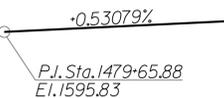
**STANDARD DRAWING**

Standard Drawings listed below are Current Edition and to be used with these plans.  
 BGX-006-08 Stencil Construction Data for Bridges  
 BGX-012-02 Geotechnical Legend



P.I. 1491+51.30  
 $\Delta = 77^{\circ}02'59"$  L.T.  
 $R = 1345.14'$   
 $Ts = 1178.65'$   
 $Ls = 213.25'$   
 $Lc = 1595.66'$   
 $\theta = 4^{\circ}32'30"$   
 $L.T. = 142.22'$   
 $S.T. = 71.13'$   
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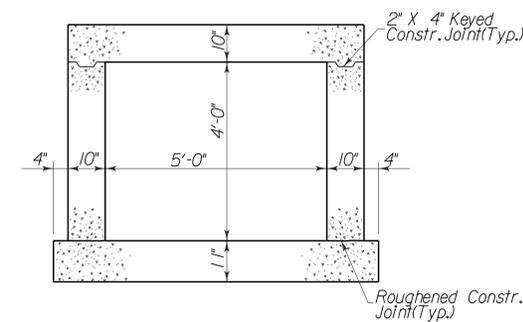
**PLAN**  
 Const. 5'-0" x 4'-0" x 157'-0" RCBC @ 17'-22'30" Skew Rt.,  
 2:1 Fill Slopes, 25.00' Fill Height, Yielding Foundation,  
 HS25-44 Loading, 30' Wings



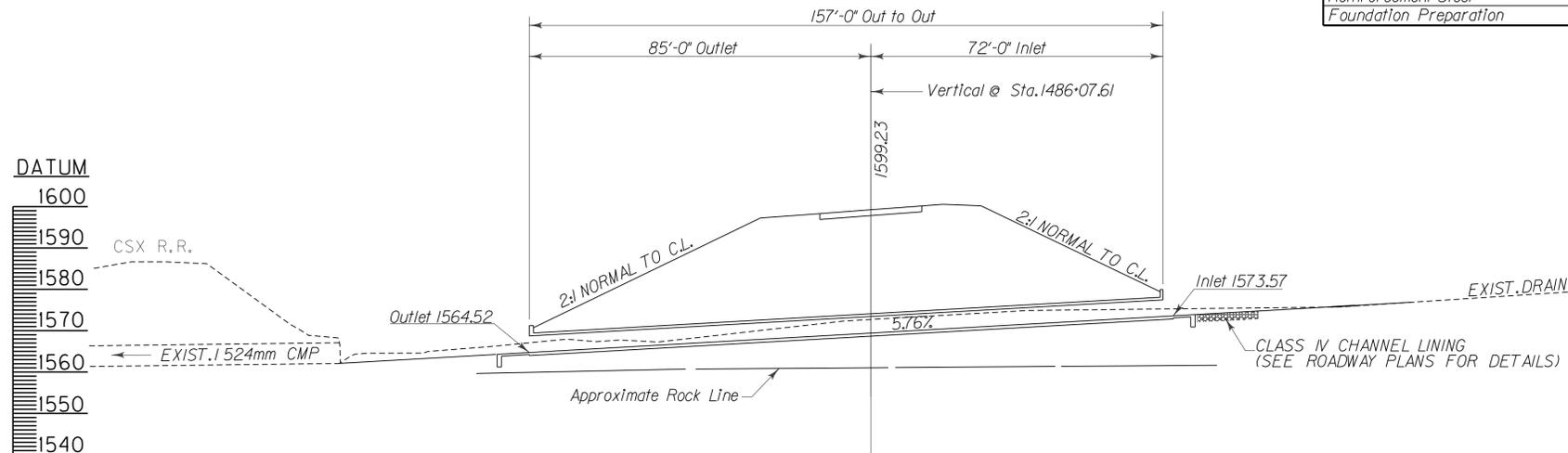
**PROFILE GRADE**

**ESTIMATE OF QUANTITIES**

Class "A" Concrete	125.4	C.Y.
Reinforcement Steel	10,513	LBS.
Foundation Preparation	1	LS.
<b>METRIC</b>		
Class "A" Concrete	95.9	CU.M.
Reinforcement Steel	4,773	KG.
Foundation Preparation	1	LS.



**TYPICAL BARREL SECTION**



**LONGITUDINAL SECTION ALONG LC CULVERT**

ITEM NUMBER  
 12-311.35

REVISION		DATE
DATE: 01-04	CHECKED BY	
DESIGNED BY:		
DETAILED BY: CH	WTB	
<b>Commonwealth of Kentucky</b>		
<b>DEPARTMENT OF HIGHWAYS</b>		
COUNTY		
<b>LETCHER</b>		
ROUTE US 119	CROSSING STA. 1486+07.61	
<b>5'-0" X 4'-0" RCBC</b>		
PREPARED BY		SHEET NO.
<b>T.H.E. ENGINEERS, INC.</b>		Sl of S6
		DRAWING NO.
		25355

FILE NAME: \$\$\$designs\$file\$specification\$\$\$  
 USER NAME: \$\$\$plotter\$\$\$  
 DATE: \$\$\$DATE\$\$\$  
 SHEET LOCATION:

### **SPECIAL NOTE FOR CONSTRUCTION PHASING**

There will be no construction activity from Station 45+720 to the End Of Project at Station 45+960 until January 1, 2014, to allow for construction of the new mine area by others. If the mine area is completed and all associated buildings and equipment are relocated before January 1, 2014 the contractor may be allowed to begin work in this area after receiving written approval from the mine owner Resource Development LLC.

## **MEMORANDUM OF AGREEMENT**

### **Re: US Highway 119 Relocation Project**

This **Memorandum of Agreement** (hereinafter the “MOA”) is entered into on this the 7<sup>th</sup> day of December, 2012, by and among the Commonwealth of Kentucky, Transportation Cabinet (together with its various departments and divisions, including but not limited to the Department of Highways) (“DOT”); the Commonwealth of Kentucky, Energy and Environment Cabinet (together with its various departments and divisions, including but not limited to the Department for Natural Resources) (“EEC”); Harlan Reclamation Services LLC (“HRS”); and Resource Development LLC (“RDC”) (hereinafter the “Parties,” or sometimes individually referred to as a “Party”).

