ince\_William\_County, (703) 792-8164 •C\_S, 02/23/2025, (703) 430-7500 •3/2025, (703) 430-7500 •mark, Inc, 03/04/2025, (804) 550-7740 ...

-Rai - F

OJECT MANAGERR RVEYED BY, DATE SIGN BY William Leol SSURFACE UTILITY

PRO, SUR, DESI SUBS

FOR INDEX OF SHEETS SEE SHEET 1B

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED

FOR THE ACQUISITION OF RIGHT OF WAY

RELOCATIONS MAY BE REQUIRED BEYOND

THE PROPOSED RIGHT OF WAY SHOWN ON

ADDITIONAL EASEMENTS FOR UTILITY

OR ANY TYPE OF CONSTRUCTION

THE PLANS.

HEAVY WOODS GROUND ELEVATION

GRADE ELEVATION

THIS PROJECT WAS DEVELOPED UTILIZING THE DEPARTMENT'S ENGINEERING DESIGN PACKAGE (OPENROADS DESIGNER 10.12). OPENROADS Computer Identification No. <u>125404</u>

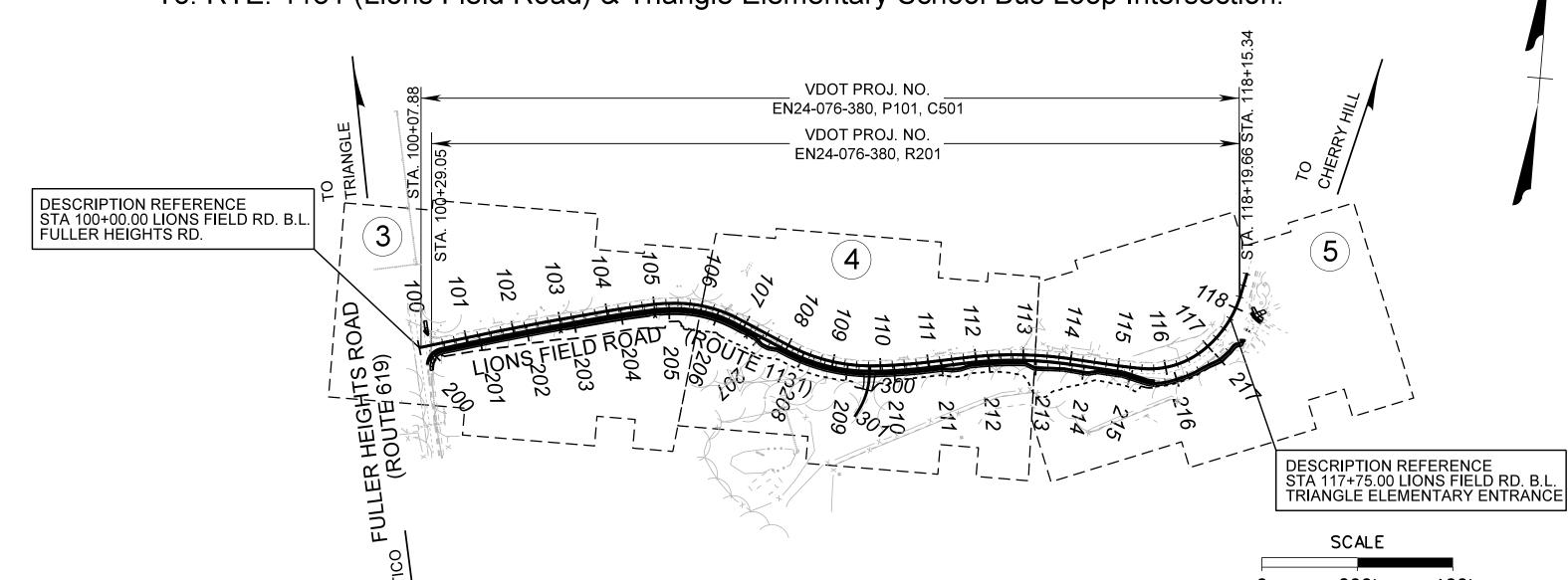
COMMONWEALTH OF VIRGINIA DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE OF PROPOSED STATE HIGHWAY

> PRINCE WILLIAM COUNTY LIONS FIELD ROAD SIDEWALK

From: RTE. 1131 (Lions Field Road) & RTE. 619 (Fuller Heights Road) Intersection.

To: RTE. 1131 (Lions Field Road) & Triangle Elementary School Bus Loop Intersection.



CONVENTIONAL SIGNS STATE LINE COUNTY LINE CITY, TOWN OR VILLAGE RIGHT OF WAY LINE FENCE LINE UNFENCED PROPERTY LINE SANITARY SEWER LINE GAS LINE ELECTRIC UNDERGROUND CABLE TRAVELED WAY GUARD RAIL RETAINING WALL RAILROADS BASE OR SURVEY LINE LEVEE OR EMBANKMENT BRIDGES **CULVERTS** DROP INLET D======= POWER POLES TELEPHONE OR TELEGRAPH POLES -**♦ ♦ ♦** TELEPHONE OR TELEGRAPH LINES - --- --- T/Tg ---- ---HEDGE TREES -- 6 6 6 6 6

THE COMPLETE ELECTRONIC PDF VERSION OF THE PLAN ASSEMBLY AS AWARDED, HAS BEEN SEALED AND SIGNED USING DIGITAL SIGNATURES AND THE OFFICIAL PLAN ASSEMBLY IN ELECTRONIC FORMAT IS STORED IN THE VDOT CENTRAL OFFICE PLAN LIBRARY, INCLUDING ALL SUBSEQUENT REVISIONS, WILL BE THE OFFICIAL CONSTRUCTION PLANS. FOR INFORMATION RELATIVE TO ELECTRONIC FILES AND LAYERED PLANS, SEE THE GENERAL NOTES.

DATUM LINE

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT.

THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE DEPARTMENT'S 2020 ROAD AND BRIDGE SPECIFICATIONS, 2016 ROAD AND BRIDGE STANDARDS, 2023 MUTCD, 2026 VIRGINIA WORK AREA PROTECTION MANUAL AND AS AMENDED BY CONTRACT PROVISIONS AND THE COMPLETE ELECTRONIC PDF VERSION OF THE PLAN ASSEMBLY.

ALL CURVES ARE TO BE SUPERELEVATED, TRANSITIONED AND WIDENED IN ACCORDANCE WITH STANDARD TC-5.11R, EXCEPT WHERE OTHERWISE NOTED.

THE <u>ORIGINAL</u> APPROVED TITLE SHEET(S), INCLUDING ORIGINAL SIGNATURES, ARE FILED IN THE VDOT CENTRAL OFFICE PLAN LIBRARY. ANY MISUSE OF ELECTRONIC FILES, INCLUDING SCANNED SIGNATURES, IS ILLEGAL AND ENFORCED TO THE FULL EXTENT OF THE LAW.

Prince William County Population 497,003 (2024 Census)

STATE PROJECT	SECTION	FEDERAL AID PROJECT NO.	TYPE CODE	UPC NO.	EQUALITIES	LENGTH I BRIDG	NCLUDING GE(S)		EXCLUDING GE(S)	BRIDGE PROJECT	TYPE PROJECT	DESCRIPTION
NO.		1 1100201 110:	CODE	140.	FEET	FEET	MILES	FEET	MILES	NO.	TROOLET	
	P101	TAP-5B01(542)	PENG	125404		1,808	0.342	1,808	0.342		PREL. ENGR.	FR: RTE. 1131 & RTE. 619 Intersection
380												TO: RTE. 1131 & School Intersection
76-3	R201		ROWA	125404		1,791	0.339	1,791	0.339		RIGHT-OF-WAY	FR: RTE. 1131 & RTE. 619 Intersection
4-0												TO: RTE. 1131 & School Intersection
EN2	C501		1000	125404		1,808	0.342	1,808	0.342		CONSTRUCTION	FR: RTE. 1131 & RTE. 619 Intersection
												TO: RTE. 1131 & School Intersection

Project Lengths are based on RTE. 1131 Construction Baseline

STATE FEDERAL AID PROJECT ROUTE PROJECT EN24-076-380 VA. (SEE TABULATION **BELOW FOR** (SEE TABULATION BELOW SECTION NUMBERS) FOR SECTION NUMBERS)

FUNCTIONAL CLASSIFICATION AND TRAFFIC DATA						
Lions Field Road -ROLLING- (RTE. 1131) Urban Local(GS-8)						
	Fr: RTE. 1131 (Lions Field Rd) & RTE. 619 (Fuller Heights Rd) Int. To: RTE. 1131 & Triangle Elementary School Bus Loop Int.					
ADT (2017)	2,800					
ADT	N/A					
DHV	N/A					
D (%) (design hour)	N/A					
T (%) (design hour)	N/A					
V (MPH)	25 MPH					

60% PLANS DECEMBER 01, 2025

TIER 1 PROJECT

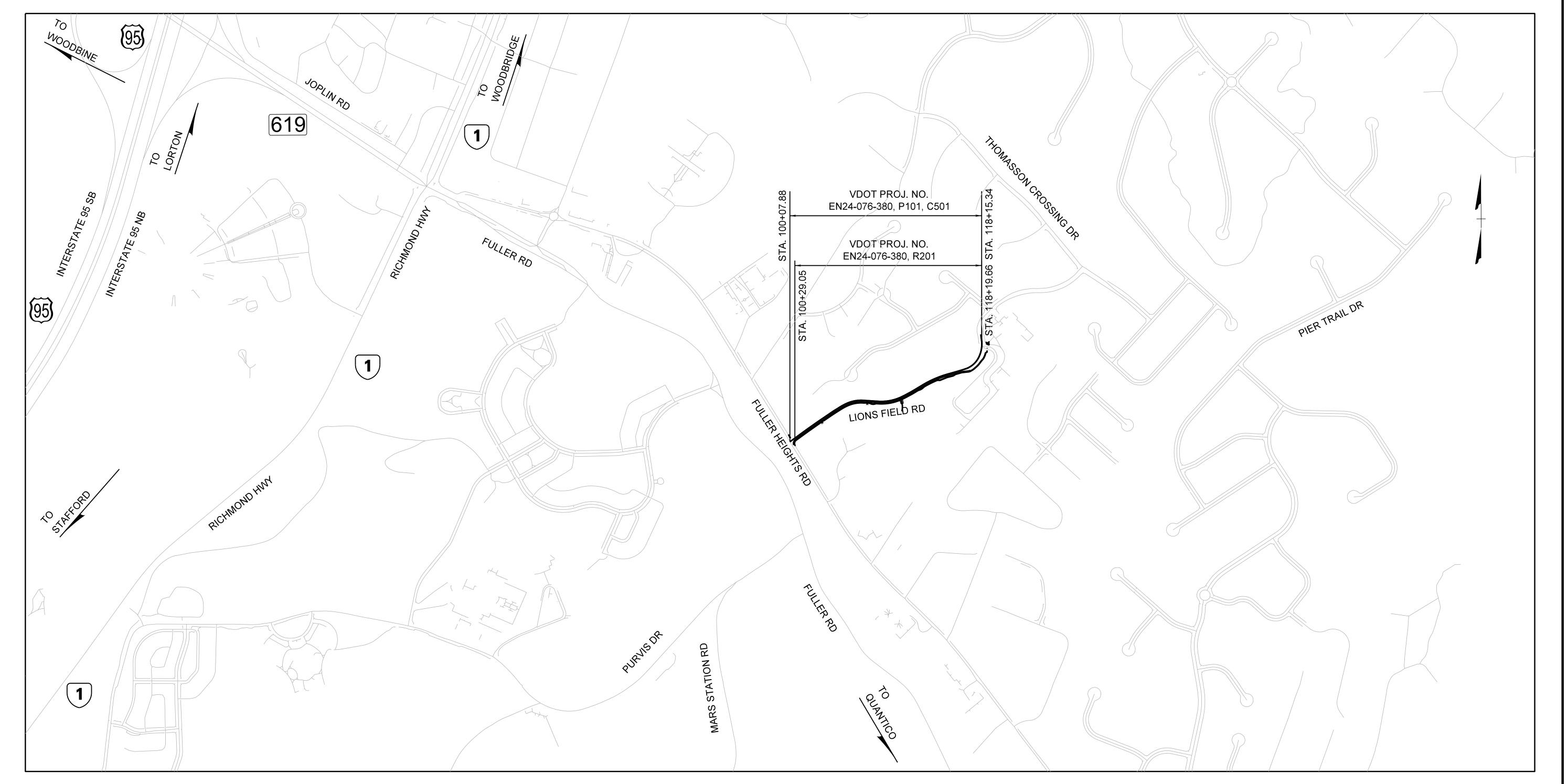
LO	CALLY ADMINISTERED PROJECTS				
	PRINCE WILLIAM COUNTY				
	NAME OF LOCALITY				
(SIGNATURE)					
	MARY ANKERS, PE				
RECOMMEN	DED FOR APPROVAL FOR RIGHT OF WAY ACQUISITION				
ASSISTANT DIRECTOR, CAPITAL PROJECTS IN TRANSPORTAT					
DATE	TITLE OF POSITION				
	(SIGNATURE)				
MARY ANKERS, PE					
RECOMMENDED FOR APPROVAL FOR CONSTRUCTION					
	ASSISTANT DIRECTOR, CAPITAL PROJECTS IN TRANSPORTAT				
DATE	TITLE OF POSITION				

	RECOMMENDED FOR APPROVAL FOR RIGHT OF WAY ACQUISITION
	DISTRICT PLANNING AND INVESTMENT MANAGER
	DISTRICT PROJECT DEVELOPMENT ENGINEER
	APPROVED FOR RIGHT OF WAY ACQUISITION
1	DISTRICT ENGINEER/ADMINISTRATOR

REVISED RECOMMENDED FOR APPROVAL FOR CONSTRUCTION DISTRICT PLANNING AND INVESTMENT MANAGER DISTRICT PROJECT DEVELOPMENT ENGINEER APPROVED FOR CONSTRUCTION DISTRICT ENGINEER/ADMINISTRATOR

Copyright 2025, Commonwealth of Virginia

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



COUNTY OF PRINCE WILLIAM POPULATION 497,003 2024 CENSUS

7 PLANS THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

SCALE 0 400' 800'

PROJECT SI EN24-076-380

PROJECT MANAGER Rami Bazlamit, PE, Prince William County, (703)792-8164.
SURVEYED BY, DATE _ <i>Tami Lenox. LS. ATCS02/23/2025. (703)430-7500</i> .
DESIGN BY William Leonetti, PE, ATCS, 02/23/2025, (703)430-7500
SUBSURFACE UTILITY BY, DATE _Accumark, Inc, 03/04/2025, (804)550-7740_

X1 - X13

CROSS SECTION SHEETS

## INDEX OF SHEETS

1	REVISED	STATE		SHEET NO.	
I		SIAIE	ROUTE	PROJECT	SHEET NO.
		VA.	1131	EN24-076-380 R201, C501	1B

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

SHEET NO.	DESCRIPTION	STATIONS
1	TITLE SHEET	
1A	LOCATION MAP	
1B	INDEX OF SHEETS	
1C	RIGHT OF WAY DATA	
1F	SURVEY ALIGNMENT DATA	
1G(1) - 1G(4)	CONSTRUCTION ALIGNMENT DATA	
1H	EXISTING UTILITIES AND SURVEY INFORMATION	
1J	TRANSPORTATION MANAGEMENT PLAN	
1L	SOILS MAP	
2	GENERAL NOTES	
2A(1) - 2A(2)	TYPICAL SECTIONS	
2B	EXISTING & PROPOSED DRAINAGE DESCRIPTIONS	
2C	PROPOSED DRAINAGE PROFILES	
2D(1)-2D(4)	STORMWATER POLLUTION PREVENTION PLAN GENERAL INFO	
2F(1)-2F(2)	QUANTITY SUMMARY SHEETS	
2G	EROSION & SEDIMENT CONTROL NOTES	
2H(1)-2H(2)	EROSION & SEDIMENT CONTROL DETAILS	
2J	CURB RAMP DETAIL	
3, 3A(1) - 3A(2)	PLAN AND PROFILE	100+00.00 TO 106+00.00
3B(1) - 3B(2)	EROSION & SEDIMENT CONTROL PLANS	100+00.00 TO 106+00.00
4, 4A(1) - 4A(2)	PLAN AND PROFILE	106+00.00 TO 113+25.00
4B(1) - 4B(2)	EROSION & SEDIMENT CONTROL PLANS	106+00.00 TO 113+25.00
5, 5A(1) - 5A(2)	PLAN AND PROFILE	113+25.00 TO 118+25.00
5B(1) - 5B(2)	EROSION & SEDIMENT CONTROL PLANS	113+25.00 TO 118+25.00
7	ENTRANCE PROFILE	
8(3)-8(5)	SIGNING & PAVEMENT MARKINGS	

PROJECT MANAGER <u>Rami Bazlamit, PE, Prince William County, (703)792-8164</u>. SURVEYED BY, DATE <u>Tami Lenox. LS. ATCS. 02/23/2025. (703)430-7500</u> \_ \_ .

DESIGN BY <u>William Leonetti. PE. ATCS. 02/23/2025. (703)430-7500</u> \_ \_ \_ .

SUBSURFACE UTILITY BY, DATE <u>Accumark. Inc. 03/04/2025. (804)550-7740</u>

## RIGHT OF WAY DATA

REVISED	STATE		SHEET NO.	
	SIAIL	ROUTE	PROJECT	SHEET NO.
	VA.	1131	EN24-076-380 R201, C501	1C

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

CITY/COLINITY PRINCE WILLIAM COUNTY

CH Y/COUN	NIY:	PRINCE WILLIAM COUNTY
UPC NO.:	12540	)4

				AREA (AREAS GREATER THAN OR EQUAL TO 1 ACRE WILL BE SHOWN IN ACRES TO 3 DECIMAL PLACES (X.XXX). AREAS LESS THAN 1 ACRE WILL BE SHOWN TO SQUARE FEET (X,XXX).)													
PARCEL NO.	LANDOWNER / GPIN SHEET NO.		TOTAL	FEI	E TAKING	PRESCRIPTIVE FEE REMA		14INDER	EASEMENTS							PROFFERS	
			TOTAL	1 1	_ TAININO	R/W	I LL INLI	MAINDEN	PERN	//ANENT	UTII	_ITY	TEMPORARY		TEMPORARY(ENTRANCES)		1110112110
			ACRES	ACRES OR SQ. FEET	HECTARES/ OR SQ. METERS	ACRES OR SQ. FEET  HECTARES/ OR SQ. METERS	ACRES OR SQ. FEET	HECTARES/ OR SQ. METERS	ACRES OR SQ. FEET	HECTARES/ OR SQ. METERS	ACRES OR SQ. FEET	HECTARES/ OR SQ. METERS	SQ. FEET	HECTARES/ OR SQ. METERS	ACRES OR SQ. FEET	HECTARES/ OR SQ. METERS	YES / NO
001	Lionsfield Valley Homeowners Association/8188-81-7896	3	0.876 AC	-			0.876 AC		128 SF				5,187 SF				
002	Lionsfield Valley Homeowners Association/8188-82-9814	3	0.263 AC	-			0.263 AC		338 SF				5,250 SF				
003	Prince William County School Board/8188-92-8814	3, 4, 5	18.619 AC	2,280 SF			18.567 AC		2,128 SF				29,315 SF				
004	Lionsfield Valley Homeowners Association/8188-92-1036	3, 4	1.043 AC	-			1.043 AC		73 SF				246 SF				

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

POINT	NORTH	EAST	ELEVATION
CS GPS-I	6,882,776,1520	11,820,113,6313	162.3116
CS GPS-2	6,882,486,6717	11,820,030.6320	146.3443
CS GPS-3	6,882,401.2357	11,819,747.5960	125.6655
CS GPS-4	6,882,242.7909	11,819,436,1001	105.4653
CS GPS-5	6,882,263.6350	11,819,090,2323	85.6065
CS GPS-6	6,882,148.4260	11 <b>,818,857.44</b> 57	<i>85.9149</i>
CS GPS-7	6,881,886.2860	II <b>,</b> 8I8 <b>,</b> 468.8248	73.7380

Survey Control Was Established By Locating Each Control Point With RTK GPS (Tied to SmartNet). Multiple Occupations

(6) Were Used At Each Station, Wtih A Four Hour Minimum

Time Spread Between Occupations.

SURVEY CONTROL POINTS

POINT	NORTH	EAST	ELEVATION
CS GPS-I	6,882,776.1520	11,820,113.6313	162.3116
CS GPS-2	6,882,486,6717	11,820,030.6320	146.3443
CS GPS-3	6,882,401.2357	11,819,747.5960	125.6655
CS GPS-4	6,882,242.7909	11,819,436,1001	105.4653
CS GPS-5	6,882,263.6350	11,819,090.2323	85.6065
CS GPS-6	6,882,148.4260	11 <b>,818,857.44</b> 57	85 <b>.</b> 9149
CS GPS-7	6,881,886.2860	11,818,468.8248	73.7380



FULLER HEIGHTS ROAD (RAK-619) W

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

GPS5

GPS4

EN24-076-380

Route	:Lions Field Road
Project	:Pedestrian Improvement
District	: NA
County	:Prince William
From	:Fuller Heights Road
To	: Triangle Elementary School Southern Entrance
Horizontal	Datum Based On VA North (1983),US Survey Foo
Vertical Do	atum Based On NAVD88
Survey By	: CH/ GC
Operator	: JM .
Date	: 2-23-25
Scale	: /" = 25'

UPC#

SURVEYED BY, DATE \_Tami Lenox, LS, ATCS, 02/23/2025, (703)430-7500\_ \_ \_ .

DESIGN BY *William Leonetti, PE, ATCS, 02/23/2025, (703)430-7500* \_\_\_\_\_\_ SUBSURFACE UTILITY BY, DATE *Accumark, Inc, 03/04/2025, (804)550-7740* \_ CONSTRUCTION ALIGNMENT DATA

R201, C501

DESIGN FEATURES RELATING TO CONSTRUCTION
OR TO REGULATION AND CONTROL OF TRAFFIC
MAY BE SUBJECT TO CHANGE AS DEEMED
NECESSARY BY THE DEPARTMENT

POT 118+77.20

ATCS HERNDON, VIRGINIA

ROADWAY ENGINEER

#### LIONS FIELD ROAD (RTE. 1131) CURVE DATA

(CI)	C2)	<b>C3</b>	<u>C4</u> )	<b>C</b> 5
PI = 102+18.96	PI = 104+21.24	PI = 105+20.07	PI = 106+17.74	PI = 108+96.25
$DELTA = 01^{\circ}46'24.07'' (RT)$	$DELTA = 02^{\circ}18'20.39'' (RT)$	$DELTA = 09^{\circ}01'34.59'' (RT)$	$DELTA = 26^{\circ}40'40.55'' (RT)$	$DELTA = 29^{\circ}03'26.11'' (LT)$
$D = 00^{\circ}57'32''$	D = 03°56′16"	D = 14°23'45"	$D = 20^{\circ}27'46''$	$D = 15^{\circ}31'38''$
T = 92.47'	T = 29.28'	T = 31.42'	T = 66.39'	T = 95.63'
L = 184.93'	L = 58.55'	L = 62.70'	L = 130.37'	L = 187.14'
R = 5,975.00'	R = 1,455.00'	R = 398.00'	R = 280.00'	R = 369.00'
<i>PC</i> = 101+26.49	<i>PC</i> = 103+91.96	<i>PC</i> = 104+88.65	PC = 105 + 51.35	PC = 108+00.62
<i>PT</i> = 103+11.42	<i>PT</i> = 104+50.51	<i>PT</i> = 105+51.35	<i>PT</i> = 106+81.73	<i>PT</i> = 109+87.76

PI = 117+60.84 PI = 116+21.48 PI = 110+43.11 *PI* = 115+19.55 PI = 112 + 91.25DELTA = 05°42'18.56" (LT) DELTA = 15°10'27.50" (RT) DELTA = 02°51'06.56" (LT) DELTA = 43°50'40.92" (LT) DELTA = 34°59'15.12" (LT)  $D = 05^{\circ}09'26''$  $D = 06^{\circ}51'42''$  $D = 04^{\circ}50'06''$  $D = 31^{\circ}49'52''$  $D = 24^{\circ}22'52''$ T = 55.36'T = 111.22'T = 29.50'T = 72.44'T = 74.07'L = 137.74'L = 143.50'L = 110.63'L = 221.14'L = 58.98'R = 1,111.00'R = 835.00'R = 1,185.00'R = 180.00'R = 235.00'PC = 114 + 90.05PC = 109 + 87.76PC = 111 + 80.03PC = 115 + 49.03PC = 116 + 86.78PT = 110 + 98.38PT = 114+01.18 PT = 115 + 49.03PT = 116+86.78 PT = 118 + 30.28

#### FRONT OF SIDEWALK CURVE DATA

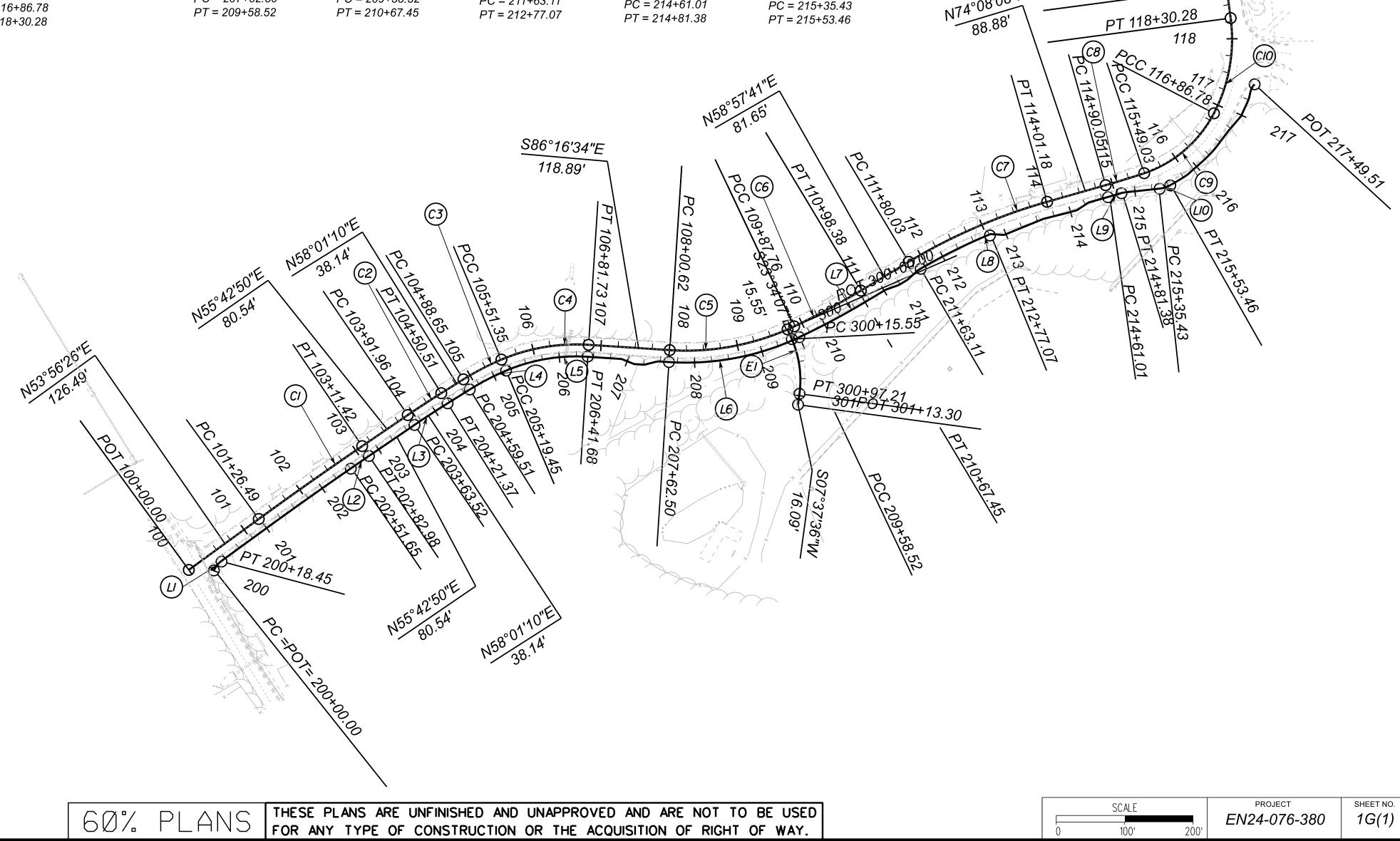
(LI)	(L2)	(L3)	(L4)	<u>(L5)</u>	
<i>PI = 200+09.48</i>	PI = 202+67.31	PI = 203+92.45	PI = 204+89.54	PI = 205+81.69	
		" (RT) DELTA = 02°18'20.39"	$'(RT) DELTA = 09^{\circ}01'34.59$	" (RT) DELTA = 26°40'40.55" (F	₹ <i>T</i> )
D = 177°24'59"	$D = 00^{\circ}57'42''$	D = 03°59'09"	$D = 15^{\circ}03'29''$	$D = 21^{\circ}49'37''$	
T = 9.48'	T = 15.66'	T = 28.93'	T = 30.03'	T = 62.24'	
L = 18.45'	L = 31.33'	L = 57.85'	L = 59.94'	L = 122.22'	
R = 32.29'	R = 5,957.50'	R = 1,437.50'	R = 380.50'	R = 262.50'	
PC = 200+00.00	PC = 202+51.65	PC = 203+63.52	PC = 204 + 59.51	<i>PC</i> = 205+19.45	
PT = 200+18.45	PT = 202+82.98	PT = 204 + 21.37	<i>PT</i> = 205+19.45	<i>PT</i> = 206+41.68	

(L6) PI = 208+62.67 L7) PI = 210+13.02 (LIO) PI = 212+20.18 PI = 214 + 71.20*PI* = 215+44.57 DELTA = 29°03'26.11" (LT) DELTA = 05°31'50.63" (LT) DELTA = 07°59'12.67" (RT) DELTA = 00°58'14.95" (LT) DELTA = 23°22'36.24" (LT)  $D = 14^{\circ}49'27''$  $D = 05^{\circ}04'38''$  $D = 07^{\circ}00'31''$  $D = 04^{\circ}45'53''$  $D = 129^{\circ}41'58''$ T = 100.16'T = 54.51'T = 57.07'T = 10.19'T = 9.14'L = 196.01'L = 108.93'L = 113.96'L = 20.38'L = 18.02'R = 386.50'R = 1,128.50'R = 817.50'R = 1,202.50'R = 44.18'PC = 207 + 62.50PC = 209 + 58.52PC = 211 + 63.11PC = 214 + 61.01PC = 215 + 35.43PT = 209 + 58.52PT = 210+67.45PT = 212 + 77.07PT = 214 + 81.38PT = 215 + 53.46

## ENTRANCE 1 CURVE DATA

(EI

PI = 300+57.42 DELTA = 31°11'42.31" (RT) D = 38°11'50" T = 41.87' L = 81.67' R = 150.00' PC = 300+15.55 PT = 300+97.21



MAY BE SUBJECT TO CHANGE AS DEEMED

NECESSARY BY THE DEPARTMENT

Element: Circular

Element: Linear

Element: Circular

Element: Circular

Element: Linear

Element: Circular

PC(

CC (

Degree of Curvature(Arc):

HPI( HPI)

PT( PT)

Middle Ordinate:

Tangent Direction:

Radial Direction: Chord Direction:

Radial Direction:

PC ( PC)

PC)

HPI)

PCC)

Delta:

Radius:

Tangent:

Chord:

PCC)

HPI)

Radius: Delta:

Length: Tangent:

Chord:

CC( CC) PT( PT)

Middle Ordinate: External:

Tangent Direction:

Radial Direction:

Chord Direction:

Radial Direction:

PT( PT) PC( PC)

HPI)

CC)

PCC)

Radius: Delta:

Length:

Chord:

Tangent:

External:

Middle Ordinate:

Tangent Direction:

Radial Direction:

Chord Direction: Radial Direction:

Tangent Direction:

Tangential Direction: Tangential Length:

> PC( HPI(

CC (

Degree of Curvature(Arc):

PCC(

External:

Middle Ordinate:

Tangent Direction: Radial Direction: Chord Direction: Radial Direction: Tangent Direction:

Tangent Direction:

PT(

Tangential Direction:

PC( HPI(

PCC(

Degree of Curvature(Arc):

PCC(

HPI(

Degree of Curvature(Arc):

Tangential Length:

CC)

Radius:

Delta:

Length:

Tangent: Chord:

External:

103+91.964 R1

104+21.243 R1

104+50.515 R1

1455.000

3.938°

58.551 29.280

58.547

N55.714°E S34.286°E

N56.867°E

S31.980°E

N58.020°E

N58.020°E 38.139

104+88.654 R1

105+51.354 R1

105+51.354 R1

106+17.745 R1

187.136

95.627

185.137

11.800

s86.276°E

s3.724°W

N79.195°E

S25.333°E

398.000

9.026° Right

105+20.069 R1

104+50.515 R1

104+88.654 R1

0.295

0.295

2.306° Right

## CON

	REVISED	STATE		STATE	SHEET
		STATE	ROUTE	PROJECT	SHEET
NSTRUCTION ALIGNMENT DATA		VA.	1131	EN24-076-380 R201, C501	1G(
Tangent Direction: N64 667°E				CONSTRUCTION OL OF TRAFFIC	

