FOR INDEX OF SHEETS SEE SHEET 1B

THIS PROJECT WAS DEVELOPED UTILIZING THE DEPARTMENT'S ENGINEERING DESIGN PACKAGE (OpenRoads Designer). OPENROADS COMPUTER IDENTIFICATION NO. (120778)



FHWA-534 DATA-46001 PPMS-120778

FEDERAL AID STATE SHEET PROJECT ROUTE PROJECT 0639-076-348 STP-5BOIC VA. SEE TABULATIONS BELOW FOR SECTION NUMBERS SEE TABULATIONS BELOW FOR SECTION NUMBERS

COMMONWEALTH OF VIRGINIA



PLAN AND PROFILE OF PROPOSED STATE HIGHWAY

FUNCTIONAL CLASSIFICATION AND TRAFFIC DATA NON NHS - URBAN MINOR COLLECTOR (GS-7) - DIVIDED - ROLLING - 30 MPH FR: ROUTE 123 (GORDON BLVD) TO: ANNAPOLIS WAY N/A ADT (2050) 12,600 N/A D (%) (design hour) N/A (%) (design hour) N/A

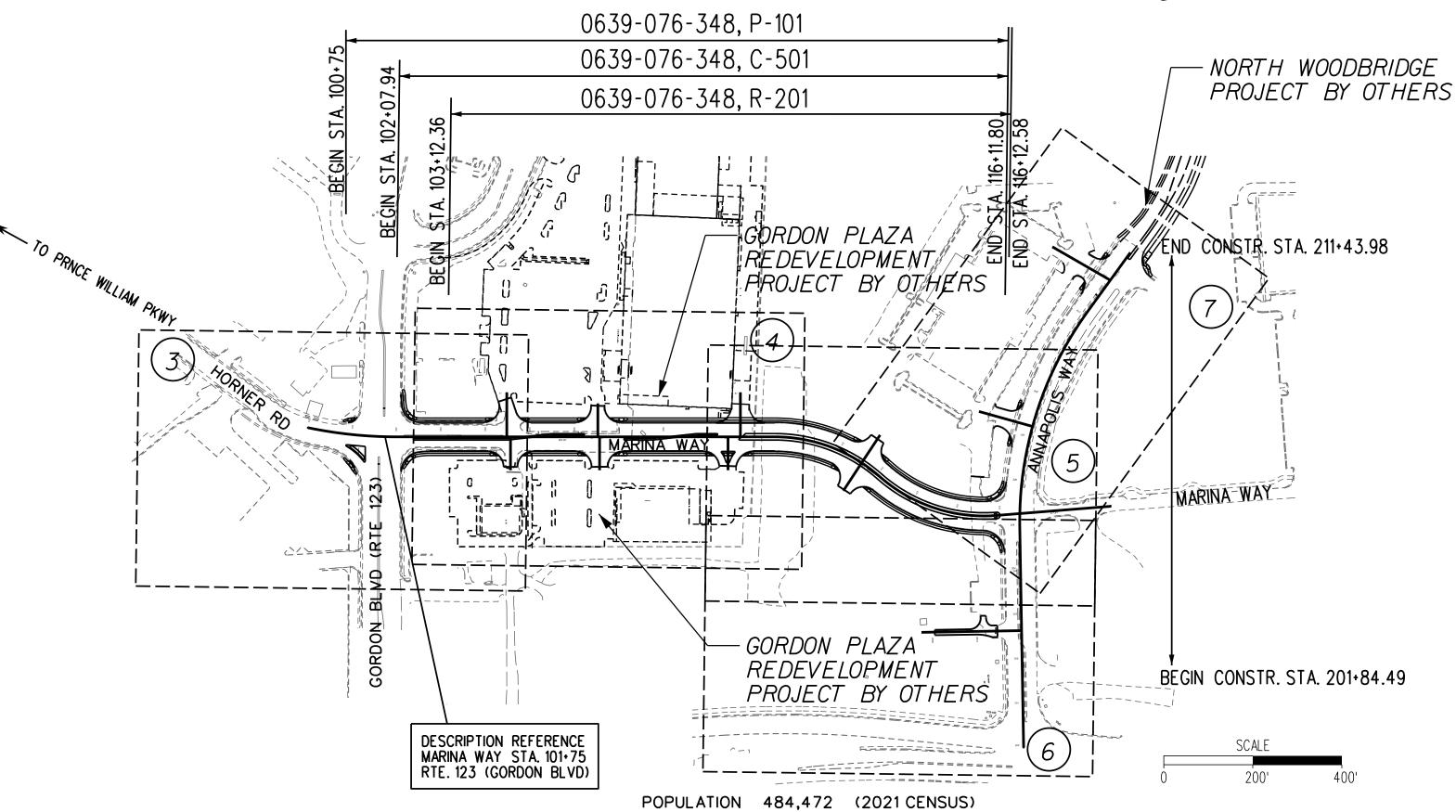
See Plan and Profile Sheets for horizontal and vertical curve design speed data

PRINCE WILLIAM COUNTY

MARINA WAY EXTENSION

FR: ROUTE 123 (GORDON BLVD)

TO: ANNAPOLIS WAY



ANY MISUSE OF ELEC IS ILLEGAL AND ENFO		DING SCANNED SIGNATURES, EXTENT OF THE LAW.
	CONV	ENTIONAL SIGNS

STATE LINE	
COUNTY LINE	
CITY, TOWN OR VILLAGE	
RIGHT OF WAY LINE	
FENCE LINE	×
UNFENCED PROPERTY LINE	
FENCED PROPERTY LINE	×————×——
WATER LINE	
SANITARY SEWER LINE	
GAS LINE	
ELECTRIC UNDERGROUND CABLE	• — E —
TRAVELED WAY	
GUARD RAIL	
RETAINING WALL	
RAILROADS	
BASE OR SURVEY LINE	

THE COMPLETE ELECTRONIC PDF VERSION OF THE PLAN

NECESSARY BY THE DEPARTMENT.

WHERE OTHERWISE NOTED.

ASSEMBLY AS AWARDED, INCLUDING ALL SUBSEQUENT REVISIONS, WILL BE THE OFFICIAL CONSTRUCTION PLANS. FOR INFORMATION

RELATIVE TO ELECTRONIC FILES AND LAYERED PLANS, SEE GENERAL

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

THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE DEPARTMENT'S 2020 ROAD AND BRIDGE SPECIFICATIONS, 2016 ROAD

SUPPLEMENT TO THE MUTCD, 2011 VIRGINIA WORK AREA PROTECTION

THE COMPLETE ELECTRONIC PDF VERSION OF THE PLAN ASSEMBLY.

THE <u>ORIGINAL</u> APPROVED TITLE SHEET(S), INCLUDING ORIGINAL SIGNATURES, ARE FILED IN THE VDOT CENTRAL OFFICE PLAN LIBRARY.

MANUAL AND AS AMENDED BY CONTRACT PROVISIONS AND

ALL CURVES ARE TO BE SUPERELEVATED, TRANSITIONED AND

WIDENED IN ACCORDANCE WITH STANDARD TC-5.11ULS, EXCEPT

AND BRIDGE STANDARDS REVISED SEPT 2022, 2009 MUTCD, 2011 VIRGINIA

LEVEE OR EMBANKMENT	THE STATE OF THE S
BRIDGES	
CULVERTS	[+]
DROP INLET	⊢−−−−−− −−−−−−−
POWER POLES	
TELEPHONE OR TELEGRAPH POLES	
TELEPHONE OR TELEGRAPH LINES	· · · · · · · · · · · · · · · · · · ·
HEDGE	
TREES	
HEAVY WOODS	2 2 2 2
GROUND ELEVATION	DATUM LINE
GRADE ELEVATION	DATUM LINE