**WHEREAS**, the Commonwealth of Kentucky and the citizens thereof desire the relocation and reconstruction of US Highway 119 in Letcher County, Kentucky (hereinafter the “Project”) for the purposes of enhanced highway safety, protection of the public welfare and good, and to promote economic development;

**WHEREAS**, the Kentucky Transportation Cabinet is that executive agency within the Commonwealth of Kentucky which, among other duties, is responsible for the design, approval and supervision of Kentucky road and highway construction projects, including the Project;

**WHEREAS**, the Kentucky Energy and Environment Cabinet is that executive agency within the Commonwealth of Kentucky which, among other duties, is designated to regulate activities dealing with natural resources including, but not limited to, surface coal mining and reclamation operations within the Commonwealth pursuant to KRS Chapter 350 and the regulations promulgated pursuant thereto, and consistent with the Surface Mining Control and Reclamation Act of 1977, Public Law 95-87 (hereinafter “SMCRA”);

**WHEREAS**, HRS is a Virginia limited liability company duly authorized to conduct business in the Commonwealth of Kentucky and, together with certain of its affiliates and contractors, is actively engaged in coal mining and reclamation operations in, among other counties, Letcher County, Kentucky;

**WHEREAS**, certain properties encompassed in Underground Coal Mining and Reclamation Operations Permit Numbers 867-5327 (for the North Fork #4 Mine), 867-5326 (for the North Fork #5 Mine), and 867-7031 (the coal haul road utilized by HRS, its affiliates and contractors) (hereinafter collectively referred to as the “Permits”) issued by the EEC to HRS, as such Permits now exist and as the same are to be amended or revised to carry out the terms of this MOA, will be impacted by DOT during the Project;

**WHEREAS**, RDC is a Virginia limited liability company duly authorized to conduct business in the Commonwealth of Kentucky which owns, leases or otherwise controls the real property associated with the Permits and certain other real property interests which have been or will be impacted by the Project;

**WHEREAS**, in connection with the Project, DOT will be establishing in locations proximate to the Permits certain rights of way for the relocation of US Highway 119 (hereinafter, the “DOT Rights of Way”) and certain areas for the placement and disposal of excess overburden (hereinafter, the “DOT Waste Areas”);

**WHEREAS**, HRS and RDC are willing, to the best of their ability, to fully cooperate with DOT and the EEC to facilitate the construction and completion of the Project as it impacts said underground coal mining and reclamation operations;

**WHEREAS**, the EEC agrees to expeditiously accept, review, and otherwise process all applications for amendments or revisions to the Permits, or other permitting actions, including, but not limited to, post mining land use changes, submitted by HRS in connection with the Project and as contemplated by this MOA;

**WHEREAS**, the EEC agrees, where appropriate and as necessary, to expeditiously review all HRS applications for bond release and to administratively release the same as related to the Project;

**WHEREAS**, the EEC agrees that any and all permitting actions, (transfers, revisions, amendments, etc.) that may be required of HRS in order to accommodate the Project, may be processed simultaneously and issued out of sequence, to the extent possible, in order to accommodate or accomplish the Project, including but not limited to approximate original contour (AOC) variances;

**WHEREAS**, the Parties acknowledge that to facilitate the Project, HRS has voluntarily and at a substantial cost, revised both its method of operation and mining sequence in regard to the Permits, and that said revisions will have an on-going impact on the operations of HRS and the designated operators conducting operations under and in connection with the Permits (such operations are hereinafter collectively and individually referred to as the “HRS Operations”);

**WHEREAS**, the DOT will be engaging and contracting with one or more contractors to perform and complete the design, engineering and construction work and related activities necessary in connection with the implementation of the Project and the establishment of the DOT Waste Areas, including various sections of the Project which will affect the Permits, the areas covered by the Permits, and the HRS Operations (any and all such DOT contractors and their subcontractors, together with all of their respective officers, employees, agents and representatives, are hereinafter referred to as the “Project contractor(s)”);

**WHEREAS**, nothing in this MOA shall be interpreted or construed to restrict or otherwise limit the right of HRS, its affiliates and contractors to engage in underground coal mining and reclamation operations and to produce coal pursuant to any coal mining permits issued to HRS by the EEC;

**WHEREAS**, neither the EEC nor HRS wish or otherwise desire to interfere with the legal process by which DOT solicits bids for highway projects and awards contracts in regard to the Project or otherwise;

**WHEREAS**, the Parties believe that the terms of this MOA are fair and equitable;

**NOW, THEREFORE**, in consideration of the mutual covenants and promises expressed herein, the Parties hereby consent, acknowledge and agree to the terms of this MOA, which shall be binding on the signatories and their respective successors in interest, heirs, executors, successors and assigns, including any purchaser and/or lessee, and agree as follows:

**A. Permit Area Issues**

1. That the Project will specifically impact and affect operations on, and the status of areas covered by, the Permits, such that HRS will need certain relief and accommodations related thereto, as described below.

**Alternate Mine Site**

2. That the Project will affect multiple structures and facilities, including existing mine management and storage buildings, mine offices, an electrical substation (previously relocated in anticipation of the Project), and an employee parking area, all of which are associated with the North Fork #4 Mine located within Permit 867-5327; these structures and facilities will have to be relocated within the existing or expanded areas covered by Permit 867-5327 and/or to areas covered by a new permit.

3. That HRS will be required to establish an alternate North Fork #4 mine site for the relocation and establishment of said structures and facilities (the "Alternate Mine Site"). Any and all cut and fill areas required to be established in developing the Alternate Mine Site will be considered permanent in nature so long as there is no coal removal in connection with establishment of the Alternate Mine Site.

4. That, in order to facilitate the relocation process in a timely manner, EEC agrees that, if required, upon HRS's submission of an application for a Kentucky Pollutant Discharge Elimination System (KPDES) permit, EEC will expeditiously process and approve the required KPDES permit for the Alternate Mine Site; likewise, if it is necessary for Permit 867-5327 to be amended to encompass the Alternate Mine Site or for a new permit to be granted, EEC shall act expeditiously and without delay to process and approve the required permit amendment or permit.

**Sediment Control Structures**

5. That, as part of the Project, the new US Highway 119 mainline will bridge over the existing sediment control structure (Pond No. 1) covered by Permit 867-5327 and that DOT shall (i) ensure that the Project design plans prepared by or on behalf of DOT (the "Project Plans") are designed so as to prevent disruption of sediment control or pond maintenance associated with Pond No. 1 and (ii) bind and require the Project contractor(s) to conduct the road construction work and all related Project activities in accordance with the Project Plans and so as to prevent disruption of sediment control or pond maintenance associated with Pond No. 1.

