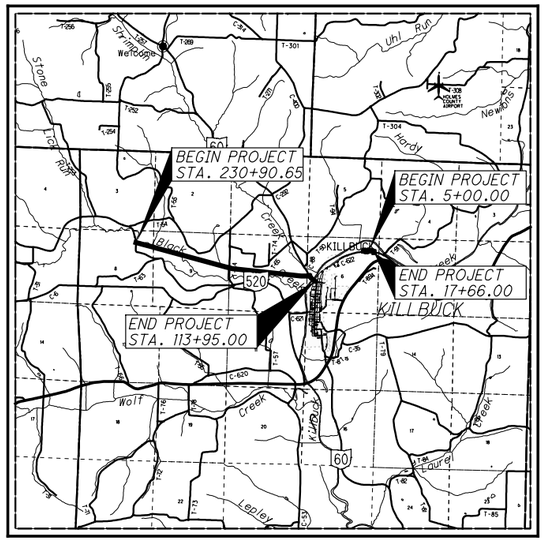

LOCATION MAP

LATITUDE: 40°30'14" LONGITUDE: -82°00'20"

SCALE IN MILES

0 1 2 3 4

N

PORTION TO BE IMPROVED
INTERSTATE HIGHWAY
FEDERAL ROUTES
STATE ROUTES
COUNTY & TOWNSHIP ROADS
OTHER ROADS

DESIGN DESIGNATION

	TRAIL	S.R. 60
CURRENT YEAR (2024) ADT	N/A	1704 (INFO FROM ODOT TIMS)
DESIGN YEAR (2044) ADT	N/A	1704 (INFO FROM ODOT TIMS)
DESIGN HOURLY VOLUME	N/A	173 (INFO FROM ODOT TIMS)
DESIGN SPEED	20 MPH	35 MPH
LEGAL SPEED	N/A	35 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	N/A	MAJOR COLLECTOR
NHS PROJECT	N/A	N/A

DESIGN EXCEPTIONS NONE REQUIRED

ADA DESIGN WAIVER NONE REQUIRED

UNDERGROUND UTILITIES
Contact Two Working Days Before You Dig
OHIO811.org Before You Dig
OHIO811, 8-1-1, or 1-800-362-2764
(Non-members must be called directly)

PLAN PREPARED BY:
WOOLPERT
DESIGN | GEOSPATIAL | INFRASTRUCTURE
ONE EASTON OVAL
SUITE 400
COLUMBUS, OH 43219
T 614-476-6000
F 614-476-6225

ENGINEERS SEAL:
BRIDGES
STATE OF OHIO 9/8/25 THOMAS M LESS PE.78901 REGISTERED PROFESSIONAL ENGINEER

ENGINEERS SEAL:
ROAD/TRAIL/CULVERTS
STATE OF OHIO 9/8/25 ALYSSA K.B. ADAIR E-88963 REGISTERED PROFESSIONAL ENGINEER

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
HOLMES COUNTY PARK DISTRICT

HOLMES-COUNTY TRAIL PHASE 5C2

S.R. 520 TO KILLBUCK
KILLBUCK TOWNSHIP
HOLMES COUNTY

INDEX OF SHEETS:

PROJECT DESCRIPTION

CONSTRUCTION OF 2.34 MILES OF PAVED SHARED USE PATH ON ABANDONED RAILROAD BED INCLUDING BRIDGE REHABILITATION AND RECONSTRUCTION, CULVERT REPLACEMENT, SAFETY RAIL, AND EQUESTRIAN STAGING WORK.

WORK INCLUDES BRIDGE REHABILITATION, FULL DEPTH SHOULDER WORK, AND INTERSECTION PEDESTRIAN FACILITY IMPROVEMENT ON STATE ROUTE 60 ABUTTING SHARED USE PATH INTO THE TOWN OF KILLBUCK.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	8.87 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.125 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	9.0 ACRES

STAGING AREA:

PROJECT EARTH DISTURBED AREA:	2.9 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.125 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	4.0 ACRES

2023 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

APPROVED BY IRENE BURGETT
APPROVED Irene Burgett
DATE 9-16-25 HOLMES COUNTY PARK DISTRICT

APPROVED
DATE 9-16-25 HOLMES COUNTY PARK DISTRICT

APPROVED
DATE 9-16-25 HOLMES COUNTY PARK DISTRICT

STANDARD CONSTRUCTION DRAWINGS

BP-3.1	1/19/2024	HW-1.1	7/19/2024	DS-1-92	7/15/2022	TC-41.20	10/18/2013			800-2023	7/18/25
BP-4.1	7/19/2013	HW-2.2	7/20/2018	PSBD-1-25	7/18/2025	TC-41.30	4/21/2023			832	7/18/25
				TST-1-99	1/15/2021	TC-42.20	10/18/2013			838	7/18/25
CB-2-2B	7/19/2024	MGS-2.1	7/18/2025	TST-2-21	1/17/2025	TC-52.10	10/18/2013			856	7/21/23
CB-2-4	7/19/2024	MGS-3.3	7/18/2025			TC-52.20	1/15/2021			902	7/19/19
		MGS-4.2	7/18/2025	MT-96.11	7/21/2023	TC-61.30	7/19/2024				
DM-1.1	1/17/2025	MGS-4.3	7/18/2025	MT-96.20	1/17/2025	TC-71.10	7/18/2025				
DM-1.2	1/17/2025			MT-96.26	1/17/2025	TC-74.10	7/21/2023				
DM-4.2	7/20/2012	RM-4.5	7/18/2025	MT-97.10	4/19/2019						
DM-4.3	1/15/2016	RM-4.6	7/18/2025	MT-97.11	1/20/2017	USFS STD 942-20-01					
DM-4.4	1/15/2016	RM-5.1	7/18/2014	MT-101.70	7/19/2024	USFS STD RHP1					
		RM-5.2	7/21/2023	MT-101.90	7/17/2020						
F-1.1	7/18/2025			MT-105.10	1/17/2020						
F-3.2	7/18/2014										

SUPPLEMENTAL SPECIFICATIONS

800-2023	7/18/25
832	7/18/25
838	7/18/25
856	7/21/23
902	7/19/19

SPECIAL PROVISIONS

WATERWAY PERMIT

FEDERAL PROJECT NO. E240232
PID NO. 120806
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT NONE
HOL-COUNTY TRAIL PHASE 5C2
1 / 133

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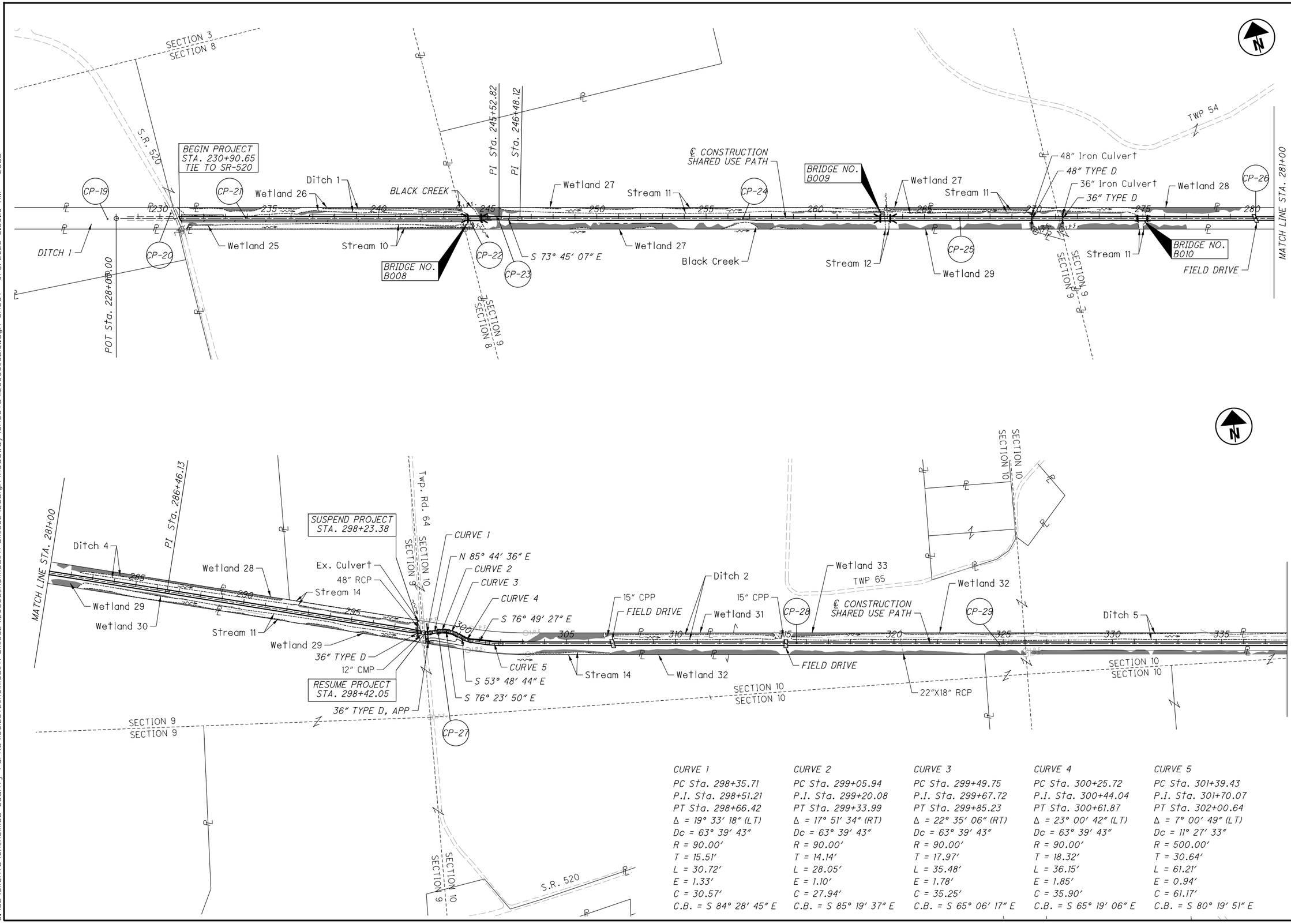

CURVE 1	CURVE 2	CURVE 3	CURVE 4	CURVE 5
PC Sta. 298+35.71	PC Sta. 299+05.94	PC Sta. 299+49.75	PC Sta. 300+25.72	PC Sta. 301+39.43
P.I. Sta. 298+51.21	P.I. Sta. 299+20.08	P.I. Sta. 299+67.72	P.I. Sta. 300+44.04	P.I. Sta. 301+70.07
PT Sta. 298+66.42	PT Sta. 299+33.99	PT Sta. 299+85.23	PT Sta. 300+61.87	PT Sta. 302+00.64
Δ = 19° 33' 18" (LT)	Δ = 17° 51' 34" (RT)	Δ = 22° 35' 06" (RT)	Δ = 23° 00' 42" (LT)	Δ = 7° 00' 49" (LT)
Dc = 63° 39' 43"	Dc = 63° 39' 43"	Dc = 63° 39' 43"	Dc = 63° 39' 43"	Dc = 11° 27' 33"
R = 90.00'	R = 90.00'	R = 90.00'	R = 90.00'	R = 500.00'
T = 15.51'	T = 14.14'	T = 17.97'	T = 18.32'	T = 30.64'
L = 30.72'	L = 28.05'	L = 35.48'	L = 36.15'	L = 61.21'
E = 1.33'	E = 1.10'	E = 1.78'	E = 1.85'	E = 0.94'
C = 30.57'	C = 27.94'	C = 35.25'	C = 35.90'	C = 61.17'
C.B. = S 84° 28' 45" E	C.B. = S 85° 19' 37" E	C.B. = S 65° 06' 17" E	C.B. = S 65° 19' 06" E	C.B. = S 80° 19' 51" E

HORIZONTAL SCALE IN FEET
0 100 200 400

CALCULATED MS
CHECKED TML

SCHEMATIC PLAN

HOL-COUNTY TRAIL
PHASE 5C2

2
133

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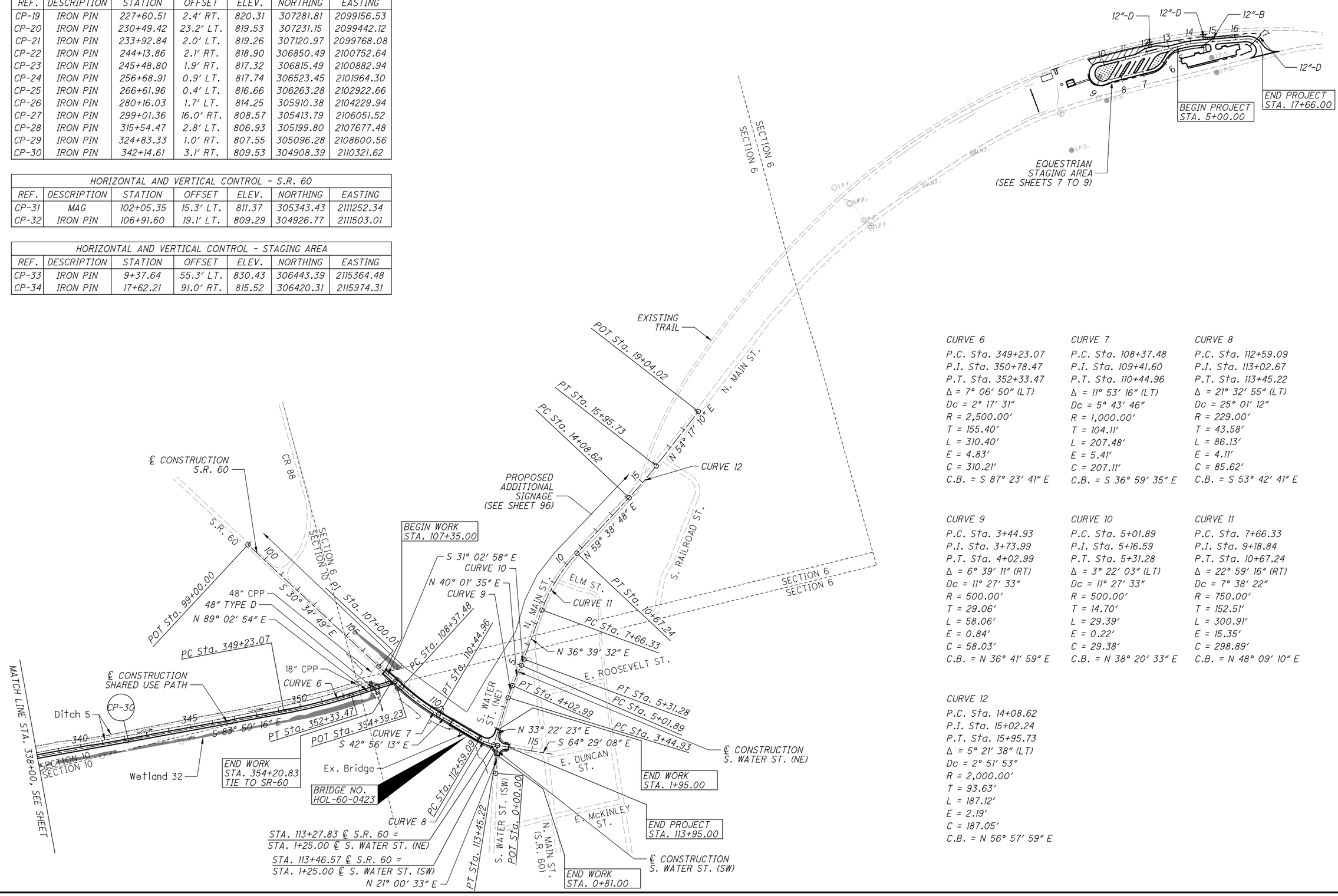
HORIZONTAL AND VERTICAL CONTROL - SHARED USE PATH						
REF.	DESCRIPTION	STATION	OFFSET	ELEV.	NORTHING	EASTING
CP-19	IRON PIN	227+60.51	2.4' RT.	820.31	307281.81	2099156.53
CP-20	IRON PIN	230+49.42	23.2' LT.	819.53	307231.15	2099442.12
CP-21	IRON PIN	233+92.84	2.0' LT.	819.26	307120.97	2099768.08
CP-22	IRON PIN	244+13.86	2.1' RT.	818.90	306850.49	2100752.64
CP-23	IRON PIN	245+48.80	1.9' RT.	817.32	306815.49	2100882.94
CP-24	IRON PIN	256+68.91	0.9' LT.	817.74	306523.45	2101964.30
CP-25	IRON PIN	266+61.96	0.4' LT.	816.66	306263.28	2102922.66
CP-26	IRON PIN	280+16.03	1.7' LT.	814.25	305910.38	2104229.94
CP-27	IRON PIN	299+01.36	16.0' RT.	808.57	305413.79	2106051.52
CP-28	IRON PIN	315+54.47	2.8' LT.	806.93	305199.80	2107677.48
CP-29	IRON PIN	324+83.33	1.0' RT.	807.55	305096.28	2108600.56
CP-30	IRON PIN	342+14.61	3.1' RT.	809.53	304908.39	2110321.62

HORIZONTAL AND VERTICAL CONTROL - S.R. 60						
REF.	DESCRIPTION	STATION	OFFSET	ELEV.	NORTHING	EASTING
CP-31	MAG	102+05.35	15.3' LT.	811.37	305343.43	2111252.34
CP-32	IRON PIN	106+91.60	19.1' LT.	809.29	304926.77	2111503.01

HORIZONTAL AND VERTICAL CONTROL - STAGING AREA						
REF.	DESCRIPTION	STATION	OFFSET	ELEV.	NORTHING	EASTING
CP-33	IRON PIN	9+37.64	55.3' LT.	830.43	306443.39	2115364.48
CP-34	IRON PIN	17+62.21	91.0' RT.	815.52	306420.31	2115974.31



CURVE 6
P.C. Sta. 349+23.07
P.I. Sta. 350+78.47
P.T. Sta. 352+33.47
Δ = 7° 06' 50" (LT)
Dc = 2° 17' 31"
R = 2,500.00'
T = 155.40'
L = 310.40'
E = 4.83'
C = 310.21'
C.B. = S 87° 23' 41" E

CURVE 7
P.C. Sta. 108+37.48
P.I. Sta. 109+41.60
P.T. Sta. 110+44.96
Δ = 11° 53' 16" (LT)
Dc = 5° 43' 46"
R = 1,000.00'
T = 104.11'
L = 207.48'
E = 5.41'
C = 207.11'
C.B. = S 36° 59' 35" E

CURVE 8
P.C. Sta. 112+59.09
P.I. Sta. 113+02.67
P.T. Sta. 113+45.22
Δ = 21° 32' 55" (LT)
Dc = 25° 01' 12"
R = 229.00'
T = 43.58'
L = 86.13'
E = 4.11'
C = 85.62'
C.B. = S 53° 42' 41" E

CURVE 9
P.C. Sta. 3+44.93
P.I. Sta. 3+73.99
P.T. Sta. 4+02.99
Δ = 6° 39' 11" (RT)
Dc = 11° 27' 33"
R = 500.00'
T = 29.06'
L = 58.06'
E = 0.84'
C = 58.03'
C.B. = N 36° 41' 59" E

CURVE 10
P.C. Sta. 5+01.89
P.I. Sta. 5+16.59
P.T. Sta. 5+31.28
Δ = 3° 22' 03" (LT)
Dc = 11° 27' 33"
R = 500.00'
T = 14.70'
L = 29.39'
E = 0.22'
C = 29.38'
C.B. = N 38° 20' 33" E

CURVE 11
P.C. Sta. 7+66.33
P.I. Sta. 9+18.84
P.T. Sta. 10+67.24
Δ = 22° 59' 16" (RT)
Dc = 7° 38' 22"
R = 750.00'
T = 152.51'
L = 300.91'
E = 15.35'
C = 298.89'
C.B. = N 48° 09' 10" E

CURVE 12
P.C. Sta. 14+08.62
P.I. Sta. 15+02.24
P.T. Sta. 15+95.73
Δ = 5° 21' 38" (LT)
Dc = 2° 51' 53"
R = 2,000.00'
T = 93.63'
L = 187.12'
E = 2.19'
C = 187.05'
C.B. = N 56° 57' 59" E

HORIZONTAL SCALE IN FEET
0 100 200 400

CALCULATED MS
CHECKED TML

SCHEMATIC PLAN

HOL-COUNTY TRAIL PHASE 5C2

REF NO.	SHEET NO.	STATION TO STATION					202 FENCE REMOVED FT		601 ROCK CHANNEL PROTECTION, TYPE C WITH FILTER CY	611 12" CONDUIT, TYPE B FT	611 12" CONDUIT, TYPE D FT	611 CATCH BASIN, NO. 2-2B EACH		607 FENCE, MISC.:WOOD FENCE (SAFETY RAIL PER SCD RM-5.2) FT		659 TOPSOIL CY	670 DITCH EROSION PROTECTION SY		SPECIAL BICYCLE RACK EACH	SPECIAL HITCHING POST EACH
R-1	8	9+31.47	LT	TO	9+18.23	LT	237													
R-2	8	9+52.10	LT	TO	10+86.74	LT	162													
R-3	8	11+96.45	LT	TO	12+71.82	LT	76													
R-4	8,9	9+18.23	LT	TO	17+37.87	RT	902													
R-5	9	14+97.57	RT	TO	15+51.40	RT	54													
R-6	9	16+75.29	RT	TO	17+02.85	LT	39													
D-1	8	12+06.42	LT	TO	12+35.31	LT					30									
D-2	9	14+40.02	RT	TO	15+10.00	LT				82		1								
D-3	9	14+46.44	LT	TO	14+75.41	LT					30									
D-4	9	16+72.91	RT	TO	16+95.55	LT					70									
E-1	8	9+63.14	LT	TO	12+15.00	LT										95	848			
E-2	9	15+10.00	LT						2											
E-3	9	16+95.55	LT						4											
F-1	8	9+19.15	LT	TO	9+31.47	LT								119						
B-1	9	14+22.76	RT																1	
B-2	9	15+47.43	RT																1	
H-1	8	9+30.26	LT																	1
H-2	8	9+27.29	LT																	1
H-3	8	9+24.32	LT																	1
H-4	8	9+21.37	LT																	1
TOTALS CARRIED TO GENERAL SUMMARY							1470		6	82	130	1		119		95	848		2	4

CALCULATED HBZ
CHECKED AKA

STAGING AREA SUBSUMMARY

HOL-COUNTY TRAIL
PHASE 5C2

REF NO.	SHEET NO.	LOCATION	STATION TO STATION					CODE	SIZE (INCHES)	630 GROUND MOUNTED SUPPORT, NO. 3 POST FT	630 SIGN POST REFLECTOR EACH	630 SIGN, FLAT SHEET SF	630 REMOVAL OF GROUND MOUNTED SIGN AND REERECTION EACH	630 REMOVAL OF WOOD POLE AND DISPOSAL EACH	642 CENTER LINE, TYPE 1 MILE	642 CHANNELIZING LINE, 8", TYPE 1 FT	642 STOP LINE, TYPE 1 FT	642 TRANSVERSE/DIAGONAL LINE, TYPE 1, (YELLOW) FT	642 PARKING LOT STALL MARKING, TYPE 1 FT	642 LANE ARROW, TYPE 1 EACH	642 DOTTED LINE, 4", TYPE 1, (WHITE) FT	642 HANDICAP SYMBOL MARKING, TYPE 1 EACH
S-1	9	STAGING AREA DRIVE	17+55.67				RT	D4-1-SPECIAL R1-1-24	EXISTING 24 x 24	10.5	1	4.00	1	1								
TC-1	8,9	STAGING AREA	10+69.92	CL	TO	17+66.02	CL								0.14							
TC-2	8	STAGING AREA	7+84.59	RT	TO	8+28.45	RT									62						
TC-3	8	STAGING AREA	7+19.53	RT	TO	7+63.39	RT									62						
TC-4	8	STAGING AREA	6+40.40	RT	TO	6+98.34	RT									62						
TC-5	8	STAGING AREA	5+51.05	LT													14					
TC-6	8	STAGING AREA	11+95.79	LT	TO	12+45.79	LT											124				
TC-7	8	STAGING AREA	11+45.79	LT	TO	11+95.79	LT														50	
TC-8	8	STAGING AREA	11+95.79	LT	TO	12+45.79	LT									50						
TC-9	8	STAGING AREA	12+45.79	LT	TO	12+95.79	LT														50	
TC-10	8	STAGING AREA	11+17.39	LT																1		
TC-11	8	STAGING AREA	9+97.11	LT																1		
TC-12	8	STAGING AREA	9+45.93	LT																1		
TC-13	8	STAGING AREA	8+66.26	LT																1		
TC-14	8	STAGING AREA	7+02.74	LT																1		
TC-15	8	STAGING AREA	6+46.93	LT																1		
TC-16	8	STAGING AREA	5+58.97	LT																1		
TC-17	8	STAGING AREA	12+81.40	LT																1		
TC-18	8	STAGING AREA	12+81.40	RT																1		
TC-19	8	STAGING AREA	12+91.76	RT	TO	13+55.59	RT														64	
TC-20	8	STAGING AREA	11+17.39	RT																1		
TC-21	8	STAGING AREA	12+20.74	LT																		1
TC-22	9	STAGING AREA	17+55.67	RT													33					
TC-23	9	STAGING AREA	15+00.00	RT											0.01							
TC-24	9	STAGING AREA	13+40.43	RT	TO	13+61.09	RT											162				
TC-25	9	STAGING AREA	15+93.79	RT	TO	16+13.67	RT											162				
TC-26	9	STAGING AREA	14+63.71	RT	TO	14+68.64	RT											26				
TC-27	9	STAGING AREA	14+60.78	RT																		1
TC-28	9	STAGING AREA	14+75.57	RT																		1
TC-29	9	STAGING AREA	13+74.51	RT	TO	15+86.96	RT													485		
TC-30	9	STAGING AREA	17+48.97	RT																1		
TC-31	9	STAGING AREA	16+24.77	LT																1		
TC-32	9	STAGING AREA	16+24.77	RT																1		
TC-33	9	STAGING AREA	14+94.20	RT																1		
TC-34	9	STAGING AREA	15+05.58	RT																1		
TC-35	9	STAGING AREA	14+68.58	LT																1		
TC-36	9	STAGING AREA	14+68.58	RT																1		
TC-37	9	STAGING AREA	15+00.00	RT	TO	15+12.00	RT										12					
TOTALS CARRIED TO GENERAL SUMMARY										10.5	1	4	1	1	0.15	237	59	474	485	17	164	3

CALCULATED HBZ
CHECKED AKA

STAGING AREA TRAFFIC CONTROL SUBSUMMARY

HOL-COUNTY TRAIL
PHASE 5C2

STATION RANGE			SIDE	DISTANCE (D)	AVERAGE WIDTH (W)	SURFACE AREA (A) A=DxW/9	CADD GENERATED AREA		204 EXCAVATION OF SUBGRADE	206 CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP		301 ASPHALT CONCRETE BASE, PG64-22, (449), 4"		304 AGGREGATE BASE, 3"	304 AGGREGATE BASE, 6"		407 TACK COAT (0.08 GAL/SY)		441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22, 1.25"	441 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449), 1.75"		452 8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P		608 4" CONCRETE WALK	
				FT	FT	SQ YD	SQ YD		CY	SY		CY		CY	CY		GAL		CY	CY		SY		SF	
BUGGY PULL-IN AREA																										
5+00.00	TO	13+55.59	LT & RT																							
		FULL DEPTH					2937.58		1142.39	2937.58		326.40			489.60		470.01		102.00	142.80						
		+AGG/ASPH BASE COURSE			1.00		52.78					5.86			8.80											
		+STAB. SUBGRADE			3.00		158.61		61.68	158.61																
SIDEWALK TO PAVILION																										
9+22.46	TO	9+25.90	LT																							
		FULL DEPTH			6.00		48.49		18.86	48.49				4.04											436.38	
		+STAB. SUBGRADE			3.00		25.79		10.03	25.79																
KILLBUCK STAGING AREA																										
13+55.59	TO	16+43.24	LT & RT	287.65																						
		FULL DEPTH			24.00	767.07			298.30	767.07		85.23			127.84		122.73		26.63	37.29						
		+AGG/ASPH BASE COURSE			1.00	31.96						3.55			5.33											
		+STAB. SUBGRADE			3.00	95.88			37.29	95.88																
16+43.24	TO	17+01.11	LT & RT	57.87																						
CURVE WIDENING		FULL DEPTH			27.45	176.50			68.64	176.50		19.61			29.42		28.24		6.13	8.58						
		+AGG/ASPH BASE COURSE			1.00	6.43						0.71			1.07											
		+STAB. SUBGRADE			3.00	19.29			7.50	19.29																
ADD INTERSECTION STAGING AREA & C.R. 622																										
17+01.11	TO	17+66.00	LT & RT	64.89																						
		FULL DEPTH			48.24		347.83		135.27	347.83		38.65			57.97		55.65		12.08	16.91						
		+AGG/ASPH BASE COURSE			1.00		9.90					1.10			1.65											
		+STAB. SUBGRADE			3.00		29.45		11.45	29.45																
PARKING LOT			RT																							
		FULL DEPTH					1336.11		519.60	1336.11		148.46			222.69		213.78		46.39	64.95						
		+AGG/ASPH BASE COURSE			1.00		37.11					4.12			6.19											
		+STAB. SUBGRADE			3.00		111.47		43.35	111.47																
FIELD DRIVE DR-1																										
9+38.32	TO	9+38.88	LT																							
		FULL DEPTH FIELD DRIVE					32.52		12.65	32.52					5.42							32.52				
FIELD DRIVE DR-2																										
12+05.00	TO	12+35.00	LT																							
		FULL DEPTH FIELD DRIVE					34.04		13.24	34.04					5.67							34.04				
FIELD DRIVE DR-3																										
14+56.39	TO	14+66.39	LT																							
		FULL DEPTH FIELD DRIVE					31.38		12.20	31.38					5.23							31.38				
FIELD DRIVE DR-4																										
14+56.39	TO	14+66.39	RT																							
		FULL DEPTH FIELD DRIVE					42.78		16.64	42.78					7.13							42.78				
							SUBTOTALS		2409.09	6194.79		633.70		4.04	974.00		890.42		193.23	270.53		140.72		436.38		
							TOTALS CARRIED TO GENERAL SUMMARY		2410	6195		634		979			891		194	271		141		437		

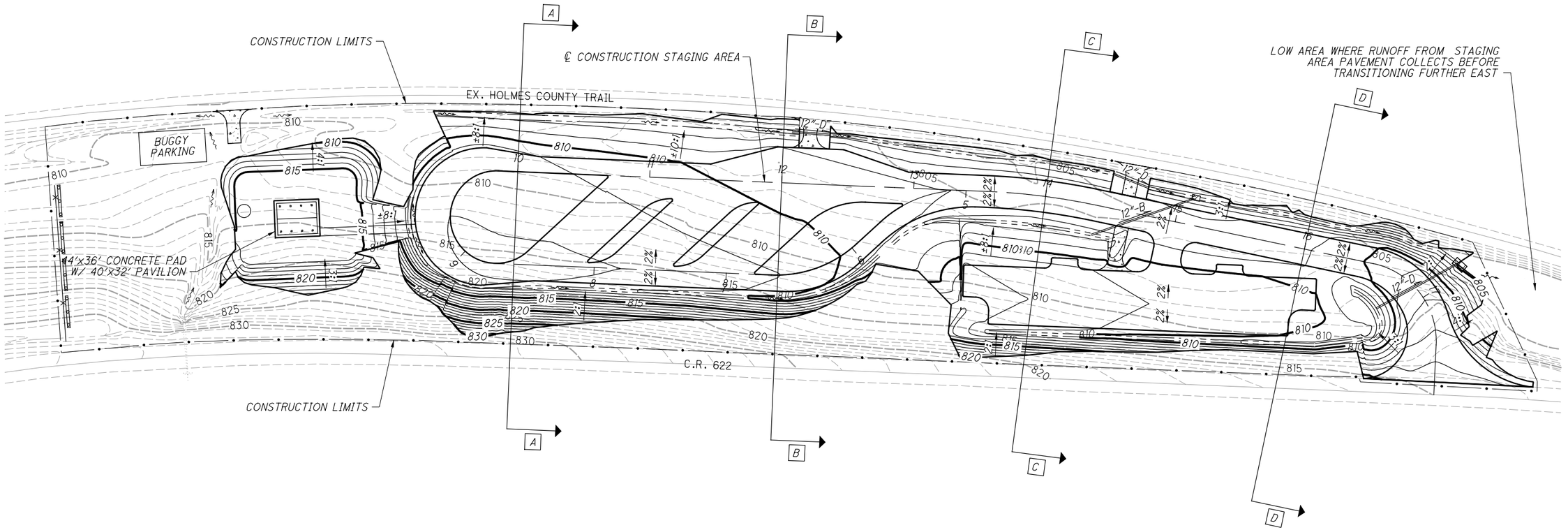
CALCULATED HBZ
CHECKED AKA

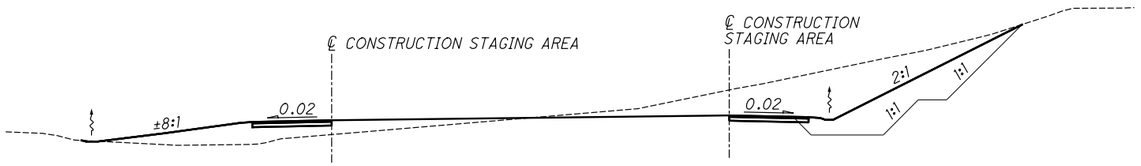
STAGING AREA PAVEMENT CALCULATIONS

HOL-COUNTY TRAIL
PHASE 5C2

6
133

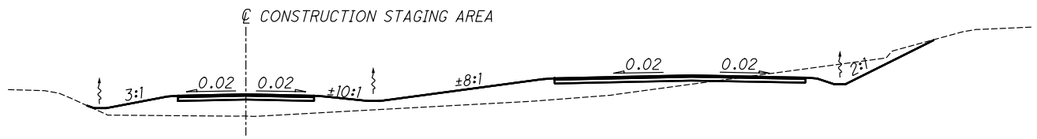
G:\DE\Clients\OH_Holmes County Parks\0012372_Holmes_Trail_5C2\20806_Holmes_Trail_5C2\Design\Roadway\Sheets\20806_GS009.dgn 9/2/2025 10:09:03 AM A.Adair Sheet



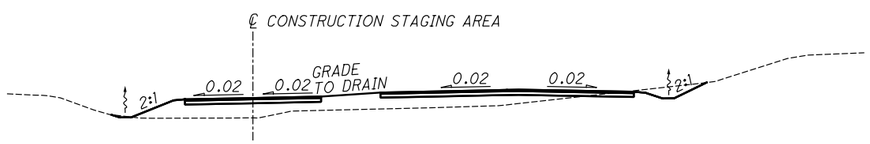


SECTION A-A
STA. 10+00

SECTION B-B
STA. 12+00



SECTION C-C
STA. 14+00



SECTION D-D
STA. 16+00

GRADING PLAN
KILLBUCK STAGING AREA

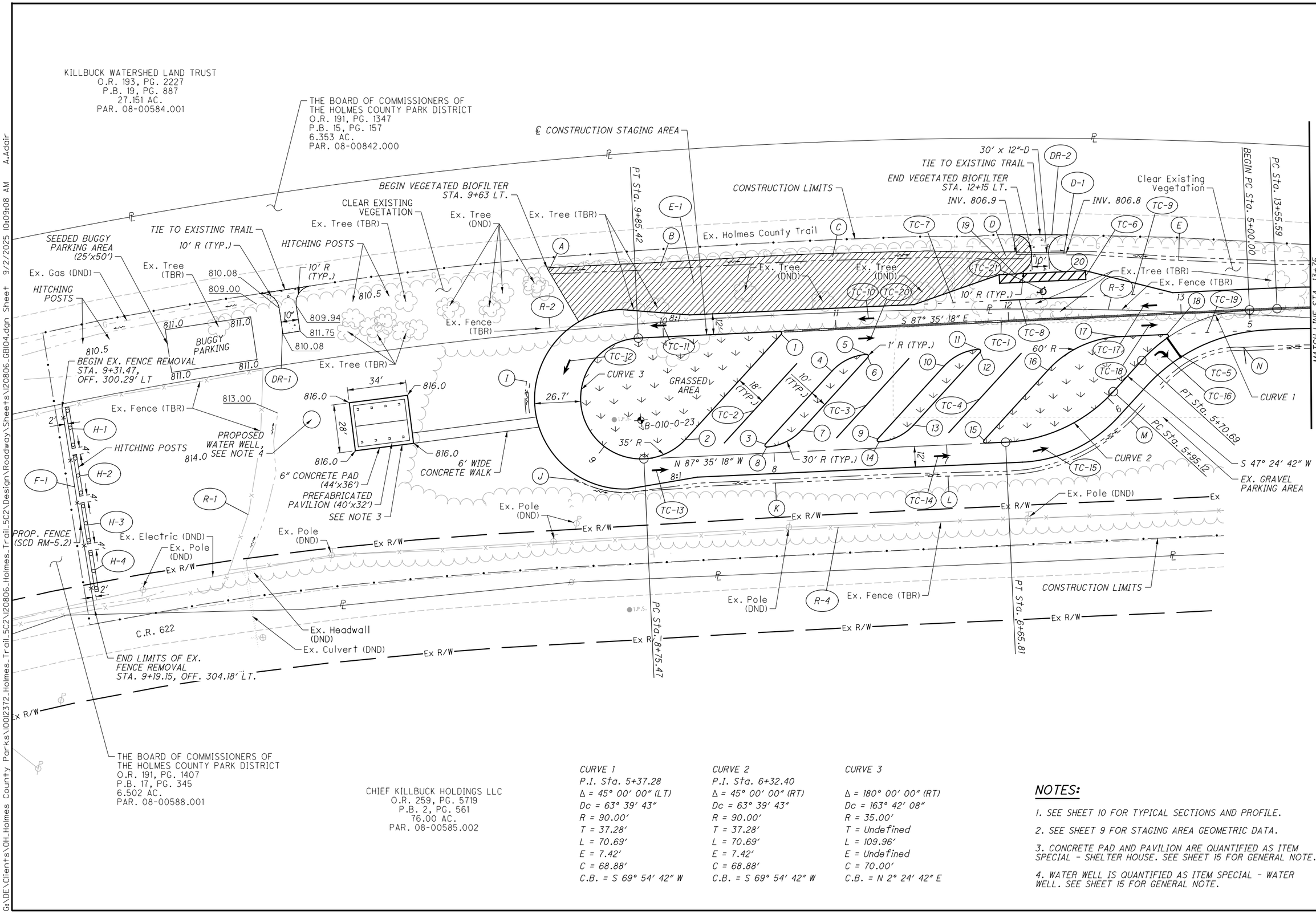
HOL-COUNTY TRAIL
PHASE 5C2

CALCULATED AKB
CHECKED MS

HORIZONTAL SCALE IN FEET
0 20 40 80

7
133

G:\DE\Clients\OH_Holmes County Parks\10012372_Holmes_Trail_5C2\20806_Holmes_Trail_5C2\Design\Roadway\Sheets\20806_GB103.dgn Sheet 9/2/2025 10:09:06 AM A.Adair



THE BOARD OF COMMISSIONERS OF THE HOLMES COUNTY PARK DISTRICT
O.R. 191, PG. 1407
P.B. 17, PG. 345
6.502 AC.
PAR. 08-00588.001

CHIEF KILLBUCK HOLDINGS LLC
O.R. 259, PG. 5719
P.B. 2, PG. 561
76.00 AC.
PAR. 08-00585.002

CURVE 1
P.I. Sta. 5+37.28
Δ = 45° 00' 00" (LT)
Dc = 63° 39' 43"
R = 90.00'
T = 37.28'
L = 70.69'
E = 7.42'
C = 68.88'
C.B. = S 69° 54' 42" W

CURVE 2
P.I. Sta. 6+32.40
Δ = 45° 00' 00" (RT)
Dc = 63° 39' 43"
R = 90.00'
T = 37.28'
L = 70.69'
E = 7.42'
C = 68.88'
C.B. = S 69° 54' 42" W

CURVE 3
Δ = 180° 00' 00" (RT)
Dc = 163° 42' 08"
R = 35.00'
T = Undefined
L = 109.96'
E = Undefined
C = 70.00'
C.B. = N 2° 24' 42" E

NOTES:

1. SEE SHEET 10 FOR TYPICAL SECTIONS AND PROFILE.

2. SEE SHEET 9 FOR STAGING AREA GEOMETRIC DATA.

3. CONCRETE PAD AND PAVILION ARE QUANTIFIED AS ITEM SPECIAL - SHELTER HOUSE. SEE SHEET 15 FOR GENERAL NOTE.

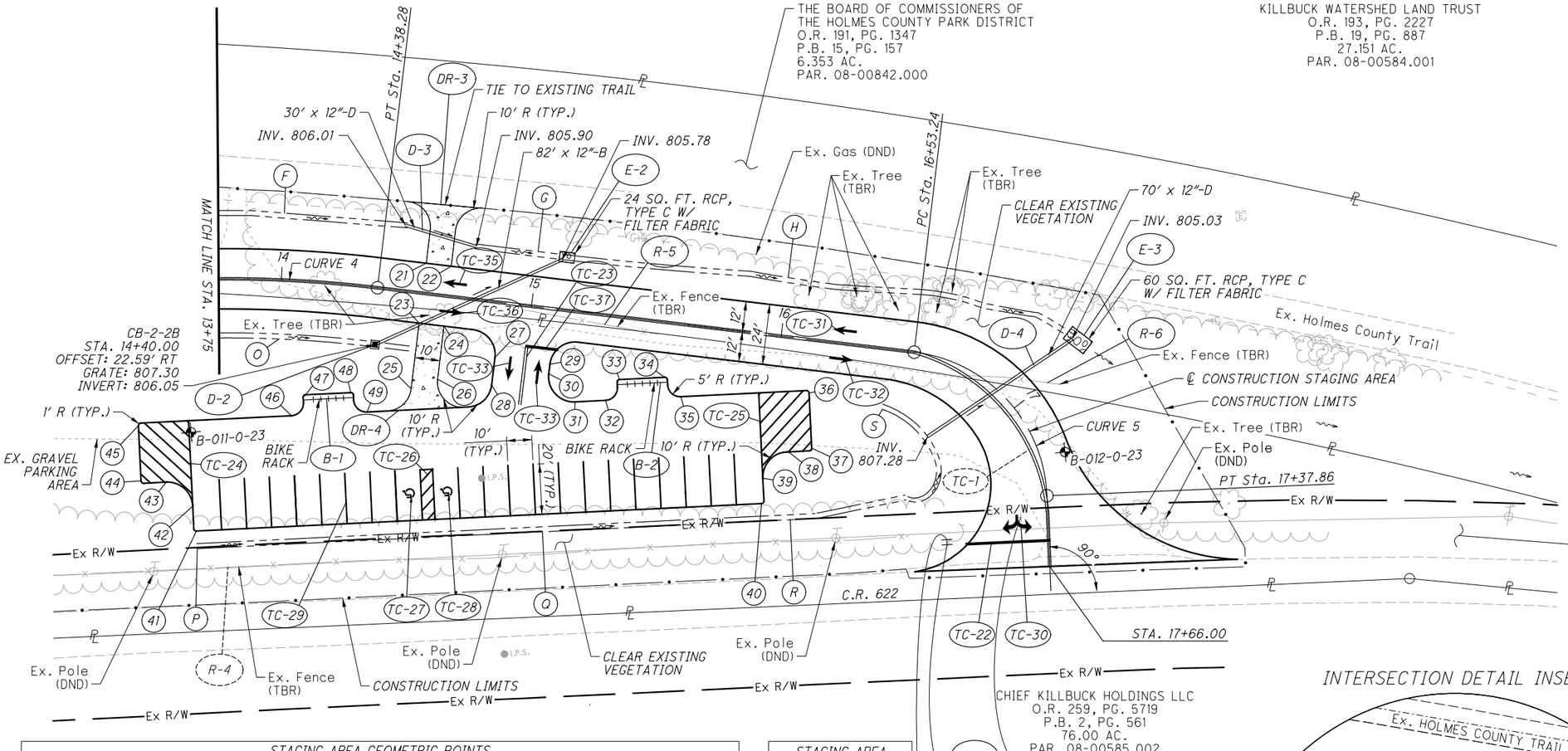
4. WATER WELL IS QUANTIFIED AS ITEM SPECIAL - WATER WELL. SEE SHEET 15 FOR GENERAL NOTE.

HORIZONTAL SCALE IN FEET
0 12.5 25 50

CALCULATED MS
CHECKED TML

KILLBUCK STAGING AREA PLAN
STA. 5+00 TO STA. 13+75

HOL-COUNTY TRAIL PHASE 5C2



CURVE 4

P.I. Sta. 13+97.03
Δ = 9° 28′ 32″ (RT)
Dc = 11° 27′ 33″
R = 500.00′
T = 41.44′
L = 82.69′
E = 1.71′
C = 82.59′
C.B. = S 82° 51′ 03″ E

CURVE 5

P.I. Sta. 17+04.31
Δ = 80° 48′ 41″ (RT)
Dc = 95° 29′ 35″
R = 60.00′
T = 51.07′
L = 84.63′
E = 18.79′
C = 77.78′
C.B. = S 37° 42′ 26″ E

HORIZONTAL SCALE IN FEET
0 12.5 25 50

CALCULATED MS
CHECKED TML

STAGING AREA GEOMETRIC POINTS

REF.	STATION	OFFSET		ELEV.	REF.	STATION	OFFSET		ELEV.
1	10+68.21	1.71′	RT	810.79	26	14+66.39	33.24′	RT	808.85
2	8+51.02	9.95′	RT	812.11	27	14+88.00	22.00′	RT	809.18
3	8+04.81	5.25′	RT	812.04	28	14+88.00	32.97′	RT	809.95
4	10+96.51	24.32′	RT	810.96	29	15+10.00	22.00′	RT	809.15
5	11+16.99	15.54′	RT	810.61	30	15+10.00	25.85′	RT	809.46
6	11+17.72	17.25′	RT	810.64	31	15+21.67	35.71′	RT	810.30
7	7+83.59	12.32′	RT	811.77	32	15+33.65	33.67′	RT	810.23
8	8+04.08	3.54′	RT	812.07	33	15+38.27	24.78′	RT	809.51
9	7+39.75	5.25′	RT	811.57	34	15+55.97	21.77′	RT	809.39
10	11+61.56	24.32′	RT	810.37	35	15+63.23	28.66′	RT	810.06
11	11+82.05	15.54′	RT	810.01	36	16+13.68	21.12′	RT	809.79
12	11+82.78	17.25′	RT	810.03	37	16+17.35	42.81′	RT	810.23
13	7+18.54	12.32′	RT	811.24	38	16+08.34	45.38′	RT	810.30
14	7+39.02	3.54′	RT	811.60	39	15+99.47	57.00′	RT	810.16
15	6+78.25	1.71′	RT	811.14	40	16+00.16	67.02′	RT	809.97
16	12+21.37	29.57′	RT	809.99	41	13+63.03	104.64′	RT	811.91
17	12+63.79	12.00′	RT	809.48	42	13+61.6	95.02′	RT	812.12
18	12+91.14	12.00′	RT	809.36	43	13+50.49	86.76′	RT	812.43
19	12+05.00	27.00′	LT	808.97	44	13+40.49	87.45′	RT	812.52
20	12+35.00	27.00′	LT	808.83	45	13+40.43	65.76′	RT	812.08
21	14+56.39	12.00′	LT	808.13	46	14+07.03	54.57′	RT	811.39
22	14+66.39	12.00′	LT	808.09	47	14+12.67	45.68′	RT	810.35
23	14+56.39	12.00′	RT	808.62	48	14+32.22	42.67′	RT	810.10
24	14+66.39	12.00′	RT	808.57	49	14+38.28	49.56′	RT	811.07
25	14+56.39	38.33′	RT	809.11					

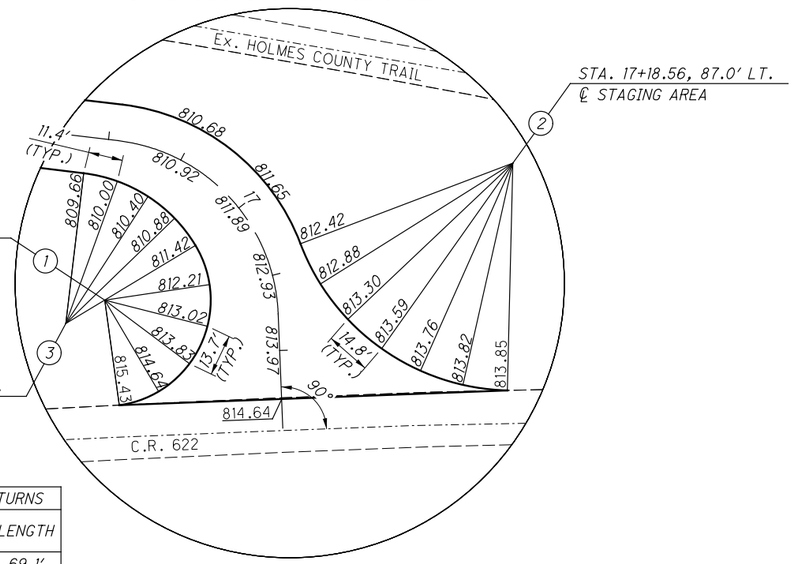
STAGING AREA DRAINAGE POINTS

REF.	ELEV.
A	807.89
B	807.65
C	807.29
D	806.92
E	806.56
F	806.19
G	805.81
H	805.45
I	810.76
J	811.49
K	811.21
L	810.27
M	808.38
N	807.80
O	807.48
P	810.75
Q	809.31
R	808.75
S	807.50

CURVE DATA FOR RADIUS RETURNS

CURVE NO.	RADIUS	INTERIOR ANGLE	LENGTH
1	35.0′	113° 09′ 58″	69.1′
2	75.0′	67° 50′ 22″	88.8′
3	50.0′	51° 50′ 47″	45.5′

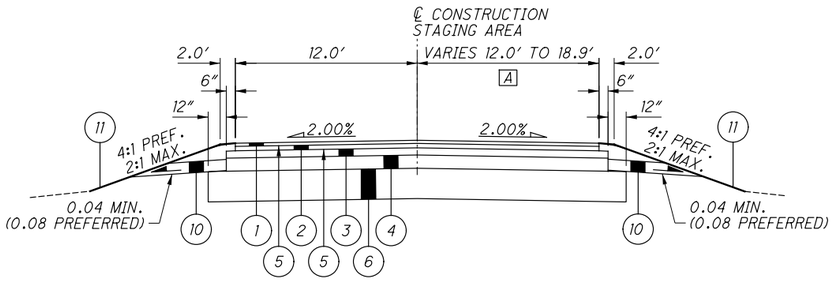
INTERSECTION DETAIL INSET



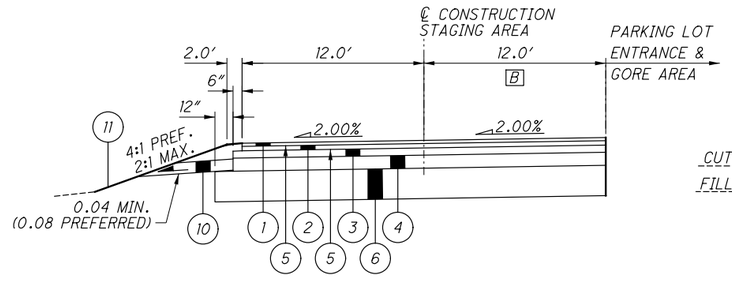
NOTES:

1. SEE SHEET 10 FOR TYPICAL SECTIONS AND PROFILE.

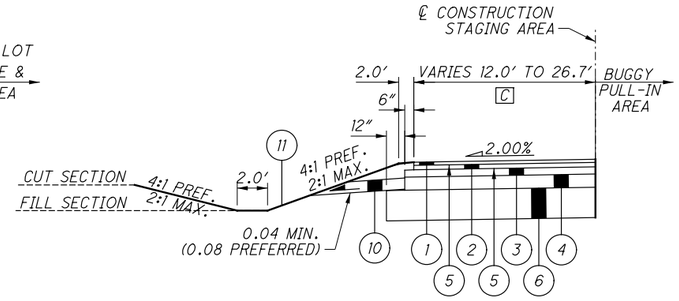
KILLBUCK STAGING AREA PLAN
STA. 13+75 TO STA. 17+66
HOL-COUNTY TRAIL
PHASE 5C2



NORMAL SECTION
SECTION APPLIES TO:
STA. 12+95.75 to STA. 13+90.00
STA. 16+43.00 to STA. 17+66.00



SUPERELEVATED SECTION
SECTION APPLIES TO:
STA. 13+90.00 to STA. 16+43.00



NORMAL SECTION
SECTION APPLIES TO:
STA. 5+51.00 to STA. 12+95.78

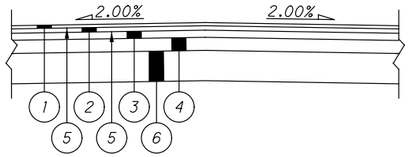
A CURVE WIDENING:
12.0′ - 18.9′ STA. 16+43.24 TO STA. 17+01.11

B SLOPE TRANSITIONS:
-2.00% TO 2.00% FROM STA. 13+90.00 TO STA. 14+54.80
2.00% FROM STA. 14+54.80 TO STA. 15+78.20
2.00% TO -2.00% FROM STA. 15+78.20 TO STA. 16+43.00

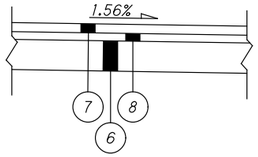
C TAPER:
12.0′ - 17.9′ STA. 8+45.14 TO STA. 8+81.90
CURVE WIDENING:
17.9′ - 26.7′ STA. 8+81.90 TO STA. 9+30.44
26.7′ - 17.9′ STA. 9+30.44 TO STA. 9+78.99
TAPER:
17.9′ - 12.0′ STA. 9+78.99 TO STA. 10+15.75

LEGEND:

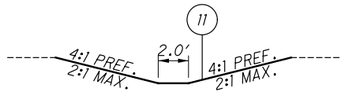
(1) ITEM 441 - 1 1/4″ ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22
(2) ITEM 441 - 1 3/4″ ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449)
(3) ITEM 301 - 4″ ASPHALT CONCRETE BASE, PG64-22, (449)
(4) ITEM 304 - 6″ AGGREGATE BASE
(5) ITEM 407 - TACK COAT (APPLIED @ 0.08 GAL/SQ. YD.)
(6) ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
(7) ITEM 608 - 4″ CONCRETE WALK
(8) ITEM 304 - 3″ AGGREGATE BASE
(9) ITEM 452 - 8″ NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P
(10) ITEM 605 - AGGREGATE DRAINS
(11) ITEM 659 - SEEDING AND MULCHING, CLASS 4A



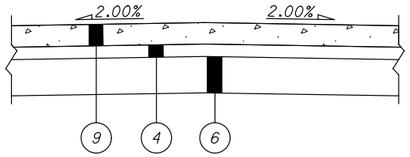
PARKING LOT SECTION



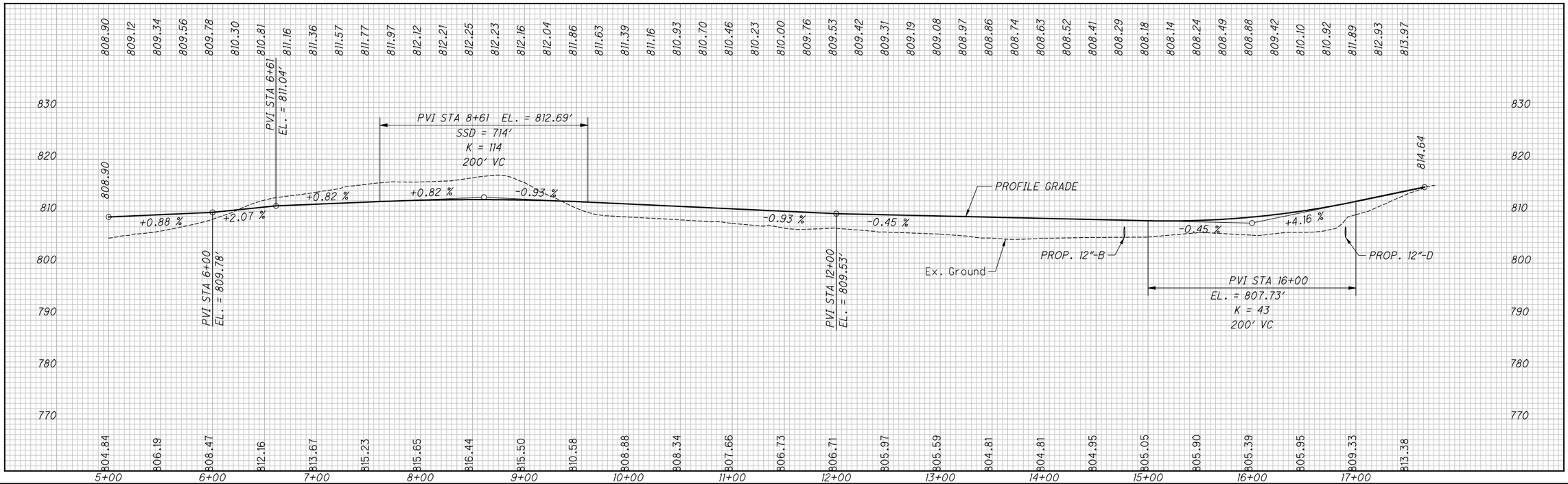
SIDEWALK SECTION



DITCH SECTION
SEE PLANS ON SHEET FOR DETAILS



DRIVE SECTION



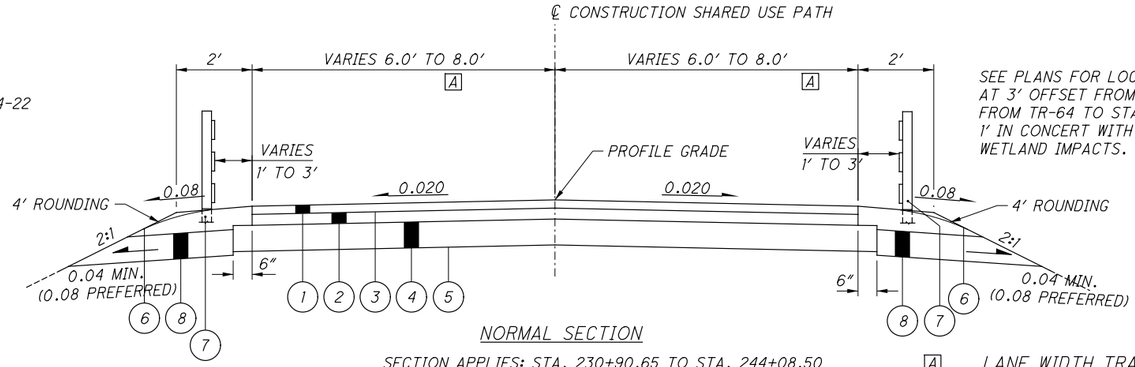
CALCULATED MS
CHECKED TML

TYPICAL SECTIONS AND PROFILE STAGING AREA

HOL-COUNTY TRAIL
PHASE 5C2

LEGEND

1. ITEM 441 - 1 ½" ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, (449), PG64-22
2. ITEM 441 - 1 ¾" ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, (449)
3. ITEM 407 - TACK COAT, 0.08 GAL/SQ YD
4. ITEM 304 - 6" AGGREGATE BASE
5. ITEM 204 - SUBGRADE COMPACTION
   ITEM 204 - PROOF ROLLING
6. ITEM 659 - SEEDING AND MULCHING, CLASS 4A
7. ITEM 607 - FENCE, MISC.: WOOD FENCE
   (SAFETY RAIL PER SCD RM-5.2)
8. ITEM 605 - AGGREGATE DRAINS
9. ITEM 304 - 8" AGGREGATE BASE
10. ITEM 452 - 8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P



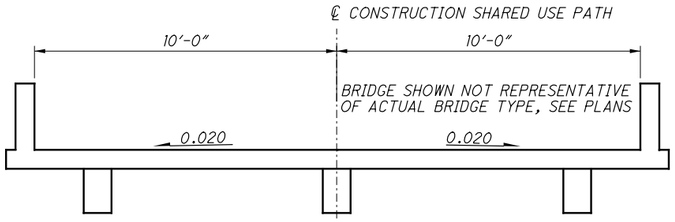
SEE PLANS FOR LOCATION OF SAFETY RAIL. RAIL IS AT 3' OFFSET FROM TR-64 TO STA. 315+00 LT., AND FROM TR-64 TO STA. 327+50 RT. NORMAL OFFSET IS 1' IN CONCERT WITH 2' GRADED SHOULDERS TO REDUCE WETLAND IMPACTS.

NORMAL SECTION

SECTION APPLIES: STA. 230+90.65 TO STA. 244+08.50
STA. 244+71.50 TO STA. 262+96.50
STA. 263+44.50 TO STA. 274+74.00
STA. 275+22.00 TO STA. 298+23.38
STA. 298+42.05 TO STA. 354+26.90

A LANE WIDTH TRANSITIONS AT 20:1 TAPER RATE

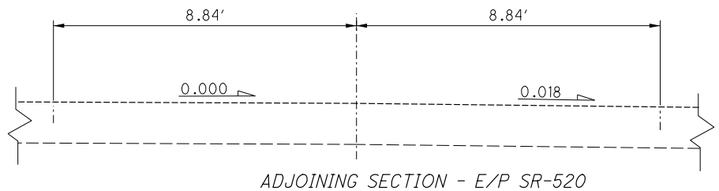
NARROWS FROM 8.0' TO 6.0' BETWEEN STA. 256+10.00 TO 256+50.00 RT.
WIDENS FROM 6.0' TO 8.0' BETWEEN STA. 256+90.00 TO 257+30.00 RT.
NARROWS FROM 8.0' TO 6.0' BETWEEN STA. 297+60.00 TO 298+00.00 LT. & RT.
WIDENS FROM 6.0' TO 8.0' BETWEEN STA. 300+60.00 TO 301+00.00 LT. & RT.
NARROWS FROM 8.0' TO 6.0' BETWEEN STA. 340+30.00 TO 340+70.00 LT.
WIDENS FROM 6.0' TO 7.0' BETWEEN STA. 343+00.00 TO 343+20.00 LT.
NARROWS FROM 7.0' TO 6.0' BETWEEN STA. 346+00.00 TO 346+20.00 LT.
WIDENS FROM 6.0' TO 7.0' BETWEEN STA. 346+80.00 TO 347+00.00 LT.
WIDENS FROM 7.0' TO 8.0' BETWEEN STA. 349+00.00 TO 349+20.00 LT.



BRIDGE CROSSINGS: (SEE BRIDGE PLANS FOR DETAILS)

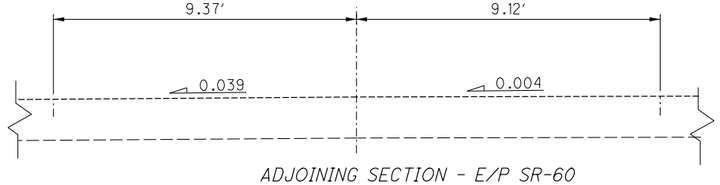
B8 - STA. 244+08.50 TO STA. 244+71.50
B9 - STA. 262+96.50 TO STA. 263+44.50
B10 - STA. 274+74.00 TO STA. 275+22.00

BRIDGE RAIL MAY BE AT GREATER/LESSER OFFSET THAN THE SAFETY RAIL ON THE PATH. CONTRACTOR TO TAPER THE RAIL AT 20:1 TRANSITION RATE UNLESS OTHERWISE SHOWN ON THE PLANS.



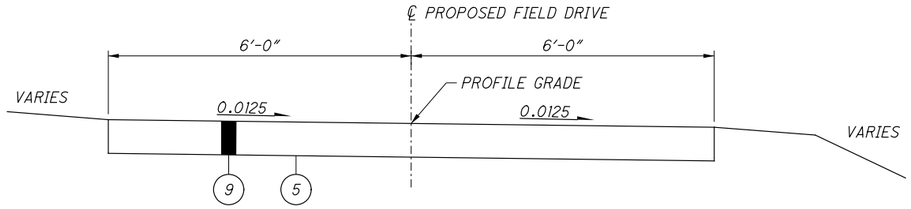
ADJOINING SECTION - E/P SR-520

SECTION APPLIES: STA. 230+90.65
(SKEW: 23° 12' 40" R.F.)



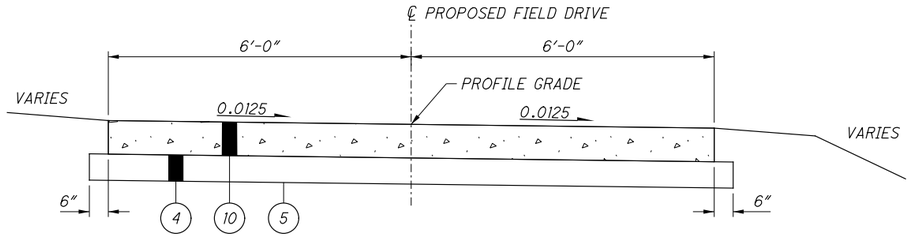
ADJOINING SECTION - E/P SR-60

SECTION APPLIES: STA. 354+26.90
(SKEW: 30° 29' 16" R.F.)



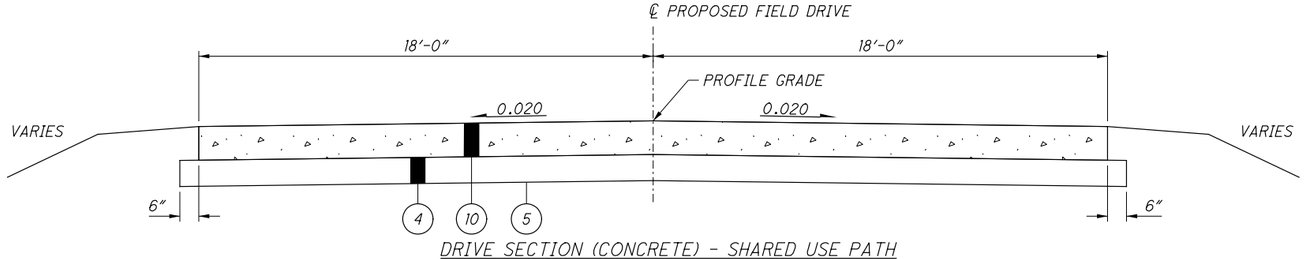
DRIVE SECTION (AGGREGATE) - VICINITY TR-64

SECTION APPLIES: STA. 10+17.92 TO STA. 11+65.06
(INDEPENDENT ALIGNMENT VICINITY TR-64) - SEE SHEET 87



DRIVE SECTION (CONCRETE) - VICINITY TR-64

SECTION APPLIES: STA. 10+06.69 TO STA. 10+17.92
(INDEPENDENT ALIGNMENT VICINITY TR-64) - SEE SHEET 87



DRIVE SECTION (CONCRETE) - SHARED USE PATH

SECTION APPLIES: STA. 280+06.91 TO STA. 280+22.09
STA. 307+04.22 TO STA. 307+20.78
STA. 314+96.00 TO STA. 315+14.00

CALCULATED MS
CHECKED TML

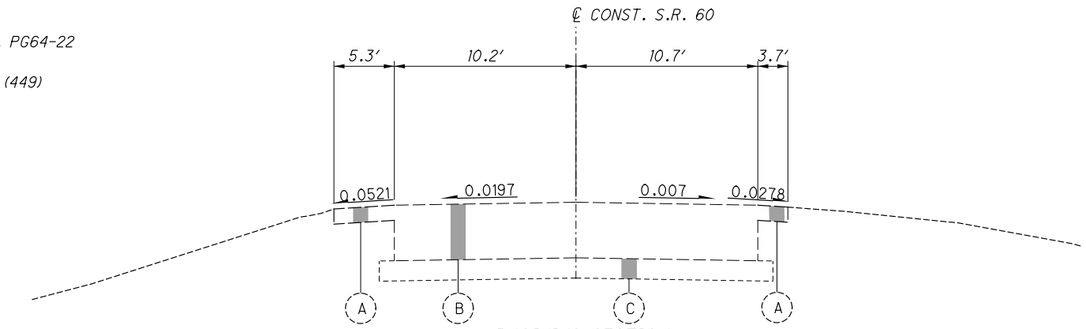
TYPICAL SECTIONS - SHARED USE PATH

HOL-COUNTY TRAIL
PHASE 5C2

LEGEND

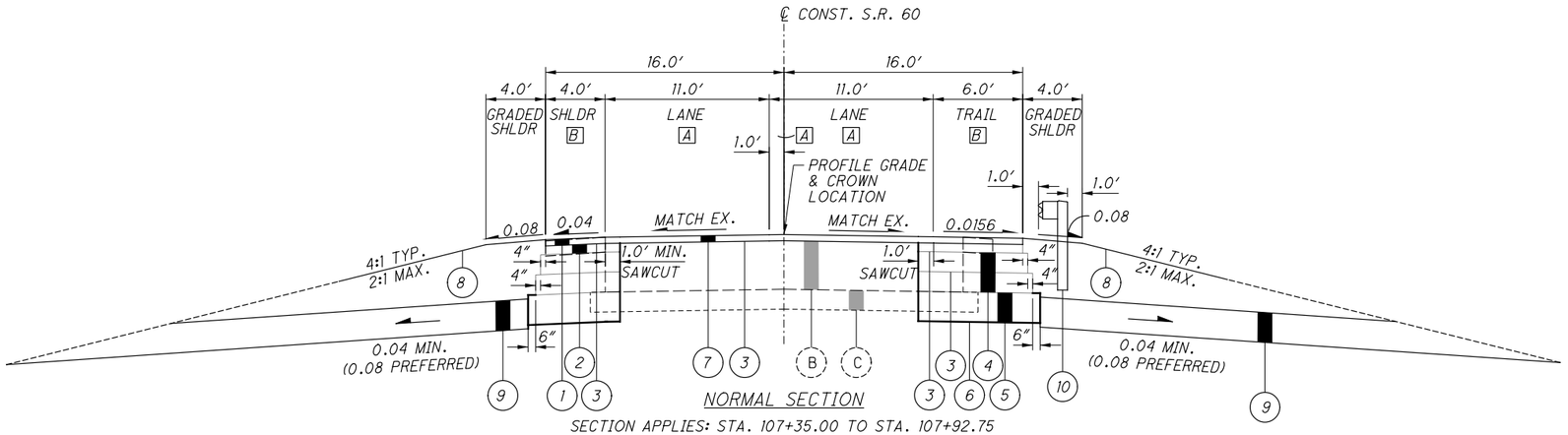
1. ITEM 441 - 1 ¼" ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, (449), PG64-22
2. ITEM 441 - 1 ¾" ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, (449)
3. ITEM 407 - TACK COAT, 0.08 GAL/SQ YD
4. ITEM 301 - 8" ASPHALT CONCRETE BASE, PG64-22, (449) (PLACE IN TWO EQUAL 4" LIFTS)
5. ITEM 304 - 6" AGGREGATE BASE
6. ITEM 204 - SUBGRADE COMPACTION
   ITEM 204 - PROOF ROLLING
7. ITEM 254 - 3" MAX PAVEMENT PLANING, ASPHALT CONCRETE
8. ITEM 659 - SEEDING AND MULCHING, CLASS 4A
9. ITEM 605 - AGGREGATE DRAINS
10. ITEM 606 - GUARDRAIL, TYPE MGS
11. ITEM 608 - 4" CONCRETE WALK
12. ITEM 609 - CURB, TYPE 6

- A) 3"-6" ± ASPHALT CONCRETE
- B) 10"-12" ± ASPHALT CONCRETE
- C) 4"-6" ± AGGREGATE BASE
- D) EX. APPROACH SLAB
  1.25"-3" ± ASPHALT OVERLAY ON
  13" REINFORCED CONCRETE CLASS C



ADJOINING SECTION

SECTION APPLIES: STA. 107+35.00



NORMAL SECTION

SECTION APPLIES: STA. 107+35.00 TO STA. 107+92.75

A LANE WIDTH TRANSITIONS

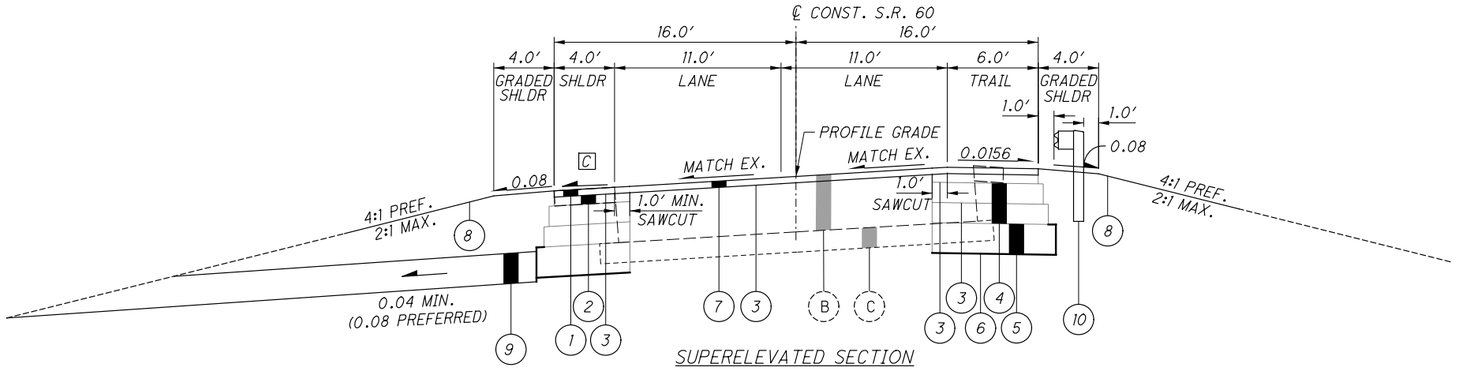
LEFT PAVEMENT WIDTH, MEASURED FROM ℄ OF CONST., WIDENS FROM 10.2′ AT STA. 107+35.00 TO 12.0′ AT STA. 107+75.00. CONCURRENT SHIFT WITH CENTERLINE MARKING ACHIEVES 11.0′ LANE WIDTH.

RIGHT PAVEMENT WIDTH, MEASURED FROM ℄ OF CONST., NARROWS FROM 10.7′ AT STA. 107+35.00 TO 10.0′ AT STA. 107+50.52. CONCURRENT SHIFT WITH CENTERLINE MARKING ACHIEVES 11.0′ LANE WIDTH.

CENTERLINE MARKING SHIFTS FROM 0.0′ OFFSET FROM ℄ OF CONST. AT STA. 107+35.00 TO 1.0′ OFFSET FROM ℄ OF CONST. AT STA. 107+57.29. 1.0′ ELSEWHERE.

B SHOULDER WIDTH TRANSITIONS

LEFT SHOULDER NARROWS FROM 5.3′ AT STA. 107+35.00 TO 4.0′ AT STA. 107+75.00.
RIGHT SHOULDER WIDENS FROM 3.7′ AT STA. 107+35.00 TO 6.0′ AT STA. 107+75.00.



SUPERELEVATED SECTION

SECTION APPLIES: STA. 107+92.75 TO STA. 110+86.75

C SHOULDER SLOPES

0.04 OR SAME SLOPE AS PAVEMENT, WHICHEVER IS GREATER.

CALCULATED KLD
CHECKED AKA

TYPICAL SECTIONS - S.R. 60

HOL-COUNTY TRAIL
PHASE 5C2

LEGEND

(1) ITEM 441 - 1 ¼" ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, (449), PG64-22

(2) ITEM 441 - 1 ¾" ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, (449)

(3) ITEM 407 - TACK COAT, 0.08 GAL/SQ YD

(4) ITEM 301 - 8" ASPHALT CONCRETE BASE, PG64-22, (449)
(PLACE IN TWO EQUAL 4" LIFTS)

(5) ITEM 304 - 6" AGGREGATE BASE

(6) ITEM 204 - SUBGRADE COMPACTION
ITEM 204 - PROOF ROLLING

(7) ITEM 254 - 3" MAX PAVEMENT PLANING, ASPHALT CONCRETE

(8) ITEM 659 - SEEDING AND MULCHING, CLASS 4A

(9) ITEM 605 - AGGREGATE DRAINS

(10) ITEM 606 - GUARDRAIL, TYPE MGS

(11) ITEM 608 - 4" CONCRETE WALK

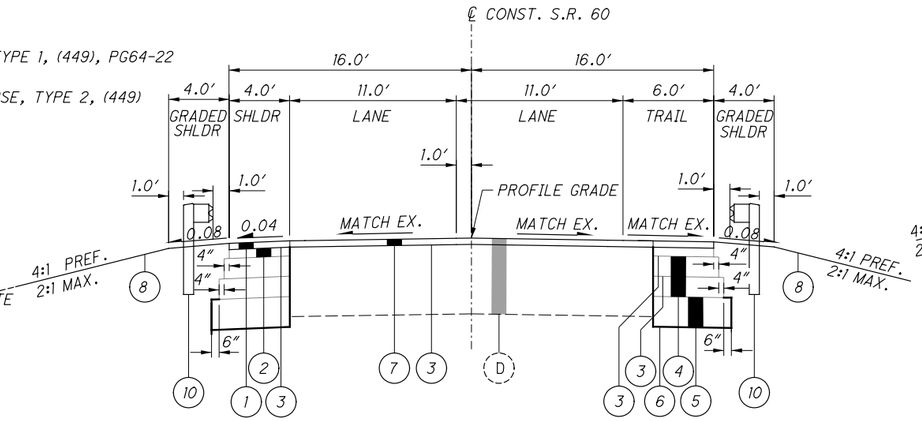
(12) ITEM 609 - CURB, TYPE 6

(A) 3"-6" ± ASPHALT CONCRETE

(B) 10"-12" ± ASPHALT CONCRETE

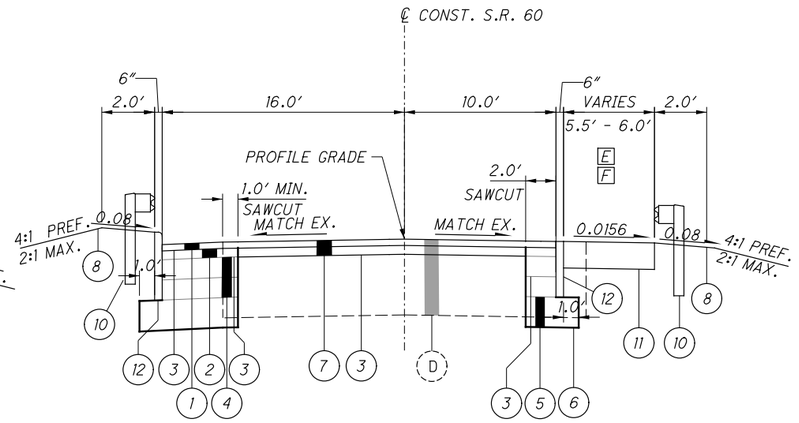
(C) 4"-6" ± AGGREGATE BASE

(D) EX. APPROACH SLAB
1.25"-3" ± ASPHALT OVERLAY ON
13" REINFORCED CONCRETE CLASS C



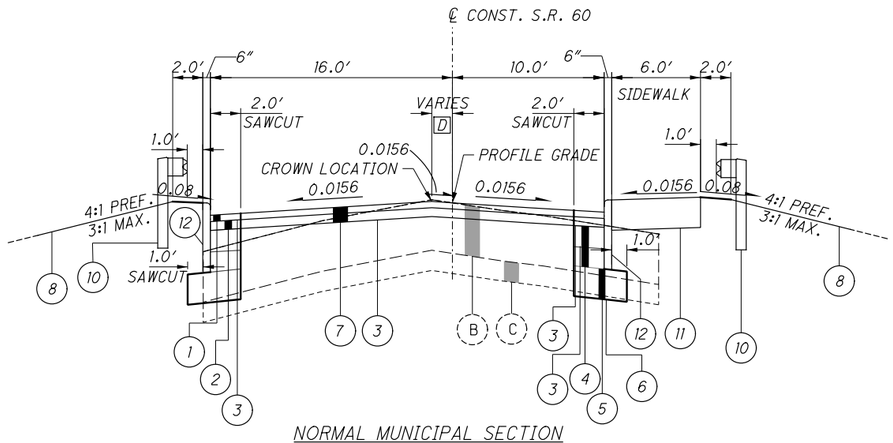
REAR APPROACH SLAB SECTION

SECTION APPLIES: STA. 110+86.75 TO STA. 111+11.75



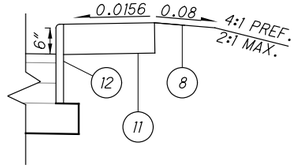
FWD APPROACH SLAB SECTION

SECTION APPLIES: STA. 112+56.25 TO STA. 112+81.29



NORMAL MUNICIPAL SECTION

SECTION APPLIES: STA. 112+81.29 TO STA. 113+46.57



(E) SIDEWALK WIDTH TRANSITIONS

SIDEWALK WIDTH IS 5.5′ FROM STA. 112+56.25 TO STA. 112+65.00. SIDEWALK WIDTH WIDENS FROM 5.5′ AT STA. 112+65.00 TO 6.0′ AT STA. 112+75.00. SIDEWALK WIDTH IS 6.0′ ELSEWHERE.

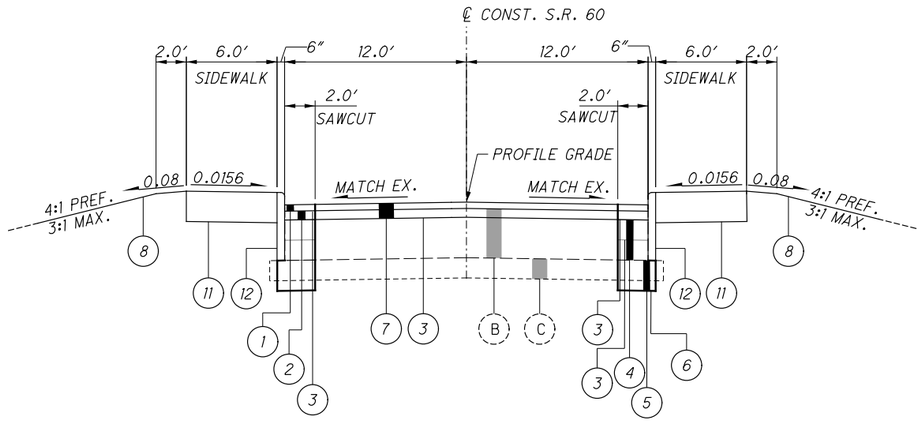
(F) CURB HEIGHT AND SLOPE TRANSITIONS

CURB HEIGHT IS 0.0′ FROM STA. 112+56.25 TO 112+65.00. CURB HEIGHT TRANSITIONS FROM 0.0′ AT 112+65.00 TO 6″ AT 112+75.00. CURB HEIGHT IS 6″ ELSEWHERE.

SIDEWALK SLOPE IS 1.56% TO THE OUTSIDE FROM STA. 112+56.25 TO STA. 112+65.00. SIDEWALK SLOPE TRANSITIONS FROM 1.56% TO THE OUTSIDE AT STA. 112+65.00 TO 1.56% TOWARDS THE PAVEMENT AT STA. 112+75.00. SLOPE IS TOWARD THE PAVEMENT ELSEWHERE.

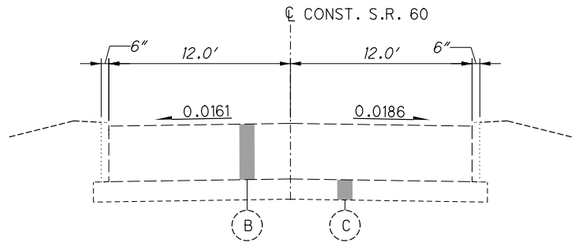
(D) CROWN OF PAVEMENT TRANSITION

CROWN LOCATION VARIES TO MATCH THE EXISTING CROWN LOCATION.INSTEAD OF MATCHING EXISTING SLOPES, SLOPE IS CORRECTED TO 0.0156 FROM THE PROFILE GRADE. MINIMUM WIDTH FROM CENTERLINE IS 0.0′ AND MAXIMUM WIDTH IS 2.8′.



NORMAL MUNICIPAL SECTION

SECTION APPLIES: STA. 113+46.57 TO STA. 113+95.00



ADJOINING SECTION

SECTION APPLIES: STA. 113+95.00

CALCULATED KLD
CHECKED AKA

TYPICAL SECTIONS - S.R. 60

HOL-COUNTY TRAIL
PHASE 5C2

13
133

G:\DE\Clients\OH_Holmes County Parks\I0022288_SR60\I20806_SR60\Design\Roadway\Sheets\I20806_GYI01.dgn Sheet 9/2/2025 10:09:14 AM A.Adair

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

POWER
AMERICAN ELECTRIC POWER
301 CLEVELAND AVE SW
CANTON, OHIO 44701
ATTN: CLARKE SAUNDERS
PHONE: (740)-985-3054
EMAIL: CMSAUNDERS@AEP.COM

GAS
OHIO CUMBERLAND GAS
P.O. BOX 230
MT. VERNON, OHIO 43050
ATTN: MARK RAMSER
PHONE: (740)-392-2941
EMAIL: MARKRAMSER@HOTMAIL.COM

ASPIRE ENERGY OF OHIO
300 TRACY BRIDGE ROAD
ORRVILLE, OHIO 44667
ATTN: BENJAMIN HARVEY
PHONE: (330)-682-1636
EMAIL: BHARVEY@CHPK.COM

OIL PRODUCTION
CAPSTONE OIL PRODUCING
6239 STATE ROUTE 514
LAKEVILLE, OH 44638
ATTN: BRANDON WALLACE
PHONE: (330)-231-4204
EMAIL: CAPSTONEOILEPRODUCING@GMAIL.COM

WATER/SEWER
VILLAGE OF KILLBUCK WATER/SEWER
451 S RAILROAD STREET
KILLBUCK, OHIO 44637
ATTN: MIKE JUDSON
PHONE: (330)-276-2745
EMAIL: KILLBUCKWWTP@EMBARQMAIL.COM

TELECOMMUNICATIONS
BRIGHTSPEED
2025 AKRON ROAD
WOOSTER, OHIO 44691
ATTN: JEFFREY SCHOONOVER
PHONE: (980)-376-1554
EMAIL: JEFFREY.L.SCHOONOVER@BRIGHTSPEED.COM

EVERSTREAM
4000 EMBASSY PARKWAY, STE 105
AKRON, OH 44333
ATTN: SUBHI SALEH
PHONE: (380)-204-5464
EMAIL: SSALEH@EVERSTREAM.NET

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

PROPERTY OWNER COORDINATION

CONTRACTOR SHALL COORDINATE WITH ADJACENT PROPERTY OWNERS TO MAINTAIN THEIR OPERATIONS. THIS INCLUDES USE OF EXISTING CATTLE CROSSINGS. MAINTAIN CONTAINMENT OF EXISTING PROPERTY FENCES WHICH ARE USED FOR CATTLE THROUGH THE DURATION OF THE PROJECT. THIS MAY INCLUDE TEMPORARY FENCING. FOR ANY INTERRUPTIONS IN CONTAINMENT, COORDINATE WITH PROPERTY OWNERS AT LEAST 7 DAYS PRIOR TO THE INTERRUPTION.

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET 3 OF THE PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

PROJECT CONTROL

POSITIONING METHOD:	GNSS
MONUMENT TYPE:	TYPE B

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM:	NAVD88
GEOID:	GEOID09

HORIZONTAL POSITIONING

REFERENCE FRAME:	NAD83 (CORS96)
ELLIPSOID:	GRS80
MAP PROJECTION:	LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM:	OHIO STATE PLANE, NORTH ZONE
COMBINED SCALE FACTOR:	1.00000000
ORIGIN OF COORDINATE SYSTEM:	N/A

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 623.

UNITS ARE IN U.S. SURVEY FEET.

ENDANGERED BAT HABITAT REMOVAL

THE PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT AND NORTHERN LONG-EARED BAT. NO TREES SHALL BE REMOVED UNDER THIS PROJECT FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THIS REQUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT. FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINIED AS A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK THREE INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

DRINKING WATER

THIS PROJECT IS LOCATED WITHIN A DRINKING WATER PROTECTION AREA. USE PROPER CONTAINMENT AND DIKING IN REFUELING AREAS. DO NOT STORE FUELS, TOXIC/HAZARDOUS MATERIALS, AND CHEMICALS NEAR DRAINAGE WAYS, DITCHES, OR STREAMS. MAINTAIN A SPILL KIT ON-SITE THROUGHOUT CONSTRUCTION ACTIVITIES. IMMEDIATELY MITIGATE ANY EVENT, SUCH AS A SPILL OF FUELS, OILS, OR CHEMICALS, THAT COULD THREATEN TO CONTAMINATE THE DRINKING WATER SUPPLY. REPORT ALL SPILLS OR EVENTS TO THE KILLBUCK WASTEWATER TREATMENT PLANT AT (330) 276-2745. IF THE SPILL IS A REPORTABLE AMOUNT (PER OHIO EPA'S RELEASE REPORTING REQUIREMENTS), CONTACT RICHLAND TOWNSHIP FIRE DEPARTMENT AT (330) 377-5301, OR THE OHIO EPA'S SPILL HOTLINE 1-800-282-9378 FOR CLEANUP OF THE SPILL.

ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS-SECTIONS EVEN THOUGH OTHERWISE SHOWN.

POST CONTRUCTION STORM WATER TREATMENT

THIS PLAN UTILIZES STRUCTURAL BEST MANAGEMENT PRACTICES (BMP'S) FOR POST CONSTRUCTION STORM WATER TREATMENT.

ENVIRONMENTAL WORK

BASED ON ENVIRONMENTAL STUDIES WITH TESTING CONDUCTED BY ODOT AND/OR FOR REGULATORY AGENCIES MATERIALS CONTAMINATED WITH PETROLEUM, CONTAMINATED SOILS, AND/OR CONTAMINATED MATERIALS, WILL BE ENCOUNTERED DURING THE EXCAVATIONS FOR CONSTRUCTION ACTIVITIES AT THE SITES LISTED BELOW WITHIN STATIONS 298+49 TO 300+50. THE ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THIS WORK. ALL EXCAVATIONS AT THE AFOREMENTIONED LOCATION SHALL BE PAID FOR UNDER THE ORIGINAL BID ITEMS.

1. TAYLOR TRUST PROPERTY, 10432 TOWNSHIP ROAD 65

ALL EXCAVATED MATERIALS WITHIN THE AFFOREMENTIONED LIMITS MAY BE STOCKPILED IN AN AREA PROVIDED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER. THE ENGINEER MAY PERMIT TEMPORARY STORAGE OF THE SUSPECTED CONTAMINATED SOILS ON AN IMPERMEABLE MEMBRANE. THE MEMBRANE WILL BE SURROUNDED BY BALES OF STRAW TO PREVENT THE SUSPECTED SOILS FROM COMING IN CONTACT WITH THE ORIGINAL SOILS. AN IMPERMIABLE WILL BE PLACED OVER THE STOCKPILE TO PREVENT CONTACT WITH PRECIPITATION AND/OR SURFACE RUN-OFF. AS A TEMPORARY STORAGE ALTERNATIVE, THE ENGINEER MAY PERMIT THE CONTRACTOR TO DIRECT LOAD THE EXCAVATED SOILS INTO TRUCKS, OR AS A THIRD ALTERNATIVE, THE CONTRACTOR MAY PLACE THE MATERIAL IN LEAK-PROOF, COVERED CONTAINERS PROVIDED BY THE CONTRACTOR. THE MATERIAL WILL REMAIN ON-SITE UNTIL ANALYTICAL RESULTS ARE RECEIVED BY THE ENGINEER.

THIS MATERIAL WILL BE PROPERLY TESTED (FOR DISPOSAL), TRANSPORTED, AND DISPOSED OF IN A LICENSED (BY THE LOCAL HEALTH DEPARTMENT) AND PERMITTED (BY THE OHIO ENVIRONMENTAL PROTECTION AGENCY) SOLID WASTE FACILITY.

IF EXCAVATIONS WITHIN THE AFOREMENTIONED LIMITS REQUIRE DEWATERING FOR CONSTRUCTION PURPOSES, THE CONTRACTOR WILL DEWATER, CONTAINERIZE, TEST THE WATER (FOR DISPOSAL) AND DISPOSE OF BY METHODS APPROVED BY THE ENGINEER. THE CONTRACTOR WILL OBTAIN ALL THE REQUIRED PERMITS AND/OR AUTHORIZATIONS NEEDED TO STORE, TRANSPORT, AND DISPOSE OF THE WATER IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, OR FEDERAL REGULATIONS.