STATE PROJECT	SECTION	FEDERAL AID PROJECT NO.	TYPE CODE	UPC NO.	LENGTH IN BRIDG			EXCLUDING GE(S)	TYPE PROJECT	DESCRIPTION			
NO.		FROJECT NO.	CODE	INU.	FEET	MILES	FEET	MILES	- PROJECI	1			
φ	P-101	STP-5B01(441)	PENG	120778	1,537	0.291	1,537	0.291	PRELIM. ENGIN.	FR: ROUTE 123 (GORDON BLVD)			
34										TO: ANNAPOLIS WAY			
-9	R-201	STP-5B01()	ROWA	120778	1,299	0.246	1,299	0.246	RIGHT OF WAY	FR: ROUTE 123 (GORDON BLVD)			
07										TO: ANNAPOLIS WAY			
39-	C-501	STP-5B01()	1000	120778	1,404	0.266	1,404	0.266	CONSTRUCTION	FR: ROUTE 123 (GORDON BLVD)			
										TO: ANNAPOLIS WAY			
90													

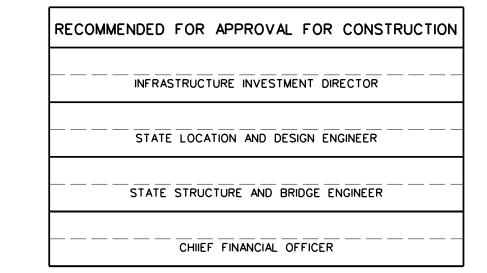
NOTE: PROJECT LENGTH BASED ON MARINA WAY CONSTRUCTION BASELINE

TIER 2 PROJECT

LOCA	ALLY ADMINISTERED PROJECTS									
PRINCE WILLIAM COUNTY										
	NAME OF LOCALITY									
	(SIGNATURE)									
NAME OF RI	ESPONSIBLE LOCAL GOVERNMENT OFFICAL (TYPED									
RECOMMENDED	FOR APPROVAL FOR RIGHT OF WAY ACQUISITION									
DATE	TITLE OF POSITION									
	(SIGNATURE)									
NAME OF RESPONSIBLE LOCAL GOVERNMENT OFFICAL (TYPED)										
RECOMMENDED FOR APPROVAL FOR CONSTRUCTION										
DATE	TITLE OF POSITION									

RECOMMENDED FOR APPROVAL FOR RIGHT OF WAY ACQUISITION								
INFRASTRUCTURE INVESTMENT DIRECTOR								
STATE LOCATION AND DESIGN ENGINEER								
CHIEF FINANCIAL OFFICER								
CHIEF ENGINEER								

APPROVED	FOR	RIGHT	OF	WAY	ACQUISITION
		CHIEF OF	BOL I		



APPROVED FOR CONSTRUCTION
CHIEF ENGINEER

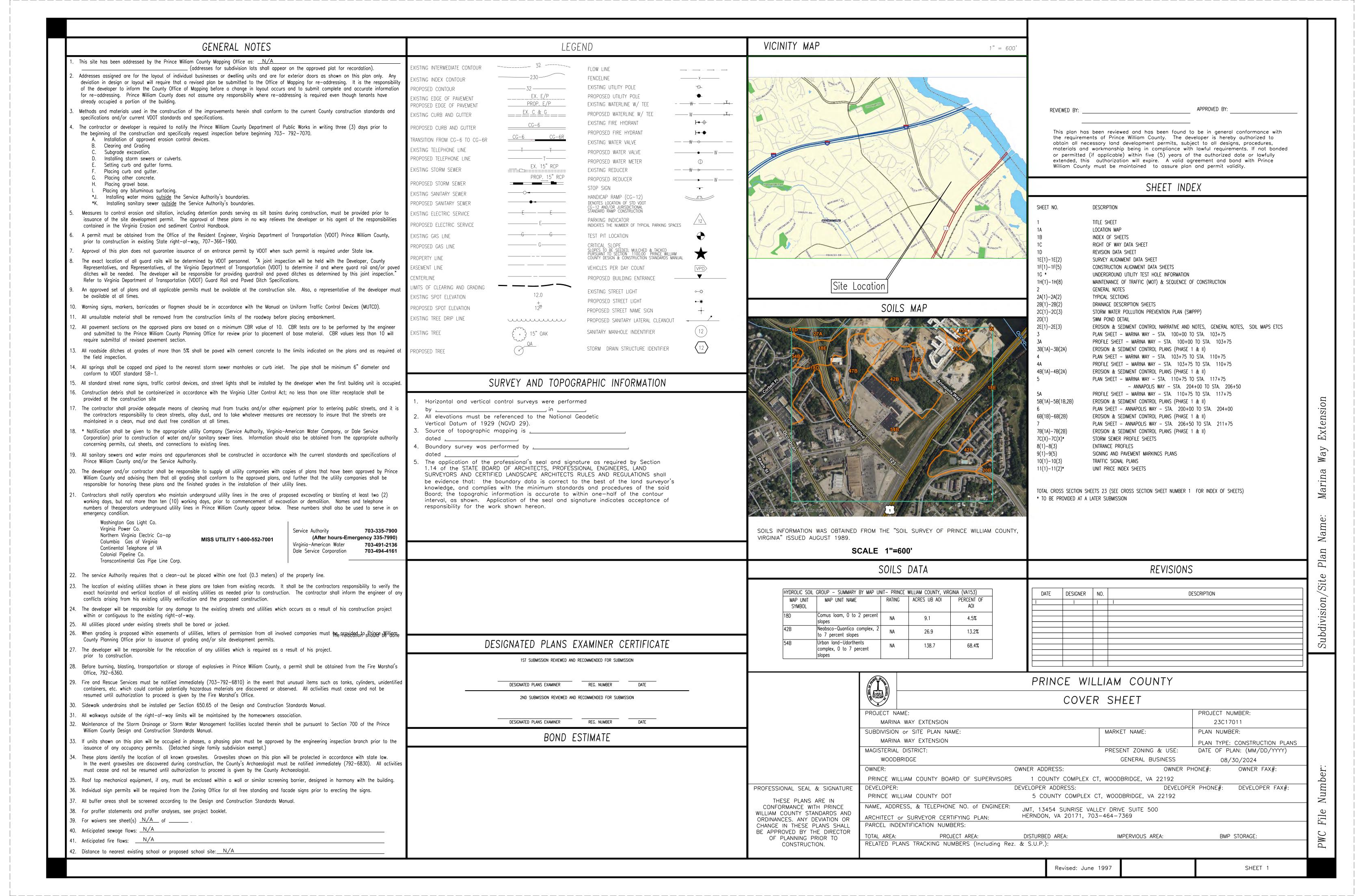
APPROVED
 DIVISION ADMINISTRATOR
DIVISION ADMINISTRATOR
FEDERAL HIGHWAY ADMINISTRATION
U.S. DEPARTMENT OF TRANSPORTATION