6. That DOT shall (i) ensure that the Project Plans for all parts of the Project (including the proposed US Highway 119 mainline together with any and all related bridges, embankments, storm-water runoff channels and controls, culverts, other structures and fill areas (including but not limited to the DOT Waste Areas), all of which hereinafter may be collectively and individually referred to as the "Project Structure(s)") are designed in such manner as to permanently prevent runoff from or associated with the Project Structures from entering into Pond No. 1 or any other sediment or storm-water runoff control structures associated with the Permits or any other affected permits issued by EEC to HRS ("Other HRS Structures"); and (ii) bind and require the Project contractor(s) to exercise best efforts to construct all parts of the Project, including all Project Structure(s), in accordance with the Project Plans and so as to permanently prevent runoff from or associated with the Project Structures from entering into Pond No. 1 or any Other HRS Structures.

7. That, to the extent that runoff or drainage flows from or associated with the Project Structures at any time during or after construction enter into or otherwise affect Pond No. 1 or any Other HRS Structures, whether due to the manner in which the Project Plans were designed, the failure of the Project contractor(s) to perform in accordance with the Project Plans, or the manner in which the Project contractor(s) conduct their work, HRS will not be subject to or held liable for any resulting violation of any current or future water quality standard by EEC or any other government agency, for example, in the case of road salt contributing to elevated conductivity. DOT will bind and require its Project contractor(s), including any consultants, professional/engineering services firms or other Project contractor(s) involved in the preparation of the Project Plans and the execution of the Project work, to defend, hold harmless and indemnify HRS, its affiliates and successors from and against any and all claims, losses, liabilities, citations, violations, penalties, fines, costs, or expenses that arise solely out of or directly from the acts and omissions of such Project contractor(s). Provided, however, that the Project contractor(s) shall not incur or be held liable for, and shall not be obligated to defend, hold harmless and indemnify the HRS Entities with respect to, any claims, losses, liabilities, citations, violations, penalties, fines, costs, and expenses that arise solely out of or directly from the acts and omissions of the HRS Entities.

8. HRS will submit a proposed revision to the pond removal plan for Pond No. 1 covered by Permit 867-5327 so as to allow it to reclaim the pond to the maximum extent practicable taking into account the effects of the construction of the new US Highway 119 mainline and related bridge to be constructed immediately adjacent to and above said pond. EEC will expeditiously process and approve the proposed revision.

### **Highwall Impacts**

9. That the Project and specifically the boundary of the DOT Rights of Way will restrict certain portions of existing highwalls associated with the mine face-up on Permit 867-5327 from being restored to AOC and that, notwithstanding any contrary requirements under Permit 867-5327 or under any applicable law or regulation, HRS will be permitted to reclaim these existing highwalls only to the extent reasonably practicable

with available spoil in the immediate vicinity and otherwise will be relieved of any further reclamation obligations with respect to such highwalls.

10. That certain portions of the haul roads on Permits 867-7031 and 867-5327, as depicted on the Map attached hereto as **EXHIBIT A**, will be stranded as a result of the Project construction (the “Stranded Haulroad Sections”) and that, notwithstanding any contrary requirements under Permits 867-7031 and 867-5327 or under any applicable law or regulation, any highwalls associated with the Stranded Haulroad Sections will be left in place permanently and will not be subject to any reclamation requirements.

### **Water Monitoring Well**

11. That, as a result of the establishment of the DOT Waste Areas, a water monitoring well (“WMP 28”) located at the head of Roberts Branch, and which serves Permits 867-5327 and 867-5326, will be destroyed by the Project contractor(s); that WMP 28 will be replaced by HRS; and that DOT will reimburse HRS for the cost of such replacement well provided that properly supported documentation is sent to the Right of Way Office, District 12, 109 Loraine Street, Pikeville, KY 41501.

### **Haulroad Impacts**

12. That, during the course of Project construction and following the completion thereof, the ability of HRS and its affiliates together with their respective successors, contractors and subcontractors (hereinafter collectively referred to as “HRS Entities”) to utilize portions of the haul roads covered by the Permits will be impeded or completely blocked.

13. That, for reasons of ensuring safety and based on the Project construction requirements, it is necessary and the right of the DOT and the Project contractor(s) to hold traffic for short periods of delay in all areas of the Project due to blasting, traffic and other construction activities. HRS agrees that, due to the construction activity, the DOT and its Project contractor(s) must be allowed to delay traffic at times when such delay is necessary, but the Project contractor(s) will be required by DOT not to cause or permit any unreasonable delay of the coal mine traffic. As such, while Project construction is underway and for purposes of ensuring mostly continuous and uninterrupted access of coal haulage trucks and other mine traffic using the haul roads covered by the Permits to access US Highway 119 (hereinafter referred to as the “Access Requirement”), DOT will bind and require its Project contractor(s):

- (i) to be responsible for at all times maintaining the traffic flow for coal mine traffic using the haul roads covered by the Permits and preventing any unreasonable delays;
- (ii) to provide access to US 119 throughout the Project construction process and not to cause or permit any unreasonable delays to the ingress and egress to US 119 from the haul roads covered by the Permits;
- (iii) to exercise their best efforts to provide 24-hour per day, 7-day per week access for traffic across Project construction areas, which access area(s),

including any alternate or parallel routes through the Project construction area facilitated by the Project contractor(s) during times when the haul roads covered by the Permits are blocked or otherwise impacted by Project work such that use of the same is prevented, at all times shall be maintained by the Project contractor(s) with durable surface in accordance with the requirements of 405 KAR 18:230, Section 5(1) (“[r]oads shall be surfaced with rock, crushed gravel, asphalt, or other material approved by the cabinet as sufficiently durable for the anticipated volume of traffic and weight and speed of vehicles to be used”) (hereinafter referred to as the “Durable Surface Requirement”); and

- (iv) to reimburse the HRS Entities for any out-of-pocket expenses reasonably incurred by them as a result of any unreasonable delays caused by the Project contractor(s) and attributable to any failure by them to perform in a manner consistent with the Access Requirement, the Durable Surface Requirement, and the other requirements set forth above, such as excess costs paid to coal hauling contractors due to any unreasonable delays.