THE CONTACTOR WILL FURNISH ALL THE LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO PROPERLY HANDLE, STORE, TEST (FOR DISPOSAL), TRANSPORT, AND DISPOSAL; INCLUDING ANY REQUIRED PERMITS, APPROVALS, OR FEES WITHIN THE AFOREMENTIONED LOCATION. PAYMENT FOR THIS WORK WILL BE MADE AT THE CONTRACT PRICE BID PER TON, PER GALLON, PER CUBIC YARD, AND PER UST. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

690E65016 ITEM SPECIAL - WORK INVOLVING PETROLEUM CONTAMINATED SOIL	99 TON
690E65024 ITEM SPECIAL - WORK INVOLVING REGULATED WATER	1000 GAL

VEGETATED BIOFILTER

THIS PLAN UTILIZES VEGETATED BIOFILTER(S) FOR POST CONSTRUCTION STORM WATER TREATMENT. PLACE EITHER ITEM 660 SODDING OR ITEM 659 SEEDING AND MULCHING WITH A 4-INCH LIFT OF TOPSOIL AS SHOWN IN THE PLANS TO ANY DISTURBED AREA ON THE SHOULDER AND FORESLOPE DRAINING TO A VEGETATED BIOFILTER. THE DITCH FOR EACH VEGETATED BIOFILTER IS TRAPEZOIDAL, AS SHOWN IN THE PLAN CROSS SECTIONS. PROVIDE ITEM 670 AS SPECIFIED IN THE PLANS.

BRIDGE ASBESTOS

AN ASBESTOS SURVEY FOR BRIDGE/STREAM CROSSINGS AT BRIDGE B9 AND BRIDGE B10 SCHEDULED FOR DEMOLITION WORK WAS CONDUCTED BY A LICENSED ASBESTOS HAZARD EVALUATION SPECIALIST. A COPY OF THE ASBESTOS INSPECTION REPORT FOR THE STRUCTURE IS INCLUDED IN THE PLAN PACKAGE FOR THIS PROJECT. THE ASBESTOS INSPECTION REPORT DID NOT IDENTIFY THE PRESENCE OF ANY ASBESTOS CONTAINING MATERIALS ABOVE REGULATORY LIMITS.

DISPOSE ASBESTOS CONTAINING MATERIALS IN A LANDFILL LICENSED BY THE OHIO DEPARTMENT OF HEALTH AND PERMITTED BY THE OHIO ENVIRONMENTAL PROTECTION AGENCY - DIVISION OF AIR POLLUTION CONTROL TO ACCEPT ASBESTOS CONTAINING MATERIAL. THE REMOVAL AND DISPOSAL OF ALL ASBESTOS CONTAINING MATERIAL MUST COMPLY WITH THE OHIO ADMINISTRATIVE CODE (OAC) REGULATIONS AND THE NATIONAL EMISSION STANDARD FOR HAZARDOUS AIR POLLUTANTS (NESHAP) STANDARD FOR ASBESTOS.

ELECTRONIC SUBMISSION: SUBMIT A COMPLETED ELECTRONIC NOTIFICATION OF DEMOLITION AND RENOVATION FORM (NDRF), APPLICABLE FEES, AND THE ASBESTOS INSPECTION REPORT TO THE OEPA AT LEAST 10 DAYS PRIOR TO ANY DEMOLITION ACTIVITY, RENOVATION ACTIVITY, OR BOTH. SUBMIT THE NDRF AND PAYMENT ALONG WITH THE ASBESTOS INSPECTION REPORT USING THE OEPA EBUSINESS CENTER. SUBMIT ONE ELECTRONIC PDF COPY AND ONE HARD COPY OF THE NDRF TO THE ENGINEER. THE ENGINEER WILL PROVIDE ONE COPY TO THE DISTRICT ENVIRONMENTAL STAFF.

BASIS OF PAYMENT: SUBMIT ALL DOCUMENTATION RELATED TO THE SURVEY, ABATEMENT, TRANSPORT, AND DISPOSAL OF ASBESTOS CONTAINING MATERIALS TO THE ENGINEER WITHIN TWO WEEKS OF COMPLETION. THE ENGINEER WILL PROVIDE A COPY OF THE DOCUMENTATION TO THE DISTRICT ENVIRONMENTAL STAFF. PAYMENT FOR THIS WORK SHALL BE MADE AT THE BID PRICE OF LUMP SUM. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

690E98400 ITEM SPECIAL - MISC.: WORK INVOLVING ASBESTOS CONTAINING MATERIALS	LUMP SUM

REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY HOLMES COUNTY PARKS, REPRESENTATIVES OF HOLMES COUNTY PARKS AND THE CONTRACTOR, ALONG WITH STATE AND LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCE SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE HOLMES COUNTY PARKS.

ALL NEW CONDUITS CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY HOLMES COUNTY PARKS. ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEMS.

VEGETATED FILTER STRIP

THIS PLAN UTILIZES VEGETATED FILTER STRIP(S) FOR POST CONSTRUCTION STORM WATER TREATMENT. PLACE EITHER ITEM 660 SODDING OR ITEM 659 SEEDING AND MULCHING WITH A 4-INCH LIFT OF TOPSOIL AND ITEM 670, SLOPE EROSION PROTECTION TO ALL DISTURBED AREAS DESIGNATED AS VEGETATED FILTER STRIPS, THE EDGE OF SHOULDER, AND THE FORESLOPE AS SPECIFIED IN THE PLANS.

CALCULATED MS CHECKED TML

GENERAL NOTES

HOL-COUNTY TRAIL
PHASE 5C2

UNSUITABLE SUBGRADE SOILS

IT IS ESTIMATED THAT 10% OF THE PROJECT AREA MAY CONTAIN UNSTABLE SUBGRADE. DUE TO THE HIGH VARIABILITY IN THE SUBGRADE, ANY SUBGRADE REPLACEMENT WILL BE AS DIRECTED BY THE ENGINEER.

CONSTRUCT THE SUBGRADE AS FOLLOWS AND IN THE FOLLOWING SEQUENCE:

1. SHAPE THE SUBGRADE WITHIN 0.2 OF THE PLAN SUBGRADE ELEVATION.
2. COMPACT THE SUBGRADE ELEVATION ACCORDING TO 204.03.
3. PROOF ROLL THE COMPACTED SUBGRADE ACCORDING TO 204.06. THE ENGINEER WILL IDENTIFY THE LIMITS OF EXCAVATION FOR UNSTABLE SUBGRADE BASED ON THE PROOF ROLLING RESULTS AND VISUAL OBSERVATIONS.
4. EXCAVATE UNSTABLE SUBGRADE AS DIRECTED BY THE ENGINEER AND STABILIZED BY REPLACING WITH GRANULAR MATERIAL, TYPE C AND GEOTEXTILE FABRIC. EXCAVATIONS WILL EXTEND 18 INCHES BEYOND EDGE OF THE PAVEMENT SURFACE.
5. PROOF ROLL THE STABILIZED AREAS ACCORDING TO 204.06 TO VERIFY STABILITY.
6. FINE GRADE THE SUBGRADE TO THE SPECIFIED GRADE.

THE FOLLOWING ITEMS AND QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER TO ADDRESS ANY ENCOUNTERED UNSTABLE SOILS.

ITEM 204 EXCAVATION OF SUBGRADE	818 CY
ITEM 204 GRANULAR MATERIAL, TYPE C	818 CY
ITEM 204 GEOTEXTILE FABRIC	2455 SY

CHANNEL EMBANKMENTS

FILL AND SLOPE PORTIONS OF THE EXISTING CHANNEL TO DRAIN AS SHOWN IN THESE PLANS. IN CHANNEL EMBANKMENT AREAS WHICH WILL NOT SUPPORT ANY PORTION OF THE NEW ROAD BED OR STRUCTURAL EMBANKMENTS, THE CONTRACTOR MAY UTILIZE EMBANKMENT METHODS MEETING THE FOLLOWING REQUIREMENTS:

CLEAR ALL WEEDS AND BRUSH IN AREAS WHERE CHANNEL EMBANKMENTS ARE TO BE PLACED. THE REQUIREMENTS FOR MOISTURE, DENSITY CONTROL, BENCHING AND SUITABLE MATERIALS IS WAIVED. PLACE THE MATERIAL IN 8-INCH LOOSE LIFTS. THE ENGINEER MAY INCREASE THE LIFT THICKNESS IN ORDER TO BRIDGE THE SOFT OR WET FOUNDATIONS DEPENDING ON THE STABILITY OF THE FOUNDATION. THE ENGINEER MAY INCREASE THE LIFT THICKNESS UP TO 24 INCHES TO OBTAIN STABILITY AT THE TOP OF THE LIFT.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM 203, EMBANKMENT.

CLEARING AND GRUBBING

THE DEPARTMENT HAS NOT MARKED INDIVIDUAL TREES AND STUMPS FOR REMOVAL. UNLESS SPECIFICALLY DESIGNATED AS "DO NOT DISTURB" IN THE PLANS, REMOVE ALL TREES AND STUMPS WITHIN THE CONSTRUCTION LIMITS UNDER THE LUMP SUM BID FOR ITEM 201 CLEARING AND GRUBBING.

FENCE LENGTHS

THE LENGTHS OF FENCE SHOWN IN THE PLANS ARE HORIZONTAL DIMENSIONS. MEASUREMENTS OF THE FINAL QUANTITIES WILL BE IN ACCORDANCE WITH ITEM 607.

ITEM 611 - GAS VALVE BOX ADJUSTED TO GRADE

THIS WORK SHALL CONSIST OF ADJUSTING GAS VALVE BOXES TO GRADE PRIOR TO THE APPLICATION OF THE SURFACE COURSE AS DIRECTED BY THE ENGINEER. LOCATIONS AND QUANTITIES SHOWN IN PLAN SHEETS.

ITEM 204 - PROOF ROLLING

THE FOLLOWING QUANTITY IS PROVIDED IN THE GENERAL SUMMARY TO ADDRESS LOCATIONS REQUIRING PROOF ROLLING. SEE OFFICE CALCULATIONS FOR ADDITIONAL INFORMATION.

ITEM 204 - PROOF ROLLING 12 HOURS.

ITEM 607 - FENCE MISC.: WOOD FENCE (SAFETY RAIL PER SCD RM-5.2)

THIS WORK CONSISTS OF FURNISHING AND ERECTING FENCE PER RM-5.2. CONSTRUCT FENCE IN A MANNER THAT PROVIDES A RIGID, TAUT FENCE CLOSELY CONFORMING TO THE SURFACE OF THE GROUND. EXTRA CARE SHALL BE TAKEN WHEN SPACING POSTS AROUND CULVERTS AND OTHER UNDERGROUND UTILITIES. COSTS OF MOUNTING A POST TO A ITEM 611 CONDUIT IS INCIDENTAL TO ITEM 607 - FENCE, MISC.: WOOD FENCE.

SAFETY FENCING IS PAID FOR AT THE UNIT PRICE BID FOR ITEM 607 - FENCE, MISC.: WOOD FENCE. THIS PRICE INCLUDES THE COST FOR MATERIAL, EQUIPMENT, LABOR, AND ALL INCIDENTALS REQUIRED TO COMPLETE THE FENCING.

CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES

WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

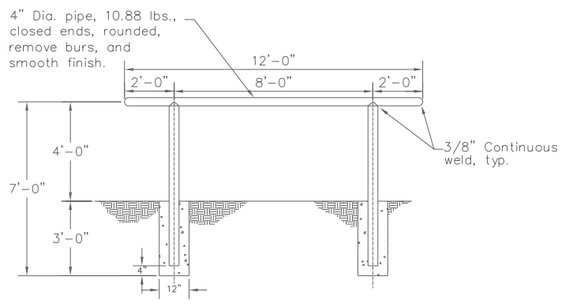
IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

PAYMENT FOR ALL THE OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEM.

ITEM SPECIAL - HITCHING POST

THIS WORK INVOLVES CONSTRUCTING HITCHING POSTS IN LOCATIONS SHOWN IN THE PLANS PER THE STANDARD SET BY USDA FOREST SERVICE. THIS ITEM SHALL BE CONSTRUCTED PER USFS STD RHP1.



SECTION

ITEM SPECIAL - WATER WELL ASSEMBLY

THE PROPOSED WATER WELL IN THE STAGING AREA INCLUDES DRILLING, INSTALLATION, DEVELOPMENT, AND TESTING FOR A DRINKING WATER PRODUCTION WELL. THE WATER WELL SHALL BE INSTALLED ACCORDING TO THE AMERICAN WATER MILITARY SERVICES "STANDARD SPECIFICATIONS: DRINKING WATER WELL REQUIREMENTS" SECTION 33 21 00 AS WELL AS THE STATE OF OHIO "TECHNICAL GUIDANCE FOR WELL CONSTRUCTION AND GROUND WATER PROTECTION." THE WELL SHALL BE COMPLETED TO PREVENT SURFACE CONTAMINATION AND PHYSICAL DAMAGE. THE CONTRACTOR SHALL FURNISH ALL EQUIPMENT, SUPPLIES, LABOR, AND INCIDENTALS REQUIRED TO COMPLETE THE WORK.

SUBMIT ALL DOCUMENTATION INCLUDING AS-BUILT DRAWINGS, DESIGN CALCULATIONS, MATERIALS DATA, PERMITS, TEST RESULTS, AND PROPOSED METHOD FOR DISPOSAL OF DEBRIS TO THE ENGINEER.

PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM 680, SPECIAL - WATER WELL ASSEMBLY.

ITEM SPECIAL - WATER WELL ASSEMBLY 1 EACH

ITEM SPECIAL - SHELTER HOUSE

THIS WORK CONSISTS OF CONSTRUCTING A 6" THICK RECTANGULAR CONCRETE GROUND PAD AND PREFABRICATED PAVILION IN THE STAGING AREA. THE STRUCTURE SIZE SHALL BE SIZED AT 32' x 40' AND CONSIST OF A POWDER COATED STEEL FRAME WITH A 26-GAUGE METAL ROOF OF A COMMERCIALLY AVAILABLE TYPE WITH 4:12 ROOF PITCH.

ENGINEERED DRAWINGS FOR THE PREFABRICATED PAVILION IN ACCORDANCE WITH C&MS 501.05 EXCEPT THAT RELEVANT DESIGN STANDARDS MAY INCLUDE ASCE-7, ACI-318, AISC STEEL CONSTRUCTION MANUAL, AND NATIONAL DESIGN SPECIFICATION (NDS) FOR WOOD CONSTRUCTION AS APPROPRIPATE. ENGINEERED DRAWINGS SHALL BE PROVIDED A MINIMUM OF 30 DAYS PRIOR TO CONSTRUCTION FOR APPROVAL, AND SHALL BE SEALED BY AN ENGINEER REGISTERED IN THE STATE OF OHIO. MINIMUM ROOF LIVE LOAD SHALL BE 30 PSF AND MINIMUM LATERAL WIND LOAD SHALL BE 20 PSF FOR THE DESIGN. MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION SHALL BE INCLUDED AND CONTRACTOR SHALL FOLLOW ALL MANUFACTURER INSTRUCTIONS.

FOUNDATIONS SHALL BE AS INDICATED IN THE MANUFACTURER ENGINEERED DRAWINGS. ADJUST CONCRETE PAD AS NEEDED TO COORDINATE WITH FOUNDATIONS. THE CONCRETE PAD SHALL BE 6 INCHES THICK AND EXTEND 2 FEET BEYOND THE ROOF OVERHANG FOR A MAXIMUM SIZE OF 36' x 44'. CONSTRUCT PAD IN ACCORDANCE WITH C&MS 452.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE THE CONTRACT PRICE BID FOR ITEM SPECIAL - SHELTER HOUSE, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS, NECESSARY TO COMPLETE THE ABOVE WORK. EXCAVATION, EMBANKMENT AND GRADING ARE NOT SEPARATELY SPECIFIED AND ARE INCIDENTAL TO THE WORK PERFORMED.

ITEM SPECIAL - SHELTER HOUSE 1 EACH

SUBSURFACE UTILITY INVESTIGATION

PERFORM SUBSURFACE UTILITY INVESTIGATION TO UTILITY QUALITY LEVEL A (TEST HOLES) IN ACCORDANCE WITH THE ODOT SUBSURFACE UTILITY LOCATION SERVICES SPECIFICATIONS. TEST HOLES ARE PRIMARILY INTENDED TO IDENTIFY LOCATIONS OF TELECOMMUNICATIONS (FIBER OPTIN) LINES WHICH MAY VARY IN FIELD.

SUBSURFACE UTILITY INVESTIGATION (CONT.)

PAYMENT FOR LEVEL A TEST HOLES SHALL BE MADE AT THE EACH UNIT PRICE AND SHALL INCLUDE ALL EQUIPMENT, LABOR, MATERIALS, MOBILIZATION, AND BACKFILL TO COMPLETE THE WORK AND LOCATE THE UTILITY IN ACCORDANCE WITH SPECIFICATIONS.

LOCATION AND USE OF THIS ITEM SHALL BE AT THE DIRECTION OF THE ENGINEER. THE FOLLOWING QUANTITIES ARE INCLUDED FOR THESE PURPOSES:

ITEM SPECIAL - LEVEL A SUE TEST HOLES 6 EACH

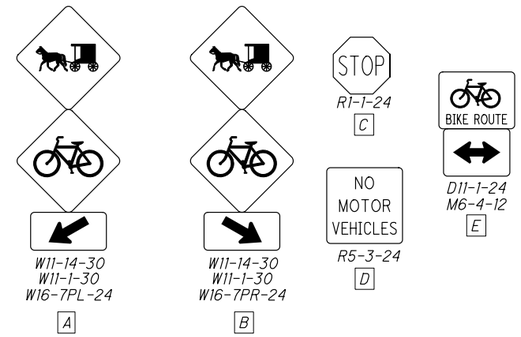
SIGN PLACEMENT

SIGN PLACEMENT ON THE SHARED-USE PATH SHALL FOLLOW THE GENERAL GUIDANCE OF STANDARD CONSTRUCTION DRAWING (SCD) TC-42.20 EXCEPT AS FOLLOWS:

LATERAL SIGN CLEARANCE SHALL BE A MINIMUM OF THREE (3) FEET AND A MAXIMUM OF SIX (6) FEET FROM THE NEAR EDGE OF THE SIGN TO THE NEAR EDGE OF THE PATH. THERE SHALL BE TWO (2) FEET OF CLEAR SPACE BETWEEN EDGE OF PAVED TRAIL AND INNER EDGE OF ANY PROPOSED SIGN.

MOUNTING HEIGHT FOR GROUND-MOUNTED SIGNS SHALL BE A MINIMUM OF FOUR (4) FEET AND A MAXIMUM OF FIVE (5) FEET MEASURED FROM THE BOTTOM EDGE OF THE SIGN TO THE NEAR EDGE OF THE PATH SURFACE.

SIGN LEGEND



ITEM SPECIAL - FILL AND PLUG EXISTING CONDUIT, 12" DIAMETER

THIS ITEM CONSISTS OF THE CONSTRUCTION OF BULKHEADS IN AN EXISTING 12 INCH DIAMETER CONDUIT AND FILLING THE AREA SEALED OFF WITH ITEM 613, SAND OR OTHER MATERIAL APPROVED BY THE ENGINEER.

LOCATE THE BULKHEADS AT THE LIMITS OF THE AREA TO BE FILLED, AS INDICATED ON THE PLANS. THE BULKHEADS CONSIST OF BRICK OR CONCRETE MASONRY WITH A MINIMUM THICKNESS OF 12 INCHES.

PUMP THE FILL MATERIAL INTO PLACE OR BY OTHER MEANS APPROVED BT THE ENGINEER, SO THAT AFTER SETTLEMENT, AT LEAST 90 PERCENT OF THE CROSS-SECTIONAL AREA OF THE CONDUIT, FOR ITS ENTIRE LENGTH IS FILLED. THE LENGTH OF FILLED AND PLUGGED CONDUIT TO BE PAID FOR IS THE ACTUAL NUMBER OF FEET (MEASURED ALONG THE CETNERLINE OF EACH CONDUIT FROM OUTER FACE TO OUTER FACE OF BULKHEADS) FILLED AND PLUGGED AS DESCRIBED ABOVE.

IN LIEU OF FILLING AND PLUGGING THE EXISTING CONDUIT, THE PIPE MAY BE CRUSHED AND BACKFILLED PER 203, OR IT MAY BE REMOVED. THE LENGTH, MEASURED AS PROVIDED ABOVE, WILL BE PAID FOR AT THE CONTRACT PRICE PER FOOT FOR, ITEM SPECIAL, FILL AND PLUG EXISTING CONDUIT.

CALCULATED MS CHECKED TML

GENERAL NOTES

HOL-COUNTY TRAIL
PHASE 5C2

ITEM 611 - 36" CONDUIT, TYPE D, AS PER PLAN

THIS WORK SHALL BE PERFORMED UNDER THE AUSPICES OF THE ODOT CONSTRUCTION AND MATERIALS SPECIFICATIONS, CURRENT EDITION, WITH THE ADDITION OF CONCRETE ENCASEMENT FOR THE ENTIRETY OF THE LENGTH OF THE CONDUIT. CLASS QC 1 CONCRETE OF 6 INCHES THICKNESS FROM THE OUTER DIAMETER OF CONDUIT SHALL BE PROVIDED FOR THE USE OF ENCASEMENT UNDER DEFICIENT COVER. THIS AS PER PLAN ITEM REFERS TO THE CONDUIT LOCATED AT STA. 298+53.72 UNDERNEATH THE SHARED USE PATH.

SECTION 4(F)

ACCESS TO HOLMES COUNTY TRAIL SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION. CLOSURE OF THE KILLBUCK STAGING AREA SHALL BE LESS THAN THE TIME NEEDED FOR CONSTRUCTION OF THE ENTIRE PROJECT. ALL PARKING AT THE OTHER VARIOUS TRAILHEADS AND TRAIL ACCESS POINTS WITHIN AND ADJACENT TO THE PROJECT SHALL NOT BE IMPACTED.

TEMPORARY CONSTRUCTION FENCING SHALL BE INSTALLED ALONG PROPOSED CONSTRUCTION LIMITS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES TO PROTECT THE SECTION 4(F) PROPERTY AND THE PUBLIC. PAYMENT FOR TEMPORARY CONSTRUCTION FENCING SHALL BE INCLUDED IN ITEM 614, MAINTAINING TRAFFIC.

APPROPRIATE SIGNAGE SHALL BE INSTALLED TO ALERT USERS OF THE HOLMES COUNTY TRAIL OF CONSTRUCTION ACTIVITIES, IF IN PROXIMITY TO RECREATIONAL FACILITIES OR FEATURES.

THE CONTRACTOR SHALL CLOSELY COORDINATE THE CONSTRUCTION SCHEDULE WITH ODOT AND THE HOLMES COUNTY PARK DISTRICT PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

659, SOIL ANALYSIS TEST	2 EACH
659, TOPSOIL	4484 CU. YD.
659, SEEDING AND MULCHING, CLASS 4A	40399 SQ. YD.
659, REPAIR SEEDING AND MULCHING	2020 SQ. YD.
659, INTER-SEEDING	2020 SQ. YD.
659, COMMERCIAL FERTILIZER	5.64 TON
659, LIME	8.35 ACRES
659, WATER	224 M. GAL.

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

IN-STREAM WORK RESRICTIONS

WORK IN THE FOLLOWING SENSITIVE STREAMS IS FURTHER RESTRICTED AS FOLLOWS:

STREAM NAME	WORK RESTRICTION DATES (NO IN-STREAM WORK PERMITTED)
BLACK CREEK	APRIL 15 THROUGH JUNE 30

IN-STREAM WORK HAS BEEN DEFINED AS THE PLACEMENT AND/OR REMOVAL OF FILL MATERIALS (TEMPORARY OR PERMANENT) BELOW ORDINARY HIGH WATER OF A STREAM. EXAMPLES OF FILL INCLUDE (BUT ARE NOT LIMITED TO) BRIDGE PIERS, ABUTMENTS, CULVERTS, ROCK CHANNEL PROTECTION, SCOUR PROTECTION, AND TEMPORARY WORK PADS.

FILLS (SUCH AS TEMPORARY WORK PADS) PLACED WITHIN A STREAM IDENTIFIED IN THE ABOVE TABLE OUTSIDE OF THE WORK RESTRICTION DATES CAN CONTINUE TO BE WORKED FROM DURING THE WORK RESTRICTION DATES, BUT CANNOT BE EXPANDED, REMOVED, OR OTHERWISE MODIFIED (BELOW ORDINARY HIGH WATER) UNTIL ONCE AGAIN OUTSIDE OF THE WORK RESTRICTION DATES.

EARTHWORK

EARTHWORK QUANTITIES WERE CALCULATED BASED ON TIGHTER INTERVALS THAN CROSS SECTION SHOWN IN PLANS. TOTALS WERE SUMMED UP BY STATIONS SHOWN ON SHEETS AND SUMMARIZED BELOW:

ITEM 203 - EXCAVATION	14,039 CY
ITEM 203 - EMBANKMENT	15,040 CY

KILLBUCK STAGING AREA

STATION	ITEM 659 - SEEDING & MULCHING, CLASS 4A (SY) (CADD PLAN VIEW AREA)	ITEM 203 - EXCAVATION (CY)	ITEM 203 - EMBANKMENT (CY)
9+00.00		237	0
9+25.00		98	27
9+50.00		1	88
9+75.00		153	122
10+00.00		279	128
10+25.00		256	123
10+50.00		261	120
10+75.00		252	128
11+00.00		231	132
11+25.00		199	139
11+50.00		169	149
11+75.00		142	147
12+00.00		106	178
12+25.00		62	204
12+50.00		20	182
12+75.00		1	166
13+00.00		0	174
13+25.00		0	221
13+50.00		34	252
13+75.00		63	242
14+00.00		52	232
14+25.00		43	243
14+50.00		37	258
14+75.00		33	232
15+00.00		26	193
15+25.00		18	172
15+50.00		16	159
15+75.00		18	148
16+00.00		17	145
16+25.00		16	130
16+50.00		12	129
16+75.00		22	141
17+00.00		18	93
17+25.00		21	42
17+50.00		22	16
TOTALS TO GEN. SUM.	9,119	2,935	5,255

S.R. 60

SHEET NO.	TYPE	ITEM 659 - SEEDING & MULCHING, CLASS 4A (SY)	ITEM 203 - EXCAVATION (CY)	ITEM 203 - EMBANKMENT (CY)
81	SHEET TOTALS	87	42	3
82	SHEET TOTALS	190	48	17
83	SHEET TOTALS	161	65	11
84	SHEET TOTALS	153	34	21
85	SHEET TOTALS	124	12	44
86	SHEET TOTALS	9	1	1
TOTALS TO GEN. SUM.		724	202	97

SHARED USE PATH

SHEET NO.	TYPE	ITEM 659 - SEEDING & MULCHING, CLASS 4A (SY)	ITEM 203 - EXCAVATION (CY)	ITEM 203 - EMBANKMENT (CY)
50	SHEET TOTALS	1,591	260	42
50	SPECIAL BENCHING		30	30
51	SHEET TOTALS	2,683	666	151
52	SHEET TOTALS	672	202	295
53	SHEET TOTALS	1,510	52	497
53	SPECIAL BENCHING		224	229
54	SHEET TOTALS	1,351	102	350
54	SPECIAL BENCHING		324	324
55	SHEET TOTALS	1,046	159	162
55	SPECIAL BENCHING		313	313
56	SHEET TOTALS	1,256	171	181
56	SPECIAL BENCHING		302	302
57	SHEET TOTALS	807	102	96
57	SPECIAL BENCHING		162	162
58	SHEET TOTALS	928	110	251
58	SPECIAL BENCHING		192	192
59	SHEET TOTALS	412	62	132
59	SPECIAL BENCHING		133	133
60	SHEET TOTALS	971	116	148
60	SPECIAL BENCHING		268	268
61	SHEET TOTALS	809	95	95
61	SPECIAL BENCHING		171	171
62	SHEET TOTALS	735	213	49
62	SPECIAL BENCHING		54	54
63	SHEET TOTALS	1,076	306	84
63	SPECIAL BENCHING		242	242
64	SHEET TOTALS	1,025	220	110
64	SPECIAL BENCHING		210	258
65	SHEET TOTALS	1,243	189	251
66	SHEET TOTALS	251	64	6
67	SHEET TOTALS	1332	83	117
68	SHEET TOTALS	993	157	29
69	SHEET TOTALS	744	216	61
69	SPECIAL BENCHING		11	11
70	SHEET TOTALS	784	174	55
70	SPECIAL BENCHING		5	5
71	SHEET TOTALS	869	92	141
72	SHEET TOTALS	697	73	69
73	SHEET TOTALS	720	297	9
74	SHEET TOTALS	1,005	717	221
74	SPECIAL BENCHING		295	295
75	SHEET TOTALS	748	476	108
75	SPECIAL BENCHING		81	81
76	SHEET TOTALS	1,128	765	633
76	SPECIAL BENCHING		522	522
77	SHEET TOTALS	926	312	236
77	SPECIAL BENCHING		185	185
78	SHEET TOTALS	839	308	91
78	SPECIAL BENCHING		8	8
79	SHEET TOTALS	961	286	471
79	SPECIAL BENCHING		119	119
80	SHEET TOTALS	444	6	643
TOTALS TO GEN. SUM.		30,556	10,902	9,688

ITEM 605 - AGGREGATE DRAINS

AGGREGATE DRAINS ARE TO BE PROVIDED FOR SUBSURFACE DRAINAGE. OUTLET LOCATIONS ON PATH ARE TYPICAL TO GUIDANCE PROVIDED IN THE ODOT PAVEMENT DESIGN MANUAL 2024 EDITION. OUTLET LOCATIONS FOR STAGING AREA ARE PROVIDED IN THE TABLE BELOW. TOTAL ESTIMATES QUANTITIES OF AGGREGATE DRAINS BELOW TO BE CARRIED TO GENERAL SUMMARY:

ITEM 605 AGGREGATE DRAINS:

STAGING AREA	436 FT
PATH	3062 FT
S.R. 60	177 FT
TOTAL:	3675 FT

KILLBUCK STAGING AREA

STATION	SIDE	ITEM 605 - AGGREGATE DRAINS (FT)
9+00.00	LT	0
9+25.00	LT	0
9+50.00	LT	8
9+75.00	LT	18
10+00.00	LT	20
10+25.00	LT	28
10+50.00	LT	30
10+75.00	LT	30
11+00.00	LT	30
11+25.00	LT	30
11+50.00	LT	28
11+75.00	LT	19
12+00.00	RT	5
12+25.00	RT	6
12+50.00	LT	8
12+75.00	RT	8
13+00.00	LT	19
13+25.00	LT	16
13+50.00	LT	12
13+75.00	RT	5
14+00.00	LT	11
14+25.00	RT	5
14+50.00	RT	5
14+75.00	RT	5
15+00.00	LT	6
15+25.00	RT	5
15+50.00	LT	6
15+75.00	RT	5
16+00.00	LT	5
16+25.00	LT	5
16+50.00	RT	9
16+75.00	RT	14
17+00.00	LT	7
17+25.00	RT	8
17+37.86	LT	20
TOTALS TO GEN. SUM.		436

ITEM 606 - ANCHOR ASSEMBLY MGS TYPE E

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE MASH 2016 TYPE E TANGENETIAL END TREATMENTS FOR TYPE MGS GUARDRAIL AS LISTED UNDER "PRODUCTS ACCEPTED FOR NEW INSTALLATIONS" ON THE ROADWAY APPROVED PRODUCTS LIST POSTED ON ROADWAY ENGINEERING'S WEB PAGE. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS. REFER TO THE POSTED SHOP DRAWINGS FOR THE MOST CURRENT APPROVED PRODUCT MODELS.

REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4 INCHES ABOVE THE GROUND LINE. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 31 INCHES FROM THE EDGE OF THE SHOULDER.

THE FACE OF THE TYPE E IMPACT HEAD SHALL BE COVERED WITH SOLID FLUORESCENT YELLOW REBOUNDABLE RETROREFLECTIVE SHEETING, PER CMS 730.191.

WHEN THE FACE OF THE ADJACENT (ATTACHED) GUARDRAIL IS LESS THAN 4' OFFSET FROM THE PROPOSED EDGE LINE, AND PERMITTING SITE CONDITIONS EXIST: THE PROPOSED TYPE E ANCHOR ASSEMBLY SHALL BE INSTALLED AT A CONSISTENT FLARE RATE THROUGH THE FULL LENGTH OF THE SYSTEM. THE FLARE RATE SHALL BE A MAXIMUM OF 25:1 (RESULTING IN A 2' OFFSET). THE INSTALLATION SHALL BE IN ACCORDANCE WITH THE SHOP DRAWINGS, PRODUCT INSTALLATION MANUAL/GUIDANCE, AND AS DIRECTED BY THE ENGINEER.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, MGS TYPE E, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSITIONS, REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

CALCULATED MS CHECKED TML

GENERAL NOTES

HOL-COUNTY TRAIL PHASE 5C2

16 / 133

ITEM 614, MAINTAINING TRAFFIC

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES ON SR-60 BY USE OF THE EXISTING AND COMPLETED PAVEMENT.

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN SIGNS AND SIGN SUPPORTS, AS DETAILED IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AND TYPE III BARRICADES OF THE TYPE AND LOCATION AS SHOWN IN THE PLANS.

WHEN CONDUCTING WORK AT THE BEGINNING OF THE PROJECT (SR-520), THE TR-64 CROSSING AND THE TIE-IN AT THE END OF THE PROJECT (SR-60), THE CONTRACTOR SHALL ENSURE THAT EXISTING TRAFFIC IS MAINTAINED ACCORDING TO SCD MT-97.10.

WHEN CONDUCTING WORK ALONG SR-60, THE CONTRACTOR SHALL ENSURE THAT EXISTING TRAFFIC IS MAINTAINED ACCORDING TO SCD MT-96.11.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. INCLUDED IN THIS ITEM IS INSTALLATION OF TEMPORARY CONSTRUCTION FENCING TO PROTECT THE SECTION 4(f) PROPERTY AND THE PUBLIC. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614 MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

TRAIL MAINTENANCE OF TRAFFIC

WHEN CONSTRUCTING THE CONNECTIONS FROM THE NEW STAGING AREA TO THE EXISTING HOLMES COUNTY TRAIL AS SHOWN ON SHEETS 8-9, MAINTAIN AT LEAST 6 FEET OF EXISTING TRAIL WIDTH OPEN TO THE PUBLIC. PROVIDE CONSTRUCTION FENCING TO SEPARATE THE TRAIL TRAFFIC FROM THE WORK AREA. PROVIDE A MINIMUM OF 1 WEEK OF NOTICE TO THE PARK DISTRICT PRIOR TO ANY IMPACTS.

IMPACTS TO THE TRAIL IN ORDER TO MAKE THE CONNECTION SHALL BE LIMITED TO 3 CONSECUTIVE CALENDAR DAYS.

ANY ADDITIONAL IMPACTS TO THE TRAIL SHALL BE COORDINATED WITH THE HOLMES COUNTY PARK DISTRICT AND APPROVED BY THE PARK DISTRICT A MINIMUM OF 1 WEEK PRIOR TO THE IMPACTS.

PROVIDE THE FOLLOWING SIGNAGE ON EITHER SIDE AND 50' OFFSET FROM THE NARROWING OF THE TRAIL:

W20-8 W5-4a R4-2

NOTIFICATION OF TRAFFIC RESTRICTIONS

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM THE SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS@DOT.OHIO.GOV) AND THE DISTRICT PUBLIC INFORMATION OFFICE (PIO). THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

NOTIFICATION OF TRAFFIC RESTRICTIONS TIME TABLE

ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS & PIO
RAMP & ROAD CLOSURES	>= 2 WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	<= 12 HOURS	4 BUSINESS DAYS PRIOR TO CLOSURE
LANE CLOSURES & RESTRICTIONS	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 2 WEEKS	5 BUSINESS DAYS PRIOR TO CLOSURE
START OF CONSTRUCTION & TRAFFIC PATTERN CHANGES	N/A	14 CALENDAR DAYS PRIOR TO IMPLEMENTATION

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME TABLE.

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616, WATER 10 M. GAL.

ITEM 614, WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (BIDIRECTIONAL)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NON-GATING IMPACT ATTENUATOR. FURNISH AN IMPACT ATTENUATOR FROM THE OFFICE OF ROADWAY ENGINEERING'S APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS, FROM THE ROADWAY STANDARDS APPROVED PRODUCTS WEB PAGE.

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE CONTRACTOR SHALL REPAIR OR REPLACE A DAMAGED UNIT WITHIN 24 HOURS OF A DAMAGING IMPACT.

WHEN BIDIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS.

WHEN GATING IMPACT ATTENUATORS ARE DESIRED, THE CONTRACTOR SHALL SUBMIT DOCUMENTATION TO THE ENGINEER FOR ACCEPTANCE.

THE COST FOR THE ADDITIONAL BARRIER REQUIRED FOR A GATING IMPACT ATTENUATOR SHALL BE INCLUDED IN THE COST OF THE GATING IMPACT ATTENUATOR.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT AND MAINTAIN A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS, TRANSITIONS, LEVELING PADS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

OVERHEAD-MOUNTED WORK ZONE SIGNALS

SIGNALS SHALL BE OVERHEAD MOUNTED IN ACCORDANCE WITH THE DETAILS SHOWN ON TRAFFIC SCD MT-96.20.

DELINEATION OF PORTABLE AND PERMANENT BARRIER

BARRIER REFLECTORS AND OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE BARRIER (PB) USED FOR TRAFFIC CONTROL; AND, ON PERMANENT CONCRETE BARRIER (INCLUDING BRIDGE PARAPETS) LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE.

BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THE SPACING SHALL BE AS PER TRAFFIC SCD MT-101.70. OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614.03 AND SCD MT-101.70. WHEN THE PB OR PERMANENT BARRIER (INCLUDING BRIDGE PARAPETS) CONTAINS GLARE SCREEN, ONE SET OF THREE VERTICAL STRIPES OF SHEETING SHALL BE CONSIDERED EQUIVALENT TO AN OBJECT MARKER, ONE-WAY.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE PLANS AND CARRIED TO THE GENERAL SUMMARY:

ITEM 614, BARRIER REFLECTOR, TYPE 1 (BI-DIRECTIONAL) 30 EACH

ITEM 614, OBJECT MARKER, TWO-WAY 25 EACH

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING EACH OF THE ABOVE ITEMS.

MAINTENANCE OF RECREATIONAL BOATING TRAFFIC

KILLBUCK CREEK RECREATIONAL BOATING TRAFFIC SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION OF THE PROJECT EITHER THROUGH EXISTING RIVER CHANNEL OR THROUGH PORTAGE TRAIL APPROVED BY THE ENGINEER.

ADEQUATE SIGNING BOTH UPSTREAM AND DOWNSTREAM SHALL BE INSTALLED AND MAINTAINED BY THE CONTRACTOR. THE FOLLOWING TYPE SIGNS ARE CONSIDERED TO BE MINIMUM TREATMENT:

1. APPROXIMATELY ONE-QUARTER MILE UPSTREAM, ADVANCED WARNING TYPE SIGNS ON BOTH BANKS;
2. APPROXIMATELY 300 FEET UPSTREAM, SIGNS SPECIFYING ACTIONS REQUIRED OF BOATERS ON BOTH BANKS;
3. APPROXIMATELY ONE-QUARTER MILE DOWNSTREAM, ADVANCE WARNING TYPE SIGNS ON BOTH BANKS; AND
4. APPROXIMATELY 300 FEET DOWNSTREAM, SIGNS SPECIFYING ACTIONS REQUIRED OF BOATERS OF BOTH BANKS.

THE ABOVE SIGNING SHALL BE MOUNTED IN SUCH A WAY AS TO BE A MINIMUM OF 4 FEET ABOVE THE WATER LEVEL, UNOBSTRUCTED BY TREE BRANCHES, AND PROPERLY ANGLED FOR MAXIMUM VISIBILITY FROM THE MAIN CLEAR CHANNEL. THE METHOD OF SUPPORTING THE SIGNS SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION. UPON COMPLETION OF THE PROJECT, THE SIGNS AND SUPPORT SYSTEMS SHALL BE COMPLETELY REMOVED FROM THE RIVER CHANNEL. THE CONTRACTOR SHALL NOTIFY LOCAL CANOE LIVERIES USING THIS PORTION OF THE RIVER AT LEAST 10 DAYS PRIOR TO ANY CHANGES AFFECTING RECREATIONAL BOATING TRAFFIC. PORTAGE TRAILS IF USED SHALL BE CONSTRUCTED AND MAINTAINED BY THE CONTRACTOR WITH THE LEAST POSSIBLE DISTURBANCE TO THE SURROUNDING AREA. THE TRAIL SHALL BE ADEQUATELY MARKED IN BOTH DIRECTIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE RIGHT-OF-WAY FOR THE PORTAGE TRAILS IF REQUIRED.

CALCULATED MS CHECKED TML

MAINTENANCE OF TRAFFIC NOTES

HOL-COUNTY TRAIL PHASE 5C2

TRENCH FOR WIDENING

TRENCH EXCAVATION FOR BASE WIDENING SHALL BE ONLY ON ONE SIDE OF THE PAVEMENT AT A TIME. THE OPEN TRENCH SHALL BE ADEQUATELY MAINTAINED AND PROTECTED WITH DRUMS OR BARRICADES AT ALL TIMES. PLACEMENT OF PROPOSED SUBBASE AND BASE MATERIAL SHALL FOLLOW AS CLOSELY AS POSSIBLE BEHIND EXCAVATION OPERATIONS. THE LENGTH OF WIDENING TRENCH WHICH IS OPEN AT ANY ONE TIME SHALL BE HELD TO A MINIMUM AND SHALL AT ALL TIMES BE SUBJECT TO APPROVAL OF THE ENGINEER.

OVERNIGHT TRENCH CLOSING

THE BASE WIDENING SHALL BE COMPLETED TO A DEPTH OF NO MORE THAN 3 INCHES BELOW THE EXISTING PAVEMENT BY THE END OF EACH WORK DAY. NO TRENCH SHALL BE LEFT OPEN OVERNIGHT. IN CASEWORK MUST BE SUSPENDED BECAUSE OF INCLEMENT WEATHER OR OTHER REASONS, THE TRENCH FOR THE UNCOMPLETED BASE WIDENING SHALL BE BACKFILLED AT THE DIRECTION OF THE ENGINEER.

SEQUENCE OF CONSTRUCTION

PRE-PHASE 1A:
INSTALL TEMPORARY TRAFFIC CONTROL DEVICES PER MT-97.11 AND CONSTRUCT ALL INTERSECTION WORK ON THE RIGHT SIDE OF SR-60 BEFORE PHASE 1 OPERATIONS. THE CONTRACTOR SHALL ALSO INSTALL THE TEMPORARY WORK ZONE TRAFFIC SIGNALS DURING PRE-PHASE. ALL PRE-PHASE WORK SHALL BE COMPLETED IN 5 DAYS OR LESS.

PHASE 1:
INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN IN THE PLANS, ACTIVATE THE TEMPORARY SIGNALS AND SHIFT TWO-WAY, ALTERNATING TRAFFIC ONTO THE LEFT SIDE OF SR-60 WHILE CONSTRUCTING DEMOLITION OF THE RIGHT SIDE OF THE EXISTING ROADWAY FOLLOWED BY THE SUBSEQUENT CONSTRUCTION OF THE RIGHT SIDE OF THE PROPOSED ROADWAY AS WELL AS THE RIGHT SIDE OF THE STRUCTURE.

PHASE 2:
INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN IN THE PLANS, MODIFY TEMPORARY SIGNALS AND SHIFT TWO-WAY, ALTERNATING TRAFFIC ONTO THE RIGHT SIDE OF SR-60 WHILE CONSTRUCTING DEMOLITION OF THE LEFT SIDE OF THE EXISTING ROADWAY FOLLOWED BY THE SUBSEQUENT CONSTRUCTION OF THE LEFT SIDE OF THE PROPOSED ROADWAY AS WELL AS THE LEFT SIDE OF THE STRUCTURE.

WORK ZONE MARKINGS AND SIGNS

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS IDENTIFIED BY THE ENGINEER FOR WORK ZONE PAVEMENT MARKINGS AND SIGNS PER THE REQUIREMENTS OF C&MS 614.04 AND 614.11.

PHASE 1 QUANTITIES
ITEM 614, WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BI-DIRECTIONAL) 4 EACH

ITEM 614, WORK ZONE CENTER LINE, CLASS I, 6", 740.06, TYPE I (DOUBLE YELLOW) 0.09 MILES

ITEM 614, WORK ZONE EDGE LINE, CLASS I, 6", 740.06, TYPE I (WHITE) 0.13 MILES

ITEM 614, WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I 23 FEET

ITEM 622, PORTABLE BARRIER, UNANCHORED 610 FEET

PHASE 2 QUANTITIES

ITEM 614, WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BI-DIRECTIONAL) 6 EACH

ITEM 614, WORK ZONE CENTER LINE, CLASS I, 6", 740.06, TYPE I (DOUBLE YELLOW) 0.02 MILES

ITEM 614, WORK ZONE EDGE LINE, CLASS I, 6", 740.06, TYPE I (WHITE) 0.14 MILES

ITEM 614, WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I 23 FEET

ITEM 622, PORTABLE BARRIER, UNANCHORED 550 FEET

FULLY-ACTUATED OPERATION OF WORK ZONE TRAFFIC SIGNAL

THE WORK ZONE SIGNAL CONTROL REQUIRED FOR THIS PROJECT AND SHOWN ON SHEETS 19-22 AND TRAFFIC SCDS MT-96.11, 96.20 AND 96.26 SHALL BE FULLY TRAFFIC-ACTUATED AND OPERATE IN A MANNER SIMILAR TO THAT DESCRIBED IN SECTION 733.02 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS.

THE INITIAL CONTROLLER TIMING SHALL BE AS FOLLOWS:

	PHASE				
	1	2	3	4	5
	EB (MAINLINE)	WB (MAINLINE)	RESIDENTIAL DRIVE STA. 108+50	RESIDENTIAL DRIVE STA. 108+30	RESIDENTIAL DRIVE STA. 110+42
MIN. GREEN	20	20	7	7	7
EXTENSION	4	4	3	3	3
MAX. GREEN	30	30	20	20	20
YELLOW	3	3	3	3	3
ALL RED	40	40	20	20	20
RECALL	OFF	OFF	OFF	OFF	OFF

SIGNAL SHALL BE FULLY ACTUATED AND REST IN ALL RED WHEN NO VEHICLES ARE DETECTED.

PHASES 3 AND 4 TO RUN CONCURRENTLY.

PROVIDE TIMING APPROPRIATE FOR THE SIGNAL LOCATION UNDER CONSIDERATION. TYPICAL FLOW RATES ARE DISPLAYED IN TABLE 697-2 IN THE ODOT TRAFFIC ENGINEERING MANUAL (TEM).

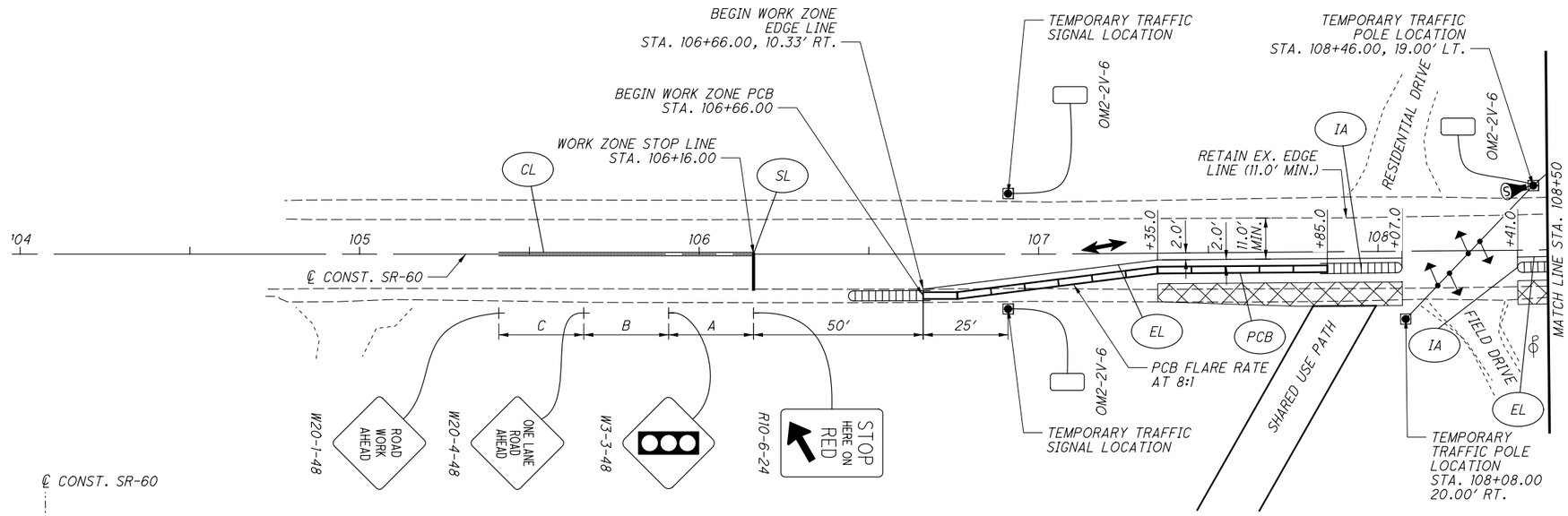
THE CONTRACTOR SHALL ALSO DESIGN, FURNISH, INSTALL AND MAINTAIN A TRAFFIC DETECTOR ON EACH TRAFFIC APPROACH WHICH WILL RELIABLY DETECT ALL LEGAL TRAFFIC APPROACHING (BUT NOT LEAVING) THE SIGNAL AS IT PASSES OR WAITS IN THE DESIGNATED DETECTOR ZONE SHOWN IN THE PLANS. DETECTOR DESIGNS WHICH DO NOT PROVIDE RELIABLE DETECTION, FREE FROM FALSE CALLS, SHALL BE IMMEDIATELY REPLACED BY THE CONTRACTOR.

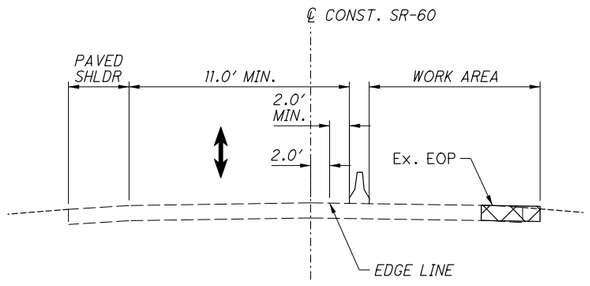
PAYMENT FOR WORK ZONE TRAFFIC SIGNAL CONTROL SHALL BE INCLUDED IN ITEM 614, MAINTAINING TRAFFIC.

CALCULATED KLD CHECKED ms

MAINTENANCE OF TRAFFIC NOTES

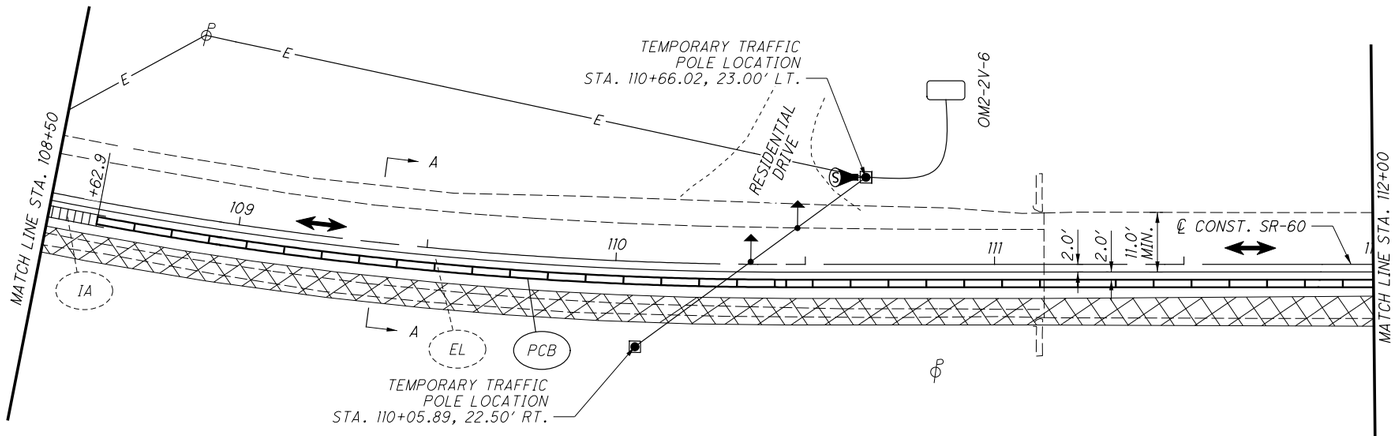
HOL-COUNTY TRAIL PHASE 5C2





SECTION A-A

PHASE 1 MAINTENANCE OF TRAFFIC
(NOT TO SCALE)



LEGEND

- PORTABLE BARRIER
- DIRECTION OF TRAFFIC
- AREA TO BE CONSTRUCTED

NOTE:

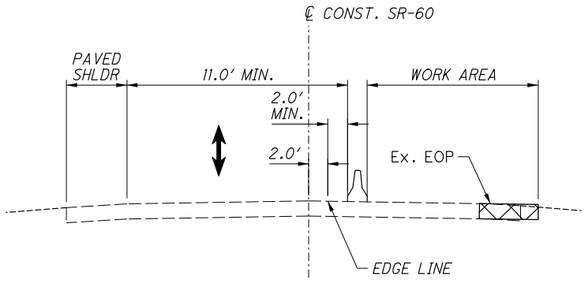
1. FOR DETAILS NOT SHOWN HERE, SEE SCD MT-96.11, MT-96.20, AND MT-96.26

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED KLD
CHECKED ms

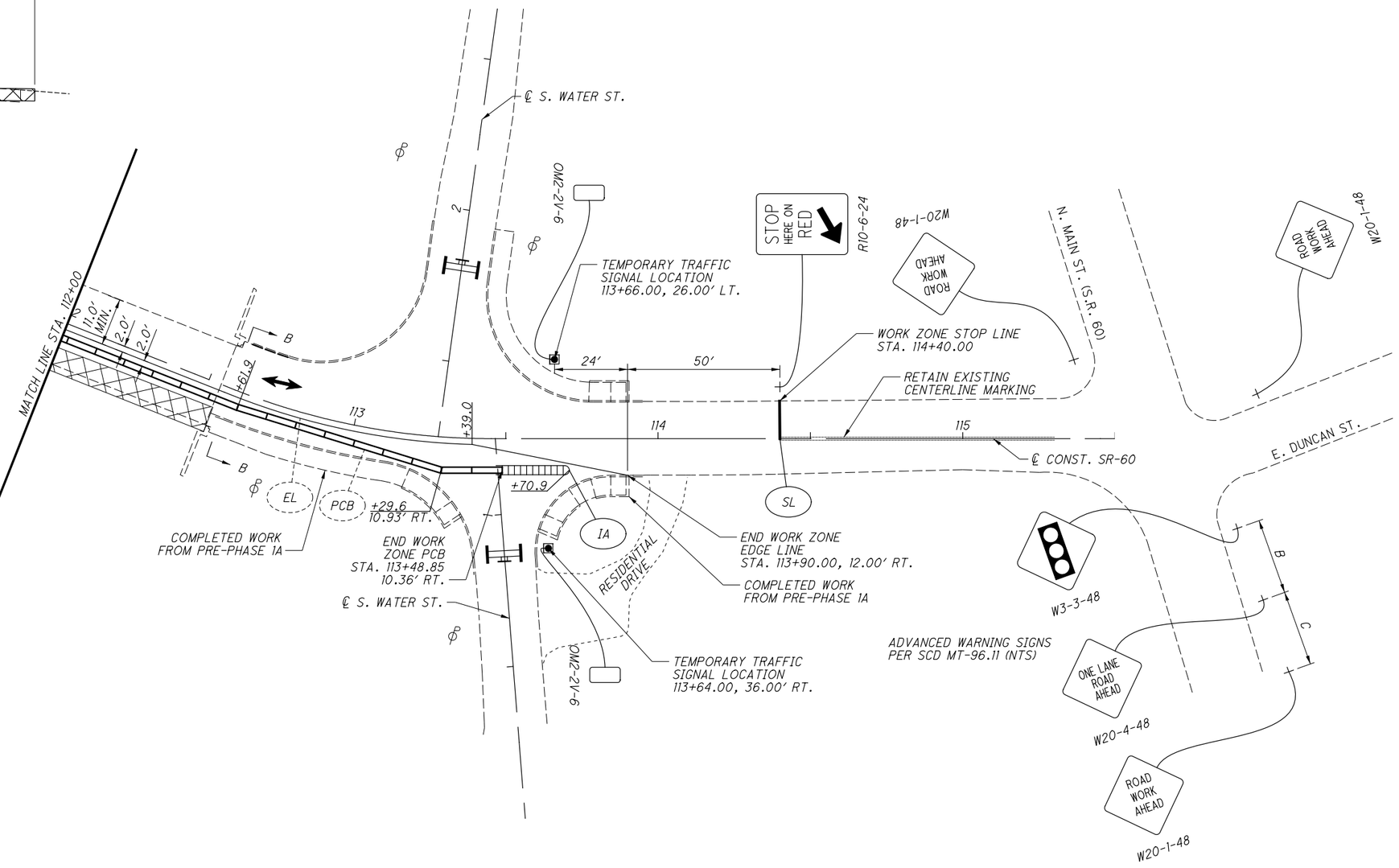
MAINTENANCE OF TRAFFIC PHASE ONE
STA. 105+00 TO STA. 112+00 - S.R. 60
HOL-COUNTY TRAIL PHASE 5C2

19
133



SECTION B-B

PHASE 1 MAINTENANCE OF TRAFFIC
(NOT TO SCALE)



ADVANCED WARNING SIGNS
PER SCD MT-96.11 (NTS)

LEGEND

- PORTABLE BARRIER
- DIRECTION OF TRAFFIC
- AREA TO BE CONSTRUCTED

NOTE:

1. FOR DETAILS NOT SHOWN HERE, SEE SCD MT-96.11, MT-96.20, AND MT-96.26

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED KLD
CHECKED ms

MAINTENANCE OF TRAFFIC PHASE ONE
STA. 112+00 TO STA. 115+50 - S.R. 60

HOL-COUNTY TRAIL
PHASE 5C2

20
133

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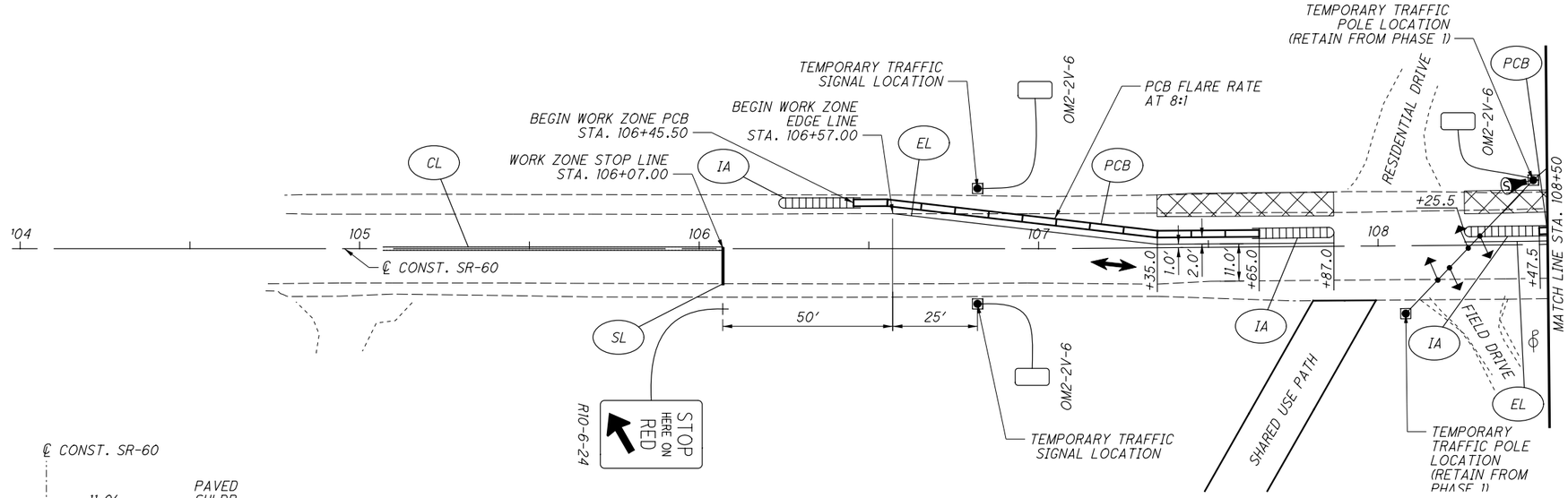
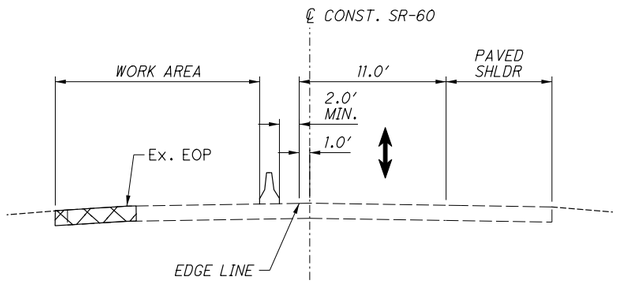
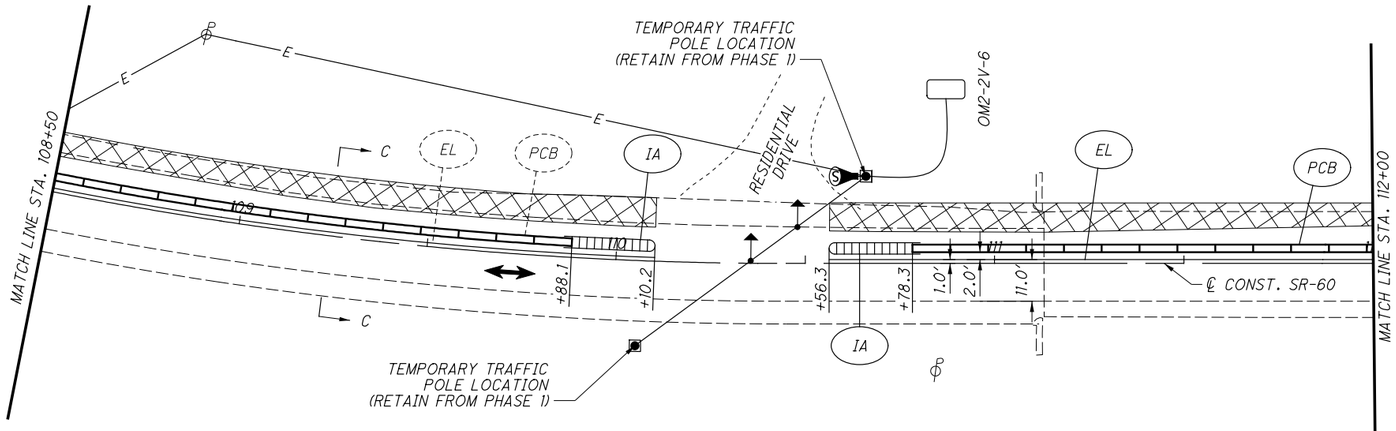




SECTION C-C

PHASE 2 MAINTENANCE OF TRAFFIC
(NOT TO SCALE)



LEGEND

- PORTABLE BARRIER
- DIRECTION OF TRAFFIC
- AREA TO BE CONSTRUCTED

NOTE:

1. FOR DETAILS NOT SHOWN HERE, SEE SCD MT-96.11, MT-96.20, AND MT-96.26

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED KLD
CHECKED ms

MAINTENANCE OF TRAFFIC PHASE TWO
STA. 105+00 TO STA. 112+00 - S.R. 60

HOL-COUNTY TRAIL
PHASE 5C2

21
133

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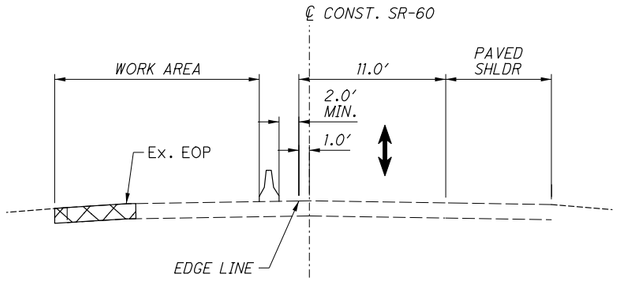
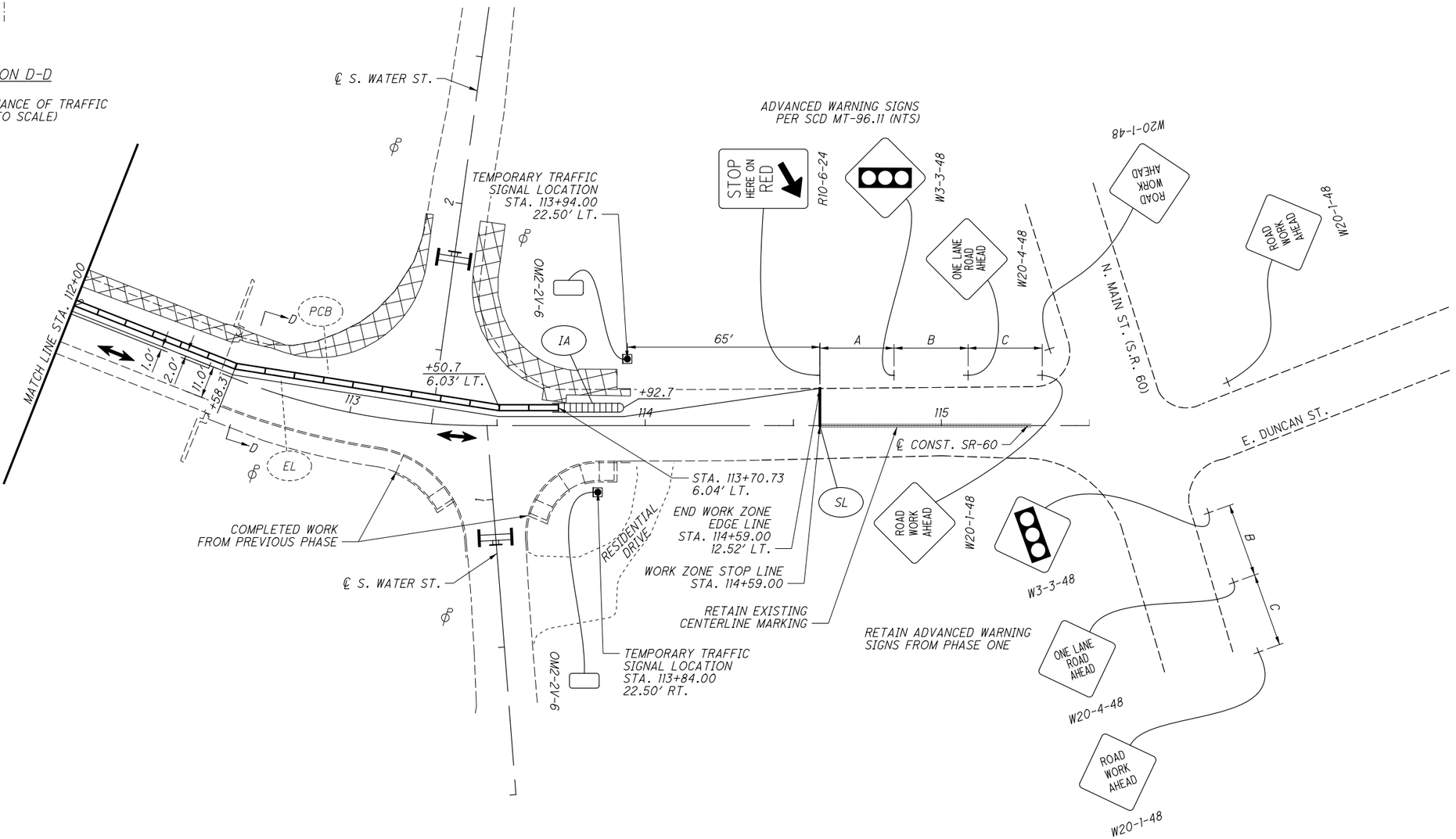


SECTION D-D

PHASE 2 MAINTENANCE OF TRAFFIC
(NOT TO SCALE)



LEGEND

- PORTABLE BARRIER
- DIRECTION OF TRAFFIC
- AREA TO BE CONSTRUCTED

NOTE:

1. FOR DETAILS NOT SHOWN HERE, SEE SCD MT-96.11, MT-96.20, AND MT-96.26

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED KLD
CHECKED ms

MAINTENANCE OF TRAFFIC PHASE TWO
STA. 112+00 TO STA. 115+50 - S.R. 60

HOL-COUNTY TRAIL
PHASE 5C2

22
133

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SHEET NUMBER													PART.	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
4	6	14	15	16	27	28	29	34	35	94			01/ENH						
																		ROADWAY	
													LS	201	11000	LS		CLEARING AND GRUBBING	
													LS	202	11200	LS		PORTIONS OF STRUCTURE REMOVED, STONE ABUTMENTS	
					4								4	202	20010	4	EACH	HEADWALL REMOVED	
					598								598	202	23000	598	SY	PAVEMENT REMOVED	
					341								341	202	32000	341	FT	CURB REMOVED	
							15						15	202	35100	15	FT	PIPE REMOVED, 24" DIAMETER AND UNDER	
					90								90	202	35200	90	FT	PIPE REMOVED, OVER 24" DIAMETER	
					436								436	202	38000	436	FT	GUARDRAIL REMOVED	
					33								33	SPECIAL	20270000	33	FT	FILL AND PLUG EXISTING CONDUIT, 12" DIAMETER	15
1,470					10,387								11,857	202	75000	11,857	FT	FENCE REMOVED	
					9								9	202	75250	9	EACH	GATE REMOVED	
				14,039									14,039	203	10000	14,039	CY	EXCAVATION	
				15,040									15,040	203	20000	15,040	CY	EMBANKMENT	
						26							26	203	35110	26	CY	GRANULAR MATERIAL, TYPE B	
								25,753	934				26,687	204	10000	26,687	SY	SUBGRADE COMPACTION	
	2,410		818			26							3,254	204	13000	3,254	CY	EXCAVATION OF SUBGRADE	
			818										818	204	30020	818	CY	GRANULAR MATERIAL, TYPE C	
			12										12	204	45000	12	HOUR	PROOF ROLLING	
			2,455										2,455	204	50000	2,455	SY	GEOTEXTILE FABRIC	
	6,195												6,195	206	15020	6,195	SY	CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP	
							238						238	606	15050	238	FT	GUARDRAIL, TYPE MGS	
							1						1	606	26150	1	EACH	ANCHOR ASSEMBLY, MGS TYPE E	
							3						3	606	26550	3	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
							4						4	606	34600	4	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE TST-2	
						427							427	607	23000	427	FT	FENCE, TYPE CLT	
119						17,080							17,199	607	98000	17,199	FT	FENCE, MISC.:WOOD FENCE (SAFETY RAIL PER SCD RM-5.2)	15
						6							6	607	98100	6	EACH	FENCE, MISC.:10 FT METAL SWING GATE	95
						2							2	607	98100	2	EACH	FENCE, MISC.:7 FT METAL SWING GATE	95
	437						849						1,286	608	10000	1,286	SF	4" CONCRETE WALK	
							406						406	608	52000	406	SF	CURB RAMP	
							330						330	609	26000	330	FT	CURB, TYPE 6	
			6										6	632	64950	6	EACH	TEST HOLE PERFORMED, LEVEL A SUE	
							1						1	638	10800	1	EACH	VALVE BOX ADJUSTED TO GRADE	
			1										1	SPECIAL	68011000	1	EACH	SHELTER HOUSE	15
			1										1	SPECIAL	68021000	1	EACH	WATER WELL ASSEMBLY	15
							4						4	SPECIAL	69050350	4	EACH	MAILBOX REMOVED AND RESET	15
2													2	SPECIAL	69050560	2	EACH	BICYCLE RACK	9
										4			4	SPECIAL	69050600	4	EACH	BOLLARD	94
		99											99	SPECIAL	69065016	99	TON	WORK INVOLVING PETROLEUM CONTAMINATED SOIL	14
		1,000											1,000	SPECIAL	69065024	1,000	GAL	WORK INVOLVING REGULATED WATER	14
4													4	SPECIAL	69098000	4	EACH	HITCHING POST	15
		LS											LS	SPECIAL	69098400	LS		MISC.: WORK INVOLVING ASBESTOS CONTAINING MATERIALS	14
																		EROSION CONTROL	
						6							6	601	32100	6	CY	ROCK CHANNEL PROTECTION, TYPE B WITH FILTER	
6						23							29	601	32200	29	CY	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	
				2									2	659	00100	2	EACH	SOIL ANALYSIS TEST	
95				4,484		217							4,796	659	00300	4,796	CY	TOPSOIL	
				40,399									40,399	659	00550	40,399	SY	SEEDING AND MULCHING, CLASS 4A	
				2,020									2,020	659	14000	2,020	SY	REPAIR SEEDING AND MULCHING	
				2,020									2,020	659	15000	2,020	SY	INTER-SEEDING	
				5.64									5.64	659	20000	5.64	TON	COMMERCIAL FERTILIZER	
				8.35									8.35	659	31000	8.35	ACRE	LIME	
				224									224	659	35000	224	MGAL	WATER	
						1,952							1,952	670	00500	1,952	SY	SLOPE EROSION PROTECTION	
848													848	670	00700	848	SY	DITCH EROSION PROTECTION	

CALCULATED AKA
CHECKED TML

GENERAL SUMMARY

HOL-COUNTY TRAIL
PHASE 5C2

23
133

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SHEET NUMBER													PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
4	5	6	16	28	29	31	34	35		99			01/ENH		EXT	TOTAL			
													LS	832	15000	LS		STORM WATER POLLUTION PREVENTION PLAN	
													LS	832	15002	LS		STORM WATER POLLUTION PREVENTION INSPECTIONS	
													175,962	832	30000	175,962	EACH	EROSION CONTROL	
																		DRAINAGE	
				60									60	602	20000	60	CY	CONCRETE MASONRY	
			3,675										3,675	605	31100	3,675	FT	AGGREGATE DRAINS	
82					15								97	611	04400	97	FT	12" CONDUIT, TYPE B	
130													130	611	04900	130	FT	12" CONDUIT, TYPE D	
				88									88	611	16900	88	FT	36" CONDUIT, TYPE D	
				83									83	611	16901	83	FT	36" CONDUIT, TYPE D, AS PER PLAN	16
				90									90	611	21400	90	FT	48" CONDUIT, TYPE D	
1													1	611	98470	1	EACH	CATCH BASIN, NO. 2-2B	
					1								1	611	98630	1	EACH	CATCH BASIN ADJUSTED TO GRADE	
					2								2	611	98634	2	EACH	CATCH BASIN RECONSTRUCTED TO GRADE	
					2								2	SPECIAL	61199700	2	EACH	GAS VALVE BOX ADJUSTED TO GRADE	15
																		PAVEMENT	
								1,375					1,375	254	01000	1,375	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 3" MAX	
		634						154					788	301	56000	788	CY	ASPHALT CONCRETE BASE, PG64-22, (449)	
		979					3,860	154					4,993	304	20000	4,993	CY	AGGREGATE BASE	
		891					1,700	321					2,912	407	10000	2,912	GAL	TACK COAT (0.08 GAL/SY)	
		194					887	73					1,154	441	70000	1,154	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22	
		271					1,034	64					1,369	441	70300	1,369	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449)	
		141					223						364	452	12010	364	SY	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC IP	
																		TRAFFIC CONTROL	
	10.5					415							425.5	630	03100	425.5	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
						103							103	630	04100	103	FT	GROUND MOUNTED SUPPORT, NO. 4 POST	
	1					5							6	630	08600	6	EACH	SIGN POST REFLECTOR	
	4					321							325	630	80100	325	SF	SIGN, FLAT SHEET	
						15							15	630	84900	15	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
	1												1	630	85100	1	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	
						8							8	630	86002	8	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
	1												1	630	89812	1	EACH	REMOVAL OF WOOD POLE AND DISPOSAL	
	0.15					2.34							2.49	642	00300	2.49	MILE	CENTER LINE, TYPE 1	
	237												237	642	00400	237	FT	CHANNELIZING LINE, 8", TYPE 1	
	59					56							115	642	00500	115	FT	STOP LINE, TYPE 1	
	474												474	642	00700	474	FT	TRANSVERSE/DIAGONAL LINE, TYPE 1, (YELLOW)	
	485												485	642	01200	485	FT	PARKING LOT STALL MARKING, TYPE 1	
	17												17	642	01300	17	EACH	LANE ARROW, TYPE 1	
	164												164	642	01500	164	FT	DOTTED LINE, 4", TYPE 1, (WHITE)	
	3												3	642	01702	3	EACH	HANDICAP SYMBOL MARKING, TYPE 1	
						0.22							0.22	646	10010	0.22	MILE	EDGE LINE, 6", (WHITE)	
						0.16							0.16	646	10200	0.16	MILE	CENTER LINE	
						43							43	646	10400	43	FT	STOP LINE	
						106							106	646	10510	106	FT	CROSSWALK LINE, 12"	
																		STRUCTURE OVER 20 FOOT SPAN (BRIDGE 008)	
										253			253	203	10000	253	CY	EXCAVATION, BRIDGE	
										320			320	203	20000	320	CY	EMBANKMENT, BRIDGE	
										LS			LS	503	11100	LS		COFFERDAMS AND EXCAVATION BRACING	
										122			122	503	21100	122	CY	UNCLASSIFIED EXCAVATION	
										LS			LS	505	11100	LS		PILE DRIVING EQUIPMENT MOBILIZATION	
										700			700	507	00600	700	FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	
										770			770	507	00650	770	FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	

CALCULATED AKA
CHECKED TML

GENERAL SUMMARY

HOL-COUNTY TRAIL
PHASE 5C2

SHEET NUMBER													PART.	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
99		111		120									01/ENH						
10,995													10,995	509	10000	10,995	LB	EPOXY COATED STEEL REINFORCEMENT	
27													27	511	31610	27	CY	CLASS QC2 CONCRETE, SUPERSTRUCTURE	
55													55	511	44110	55	CY	CLASS QC1 CONCRETE, ABUTMENT NOT INCLUDING FOOTING	
28													28	511	46510	28	CY	CLASS QC1 CONCRETE, FOOTING	
126													126	512	10100	126	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
5													5	515	12030	5	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB17-48, 61'-0"	
24													24	516	13900	24	SF	2" PREFORMED EXPANSION JOINT FILLER	
53													53	516	14014	53	FT	INTEGRAL ABUTMENT EXPANSION JOINT SEAL	
40													40	516	31010	40	FT	2" DEEP JOINT SEALER	
20													20	516	43101	20	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES ONLY (NEOPRENE), AS PER PLAN, 1.5" THICK	103
132													132	517	70001	132	FT	RAILING (TWIN STEEL TUBE), AS PER PLAN	98
59													59	518	21200	59	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	
149													149	SPECIAL	51822300	149	FT	STEEL DRIP STRIP	
81													81	518	40000	81	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	
70													70	518	40010	70	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	
90													90	601	32200	90	CY	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER, BRIDGE	
6													6	856	10000	6	CY	BRIDGE DECK WATERPROOFING ASPHALT CONCRETE	
																		STRUCTURE OVER 20 FOOT SPAN (BRIDGE 009)	
		LS											LS	202	11203	LS		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	110
		29											29	203	10000	29	CY	EXCAVATION, BRIDGE	
		35											35	203	20000	35	CY	EMBANKMENT, BRIDGE	
		LS											LS	503	11100	LS		COFFERDAMS AND EXCAVATION BRACING	
		47											47	503	21100	47	CY	UNCLASSIFIED EXCAVATION	
		6,823											6,823	509	10000	6,823	LB	EPOXY COATED STEEL REINFORCEMENT	
		156											156	510	10001	156	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN	110
		22											22	511	31610	22	CY	CLASS QC2 CONCRETE, SUPERSTRUCTURE	
		29											29	511	44110	29	CY	CLASS QC1 CONCRETE, ABUTMENT NOT INCLUDING FOOTING	
		79											79	512	10100	79	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
		5											5	515	12030	5	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB17-48, 46'-0"	
		21											21	516	13900	21	SF	2" PREFORMED EXPANSION JOINT FILLER	
		40											40	516	31010	40	FT	2" DEEP JOINT SEALER	
		20											20	516	43101	20	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES ONLY (NEOPRENE), AS PER PLAN, 1.5" THICK	113
		102											102	517	70001	102	FT	RAILING (TWIN STEEL TUBE), AS PER PLAN	110
		15											15	518	21200	15	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	
		107											107	SPECIAL	51822300	107	FT	STEEL DRIP STRIP	
		73											73	518	40000	73	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	
		24											24	518	40010	24	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	
		20											20	519	11101	20	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	110
		36											36	601	32200	36	CY	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER, BRIDGE	
		5											5	856	10000	5	CY	BRIDGE DECK WATERPROOFING ASPHALT CONCRETE	
																		STRUCTURE OVER 20 FOOT SPAN (BRIDGE 010)	
				LS									LS	202	11203	LS		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	119
				27									27	203	10000	27	CY	EXCAVATION, BRIDGE	
				32									32	203	20000	32	CY	EMBANKMENT, BRIDGE	
				LS									LS	503	11100	LS		COFFERDAMS AND EXCAVATION BRACING	
				30									30	503	21100	30	CY	UNCLASSIFIED EXCAVATION	

CALCULATED AKA
CHECKED TML

GENERAL SUMMARY

HOL-COUNTY TRAIL
PHASE 5C2

25
133

G:\DE\Clients\OH_Holmes County Parks\0012372_Holmes_Trail_5C2\120806_Holmes_Trail_5C2\Design\Roadway\Sheets\120806_GG003.dgn Sheet 9/5/2025 10:00:53 AM Less

SHEET NUMBER													PART.	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
17	18		120		128								01/ENH						
			5,053										5,053	509	10000	5,053	LB	EPOXY COATED STEEL REINFORCEMENT	
			116										116	510	10001	116	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN	119
			22										22	511	31610	22	CY	CLASS QC2 CONCRETE, SUPERSTRUCTURE	
			14										14	511	44110	14	CY	CLASS QC1 CONCRETE, ABUTMENT NOT INCLUDING FOOTING	
			71										71	512	10100	71	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
			5										5	515	12030	5	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB17-48, 46'-0"	
			21										21	516	13900	21	SF	2" PREFORMED EXPANSION JOINT FILLER	
			40										40	516	31010	40	FT	2" DEEP JOINT SEALER	
			20										20	516	43101	20	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES ONLY (NEOPRENE), AS PER PLAN, 1.5" THICK	122
			102										102	517	70001	102	FT	RAILING (TWIN STEEL TUBE), AS PER PLAN	119
			14										14	518	21200	14	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	
			107										107	SPECIAL	51822300	107	FT	STEEL DRIP STRIP	
			57										57	518	40000	57	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	
			24										24	518	40010	24	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	
			20										20	519	11101	20	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	119
			28										28	601	32200	28	CY	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER, BRIDGE	
			5										5	856	10000	5	CY	BRIDGE DECK WATERPROOFING ASPHALT CONCRETE	
																		STRUCTURE OVER 20 FOOT SPAN (HOL-60-0423)	
					LS								LS	202	11203	LS		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	128
					6,131								6,131	509	10000	6,131	LB	EPOXY COATED STEEL REINFORCEMENT	
					40								40	511	34410	40	CY	CLASS QC2 CONCRETE, SUPERSTRUCTURE	
					69								69	512	10100	69	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
					154								154	517	70100	154	FT	RAILING (THREE STEEL TUBE BRIDGE RAILING)	
					154								154	517	70101	154	FT	RAILING (THREE STEEL TUBE BRIDGE RAILING), AS PER PLAN	128
																		MAINTENANCE OF TRAFFIC	
	10												10	614	12384	10	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL)	
30													30	614	13310	30	EACH	BARRIER REFLECTOR, TYPE 1, (BIDIRECTIONAL)	
25													25	614	13360	25	EACH	OBJECT MARKER, TWO WAY	
	0.11												0.11	614	21200	0.11	MILE	WORK ZONE CENTER LINE, CLASS I, 740.06, TYPE I	
	0.27												0.27	614	22210	0.27	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 740.06, TYPE I	
	46												46	614	26400	46	FT	WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I	
10													10	616	10000	10	MGAL	WATER	
	1,160												1,160	622	41100	1,160	FT	PORTABLE BARRIER, UNANCHORED	
																		INCIDENTALS	
LS													LS	614	11000	LS		MAINTAINING TRAFFIC	17
													12	619	16010	12	MNTH	FIELD OFFICE, TYPE B	
													LS	623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
													LS	624	10000	LS		MOBILIZATION	

CALCULATED AKA
CHECKED TML

GENERAL SUMMARY

HOL-COUNTY TRAIL
PHASE 5C2

REF NO.	SHEET NO.	STATION TO STATION					202 HEADWALL REMOVED	202 PIPE REMOVED, OVER 24" DIAMETER	202 GATE REMOVED	202 FENCE REMOVED		202 PAVEMENT REMOVED	202 CURB REMOVED	202 GUARDRAIL REMOVED		SPECIAL FILL AND PLUG EXISTING CONDUIT, 12" DIAMETER
							EACH	FT	EACH	FT		SY	FT	FT		FT
		SHARED USE PATH														
R-1	39	245+30.95	CL				1									
R-2	41	269+90.20	RT				1									
R-3	41	269+90.30	LT&RT					26								
R-4	41	271+32.84	LT				1									
R-5	41	271+31.78	RT				1									
R-6	41	271+32.52	LT&RT					32								
R-7	41-42	270+99.44	LT	TO	280+01.76	LT				923						
R-8	42	280+09.68	LT						1							
R-9	42-43, 87	280+17.63	LT	TO	297+98.56	LT				1781						
R-10	42-43, 87	288+13.33	RT	TO	298+22.00	RT				1013						
R-11	87	297+99.97	LT&RT						1							
R-12	87	298+09.64	LT&RT					32								
R-13	87	298+61.54	LT&RT						1							
R-14	87	298+62.61	LT	TO	298+68.66	LT				43						
R-15	87	298+60.02	RT	TO	299+95.79	RT				286						
R-16	43-44, 87	299+90.30	RT	TO	307+07.82	RT				729						
R-17	87	299+26.05	LT	TO	299+37.18	LT				32						
R-18	43-44	305+24.66	LT	TO	306+91.18	LT				232						
R-19	43	305+24.46	LT&RT						1							
R-20	44	307+19.54	RT						1							
R-21	44	307+31.25	RT	TO	314+92.16	RT				761						
R-22	44	314+92.23	LT	TO	314+92.63	LT				10						
R-23	44	315+15.75	LT	TO	315+15.89	LT				10						
R-24	44	314+92.19	RT						1							
R-25	44	315+03.49	RT						1							
R-26	44	315+15.20	RT						1							
R-27	44-46	315+15.77	LT	TO	333+76.12	LT				1861						
R-28	44-46	315+14.71	RT	TO	333+78.45	RT				1865						
R-29	46	333+78.45	LT&RT						1							
R-30	47	344+64.30	RT	TO	344+68.57	LT				32						
R-31	47	344+68.57	LT	TO	352+78.74	LT				809						
R-32	87	298+15.13	RT	TO	298+45.72	RT										33
		S.R. 60														
R-33	48,49	107+35.00	RT	TO	111+11.75	RT						187				
R-34	48,49	107+35.00	LT	TO	111+11.75	LT						264				
R-35	48,49	108+48.50	RT	TO	111+09.25	RT								265		
R-36	48,49	110+58.29	LT	TO	111+10.41	LT								55		
R-37	49	112+56.25	RT	TO	0+81.00	LT						52	109			
R-38	49	112+57.25	LT	TO	1+95.00	LT						52	85			
R-39	49	112+56.77	RT	TO	113+04.34	RT								52		
R-40	49	112+56.77	LT	TO	1+84.15	LT								64		
R-41	49	1+95.00	RT	TO	113+95.00	LT						26	92			
R-42	49	0+81.00	RT	TO	113+95.00	RT						17	55			
TOTALS CARRIED TO GENERAL SUMMARY							4	90	9	10387		598	341	436		33

CALCULATED HBZ
CHECKED AKA

REMOVALS SUBSUMMARY

HOL-COUNTY TRAIL
PHASE 5C2

REF NO.	SHEET NO.	STATION TO STATION						202 PORTIONS OF STRUCTURE REMOVED, STONE ABUTMENTS	203 GRANULAR MATERIAL, TYPE B	204 EXCAVATION OF SUBGRADE		601 ROCK CHANNEL PROTECTION, TYPE B WITH FILTER	601 ROCK CHANNEL PROTECTION, TYPE C WITH FILTER		602 CONCRETE MASONRY		611 36" CONDUIT, TYPE D	611 36" CONDUIT, TYPE D, AS PER PLAN	611 48" CONDUIT, TYPE D		607 FENCE, TYPE CLT	607 FENCE, MISC.:WOOD FENCE (SAFETY RAIL PER SCD RM-5.2)	607 FENCE, MISC.:10 FT METAL SWING GATE	607 FENCE, MISC.:7 FT METAL SWING GATE		659 TOPSOIL	670 SLOPE EROSION PROTECTION	
								LS	CY	CY		CY	CY		CY		FT	FT	FT		FT	FT	EACH	EACH		CY	SY	
		SHARED USE PATH																										
D-1	41/89	269+91.00											5.3		17.6				38									
D-2	41/90	271+32.00											4.0		14.4		33											
D-3	87/91	298+07.82											3.4		1.6		55											
D-4	87/92	298+53.72							10	10		5.4			7.9			83										
D-5	47/93	353+40.09						LS	16	16			7.8		17.6				52									
E-1	38	231+00.00	LT		232+90.00	LT																				19	169	
E-2	38-39	231+00.00	RT		243+95.00	RT																				128	1151	
E-3	38-39	236+85.00	LT		243+95.00	LT																				70	631	
E-4	87	299+00.00	RT										0.8															
E-5	43	303+00.00	LT										0.8															
F-1	38	233+30.00	LT	TO	236+85.00	LT																	355					
F-2	39	243+81.51	LT	TO	244+98.49	LT																	58					
F-3	39	243+81.51	RT	TO	244+98.49	RT																	58					
F-4	39	245+65.00	LT	TO	246+35.00	LT																	71					
F-5	39-40	249+65.00	LT	TO	256+85.00	LT																	721					
F-6	40	256+00.00	RT	TO	257+39.95	RT																	141					
F-7	40	262+69.51	LT	TO	263+71.49	LT																	58					
F-8	40	262+69.51	RT	TO	263+71.49	RT																	58					
F-9	41	269+56.00	LT	TO	270+26.00	LT																	71					
F-10	41	269+56.00	RT	TO	274+72.54	RT																	376					
F-11	41	270+97.00	LT	TO	274+72.54	LT																	517					
F-12	41-42	275+23.46	LT	TO	280+00.00	LT																	477					
F-13	41-42	275+23.46	RT	TO	280+09.00	RT																	486					
F-14	42-43	280+20.00	LT	TO	298+10.00	LT																	1791					
F-15	42-43	280+29.00	RT	TO	298+22.00	RT																	1794					
F-16	87	298+62.22	RT	TO	300+47.52	RT																427						
F-17	43-44	300+47.52	RT	TO	307+05.00	RT																	661					
F-18	44	306+48.10	LT	TO	307+00.00	LT																	52					
F-19	44	307+20.00	LT	TO	314+95.00	LT																	775					
F-20	44	307+25.00	RT	TO	314+95.00	RT																	770					
F-21	44-47	315+15.00	LT	TO	354+10.00	LT																	3895					
F-22	44-47	315+15.00	RT	TO	354+10.00	RT																	3895					
G-1	42	280+00.00	LT	TO	280+20.00	LT																		1				
G-2	42	280+09.00	RT	TO	280+29.00	RT																		1				
G-3	44	307+00.00	LT	TO	307+20.00	LT																		1				
G-4	44	307+05.00	RT	TO	307+25.00	RT																		1				
G-5	44	314+95.00	LT	TO	315+15.00	LT																		1				
G-6	44	314+95.00	RT	TO	315+15.00	RT																		1				
G-7	87	297+96.80	LT	TO	297+98.02	LT																			1				
		DRIVE OFF TR-64																										
G-8	87	10+28.49	LT	TO	10+28.49	RT																			1				
TOTALS CARRIED TO GENERAL SUMMARY								LS	26	26		6	23		60		88	83	90		427	17080	6	2		217	1952	