Copyright 2024, Commonwealth of Virginia PRINCE WILLIAM COUNTY PROJECT

23CI70II

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

0639-076-348



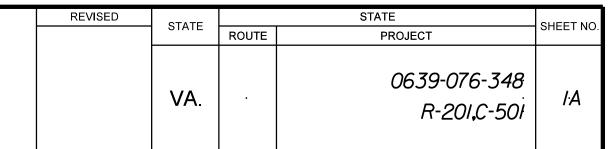
PROJECT MANAGER_MEKDES_TABOR_(703-792-8137)
SURVEYED BY, DATE JMI_AUGUSI_2024

DESIGN BY JMI_(703)_464-7369
SUBSURFACE UTILITY BY, DATE JMI_AUGUSI_2024

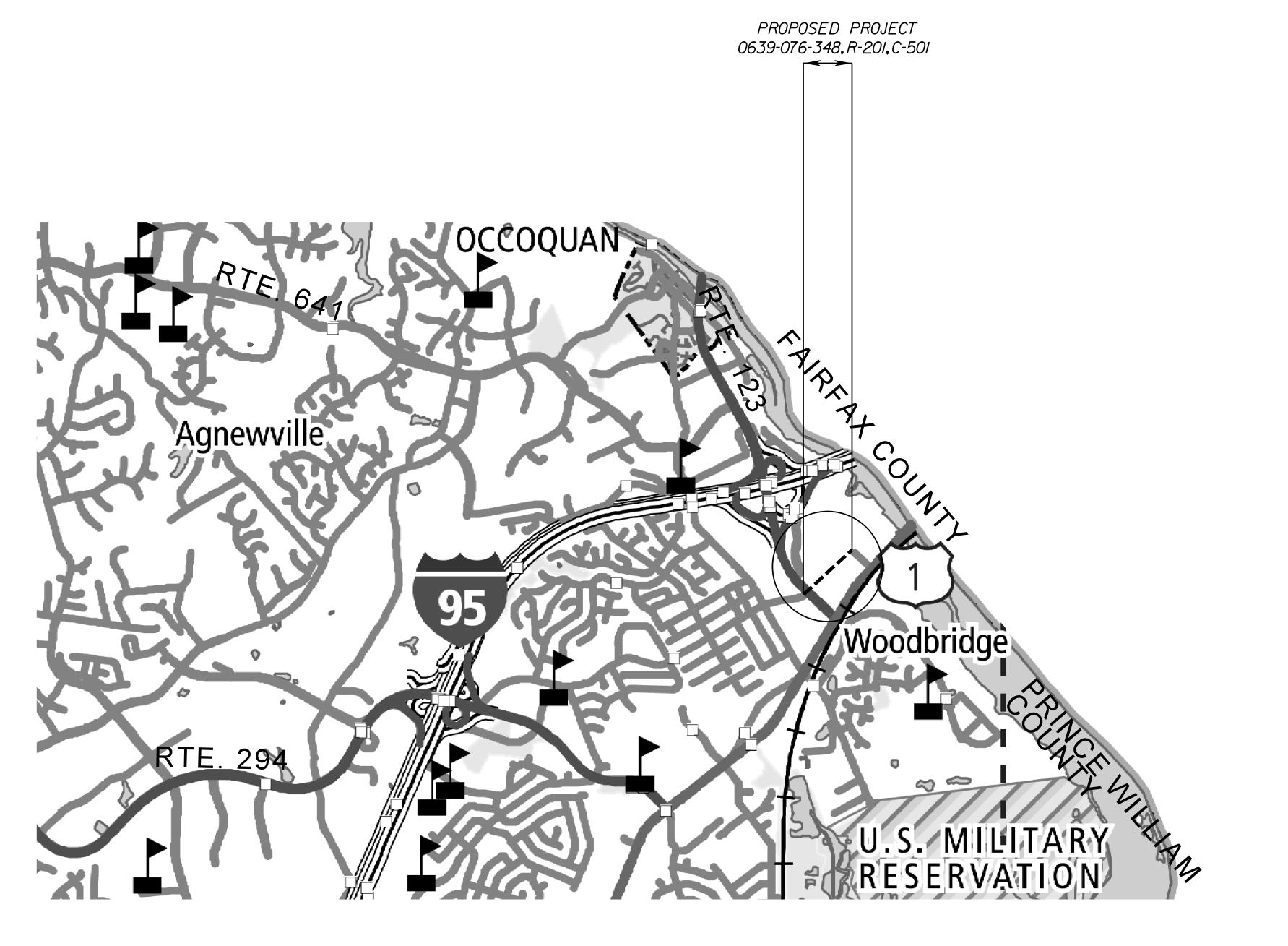
TO SUBSURFACE UTILITY BY, DATE JMI_AUGUSI_2024

LOCATION MAP

PRINCE WILLIAM COUNTY



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



PROJECT 0639-076-348

NTS

INDEX OF SHEETS

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
1	TITLE SHEET
IA	LOCATION MAP
IB	INDEX OF SHEETS
IC	RIGHT OF WAY DATA SHEET
ID	REVISION DATA SHEET
IE(I) - IE(2)	SURVEY ALIGNMENT DATA SHEET
IF(I) -IF(5)	CONSTRUCTION ALIGNMENT DATA SHEETS
IG*	UNDERGROUND UTILITY TEST HOLE INFORMATION
IH(I) -IH(8)	MAINTENANCE OF TRAFFIC (MOT) & SEQUENCE OF CONSTRUCTION
2	GENERAL NOTES
2A(I) - 2A(2)	TYPICAL SECTIONS
2B(I)-2B(2)	DRAINAGE DESCRIPTION SHEETS
20(1)-20(3)	STORM WATER POLLUTION PREVENTION PLAN (SWPPP)
2D(I)	SWM POND DETAIL
2E(I)-2E(3)	EROSION & SEDIMENT CONTROL NARRATIVE AND NOTES, GENERAL NOTES, SOIL MAPS ETCS
3	PLAN SHEET - MARINA WAY - STA. 100.00 TO STA. 103.75
<i>3A</i>	PROFILE SHEET - MARINA WAY - STA. 100.00 TO STA. 103.75
3B(IA) - 3B(2A)	EROSION & SEDIMENT CONTROL PLANS (PHASE &)
4	PLAN SHEET - MARINA WAY - STA. 103.75 TO STA. 110.75
4A	PROFILE SHEET - MARINA WAY - STA. 103.75 TO STA. 110.75
4B(IA) - 4B(2A)	EROSION & SEDIMENT CONTROL PLANS (PHASE &)
5	PLAN SHEET - MARINA WAY - STA. 110.75 TO STA. 117.75
	- ANNAPOLIS WAY - STA. 204.00 TO STA. 206.50
5A	PROFILE SHEET - MARINA WAY - STA. 110+75 TO STA. 117+75
5B(IA) - 5B(IB,2B)	EROSION & SEDIMENT CONTROL PLANS (PHASE & II)
6	PLAN SHEET - ANNAPOLIS WAY - STA. 200.00 TO STA. 204.00
6B(IB) - 6B(2B)	EROSION & SEDIMENT CONTROL PLANS (PHASE &)
7	PLAN SHEET - ANNAPOLIS WAY - STA. 206.50 TO STA. 211.75
7B(IA) - 7B(2B)	EROSION & SEDIMENT CONTROL PLANS (PHASE &)
7C(X)-7C(X) *	STORM SEWER PROFILE SHEETS
8(1)-8(3)	ENTRANCE PROFILES
9(1) - 9(5)	SIGNING AND PAVEMENT MARKINGS PLANS
10(1)-10(3)	TRAFFIC SIGNAL PLANS
II(I)-II(2)*	UNIT PRICE INDEX SHEETS

TOTAL CROSS SECTION SHEETS 23 (SEE CROSS SECTION SHEET NUMBER I FOR INDEX OF SHEETS)

* TO BE PROVIDED AT A LATER SUBMISSION

PROJECT SHEET N / A 0639-076-348 IB

d1207780lc**.**dgn Plotted By: KTurciosLovato

PROJECT MANAGER_MEKDES_TABOR_(703-792-8137)
SURVEYED BY, DATE_JMI_AUGUSI_2024 DESIGN BY JMT_(703) 464-7369______ SUBSURFACE UTILITY BY, DATE JMI. AUGUSI 2024

RIGHT OF WAY DATA SHEET

STATE REVISED ROUTE PROJECT 0639-076-348 VA.