#HPI ( HPI ) 110+43.115 R1 6882298.665 11819498  ** TATION NORTHING EASTING CC ( CC) 6883279.136 11818972  Element: Linear PT ( PT) 110+98.382 R1 6882327.209 11819545  ** START ( START) 100+00.000 R1 6881918.970 11818563.254	* BENTLEY HORIZONTAI *	L ALIGNMENT	REVIEW			Tangent Di	rection:	N64.667°E		
* Alignment style: Linear\Road Design\Alignments\Horizontal\25 Scale Baselines	-	_	SFIELD			Element: Circular				
## 1814948			selines	PCC (	PCC)	109+87.756 R1	6882274.978	11819448.050		
Element: Linear  START ( START) 100+00.000 R1 6881918.970 11818563.254 Radius: 1111.000  PC ( PC) 101+26.490 R1 6881993.425 11818665.509 Degree of Curvature (Arc): 5.705° Left  Tangential Length: 126.490  Tangential Length: 126.490  Element: Circular  PC ( PC) 101+26.490 R1 6881993.425 11818665.509 Degree of Curvature (Arc): 55.359  Element: Circular  PC ( PC) 101+26.490 R1 6881993.425 11818665.509 Middle Ordinate: 1.377  HPI ( HPI) 102+18.963 R1 6882047.857 11818740.265 Tangent Direction: N64.666°E  CC ( CC) 6877163.196 11822182.541 Radial Direction: S25.33°E	*	IIIICAI (ICAA	Debign (niiignmenes (nei	irzonodi (zo bodie ba	.50111105	HPI(	HPI)	110+43.115 R1	6882298.665	11819498.085
Element: Linear  START( START) 100+00.000 R1 6881918.970 11818563.254  PC( PC) 101+26.490 R1 6881993.425 11818665.509  Element: Circular  PC( PC) 101+26.490 R1 6881993.425 11818665.509  Element: Circular  PC( PC) 101+26.490 R1 6881993.425 11818665.509  Element: Circular  PT( PT) 110+98.382 R1 6882327.209 11819545  Radius: 1111.000  Degree of Curvature(Arc): 5.705° Left  Length: 110.626  Tangential Length: 55.359  Element: Circular  PC( PC) 101+26.490 R1 6881993.425 11818665.509  HPI( HPI) 102+18.963 R1 6882047.857 11818740.265  CC( CC) 6877163.196 11822182.541  PRedial Direction: N64.667°E  PRedial Direction: N64.667°E			STATION	NORTHING	FASTING	CC (	CC)		6883279.136	11818972.668
START ( START) 100+00.000 R1 6881918.970 11818563.254 Radius: 1111.000 PC ( PC) 101+26.490 R1 6881993.425 11818665.509 Delta: 5.705° Left  Tangential Direction: N53.941°E Tangential Length: 126.490 Tangential Length: 126.490 Element: Circular PC ( PC) 101+26.490 R1 6881993.425 11818665.509 PC ( PC) 101+26.490 R1 6881993.425 11818665.509 HPI ( HPI) 102+18.963 R1 6882047.857 11818740.265 CC ( CC) 6877163.196 11822182.541  Radius: 1111.000 Delta: 5.705° Left Degree of Curvature (Arc): 5.157° Degree of Curvature (Arc): 110.626 Tangent: 111.000 Delta: 5.705° Left Degree of Curvature (Arc): 5.157° Tangent: 111.000 Delta: 5.705° Left Degree of Curvature (Arc): 5.157° Tangent: 111.000 Delta: 5.705° Left Degree of Curvature (Arc): 5.157° Tangent: 111.000 Delta: 5.705° Left Tangent: 111.000 Delta: 5.705° Left Degree of Curvature (Arc): 5.157° Tangent: 111.000 Delta: 5.705° Left Tangent: 111.000 Delta: 110.626 Tangent: 111.000 Tangent: 110.626 Tangent: 111.000 Tangent: 110.626 Tangent: 111.000 Tangent: 110.626 Tangent: 110.62	Element: Linear		517111011	IVOICIIIIIVO	LIISTING	PT (	PT)	110+98.382 R1	6882327.209	11819545.517
PC( PC) 101+26.490 R1 6881993.425 11818665.509  Tangential Direction: N53.941°E  Tangential Length: 126.490  Element: Circular  PC( PC) 101+26.490 R1 6881993.425 11818665.509  PC( PC) 101+26.490 R1 6881993.425 11818665.509  HPI( HPI) 102+18.963 R1 6882047.857 11818740.265  CC( CC) 6877163.196 11822182.541  Degree of Curvature(Arc): 5.705° Left  Degree of Curvature(Arc): 5.157°  Degree of Curvature(Arc): 5.157°  Alength: 110.626  Tangent: 110.626  Tangent: 55.359  Middle Ordinate: 1.377  External: 1.378  Tangent Direction: N64.667°E  Radial Direction: S25.333°E		START)	100+00 000 R1	6881918 970	11818563 254		Radius:	1111.000		
Tangential Direction: N53.941°E	,	•					Delta:			
Tangential Length: 126.490  Element: Circular  PC( PC) 101+26.490 R1 6881993.425 11818665.509  HPI( HPI) 102+18.963 R1 6882047.857 11818740.265  CC( CC) 6877163.196 11822182.541  Element: Circular  PC PC) 101+26.490 R1 6881993.425 11818665.509  External: 1.378  External: 1.378  Tangent Direction: N64.667°E	•	,		0001330.120	11010000.003	Degree of Curvatu	re(Arc):	5.157°		
Tangent: 55.359 Chord: 110.581  PC( PC) 101+26.490 R1 6881993.425 11818665.509 HPI( HPI) 102+18.963 R1 6882047.857 11818740.265 CC( CC) 6877163.196 11822182.541  Tangent: 55.359 Middle Ordinate: 1.377 External: 1.378 Tangent Direction: N64.667°E	<del>-</del>						Length:	110.626		
PC( PC) 101+26.490 R1 6881993.425 11818665.509 Middle Ordinate: 1.377  HPI( HPI) 102+18.963 R1 6882047.857 11818740.265  CC( CC) 6877163.196 11822182.541 External: 1.378  Radial Direction: N64.667°E  Radial Direction: 925.333°E	rangenerar	deligeli.	120.450				Tangent:	55.359		
PC( PC) 101+26.490 R1 6881993.425 11818665.509 Middle Ordinate: 1.377  HPI( HPI) 102+18.963 R1 6882047.857 11818740.265 External: 1.378  CC( CC) 6877163.196 11822182.541 Tangent Direction: N64.667°E  Radial Direction: S25.333°E	Flement: Circular						Chord:	110.581		
HPI( HPI) 102+18.963 R1 6882047.857 11818740.265 External: 1.378  CC( CC) 6877163.196 11822182.541 Tangent Direction: N64.667°E  Radial Direction: \$25.333°E		DC)	101±26 /90 D1	6991003 125	11919665 500	Middle O	rdinate:	1.377		
CC( CC) 6877163.196 11822182.541 Tangent Direction: N64.667°E	•					E	xternal:	1.378		
Radial Direction: S25 333°E	•	,	102+10.903 RI			Tangent Di	rection:	N64.667°E		
	СС ( РТ (	CC) PT)	103+11 421 R1	6877163.196 6882099 950	11822182.541	Radial Di	rection:	S25.333°E		

a.	5.705° Lef	D-1+		11010303.234	0001910.970	100+00.000 R1	SIARI)	SIARI (
L		Delta:		11818665.509	6881993.425	101+26.490 R1	PC)	PC (
	5.157°	re(Arc):	Degree of Curvatur			N53.941°E	irection:	Tangential D
	110.626	Length:	•			126.490		Tangentia
	55.359	Tangent:	T			120.490	L Length.	Tangencia.
	110.581	Chord:						lement: Circular
	1.377	rdinate:	Middle Or	11818665.509	6881993.425	101+26.490 R1	PC)	PC(
	1.378	xternal:	Ex					,
	N64.667°E	rection:	Tangent Dire	11818740.265	6882047.857	102+18.963 R1	HPI)	HPI(
	S25.333°E		Radial Dir	11822182.541	6877163.196		CC)	CC (
	N61.814°E		Chord Dire	11818816.670	6882099.950	103+11.421 R1	PT)	PT(
	S31.039°E		Radial Dire			5975.000	Radius:	
					t	1.773° Right	Delta:	
	N58.961°E	rection:	Tangent Dire			0.959°	are(Arc):	Degree of Curvati
			71			184.931	Length:	_
	440.00.0004	,	Element: Linear			92.473	Tangent:	
68	110+98.382 R1	PT)	PT (			184.924	Chord:	
68	111+80.033 R1	PC)	PC (			0.715	Ordinate:	Middle
	N58.961°E	rection:	Tangential Dire			0.715	External:	

11818883.217

11818907.408

11819702.856

11818932.244

11819020.170

11819020.170

11819081.303

6882145.321

6882161.815

6880943.150

6882177.323

6882226.413

6882226.413

6882252.304

Della:	1.//3 KIGI	IL		Tangent Dir	rection.	N58.961°E		
Degree of Curvature(Arc):	0.959°			Tangenc Dir	eccion.	N30:301 E		
Length:	184.931			Element: Linear				
Tangent:	92.473				DIII)	110-00 202 D1	6882327.209	11010545 517
Chord:	184.924			PT (	PT)	110+98.382 R1		11819545.517
Middle Ordinate:	0.715			PC (	PC)	111+80.033 R1	6882369.309	11819615.477
External:	0.716			Tangential Dir		N58.961°E		
Tangent Direction:	N53.941°E			Tangential	Length:	81.650		
Radial Direction:	S36.059°E							
Chord Direction:	N54.827°E			Element: Circular	D.G.)	111.00 022 51	6000060 200	11010615 477
Radial Direction:	S34.286°E			PC (	PC)	111+80.033 R1	6882369.309	11819615.477
Tangent Direction:	N55.714°E			HPI(	HPI)	112+91.255 R1	6882426.657	11819710.774
rangent birection:	N55./14 E			CC (	CC)		6881653.865	11820046.017
T3				PT (	PT)	114+01.175 R1	6882457.061	11819817.760
Element: Linear					Radius:	835.000		
PT( PT)	103+11.421 R1	6882099.950	11818816.670		Delta:	15.174° Right	-	
PC( PC)	103+91.964 R1	6882145.321	11818883.217	Degree of Curvatur	re(Arc):	6.862°		
Tangential Direction:	N55.714°E			<u> </u>	Length:	221.143		
Tangential Length:	80.543				Cangent:	111.222		
				-	Chord:	220.497		
Element. Cincular					CITOL C.	220.437		

	CCTHGT.	, , .		
Tangent Dir	ection:	N58.961°E		
Radial Dir	ection:	S31.039°E		
Chord Dir	ection:	N66.549°E		
Radial Dir	ection:	S15.864°E		
Tangent Dir	ection:	N74.136°E		
Element: Linear				
PT (	PT)	114+01.175 R1	6882457.061	11819817.760
PC (	PC)	114+90.053 R1	6882481.357	11819903.253
Tangential Dir	ection:	N74.136°E		
Tangential	Length:	88.878		
Element: Circular				
PC (	PC)	114+90.053 R1	6882481.357	11819903.253
HPI(	HPI)	115+19.550 R1	6882489.420	11819931.627

Middle Ordinate:

Tangent Direction:

Radial Direction:

Chord Direction:

Middle Ordinate:

Tangent Direction:

External:

Radial Direction:

External:

S15.864°E

N72.710°E

S18.716°E

134.406

13.016

14.030

N71.284°E

7.310

7.375

		HPI(	HPI)	115+19.550 R1	6882489.420
		CC (	CC)		6883621.222
		PCC (	PCC)	115+49.035 R1	6882498.885
		R	adius:	1185.000	
6882177.323	11818932.244		Delta:	2.852° Left	
6882197.522	11818964.595	Degree of Curvature	(Arc):	4.835°	
		L	ength:	58.982	
		Ta	ngent:	29.497	
			Chord:	58.976	
6882197.522	11818964.595	Middle Ord	linate:	0.367	
6882214.161	11818991.242	Ext	ernal:	0.367	

14.396°	Tangent Direction:	N71.284°E		
62.700				
31.415	Element: Circular			
62.635	PCC ( PCC)	115+49.035 R1	6882498.885	11819959.564
1.234	HPI( HPI)	116+21.476 R1	6882522.130	11820028.174
1.238	CC ( CC)		6882669.367	11819901.805
N58.020°E	PCC ( PCC)	116+86.777 R1	6882586.421	11820061.555
S31.980°E	Radius:	180.000		
N62.533°E	Delta:	43.845° Left		
S22.954°E	Degree of Curvature(Arc):	31.831°		
N67.046°E	Length:	137.742		
	Tangent:	72.441		

106+81.727 R1 280.000 26.678° Right 20.463°	6881968.584 6882247.993	11819129.369 11819147.553	Tangent Di Radial Di Chord Di Radial Di Tangent Di	rection: rection: rection:	N71.284°E S18.716°E N49.361°E S62.561°E N27.439°E		
130.373			Element: Circular				
66.390			PCC (	PCC)	116+86.777 R1	6882586.421	11820061.555
129.198			HPI(	HPI)	117+60.844 R1	6882652.156	11820095.686
7.554			CC (	CC)		6882694.711	11819852.993
7.763			PT (	PT)	118+30.279 R1	6882725.581	11820085.956
N67.046°E				Radius:	235.000		
S22.954°E				Delta:	34.988° Left		
N80.385°E			Degree of Curvatu	re(Arc):	24.381°		
S3.724°W				Length:	143.502		
S86.276°E			•	Tangent:	74.067		
				Chard.	141 283		

				Chord:	141.283		
			Middle Or	dinate:	10.869		
106+81.727 R1	6882247.993	11819147.553	Ex	ternal:	11.396		
108+00.619 R1	6882240.271	11819266.194	Tangent Dir	ection:	N27.439°E		
S86.276°E			Radial Dir	ection:	S62.561°E		
118.892			Chord Dir	ection:	N9.945°E		
			Radial Direction:		N82.452°E		
			Tangent Dir	ection:	N7.548°W		
108+00.619 R1	6882240.271	11819266.194	3				
108+96.246 R1	6882234.060	11819361.619	Element: Linear				
	6882608.492	11819290.160	PT (	PT)	118+30.279 R1	6882725.581	11820085.956
109+87.756 R1	6882274.978	11819448.050	END (	END)	118+77.198 R1	6882772.093	11820079.793
369.000			Tangential Dir	,	N7.548°W		
29.057° Left			Tangential	Length:	46.918		
15.527°			3	2			

ENTRANCE 1 HORIZONTAL GEOMETRY REPORT

ATCS

HERNDON, VIRGINIA ROADWAY ENGINEER

*	BENTLEY	HORIZONTAL	ALIGNMENT	REVIEW
*				
*	Alignmer	nt name: EN	TRANCE1_BL	_FIXED

Tangential Length:

*	Alignment	descrip	lescription:									
*	Alignment	style:	Linear\Road	Design\Alignments	\Horizontal\25	Scale	Baseline					
*												

			STATION	NORTHING	EASTIN
Element:	Linear				
	START (	START)	300+00.000 R1	6882270.582	11819438.40
	PC(	PC)	300+15.546 R1	6882256.333	11819444.62
Tar		Direction:	S23.569°E		
	Tangenti	al Length:	15.546		
Element:	Circular	:			
	PC(	PC)	300+15.546 R1	6882256.333	11819444.62
	HPI(	HPI)	300+57.420 R1	6882217.952	11819461.36
	CC (	CC)		6882196.356	11819307.13
	PT(	PT)	300+97.215 R1	6882176.448	11819455.81
		Radius:	150.000		
		Delta:	31.195° Ri	.ght	
Degree	of Curva	ature(Arc):	38.197°		
		Length:	81.669		
		Tangent:	41.874		
		Chord:	80.664		
	Middle	e Ordinate:	5.524		
		External:	5.735		
		Direction:	S23.569°E		
	Radial	Direction:	s66.431°W		
		Direction:	s7.971°E		
		Direction:	N82.373°W		
	Tangent	Direction:	S7.627°W		
Element:	Linear				
	PT(	PT)	300+97.215 R1	6882176.448	11819455.83
	END(	END)	301+13.304 R1	6882160.501	11819453.67
		Direction:	s7.627°W		

16.090

11819579.321

11819959.564

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UTILITY BY, DATE <i>_Accumark, <u>Inc., 03/04/2025, (804)55</u>0-774</i> 0_									VA. 1131	EN	N24-076-38 R201, C50
ONT OF SIDEWALK HORIZONTAL GEOMETRY REPORT (PART 1)				UDT ( UDT)	202171 440 P1	C0000F0 27F	11010700 541				
NTLEY HORIZONTAL ALIGNMENT REVIEW  ignment name: LionsField FOS Engineered	Tangential Length: 4.985  Element: Linear			HPI( HPI) HPI( HPI) Tangential Direction:	202+71.440 R1 202+76.238 R1 N55.294°E	6882059.375 6882062.107	11818788.541 11818792.485	OR TO REGI	ATURES RELATING T ULATION AND CONTF BJECT TO CHANGE	ROL OF TRAFFIC	
ignment description: ignment style: Linear\Road Design\Sidewalk\Cement Concrete Sidewalk 4in	HPI( HPI) 201+46.619 R1 HPI( HPI) 201+51.604 R1 Tangential Direction: N54.094°E	6881987.195 6881990.119	11818686.709 11818690.747	Tangential Length: Element: Linear	4.798				BY THE DEPARTME		
STATION NORTHING EASTING ent: Circular	Tangential Length: 4.985  Element: Linear			HPI( HPI) HPI( HPI) Tangential Direction:	202+76.238 R1 202+81.224 R1 N55.341°E	6882062.107 6882064.942	11818792.485 11818796.586	ATCS HERNDON, VIRGINIA			
PC(       PC)       200+00.000 R1       6881884.441       11818603.904         HPI(       HPI)       200+04.455 R1       6881888.376       11818601.815         CC(       CC)       6881910.661       11818653.274	HPI( HPI) 201+51.604 R1 HPI( HPI) 201+59.564 R1 Tangential Direction: N54.156°E	6881990.119 6881994.779	11818690.747 11818697.199	Tangential Length: Element: Linear	4.985			ROADWAY ENGINEER			
PCC( PCC) 200+08.891 R1 6881892.592 11818600.375 Radius: 55.901 Delta: 9.113° Right	Tangential Length: 7.959			HPI( HPI) HPI( HPI) Tangential Direction:	202+81.224 R1 202+86.209 R1 N55.389°E	6882064.942 6882067.774	11818796.586 11818800.689				
gree of Curvature(Arc): 102.495°  Length: 8.891  Tangent: 4.455	Element: Linear	6881994.779 6881998.869	11818697.199 11818702.876	Tangential Length: Element: Linear	4.986			Chord Direction:	N80.385°E		
Chord: 8.882 Middle Ordinate: 0.177 External: 0.177	Tangential Direction: N54.228°E Tangential Length: 6.997			HPI( HPI) HPI( HPI)	202+86.209 R1 202+91.195 R1	6882067.774 6882070.602	11818800.689 11818804.795	Radial Direction: Tangent Direction:	S3.724°W S86.276°E		
Tangent Direction: N27.972°W Radial Direction: N62.028°E Chord Direction: N23.416°W	Element: Linear	6881998.869 6882001.779	11818702.876 11818706.923	Tangential Direction: Tangential Length:	N55.437°E 4.985			Element: Linear PT( PT) HPI( HPI)	206+76.235 R1 207+25.329 R1	6882230.530 6882227.341	118191 118191
Radial Direction: N71.141°E Tangent Direction: N18.859°W	Tangential Direction: N54.286°E Tangential Length: 4.985			Element: Linear HPI( HPI) HPI( HPI)	202+91.195 R1 202+96.180 R1	6882070.602 6882073.427	11818804.795 11818808.902	Tangential Direction: Tangential Length:	S86.276°E 49.094	000111	110101
ent: Circular PCC( PCC) 200+08.891 R1 6881892.592 11818600.375	Element: Linear  HPI( HPI) 201+71.545 R1  HPI( HPI) 201+79.245 R1	6882001.779 6882006.268	11818706.923 11818713.180	Tangential Direction: Tangential Length:	N55.485°E 4.985			Element: Linear  HPI( HPI)	207+25.329 R1	6882227.341	1181919
HPI(       HPI)       200+12.908 R1       6881896.393       11818599.076         CC(       CC)       6881910.661       11818653.274         PCC(       PCC)       200+16.912 R1       6881900.341       11818598.334	HPI( HPI) 201+79.245 R1 Tangential Direction: N54.347°E Tangential Length: 7.700	6882006.268	11818/13.180	Element: Linear HPI( HPI) HPI( HPI)	202+96.180 R1 203+01.165 R1	6882073.427 6882076.249	11818808.902 11818813.013	HPI( HPI) Tangential Direction: Tangential Length:	207+29.382 R1 S68.923°E 4.053	6882225.884	1181919
Radius: 55.901 Delta: 8.220° Right (ree of Curvature(Arc): 102.495°	Element: Linear  HPI( HPI) 201+79.245 R1	6882006.268	11818713.180	Tangential Direction: Tangential Length:	N55.532°E 4.985	0002070.249	11010013.013	Element: Linear HPI( HPI)	207+29.382 R1	6882225.884	118191
Length: 8.020 Tangent: 4.017 Chord: 8.013	HPI (HPI) 201+86.502 R1 Tangential Direction: N54.419°E Tangential Length: 7.256	6882010.490	11818719.081	Element: Linear HPI( HPI)	203+01.165 R1	6882076.249	11818813.013	HPI( HPI) Tangential Direction: Tangential Length:	207+45.329 R1 S68.188°E 15.947	6882219.958	118192
Middle Ordinate: 0.144 External: 0.144	Element: Linear	6002010 400	11010710 001	HPI( HPI) Tangential Direction: Tangential Length:	203+06.151 R1 N55.580°E 4.985	6882079.067	11818817.125	Element: Linear		6000010 050	11010
Tangent Direction: N18.859°W Radial Direction: N71.141°E Chord Direction: N14.749°W	HPI( HPI) 201+86.502 R1 HPI( HPI) 201+91.487 R1 Tangential Direction: N54.478°E	6882010.490 6882013.386	11818719.081 11818723.139	Element: Linear  HPI( HPI)	203+06.151 R1	6882079.067	11818817.125	HPI( HPI) HPI( HPI) Tangential Direction:	207+45.329 R1 207+50.481 R1 S85.727°E	6882219.958 6882219.574	11819 11819
Radial Direction: N79.361°E Tangent Direction: N10.639°W	Tangential Length: 4.985  Element: Linear			HPI( HPI) Tangential Direction:	203+11.136 R1 N55.628°E	6882081.881	11818821.240	Tangential Length: Element: Linear	5.152		
nt: Circular PCC( PCC) 200+16.912 R1 6881900.341 11818598.334 HPI( HPI) 200+21.739 R1 6881905.072 11818597.377	HPI( HPI) 201+91.487 R1 PC( PC) 201+96.472 R1 Tangential Direction: N54.526°E	6882013.386 6882016.279	11818723.139 11818727.199	Tangential Length: Element: Linear	4.985			HPI( HPI) HPI( HPI) Tangential Direction:	207+50.481 R1 207+60.321 R1 S86.276°E	6882219.574 6882218.935	11819 11819
CC( CC) 6881906.190 11818627.246 PCC( PCC) 200+26.481 R1 6881909.862 11818597.978	Tangential Length: 4.985			HPI( HPI) HPI( HPI) Tangential Direction:	203+11.136 R1 203+17.538 R1 N55.683°E	6882081.881 6882085.491	11818821.240 11818826.528	Tangential Length:	9.841		
Radius: 29.498  Delta: 18.587° Right ee of Curvature(Arc): 194.239°	Element: Circular  PC( PC) 201+96.472 R1  HPI( HPI) 202+11.429 R1	6882016.279 6882024.954	11818727.199 11818739.382	Tangential Length: Element: Linear	6.402			Element: Linear HPI( HPI) HPI( HPI)	207+60.321 R1 207+60.802 R1	6882218.935 6882219.006	11819 11819
Length: 9.569 Tangent: 4.827 Chord: 9.527	CC( CC) PT( PT) 202+26.385 R1 Radius: 5957.500	6877163.196 6882033.567	11822182.541 11818751.609	HPI( HPI) HPI( HPI)	203+17.538 R1 203+98.081 R1	6882085.491 6882130.862	11818826.528 11818893.075	Tangential Direction: Tangential Length:	N81.539°E 0.480		
Middle Ordinate: 0.387 External: 0.392 Tangent Direction: N11.436°W	Delta: 0.288° Right Degree of Curvature(Arc): 0.962° Length: 29.912	t		Tangential Direction: Tangential Length:	N55.714°E 80.543			Element: Linear HPI( HPI) HPI( HPI)	207+60.802 R1 207+76.518 R1	6882219.006 6882222.905	11819 11819
Radial Direction: N78.564°E Chord Direction: N2.142°W Radial Direction: S82.849°E	Tangent: 14.956 Chord: 29.912 Middle Ordinate: 0.019			Element: Linear HPI( HPI) PC( PC)	203+98.081 R1 204+01.081 R1	6882130.862 6882132.550	11818893.075 11818895.555	Tangential Direction: Tangential Length:	N75.636°E 15.716	0002222.303	11013
Tangent Direction: N7.151°E	External: 0.019 Tangent Direction: N54.550°E			Tangential Direction: Tangential Length:	N55.774°E 3.000			Element: Linear HPI( HPI)	207+76.518 R1	6882222.905	11819
t: Circular     PCC( PCC)	Radial Direction: S35.450°E Chord Direction: N54.693°E Radial Direction: S35.163°E			Element: Circular PC( PC)	204+01.081 R1	6882132.550	11818895.555	HPI( HPI) Tangential Direction: Tangential Length:	207+80.669 R1 N76.506°E 4.151	6882223.873	118192
CC( CC) 6881906.001 11818630.037 PCC( PCC) 200+34.560 R1 6881917.684 11818599.930 Radius: 32.295	Tangent Direction: N54.837°E  Element: Linear			HPI( HPI) CC( CC)	204+28.508 R1	6882147.953 6880943.150	11818918.249 11819702.856	Element: Linear HPI( HPI)	207+80.669 R1	6882223.873	11819
Delta: 14.334° Right ee of Curvature(Arc): 177.416° Length: 8.079	PT( PT) 202+26.385 R1 HPI( HPI) 202+31.370 R1	6882033.567 6882036.437	11818751.609 11818755.686	Radius: Delta:	204+55.928 R1 1437.500 2.186° Righ	6882162.479	11818941.513	PC( PC)  Tangential Direction:  Tangential Length:	207+97.074 R1 \$86.276°E 16.405	6882222.808	11819
Tangent: 4.061 Chord: 8.058	Tangential Direction: N54.861°E Tangential Length: 4.985			Degree of Curvature(Arc): Length: Tangent:	3.986° 54.847 27.427			Element: Circular		5000000 000	4.4.0.4.4
Middle Ordinate: 0.252 External: 0.254 Tangent Direction: N6.875°E	Element: Linear	6882036.437 6882039.303	11818755.686 11818759.765	Chord: Middle Ordinate: External:	54.844 0.262 0.262			PC( PC) HPI( HPI) CC( CC)	207+97.074 R1 208+97.235 R1	6882222.808 6882216.303 6882608.492	11819 11819 11819
Radial Direction: S83.125°E Chord Direction: N14.042°E Radial Direction: S68.791°E	Tangential Direction: N54.909°E Tangential Length: 4.985			Tangent Direction: Radial Direction: Chord Direction:	N55.833°E S34.167°E N56.927°E						
Tangent Direction: N21.209°E t: Circular	Element: Linear  HPI( HPI) 202+36.355 R1  HPI( HPI) 202+41.341 R1	6882039.303 6882042.165	11818759.765 11818763.847	Radial Direction: Tangent Direction:	S31.980°E N58.020°E						
PCC( PCC) 200+34.560 R1 6881917.684 11818599.930 HPI( HPI) 200+44.044 R1 6881926.526 11818603.361	HPI( HPI) 202+41.341 R1 Tangential Direction: N54.957°E Tangential Length: 4.985	0002042.103	11010703.047	Element: Linear PT( PT)	204+55.928 R1	6882162.479	11818941.513				
CC( CC) 6881906.001 11818630.037 PT( PT) 200+53.009 R1 6881932.108 11818611.028 Radius: 32.295	Element: Linear HPI( HPI) 202+41.341 R1	6882042.165	11818763.847	PC( PC) Tangential Direction: Tangential Length:	204+94.067 R1 N58.020°E 38.139	6882182.678	11818973.864				
Delta: 32.731° Right ee of Curvature(Arc): 177.416° Length: 18.449	HPI( HPI) 202+46.326 R1 Tangential Direction: N55.005°E Tangential Length: 4.985	6882045.024	11818767.931	Element: Circular PC( PC)	204+94.067 R1	6882182.678	11818973.864				
Tangent: 9.484 Chord: 18.199 Middle Ordinate: 1.308	Element: Linear  HPI( HPI) 202+46.326 R1	6882045.024	11818767.931	HPI (HPI) CC (CC) PCC (PCC)	205+24.101 R1 205+54.011 R1	6882198.585 6881859.927 6882210.298	11818999.339 11819175.388 11819026.995				
External: 1.364 Tangent Direction: N21.209°E Radial Direction: S68.791°E	HPI( HPI) 202+51.311 R1 Tangential Direction: N55.053°E Tangential Length: 4.985	6882047.880	11818772.017	Radius: Delta: Degree of Curvature(Arc):	380.500 9.026° Righ 15.058°						
Chord Direction: N37.575°E Radial Direction: S36.059°E	Element: Linear	6000047, 000	11010770 017	Length: Tangent:	59.943 30.034						
Tangent Direction: N53.941°E	HPI( HPI) 202+51.311 R1 HPI( HPI) 202+56.297 R1 Tangential Direction: N55.101°E	6882047.880 6882050.732	11818772.017 11818776.106	Chord: Middle Ordinate: External:	59.881 1.180 1.183						
PT( PT) 200+53.009 R1 6881932.106 11818611.025 HPI( HPI) 201+33.149 R1 6881979.278 11818675.810 Fangential Direction: N53.941°E	Tangential Length: 4.985  Element: Linear			Tangent Direction: Radial Direction: Chord Direction:	N58.020°E S31.980°E N62.533°E						
Tangential Length: 80.140	HPI( HPI) 202+56.297 R1 HPI( HPI) 202+61.282 R1 Tangential Direction: N55.149°E	6882050.732 6882053.581	11818776.106 11818780.197	Radial Direction: Tangent Direction:	S22.954°E N67.046°E						
HPI (HPI) 201+33.149 R1 6881979.278 11818675.810 HPI (HPI) 201+36.648 R1 6881981.337 11818678.640	Tangential Length: 4.985			Element: Circular PCC( PCC)	205+54.011 R1	6882210.298 6882234 572	11819026.995				
angential Direction: N53.957°E Tangential Length: 3.499	Element: Linear  HPI( HPI) 202+61.282 R1  HPI( HPI) 202+66.267 R1	6882053.581 6882056.426	11818780.197 11818784.291	HPI( HPI) CC( CC) PT( PT)	206+16.251 R1 206+76.235 R1	6882234.572 6881968.584 6882230.530	11819084.307 11819129.369 11819146.417				
t: Linear	Tangential Direction: N55.197°E Tangential Length: 4.985			Radius: Delta: Degree of Curvature(Arc):	262.500 26.678° Righ 21.827°	:					
Tangential Length: N53.998°E  4.986	Element: Linear	6882056.426 6882059.375	11818784.291 11818788.541	Length: Tangent: Chord:	122.225 62.241 121.124						
nt: Linear HPI( HPI) 201+41.634 R1 6881984.268 11818682.673	Tangential Direction: N55.246°E Tangential Length: 5.173			Middle Ordinate: External: Tangent Direction:	7.082 7.278 N67.046°E						
HPI( HPI) 201+46.619 R1 6881987.195 11818686.709 Tangential Direction: N54.046°E	Element: Linear			Radial Direction:	N67.046 E S22.954°E						OJECT