14. That, when coal trucks are hauling on the haul roads covered by Permit 867-7031 and crossing over the active Project construction area, the HRS Entities will not be subject to or held liable for any citations or violations by EEC or any other government agency and will not incur any fines or violations for any tracking occurrences that arise solely out of or directly from the activities of the Project contractor(s) or the failure of the Project contractor(s) to comply with the Durable Surface Requirement. DOT will bind and require each of its Project contractor(s) to defend, hold harmless and indemnify the HRS Entities from and against any and all claims, losses, liabilities, citations, violations, penalties, fines, costs, and expenses, and to be insured and bonded for any liability or indemnification obligation so incurred, that arise solely out of or directly from the activities of the Project contractor(s) or the failure of the Project contractor(s) to comply with the Durable Surface Requirement. Provided, however, that the Project contractor(s) shall not incur or be held liable for, and shall not be obligated to defend, hold harmless and indemnify the HRS Entities with respect to, any claims, losses, liabilities, citations, violations, penalties, fines, costs, and expenses that arise solely out of or directly from the activities of the HRS Entities.

15. That DOT has agreed to provide a replacement paved access road to reconstructed US Highway 119 for coal haulage and mine traffic traveling to and from Permit 867-5327 (North Fork #4 Mine) and to and from Permit 867-5326 (North Fork #5 Mine) (the “Replacement Haulroads”) prior to blocking the existing access to coal haul roads on the Permits, which Replacement Haulroads shall be designed and constructed by DOT’s Project contractor(s) in accordance with the Durable Surface Requirement and in compliance with all federal and state laws and regulations applicable to coal haul roads, including SMCRA requirements and any requirements of the Mine Safety and Health Administration (MSHA) applicable to mining-related haul roads, and capable of handling the typical truck size and traffic consistent with a coal haul road in this geographic area.

16. That EEC shall act expeditiously and without delay to process and approve any required applications for permit amendments or for a new permit to cover the Replacement Haulroads.

17. That, following completion of the Replacement Haulroads and in the event it becomes necessary for coal haul trucks and other mine traffic using the Replacement Haulroads to cross the Project area to access the existing US Highway 119 while the reconstructed stretch of US Highway 119 in that immediate area is still under construction, the Access Requirement and the Durable Surface Requirement shall apply to said Project areas and shall be binding on DOT's Project contractor(s). If and when coal trucks are hauling on the Replacement Haulroads and crossing over the active Project construction areas as aforesaid, the HRS Entities will not be subject to or held liable for any citations or violations by EEC or any other government agency, and will not incur any fines or penalties, for any tracking occurrences that arise solely out of or directly from the activities of the Project contractor(s) or the failure of the Project contractor(s) to comply with the Durable Surface Requirement. For the sake of greater certainty, it is acknowledged and agreed that, if mud, dirt, dust or other material is not being tracked by coal haul trucks or other mine traffic prior to entering Project construction areas and a tracking occurrence has resulted only after the vehicle leaves a Project construction area, then the HRS Entities will not be subject to any citations, violations, fines or penalties for any such tracking occurrence. DOT will bind and require the Project contractor(s) to defend, hold harmless and indemnify the HRS Entities from and against any and all claims, losses, liabilities, citations, violations, penalties, fines, costs, and expenses, and to be insured and bonded for any liability or indemnification obligation so incurred, arising solely out of or directly from the activities of the Project contractor(s) or the failure of the Project contractor(s) to comply with the Access Requirement and the Durable Surface Requirement in accordance with the preceding provisions of this paragraph. Provided, however, that the Project contractor(s) shall not incur or be held liable for, and shall not be obligated to defend, hold harmless and indemnify the HRS Entities with respect to, any such claims, losses, liabilities, citations, violations, penalties, fines, costs, and expenses that arise solely out of or directly from the activities of the HRS Entities.

18. That the boundaries for the DOT Waste Areas as shown on EXHIBIT A will be adjusted so that neither DOT nor its Project contractor(s) will utilize HRS's roads covered by the Permits ("HRS Permitted Roads"), nor will the fill drainage impact the HRS Permitted Roads or Other HRS Structures; that DOT, its Project contractor(s) and subcontractor(s), together with any of their respective employees, will not use any portion of the HRS Permitted Roads (except as otherwise depicted by the area cross-hatched as shown on EXHIBIT A) for any purpose in connection with the Project without the prior written consent of HRS, without completion of any training required by MSHA or by the EEC's Office of Mine Safety and Licensing (KYOMSL), and without agreeing to a written indemnification agreement acceptable to all parties; and that DOT, directly or through will require its Project contractor(s) to construct their own Project access roads into and around the DOT Waste Areas and as otherwise needed to access the Project areas from existing US Highway 119, from any completed segments of the reconstructed US Highway 119, or from any other locations.

19. That DOT, on its own behalf and on behalf of its Project contractor(s), acknowledges and agrees that (i) HRS has no authority to grant access or usage rights to any third party to utilize the private bridge, as shown on EXHIBIT A, connecting existing US Highway 119 to Permit 867-7031 (the "Private Bridge") insofar as the rights of the HRS Entities to use the Private Bridge extend from a lease agreement with a private landowner and are now for mining-related purposes only, and (ii) contingent upon said private landowner granting and conveying a temporary easement to the DOT for ingress and egress over the bridge and upon the property adjoining the bridge, the HRS Entities will grant and allow the DOT and its Project contractor(s) ingress and egress to cross over the aforesaid private bridge to and from US 119 for any reason in connection with Project; provided, however, that such usage of the private bridge shall be limited to ingress and egress only by vehicles in compliance with the design weight limits applicable to the bridge.

20. That DOT will bind and require the Project contractor(s) to defend, hold harmless and indemnify the HRS Entities from and against any and all claims, losses, liabilities, penalties, fines, costs, and expenses arising solely out of or directly from any use by the Project contractor(s) of the HRS Permitted Roads or the Private Bridge. Provided, however, that the Project contractor(s) shall not incur or be held liable for, and shall not be obligated to defend, hold harmless and indemnify the HRS Entities with respect to, any such claims, losses, liabilities, penalties, fines, costs, and expenses that arise solely out of or directly from the activities of the HRS Entities in connection with use of the HRS Permitted Roads or the Private Bridge.

### **Powerline Relocation**

21. That, as a result of the establishment of the DOT Waste Areas, a 12,470 volt distribution line (the "Powerline") connected to North Fork #4 Mine, which powerline is owned by HRS or one of its affiliates, will have to be relocated because it crosses the southernmost portion of Waste Area #1, with such relocation required before the Project contractor(s) access Waste Area #1.

22. That HRS, through an authorized contractor, will perform such relocation.

23. That DOT will reimburse HRS for the actual cost of such relocation in an amount not to exceed \$ \_\_\_\_\_ provided that properly supported documentation is sent to the Right of Way Office, District 12, 109 Loraine Street, Pikeville, KY 41501.