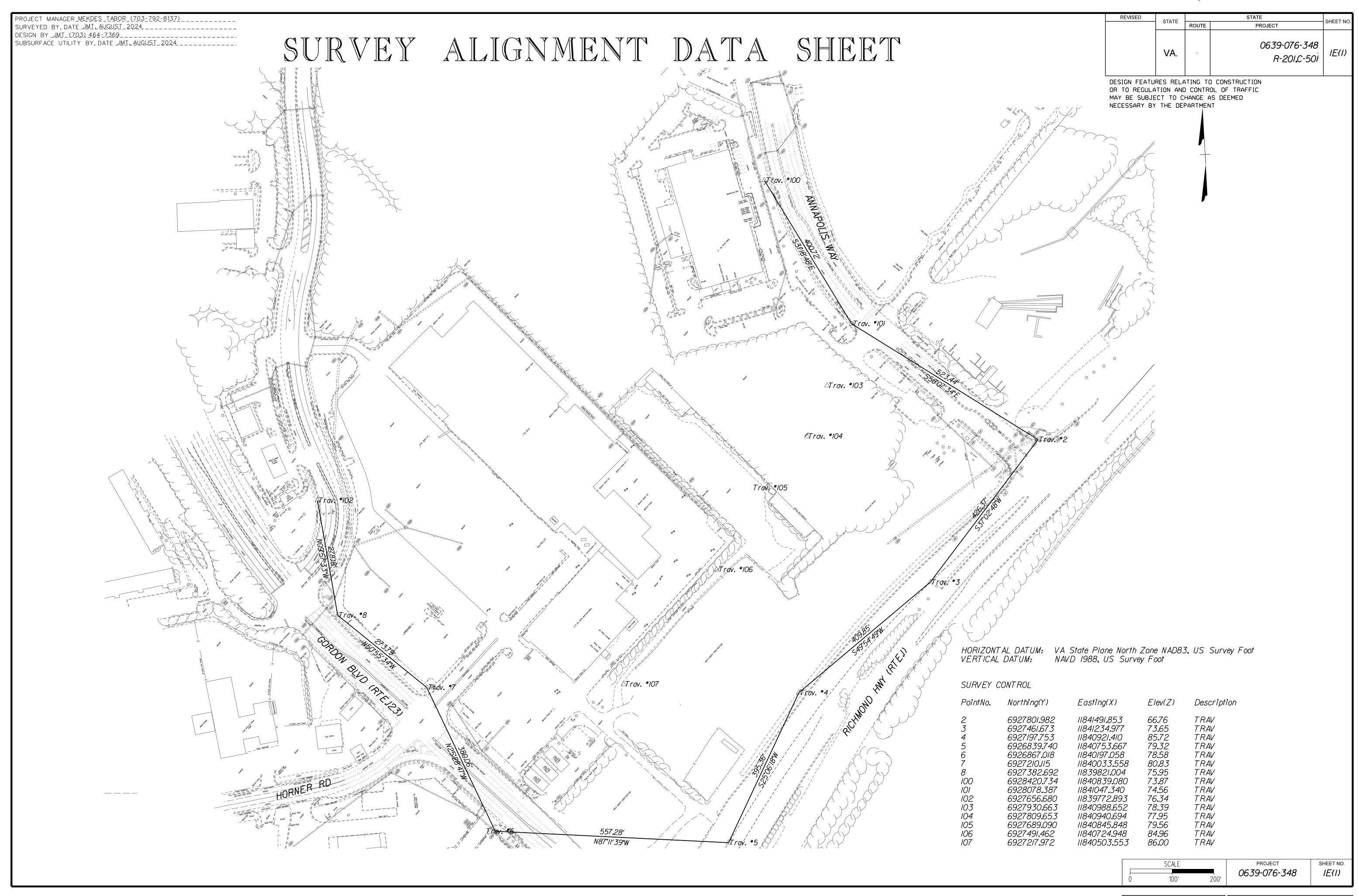
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

City/County: Prince William County

UPC No.: 120778

				AREA (Areas greate	er than or equalto 1 acre	will be show	n in acres to	3 decimal p	olaces (x.xxx)	. Areas les	ss than 1 acre	will be shown t	to square		1 NO. 120					
PARCEL	LANDOWNER	SHEET				PRESCRIPTIVE			EASEMENTS				2225520								
NO.		NO.	TOTAL FEE TAKING		TOTAL FEE TAKING		TOTAL		TAKING	R/W	FEE RE	MAINDER	DRAI	INAGE	Ul	ΓΙLITΥ	TEMPOR	RARY	SIGHT D	ISTANCE	PROFFERS
			ACRES OR SQUARE FEET	ACRES OR SQ. FEET	HECTARES/ OR SQ. METERS	ACRES OR SQ. FEET SQ. METERS	ACRES OR SQ. FEET	HECTARES/ OR SQ. METERS	ACRES OR SQ. FEET	HECTARES/ OR SQ. METERS	ACRES OF SQ. FEET	HECTARES/ OR SQ. METERS	ACRES OR SQ. FEET S	HECTARES/ OR SQ. METERS	ACRES OR SQ. FEET	HECTARES/ OR SQ. METERS	YES / NO				
001	LEARY FAMILY LLC	3	0.2489 AC	124 SF			0.246 AC						451 SF				NO				
002	GORDON PLAZA 0225, LLC	3,4	17.1075 AC	1.344 AC			15.764 AC						0.837 AC				NO				
003	COMMONWEALTH OF VIRGINIA	5,7	1.99725 AC	0.748 AC			1.249 AC						1,364 SF		2,340 SF		NO				
004	ASHNA, LLC	5	7.40298 AC	0.865 AC			6.538 AC		0.233 AC				0.355 AC		4,699 SF		NO				
005	99I ANNAPOLIS WAY, LLC	5,7	4.64461 AC	542 SF			4.632 AC		194 SF				0.447 AC				NO				
006	COMMONWEALTH OF VIRGINIA	6	1.1055 AC	0.832 AC			0.274 AC		965 SF								NO				
																N,	/ A				

PROJECT MANAGER_MEKDES_TABOR_(703-792-8137) SURVEYED BY, DATE_JMI_AUGUSI_2024 DESIGN BY_JMI_(703)_464-7369 SUBSURFACE_UTILITY_BY, DATE_JMI_AUGUSI_2024			REVISED STA	STATE SHEET N
SURVEYED BY, DATE JMT. AUGUST 2024				ROUTE PROJECT
SUBSURFACE UTILITY BY DATE JMT, AUGUST 2024				0630-076-348
	REVISION	DATA SHEET	VA	A. 0639-076-348 1D
				R-201,C-501
State Pro lect: 0639-076-348, P-101,R-201,C-501			DESIGN FEATURES F	RELATING TO CONSTRUCTION
State Project: 0639-076-348, P-IOI,R-20I,C-50I Federal Project: STP-5B0I(44I)(xxx)(xxx) From: ROUTE I23 (GORDON BLVD) To: ANNAPOLIS WAY			OR TO REGULATION	AND CONTROL OF TRAFFIC
From: ROUTE 123 (GORDON BLVD)			MAY BE SUBJECT TO NECESSARY BY THE	O CHANGE AS DEEMED
To: ANNAPOLIS WAY			NECESSAIN BY THE	DEI AIMINENT
UPC Number: 120778				
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				PROJECT SHEET NO. 1D
				'A 0639-076-348 ID
•				



PROJECT MANAGER_MEKDES_TABOR_(703-792-8137)_____

SURVEYED BY, DATE JMT. AUGUST 2024

DESIGN BY <u>JMT (703) 464-7369</u> SUBSURFACE UTILITY BY, DATE JMT. AUGUST 2024 LD-200 (REV. 10/2014) Virginia Department of Transportation Horizontal Control Control Station I.D.: Trav #2 Date: 02-26-2024 VA State Plane Coordinates: NAD 83-U.S. Survey Feet VDOT Project Coordinates (2014) East (X): 11841491.853 ft. East (X): 11841491,853 ft. North (Y): 6927801.982 ft. North (Y): 6927801.982 ft. Ortho, Elevation (H):66,700 ft. Elevation: 66.700 ft. Zone : North Project Specific Combined Scale Project Information Factor: 1.000000000 (9 Decimal Places) Project: Marina Way Extension Route: Marina Way County: Prince Williams Latitude: 46° 17′ 52.92599" N (5 Decimal Places) Established By: _____ Longitude: 77° 05′ 57,15583" W (5 Decimal Places) Geoid Separation (N):-34.662m To convert Virginia State Plane Coordinates to VDOT Project Coordinates, use the following formula: Ellipsoid Height(h):-24.390m Horizontal Datum : NAD83 Year : 2010 Multiply the Easting And Northing Values (For Both Vertical Datum : NAVD88 Geoid : 18 Zones) by the Project Specific Combined Scale Factor. (Located above left) Azimuth to Station :Trav *IOI is 301° 52′ 26″ * Reverse this Procedure to convert VDOT Project Coordinates (2014) to NAD 83 - U.S. Survey Feet DETAILED SKETCH (Not to Scale) To Reach Trav *2 From the Intersection Of Route I And Occoquan Road, Go North 3075' On Route I.Trav #2 Is On The Left. 22.4' From The Corner Of A Concrete Pad: 42.5' From A Speed Limit Sign; And 54.5' From The Corner OF A 4.5' Metal Fence. Trav. #2 On Conc. Pads To 1-95 To Occoquan Road Route I