EYED BY, DATE <i>_Tami Lenox. LS. ATCS,_02/23/2025. (703)430-7.</i> SN BY <i>William Leonetti. PE. ATCS_02/23/2025. (703)430-7500_</i> URFACE UTILITY BY, DATE <i>_Accumark. Inc, 03/04/2025. (804)5</i>													ROUTE	PROJECT EN24-076-386	0
FRONT OF SIDEWALK	HORIZONTAL G	GEOMETRY RE	EPORT (PART 2)										VA.   1131	R201, C50	110
PCC( PCC) Radius: Delta: Degree of Curvature(Arc): Length: Tangent:	209+93.085 R1 386.500 29.057° Left 14.824° 196.011 100.162	6882259.161 t	11819455.538	Element: Linear  HPI( HPI)  HPI( HPI)  Tangential Direction:  Tangential Length:	213+90.024 R1 213+93.868 R1 N67.978°E 3.845	6882430.743 6882432.184	11819808.978 11819812.542					OR TO REGULAT	S RELATING TO CONSTI ION AND CONTROL OF T T TO CHANGE AS DEEMI THE DEPARTMENT	RAFFIC	<b>,</b>
Chord:  Middle Ordinate: External: Tangent Direction: Radial Direction: Chord Direction: Radial Direction:	193.918 12.359 12.768 \$86.276°E \$3.724°W N79.195°E \$25.333°E			Element: Linear  HPI( HPI)  HPI( HPI)  Tangential Direction:  Tangential Length:  Element: Linear	213+93.868 R1 213+94.769 R1 N75.575°E 0.901	6882432.184 6882432.409	11819812.542 11819813.414				ATCS HERNDON, VIRGINIA ROADWAY ENGINEER				
Tangent Direction:  Element: Circular  PCC( PCC)  HPI( HPI)  CC( CC)	N64.667°E  209+93.085 R1 210+47.595 R1	6882259.161 6882282.485 6883279.136	11819455.538 11819504.806 11818972.668	HPI( HPI) HPI( HPI) Tangential Direction: Tangential Length: Element: Linear	213+94.769 R1 214+29.581 R1 N75.966°E 34.812	6882432.409 6882440.850	11819813.414 11819847.187	HPI( HPI) HPI( HPI) Tangential Direction: Tangential Length:	216+04.224 R1 216+14.577 R1 N40.551°E 10.354	6882572.821 6882580.688	11820093.045 11820099.776				
PT( PT) Radius: Delta: Degree of Curvature(Arc): Length: Tangent: Chord:	211+02.020 R1 1128.500 5.531° Left 5.077° 108.935 54.510 108.893	6882310.449 t	11819551.596	HPI( HPI) HPI( HPI) Tangential Direction: Tangential Length: Element: Linear	214+29.581 R1 214+44.360 R1 N74.138°E 14.779	6882444.890 6882444.890 6882444.890	11819847.187 11819861.403	Element: Linear  HPI( HPI)  HPI( HPI)  Tangential Direction:  Tangential Length:	216+14.577 R1 216+22.618 R1 N28.478°E 8.041	6882580.688 6882587.756	11820099.776 11820103.610				
Middle Ordinate: External: Tangent Direction: Radial Direction: Chord Direction: Radial Direction:	1.314 1.316 N64.667°E S25.333°E N61.901°E S30.864°E			HPI( HPI) HPI( HPI) Tangential Direction: Tangential Length: Element: Linear HPI( HPI)	214+44.360 R1 214+44.849 R1 N61.921°E 0.489	6882445.120 6882445.120	11819861.403 11819861.835	Element: Linear  HPI( HPI)  HPI( HPI)  Tangential Direction:  Tangential Length:	216+22.618 R1 216+32.887 R1 N24.830°E 10.269	6882587.756 6882597.076	11820103.610 11820107.923				
Tangent Direction:  Element: Linear PT(PT) HPI(HPI) Tangential Direction: Tangential Length:	N59.136°E  211+02.020 R1 211+07.072 R1 N59.021°E 5.051	6882310.449 6882313.049	11819551.596 11819555.927	HPI( HPI) Tangential Direction: Tangential Length: Element: Linear HPI( HPI)	214+60.610 R1 N56.264°E 15.761 214+60.610 R1	6882453.873 6882453.873	11819874.941 11819874.941	Element: Linear  HPI( HPI)  HPI( HPI)  Tangential Direction:  Tangential Length:	216+32.887 R1 216+38.002 R1 N23.890°E 5.115	6882597.076 6882601.753	11820107.923 11820109.994				
Element: Linear HPI(HPI) HPI(HPI) Tangential Direction: Tangential Length:	211+07.072 R1 211+37.072 R1 N58.961°E 30.000	6882313.049 6882328.517	11819555.927 11819581.631	HPI( HPI) Tangential Direction: Tangential Length: Element: Linear HPI( HPI)	214+64.669 R1 N56.979°E 4.060 214+64.669 R1	6882456.085 6882456.085	11819878.345 11819878.345	Element: Linear  HPI( HPI)  HPI( HPI)  Tangential Direction:  Tangential Length:  Element: Linear	216+38.002 R1 216+38.706 R1 N24.373°E 0.704	6882601.753 6882602.394	11820109.994 11820110.285				
Element: Linear  HPI( HPI)  HPI( HPI)  Tangential Direction:  Tangential Length:	211+37.072 R1 211+57.380 R1 N70.442°E 20.308	6882328.517 6882335.315	11819581.631 11819600.768	PC( PC) Tangential Direction: Tangential Length:  Element: Circular PC( PC) HPI( HPI)	214+95.537 R1 N74.136°E 30.867 214+95.537 R1 215+05.750 R1	6882464.523 6882464.523 6882467.315	11819908.037 11819908.037 11819917.861	HPI( HPI) HPI( HPI) Tangential Direction: Tangential Length: Element: Linear	216+38.706 R1 216+42.933 R1 N23.590°E 4.227	6882602.394 6882606.268 6882606.268	11820110.285 11820111.976 11820111.976				
Element: Linear HPI(HPI) HPI(HPI) Tangential Direction: Tangential Length:	211+57.380 R1 211+62.478 R1 N59.186°E 5.099	6882335.315 6882337.927	11819600.768 11819605.146	CC( CC) PT( PT) Radius: Delta: Degree of Curvature(Arc): Length:	215+15.963 R1 1202.500 0.973° Le: 4.765° 20.426	6883621.222 6882470.274	11819579.321 11819927.637	HPI( HPI) HPI( HPI) Tangential Direction: Tangential Length: Element: Linear HPI( HPI)	216+42.933 R1 216+44.541 R1 N19.765°E 1.607	6882607.781 6882607.781	11820112.520 11820112.520				
Element: Linear  HPI( HPI)  HPI( HPI)  Tangential Direction:  Tangential Length:	211+62.478 R1 211+72.377 R1 N58.961°E 9.899	6882337.927 6882343.031	11819605.146 11819613.628	Tangent: Chord: Middle Ordinate: External: Tangent Direction: Radial Direction:	10.213 20.426 0.043 0.043 N74.136°E S15.864°E			HPI( HPI) Tangential Direction: Tangential Length:  Element: Linear HPI( HPI) HPI( HPI)	216+47.558 R1 N15.945°E 3.018 216+47.558 R1 216+48.415 R1	6882610.682 6882610.682 6882611.517	11820113.349 11820113.349 11820113.540				
Element: Linear  HPI( HPI)  HPI( HPI)  Tangential Direction:  Tangential Length:  Element: Linear	211+72.377 R1 211+72.680 R1 N51.263°E 0.303	6882343.031 6882343.221	11819613.628 11819613.865	Chord Direction: Radial Direction: Tangent Direction:  Element: Linear PT( PT) HPI( HPI)	N73.649°E \$16.838°E N73.162°E 215+15.963 R1 215+18.116 R1	6882470.274 6882470.678	11819927.637 11819929.752	Tangential Direction: Tangential Length:  Element: Linear  HPI( HPI)  HPI( HPI)	N12.927°E 0.856 216+48.415 R1 216+55.087 R1	6882611.517 6882618.041	11820113.540 11820113.540 11820114.940				
HPI( HPI) HPI( HPI) Tangential Direction: Tangential Length: Element: Linear	211+72.680 R1 211+88.021 R1 N47.462°E 15.341	6882343.221 6882353.592	11819613.865 11819625.168	Tangential Direction: Tangential Length:  Element: Linear HPI(HPI) PC(PC)	N79.186°E 2.153 215+18.116 R1 215+69.965 R1	6882470.678 6882476.251	11819929.752 11819981.300	Tangential Direction: Tangential Length:  Element: Linear HPI(HPI) HPI(HPI)	N12.106°E 6.672 216+55.087 R1 216+56.089 R1	6882618.041 6882619.014	11820114.940 11820115.176				
HPI( HPI) HPI( HPI) Tangential Direction: Tangential Length: Element: Linear	211+88.021 R1 211+92.881 R1 N47.722°E 4.860	6882353.592 6882356.862	11819625.168 11819628.764 11819628.764	Tangential Direction: Tangential Length:  Element: Circular PC(PC) HPI(HPI)	N83.830°E 51.849 215+69.965 R1 215+79.098 R1	6882476.251 6882477.232	11819981.300 11819990.381	Tangential Direction: Tangential Length:  Element: Linear HPI(HPI) HPI(HPI)	N13.650°E 1.002 216+56.089 R1 216+60.353 R1	6882619.014 6882623.005	11820115.176 11820116.678				
HPI( HPI) PC( PC) Tangential Direction: Tangential Length:  Element: Circular PC( PC)	211+92.881 R1 211+97.673 R1 N59.466°E 4.792	6882356.862 6882359.297 6882359.297	11819632.891 11819632.891	CC( CC) PT( PT) Radius: Delta: Degree of Curvature(Arc): Length: Tangent:	215+87.978 R1 44.176 23.362° Lef 129.699° 18.012 9.133	6882520.170 6882481.734 t	11819976.552 11819998.327	Tangential Direction: Tangential Length: Element: Linear HPI(HPI) HPI(HPI)	N20.624°E 4.264 216+60.353 R1 216+60.718 R1	6882623.005 6882623.329	11820116.678 11820116.847				
HPI( HPI) CC( CC) PT( PT) Radius: Delta: Degree of Curvature(Arc): Length: Tangent:	212+54.744 R1  213+11.630 R1 817.500 7.987° Righ 7.009° 113.957 57.071	6882388.137 6881653.865 6882409.856	11819682.139 11820046.017 11819734.916	Chord:  Middle Ordinate: External:  Tangent Direction: Radial Direction: Chord Direction: Radial Direction: Tangent Direction:	17.888 0.915 0.934 N83.830°E S6.170°E N72.149°E S29.532°E N60.468°E			Tangential Direction: Tangential Length:  Element: Linear HPI(HPI) HPI(HPI) Tangential Direction:	N27.552°E 0.366 216+60.718 R1 216+62.823 R1 N30.266°E	6882623.329 6882625.147	11820116.847 11820117.908				
Chord: Middle Ordinate: External: Tangent Direction: Radial Direction: Chord Direction:	113.865 1.985 1.990 N59.645°E S30.355°E N63.639°E			Element: Linear PT( PT) HPI( HPI) Tangential Direction: Tangential Length:	215+87.978 R1 215+88.389 R1 N36.479°E 0.411	6882560.469 6882560.800	11820082.494 11820082.739	Tangential Length:  Element: Linear  HPI( HPI)  HPI( HPI)  Tangential Direction:  Tangential Length:	2.105 216+62.823 R1 216+64.377 R1 N35.357°E 1.554	6882625.147 6882626.414	11820117.908 11820118.807				
Radial Direction: Tangent Direction: Element: Linear PT(PT) HPI(HPI) Tangential Direction:	\$22.368°E N67.632°E 213+11.630 R1 213+31.404 R1 \$86.681°E	6882409.856 6882408.711	11819734.916 11819754.656	Element: Linear  HPI( HPI)  HPI( HPI)  Tangential Direction:  Tangential Length:	215+88.389 R1 215+95.438 R1 N40.637°E 7.049	6882560.800 6882566.149	11820082.739 11820087.330	Element: Linear  HPI( HPI)  HPI( HPI)  Tangential Direction:  Tangential Length:	216+64.377 R1 216+64.863 R1 N38.181°E 0.486	6882626.414 6882626.796	11820118.807 11820119.108				
Tangential Length:  Element: Linear  HPI( HPI)  HPI( HPI)  Tangential Direction:	19.774 213+31.404 R1 213+36.480 R1 N68.927°E	6882408.711 6882410.536	11819754.656 11819759.393	Element: Linear  HPI(HPI)  HPI(HPI)  Tangential Direction:  Tangential Length:	215+95.438 R1 216+01.917 R1 N40.566°E 6.479	6882566.149 6882571.071	11820087.330 11820091.543	Element: Linear HPI(HPI) HPI(HPI) Tangential Direction: Tangential Length:	216+64.863 R1 216+67.439 R1 N42.313°E 2.576	6882626.796 6882628.701	11820119.108 11820120.842				
Tangential Length:  Element: Linear  HPI( HPI)  HPI( HPI)  Tangential Direction:  Tangential Length:	5.076 213+36.480 R1 213+90.024 R1 N67.829°E 53.544	6882410.536 6882430.743	11819759.393 11819808.978	Element: Linear  HPI( HPI)  HPI( HPI)  Tangential Direction:  Tangential Length:  Element: Linear	216+01.917 R1 216+04.224 R1 N40.628°E 2.307	6882571.071 6882572.821	11820091.543 11820093.045	Element: Linear  HPI( HPI)  END( END)  Tangential Direction:  Tangential Length:	216+67.439 R1 216+67.634 R1 N82.144°E 0.194	6882628.701 6882628.728	11820120.842 11820121.034				
rangentrar Length:	JJ. 344				"/ PI /\N	THESE F	PLANS ARE UNFINI	SHED AND UNAPPROVED AND A		USED				PROJECT <b>EN24-076-380</b>	SHEET <b>1G</b> (

DIST

PROJECT MANAGER Rami Bazlamit, PE, Prince William County, (703) 792-8164 SURVEYED BY, DATE \_Tami Lenox, LS, ATCS, 02/23/2025, (703)430-7500\_ \_ \_ . DESIGN BY **William Leonetti, PE, ATCS, 02/23/2025, (703)430-7500** \_ \_ \_ \_ \_ \_ \_ \_ SUBSURFACE UTILITY BY, DATE <u>Accumark, Inc. 03/04/2025, (804)550-7740</u>

## EXISTING UTILITIES AND SURVEY INFORMATION

REVISED	STATE		SHEET NO	
	STATE	ROUTE	PROJECT	SHEET NO.
	VA.	1131	EN24-076-380 R201, C501	1H

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

#### General Notes:

Date Of Preliminary Submittal: N/A Date Of Final Submittal: 03/04/2025

Accumark, Inc. Performed An Underground Utility Investigation Effort In February 2025 Within The Project Limits Specified By The Client. The Utility Designation Was Performed In Accordance With Quality Level B (Location Depicted Per Electronic Information Obtained) Standards, Or Unless Otherwise Noted Hereon As Quality Levels C Or D, Datur (Location Shown According To Utility Records), Parole Information (Verbal) And By Surface Features.

The Quality Control / Quality Assurance Review Conducted By Accumark Staff Was Managed And Directly Supervised By Frank R. Richardson, II, L.S. - Accumark, Inc.

The Utility Sizes Shown Herein Are Based On Information Provided By The Utility Company's Owner, By Written Records, By Verbal Information Or By Observed Visual Evidence.

This Survey Is Not A Current Boundary Survey And Does Not Depict Boundary Or Right-Of-Way Information.

Surveyed Locations Of Designated Utilities May Not Represent The Exact Centerline Of The Utility. Test Holes Will Be Necessary To Identify The Exact Centerline.

At Time Of Utility File Submittal Records Have Not Been Received From All Utility Owners. Once Received Accumark Will Review And Revise The Utility File As Necessary.

Accumark Recommends Test Holes On Any Utility Linework Provided If The Possibility Of A Conflict With Proposed Design Exists, Specifically On Provided QLC And QLD Linework.

Utility Ownership Labels Depicted In This File Are Based On Field Information Combined With Available Record Data Provided By Utility Owners But Is Not Guaranteed To Be Accurate And Should Be Confirmed Explicitly With The Utility Owners.

#### **Utility Field Location Reference Notes:**

All Horizontal And Vertical Survey Data Contained In Utility Mapping File "su7078 08 -Accumark.dgn" Are Referenced To Traverse Stations / Control Points As Shown In A Text File Entitled "7078-8pnts.txt" Emailed From ATCS On 01/31/2025.

Any Duplicate Utility Structures Survey Located But Also Found Within The Base Mapping Provided Have Been Utilized By Accumark, Inc's Internal QA/QC Of The Utility Mapping. The Base Mapping File Utilized Is Entitled "s7078\_08.dgn" Emailed From ATCS On 02/24/2025.

#### **Utility Notes**

Unable To Isolate Signal Of Fiber Optics In This Area Due To Utility Congestion. Drawn In DATR As Clarification.

#### **Utility Owners:**

#### WATER & SEWER:

Prince William County (PWS) - Requested, Received 4 County Complex Ct, Woodbridge, VA 22192 Luke Engbert 703.335.7900 lengbert@pwcsa.org

Prince William County (PWS) - Requested, Received Maureen Knight Knight@pwcsa.org

#### ELECTRIC:

Dominion Energy (DOM) - Requested, Received 600 E Canal St Richmond, VA 23219 Katelyn Sullivan 804.771.4096 katelyn.b.sullivan@dominionenergy.com https://dominionenergycrm.my.site.com/DEVAGISFacilityLocateForm/s/

Prince William County (PWS) Requested, Not Received Maureen Knight Knight@pwcsa.org

#### **TELECOMMUNICATIONS:**

Comcast (CMC) - Requested, Received 8031 Corporate Drive Nottingham, MD 21236 Stephen Shelley 443-243-8904 NED-BLT\_BeltwayRegionDesignRequests@cable.comcast.com

Verizon (VZN) - Requested, Received 4242 Duke Street Alexandria, VA 22304 Antonio Ashby 252-405-3941

antonio.t.ashby@verizon.com

#### GAS:

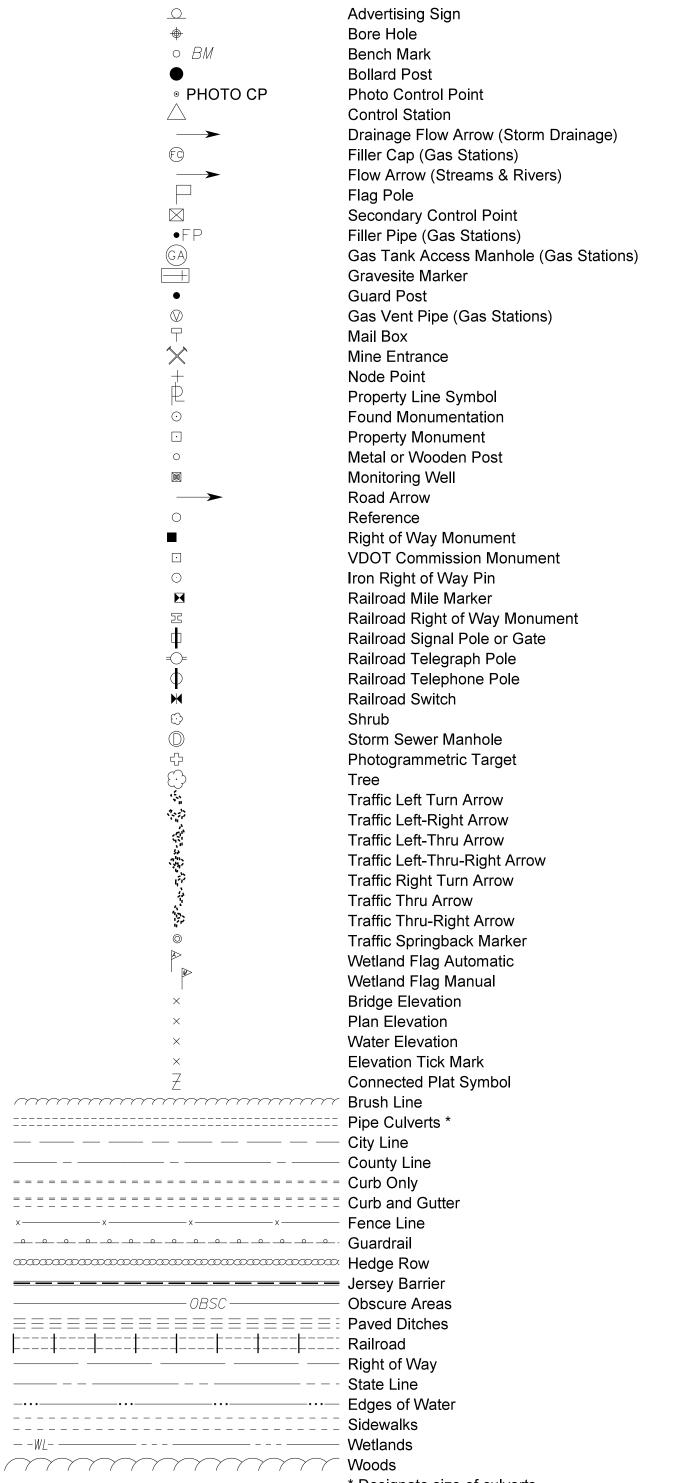
Columbia Gas (CGV) - Requested, Received Chester, VA Andrew Steszewski 804.241.8834 ASteszewski@nisource.com

#### UTILITY LEGEND

□EB	Electric Box	□тв	Telephone Booth
	Electric Guy Pole		Telephone Guy Pole
环	Electric Ground Light	$\otimes$	Telephone Guy Wire
$\otimes$	Electric Guy Wire	•	Test Holes (All Utilities)
E	Electric Hand Hole		Telephone Cell Tower
$\boxtimes$	Electric Meter		Telephone Hand Hole
E	Electric Manhole		Telephone Manhole
0	Electric Marker Post	0	Telephone Marker Post
E	Electric Pedestal		Telephone Pole
	Electric Stub		Telephone Pedestal
_	Electric Power Pole	<u></u>	Telephone Riser Pole
<u></u>	Electric Power Riser Pole		Television Satellite Dish
<b>₩</b> 0-≪	Electric Light Pole	$\uparrow$	Tower Anchor
0-«	Electric Luminaire	<b>○</b> •	Traffic Camera Pole
2	End of Information (All Utilities)	TC	Traffic Control Hand Hole
<del>-</del>	Fire Hydrant	TO	Traffic Control Manhole
- - - -	Fiber Optic Hand Hole	$\otimes$	Traffic Control Guy Wire
©	Fiber Optic Marker	TC	Traffic Control Pedestal
FO	Fiber Optic Manhole		Traffic Signal Guy Pole
FO	Fiber Optic Pedestal	<u></u>	Traffic Signal Pole
$\boxtimes$	Gas Meter	<	Traffic Signal Pole w/Luminaire
(G)	Gas Manhole		Telephone Stub
0	Gas Marker Post	TV	Television Hand Hole
(MW)	Gas Monitoring Well		Television Manhole
	Gas Stub	0	Television Marker Post
Ø	Gas Test Station		Television Pedestal
•	Gas Valve		Television Stub
Ð	Gas Vent	•	Water Blow Off
	Gas Well		Water Well
$\oplus$	Sanitary Air Release Valve	$\otimes$	Water Meter
<del>-</del>	Sanitary Flow Arrow	(WM)	Water Manhole
	Sanitary Stub	©	Water Marker Post
$\bowtie$	Sewer Clean Out	φ	Water Spigot
9	Sanitary Force Main Valve		Water Siamese Connection
0	Sanitary Marker Post		Water Stub
S	Sanitary Manhole	•	Water Valve
-©-	Sewer Vent Pipe	<del> </del>	Water Post Inspection Valve
$\bowtie$	Unknown Clean Out	<b>(</b>	Water Irrigation Valve
U	Unknown Hand Hole	ST	Water Steam Manhole
(UK)	Unknown Manhole		Water Steam Vent Pipe

	CHEM	
——————————————————————————————————————		
		Sanitary Force Main *
		— Traffic Control Fiber Optic
T/F0	· ·	— Telephone Fiber Optic
——— FO ———	· ·	—— Underground Fiber Optic
		— – Unknown Utility Line
————— E ———	·	—— Underground Power Cable
		—— Underground Power Cable Duct
		—— Underground Telephone Cable
—————T/Tg Duct———	• •	—— Underground Telephone Cable Duct
		—— Underground Traffic Control
		—— Underground Traffic Control Duct
		—— Underground Television Cable
		Underground Television Cable Duct
W		
——————————————————————————————————————		
— Unk —— — —		Depicted According To Utility Records **
		Abandoned According To Utility Records **
— UIK —— —— —		<ul> <li>According To Miss Utility Information **</li> <li>* Designate size ( Variable from 0. 75" to 54" )</li> <li>** Designate type ( Unknown line is shown )</li> </ul>

## PLANIMETRIC LEGEND



\* Designate size of culverts (Variable from 12" to 120")

> PROJECT EN24-076-380

SHEET NO.

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

#### PROJECT CATEGORY

- A. THIS WILL BE A "TYPE A CATEGORY 1" PROJECT. CONSTRUCTION WILL CONSIST OF THE INSTALLATION OF A HYDRAULIC CEMENT CONCRETE SIDEWALK ALONG RTE. 1131 LIONS FIELD RD FROM FULLER HEIGHTS RD TO TRIANGLE ELEMENTARY SCHOOL. THIS WILL INCLUDE ADA RAMPS AT FOUR LOCATIONS, AND A CROSSWALK ACROSS THE TRIANGLE ELEMENTARY SCHOOL BUS LOOP.
- B. THE LENGTH OF THE WORK AREA BEGINS AT THE CONNECTION WITH THE SIDEWALK AT FULLER HEIGHTS RD, AND EXTENDS APPROXIMATELY 1825 FEET NORTH TO THE EXISTING SIDEWALK AT TRIANGLE ELEMENTARY SCHOOL.
- C. THE TRAFFIC USING THE FACILITY INCLUDES A MIXTURE OF COMMUTERS, AND LOCAL RESIDENTS. LOCAL TRAFFIC CONSISTS OF VEHICULAR, BICYCLE, AND PEDESTRIAN TRAFFIC.
- D. EQUIPMENT AND MATERIAL STORAGE AREAS ARE ASSUMED NOT WITHIN THE EXISTING RIGHT OF WAY. THERE ARE NO ISOLATED AREAS WITHIN THE RIGHT OF WAY FOR THE CONTRACTOR TO STORE EQUIPMENT & MATERIALS. THE CONTRACTOR MUST REQUEST IN WRITING, PERMISSION TO USE THE ROW AND TO DESCRIBE THE LOCATION OF EACH ROW AREA AND UNDER WHAT CIRCUMSTANCES THE ROW WILL BE USED DURING THE LIFE OF THE PROJECT. NO ROW USAGE WILL BE PERMITTED WITHOUT PROPER NOTIFICATION AND APPROVAL BY THE ENGINEER.

#### **GENERAL NOTES**

- 1. UNLESS OTHERWISE APPROVED OR DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL PLAN AND PROSECUTE THE WORK IN ACCORDANCE WITH THE TEMPORARY TRAFFIC CONTROL TTC PLANS.
- 2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE 2020 VDOT ROAD AND BRIDGE SPECIFICATIONS, 2009 MUTCD, THE 2026 VIRGINIA WORK AREA PROTECTION MANUAL, VER. 11.0 AND AS DIRECTED BY THE ENGINEER.
- 3. LANE OR SHOULDER CLOSURE HOURS

WEEKDAY							
SINGLE LANE OR SHOULDER CLOSURES	COMPLETE ROAD CLOSURE PERIOD FOR 15 MINUTES INTERMITTENT STOPPAGE						
9:00AM TO 3:30PM	10:00PM TO 4:00AM						
8:00PM TO 5:00AM	10:00FW 10 4:00AW						
ALL LANES OPEN AT 2:00 PM ON FRIDAY UNTIL THE ALLOWABLE HOURS SPECIFIED IN THE WEEKEND TABLE.							

	WEE	KEND
	SINGLE LANE OR SHOULDER CLOSURES	COMPLETE ROAD CLOSURE PERIOD FOR 15 MINUTES INTERMITTENT STOPPAGE
FRIDAY TO SATURDAY	9:00PM TO 9:00AM	10:00PM TO 6:00AM
SATURDAY TO SUNDAY	9:00PM TO 9:00AM	10:00PM TO 6:00AM
SUNDAY TO MONDAY	8:00PM TO 5:00AM	10:00PM TO 4:00AM

4. SPECIFIC TRAFFIC CONTROL FIGURES AND NOTES FROM THE CURRENT 2026 VIRGINIA WORK AREA PROTECTION MANUAL (VERSION 11.0) INCLUDE, BUT NOT LIMITED TO:

TTC-1.0 "WORK BEYOND THE SHOULDER"

TTC-23.0 "LANE CLOSURE ON A TWO-LANE ROAD USING FLAGGERS"

TTC-24.0 "NON-STATIONARY WORK ON A TWO-LANE ROADWAY USING FLAGGERS"

TTC-68.0 "LANE CLOSURE FOR FLAGGING ON AN INTERSECTING ROADWAY"

- 5. ACCESS TO ADJACENT RESIDENTIAL PROPERTIES SHALL BE MAINTAINED AT ALL TIMES OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL NOTIFY EACH AFFECTED PROPERTY OWNER AT LEAST 48 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OF ACCESS.
- 6. CONSTRUCT THE PROPOSED DRAINAGE SYSTEM WITHIN THE WORK AREA. THE EXISTING DRAINAGE SYSTEM SHALL NOT BE REMOVED UNTIL THE PERMANENT OR TEMPORARY SYSTEM IS IN PLACE. THE CONTRACTOR SHALL PROVIDE TEMPORARY DRAINAGE AS REQUIRED, TO PREVENT PONDING OF THE WATER ON THE ROADWAY AND ADJACENT PROPERTIES. THE COST OF THE TEMPORARY DRAINAGE OTHER THAN ITEMS THAT HAVE BEEN QUANTIFIED IN THESE PLANS IS INCLUDED IN THE PRICE BID FOR OTHER DRAINAGE ITEMS AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED OR AS DIRECTED BY THE ENGINEER.
- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ANY EXISTING SIGNS, UNLESS OTHERWISE ADVISED BY THE ENGINEER TO REMOVE OR RELOCATE.
- 8. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE CONSTRUCTION, SIGNING, AND TRAFFIC MANAGEMENT PLAN WITH OTHER ADJACENT PROJECTS UNDER CONSTRUCTION.
- 9. ALL EROSION AND SEDIMENT CONTROL MEASURES AND TEMPORARY DRAINAGE SHALL BE IN PLACE PRIOR TO THE BEGINNING OF CONSTRUCTION.

# TRANSPORTATION MANAGEMENT PLAN & SEQUENCE OF CONSTRUCTION

- 10. EQUIPMENT AND MATERIALS SHALL NOT BE STORED WITHIN THE ESTABLISHED CLEAR ZONE AND/OR DEFLECTION ZONE OF PHYSICAL BARRIERS IN ACCORDANCE WITH THE 2026 VIRGINIA WORK AREA PROTECTION MANUAL. VERSION 11.0.
- 11. IF THERE IS ANY SIGNIFICANT DEVIATION FROM THE TTC PLAQUES, THE MODIFIED TTC SHOULD BE APPROVED AND DIRECTED BY THE ENGINEER.
- 12. ALL LANE AND/OR SHOULDER CLOSURES ALONG VDOT MAINTAINED ROADWAYS SHALL BE COMPLETELY REMOVED ON A DAILY/NIGHTLY BASIS WITH LANES BEING FULLY OPEN TO TRAFFIC AT ALL TIMES BEYOND THE ALLOWABLE AND/OR APPROVED LANE CLOSURE HOURS.
- 13. THE APPLICANT/CONTRACTOR SHALL BE PROPERLY TRAINED AND RESPONSIBLE FOR MAINATAINING ALL PROJECT LANE CLOSURE INFORMATION OR ANY WORK WITHIN VDOT RIGHT-OF-WAY ON LCAMS AND VA TRAFFIC/511 THROUGHOUT THE DURATION OF THE PROJECT IN ACCORDANCE WITH IIM-OD-16-03, DATED DECEMBER 16, 2016.
- 14. ALL LANE AND/OR SHOULDER CLOSURES SHALL BE ACCURATELY ENTERED AND ACCEPTED INTO LCAMS AT LEAST TEN (10) DAYS IN ADVANCE OF THE PROPOSED LANE AND/OR SHOULDER CLOSURE(S) AND NO LATER THAN CLOSE OF BUSINESS WEDNESDAY THE WEEK PRIOR TO THE CLOSURE STATING THE LOCATION, PURPOSE, SPECIFIC LANE(S) TO BE CLOSED, TIME AND DURTAION OF CLOSURE. ANY CONFLICTS GENERATED FROM LCAMS SHALL BE RESOLVED NO LATER THAN CLOSE OF BUSINESS THURSDAY THE WEEK PRIOR TO THE CLOSURE.
- 15. REGARDLESS OF PRIOR APPROVALS, ANY/ALL REQUESTS FOR DEVIATION FROM THE ALLOWABLE LANE CLOSURE HOURS ALONG VDOT MAINTAINED ROADWAYS SHALL BE SUBMITTED TO VDOT NOVA TRAFFIC OPERATIONS FOR REVIEW A MINIMUM OF FOURTEEN (14) DAYS IN ADVANCE OF WORK.
- 16. THE APPLICANT/CONTRACTOR MUST CONTACT THE VDOT NORTHERN DISTRICT TRANSPORTATION OPERATIONS CENTER/TOC (703-539-0100) DAILY/NIGHTLY 15-45 MINUTES PRIOR TO EXECUTING EVRY LANE AND/OR SHOULDER CLOSURES AND CONTACT TOC AGAIN ONCE DAILY/NIGHTLY WORK HAS BEEN COMPLETED AND LANE AND/OR SHOULDER CLOSURES HAVE BEEN REMOVED.
- 17. THE APPLICANT/CONTRACTOR SHALL VERIFY THERE ARE NO ACTIVITIES OR EVENTS IN THE AREA WHICH MAY CAUSE CONFLCIT WITH THIS WORK AND SHALL COORDINATE WITH ANY OTHER CURRENT/ONGOING PROJECTS ADMINITERED BY VDOT, THE LOCAL JURISDICTIONS(S) OR ANY PRIVATE ENTITIES WITHIN THE AREA THAT MIGHT BE AFFECTED BY THESE LANE CLOSURES.
- 18. LANE CLOSURES ALONG VDOT MAINTAINED ROADWAYS WILL NOT BE PERMITTED DURING INCLEMENT WEATHER OR EMERGENCY SITUATIONS.
- 19. LANE AND/OR SHOULDER CLOSURES ALONG VDOT MAINTAINED ROADWAYS SHALL NOT BEGIN IF HEAVY TRAFFIC OR SIGNIFICANT QUEUING AND BACKUPS ARE ALREADY PRESENT ALONG THE ROADWAY(S).
- 20. ACCESS TO/FROM ALL RAMPS, ROADWAYS, SIDE STREETS, DRIVEWAYS AND PROPERTIES, AS APPLICABLE, WITHIN AND ADJACENT TO THE WORK AREA SHALL BE MAINTAINED AT ALL TIMES THROUGHOUT THE DURATION OF THE WORK.
- 21. THE APPLICANT/CONTRACTOR SHALL CONTINUOUSLY MONITOR ALL LANE CLOSURE(S) AND DETOUR ROUTES, IF APPLICABLE, AND MAKE SPOT ADJUSTMENTS AS NEEDED/AVAILABLE TO EASE UNDUE BACKUPS, DELAYS OR QUEUING AND REOPEN LANES IMMMEDIATELY, IF NECESSARY.
- 22. LANE AND SHOULDER CLOSURE HOURS OF OPERATION ALONG VDOT MAINTAINED ROADWAYS MAY BE ADJUSTED BY VDOT AT ANY TIME IF SIGNIFICANT TRAFFIC IMPACTS ROUTINELY DEVELOP AS A RESULT OF THE PROJECT OR CITIZEN COMPLAINTS ARE RECEIVED.
- 23. THE APPLICANT/CONTRACTOR SHALL NOTIFY THE VIRGINIA STATE POLICE (VSP), AS NECESSARY, AND THE VARIOUS LOCAL AREA LAW ENFORCEMENT AND EMERGENCY SERVICES OF ALL CLOSURES AND TIMES FOR SITUATIONAL AWARNESS.
- 24. ALL ANTICIPATED AND/OR INCIDENTAL IMPACTS TO VDOT MAINTAINED TRAFFIC SIGNALS SHALL REQUIRE NOTIFICATION THROUGH VDOT NOVA DISTRICT TRAFFIC OPERATIONS DIVISION.
- 25. WHEN WORKING IN AND AROUND ANY CROSSWALKS OR TRAILS, CONTINUOUSLY MONITOR SAFE PEDESTRIAN AND BICYCLE ACCESS AT ALL TIMES.
- 26. DEPENDING ON THE TIME OF YEAR AND DAY, THE APPLICANT/CONTRACTOR MUST NOTIFY AND/OR COORDINATE WITH THE LOCAL AREA SCHOOLS OF ALL CLOSURES AND TIMES TO AVOID ISSUES WITH SCHOOL BUILDING ACCESS AND/OR BUS SCHEDULES AND ROUTES.
- 27. DURING LANE CLOSURES, THE WORK ZONE SHALL REMAIN CONTINUOUSLY ACTIVE WITH CONSTRUCTION OPERATIONS.

NECESSARY BY THE DEPARTMENT

#### PUBLIC COMMUNICATIONS PLAN

THE PUBLIC SHALL BE NOTIFIED OF THE EXPECTED SCHEDULE ON VDOT AND PRINCE WILLIAM COUNTY'S WEBSITES FOR THIS PROJECT. INFORMATION OF THE POTENTIAL FOR CONGESTION DURING THE PEAK HOURS OF OPERATION IS PROVIDED BY THE REGIONAL TRAFFIC OPERATIONS CENTER.

#### TRANSPORTATION OPERATIONS PLAN

ATCS HERNDON, VIRGINIA

ROADWAY ENGINEER

THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION PROJECT MANAGER, THE PUBLIC AFFAIRS SECTION, AND THE TRAFFIC OPERATIONS CENTER (TOC), OF LANE CLOSURE INFORMATION, ONE WEEK IN ADVANCE, ON WEDNESDAY, FOR DISTRIBUTION ON THE 511 SYSTEM AND VOIS. EMERGENCY RESPONSE PROFESSIONALS SHALL RESPOND TO TRAFFIC INCIDENTS IN THE WORK ZONE AS SOON AS POSSIBLE.