CALCULATED HBZ
CHECKED AKA

ROADWAY SUBSUMMARY

HOL-COUNTY TRAIL
PHASE 5C2

REF NO.	SHEET NO.	STATION TO STATION					202 PIPE REMOVED, 24" DIAMETER AND UNDER		606 GUARDRAIL, TYPE MGS	606 ANCHOR ASSEMBLY, MGS TYPE E	606 ANCHOR ASSEMBLY, MGS TYPE T	606 MGS BRIDGE TERMINAL ASSEMBLY, TYPE TST-2		608 4" CONCRETE WALK	608 CURB RAMP		609 CURB, TYPE 6		611 12" CONDUIT, TYPE B	611 CATCH BASIN ADJUSTED TO GRADE	611 CATCH BASIN RECONSTRUCTED TO GRADE	SPECIAL GAS VALVE BOX ADJUSTED TO GRADE		638 VALVE BOX ADJUSTED TO GRADE		SPECIAL MAILBOX REMOVED AND RESET	
		S.R. 60					FT		FT	EACH	EACH	EACH		SF	SF		FT		FT	EACH	EACH	EACH		EACH		EACH	
MB-1	48	108+31.20	LT																							3	
MB-2	48	110+64.55	LT																							1	
GR-1	48,49	108+45.38	RT	TO	111+09.25	RT			187.5	1		1															
GR-2	48,49	110+58.30	LT	TO	111+10.42	LT			12.5		1	1															
GR-3	49	112+56.76	RT	TO	113+05.38	RT			12.5		1	1															
GR-4	49	112+56.78	LT	TO	1+69.14	LT			25		1	1															
A-1	49	1+70.22	RT																					1			
A-2	49	113+77.24	LT																			1					
A-3	49	113+93.17	RT																			1					
C-1	49	112+56.75	RT	TO	0+81.00	LT											109.2										
C-2	49	112+56.75	LT	TO	1+78.47	LT											72.8										
C-3	49	1+95.00	RT	TO	113+95.00	LT											92.4										
C-4	49	0+81.00	RT	TO	113+95.00	RT											54.9										
D-6	49	113+39.30	RT																	1							
D-7	49	113+69.79	LT				5												5		1						
D-8	49	113+70.19	RT				10												10		1						
W-1	49	112+56.75	RT	TO	0+96.93	LT								389	141												
W-2	49	1+95.00	RT	TO	113+90.50	LT								418	86												
W-3	49	0+90.26	RT	TO	113+90.50	RT								42	179												
TOTALS CARRIED TO GENERAL SUMMARY							15		238	1	3	4		849	406		330		15	1	2	2		1		4	

A.Adair 9/2/2025 10:09:29 AM Sheet

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CALCULATED KLD
CHECKED AKA

ROADWAY SUBSUMMARY

HOL-COUNTY TRAIL
PHASE 5C2

REF NO.	SHEET NO.	LOCATION	STATION	SIDE	CODE	SIZE (INCHES)	630 GROUND MOUNTED SUPPORT, NO. 3 POST FT	630 GROUND MOUNTED SUPPORT, NO. 4 POST FT	630 SIGN POST REFLECTOR EACH		630 SIGN, FLAT SHEET SF		630 REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL EACH	630 REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL EACH
S-1	38	PROP. HOLMES COUNTY SHARED USE PATH	230+55	LT	R5-3-24	24 x 24	11				4.00			
S-2	38		230+56	LT	W11-14-30	30 x 30		14.5			6.25			
					W11-1-30	30 x 30					6.25			
					W16-7PR-24	24 x 12					2.00			
S-3	38		230+60	LT	D11-1-24	24 x 18	11				3.00			
					M6-4-12	24 x 12					2.00			
S-4	38		230+60	RT	R1-1-24	24 x 24	10		1		4.00			
S-5	38		230+98	LT	R1-1-24	24 x 24	10		1		4.00			
S-6	38		231+04	RT	R5-3-24	24 x 24	11				4.00			
S-7	38		231+03	RT	D11-1-24	24 x 18	11				3.00			
					M6-4-12	24 x 12					2.00			
S-8	38		231+07	RT	W11-14-30	30 x 30		14.5			6.25			
					W11-1-30	30 x 30					6.25			
					W16-7PL-24	24 x 12					2.00			
S-9	87		298+14	LT	R5-3-24	24 x 24	11				4.00			
S-10	87		298+15	LT	W11-14-30	30 x 30		14.5			6.25			
					W11-1-30	30 x 30					6.25			
					W16-7PR-24	24 x 12					2.00			
S-11	87		298+18	LT	D11-1-24	24 x 18	11				3.00			
					M6-4-12	24 x 12					2.00			
S-12	87		298+16	RT	R1-1-24	24 x 24	10		1		4.00			
S-13	87		298+48	RT	R5-3-24	24 x 24	11				4.00			
S-14	87		298+48	RT	D11-1-24	24 x 18	11				3.00			
					M6-4-12	24 x 12					2.00			
S-15	87		298+51	RT	W11-14-30	30 x 30		14.5			6.25			
					W11-1-30	30 x 30					6.25			
					W16-7PL-24	24 x 12					2.00			
S-16	87		298+48	LT	R1-1-24	24 x 24	10		1		4.00			
S-17	47		354+15	RT	R1-1-24	24 x 24	10		1		4.00			
S-18	96	SR-60	99+00	RT	W3-5-36	36 x 36	11.5				9.00			
S-19	96		100+25	RT	W1-4L-30	30 x 30	11				6.25			
S-20	96		101+50	RT	W5-1-36	36 x 36	11.5				9.00			
S-21	96		103+00	RT	R2-1-24	24 x 30	11				5.00			
S-22	96		104+07	RT	W11-H14A-36	36 x 36		14.5			9.00			
					W11-H1A-36	36 x 36					9.00			
S-23	96		105+56	RT										1
S-24	96		106+56	RT									1	1
S-25	96		108+07	LT	W11-14-30	30 x 30	13.25				6.25			
					W11-1-30	12 x 9					0.75			
					W16-5PR-24	24 x 18					3.00			
S-26	96		108+18	LT	D11-1-24	24 x 18	10.75				3.00			
					M6-1R-12	12 x 9					0.75			
S-27	96		108+28	LT	D11-1-24	24 x 18	10.75				3.00			
					M6-1L-12	12 x 9					0.75			
S-28	96		109+00	LT	W1-4L-30	30 x 30	11				6.25			
S-29	96		109+30	LT	W11-14-30	30 x 30	13.25				6.25			
					W11-1-30	12 x 9					0.75			
					W16-5PL-24	24 x 18					3.00			
S-30	96		111+00	LT	W5-1-36	36 x 36	11.5				9.00			
S-31	96		112+44	RT	D11-1-24	24 x 18	10.75				3.00			
					M6-1L-12	12 x 9					0.75			
S-32	96		112+91	RT	W11-14-30	30 x 30		15.25			6.25			
					W11-1-30	12 x 9					0.75			
					W16-5PL-24	24 x 18					3.00			
S-33	96		113+58	LT	D11-1-24	24 x 18	12.75				3.00			
					M6-3-12	12 x 9					0.75			
S-34	96		114+58	LT	W11-14-30	30 x 30	13.25				6.25			
					W11-1-30	12 x 9					0.75			
					W16-5P-24	24 x 18					3.00			
TOTALS CARRIED TO SHEET 31							291	88	5		232		1	2

CALCULATED HBZ
CHECKED AKA

TRAFFIC CONTROL SUBSUMMARY

HOL-COUNTY TRAIL
PHASE 5C2

REF NO.	SHEET NO.	LOCATION	STATION	SIDE	CODE	SIZE (INCHES)	630 GROUND MOUNTED SUPPORT, NO. 3 POST FT	630 GROUND MOUNTED SUPPORT, NO. 4 POST FT	630 SIGN POST REFLECTOR EACH		630 SIGN, FLAT SHEET SF		630 REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL EACH	630 REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL EACH
S-35	96	WATER ST.	0+90	RT	R1-1-30	30 x 30	14				6.25		2	1
					W4-4P-24	24 x 12					2.00			
S-36	96		1+53	LT	R1-1-30	30 x 30	14				6.25		2	1
					W4-4P-24	24 x 12					2.00			
S-37	96	N. MAIN ST. (WATER ST. ALIGNMENT)	4+98	RT	W11-14-30	30 x 30	13.25				6.25			
					W11-1-30	12 x 9					0.75			
					W16-5P-24	24 x 18					3.00			
S-38	96		5+81	RT	D11-1-24	24 x 18	10.75				3.00			
					M6-3-12	12 x 9					0.75			
S-39	96	WATER ST.	5+99	LT	D11-1-24	24 x 18	10.75				3.00			
					M6-3-12	12 x 9					0.75			
S-40	96		6+99	LT	W11-14-30	30 x 30	13.25				6.25			
					W11-1-30	12 x 9					0.75			
					W16-5P-24	24 x 18					3.00			
S-41	96		12+56	RT	W11-14-30	30 x 30	13.25				6.25			
					W11-1-30	12 x 9					0.75		2	1
					W16-5PL-24	24 x 18					3.00			
S-42	96		13+56	RT	D11-1-24	24 x 18	10.75				3.00			
					M6-1L-12	12 x 9					0.75		3	1
S-43	96	EX. HOLMES COUNTY TRAIL (WATER ST. ALIGNMENT)	15+02	LT	D11-1-24	24 x 18	10.75				3.00			
					M6-2R-12	12 x 9					0.75		3	1
S-44	96		15+97	LT	W11-14-30	30 x 30	12.75				6.25			
					W11-1-30	12 x 9					0.75			
					W16-7PL-24	24 x 12					2.00			
S-45	96	WATER ST.	20+55	LT	W11-H14A-36	36 x 36		14.5			9.00			
					W11-H1A-36	36 x 36					9.00		2	1
TOTALS THIS SHEET							124	15			89		14	6
TOTALS SHEET 30							291	88	5		232		1	2
TOTALS CARRIED TO GENERAL SUMMARY							415	103	5		321		15	8

REF NO.	SHEET NO.	STATION TO STATION					642 STOP LINE, TYPE 1 FT	642 CENTER LINE, TYPE 1, (DOUBLE YELLOW) MILE	646 STOP LINE FT	646 CENTER LINE, (DOUBLE YELLOW) MILE	646 EDGE LINE, 6", (WHITE) MILE	646 CROSSWALK LINE, 12" FT
		SHARED USE PATH										
TC-1	38	231+00.00					16					
TC-2	38-43	231+00.00	CL	TO	298+15.00	CL		1.28				
TC-3	87	298+15.00					12					
TC-4	87	298+52.00					12					
TC-5	43-47	298+52.00	CL	TO	354+15.50	CL		1.06				
TC-6	47	354+15.50					16					
		S.R. 60										
TC-7	48,49	106+07.00	CL	TO	111+11.75	CL				0.10		
TC-8	48,49	107+35.00	RT	TO	111+11.75	RT					0.08	
TC-9	48,49	107+35.00	LT	TO	111+11.75	LT					0.08	
TC-10	49	111+11.75	LT	TO	112+56.25	LT					0.03	
TC-11	49	111+11.75	CL	TO	112+56.25	CL				0.03		
TC-12	49	111+11.75	RT	TO	112+56.25	RT					0.03	
TC-13	49	112+56.25	CL	TO	113+00.00	CL				0.01		
TC-14	49	1+53.00	LT						22			
TC-15	49	113+32.29	RT	TO	113+63.05	RT						58
TC-16	49	0+90.00	LT&RT						21			
TC-17	49	113+84.00	LT&RT									48
TC-18	49	113+95.00	CL	TO	114+59.00	CL				0.02		
TOTALS CARRIED TO GENERAL SUMMARY							56	2.34	43	0.16	0.22	106

CALCULATED HBZ
CHECKED AKA

TRAFFIC CONTROL SUBSUMMARY

HOL-COUNTY TRAIL
PHASE 5C2

STATION RANGE			SIDE	DISTANCE (D)	AVERAGE WIDTH (W)	SURFACE AREA (A) A=DxW/9	CADD GENERATED AREA		204		304	304		407		441	441		452							
									SUBGRADE COMPACTION		AGGREGATE BASE, 6"	AGGREGATE BASE, 8"		TACK COAT (0.08 GAL/SY)		ASPHALT CONCRETE SURFACE COURSE, TYPE I, (449), PG64-22, 1.5"	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449), 1.75"		8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P							
				FT	FT	SQ YD	SQ YD		SY		CY	CY		GAL		CY	CY		SY							
SHARED USE PATH																										
230+90.65	TO	244+08.50	LT & RT	1317.85																						
		FULL DEPTH			16.00	2342.84			2342.84		390.47			187.43		97.62	113.89									
		+AGG COURSE			1.00	146.43					24.40															
		+SUBGRADE			3.00	439.28			439.28																	
244+71.50	TO	256+10.00	LT & RT	1138.50																						
		FULL DEPTH			16.00	2024.00			2024.00		337.33			161.92		84.33	98.39									
		+AGG COURSE			1.00	126.50					21.08															
		+SUBGRADE			3.00	379.50			379.50																	
256+10.00	TO	256+50.00	LT & RT	40.00																						
LANE TAPER RT		FULL DEPTH			15.00	66.67			66.67		11.11			5.33		2.78	3.24									
		+AGG COURSE			1.00	4.44					0.74															
		+SUBGRADE			3.00	13.33			13.33																	
256+50.00	TO	256+90.00	LT & RT	40.00																						
		FULL DEPTH			14.00	62.22			62.22		10.37			4.98		2.59	3.02									
		+AGG COURSE			1.00	4.44					0.74															
		+SUBGRADE			3.00	13.33			13.33																	
256+90.00	TO	257+30.00	LT & RT	40.00																						
LANE TAPER RT		FULL DEPTH			15.00	66.67			66.67		11.11			5.33		2.78	3.24									
		+AGG COURSE			1.00	4.44					0.74															
		+SUBGRADE			3.00	13.33			13.33																	
257+30.00	TO	262+96.50	LT & RT	566.50																						
		FULL DEPTH			16.00	1007.11			1007.11		167.85			80.57		41.96	48.96									
		+AGG COURSE			1.00	62.94					10.49															
		+SUBGRADE			3.00	188.83			188.83																	
263+44.50	TO	274+74.00	LT & RT	1129.50																						
		FULL DEPTH			16.00	2008.00			2008.00		334.67			160.64		83.67	97.61									
		+AGG COURSE			1.00	125.50					20.92															
		+SUBGRADE			3.00	376.50			376.50																	
275+22.00	TO	280+06.91	LT & RT	484.91																						
		FULL DEPTH			16.00	862.06			862.06		143.68			68.96		35.92	41.91									
		+AGG COURSE			1.00	53.88					8.98															
		+SUBGRADE			3.00	161.64			161.64																	
280+06.91	TO	280+22.09	LT & RT	15.18																						
		FULL DEPTH FIELD DRIVE			36.00		60.70		60.70		10.12								60.70							
280+22.09	TO	297+60.00	LT & RT	1737.91																						
		FULL DEPTH			16.00	3089.62			3089.62		514.94			247.17		128.73	150.19									
		+AGG COURSE			1.00	193.10					32.18															
		+SUBGRADE			3.00	579.30			579.30																	
297+60.00	TO	298+00.00	LT & RT	40.00																						
LANE TAPER LT&RT		FULL DEPTH			14.00	62.22			62.22		10.37			4.98		2.59	3.02									
		+AGG COURSE			1.00	4.44					0.74															
		+SUBGRADE			3.00	13.33			13.33																	
298+00.00	TO	298+23.38	LT & RT	23.38																						
		FULL DEPTH			12.00	31.17			31.17		5.20			2.49		1.30	1.52									
		+AGG COURSE			1.00	2.60					0.43															
		+SUBGRADE			3.00	7.79			7.79																	
							SUBTOTALS		13869.47		2068.67			929.81		484.27	564.99		60.70							
							TOTALS CARRIED TO SHEET 34		13870		2069			930		485	565		61							

CALCULATED HBZ
CHECKED AKA

SHARED USE PATH PAVEMENT CALCULATIONS

HOL-COUNTY TRAIL
PHASE 5C2

STATION RANGE			SIDE	DISTANCE (D)	AVERAGE WIDTH (W)	SURFACE AREA (A) A=DxW/9	CADD GENERATED AREA		204		304	304		407		441	441		452							
									SUBGRADE COMPACTION		AGGREGATE BASE, 6"	AGGREGATE BASE, 8"		TACK COAT (0.08 GAL/SY)		ASPHALT CONCRETE SURFACE COURSE, TYPE I, (449), PG64-22, 1.5"	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449), 1.75"		8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P							
				FT	FT	SQ YD	SQ YD		SY		CY	CY		GAL		CY	CY		SY							
298+42.05	TO	300+60.00	LT & RT	217.95																						
		FULL DEPTH			12.00	290.60			290.60		48.43			23.25		12.11	14.13									
		+AGG COURSE			1.00	24.22					4.04															
		+SUBGRADE			3.00	72.65			72.65																	
300+60.00	TO	301+00.00	LT & RT	40.00																						
LANE TAPER LT&RT		FULL DEPTH			14.00	62.22			62.22		10.37			4.98		2.59	3.02									
		+AGG COURSE			1.00	4.44					0.74															
		+SUBGRADE			3.00	13.33			13.33																	
301+00.00	TO	307+04.22	LT & RT	604.22																						
		FULL DEPTH			16.00	1074.17			1074.17		179.03			85.93		44.76	52.22									
		+AGG COURSE			1.00	67.14					11.19															
		+SUBGRADE			3.00	201.41			201.41																	
307+04.22	TO	307+20.78	LT & RT	16.56																						
		FULL DEPTH FIELD DRIVE			36.00		66.26		66.26		11.04								66.26							
307+20.78	TO	314+96.00	LT & RT	775.22																						
		FULL DEPTH			16.00	1378.17			1378.17		229.69			110.25		57.42	66.99									
		+AGG COURSE			1.00	86.14					14.36															
		+SUBGRADE			3.00	258.41			258.41																	
314+96.00	TO	315+14.00	LT & RT	18.00																						
		FULL DEPTH FIELD DRIVE			36.00		72.00		72.00		12.00								72.00							
315+14.00	TO	340+30.00	LT & RT	2516.00																						
		FULL DEPTH			16.00	4472.89			4472.89		745.48			357.83		186.37	217.43									
		+AGG COURSE			1.00	279.56					46.59															
		+SUBGRADE			3.00	838.67			838.67																	
340+30.00	TO	340+70.00	LT & RT	40.00																						
LANE TAPER LT		FULL DEPTH			15.00	66.67			66.67		11.11			5.33		2.78	3.24									
		+AGG COURSE			1.00	4.44					0.74															
		+SUBGRADE			3.00	13.33			13.33																	
340+70.00	TO	343+00.00	LT & RT	230.00																						
		FULL DEPTH			14.00	357.78			357.78		59.63			28.62		14.91	17.39									
		+AGG COURSE			1.00	25.56					4.26															
		+SUBGRADE			3.00	76.67			76.67																	
343+00.00	TO	343+20.00	LT & RT	20.00																						
LANE TAPER LT		FULL DEPTH			14.50	32.22			32.22		5.37			2.58		1.34	1.57									
		+AGG COURSE			1.00	2.22					0.37															
		+SUBGRADE			3.00	6.67			6.67																	
343+20.00	TO	346+00.00	LT & RT	280.00																						
		FULL DEPTH			15.00	466.67			466.67		77.78			37.33		19.44	22.69									
		+AGG COURSE			1.00	31.11					5.19															
		+SUBGRADE			3.00	93.33			93.33																	
346+00.00	TO	346+20.00	LT & RT	20.00																						
LANE TAPER LT		FULL DEPTH			14.50	32.22			32.22		5.37			2.58		1.34	1.57									
		+AGG COURSE			1.00	2.22					0.37															
		+SUBGRADE			3.00	6.67			6.67																	
							SUBTOTALS		9952.99		1483.15			658.69		343.07	400.24		138.26							
							TOTALS CARRIED TO SHEET 34		9953		1484			659		344	401		139							

CALCULATED HBZ
CHECKED AKA

SHARED USE PATH PAVEMENT CALCULATIONS

HOL-COUNTY TRAIL PHASE 5C2

STATION RANGE			SIDE	DISTANCE (D)	AVERAGE WIDTH (W)	SURFACE AREA (A) A=DxW/9	CADD GENERATED AREA		204		304	304		407		441	441		452							
									SUBGRADE COMPACTION		AGGREGATE BASE, 6"	AGGREGATE BASE, 8"		TACK COAT (0.08 GAL/SY)		ASPHALT CONCRETE SURFACE COURSE, TYPE I, (449), PG64-22, 1.5"	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449), 1.75"		8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P							
				FT	FT	SQ YD	SQ YD		SY		CY	CY		GAL		CY	CY		SY							
346+20.00	TO	346+80.00	LT & RT	60.00																						
		FULL DEPTH			14.00	93.33			93.33		15.56			7.47		3.89	4.54									
		+AGG COURSE			1.00	6.67					1.11															
		+SUBGRADE			3.00	20.00			20.00																	
346+80.00	TO	347+00.00	LT & RT	20.00																						
LANE TAPER LT		FULL DEPTH			14.50	32.22			32.22		5.37			2.58		1.34	1.57									
		+AGG COURSE			1.00	2.22					0.37															
		+SUBGRADE			3.00	6.67			6.67																	
347+00.00	TO	349+00.00	LT & RT	200.00																						
		FULL DEPTH			15.00	333.33			333.33		55.56			26.67		13.89	16.20									
		+AGG COURSE			1.00	22.22					3.70															
		+SUBGRADE			3.00	66.67			66.67																	
349+00.00	TO	349+20.00	LT & RT	20.00																						
LANE TAPER LT		FULL DEPTH			15.50	34.44			34.44		5.74			2.76		1.44	1.67									
		+AGG COURSE			1.00	2.22					0.37															
		+SUBGRADE			3.00	6.67			6.67																	
349+20.00	TO	354+20.86	LT & RT	500.86																						
		FULL DEPTH			16.00	890.42			890.42		148.40			71.23		37.10	43.28									
		+AGG COURSE			1.00	55.65					9.28															
		+SUBGRADE			3.00	166.95			166.95																	
FIELD DRIVE OFF TR-64																										
10+06.69	TO	11+65.06		158.37																						
FULL DEPTH FIELD DRIVE APRON					22.00		22.48		22.48		3.75								22.48							
FULL DEPTH FIELD DRIVE					12.00		256.26		256.26			56.95														
SUBTOTALS									1929.44		249.20	56.95		110.70		57.66	67.27		22.48							
TOTALS THIS SHEET									1930		307			111		58	68		23							
TOTALS SHEET 32									13870		2069			930		485	565		61							
TOTALS SHEET 33									9953		1484			659		344	401		139							
TOTALS CARRIED TO GENERAL SUMMARY									25753		3860			1700		887	1034		223							

SHARED USE PATH PAVEMENT CALCULATIONS

HOL-COUNTY TRAIL
PHASE 5C2

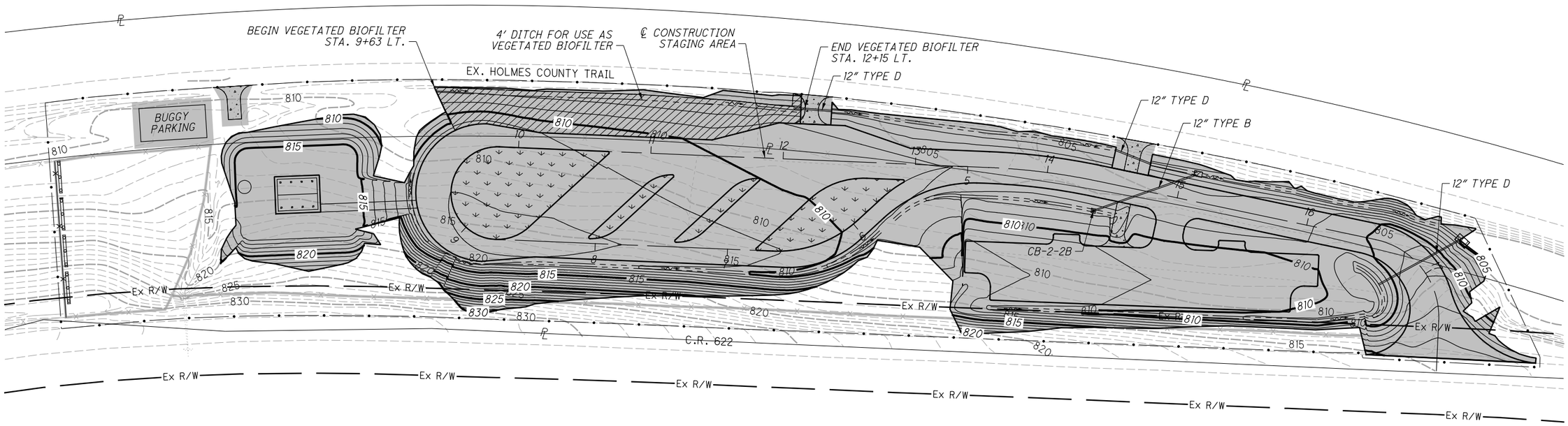
CALCULATED HBZ
CHECKED AKA

STATION RANGE			SIDE	DISTANCE (D)	AVERAGE WIDTH (W)	SURFACE AREA (A) A=DxW/9	CADD GENERATED AREA	204 SUBGRADE COMPACTION	254 PAVEMENT PLANING, ASPHALT CONCRETE, 3" MAX		301 ASPHALT CONCRETE BASE, PG64-22, (449), 8"	301 ASPHALT CONCRETE BASE, PG64-22, (449), 4" LIFT		304 AGGREGATE BASE, 6"	304 AGGREGATE BASE, 8"		407 TACK COAT (0.08 GAL/SY)		441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22, 1.25"	441 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449), 1.75"					
				FT	FT	SQ YD	SQ YD	SY	SY		CY	CY		CY	CY		GAL		CY	CY					
RESURFACING AND WIDENING S.R. 60																									
107+35.00	TO	107+75.00	LT & RT	40.00																					
PVMT TAPER		RESURFACING			18.15		80.67		80.67								6.45		2.80						
		FULL DEPTH			12.83		57.00	57.00			12.67			9.50			13.68		1.98	2.77					
		+2 X 4" ASPHALT BASE STEP			0.67	2.96						0.33					0.24								
		+2 X 8" ASPHALT BASE STEP			1.33	5.93						0.66													
		+2 X 14" AGGREGATE BASE STEP			2.33	10.37								1.73											
		+2 X 18" SUBGRADE STEP			3.00	13.33		13.33																	
107+75.00	TO	110+86.75	LT & RT	311.75																					
		RESURFACING			18.04		624.78		624.78								49.98		21.69						
		FULL DEPTH			13.96		483.67	483.67			107.48			80.61			116.08		16.79	23.51					
		+2 X 4" ASPHALT BASE STEP			0.67	23.09						2.57					1.85								
		+2 X 8" ASPHALT BASE STEP			1.33	46.19						5.13													
		+2 X 14" AGGREGATE BASE STEP			2.33	80.82								13.47											
		+2 X 18" SUBGRADE STEP			3.00	103.92		103.92																	
REAR APPROACH SLAB S.R. 60																									
110+86.75	TO	111+11.75	LT & RT	25.00																					
		RESURFACING			24.00		66.67		66.67								5.33		2.31						
		FULL DEPTH			8.00		22.22	22.22			4.94			3.70			5.33		0.77	1.08					
		+2 X 4" ASPHALT BASE STEP			0.67	1.85						0.21					0.15								
		+2 X 8" ASPHALT BASE STEP			1.33	3.70						0.41													
		+2 X 14" AGGREGATE BASE STEP			2.33	6.48								1.08											
		+2 X 18" SUBGRADE STEP			3.00	8.33		8.33																	
FORWARD APPROACH SLAB S.R. 60																									
112+56.25	TO	112+81.29	LT & RT	25.04																					
		RESURFACING			21.85		60.78		60.78								9.72		2.11	2.95					
		FULL DEPTH			4.31		12.00	12.00			2.67			2.00			2.88		0.42	0.58					
		+2 X 18" AGG BASE & SUBGRADE STEP			3.00	8.35		8.35						1.39											
ADD INTERSECTION S.R. 60 & WATER ST.																									
112+81.29	TO	113+95.00	LT & RT																						
		RESURFACING					541.44		541.44								86.63		18.80	26.32					
		FULL DEPTH					76.11	76.11			16.91			12.69			18.27		2.64	3.70					
		+2 X 18" AGG BASE & SUBGRADE STEP					49.56	49.56						8.26											
RESIDENTIAL DRIVE AT STA. 108+05																									
		ASPHALT APRON	LT				15.00	15.00						2.50			1.20		0.52	0.73					
FIELD DRIVE AT STA. 108+30																									
		ASPHALT APRON	RT				9.78	9.78						1.63			0.78		0.34	0.48					
		AGGREGATE BUILDUP					7.78	7.78							1.73										
RESIDENTIAL DRIVE AT STA. 110+42			LT																						
		ASPHALT APRON					24.60	24.60						4.10			1.97		0.85	1.20					
		AGGREGATE BUILDUP					42.11	42.11							9.36										
						SUBTOTALS		933.75	1374.33		144.67	9.30		142.66	11.09		320.55		72.04	63.32					
						TOTALS CARRIED TO GENERAL SUMMARY		934	1375		154			154			321		73	64					

CALCULATED AKA
CHECKED TML

S.R. 60 PAVEMENT CALCULATIONS

HOL-COUNTY TRAIL
PHASE 5C2



LEGEND

EARTH DISTURBED AREA (2.90 AC.)

VEGETATED BIOFILTER

BMP TYPE	STATION RANGE	SIDE	WIDTH	LAT./LONG. BEGIN		LAT./LONG. END		EDA TREATMENT CREDIT (ACRES)
VEGETATED BIOFILTER	9+63 TO 12+15	LT.	4'	40.506959	-81.972001	40.506970	-81.971088	0.59
						TREATMENT PROVIDED		0.59
						TREATMENT REQUIRED		0.58

PROJECT DATA			
TOTAL AREA (RIGHT OF WAY)	4.90 AC	RUNOFF COEFFICIENT FOR PRE-CONSTRUCTION SITE	0.38
PROJECT EARTH DISTURBED AREAS (EFFECTIVE)	2.90 AC	RUNOFF COEFFICIENT FOR POST CONSTRUCTION SITE	0.45
ESTIMATED CONTRACTOR EARTH DISTURBED AREAS	0.125 AC	POST CONSTRUCTION BMP:	VEGETATED BIOFILTER
NOTICE OF INTENT EARTH DISTURBED AREAS	4.0 AC	IMMEDIATE RECEIVING WATERS	BLACK CREEK
IMPERVIOUS (PAVED) AREA FOR PRE-CONSTRUCTION SITE	0.69 AC	SUBSEQUENT RECEIVING WATERS	KILLBUCK CREEK
IMPERVIOUS (PAVED) AREA FOR POST CONSTRUCTION SITE	1.21 AC		

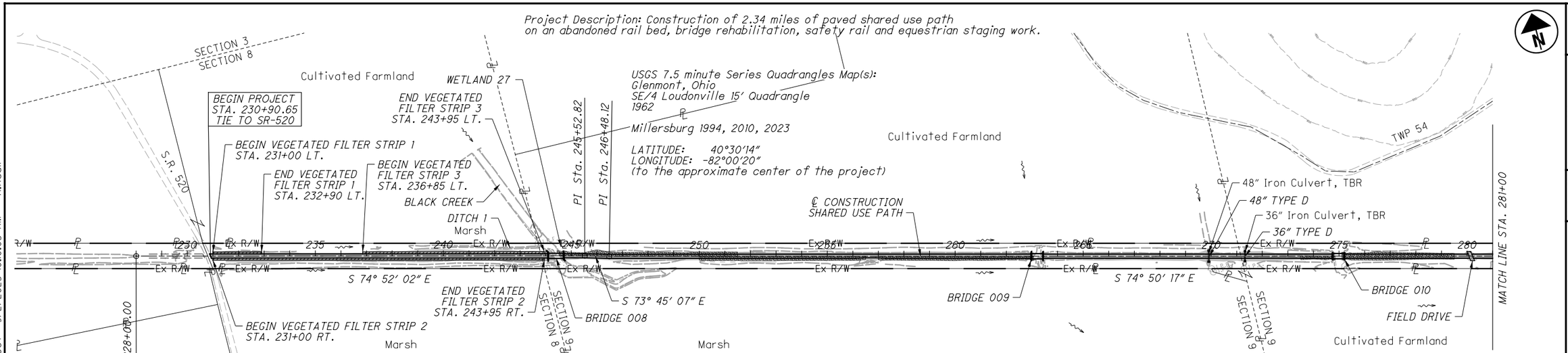
HORIZONTAL SCALE IN FEET
0 20 40 80

CALCULATED AKB
CHECKED MS

PROJECT SITE PLAN
STAGING AREA

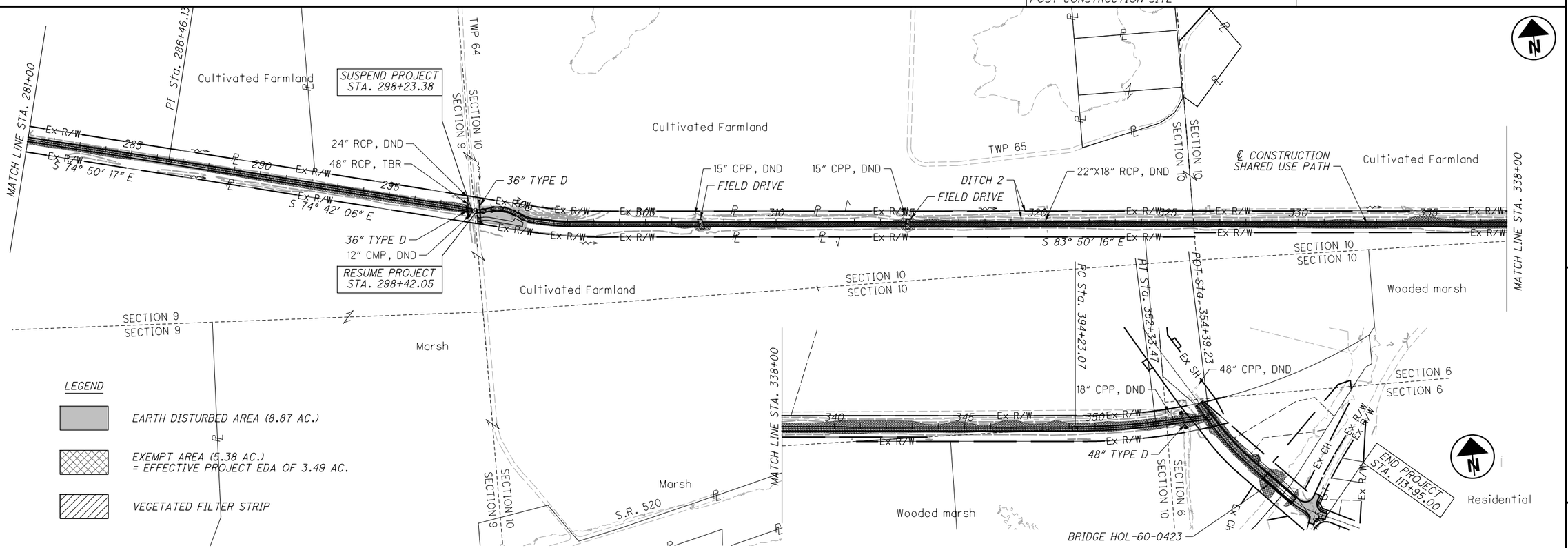
HOL-COUNTY TRAIL
PHASE 5C2

Project Description: Construction of 2.34 miles of paved shared use path on an abandoned rail bed, bridge rehabilitation, safety rail and equestrian staging work.



BMP TYPE	STATION RANGE	SIDE	WIDTH	LAT./LONG. BEGIN		LAT./LONG. END		EDA TREATMENT CREDIT (ACRES)
VEGETATED FILTER STRIP 1	231+00 TO 232+90	LT.	8	40.508907	-82.028937	40.508768	-82.028279	0.07
VEGETATED FILTER STRIP 2	231+00 TO 243+95	RT.	8	40.508864	-82.028953	40.507918	-82.024464	0.48
VEGETATED FILTER STRIP 3	236+85 TO 243+95	LT.	8	40.508479	-82.026910	40.510705	-82.024429	0.26
						TREATMENT PROVIDED		0.81
						TREATMENT REQUIRED		0.70

PROJECT DATA			
TOTAL AREA (RIGHT OF WAY)	27.40 AC	RUNOFF COEFFICIENT FOR PRE-CONSTRUCTION SITE	0.30
PROJECT EARTH DISTURBED AREAS	8.87 AC	RUNOFF COEFFICIENT FOR POST CONSTRUCTION SITE	0.40
ESTIMATED CONTRACTOR EARTH DISTURBED AREAS	0.125 AC	POST CONSTRUCTION BMP:	VEGETATED FILTER STRIPS
NOTICE OF INTENT EARTH DISTURBED AREAS	9.0 AC	IMMEDIATE RECEIVING WATERS	BLACK CREEK
IMPERVIOUS (PAVED) AREA FOR PRE-CONSTRUCTION SITE	0.00 AC	SUBSEQUENT RECEIVING WATERS	KILLBUCK CREEK
IMPERVIOUS (PAVED) AREA FOR POST CONSTRUCTION SITE	4.52 AC		



HORIZONTAL SCALE IN FEET
0 100 200 400

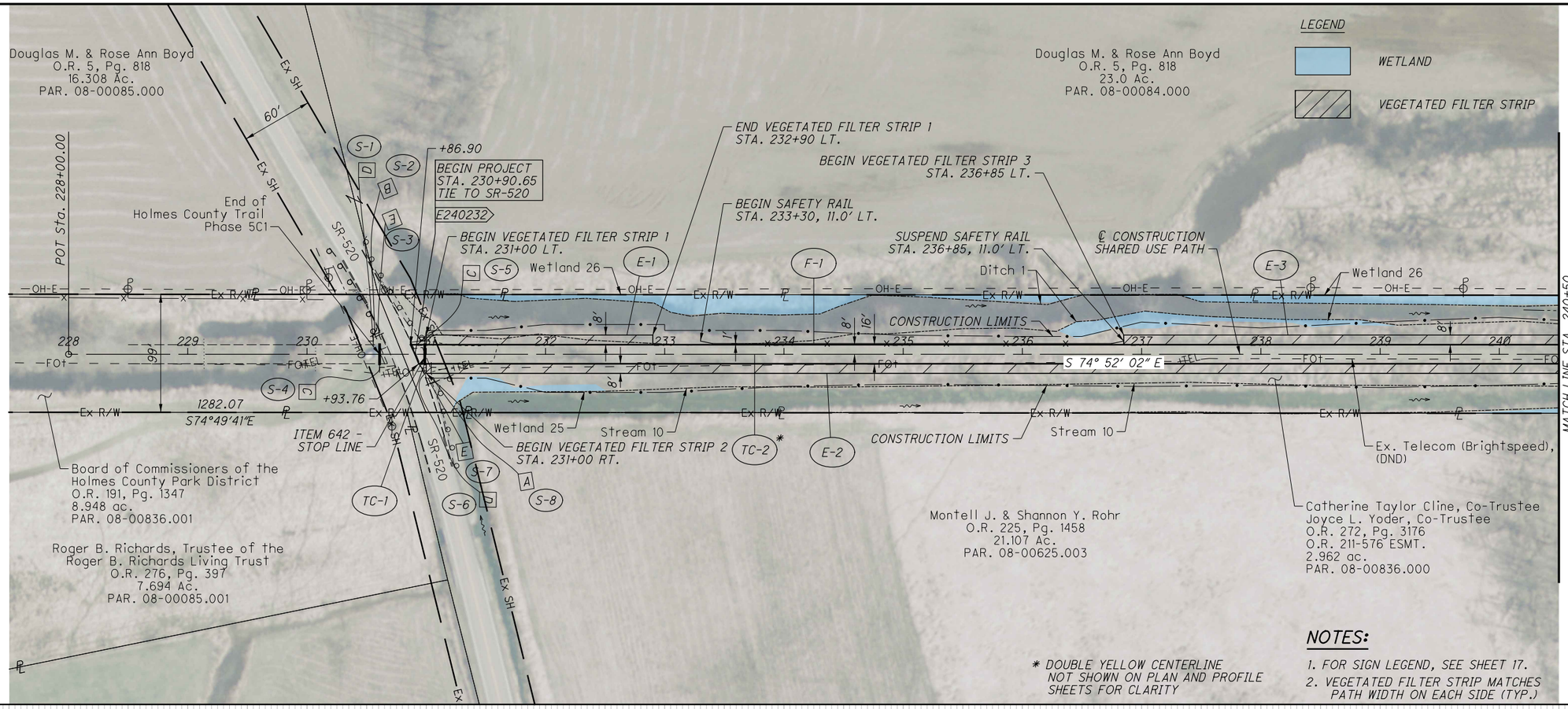
CALCULATED MS
CHECKED TML

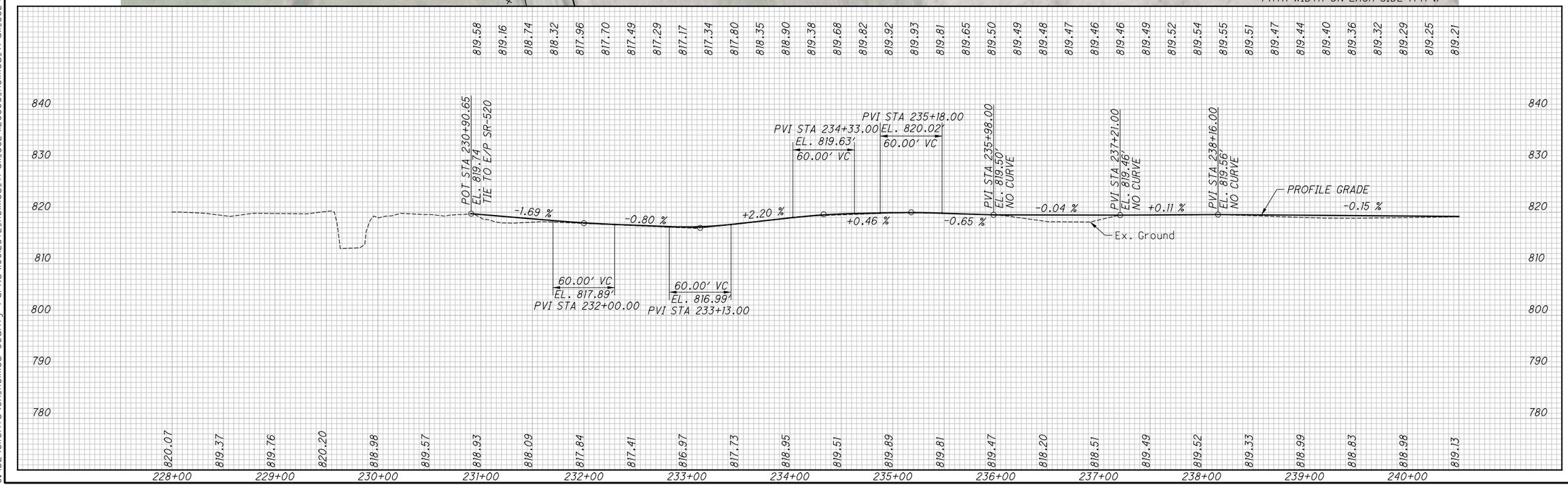
PROJECT SITE PLAN

HOL-COUNTY TRAIL PHASE 5C2

37
133

G:\DE\Clients\OH_Holmes County Parks\10012372_Holmes_Trail_5C2\20806_Holmes_Trail_5C2\Design\Drainage\Sheets\20806_DE001.dgn Sheet 9/2/2025 10:10:03 AM A.Adair





PLAN AND PROFILE
STA. 228+00 TO STA. 240+50

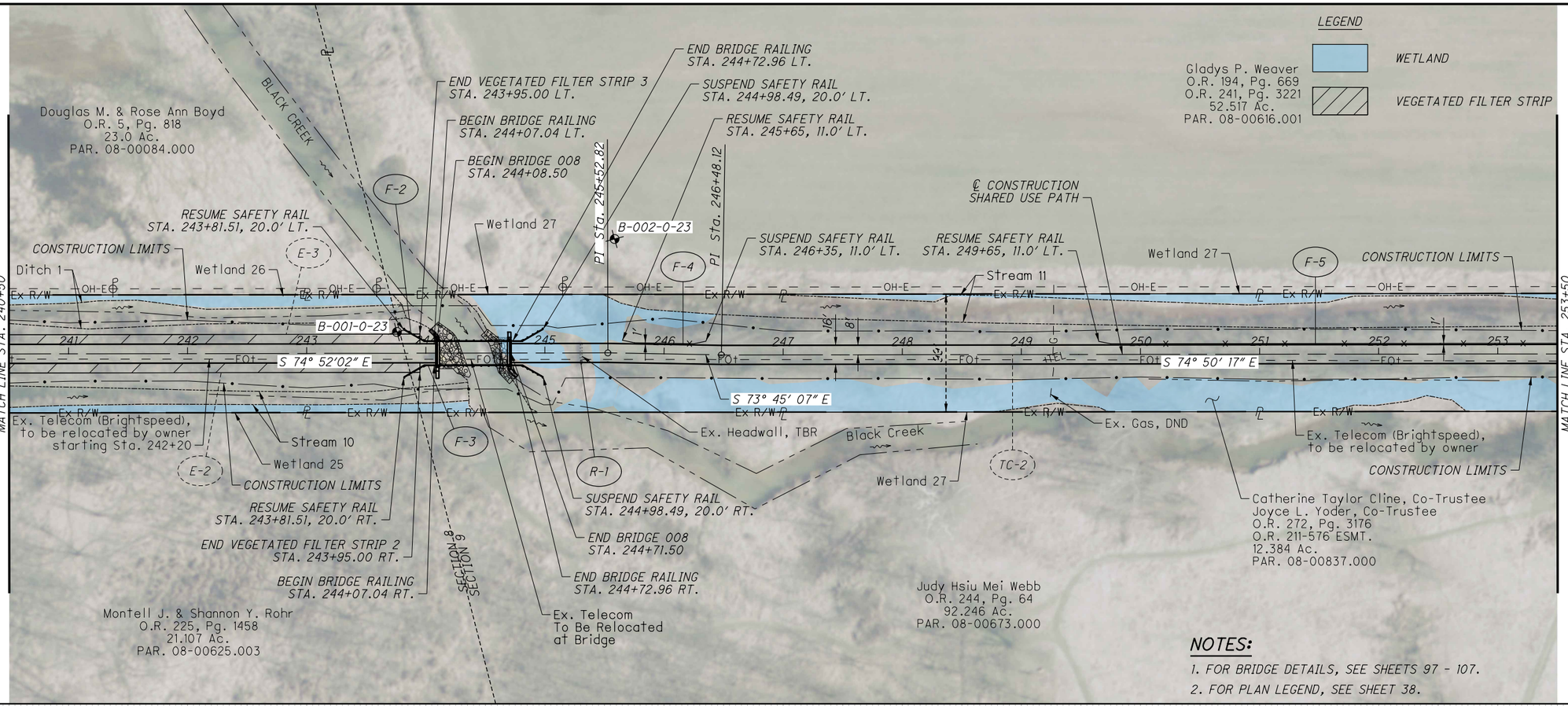
HOL-COUNTY TRAIL
PHASE 5C2

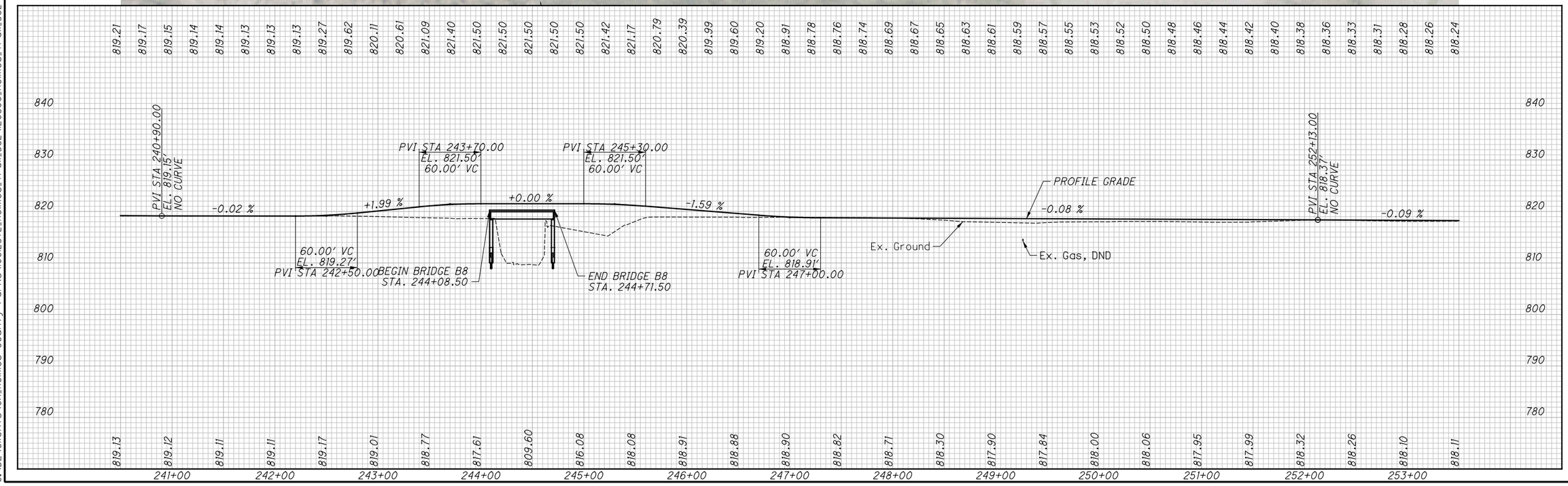
38
133

CALCULATED MS
CHECKED TML

HORIZONTAL SCALE IN FEET
0 25 50 100

G:\DE\Clients\OH_Holmes County Parks\0002372_Holmes_Trail_5C2\20806_Holmes_Trail_5C2\Design\Roadway\Sheets\20806_GP101.dgn 8/6052_GP101 10/1/2025 12:06:35 PM Less





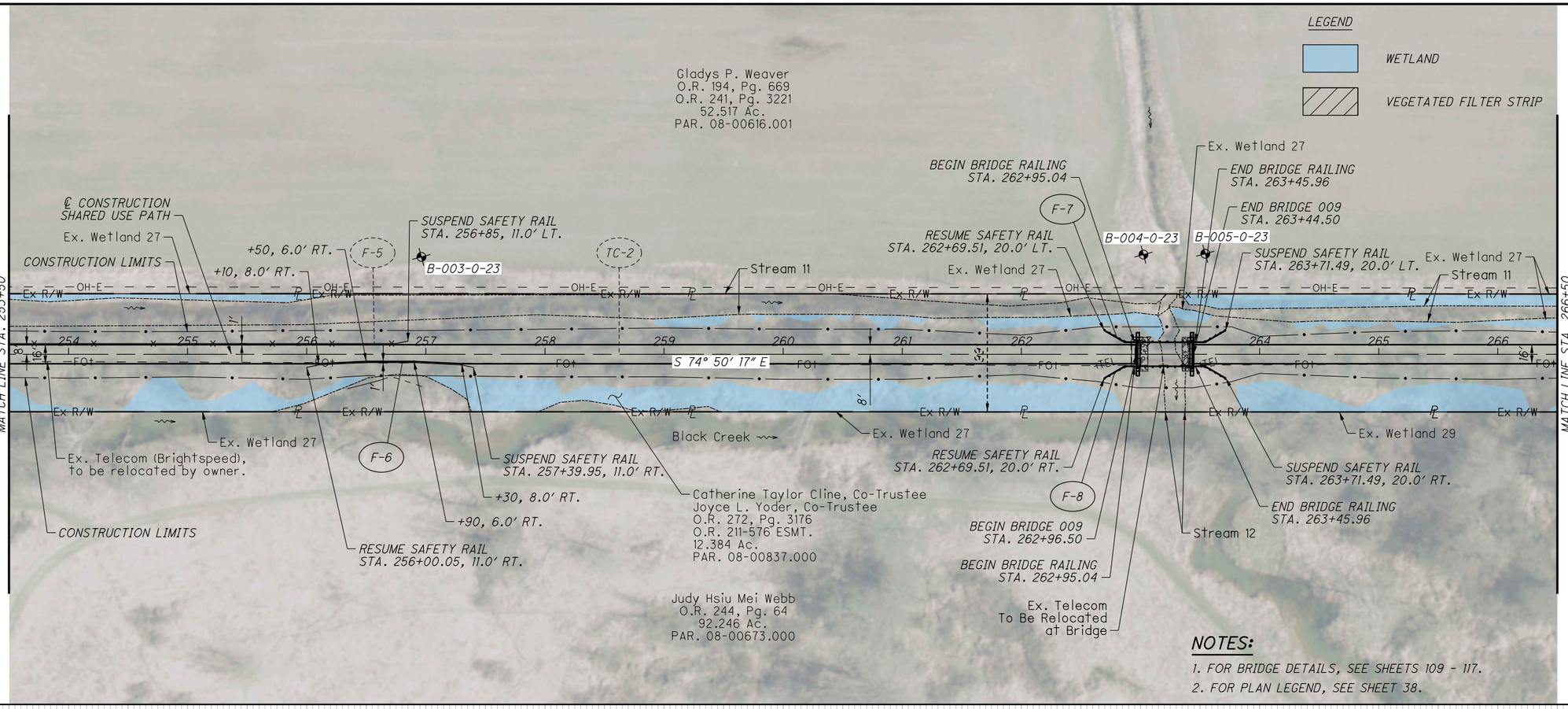
HORIZONTAL SCALE IN FEET
0 25 50 100

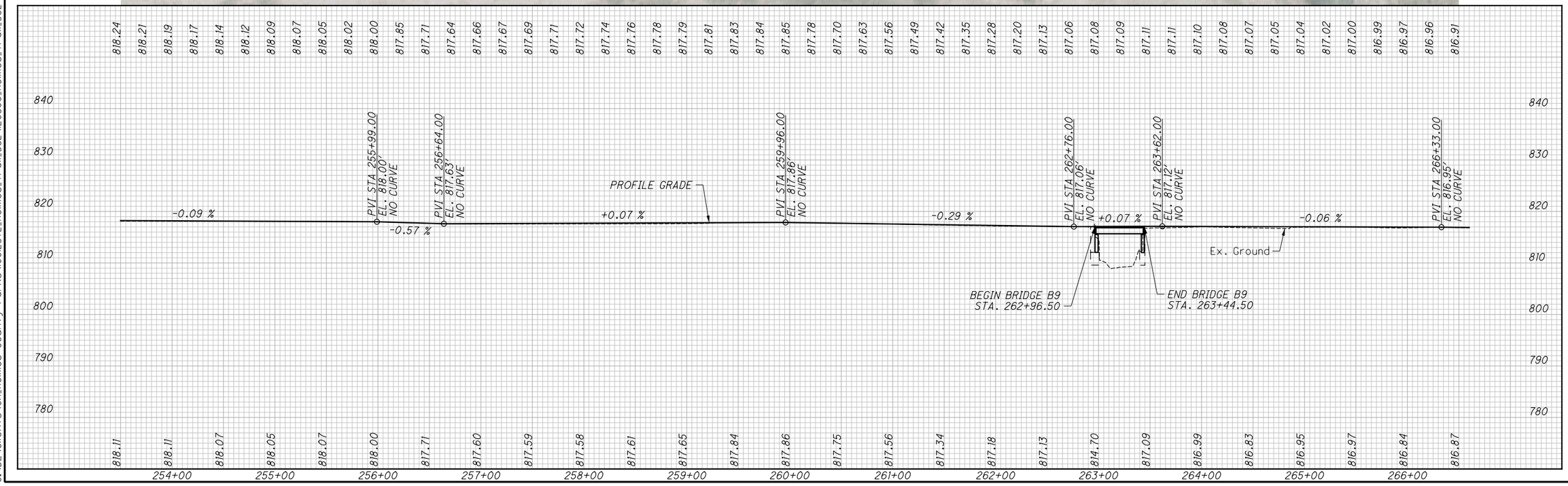
CALCULATED MS
CHECKED TML

PLAN AND PROFILE
STA. 240+50 TO STA. 253+50

HOL-COUNTY TRAIL
PHASE 5C2

39
133





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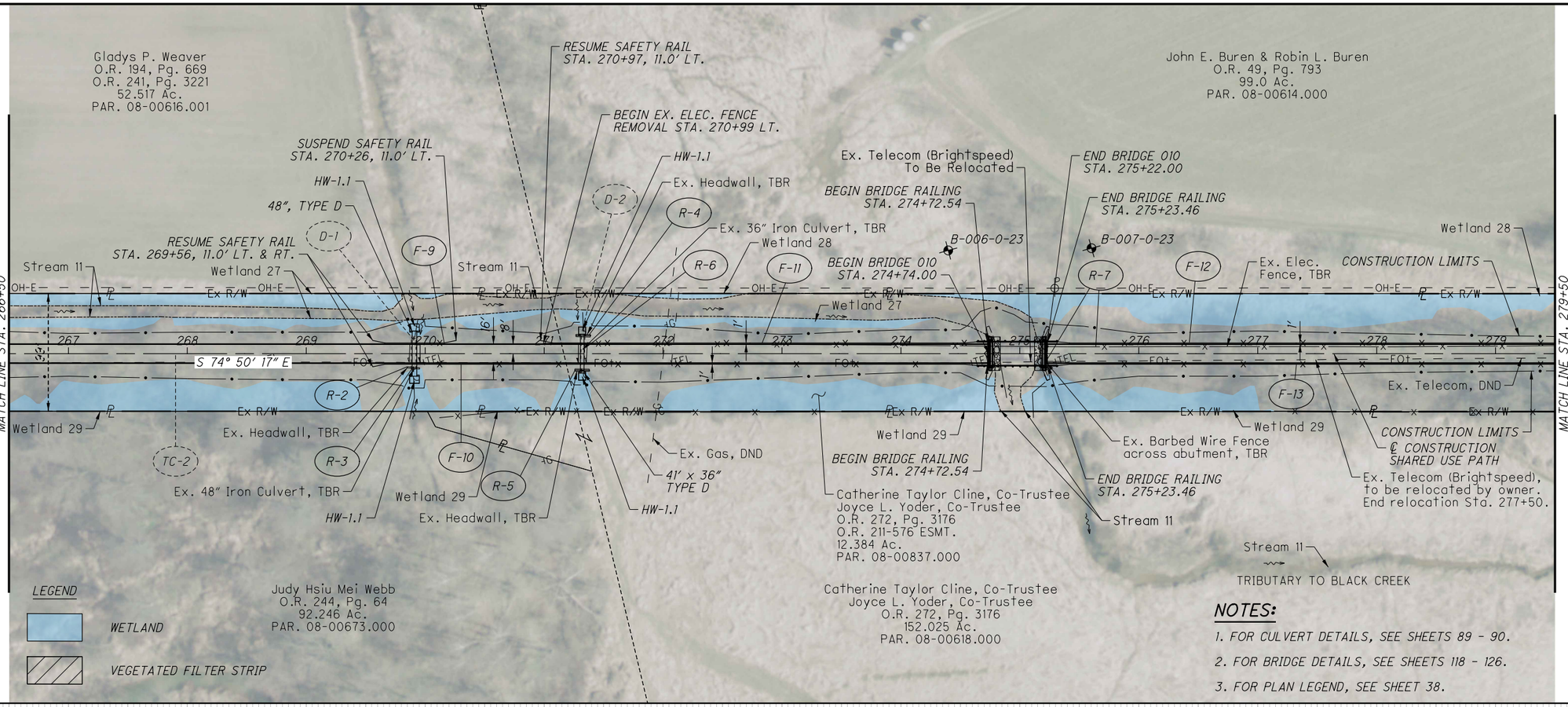
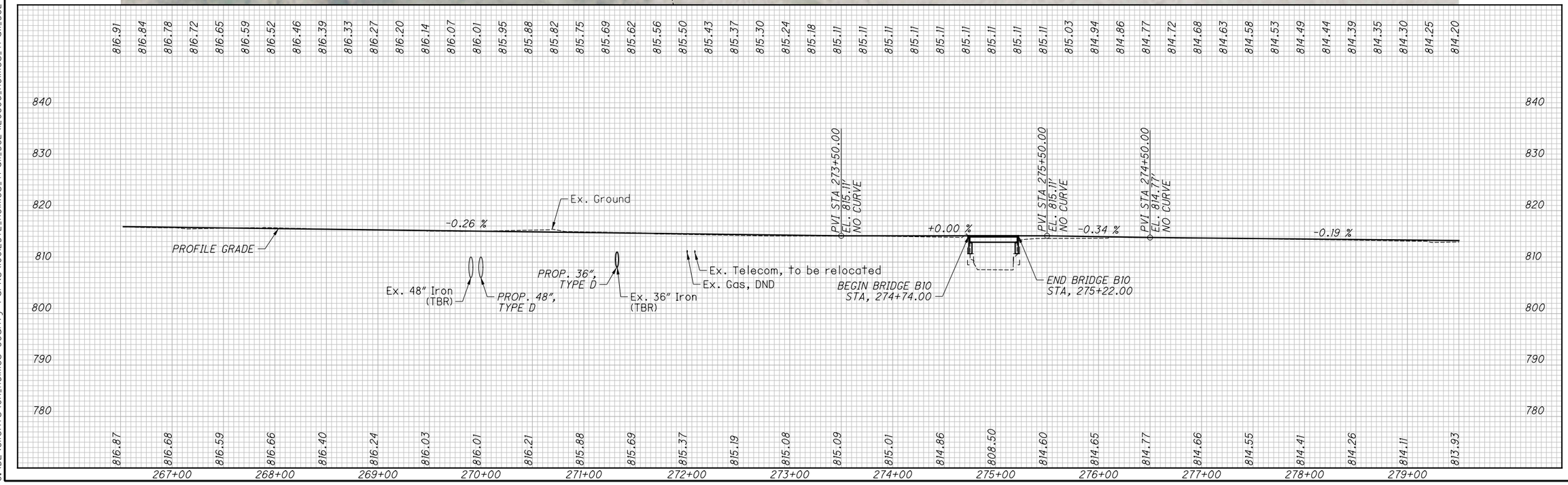
HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED MS
CHECKED TML

PLAN AND PROFILE
STA. 253+50 TO STA. 266+50

HOL-COUNTY TRAIL
PHASE 5C2





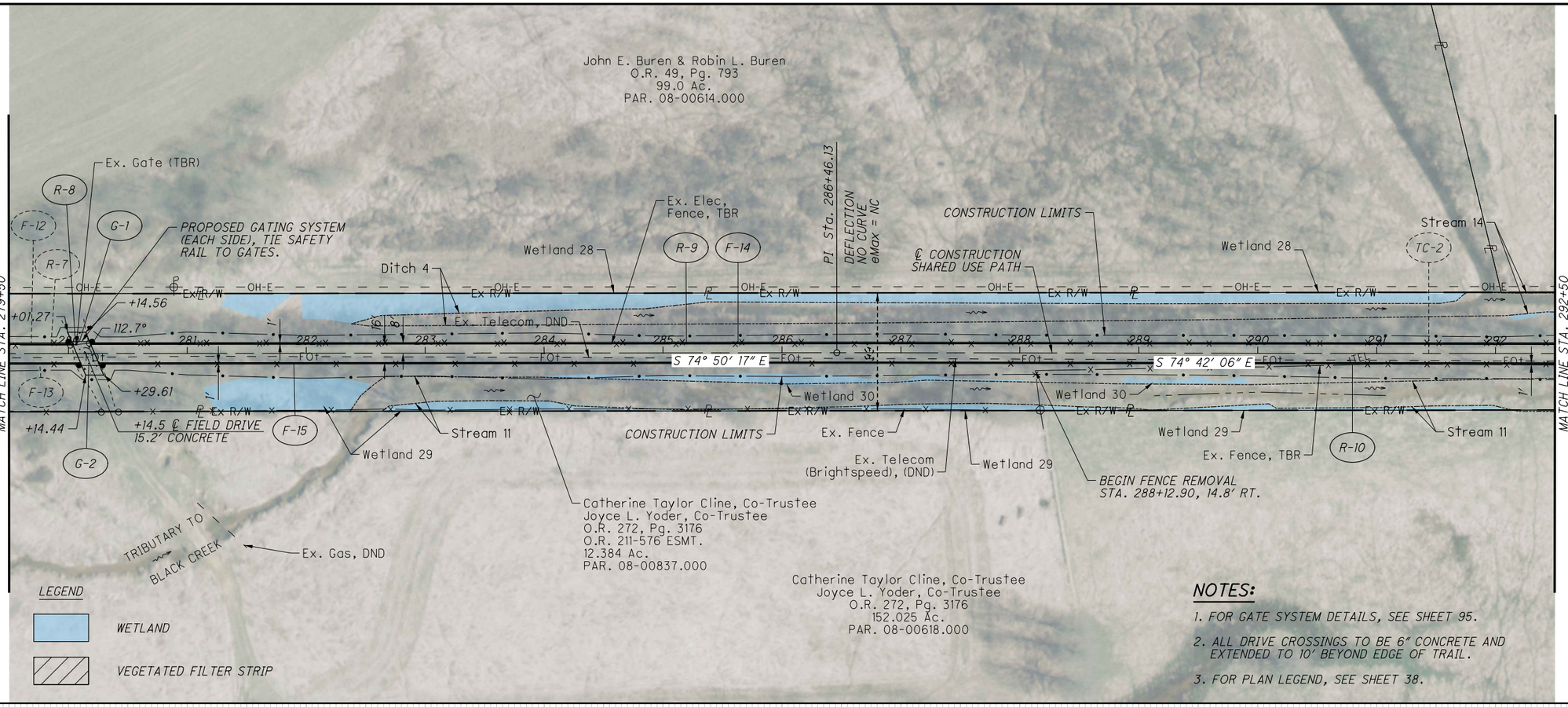
HORIZONTAL SCALE IN FEET
0 25 50 100

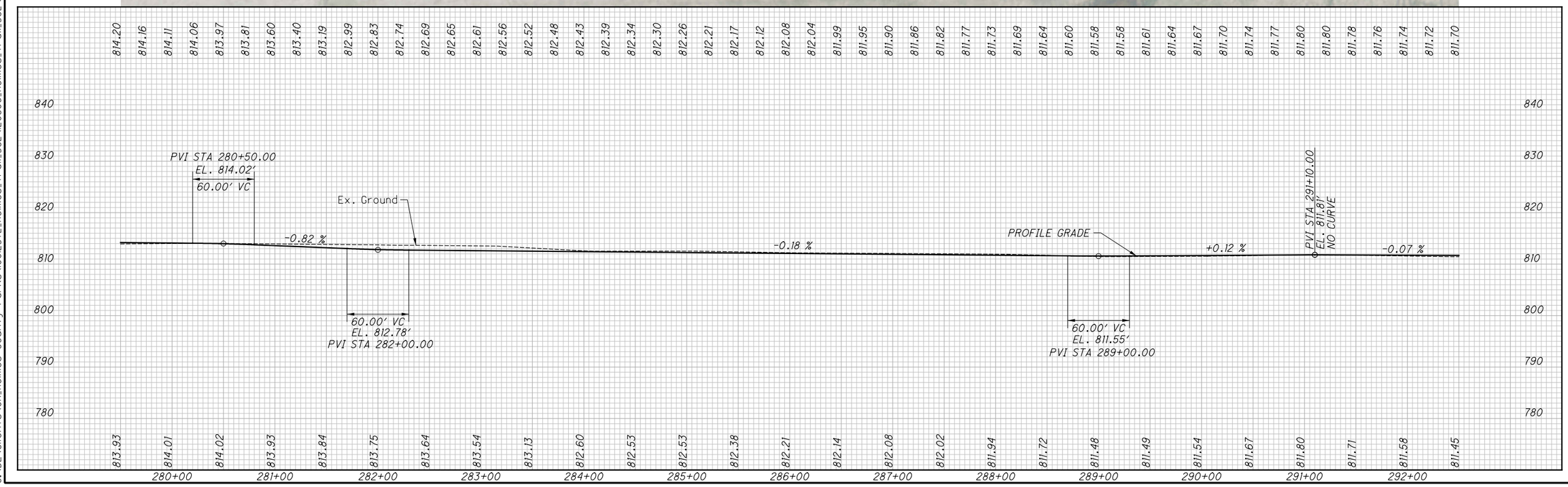
CALCULATED MS
CHECKED TML

PLAN AND PROFILE
STA. 266+50 TO STA. 279+50

HOL-COUNTY TRAIL
PHASE 5C2

41
133





N

0 25 50 100 HORIZONTAL SCALE IN FEET

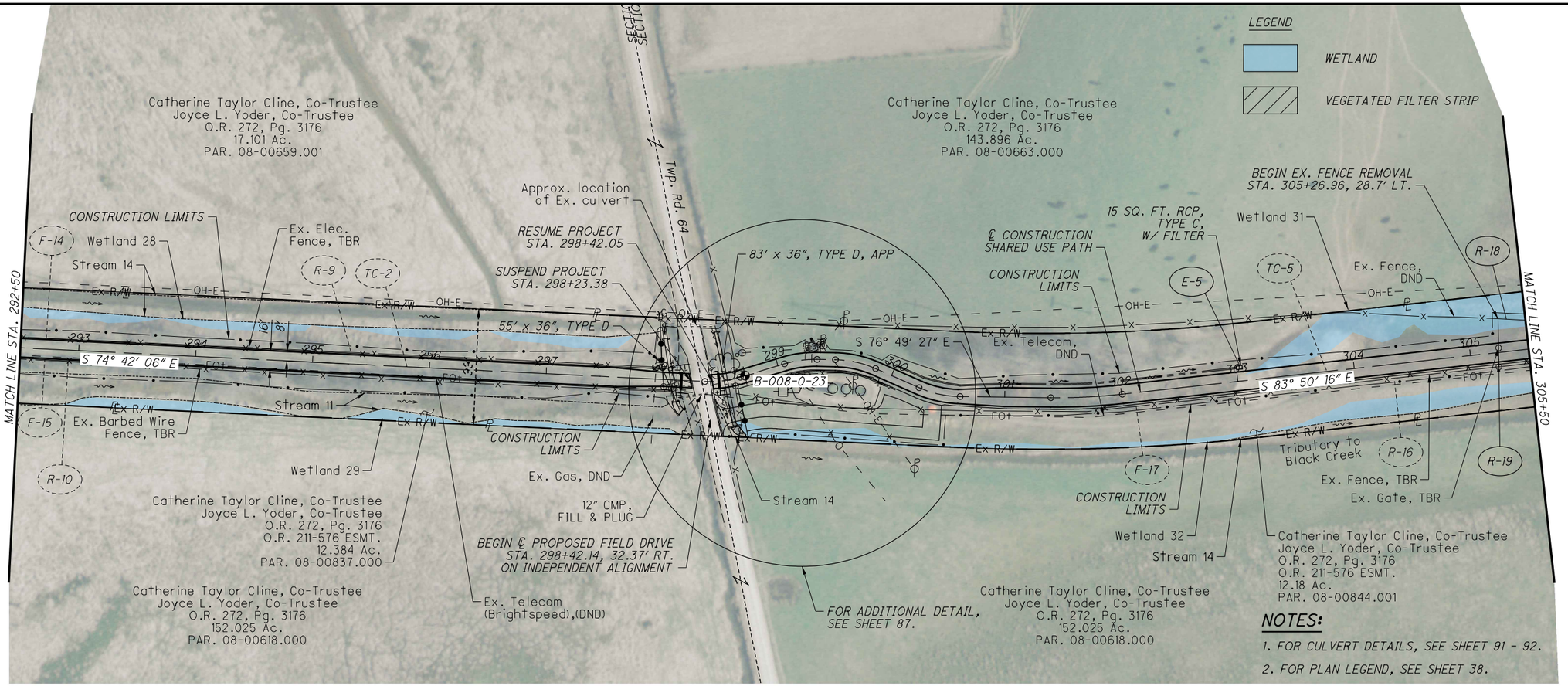
CALCULATED MS CHECKED TML

PLAN AND PROFILE
STA. 279+50 TO STA. 292+50

HOL-COUNTY TRAIL
PHASE 5C2

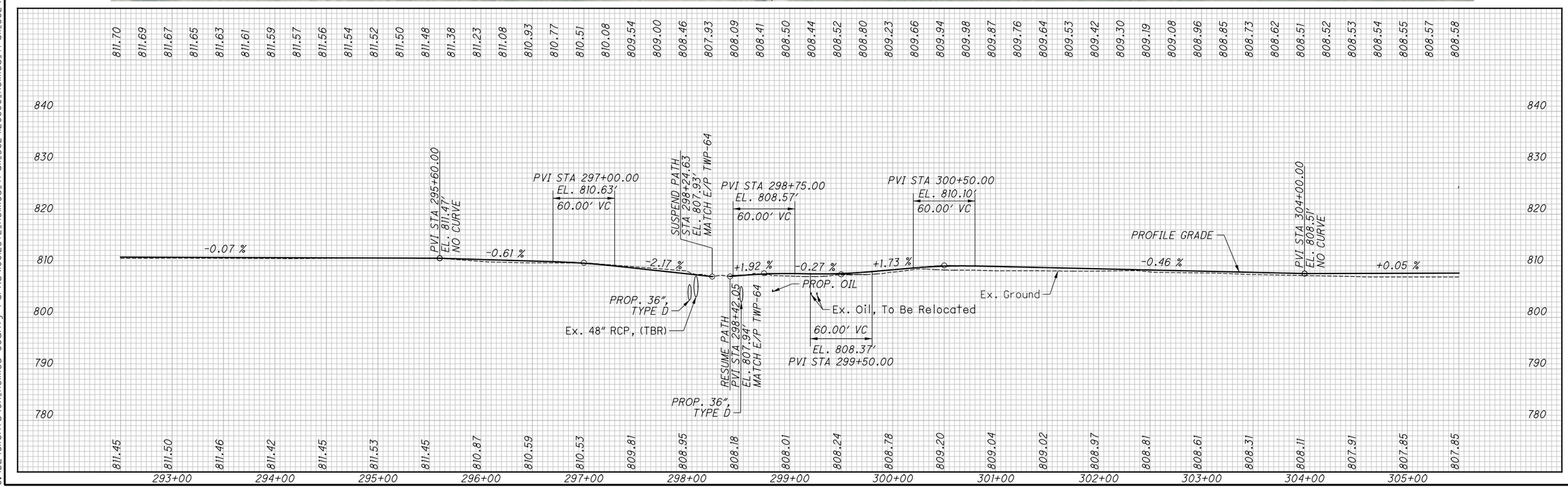
42
133

G:\DE\Clients\OH_Holmes County Parks\0012372_Holmes_Trail_5C2\120806_Holmes_Trail_5C2\Design\Roadway\Sheets\120806_GP105.dgn 86052_GP105 10/1/2025 12:19:54 PM Less



NOTES:

1. FOR CULVERT DETAILS, SEE SHEET 91 - 92.
2. FOR PLAN LEGEND, SEE SHEET 38.



CALCULATED MS
CHECKED TML

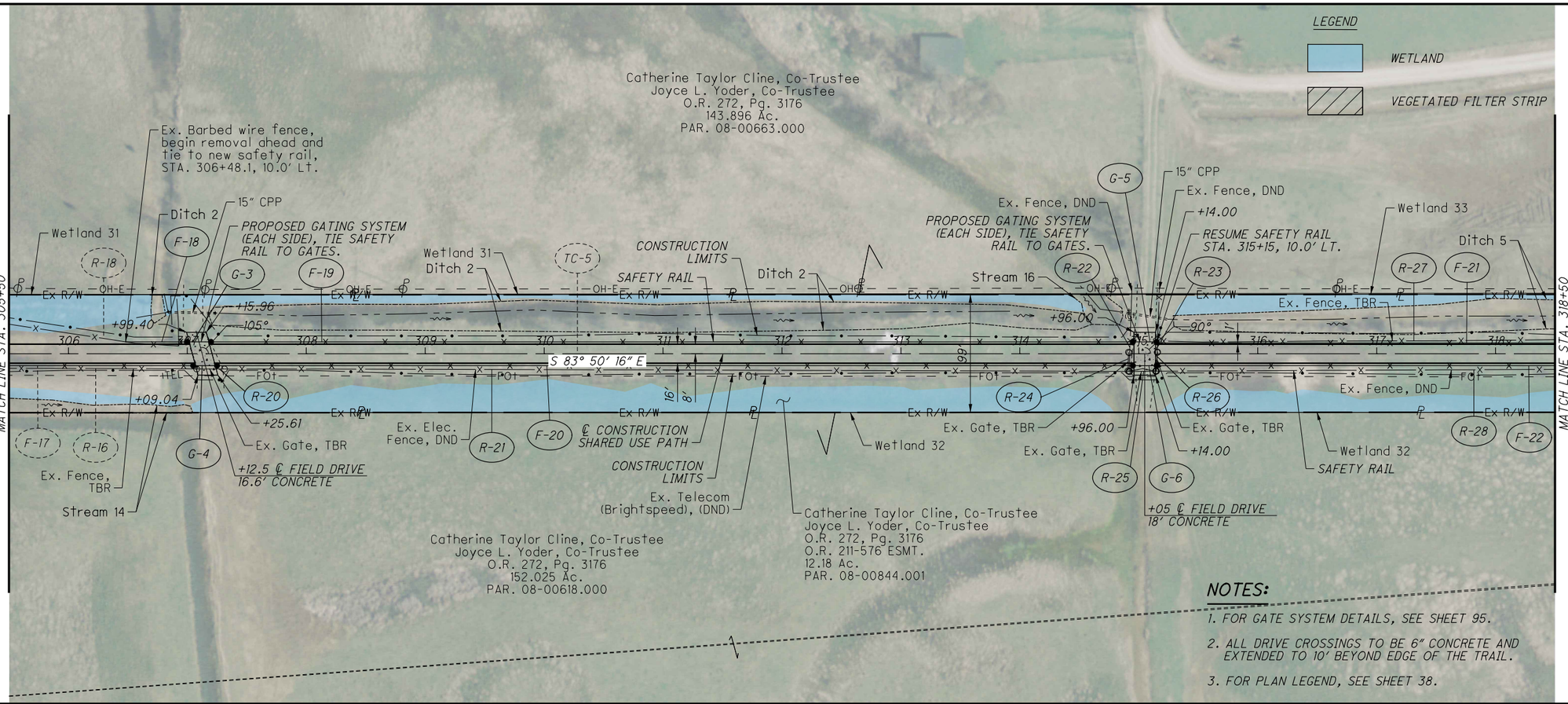
HORIZONTAL SCALE IN FEET
0 25 50 100

PLAN AND PROFILE
STA. 292+50 TO STA. 305+50

HOL-COUNTY TRAIL
PHASE 5C2

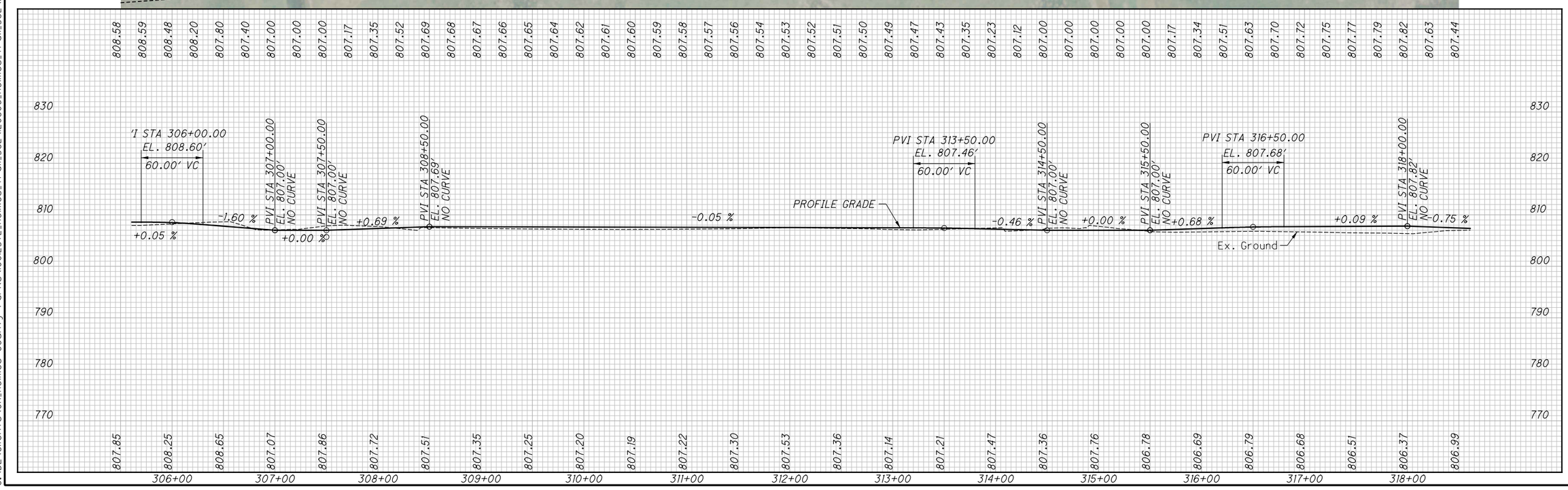
43
133

G:\DE\Clients\OH_Holmes County Parks\I002372_Holmes_Trail_5C2\I20806_Holmes_Trail_5C2\Design\Roadway\Sheets\I20806_GPI06.dgn 86052_GPI06 10/1/2025 12:21:56 PM Less



NOTES:

1. FOR GATE SYSTEM DETAILS, SEE SHEET 95.
2. ALL DRIVE CROSSINGS TO BE 6" CONCRETE AND EXTENDED TO 10' BEYOND EDGE OF THE TRAIL.
3. FOR PLAN LEGEND, SEE SHEET 38.



HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED MS
CHECKED TML

PLAN AND PROFILE
STA. 305+50 TO STA. 318+50

HOL-COUNTY TRAIL
PHASE 5C2

44
133

G:\DE\Clients\OH_Holmes County Parks\0002372_Holmes_Trail_5C2\20806_Holmes_Trail_5C2\Design\Roadway\Sheets\20806_GPI07.dgn 86052_GPI07 10/1/2025 12:25:04 PM Less

Catherine Taylor Cline, Co-Trustee
Joyce L. Yoder, Co-Trustee
O.R. 272, Pg. 3176
143.896 Ac.
PAR. 08-00663.000

Catherine Taylor Cline, Co-Trustee
Joyce L. Yoder, Co-Trustee
O.R. 272, Pg. 3176
151.364 Ac.
PAR. 08-00668.000

Catherine Taylor Cline, Co-Trustee
Joyce L. Yoder, Co-Trustee
O.R. 272, Pg. 3176
152.025 Ac.
PAR. 08-00618.000

Catherine Taylor Cline, Co-Trustee
Joyce L. Yoder, Co-Trustee
O.R. 272, Pg. 3176
O.R. 211-576 ESMT.
12.18 Ac.
PAR. 08-00844.001

Nathan E. Troyer
O.R. 273, Pg. 4645
93.939 Ac.
PAR. 08-00283.001

MATCH LINE STA. 318+50

MATCH LINE STA. 331+50

Ex. Telecom, DND

Wetland 33

Wetland 32

Ditch 5

CONSTRUCTION LIMITS

℄ CONSTRUCTION
SHARED USE PATH

SAFETY RAIL
PER RM-5.2

Ex. Barbed Wire
Fence, TBR

F-21

R-27

S 83° 50′ 16″ E

99

128

22″x18″ RCP
(Oulet not located)
(DND)

F-22

Ex. Telecom
(Brightspeed), (DND)

TC-5

SAFETY RAIL
PER RM-5.2
CONSTRUCTION LIMITS

END 10′ OFFSET FOR SAFETY RAIL
STA. 327+50.0, RESUME 9′ OFFSET
AT STA. 327+70

Ex. Elec.
Fence, TBR

R-28

LEGEND

WETLAND

VEGETATED FILTER STRIP

NOTES:

1. FOR PLAN LEGEND, SEE SHEET 38.

807.44 807.25 807.07 806.88 806.69 806.72 806.74 806.76 806.78 806.81 806.83 806.85 806.88 806.90 806.92 806.95 806.97 806.99 807.02 807.04 807.06 807.09 807.11 807.13 807.15 807.18 807.20 807.22 807.25 807.27 807.29 807.32 807.34 807.36 807.39 807.41 807.43 807.46 807.48 807.50 807.52 807.55 807.57 807.59 807.62 807.64 807.66 807.69 807.71 807.73 807.76 807.78 807.80

830 820 810 800 790 780 770

PVI STA 319+50.00
EL. 806.69'
NO CURVE

-0.75 %

PROFILE GRADE

+0.09 %

Ex. Ground

Ex. Telecom, DND

Ex. 22″ RCP, (DND)
Outlet not located

Ex. Telecom, DND

806.99 806.77 806.62 806.50 806.57 806.86 806.56 806.19 806.13 806.21 806.96 806.97 807.44 807.54 807.59 807.58 807.70 807.56 807.74 808.01 808.49 808.57 808.68 808.77 808.76 808.83 809.06

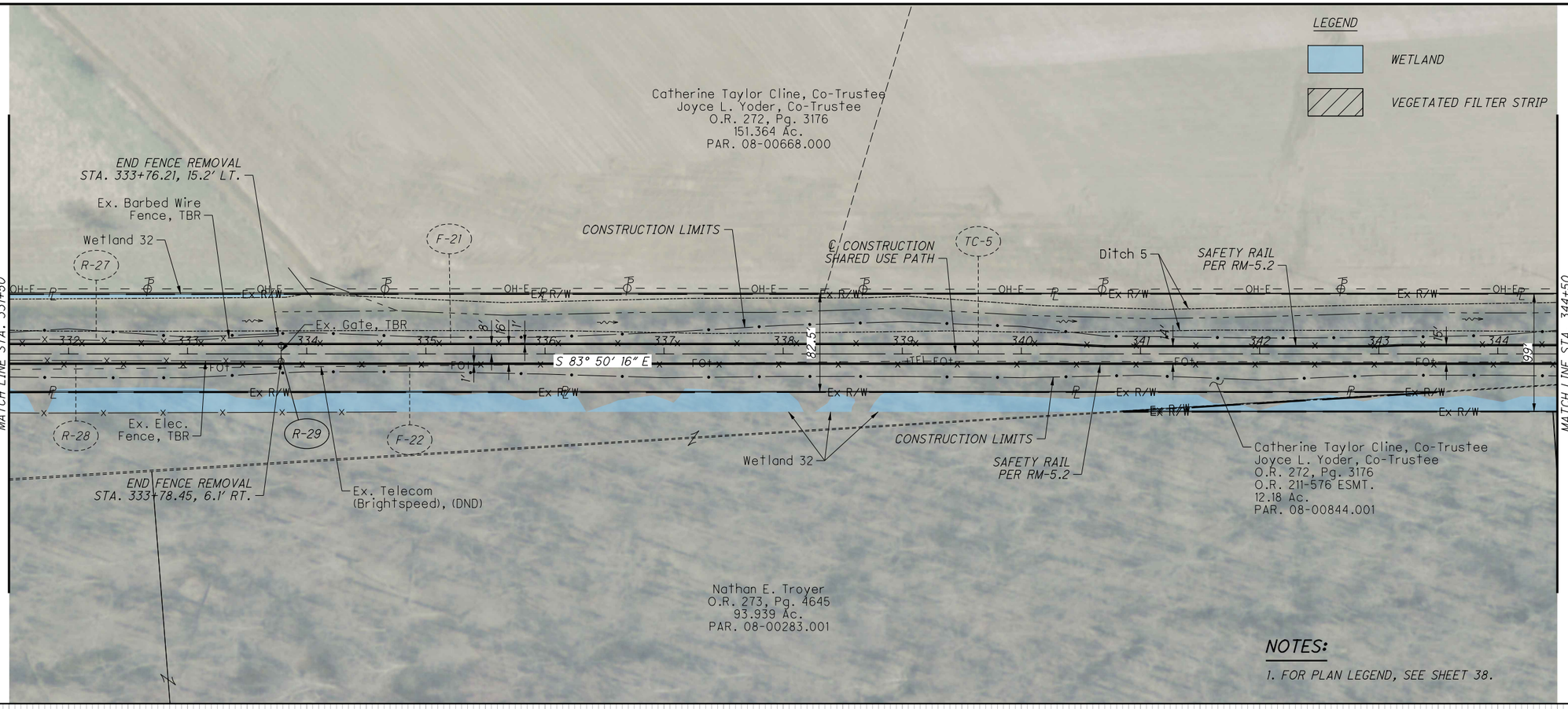
319+00 320+00 321+00 322+00 323+00 324+00 325+00 326+00 327+00 328+00 329+00 330+00 331+00

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED MS
CHECKED TML

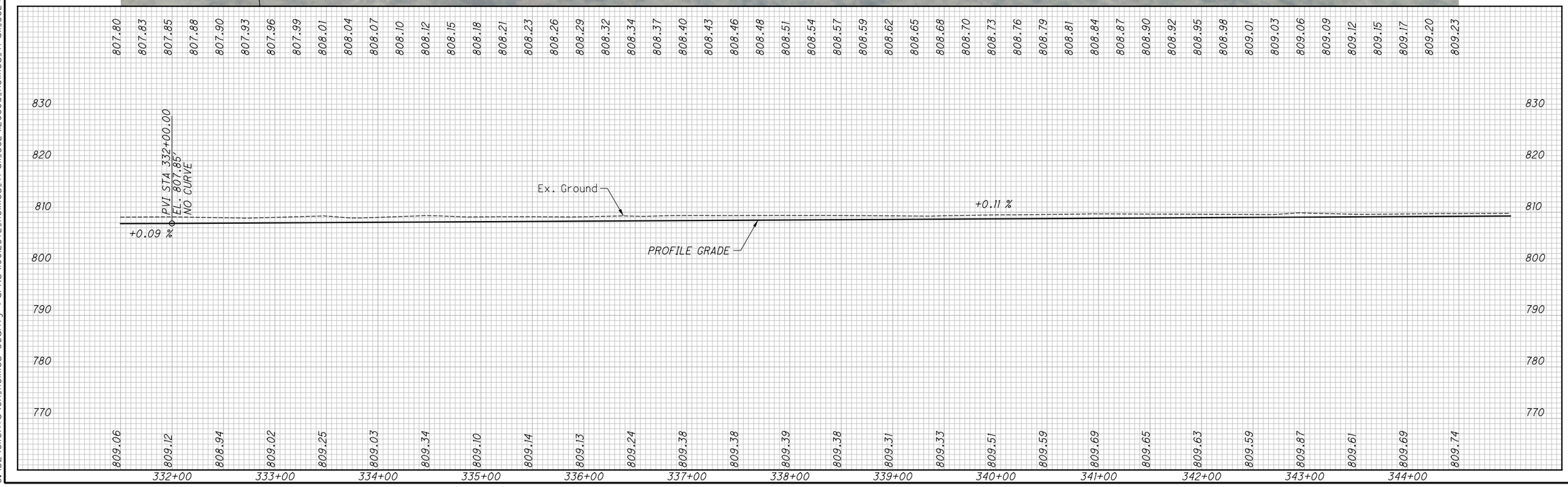
PLAN AND PROFILE
STA. 318+50 TO STA. 331+50

HOL-COUNTY TRAIL
PHASE 5C2



NOTES:

1. FOR PLAN LEGEND, SEE SHEET 38.



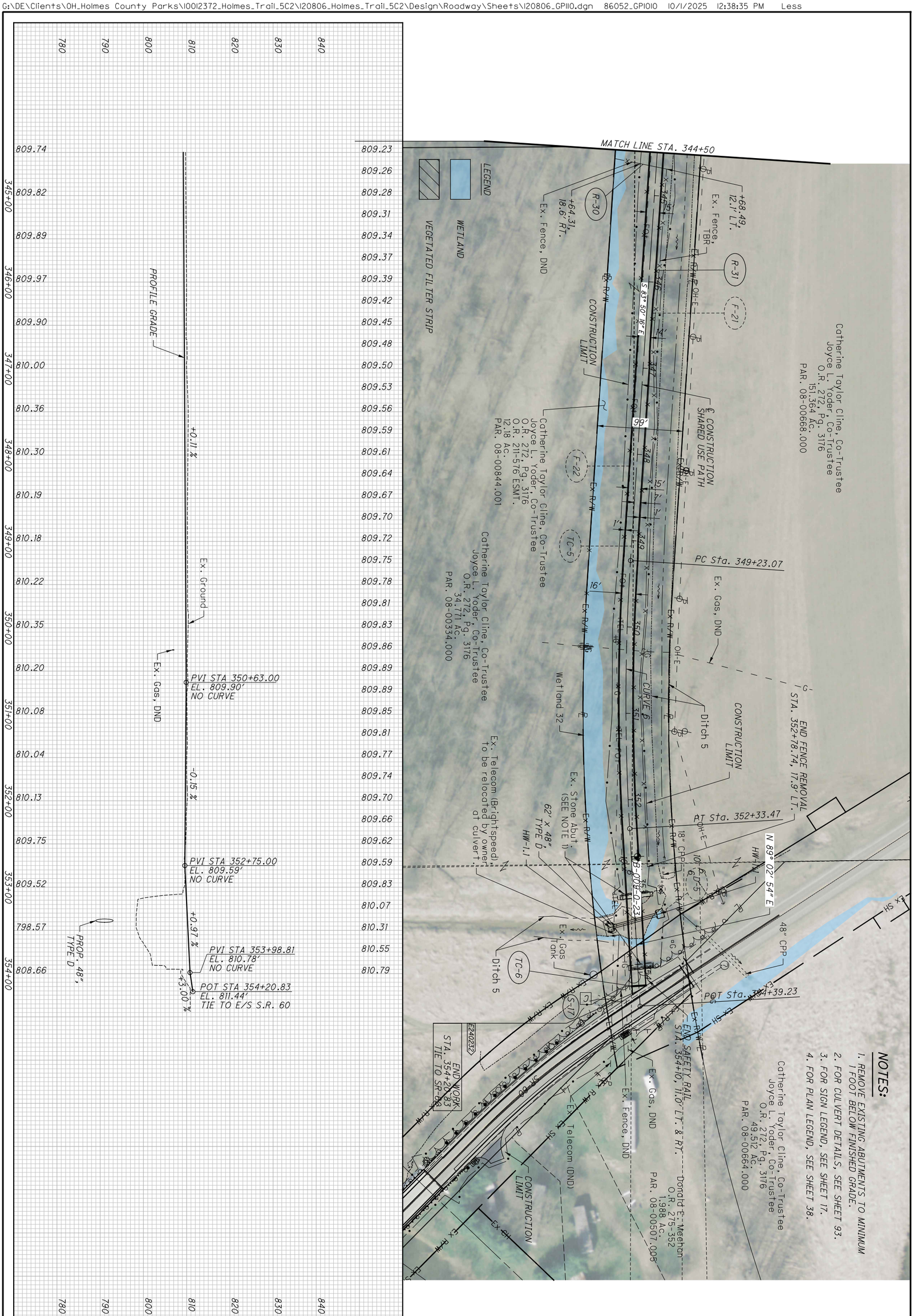
HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED MS
CHECKED TML

PLAN AND PROFILE
STA. 331+50 TO STA. 344+50

HOL-COUNTY TRAIL
PHASE 5C2

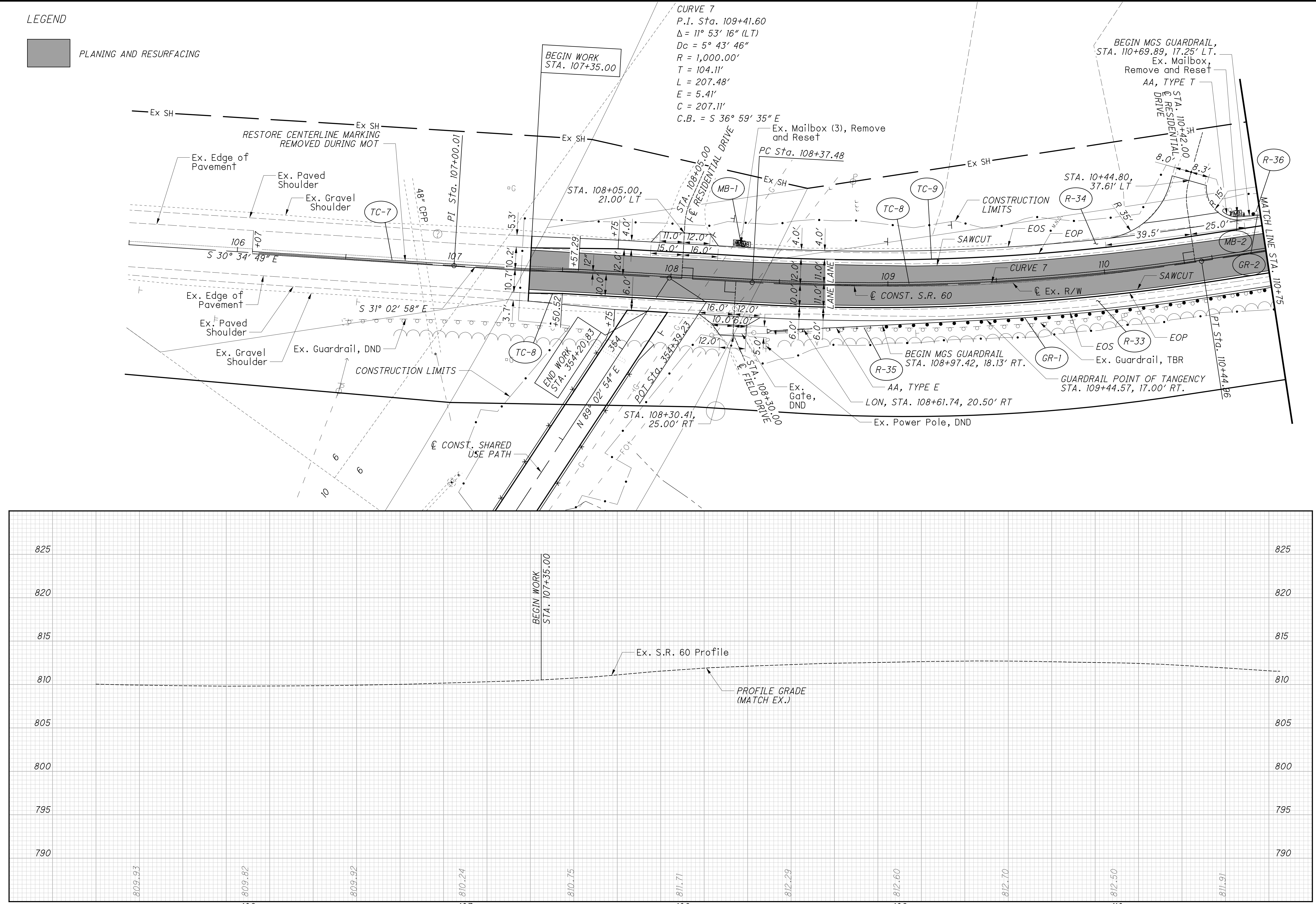
46
133



NOTES:

1. REMOVE EXISTING ABUTMENTS TO MINIMUM 1 FOOT BELOW FINISHED GRADE.
2. FOR CULVERT DETAILS, SEE SHEET 93.
3. FOR SIGN LEGEND, SEE SHEET 17.
4. FOR PLAN LEGEND, SEE SHEET 38.