	min or Starron 1.D Trav	*6 Date: 02-26-20) <u> </u>
	840197.058 ft. 926867.018 ft.	East (X): I North (Y): 6 Ortho. Elevation	: NAD 83- U.S. Survey Fee 1840197.058 ft. 6926867.018 ft. n (H):78.580 ft. : North
· · · · · · · · · · · · · · · · · · ·	c Combined Scale O (9 Decimal Places)	Project I. Project : Marina Way Exte	nformation nsion
	atitude: 46° 17′ 44.00031" N (5 Decimal Places) ongitude: 77° 06′ 15.55698" W (5 Decimal Places)		ounty : Prince Williams
Geoid Separation (N):-34.6 Ellipsoid Height (h):-10.717	m	To convert Virginia State Project Coordinates, use th	Plane Coordinates to VDOT ne following formula :
orizontal Datum : NAD83 Year : 2010 ertical Datum : NAVD88 Geoid : 18 zimuth to Station :Trav *7 is 334°31′13"		* Multiply the Easting And Northing Values (For Zones) by the Project Specific Combined Scale F (Located above left)	
AZIMAIN TO STONON . TT GV	1 10 33 1 31 13	* Reverse this Procedure t Coordinates (2014) to NAD	
		CH (Not to Scale)	
The Intersection Of And Go 470'.Trav # 21.3' To The End Ot	From The Intersection Oil Route I And Gordon Boul 6 Is On The Left. 12.3' If f The Curb; And 76.4' To	f Route I And Occoquan Nevard.Turn Left Onto G From The Corner Of A o The Corner Of A Drop	ordon Boulevard Concrete Sidewalk; o Inlet.
The Intersection Of And Go 470'.Trav #	From The Intersection Oil Route I And Gordon Boul 6 Is On The Left. 12.3' If f The Curb; And 76.4' To	f Route I And Occoquan Nevard.Turn Left Onto G From The Corner Of A o The Corner Of A Drop on Boulevard	ordon Boulevard Concrete Sidewalk;
The Intersection Of And Go 470'.Trav # 21.3' To The End Ot	From The Intersection Oil Route I And Gordon Boul 6 Is On The Left. 12.3' If f The Curb; And 76.4' To	f Route I And Occoquan Nevard.Turn Left Onto G From The Corner Of A o The Corner Of A Drop	ordon Boulevard Concrete Sidewalk; Inlet. To Route I
The Intersection Of And Go 470'.Trav # 21.3' To The End Ot	From The Intersection Oil Route I And Gordon Boul 6 Is On The Left. 12.3' If f The Curb; And 76.4' To	F Route I And Occoquan Plevard. Turn Left Onto Grown The Corner Of A Drop on Boulevard Conc. Median	ordon Boulevard Concrete Sidewalk; o Inlet.

SURVEY ALIGNMENT DATA SHEET

* Multiply the Easting And Northing Values (For Both

Zones) by the Project Specific Combined Scale Factor.

* Reverse this Procedure to convert VDOT Project

Coordinates (2014) to NAD 83 - U.S. Survey Feet

(Located above left)

•	nsportation Horizontal Control *8 Date: 02-26-2024	
VDOT Project Coordinates (2014) East (X): 11839821.004 ft. North (Y): 6927382.692 ft. Elevation: 75.950 ft.	VA State Plane Coordinates: NAD 83-U.S. Survey Feet East (X): II83982I.004 ft. North (Y): 6927382.692 ft. Ortho. Elevation (H):75.950 ft. Zone: North	
Project Specific Combined Scale Factor: I.000000000 (9 Decimal Places)	Project Information Project: Marina Way Extension	
Latitude: 46° 17′ 49.08049″ N (5 Decimal Places) Longitude: 77° 06′ 20.73758″ W (5 Decimal Places) Geoid Separation(N): -34.67Im Ellipsoid Height(h): -11.52Im	Route: Marina Way County: Prince Williams Established By: To convert Virginia State Plane Coordinates to VDOT Project Coordinates, use the following formula:	

Year : 2010

Geoid : 18

Horizontal Datum : NAD83

Azimuth to Station :Trav #102 is 350°02′27"

Vertical Datum : NAVD88

LD-200 (REV. 10/2014)

The Intersection (And Go II31'.Trav	DETAILED SKETCH (Not to Scale) R From The Intersection Of Route I And Occoquan Of Route I And Gordon Boulevard.Turn Left Onto Go *8 Is On The Right. 23.9' To The Corner Of A Di her Of A Curb; And 33.6' To A Power Pole.	ordon Boulevard
	Trav. #8 33.6' Power Pole	
	Conc. Median	Sidēwālk
To 1-95 ———————	Gordon Boulevard	To Route I
		LD-200 (REV. 10/2014)

VDOT Project Coordinates (2014) East (X): 11841047.340 ft. North (Y): 6928078.387 ft. Elevation: 74.560 ft.	VA State Plane Coordinates: NAD 83-U.S. Survey Fee East (X): 84 047.340 ft. North (Y): 6928078.387 ft. Ortho. Elevation (H):74.560 ft. Zone: North
Project Specific Combined Scale Factor: I.000000000 (9 Decimal Places) Latitude: 46° I7′ 55.6842I" N (5 Decimal Places) Longitude: 77° 06′ 03.34875" W (5 Decimal Places) Geoid Separation (N): -34.666m Ellipsoid Height (h): -II.940m Horizontal Datum: NAD83 Year: 2010 Vertical Datum: NAVD88 Geoid: 18 Azimuth to Station: Trav *100 is 328° 41′ 12"	Project Information Project: Marina Way Extension Route: Marina Way County: Prince Williams Established By: To convert Virginia State Plane Coordinates to VDOT Project Coordinates, use the following formula: * Multiply the Easting And Northing Values (For Both Zones) by the Project Specific Combined Scale Factor. (Located above left) * Reverse this Procedure to convert VDOT Project Coordinates (2014) to NAD 83 - U.S. Survey Feet
DETAILED SKET To Reach Trav *IOI From The Intersection Of The Intersection Of Route I And Annapolis W	f Route I And Occoquan Road,Go North To ay.Turn Left Onto Annapolis Way And
Go 598'.Trav #101 Is On The Left. 4.2' To The 6.7' To The Corner Of A Curb; And 28.0' To	The state of the s
6.7' To The Corner Of A Curb; And 28.0' To	A Sanitary Sewer Manhole.

LD-200 (REV. 10/2014)

: Marina Way Extension Route : Marina Way District : Northern Virginia : Prince Williams Horizontal Datum Based On NAD83 Vertical Datum Based On NAVD88 Survey By : Johnson, Mirmiran, & Thompson : 08/21/2024 Scale : /" = 25′

UTILITY LEGEND

⊐EB	Electric Box	□ТВ	Telephone Booth
	Electric Guy Pole		Telephone Guy Pole
<u> </u>	Electric Ground Light	\otimes	Telephone Guy Wire
\otimes	Electric Guy Wire	lacksquare	Test Holes (All Utilities)
E	Electric Hand Hole		Telephone Cell Tower
	Electric Meter		Telephone Hand Hole
X D	Electric Manhole		Telephone Manhole
©	Electric Marker Post	0	Telephone Marker Post
E	Electric Pedestal	•	Telephone Pole
	Electric Stub	İ	Telephone Pedestal
E] ■- \$- *	Electric Power Pole		Telephone Riser Pole
<u></u>	Electric Power Riser Pole		Television Satellite Dish
*	Electric Light Pole	\cap	Tower Anchor
0-4	Electric Luminaire	○	Traffic Camera Pole
2	End of Information (All Utilities)	TC	Traffic Control Hand Hole
}	Fire Hydrant	TO	Traffic Control Manhole
Ē	Fiber Optic Hand Hole	\otimes	Traffic Control Guy Wire
0	Fiber Optic Marker	TC	Traffic Control Pedestal
=	Fiber Optic Manhole		Traffic Signal Guy Pole
0	Fiber Optic Pedestal	<u></u>	Traffic Signal Pole
	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
Õ	Gas Test Station	TV	Television Pedestal
\odot	Gas Valve		Television Stub
Đ	Gas Vent	\oplus	Water Blow Off
∞ →	Gas Well		Water Well
\supset	Sanitary Air Release Valve	\otimes	Water Meter
	Sanitary Flow Arrow	w M	Water Manhole
	Sanitary Stub	©	Water Marker Post
\bowtie	Sewer Clean Out	φ	Water Spigot
3	Sanitary Force Main Valve		Water Siamese Connection
©	Sanitary Marker Post		Water Stub
\$	Sanitary Manhole		Water Valve
<u></u>	Sewer Vent Pipe	+	Water Post Inspection Valve
\bowtie	Unknown Clean Out	•	Water Irrigation Valve
JK)	Unknown Hand Hole	ST	Water Steam Manhole
NK)	Unknown Manhole		Water Steam Vent Pipe