THE FOLLOWING IS THE CONTACT LIST OF EMERGENCY RESPONSE AGENCIES IN CASE AN INCIDENT OCCURS IN THE WORK ZONE:

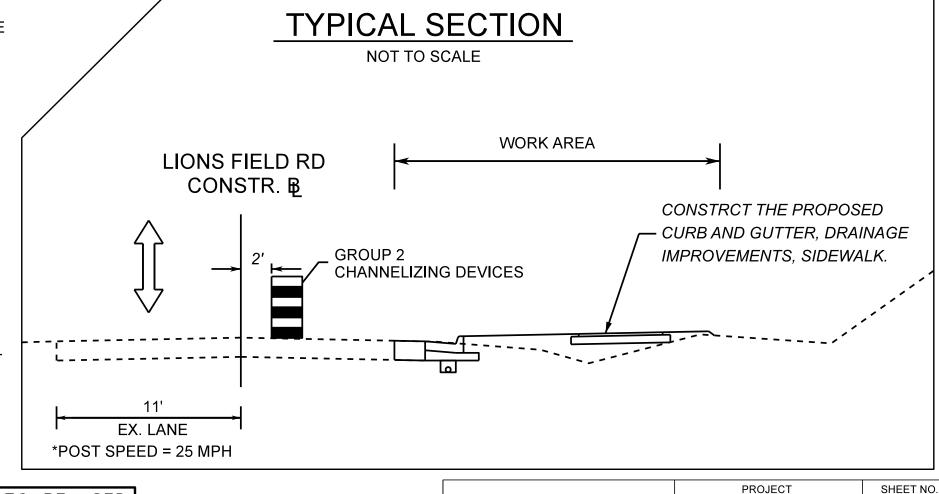
POLICE/AMBULANCE/FIRE SAFETY/HAZMAT SPILLS - 911
TRAFFIC OPERATIONS CENTER - (703) 539-0100
VIRGINIA STATE POLICE - (703) 791-3101
VDOT NOVA DISTRICT PRINCE WILLIAM RESIDENCY - (703) 259-0244
PRINCE WILLIAM COUNTY POLICE - (703) 792-6500

FOLLOWING ANY TRAFFIC INCIDENTS, THE SITE SHALL BE CLEARED AND RESTORED FOR NORMAL TRAFFIC OPERATIONS AS SOON AS POSSIBLE.

TRAFFIC INCIDENTS WILL BE INVESTIGATED AND MEASURES INTRODUCED TO REDUCE OCCURRENCES. IF NECESSARY THE TRANSPORTATION MANAGEMENT PLANS MAY BE REVISED IN CONSULTATION WITH A VDOT ENGINEER.

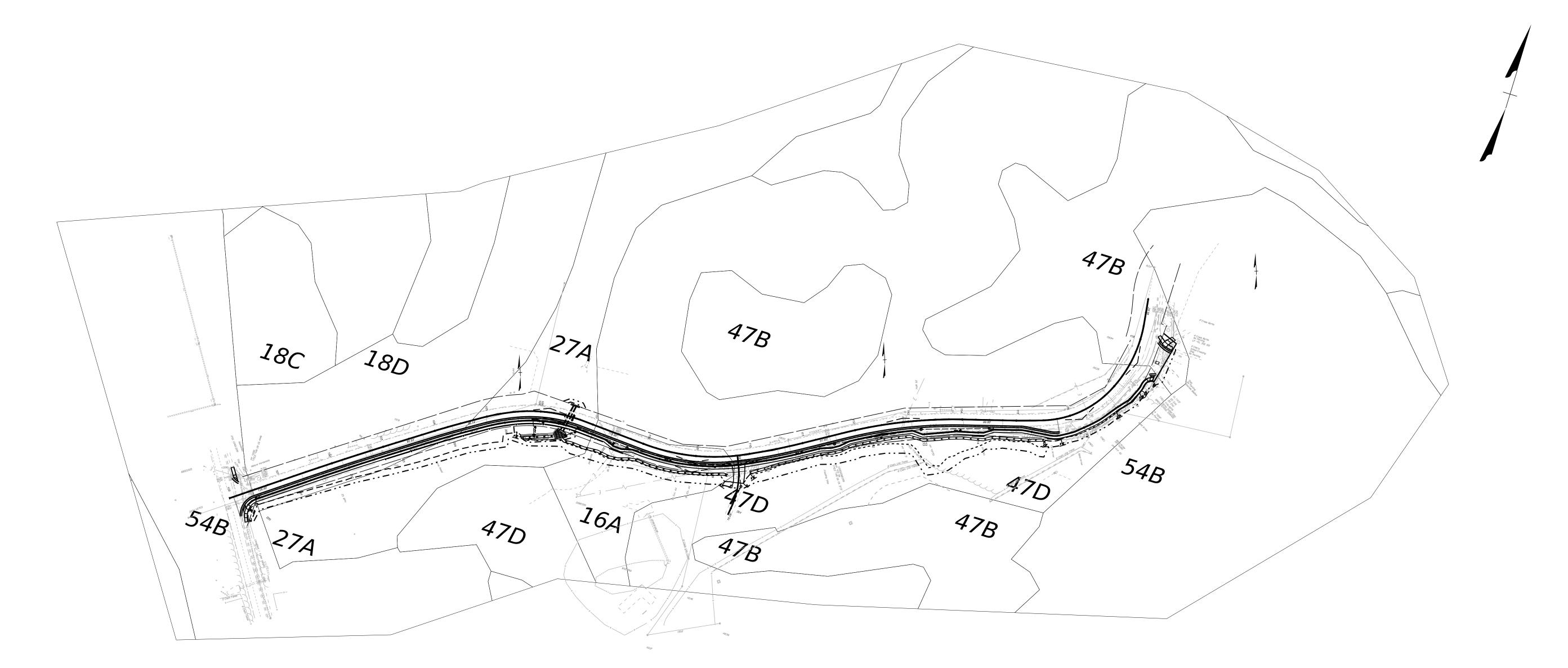
#### SUGGESTED SEQUENCE OF CONTRUCTION

- 1. THE CONTRACTOR SHALL CLOSE THE EASTBOUND LANE OF LIONS FIELD ROAD IN ACCORDANCE WITH 2026 VWAPM VER. 11.0 FIGURE TTC-23.0 "LANE CLOSURE ON A TWO-LANE ROAD USING FLAGGERS", AS WELL AS CLOSE THE NORTHBOUND LANE OF FULLER HEIGHTS ROAD AT THE INTERSECTION IN ACCORDANCE WITH TTC-68.0 "LANE CLOSURE FOR FLAGGING ON AN INTERSECTING ROADWAY". CONSTRUCT THE PROPOSED CURB AND GUTTER, CURB RAMPS, DRAINAGE IMPROVEMENTS, AND SIDEWALK ALONG LIONS FIELD ROAD. WORK OUTSIDE THE ROADWAY MAY CONTINUE OUTSIDE OF ALLOWABLE LANE CLOSURE HOURS USING VWAPM FIGURE TTC-1.0 "WORK BEYOND THE SHOULDER". PEDESTRIAN ACCESS SHALL BE MAINTAINED DURING CONSTRUCTION AND THE SITE WILL BE STABILIZED AT THE END OF EACH DAY TO ALLOW PEDESTRIAN ACCESS.
- 2. THE CONTRACTOR SHALL MILL & OVERLAY THE ADJACENT LANE ON LIONS FIELD ROAD AS SHOWN ON THE PLANS IN ACCORDANCE WITH VWAPM FIGURE TTC-24.0 "NON-STATIONARY WORK ON A TWO-LANE ROADWAY USING FLAGGERS".



REVISED	STATE	STATE				
	SIAIL	ROUTE	PROJECT	SHEET N		
	VA.	1131	EN24-076-380 R201, C501	1L		

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



		SOIL CLA	SSIFICATION			
SOIL UNIT	NAME	SLOPE CHARACTERISTICS	RUNOFF POTENTIAL	DEPTH TO BEDROCK	HSG	AASHTO CLASSIFICATION
16A	DELANCO FINE SANDY LOAM	0 TO 4 % SLOPES	MEDIUM	> 200 CM	D	A-4
18C	DUMFRIES SANDY LOAM	7 TO 15 % SLOPES	LOW	> 200 CM	А	A-4
18D	DUMFRIES SANDY LOAM	15 TO 25 % SLOPES	MEDIUM	> 200 CM	А	A-4
27A	HATBORO-CODORUS COMPLEX	0 TO 2 % SLOPES	LOW	> 200 CM	D	A-4
47B	QUANTICO SANDY LOAM	2 TO 7 % SLOPES	MEDIUM	> 200 CM	В	A-4
47D	QUANTICO SANDY LOAM	15 TO 25 % SLOPES	HIGH	> 200 CM	В	A-4
54B	URBAN LAND-UDORTHENTS COMPLEX	0 TO 7 % SLOPES	N/A	> 200 CM	N/A	N/A

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

PROJECT EN24-076-380

#### SURVEYED BY, DATE \_Tami Lenox, LS. ATCS, 02/23/2025, (703)430-7500\_ \_ \_ . DESIGN BY *William Leonetti, PE, ATCS, 02/23/2025, (703)430-7500* \_ \_ \_ \_ \_ \_ SUBSURFACE UTILITY BY, DATE \_Accumark, Inc, 03/04/2025, (804)550-7740\_

## GENERAL NOTES

REVISED	STATE		STATE	SHEET NO
	SIAIL	ROUTE	PROJECT	SHEET NO
	VA.	1131	EN24-076-380 R201, C501	2

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

#### GRADING

- G-1 The grade line denotes top of finished pavement unless shown otherwise on typical sections or plans.
- G-2 Earthwork quantities on this project are based on anticipated settlement and may require adjusting during construction.
- G-4 The cost of removal of all existing concrete items located in the area to be graded, including, but not limited to the following, shall be included in the price bid for regular excavation: <u>Curb and gutter</u>, concrete foundations
- G-6 The borrow material for this project shall be a minimum CBR $_{-10}$  or as approved by the Materials Engineer.

#### DRAINAGE

- D-1 The horizontal location of all drainage structures shown on these plans is approximate only, with the exception of structures showing specific stations, special design bridges and storm sewer systems.
- D-2 The horizontal location and invert elevations shown for proposed culverts and storm sewer outfall pipes are based on existing survey data and required design criteria. If during construction, it is found that the horizontal location or invert elevations shown on the plans differ significantly from the horizontal location or elevations of the stream or swale in which the culvert or storm sewer outfall pipe is to be placed, the Engineer shall confer with, and get approval from, the applicable District Drainage Engineer before installing the culvert or storm sewer outfall pipe.
- D-3 The "H" dimensions shown on plans for drop inlets and junction boxes and the "L.F." dimensions shown for manholes are for estimating purposes and are based on the proposed invert elevations shown for the structure and the anticipated top (rim) elevation based on existing or proposed finished grade. The actual "H" or "L.F." dimensions are to be determined by the contractor from field conditions.
- D-6 Pipes shall conform to any of the allowable types shown on sheet number 2B, within the applicable height of cover limitations. For strength, sheet thickness, or class designation; available sizes; height of cover limitations; and other restrictions for a particular pipe type or height of cover, see the VDOT Road and Bridge Standard PC-1. Structural plate pipe may be substituted for corrugated pipe of the same size, provided the substitution complies with the applicable sections of the VDOT Road and Bridge Standards PC-1.
- D-10 The proposed riprap may be omitted by the Engineer if the slope designated for placement of riprap is found to be comprised of solid rock or closely consolidated boulders with soundness, size and weight equal to, or exceeding, the specifications for the proposed riprap.
- D-13 Existing drainage facilities being utilized as a part of the drainage system, and designated on the plans "To Be Cleaned Out" shall be cleaned as directed by the Engineer. The cost incidental to this shall be included in the contract price for other items.
- D-16 When CG-6 or CG-7 is specified on a radius (such as at a street intersection), the Engineer may approve a decrease in the cross slope of the gutter to facilitate proper drainage.

#### PAVEMENT

P-2 The pavement materials on this project will be paid for on a tonnage basis. The weight will vary in accordance with the specific gravity of the aggregates and the asphaltic content of the mix actually used to secure the design depth. The weight of the asphalt concrete is based on 95% of the theoretical maximum density.

#### INCIDENTALS

- 1-5 That portion of the right of way lying within the Clear Zone or within a minimum of 10 feet from the edge of pavement or surfacing or within the limits of the construction slopes beyond 10 feet, shall be cleared and grubbed in accordance with the applicable VDOT Road and Bridge Specifications, Section 301, where sufficient right of way or construction easement is provided.
- 1-9 When no centerline alignment is shown for a proposed entrance, the entrance shall be constructed in the same location as the existing entrance.
- I-16 The "underground utilities" survey data on this project has been provided by consultant and copies are available from the Department.
- I-19 The following outside sources, under contract with VDOT, have provided information on this project.

ATCS ATCS Hydraulic Design Roadway Design Utility Design -Utility Designation -Utility Location -Accumark, INC Accumark, INC ATCS Survey Bridgé Design Traffic Design N/A **ATCS** 

Landscape Design -

If questions or problems arise during construction, please contact the Area Construction Engineer. DO NOT CONTACT THE OUTSIDE SOURCES.

1-20 The Official Electronic PDF Version of the plans will override the paper copies or prints of specific layers.

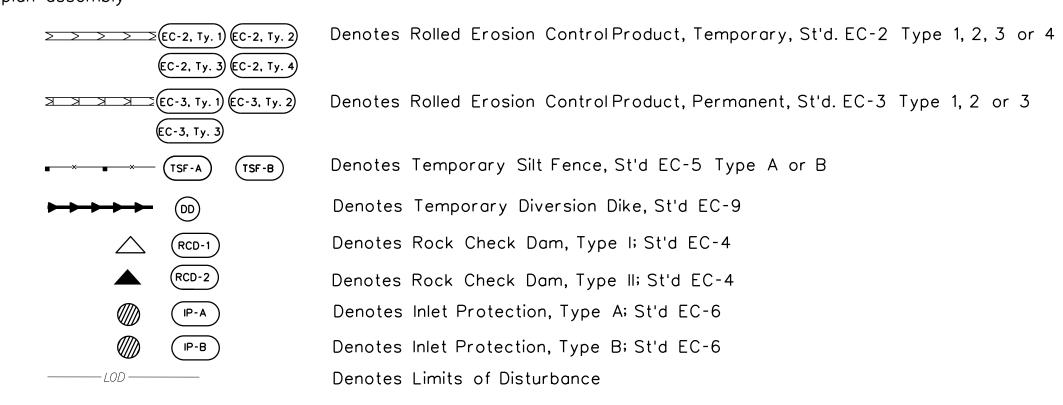
Portions of this plan assembly have been CADD generated. To assist in the preparation of the bid and construction of the project, Microstation format (.dgn) files will be made available to the prime contractor during bids and after award of the contract.

1-21 All electronic plan assemblies will include the construction plans in two formats: PDF files and MicroStation format (.dgn) files. Only the PDF files will be considered as part of the official plan assembly.

The MicroStation format (.dgn) files are furnished only as information for the contractor. These plans are developed in layers (levels) to aid in readability. (See the VDOT CADD Manual for CADD Level Structure). However, the construction items may or may not be in the proper layering scheme as described in the VDOT CADD Manual. The Microstation files will only match the scanned files if all required levels are turned on. A Microstation Software license is required to be able to read these files.

#### EROSION AND SEDIMENT CONTROL (ESC)

- E-1 If the removal of Brush Silt Barrier is specified by the plans or required by the Engineer, the cost of removal and disposal of brush shall be in accordance with Section 109 of the applicable VDOT Road and Bridge Specifications.
- E-2 Rock for Check Dams, Inlet Protection, Erosion Control Stone and Riprap shall be in accordance with Section 203 and Section 414 of the applicable VDOT Road and Bridge Specifications
- E-3 The following symbols are used to depict Erosion Control items in the plan assembly:



E-4 Permanent vegetation shall be established on all denuded areas not otherwise stabilized with non-erodible materials. See the roadside development sheet for details on permanent vegetation establishment.

PROJECT MANAGER <u>Rami Bazlamit, PE, Prince William County, (703)792-8164</u>

EXIST. R/W

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

MATERIALS ENGINEER RTE. 1131 (LIONS FIELD RD) CONSTR. B

VARIES 28' - 30'

\_12' CLR ZONE\_\_\_\_\_ 25 MPH INSET "A" -ST'D CG-6 INSET "B" MILL & OVERLAY MATCH EXISTING DITCH DEPTH VARIES 1' - 7.5' ST'D UD-4 1' FULL DEPTH SAWCUT

TYSONS CORNER, VIRGINIA

ATCS

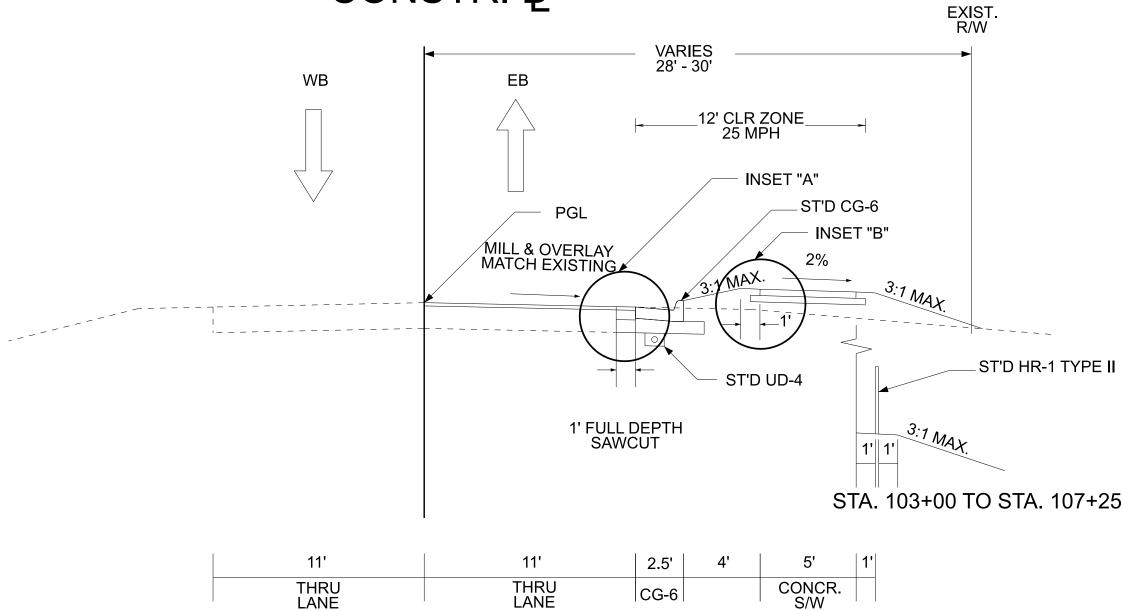
HERNDON, VIRGINIA

ROADWAY ENGINEER

STA. 109+75 TO STA. 115+12

THRU LANE

# RTE. 1131 (LIONS FIELD RD) CONSTR. B



STA. 100+50 TO STA. 109+75

Asphalt Conc. Type

SM-9.5A or SM-9.5D @ 165 Lbs. per S.Y.

4" Asphalt Conc. Base Course

BM-25.0

6" Aggr. Base Mat'l. Ty. I

# PRIVATE AND COMMERCIAL ENTRANCES

TYPE I TYPE II Concrete Crusher Run Aggr. .4..4..4..4. 6" Crusher Run Concrete Entrance Pavement Aggr. 25 or 26 7" HES 4" Aggr. Base Mat'l. Ty. I No. 2IA or 2IB NOT TO SCALE TYPE IV TYPE III Asphalt Commercial Asphalt 

Asphalt Conc.Type

SM-9.5A or SM-9.5D @ 220 Lbs. per S.Y.

4" Aggr. Base Mat'l. Ty. I

No. 21A or 21B

No. 21A or 21B The type of entrance (I, II, III, IV) to be constructed will be determined by the existing condition at the time of construction.

#### PAVEMENT DESIGN

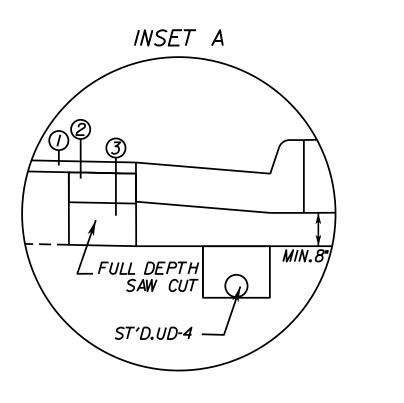
- () 1.5" ASPHALT CONCRETE TYPE SM-9.5A
- ② 6" ASPHALT CONCRETE TYPE BM-25.0A
- 3 8" AGGREGATE BASE MATERIAL, TYPE I, SIZE NO. 21B
- 4 4" HYDRAULIC CEMENT CONCRETE, CLASS A3 (5) 4" AGGREGATE BASE MATERIAL, TYPE I, NO. 21B

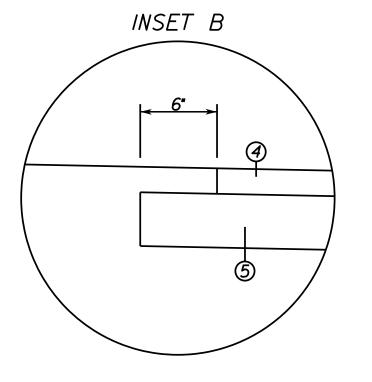
## NOTES:

I. ALL PAVEMENT WIDENING SHALL BE PERFORMED IN ACCORDANCE WITH STANDARD WP-2. 2. SEE PLANS AND CROSS SECTIONS FOR VARIATIONS IN TYPICAL SECTION.THE CROSS SECTIONS SHALL TAKE PRECEDENCE OVER THE TYPICAL SECTIONS.

#### UNSUITABLE SOIL TREATMENT OPTION:

A. UNDERCUT THE SUBGRADE TO 18 INCHES BELOW FINISHED SUBGRADE ELEVATION, PLACE A WOVEN GEOTEXTILE SUBGRADE STABILIZATION FABRIC MEETING THE REQUIREMENTS OF THE VDOT ROAD AND BRIDGE SPECIFICATIONS. ABOVE THE GEOTEXTILE, REPLACE THE UNDERCUT MATERIAL WITH SELECT MATERIAL, TYPE II, MINIMUM CBR-IO.





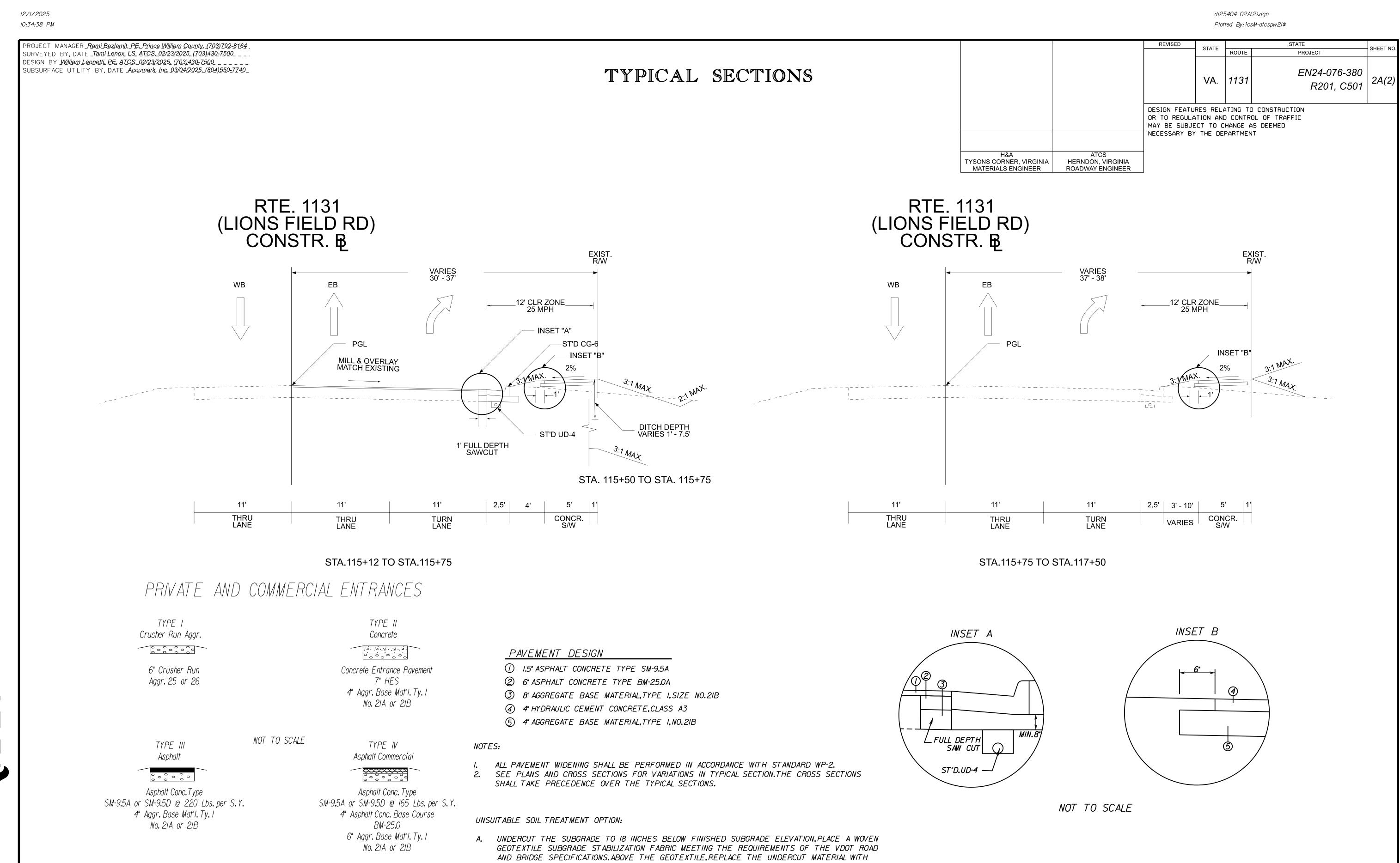
NOT TO SCALE

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.



PROJECT EN24-076-380

SHEET NO. 2A(1)



SELECT MATERIAL, TYPE II, MINIMUM CBR-IO.

No. 2IA or 2IB

The type of entrance (I, II, III, IV) to be constructed will be determined by the existing condition at the

time of construction.

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

PROJECT EN24-076-380 SHEET NO.

2A(2)

( 3-1

3-1

4-2

3-2

( 4-10

## DRAINAGE DESCRIPTIONS

STATE STATE ROUTE PROJECT EN24-076-380 VA. | 1131 R201, C501

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ATCS HERNDON, VIRGINIA HYDRAULIC ENGINEER

INV.(IN) 73.37 INV.(OUT) 72.50 (CONNECT TO EX.STRC E-I) ( E001 MODIFY EXISTING DROP INLET MODIFY TO ACCEPT 15" STORM SEWER PIPE

52'-15" STORM SEWER PIPE REQ.(4' COVER)

PROPOSED DRAINAGE DESCRIPTIONS

( 4-2 I STD.DI-3C REQ. L=6'.H=3.9' INV = 82.43 CONNECT UD-4 TO DI

I STD.DI-3B REQ.

L=6.0', H=3.9' INV = 73.37'

SILT-TIGHT JOINT TYPE

CONNECT UD-4 TO DI

48'-15" STORM SEWER PIPE REQ.(3' COVER) SILT-TIGHT JOINT TYPE INV.(IN) 82.43 INV.(OUT) 81.73 I STD.DI-3A REQ. L=2.5', H=4.8' INV = 81.73'

CONNECT UD-4 TO DI STD.IS-I REQ. 27'-15" STORM SEWER PIPE REQ.(3' COVER) SILT-TIGHT JOINT TYPE INV.(IN) 81.73 INV.(OUT) 78.00

3-3 I STD.15" END WALL EW-I /NV = 78.00 1.7 TONS STD.EC-I CLASS AI REQ. I STD.DI-3B REQ. 5-1 L=8',H=4.3' INV.127.80

CONNECT UD-4 TO DI

5-1 123'-15" STORM SEWER PIPE REQ. SILT-TIGHT JOINT TYPE INV.(IN) 125.40 INV.(OUT) 116.82 4-10

4.7 LF STD.MH-IOR 2 REQ. ISTD.MH-IFRAME & COVER REQ. INV.116.82 STD. IS-I REQ.

159'-15" STORM SEWER PIPE REQ.(5' COVER) SILT-TIGHT JOINT TYPE INV.(IN) II6.82 INV.(OUT) IO9.26

4-9 4.3 LF STD.MH-10R 2 REQ. ISTD.MH-IFRAME & COVER REQ. INV.109.26

STD.IS-I REQ. 4-9 150'-15" STORM SEWER PIPE REQ.(5' COVER) SILT-TIGHT JOINT TYPE

INV.(IN) 109.26 INV.(OUT) 103.22 4-8 I STD.DI-3B REQ. L=8', H=3.9' INV = 103.22 CONNECT UD-4 TO DI

STD.IS-I REQ. 51'-15" STORM SEWER PIPE REQ.(3' COVER) SILT-TIGHT JOINT TYPE

INV.(IN) 103.22 INV.(OUT) 101.22 4.3 LF STD.MH-10R 2 REQ. ISTD.MH-IFRAME & COVER REQ. INV.101.22 STD.IS-I REQ.

49'-15" STORM SEWER PIPE REQ.(5' COVER) SILT-TIGHT JOINT TYPE INV.(IN) IOI.22 INV.(OUT) 99.70 4.3 LF STD.MH-LOR 2 REQ. ISTD.MH-LFRAME & COVER REQ. INV.99.97 STD.IS-LREQ.

125'-15" STORM SEWER PIPE REQ.(5' COVER) SILT-TIGHT JOINT TYPE

INV.(IN) 99.97 INV.(OUT) 92.82 9.8 LF STD.MH-IOR 2 REQ. ISTD.MH-IFRAME & COVER REQ. INV.87.00 STD.IS-I REQ.

94'-15" STORM SEWER PIPE REQ.(8' COVER) SILT-TIGHT JOINT TYPE

/NV.(/N) 87.00 /NV.(OUT) 83.84 I STD.DI-3B REQ. L=6',H=9.0' INV = 78.75 CONNECT UD-4 TO DI

STD.IS-I REQ. -( 4-4 27'-15" STORM SEWER PIPE REQ.(8' COVER) SILT-TIGHT JOINT TYPE INV.(IN) 78.75 INV.(OUT) 78.00

4-1 I STD.15" END WALL EW-I /NV = 78.00

(C4-1)50'-(2)36"STORM SEWER PIPE REQ.(3'COVER)(10°SKEW) SILT TIGHT JOINT TYPE INV (IN) = 79.88 INV (OUT) = 79.10 2 STD.36" END WALLS (EW-6)

43.7 TONS STD.EC-I CLASS I REQ.TYPE A INSTALLATION REQ. ADJUST EXISTING CULVERT

EXISTING DRAINAGE DESCRIPTIONS

TO BE CLEANED OUT

IN PLACE DI TOP = 76.58 18" RCP 1N: 72.09 18" RCP OUT: 72.06

( E002 )

IN PI.18" RCP 18" RCP IN: 103.03 18" RCP OUT: 102.58

ALLOWABLE TYPE PIPE CULVERT (UNLESS OTHERWISE SHOWN IN DRAINAGE DESCRIPTIONS) (SEE ROAD AND BRIDGE PC-I FOR HEIGHT OF COVER LIMITATIONS FOR EACH TYPE)												
LOCATION	CONCRETE	ALUMINUM COATED TYPE 2 CORRUGATED STEEL	POLYMER COATED (10/10) CORRUGATED STEEL	UNCOATED GALVANIZED CORRUGATED STEEL	GALVANIZED STEEL STRUCTURAL PLATE	GALVANIZED STEEL STRUCTURAL PLATE WITH THICKENED INVERT	CORRUGATED ALUMINUM ALLOY	CORRUGATED ALUMINUM ALLOY STRUCTURAL PLATE	POLYVINYLCHLORIDE (PVC) RIBBED PIPE (SMOOTH INETRIOR)	POLYETHYLENE (PE) CORRUGATED TYPE C	POLYETHYLENE (PE) CORRUGATED TYPE S	POLYPROPYLENE (PP) TYPE D OR S
Lions Field Road	X		Χ			X			Х	X	Х	Χ

ALLOWABLE TYPE OF (SEE ROAD A	STORM SE ND BRIDGE	WER PIPE PC-1 FOR	(UNLESS HEIGHT (	OTHERWISE DF COVER I	E SHOWN I LIMIT AT IONS	N DRAINAG S FOR EAC	E DESCRIF CH TYPE)	PTIONS)
LOCATION	CONCRETE	ALUMINUM COATED TYPE 2 STEEL SPIRAL RIB	POLYMER COATED (10/10) CORRUGATED STEEL SPIRAL RIB	POLYMER COATED (10/10) CORRUGATED STEEL DOUBLE WALL (SMOOTH INTERIOR)	ALUMINUM SPIRAL RIB	POLYVINYLCHLORIDE (PVC) RIBBED PIPE (SMOOTH INTERIOR)	POLYETHYLENE (PE) CORRUGATED TYPE S	POLYPROPYLENE (PP) TYPE D OR S
Lions Field Road	X		X	X		Χ	X	X

				DITCH	TABULATIONS					
Ditch No.	Plan St./Offset To Plan Sta./Offset	Road	Length (ft)	Bottom Width (ft)	Avg.Longitudinal Slope (	ft/ft) Lining Depth (ft.	Lining Width (ft)	Front Slope	Back Slope	Lining
4	115+50/39 RT - 109+94/34 RT	Lions Field Road	556	-	0.05		5	3	2	EC-2 Type 4
3	109+56/35 RT - 106+50/42 RT	Lions Field Road	3/9	_	0.07		5	3	2	EC-3 Type /
2	106+33/42 RT - 105+65/49 RT	Lions Field Road	56	6	0.04	2	10	/	/	EC-3 Type /
/	106+50/43 RT - 106+33/42 RT	Lions Field Road	17	10	0.04	2	14	/	/	Rock Riprap

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

EN24-076-380

SHEET NO. 2B

PROJECT MANAGER <u>Rami Bazlamit</u>, <u>PE</u>, <u>Prince William County</u>, (703)792-8164 .

SURVEYED BY, DATE <u>Tami Lenox</u>, <u>LS</u>, <u>ATCS</u>, 02/23/2025, (703)430-7500 \_ \_ \_ .

DESIGN BY <u>William Leonetti</u>, <u>PE</u>, <u>ATCS</u>, 02/23/2025, (703)430-7500 \_ \_ \_ \_ \_ \_ .

SUBSURFACE UTILITY BY, DATE <u>Accumark</u>, <u>Inc</u>, 03/04/2025, (804)550-7740

#### STORMWATER POLLUTION PREVENTION PLAN (SWPPP) GENERAL INFORMATION SHEET (1)

The information contained in the SWPPP General Information sheets is intended to comply with the requirements of the General VPDES Permit For Discharges Of Stormwater From Construction Activities (VAR10) (the CGP) issued July 1, 2024 and VDOT's approved Annual ESC and SWM Standards and Specifications.