47 / 133	HOL-COUNTY TRAIL PHASE 5C2	PLAN AND PROFILE STA. 344+50 TO STA. 354+39.23	CALCULATED MS / CHECKED TML	0 50 25 100 HORIZONTAL SCALE IN FEET



0 10 20 40
HORIZONTAL SCALE IN FEET

CALCULATED KLD
CHECKED AKA

PLAN AND PROFILE S.R. 60
STA. 105+50 TO 110+75

HOL-COUNTY TRAIL
PHASE 5C2

LEGEND

PLANING AND RESURFACING

DONALD E MEEHAN
O.R. 277, PG. 1500
P.B. 19, PG. 834
P.C. 0.710 AC.
PAR. 08-00507-003

℄ CONST. S. WATER ST.

END WORK
STA. 1+95.00
(S. WATER ST. NE)

N 33° 22' 23" E

BEGIN CURB HEIGHT TRANSITION FROM 0" TO 6" OVER 10.0'

BRAYDEN D CHANAY
O.R. 282, PG. 4304
0.25 AC.
PAR. 09-00159-000

BRAYDEN D CHANAY
O.R. 282, PG. 4304
0.09 AC.
PAR. 09-00158-000

BRAYDEN D CHANAY
O.R. 282, PG. 4304
0.166 AC.
PAR. 09-00157-000

CURVE 8
P.I. Sta. 113+02.67
Δ = 21° 32' 55" (LT)
Dc = 25° 01' 12"
R = 229.00'
T = 43.58'
L = 86.13'
E = 4.11'
C = 85.62'
C.B. = S 53° 42' 41" E

POT Sta. 115+93.43

END PROJECT
STA. 113+95.00

Ex. Gas Marker, ATG/Relocate by owner (Aspire Energy)

12" TYPE B (ASSUMED SIZE) CONNECT VIA MASONRY COLLAR PER DM-1.1

S 64° 29' 08" E

RESTORE CENTERLINE MARKING REMOVED DURING MOT

ADEN B RABER
O.R. 251, PG. 6367
P.B. 4, PG. 164
0.1200 AC.
PAR. 09-00243-000

END MGS GUARDRAIL
STA. 110+82.35, 16.25' LT.

END FULL DEPTH SECTION
BEGIN APPROACH SLAB
STA. 110+86.75

MGS BTA, TYPE TST-2

END APPROACH SLAB
BEGIN BRIDGE
STA. 111+11.75
CONST. LIMITS

MATCH LINE STA. 110+75

12.5:1

℄ Ex. R/W

S 42° 56' 13" E

℄ CONST. S.R. 60

LONGITUDINAL JOINT

CONSTRUCTION LIMITS

MGS BTA, TYPE TST-2

END MGS GUARDRAIL
STA. 110+82.35, 16.25' RT'

Ex. Guardrail, TBR

END MGS GUARDRAIL
STA. 1+56.94, 19.04' LT.
LON, STA.113+00.53,
25.59' LT.

BEGIN MGS GUARDRAIL
STA. 112+85.41, 18.29' LT.

MGS BTA, TYPE TST-2
END BRIDGE

BEGIN APPROACH SLAB
STA. 112+56.25

BEGIN CURB HEIGHT TRANSITION FROM 0" TO 6" OVER 10.0'

MGS BTA, TYPE TST-2

END APPROACH SLAB
BEGIN FULL DEPTH, STA. 112+81.29
BEGIN MGS GUARDRAIL
STA. 112+81.96, 17.48' RT.

END MGS GUARDRAIL, STA. 112+93.44, 19.04' RT.

PC Sta. 112+59.09

AA, TYPE T

Ex. Power Pole, DND

FORM SIDEWALK AROUND POLE

SAWCUT

6' WALK

Ex. CB, RTG

Ex. Water Valve, ATG

STA. 113+27.83 ℄ S.R. 60 = STA. 1+25.00 ℄ S. WATER ST.

PT Sta. 113+45.22

STA. 113+46.57 ℄ S.R. 60 = STA. 1+25.00 ℄ S. WATER ST.

CURVE 8

Ex. Gas Marker, ATG/Relocate by owner (Aspire Energy)

12" TYPE B CONDUITS (ASSUMED SIZE) CONNECT VIA MASONRY COLLAR PER DM-1.1

Ex. CB, RTG

Ex. Tree, DND

RES. DRIVE, DND

RANDY STARNER
O.R. 218, PG. 739
P.B. 4, PG. 164
0.1200 AC.
PAR. 09-00313-000

Ex. Fire Hydrant, DND

SAWCUT

RES. DRIVE, DND

STA. 113+63.05, 24.31' RT.

END WORK, STA. 0+81.00
(S. WATER ST. SW)

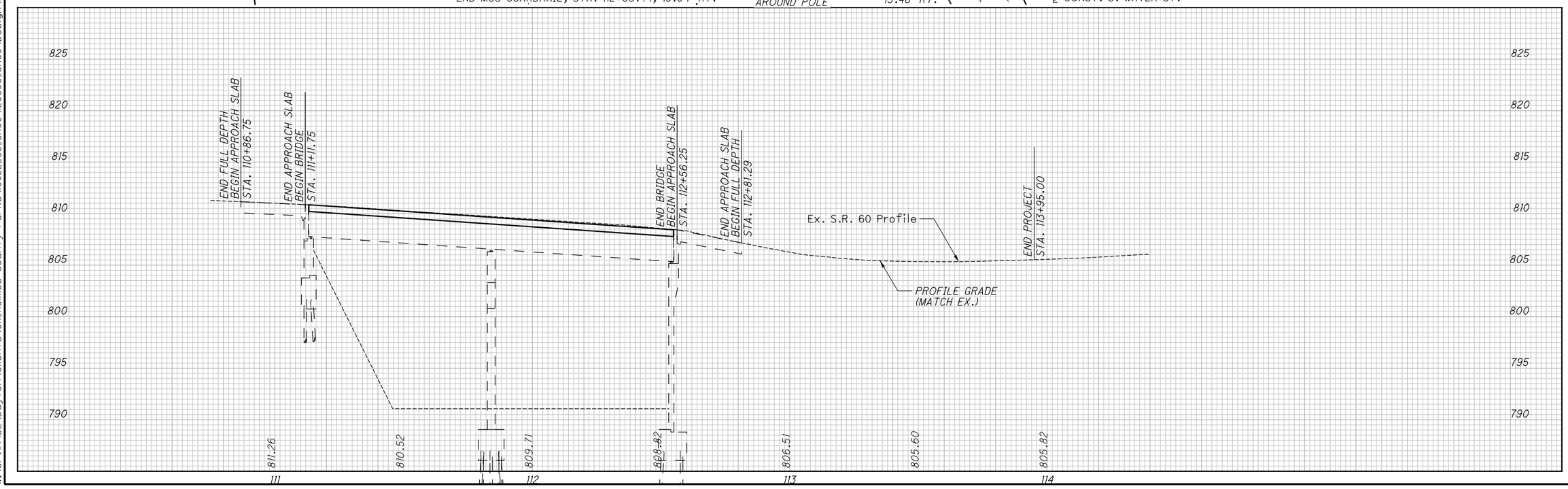
STA. 113+32.29, 19.48' RT.

℄ CONST. S. WATER ST.

Ex. CB, ATG

N 21° 00' 33" E

R-33 R-34 R-35 R-36 GR-1 GR-2 GR-3 GR-4 TC-10 TC-11 TC-12 TC-13 TC-14 TC-15 TC-16 TC-17 TC-18 W-1 W-2 W-3 C-1 C-2 C-3 C-4 D-6 D-7 D-8 R-37 R-38 R-39 R-40 R-41 R-42 A-1 A-2 A-3



W:\Srvin\DE\Dayton\Clients\OH_Holmes County Parks\10022288.SR60\20806_SR60\Design\Roadway\Sheets\20806_GPI02.dgn 10/1/2025 12:52:24 PM Less

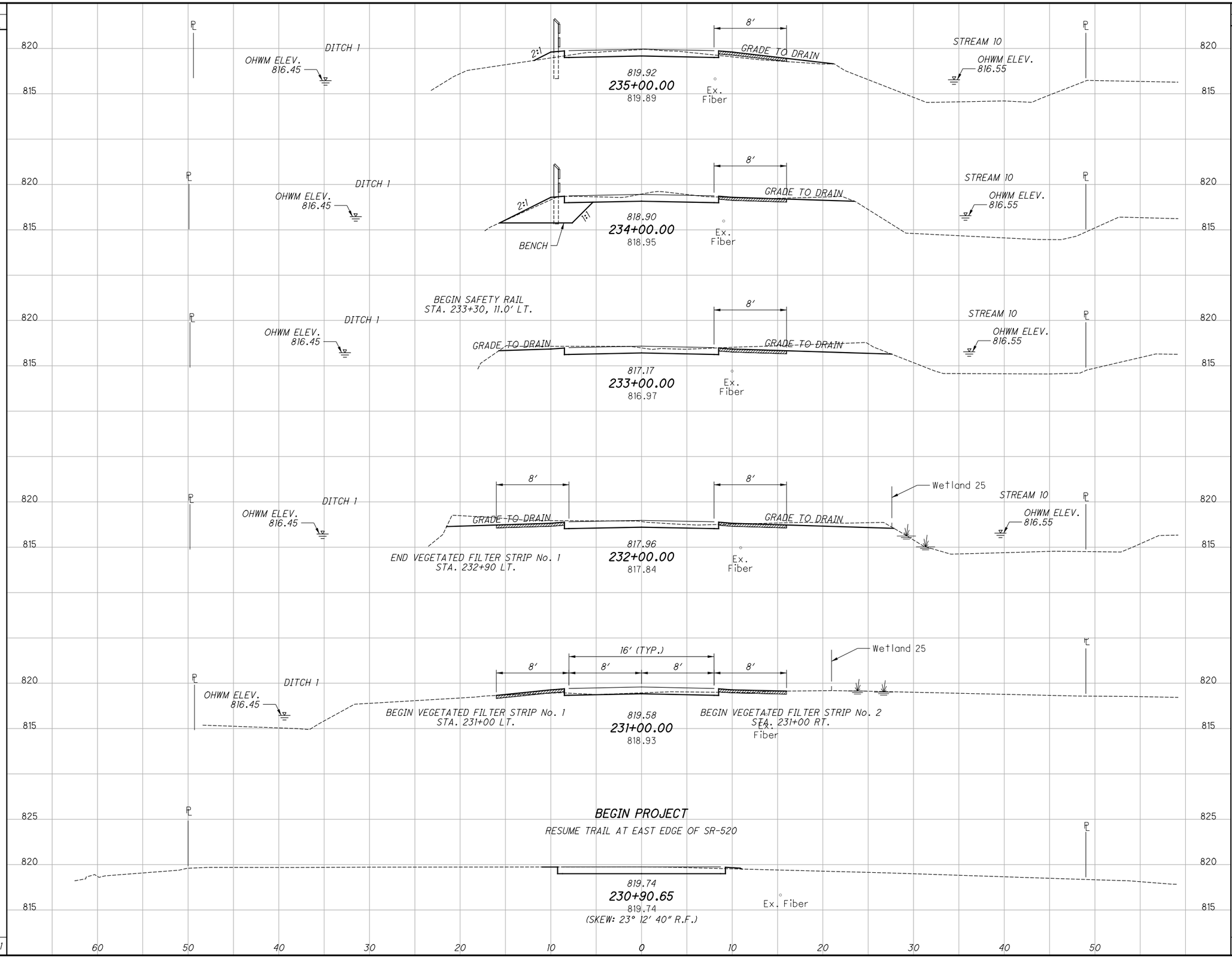
HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED KLD
CHECKED AKA

PLAN AND PROFILE S.R. 60
STA. 110+75 TO STA. 115+00

HOL-COUNTY TRAIL
PHASE 5C2

SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
1591		260	42

CALCULATED MS
CHECKED TML

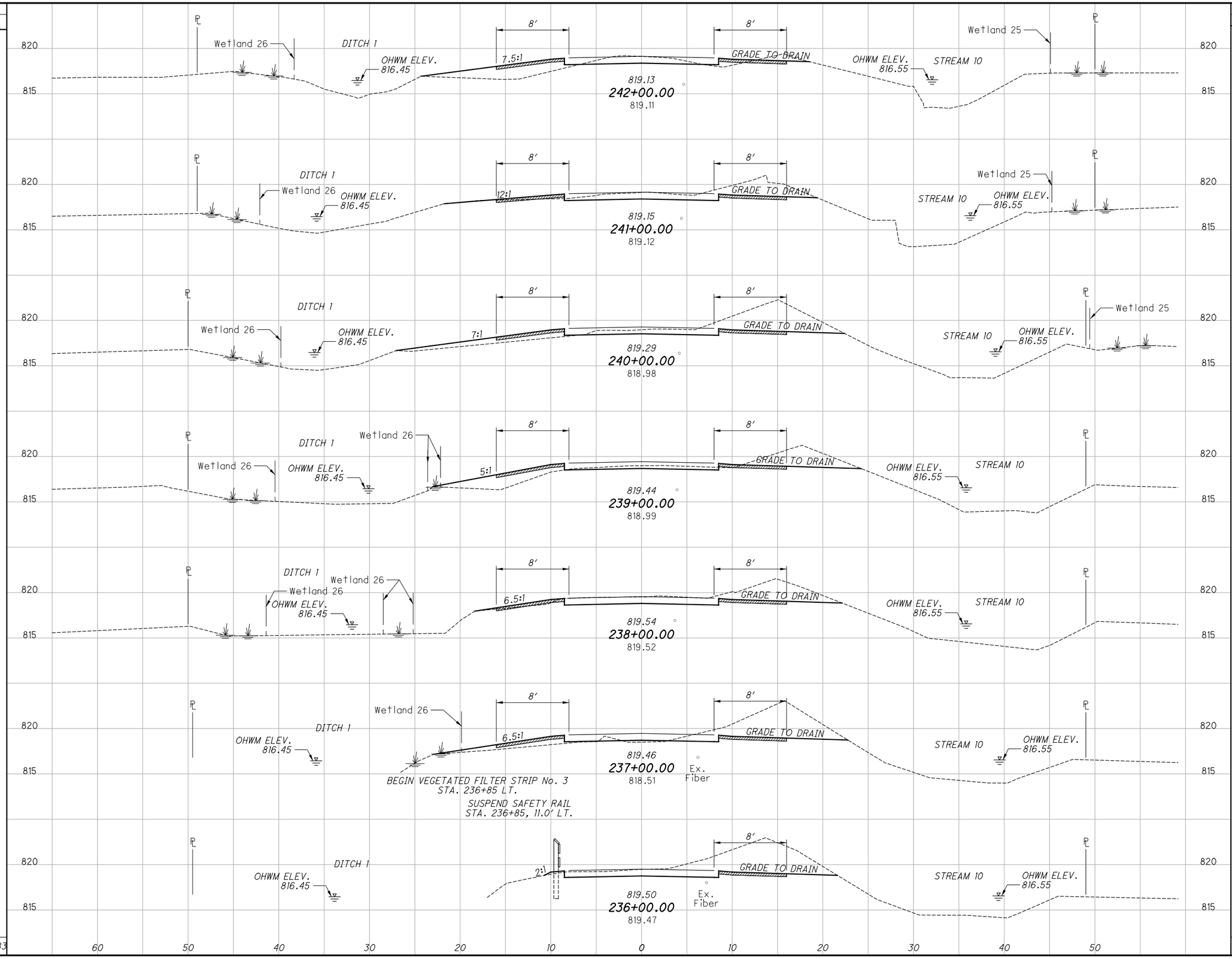
CROSS SECTIONS
STA. 230+90.65 TO STA. 235+00.00

HOL-COUNTY TRAIL
PHASE 5C2

50
133

G:\DE\Clients\OH_Holmes County Parks\10012372_Holmes_Trail_5C2\120806_Holmes_Trail_5C2\Design\Roadway\Sheets\120806_XS101.dgn Sheet 9/2/2025 10:10:06 AM A.Adair

SEEDING	
END WIDTH	SQ. YDS.
	2683



END AREA		VOLUME	
CUT	FILL	CUT	FILL
		666	151

CALCULATED MS

CHECKED TML

CROSS SECTIONS

STA. 236+00.00 TO STA. 242+00.00

HOL-COUNTY TRAIL
PHASE 5C2

51
133

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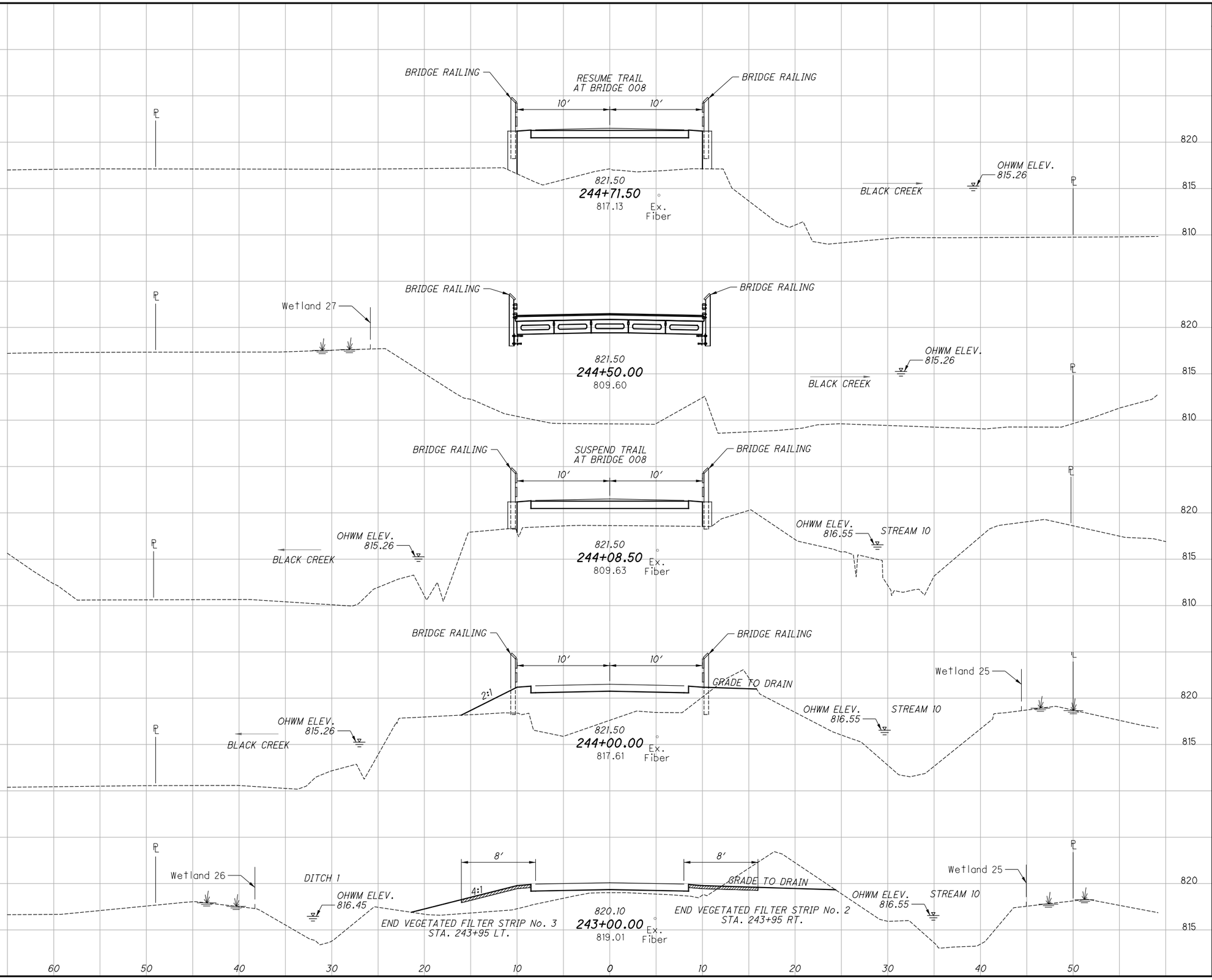
SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED MS
CHECKED TML



CROSS SECTIONS
STA. 243+00.00 TO STA. 244+71.50

HOL-COUNTY TRAIL
PHASE 5C2

52
133

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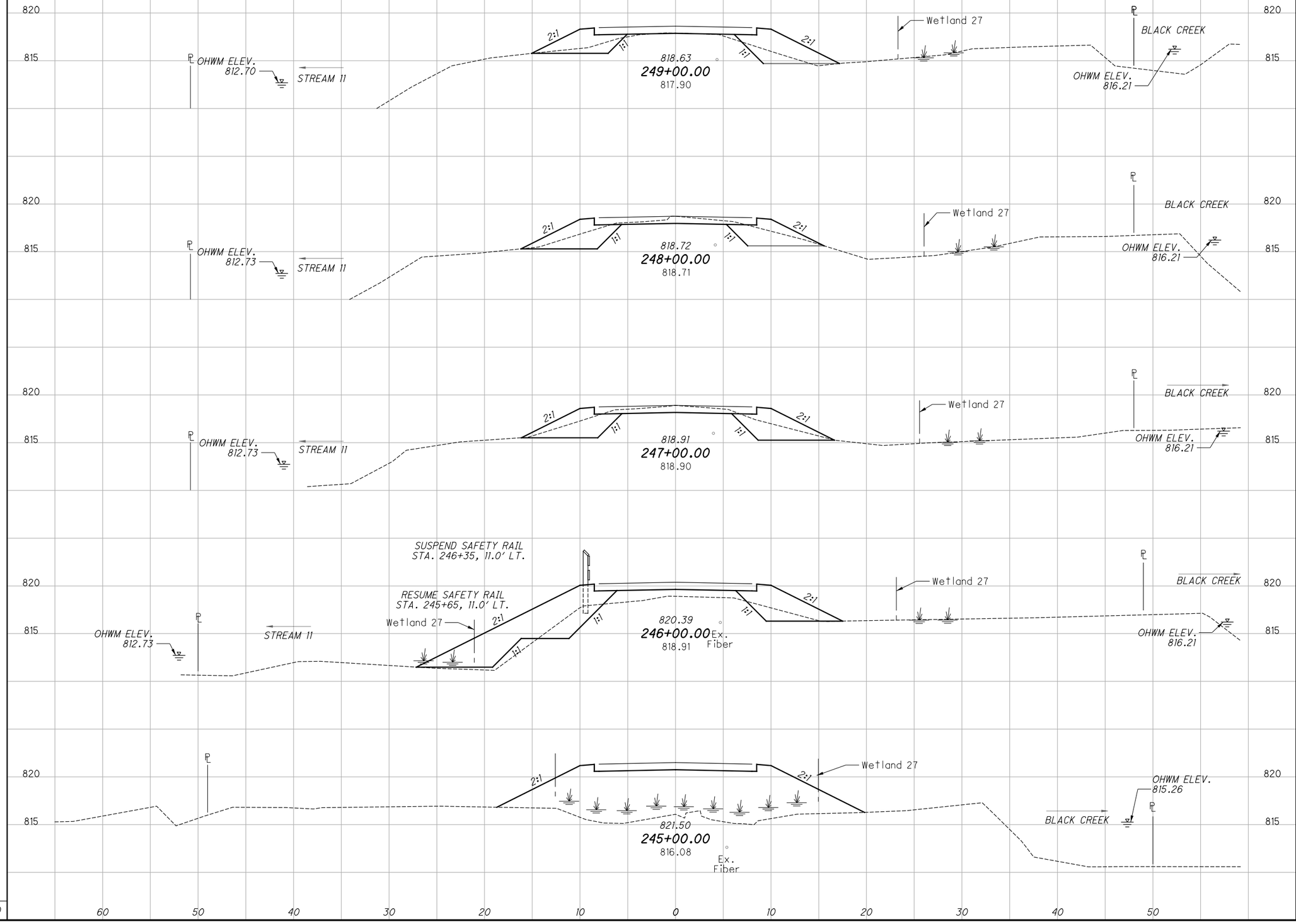
SEEDING	
END WIDTH	SQ. YDS.

END AREA	
CUT	FILL

VOLUME	
CUT	FILL

CALCULATED MS

CHECKED TML



CROSS SECTIONS
STA. 245+00.00 TO STA. 249+00.00

HOL-COUNTY TRAIL
PHASE 5C2

53
133

G:\DE\Clients\OH_Holmes County Parks\100l2372_Holmes_Trail_5C2\120806_Holmes_Trail_5C2\Design\Roadway\Sheets\120806_XS101.dgn Sheet 9/2/2025 10:11:20 AM A.Adair

SEEDING	
END WIDTH	SQ. YDS.
1351	

820
815

PL OHWM ELEV. 812.63 STREAM 11
2:1 1:1 1:1 2:1
818.19
254+00.00 Ex. Fiber
818.11
Wetland 27 PL

820
815

PL OHWM ELEV. 812.65 STREAM 11
2:1 1:1 1:1 2:1
818.28
253+00.00 Ex. Fiber
818.10
Wetland 27
BLACK CREEK PL

820
815

PL OHWM ELEV. 812.67 STREAM 11
2:1 1:1 1:1 2:1
818.38
252+00.00 Ex. Fiber
818.32
Wetland 27
BLACK CREEK PL

820
815

PL OHWM ELEV. 812.69 STREAM 11
2:1 1:1 1:1 2:1
818.46
251+00.00 Ex. Fiber
817.95
Wetland 27
BLACK CREEK PL

820
815

PL OHWM ELEV. 812.70 STREAM 11
RESUME SAFETY RAIL STA. 249+65, 11.0' LT.
2:1 1:1 1:1 2:1
818.53
250+00.00
817.97
Wetland 27
BLACK CREEK PL

60 50 40 30 20 10 0 10 20 30 40 50

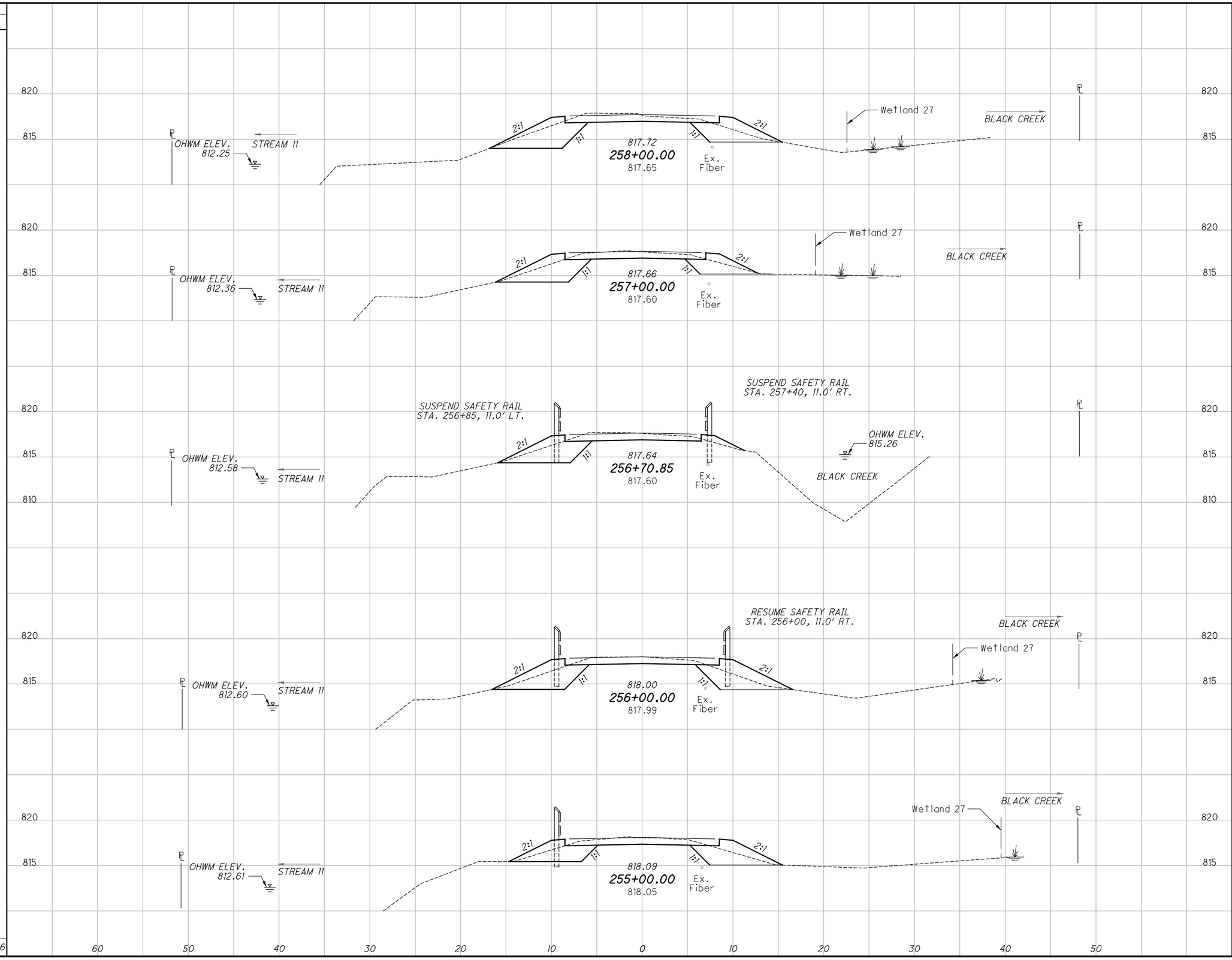
END AREA		VOLUME	
CUT	FILL	CUT	FILL
		102	350

CALCULATED MS CHECKED TML

CROSS SECTIONS
STA. 250+00.00 TO STA. 254+00.00

HOL-COUNTY TRAIL
PHASE 5C2

SEEDING	
END WIDTH	SQ. YDS.
1046	



END AREA		VOLUME	
CUT	FILL	CUT	FILL
		159	162

CALCULATED MS
CHECKED TML

CROSS SECTIONS
STA. 255+00.00 TO STA. 258+00.00

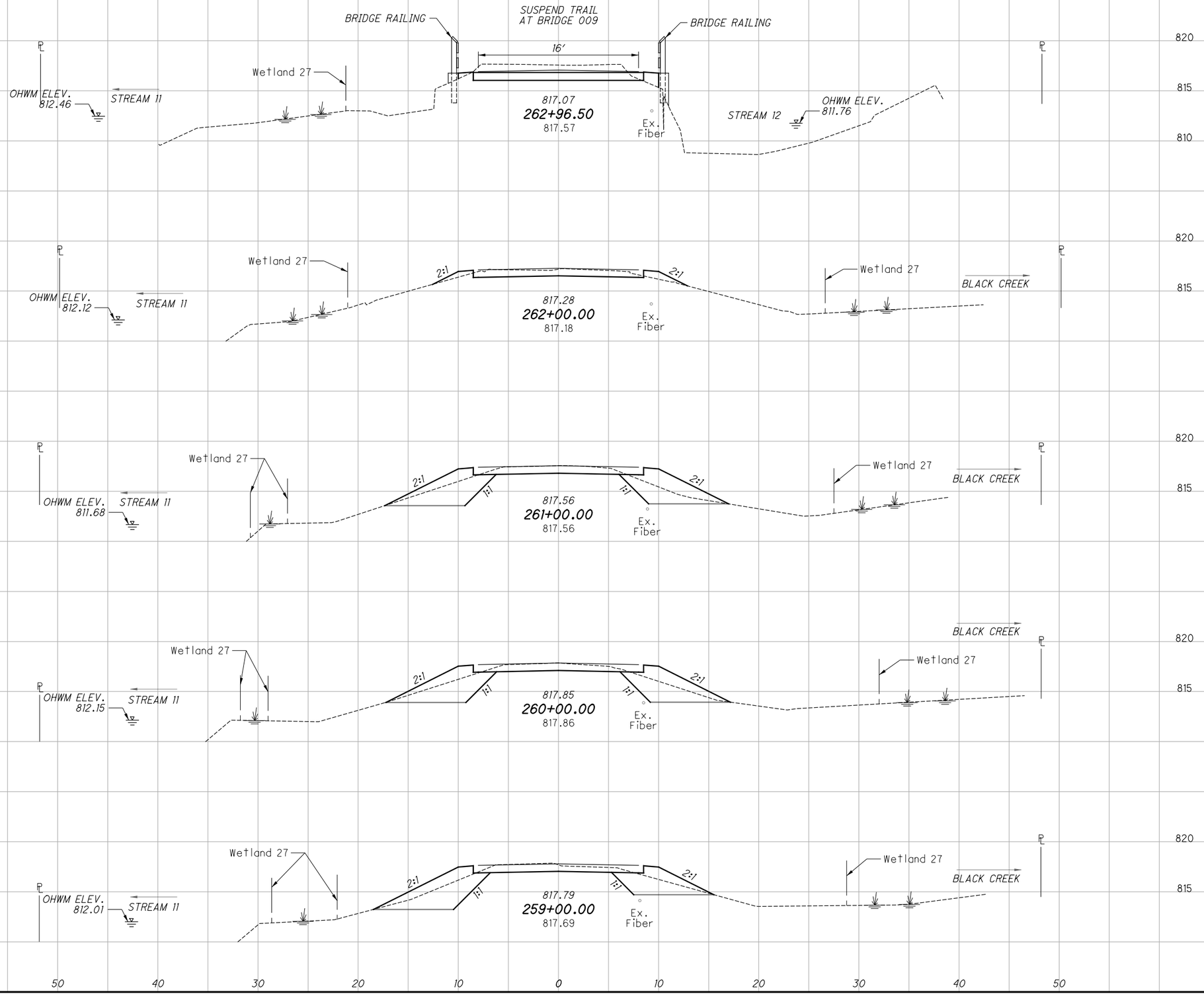
HOL-COUNTY TRAIL PHASE 5C2

SEEDING	
END WIDTH	SQ. YDS.

END AREA	
CUT	FILL

VOLUME	
CUT	FILL

CALCULATED MS
CHECKED TML



1256

60 50 40 30 20 10 0 10 20 30 40 50

171 181

CROSS SECTIONS
STA. 259+00.00 TO STA. 262+96.50

HOL-COUNTY TRAIL
PHASE 5C2

56
133

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SEEDING

END WIDTH	SQ. YDS.

END AREA

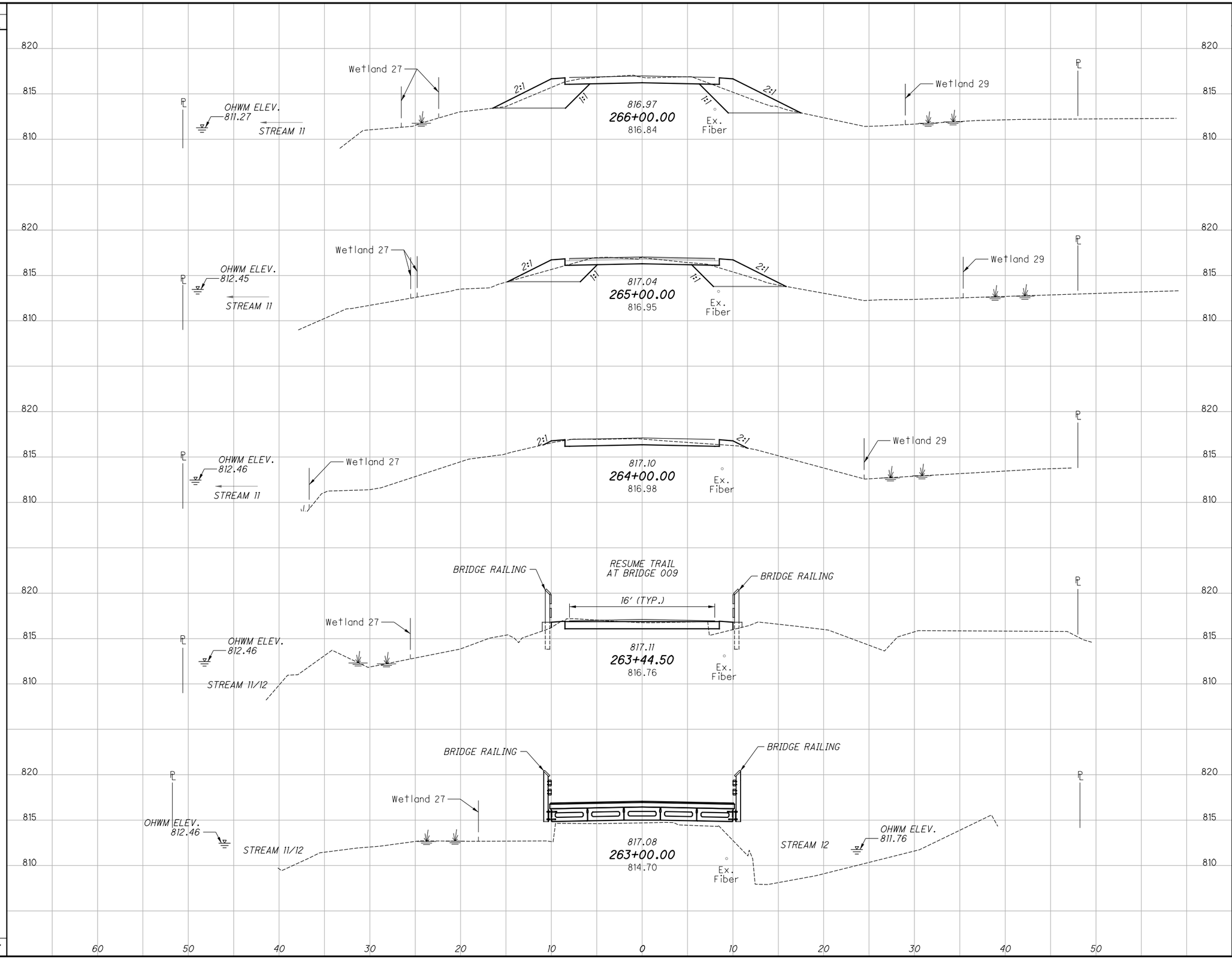
CUT	FILL

VOLUME

CUT	FILL

CALCULATED MS

CHECKED TML



CROSS SECTIONS

STA. 263+00.00 TO STA. 266+00.00

HOL-COUNTY TRAIL
PHASE 5C2

807

102 96

57
133

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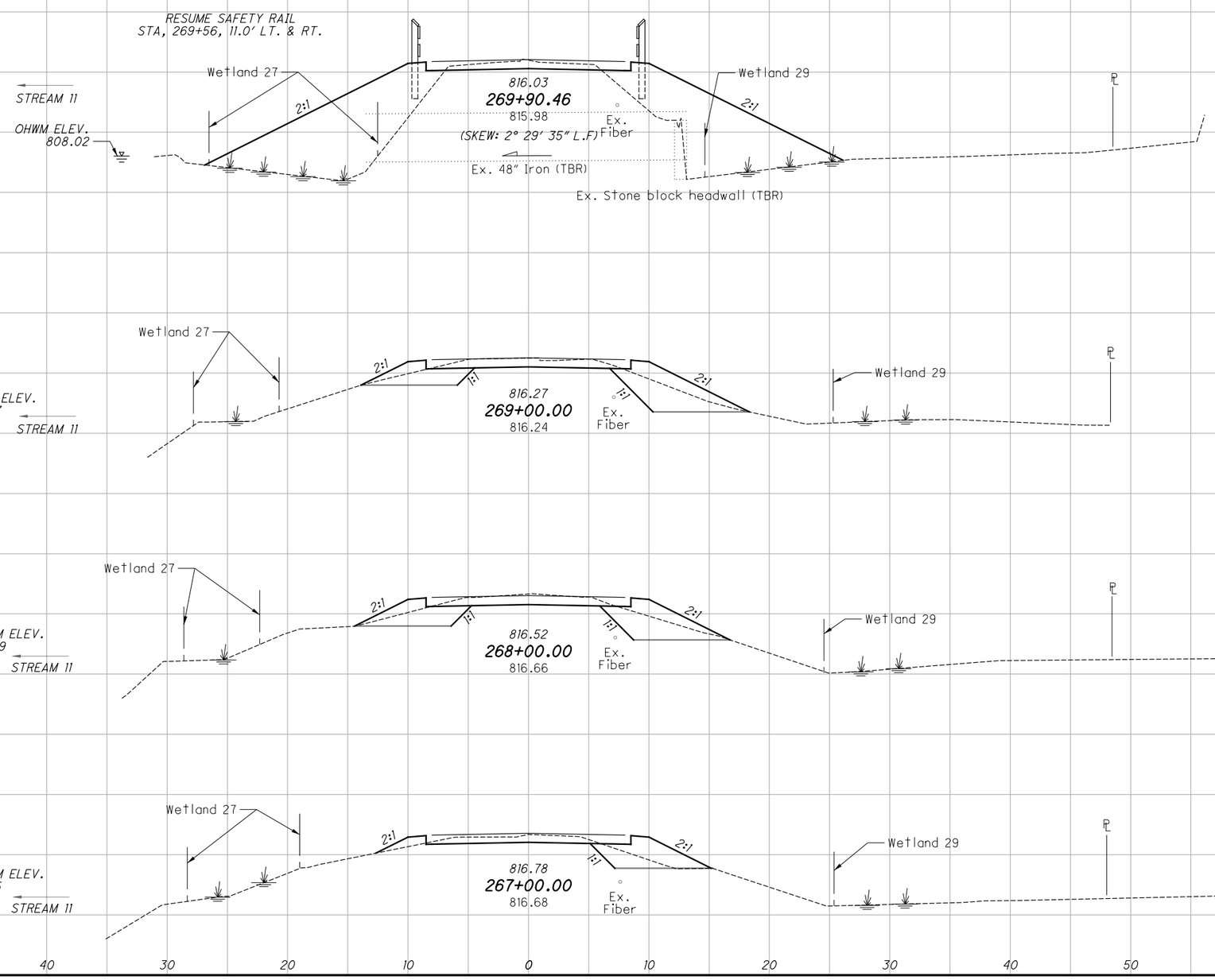
SEEDING	
END WIDTH	SQ. YDS.
	928



END AREA		VOLUME	
CUT	FILL	CUT	FILL
		110	251

CALCULATED MS
CHECKED TML

CROSS SECTIONS
STA. 267+00.00 TO STA. 269+90.46

HOL-COUNTY TRAIL PHASE 5C2

58
133

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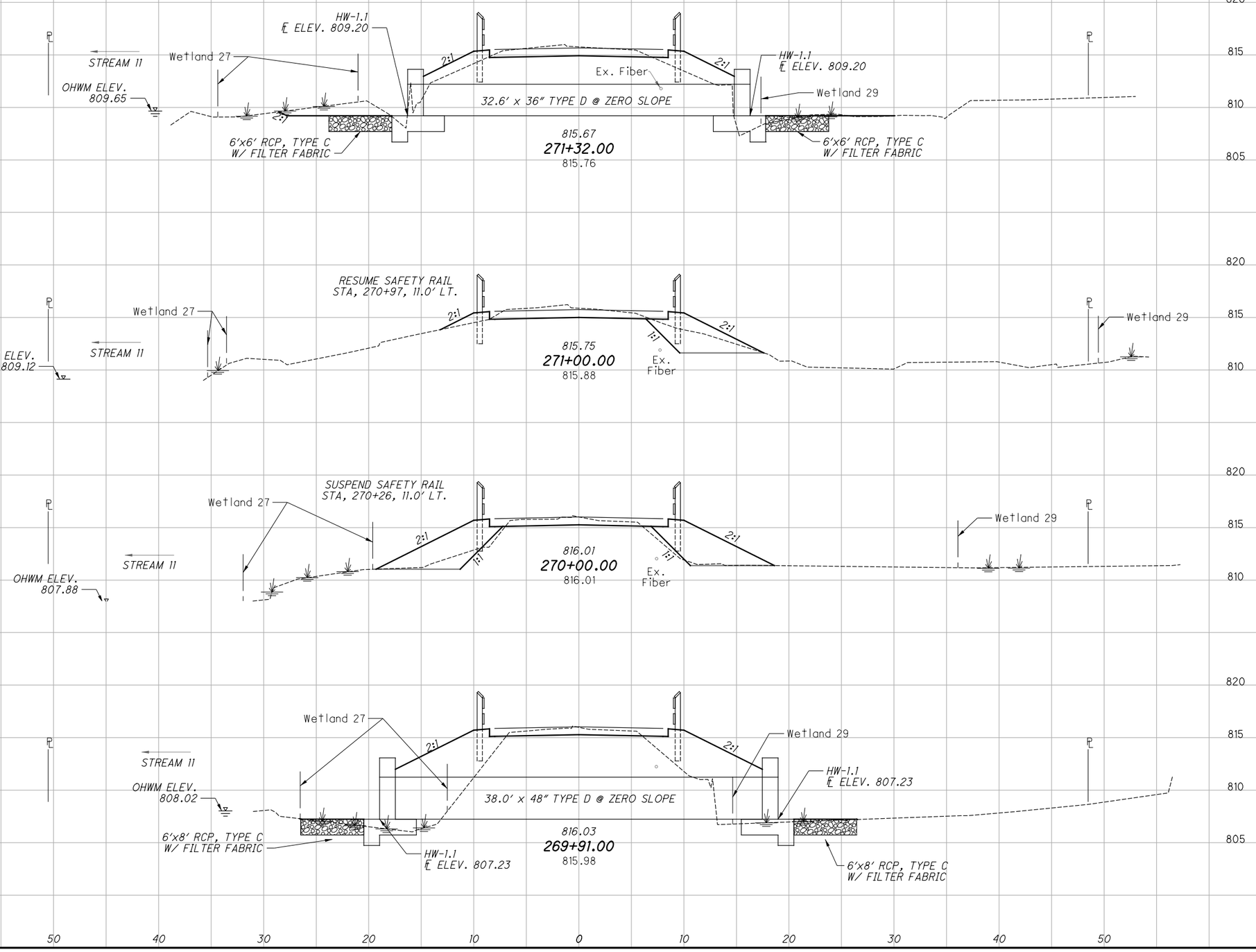
SEEDING	
END WIDTH	SQ. YDS.

END AREA	
CUT	FILL

VOLUME	
CUT	FILL

CALCULATED MS

CHECKED TML



CROSS SECTIONS
STA. 269+91.00 TO STA. 271+32.00

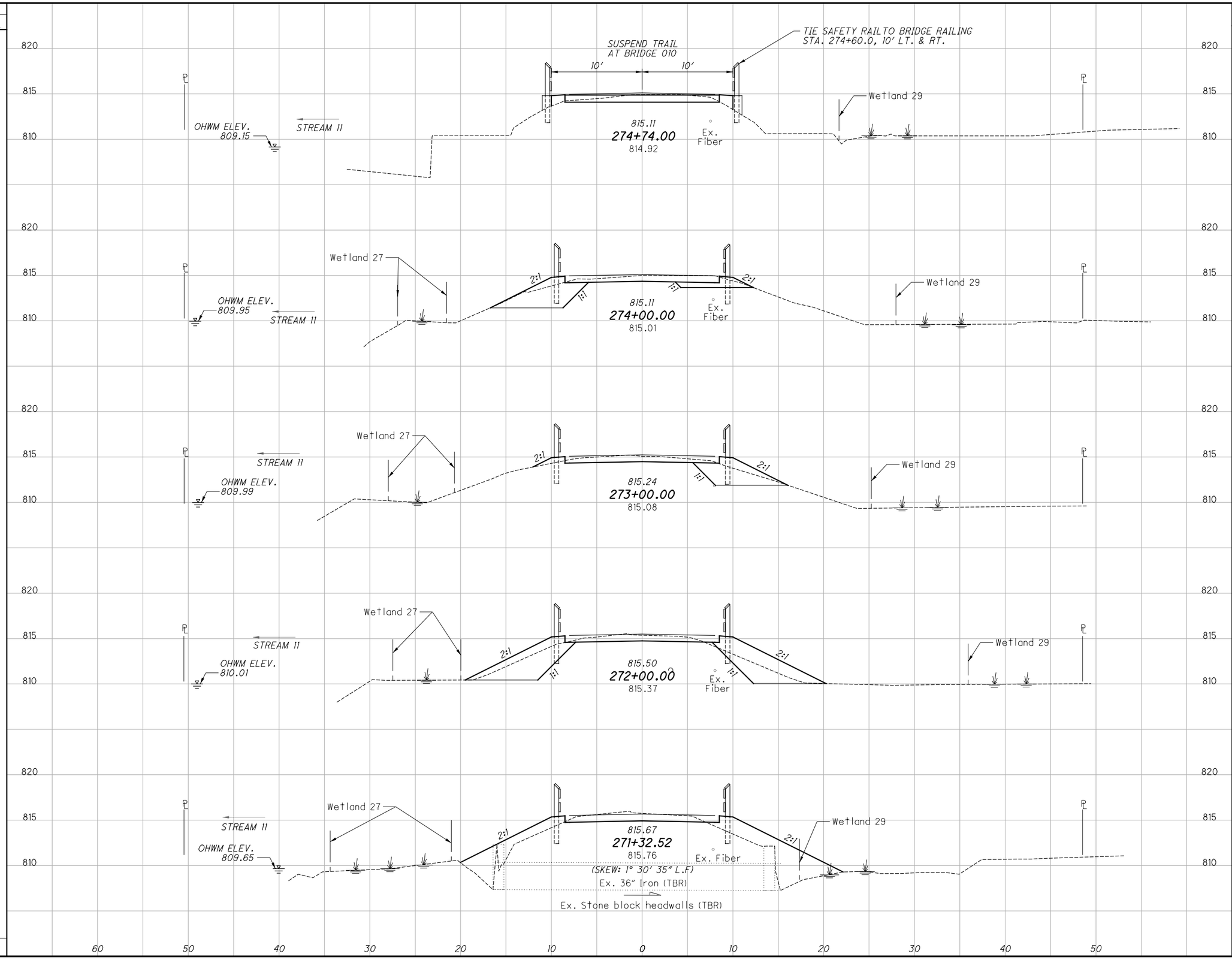
HOL-COUNTY TRAIL
PHASE 5C2

412

62

132

SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL

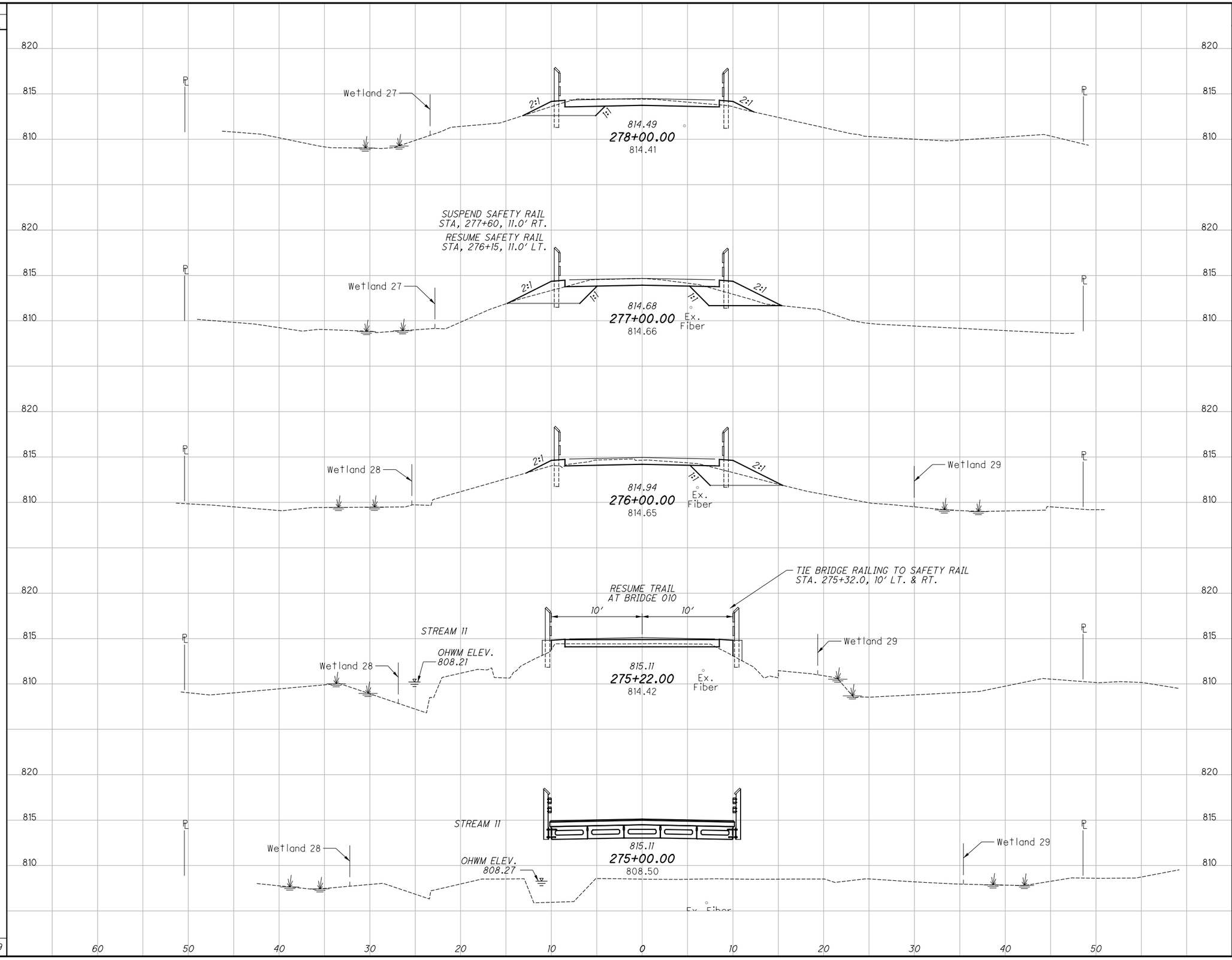
CALCULATED	CHECKED
MS	TML

CROSS SECTIONS
STA. 271+32.52 TO STA. 274+74.00

HOL-COUNTY TRAIL
PHASE 5C2

971 116 148

SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
809		95	95

CALCULATED MS
CHECKED TML

CROSS SECTIONS
STA. 275+00.00 TO STA. 278+00.00

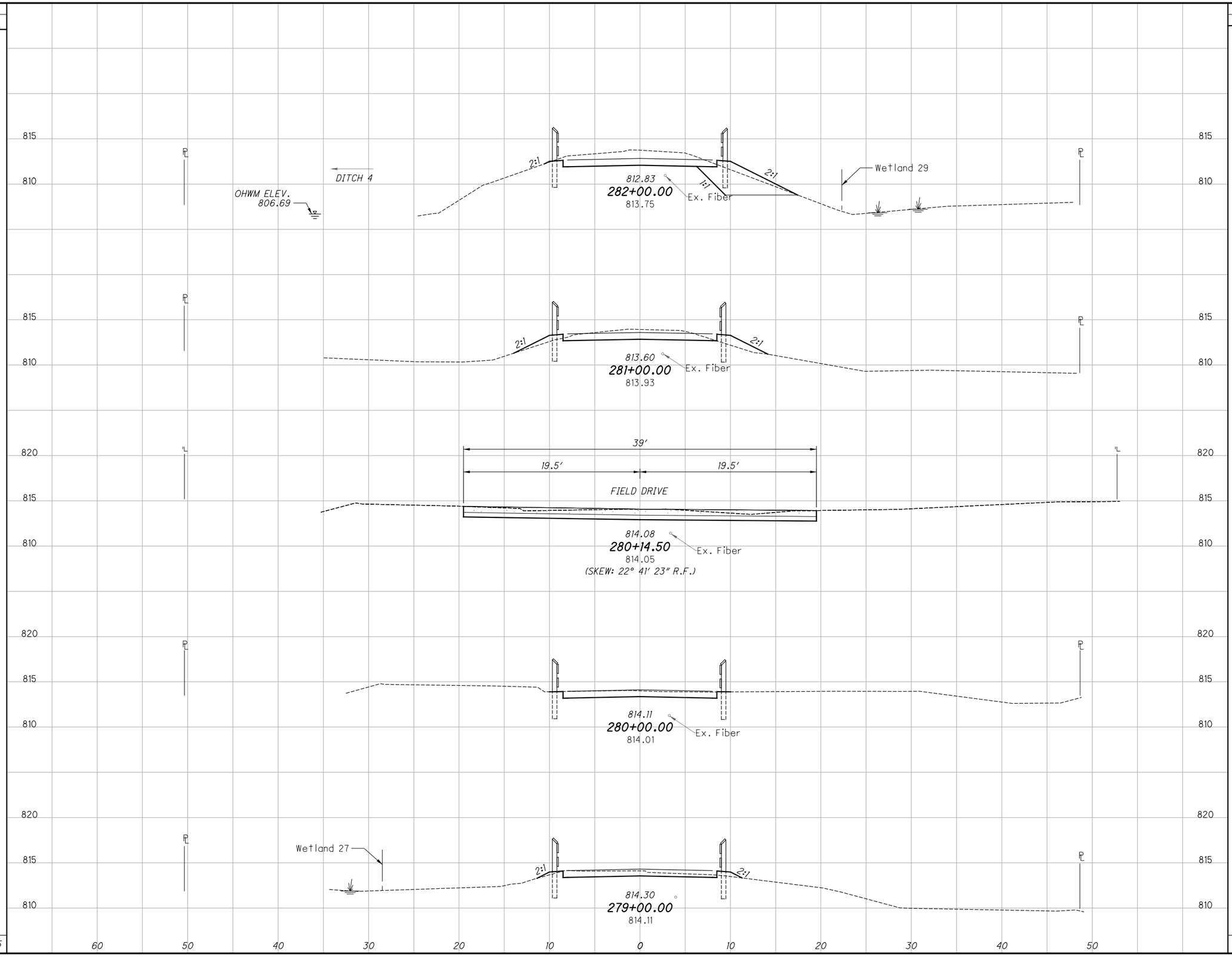
HOL-COUNTY TRAIL
PHASE 5C2

SEEDING	
END WIDTH	SQ. YDS.
	735

END AREA	
CUT	FILL

VOLUME	
CUT	FILL
213	49

CALCULATED MS
CHECKED TML



CROSS SECTIONS
279+00.00 TO STA. 282+00.00

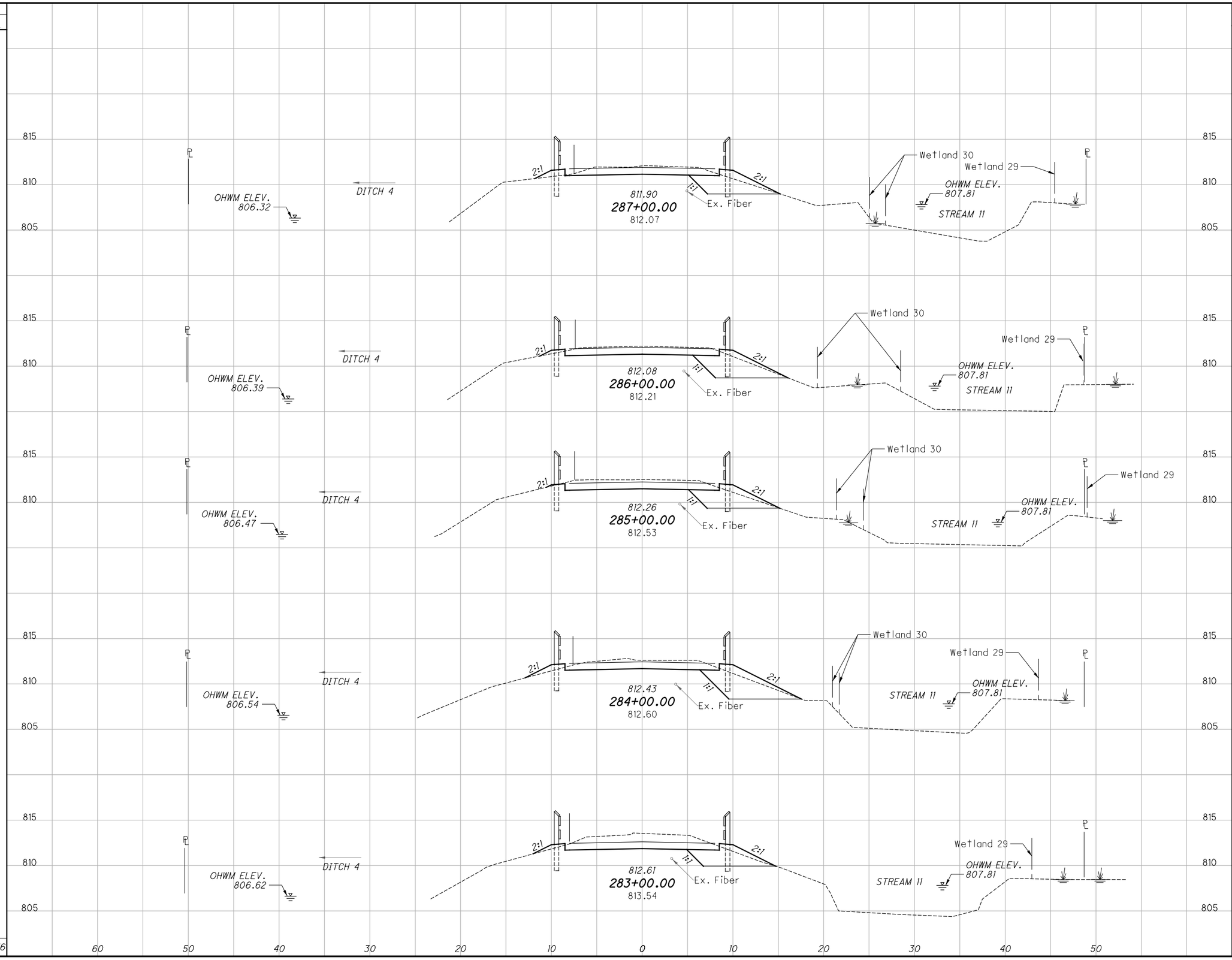
HOL-COUNTY TRAIL
PHASE 5C2
STA. 279+00.00

SEEDING	
END WIDTH	SQ. YDS.
	1076

END AREA	
CUT	FILL

VOLUME	
CUT	FILL
306	84

CALCULATED MS
CHECKED TML



CROSS SECTIONS
STA. 283+00.00 TO STA. 287+00.00

HOL-COUNTY TRAIL
PHASE 5C2

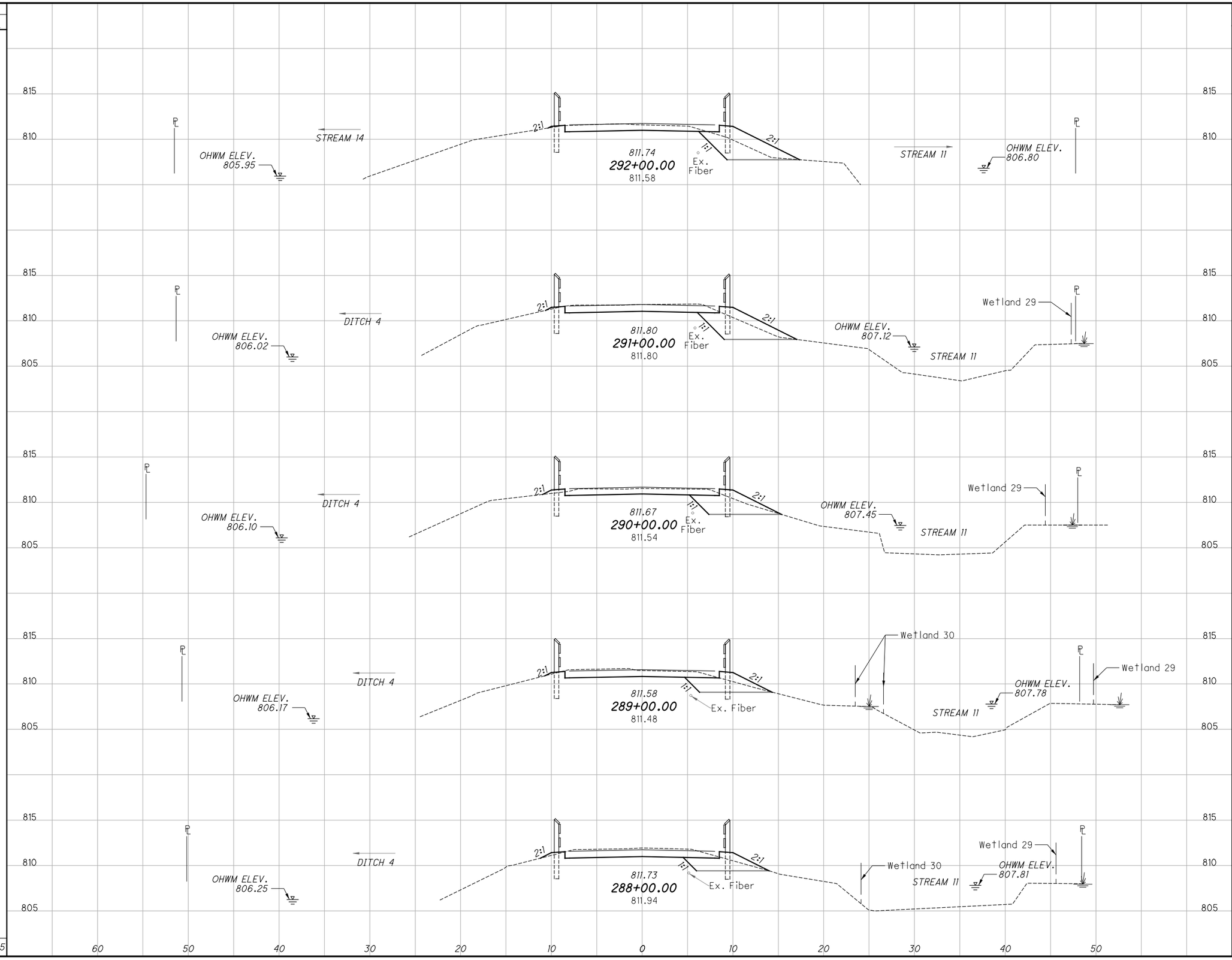
63
133

SEEDING	
END WIDTH	SQ. YDS.

END AREA	
CUT	FILL

VOLUME	
CUT	FILL
210	110

CALCULATED MS | CHECKED TML



CROSS SECTIONS
STA. 288+00.00 TO STA. 292+00.00

HOL-COUNTY TRAIL
PHASE 5C2

64
133

1025

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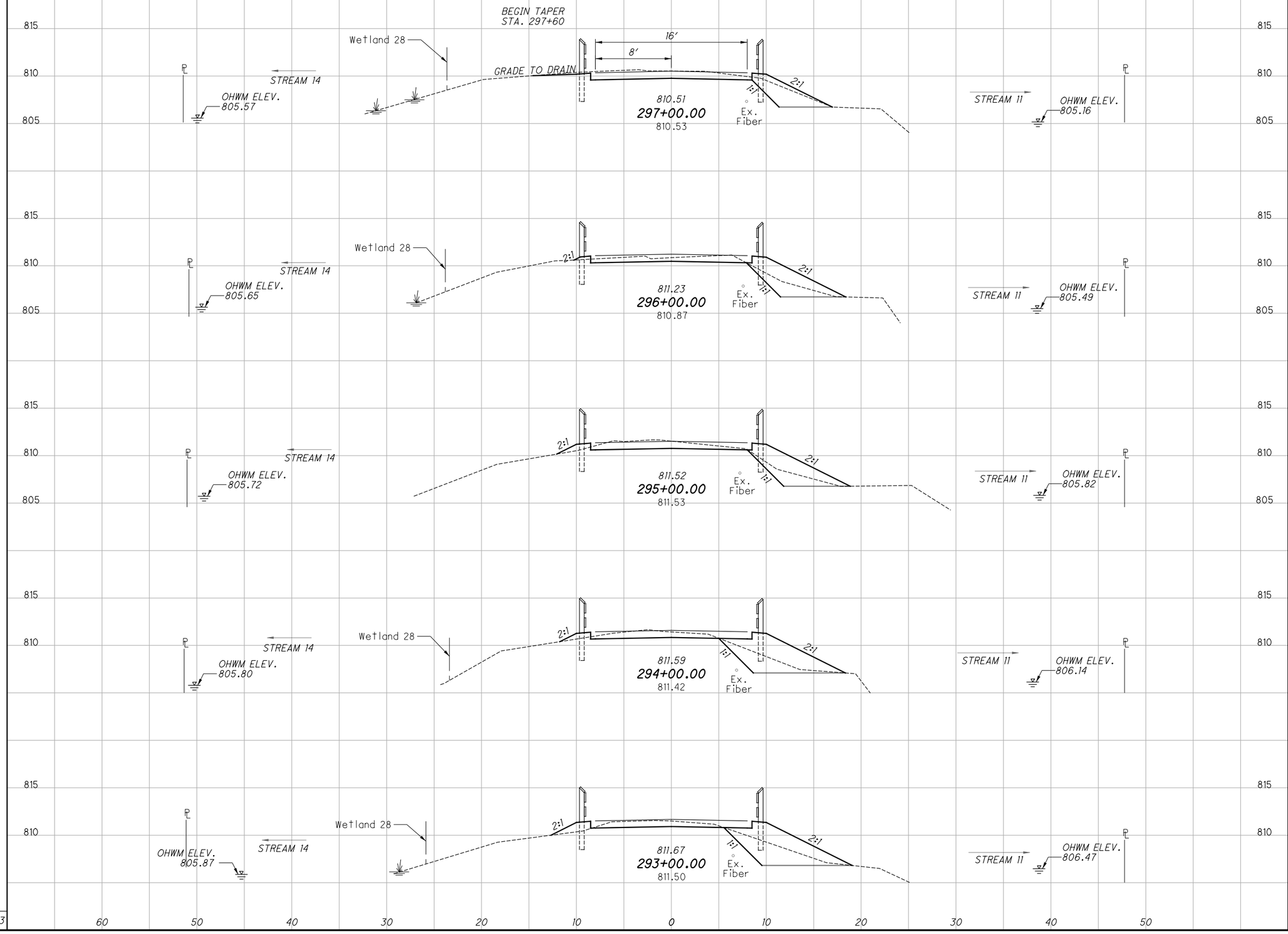
SEEDING	
END WIDTH	SQ. YDS.

END AREA	
CUT	FILL

VOLUME	
CUT	FILL

CALCULATED MS

CHECKED TML



CROSS SECTIONS
STA. 293+00.00 TO STA. 297+00.00

HOL-COUNTY TRAIL
PHASE 5C2

1243

189 251

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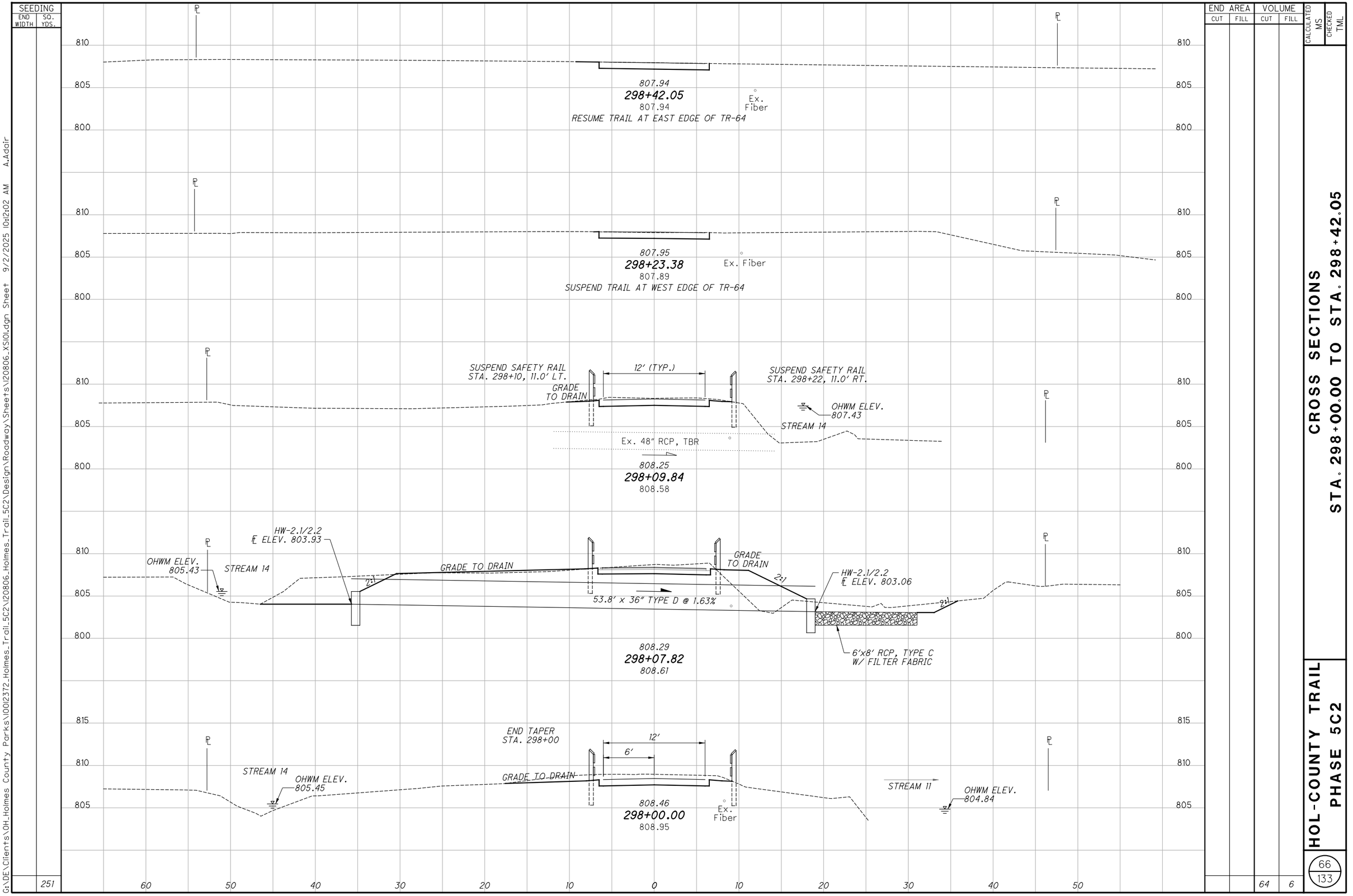
SEEDING	
END WIDTH	SQ. YDS.

END AREA	
CUT	FILL

VOLUME	
CUT	FILL

CALCULATED MS
CHECKED TML



CROSS SECTIONS
STA. 298+00.00 TO STA. 298+42.05

HOL-COUNTY TRAIL
PHASE 5C2

66
133

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251

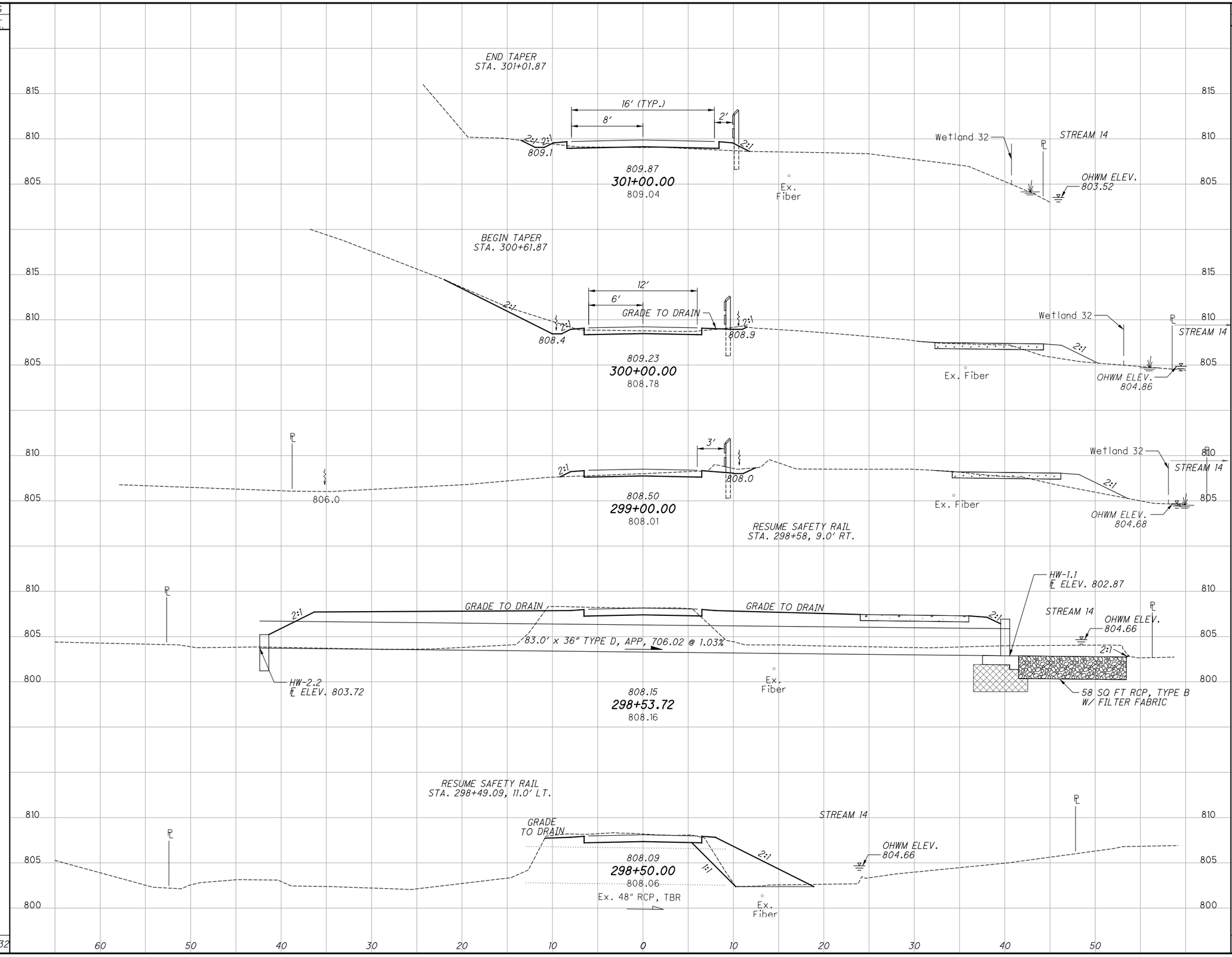
64 6

SEEDING	
END WIDTH	SQ. YDS.
1332	

END AREA	
CUT	FILL

VOLUME	
CUT	FILL
83	117

CALCULATED MS | CHECKED TML



CROSS SECTIONS
STA. 298+50.00 TO STA. 301+00.00

HOL-COUNTY TRAIL
PHASE 5C2

67
133

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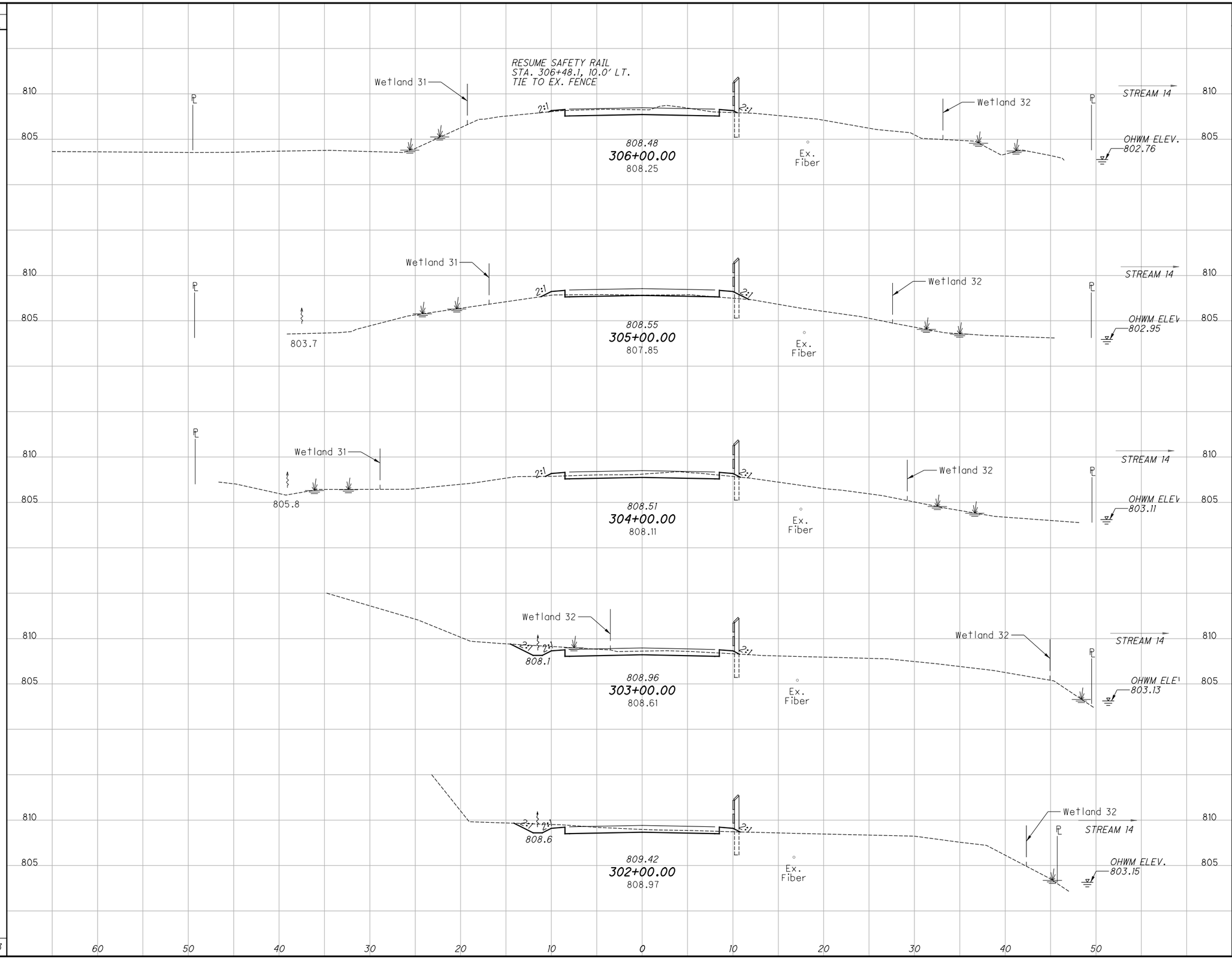
SEEDING	
END WIDTH	SQ. YDS.
	993

END AREA	
CUT	FILL

VOLUME	
CUT	FILL
157	29

CALCULATED MS
CHECKED TML



CROSS SECTIONS
STA. 302+00.00 TO STA. 306+00.00

HOL-COUNTY TRAIL
PHASE 5C2

68
133

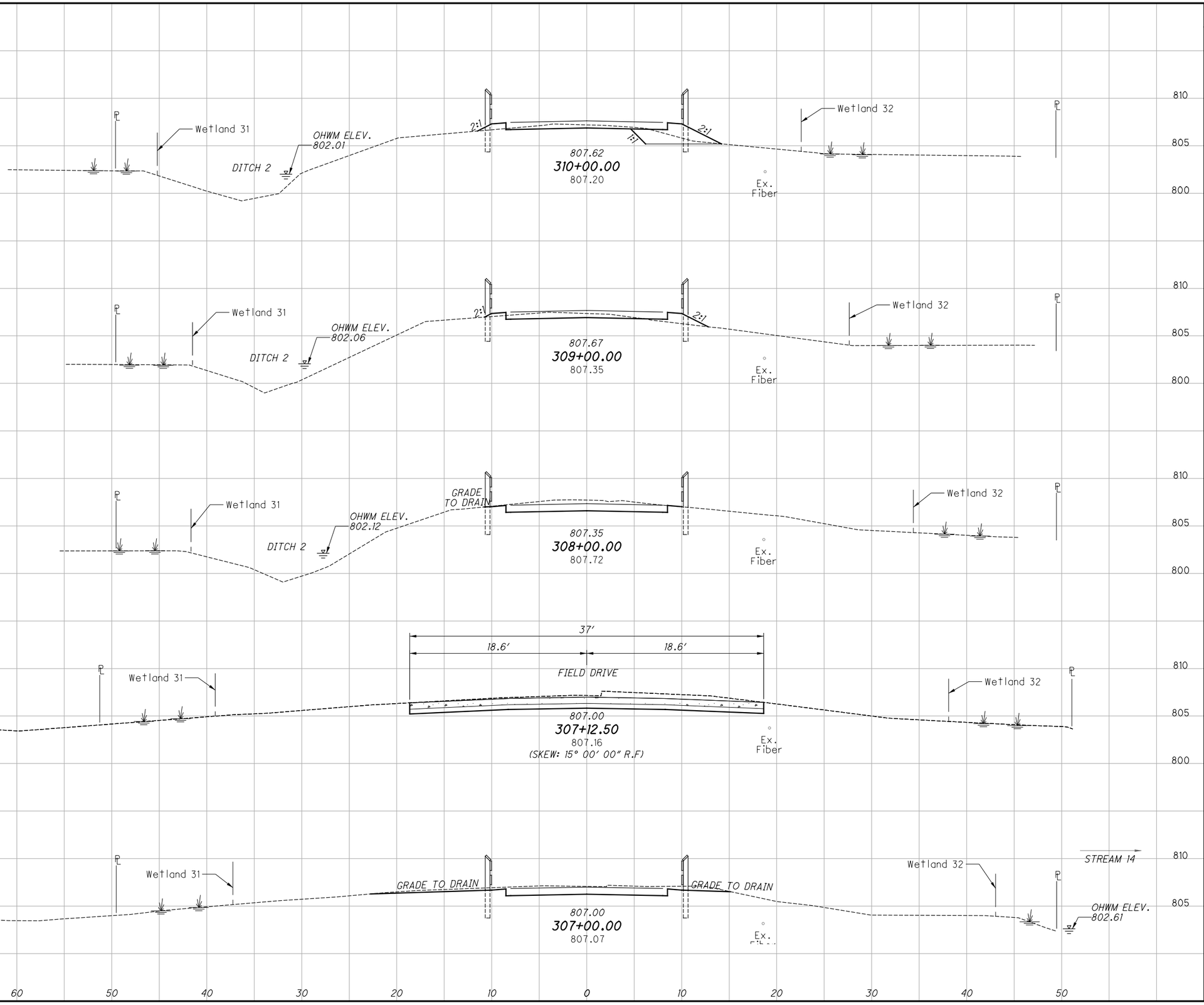
SEEDING	
END WIDTH	SQ. YDS.

END AREA	
CUT	FILL

VOLUME	
CUT	FILL

CALCULATED MS

CHECKED TML



CROSS SECTIONS
STA. 307+00.00 TO STA. 310+00.00

HOL-COUNTY TRAIL
PHASE 5C2

744

216 61

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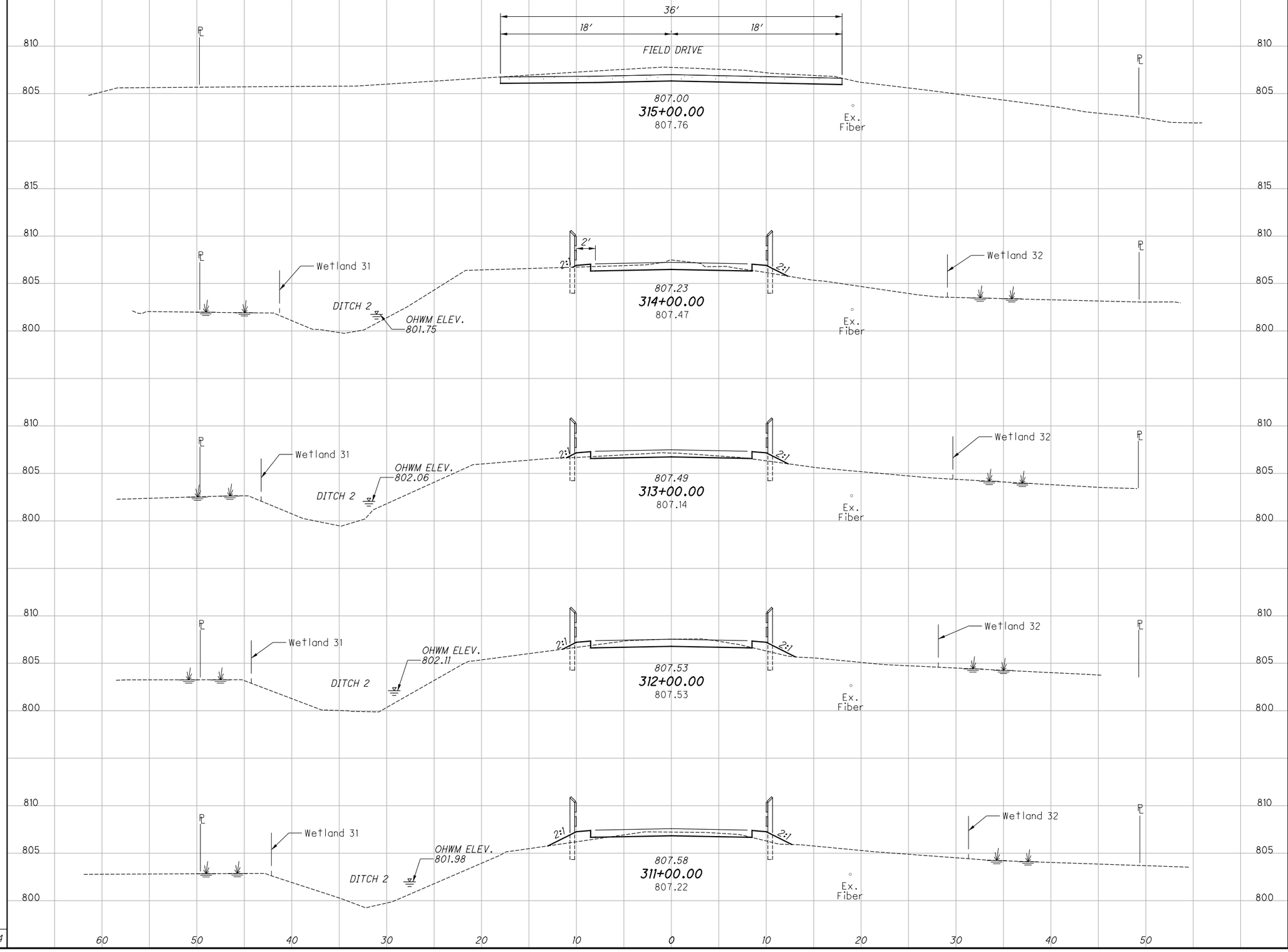
SEEDING	
END WIDTH	SQ. YDS.