Gas Line *

Gas Line Duct

Gravity Sewer *

Sanitary Force Main *

Telephone Fiber Optic

Unknown Utility Line

Vacuum Sewer

Water Line Duct

Water Line *

Underground Fiber Optic

Underground Power Cable

Underground Power Cable Duct

Underground Telephone Cable Duct

Underground Traffic Control Duct

Underground Television Cable Duct

Depicted According To Utility Records **

According To Miss Utility Information **

Abandoned According To Utility Records **

* Designate size (Variable from 0.75" to 54") ** Designate type (Unknown line is shown)

Underground Telephone Cable

Underground Traffic Control

Underground Television Cable

Traffic Control Fiber Optic

Fiber Optic Cable Television Chemical Line (above or below ground) Underground Fiber Optic Duct Fuel Line (above or below ground)

STATE REVISED ROUTE PROJECT 0639-076-348 VA.

Advertising Sign

Photo Control Point

Drainage Flow Arrow (Storm Drainage)

Bore Hole

Bench Mark

Bollard Post

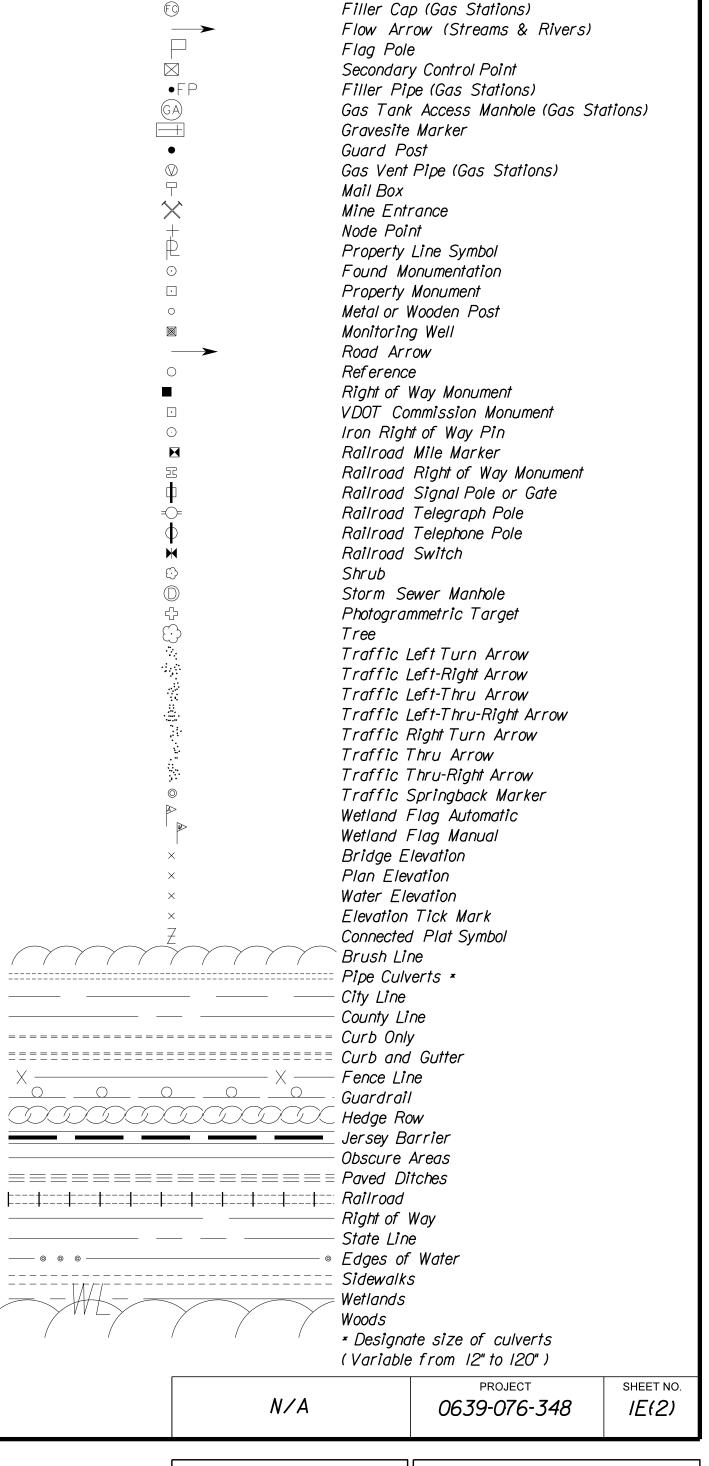
Control Station

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

PLANIMETRIC LEGEND

o BM

• PHOTO CP



PROJECT MANAGER_MEKDES_TABOR_(703-792-8137)______ SURVEYED BY, DATE JMI. AUGUSI 2024 DESIGN BY <u>JMT (703) 464-7369</u> SUBSURFACE UTILITY BY, DATE <u>JMI_AUGUSI_2024</u>_______ MARINA WAY ALIGNMENT Element: Circular PC = 100.00.000 N 6927015.399 E 11839891.750 HPI = 101.00.353 N 6927074.240 E 11839973.042 CC = N 6927805.207 E 11839320.066 PT = 102.00.002 N 6927148.407 E 11840040.645 Radius = 974.997 Delta = II.753° Left Degree of Curvature (Arc) = 5.877° Length = 200,002 Tangent = 100.353 Chord = 199.652 Middle Ordinate = 5,124 External = 5,151 Back Tangent Direction = N54J02°E Back Radial Direction = S35.898°E Chord Direction = N48.225°E Ahead Radial Direction = S47.651°E Ahead Tangent Direction = N42.349°E Element: Linear PT = 102+00.002 N 6927148.407 E 11840040.645 PC = 110+50.002 N 6927776.606 E 11840613.241 Tangential Direction = N42.349°E Tangential Length = 850.000 Element: Circular PC = 110.50.002 N 6927776.606 E 11840613.241 HPI = 111.84.285 6927875.848 11840703.700 CC = N 6927537.462 E 11840875.606 PRC = 113.06.757 N 6927890.378 E 11840837.194 Radius = 355.000 Delta = 41.439° Right Degree of Curvature (Arc) = 16.140° Length = 256.755 Tangent = 134,282 Chord = 251,195 Middle Ordinate = 22.960 External = 24.548 Back Tangent Direction = N42.349°E Back Radial Direction = S47.651°E Chord Direction = N63.069°E Ahead Radial Direction = \$6.212°E Ahead Tangent Direction = N83.788°E Element: Circular PRC = 113.06.757 N 6927890.378 E 11840837.194 HPI = 114.57,623 N 6927906,702 E 11840987,174 Radius = 355.000 Delta = 46.049° Left Degree of Curvature (Arc) = 16,140° Length = 285.313 Tangent = 150,866 Chord = 277.696 Middle Ordinate = 28.280 External = 30.727 Back Tangent Direction = N83.788*E Back Radial Direction = \$6.212°E Chord Direction = N60.764°E Ahead Radial Direction = S52.260°E Ahead Tangent Direction = N37.740°E Element: Linear PT = 115+92.070 N 6928026.008 E 11841079.515 END = 118+50.000 N 6928229.979 E 11841237.387 Tangential Direction = N37.740°E Tangential Length = 257.930 PI = 101+00.35 DELTA = II*45'II.31" (LT) D = 05°52′35" T = 100.35' L = 200.00' R = 975.00' PC = 100.00.00 PT = 102+00.00 e = N.C.(ULS) V = 40 MPH

CONSTRUCTION ALIGNMENT DATA SHEET

REVISED
STATE
ROUTE
ROUTE
PROJECT

VA.