### **B. Bond Release – DOT Rights of Way and Easements**

24. That EXHIBIT A hereto shows those portions of the Permits that either will be rendered useless or will be within the DOT Rights of Way, which areas are referred to and known as "Release Increments No. 1."

25. That the EEC and HRS agree that Release Increments No. 1 shall be further identified and bonded by means of a minor permit revision deleting such areas from the Permits, which the EEC shall expeditiously process.

26. That, upon DOT securing said rights of way and/or easements, the EEC shall expeditiously and administratively grant to HRS a Phase III Bond Release for Release Increments No. 1, thus terminating the EEC's jurisdiction over those portions of the Permits.

### **C. Post Mining Land Use**

27. That EEC and HRS agree that the appropriate Post Mining Land Use (hereinafter "PMLU") for the affected permitted areas covered by the Permits, as depicted on EXHIBIT A hereto, is Industrial/Commercial.

28. That, upon HRS's request to EEC pursuant to 405 KAR 8:010 19(2), EEC will approve HRS's request to change the PMLU for said affected permitted areas covered by the Permits to Industrial/Commercial.

29. That, following EEC's approval of the PMLU for said affected permitted areas to Industrial/Commercial, HRS shall have no obligation to reclaim said affected permitted areas covered by the Permits, but shall not be relieved of any reclamation obligations for areas outside of the affected permitted areas except as otherwise expressly provided in this MOA.

### **D. Bond Release**

30. That, upon DOT's execution of a right to enter on and/or possess the DOT Rights of Way and the DOT Waste Areas, EEC's approval of the PMLU change to Industrial/Commercial, and HRS's relocation of the affected structures and facilities in the mine face-up area covered by Permit 867-5327 to the Alternate Mine Site, EEC shall act expeditiously and without delay to grant HRS an administrative Phase III bond release for the affected portions of Permits 867-5327 and 867-7031, thereby terminating its jurisdiction over said areas.

### **E. Just Compensation for North Fork #4 Mine Site Impacts**

31. Following execution of this MOA and pursuant to other agreements being executed contemporaneously herewith, DOT is reimbursing RDC for costs which it has already incurred or will incur in connection with the Project.

32. DOT agrees to bind and require its Project contractor(s) to reimburse North Fork Coal Corporation, an HRS and RDC affiliate and a designated operator under Permit 867-5327 (for the North Fork #4 Mine), for any documented mine operation interruptions and delays associated with blasting within regulated distances of the mine (*i.e.*, within 500' of the mine workings) based on a per minute of delay cost in the amount of **\$66.93 per minute**. DOT further agrees to bind its Project contractor(s) to the obligation of obtaining an MSHA Joint Approval Form SMP-60 covering blasting within 500' of an active underground mine.

## **F. General**

33. In all instances in this MOA in which reference is made to DOT binding and requiring the Project contractor(s) to do or not do certain things and imposing obligations on the Project contractor(s) for the benefit of the HRS Entities (hereinafter referred to as the "Project Contractor Obligations"), DOT represents, warrants, covenants and agrees that it shall fulfill its obligations in this regard by duly and effectively doing each of the following:

(i) attaching this MOA as an appendix to DOT's contract(s) and agreement(s) with the Project contractor(s) (such contract(s) and agreement(s) with the Project contractor(s) hereinafter referred to as the "Project Contractor Agreement(s)"); and

(ii) including provisions in the Project Contractor Agreement(s) pursuant to which:

- a. the Project contractor(s) promise, covenant and agree to perform the Project Contractor Obligations for the benefit of the DOT and the HRS Entities, and
- b. the HRS Entities are granted the status of third party beneficiaries under the Project Contractor Agreement(s) such that the HRS Entities are effectively granted the rights and powers, including through actions at law and in equity, to enforce the Project Contractor Obligations as against the Project contractor(s), to compel performance of the Project Contractor Obligations by the Project contractor(s), and to recover from the Project contractor(s) any and all damages caused by non-performance or breach of the Project Contractor Obligations by the Project contractor(s).

34. That the recitals to this MOA shall be a part of the MOA, and not mere recitals, and fully enforceable as part of the MOA between the Parties.

35. That, except as otherwise expressly provided herein or as reasonably construed from the express provisions hereof, this MOA is not intended to impose upon DOT any responsibilities, obligations or liabilities for any of HRS's activities on the Permits during Project construction.

36. That EXHIBIT A (the Map) is attached hereto and incorporated by reference.

37. That should HRS be ordered by any state or federal agency or other authority to undertake any measures for any reason that would require access to any of the permit and bond released areas covered by Sections B, C and D, above, DOT hereby grants such access to the HRS Entities, so that HRS may accomplish said measures. Further, in carrying out said measures, HRS shall not unreasonably interfere with the Project. Finally, the EEC shall not require a SMCRA permit or posting of any bonds by HRS for performing said measures.

38. That in the event of a breach of the terms of this MOA by any Party, the remaining Parties may exercise any and all rights and remedies provided for herein and

by law or in equity, including, but not limited to, the right to obtain a decree of specific performance requiring the Party to perform any and all of its obligations under this MOA.

39. That this MOA constitutes the final, complete and exclusive agreement between the Parties with respect to the subject matter herein and shall be specifically enforceable against each of the Parties.

40. That this MOA shall not be changed, amended, waived, discharged or terminated orally, but only by an instrument in writing signed by all of the Parties.

41. That this MOA shall inure to the benefit of and be binding upon all of the Parties and their respective successors in interest, heirs, executors, successors and assigns, including any purchaser and/or lessee.

42. That this MOA may be executed in any number of counterparts but all such counterparts shall constitute one and the same instrument.

43. That this MOA shall be construed and otherwise governed in all respects by the laws of the Commonwealth of Kentucky.

44. That should any provision of this MOA be declared to be invalid or unenforceable to any extent, the remainder of this MOA shall not be affected thereby and shall be enforced to the fullest extent permitted by law.

45. That each of the Parties represents and warrants to each other Party hereto that this Agreement has been signed by a representative of each Party duly authorized to execute and deliver the same on behalf thereof.