END AREA	
CUT	FILL

VOLUME	
CUT	FILL

CALCULATED MS

CHECKED TML



CROSS SECTIONS
STA. 311+00.00 TO STA. 315+00.00

HOL-COUNTY TRAIL
PHASE 5C2

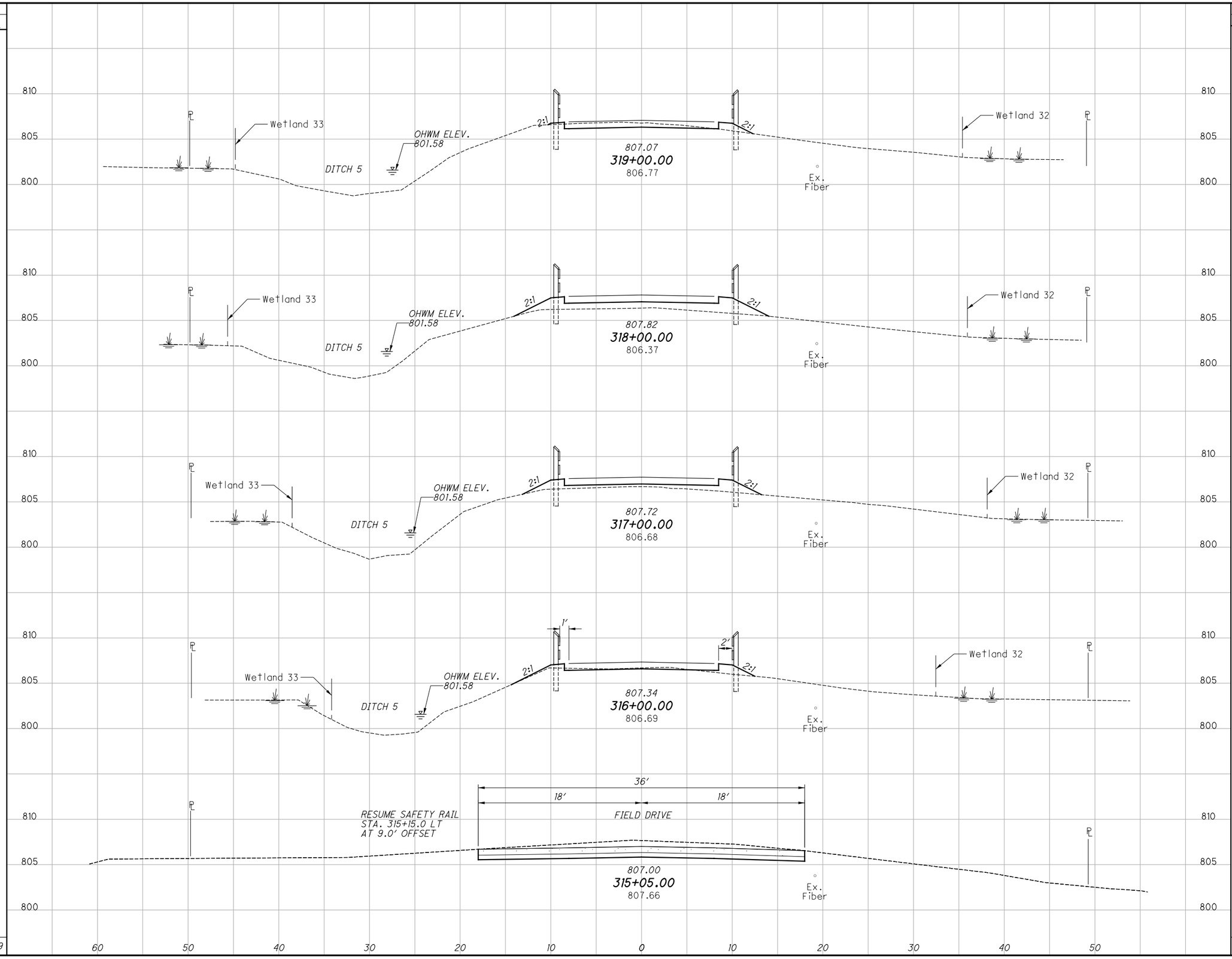
70
133

784

174

55

SEEDING	
END WIDTH	SQ. YDS.
869	



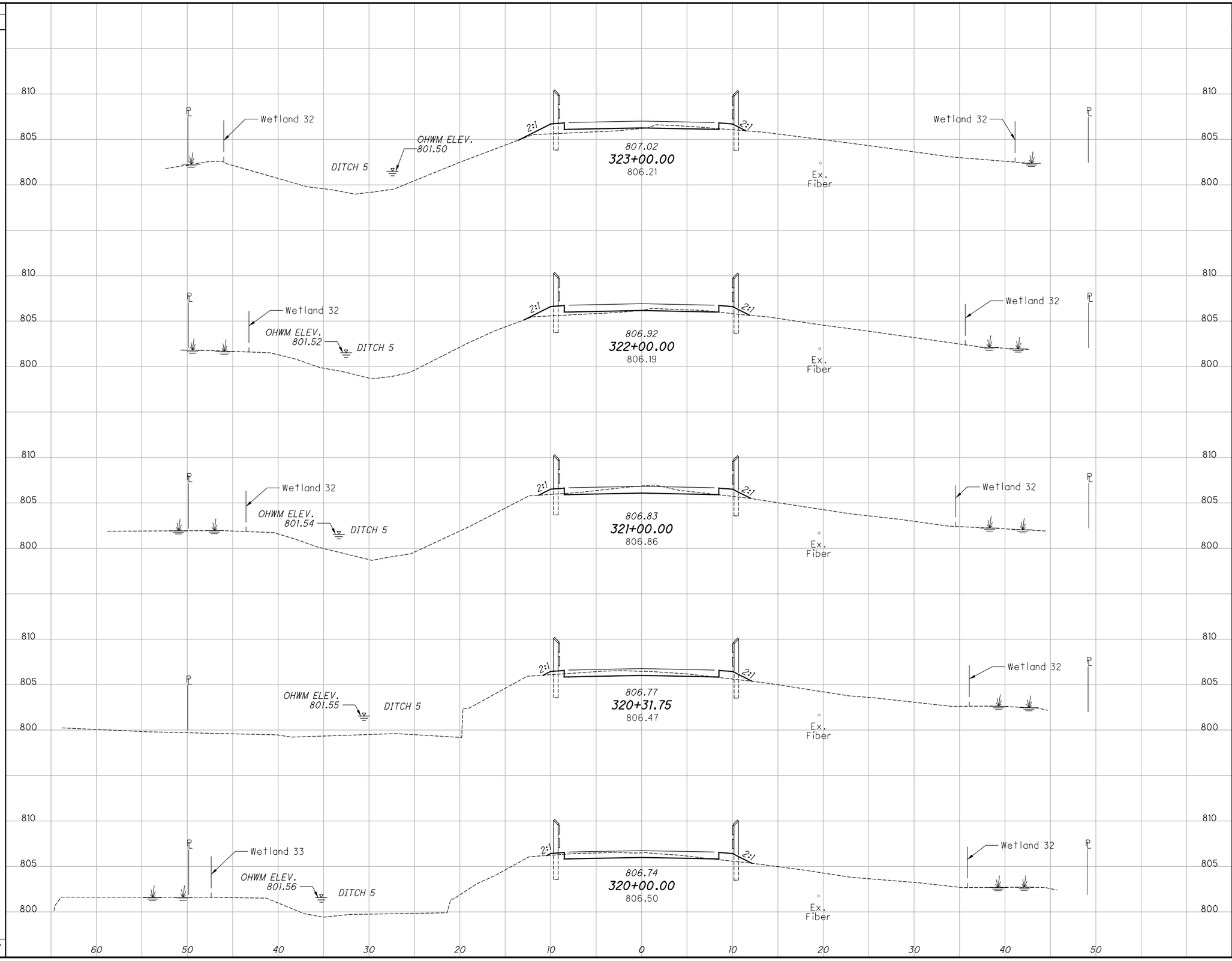
END AREA		VOLUME	
CUT	FILL	CUT	FILL
		92	141

CALCULATED MS
CHECKED TML

CROSS SECTIONS
STA. 315+05.00 TO STA. 319+00.00

HOL-COUNTY TRAIL
PHASE 5C2

SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED MS
CHECKED TML

CROSS SECTIONS
STA. 320+00.00 TO STA. 323+00.00

HOL-COUNTY TRAIL
PHASE 5C2

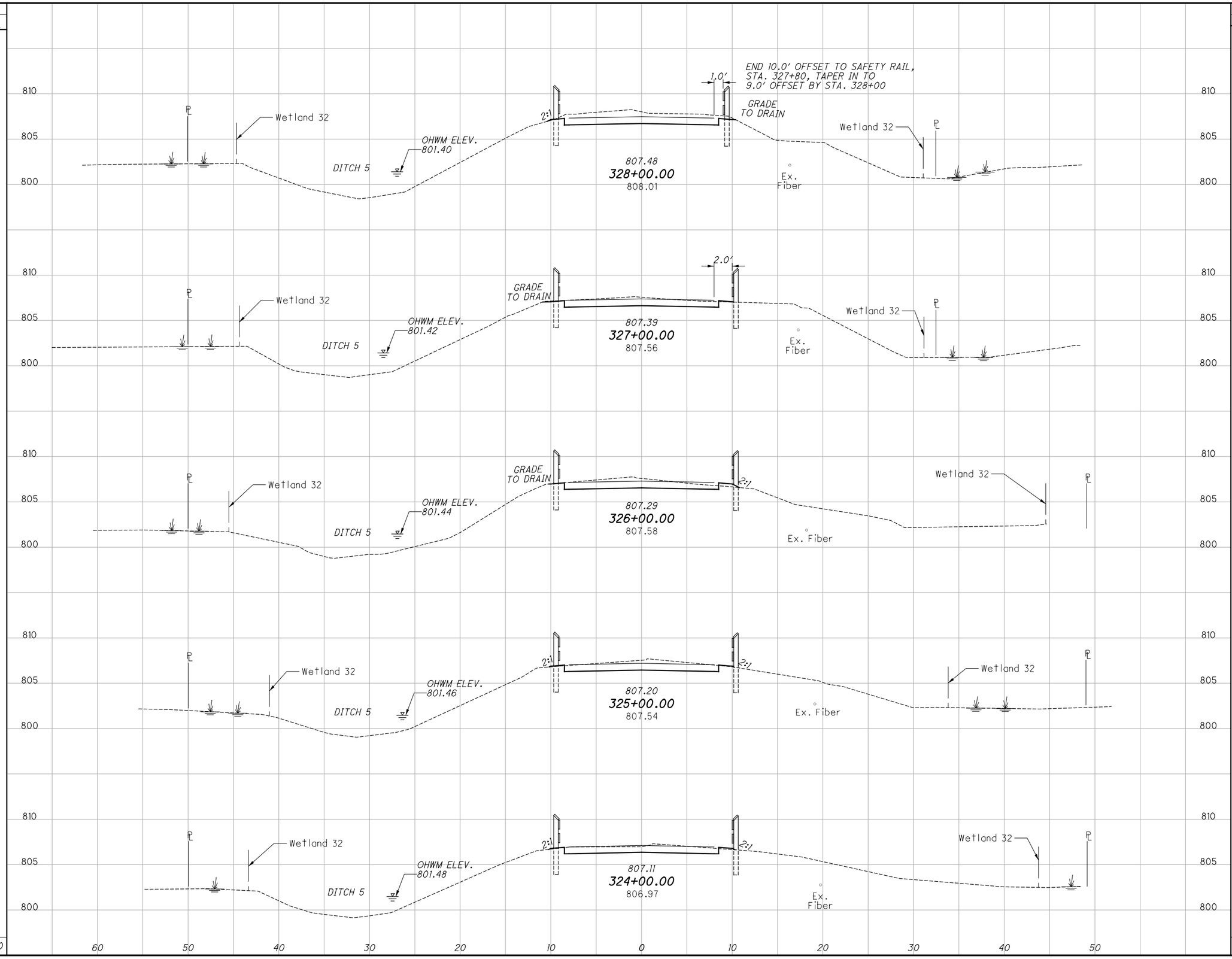
72
133

697

73 69

G:\DE\Clients\OH_Holmes County Parks\100l2372_Holmes_Trail_5C2\120806_Holmes_Trail_5C2\Design\Roadway\Sheets\120806_XS101.dgn Sheet 9/2/2025 10:12:23 AM A.Adair

SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
720		297	9

CALCULATED MS
CHECKED TML

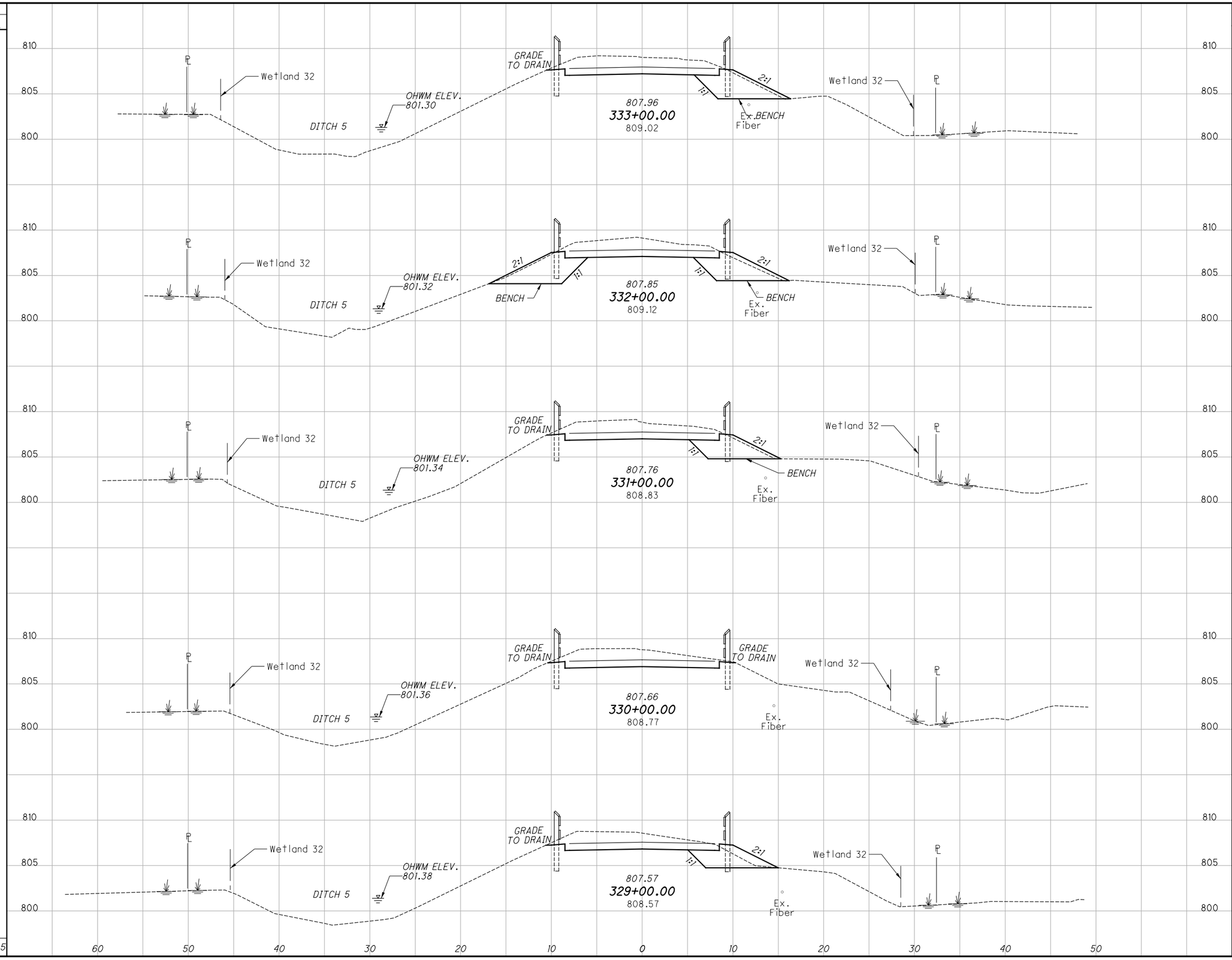
CROSS SECTIONS
STA. 324+00.00 TO STA. 328+00.00

HOL-COUNTY TRAIL PHASE 5C2

73
133

G:\DE\Clients\OH_Holmes County Parks\10012372_Holmes_Trail_5C2\20806_Holmes_Trail_5C2\Design\Roadway\Sheets\20806_XS101.dgn Sheet 9/2/2025 10:12:27 AM A.Adair

SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED MS
CHECKED TML

CROSS SECTIONS
STA. 329+00.00 TO STA. 333+00.00

HOL-COUNTY TRAIL
PHASE 5C2

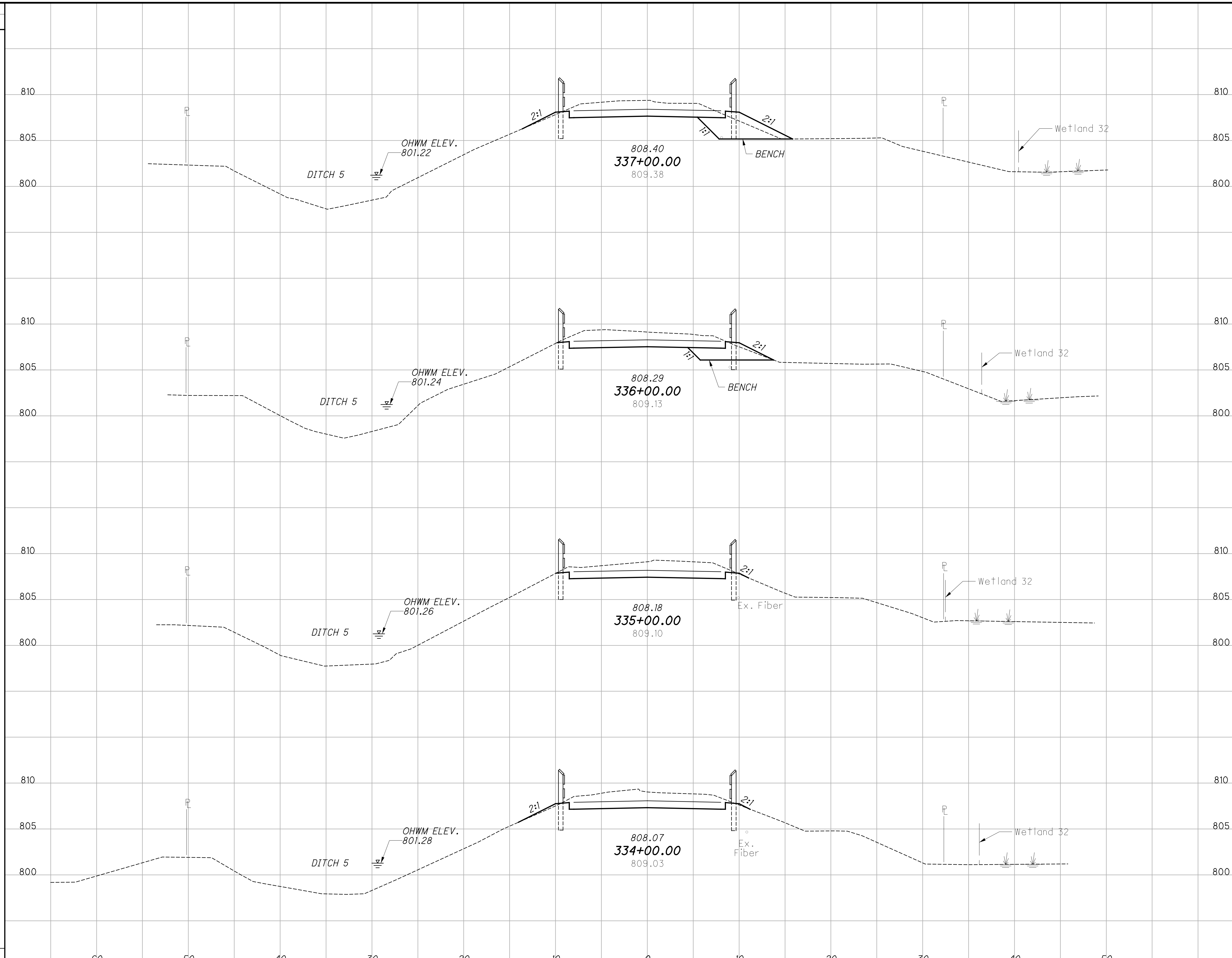
74
133

1005

717 221

G:\DE\Clients\OH_Holmes County Parks\10012372_Holmes_Trail_5C2\20806_Holmes_Trail_5C2\Design\Roadway\Sheets\20806_XS101.dgn Sheet 9/2/2025 10:23:31 AM A.Adair

SEEDING	
END WIDTH	SQ. YDS.
	748



END AREA		VOLUME	
CUT	FILL	CUT	FILL
		476	108

CALCULATED MS

CHECKED TML

CROSS SECTIONS
STA. 334+00.00 TO STA. 337+00.00

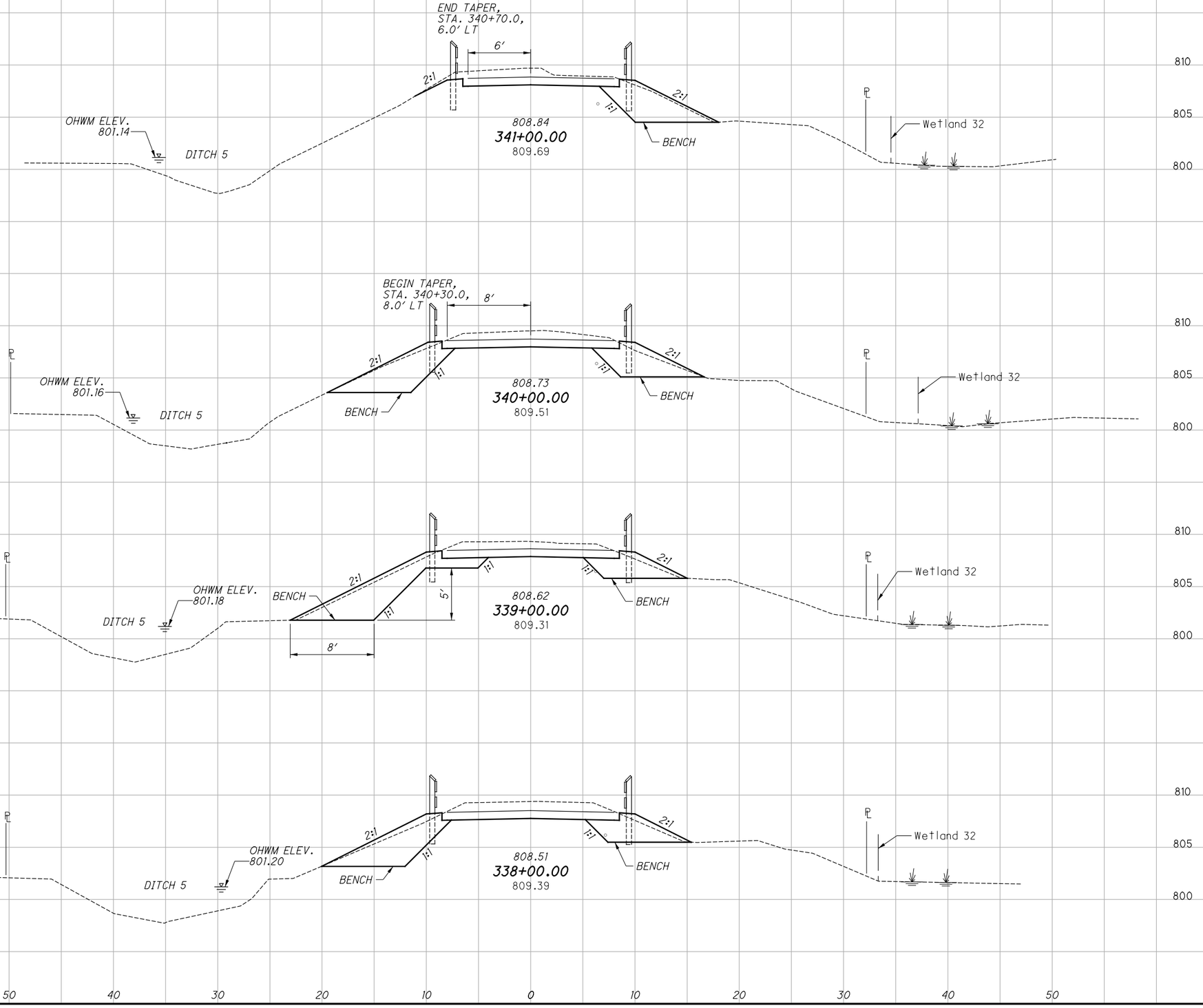
HOL-COUNTY TRAIL
PHASE 5C2

SEEDING	
END WIDTH	SQ. YDS.

END AREA	
CUT	FILL

VOLUME	
CUT	FILL

CALCULATED MS | CHECKED TML



CROSS SECTIONS
STA. 338+00.00 TO STA. 341+00.00

HOL-COUNTY TRAIL
PHASE 5C2

76
133

1128

765 633

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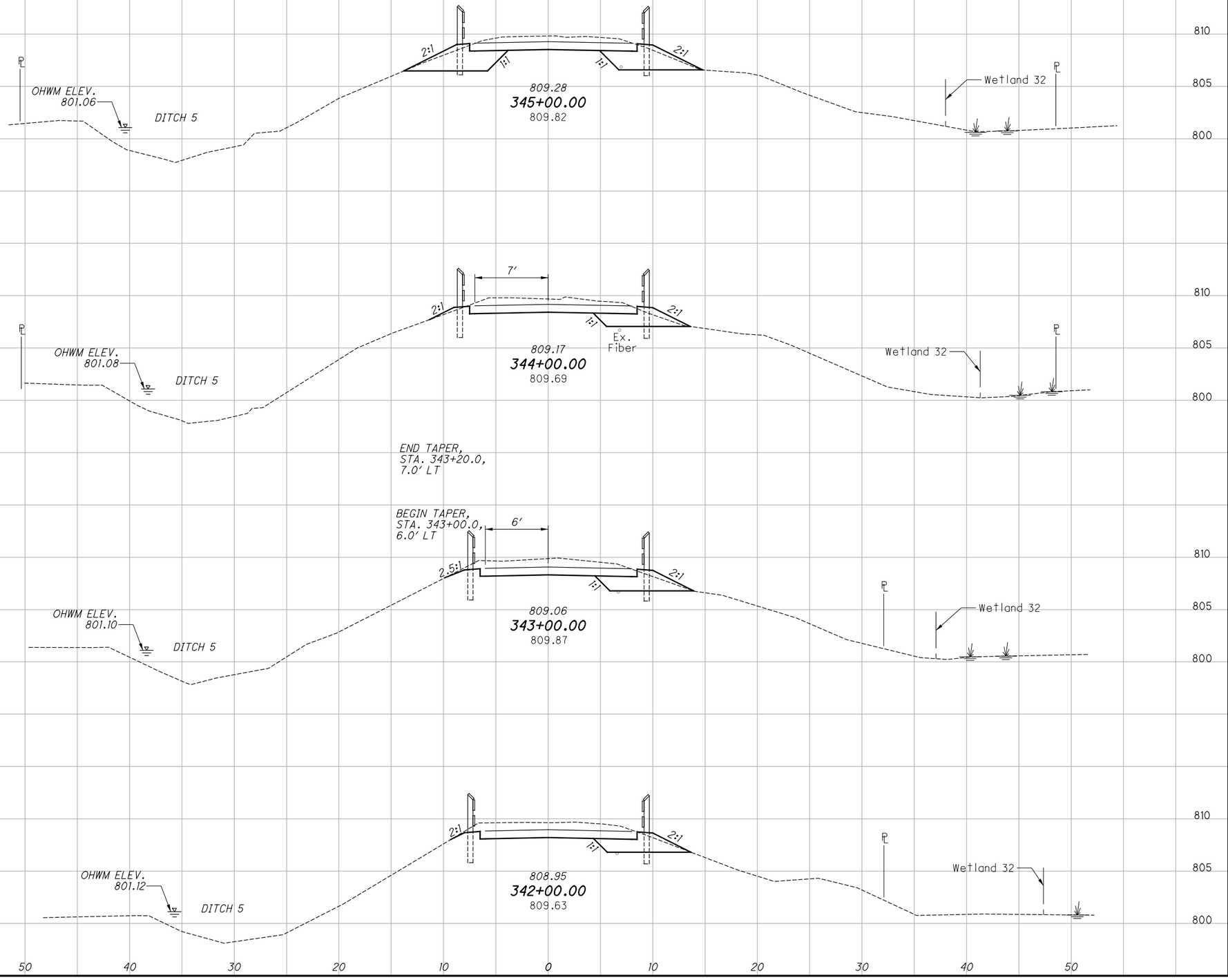
SEEDING	
END WIDTH	SQ. YDS.
	926

END AREA	
CUT	FILL

VOLUME	
CUT	FILL
312	236

CALCULATED MS
CHECKED TML



CROSS SECTIONS
STA. 342+00.00 TO STA. 345+00.00

HOL-COUNTY TRAIL
PHASE 5C2

77
133

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SEEDING	
END WIDTH	SQ. YDS.

END TAPER,
STA. 349+20.0,
8.0' LT

BEGIN TAPER,
STA. 349+00.0,
6.0' LT

7'

2:1

2:1

℄

OHWM ELEV.
800.98

DITCH 5

Ex.
Fiber

809.72
349+00.00
810.18

℄

Wetland 32

810
805
800

GRADE
TO DRAIN

2:1

℄

OHWM ELEV.
801.00

DITCH 5

Ex.
Fiber

809.61
348+00.00
810.30

℄

Wetland 32

END TAPER,
STA. 347+00.0,
7.0' LT

BEGIN TAPER,
STA. 346+80.0,
6.0' LT

7'

2:1

2:1

℄

OHWM ELEV.
801.02

DITCH 5

Ex.
Fiber

809.50
347+00.00
810.00

℄

Wetland 32

END TAPER,
STA. 346+20.0,
6.0' LT

BEGIN TAPER,
STA. 346+00.0,
7.0' LT

7'

2:1

2:1

℄

OHWM ELEV.
801.04

DITCH 5

Ex.
Fiber

809.39
346+00.00
809.97

℄

Wetland 32

60 50 40 30 20 10 0 10 20 30 40 50

END AREA		VOLUME	
CUT	FILL	CUT	FILL
839		308	91

CALCULATED MS
CHECKED TML

CROSS SECTIONS
STA. 346+00.00 TO STA. 349+00.00

HOL-COUNTY TRAIL
PHASE 5C2

78
133

G:\DE\Clients\OH_Holmes County Parks\10012372_Holmes_Trail_5C2\20806_Holmes_Trail_5C2\Design\Roadway\Sheets\20806_XS101.dgn Sheet 9/2/2025 10:12:44 AM A.Adair

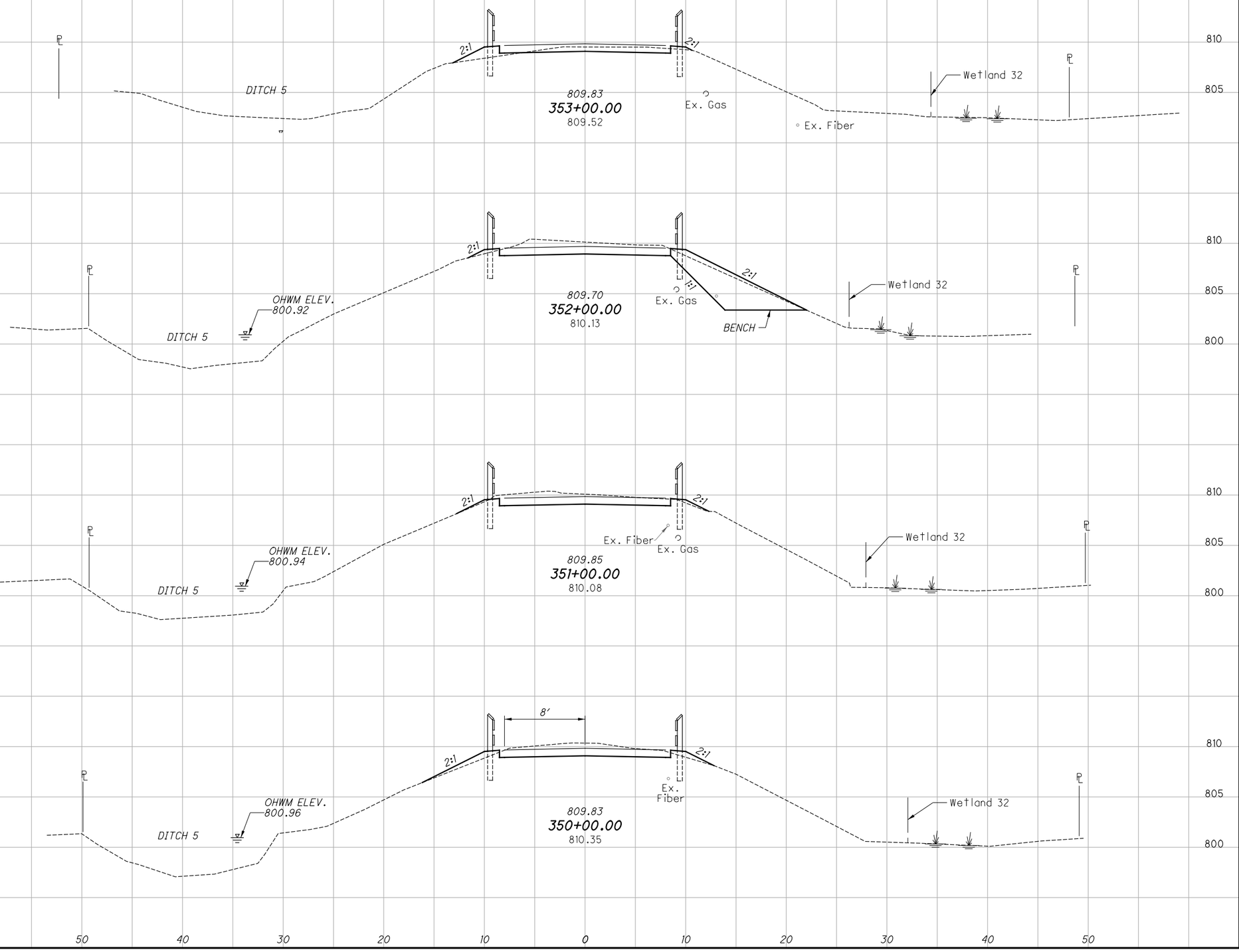
SEEDING	
END WIDTH	SQ. YDS.

END AREA	
CUT	FILL

VOLUME	
CUT	FILL

CALCULATED MS

CHECKED TML



961

286 471

CROSS SECTIONS

STA. 350+00.00 TO STA. 353+00.00

HOL-COUNTY TRAIL PHASE 5C2

79
133

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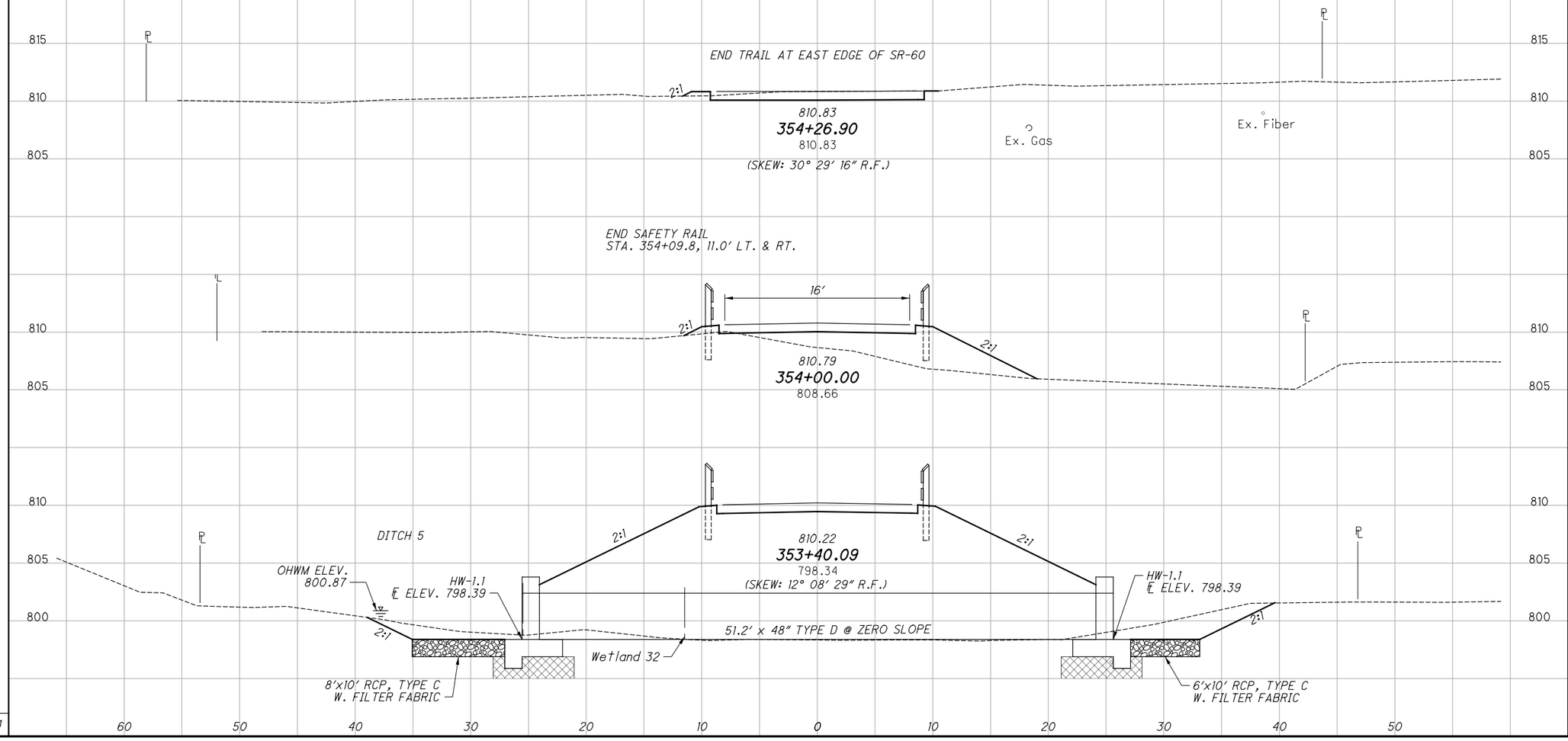
SEEDING	
END WIDTH	SQ. YDS.

END AREA	
CUT	FILL

VOLUME	
CUT	FILL

CALCULATED MS

CHECKED TML



CROSS SECTIONS
STA. 353+40.09 TO STA. 354+26.90

HOL-COUNTY TRAIL
PHASE 5C2

STA. 354+26.90

444

6 643

80
133

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SEEDING	
END WIDTH	SQ. YDS.
87	

END AREA	
CUT	FILL

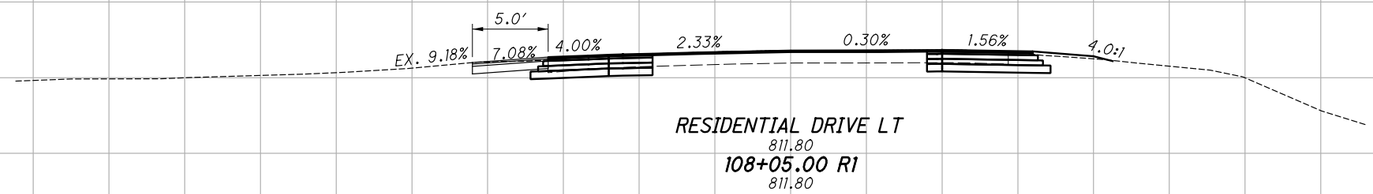
VOLUME	
CUT	FILL
42	3

CALCULATED AKA

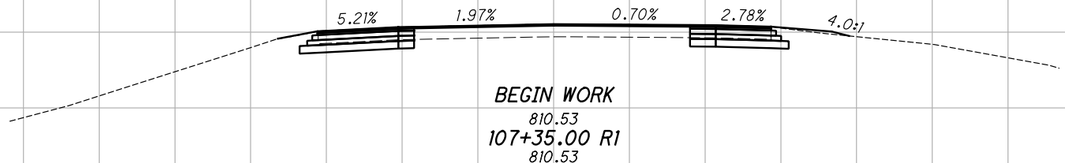
CHECKED MS

RESIDENTIAL DRIVE - ASPHALT APRON

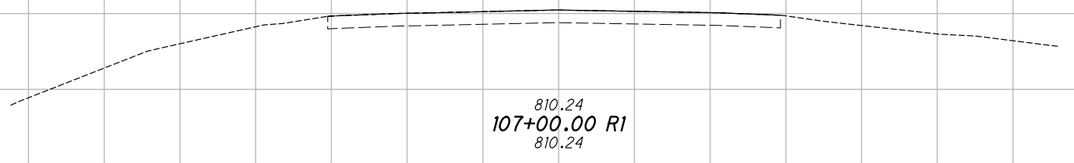
ITEM 204 - SUBGRADE COMPACTION
ITEM 304 - 6" AGGREGATE BASE
ITEM 441 - 1.25" ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, (449) PG64-22
ITEM 407 - TACK COAT, 0.08 GAL/SQ YD
ITEM 441 - 1.75" ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, (449)



RESIDENTIAL DRIVE LT
811.80
108+05.00 R1
811.80



BEGIN WORK
810.53
107+35.00 R1
810.53



810.24
107+00.00 R1
810.24

CROSS SECTIONS - S.R. 60
STA. 107+00 TO STA. 108+05.00

HOL-COUNTY TRAIL
PHASE 5C2

81
133

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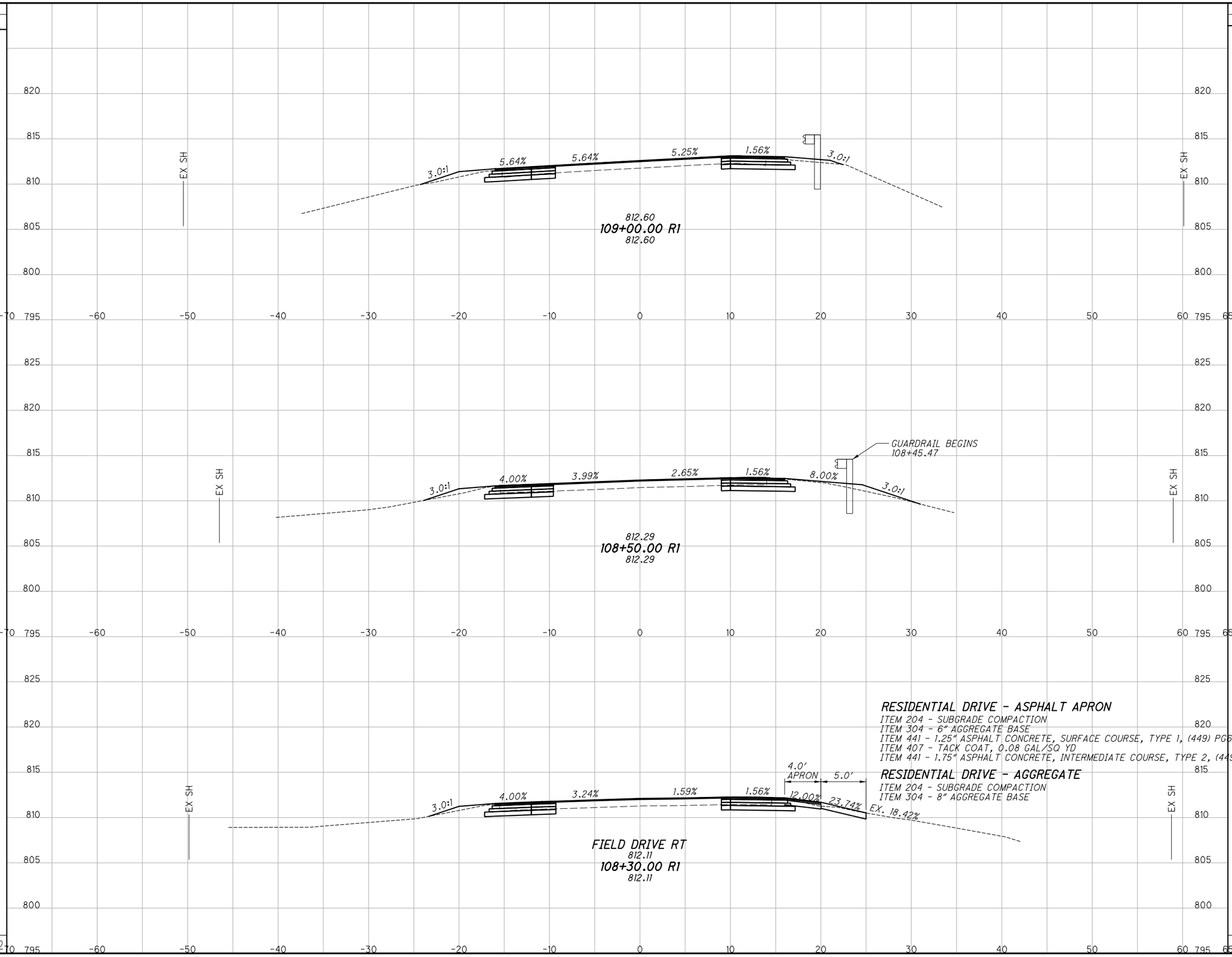
SEEDING	
END WIDTH	SQ. YDS.

END AREA	
CUT	FILL

VOLUME	
CUT	FILL

CALCULATED AKA

CHECKED MS



CROSS SECTIONS - S.R. 60

STA. 108+30.00 TO STA. 109+00.00

HOL-COUNTY TRAIL PHASE 5C2

82
133

48 17

190

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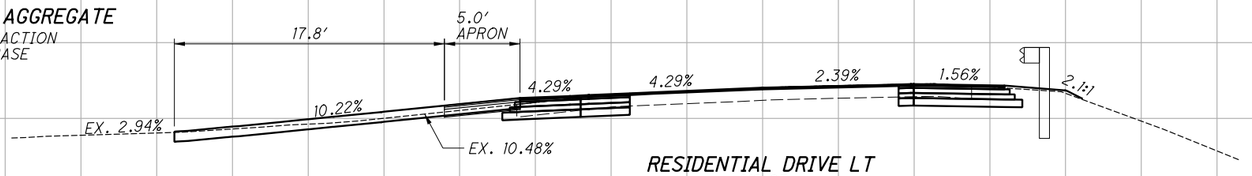
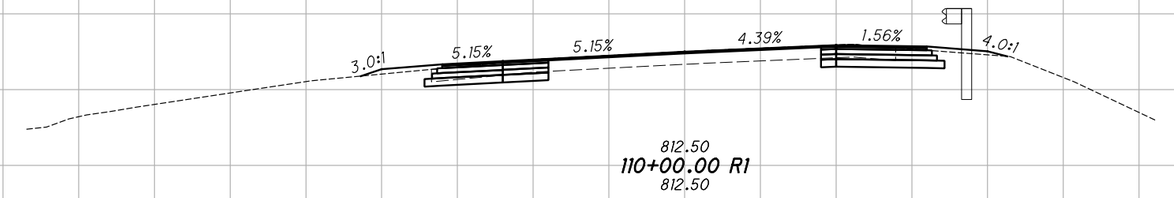
SEEDING	
END WIDTH	SQ. YDS.

RESIDENTIAL DRIVE - ASPHALT APRON
ITEM 204 - SUBGRADE COMPACTION
ITEM 304 - 6" AGGREGATE BASE
ITEM 441 - 1.25" ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, (449) PG64-22
ITEM 407 - TACK COAT, 0.08 GAL/SQ YD
ITEM 441 - 1.75" ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, (449)

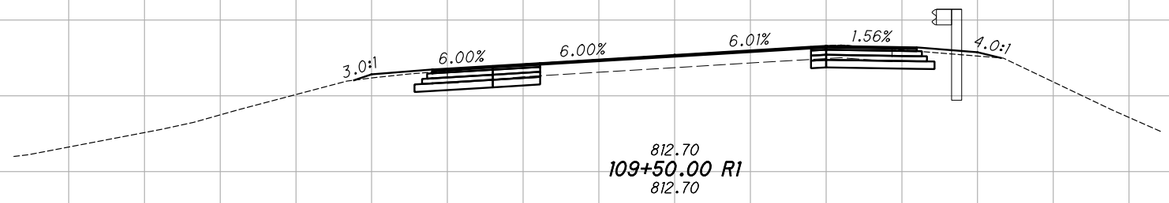
RESIDENTIAL DRIVE - AGGREGATE
ITEM 204 - SUBGRADE COMPACTION
ITEM 304 - 8" AGGREGATE BASE



RESIDENTIAL DRIVE LT
812.03
110+42.00 R1
812.03



812.50
110+00.00 R1
812.50



812.70
109+50.00 R1
812.70

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED AKA
CHECKED MS

CROSS SECTIONS - S.R. 60
STA. 109+50.00 TO STA. 110+42.00

HOL-COUNTY TRAIL
PHASE 5C2

83
133

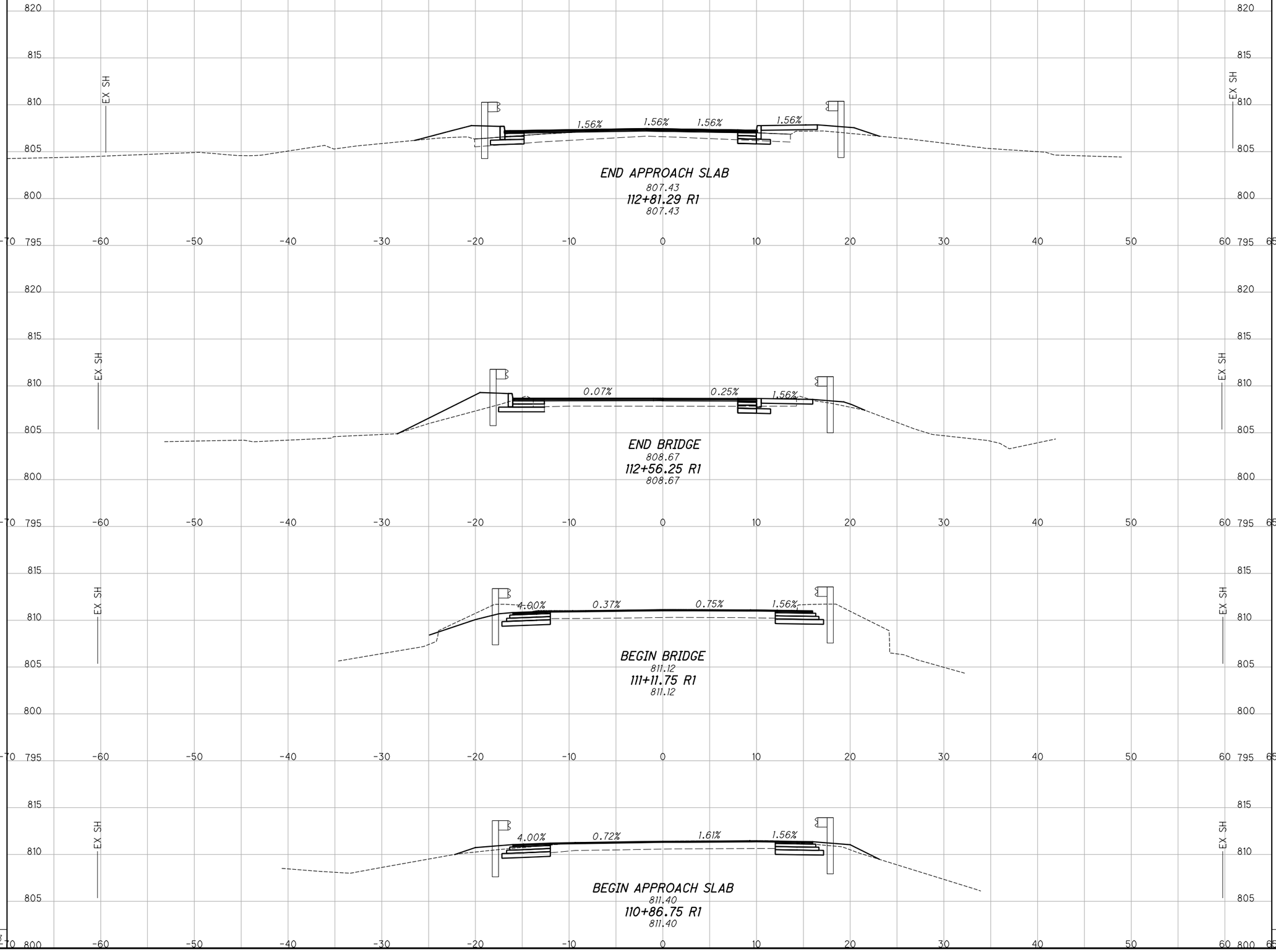
SEEDING	
END WIDTH	SQ. YDS.

END AREA	
CUT	FILL

VOLUME	
CUT	FILL

CALCULATED AKA

CHECKED MS



CROSS SECTIONS - S.R. 60

STA. 110+86.75 TO STA. 112+81.29

HOL-COUNTY TRAIL PHASE 5C2

84
133

153

34 21

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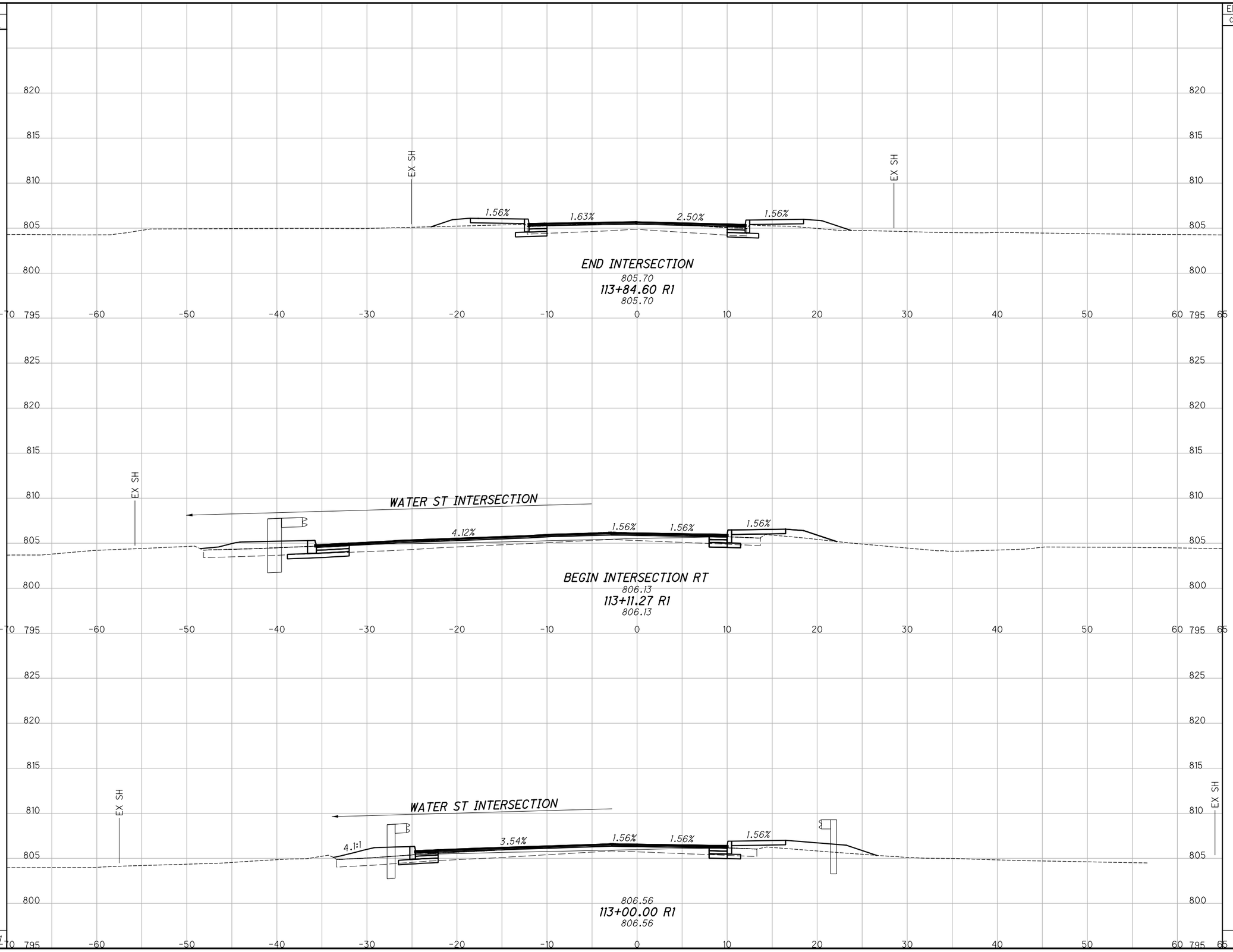
SEEDING	
END WIDTH	SQ. YDS.

END AREA	
CUT	FILL

VOLUME	
CUT	FILL

CALCULATED AKA

CHECKED MS



CROSS SECTIONS - S.R. 60
STA. 113+00.00 TO STA. 113+84.60

HOL-COUNTY TRAIL
PHASE 5C2

85
133

12 44

124

G:\DE\Clients\OH_Holmes County Parks\10022288_SR60\20806_SR60\Design\Roadway\Sheets\20806_XS100.dgn SR_60_SHEET 9/2/2025 10:12:57 AM A.Adair

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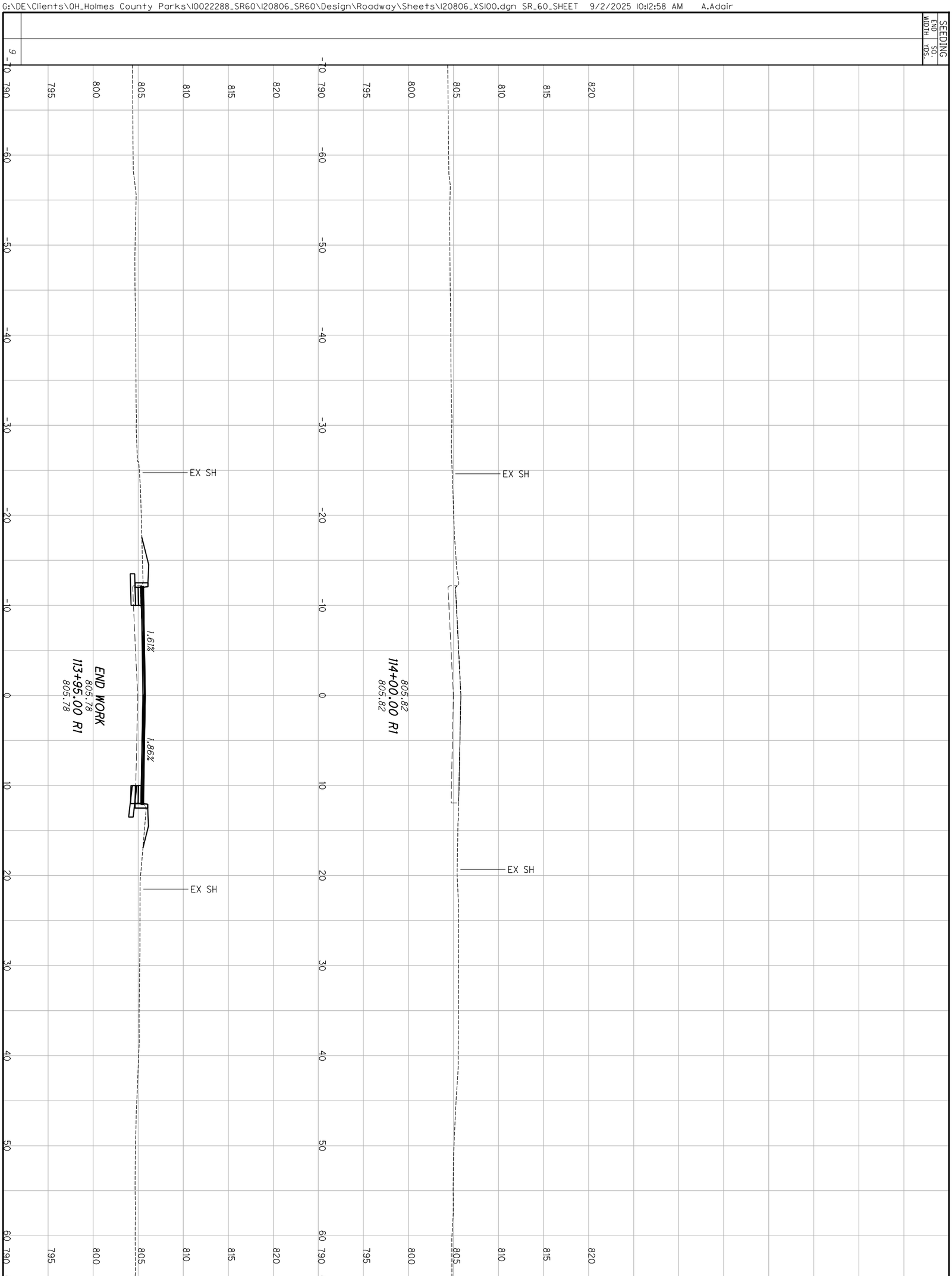


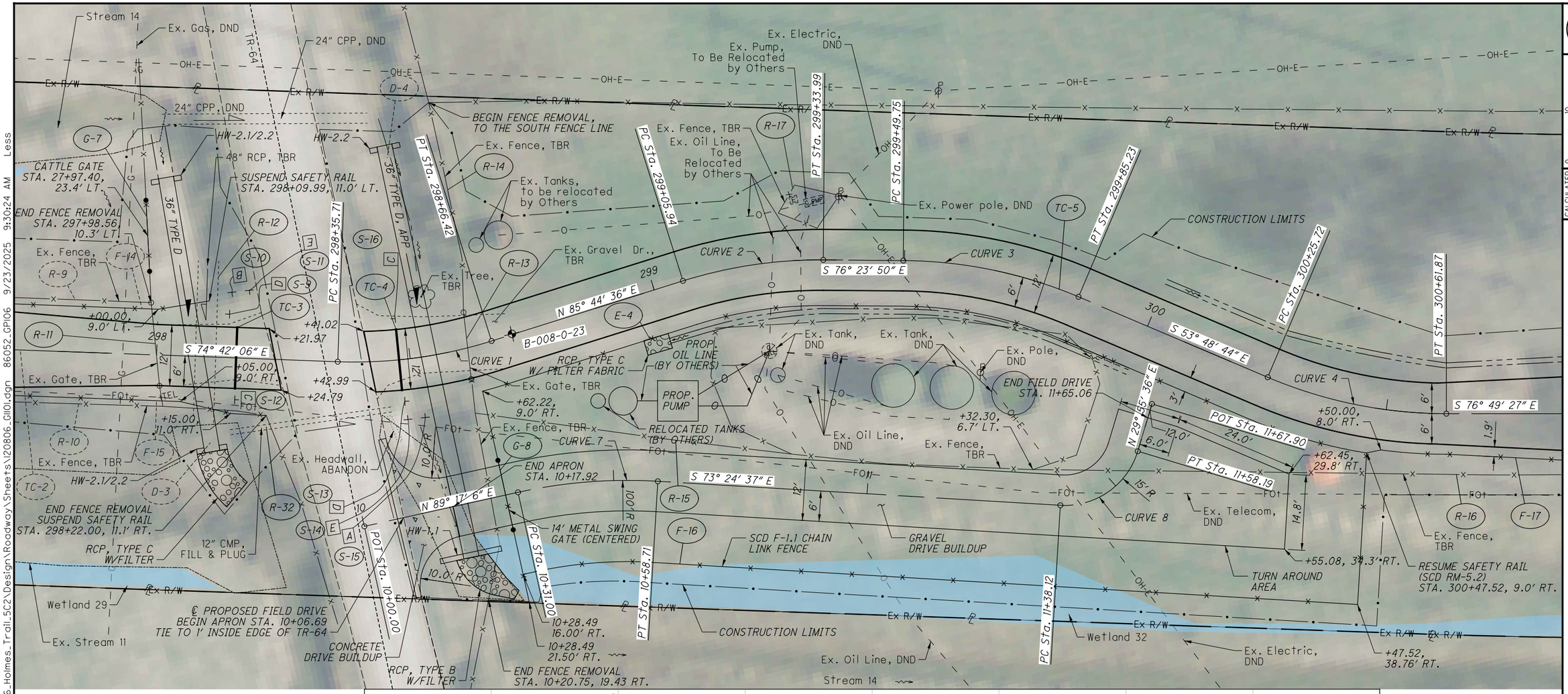
END AREA CUT FILL
VOLUME CUT FILL
1
1

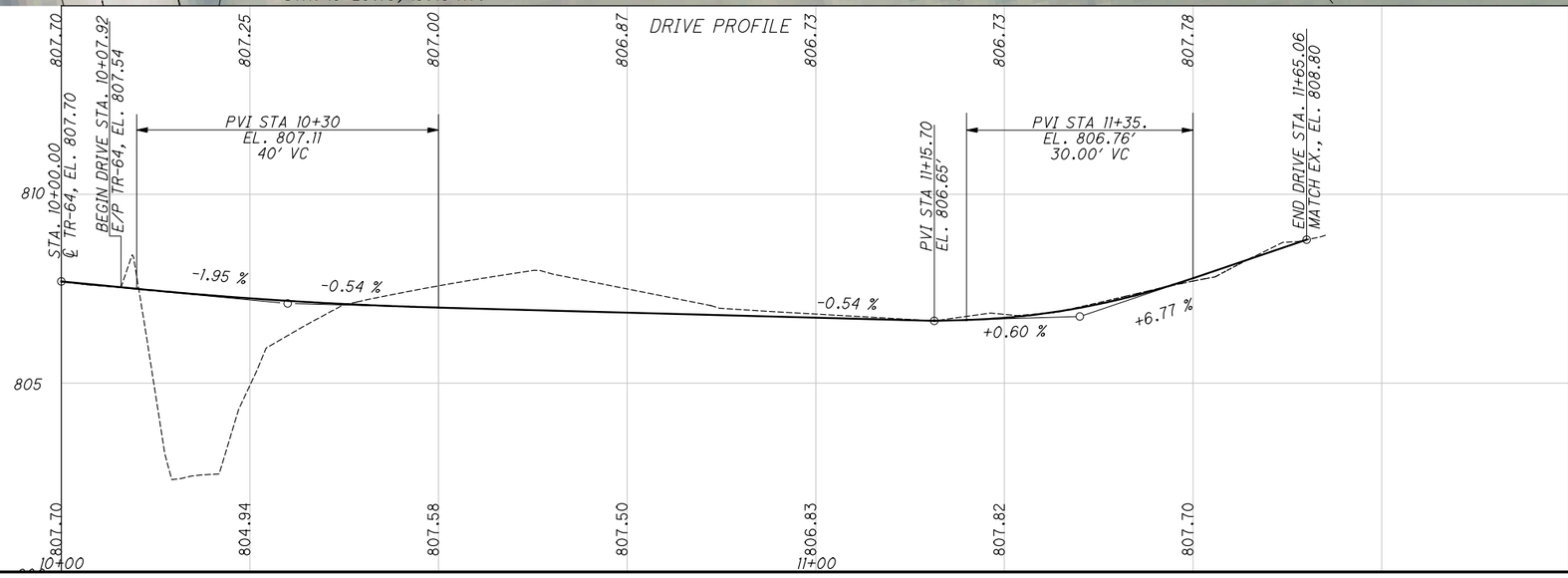
86
133

HOL-COUNTY TRAIL
PHASE 5C2

CROSS SECTIONS - S.R. 60
STA. 113+95.00 TO STA. 114+00.00

CALCULATED AKA
CHECKED MS





NOTES:

1. FOR TYPICAL DRIVE SECTION, SEE SHEET 11.
2. FOR SIGN LEGEND, SEE SHEET 15.
3. FOR GATE SYSTEM DETAILS, SEE SHEET 95.

Δ = 15° 52' 29" (RT)
Dc = 57° 17' 45"
R = 100.00'
T = 13.94'
L = 27.71'
E = 0.97'
C = 27.62'
C.B. = S 81° 20' 52" E

Δ = 76° 39' 47" (LT)
Dc = 381° 58' 19"
R = 15.00'
T = 11.86'
L = 20.07'
E = 4.12'
C = 18.61'
C.B. = N 68° 15' 29" E

HORIZONTAL SCALE IN FEET
0 5 10 20

CALCULATED MS
CHECKED TML

INTERSECTION DETAILS TR-64

HOL-COUNTY TRAIL
PHASE 5C2

STA. 112+72.43, 51.00' LT. S.R. 60 =
STA. 1+78.47, 46.00' LT. S. WATER ST. (NE)
Δ = 100° 21' 08.5"
R = 35.00'
L = 61.30'

BEGIN CURB HEIGHT TRANSITION
FROM 6" TO 0" OVER 10.0'
STA. 1+85.00 (S. WATER ST. NE)

+95 END WORK
MATCH EX. (803.57)

STA. 113+78.66, 47.00' LT. S.R. 60 =
STA. 1+77.85, 44.00' RT. S. WATER ST. (NE)
Δ = 97° 51' 31.2"
R = 35.00'
L = 59.78'

N 33° 22' 23" E

(803.11) (803.25) (803.31)
(803.55) (803.32) (803.51) (803.51) (803.71)
11.0' 2 9.0'
0.18% 1.56%

804.08 804.06 804.04
804.47 804.19
804.85 804.35
805.48 804.59
806.28 804.76
807.02 804.92
807.67 805.27
805.21 804.91 804.80
(0.0' (TYP.)) (10.0' (TYP.))

S. WATER ST. (NE)

PC Sta. 112+59.08

(807.85) (808.48) (808.80) (808.66)
112 (809.71)
S 42° 56' 13" E (809.32)
(809.59) (809.20) (808.79) (808.66)
S.R. 60
16.0' 10.0' 11.3'
0.07% 0.25% 1.56%
(808.82) (808.67)
+60.15 0.70' LT.
+78.87 1.50' LT.
+07.52 2.80' LT.
CROWN OF PAVEMENT
807.77 807.74 807.59 806.60 806.56 805.86 805.82 805.77
113
CURVE 8
86.5°
94.5°
S. WATER ST. (SW)
805.61 805.22
805.97 805.79 805.48 805.15 804.81 804.71 804.14
SAWCUT
7.0' 10.0' (TYP.)

PT Sta. 113+45.22

STA. 113+69.79, 12.75' LT.
EX. CB (RTG),
EX. GRATE ELEV 804.98
PR. GRATE ELEV 804.77

+95 END WORK
MATCH EX. (805.78)
(805.91) (805.42) (805.59)
805.12 805.61 +50.36 0.43' LT. 805.60
805.64 805.64
9.8' 12.0' 1.61% 1.86%
SAWCUT
114
S 64° 29' 08" E (806.10)
(805.82)
STA. 113+46.57 ℄ S.R. 60 =
STA. 1+25.00 ℄ S. WATER ST. (SW)
(805.56) (805.58) (806.12)
11.2'
805.40 805.02 804.61 804.44 803.83
10.0' 12.0'

STA. 113+70.19, 16.11' RT.
EX. CB (RTG),
EX. GRATE ELEV 804.80
PR. GRATE ELEV 804.63

STA. 113+84.60, 37.00' RT. S.R. 60 =
STA. 0+85.13, 35.00' RT. S. WATER ST. (SW)
Δ = 94° 30' 19.3"
R = 25.00'
L = 41.24'

STA. 113+27.83 ℄ S.R. 60 =
STA. 1+25.00 ℄ S. WATER ST. (NE)

STA. 113+11.27, 45.00' RT. S.R. 60 =
STA. 0+86.42, 45.00' LT. S. WATER ST. (SW)
Δ = 76° 59' 59.4"
R = 35.00'
L = 47.04'

STA. 113+39.30, 31.48' RT.
EX. CB (ATG),
EX. GRATE ELEV 804.22
PR. GRATE ELEV 804.44

STA. 0+96.78
12.88' RT.
S. WATER ST. (SW)

0.90% 1.50%
10.0' 10.0'
(803.81) (803.85) (803.84) (803.68) (803.57)
N 21° 00' 33" E
+81 END WORK
MATCH EX. (803.72)
(803.49) (803.46) (803.43)

CURB RAMP DETAIL
SCALE 1" = 10'

TC 805.79
FC 805.79
TC 806.10
FC 805.60
TC 806.13
FC 805.63
TC 805.70
EP 805.20
TC 805.51
EP 805.51
STA. 113+87.00, 12.00' RT.
S.R. 60
TC 805.54
EP 805.54
TC 806.05
FC 805.55
1.50%
0.80%
1.50%
7.0'
6.0'
2.7%
7.3'
5.0'
6.0'
1.0'

CURB RAMP DETAIL
SCALE 1" = 10'

TC 806.19
EP 805.69
TC 806.28
FC 806.28
TC 805.12
EP 805.12
STA. 1+03.51
14.46' LT.
S. WATER ST. (SW)
TC 805.71
FC 805.21
TC 805.04
EP 805.04
TC 805.63
FC 805.13
TC 805.49
FC 804.99
6.0'
7.64%
14.0'
17.8'
1.56%
5.0'
6.0'
1.0'

CURB RAMP DETAIL
SCALE 1" = 10'

TC 805.39
EP 805.39
TC 805.60
EP 805.27
STA. 113+87.00, 12.00' RT.
S.R. 60
TC 805.14
EP 804.81
TC 805.47
EP 805.47
TC 804.50
EP 804.50
TC 805.99
FC 805.49
TC 804.43
EP 804.43
TC 804.93
FC 804.43
TC 806.06
FC 805.56
TC 805.02
FC 804.52
TC 805.09
FC 804.59
TC 805.20
FC 805.20
TC 805.98
FC 805.48
TC 805.50
FC 805.50
1.56%
1.00%
1.50%
6.8'
5.0'
1.50%
1.0'
5.0'
3.09%
0.40%
7.62%
5.00%
5.9'
5.0'
6.0'
8.0'
1.40%
1.56%

LEGEND

(XXX.XX) - EXISTING ELEVATION
XXX.XX - PROPOSED ELEVATION
TC - TOP OF CURB
FC - FACE OF CURB
EP - EDGE OF PAVEMENT

HORIZONTAL SCALE IN FEET
0 5 10 20

CALCULATED KLD
CHECKED AKA

INTERSECTION DETAIL
S.R. 60 AND S. WATER ST.

HOL-COUNTY TRAIL
PHASE 5C2

88
133

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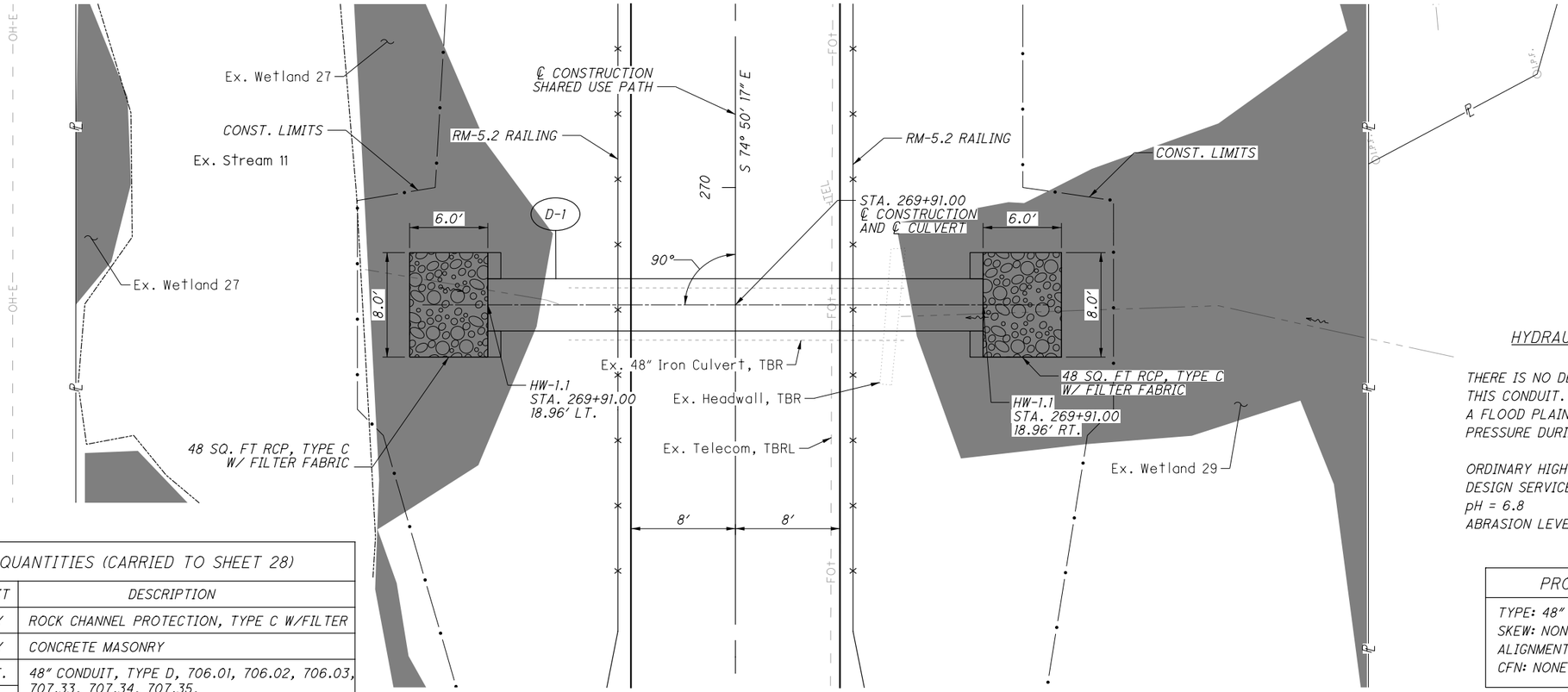


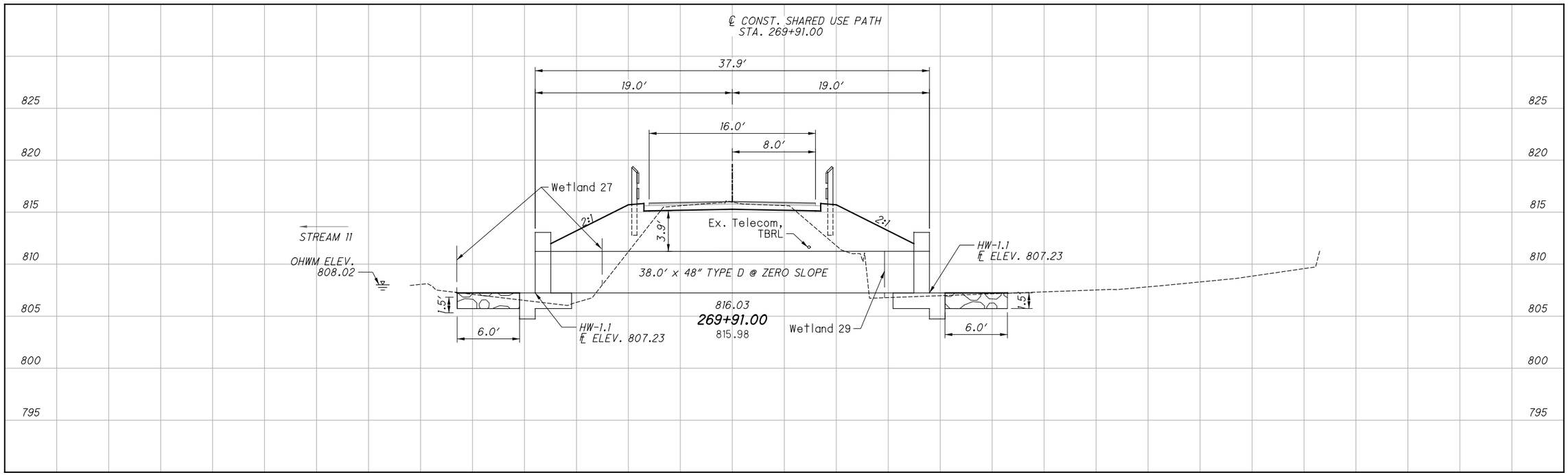
ESTIMATED QUANTITIES (CARRIED TO SHEET 28)			
ITEM	QUANTITY	UNIT	DESCRIPTION
601	5.3	CY	ROCK CHANNEL PROTECTION, TYPE C W/FILTER
602	17.6	CY	CONCRETE MASONRY
611	38	FT.	48" CONDUIT, TYPE D, 706.01, 706.02, 706.03, 707.33, 707.34, 707.35,

HYDRAULIC DATA

THERE IS NO DEFINED AREA FEEDING THIS CONDUIT. IT IS INSTALLED AS A FLOOD PLAIN CONDUIT TO RELEASE PRESSURE DURING FREQUENT FLOODING.

ORDINARY HIGH WATER MARK: 811.69
DESIGN SERVICE LIFE: 75 YRS
pH = 6.8
ABRASION LEVEL: 1

PROPOSED STRUCTURE
TYPE: 48" CONDUIT, TYPE D
SKEW: NONE
ALIGNMENT: TANGENT
CFN: NONE

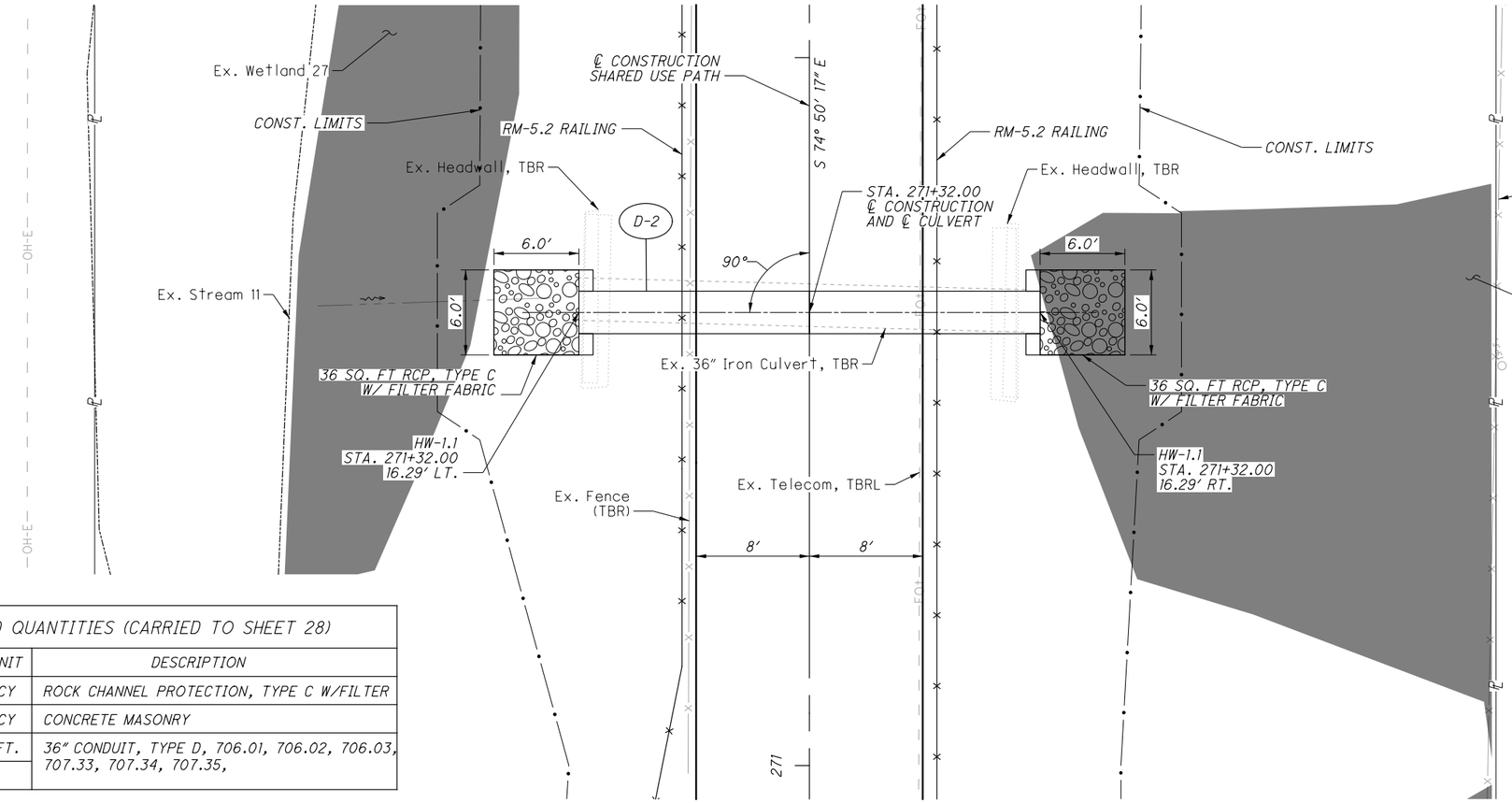


CULVERT DETAILS
STA. 269+91.00

HOL-COUNTY TRAIL
PHASE 5C2

HORIZONTAL SCALE IN FEET
0 5 10

CALCULATED MS
CHECKED TML



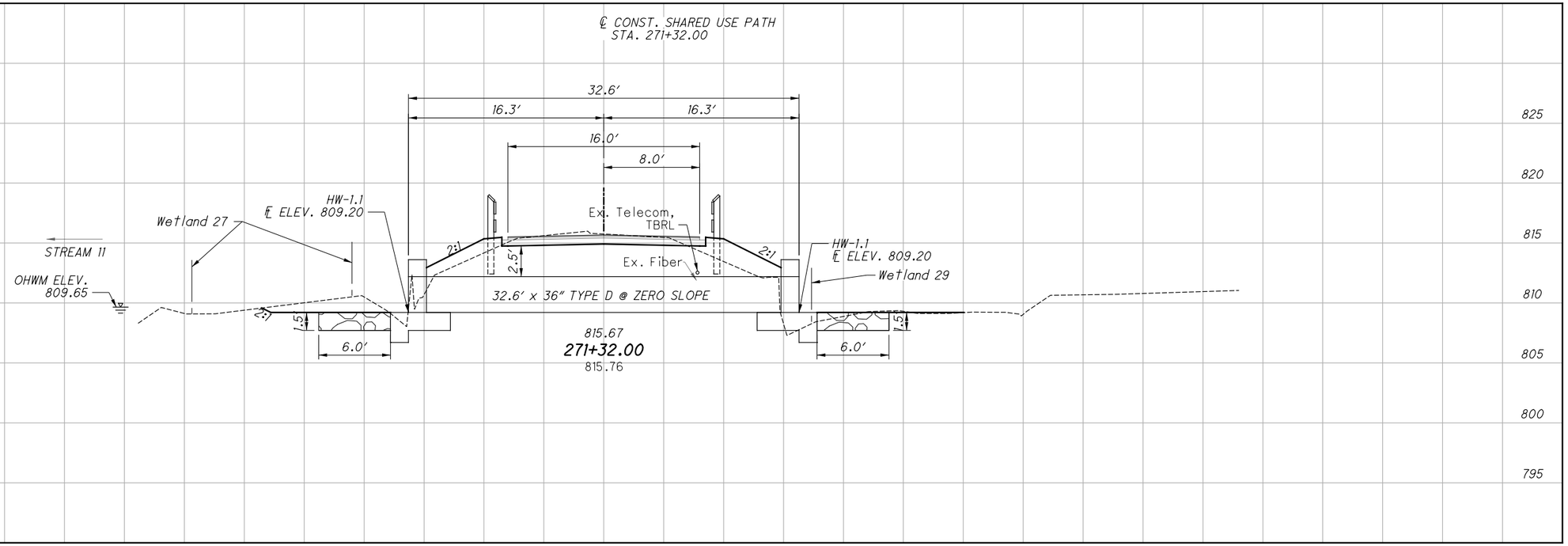
ESTIMATED QUANTITIES (CARRIED TO SHEET 28)			
ITEM	QUANTITY	UNIT	DESCRIPTION
601	4.0	CY	ROCK CHANNEL PROTECTION, TYPE C W/FILTER
602	14.4	CY	CONCRETE MASONRY
611	33	FT.	36" CONDUIT, TYPE D, 706.01, 706.02, 706.03, 707.33, 707.34, 707.35,

HYDRAULIC DATA

THERE IS NO DEFINED AREA FEEDING THIS CONDUIT. IT IS INSTALLED AS A FLOOD PLAIN CONDUIT TO RELEASE PRESSURE DURING FREQUENT FLOODING.