The SWPPP General Information sheets are to be completed and included in the construction plan set (or other such documents) for land disturbance activities that disturb an area equal to or greater than 10,000 square feet outside the Chesapeake Bay Preservation Area, or equal to or greater than 2,500 square feet in the area defined as Tidewater, Virginia in the Virginia Chesapeake Bay Preservation Act.

The VDOT RLD (as defined in the latest IIM-LD-242) will ensure that the information shown on the SWPPP General Information sheets is updated/revised as necessary in order to reflect changes that may occur during the construction phase of the land disturbing (construction) activity. The updated/revised sheets shall be maintained with the designated record set of plans (or other such documents) for the land disturbance (construction) activity.

I certify under penalty of law that I have read and understand this document and that this document and all attachments were prepared in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I further certify that this document and all other documents related to the SWPPP, as identified on the SWPPP General Information Sheets, are maintained at the activity site, or at a location convenient to the activity site where no on-site facilities are available, and such documents will be made available for review upon request in accordance with the provisions of the <u>General VPDFS Permit for Discharges of Stormwater from Construction Activities (VAR10) when applicable</u>. Where the SWPPP documents are not stored on-site, a copy of such documents shall be in the possession of those with day to day operational control over the implementation of the SWPPP whenever they are on site.

\* or \*\* Duly Authorized Representative Signature

Signature:
Printed Name:
Date:

(1) See Section 1, Item 12 relating to delegation of authority, and form LD-445H (Delegation of Authority).

#### ACRONYMS

ACE - Area Construction Engineer
AS&S - Annual Standards and Specifications

BMP - Best Management Practice
CBPA - Chesapeake Bay Preservation Act

CGP - General VPDES Permit For Discharges of

Stormwater from Construction Activities (VAR10)
DEQ - Department of Environmental Quality

DHE - District Hydraulic Engineer

EPA - U.S. Environmental Protection Agency ESC - Erosion and Sediment Control

IIM - Instructional and Informational Memorandum
NPDES - National Pollutant Discharge Elimination System

R&B - Road and Bridge

RLD - Responsible Land Disturber SWM - Stormwater Management

SWPPP - Stormwater Pollution Prevention Plan

TMDL - Total Maximum Daily Load

VDOT - Virginia Department of Transportation
VESMP - Virginia Erosion and Stormwater Management

/ESMP - Virginia Erosion and Stormw

VPDES - Virginia Pollutant Discharge Elimination System

WLA - Waste Load Allocation

### SECTION I GENERAL INFORMATION

- 1. Activity Description Construction of Sidewalk along Lions Field Road from the intersection with Fuller Heights Road to the driveway entrance of Triangle Elementary School.
- 2. This land disturbance (construction) activity site is located in Prince William County and approximately 1.45 acres will be disturbed by excavation, grading or other construction activities.
- 3. A. This proposed activity disturbs one acre or greater and required coverage under the VPDES General Permit for Discharges of Stormwater from Construction Activities (the VPDES Construction Permit) as issued by the DEQ. A copy of the VPDES Construction Permit (VAR10), the registration information (LD-445 & LD-445C forms) and the permit coverage letter received from DEQ shall be maintained with other SWPPP documents for this land disturbing activity.
- XX 4. The location of support facilities that will be covered under the CGP coverage for this land disturbance (construction) activity shall be provided by the contractor and identified on a legible map. Support facilities shall include, but not be limited to, borrow and disposal areas, construction and waste material storage areas, equipment and vehicle washing, maintenance, storage and fueling areas, storage areas for fertilizers, fuels or chemicals, concrete wash out areas, sanitary waste facilities and any other areas that may involve land disturbance or pollutant-generating activities of its own. Must also include areas where polymers, flocculants, or other stormwater treatment chemicals will be used or stored. Only support facilities within the VDOT ROW and easements are covered under this CGP.
- XX 5. Written Evidence of permit coverage shall be provided by the contractor for all support activities located outside of VDOT right of way or easement in the form of the CGP coverage letter: (List VPDES Permit \* or Letter from VESMP Authority stating coverage not needed)

Impaired waters, TMDLs, Exceptional waters, and Turbidity Monitoring

6. Does stormwater from this land disturbing activity discharge into surface waters that have been identified as impaired in the 2022 305(b)/303(d) Water Quality Assessment Integrated Report for Benthic Macroinvertebrates Bioassessments? (See latest DEQ Environmental Mapper)

□ No ⊠ Yes

List impaired water(s) here: Potomac River

7. Does stormwater from this land disturbing activity discharge into a watershed with a <u>IMDL</u> waste load allocation established prior to July 1, 2024 for sediment, total suspended solids, turbidity, nitrogen or phosphorus, including all surface waters within the Chesapeake Bay Watershed?

□ No 図 Yes

List TMDL(s) and pollutant(s) here: Chesapeake Bay - Total Suspended Solids,

Phosphorus, Nitrogen
8. Does stormwater from this land-disturbing activity discharge stormwater to surface waters that have been identified as Exceptional in 9VAC25-260-30.A.3.c of the Water Quality Standards regulation?

⊠ No □ Yes

List name of surface waters:

9. If "NO" was answered in note 6, 7, and 8, then items a, b, c and d (below) shall be implemented and adhered to for this land-disturbing activity. If "Yes" was answered in note 6, 7, or 8, then the requirements of Part IB.4.a or Part I.B.5, as applicable, of the Construction General Permit shall be implemented and the operator shall ensure the following SWPPP requirements are adhered to for this land-disturbing activity:

a. Permanent or temporary soil stabilization shall be applied to denuded areas within seven (7) days after final grade is reached on any portion of the construction site.

b. Temporary and permanent stabilization will be applied as noted and in accordance with ESC Minimum Standards 1 and 3.

c. Nutrients (e.g., fertilizers) shall be applied in accordance with manufacturers recommendations or an approved nutrient management plan and shall not be applied during rainfall events; Nutrients are being applied per the projects Roadside Development

d. Inspections shall be conducted at a frequency of (i) at least once every four (4) business days or (ii) at least once every (5) business days and no later than 24 hours following a measurable storm event. In the event that a measurable storm event occurs when there are more than 24 hours between business days, the inspection shall be conducted on the next business day; and Inspections are being completed at least every four (4) business days (C-107s are completed on Mondays and Thursdays) Representative inspections used by utility line installation, pipeline construction, or other similar linear construction activities shall inspect all outfalls.

e. <u>Turbidity Monitoring Requirement</u> - Undertake one of the methods identified In Part II.B.8. of the CGP for controlling and documenting construction dewatering discharges.

- 10. Concentrated stormwater is discharged from this land disturbance (construction) activity into Little Creek roughly 173' from the Fuller Heights Road and Lions Field Road intersection. Little Creek continues downstream until the confluence with tidal Quantico Creek.
- 11. The ESC and SWM plans (where applicable) for this land disturbance (construction) activity have been developed in accordance with VDOT's Annual Erosion and Sediment Control and Stormwater Management Standards and Specifications as approved by the DEQ.
- 12. List the RLD and other responsible parties for the land disturbance activity: (required for erosion and sediment control). The following individual(s) are "duly authorized" to sign all reports required by the CGP including the SWPPP General Information Sheets and Inspection Reports (C-107). Reference form LD-445H for Duly Authorized Representatives (form LD-445H for the project is hereby incorporated by reference into this SWPPP). These individual(s) has/have overall responsibility or the environmental matters for the project: (required only for permitted projects):

Name	Position	Qualifications (if required)	Responsibility
	RLD		Certify the SWPPP (with date & sig.)
	Certified Contractor		Sign (C-107) Inspection Form Part 1
	Certified Inspector		Sign (C-107) Inspection Form Part 1
	Certified Inspector		Sign (C-107) Inspection Form Part 2

X 13. The name of the VDOT individual(s) responsible for the oversight inspection in accordance with IIM-LD-256 on these land disturbance construction activities as identified on these SWPPP General Information Sheets. The following individual(s) are "duly authorized" to sign all reports required by the CGP including the SWPPP General Information Sheets and Inspection Reports (C-107). Reference for LD-445H for Duly Authorized Representatives (form LD-445H for the project is hereby incorporated by reference into this SWPPP). The names will be updated and maintained with the other SWPPP documents for this land disturbance activity.

REVISED			STATE	l
	STATE	ROUTE	PROJECT	SHEET NO.
	VA.	1131	EN24-076-380 R201, C501	2D(1)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

VDOT Individuals	Position	Qualifications (if required)	Responsibility
Marian Carroll	NPDES		NPDES coordinator or designee(s) responsible for the oversight inspection in accordance with IIM-LD-256
Pawan Sarang, P.E.	Dist. Hyd. Engineer		District Hydraulic Engineer or designee(s)responsible for the review & the coordination approval of ESC SWM plan modification(s).
	ACE		Project Manager during Construction

X14. The ESC and P2 inspections for this land disturbing (construction) activity shall follow (Select Schedule 1 or 2, if schedule \*2 is used, void note \*15) as defined in R&B Specifications identified on the title sheet except for Section 107 an Inspection Requirements Rain gauge notes apply only to Inspection Schedule 1.

If the operator must make the same repairs more than two times to the same control at the same location, even if the fix can be completed by the close of the next business day, the operator shall either:

- Complete work to fix any subsequent repeat occurrences of this same problem under the corrective action procedures in Part II H, including keeping any records of the condition and how it was corrected under Part II C: or
- Document in the inspection report under Part IIG why the specific reoccurrence of this same problem should still be addressed as a routine maintenance fix.
- ※※ 15. The location of the on-site rain gage that will be used to determine the occurrence of a measurable storm event for the purposes of ESC and Pollution Prevention inspections will be provided by the contractor and identified on the record set of plans or in other appropriate SWPPP documents for this land disturbance activity: (List location of rain gage).

The rain gage shall be observed daily at "\_\_\_\_\_\_" to determine the occurrence of a measurable storm event (i.e., 0.25 inches of rainfall or greater in a 24 hour period). A log book shall be maintained to record observation information which shall include (1) the date, (2) the time, (3) whether or not rainfall is occurring at the time of the observation, (4) the amount of accumulated rainfall in the gage, if any, and (5) whether or not an inspection is required based on the amount of accumulated rainfall in the gage.

A discharge caused by snow melt (from a snow event producing 3.25 inches or more of snow within a 24-hour period). The operator is required to conduct one inspection once the discharge of snow melt occurs. Additional inspections are only required if, following the discharge from the first snow melt, there is a discharge from a separate storm event.

If there is no rainfall occurring at the time of the observation, the observation information shall be noted in the log book and the rain gage emptied and replaced. An inspection is required if there is 0.25 inches or more accumulation noted in the rain gage. If there is rainfall occurring at the time of the observation, the observation information is to be noted in the log book. The rain gage is not to be emptied but left to accumulate additional rainfall until the conclusion of the rainfall event. At the conclusion of the rainfall event, an observation of the rain gage shall be made and the observation information shall be noted in the log book and the rain gage emptied and replaced. An inspection is required if there is 0.25 inches or more accumulation noted in the rain gage.

16. The following VDOT documents are applicable to a) permitted projects b) non-permitted projects in Chesapeake Bay Preservation Areas (CBPA) with 2,500 S.F. to 1.0 acre of land disturbance c) non-permitted projects requiring a SWPPP and d) Non-permitted, Non-CBPA with BMP projects that have a water quantity BMP:

VDOT LD-445: Permitted projects, CBPA projects and Non-permitted,
Non-CBPA with BMP projects that have a water quantity
BMP and ESC projects > 10,000 s.f. but <1 acre.

VDOT LD-445A: Permitted projects only.

VDOT LD-445C: Projects that require a permit, ESC Plan, SWM, or SWPPP.

VDOT LD-445D: Permitted projects, CBPA projects and Non-permitted,

Non-CBPA with BMP projects that have a water quantity BMP.

VDOT LD-445F: Emergency work projects (when applicable) VDOT LD-445H: Permitted projects only.

VDOT C-107 Part I (All projects that require a SWPPP).

VDOT C-107 Part II (Only for Permitted Projects).
VDOT LD-445I: AS&S Approval Form (when applicable)

VDOT LD-445J: Off-site Support/ Material Disposal Area Activities Tracking Form

X Denotes information that is to be provided/completed by the RLD.

XX Denotes information that is to be provided/completed by the contractor. Revised 7/25/24 SWPPP Sheet 1 of 3

PROJECT SHEET NO. 2D(1)

60% PLANS

PROJECT MANAGER Rami Bazlamit, PE, Prince William County, (703) 792-8164 SURVEYED BY, DATE \_Tami Lenox, LS, ATCS, 02/23/2025, (703)430-7500\_ \_ \_ . DESIGN BY *William Leonetti, PE, ATCS, 02/23/2025, (703)430-7500* \_ \_ \_ \_ \_ \_ SUBSURFACE UTILITY BY, DATE \_Accumark, Inc, 03/04/2025, (804)550-7740\_

#### STORMWATER POLLUTION PREVENTION PLAN (SWPPP) GENERAL INFORMATION SHEET (2)

Ī	REVISED	STATE	STATE STATE		
ſ		STATE	ROUTE	PROJECT	SHEET NO.
		VA.	1131	EN24-076-380 R201, C501	2D(2)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

#### SECTION II EROSION AND SEDIMENT CONTROL

- ★米 1. The intended sequence and timing of activities that disturb soils at the site (e.g., grubbing, excavation, grading, utilities and infrastructure installation, etc.) shall be provided by the contractor in accordance with the current edition of Section 108 of the VDOT R&B Specifications identified on the title sheet and shall be included with the other SWPPP documents for this land disturbance (construction) activity.
- 2. Existing and proposed drainage patterns on the construction site and approximate slopes anticipated before and after major grading activities are identified in the construction plan set (or other such documents) for this land disturbance (construction) activity.
- 3. Areas of soil disturbance and areas of the site which will not be disturbed are identified in the construction plan set (or other such documents) for this land disturbance (construction) activity.
- 4. Locations of major structural and nonstructural ESC measures intended to filter, settle or similarly remove sediment are identified in the construction plan set (or other such documents) for this land disturbance (construction) activity.
- 5. Locations where stabilization practices are expected to occur are identified in the construction plan set (or other such documents) for this land disturbance (construction) activity.
- 6. A description of interim and permanent stabilization practices for the site are identified in the applicable sections of the documents identified in Note 1 of Section IV.
- ★★ 7. A record of the dates when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the construction site, and when stabilization measures are initiated will be provided by the contractor and maintained with the record set of plans or other SWPPP documents for this land disturbance (construction) activity: (List how this will be tracked and the location)
  - 8. A description and schedule of procedures to maintain vegetation, erosion and sediment control measures and other protective measures in good and effective operating conditions are identified in the current edition of Sections 107 and 303 of the VDOT R&B Specifications identified on the title sheet.
- 9. Nutrients shall be applied in accordance with the current edition of Sections 603, 604 and 605 of the VDOT Road and Bridge Specifications identified on the title sheet. Nutrients shall not be applied during rainfall events. Top soil shall be applied in accordance with the current edition of section 602 of the Road and Bridge Specifications identified on the title sheet.
- 10. All engineering calculations supporting the design of erosion and sediment control measures proposed for this land disturbance (construction) activity are contained in the project drainage file located in the VDOT NOVA District Hydraulics Section and will be made available for review upon request during normal business hours.
- 11. The temporary erosion and siltation controlitems shown on the ESC Plan for this land disturbing (construction) activity are intended to provide a general plan for controlling erosion and sediment within the project limits. The ESC Plan is based on field conditions at the time of plan development and an assumed sequence of construction for the project. The contractor, in conjunction with the VDOT Project Engineer and/or ESC Inspector, shall adjust the location, quantity and type of erosion and sediment controlitems required based on the actual field conditions encountered at the time of construction and the actual scheduling and sequencing of the construction activities. Significant changes to the proposed ESC Plan (e.g., those that require an engineering analysis, elimination of a perimeter control, change to ESC concept that would affect the quantity or direction of flow of water) shall be submitted to the applicable District Hydraulics Engineer for review and approval. Any changes to the proposed ESC Plan must be noted on the designated record set of plans which shall be retained on the project site and made available upon request during normal business hours. Changes noted on the designated record set of plans must address certification language with initial and date by duly authorized personnel.
- 12. The areas beyond the project's construction limits are to be protected from siltation. Perimeter controls such as silt fence, diversion dikes, turbidity curtains, etc. shall be installed prior to any grubbing operations or other earth moving activities.
- 13. Temporary earthen structures such as dikes and berms are to be stabilized immediately upon installation. Stabilization may include temporary or permanent seeding, riprap, aggregate, sod, mulching, and/or soil stabilization blankets and matting in conjunction with seeding.
- 14. All channel relocations are to be constructed during the earliest stage of construction and shall be constructed in accordance with all applicable permit requirements and shall be constructed in the dry wherever possible. Stabilization or vegetation shall be established before flow is redirected through the constructed area as directed by the Engineer.
- 15. The contractor shall plan and implement his land disturbance operations in order to:
  - a. Control the volume and velocity of stormwater runoff within the site to minimize erosion.
  - b. Control the peak flow rates, volume and velocity of stormwater discharges to minimize erosion at outlets and in downstream channels.
  - c. Minimize the amount of soil exposed.
  - d. Minimize the disturbance of steep slopes.
  - e. Minimize sediment discharge from the site.
  - f. Provide and maintain natural buffers around surface waters, direct stormwater runoff to vegetated areas and maximize stormwater infiltration, unless infeasible.
  - g. Minimize soil compaction (except in those areas where compaction is required by the contract documents) and preserve topsoil where feasible.

- XX 16. The name of the individual(s) or contractor(s) responsible for the installation and maintenance of the erosion and sediment control measures shall be supplied by the contractor and maintained with the other SWPPP documents for this land disturbance (construction) activity.
  - 17. Soil stockpiles temporarily placed within the project area or on VDOT right of way or easement shall be identified, stabilized, and protected with sediment trapping measures.
  - 18. A construction entrance or other approved measure shall be installed at all locations where construction vehicular traffic access routes intersect a paved or a public road in order to minimize the transport of sediment by vehicular tracking onto the paved surface. Where sediment is transported onto a paved or a public road surface, the road shall be cleaned thoroughly at the end of each work day by shoveling or sweeping. Removed sediment shall be disposed of in accordance with Section 106.04 of the R&B Specifications identified on the title sheet. Construction entrances shall be maintained as necessary, including the addition of additional rock, as part of routine maintenance.
  - 19. Any variance, exception or deviation approved by DEQ must be listed below and supporting documentation (exception/variance/deviation request and DEQ approval) must be maintained with the SWPPP.

The following exceptions to the Water Quantity criteria of the VESMP Regulation have been approved by the DEQ for this land disturbance (construction) activity: (list all approved variances, exceptions, deviations and include a brief description of the variance, the date approved and the approving DEQ Office).

	Type(1)	Regulation	Modified(2)	Approval Date(3)	Description
L					
L					

- (1) Type of modification (Variance from ESC regulations, or Deviation from published
- (2) Section of Regulation or Guidance Document Modified (e.g. ESC Min. Std. 15) (3) Date that variance/exception/deviation was approved by DEQ.
- (4) Description and request

## SECTION III POST CONSTRUCTION STORMWATER MANAGEMENT

Choose the appropriate note 1A or 1B that is applicable to the proposed post construction SWM Plan for this land disturbance (construction) activity. (Delete, strike through or mark as NA those notes not applicable.)

- 米 1. This land disturbance activity utilizes the technical criteria contained in Article 3 (9VAC25-875-570. et sea.) of the VESMP Regulations (Formerly Part IIB of the technical criteria). (Include one of the following notes as appropriate)
- 2. An exception for (number) pounds of phosphorus removal has been granted for this land disturbance activity by the DEQ in its letter dated (date).
- 3. Any variance, exception or deviation approved by DEQ must be listed below and supporting documentation (exception/variance/deviation request and DEQ approval) must be maintained with the SWPPP.

The following exceptions to the Water Quantity criteria of the VESMP Regulation have been approved by the DEQ for this land disturbance activity: (list all approved variances, exceptions/deviations and include a brief description, the date approved and the approving DEQ Office)

Type(1)	Regulation Modified(2)	Approval Date(3)	Description
		,	

- (1) Type of modification (Variance, or Exception from SWM Regulations or Deviation from published quidance)
- (2) Section of Regulation or Guidance Document Modified (e.g. ESC Min. Std. 15)
- (3) Date that variance/exception/deviation was approved by DEQ. (4) Description of request
- 4. The permanent on-site SWM facilities or off-site strategies proposed to meet the water quality/quantity requirements for this land disturbance (construction) activity are listed in Section VI.

- 5. A description of all post-construction stormwater management measures that will be installed during the construction process to control pollutants in stormwater discharges after construction operations have been completed is included in the construction plan set (or other such documents) for this land disturbance (construction) activity.
- 6. All engineering calculations supporting the design of the post-construction stormwater management measures for this land disturbance (construction) activity, including an explanation of the technical basis used to select the practices, are contained in the project drainage file located in the VDOT NOVA District Hydraulics Section and will be made available for review upon request during normal working business hours.
- X Denotes information that is to be provided/ completed by the RLD.
- $\mathbf{X}$  Denotes information that is to be provided/completed by the contractor.

Revised 7/25/24 SWPPP Sheet 2 of 3

EN24-076-380

PROJECT SHEET NO. 2D(2) The information contained in the SWPPP General Information sheets is intended to comply with the requirements of the General VPDES Permit For Discharges Of Stormwater From Construction Activities (the CGP) issued July 1, 2024 and VDOT's approved Annual ESC and SWM Standards and Specifications.

The SWPPP General Information sheets are to be completed and included in the construction plan set (or other such documents) for land disturbance (construction) activities that disturb an area equal to or greater than 10,000 square feet outside the Chesapeake Bay Preservation Area, or equal to or greater than 2,500 square feet in the area defined as Tidewater, Virginia in the Virginia Chesapeake Bay Preservation Act.

The VDOT RLD will ensure that the information shown on the SWPPP General Information sheets is updated/revised as necessary in order to reflect changes that may occur during the construction phase of the land disturbing (construction) activity. The updated/revised sheets shall be maintained with the designated record set of plans (or other such documents) for the land disturbance (construction) activity.

#### SECTION IV SWPPP

- 1. All documents related to the SWPPP for this land disturbance (construction) activity shall be maintained at the activity site and shall be readily available for review upon request during normal business hours. Such documents include, but are not limited to, the construction plans (or other such documents), the ESC Plan, the Pollution Prevention Plan, the post construction SWM Plan (if applicable), the VDOT R&B Standards and Specifications, Supplemental Specifications, Special Provisions and Special Provision Copied Notes. Documents related to stormwater pollution prevention which are not a part of those documents referenced above, such as copies of the CGP coverage letter (when applicable) and the CGP (when applicable) and those required to be developed by the contractor for pollution prevention associated with any support facilities being included in the CGP coverage for this land disturbance (construction) activity are to be maintained at the activity site with the other SWPPP documents for this land disturbance (construction) activity. Where no facilities are available at the activity site to maintain the SWPPP documents, they are to be kept by or with the designated RLD at a location convenient to the activity site where they would be made available for review upon request during normal business hours.
- 2. The SWPPP and any subsequent amendments, modifications and updates shall be signed and certified as necessary to comply with the CGP, and shall be implemented from commencement of land disturbance until termination of CGP coverage or completion of land disturbance (construction) activities where no CGP coverage is required.
- XX 3. For all support facilities that will be included in the CGP coverage for this land disturbance (construction) activity, the contractor shall develop a SWPPP in accordance with, but not limited to, Section 106 and 107 of the VDOT Road and Bridge Specifications identified on the title sheet. The SWPPP for the support facilities shall be maintained with and become a component of the SWPPP for this land disturbance (construction) activity. Support facilities shall include, but not be limited to, borrow and disposal areas, construction and waste material storage areas, equipment and vehicle washing, maintenance, storage and fueling areas, storage areas for fertilizers, fuels or chemicals, concrete wash out areas, sanitary waste facilities and any other areas that may generate a stormwater or non-stormwater discharge directly related to the construction site.
  - 4. For those land disturbing (construction) activities requiring coverage under the CGP, the SWPPP shall be made available for review upon the request of the DEQ, the EPA, the VESMP Authority, the VESCP Authority, local government officials or the operator of a municipal separate storm sewer system (MS4) receiving discharge from the construction site.
- X 5. For those land disturbing (construction) activities requiring coverage under the CGP, the VDOT RLD shall post, or have posted, a copy of the CGP coverage letter and a copy of a completed LD-445A form, noting the name and contact information for the VDOT person responsible for the land disturbing (construction) activity and its SWPPP, outside the project's construction office along with other Federal and State mandated information. The copy of the notice of coverage letter shall be visible such that it can be readily viewed from a public right-of-way. Where there is no construction office (e.g., a maintenance activity), the permit coverage letter and the LD-445A form are to be maintained with the other SWPPP documents for the land disturbing (construction) activity.
- 6. The SWPPP shall be made available for review by the public upon request. Such reviews shall be at a time and publicly accessible location convenient to the public and shall be scheduled during normal business hours and no less than once per

#### SECTION V - POLLUTION PREVENTION PLAN

curing compounds and other construction materials.

- 1. The following non-stormwater discharges from this land disturbing (construction) activity and any support facilities covered by this permit are prohibited:
  - a. Wastewater from concrete washouts.b. Wastewater from the washout or clean out of stucco, paint, from release oils,
  - c. Fuels, oils or other pollutants used in vehicle and equipment operation and
  - d. Oils, toxic substances or hazardous substances from spills or other releases.
  - e. Soaps, solvents or detergents used in equipment and vehicle washing.
  - f. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- 2. The following non-stormwater discharges from this land disturbing (construction) activity and any support facilities are allowed when discharged in compliance with this CGP:
  - a. Discharges from emergency fire fighting activities.
  - b. Fire hydrant flushings managed to avoid an instream impact.
  - c. Waters used to wash vehicles or equipment, provided no soaps, solvents or detergents are used and the wash water is filtered, settled or similarly treated prior to discharge.
  - d. Water used to control dust that is filtered, settled or similarly treated prior to discharge.
  - e. Potable water including uncontaminated waterline flushings managed in a manner to avoid stream impacts.
  - f. Routine external building wash down, provided no soaps, solvents or detergents are used, external building surfaces do not contain hazardous substances, and the wash water is filtered, settled or similarly treated prior to discharge.
  - g. Pavement wash waters, provided spills or leaks of toxic or hazardous materials have not occurred (unless all spilled or leaked material is removed prior to washing), soaps, solvents or detergents are not used and the wash water is filtered, settled or similarly treated prior to discharge.
  - h. Uncontaminated air conditioning or compressor condensate.
  - i. Uncontaminated ground water or spring water.
  - j. Foundation or footing drains, provided flows are not contaminated with process materials such as solvents or contaminated groundwater.
  - k. Uncontaminated excavation dewatering, including dewatering trenches and excavations that are filtered, settled or similarly treated prior to discharge.
  - I. Landscape irrigation.
- XX 3. The contractor shall develop a Pollution Prevention Plan to address any operations that have a potential to generate a pollutant that may reasonably be expected to affect the quality of stormwater discharges from this land disturbance (construction) activity. The Pollution Prevention Plan shall be developed in accordance with, but not limited to, Sections 106 and 107 of the VDOT Road and Bridge Specifications identified on the title sheet and shall include a narrative with appropriate plan detail and shall:
  - a. Identify the potential pollutant-generating activities and the pollutant that is expected to be exposed to stormwater.
  - b. Describe the location where the potential pollutant-generating activities will occur, or if identified on the record set of plans, reference the record set of plans
  - c. Identify all non-stormwater discharges, as described in note two of this section, that are or will be commingled with stormwater discharges from the construction activity, including any on-site support activities.
  - d. Identify the person(s) or contractor(s) responsible for implementing and maintaining the pollution prevention practices for each pollutant-generating activity.

- e. Describe the pollution prevention practices and procedures that will be implemented to:
  - 1) Prevent and respond to leaks, spills, and other releases, including procedures for expeditiously stopping, containing, and cleaning up spills, leaks, and other releases, and procedures for reporting leaks, spills, and other releases in accordance with Section 107 of the VDOT Road and Bridge Specifications identified on the title sheet and the requirements within the CGP.
  - 2) Prevent the discharge of spilled and leaked fuels and chemicals from vehicle fueling and maintenance activities.
  - 3) Prevent the discharge of soaps, solvents, detergents, and wash water from construction materials, including procedures for the clean-up of stucco, paint, form release oils, and curing compounds.
  - 4) Minimize the discharge of pollutants from vehicle and equipment washing, wheel wash water, and other types of washing.
  - 5) Direct concrete wash water into a leakproof container or leakproof settling basin designed so that no overflows can occur due to inadequate sizing or precipitation. Hardened concrete wastes shall be removed and disposed of in a manner consistent with the handling of other construction wastes. Liquid concrete wastes shall be removed and disposed of in a manner consistent with the handling of other construction wash waters and shall not be discharged to surface waters, disposed of through infiltration, or otherwise disposed of on the ground.
  - 6) Minimize the discharge of pollutants from storage, handling, and disposal of construction products, materials, and wastes including building products (such as asphalt sealants, copper flashing, roofing materials, adhesives, and concrete admixtures), pesticides, herbicides, insecticides, fertilizers, landscape materials, construction and domestic wastes (such as packaging materials), scrap construction materials, masonry products, timber, pipe and electrical cuttings, plastics, styrofoam, concrete, and other trash or building materials.
  - 7) Prevent the discharge of fuels, oils, and other petroleum products, hazardous or toxic wastes, waste concrete and sanitary wastes.
  - 8) Address any other discharge from any potential pollutant-generating activity not listed herein.
  - 9) Minimize the exposure of waste materials to precipitation by closing or covering waste containers during precipitation events and at the end of the business day, or implementing other similarly effective practices. Minimization of exposure is not required in case where the exposure to precipitation will not result in a discharge of pollutants.
  - 10) Describe and implement procedures for providing pollution prevention awareness (including but not limited to prevention practices, disposal practices and appropriate disposal locations) for all applicable wastes (including any wash water), to appropriate personnel.
  - X Denotes information that is to be provided/completed by the RLD.
  - XX Denotes information that is to be provided/completed by the contractor.

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SHEET NO.

2D(3)

PROJECT EN24-076-380

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

DISTRICT

ALTERNATIVE BMP INFORMATION Plan Sheet(s) Date

DISTRICT Table A: Permanent BMP Types (1999 Va. SWM Handbook) Bio-retention Basin Bio-retention Filter Constructed Stormwater Wetlands Extended Detention Basin Grassed Swale Infiltration Basin Infiltration Trench Manufactured Treatment Device (MTD) (8) Retention Basin I

> Table B: Alternative BMP Types Other Approved Options (List Type) (4)

Made Functional

Type of BMP Installed

(See Table A, C, or D)

Type of BMP Installed

(See Table B)

Geographic Location

(County or City)

Geographic Location

(County or City)

(5)

INSTALLED BMP INFORMATION

(VDOT Owned/Operated)

Plan Sheet(s) X Date BMP

PROJECT MANAGER Rami Bazlamit, PE, Prince William County, (703) 792-8164

SURVEYED BY, DATE \_Tami Lenox, LS, ATCS, 02/23/2025, (703)430-7500\_ \_ \_ . DESIGN BY *William Leonetti, PE, ATCS, 02/23/2025, (703)430-7500* \_ \_ \_ \_ \_ \_ SUBSURFACE UTILITY BY, DATE \_Accumark, Inc, 03/04/2025, (804)550-7740\_

#### STORMWATER POLLUTION PREVENTION PLAN (SWPPP) GENERAL INFORMATION SHEET (4)

## SECTION VI - PERMANENT BMP INFORMATION $\triangle$

Receiving Water

\* Denotes information that is to be completed by the RLD. ( ) See note referenced by number in parentheses.

Receiving Water

(2)

VA 6th

Latitude/Longitude

VA 6th

Order

HUC

(5) (7)

LAT

Latitude/Longitude

(1)(5)

LONG

LAT

Order Water (9) HUC (7) LONG TOTAL Impervious | Pervious

Name of Impaired

Water (9)

Name of Impaired

# Perpetual Nutrient Credits Acquired for Project Nutrient Credits Name of

(lbs./TP./year)

Acquired

(6) (12)

Acres Treated Per BMP (3)

TBD 0.63

Nutrient Credit

Generating Entity

Extended Detention Basin Enhanced Retention Basin II Retention Basin III Sand Filter Vegetated Filter Strip Other Approved Types (List Type) Detention Basin

Comprehensive SWM Plan (Regional) Facility Pollutant Loading Pro Rata Share Program

Table C: Permanent BMP Types (BMP Clearing House) Sheet Flow to Vegetated Filter Strip (Level Spreader) Grass Channel Soil Compost Amendment Permeable Pavement (Level 1) Permeable Pavement (Level 2) Infiltration Practice (Level 1) Infiltration Practice (Level 2) Bioretention (Level 1) Bioretention (Level 2) Dry Swale (Level 1) Dry Swale (Level 2) Wet Swale (Level 1) Wet Swale (Level 2) Filtering Practice (Level 1) Filtering Practice (Level 2) Constructed Wetlands (Level 1) Constructed Wetlands (Level 2) Extended Detention Pond (Level 1) Extended Detention Pond (Level 2)

Manufactured Treatment Device (MTD)(8)

Other Approved Types (List Type)

Wet Pond (Level 1)

Wet Pond (Level 2)

\*Table D: Permanent Post-Construction BMP Types (Virginia Stormwater Management Handbook, Ver. 1.0) Constructed Wetland Wet Pond Extended Detention Pond Rainwater Harvesting Grass Channel Dry Swale Wet Swale Regenerative Stormwater Conveyance Rooftop/Impervious Surface Disconnection Vegetated Roof Permeable Pavement Infiltration Practices Bioretention Filtering Practices Sheet Flow to Vegetated Filter Strip/ Conserved Open Space Soil Compost Amendment Tree Planting Earthen Embankment Principal Spillway Vegetated Emergency Spillway Pretreatment Quantity-Only Approach to BMPs MTD-H Hydrodynamic Devices MTD-F Filtering Devices MTD-B Biofilter Devices

\*Designer may not mix methods from Tables

A, B and C with methods from Table D.