46. That all notices, requests, applications, or approvals required under this MOA, shall be deemed to have been fully given when made in writing and: (a) hand-delivered; or (b) deposited in U.S. mail, postage prepaid, by registered or certified mail, return receipt requested, and addressed as follows:

Commonwealth of Kentucky  
Transportation Cabinet  
200 Mero Street  
Frankfort, KY 40601

Commonwealth of Kentucky  
Energy and Environment Cabinet  
Capital Plaza Tower  
500 Mero Street  
Frankfort, KY 40601

Harlan Reclamation Services LLC  
P.O. Box 2560  
Wise, VA 24293

Resource Development LLC  
Attn: Director - Land Management  
5703 Crutchfield Drive  
Norton, VA 24273

With a copy to:  
Alpha Natural Resources Services, LLC  
Attn: Legal Department  
P.O. Box 16429  
Bristol, VA 24209

*[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]*

**IN WITNESS WHEREOF**, each of the Parties hereto has caused this Memorandum of Agreement to be executed and delivered in their names, by an individual thereunto duly authorized, as of the date first written above.

**Commonwealth of Kentucky,  
Transportation Cabinet**

By: \_\_\_\_\_  
Michael Hancock  
Secretary  
Transportation Cabinet  
Commonwealth of Kentucky

COMMONWEALTH OF KENTUCKY )  
 ) :SS  
COUNTY OF \_\_\_\_\_ )

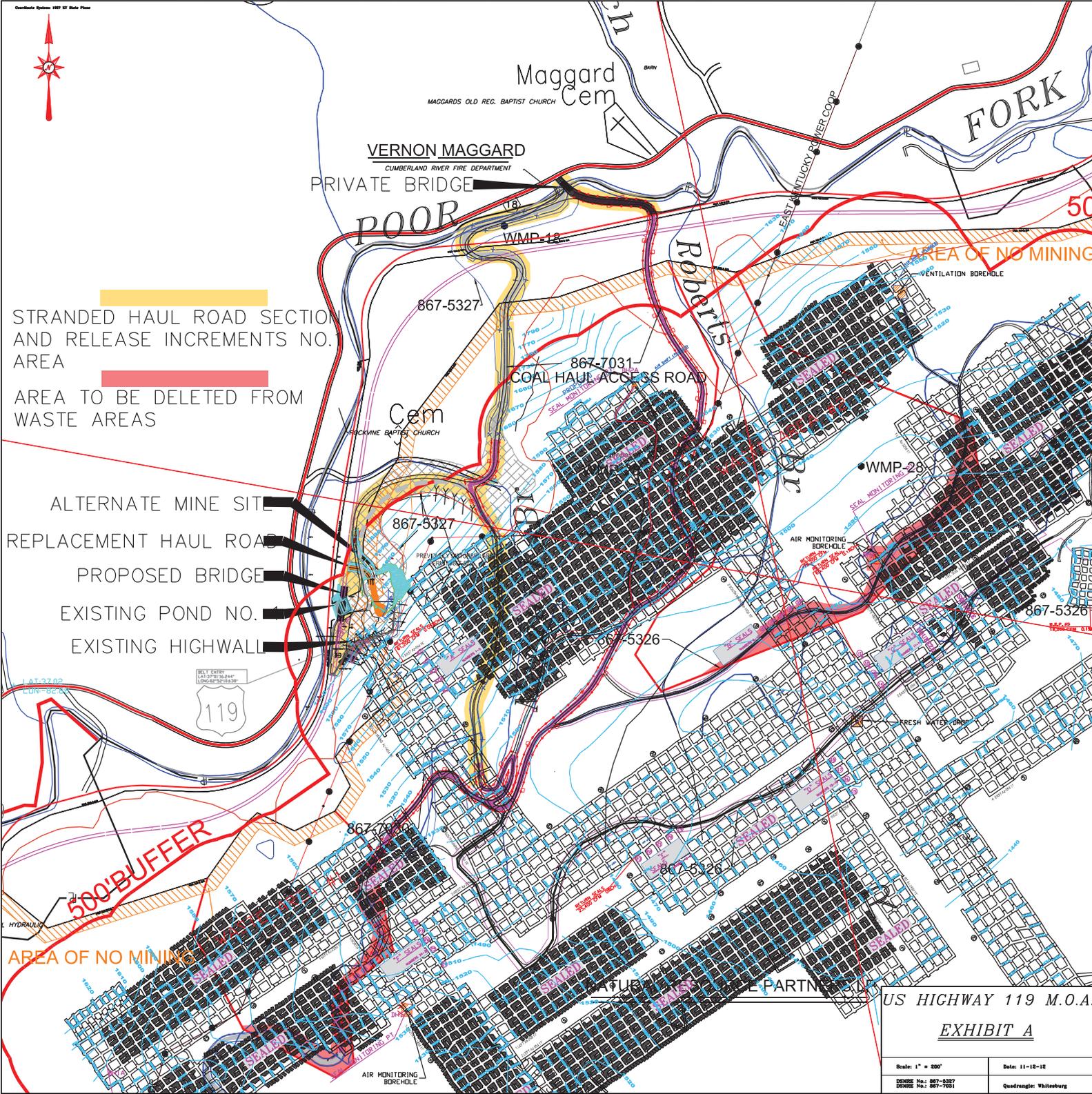
The foregoing instrument was acknowledged before me this the \_\_\_ day of December, 2012, by Michael Hancock, to me personally known, as the Secretary of the Commonwealth of Kentucky, Transportation Cabinet, and that said instrument was signed on behalf of said agency by proper authority and the instrument was the act of the agency for the purposes stated above.

My commission expires: \_\_\_\_\_.