ORDINARY HIGH WATER MARK: 811.69
DESIGN SERVICE LIFE: 75 YRS
pH = 6.8
ABRASION LEVEL: 1

PROPOSED STRUCTURE
TYPE: 36" CONDUIT, TYPE D
SKEW: NONE
ALIGNMENT: TANGENT
CFN: NONE



CULVERT DETAILS
STA. 271+32.00

HOL-COUNTY TRAIL
PHASE 5C2

HORIZONTAL SCALE IN FEET
0 5 10

CALCULATED MS
CHECKED TML

90
133

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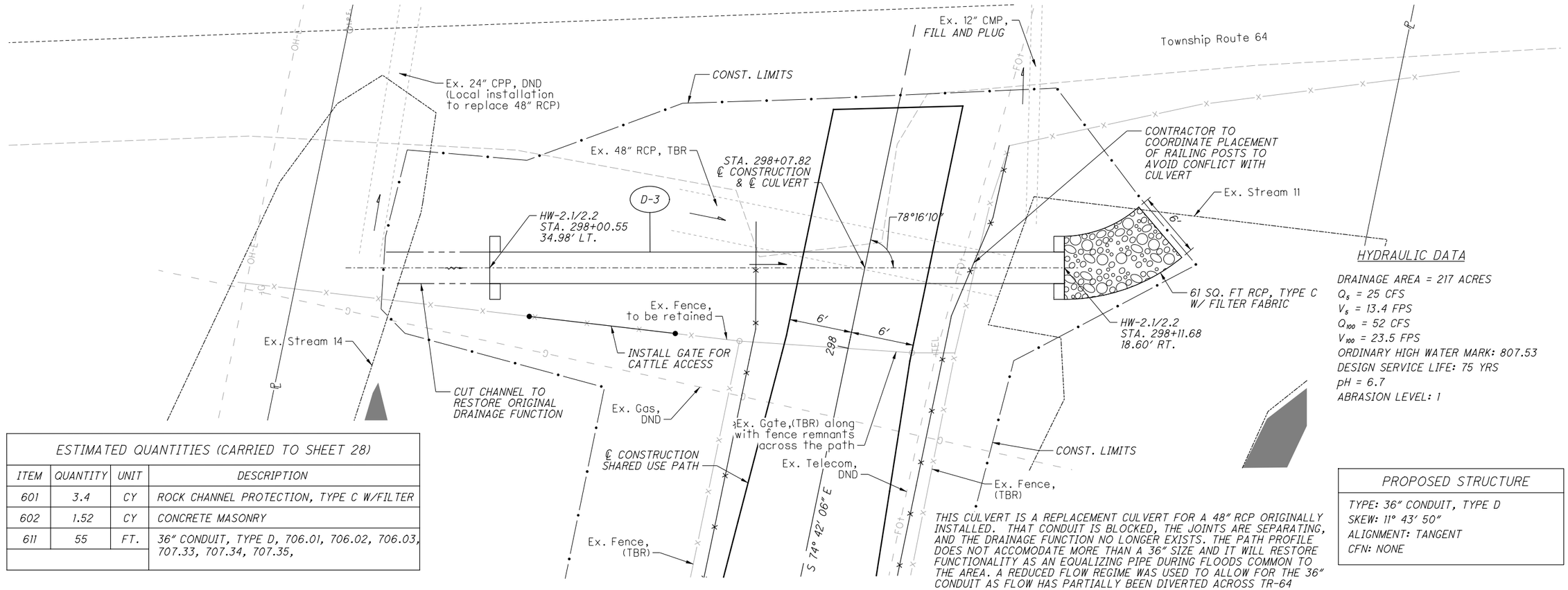
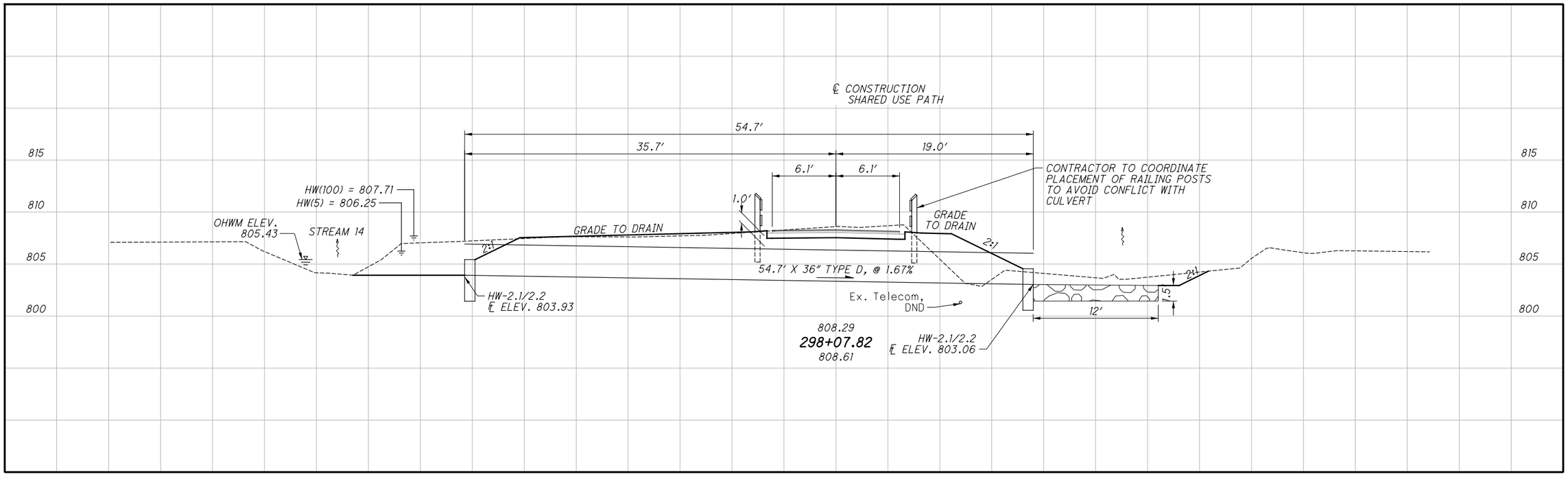


ESTIMATED QUANTITIES (CARRIED TO SHEET 28)			
ITEM	QUANTITY	UNIT	DESCRIPTION
601	3.4	CY	ROCK CHANNEL PROTECTION, TYPE C W/FILTER
602	1.52	CY	CONCRETE MASONRY
611	55	FT.	36" CONDUIT, TYPE D, 706.01, 706.02, 706.03, 707.33, 707.34, 707.35,

PROPOSED STRUCTURE
TYPE: 36" CONDUIT, TYPE D
SKEW: 11° 43' 50"
ALIGNMENT: TANGENT
CFN: NONE

THIS CULVERT IS A REPLACEMENT CULVERT FOR A 48" RCP ORIGINALLY INSTALLED. THAT CONDUIT IS BLOCKED, THE JOINTS ARE SEPARATING, AND THE DRAINAGE FUNCTION NO LONGER EXISTS. THE PATH PROFILE DOES NOT ACCOMODATE MORE THAN A 36" SIZE AND IT WILL RESTORE FUNCTIONALITY AS AN EQUALIZING PIPE DURING FLOODS COMMON TO THE AREA. A REDUCED FLOW REGIME WAS USED TO ALLOW FOR THE 36" CONDUIT AS FLOW HAS PARTIALLY BEEN DIVERTED ACROSS TR-64

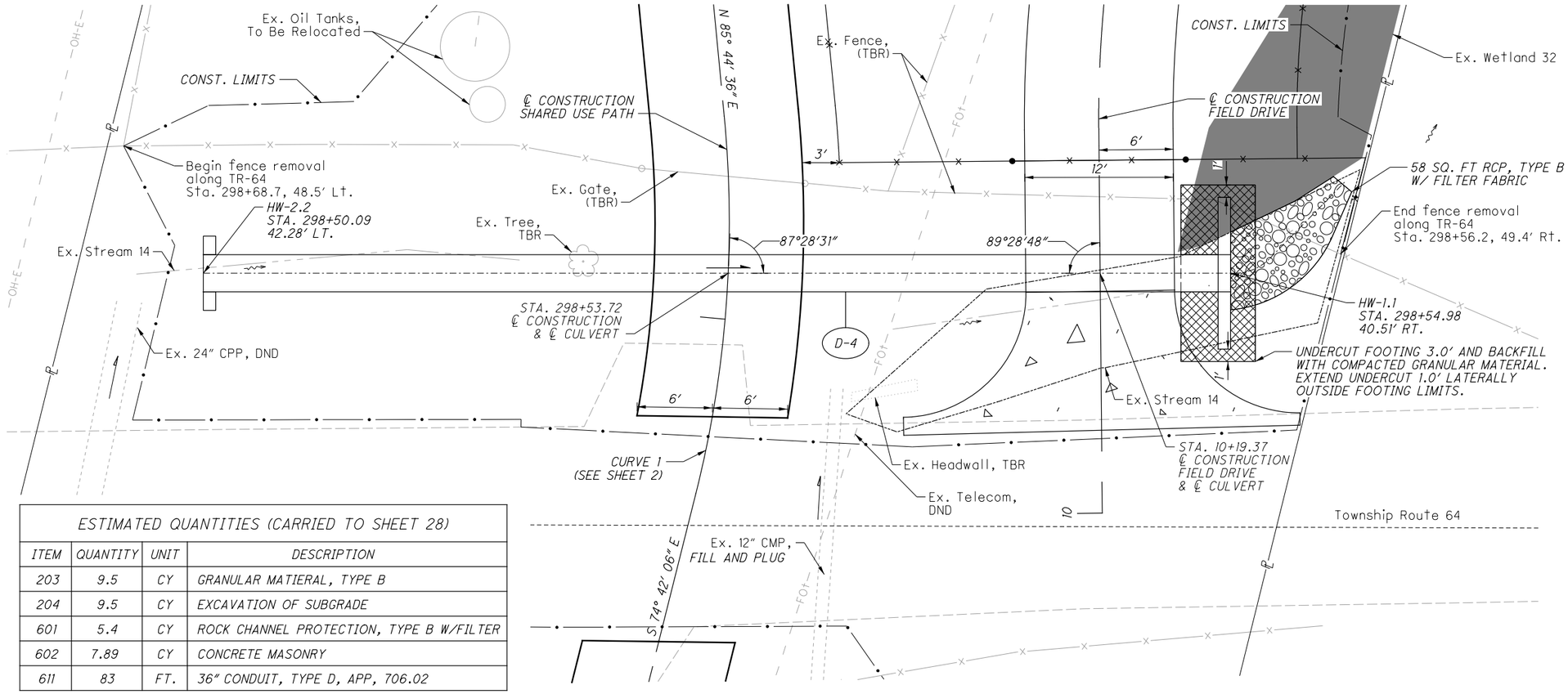


CALCULATED MS CHECKED TML

HORIZONTAL SCALE IN FEET 0 5 10

CULVERT DETAILS STA. 298+07.82

HOL-COUNTY TRAIL PHASE 5C2

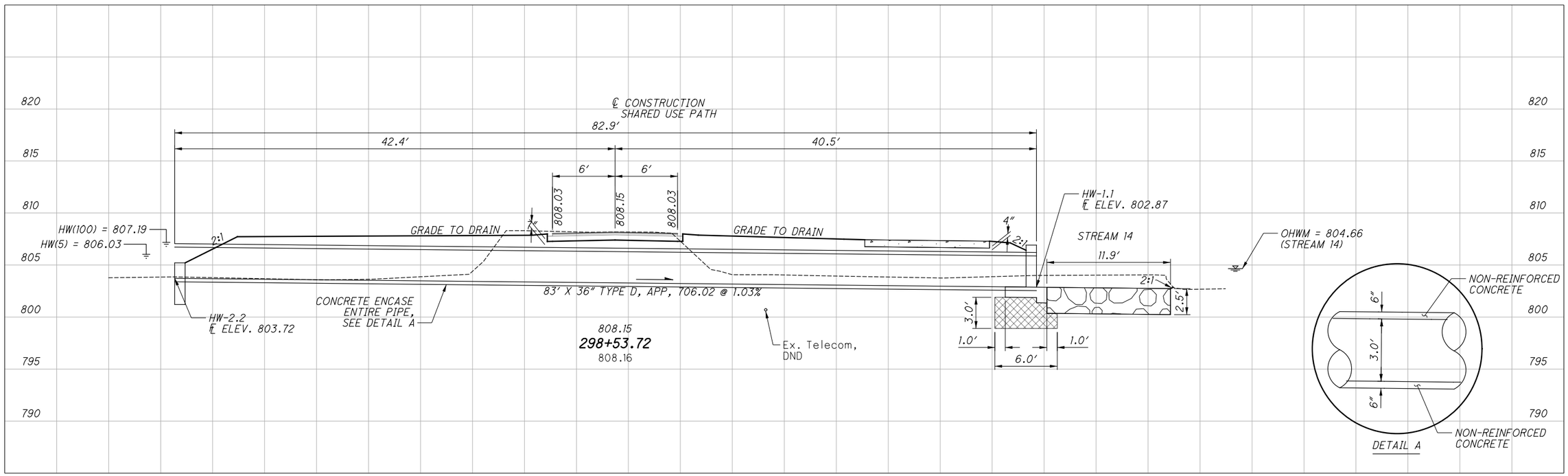


ESTIMATED QUANTITIES (CARRIED TO SHEET 28)			
ITEM	QUANTITY	UNIT	DESCRIPTION
203	9.5	CY	GRANULAR MATIERAL, TYPE B
204	9.5	CY	EXCAVATION OF SUBGRADE
601	5.4	CY	ROCK CHANNEL PROTECTION, TYPE B W/FILTER
602	7.89	CY	CONCRETE MASONRY
611	83	FT.	36" CONDUIT, TYPE D, APP, 706.02

HYDRAULIC DATA

DRAINAGE AREA = 71 ACRES
Q_s = 29.9 CFS
V_s = 9.8 FPS
Q_{100} = 51.3 CFS
V_{100} = 11.2 FPS
ORDINARY HIGH WATER MARK: 804.66
DESIGN SERVICE LIFE: 75 YRS
pH = 6.7
ABRASION LEVEL: 1

PROPOSED STRUCTURE
TYPE: 36" CONDUIT, TYPE D, APP
SKEW: 2° 35' 52"
ALIGNMENT: CURVE
CFN: NONE

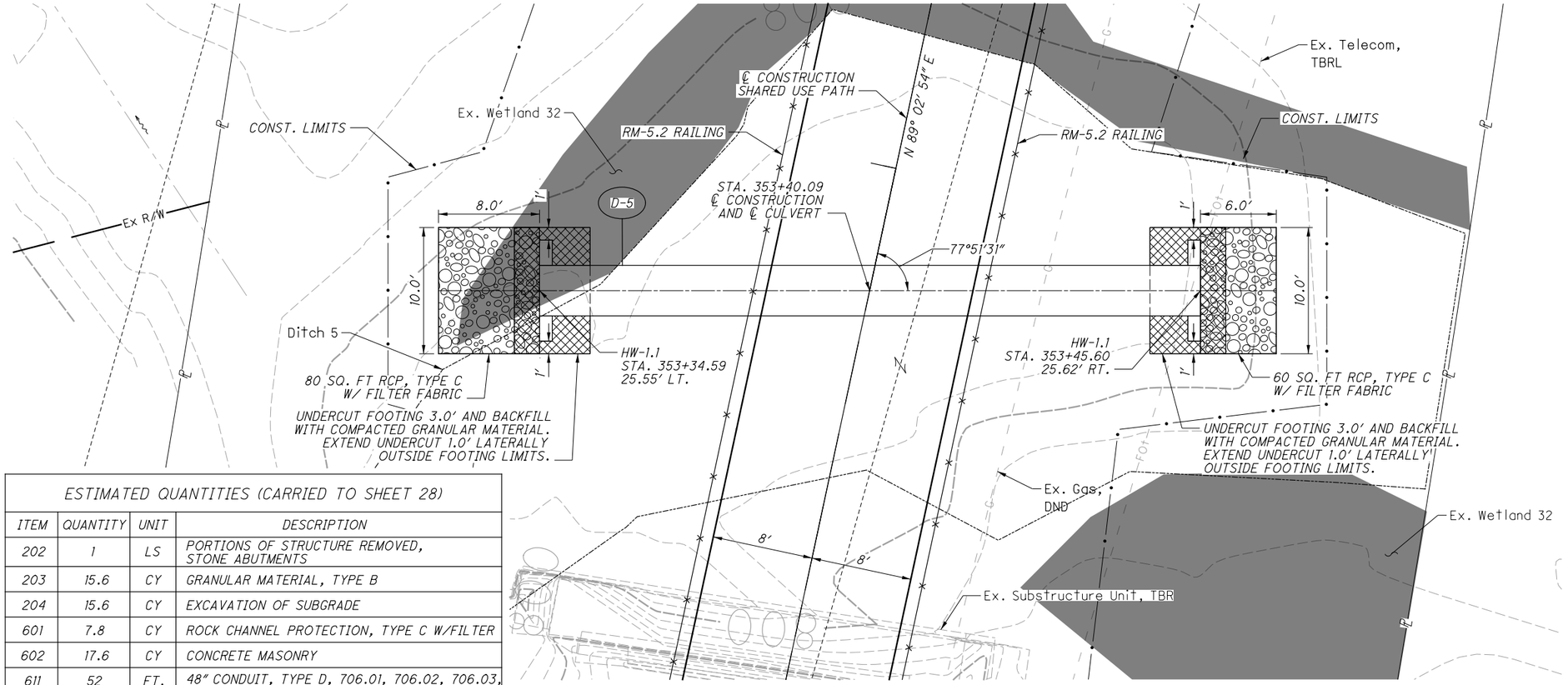


CULVERT DETAILS
STA. 298+53.72

HOL-COUNTY TRAIL
PHASE 5C2

HORIZONTAL
SCALE IN FEET
0 5 10

CALCULATED MS
CHECKED TML



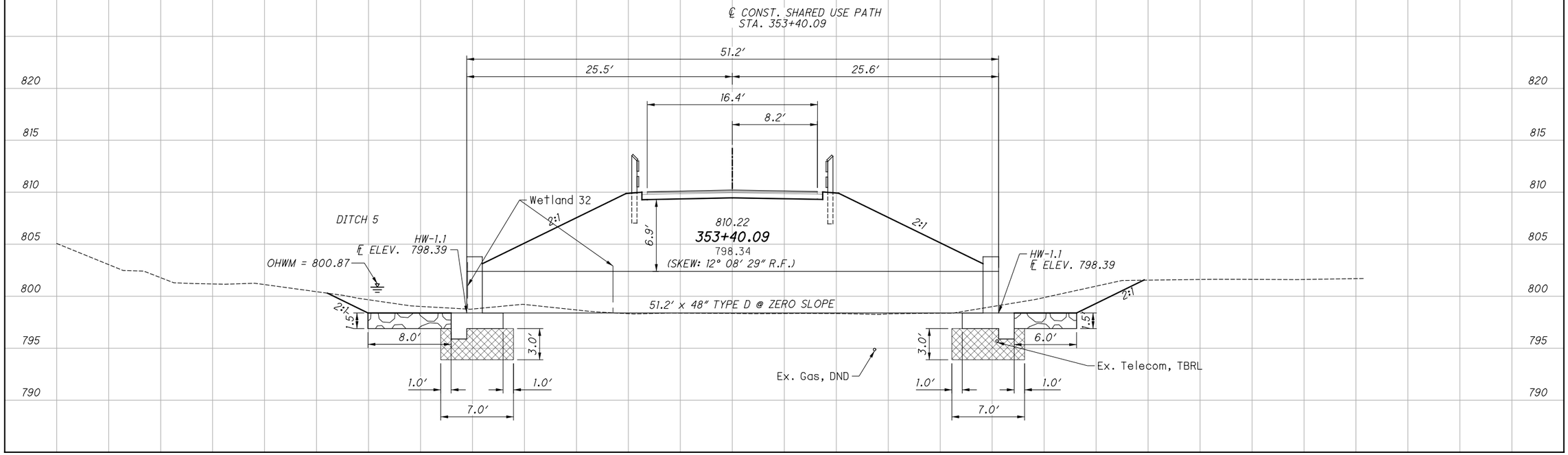
ESTIMATED QUANTITIES (CARRIED TO SHEET 28)			
ITEM	QUANTITY	UNIT	DESCRIPTION
202	1	LS	PORTIONS OF STRUCTURE REMOVED, STONE ABUTMENTS
203	15.6	CY	GRANULAR MATERIAL, TYPE B
204	15.6	CY	EXCAVATION OF SUBGRADE
601	7.8	CY	ROCK CHANNEL PROTECTION, TYPE C W/FILTER
602	17.6	CY	CONCRETE MASONRY
611	52	FT.	48" CONDUIT, TYPE D, 706.01, 706.02, 706.03, 707.33, 707.34, 707.35,

HYDRAULIC DATA

THERE IS NO DEFINED AREA FEEDING THIS CONDUIT. IT IS INSTALLED AS A FLOOD PLAIN CONDUIT TO RELEASE PRESSURE DURING FREQUENT FLOODING.

ORDINARY HIGH WATER MARK: 800.67
DESIGN SERVICE LIFE: 75 YRS
pH = 6.8
ABRASION LEVEL: 1

PROPOSED STRUCTURE
TYPE: 48" CONDUIT, TYPE D
SKEW: 12°08'29" R.F.
ALIGNMENT: TANGENT
CFN: NONE



CULVERT DETAILS
STA. 353+40.09

HOL-COUNTY TRAIL
PHASE 5C2

HORIZONTAL SCALE IN FEET
0 5 10

CALCULATED MS
CHECKED TML

93
133

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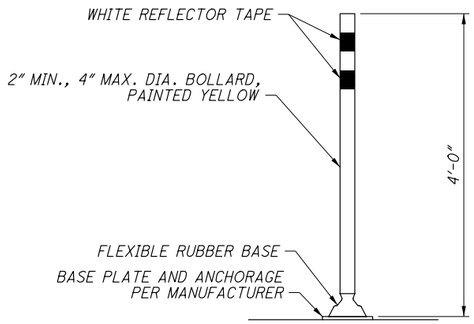
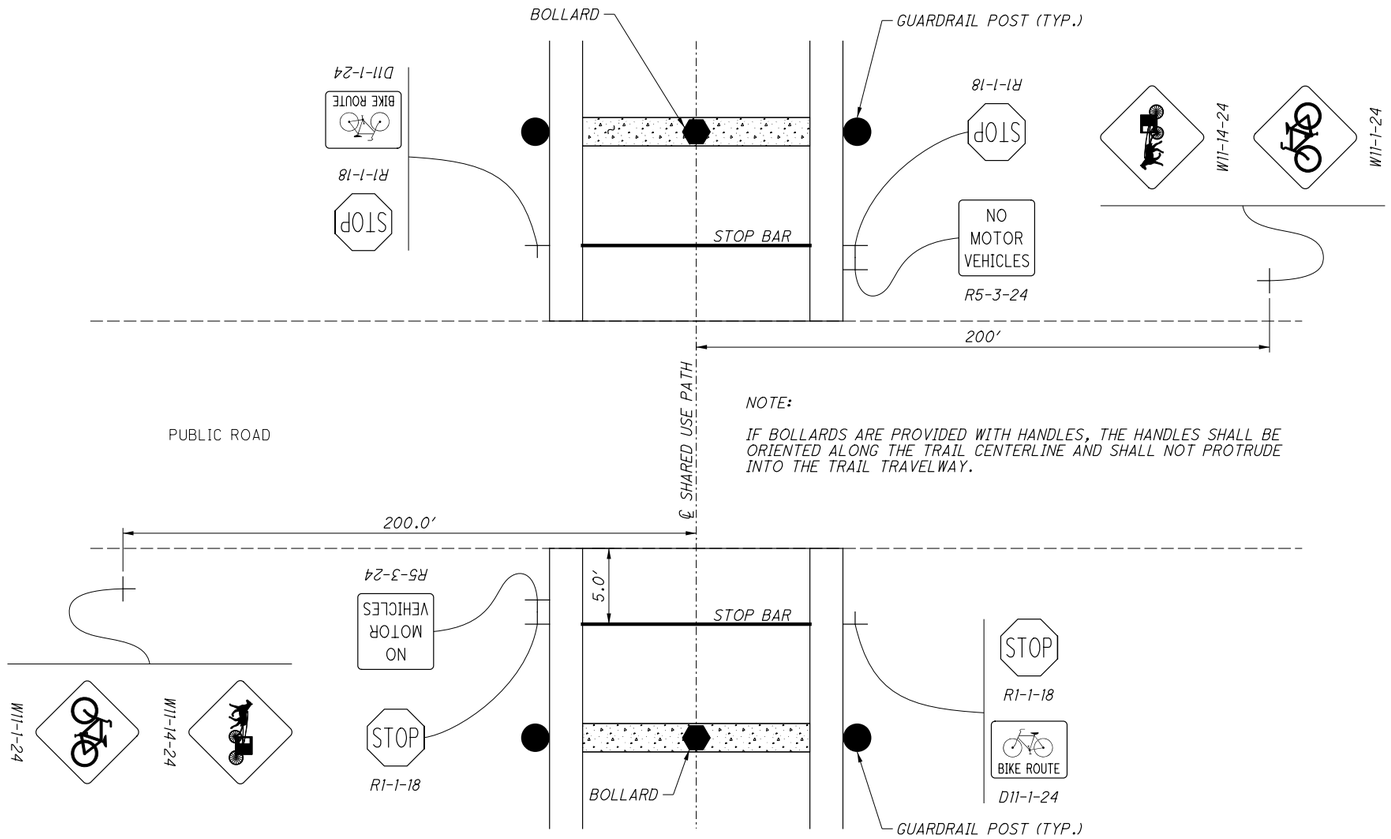


BOLLARD DETAIL

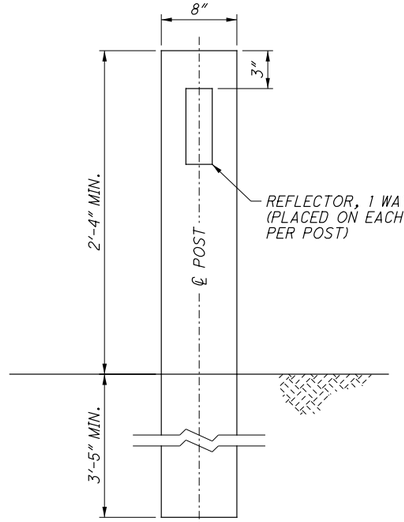
NOTES:

1. PROVIDE FLEXIBLE BOLLARD AS SHOWN. BOLLARD SHALL BE CAPABLE OF WITHSTANDING IMPACT OF UP TO 15 MPH BY A STANDARD VEHICLE AND RETURNING TO AN UPRIGHT POSITION.
2. ANCHOR BOLLARD TO ASPHALT PER MANUFACTURER'S RECOMMENDATIONS.
3. BOLLARD SHALL BE REMOVABLE FROM THE BASE USING A MANUFACTURER SUPPLIED TOOL. PROVIDE THE TOOL TO HOLMES COUNTY PARK DISTRICT UPON COMPLETION OF THE WORK.
4. BOLLARD LOCATIONS (4 EACH TOTAL):
   SR-520 TRAIL ENTRANCE
   TWP. RD. 64, EACH SIDE
   SR-64 TRAIL ENTRANCE
5. PAYMENT FOR INSTALLATION OF THE BOLLARDS SHALL BE MADE AT THE EACH BOLLARD UNIT QUANTITY FOR ITEM 690 SPECIAL - BOLLARDS, INCLUDING ALL LABOR, EQUIPMENT, AND MATERIALS TO COMPLETE THE WORK.

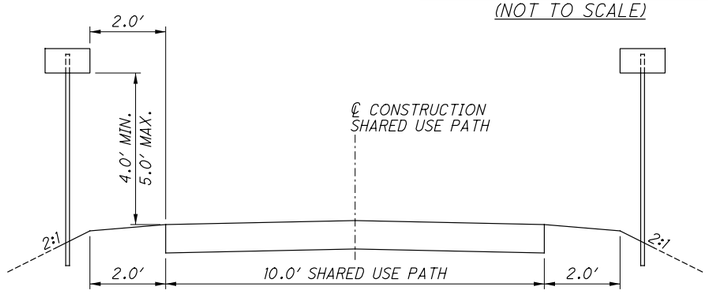


NOTE:

IF BOLLARDS ARE PROVIDED WITH HANDLES, THE HANDLES SHALL BE ORIENTED ALONG THE TRAIL CENTERLINE AND SHALL NOT PROTRUDE INTO THE TRAIL TRAVELWAY.



GUARDRAIL POST, AS PER PLAN
(NOT TO SCALE)



TYPICAL SIGN PLACEMENT

CALCULATED MS
CHECKED TML

MISCELLANEOUS DETAILS

HOL-COUNTY TRAIL
PHASE 5C2

94
133

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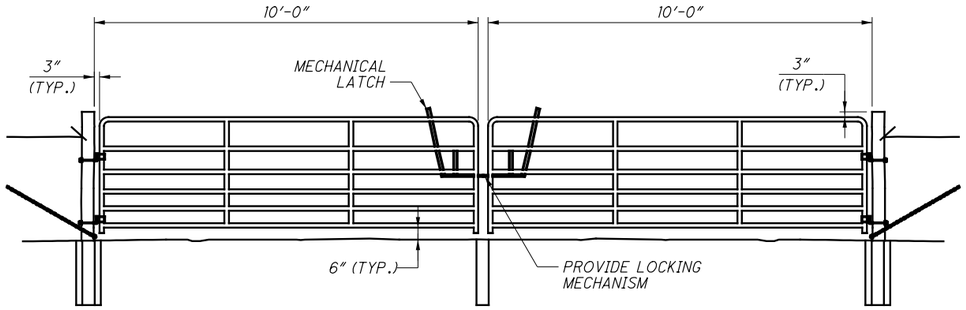
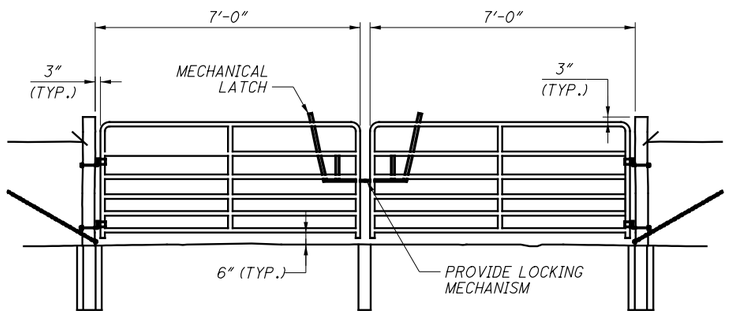


10 FT METAL SWING GATE DETAIL

STA. 280+00.00 TO STA. 280+22.56
STA. 280+06.94 TO STA. 280+28.52
STA. 307+00.00 TO STA. 307+21.90
STA. 307+04.25 TO STA. 307+25.07
STA. 314+94.50 TO STA. 315+14.90 (LT.)
STA. 314+94.50 TO STA. 315+14.90 (RT.)



7 FT METAL SWING GATE DETAIL

℄ PROP. FIELD DRIVE OFF TR-64 STA. 10+23.49

NOTES:

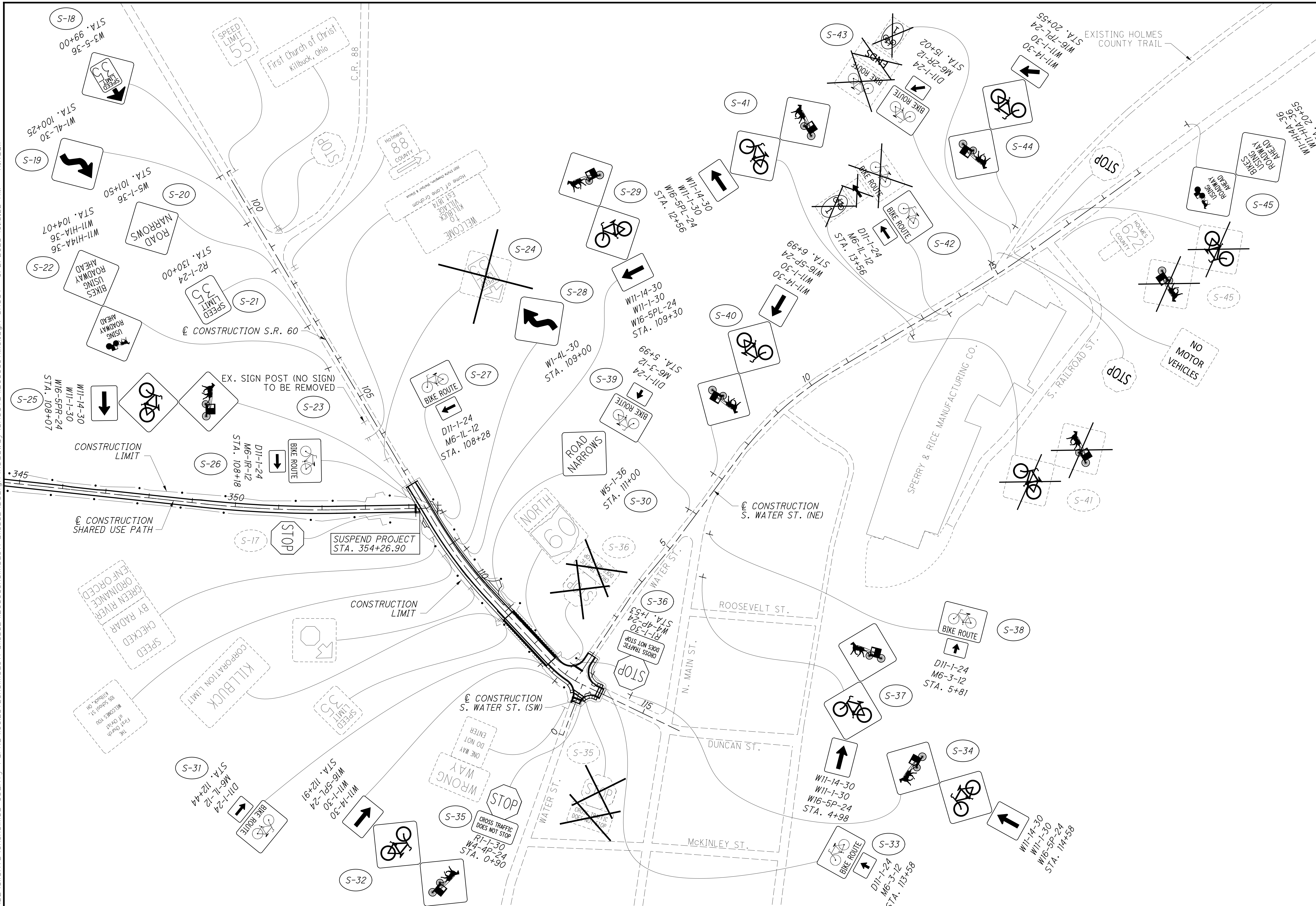
1. SEE USFS STD 942-20-01 FOR ADDITIONAL METAL SWING GATE DETAILS.

CALCULATED JYM
CHECKED TML

GATE SYSTEM DETAILS

HOL-COUNTY TRAIL
PHASE 5C2

95
133



N
HORIZONTAL SCALE IN FEET
0 50 100 200
CALCULATED MS
CHECKED TML

TRAFFIC CONTROL

HOL-COUNTY TRAIL PHASE 5C2

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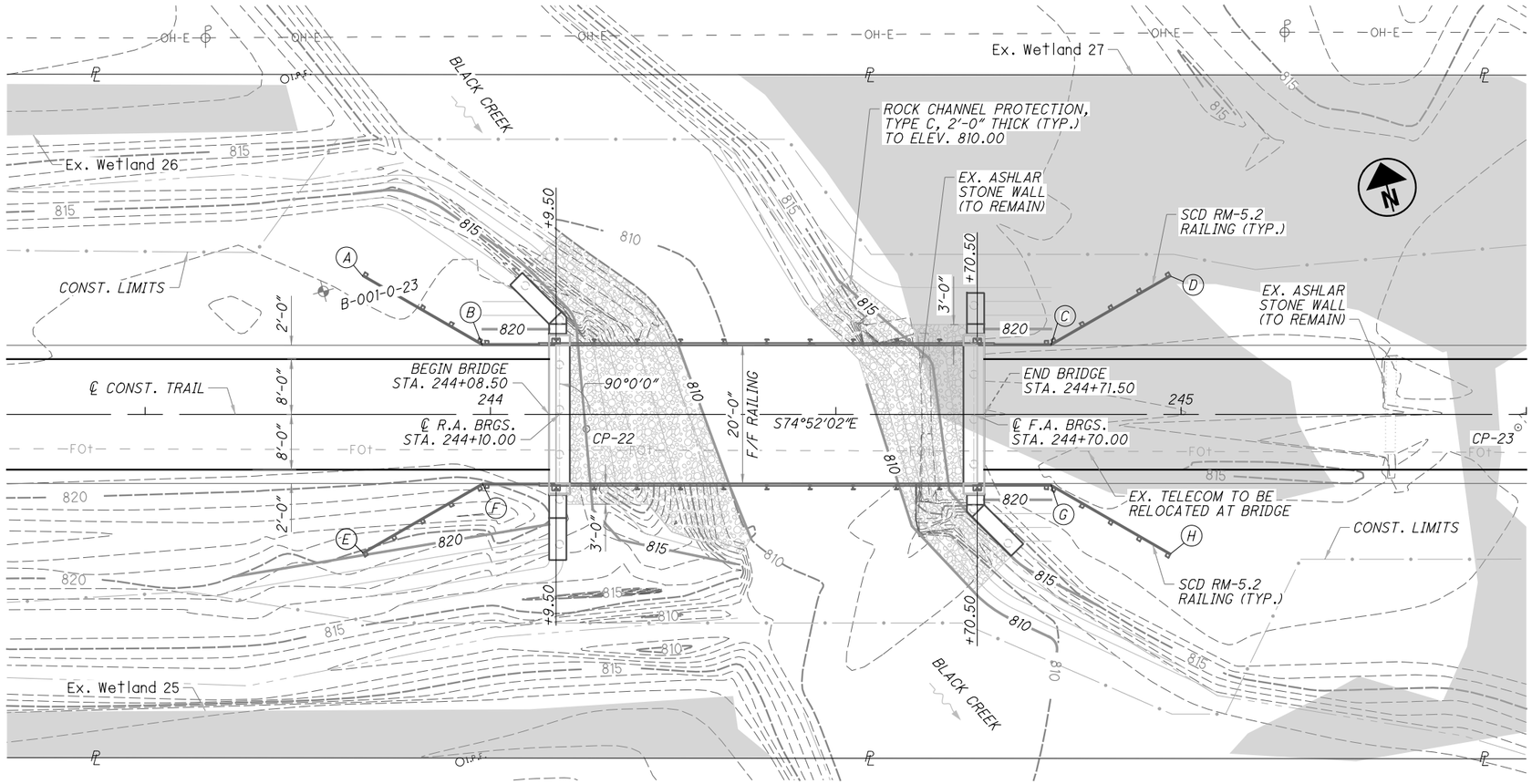
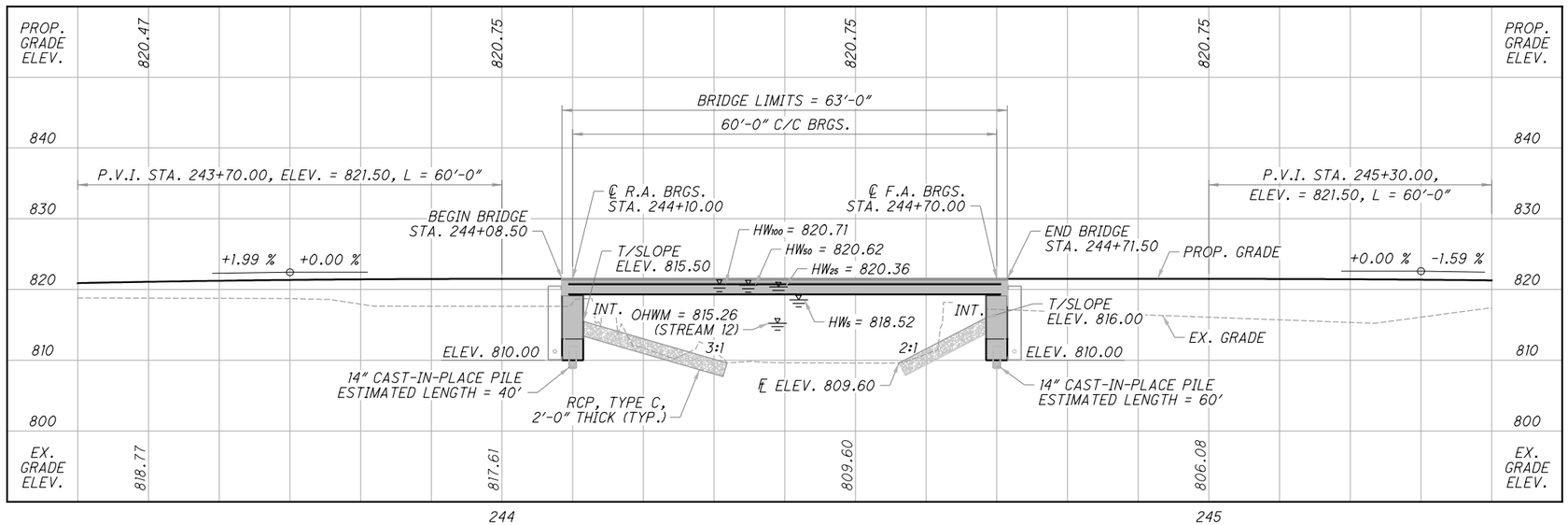


PLAN



PROFILE (ALONG ℄ CONST. TRAIL)

BENCHMARK DATA

CP-22	STA. 244+13.86,	ELEV. 818.90,	OFFSET 2.1' RT.
CP-23	STA. 244+48.80,	ELEV. 817.32,	OFFSET 1.9' RT.

FOR ADDITIONAL BENCHMARK INFORMATION. SEE ROADWAY PLAN SHEET 3/133

NOTES

EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

LEGEND

- BORING LOCATION
- ROCK CHANNEL PROTECTION, TYPE C, 2'-0" THICK

RM-5.2 RAILING STATIONS

(A)	STA. 243+81.51	OFFSET 20.0' LT.
(B)	STA. 243+98.83	OFFSET 10.0' LT.
(C)	STA. 244+81.17	OFFSET 10.0' LT.
(D)	STA. 244+98.49	OFFSET 20.0' LT.
(E)	STA. 243+81.51	OFFSET 20.0' RT.
(F)	STA. 243+98.83	OFFSET 10.0' RT.
(G)	STA. 244+81.17	OFFSET 10.0' RT
(H)	STA. 244+98.49	OFFSET 20.0' RT.

HYDRAULIC DATA

DRAINAGE AREA = 33.1 SQ. MILES

Q (5) =	2690 CFS	V (5) =	0.84 FT/S	HYDRAULIC DESIGN
Q (25) =	4780 CFS	V (25) =	1.66 FT/S	SCOUR DESIGN
Q (50) =	5790 CFS	V (50) =	1.26 FT/S	SCOUR CHECK
Q (100) =	6860 CFS	V (100) =	1.43 FT/S	BRIDGE CHECK

STRUCTURE CLEARS THE 5 YEAR DESIGN HW BY 0.79 FEET.

EXISTING STRUCTURE

TYPE: TWO ASHLAR MASONRY ABUTMENTS (NO SUPERSTRUCTURE)

DISPOSITION: TO REMAIN AS CHANNEL PROTECTION

PROPOSED STRUCTURE

TYPE: SINGLE SPAN COMPOSITE PRESTRESSED CONCRETE BOX BEAM ON INTEGRAL ABUTMENTS ON PILES

SPANS: 60'-0" C/C BRG.

ROADWAY: 20'-0" F/F TST RAILING

LOADING: H15 TRUCK OR 90 PSF PEDESTRIAN LOADING

SKEW: NONE

CURRENT WEARING SURFACE: 1½" CONCRETE ASPHALT

FUTURE WEARING SURFACE: 0.03 KSF

APPROACH SLABS: NONE

ALIGNMENT: TANGENT

CROWN: 0.02 FT/FT

COORDINATES: LATITUDE 40°30'28"N
LONGITUDE 82°01'27"W

DESIGN AGENCY
ONE EASTON OVAL
SUITE 400
COLUMBUS, OH 43219
T 614-476-6000
F 614-476-6225
WOOLPERT
DESIGN | GEOSPATIAL | INFRASTRUCTURE

DESIGNED	DRAWN	REVIEWED	DATE
JYM	JYM	TML	06/2025
CHECKED	REVISED	STRUCTURE FILE NUMBER	
PES		00000	

HOLMES COUNTY
STA. 244+08.50
STA. 244+71.50

SITE PLAN
BRIDGE NO. 008
HOLMES COUNTY TRAIL OVER BLACK CREEK

HOL CO. TR. 5C2
PID No. 120806

1 / 12

97/133

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

DS-1-92	REVISED 7/15/2022
PSBD-1-25	REVISED 7/18/2025
TST-1-99	REVISED 1/15/2021

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO THE 9TH EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020 AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

OPERATIONAL IMPORTANCE:

A LOAD MODIFIER OF 1.0 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN LOADING:

DESIGN LOADING INCLUDES:
0.090 KSF PEDESTRIAN LIVE LOAD OR
NON-CONCURRENT H15-44 (TRUCK ONLY)
FUTURE WEARING SURFACE OF 0.03 KSF
1½" CONCRETE ASPHALT OVERLAY

DESIGN DATA:

CONCRETE CLASS QC2 - COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)
CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)
EPOXY COATED STEEL REINFORCEMENT - MINIMUM YIELD STRENGTH 60 KSI (DECK, DIAPHRAGM, ABUTMENT)

CONCRETE FOR PRESTRESSED BEAMS:
COMPRESSIVE STRENGTH (FINAL) - 7.0 KSI
COMPRESSIVE STRENGTH (RELEASE) - 5.0 KSI
PRESTRESSING STRAND:
AREA = 0.167 SQ. IN.
ULTIMATE STRENGTH = 270 KSI
INITIAL STRESS = 202.5 KSI (LOW RELAXATION STRANDS)

DECK PROTECTION METHOD:

EPOXY COATED REINFORCING STEEL
2½" CONCRETE COVER
STEEL DRIP STRIP

MONOLITHIC WEARING SURFACE:

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1 INCH THICK.

EXISTING STRUCTURE VERIFICATION:

DETAILS AND DIMENSIONS ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C&MS SECTIONS 102.05 AND 105.02.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

ABUTMENT DIAPHRAGM CONCRETE:

DO NOT PLACE THE ABUTMENT CONCRETE ABOVE THE BRIDGE SEAT CONSTRUCTION UNTIL THE PRESTRESSED BOX BEAMS HAVE BEEN ERECTED.

BEAM CAMBER:

THE BEAM SEAT ELEVATIONS ASSUME ESTIMATED CAMBER AT DAY 30. THE ESTIMATED QUANTITY OF DECK CONCRETE IS MEASURED ACCORDING TO C&MS 511. IN ADDITION TO THE DESIGN SLAB THICKNESS, THE QUANTITY INCLUDES A VARIABLE HAUNCH THICKNESS THAT PROVIDES AN ALLOWANCE FOR BEAM CAMBER.

DEMOLITION DEBRIS:

THE CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID AND/OR LIMIT DEMOLITION DEBRIS FROM ENTERING THE STREAM. ANY MATERIAL THAT DOES FALL INTO THE STREAM SHALL BE REMOVED AS SOON AS POSSIBLE.

PILE DESIGN LOADS:

THE ULTIMATE BEARING VALUE IS 175 KIPS PER PILE FOR THE REAR ABUTMENT PILES. THE ULTIMATE BEARING VALUE IS 175 KIPS PER PILE FOR THE FORWARD ABUTMENT PILES.

ABUTMENT PILES:

14" CLOSED-END, CIP PILES 45 FEET LONG, ORDER LENGTH (REAR ABUTMENT)
14" CLOSED-END, CIP PILES 65 FEET LONG, ORDER LENGTH (FORWARD ABUTMENT)

ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE):

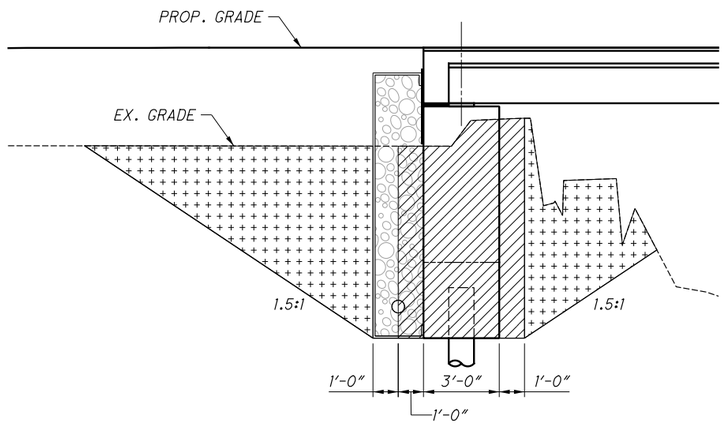
SEAL ALL CONCRETE SURFACES INCLUDING ABUTMENTS, WINGWALLS, THE OUTSIDE FASCIAS OF THE DECK AND EXTERIOR BEAMS, AND THE COMPLETE UNDERSIDE OF THE EXTERIOR BEAMS USING EPOXY-URETHANE SEALER. THE FINAL COLOR SHALL BE FEDERAL COLOR STANDARD NO. 17778, PER THE CMS.

ITEM 517 - RAILING (TWIN STEEL TUBE), AS PER PLAN:

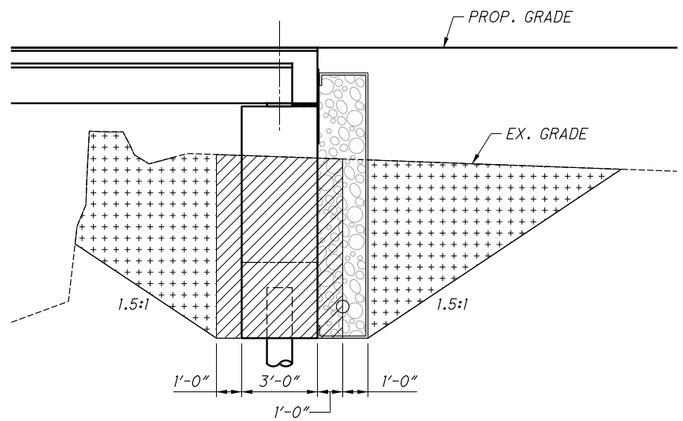
THE TST-1-99 RAILING SHALL BE MODIFIED WITH AN EXTENDED POST AND ADDITIONAL STEEL TUBE SIDE RAIL TO PROVIDE A MINIMUM 4-FT HEIGHT FROM TOP OF RAIL TO TOP OF DECK. PAYMENT FOR THIS ITEM 517 - RAILING (TWIN STEEL STUBE), AS PER PLAN SHALL INCLUDE STEEL POSTS, STEEL TUBING SIDE RAILS, AND ALL CONNECTION ELEMENTS INCLUDING BOLTS, NUTS, AND WASHERS.

ABBREVIATIONS:

ABUT.	ABUTMENT
BRGS.	BEARINGS
C/C	CENTER-TO-CENTER
℄	CENTERLINE
CONST.	CONSTRUCTION
DIA.	DIAMETER
ELEV.	ELEVATION
EX.	EXISTING
F.A.	FORWARD ABUTMENT
F/F	FACE-TO-FACE
NPCPP	NON-PERFORATED CORRUGATED PLASTIC PIPE
PCPP	PERFORATED CORRUGATED PLASTIC PIPE
PROP.	PROPOSED
R.A.	REAR ABUTMENT
RCP	ROCK CHANNEL PROTECTION
T/	TOP OF
TYP.	TYPICAL
W/	WITH



REAR ABUTMENT



FORWARD ABUTMENT

EXCAVATION LIMITS

LIMITS OF UNCLASSIFIED EXCAVATION

ITEM 203 - EXCAVATION

ITEM 518 - POROUS BACKFILL W/ GEOTEXTILE FABRIC

DESIGN AGENCY
ONE EASTON OVAL
SUITE 400
COLUMBUS, OH 43219
T 614-476-6000
F 614-476-6225
WOLPERT
DESIGN | GEOTECHNICAL | INFRASTRUCTURE

DESIGNED	DRAWN	REVIEWED	DATE
JYM	JYM	TML	06/2025
CHECKED	REVISED	STRUCTURE FILE NUMBER	
PES		00000	

STRUCTURE GENERAL NOTES
BRIDGE NO. 008
HOLMES COUNTY TRAIL OVER BLACK CREEK

HOL CO. TR. 5C2
PID No. 120806

BRIDGE B8 ESTIMATED QUANTITIES

CALC BY: JYM DATE: 6/12/2025
CHECK BY: SL DATE: 6/17/2025

ITEM	EXT	QUANTITY	UNIT	DESCRIPTION	SHEET
203	10000	253	CY	EXCAVATION	
203	20000	320	CY	EMBANKMENT	
503	11100	LS		COFFERDAMS AND EXCAVATION BRACING	
503	21100	122	CY	UNCLASSIFIED EXCAVATION	
505	11100	LS		PILE DRIVING EQUIPMENT MOBILIZATION	
507	00600	700	FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	
507	00650	770	FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	
509	10000	10995	LB	EPOXY COATED STEEL REINFORCEMENT	
511	31610	27	CY	CLASS QC2 CONCRETE, SUPERSTRUCTURE	
511	44110	55	CY	CLASS QC1 CONCRETE, ABUTMENT NOT INCLUDING FOOTING	
511	46510	28	CY	CLASS QC1 CONCRETE, FOOTING	
512	10100	126	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
515	12030	5	EA	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB17-48, 61'-0"	
516	13900	24	SF	2" PREFORMED EXPANSION JOINT FILLER	
516	14014	53	FT	INTEGRAL ABUTMENT EXPANSION JOINT SEAL	
516	31010	40	FT	2" DEEP JOINT SEALER	
516	43101	20	EA	ELASTOMERIC BEARING WITH INTERNAL LAMINATES ONLY (NEOPRENE), AS PER PLAN, 1.5" THICK	7/12
517	70001	132	FT	RAILING (TWIN STEEL TUBE), AS PER PLAN	2/12
518	21200	59	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	
SPECIAL	518E22300	149	FT	STEEL DRIP STRIP	
518	40000	81	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	
518	40010	70	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	
601	32200	90	CY	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	
856	10000	6	CY	BRIDGE DECK WATERPROOFING ASPHALT CONCRETE	

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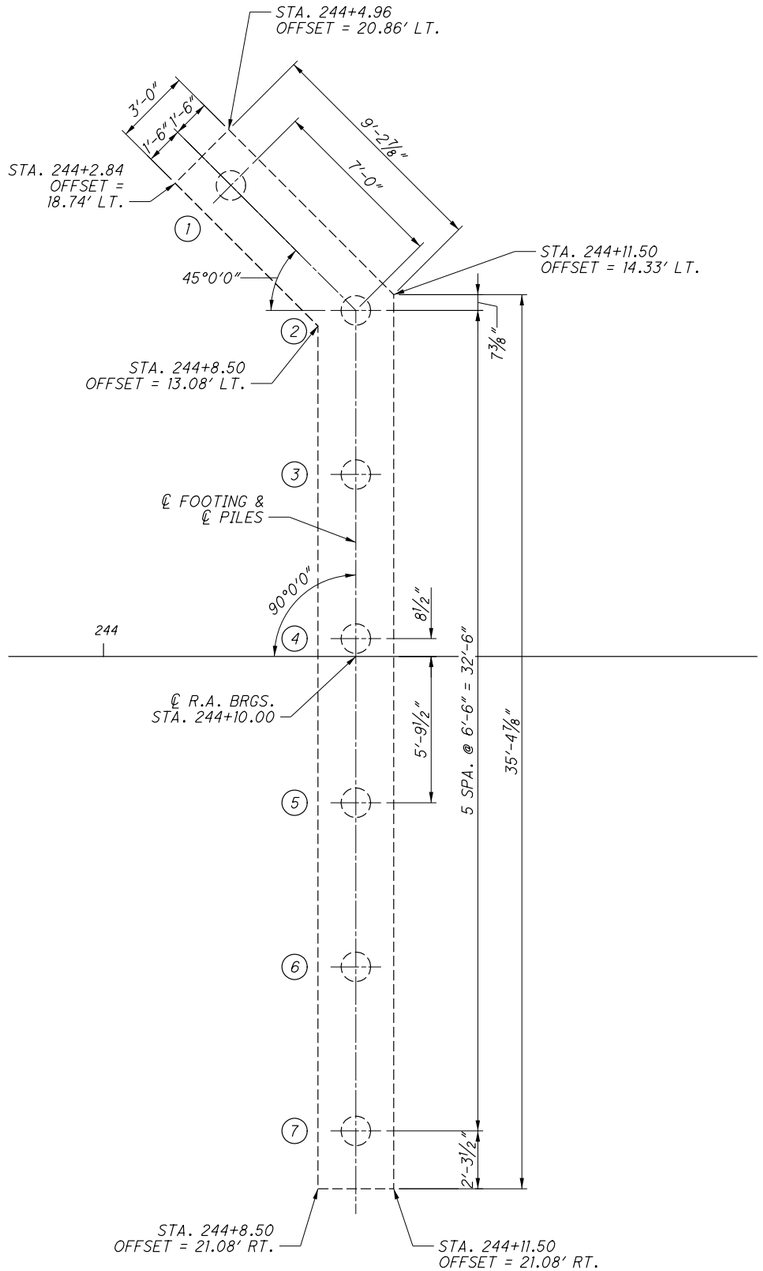
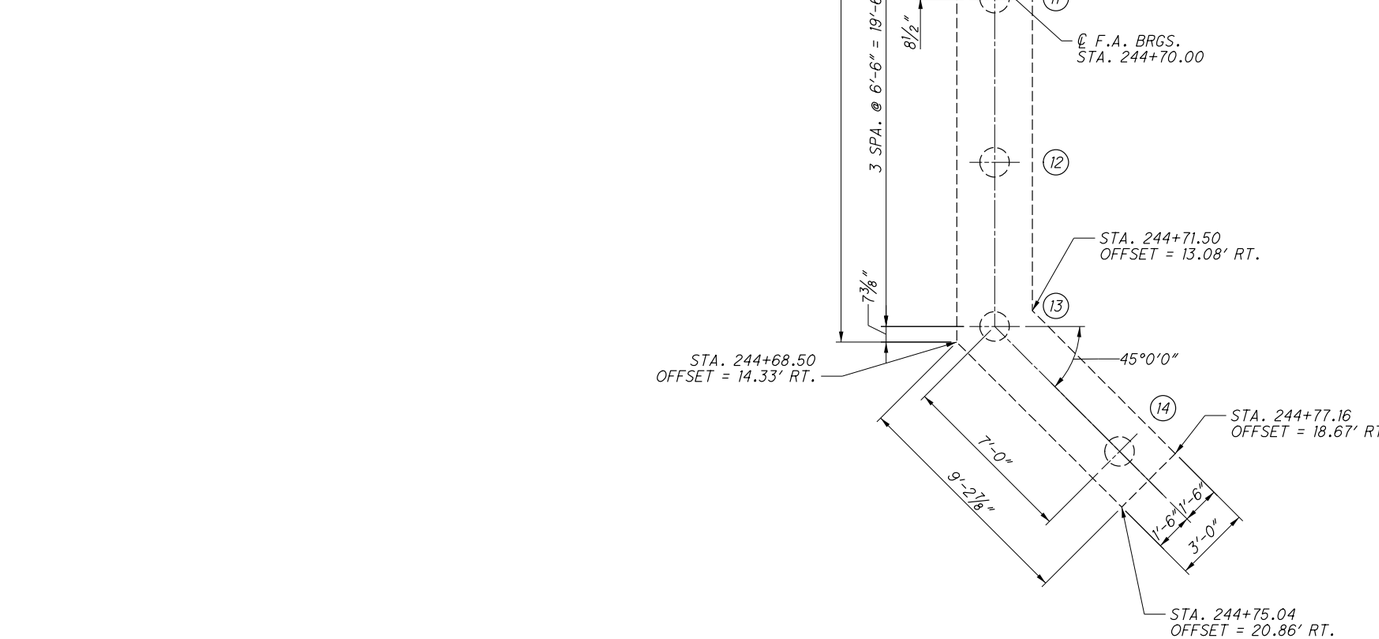
DESIGNED JYM | DRAWN JYM | REVIEWED TML | DATE 06/2025
CHECKED PES | REVISED | STRUCTURE FILE NUMBER 00000

ESTIMATED QUANTITIES
BRIDGE NO. 008
HOLMES COUNTY TRAIL OVER BLACK CREEK

HOL CO. TR. 5C2
PID No. 120806





LEGEND:

- 14" CIP PILE
- (#) PILE NUMBER

NOTES:

1. SEE SHEET 5/12 FOR REAR ABUTMENT PLAN AND ELEVATION.
2. SEE SHEET 6/12 FOR FORWARD ABUTMENT PLAN AND ELEVATION.
3. ESTIMATED PILE LENGTHS ARE AS FOLLOWS:
   REAR ABUTMENT = 40 FT
   FORWARD ABUTMENT = 60 FT

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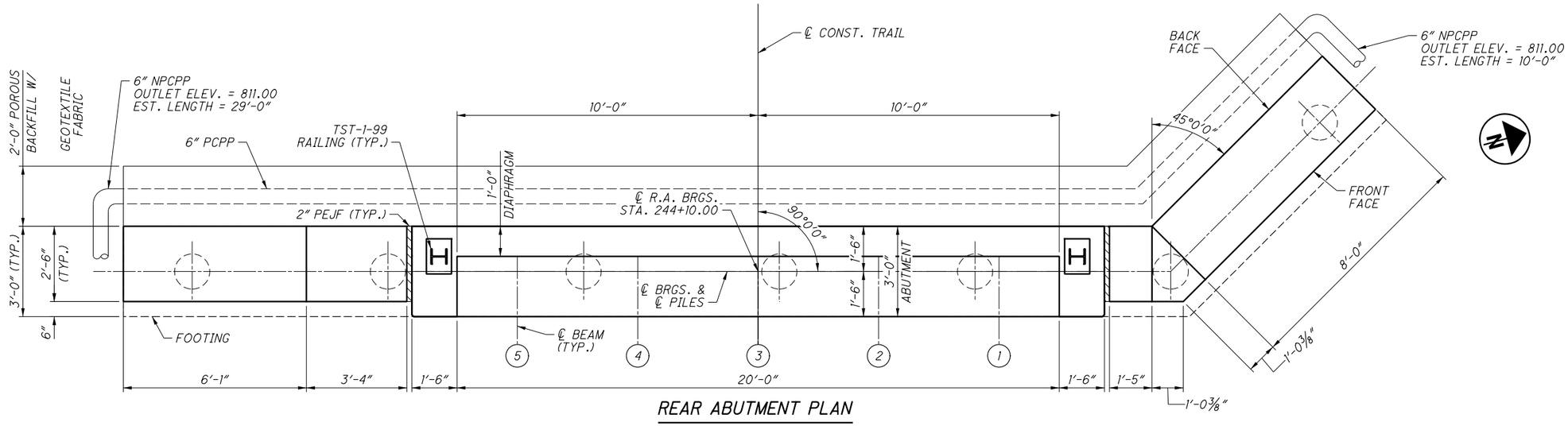
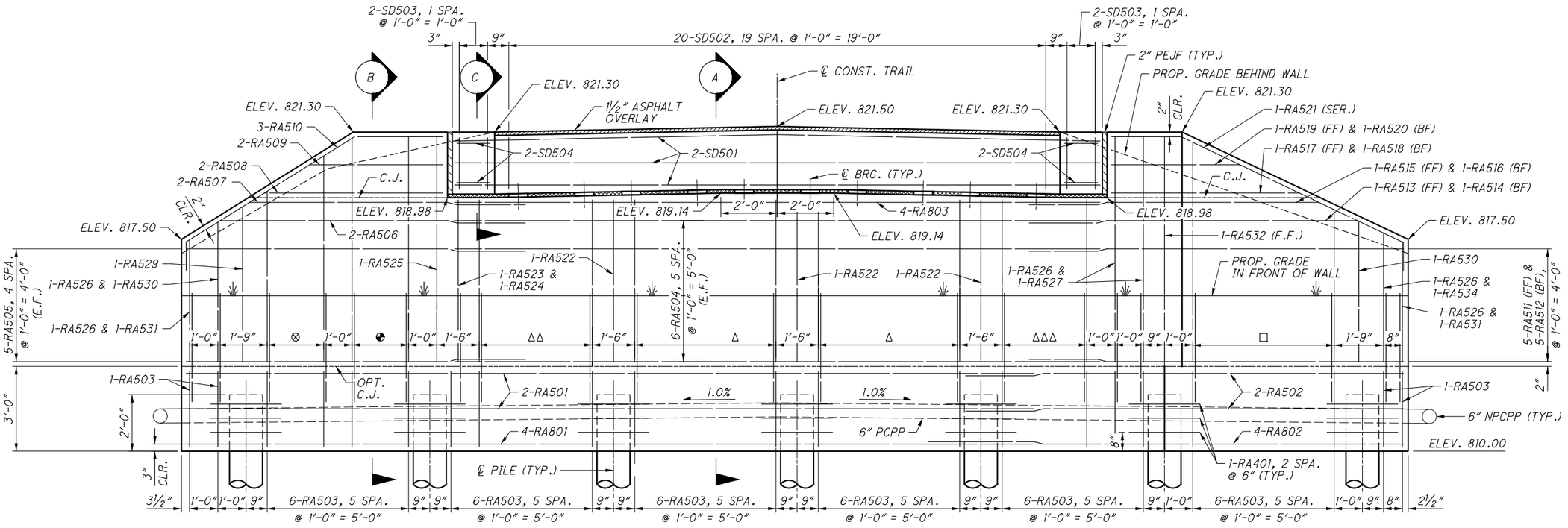
FOUNDATION PLAN

BRIDGE NO. 008
HOLMES COUNTY TRAIL OVER BLACK CREEK

HOL CO. TR. 5C2
PID No. 120806



REAR ABUTMENT PLAN



REAR ABUTMENT ELEVATION

LEGEND:

(#)	BEAM NUMBER	△	6 SETS OF 1-RA523 & 1-RA524, 5 SPA. @ 1′-0″ = 5′-0″	◕	3 SETS OF 1-RA526 & 1-RA527, 2 SPA. @ 1′-0″ = 2′-0″
E.F.	EACH FACE	△△	5 SETS OF 1-RA523 & 1-RA524, 4 SPA. @ 1′-0″ = 4′-0″	⊗	3 SETS OF 1-RA526 & 1-RA528 (SER.), 2 SPA. @ 1′-0″ = 2′-0″
F.F.	FRONT FACE	△△△	4 SETS OF 1-RA523 & 1-RA524, 3 SPA. @ 1′-0″ = 3′-0″	□	6-RA526 & 6-RA533 (SER.), 5 SPA. @ 1′-0″ = 5′-0″
	14″ CIP PILE				

NOTES:

1. ALL DIMENSIONS MEASURED ALONG CENTERLINE BEARING.
2. SEE SHEET 6/12 FOR FORWARD ABUTMENT PLAN AND ELEVATION.
3. SEE SHEET 7/12 FOR SECTION A, SECTION B, AND SECTION C.
4. REINFORCING STEEL LAP LENGTHS ARE AS FOLLOWS:
   #5 BARS = 2′-5″
   #8 BARS = 3′-9″

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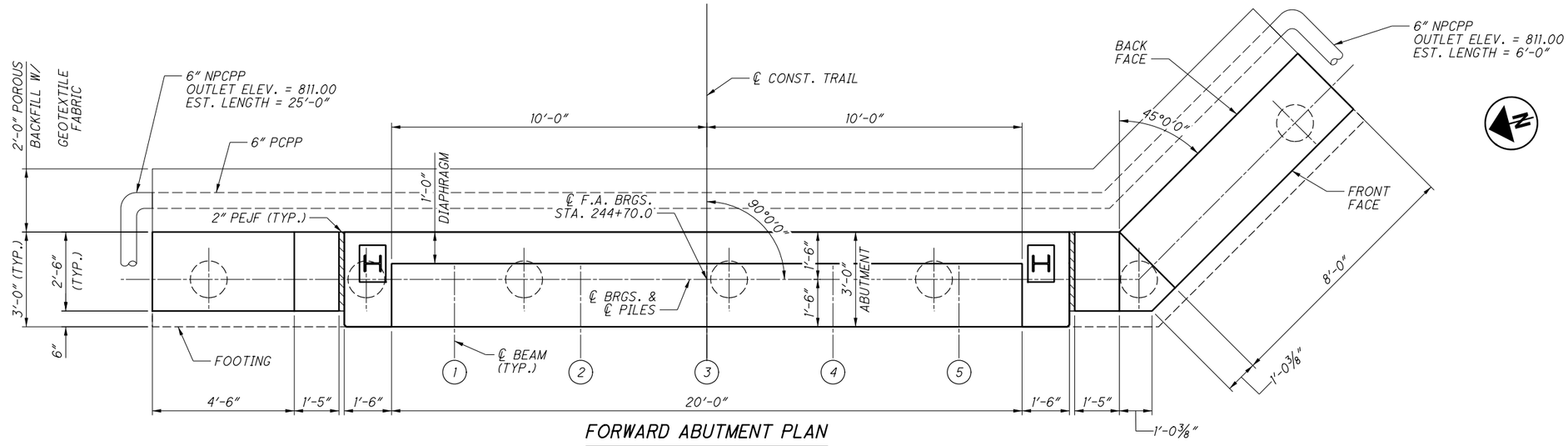
REAR ABUTMENT PLAN AND ELEVATION
BRIDGE NO. B008
HOLMES COUNTY TRAIL OVER BLACK CREEK

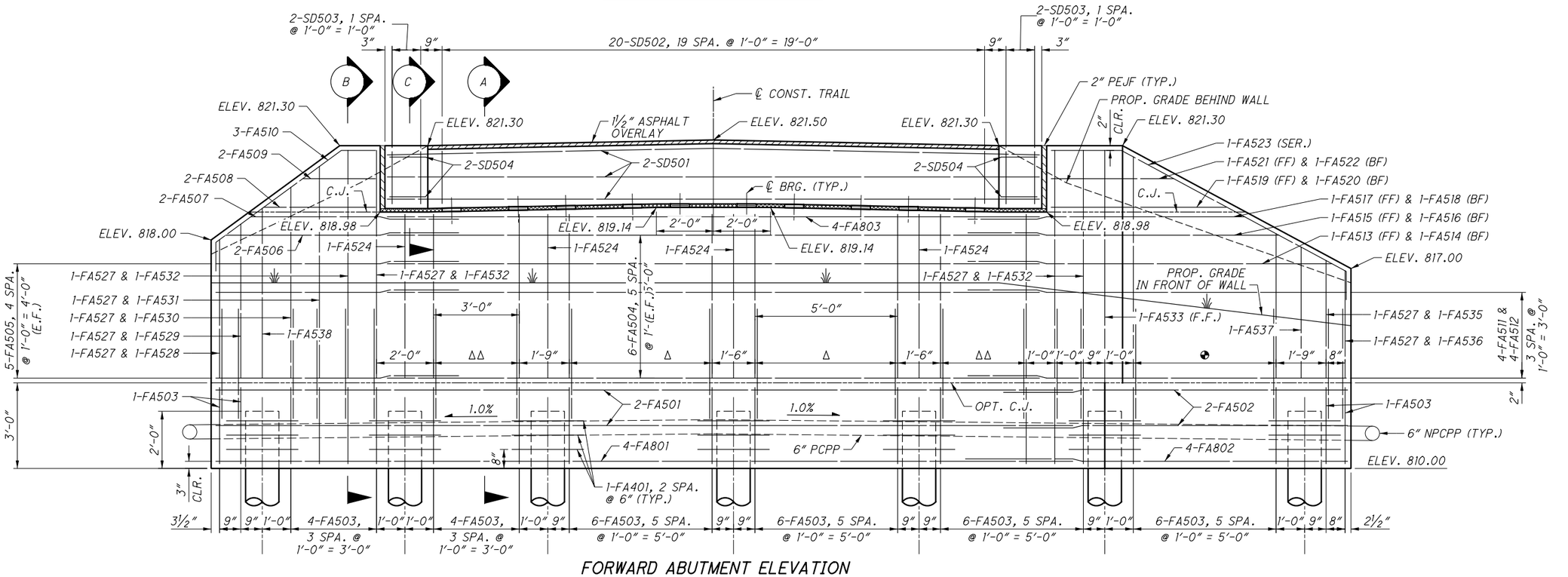
HOL CO. TR. 5C2
PID No. 120806

5 / 12

101 / 133



FORWARD ABUTMENT PLAN



FORWARD ABUTMENT ELEVATION

LEGEND:

(#)	BEAM NUMBER
E.F.	EACH FACE
F.F.	FRONT FACE
	14" CIP PILE
Δ	6 SETS OF 1-FA525 & 1-FA526, 5 SPA. @ 1'-0" = 5'-0"
ΔΔ	4 SETS OF 1-FA525 & 1-FA526, 3 SPA. @ 1'-0" = 3'-0"
◕	6 SETS OF 1-FA527 & 1-FA534 (SER.), 5 SPA. @ 1'-0" = 5'-0"

NOTES:

1. ALL DIMENSIONS MEASURED ALONG CENTERLINE BEARING.
2. SEE SHEET 5/12 FOR REAR ABUTMENT PLAN AND ELEVATION.
3. SEE SHEET 7/12 FOR SECTION A, SECTION B, AND SECTION C.
4. REINFORCING STEEL LAP LENGTHS ARE AS FOLLOWS:
   #5 BARS = 2'-5"
   #8 BARS = 3'-9"

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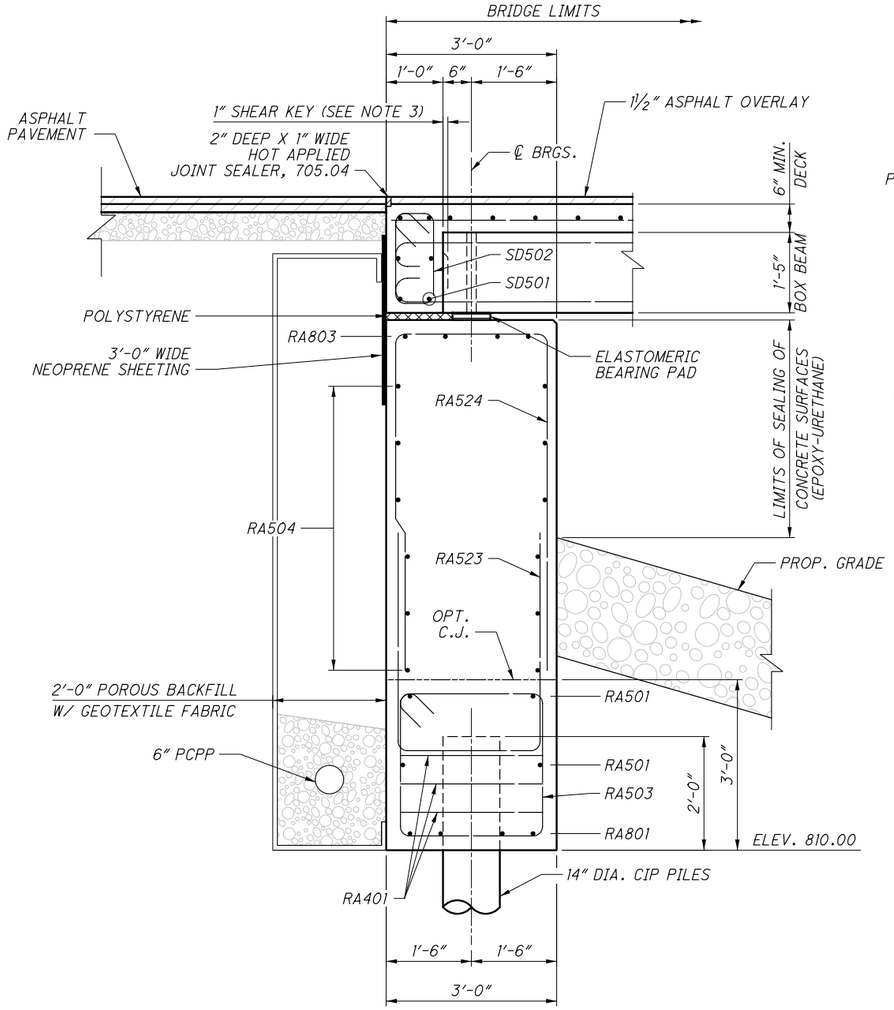
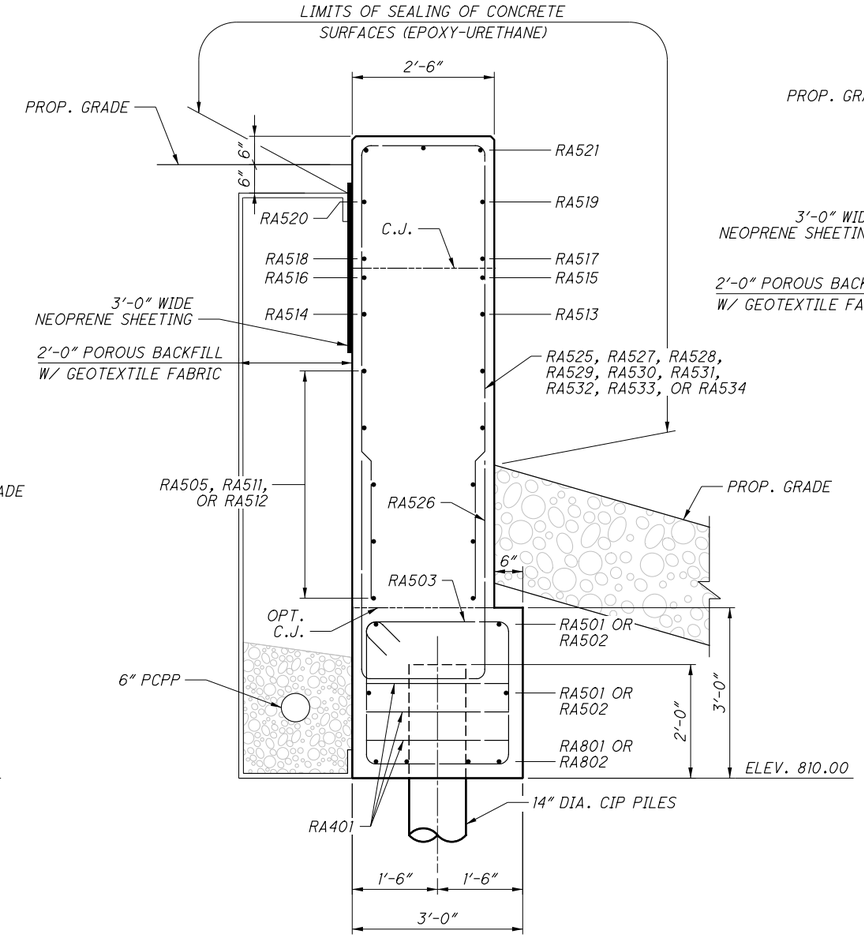
FORWARD ABUTMENT PLAN AND ELEVATION
BRIDGE NO. B008
HOLMES COUNTY TRAIL OVER BLACK CREEK

HOL CO. TR. 5C2
PID No. 120806



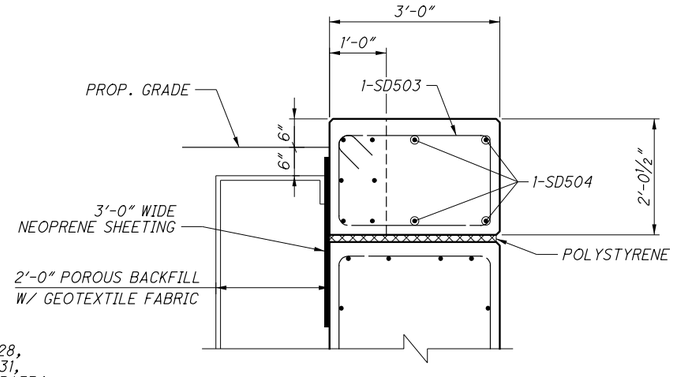
SECTION A-A

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT SIMILAR)



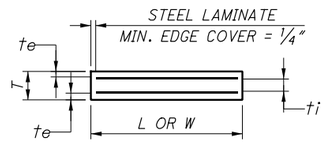
SECTION B-B

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT SIMILAR)



SECTION C-C

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT SIMILAR)



LEGEND:

te = EXTERIOR LAYER THICKNESS
Ne = NUMBER OF EXTERIOR LAYERS
ti = INTERIOR LAYER THICKNESS
Ni = NUMBER OF INTERIOR LAYERS
DL = DEAD LOAD
LL = LIVE LOAD

ELASTOMERIC BEARING PAD DATA													
LOCATION	L	W	T	te	Ne	ti	Ni	ts (12 GAGE)	DESIGN LOADS (KIPS) DL	LLmax	LLmin	SERVICE TOTAL	DESIGN ROTATION (RAD.)
EXTERIOR	7"	11"	1.409"	0.35"	2	0.5"	1	0.1046"	18.0	5.7	0.0	23.7	0.006199
INTERIOR	7"	11"	1.409"	0.35"	2	0.5"	1	0.1046"	18.0	4.7	0.0	22.7	0.006199

LAMINATED ELASTOMERIC BEARING

NOTES:

1. SEE SHEET 5/12 FOR REAR ABUTMENT PLAN AND ELEVATION.
2. SEE SHEET 6/12 FOR FORWARD ABUTMENT PLAN AND ELEVATION.
3. PROVIDE A 1" DEEP SHEAR KEY CENTERED IN BEAM END. THE SHEAR KEY HEIGHT SHALL BE ONE-HALF OF THE BOX BEAM HEIGHT AND THE WIDTH SHALL BE 38".
4. PROVIDE 1½" EXPANDED POLYSTYRENE FILLER ALONG BEAM SEAT.
5. ELASTOMERIC BEARINGS: THE ELASTOMER SHALL HAVE A HARDINESS OF 50 DUROMETER. THE BEARINGS WERE DESIGNED IN ACCORDANCE WITH SECTION 14.7.6 (METHOD A) OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS. THE LONG-TERM COMPRESSION PROOF LOAD TEST (AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, DIVISION II, SECTION 18.7.2.6) IS NOT REQUIRED.
6. STEEL LAMINATES SHALL HAVE A THICKNESS OF 12-GAGE (0.1046 INCHES).

DESIGN AGENCY
ONE EASTON OVAL
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DESIGNED	DRAWN	REVIEWED	DATE
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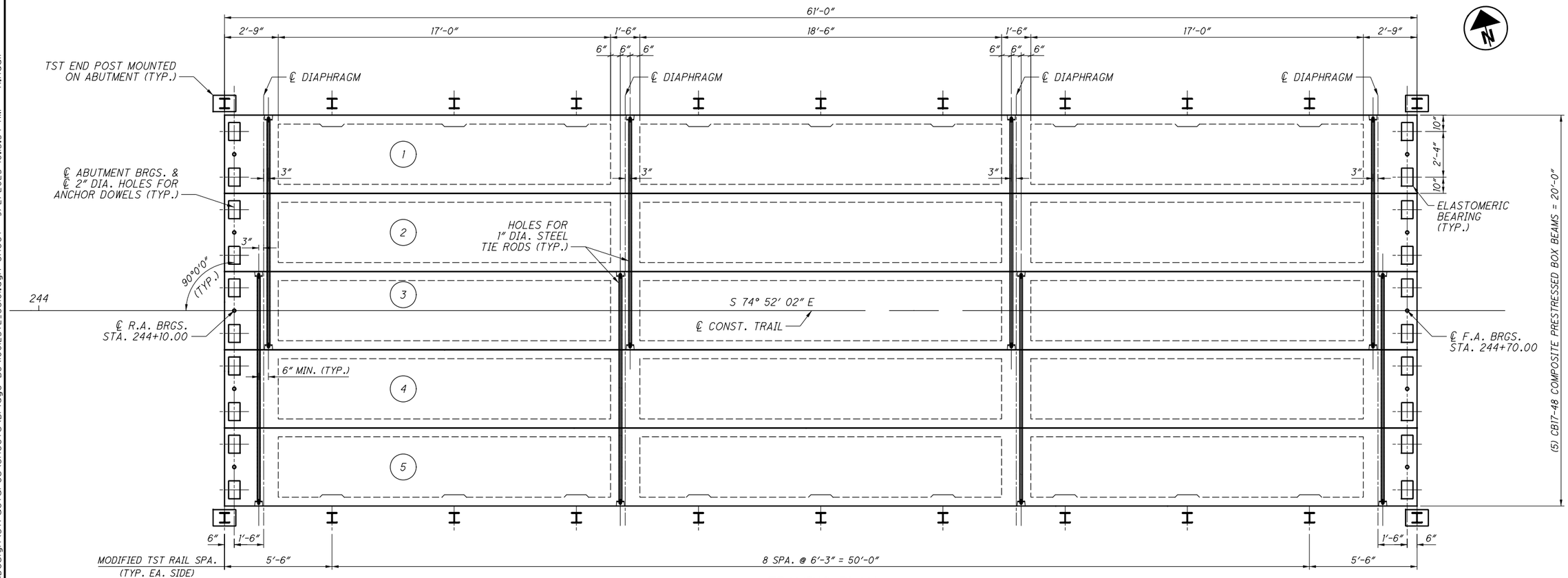
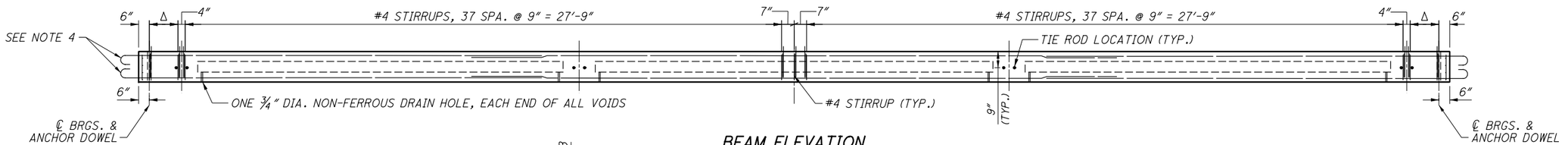
ABUTMENT AND WINGWALL SECTION DETAILS

BRIDGE NO. B008
HOLMES COUNTY TRAIL OVER BLACK CREEK

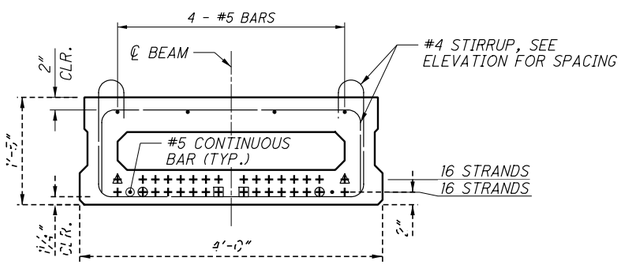
HOL CO. TR. 5C2
PID No. 120806



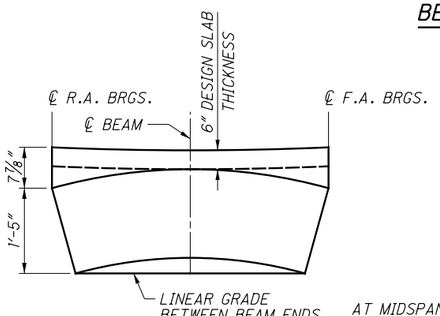
FRAMING PLAN



BEAM ELEVATION



BEAM DETAILS



CAMBER DIAGRAM

AT MIDSPAN:
CAMBER AT DAY 0 = 2"

CAMBER AT DAY 30 = 3"

VERTICAL ADJUSTMENT = 0"

BEAM SEAT ELEVATIONS ASSUME ESTIMATED CAMBER AT DAY 30

LEGEND:

- Δ — 4 SPA. @ 4" = 1'-4"
- (#) — BEAM NUMBER
- • — MILD REINFORCING STEEL BAR
- + — PRESTRESSING STRAND LOCATION, BONDED FULL LENGTH
- ⊕ — DEBONDED STRAND, 2.50' EACH END
- ⊕ — DEBONDED STRAND, 5.00' EACH END
- ⊞ — DEBONDED STRAND, 7.50' EACH END

NOTES:

1. SEE ODOT SCD PSBD-1-25 FOR ADDITIONAL PRESTRESSED BOX BEAM DETAILS NOT SHOWN.
2. 2" DIA. ANCHOR DOWELS TO BE FILLED WITH 705.20 NON-SHRINK NON-METALLIC GROUT AT THE ABUTMENTS.
3. THE CALCULATED DEFLECTION DUE TO DEAD LOAD APPLIED AFTER THE BEAMS ARE SET (WEIGHT OF SURFACE COURSE, RAILING, ETC.) IS 1 1/16".
4. EXTEND TOP & BOTTOM LONGITUDINAL BARS AN EMBEDMENT OF 10" INTO ABUTMENT BACKWALL AND PROVIDE STANDARD 180° HOOK. BARS TO BE EPOXY COATED AND PAID FOR UNDER ITEM 515.
5. PROVIDE 1" DEEP SHEAR KEY CENTERED IN BEAM END. THE SHEAR KEY SHALL BE 8½" TALL AND 38" WIDE.

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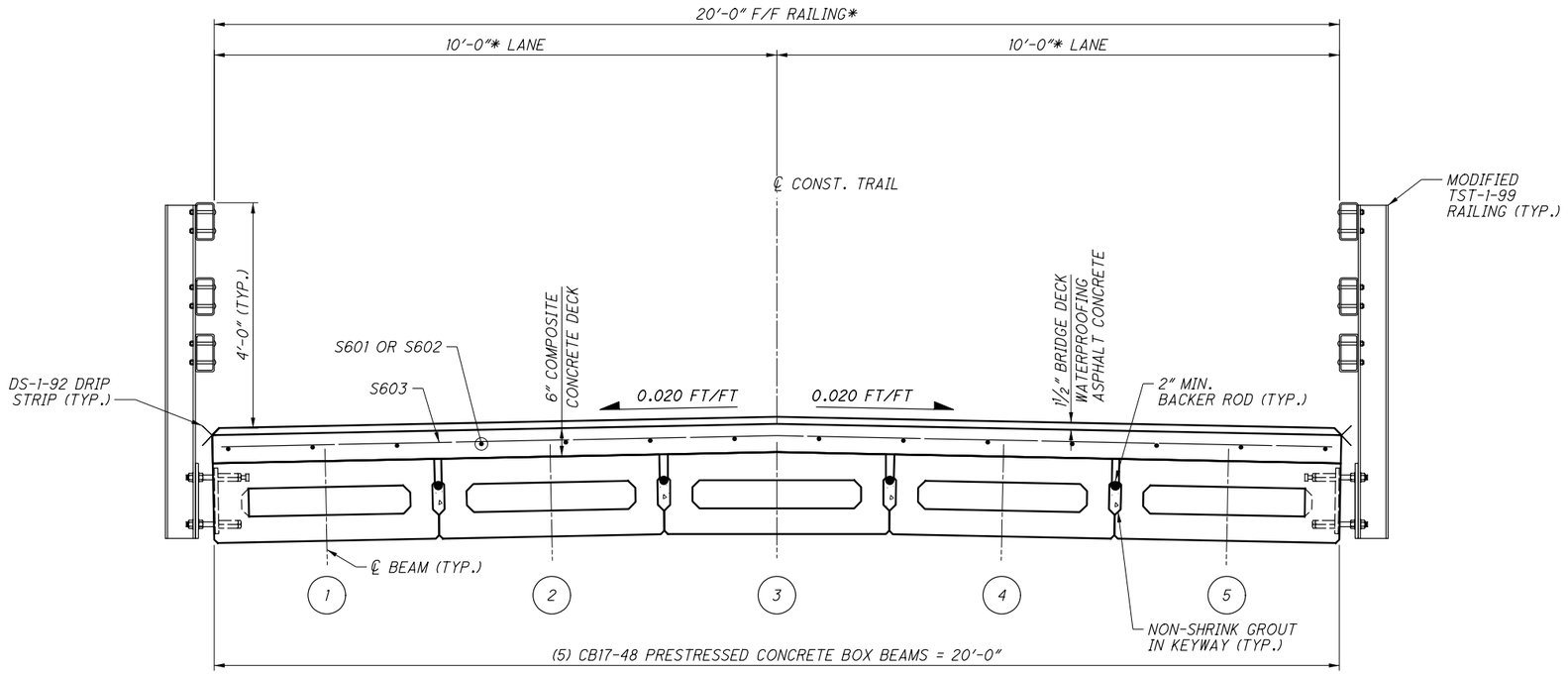
FRAMING PLAN AND DETAILS

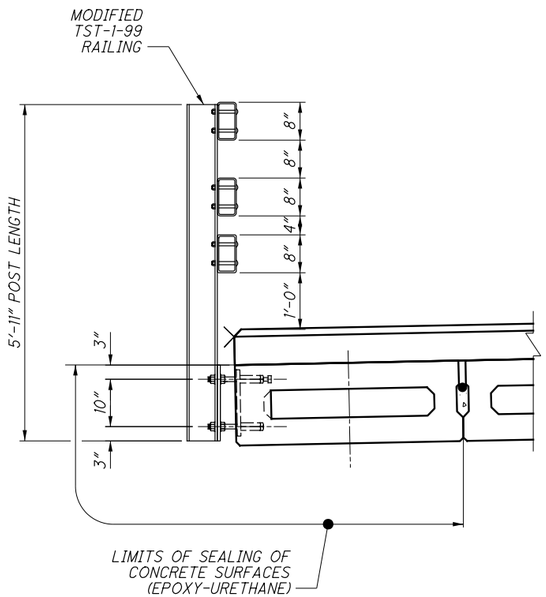
BRIDGE NO. 008
HOLMES COUNTY TRAIL OVER BLACK CREEK

HOL CO. TR. 5C2
PID No. 120806



TRANSVERSE SECTION

* = PLUS FIT-UP



SEALING DETAIL

LEGEND:

(#) - BEAM NUMBER

NOTES:

1. SEE SHEET 8/12 FOR ADDITIONAL RAILING DETAILS.
2. SEE ODOT SCD DS-1-92 FOR ADDITIONAL DRIP STRIP DETAILS.

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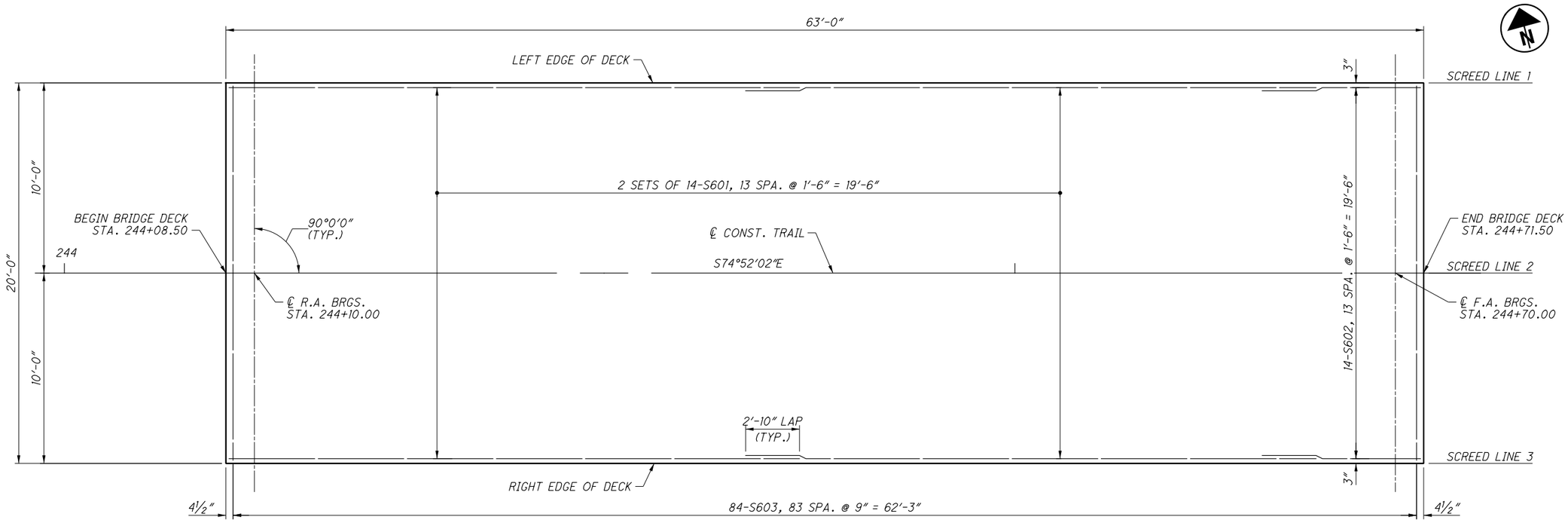
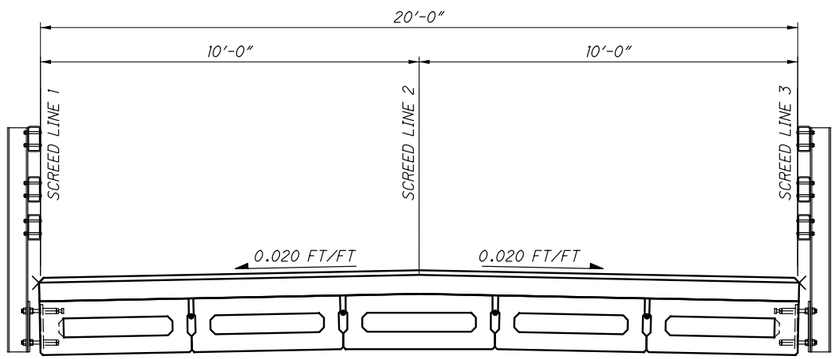
TRANSVERSE SECTION
BRIDGE NO. 008
HOLMES COUNTY TRAIL OVER BLACK CREEK

HOL CO. TR. 5C2
PID No. 120806



DECK REINFORCING PLAN



TRANSVERSE SECTION

FINAL DECK SURFACE AND SCREED ELEVATION TABLE						
LOCATION		CL R.A. BRGS.	SPAN 1			CL F.A. BRGS.
			1/4 SPAN	1/2 SPAN	3/4 SPAN	
LEFT EDGE OF DECK SCREED LINE 1	STATION	244+10.00	244+25.00	244+40.00	244+55.00	244+70.00
	OFFSET (FT, LEFT)	10.00	10.00	10.00	10.00	10.00
	FINAL DECK ELEVATION	821.30	821.30	821.30	821.30	821.30
	SCREED ELEVATION	821.30	821.36	821.39	821.36	821.30
	DEAD LOAD DEFLECTIONS	0"	- 3/4"	- 1 1/16"	- 3/4"	0"
CENTERLINE CONST. TRAIL SCREED LINE 2	STATION	244+10.00	244+25.00	244+40.00	244+55.00	244+70.00
	FINAL DECK ELEVATION	821.50	821.50	821.50	821.50	821.50
	SCREED ELEVATION	821.50	821.56	821.59	821.56	821.50
	DEAD LOAD DEFLECTIONS	0"	- 3/4"	- 1 1/16"	- 3/4"	0"
RIGHT EDGE OF DECK SCREED LINE 3	STATION	244+10.00	244+25.00	244+40.00	244+55.00	244+70.00
	OFFSET (FT, RIGHT)	10.00	10.00	10.00	10.00	10.00
	FINAL DECK ELEVATION	821.30	821.30	821.30	821.30	821.30
	SCREED ELEVATION	821.30	821.36	821.39	821.36	821.30
	DEAD LOAD DEFLECTIONS	0"	- 3/4"	- 1 1/16"	- 3/4"	0"

NOTES:

1. SEE SHEET 9/12 FOR TRANSVERSE SECTION.
2. SCREED ELEVATIONS SHOWN REPRESENT THE THEORETICAL DECK SURFACE LOCATION PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.
3. FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURRED.
4. STATIONS AND OFFSETS PROVIDED ALONG CENTERLINE CONST. TRAIL.
5. DECK SLAB THICKNESS FOR CONCRETE QUANTITY:
   THE ESTIMATED QUANTITY OF DECK CONCRETE IS MEASURED ACCORDING TO C&MS 511. IN ADDITION TO THE DESIGN SLAB THICKNESS, THE QUANTITY INCLUDES A VARIABLE HAUNCH THICKNESS THAT PROVIDES AN ALLOWANCE FOR BEAM CAMBER.