- (1) In decimal degrees to the nearest one ten-thousandth of a degree.
- (2) For streams with no names, list "(Unnamed Tributary to downstream
- (3) Show acres treated to the nearest one hundredths acre.
- (4) Include agreements with off-site BMP owners.
- (5) Information pertains to the alternative BMP option location, where Exception - Not required for nutrient credit purchase option.
- (6) Applies to the purchase of nutrient credits only.
- (7) Virginia 6th Order HUC (VAHU6) Example YO30.
- (8) Final approved shop drawings of Manufactured Treatment Devices (MTDs) are to be included with the BMP information submitted with the LD-445D form.
- (9) List the name of any impaired water to which the BMP discharges. The determination of impaired water shall be based on those surface waters identified as impaired in the 2022 305(b)/303(d) Water Quality Assessment Integrated Report for Benthic Macroinvertebrates Bioassessments and shall be the first named waterbody to which the BMP discharges.
- (10) BMP Maintenance ID Number is to be assigned by the District Maintenance Division at permit termination or project completion. This ID number shall be assigned prior to the permit close out process and entered by the area construction engineer under this column, per IIM-LD-195.

STATE STATE ROUTE PROJECT EN24-076-380 VA. | 1131 2D(4)R201, C501 DESIGN FEATURES RELATING TO CONSTRUCTION

BMP Maintenance

and Inspection Manual

(11)

SECTION

OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

**X** BMP Maintenance

ID Number

(10)

 $\bigwedge$  Any changes to the proposed SWM Plan or BMPs necessitated during the construction phase of the project that affects the proposed construction details or potentially affects the information shown in the BMP Tables A and/or B shall be coordinated by the VDOT RLD with the appropriate VDOT District Hydraulics Engineer. The construction plans and the BMP Tables A and/or B are to be formally revised to reflect any authorized/ approved changes to the proposed SWM Plan and/or the proposed BMP construction details. All plan revisions shall be completed in accordance with the Road Design Manual and the Construction Division IIM-CD-2013-12.01, signed and sealed in accordance with Department's sealing and signing policy IIM-LD-243 and filed with the construction record drawings maintained in the VDOT Central Office Plan File Room (ProjectWise). Prior to submitting for termination of coverage under the CGP, the RLD shall have the District Maintenance Division (Infrastructure Manager or Designee) along with the ACE, DHE, and the NPDES coordinator review the BMPs installed with the project for acceptance of maintenance responsibility and to obtain a Maintenance ID number for each BMP listed in BMP Table A. The RLD shall use the information in BMP Tables A and B along with the assigned Maintenance ID number and the date that the BMP became functional as a permanent control measure (for BMPs in Table A only) to complete the LD-445D form when certifying the construction of the BMPs and submitting for termination of coverage under the CGP.

- (11) Provide the section of the manual that pertains to the type of BMP. The manual can be found at https://www.vdot.virginia.gov/ media/vdotvirginiagov/doingbusiness/technical-guidance-and-support/ technicalquidance-documents/maintenance/VDOT\_-BMP\_-Manual\_acc.odf in the Maintenance selections. Example: Section 4 would be noted for the maintenance and inspection manual for a Bioretention Linfiltration BMP.
- (12) Nutrient credits purchased to the nearest one hundredth pound.
- (13) If level spreader is utilized as part of sheet flow to vegetative filter strip, report under that BMP type Table C.
- (14) If several level spreaders are in close proximity, they may be combined for recording purposes; however each level spreader shall have individual lat/longs reported.

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SHEET NO.

2D(4)

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

d125404\_02F(1).dgn Plotted By: icsM-atcspw2l\$

PROJECT MANAGER Rami Bazlamit, PE, Prince William County, (703)792-8164 SURVEYED BY, DATE \_Tami Lenox, LS, ATCS, 02/23/2025, (703)430-7500\_ \_ \_ . DESIGN BY William Leonetti, PE, ATCS, 02/23/2025, (703)430-7500 SUBSURFACE UTILITY BY, DATE \_Accumark, Inc, 03/04/2025, (804)550-7740\_

## SUMMARY OF QUANTITIES

\* SURFACE QUANTITY INCLUDES 1.5" ENTRANCE TY.III SURFACE

\* SIDEWALK SUBBASE QUANTITY INCLUDES 4" ENTRANCE TY.III SUBBASE

REVISED	STATE		SHEET NO.	
	STATE	ROUTE	PROJECT	SHEET NO.
	VA.	1131	EN24-076-380 R201, C501	2F(1)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

$\otimes$	Denotes item(s) to be paid for on
	the basis of plan quantities in
	accordance with the applicable
	provisions of the current VDOT
	Road and Bridge Specifications.

- (1) Cut quantity shown does not include the material removed as Demolition of Pavement.
- Quantity shown for use in Grading Diagram only. See other Summaries for pay item(s).
- 3 Included in Total Regular Excavation.
- 4 Included in Roadway Cut quantity.
- Quantities for Temporary Sediment Basins and Temporary Sediment Traps are included with the Stormwater Management Basin quantities.
- 6 Denotes pay item.
- 7 Included in total fill quantity.
- 8 This quantity comes from the computer listings and/or manual cross-sections and may be adjusted for other quantities.
- 9 Volumes obtained for Cut Ditches and Fill Ditches not included in computer listings.
- (1) Includes settlement of in-place soil.

Total Fill	Demolition of Pavement (N)	Minor Structure Excavation 🖎	Stormwater (S)	# Basins (N)	6 Borrow (Embank- ment)	<u>F(</u>
C.Y.	C. Y.	<i>C. Y.</i>	C. Y.	C.Y.	<i>C. Y.</i>	RO
						Ro fil

FORMULAS Roadway Cut(C) = Unadjusted Cutfrom Computer Listings or ManualCross-Sections minus(-)Demolition of Pavement.

Roadway Fill(J) = Fill Required plus (+) Material for Backfill of Demolition of Pavement Areas in Fill(for heights of fill < 3 feet below subgrade)

Total Reg. Excav.(M) = C + E + F + H + K

Total Fill (N) = J + E + G + H + L + R

Borrow (S) = [N - ([C + F + K + P + Q - D - I] Estimated Material to be Obtained Off-Site

					ROUTE 1131					
				ROADM	/AY			CG-9D	CG-6	SIDEWALK
		SURF ACE*	BASE	SUBBASE				SUBBASE	SUBBASE	SUBBASE*
5 <i>ET</i>	PAVEMENT AREA	ASPHALT CONCRETE	ASPHALT CONCRETE	AGGR.BASE MATL.TYJ	C	OVERLAY/BUILD	OUP .	AGGR.BASE MATL.TYJ	AGGR.BASE MATL.TYJ	AGGR.BASE MATL.TY.J
SHEE	PAV	TY.SM-9.5A	TY.BM-25.0	NO.2IB	PAVEMENT AREA	SURF ACE	FLEXIBLE PAVEMENT	NO.2IB	NO.2IB	NO.2IB
		I.5" DEPTH	6" DEPTH	8" DEPTH		I.5" DEPTH	PLANNING	8" DEPTH	8" DEPTH	4" DEPTH
	S.Y.	TON	TON	TON	S.Y.	TON	S.Y.	TON	TON	TON
3	69	5.7	22.8	31,1	685	56.6	685	-	106.8	86.6
4	81	12	26.8	36.5	805	66.5	805	20.8	119.9	123.9
5	34	2.9	11.3	15.3	331	27.4	331	-	<i>50.</i> J	<i>68J</i>
TOTAL	184	20.6	60.9	82.9	1,821	150.5	1,821	20.8	276.8	278.6

	INCIDENTAL												
ITEM DESCRIPTION	CLEARING AND GRUBBING	SAW CUTTING	CURB, STD.CG-2	CURB, RADIAL CG-2	COMB.CURB & GUTTER,STD.CG-6	COMB.CURB & GUTTER,RAD.CG-6	ENTRANCE GUTTER CG-9D	CG-12 DETECABLE WARNING SURFACE	HYDR.CEMENT CONC.SIDEWALK 4"	DEMO OF PAVEMENT FLEXIBLE	MOBILIZATION	CONSTRUCTION SURVEYING CONSTR.	
ITEM NO.	30ISD20- 0002	412SD20- 0044	502SD20- 0011	502SD20- 0018	502SD20- 0022	502SD20- 0023	502SD20- 0029	504SD20- 0002	504SD20- 0003	504SD20- 0004	513SD20- 0001	517SD20- 0001	
UNIT	ACRE	LF	LF	LF	LF	LF	SY	SY	SY	SY	LS	LS	
SHEET NO.													
3	0.2	620	66	39	201	409	-	<b>3.</b> 5	345	69	-	-	
4	0.3	<i>72</i> 7	-	-	221	464	42	-	394	81	-	-	
5	0.05	301	60	41	143	154	-	2.5	293	34			
TOTAL	0.55	1648	126	80	565	1027	42	6	1032	184	1	1	

ITEM DESCRIPTION	TEMPORARY SIGN	GROUP 2 CHANNELIZING DEVICE	FLAGGER SERVICE	PORTABLE TEMPORARY RUMBLE STRIP ARRAY
ITEM NO.	512SD20- 0014	512SD20- 0024	512SD20- 0027	512SP20 0001
UNIT	SF	DAY	HR	DAY
SHEET NO.				
PHASE I	322	5320	3/92	399
TOTAL	322	5320	3192	399

	⊗ Poadway	Root Mat	Root Mat	hes 60		itable erial	(O) Roadway	000000000000000000000000000000000000000	ביווו מווכפא	Total Regular	<del>-</del>	on of sent	ucture tion	'ater (G)	menr ns (N)	6
Location	Roadway Cut	in Cut	in Fill Sections	)itc	Below Subgrade	Above Subgrade	Fill	L <sub>1</sub>	<u> </u>   	Regular Excavation 6	Total Fill	emoliti Pavem	r Stri	tormw	anageme Basins	Borrow (Embank-
	(1) (8)			Cut Fill			8		Fill			Q	Mino. E,	Cut	<b>≥</b>   <i>Fi</i> //	ment)
	C. Y.	C. Y.	C. Y.	C. Y. C. Y.	<i>C. Y.</i>	C. Y.	C. Y.	C. Y.	C. Y.	C. Y.	<i>C. Y.</i>	C. Y.	C. Y.	C.Y.	C. Y.	C. Y.
ROUTE 1131	1188	727	1713	N/A W/A	501	758	1759	N/A	N/A	3402	3973		N/A	N/A	N/A	
FORMULAS	C	D	E	$\mid F \mid G$	Н	/	J	K	L	M	N	0	P	Q	R	S
	3	4	3 7	3 7	3 7	4	7	3	7						7	

12/2/2025

PROJECT MANAGER <u>Rami Bazlamit, PE Prince William County, (703)792-8164</u>.

SURVEYED BY, DATE <u>Tami Lenox</u>, <u>LS</u>, <u>ATCS</u>, <u>02/23/2025</u>, <u>(703)430-7500</u> \_ \_ .

DESIGN BY <u>William Leonetti</u>, <u>PE</u>, <u>ATCS</u>, <u>02/23/2025</u>, <u>(703)430-7500</u> \_ \_ .

SUBSURFACE UTILITY BY, DATE <u>Accumark</u>, <u>Inc</u>, <u>03/04/2025</u>, <u>(804)550-7740</u>

60% PLANS THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

EN24-076-380

2F(2)

STORM SEWER PIPE				END	WALL	DROP II	NLETS - LEN NUMBE	IGTH, TYPE ER	E AND	MANF	HOLE	UNDER	RDRAIN		
					EW-/	EW-6									
STRUCTURE	/2"	36"	MINOR STR. EXCAV. PIPE CULVERT	POST INSTALLATION INSPECTION	/5"	36"	DROP INLET DI-3A	DROP INLET DI-3B L = 6'	DROP INLET DI-3B L = 8'	DROP INLET DI-3C L = 6'	MH-1 Or 2	FRAME & COVER MH-1	UD-4 (PERFORATED)	OUTLET PIPE	REMARKS
	LF	LF	CY	LF	EA	EA	EA	EA	EA	EA	LF	EA	LF	LF	
3-/								/					500	/	CONNECT TO UD
3-1 TO E001	52			52											CONNECT TO EX.CDI EOOI
4-2										/			82	2	CONNECT TO UD
4-2 TO 3-2	48			48											
3-2							/						28	/	IS-I REQ. CONNECT TO UD
3-2 TO 3-3	27			27											
3-3					/										
C4-1		104	125	104		2									
5-/									/				130	/	CONNECT TO UD
5-1 TO 4-10	123			123											
4-10											4	/			IS-I REQ.
4-10 TO 4-9	<i>159</i>			159											
4-9	1.47			1.47							5.4	/			IS-I REQ.
4-9 TO 4-8 4-8	147			147					/				441	/	IS-I REQ.
4-8 TO 4-7	 5/			5/					/				741	/	CONNECT TO UD
4-7											6.2	/			IS-I REQ.
4-7 TO 4-II	49			49											
4-11											6.6	/			IS-I REQ.
<i>4-11 TO 4-6</i>	125			125											
4-6											9.2	/			IS-I REQ.
4-6 TO 4-5	94			94											
4-5								/					329	/	IS-I REQ. CONNECT TO UD
4-5 TO 4-4	27			27											
4-4					/										
TOTAL	902	104	125	1006	2	2	/	2	2	/	31.4	5	1510	7	

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					STATE	ROUTE		PROJECT	
					VA.	1131		EN24-070 R201,	
					ILATION AND BJECT TO C	) CONTR HANGE 4			
	ATCS HERNDON, VIRGIN HYDRAULIC ENGIN		ATCS NDON, VIRGINIA DWAY ENGINEER						
<u></u>	AND SEL	DIMENT	CONTRO	L SUM	'MARY	,			
ROLLE EROSIO CONTR	ON ROCK CHECK	TEMPORARY SILT	INLET PROTECT	(6-J.	)-/ -/		*		

d125404\_02F(2)**.**dgn

Plotted By:icsM-atcspw2l\$

	ERO.	S/ON	/ ДЛ	10	SEL	DIME		CO	VTR	OL	SUN	1MA	RY			
	ROLLED EROSION CONTROL PRODUCT (RECP). PERMANENT ST'D. EC-2/3				ST'D.	FENCE	ORARY LT ST'D. C-5	INLET S7	PROTE	CTION 6	(ST'D EC-9)	SS AV, EC-1	CLASS 1, EC-1	4V. AT 10N	ENTRANCE *	
	SHEET NUMBER	RECP.ST'D.EC-2 TY,4	RECP.ST'D.EC-3 TY.I	CHECK DAM.ROCK TY.	CHECK DAM.ROCK TY.2	TEMP.SILT FENCE,TY.A	TEMP.SILT FENCE,TY.B	INLET PROTECTION, TYPE A	INLET PROTECTION, TYPE B	INLET PROTECTION, TYPE C	TEMPORARY DIVERSION DIKE	EROS.CONTROL STONE CLASS	EROS.CONTROL STONE CLA	SILTATION CONTROL, EXCAVATION	STABILIZED CONSTRUCTION E (EC-1)	SAFETY FENCE
ITEM NO.		606SD20-0004	606SD20-0005	303SD20-0022	303SD20-0023	303SD20-0034	303SD20-0033	303SD20-0030	303SD20-003/		303SD20-002/	414SD20-0001	414SD20-0003	303SD20-0029		507SD20-0002
UNIT		SY	SY	EΑ	EA	LF	LF	EA	EA	EA	LF	TON	TON	CY	EA	LF
	3B(I)		532	/		507			/	/	10			97		554
PHASE	4B(I)		252	/	12	322				/	47		43.7	64	/	739
	5B(I)		704		5	0.00			/		<i>r</i> -→		477	7		510
SUBTOTAL N	70:0:		784	2	17	829			2	2	57		43.7	168	/	1804
	3B(2)											1.7				
PHASE	4B(2)	1675	1600	/	20									//		
	5B(2)	1105			7				/					7		
SUBTOTAL		2780	1600	/	27				/			1.7		18		
TOTAL		2780	2384	3	44				3	2	57	1.7	43.7	186	/	1804

<sup>\*</sup> Not a Pay Item

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED

PROJECT MANAGER *Rami Bazlamit, PE, Prince William County, (703)792-8164* SURVEYED BY, DATE **\_Tami <u>Lenox, LS, ATCS, 02/23/2025, (703)430-750</u>0\_ \_ \_ .** DESIGN BY *William Leonetti, PE, ATCS\_02/23/2025, (703)430-7500\_\_\_\_\_\_* SUBSURFACE UTILITY BY, DATE \_Accumark, Inc, 03/04/2025, (804)550-7740\_

## EROSION AND SEDIMENT CONTROL GENERAL NOTES & NARRATIVE

#### STATE PROJECT EN24-076-380 VA. |1131 R201, C501

#### PROJECT DESCRIPTION

THE PROJECT ADDS A 5' SIDEWALK ON LIONS FIELD ROAD, FROM THE INTERSECTION WITH FULLER HEIGHTS ROAD TO THE DRIVEWAY ENTRANCE OF TRIANGLE ELEMENTARY SCHOOL, THE APPROXIMATE LENGTH OF THE PROJECT IS 1800 FEET. A NEW CROSSWALK WILL BE CONSTRUCTED TO SPAN THE DRIVEWAY ENTRANCE OF THE SCHOOL. THE PURPOSE IS TO EXTEND THE EXISTING PEDESTRIAN FACILITY ALONG LIONS FIELD ROAD TO IMPROVE PEDESTRIAN ACCESS TO THE SCHOOL.

THIS EROSION AND SEDIMENT CONTROL PLAN IS COORDINATED WITH THE CONSTRUCTION OF THE SIDEWALK. THE TOTAL DISTURBED AREA IS APPROXIMATELY 1.45 ACRES.

#### SITE CONDITIONS & ADJACENT AREAS

CURRENTLY, LIONS FIELD ROAD IS LINED WITH MATURE FORESTED AREAS WITH A FEW RESIDENTIAL LOTS ALONG THE NORTH SIDE OF THE ROAD. THERE IS AN EXISTING 54" REINFORCED CONCRETE PIPE THAT FLOWS SOUTH UNDER LIONS FIELD ROAD THROUGH AN 18' DOUBLE BARREL CULVERT AND INTO A STREAM. THIS STRUCTURE IS LOCATED ROUGHLY 600' FROM THE FULLER HEIGHTS INTERSECTION.

#### SOILS

A SOILS MAP WITH HYDROLOGIC SOIL GROUP (HSG) DATA IS PROVIDED ON THE WATER QUALITY MAPS IN THE DRAINAGE AND STORMWATER REPORT.

#### TEMPORARY AND PERMANENT SEEDING

THE PROJECT SHALL BE STABILIZED AFTER CONSTRUCTION BY PROVIDING PERMANENT SEEDING. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADING IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN FOURTEEN DAYS. PERMANENT SOIL STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN SIX MONTHS, FOR WINTER STABILIZATION, ANY AREA DENUDED FOR MORE THAN FOURTEEN DAYS AFTER NOVEMBER ISTAND BEFORE MARCH IST SHALL BE MULCHED AND SEEDED APPROPRIATE TO THE SEASON AND SITE CONDITIONS. PREPARATION OF AREA FOR PERMANENT STABILIZATION SHALL BE PERFORMED IN ACCORDANCE WITH THE VIRGINIA STORMWATER MANAGEMENT HANDBOOK FOR CONSTRUCTION BMPS.

#### OFF-SITE AREAS

AT THE TIME OF PLAN PREPARATION, NO OFF-SITE FOR BORROW OR WASTE MATERIAL WERE IDENTIFIED OR CONSIDERED NECESSARY.IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE SURE THESE SITES (IF NEEDED) CONFORM TO ALL PERTINENT CURRENT VIRGINIA CODES AND STANDARDS.AND THE PROPER PERMITS HAVE BEEN OBT AINED.

#### CRITICAL AREAS

NO AREAS WITHIN THE PROJECT LIMITS IS CATEGORIZED AS CRITICAL.

#### STORMWATER RUNOFF CONSIDERATIONS

THE PROJECT RUNOFF FLOWS TO TWO OUTFALL LOCATIONS WHICH HAVE BEEN ANALYZED FOR ADEQUACY REGARDING CHANNEL AND FLOOD PROTECTION.THERE ARE NO STORMWATER FACILITIES LOCATED IN THE PROJECT AREA, THE RUNOFF FROM THE PROJECT IS CONVEYED TO THE OUTFALL LOCATIONS VIA PROPOSED CURB & GUTTER AND DOUBLE BARREL 36" CULVERT, THE STREAM DOWNSTREAM OF THE CULVERT WILL BE RELOCATED TO ALIGN WITH THE PROPOSED DESIGN. THE OUTFALL CALCULATIONS SHOWING ADEQUACY OF OUTFALLS ARE PROVIDED IN THE DRAINAGE AND STORMWATER REPORT.

#### CALCULATIONS

SEE DRAINAGE AND STORMWATER REPORT FOR CALCULATIONS.

#### MAINTENANCE PROGRAM

THE CONTRACTOR SHALL MAKE A VISUAL INSPECTION OF ALL CONSTRUCTION BMPs AND NEWLY STABILIZED AREAS (I.E. SEEDED AND MULCHED,OR SODDED AREAS)ON A DAILY BASIS AND AFTER EACH RAINFALL EVENT TO ENSURE THAT ALL CONSTRUCTION BMPs ARE FUNCTIONING PROPERLY. THE FOLLOWING ITEMS WILL BE CHECKED REGULARLY.IN PARTICULAR: THE SILT FENCE BARRIER WILL BE CHECKED FOR UNDERMINING, COLLAPSE, OR DETERIORATION OF THE FABRIC. THE SEEDED AREAS WILL BE CHECKED TO ENSURE THAT A GOOD STAND OF GRASS IS MAINTAINED. ANY DENUDED AREAS SHALL BE RE-SEEDED, MULCHED, AND FERTILIZED AS REQUIRED. ANY DAMAGED BMP SHALL BE REPAIRED BY THE END OF THE WORK DAY.INCLUDING RE-SEEDING AND MULCHING IF NECESSARY. THE CONTRACTOR MAY INSTALL ADDITIONAL MEASURES AS DEEMED NECESSARY AND AT THE APPROVAL OF THE PROJECT'S ESC INSPECTOR.

#### EROSION & SEDIMENT CONTROL MEASURES

ALL VEGETATIVE AND OTHER CONSTRUCTION BMPs SHALL BE CONSTRUCTED AND MAINTAINED ACCORDING TO THE MINIMUM STANDARDS AND SPECIFICATIONS DETAILED IN THE VIRGINIA STORMWATER HANDBOOK v IJ AND SHALL BE ADHERED TO UNLESS OTHERWISE WAIVED OR APPROVED BY A VARIANCE.

#### CONSTRUCTION SEQUENCE

THE CONTRACTOR MUST FIRST ESTABLISH ALL PERIMETER CONTROLS PRIOR TO CLEARING AND GRUBBING. THE CONTRACTOR WILL INSTALL CONSTRUCTION BMPs AS SHOWN IN PHASE I PLANS ON SHEETS 3B(I), 4B(I), AND 5B(I) AND TRANSITION TO BMP INSTALLATIONS AS CONSTRUCTION PROGRESSES IN PHASE 2 PLANS ON SHEETS 3B(2),4B(2),AND 5B(2).THE CONTRACTOR SHALL CONTINUE TO MAINTAIN ALL PHASE I CONTROLS AS DEEMED NECESSARY BY PROJECT INSPECTOR AND ENGINEER.

THE PROJECT'S ESC INSPECTOR SHALL HAVE AUTHORITY TO ADD OR DELETE CONSTRUCTION BMPs AS NEEDED IN THE FIELD AS SITE CONDITIONS WARRANT PER VDOT AND PWC STANDARDS.IN ADDITION, SEDIMENT CONTROLS MAY NOT BE REMOVED WITHOUT PRIOR APPROVAL OF THE PROJECT'S ESC INSPECTOR, AND COORDINATION WITH THE ENGINEER AS NECESSARY.

I.HOLD PRECONSTRUCTION MEETING WITH APPLICABLE PRINCE WILLIAM COUNTY STAFF, CONTRACTOR, PROJECT INSPECTION STAFF, AND ENGINEER OF RECORD.

2.PLACE CONSTRUCTION ENTRANCES AS SHOWN ON THE PLANS BUT DETERMINED BY THE CONTRACTOR PRIOR TO BEGINNING ANY PERMANENT CONSTRUCTION OR EARTH MOVING ACTIVITIES. 3.INSTALL SILT FENCE, OTHER PERIMETER CONTROLS, INLET PROTECTION, AND ROCK CHECK DAMS SHOWN IN PHASE I PLANS PRIOR TO ANY CONSTRUCTION ACTIVITIES.

4.SITE INSPECTOR APPROVAL MUST BE OBTAINED AFTER ALL E&S CONTROLS HAVE BEEN INSTALLED PRIOR TO FURTHER LAND DISTURBANCE OR CONSTRUCTION. 5.PERFORM CLEARING AND GRUBBING.

#### PHASE 2:

I.PERIMETER CONTROLS AND INLET PROTECTION PLACED IN PHASE I SHALL REMAIN IN PLACE UNLESS OTHERWISE NOTED.INSTALL A DIVERSION DIKE IN PLACE OF THE ROCK CHECK DAMS AS SHOWN IN PHASE 2 PLANS PRIOR TO SIDEWALK CONSTRUCTION. 2.CONSTRUCT PROPOSED DRAINAGE STRUCTURES FIRST AS SHOWN IN

PLANS TO ENSURE POSITIVE DRAINAGE AND ADEQUATE CONVEYANCE OF STORMWATER WITHIN THE PROJECT SITE. 3.INSTALL ANY ADDITIONAL SILT FENCE AND INLET PROTECTION AS

SHOWN IN PHASE 2 PLANS OR AS DEEMED NECESSARY BY THE SITE INSPECTOR. 4. AFTER ACHIEVING ADEQUATE SITE STABILIZATION, ALL CONSTRUCTION

BMPs SHALL BE REMOVED AND THE SURROUNDING AREAS CLEANED AND ESTABLISHED TO THE SATISFACTION OF THE INSPECTOR.ANY AREAS IMPACTED BY EROSION CONTROL MEASURES SHALL BE RESTORED TO THEIR ORIGINAL STATE.

#### CONSTRUCTION BMPS

#### Silt Fence C-PCM-04

SILT FENCE SHALL BE USED TO INTERCEPT AND DETAIN SMALL AMOUNTS OF SEDIMENT FROM DISTURBED AREAS OF LIMITED EXTENT IN ORDER TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION SITE AND TO DECREASE THE VELOCITY OF SHEET FLOW. SILT FENCE SHALL BE INSPECTED AFTER EACH RAINFALL EVENT AND AT LEAST DAILY DURING PROLONGED RAINFALL.ANY REPAIRS REQUIRED SHALL BE MADE IMMEDIATELY. SEDIMENT DEPOSIT SHOULD BE REMOVED AFTER EACH STORM EVENT. SEDIMENT DEPOSITS MUST BE REMOVED WHEN DEPOSITS REACH APPROX.ONE-HALF THE HEIGHT OF THE BARRIER.

#### Inlet Protection C-SCM-04

INLET PROTECTION SHALL BE USED TO PREVENT SITE GENERATED SEDIMENT FROM ENTERING STORM DRAIN SYSTEMS AND CULVERTS PRIOR TO PERMANENT STABILIZATION OF THE DISTURBED AREA,THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN EVENT AND REPAIRS MADE AS NEEDED. SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO IT'S ORIGINAL DIMENSIONS. WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-HALF THE DESIGN DEPTH OF THE CONTROL. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA IN SUCH A MANNER THAT IT WILL NOT ERODE. (PER VDOT ST'D.EC-6 Typ.A,B & C)

#### CONSTRUCTION BMPS - Cont'd

#### Outlet Protection C-ECM-15

SILT FENCE SHALL BE USED TO INTERCEPT AND DETAIN SMALL AMOUNTS OF SEDIMENT FROM DISTURBED AREAS OF LIMITED EXTENT IN ORDER TO PREVENT SEDIMENT FROMLEAVING THE CONSTRUCTION SITE AND TO DECREASE THE VELOCITY OF SHEET FLOW.SILT FENCE SHALL BE INSPECTED AFTER EACH RAINFALL EVENT AND AT LEAST DAILY DURING PROLONGED RAINFALL.ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.SEDIMENT DEPOSIT SHOULD BE REMOVED AFTER EACH STORM EVENT. SEDIMENT DEPOSITS MUST BE REMOVED WHE DEPOSITS REACH APPROX. ONE-HALF THE HEIGHT OF THE BARRIER.

#### Rip Rap C-ECM-13

RIP RAP SHALL BE USED TO PROTECT THE SOIL FROM EROSIVE FORCES OF CONCENTRATED RUNOFF.TO SLOW THE VELOCITY OF CONCENTRATED RUNOFF WHILE ENHANCING THE POTENTIAL FOR INFILTRATION, AND TO STABILIZE SLOPES WITH SEEPAGE PROBLEMS AND/OR NON-COHESIVE SOILS.RIP RAP SHOULD REQUIRE VERY LITTLE MAINTENANCE IF INSTALLED PROPERLY.

#### Rock Check Dams C-SCM-07

ROCK CHECK DAMS SHALL BE USED TO REDUCE THE VELOCITY OF CONCENTRATED FLOWS, THEREBY REDUCING EROSION OF THE SWALE OR DITCH.THIS PRACTICE ALSO TRAPS SEDIMENT GENERATED FROM THE SITE AND OTHER ADJACENT AREAS OR THE DITCH ITSELF, MAINLY BY PONDING OF STORMWATER RUNOFF. CHECK DAMS SHOULD BE CHECKED FOR SEDIMENT ACCUMULATION AFTER EACH RUNOFF PRODUCING STORM EVENT.SEDIMENT SHOULD BE REMOVED WHEN IT REACHES ONE HALF OF THE ORIGINAL HEIGHT OF THE CONTROL. (PER VDOT ST'D.EC-4)

#### Temporary Seeding C-SSM-09

TEMPORARY SEEDING SHALL BE USED TO REDUCE EROSION AND SEDIMENT BY STABILIZING DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE FOR A PERIOD OF MORE THAN FOURTEEN (14) DAYS.

#### Permanent Seeding C-SSM-IO

ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE STABILIZED WITH PERMANENT SEEDING IMMEDIATELY FOLLOWING FINISHED GRADING. SEEDING SHALL BE DONE ACCORDING TO THE VIRGINIA STORMWATER MANAGEMENT HANDBOOK (VSMH v.I.I).

#### Dust Control C-SCM-OI

DUST CONTROL SHALL BE USED TO PREVENT SURFACE AND AIR MOVEMENT OF DUSTFROM EXPOSED SOIL SURFACES AND REDUCE THE PRESENCE OF AIRBORNE SUBSTANCES WHICH MAY PRESENT HEALTH HAZARDS.TRAFFIC SAFETY PROBLEMS OR HARM TO ANIMAL LIFE.

#### GENERAL ESC NOTES

- I. UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDINGTO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA STORMWATERMANAGEMENT HANDBOOK AND VIRGINIA EROSION AND STORMWATER MANAGEMENT PROGRAM REGULATION 9VAC25-875.
- 2. THE PLAN APPROVING AUTHORITY MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTIONCONFERENCE.ONE WEEK PRIOR TO THE COMMENCEMENT OF THE LAND DISTURBING ACTIVITY. AND ONE WEEK PRIOR TO FINAL INSPECTION.
- 3. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING,
- 4. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON SITE AT ALL TIMES.

#### GENERAL ESC NOTES - Cont'd

DEVICES SHALL BE MADE IMMEDIATELY.

5. PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO, OFFSITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT ASUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.

NECESSARY BY THE DEPARTMENT

- 6. THE CONTRACTOR IS RESPONSIBLE FOR THEINSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION ANDSEDIMENTATION AS DETERMINED BY THE PLAN APPROVING AUTHORITY.
- 7. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF PRODUCING RAIN EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN EFFECTIVENESS OF THE EROSION CONTROL
- 8. THE PROJECT'S ESC INSPECTOR HAS THE AUTHORITY TO ADD OR DELETE EROSION AND SEDIMENT CONTROL MEASURES AS SITE CONDITIONS WARRANT.

THIS EROSION & SEDIMENT CONTROL PLAN IS CONSISTENT WITH THE FOLLOWING MINIMUM STANDARDS:

MS-I STABILIZATION: ALL DENUDED AREAS REQUIRING TEMPORARY OR PERMANENT STABILIZATION SHALL BE STABILIZED.

MS-2 STOCKPILES, WASTE, AND BORROW AREAS: ALL STOCKPILES SHALL BE STABILIZED WITH SEEDING AND/OR CONTROLLED WITH SEDIMENT TRAPPING MEASURES.

MS-3 PERMANENT VEGETATION: PERMANENT VEGETATION SHALL PROVIDE ADEQUATE STABILIZATION

MS-4 FIRST-STEP MEASURES: SEDIMENT TRAPPING FACILITIES SHALL BE CONSTRUCTED AS A FIRST STEP IN LAND DISTURBING ACTIVITIES.

MS-5 EARTHEN STRUCTURE STABILIZATION: STABILIZATION MEASURES TO BE APPLIED TO EARTHEN STRUCTURES IMMEDIATELY AFTER INSTALLATION.

MS-6 TRAPS AND BASINS: NOT APPLICABLE TO THIS PROJECT

MS-7 CUT AND FILL SLOPES: FINISHED CUT AND FILL SLOPES SHALL BE ADEQUATELY STABILIZED.

MS-8 CONCENTRATED RUNOFF: CONCENTRATED RUNOFF ON CUT AND FILL SLOPES SHALL BE CONCENTRATED WITHIN A TEMPORARY OR PERMANENT CHANNEL, FLUME, OR SLOPE DRAIN STRUCTURE

MS-9 WATER SEEPS: ADEQUATE DRAINAGE OR PROTECTION SHALL BE PROVIDED IF WATER SEEPS FROM A SLOPE FACE.

MS-10 INLET PROTECTION: ALL OPERATIONAL STORM SEWER INLETS SHALL HAVE ADEQUATE INLET PROTECTION.

MS-II OUTLET PROTECTION: OUTLET PROTECTION SHALL BE INSTALLED BEFORE NEW CONSTRUCTED STORMWATER CONVEYANCE CHANNELS OR PIPE ARE MADE OPERATIONAL.

MS-12 WATERCOURSE CONSTRUCTION: NOT APPLICABLE TO THIS PROJECT

MS-13 TEMPORARY VEHICULAR STREAM CROSSING: NOT APPLICABLE

MS-15 STREAM BED AND BANK STABILIZATION: NOT APPLICABLE

MS-14 OTHER WATERCOURSE REGULATIONS: NOT APPLICABLE

SHALL BE STABILIZED PROPERLY

MS-16 UTILITY CONSTRUCTION: WHERE APPLICABLE, UTILITY TRENCHES

MS-17 VEHICULAR TRACKING AND CONSTRUCTION ENTRANCES: SOIL AND MUD MUST BE KEPT OFF PUBLIC ROADWAYS AND TRAIL AT INTERSECTIONS WITH SITE ACCESS ROADS.

MS-18 TEMPORARY CONTROL REMOVAL: TEMPORARY CONTROL STRUCTURES SHALL BE REMOVED WHEN NO LONGER NEEDED.