\_\_\_\_\_  
NOTARY PUBLIC







STRANDED HAUL ROAD SECTION  
AND RELEASE INCREMENTS NO.  
AREA

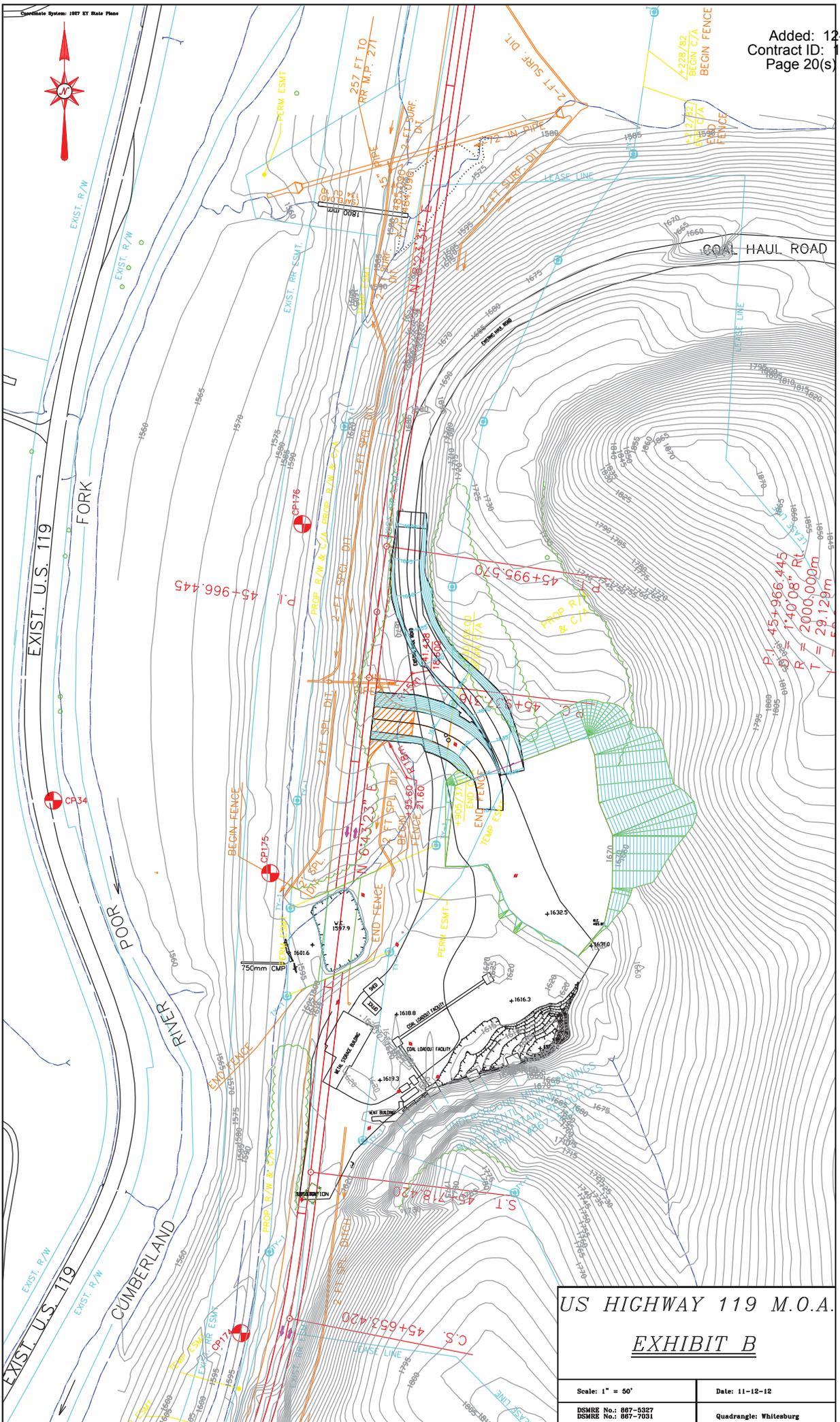
AREA TO BE DELETED FROM  
WASTE AREAS

- ALTERNATE MINE SITE
- REPLACEMENT HAUL ROAD
- PROPOSED BRIDGE
- EXISTING POND NO.
- EXISTING HIGHWALL

US HIGHWAY 119 M.O.A.

EXHIBIT A

Scale: 1" = 500'	Date: 11-18-12
DRAWN No.: 867-5327	Quadrangle: Whitesburg
DESIGN No.: 867-5327	



US HIGHWAY 119 M.O.A.  
**EXHIBIT B**

Scale: 1" = 50'	Date: 11-12-12
DSMRE No.: 887-9387	Quadrangle: Whitesburg
DSMRE No.: 887-7031	

**PROPOSAL BID ITEMS**

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Report Date 12/11/12

**Section: 0001 - PAVING**

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	FP	AMOUNT
0010	00001		DGA BASE	5,112.00	TON		\$	
0020	00003		CRUSHED STONE BASE	6,682.00	TON		\$	
0030	00018		DRAINAGE BLANKET-TYPE II-ASPH	1,363.00	TON		\$	
0040	00020		TRAFFIC BOUND BASE	145.00	TON		\$	
0050	00100		ASPHALT SEAL AGGREGATE	151.40	TON		\$	
0060	00103		ASPHALT SEAL COAT	18.20	TON		\$	
0070	00212		CL2 ASPH BASE 1.00D PG64-22	343.00	TON		\$	
0080	00214		CL3 ASPH BASE 1.00D PG64-22	5,348.00	TON		\$	
0090	00301		CL2 ASPH SURF 0.38D PG64-22	140.00	TON		\$	
0100	00358		ASPHALT CURING SEAL	4.60	TON		\$	
0110	00388		CL3 ASPH SURF 0.38B PG64-22	168.00	TON		\$	
0120	02702		SAND FOR BLOTTER	11.50	TON		\$	

**Section: 0002 - ROADWAY**

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	FP	AMOUNT
0130	00004		RESHAPE-COMPACT EXIST DGA BASE	6,450.00	SQYD		\$	
0140	00078		CRUSHED AGGREGATE SIZE NO 2	4.00	TON		\$	
0150	01000		PERFORATED PIPE-4 IN	110.00	LF		\$	
0160	01005		PERFORATED PIPE EDGE DRAIN-4 IN	550.00	LF		\$	
0170	01010		NON-PERFORATED PIPE-4 IN	40.00	LF		\$	
0180	01020		PERF PIPE HEADWALL TY 1-4 IN	3.00	EACH		\$	
0190	01032		PERF PIPE HEADWALL TY 4-4 IN	1.00	EACH		\$	
0200	01711		FILL AND CAP WELL	1.00	EACH		\$	
0210	01786		FILL AND CAP MANHOLE	1.00	EACH		\$	
0220	01890		ISLAND HEADER CURB TYPE 1	50.00	LF		\$	
0230	01982		DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL WHITE	20.00	EACH		\$	
0240	02014		BARRICADE-TYPE III	4.00	EACH		\$	
0250	02159		TEMP DITCH	6,530.00	LF		\$	
0260	02200		ROADWAY EXCAVATION	3,337,699.00	CUYD		\$	
0270	02203		STRUCTURE EXCAV-UNCLASSIFIED	5,000.00	CUYD		\$	
0280	02242		WATER	1,500.00	MGAL		\$	
0290	02262		FENCE-WOVEN WIRE TYPE 1	9,350.00	LF		\$	
0300	02265		REMOVE FENCE	935.00	LF		\$	
0310	02363		GUARDRAIL CONNECTOR TO BRIDGE END TY A	2.00	EACH		\$	
0320	02381		REMOVE GUARDRAIL	50.00	LF		\$	
0330	02404		SEPTIC TANK TREATMENT	1.00	EACH		\$	
0340	02429		RIGHT-OF-WAY MONUMENT TYPE 1	47.00	EACH		\$	
0350	02431		WITNESS R/W MONUMENT TYPE 2	4.00	EACH		\$	
0360	02432		WITNESS POST	51.00	EACH		\$	
0370	02488		CHANNEL LINING CLASS IV	3,960.00	CUYD		\$	
0380	02545		CLEARING AND GRUBBING(103 ACRES)	1.00	LS		\$	
0390	02562		SIGNS	101.00	SQFT		\$	
0400	02585		EDGE KEY	24.00	LF		\$	
0410	02596		FABRIC-GEOTEXTILE TYPE I	794.00	SQYD		\$	