O639-076-348
P-IOI, R-20I,C-50I

DESIGN FEATURES RELATING TO CONSTRUCTION
OR TO REGULATION AND CONTROL OF TRAFFIC

MAY BE SUBJECT TO CHANGE AS DEEMED

NECESSARY BY THE DEPARTMENT

Johnson, Mirmiran & Thompson Herndon, Virginia ROADWAY ENGINEER

MARINA WAY CONSTRUCTION BASELINE

BEGIN CONSTRUCTION
0639-076-347,0-101

STAJO2-07.94

BEGIN PROJECT
0639-076-347,0-101

STAJO2-07.94

STAJO3-12.36

N42"20'56"E

SEE SHEET Fig.

SHEET Fig.

STAJO3-12.36

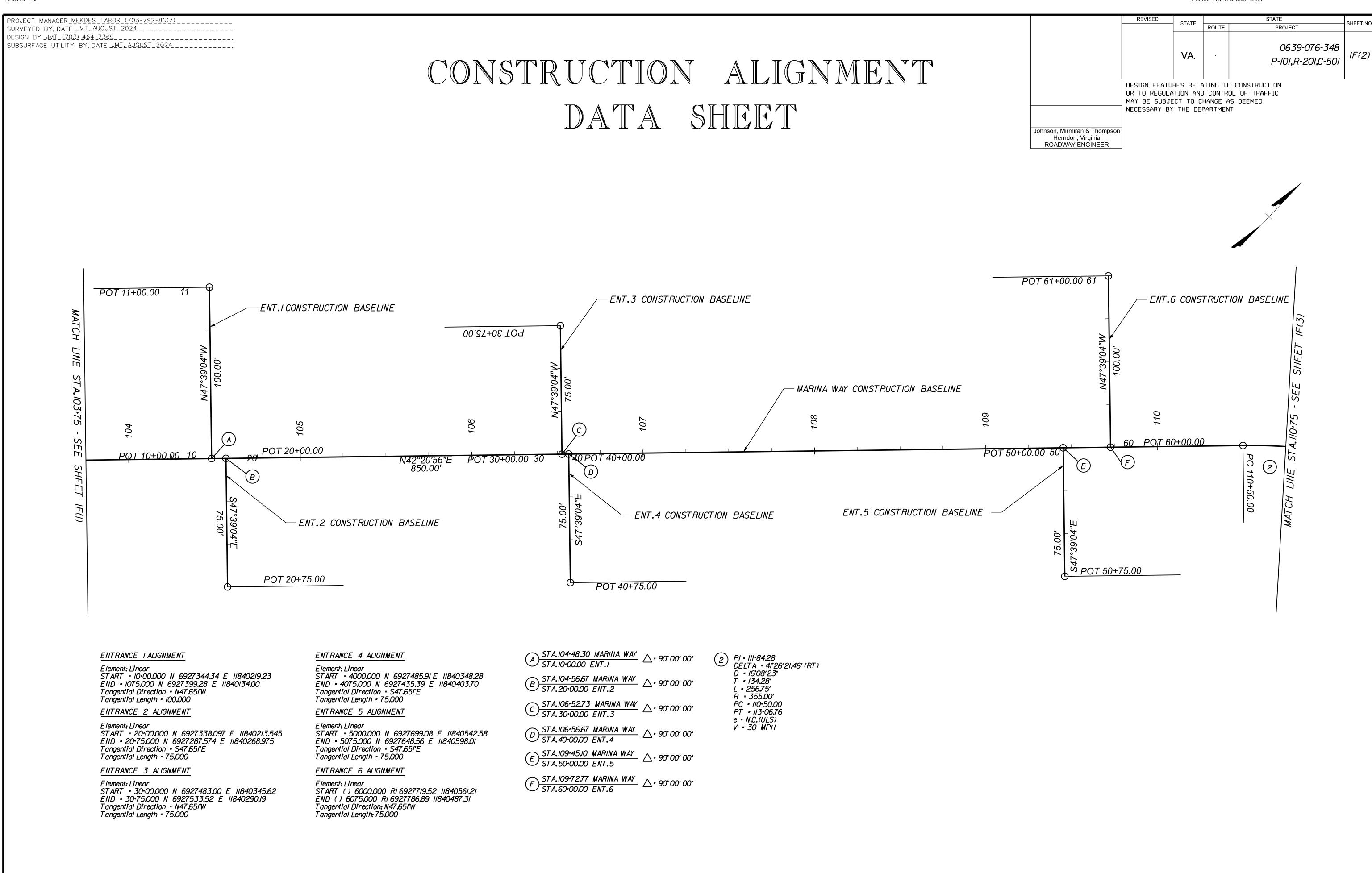
SHEET Fig.

SHE

SCALE 0 25' 50'

PROJECT 0639-076-348

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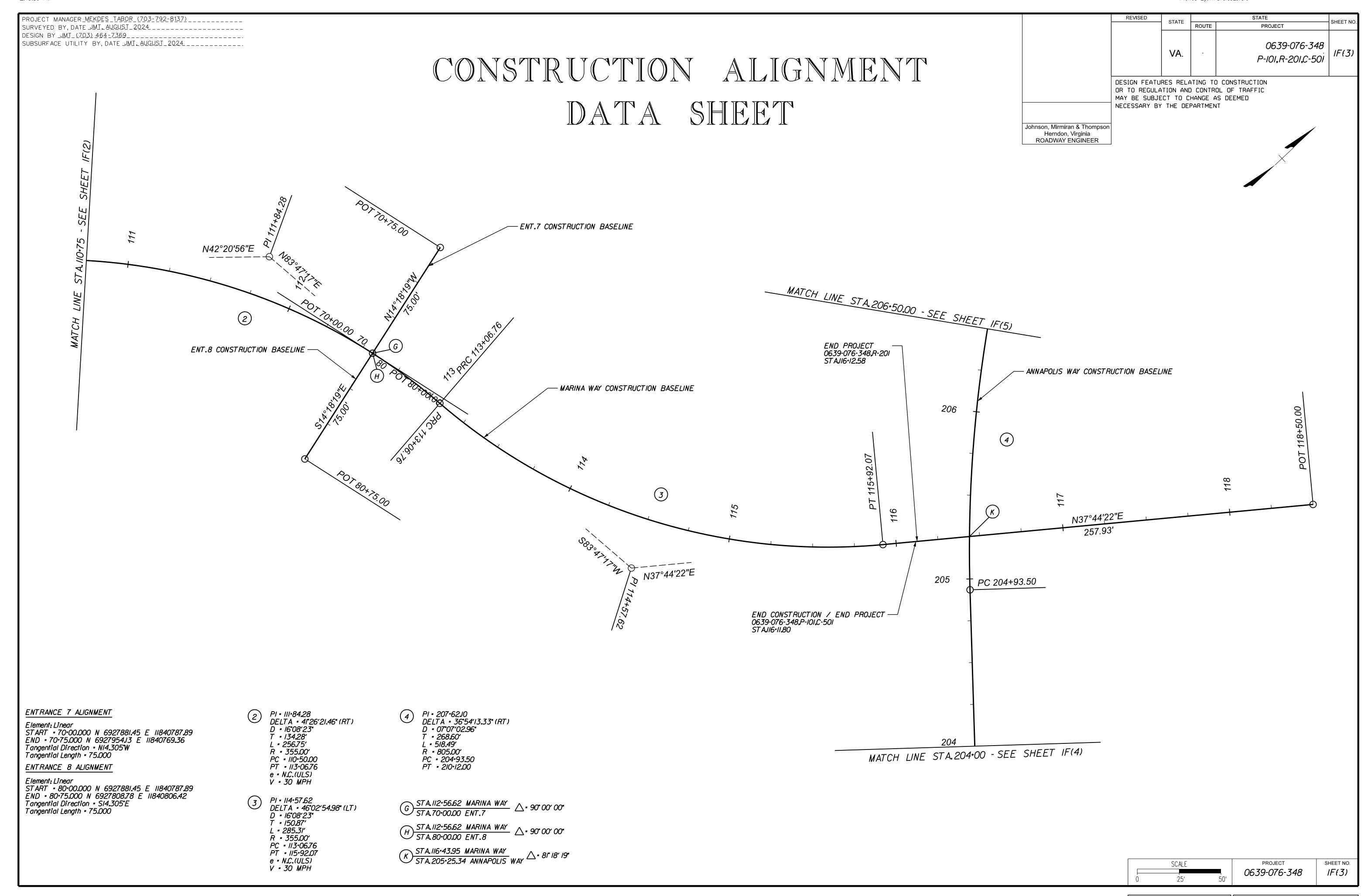
PROJECT