MS-19 ADEQUATE STORMWATER CONVEYANCE TO ADEQUATE SWM OUTFALL DOWNSTREAM CHANNELS FROM DEVELOPMENT SHALL BE ADEQUATELY PROTECTED FROM EROSION AND SEDIMENT DEPOSITION.

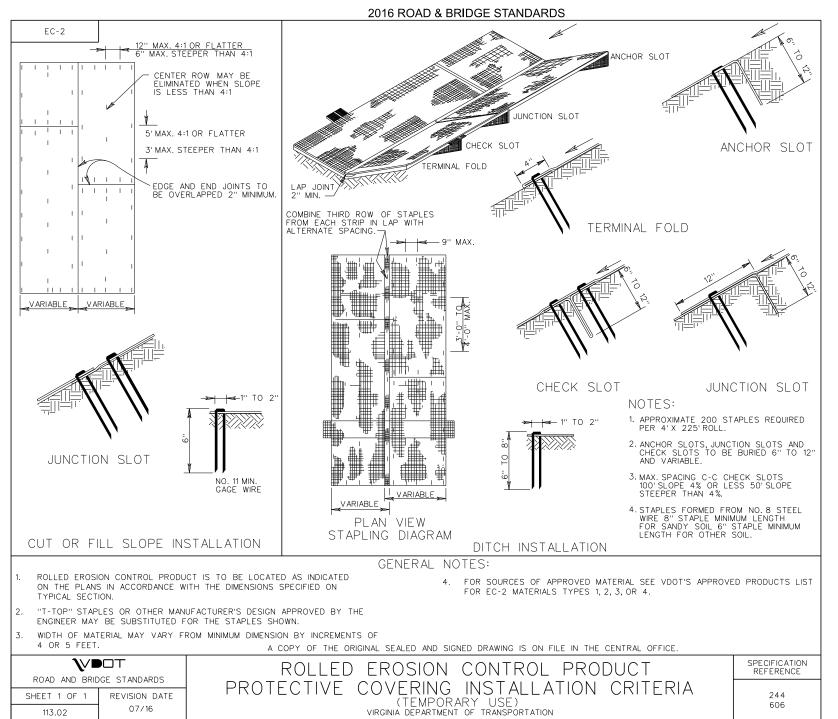
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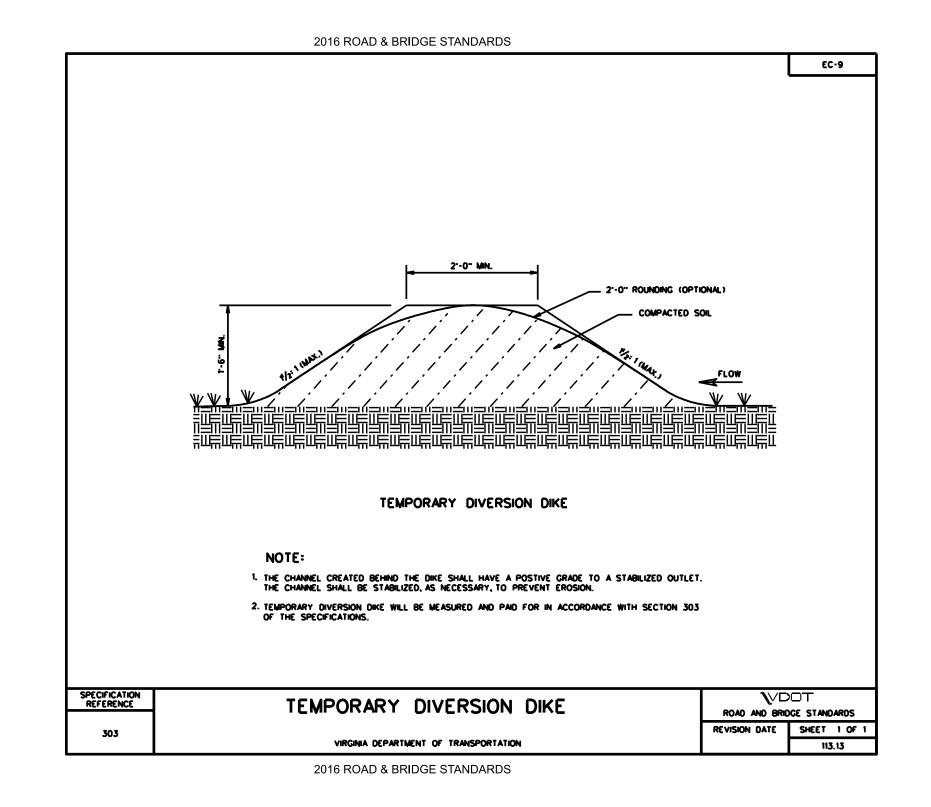
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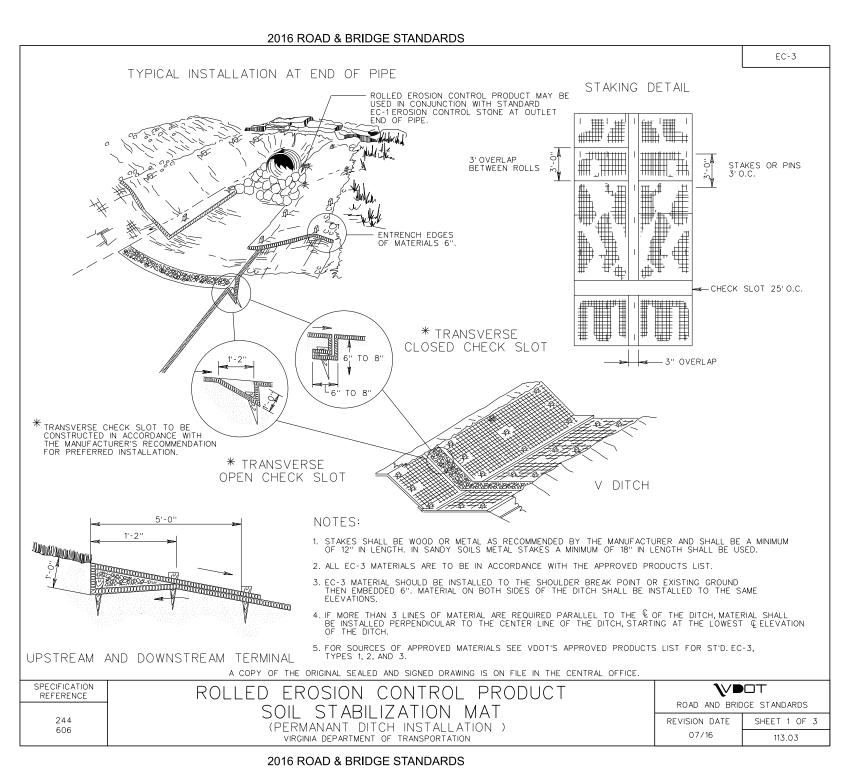
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	VA.	1131	EN24-076-380 R201, C501	2H(1)	

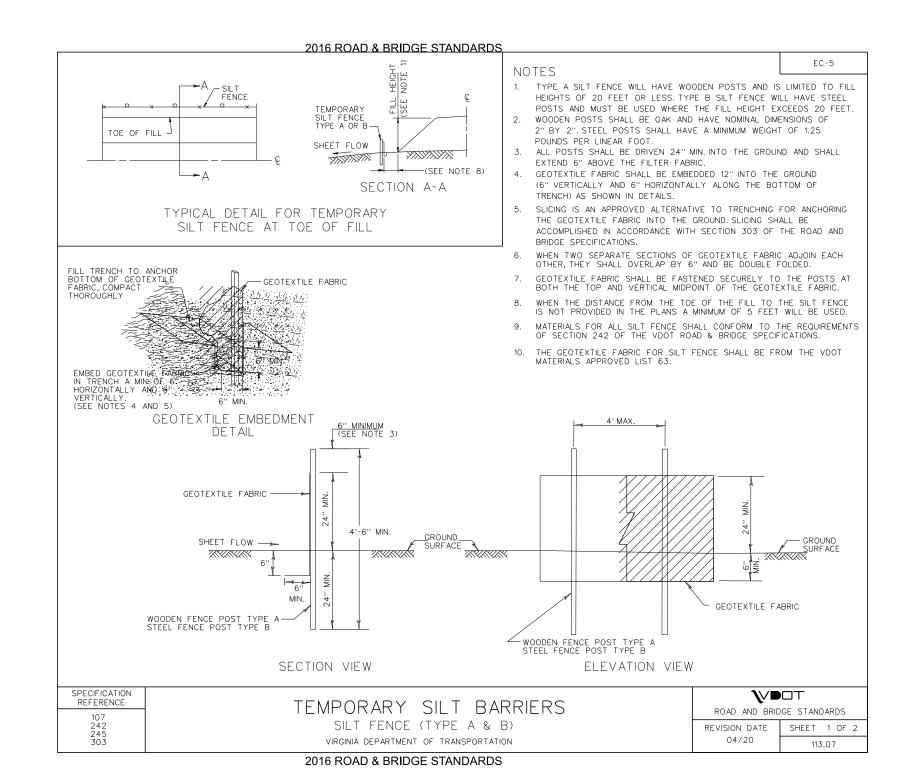
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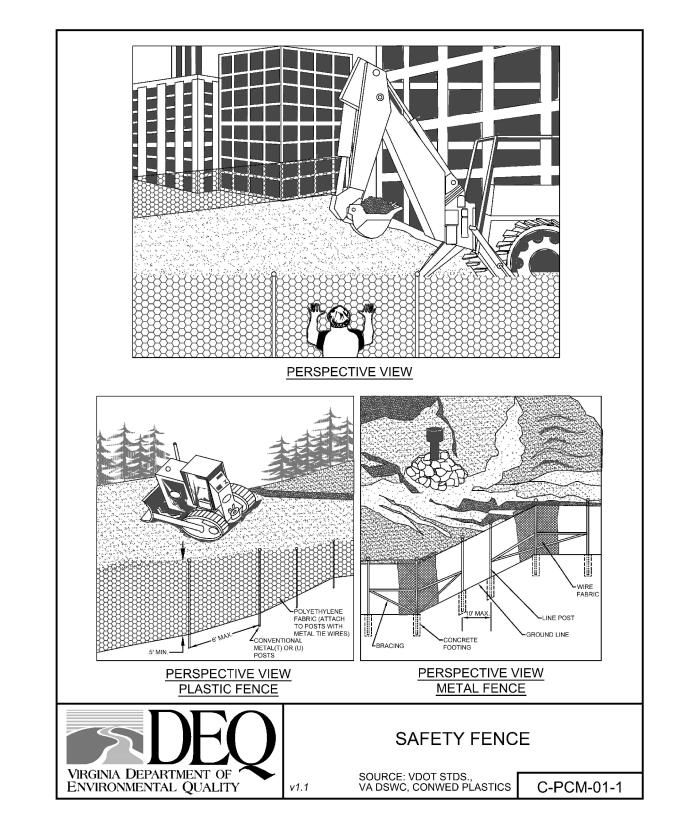


2016 ROAD & BRIDGE STANDARDS



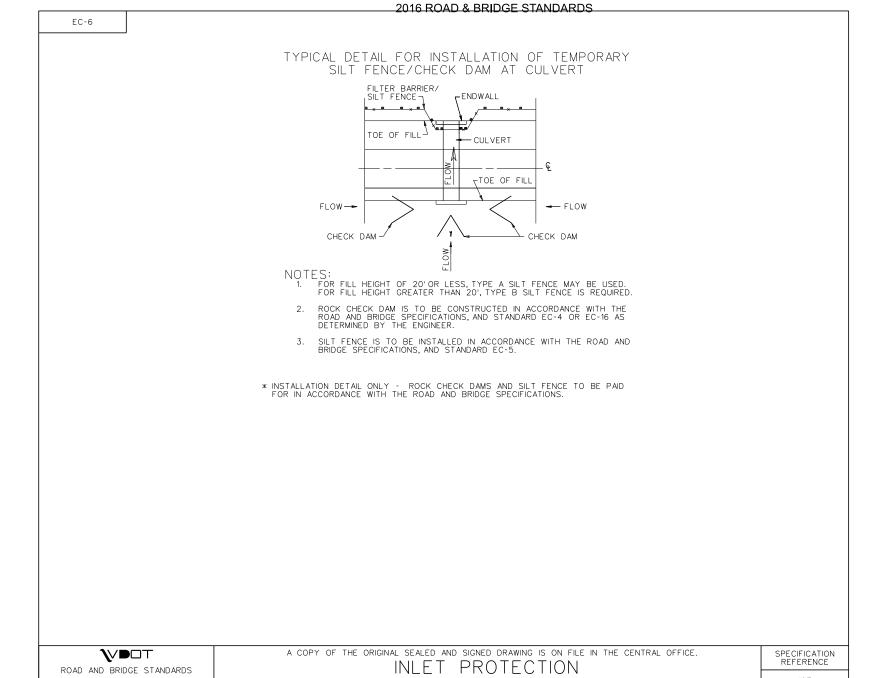






REVISED	STATE		STATE	SHEET NO.
	SIAIE	ROUTE	PROJECT	SHEET NO.
	VA.	1131	EN24-076-380 R201, C501	2H(2)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



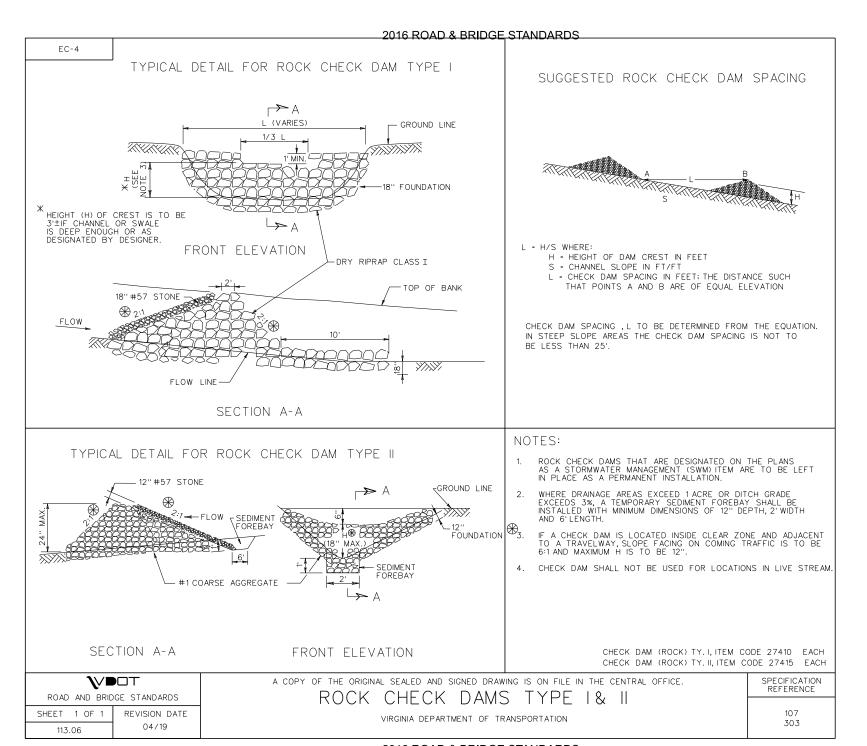
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VIRGINIA DEPARTMENT OF TRANSPORTATION 2016 ROAD & BRIDGE STANDARDS

VDOT

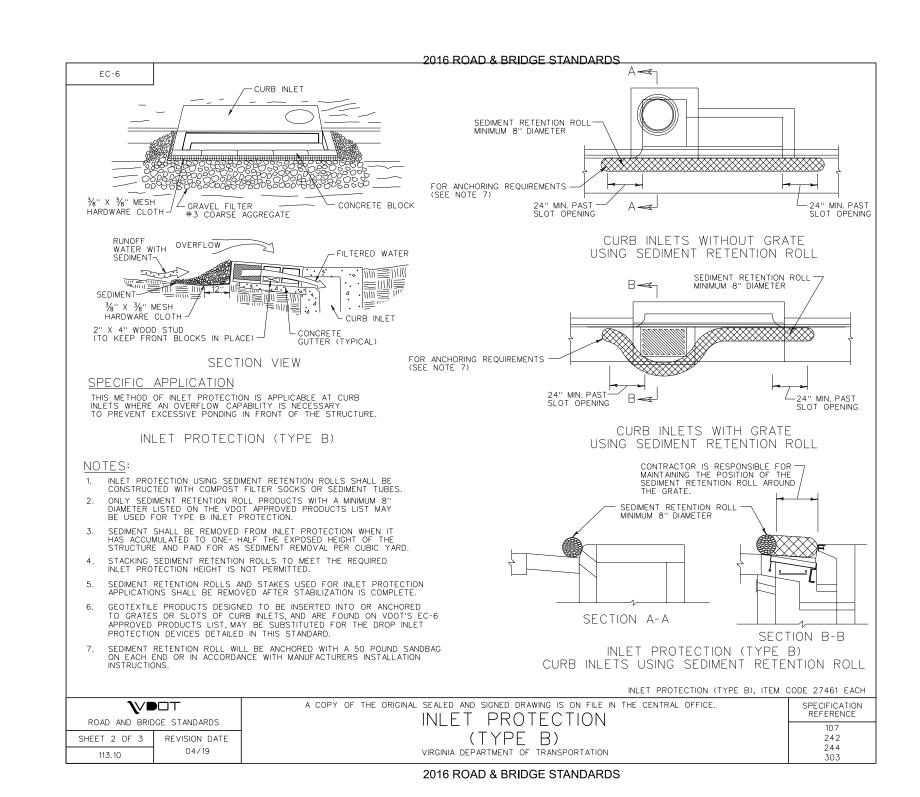
ROAD AND BRIDGE STANDARDS

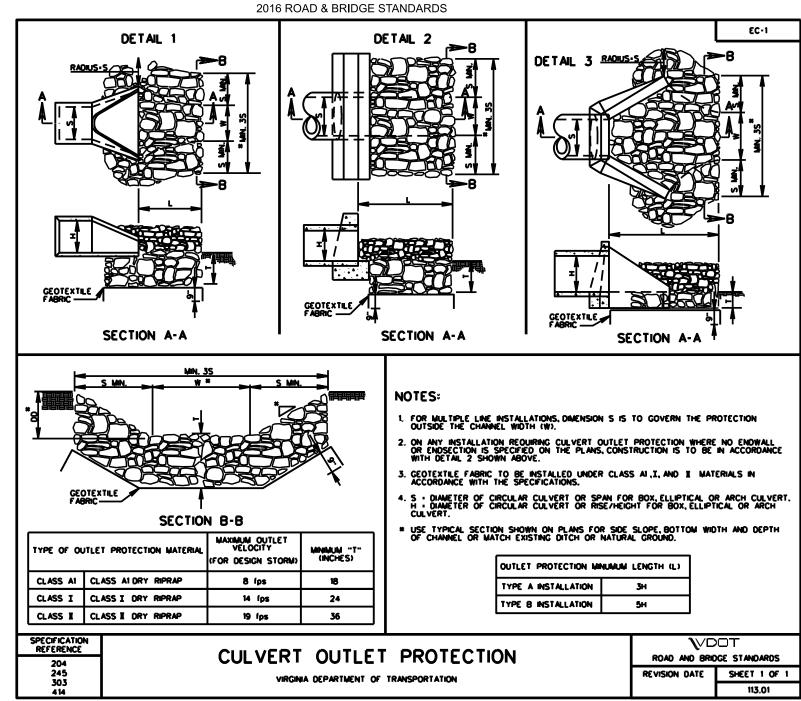
SHEET 3 OF 3 REVISION DATE 04/19

# EROSION & SEDIMENT CONTROL DETAILS SHEET (2)



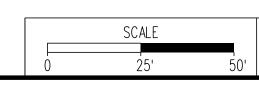
2016 ROAD & BRIDGE STANDARDS





2016 ROAD & BRIDGE STANDARDS

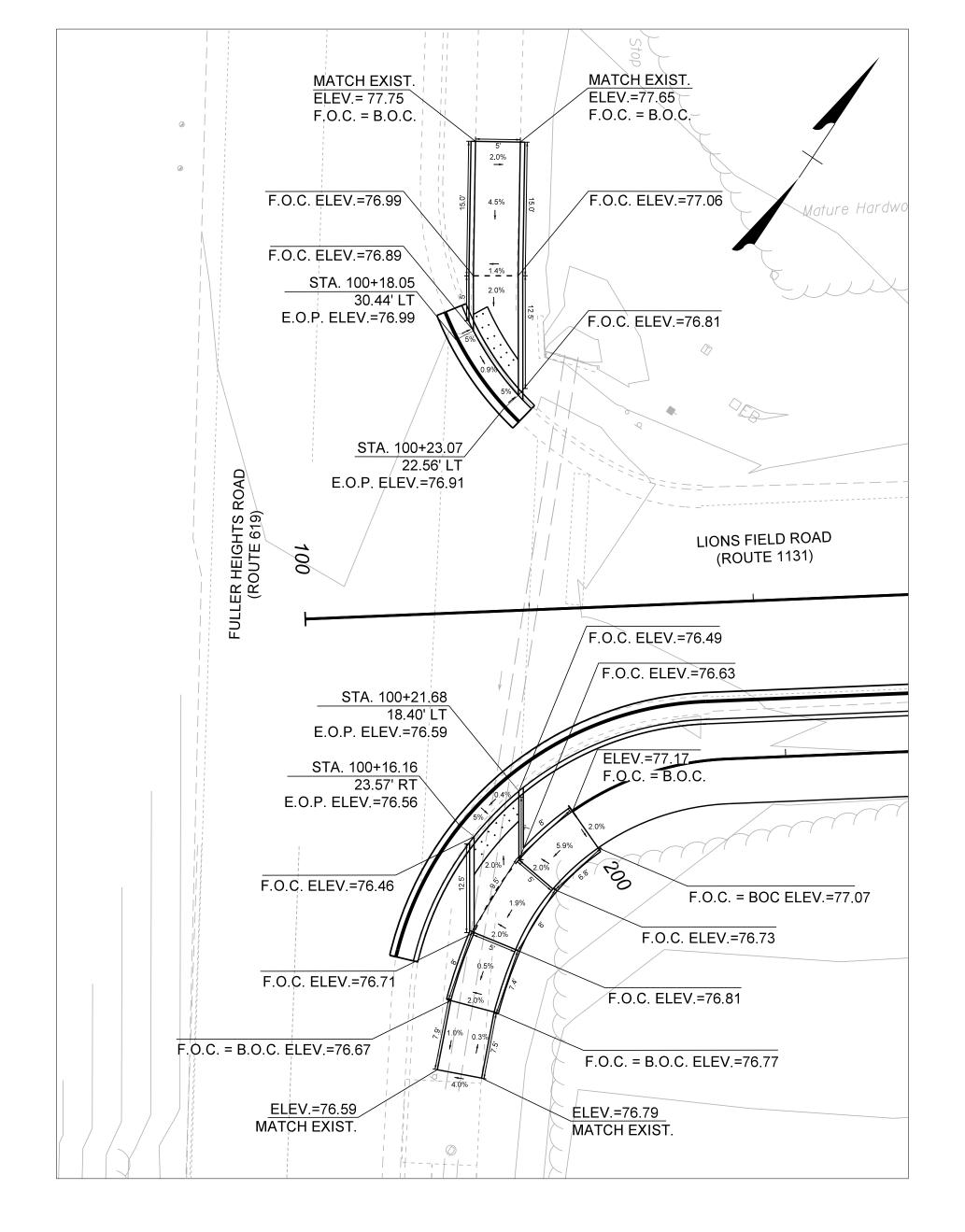
THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.



DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

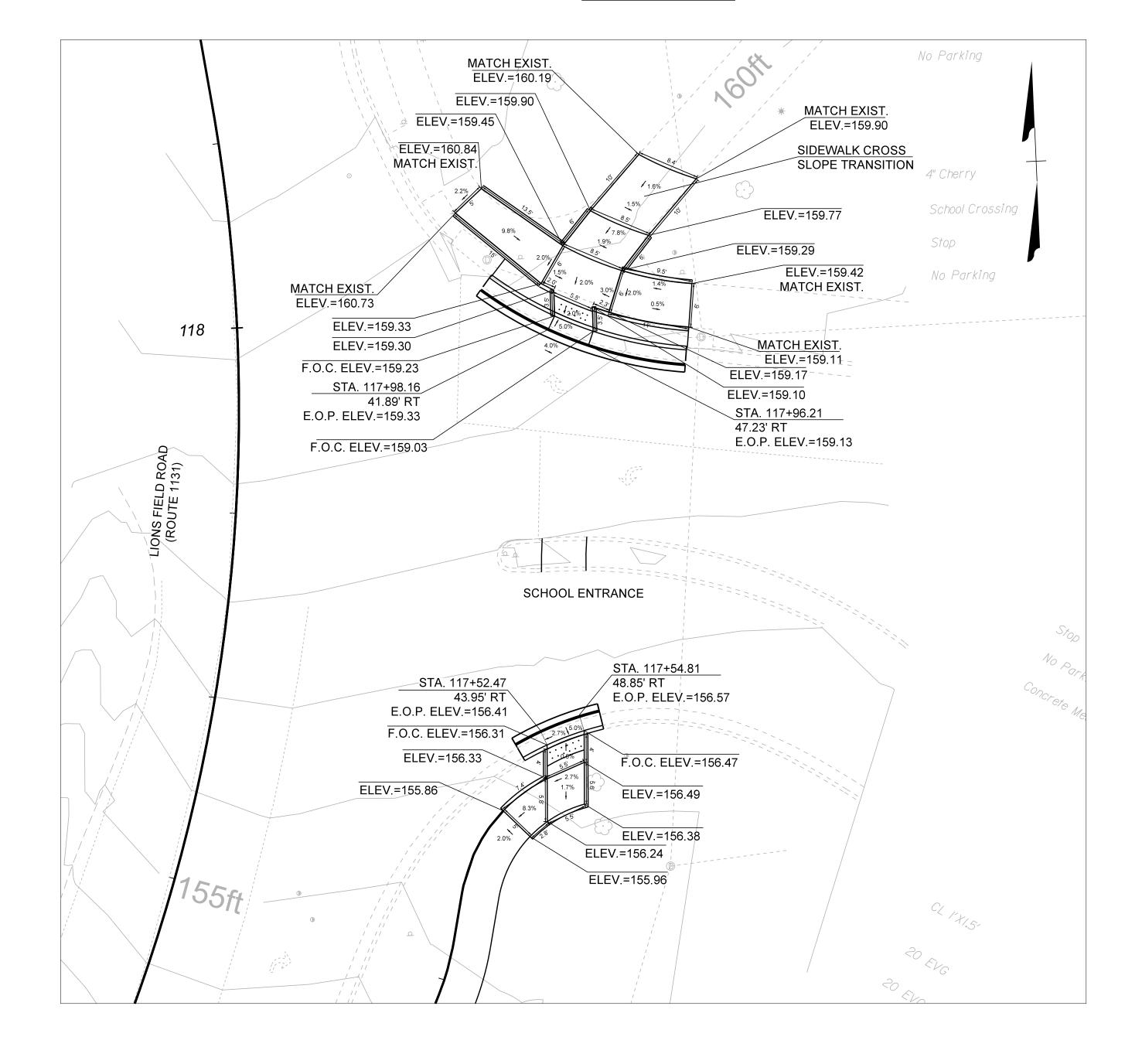
ATCS

HERNDON, VIRGINIA ROADWAY ENGINEER



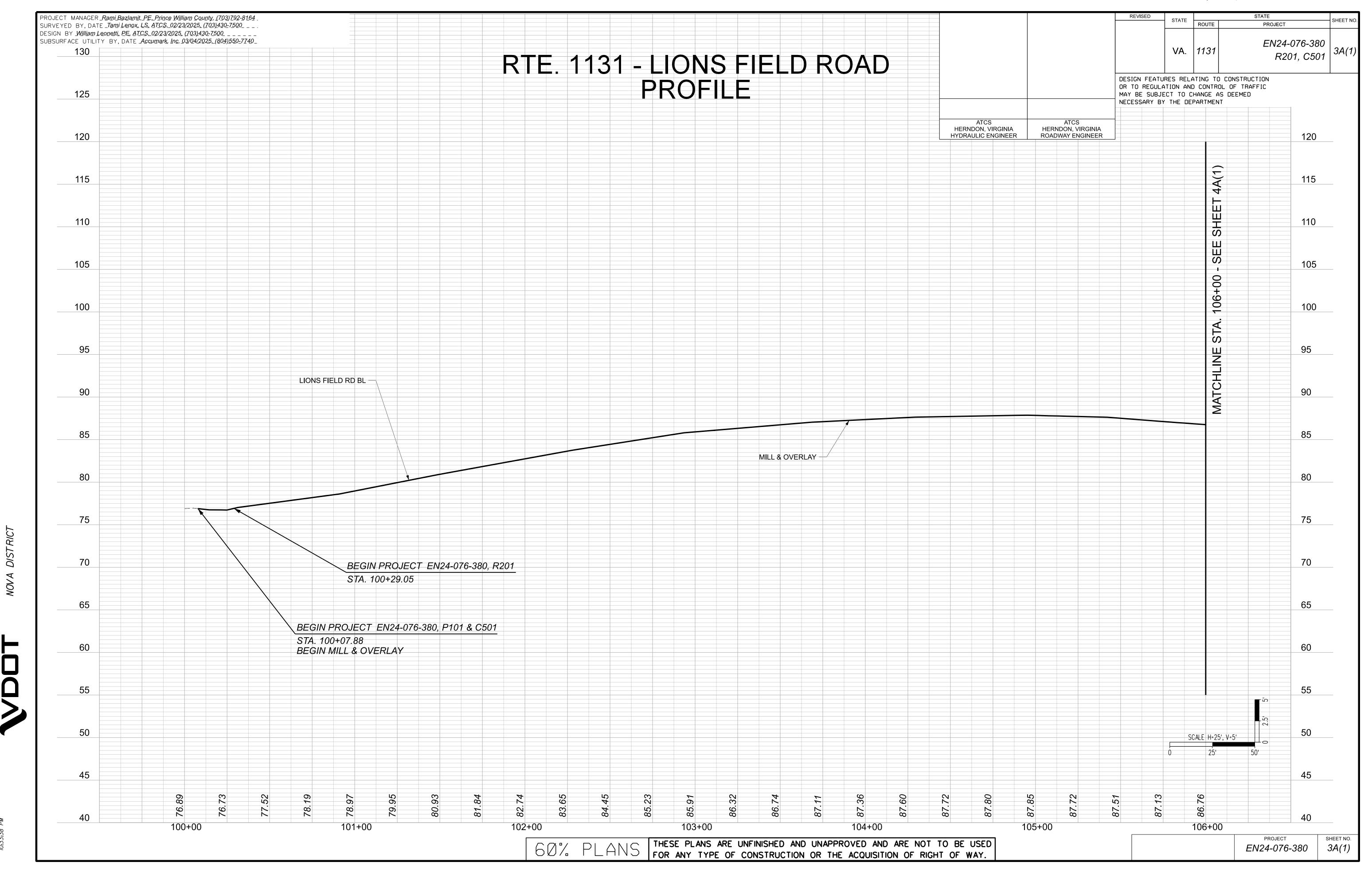
STA./OFFSET SHOWN FROM LIONS FIELD ROAD (RTE. 1131) CONST. B

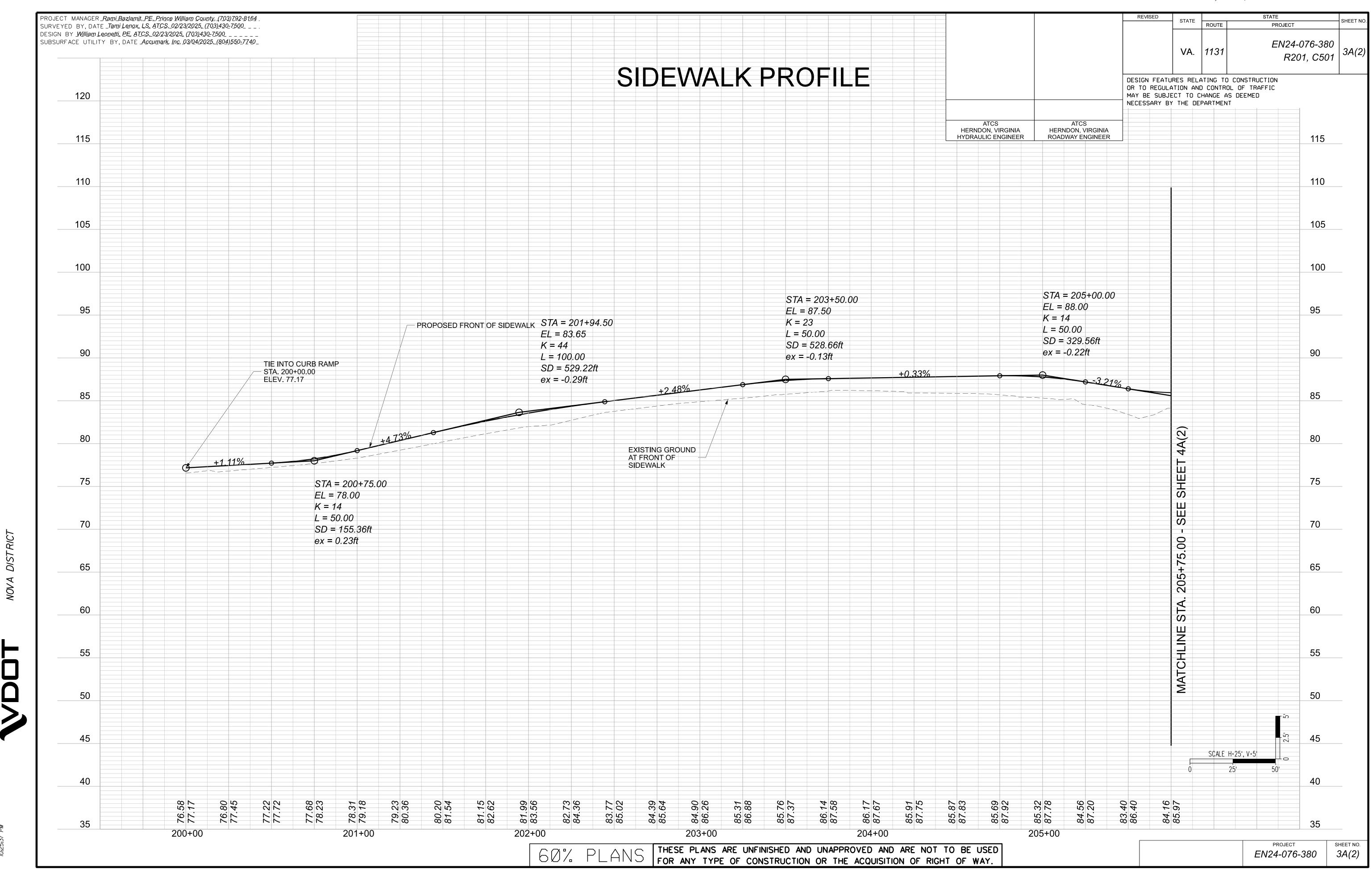
E.O.P. = EDGE OF PAVEMENT F.O.C. = FACE OF CURB (FLOW LINE) B.O.C. = BACK OF CURB



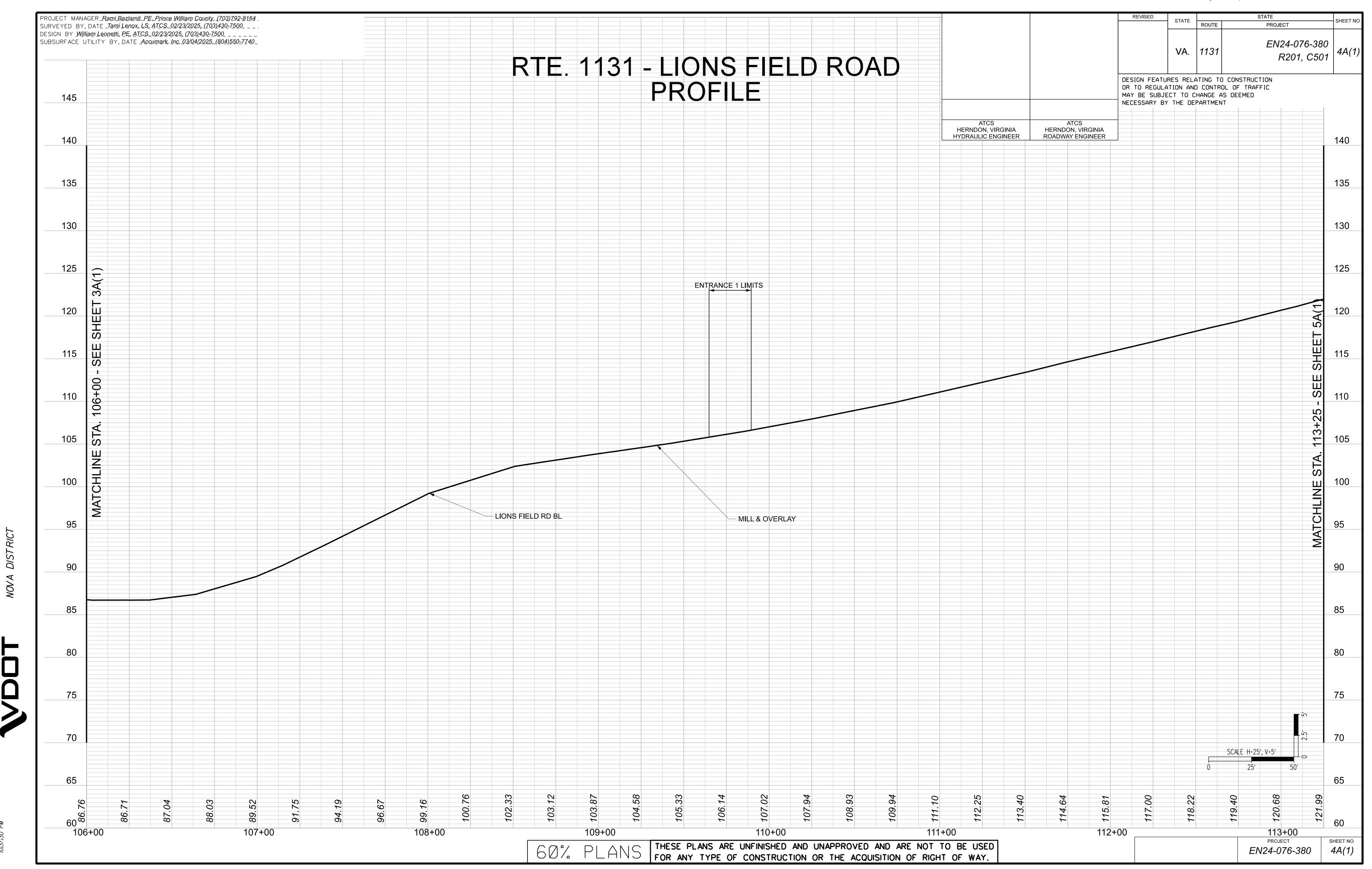
SHEET NO.