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**PROPOSAL BID ITEMS**

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Report Date 12/11/12

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	FP	AMOUNT
0420	02598		FABRIC-GEOTEXTILE TYPE III	4,456.00	SQYD		\$	
0430	02600		FABRIC GEOTEXTILE TY IV FOR PIPE	966.00	SQYD	\$2.00	\$	\$1,932.00
0440	02650		MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	
0450	02690		SAFELOADING	11.00	CUYD		\$	
0460	02701		TEMP SILT FENCE	6,530.00	LF		\$	
0470	02703		SILT TRAP TYPE A	58.00	EACH		\$	
0480	02704		SILT TRAP TYPE B	58.00	EACH		\$	
0490	02706		CLEAN SILT TRAP TYPE A	58.00	EACH		\$	
0500	02707		CLEAN SILT TRAP TYPE B	58.00	EACH		\$	
0510	02709		CLEAN TEMP SILT FENCE	6,530.00	LF		\$	
0520	02711		SEDIMENTATION BASIN	6,054.00	CUYD		\$	
0530	02726		STAKING	1.00	LS		\$	
0540	05950		EROSION CONTROL BLANKET	136,260.00	SQYD		\$	
0550	05952		TEMP MULCH	280,720.00	SQYD		\$	
0560	05953		TEMP SEEDING AND PROTECTION	280,720.00	SQYD		\$	
0570	05966		TOPDRESSING FERTILIZER	13.50	TON		\$	
0580	10020NS		FUEL ADJUSTMENT	494,964.00	DOLL	\$1.00	\$	\$494,964.00
0590	10030NS		ASPHALT ADJUSTMENT	17,736.00	DOLL	\$1.00	\$	\$17,736.00
0600	20000ES724		TREE	1,006.00	EACH		\$	
0610	20209EP69		GRANULAR PILE CORE	1,475.00	CUYD		\$	
0620	20667ED		PNEUMATIC BACKSTOWING	4,500.00	TON		\$	
0630	21802EN		G/R STEEL W BEAM-S FACE (7 FT POST)	1,888.00	LF		\$	
0640	23131ER701		PIPELINE VIDEO INSPECTION	234.00	LF		\$	

**Section: 0003 - DRAINAGE**

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	FP	AMOUNT
0650	00464		CULVERT PIPE-24 IN	84.00	LF		\$	
0660	00468		CULVERT PIPE-36 IN	125.00	LF		\$	
0670	01208		PIPE CULVERT HEADWALL-24 IN	1.00	EACH		\$	
0680	01212		PIPE CULVERT HEADWALL-36 IN	1.00	EACH		\$	
0690	01434		SLOPED BOX OUTLET TYPE 1-24 IN	1.00	EACH		\$	
0700	24186EC		BORE AND JACK PIPE-36 IN	25.00	LF		\$	

**PROPOSAL BID ITEMS**

Report Date 12/11/12

**Section: 0004 - BRIDGE**

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	FP	AMOUNT
0710	02231		STRUCTURE GRANULAR BACKFILL	915.00	CUYD		\$	
0720	02599		FABRIC-GEOTEXTILE TYPE IV	820.00	SQYD		\$	
0730	02998		MASONRY COATING	3,099.00	SQYD		\$	
0740	03299		ARMORED EDGE FOR CONCRETE	241.00	LF		\$	
0750	08002		STRUCTURE EXCAV-SOLID ROCK	1,981.00	CUYD		\$	
0760	08003		FOUNDATION PREPARATION(25296)	1.00	LS		\$	
0770	08003		FOUNDATION PREPARATION(25355)	1.00	LS		\$	
0780	08003		FOUNDATION PREPARATION(25613)	1.00	LS		\$	
0800	08016		REINF CONC SLOPE WALL-6 IN	355.00	SQYD		\$	
0810	08019		CYCLOPEAN STONE RIP RAP	818.00	TON		\$	
0820	08033		TEST PILES	153.00	LF		\$	
0830	08037		COFFERDAM(25296)	1.00	LS		\$	
0840	08039		PRE-DRILLING FOR PILES	239.00	LF		\$	
0850	08046		PILES-STEEL HP12X53	2,156.00	LF		\$	
0860	08094		PILE POINTS-12 IN	63.00	EACH		\$	
0870	08096		PILES-PRESTRESSED CONC-14 IN	714.00	LF		\$	
0880	08100		CONCRETE-CLASS A	2,563.90	CUYD		\$	
0890	08104		CONCRETE-CLASS AA	3,975.50	CUYD		\$	
0900	08150		STEEL REINFORCEMENT	470,477.00	LB		\$	
0910	08151		STEEL REINFORCEMENT-EPOXY COATED	1,093,083.00	LB		\$	
0920	08160		STRUCTURAL STEEL(25296)	1.00	LS		\$	
0930	08471		EXPANSION DAM-2.5 IN NEOPRENE	139.00	LF		\$	
0940	08472		EXPANSION DAM-4 IN NEOPRENE	102.00	LF		\$	
0950	08637		PRECAST PC I BEAM TYPE 7	11,283.00	LF		\$	
0960	08638		PRECAST PC I BEAM TYPE 8	864.00	LF		\$	

**Section: 0005 - TRAINEES**

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	FP	AMOUNT
0970	02742		TRAINEE PAYMENT REIMBURSEMENT1 TRUCK DRIVER TRAINEE	1,000.00	HOUR		\$	
0980	02742		TRAINEE PAYMENT REIMBURSEMENT1 CLASS A OPERATOR TRAINEE	1,600.00	HOUR		\$	
0990	02742		TRAINEE PAYMENT REIMBURSEMENT1 CARPENTER TRAINEE	1,400.00	HOUR		\$	

**Section: 0006 - MOBILIZATION / DEMOBILIZATION**

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	FP	AMOUNT
1000	02568		MOBILIZATION	1.00	LS		\$	
1010	02569		DEMOBILIZATION	1.00	LS		\$	