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DECK REINFORCING PLAND AND FINAL DECK ELEVATIONS
BRIDGE NO. 008
HOLMES COUNTY TRAIL OVER BLACK CREEK

HOL CO. TR. 5C2
PID No. 120806

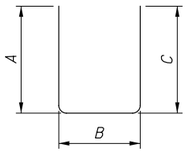
REAR ABUTMENT

BAR MARK	MAT'RL TYPE	TOTAL	LENGTH	WEIGHT (LBS)	TYPE	DIMENSIONS A	B	C	D	E	R	INC.
RA401	ECSR	21	9'-6"	134	3	2'-6"	2'-0"					
RA501	ECSR	4	30'-0"	126	ST.							
RA502	ECSR	2 SER OF 2	12'-0" TO 13'-10"	54	19	4'-3" TO 5'-2"	5'-6" TO 6'-2"	5'-6" TO 6'-2"				1'-10"
RA503	ECSR	40	10'-7"	442	3	2'-6"	2'-6"					
RA504	ECSR	12	23'-0"	288	ST.							
RA505	ECSR	10	12'-0"	126	ST.							
RA506	ECSR	2	10'-9"	23	ST.							
RA507	ECSR	2	9'-9"	21	ST.							
RA508	ECSR	2	6'-3"	14	ST.							
RA509	ECSR	2	4'-8"	10	ST.							
RA510	ECSR	3	10'-10"	34	13	1'-0"	3'-8"	5'-11"	3'-1"			
RA511	ECSR	5	13'-10"	73	19	5'-2"	6'-2"	6'-2"				
RA512	ECSR	5	12'-0"	63	19	4'-3"	5'-6"	5'-6"				
RA513	ECSR	1	12'-4"	13	19	5'-2"	5'-1"	5'-1"				
RA514	ECSR	1	10'-6"	11	19	4'-3"	4'-5"	4'-5"				
RA515	ECSR	1	10'-11"	12	19	5'-2"	4'-1"	4'-1"				
RA516	ECSR	1	9'-1"	10	19	4'-3"	3'-5"	3'-5"				
RA517	ECSR	1	10'-2"	11	19	5'-2"	3'-7"	3'-7"				
RA518	ECSR	1	8'-4"	9	19	4'-3"	2'-11"	2'-11"				
RA519	ECSR	1	8'-1"	9	19	5'-2"	2'-1"	2'-1"				
RA520	ECSR	1	6'-3"	7	19	4'-3"	1'-5"	1'-5"				
RA521	ECSR	1 SER OF 3	10'-9" TO 12'-6"	37	13	1'-0"	3'-9"	7'-10" TO 8'-9"	1'-3" TO 2'-2"			11"
RA522	ECSR	3	16'-11"	53	3	2'-8"	5'-6"					
RA523	ECSR	22	10'-1"	232	2	3'-10"	2'-8"	3'-10"				
RA524	ECSR	22	13'-5"	308	2	5'-6"	2'-8"	5'-6"				
RA525	ECSR	1	21'-9"	23	3	2'-8"	7'-11"					
RA526	ECSR	18	9'-7"	180	2	3'-10"	2'-2"	3'-10"				
RA527	ECSR	3	17'-9"	56	2	7'-11"	2'-2"	7'-11"				
RA528	ECSR	1 SER OF 3	13'-11" TO 16'-5"	48	2	6'-0" TO 7'-3"	2'-2"	6'-0" TO 7'-3"				1'-3"
RA529	ECSR	1	15'-9"	17	3	2'-2"	5'-5"					
RA530	ECSR	2	11'-9"	25	2	4'-11"	2'-2"	4'-11"				
RA531	ECSR	2	10'-7"	23	2	4'-4"	2'-2"	4'-4"				
RA532	ECSR	1	9'-3"	10	ST.							
RA533	ECSR	1 SER OF 6	12'-7" TO 17'-5"	94	2	5'-4" TO 7'-9"	2'-2"	5'-4" TO 7'-9"				1'-0"
RA534	ECSR	1	10'-11"	12	2	4'-6"	2'-2"	4'-6"				
RA801	ECSR	4	30'-0"	321	ST.							
RA802	ECSR	1 SER OF 4	15'-9" TO 17'-9"	179	19	7'-11" TO 8'-11"	5'-7" TO 6'-3"	5'-7" TO 6'-3"				8"
RA803	ECSR	4	23'-0"	246	ST.							
			TOTAL = 3354 LBS									

DIAPHRAGMS

BAR MARK	MAT'RL TYPE	NUMBER REAR	NUMBER FWD.	TOTAL	LENGTH	WEIGHT (LBS)	TYPE	DIMENSIONS A	B	C	D	E	R	INC.
SD501	ECSR	6	6	12	22'-8"	284	ST.							
SD502	ECSR	20	20	40	5'-1"	213	3	8"	1'-7"					
SD503	ECSR	4	4	8	9'-1"	76	3	2'-8"	1'-7"					
SD504	ECSR	8	8	16	1'-2"	20	ST.							
					TOTAL = 593 LBS									

REINFORCING STEEL BAR BEND DIAGRAM



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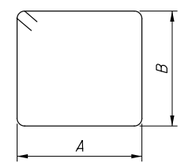

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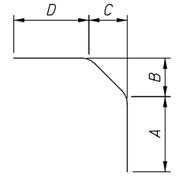

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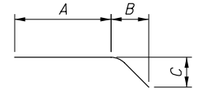

TYPE-19

NOTES:

1. THE BAR SIZE NUMBER IS SPECIFIED IN THE BAR MARK COLUMN, THE FIRST DIGIT AFTER THE LETTERS WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS AFTER THE LETTERS WHERE FOUR DIGITS ARE USED, INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, RA501 IS A NO. 5 BAR IN THE REAR ABUTMENT. A LEGEND OF THE DESCRIPTORS IS GIVEN BELOW:

   RA REAR ABUTMENT
   FA FORWARD ABUTMENT
   SD DIAPHRAGM
   S SUPERSTRUCTURE

2. BAR DIMENSIONS SHOWN ARE OUT-TO-OUT UNLESS OTHERWISE NOTED.
3. "ST." INDICATES A STRAIGHT BAR.
4. ALL REINFORCING STEEL SHALL BE EPOXY COATED.
5. MATERIALS LEGEND, ECSR = EPOXY COATED STEEL REINFORCEMENT.

DESIGN AGENCY
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F 614-476-6225
WOOLPERT
DESIGN | GEOSPATIAL | INFRASTRUCTURE

DESIGNED	DRAWN	REVIEWED	DATE
JYM	JYM	TML	06/2025
CHECKED	REVISED	STRUCTURE FILE NUMBER	
PES		00000	

REINFORCING STEEL LIST
BRIDGE NO. 008
HOLMES COUNTY TRAIL OVER BLACK CREEK

HOL CO. TR. 5C2
PID No. 120806

FORWARD ABUTMENT												
BAR MARK	MAT'RL TYPE	TOTAL	LENGTH	WEIGHT (LBS)	TYPE	DIMENSIONS A	B	C	D	E	R	INC.
FA401	ECSR	21	9'-6"	134	3	2'-6"	2'-0"					
FA501	ECSR	4	30'-0"	126	ST.							
FA502	ECSR	2 SER OF 2	12'-0" TO 13'-10"	54	19	4'-3" TO 5'-2"	5'-6" TO 6'-2"	5'-6" TO 6'-2"				1'-10"
FA503	ECSR	36	10'-7"	398	3	2'-6"	2'-6"					
FA504	ECSR	12	23'-0"	288	ST.							
FA505	ECSR	10	8'-6"	89	ST.							
FA506	ECSR	2	8'-0"	17	ST.							
FA507	ECSR	2	7'-2"	15	ST.							
FA508	ECSR	2	3'-10"	8	ST.							
FA509	ECSR	2	2'-6"	6	ST.							
FA510	ECSR	3	7'-4"	23	13	1'-0"	3'-2"	4'-4"	1'-2"			
FA511	ECSR	4	13'-10"	58	19	5'-2"	6'-2"	6'-2"				
FA512	ECSR	4	12'-0"	51	19	4'-3"	5'-6"	5'-6"				
FA513	ECSR	1	13'-5"	14	19	5'-2"	5'-10"	5'-10"				
FA514	ECSR	1	11'-6"	12	19	4'-3"	5'-2"	5'-2"				
FA515	ECSR	1	11'-6"	12	19	5'-2"	4'-6"	4'-6"				
FA516	ECSR	1	9'-9"	11	19	4'-3"	3'-11"	3'-11"				
FA517	ECSR	1	10'-4"	11	19	5'-2"	3'-8"	3'-8"				
FA518	ECSR	1	8'-6"	9	19	4'-3"	3'-0"	3'-0"				
FA519	ECSR	1	9'-9"	11	19	5'-2"	3'-3"	3'-3"				
FA520	ECSR	1	7'-10"	9	19	4'-3"	2'-7"	2'-7"				
FA521	ECSR	1	7'-10"	9	19	5'-2"	1'-11"	1'-11"				
FA522	ECSR	1	6'-0"	7	19	4'-3"	1'-3"	1'-3"				
FA523	ECSR	1 SER OF 3	10'-11" TO 12'-8"	37	13	1'-0"	4'-2"	7'-10" TO 8'-9"	1'-3" TO 2'-2"			11"
FA524	ECSR	4	16'-11"	71	3	2'-8"	5'-6"					
FA525	ECSR	20	10'-1"	211	2	3'-10"	2'-8"	3'-10"				
FA526	ECSR	20	13'-5"	280	2	5'-6"	2'-8"	5'-6"				
FA527	ECSR	16	9'-7"	160	2	3'-10"	2'-2"	3'-10"				
FA528	ECSR	1	11'-3"	12	2	4'-8"	2'-2"	4'-8"				
FA529	ECSR	1	12'-7"	14	2	5'-4"	2'-2"	5'-4"				
FA530	ECSR	1	15'-3"	16	2	6'-8"	2'-2"	6'-8"				
FA531	ECSR	1	16'-7"	18	2	7'-4"	2'-2"	7'-4"				
FA532	ECSR	4	17'-9"	75	2	7'-11"	2'-2"	7'-11"				
FA533	ECSR	1	7'-11"	9	ST.							
FA534	ECSR	1 SER OF 6	11'-11" TO 17'-3"	92	2	5'-0" TO 7'-8"	2'-2"	5'-0" TO 7'-8"				1'-1"
FA535	ECSR	1	9'-11"	11	2	4'-0"	2'-2"	4'-0"				
FA536	ECSR	1	9'-3"	10	2	3'-8"	2'-2"	3'-8"				
FA537	ECSR	1	14'-1"	15	3	4'-7"	2'-2"					
FA538	ECSR	1	16'-9"	18	3	5'-11"	2'-2"					
FA801	ECSR	4	30'-0"	321	ST.							
FA802	ECSR	1 SER OF 4	12'-1" TO 14'-0"	140	19	4'-4" TO 5'-4"	5'-6" TO 6'-2"	5'-6" TO 6'-2"				8"
FA803	ECSR	4	23'-0"	246	ST.							
			TOTAL =	3128	LBS							

SUPERSTRUCTURE												
BAR MARK	MAT'RL TYPE	TOTAL	LENGTH	WEIGHT (LBS)	TYPE	DIMENSIONS A	B	C	D	E	R	INC.
S601	ECSR	28	30'-0"	1262	ST.							
S602	ECSR	14	8'-4"	176	ST.							
S603	ECSR	84	19'-8"	2482	ST.							
			TOTAL =	3920	LBS							

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DESIGNED	DRAWN	REVIEWED	DATE
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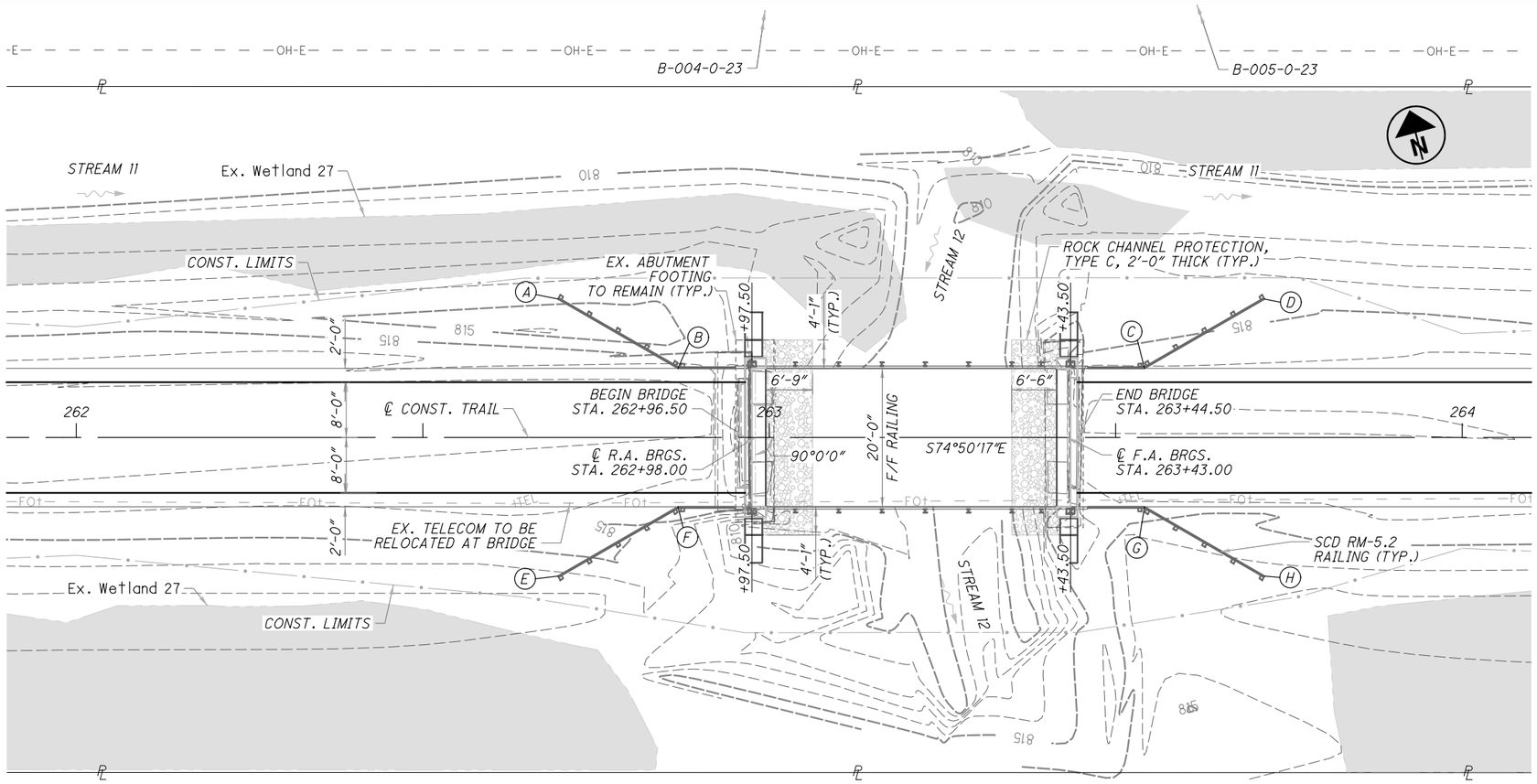
CHECKED	REVISED	STRUCTURE FILE NUMBER	
PES		00000	

REINFORCING STEEL LIST
BRIDGE NO. 008
HOLMES COUNTY TRAIL OVER BLACK CREEK

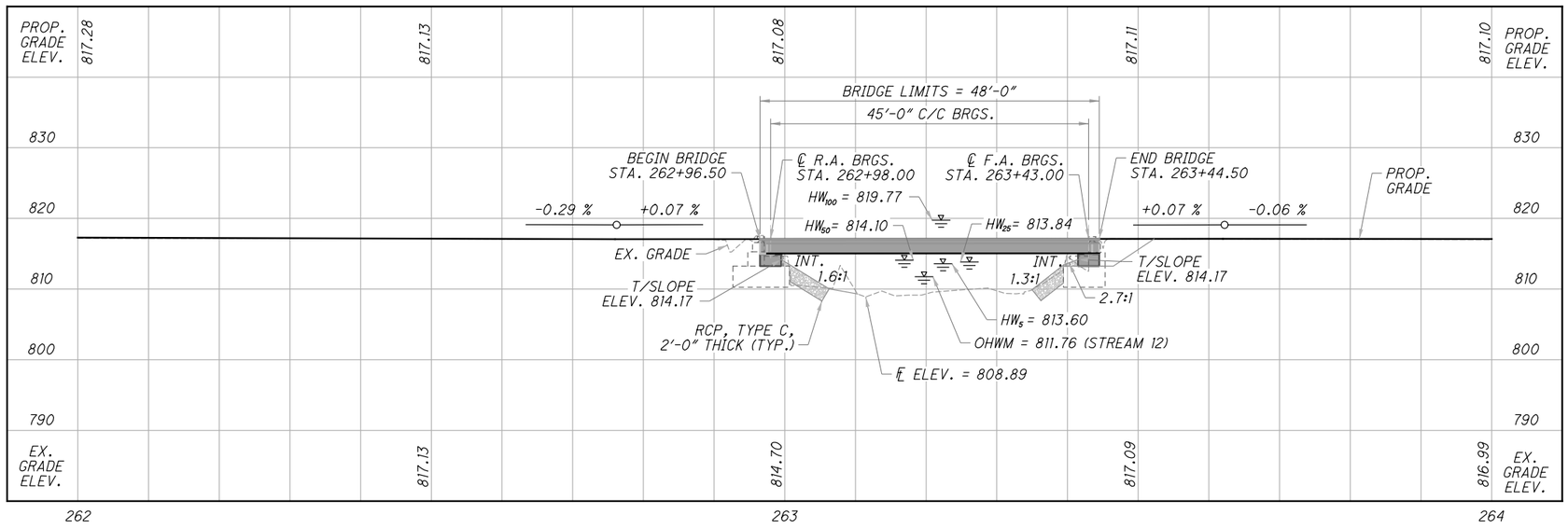
HOL CO. TR. 5C2
PID No. 120806

12 / 12

108
133



PLAN



PROFILE (ALONG ℄ CONST. TRAIL)

BENCHMARK DATA

CP-25 STA. 266+61.96, ELEV. 816.66, OFFSET 0.4' LT.

FOR ADDITIONAL BENCHMARK INFORMATION. SEE ROADWAY PLAN SHEET (3/133)

NOTES

EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

LEGEND

- BORING LOCATION
- ROCK CHANNEL PROTECTION, TYPE C, 2'-0" THICK

RM-5.2 RAILING STATIONS

(A)	STA. 262+69.51	OFFSET 20.0' LT.
(B)	STA. 262+86.83	OFFSET 10.0' LT.
(C)	STA. 263+54.17	OFFSET 10.0' LT.
(D)	STA. 263+71.49	OFFSET 20.0' LT.
(E)	STA. 262+69.51	OFFSET 20.0' RT.
(F)	STA. 262+86.83	OFFSET 10.0' RT.
(G)	STA. 263+54.17	OFFSET 10.0' RT
(H)	STA. 263+71.49	OFFSET 20.0' RT.

HYDRAULIC DATA

DRAINAGE AREA = 0.40 SQ. MILES

Q (5) =	136 CFS	V (5) =	1.75 FT/S	HYDRAULIC DESIGN
Q (25) =	231 CFS	V (25) =	2.75 FT/S	SCOUR DESIGN
Q (50) =	280 CFS	V (50) =	3.04 FT/S	SCOUR CHECK
Q (100) =	335 CFS	V (100) =	0.31 FT/S	BRIDGE CHECK

STRUCTURE CLEARS THE 5 YEAR DESIGN HW BY 1.43 FEET.

EXISTING STRUCTURE

DISPOSITION: NO SUPERSTRUCTURE; REMOVE UNREINFORCED CONCRETE PEDESTALS. BACKWALL AND WINGWALLS TO REMAIN ON TOP OF ASHLAR MASONRY FOOTING

PROPOSED STRUCTURE

TYPE: SINGLE SPAN COMPOSITE PRESTRESSED CONCRETE BOX BEAM ON NEW SEMI-INTEGRAL ABUTMENTS ON EXISTING MASONRY SPREAD FOOTINGS

SPANS: 45'-0" C/C BRG.

ROADWAY: 20'-0" F/F TST RAILING

LOADING: HI15 TRUCK OR 90 PSF PEDESTRIAN LOADING

SKEW: NONE

CURRENT WEARING SURFACE: 1½" CONCRETE ASPHALT

FUTURE WEARING SURFACE: 0.03 KSF

APPROACH SLABS: NONE

ALIGNMENT: TANGENT

CROWN: 0.02 FT/FT

COORDINATES: LATITUDE 40°30'23.25"N
LONGITUDE 82°01'4.04"W

DESIGN AGENCY
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WOLFPERT
DESIGN | GEOTECHNICAL | INFRASTRUCTURE

DESIGNED	DRAWN	REVIEWED	DATE
JYM	JYM	TML	06/2025
CHECKED	REVISED	STRUCTURE FILE NUMBER	
PES		00000	

HOLMES COUNTY
STA. 262+96.50
STA. 263+44.50

SITE PLAN
BRIDGE NO. 009
HOLMES COUNTY TRAIL OVER BLACK CREEK (STREAM 12)

HOL CO. TR. 5C2
PID No. 120806

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

DS-1-92	REVISED 7/15/2022
PSBD-1-25	REVISED 7/18/2025
TST-1-99	REVISED 1/15/2021

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO THE 9TH EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020 AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

OPERATIONAL IMPORTANCE:

A LOAD MODIFIER OF 1.0 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN LOADING:

DESIGN LOADING INCLUDES:
0.090 KSF PEDESTRIAN LIVE LOAD OR
NON-CONCURRENT H15-44 (TRUCK ONLY)
FUTURE WEARING SURFACE OF 0.03 KSF
1½" CONCRETE ASPHALT OVERLAY

DESIGN DATA:

CONCRETE CLASS QC2 - COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)
CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)
EPOXY COATED STEEL REINFORCEMENT - MINIMUM YIELD STRENGTH 60 KSI (DECK, DIAPHRAGM, ABUTMENT)

CONCRETE FOR PRESTRESSED BEAMS:
COMPRESSIVE STRENGTH (FINAL) - 7.0 KSI
COMPRESSIVE STRENGTH (RELEASE) - 5.0 KSI
PRESTRESSING STRAND:
AREA = 0.167 SQ. IN.
ULTIMATE STRENGTH = 270 KSI
INITIAL STRESS = 202.5 KSI (LOW RELAXATION STRANDS)

DECK PROTECTION METHOD:

EPOXY COATED REINFORCING STEEL
2½" CONCRETE COVER
STEEL DRIP STRIP

MONOLITHIC WEARING SURFACE:

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1 INCH THICK.

EXISTING STRUCTURE VERIFICATION:

DETAILS AND DIMENSIONS ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C&MS SECTIONS 102.05 AND 105.02.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

ABUTMENT DIAPHRAGM CONCRETE:

DO NOT PLACE THE ABUTMENT CONCRETE ABOVE THE BRIDGE SEAT CONSTRUCTION UNTIL THE PRESTRESSED BOX BEAMS HAVE BEEN ERECTED.

BEAM CAMBER:

THE BEAM SEAT ELEVATIONS ASSUME ESTIMATED CAMBER AT DAY 30. THE ESTIMATED QUANTITY OF DECK CONCRETE IS MEASURED ACCORDING TO C&MS 511. IN ADDITION TO THE DESIGN SLAB THICKNESS, THE QUANTITY INCLUDES A VARIABLE HAUNCH THICKNESS THAT PROVIDES AN ALLOWANCE FOR BEAM CAMBER.

DEMOLITION DEBRIS:

THE CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID AND/OR LIMIT DEMOLITION DEBRIS FROM ENTERING THE STREAM. ANY MATERIAL THAT DOES FALL INTO THE STREAM SHALL BE REMOVED AS SOON AS POSSIBLE.

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN:

THIS WORK CONSISTS OF THE REMOVAL OF PORTIONS OF THE EXISTING STRUCTURE FOR BRIDGE NO. 009. REMOVE EXISTING SUPERSTRUCTURE IN ITS ENTIRETY. REMOVE EXISTING ABUTMENTS AND WINGWALLS TO PROPOSED BEAM SEAT ELEVATIONS AS SHOWN IN REMOVAL DETAILS BELOW. REMOVE CONCRETE PEDESTALS IN ITS ENTIRETY.

REMOVE AFOREMENTIONED PORTIONS OF EXISTING STRUCTURE WITH SUFFICIENT CARE AS TO AVOID DAMAGE TO THE REMAINING PORTIONS OF THE STRUCTURE. IN CASE OF DAMAGE TO EXISTING STRUCTURE, REPAIR OR REPLACE THE STRUCTURE AT NO EXPENSE TO THE DEPARTMENT.

CUT LINE CONSTRUCTION JOINT PREPARATION: SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. REMOVE CONCRETE TO A ROUGH SURFACE. LEAVE THE EXISTING CONCRETE REINFORCEMENT, IF REQUIRED IN THE PLANS, IN PLACE. INSTALL DOWEL BARS AS SPECIFIED. PRIOR TO CONCRETE PLACEMENT, ABRASIVELY CLEAN JOINT SURFACES AND EXISTING EXPOSED REINFORCEMENT TO REMOVE LOOSE AND DISINTEGRATED CONCRETE AND LOOSE RUST. THOROUGHLY CLEAN THE JOINT SURFACE AND EXPOSED REINFORCEMENT OF ALL DIRT, DUST, RUST, OR OTHER FOREIGN MATERIAL BY THE USE OF WATER, AIR UNDER PRESSURE, OR OTHER METHODS THAT PRODUCE SATISFACTORY RESULTS. EXISTING STEEL REINFORCEMENT DOES NOT HAVE TO HAVE A BRIGHT CLEAN FINISH, BUT REMOVE ALL PACK AND LOOSE RUST. THOROUGHLY DRENCH EXISTING CONCRETE SURFACES WITH CLEAN WATER AND ALLOW TO DRY TO A DAMP CONDITION BEFORE PLACING CONCRETE.

SUBSTRUCTURE CONCRETE REMOVAL: REMOVE CONCRETE BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. THE DEPARTMENT WILL NOT PERMIT HYDRAULIC HOE-RAM TYPE HAMMERS. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED. OUTSIDE THE 18-IN LIMIT, THE CONTRACTOR MAY USE THE HAMMERS NOT EXCEEDING 90 POUNDS UPON THE APPROVAL OF THE ENGINEER. DO NOT PLACE PNEUMATIC HAMMERS IN DIRECT CONTACT WITH CONCRETE REINFORCEMENT THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN (CONT'D):

THE CONTRACTOR SHALL RETAIN THE SERVICES OF A GEOTECHNICAL ENGINEER, GEOTECHNICAL TESTING REPRESENTATIVE, OR OTHER QUALIFIED INDIVIDUAL WHO HAS COMPLETED THE ODOT SOIL AND ROCK CLASSIFICATION COURSE TO INSPECT THE FOUNDATION BEARING MATERIAL AFTER EXCAVATION AND PRIOR TO CONSTRUCTION OF THE NEW FOOTINGS. PERFORM FOUR TOTAL DYNAMIC CONE PENETROMETER (DCP) TESTS, ONE AT EACH END OF EACH ABUTMENT TO CONFIRM BEARING RESISTANCES OF THE SUBSURFACE MATERIAL. IF BEARING RESISTANCES BELOW THE DESIGN SERVICE VALUE IS ENCOUNTERED, CONTACT THE ENGINEER FOR DIRECTION PRIOR TO PROCEEDING WITH THE FOUNDATION WORK.

THIS WORK SHALL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE FOR ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.

ITEM 510 - DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN:

PRIOR TO DRILLING DOWEL HOLES, LOCATE ALL EXISTING REINFORCING STEEL BARS IN THE AREA OF THE HOLE WITH THE AID OF A REINFORCING STEEL BAR LOCATOR (PACHOMETER). IF AN EXISTING BAR IS ENCOUNTERED AT THE SAME LOCATION AS A PROPOSED DOWEL HOLE, MOVE THE DOWEL HOLE TO EITHER SIDE OF THE EXISTING BAR.

PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED IN THE EACH CONTRACT PRICE FOR ITEM 510 - DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN, UNLESS SEPARATELY ITEMIZED IN THE PLANS.

ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE):

SEAL ALL CONCRETE SURFACES INCLUDING ABUTMENTS, WINGWALLS, THE OUTSIDE FASCIAS OF THE DECK AND EXTERIOR BEAMS, AND THE COMPLETE UNDERSIDE OF THE EXTERIOR BEAMS USING EPOXY-URETHANE SEALER. THE FINAL COLOR SHALL BE FEDERAL COLOR STANDARD NO. 17778, PER THE CMS.

FOUNDATION BEARING RESISTANCE:

FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 1.0 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 1.0 KIPS PER SQUARE FOOT.

ITEM 517 - RAILING (TWIN STEEL TUBE), AS PER PLAN:

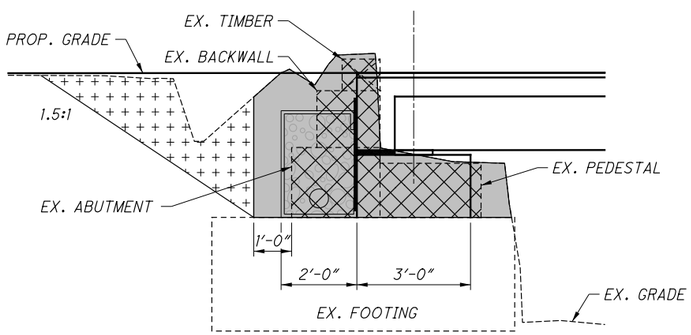
THE TST-1-99 RAILING SHALL BE MODIFIED WITH AN EXTENDED POST AND AN ADDITIONAL STEEL TUBE SIDE RAIL TO PROVIDE A MINIMUM 4-FT HEIGHT FROM TOP OF RAIL TO TOP OF DECK. PAYMENT FOR THIS ITEM 517 - RAILING (TWIN STEEL STUBE), AS PER PLAN SHALL INCLUDE TIMBER RAILS, STEEL POSTS, STEEL TUBING SIDE RAILS, AND ALL CONNECTION ELEMENTS INCLUDING BOLTS, NUTS, AND WASHERS.

ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN:

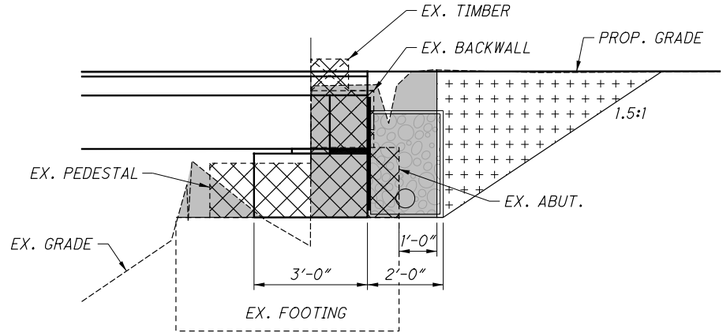
PRIOR TO THE SURFACE CLEANING SPECIFIED IN 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PLACED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

ABBREVIATIONS:

ABUT.	ABUTMENT
BRGS.	BEARINGS
C/C	CENTER-TO-CENTER
℄	CENTERLINE
CONST.	CONSTRUCTION
DIA.	DIAMETER
ELEV.	ELEVATION
EX.	EXISTING
F.A.	FORWARD ABUTMENT
F/F	FACE-TO-FACE
NPCPP	NON-PERFORATED CORRUGATED PLASTIC PIPE
PCPP	PERFORATED CORRUGATED PLASTIC PIPE
PROP.	PROPOSED
R.A.	REAR ABUTMENT
RCP	ROCK CHANNEL PROTECTION
T/	TOP OF
TYP.	TYPICAL
W/	WITH



REAR ABUTMENT



FORWARD ABUTMENT

REMOVAL DETAILS

LIMITS OF UNCLASSIFIED EXCAVATION

ITEM 202 - PORTION OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN

ITEM 203 - EXCAVATION

ITEM 518 - POROUS BACKFILL W/ GEOTEXTILE FABRIC

DESIGN AGENCY
ONE EASTON OVAL
SUITE 180
COLUMBUS, OH 43219
T 614-478-6000
F 614-478-6225
WOLPERT
DESIGN | GEOTECHNICAL | INFRASTRUCTURE

DESIGNED	DRAWN	REVIEWED	DATE
JYM	JYM	TML	06/2025
CHECKED	REVISED	STRUCTURE FILE NUMBER	
PES		00000	

STRUCTURE GENERAL NOTES

BRIDGE NO. B009
HOLMES COUNTY TRAIL OVER BLACK CREEK (STREAM 12)

HOL CO. TR. 5C2
PID No. 120806

BRIDGE B9 ESTIMATED QUANTITIES

CALC BY: JYM DATE: 6/12/2025
CHECK BY: SL DATE: 6/17/2025

ITEM	EXT	QUANTITY	UNIT	DESCRIPTION	SHEET
202	11203	1	LS	PORTIONS OF STRUCTURE REMOVED OVER 20 FOOT SPAN, AS PER PLAN	2/9
203	10000	29	CY	EXCAVATION	
203	20000	35	CY	EMBANKMENT	
503	11100	1	LS	COFFERDAMS AND EXCAVATION BRACING	
503	21100	47	CY	UNCLASSIFIED EXCAVATION	
509	10000	6823	LB	EPOXY COATED STEEL REINFORCEMENT	
510	10001	156	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN	2/9
511	31610	22	CY	CLASS QC2 CONCRETE, SUPERSTRUCTURE	
511	43510	29	CY	CLASS QC1 CONCRETE, ABUTMENT INCLUDING FOOTING	
512	10100	79	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
515	12030	5	EA	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB17-48, 46'-0"	
516	13900	21	SF	2" PREFORMED EXPANSION JOINT FILLER	
516	31010	40	FT	2" DEEP JOINT SEALER	
516	43101	20	EA	ELASTOMERIC BEARING WITH INTERNAL LAMINATES ONLY (NEOPRENE), AS PER PLAN, 1.5" THICK	5/9
517	70001	102	FT	RAILING (TWIN STEEL TUBE), AS PER PLAN	2/9
518	21200	15	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	
SPECIAL	518E22300	107	FT	STEEL DRIP STRIP	
518	40000	73	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	
518	40010	24	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	
519	11101	20	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	2/9
601	32200	36	CY	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	
856	10000	5	CY	BRIDGE DECK WATERPROOFING ASPHALT CONCRETE	

DESIGN AGENCY
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SUITE 400
COLUMBUS, OH 43219
T 614-476-6000
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WOOLPERT
DESIGN | GEOSPATIAL | INFRASTRUCTURE

DESIGNED	DRAWN	REVIEWED	DATE
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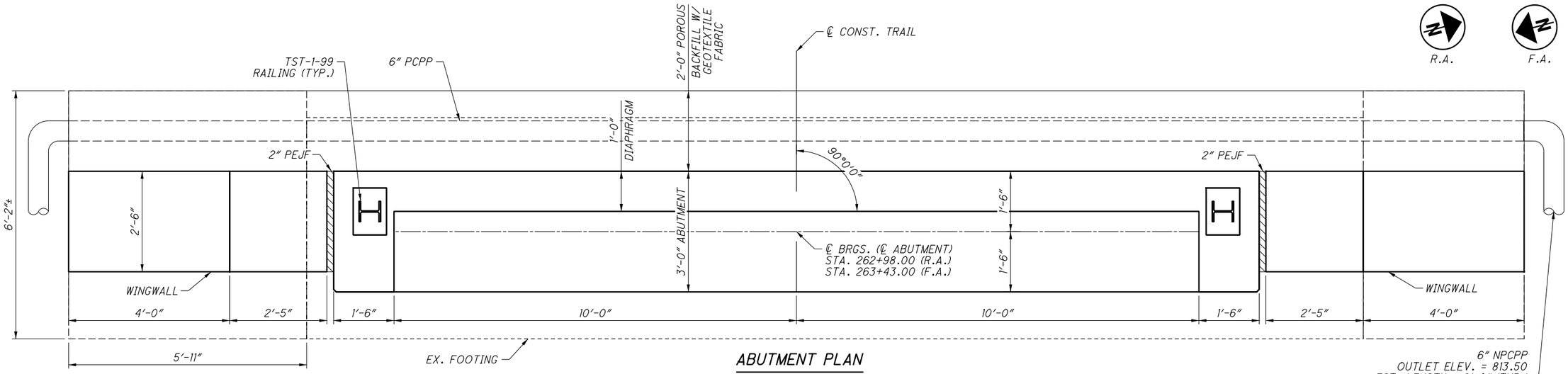
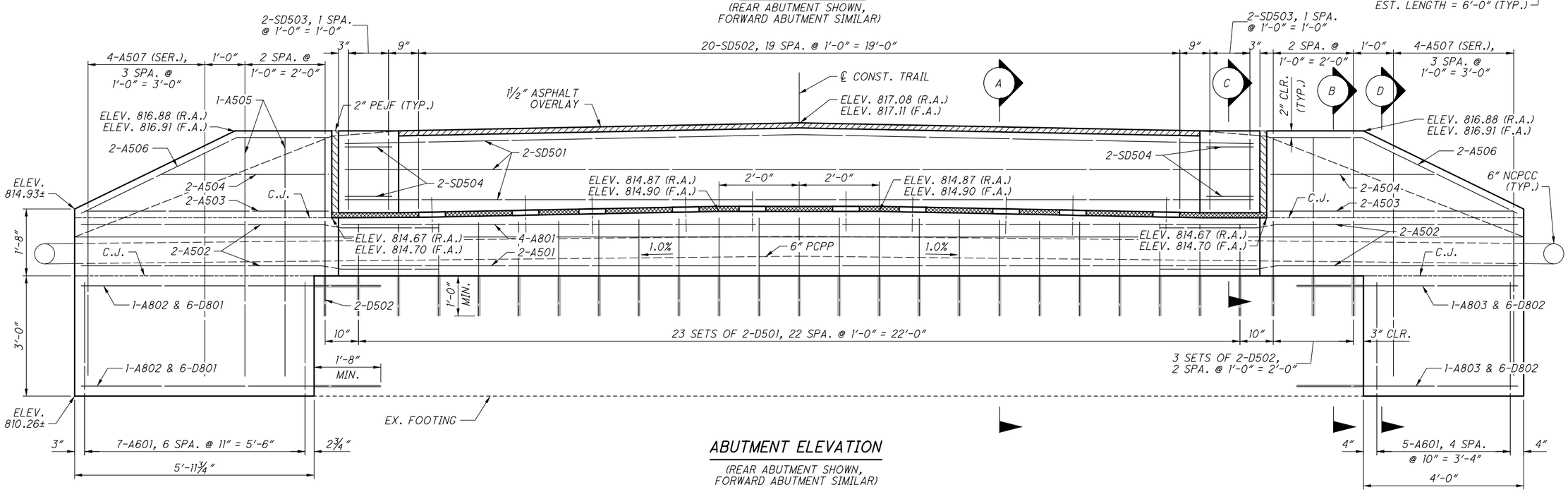
ESTIMATED QUANTITIES
BRIDGE NO. B009
HOLMES COUNTY TRAIL OVER BLACK CREEK (STREAM 12)

HOL CO. TR. 5C2
PID No. 120806



ABUTMENT PLAN

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT SIMILAR)



ABUTMENT ELEVATION

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT SIMILAR)

LEGEND:

DOWEL BAR

NOTES:

1. ALL DIMENSIONS MEASURED ALONG CENTERLINE BEARING.
2. SEE SHEET 5/9 FOR SECTION A, SECTION B, AND SECTION C.
3. REINFORCING STEEL LAP LENGTHS ARE AS FOLLOWS: #5 BARS = 2'-5".

DESIGN AGENCY
ONE EASTON OVAL
SUITE 400
COLUMBUS, OH 43219
T 614-476-6000
F 614-476-6225
WOOLPERT

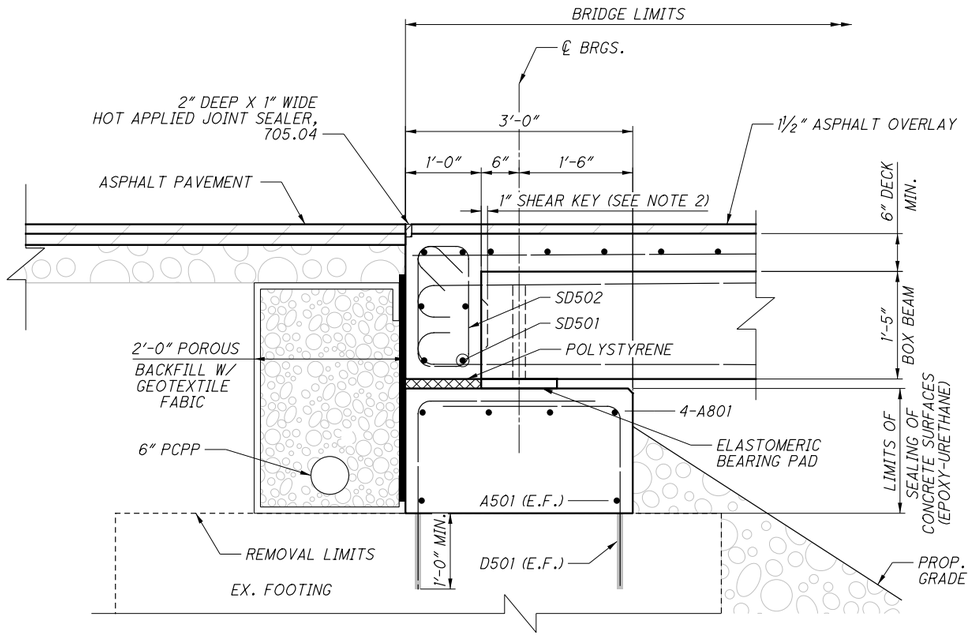
DESIGNED	DRAWN	REVIEWED	DATE
SL	SL	TML	06/2025
CHECKED	REVISED	STRUCTURE FILE NUMBER	
PES		00000	

ABUTMENT PLAN AND ELEVATION
BRIDGE NO. 009
HOLMES COUNTY TRAIL OVER BLACK CREEK (STREAM 12)

HOL CO. TR. 5C2
PID No. 120806

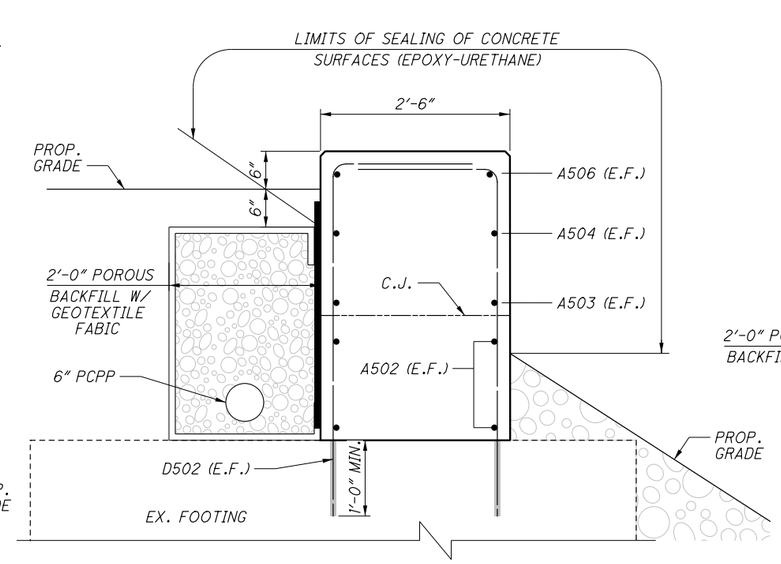
4 / 9

112 / 133



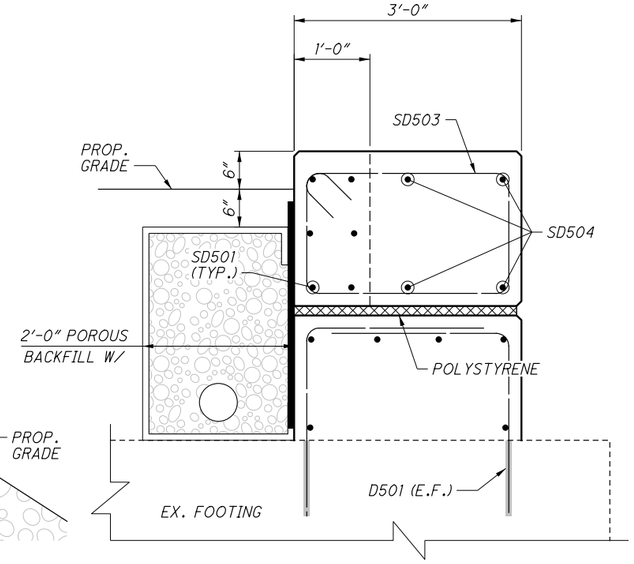
SECTION A-A

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT SIMILAR)



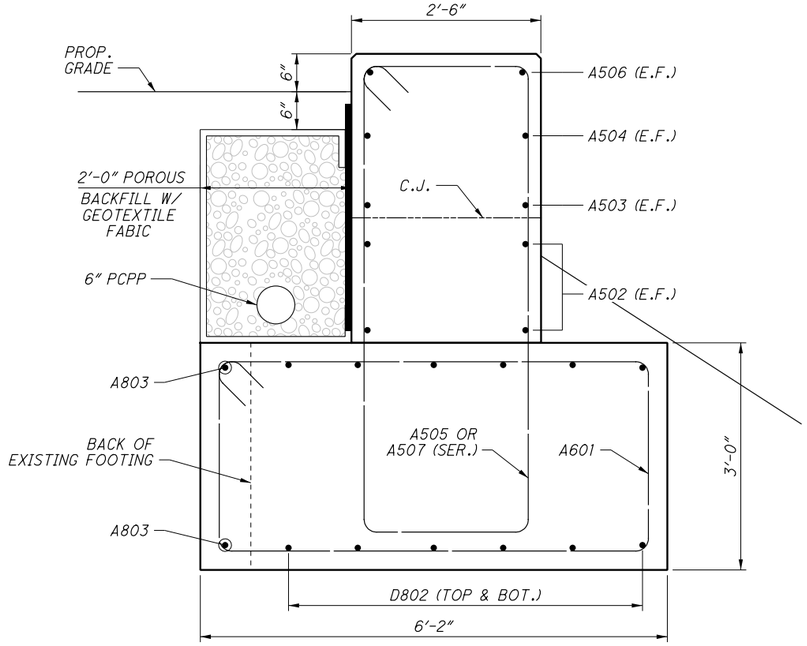
SECTION B-B

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT SIMILAR)



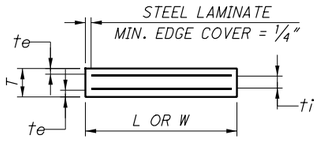
SECTION C-C

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT SIMILAR)



SECTION D-D

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT SIMILAR)



LEGEND:

DOWEL BAR

te = EXTERIOR LAYER THICKNESS
Ne = NUMBER OF EXTERIOR LAYERS
ti = INTERIOR LAYER THICKNESS
Ni = NUMBER OF INTERIOR LAYERS
DL = DEAD LOAD
LL = LIVE LOAD

ELASTOMERIC BEARING PAD DATA													
LOCATION	L	W	T	te	Ne	ti	Ni	ts (12 GAGE)	DESIGN LOADS (KIPS) DL	LLmax	LLmin	SERVICE TOTAL	DESIGN ROTATION (RAD.)
EXTERIOR	7"	11"	1.409"	0.35"	2	0.5"	1	0.1046"	13.5	5.9	0.0	19.4	0.005376
INTERIOR	7"	11"	1.409"	0.35"	2	0.5"	1	0.1046"	13.5	4.9	0.0	18.4	0.005376

LAMINATED ELASTOMERIC BEARING

NOTES:

1. SEE SHEET 4/9 FOR ABUTMENT PLAN AND ELEVATION.
2. PROVIDE A 1" DEEP SHEAR KEY CENTERED IN BEAM END. THE SHEAR KEY HEIGHT SHALL BE ONE-HALF OF THE BOX BEAM HEIGHT AND THE WIDTH SHALL BE 38".
3. PROVIDE 1½" EXPANDED POLYSTYRENE FILLER ALONG BEAM SEAT.
4. ELASTOMERIC BEARINGS: THE ELASTOMER SHALL HAVE A HARDINESS OF 50 DUROMETER. THE BEARINGS WERE DESIGNED IN ACCORDANCE WITH SECTION 14.7.6 (METHOD A) OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS. THE LONG-TERM COMPRESSION PROOF LOAD TEST (AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, DIVISION II, SECTION 18.7.2.6) IS NOT REQUIRED.
5. STEEL LAMINATES SHALL HAVE A THICKNESS OF 12-GAGE (0.1046 INCHES).

DESIGN AGENCY
ONE EASTON OVAL
SUITE 400
COLUMBUS, OH 43219
T 614-476-6000
F 614-476-6225
WOOLPERT
DESIGN | GEOSPATIAL | INFRASTRUCTURE

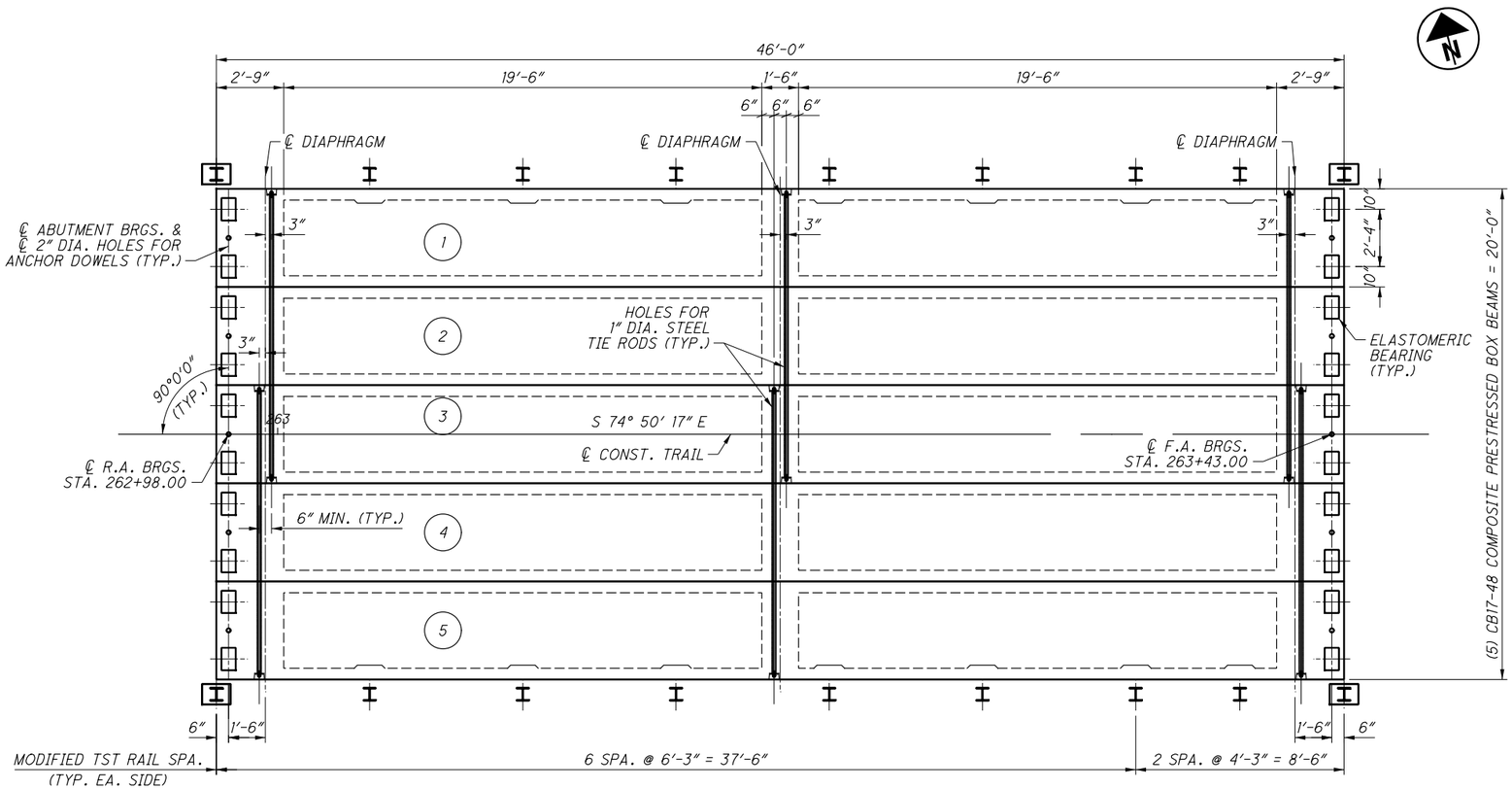
DESIGNED SL | DRAWN SL | CHECKED PES | REVIEWED TML | DATE 06/2025 | REVISED | STRUCTURE FILE NUMBER 00000

ABUTMENT SECTION
BRIDGE NO. 009
HOLMES COUNTY TRAIL OVER BLACK CREEK (STREAM 12)

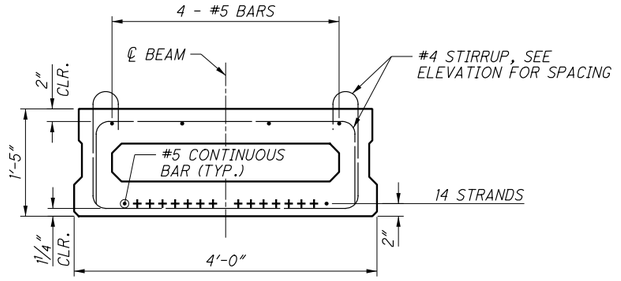
HOL CO. TR. 5C2
PID No. 120806

5 / 9

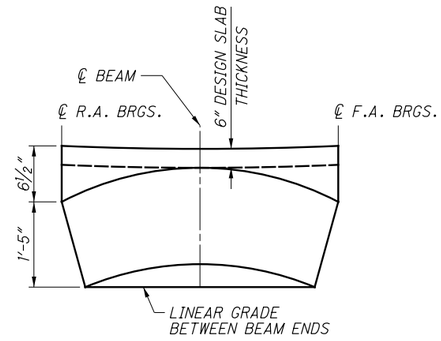
113 / 133



FRAMING PLAN



BEAM DETAILS



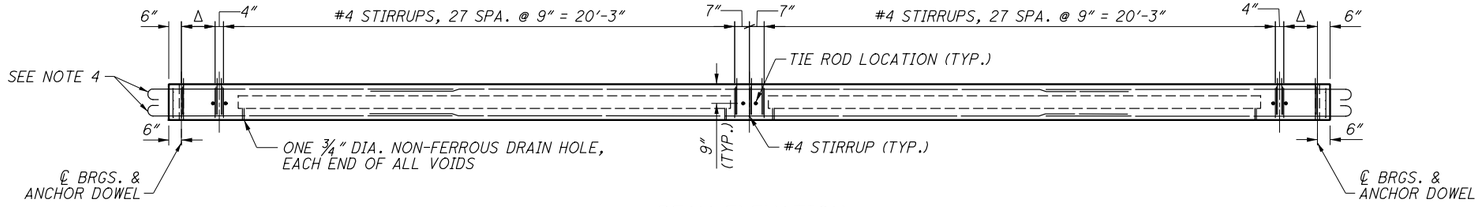
CAMBER DIAGRAM

AT MIDSPAN:
CAMBER AT DAY 0 = ⅝"

CAMBER AT DAY 30 = ⅞"

VERTICAL ADJUSTMENT = 0"

BEAM SEAT ELEVATIONS ASSUME ESTIMATED CAMBER AT DAY 30



BEAM ELEVATION

LEGEND:

- Δ — 4 SPA. @ 4" = 1'-4"
- (#) — BEAM NUMBER
- • — MILD REINFORCING STEEL BAR
- + — PRESTRESSING STRAND LOCATION, BONDED FULL LENGTH

NOTES:

1. SEE ODOT SCD PSBD-1-25 FOR ADDITIONAL PRESTRESSED BOX BEAM DETAILS NOT SHOWN.
2. 2" DIA. ANCHOR DOWELS TO BE FILLED WITH 705.20 NON-SHRINK NON-METALLIC GROUT AT THE ABUTMENTS.
3. THE CALCULATED DEFLECTION DUE TO DEAD LOAD APPLIED AFTER THE BEAMS ARE SET (WEIGHT OF SURFACE COURSE, RAILING, ETC.) IS ⅜".
4. EXTEND TOP & BOTTOM LONGITUDINAL BARS AN EMBEDMENT OF 10" INTO ABUTMENT BACKWALL AND PROVIDE STANDARD 180° HOOK. BARS TO BE EPOXY COATED AND PAID FOR UNDER ITEM 515.
5. PROVIDE 1" DEEP SHEAR KEY CENTERED IN BEAM END. THE SHEAR KEY SHALL BE 8½" TALL AND 38" WIDE.

DESIGN AGENCY
ONE EASTON OVAL
SUITE 400
COLUMBUS, OH 43219
T 614-476-6000
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DESIGN | GEOTECHNICAL | INFRASTRUCTURE

DESIGNED	DRAWN	REVIEWED	DATE
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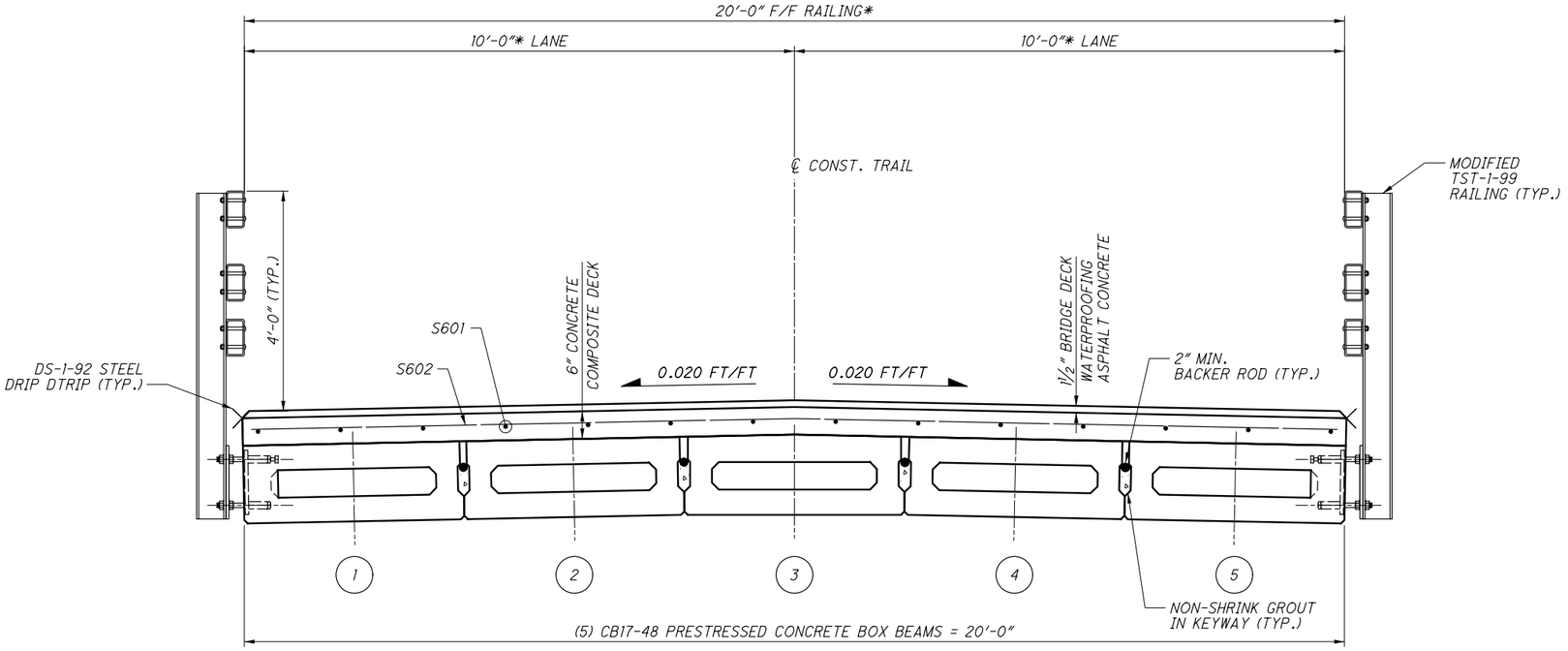
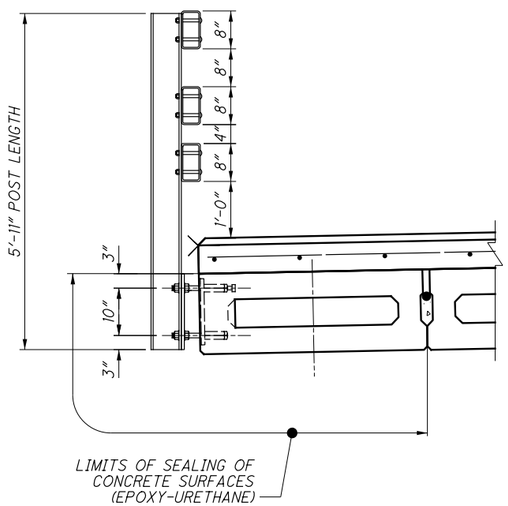
FRAMING PLAN AND DETAILS
BRIDGE NO. B009
HOLMES COUNTY TRAIL OVER BLACK CREEK (STREAM 12)

HOL CO. TR. 5C2
PID No. 120806



TRANSVERSE SECTION

* = PLUS FIT-UP



SEALING DETAIL

LEGEND:

(#) - BEAM NUMBER

NOTES:

1. SEE SHEET 6/9 FOR ADDITIONAL RAILING DETAILS.
2. SEE ODOT SCD DS-1-92 FOR ADDITIONAL DRIP STRIP DETAILS.

DESIGN AGENCY
ONE EASTON OVAL
SUITE 400
COLUMBUS, OH 43219
T 614-476-6000
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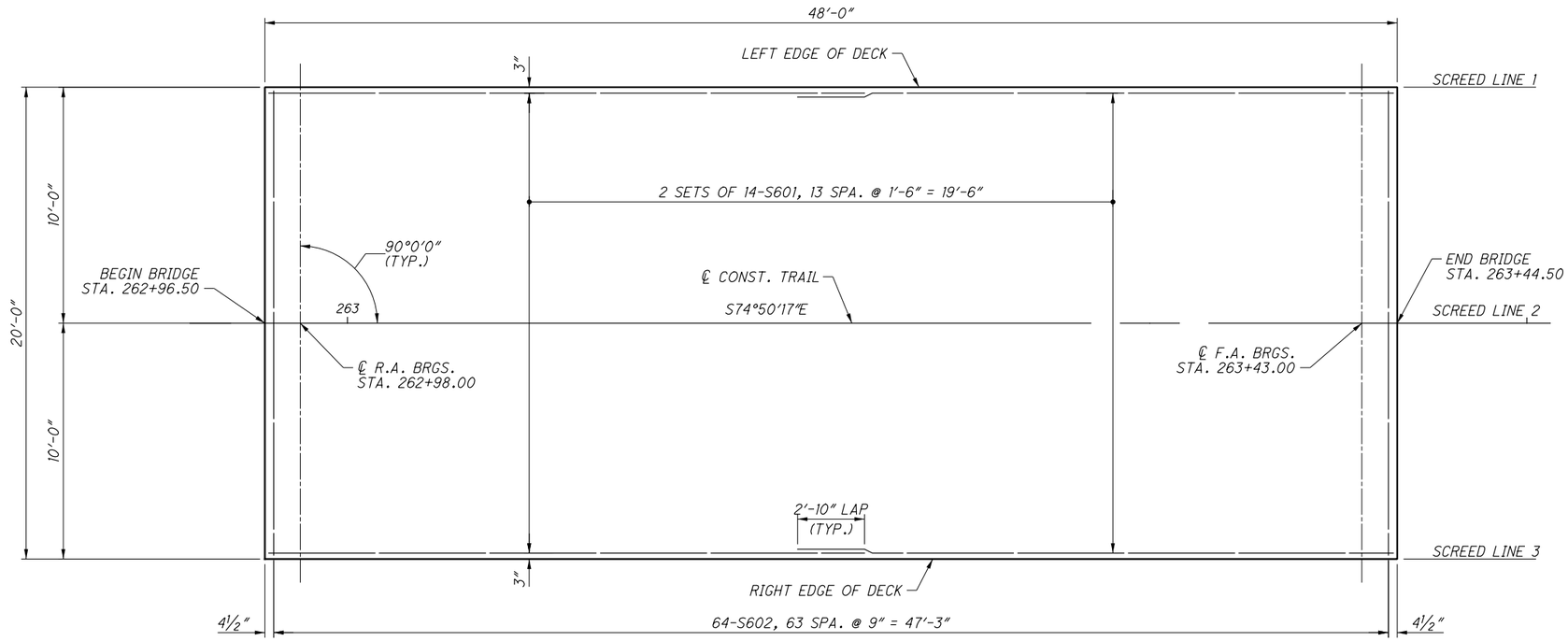
WOLPERT
DESIGN | ENVIRONMENTAL | INFRASTRUCTURE

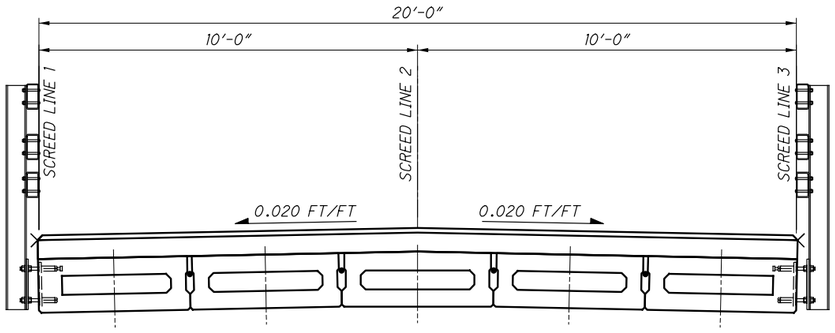
DESIGNED	DRAWN	REVIEWED	DATE
JYM	JYM	TML	06/2025
CHECKED	REVISED	STRUCTURE FILE NUMBER	
PES		00000	

TRANSVERSE SECTION
BRIDGE NO. 009
HOLMES COUNTY TRAIL OVER BLACK CREEK (STREAM 12)

HOL CO. TR. 5C2
PID No. 120806



DECK REINFORCING PLAN



TRANSVERSE SECTION

FINAL DECK SURFACE AND SCREED ELEVATION TABLE						
LOCATION		CL R.A. BRGS.	SPAN 1			CL F.A. BRGS.
			1/4 SPAN	1/2 SPAN	3/4 SPAN	
LEFT EDGE OF DECK SCREED LINE 1	STATION	262+98.00	263+09.25	263+20.50	263+31.75	263+43.00
	OFFSET (FT, LEFT)	10.00	10.00	10.00	10.00	10.00
	FINAL DECK ELEVATION	816.88	816.88	816.89	816.90	816.91
	SCREED ELEVATION	816.88	816.90	816.92	816.92	816.91
	DEAD LOAD DEFLECTIONS	0"	- 1/4"	- 5/16"	- 1/4"	0"
CENTERLINE CONST. TRAIL SCREED LINE 2	STATION	262+98.00	263+09.25	263+20.50	263+31.75	263+43.00
	FINAL DECK ELEVATION	817.08	817.08	817.09	817.10	817.11
	SCREED ELEVATION	817.08	817.10	817.12	817.12	817.11
	DEAD LOAD DEFLECTIONS	0"	- 1/4"	- 5/16"	- 1/4"	0"
RIGHT EDGE OF DECK SCREED LINE 3	STATION	262+98.00	263+09.25	263+20.50	263+31.75	263+43.00
	OFFSET (FT, RIGHT)	10.00	10.00	10.00	10.00	10.00
	FINAL DECK ELEVATION	816.88	816.88	816.89	816.90	816.91
	SCREED ELEVATION	816.88	816.90	816.92	816.92	816.91
	DEAD LOAD DEFLECTIONS	0"	- 1/4"	- 5/16"	- 1/4"	0"

NOTES:

1. SEE SHEET 7/9 FOR TRANSVERSE SECTION.
2. SCREED ELEVATIONS SHOWN REPRESENT THE THEORETICAL DECK SURFACE LOCATION PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.
3. FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURRED.
4. STATIONS AND OFFSETS PROVIDED ALONG CENTERLINE CONST. TRAIL.
5. DECK SLAB THICKNESS FOR CONCRETE QUANTITY:
   THE ESTIMATED QUANTITY OF DECK CONCRETE IS MEASURED ACCORDING TO C&MS 511. IN ADDITION TO THE DESIGN SLAB THICKNESS, THE QUANTITY INCLUDES A VARIABLE HAUNCH THICKNESS THAT PROVIDES AN ALLOWANCE FOR BEAM CAMBER.

DESIGN AGENCY
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SUITE 400
COLUMBUS, OH 43219
T 614-476-6000
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WOOLPERT
DESIGN | GEOSPATIAL | INFRASTRUCTURE

DESIGNED	DRAWN	REVIEWED	DATE
JYM	JYM	TML	06/2025
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PES		00000	

DECK REINFORCING PLAN AND FINAL DECK ELEVATIONS
BRIDGE NO. B009
HOLMES COUNTY TRAIL OVER BLACK CREEK (STREAM 12)

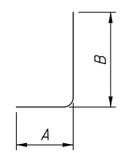
HOL CO. TR. 5C2
PID No. 120806

ABUTMENT														
BAR MARK	MAT'RL TYPE	NUMBER REAR	NUMBER FWD.	TOTAL	LENGTH	WEIGHT (LBS)	TYPE	DIMENSIONS A	B	C	D	E	R	INC.
D501	ECSR	46	46	92	4'-7"	440	1	2'-6"	2'-2"					
D502	ECSR	8	8	16	6'-4"	106	1	2'-0"	4'-5"					
A501	ECSR	2	2	4	23'-0"	96	ST.							
A502	ECSR	8	8	16	8'-8"	145	ST.							
A503	ECSR	4	4	8	6'-1"	51	ST.							
A504	ECSR	4	4	8	4'-0"	34	ST.							
A505	ECSR	2	2	4	16'-9"	70	3	2'-2"	5'-11"					
A506	ECSR	4	4	8	6'-5"	54	19	2'-2"	3'-10"	1'-10"				
		2	2	4	12'-11"				4'-0"					
A507	ECSR	SER OF	SER OF	SER OF	TO	241	3	2'-2"	TO					1'-0"
		4	4	4	15'-11"				5'-6"					
A601	ECSR	12	12	24	17'-2"	619	3	5'-8"	2'-6"					
A801	ECSR	4	4	8	23'-0"	492	ST.							
A802	ECSR	2	2	4	5'-7"	60	ST.							
A803	ECSR	2	2	4	3'-8"	40	ST.							
D801	ECSR	12	12	24	7'-5"	476	ST.							
D802	ECSR	12	12	24	5'-6"	353	ST.							
					TOTAL = 3277 LBS									

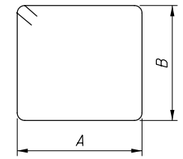
DIAPHRAGMS														
BAR MARK	MAT'RL TYPE	NUMBER REAR	NUMBER FWD.	TOTAL	LENGTH	WEIGHT (LBS)	TYPE	DIMENSIONS A	B	C	D	E	R	INC.
SD501	ECSR	6	6	12	22'-8"	284	ST.							
SD502	ECSR	20	20	40	5'-1"	213	3	8"	1'-7"					
SD503	ECSR	4	4	8	9'-1"	76	3	2'-8"	1'-7"					
SD504	ECSR	8	8	16	1'-2"	20	ST.							
					TOTAL = 593 LBS									

SUPERSTRUCTURE												
BAR MARK	MAT'RL TYPE	TOTAL	LENGTH	WEIGHT (LBS)	TYPE	DIMENSIONS A	B	C	D	E	R	INC.
S601	ECSR	28	25'-3"	1062	ST.							
S602	ECSR	64	19'-8"	1891	ST.							
			TOTAL = 2953 LBS									

REINFORCING STEEL BAR BEND DIAGRAM



TYPE-1



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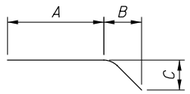


TYPE-19

NOTES:

1. THE BAR SIZE NUMBER IS SPECIFIED IN THE BAR MARK COLUMN, THE FIRST DIGIT AFTER THE LETTERS WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS AFTER THE LETTERS WHERE FOUR DIGITS ARE USED, INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, RA501 IS A NO. 5 BAR IN THE REAR ABUTMENT. A LEGEND OF THE DESCRIPTORS IS GIVEN BELOW:

   A ABUTMENT
   SD DIAPHRAGM
   D DOWEL
   S SUPERSTRUCTURE

2. BAR DIMENSIONS SHOWN ARE OUT-TO-OUT UNLESS OTHERWISE NOTED.

3. "ST." INDICATES A STRAIGHT BAR.

4. ALL REINFORCING STEEL SHALL BE EPOXY COATED.

5. MATERIALS LEGEND, ECSR = EPOXY COATED STEEL REINFORCEMENT.

DESIGN AGENCY
ONE EASTON OVAL
SUITE 400
COLUMBUS, OH 43219
T 614-476-6000
F 614-476-6225
WOOLPERT
DESIGN | GEOSPATIAL | INFRASTRUCTURE

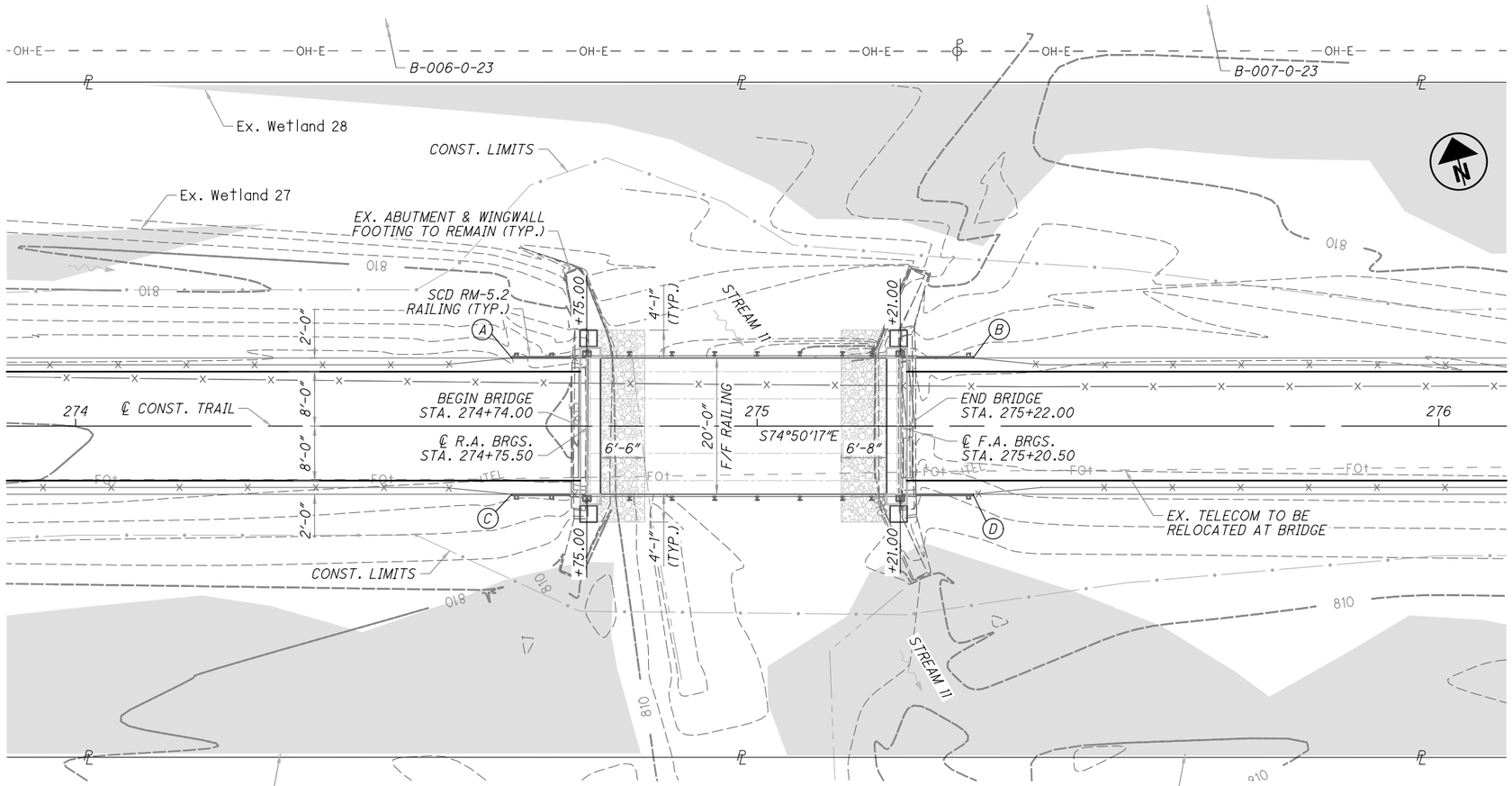
DESIGNED SL | DRAWN SL | REVIEWED TML | DATE 06/2025
CHECKED PES | REVISED | STRUCTURE FILE NUMBER 00000

REINFORCING STEEL LIST
BRIDGE NO. 009
HOLMES COUNTY TRAIL OVER BLACK CREEK (STREAM 12)

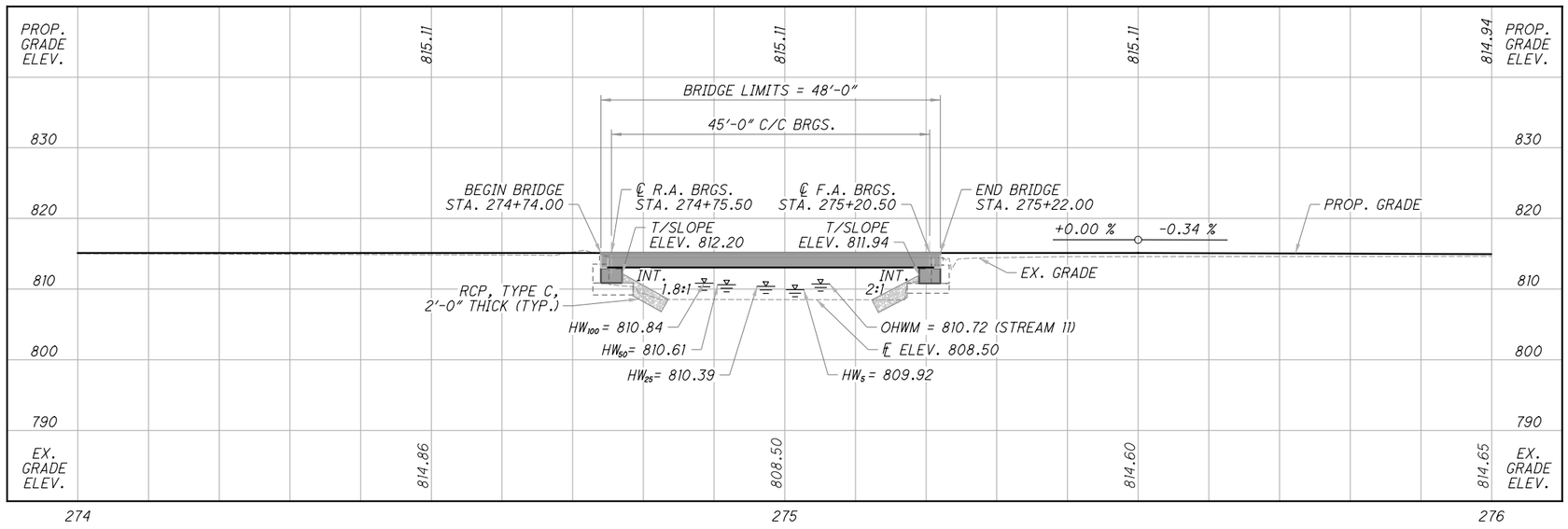
HOL CO. TR. 5C2
PID No. 120806

9 / 9

117
133



PLAN



PROFILE (ALONG ℄ CONST. TRAIL)

BENCHMARK DATA

CP-26 STA. 280+16.03, ELEV. 814.25, OFFSET 1.7' LT.

FOR ADDITIONAL BENCHMARK INFORMATION. SEE ROADWAY PLAN SHEET 3/133

NOTES

EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

LEGEND

- BORING LOCATION
- ROCK CHANNEL PROTECTION, TYPE C, 2'-0" THICK

RM-5.2 RAILING STATIONS

(A)	STA. 274+64.00	OFFSET 10.0' LT.
(B)	STA. 275+31.67	OFFSET 10.0' LT.
(C)	STA. 274+64.00	OFFSET 10.0' RT.
(D)	STA. 275+31.67	OFFSET 10.0' RT.

HYDRAULIC DATA

DRAINAGE AREA = 0.04 SQ. MILES

Q (5) =	68 CFS	V (5) =	1.74 FT/S	HYDRAULIC DESIGN
Q (25) =	119 CFS	V (25) =	2.14 FT/S	SCOUR DESIGN
Q (50) =	147 CFS	V (50) =	2.32 FT/S	SCOUR CHECK
Q (100) =	180 CFS	V (100) =	2.51 FT/S	BRIDGE CHECK

STRUCTURE CLEARS THE 5 YEAR DESIGN HW BY 3.15 FEET.

EXISTING STRUCTURE

TYPE: NO SUPERSTRUCTURE; UNREINFORCED CONCRETE BACKWALL AND ANGLED WINGWALLS ON TOP OF CONCRETE BRIDGE SEAT REMAIN; FOUNDATION TYPE UNKNOWN.

PROPOSED STRUCTURE

TYPE: SINGLE SPAN COMPOSITE PRESTRESSED CONCRETE BOX BEAM ON SEMI-INTEGRAL ABUTMENTS ON EXISTING CONCRETE SPREAD FOOTINGS

SPANS: 45'-0" C/C BRG.
ROADWAY: 20'-0" F/F TST RAILING
LOADING: H15 TRUCK OR 90 PSF PEDESTRIAN LOADING
SKEW: NONE
CURRENT WEARING SURFACE: 1½" CONCRETE ASPHALT
FUTURE WEARING SURFACE: 0.03 KSF
APPROACH SLABS: NONE
ALIGNMENT: TANGENT
CROWN: 0.02 FT/FT
COORDINATES: LATITUDE 40°30'20.19"N
LONGITUDE 82°00'49.44"W

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WOLPERT
DESIGN | GEOTECHNICAL | INFRASTRUCTURE

DESIGNED	DRAWN	REVIEWED	DATE
JYM	JYM	TML	06/2025
CHECKED	REVISED	STRUCTURE FILE NUMBER	
PES		00000	

HOLMES COUNTY
STA. 274+74.00
STA. 275+22.00

SITE PLAN
BRIDGE NO. 010
HOLMES COUNTY TRAIL OVER BLACK CREEK (STREAM 11)

HOL CO. TR. 5C2
PID No. 120806

1 / 9

118 / 133

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STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

DS-1-92	REVISED 7/15/2022
PSBD-1-25	REVISED 7/18/2025
TST-1-99	REVISED 1/15/2021

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO THE 9TH EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020 AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

OPERATIONAL IMPORTANCE:

A LOAD MODIFIER OF 1.0 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN LOADING:

DESIGN LOADING INCLUDES:
0.090 KSF PEDESTRIAN LIVE LOAD OR
NON-CONCURRENT H15-44 (TRUCK ONLY)
FUTURE WEARING SURFACE OF 0.03 KSF
1½" CONCRETE ASPHALT OVERLAY

DESIGN DATA:

CONCRETE CLASS QC2 - COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)
CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)
EPOXY COATED STEEL REINFORCEMENT - MINIMUM YIELD STRENGTH 60 KSI (DECK, DIAPHRAGM, ABUTMENT)

CONCRETE FOR PRESTRESSED BEAMS:
COMPRESSIVE STRENGTH (FINAL) - 7.0 KSI
COMPRESSIVE STRENGTH (RELEASE) - 5.0 KSI
PRESTRESSING STRAND:
AREA = 0.167 SQ. IN.
ULTIMATE STRENGTH = 270 KSI
INITIAL STRESS = 202.5 KSI (LOW RELAXATION STRANDS)

DECK PROTECTION METHOD:

EPOXY COATED REINFORCING STEEL
2½" CONCRETE COVER
STEEL DRIP STRIP

MONOLITHIC WEARING SURFACE:

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1 INCH THICK.

EXISTING STRUCTURE VERIFICATION:

DETAILS AND DIMENSIONS ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C&MS SECTIONS 102.05 AND 105.02.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

ABUTMENT DIAPHRAGM CONCRETE:

DO NOT PLACE THE ABUTMENT CONCRETE ABOVE THE BRIDGE SEAT CONSTRUCTION UNTIL THE PRESTRESSED BOX BEAMS HAVE BEEN ERECTED.

BEAM CAMBER:

THE BEAM SEAT ELEVATIONS ASSUME ESTIMATED CAMBER AT DAY 30. THE ESTIMATED QUANTITY OF DECK CONCRETE IS MEASURED ACCORDING TO C&MS 511. IN ADDITION TO THE DESIGN SLAB THICKNESS, THE QUANTITY INCLUDES A VARIABLE HAUNCH THICKNESS THAT PROVIDES AN ALLOWANCE FOR BEAM CAMBER.

DEMOLITION DEBRIS:

THE CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID AND/OR LIMIT DEMOLITION DEBRIS FROM ENTERING THE STREAM. ANY MATERIAL THAT DOES FALL INTO THE STREAM SHALL BE REMOVED AS SOON AS POSSIBLE.

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN:

THIS WORK CONSISTS OF THE REMOVAL OF PORTIONS OF THE EXISTING STRUCTURE FOR BRIDGE NO. 010. REMOVE EXISTING SUPERSTRUCTURE IN ITS ENTIRETY. REMOVE EXISTING ABUTMENTS AND WINGWALLS TO PROPOSED BEAM SEAT ELEVATIONS AS SHOWN IN REMOVAL DETAILS BELOW.

REMOVE AFOREMENTIONED PORTIONS OF EXISTING STRUCTURE WITH SUFFICIENT CARE AS TO AVOID DAMAGE TO THE REMAINING PORTIONS OF THE STRUCTURE. IN CASE OF DAMAGE TO EXISTING STRUCTURE, REPAIR OR REPLACE THE STRUCTURE AT NO EXPENSE TO THE DEPARTMENT.

CUT LINE CONSTRUCTION JOINT PREPARATION: SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. REMOVE CONCRETE TO A ROUGH SURFACE. LEAVE THE EXISTING CONCRETE REINFORCEMENT, IF REQUIRED IN THE PLANS, IN PLACE. INSTALL DOWEL BARS AS SPECIFIED. PRIOR TO CONCRETE PLACEMENT, ABRASIVELY CLEAN JOINT SURFACES AND EXISTING EXPOSED REINFORCEMENT TO REMOVE LOOSE AND DISINTEGRATED CONCRETE AND LOOSE RUST. THOROUGHLY CLEAN THE JOINT SURFACE AND EXPOSED REINFORCEMENT OF ALL DIRT, DUST, RUST, OR OTHER FOREIGN MATERIAL BY THE USE OF WATER, AIR UNDER PRESSURE, OR OTHER METHODS THAT PRODUCE SATISFACTORY RESULTS. EXISTING STEEL REINFORCEMENT DOES NOT HAVE TO HAVE A BRIGHT CLEAN FINISH, BUT REMOVE ALL PACK AND LOOSE RUST. THOROUGHLY DRENCH EXISTING CONCRETE SURFACES WITH CLEAN WATER AND ALLOW TO DRY TO A DAMP CONDITION BEFORE PLACING CONCRETE.

SUBSTRUCTURE CONCRETE REMOVAL: REMOVE CONCRETE BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. THE DEPARTMENT WILL NOT PERMIT HYDRAULIC HOE-RAM TYPE HAMMERS. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED. OUTSIDE THE 18-IN LIMIT, THE CONTRACTOR MAY USE THE HAMMERS NOT EXCEEDING 90 POUNDS UPON THE APPROVAL OF THE ENGINEER. DO NOT PLACE PNEUMATIC HAMMERS IN DIRECT CONTACT WITH CONCRETE REINFORCEMENT THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN (CONT'D):

THE CONTRACTOR SHALL RETAIN THE SERVICES OF A GEOTECHNICAL ENGINEER, GEOTECHNICAL TESTING REPRESENTATIVE, OR OTHER QUALIFIED INDIVIDUAL WHO HAS COMPLETED THE ODOT SOIL AND ROCK CLASSIFICATION COURSE TO INSPECT THE FOUNDATION BEARING MATERIAL AFTER EXCAVATION AND PRIOR TO CONSTRUCTION OF THE NEW FOOTINGS. PERFORM FOUR TOTAL DYNAMIC CONE PENETROMETER (DCP) TESTS, ONE AT EACH END OF EACH ABUTMENT TO CONFIRM BEARING RESISTANCE OF THE SUBSURFACE MATERIAL. IF BEARING RESISTANCES BELOW THE DESIGN SERVICE VALUE ARE ENCOUNTRED, CONTACT THE ENGINEER FOR DIRECTION PRIOR TO PROCEEDING WITH THE FOUNDATION WORK.