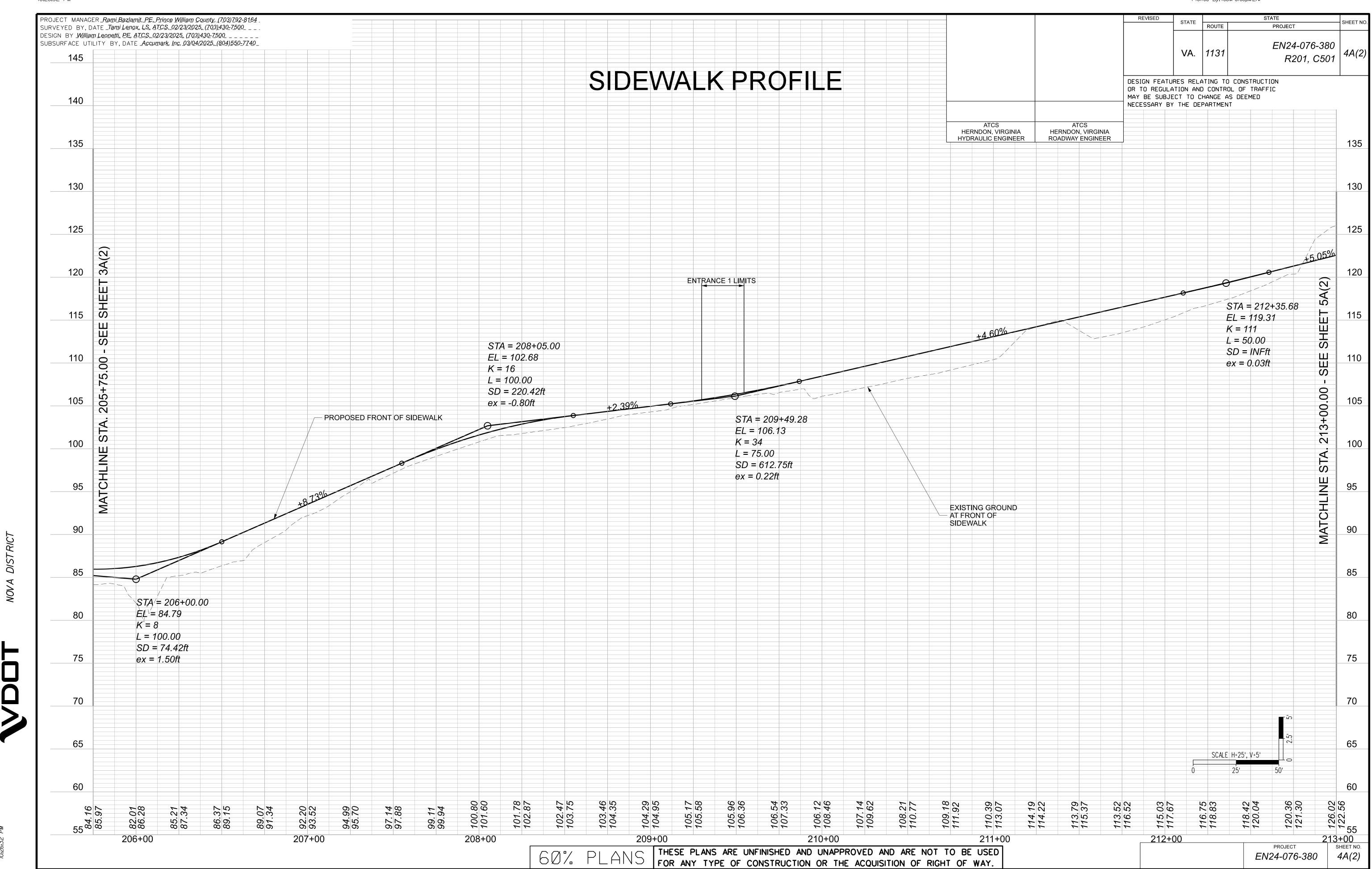
2J



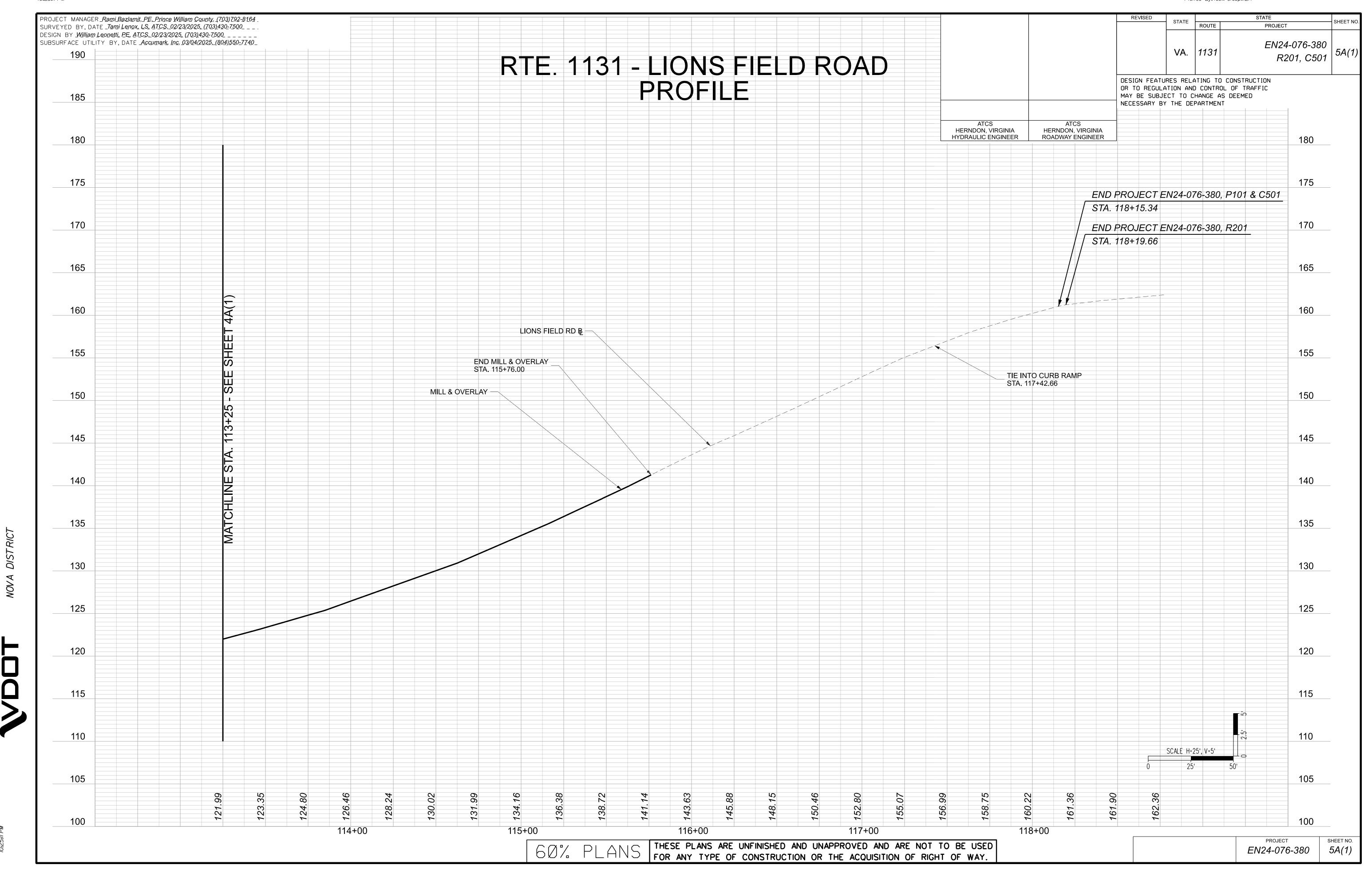


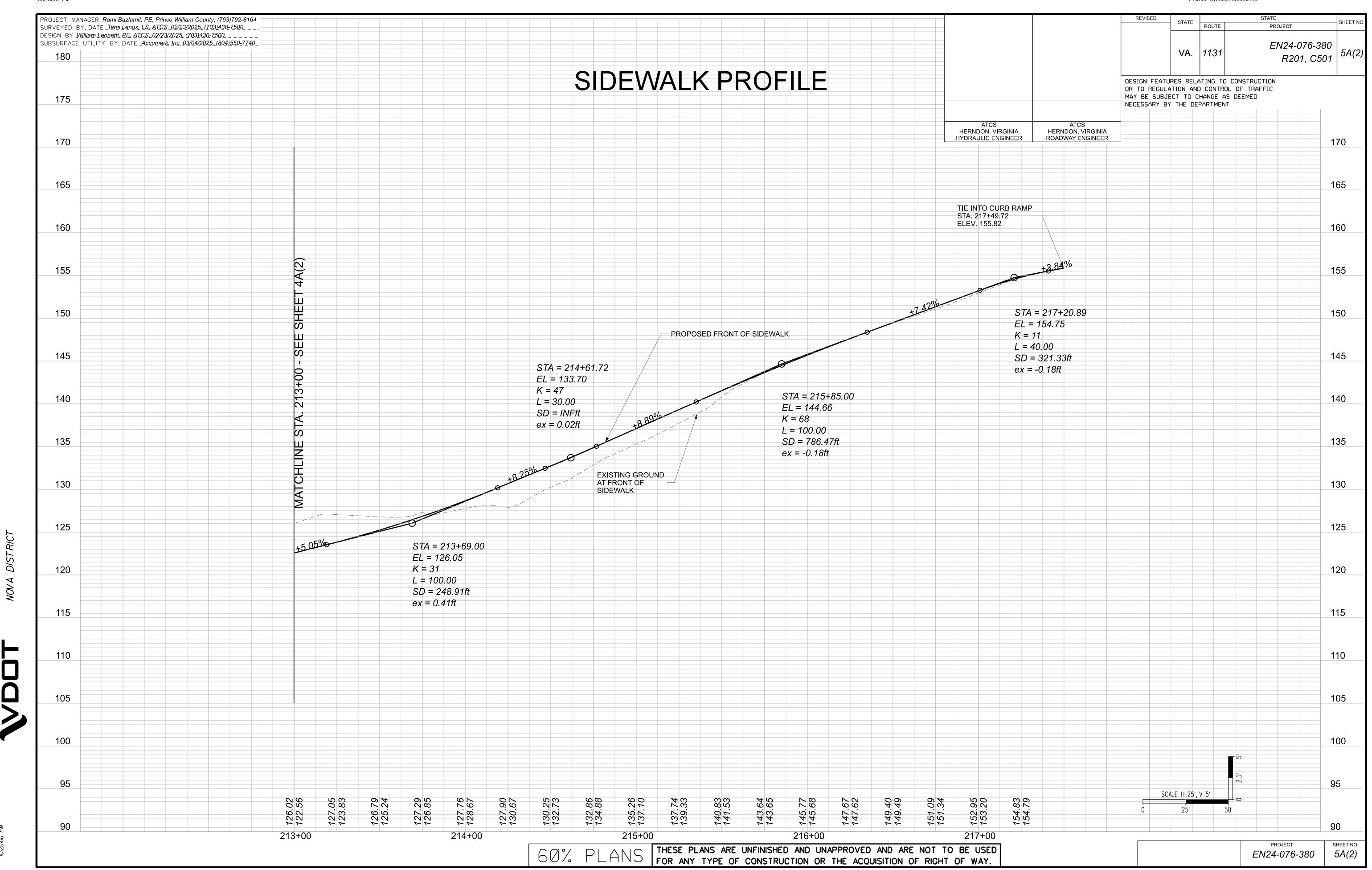
FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

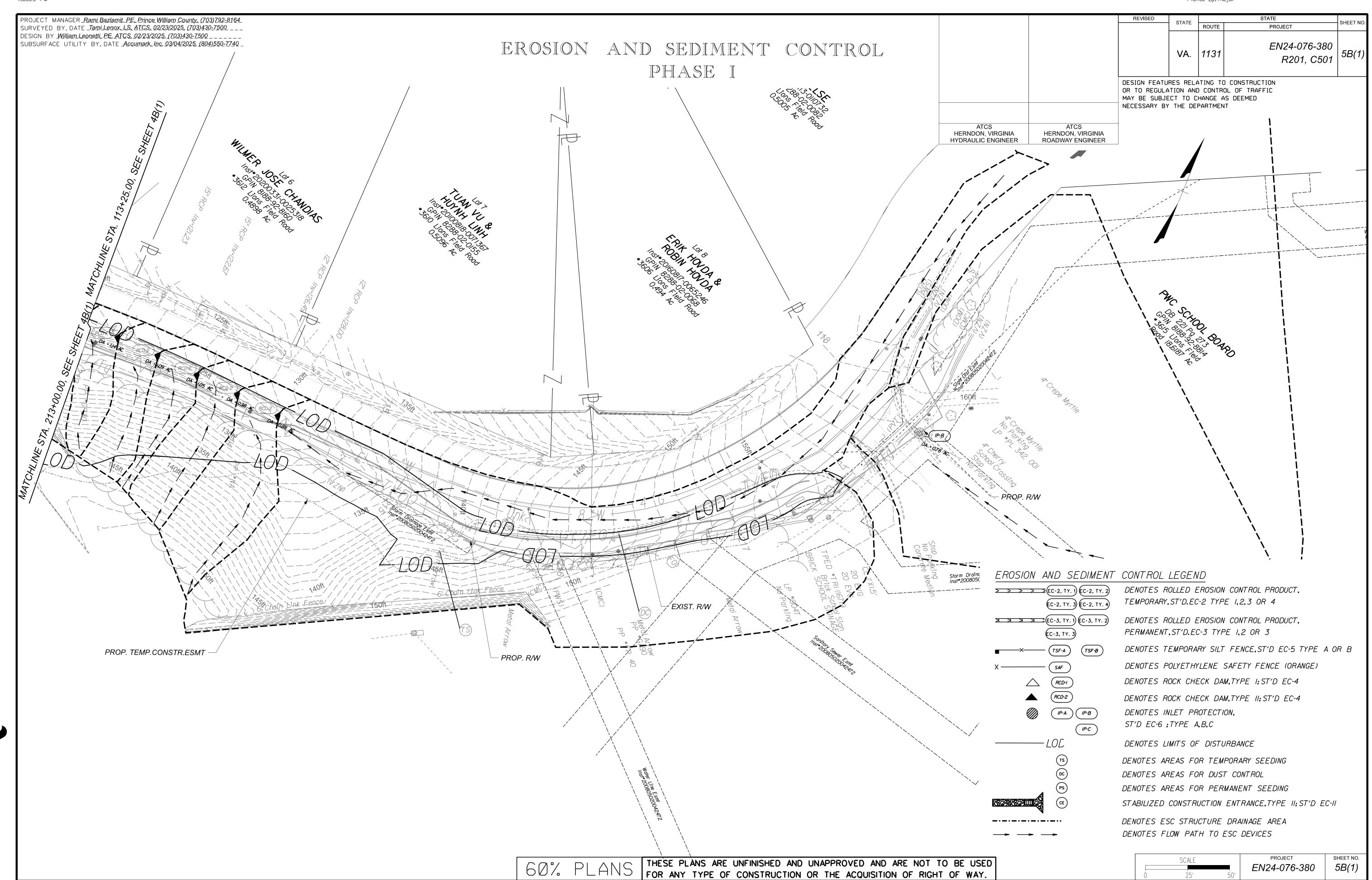


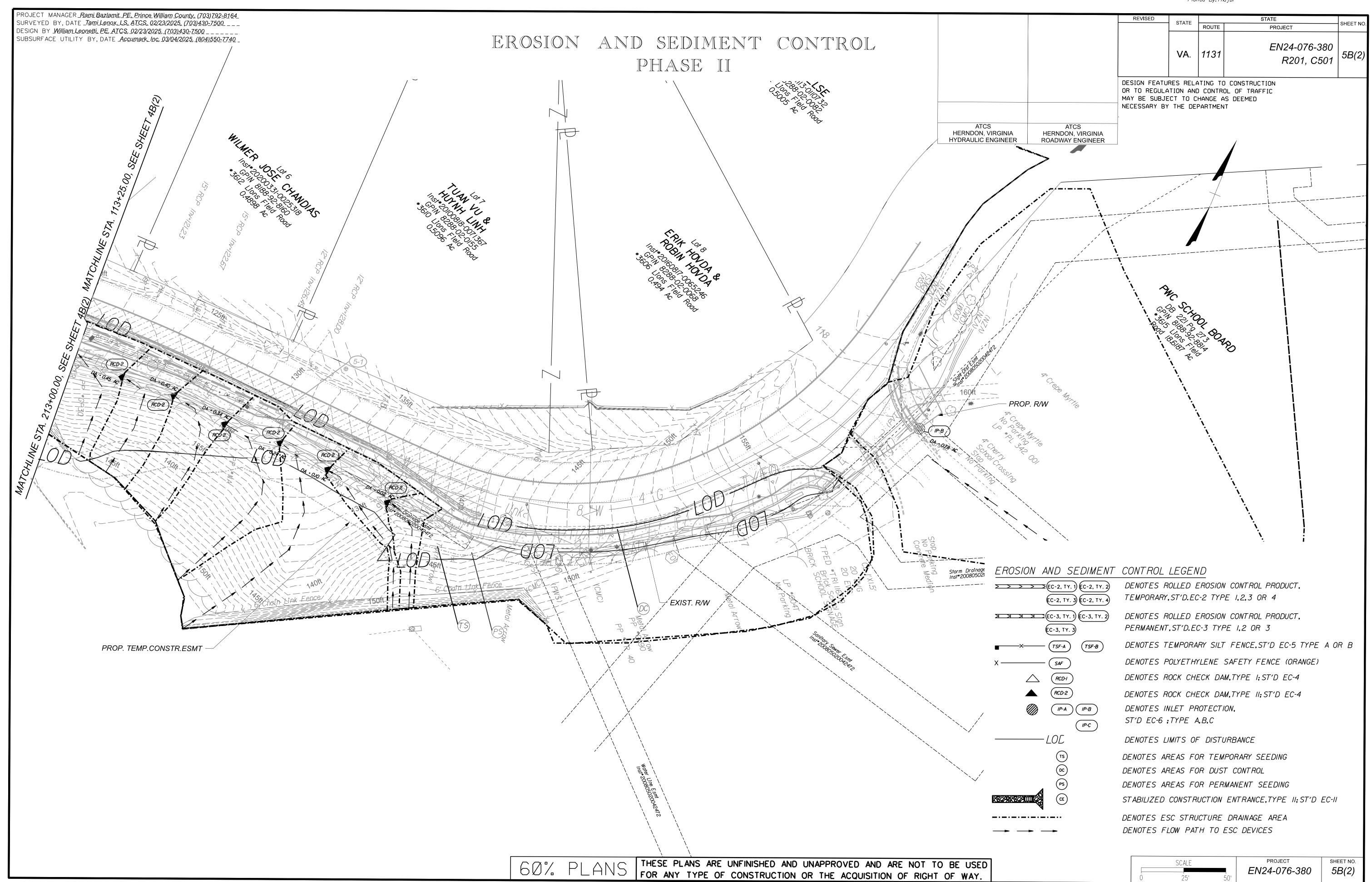


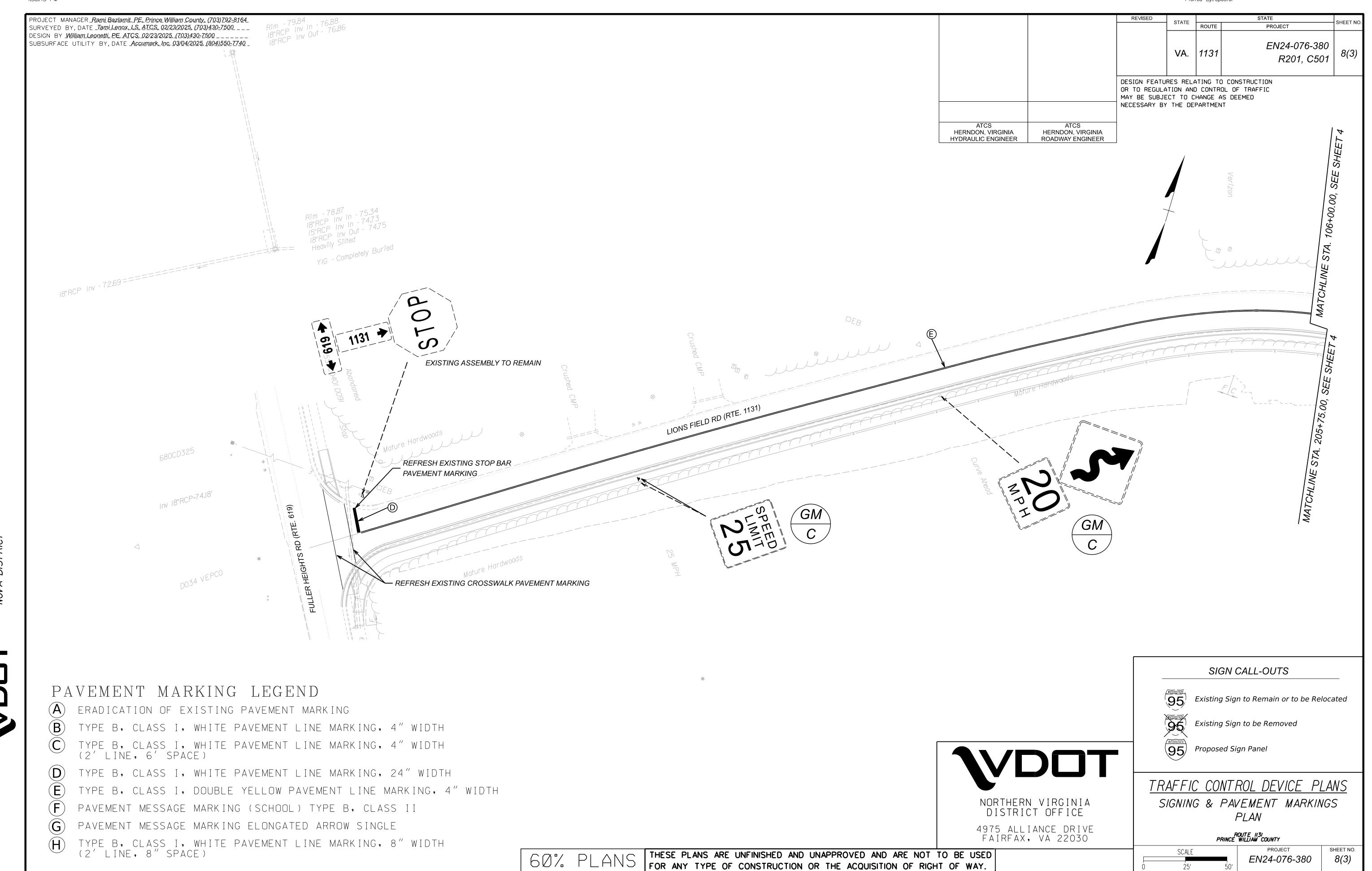
NOVA DISTRIC



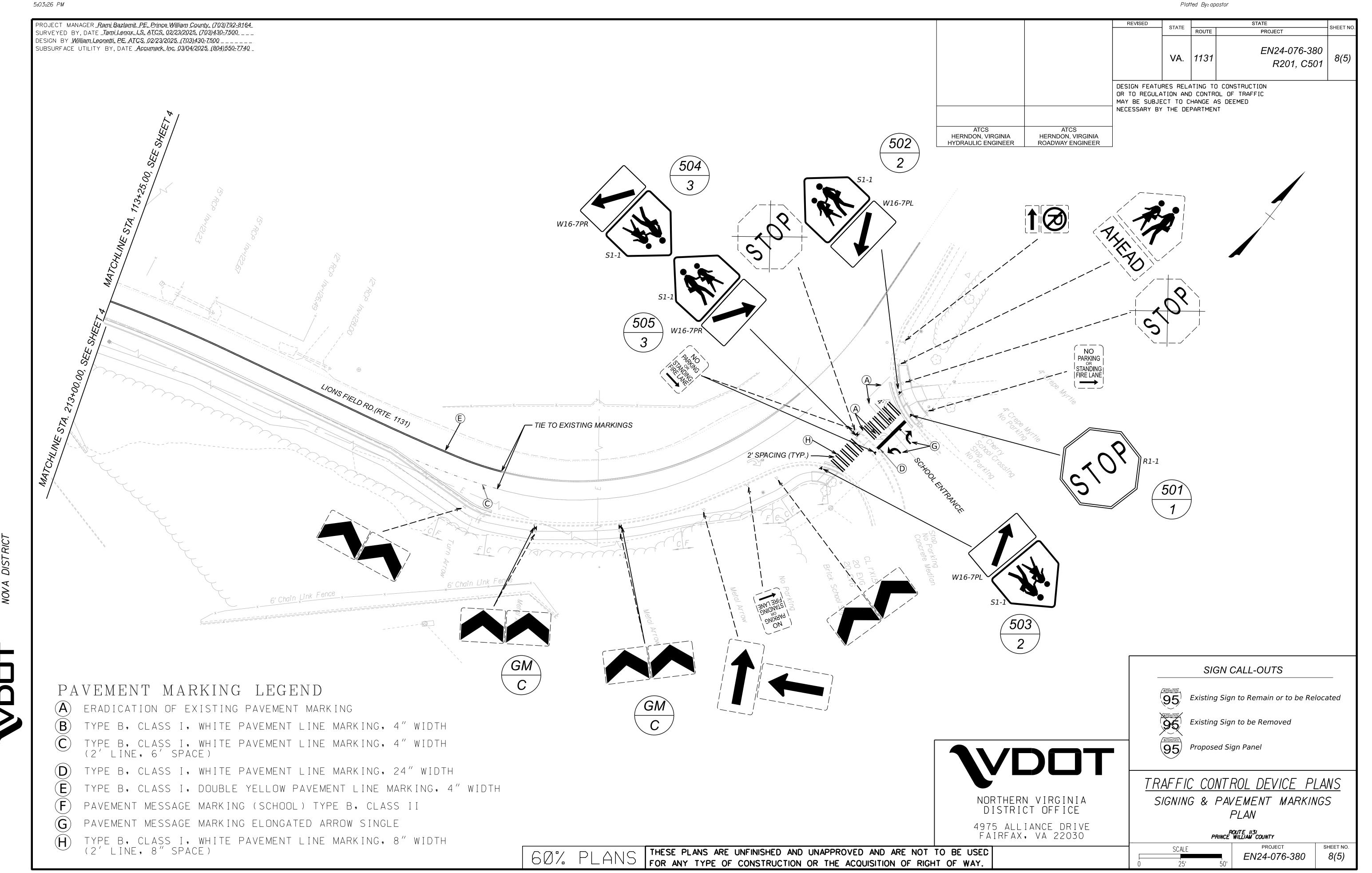








NOVA DISTRICT

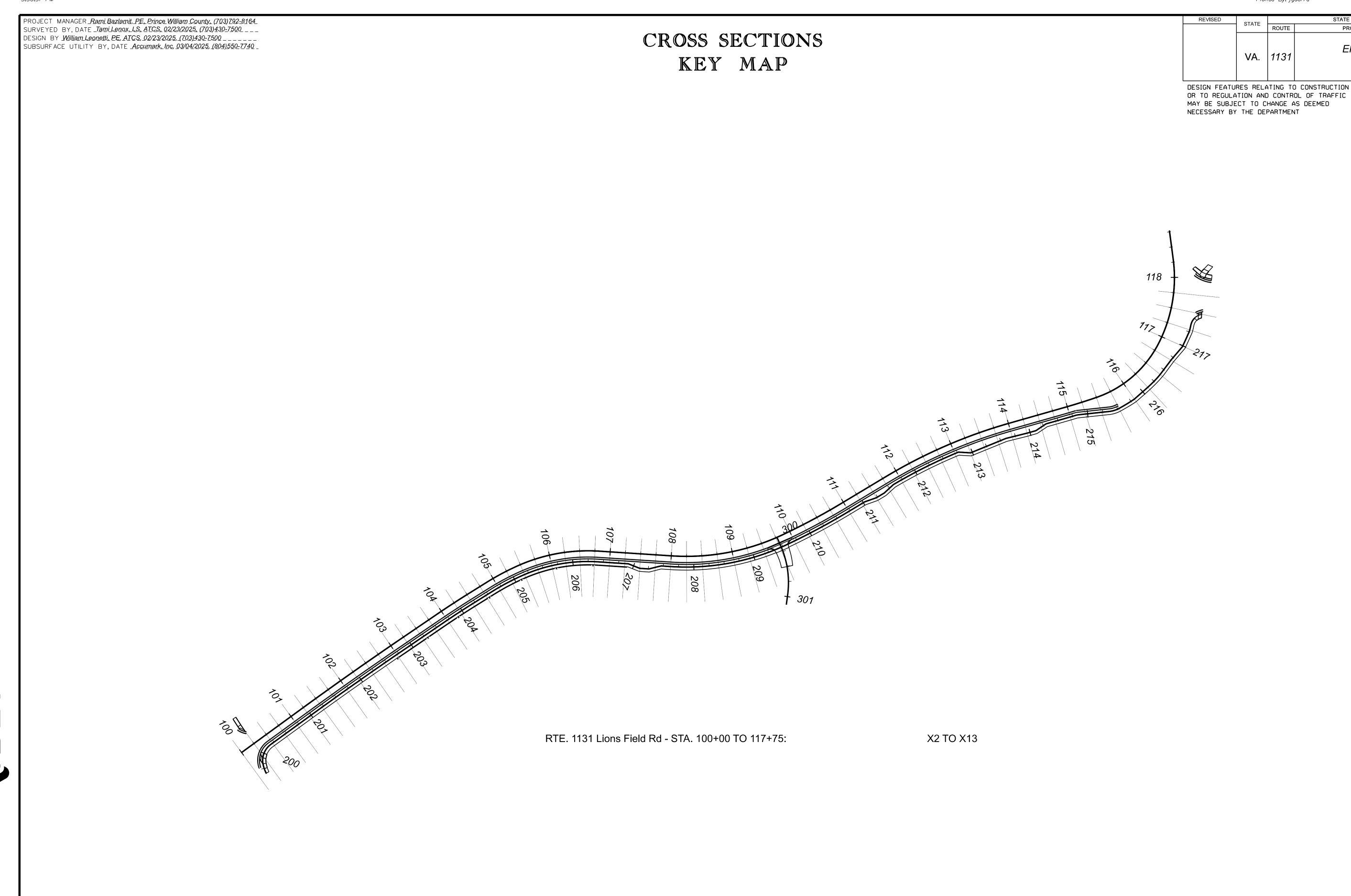


STATE

PROJECT

EN24-076-380

R201, C501



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