THIS WORK SHALL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE FOR ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.

ITEM 510 - DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN:

PRIOR TO DRILLING DOWEL HOLES, LOCATE ALL EXISTING REINFORCING STEEL BARS IN THE AREA OF THE HOLE WITH THE AID OF A REINFORCING STEEL BAR LOCATOR (PACHOMETER). IF AN EXISTING BAR IS ENCOUNTERED AT THE SAME LOCATION AS A PROPOSED DOWEL HOLE, MOVE THE DOWEL HOLE TO EITHER SIDE OF THE EXISTING BAR.

PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED IN THE EACH CONTRACT PRICE FOR ITEM 510 - DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN, UNLESS SEPARATELY ITEMIZED IN THE PLANS.

ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE):

SEAL ALL CONCRETE SURFACES INCLUDING ABUTMENTS, WINGWALLS, THE OUTSIDE FASCIAS OF THE DECK AND EXTERIOR BEAMS, AND THE COMPLETE UNDERSIDE OF THE EXTERIOR BEAMS USING EPOXY-URETHANE SEALER. THE FINAL COLOR SHALL BE FEDERAL COLOR STANDARD NO. 17778, PER THE CMS.

FOUNDATION BEARING RESISTANCE:

FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 0.69 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 1.0 KIPS PER SQUARE FOOT.

ITEM 517 - RAILING (TWIN STEEL TUBE), AS PER PLAN:

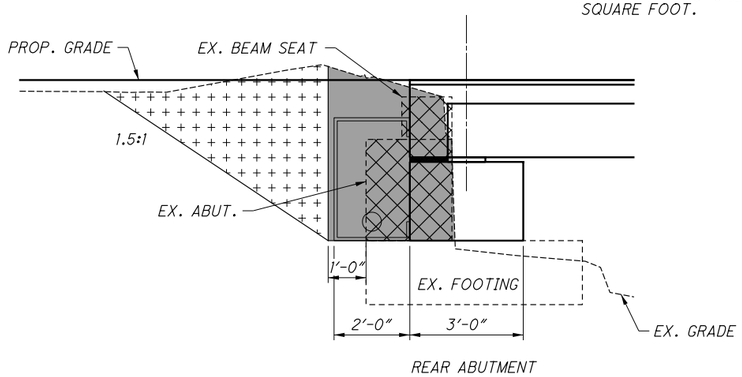
THE TST-1-99 RAILING SHALL BE MODIFIED WITH AN EXTENDED POST AND AN ADDITIONAL STEEL TUBE SIDE RAIL TO PROVIDE A MINIMUM 4-FT HEIGHT FROM TOP OF RAIL TO TOP OF DECK. PAYMENT FOR THIS ITEM 517 - RAILING (TWIN STEEL STUBE), AS PER PLAN SHALL INCLUDE TIMBER RAILS, STEEL POSTS, STEEL TUBING SIDE RAILS, AND ALL CONNECTION ELEMENTS INCLUDING BOLTS, NUTS, AND WASHERS.

ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN:

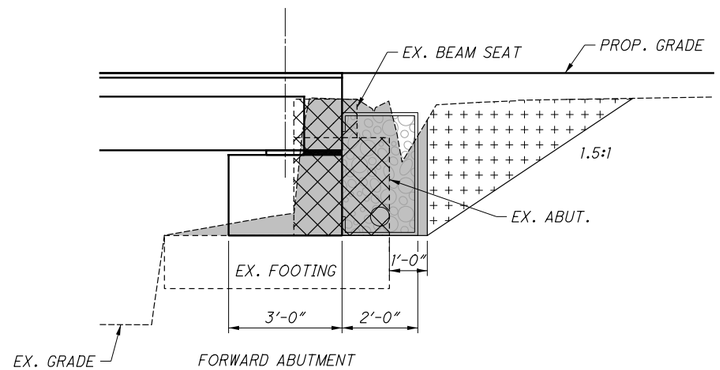
PRIOR TO THE SURFACE CLEANING SPECIFIED IN 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PLACED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

ABBREVIATIONS:

ABUT.	ABUTMENT
BRGS.	BEARINGS
C/C	CENTER-TO-CENTER
℄	CENTERLINE
CONST.	CONSTRUCTION
DIA.	DIAMETER
ELEV.	ELEVATION
EX.	EXISTING
F.A.	FORWARD ABUTMENT
F/F	FACE-TO-FACE
NPCPP	NON-PERFORATED CORRUGATED PLASTIC PIPE
PCPP	PERFORATED CORRUGATED PLASTIC PIPE
PROP.	PROPOSED
R.A.	REAR ABUTMENT
RCP	ROCK CHANNEL PROTECTION
T/	TOP OF
TYP.	TYPICAL
W/	WITH



REAR ABUTMENT



FORWARD ABUTMENT

REMOVAL DETAILS

LIMITS OF UNCLASSIFIED EXCAVATION

ITEM 202 - PORTION OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN

ITEM 203 - EXCAVATION

ITEM 518 - POROUS BACKFILL W/ GEOTEXTILE FABRIC

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WOOLPERT
DESIGN | GEOSPATIAL | INFRASTRUCTURE

DESIGNED	DRAWN	REVIEWED	DATE
JYM	JYM	TML	06/2025
CHECKED	REVISED	STRUCTURE FILE NUMBER	
PES		00000	

STRUCTURE GENERAL NOTES

BRIDGE NO. 010
HOLMES COUNTY TRAIL OVER BLACK CREEK (STREAM 11)

HOL CO. TR. 5C2
PID No. 120806

BRIDGE B10 ESTIMATED QUANTITIES

CALC BY: JYM DATE: 6/13/2025
CHECK BY: SL DATE: 6/17/2025

ITEM	EXT	QUANTITY	UNIT	DESCRIPTION	SHEET
202	11203	LS		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	2/9
203	10000	27	CY	EXCAVATION	
203	20000	32	CY	EMBANKMENT	
503	11100	LS		COFFERDAMS AND EXCAVATION BRACING	
503	21100	30	CY	UNCLASSIFIED EXCAVATION	
509	10000	5053	LB	EPOXY COATED STEEL REINFORCEMENT	
510	10001	116	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN	2/9
511	31610	22	CY	CLASS QC2 CONCRETE, SUPERSTRUCTURE	
511	44110	14	CY	CLASS QC1 CONCRETE, ABUTMENT NOT INCLUDING FOOTING	
512	10100	71	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
515	12030	5	EA	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB17-48, 46'-0"	
516	13900	21	SF	2" PREFORMED EXPANSION JOINT FILLER	
516	31010	40	FT	2" DEEP JOINT SEALER	
516	43101	20	EA	ELASTOMERIC BEARING WITH INTERNAL LAMINATES ONLY (NEOPRENE), AS PER PLAN, 1.5" THICK	5/9
517	70001	102	FT	RAILING (TWIN STEEL TUBE), AS PER PLAN	2/9
518	21200	14	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	
SPECIAL	518E22300	107	FT	STEEL DRIP STRIP	
518	40000	57	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	
518	40010	24	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	
519	11101	20	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	2/9
601	32200	28	CY	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	
856	10000	5	CY	BRIDGE DECK WATERPROOFING ASPHALT CONCRETE	

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ESTIMATED QUANTITIES
BRIDGE NO. 010
HOLMES COUNTY TRAIL OVER BLACK CREEK (STREAM 11)

HOL CO. TR. 5C2
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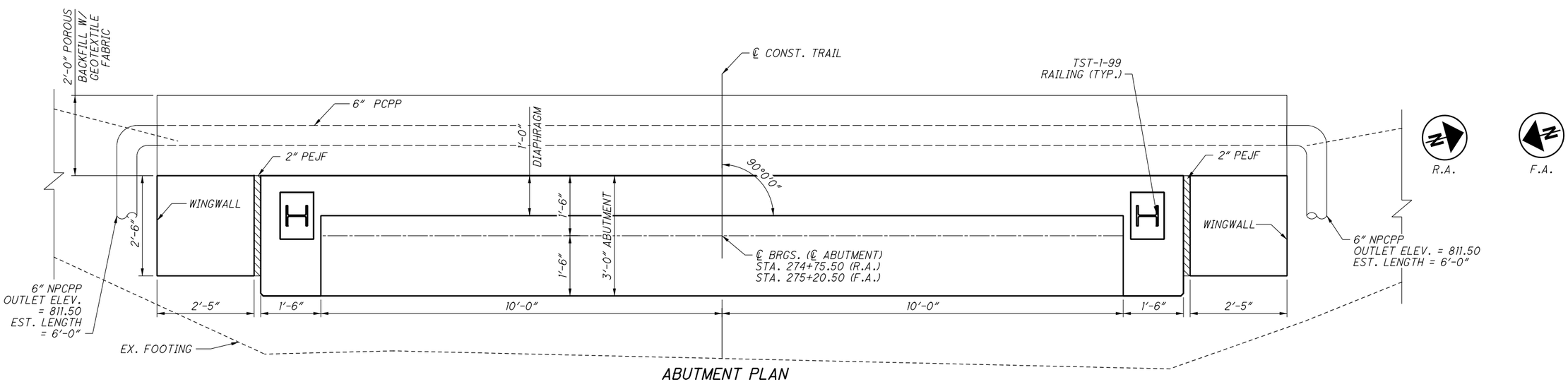
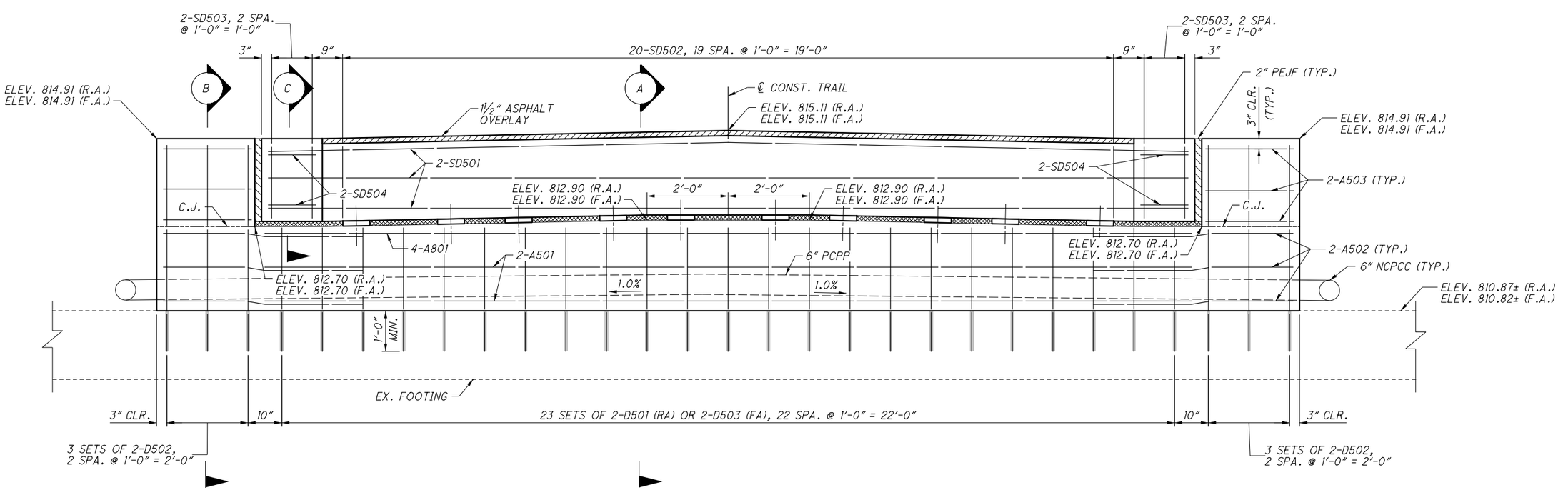


ABUTMENT PLAN

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT SIMILAR)



ABUTMENT ELEVATION

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT SIMILAR)

LEGEND:

DOWEL BAR

NOTES:

1. ALL DIMENSIONS MEASURED ALONG CENTERLINE BEARING.
2. SEE SHEET 5/9 FOR SECTION A, SECTION B, AND SECTION C.
3. REINFORCING STEEL LAP LENGTHS ARE AS FOLLOWS: #5 BARS = 2'-5".

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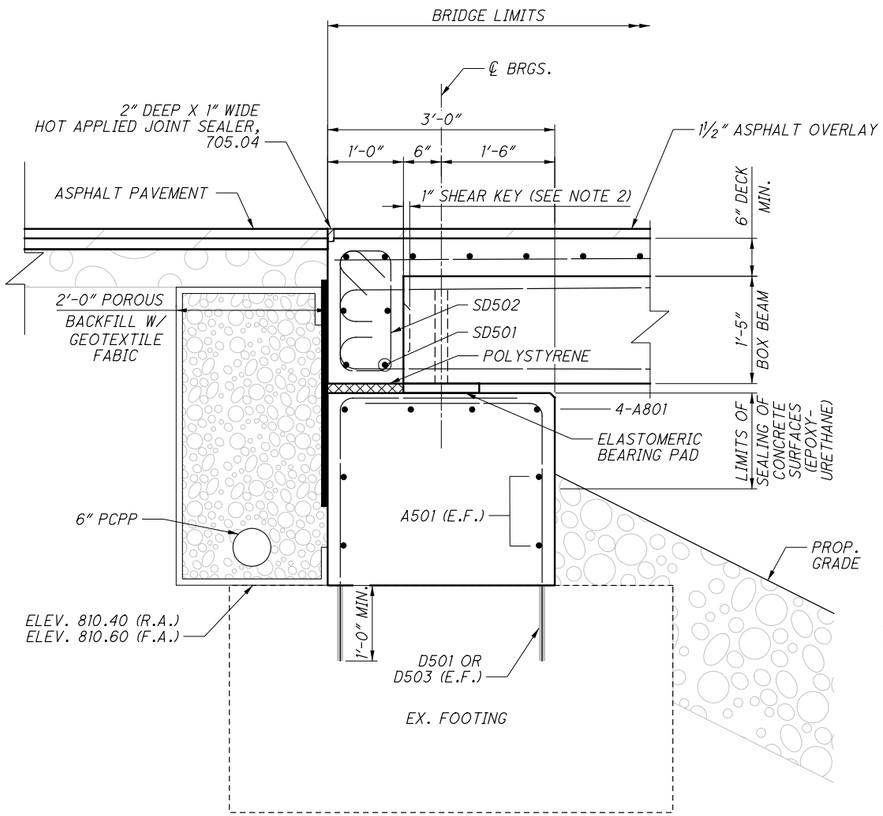
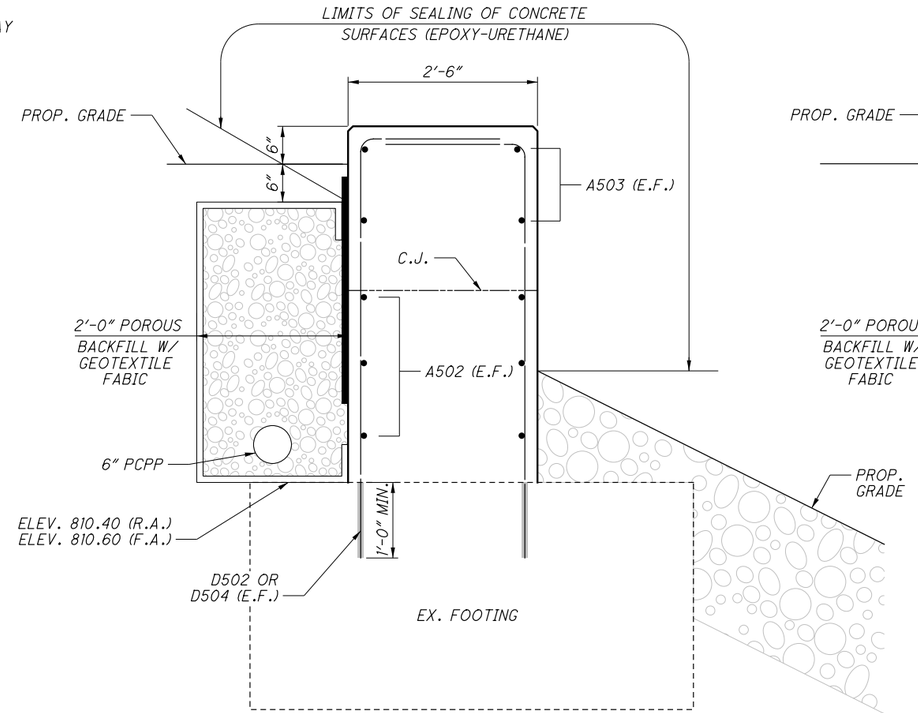
ABUTMENT PLAN AND ELEVATION
BRIDGE NO. 010
HOLMES COUNTY TRAIL OVER BLACK CREEK (STREAM 11)

HOL CO. TR. 5C2
PID No. 120806



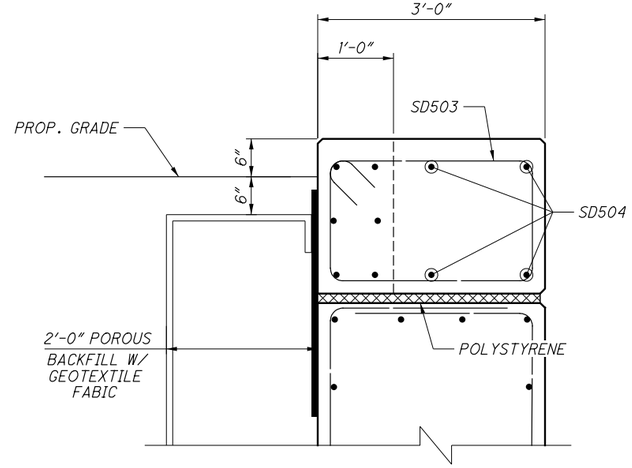
SECTION A-A

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT SIMILAR)



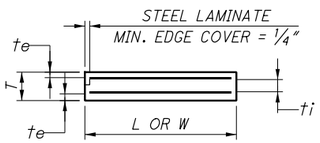
SECTION B-B

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT SIMILAR)



SECTION C-C

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT SIMILAR)



LEGEND:

DOWEL BAR

te = EXTERIOR LAYER THICKNESS
Ne = NUMBER OF EXTERIOR LAYERS
ti = INTERIOR LAYER THICKNESS
Ni = NUMBER OF INTERIOR LAYERS
DL = DEAD LOAD
LL = LIVE LOAD

ELASTOMERIC BEARING PAD DATA

LOCATION	L	W	T	te	Ne	ti	Ni	ts (12 GAGE)	DESIGN LOADS (KIPS) DL	LLmax	LLmin	SERVICE TOTAL	DESIGN ROTATION (RAD.)
EXTERIOR	7"	11"	1.409"	0.35"	2	0.5"	1	0.1046"	13.5	5.9	0.0	19.4	0.005376
INTERIOR	7"	11"	1.409"	0.35"	2	0.5"	1	0.1046"	13.5	4.9	0.0	18.4	0.005376

LAMINATED ELASTOMERIC BEARING

NOTES:

1. SEE SHEET 4/9 FOR ABUTMENT PLAN AND ELEVATION.
2. PROVIDE A 1" DEEP SHEAR KEY CENTERED IN BEAM END. THE SHEAR KEY HEIGHT SHALL BE ONE-HALF OF THE BOX BEAM HEIGHT AND THE WIDTH SHALL BE 38".
3. PROVIDE 1½" EXPANDED POLYSTYRENE FILLER ALONG BEAM SEAT.
4. ELASTOMERIC BEARINGS: THE ELASTOMER SHALL HAVE A HARDINESS OF 50 DUROMETER. THE BEARINGS WERE DESIGNED IN ACCORDANCE WITH SECTION 14.7.6 (METHOD A) OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS. THE LONG-TERM COMPRESSION PROOF LOAD TEST (AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, DIVISION II, SECTION 18.7.2.6) IS NOT REQUIRED.
5. STEEL LAMINATES SHALL HAVE A THICKNESS OF 12-GAGE (0.1046 INCHES).

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WOOLPERT

DESIGNED	DRAWN	REVIEWED	DATE
SL	SL	TML	06/2025
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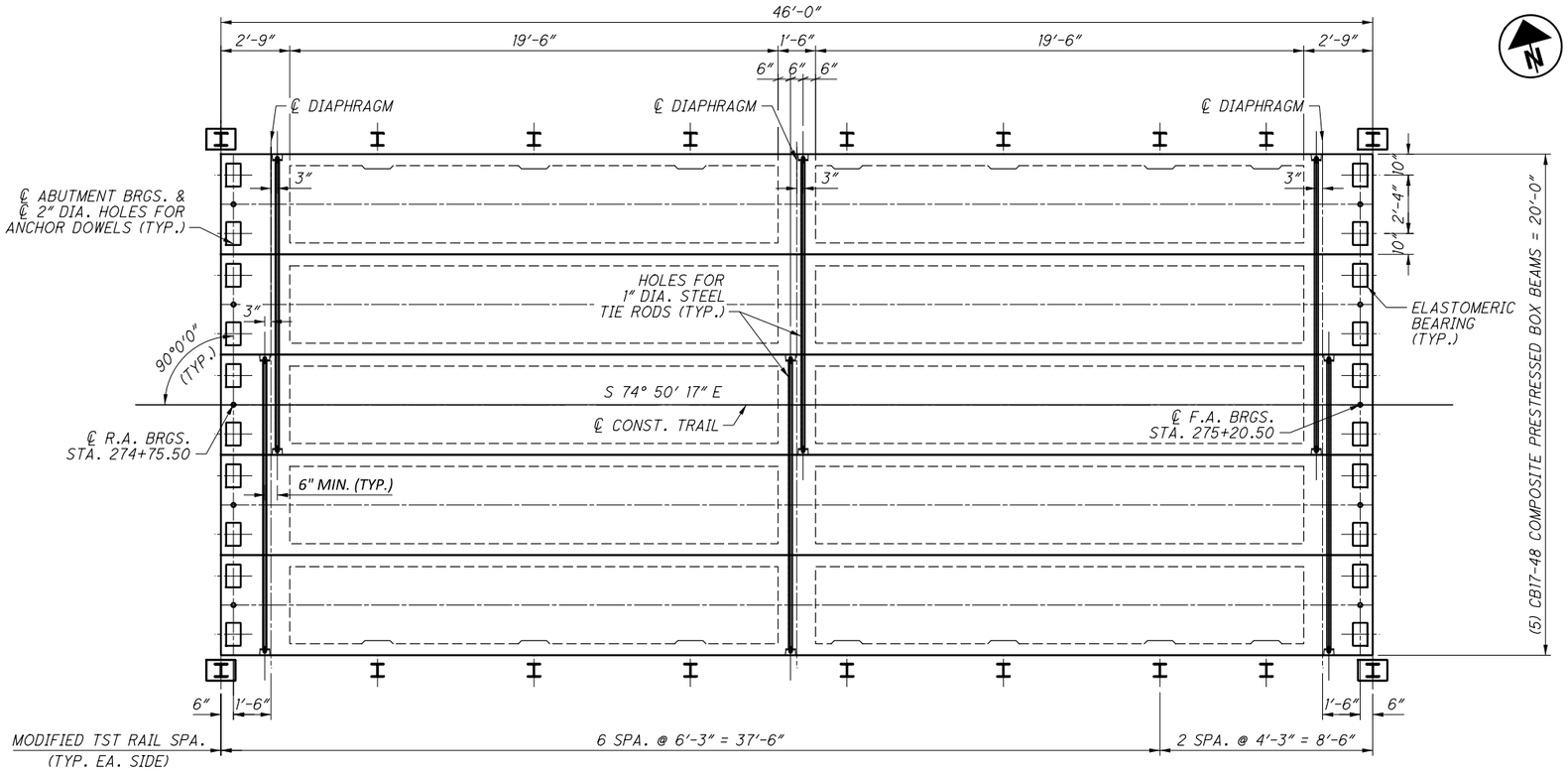
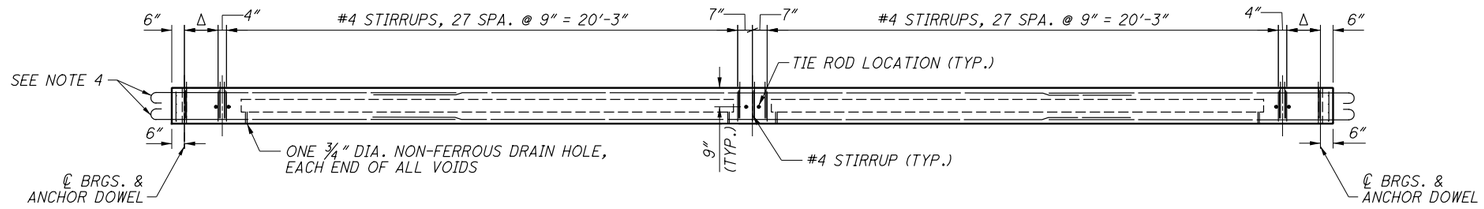
PES		00000	

ABUTMENT SECTION
BRIDGE NO. 010
HOLMES COUNTY TRAIL OVER BLACK CREEK (STREAM 11)

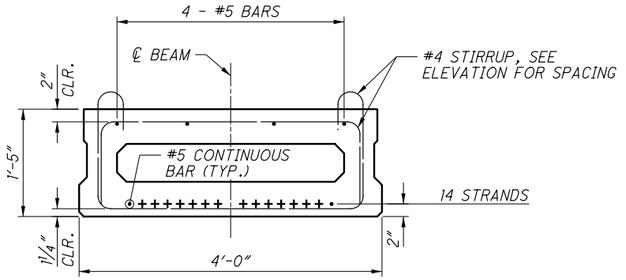
HOL CO. TR. 5C2
PID No. 120806



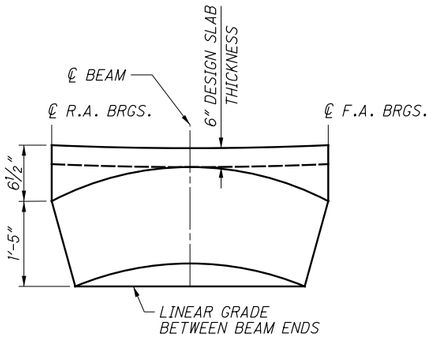
FRAMING PLAN



BEAM ELEVATION



BEAM DETAILS



CAMBER DIAGRAM

AT MIDSPAN:
CAMBER AT DAY 0 = 5/8"

CAMBER AT DAY 30 = 7/8"

VERTICAL ADJUSTMENT = 0"

BEAM SEAT ELEVATIONS ASSUME ESTIMATED CAMBER AT DAY 30

LEGEND:

Δ	4 SPA. @ 4" = 1'-4"
(#)	BEAM NUMBER
•	MILD REINFORCING STEEL BAR
+	PRESTRESSING STRAND LOCATION, BONDED FULL LENGTH

NOTES:

1. SEE ODOT SCD PSBD-1-25 FOR ADDITIONAL PRESTRESSED BOX BEAM DETAILS NOT SHOWN.
2. 2" DIA. ANCHOR DOWELS TO BE FILLED WITH 705.20 NON-SHRINK NON-METALLIC GROUT AT THE ABUTMENTS.
3. THE CALCULATED DEFLECTION DUE TO DEAD LOAD APPLIED AFTER THE BEAMS ARE SET (WEIGHT OF SURFACE COURSE, RAILING, ETC.) IS 3/8".
4. EXTEND TOP & BOTTOM LONGITUDINAL BARS AN EMBEDMENT OF 10" INTO ABUTMENT BACKWALL AND PROVIDE STANDARD 180° HOOK. BARS TO BE EPOXY COATED AND PAID FOR UNDER ITEM 515.
5. PROVIDE 1" DEEP SHEAR KEY CENTERED IN BEAM END. THE SHEAR KEY SHALL BE 8½" TALL AND 38" WIDE.

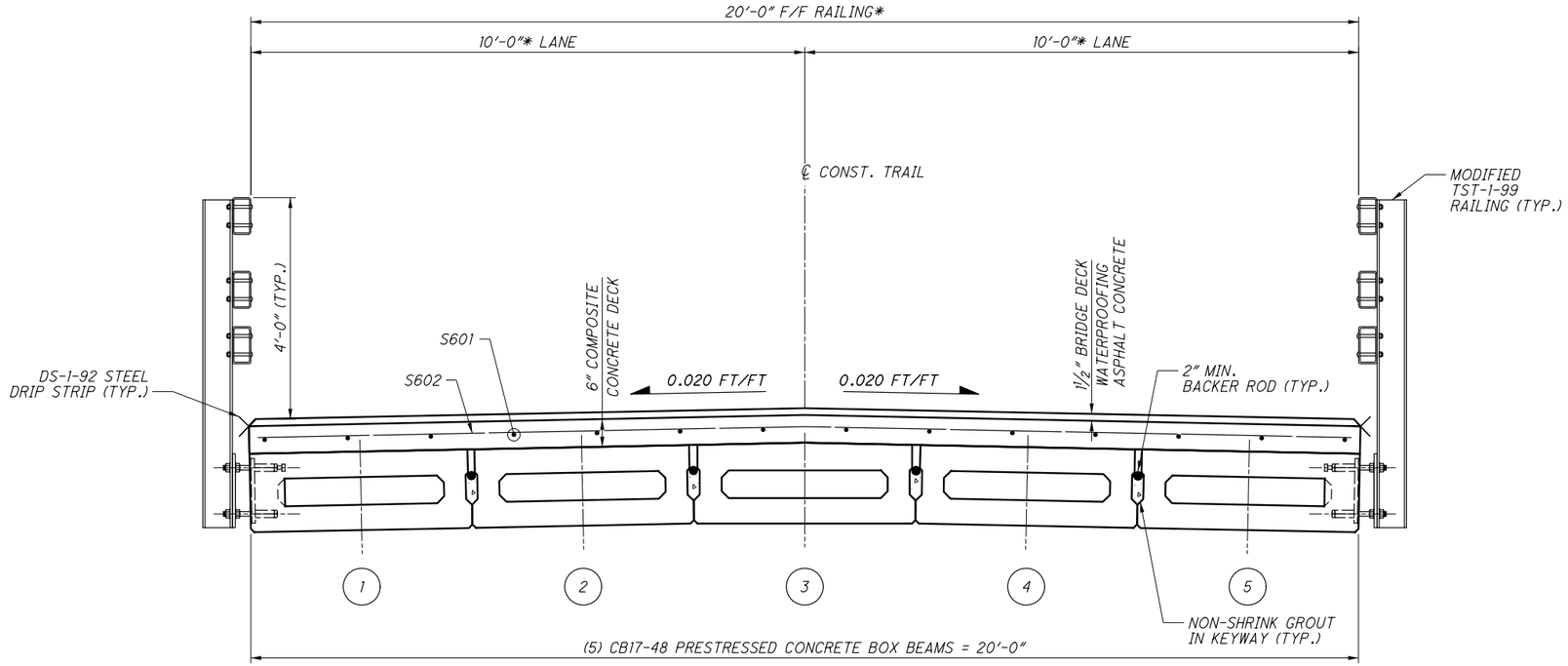
DESIGN AGENCY
ONE EASTON OVAL
SUITE 400
COLUMBUS, OH 43219
T 614-476-6000
F 614-476-6225
WOOLPERT
DESIGN | GEOSPATIAL | INFRASTRUCTURE

DESIGNED	DRAWN	REVIEWED	DATE
JYM	JYM	TML	06/2025
CHECKED	REVISED	STRUCTURE FILE NUMBER	
PES		00000	

FRAMING PLAN AND DETAILS

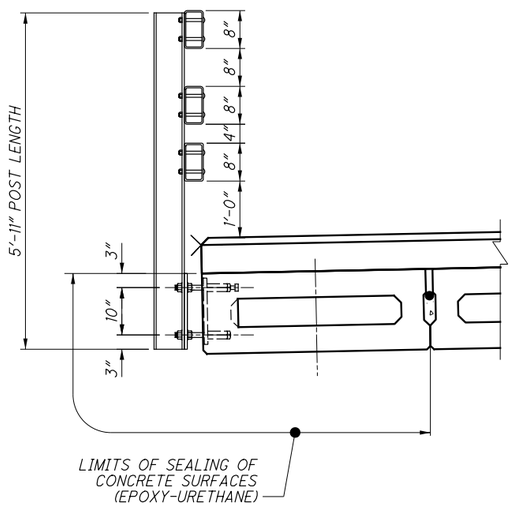
BRIDGE NO. B010
HOLMES COUNTY TRAIL OVER BLACK CREEK (STREAM 11)

HOL. CO. TR. 5C2
PID No. 120806



TRANSVERSE SECTION

* = PLUS FIT-UP



SEALING DETAIL

LEGEND:

(#) - BEAM NUMBER

NOTES:

1. SEE SHEET 6/9 FOR ADDITIONAL RAILING DETAILS.
2. SEE ODOT SCD DS-1-92 FOR ADDITIONAL DRIP STRIP DETAILS.

DESIGN AGENCY
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JYM	JYM	TML	06/2025
CHECKED	REVISED	STRUCTURE FILE NUMBER	
PES		00000	

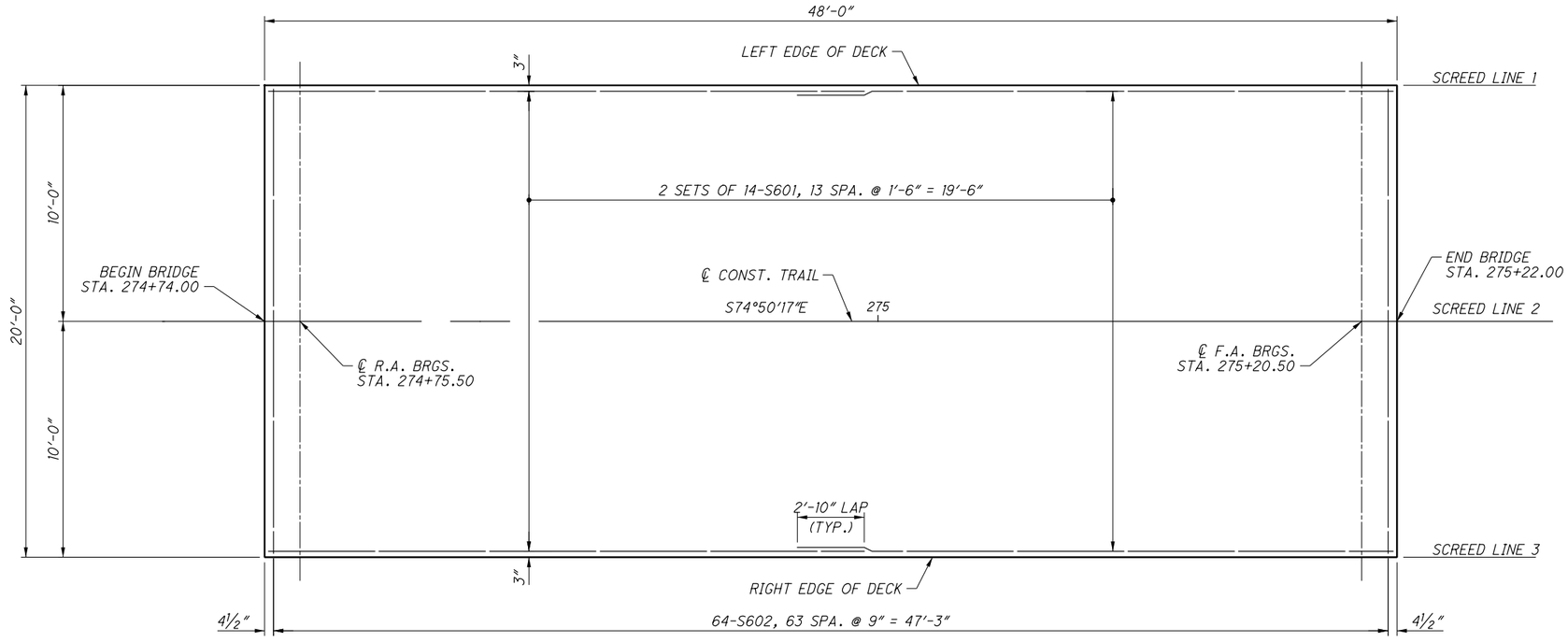
TRANSVERSE SECTION
BRIDGE NO. 010
HOLMES COUNTY TRAIL OVER BLACK CREEK (STREAM 11)

HOL CO. TR. 5C2
PID No. 120806

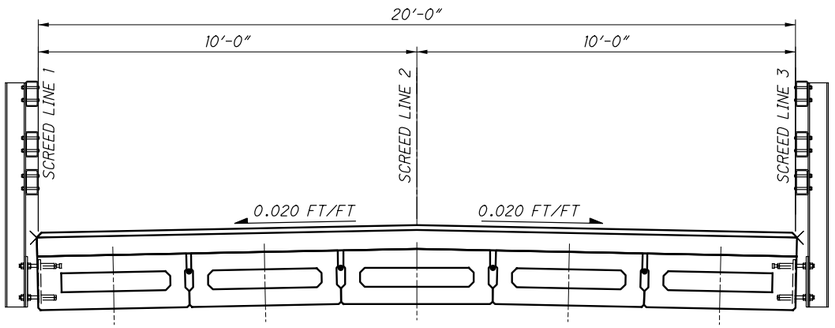
7 / 9

124
133

G:\DE\Clients\OH_Holmes County Parks\0012372_Holmes_Trail_5C2\120806_Holmes_Trail_5C2\Design\Structures\Sheets\Bridge BIO\0012372_ST301.dgn Sheet 9/2/2025 10:14:18 AM A.Adair



DECK REINFORCING PLAN



TRANSVERSE SECTION

FINAL DECK SURFACE AND SCREED ELEVATION TABLE

LOCATION		CL R.A. BRGS.	SPAN 1			CL F.A. BRGS.
			1/4 SPAN	1/2 SPAN	3/4 SPAN	
LEFT EDGE OF DECK SCREED LINE 1	STATION	274+75.50	274+86.75	274+98.00	275+09.25	275+20.50
	OFFSET (FT, LEFT)	10.00	10.00	10.00	10.00	10.00
	FINAL DECK ELEVATION	814.91	814.91	814.91	814.91	814.91
	SCREED ELEVATION	814.91	814.93	814.94	814.93	814.91
	DEAD LOAD DEFLECTIONS	0"	- 1/4"	- 5/16"	- 1/4"	0"
CENTERLINE CONST. TRAIL SCREED LINE 2	STATION	274+75.50	274+86.75	274+98.00	275+09.25	275+20.50
	FINAL DECK ELEVATION	815.11	815.11	815.11	815.11	815.11
	SCREED ELEVATION	815.11	815.13	815.14	815.13	815.11
	DEAD LOAD DEFLECTIONS	0"	- 1/4"	- 5/16"	- 1/4"	0"
RIGHT EDGE OF DECK SCREED LINE 3	STATION	274+75.50	274+86.75	274+98.00	275+09.25	275+20.50
	OFFSET (FT, RIGHT)	10.00	10.00	10.00	10.00	10.00
	FINAL DECK ELEVATION	814.91	814.91	814.91	814.91	814.91
	SCREED ELEVATION	814.91	814.93	814.94	814.93	814.91
	DEAD LOAD DEFLECTIONS	0"	- 1/4"	- 5/16"	- 1/4"	0"

NOTES:

1. SEE SHEET 7/9 FOR TRANSVERSE SECTION.
2. SCREED ELEVATIONS SHOWN REPRESENT THE THEORETICAL DECK SURFACE LOCATION PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.
3. FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURRED.
4. STATIONS AND OFFSETS PROVIDED ALONG CENTERLINE CONST. TRAIL.
5. DECK SLAB THICKNESS FOR CONCRETE QUANTITY:
   THE ESTIMATED QUANTITY OF DECK CONCRETE IS MEASURED ACCORDING TO C&MS 511. IN ADDITION TO THE DESIGN SLAB THICKNESS, THE QUANTITY INCLUDES A VARIABLE HAUNCH THICKNESS THAT PROVIDES AN ALLOWANCE FOR BEAM CAMBER.

DESIGN AGENCY
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DESIGNED	DRAWN	REVIEWED	DATE
JYM	JYM	TML	06/2025
CHECKED	REVISED	STRUCTURE FILE NUMBER	
PES		00000	

DECK REINFORCING PLAN AND FINAL DECK ELEVATIONS
BRIDGE NO. B010
HOLMES COUNTY TRAIL OVER BLACK CREEK (STREAM 11)

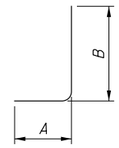
HOL CO. TR. 5C2
PID No. 120806

ABUTMENT														
BAR MARK	MAT'RL TYPE	NUMBER REAR	NUMBER FWD.	TOTAL	LENGTH	WEIGHT (LBS)	TYPE	DIMENSIONS A	B	C	D	E	R	INC.
D501	ECSR	46	46	92	5'-0"	480	1	2'-6"	2'-7"					
D502	ECSR	12	12	24	6'-9"	169	1	2'-0"	4'-10"					
A501	ECSR	4	4	8	23'-0"	192	ST.							
A502	ECSR	12	12	24	4'-10"	121	ST.							
A503	ECSR	12	12	24	2'-1"	53	ST.							
A801	ECSR	4	4	8	23'-0"	492	ST.							
					TOTAL = 1507 LBS									

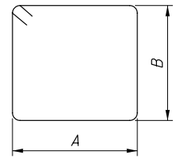
DIAPHRAGMS														
BAR MARK	MAT'RL TYPE	NUMBER REAR	NUMBER FWD.	TOTAL	LENGTH	WEIGHT (LBS)	TYPE	DIMENSIONS A	B	C	D	E	R	INC.
SD501	ECSR	6	6	12	22'-8"	284	ST.							
SD502	ECSR	20	20	40	5'-1"	213	3	8"	1'-7"					
SD503	ECSR	4	4	8	9'-1"	76	3	2'-8"	1'-7"					
SD504	ECSR	8	8	16	1'-2"	20	ST.							
					TOTAL = 593 LBS									

SUPERSTRUCTURE												
BAR MARK	MAT'RL TYPE	TOTAL	LENGTH	WEIGHT (LBS)	TYPE	DIMENSIONS A	B	C	D	E	R	INC.
S601	ECSR	28	25'-3"	1062	ST.							
S602	ECSR	64	19'-8"	1891	ST.							
			TOTAL = 2953 LBS									

REINFORCING STEEL BAR BEND DIAGRAM



TYPE-1



TYPE-3

NOTES:

1. THE BAR SIZE NUMBER IS SPECIFIED IN THE BAR MARK COLUMN, THE FIRST DIGIT AFTER THE LETTERS WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS AFTER THE LETTERS WHERE FOUR DIGITS ARE USED, INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, RA501 IS A NO. 5 BAR IN THE REAR ABUTMENT. A LEGEND OF THE DESCRIPTORS IS GIVEN BELOW:

   A ABUTMENT
   SD DIAPHRAGM
   D DOWEL
   S SUPERSTRUCTURE

2. BAR DIMENSIONS SHOWN ARE OUT-TO-OUT UNLESS OTHERWISE NOTED.
3. "ST." INDICATES A STRAIGHT BAR.
4. ALL REINFORCING STEEL SHALL BE EPOXY COATED.
5. MATERIALS LEGEND, ECSR = EPOXY COATED STEEL REINFORCEMENT.

DESIGN AGENCY
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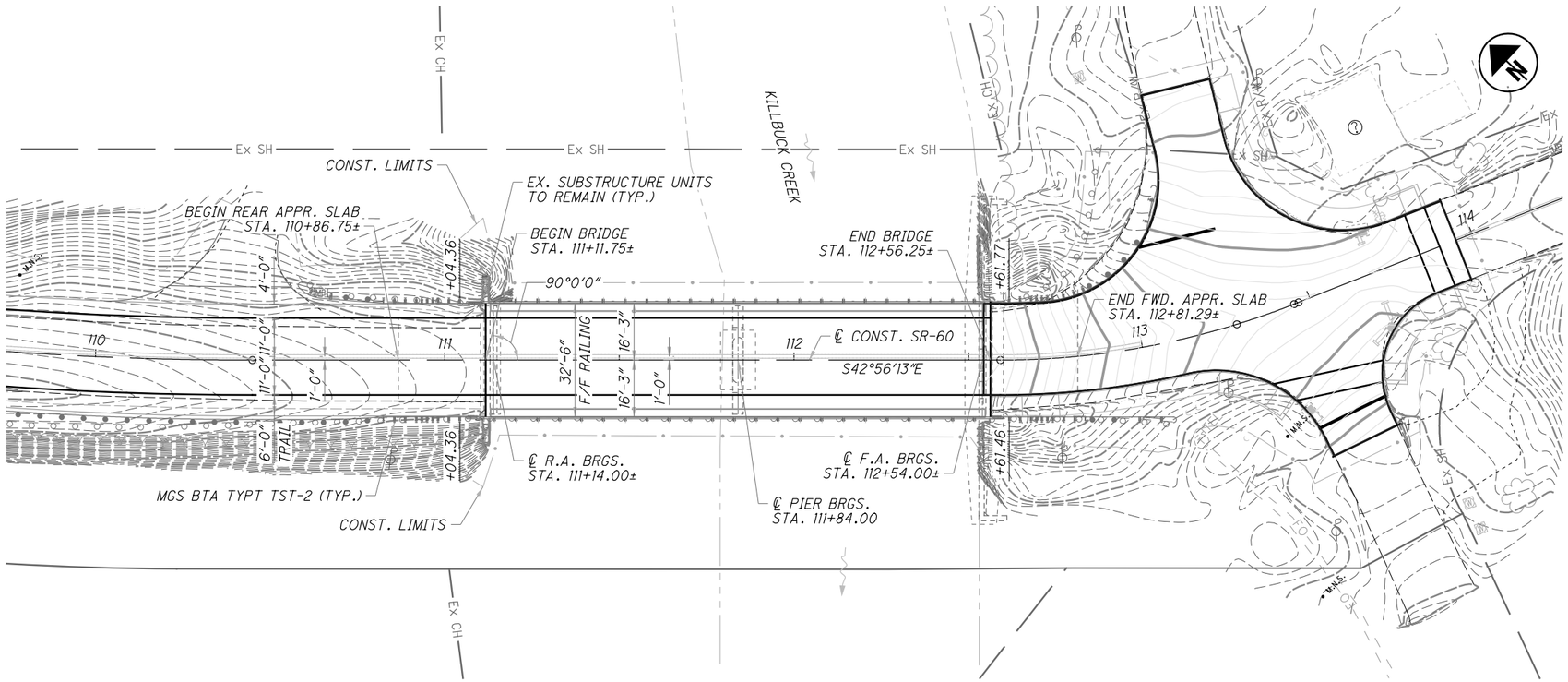
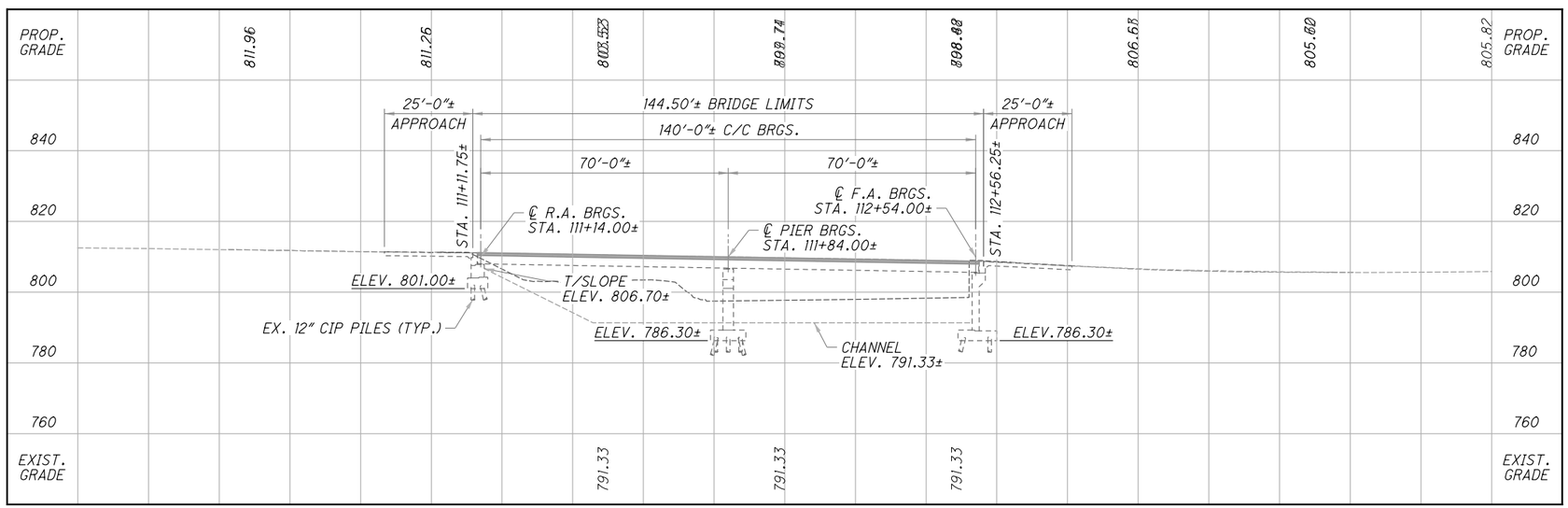
DESIGNED	DRAWN	REVIEWED	DATE
SL	SL	TML	06/2025
CHECKED	REVISED	STRUCTURE FILE NUMBER	
PES		00000	

REINFORCING STEEL LIST
BRIDGE NO. 010
HOLMES COUNTY TRAIL OVER BLACK CREEK (STREAM 11)

HOL CO. TR. 5C2
PID No. 120806



PLAN



PROFILE

(ALONG ℄ CONST. SR-60)

BENCHMARK DATA

CNPT IP#7 STA. 106+91.60, ELEV. 809.29, OFFSET 19.13' LT.

FOR ADDITIONAL BENCHMARK INFORMATION. SEE ROADWAY PLAN SHEET 3/133

NOTES

EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

DESIGN TRAFFIC:
2024 ADT = 1704 2024 ADTT = 189
2044 ADT = 1704 2044 ADTT = 189
DIRECTIONAL DISTRIBUTION = 58%

EXISTING STRUCTURE

TYPE: TWO-SPAN CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK, CONCRETE STUB ABUTMENT AND WALL-TYPE ABUTMENT ON CIP PILES AND CONCRETE TEE-TYPE PIER ON CIP PILES

SPANS: 70'-0"±, 70'-0"± C/C BRGS.

ROADWAY: 28'-0"± T/T CURB WITH 2'-3"± SAFETY CURBS

LOADING: CF130(57)

SKEW: NONE

WEARING SURFACE: 3/4" MONOLITHIC CONCRETE

APPROACH SLABS: REAR AS-1-54 (25'-0"± LONG), FORWARD SPECIAL (25'-0"± LONG)

ALIGNMENT: TANGENT

CROWN: 3/16"/FT

STRUCTURAL FILE NUMBER: 3800725

DATE BUILT: 1962

DISPOSITION: DECK EDGES, SAFETY CURBS, AND RAILINGS TO BE REMOVED AND REPLACED

PROPOSED STRUCTURE

TYPE: TWO-SPAN CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK, CONCRETE STUB ABUTMENT AND WALL-TYPE ABUTMENT ON CIP PILES AND CONCRETE TEE-TYPE PIER ON CIP PILES

SPANS: 70'-0"±, 70'-0"± C/C BRGS.

ROADWAY: 32'-6" F/F TST RAILINGS

LOADING: H-15 AND 90 PSF PEDESTRIAN

SKEW: NONE

FUTURE WEARING SURFACE: 60 PSF

APPROACH SLABS: REAR AS-1-54 (25'-0"± LONG), FORWARD SPECIAL (25'-0"± LONG)

ALIGNMENT: TANGENT

CROWN: 3/16"/FT

COORDINATES: LATITUDE 40°30'3.10"
LONGITUDE 81°59'02.11"

DESIGN AGENCY
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WOLPERT
DESIGN | GEOTECHNICAL | INFRASTRUCTURE

DESIGNED JYM | DRAWN JYM | REVIEWED TML | DATE 06/2025
CHECKED PES | REVISED | STRUCTURE FILE NUMBER 3800725

SITE PLAN
BRIDGE NO. HOL-60-0423
SR-60 OVER KILLBUCK CREEK

HOL CO. TR. 5C2
PID No. 120806

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STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

PCB-91	REVISED 7/17/2020
TST-2-21	REVISED 1/17/2025

AND THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

843	DATED 1/19/2024

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO THE 9TH EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020 AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

OPERATIONAL IMPORTANCE:

A LOAD MODIFIER OF 1.0 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN LOADING:

DESIGN LOADING INCLUDES:
VEHICULAR LIVE LOAD: H-15
FUTURE WEARING SURFACE (FWS) OF 0.06 KSF
PEDESTRIAN LIVE LOAD: 0.09 KSF

DESIGN DATA:

CONCRETE CLASS QC2 - COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)
EPOXY COATED STEEL REINFORCEMENT - MINIMUM YIELD STRENGTH 60 KSI (DECK)

DECK PROTECTION METHOD:

EPOXY COATED REINFORCING STEEL
1¾"± CONCRETE COVER

MONOLITHIC WEARING SURFACE:

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE ¾" INCH THICK.

EXISTING STRUCTURE VERIFICATION:

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C&MS SECTIONS 102.05, 105.02, AND 513.04.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

DEMOLITION DEBRIS:

THE CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID AND/OR LIMIT DEMOLITION DEBRIS FROM ENTERING THE STREAM. ANY MATERIAL THAT DOES FALL INTO THE STREAM SHALL BE REMOVED AS SOON AS POSSIBLE.

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN:

THIS WORK CONSISTS OF THE REMOVAL OF CONCRETE DECKS INCLUDING CURBS, METAL RAILINGS, DECK JOINTS, SCUPPERS, AND OTHER APPURTENANCES FROM STEEL SUPPORTING SYSTEMS. THE PROVISIONS OF ITEM 202 APPLY EXCEPT AS SPECIFIED BY THE FOLLOWING NOTES. PERFORM WORK CAREFULLY DURING DECK REMOVALS TO PROTECT PORTIONS OF SUCH SYSTEMS THAT ARE TO BE SALVAGED AND INCORPORATED INTO THE PROPOSED STRUCTURE. THE DEPARTMENT WILL NOT PERMIT THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE RAM TYPE EQUIPMENT. SUBMIT CONSTRUCTION PLANS ACCORDING TO C&MS 501.05.

DECK REMOVALS - DECK EDGE REHABILITATION:

IF THE CONTRACTOR'S MEANS AND METHODS REQUIRE DRILLING HOLES THROUGH THE BRIDGE DECK, ALL HOLES SHALL BE DRILLED FROM THE BOTTOM OF THE DECK UPWARD. DRILLING HOLES FROM THE TOP OF THE DECK IS NOT PERMITTED. FALSEWORK INTENDED TO FORM THE NEW DECK EDGE MAY BE USED AS A WORK PLATFORM TO AID IN THE DECK EDGE REMOVAL. IF FORMS BECOME DAMAGED DURING CONCRETE REMOVAL, THE DAMAGED PORTIONS SHALL BE REPAIRED OR REPLACED PRIOR TO POURING THE CONCRETE. PRIOR TO PLACING CONCRETE, THOUROUGHLY CLEAN ALL SURFACES OF THE FORMS THAT CONTACT THE BOTTOM OF THE EXISTING BRIDGE DECK TO ENSURE A SNUG FIT BETWEEN THE FORMS AND EXISTING BRIDGE DECK. THE PORTION OF THE FORM TO BE IN CONTACT WITH THE FRESH CONCRETE SHALL BE FREE OF LAITANCE, SILT, DIRT, SHAVINGS, SAWDUST, LOOSE AND BUILT-UP RUST, AND OTHER DEBRIS. ALL HOLES DRILLED THROUGH THE BRIDGE DECK SHALL BE REPAIRED WITH TROWELABLE MORTAR IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 843.

IF A SPLITTER IS USED TO DEMOLISH THE DECK EDGE, HOLES SHALL BE SPACED NO FURTHER THAN 12-IN APART, MEASURED LONGITUDINALLY ALONG THE BRIDGE DECK. EACH HOLE SHALL BE USED TO SPLIT THE CONCRETE; SKIPPING HOLES WILL NOT BE PERMITTED. ANY DAMAGE TO THE EXISTING STRUCTURE THAT IS TO REMAIN WILL BE REPAIRED AT NO ADDITIONAL COST TO THE DEPARTMENT. IF THE DAMAGE TO THE REMAINING STRUCTURE IS SIGNIFICANT, AT THE DIRECTION OF THE ENGINEER, PROVIDE A REPAIR PLAN IN ACCORDANCE WITH C&MS 501.05.C.

CUT LINE CONSTRUCTION JOINT PREPARATION:

PRIOR TO REMOVING THE DECK EDGE, PLACE A 1-IN (+0-IN, -1/4-IN) DEEP SAW CUT AT THE BOUNDARIES OF PROPOSED CONCRETE REMOVALS. IF THERE ARE INTEGRAL CONCRETE PIER CAPS WITHIN THE PROPOSED REMOVAL LIMITS, ALSO SAWCUT THE DECK CONCRETE ALONG THE INTERFACE OF THE DECK AND PIER CAP. REMOVE CONCRETE TO A ROUGH SURFACE. LEAVE THE EXISTING CONCRETE REINFORCEMENT, IF REQUIRED IN THE PLANS, IN PLACE. INSTALL DOWEL BARS IF SPECIFIED. PRIOR TO CONCRETE PLACEMENT, ABRASIVELY CLEAN JOINT SURFACES AND EXISTING EXPOSED REINFORCEMENT TO REMOVE LOOSE AND DISINTEGRATED CONCRETE AND LOOSE RUST. THOROUGHLY CLEAN THE JOINT SURFACE AND EXPOSED REINFORCEMENT OF ALL DIRT, DUST, RUST OR OTHER FOREIGN MATERIAL BY USE OF WATER, AIR UNDER PRESSURE, OR OTHER METHODS THAT PRODUCE SATISFACTORY RESULTS. EXISTING STEEL REINFORCEMENT DOES NOT HAVE TO HAVE A BRIGHT STEEL FINISH BUT REMOVE ALL PACK AND LOOSE RUST. THOROUGHLY DRENCH EXISTING CONCRETE SURFACES WITH CLEAN WATER AND ALLOW TO DRY TO A DAMP CONDITION BEFORE PLACING CONCRETE.

ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE):

SEAL ALL CONCRETE SURFACES INCLUDING THE OUTSIDE FASCIAS OF THE DECK TO THE FASCIA BEAM UNDER THE DECK USING AN EPOXY-URETHANE SEALER. THE FINAL COLOR SHALL BE FEDERAL COLOR STANDARD NO. 17778, PER THE CMS.

ITEM 517 - RAILING (THREE STEEL TUBE BRIDGE RAILING), AS PER PLAN:

THE TST-2-21 RAILING ON THE RIGHT EDGE OF DECK SHALL BE MODIFIED WITH AN EXTENDED POST AND ADDITIONAL STEEL TUBE SIDE RAIL TO PROVIDE A MINIMUM 4'-3" HEIGHT FROM TOP OF RAIL TO TOP OF DECK. PAYMENT FOR THIS ITEM 517 - RAILING (THREE STEEL TUBE BRIDGE RAILING), AS PER PLAN SHALL INCLUDE STEEL POSTS, STEEL TUBING SIDE RAILS, AND ALL CONNECTION ELEMENTS INCLUDING BOLTS, NUTS, AND WASHERS.

ABBREVIATIONS:

ABUT.	- ABUTMENT
APPR.	- APPROACH
APPROX.	- APPROXIMATE
BRG(S).	- BEARING(S)
C/C	- CENTER TO CENTER
℄	- CENTERLINE
C.J.	- CONSTRUCTION JOINT
CLR.	- CLEAR
CONST.	- CONSTRUCTION
EA.	- EACH
ELEV.	- ELEVATION
EX.	- EXISTING
F.A.	- FORWARD ABUTMENT
F/F	- FACE TO FACE
FWD.	- FORWARD
LT.	- LEFT
PROP.	- PROPOSED
R.A.	- REAR ABUTMENT
SPA.	- SPACES
STA.	- STATION
TBR	- TO BE REMOVED
T/T	- TOE TO TOE
TYP.	- TYPICAL

SR60 STRUCTURE ESTIMATED QUANTITIES — CALC BY: JYM — DATE: 6/10/2025 — CHECK BY: PES — DATE: 6/11/2025

ITEM	EXT	QUANTITY	UNIT	DESCRIPTION	SHEET
202	11203	LS		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	2/7
509	10000	6131	LB	EPOXY COATED STEEL REINFORCEMENT	
511	34410	40	CY	CLASS QC2 CONCRETE, SUPERSTRUCTURE	
512	10100	69	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
517	70100	154	FT	RAILING (THREE STEEL TUBE BRIDGE RAILING)	
517	70101	154	FT	RAILING (THREE STEEL TUBE BRIDGE RAILING), AS PER PLAN	2/7

DESIGN AGENCY
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WOOLPERT
DESIGN | GEOSPATIAL | INFRASTRUCTURE

DESIGNED	DRAWN	REVIEWED	DATE
JYM	JYM	TML	06/2025
CHECKED	REVISED		STRUCTURE FILE NUMBER
PES			3800725

STRUCTURE GENERAL NOTES AND ESTIMATED QUANTITIES

BRIDGE NO. HOL-60-0423
SR-60 OVER KILLBUCK CREEK

HOL CO. TR. 5C2
PID No. 120806

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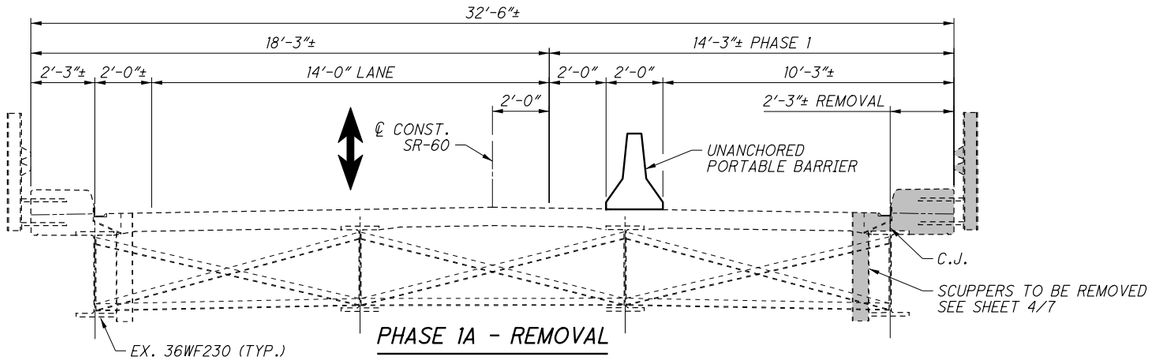
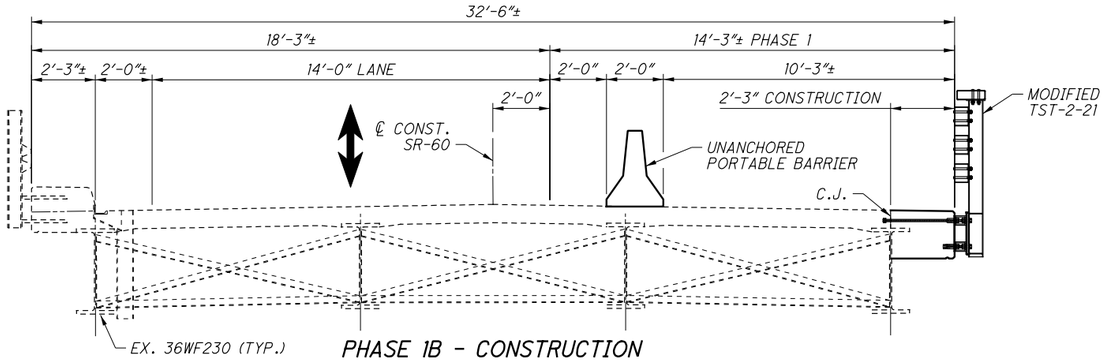
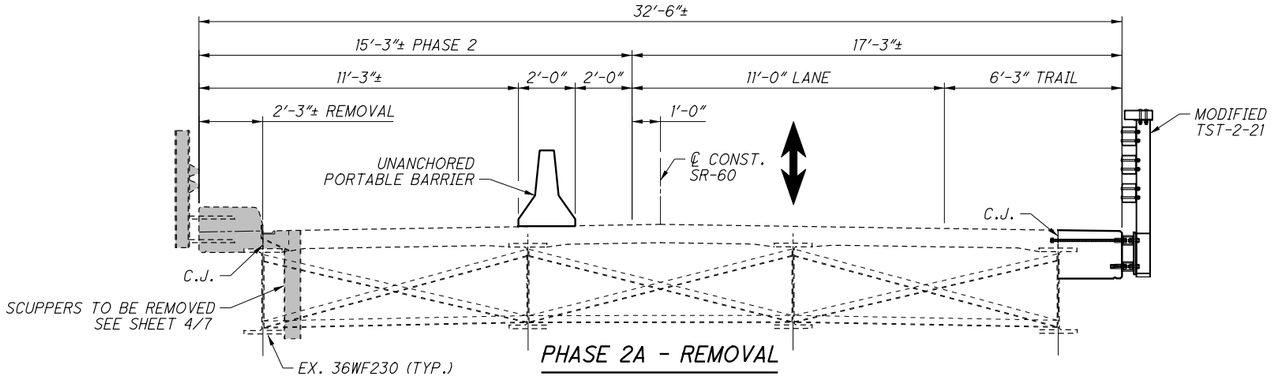


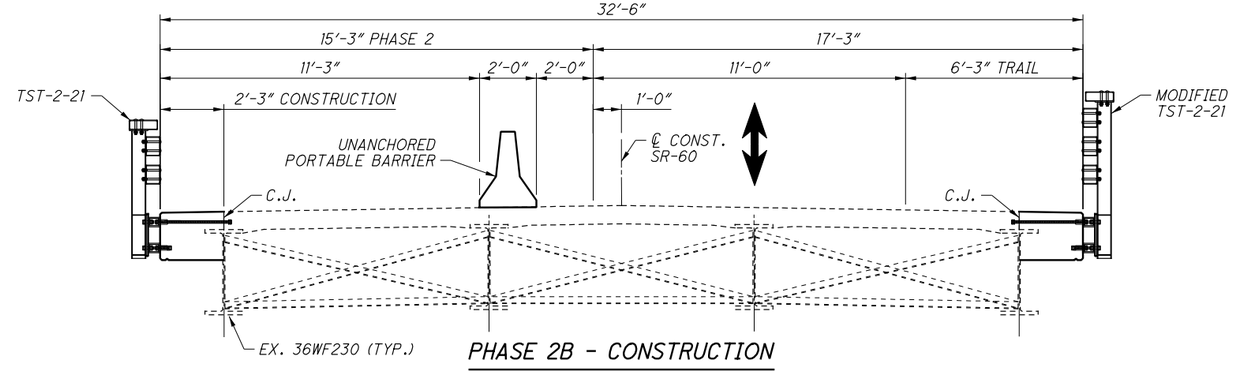
PHASE 1A - REMOVAL



PHASE 1B - CONSTRUCTION



PHASE 2A - REMOVAL



PHASE 2B - CONSTRUCTION

SEQUENCE FOR CONSTRUCTION:

RECONSTRUCTION OF THE 04.23 STRUCTURE ON SR-60 SHALL BE COMPLETED AS DETAILED. MAINTAINING TRAFFIC DURING CONSTRUCTION RESULTS IN THE PROPOSED WORK BEING COMPLETED IN PHASES. ALL PHASES SHALL BE COMPLETED IN NUMERIC ORDER AND SHALL NOT OCCUR CONCURRENTLY. AN OVERVIEW OF EACH INDIVIDUAL PHASE IS AS FOLLOWS:

PHASE 1A

INSTALL TRAFFIC CONTROL AS DETAILED ON THE MAINTENANCE OF TRAFFIC PLANS. AFTER PORTABLE BARRIER IS PLACED AND TRAFFIC CONTROL IS IN OPERATION, REMOVE THE RIGHT DECK EDGE OF THE EXISTING STRUCTURE AS SHOWN.

PHASE 1B

CONSTRUCT THE RIGHT DECK EDGE OF THE PROPOSED STRUCTURE AS SHOWN. THIS WORK IS COMPLETED WHILE ONE LANE OF TRAFFIC IS MAINTAINED ON THE EXISTING STRUCTURE USING THE TRAFFIC CONTROL ESTABLISHED IN PHASE 1A.

PHASE 2A

SWITCH TRAFFIC CONTROL AS DETAILED ON THE MAINTENANCE OF TRAFFIC PLANS TO MAINTAIN ONE LANE OF TRAFFIC ON THE NEWLY CONSTRUCTED RIGHT PORTION OF THE STRUCTURE. AFTER PORTABLE BARRIER IS PLACED AND TRAFFIC CONTROL IS IN OPERATION, REMOVE THE LEFT DECK EDGE OF THE EXISTING STRUCTURE AS SHOWN.

PHASE 2B

CONSTRUCT THE LEFT DECK EDGE OF THE PROPOSED STRUCTURE AS SHOWN, COMPLETING THE PROPOSED WORK. THIS WORK IS COMPLETED WHILE ONE LANE OF TRAFFIC IS MAINTAINED ON THE NEWLY CONSTRUCTED RIGHT PORTION OF THE STRUCTURE USING THE TRAFFIC CONTROL ESTABLISHED IN PHASE 2A. AFTER COMPLETION OF THE WORK, REMOVE THE PORTABLE BARRIERS.

LEGEND:

REMOVAL

NOTES:

1. SEE SCD PCB-91 FOR ADDITIONAL PORTABLE BARRIER DETAILS.
2. SEE SHEETS 17/133 - 22/133 FOR ADDITIONAL MAINTENANCE OF TRAFFIC DETAILS.
3. PORTABLE BARRIERS PLACED ONTO THE EXISTING DECK DURING PHASE 1 AND PHASE 2 CONSTRUCTION MAY REMAIN UNANCHORED PROVIDED THERE IS A MINIMUM 1'-6" CLEARANCE BETWEEN THE PB AND THE EDGE OF DECK.

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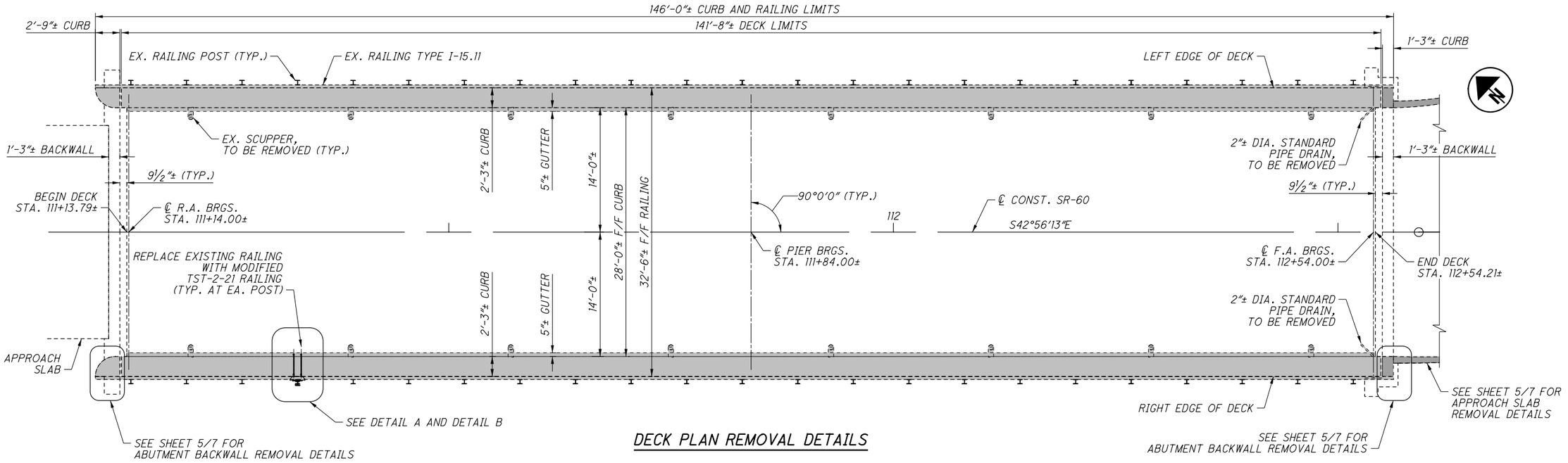
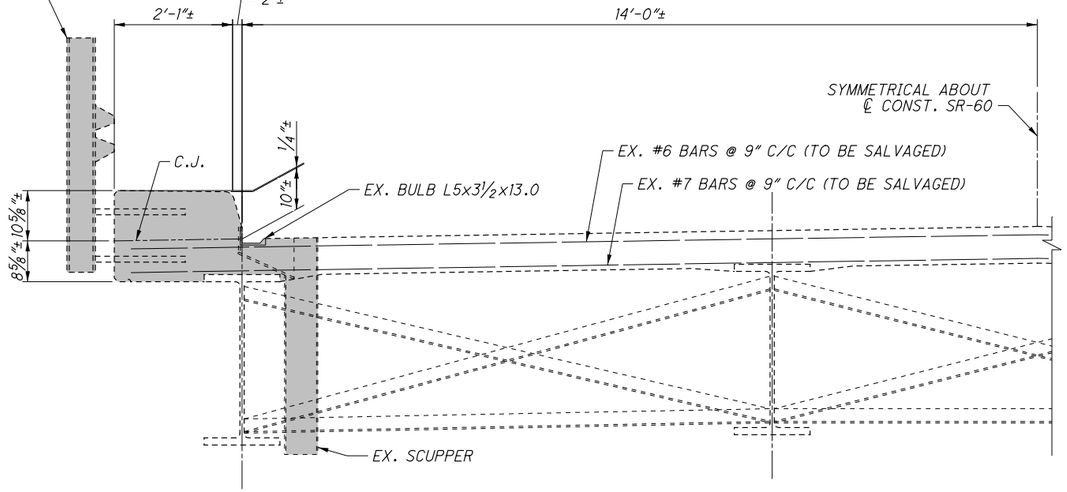
JYM	JYM	TML	06/2025
CHECKED	REVISED	STRUCTURE FILE NUMBER	
PES		3800725	

PHASED CONSTRUCTION DIAGRAMS
BRIDGE NO. HOL-60-0423
SR-60 OVER KILLBUCK CREEK

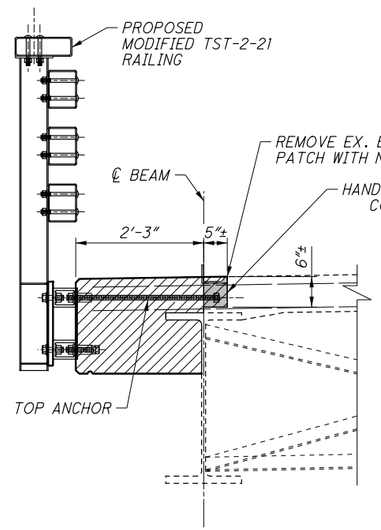
HOL CO. TR. 5C2
PID No. 120806



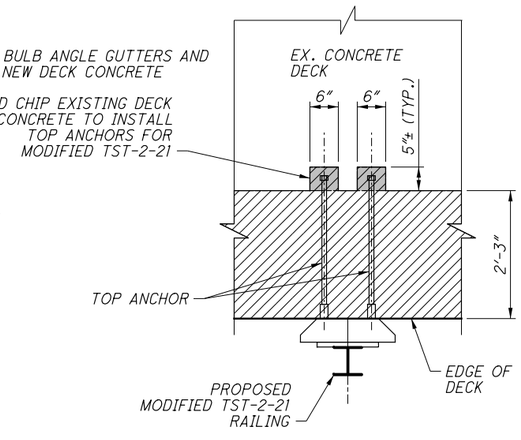
DECK PLAN REMOVAL DETAILS



CURB AND RAILING REMOVAL DETAILS



DETAIL A



DETAIL B

(PLAN VIEW)

LEGEND:

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN

ITEM 511 - CLASS QC2 CONCRETE, SUPERSTRUCTURE

NOTES:

1. SEE SHEET 2/7 FOR STRUCTURE GENERAL NOTES INCLUDING PORTIONS OF STRUCTURE REMOVED, AS PER PLAN.
2. SEE SHEET 5/7 FOR ADDITIONAL REMOVAL DETAILS.
3. SEE SHEET 7/7 FOR ADDITIONAL DECK AND RAILING DETAILS.
4. INTERFACE BETWEEN EXISTING CONCRETE AND NEW CONCRETE SHALL BE CLEAN AND FREE OF LAITANCE PER CMS 512.03.
5. EXISTING REINFORCING STEEL INDICATED TO BE SALVAGED MAY BE REMOVED AND REPLACED WITH DOWELED BARS AT THE SAME SIZE AND SPACING, AT THE CONTRACTOR'S EXPENSE.

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CHECKED PES | REVISED | STRUCTURE FILE NUMBER 3800725

REMOVAL DETAILS
BRIDGE NO. HOL-60-0423
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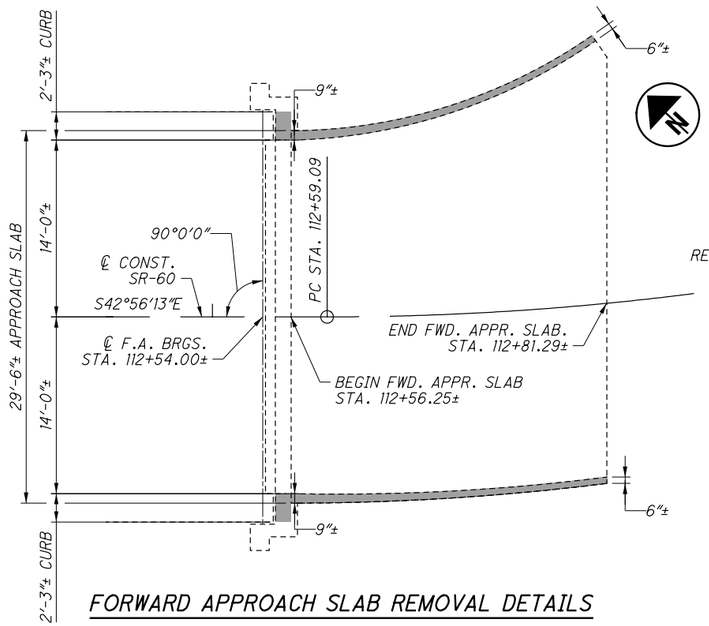
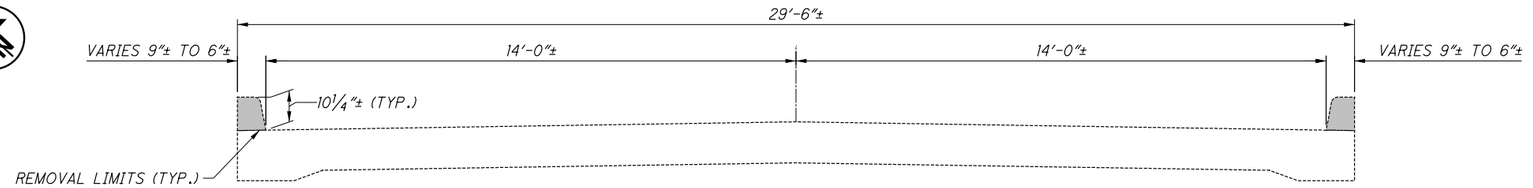
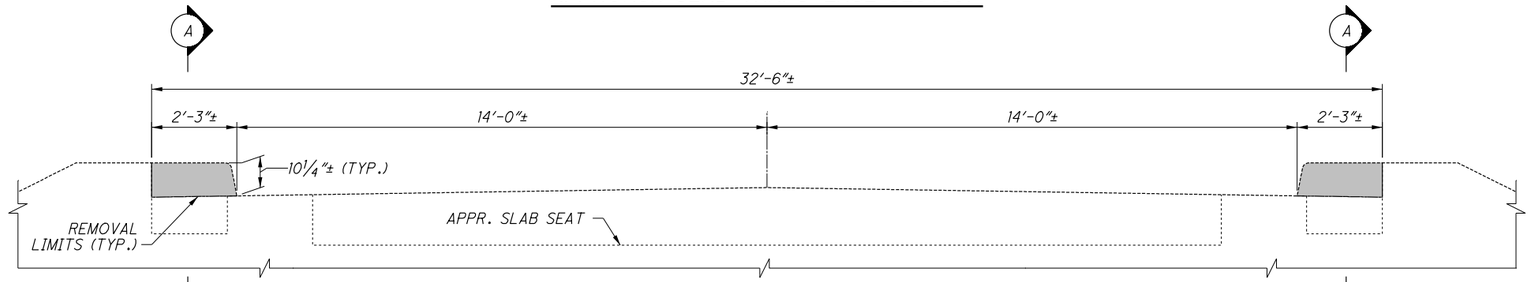


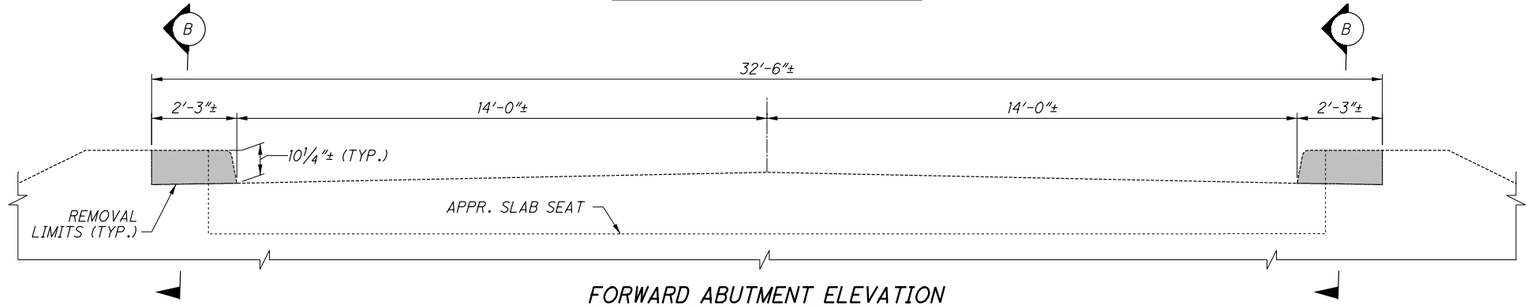
FORWARD APPROACH SLAB REMOVAL DETAILS



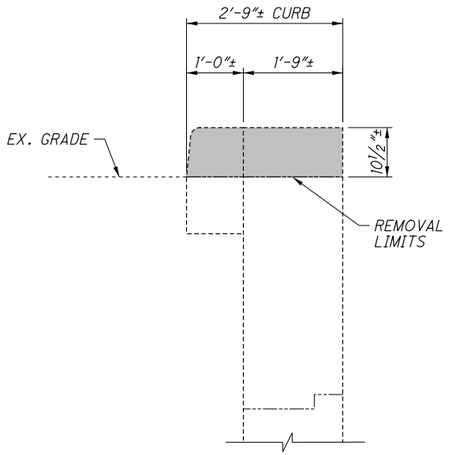
APPROACH SLAB TRANSVERSE SECTION



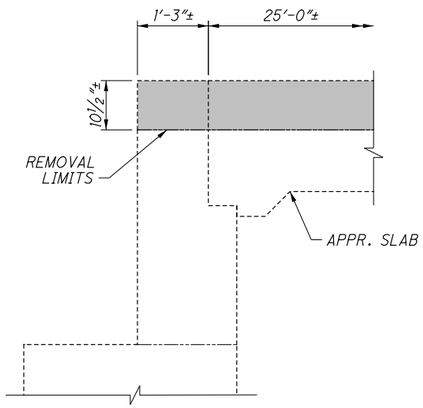
REAR ABUTMENT ELEVATION



FORWARD ABUTMENT ELEVATION



SECTION A - R.A. CURB REMOVAL



SECTION B - F.A. CURB REMOVAL

LEGEND:

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN

NOTES:

1. SEE SHEET 2/7 FOR STRUCTURE GENERAL NOTES INCLUDING PORTIONS OF STRUCTURE REMOVED, AS PER PLAN.
2. SEE SHEET 4/7 FOR ADDITIONAL REMOVAL DETAILS.

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DESIGNED	DRAWN	REVIEWED	DATE
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REMOVAL DETAILS
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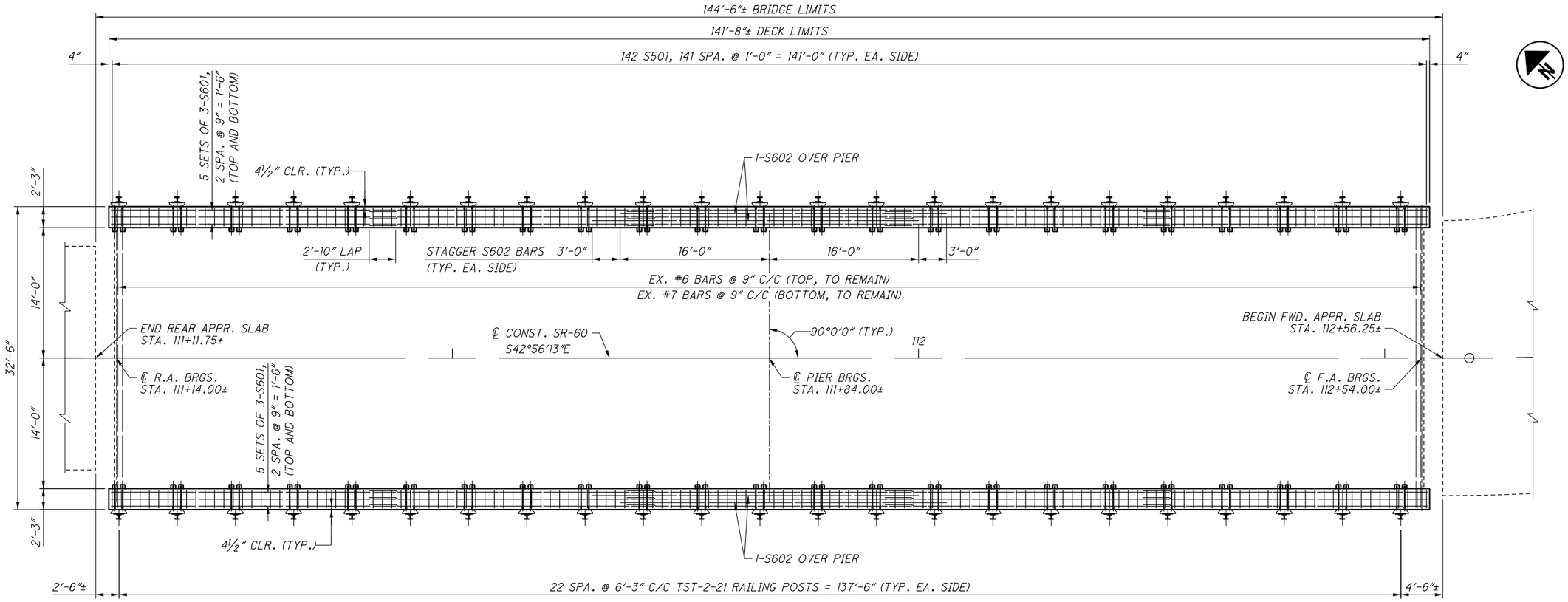
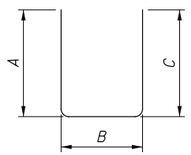
SR-60 OVER KILLBUCK CREEK

HOL CO. TR. 5C2
PID No. 120806



REINFORCING STEEL BAR BEND DIAGRAM



TYPE-2

DECK REINFORCING PLAN

SUPERSTRUCTURE													
BAR MARK	MAT'RL TYPE	TOTAL	LENGTH	WEIGHT (LBS)	TYPE	DIMENSIONS							
						A	B	C	D	E	R	INC.
S601	ECSR	70	30'-4"	3190	ST.							
S602	ECSR	4	35'-0"	211	ST.							
S603	ECSR	376	4'-10"	2730	2	1'-11"	1'-4"	1'-11"				
			TOTAL =	6131	LBS							

NOTES:

1. SEE SHEET 4/7 AND 5/7 FOR REMOVAL DETAILS.
2. SEE SHEET 7/7 FOR TRANSVERSE SECTION.
3. PLACE S501 BARS TO AVOID CONFLICT WITH TST RAILING ANCHORS.
4. THE BAR SIZE NUMBER IS SPECIFIED IN THE BAR MARK COLUMN. THE FIRST DIGIT AFTER THE LETTERS WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS AFTER THE LETTERS WHERE FOUR DIGITS ARE USED, INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, S601 IS A NO. 6 BAR IN THE SUPERSTRUCTURE. A LEGEND OF THE DESCRIPTORS IS GIVEN BELOW:

   S = SUPERSTRUCTURE
5. BAR DIMENSIONS SHOWN ARE OUT-TO-OUT UNLESS OTHERWISE NOTED.
6. "ST." INDICATES A STRAIGHT BAR.
7. MATERIALS LEGEND, ECSR = EPOXY COATED STEEL REINFORCEMENT.

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DECK REINFORCING PLAN
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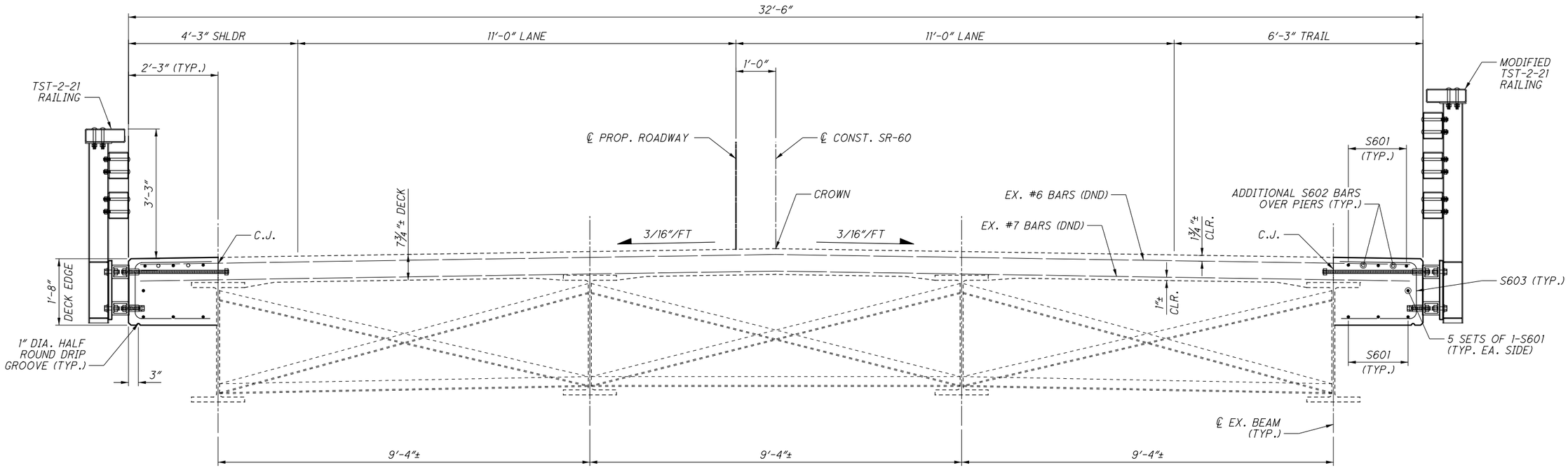
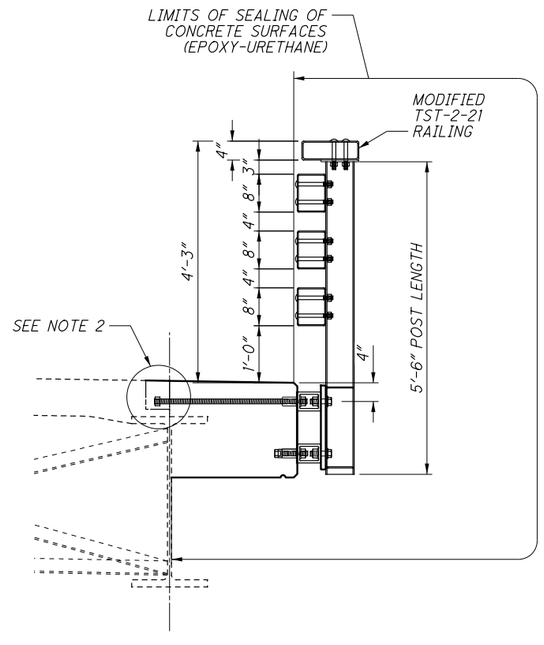


TRANSVERSE SECTION



RAILING DETAILS AND SEALING LIMITS

NOTES:

1. SEE SCD TST-2-21 FOR ADDITIONAL RAILING DETAILS.
2. SEE SHEET 2/7 FOR ADDITIONAL DETAILS ON RAILING (THREE STEEL TUBE BRIDGE RAILING), AS PER PLAN.
3. SEE SHEET 4/7 FOR TOP ANCHOR INSTALLATION DETAILS.

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TRANSVERSE SECTION
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