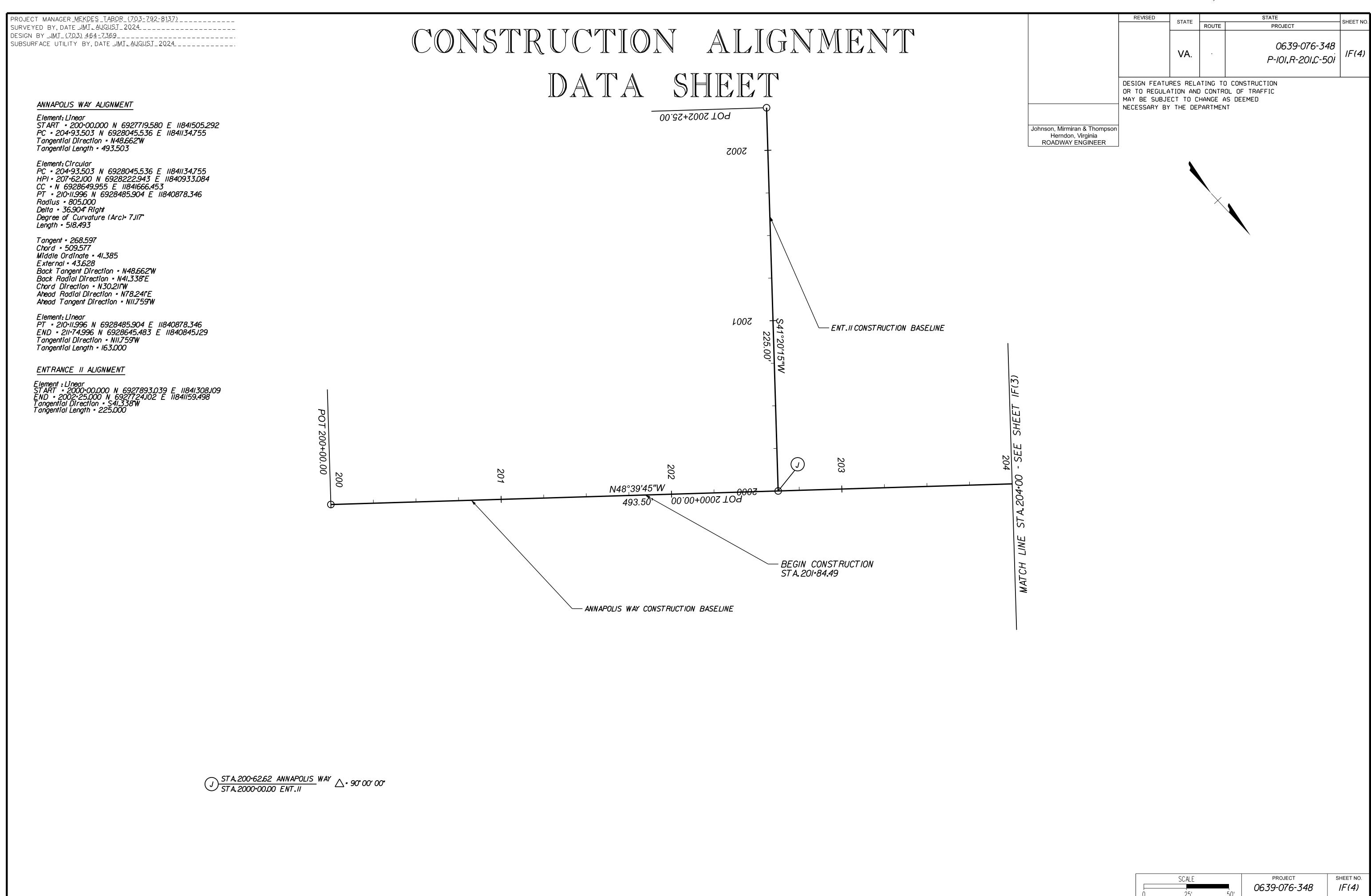
0639-076-348

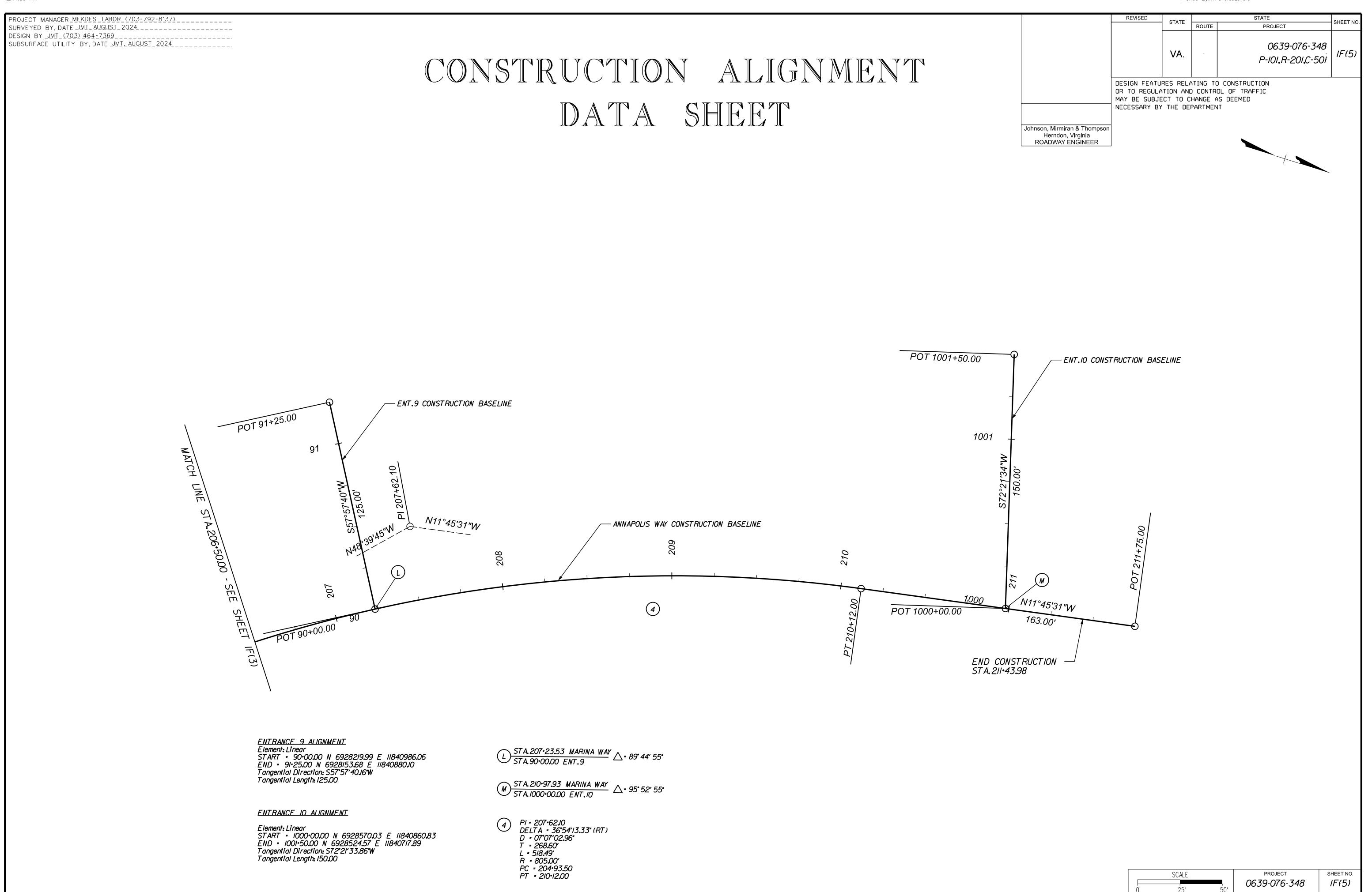
SCALE

SHEET NO.

IF(2)







PROJECT MANAGER_MEKDES_TABOR_(703-792-8137)

SURVEYED BY, DATE JMI_AUGUSI_2024

DESIGN BY JMI_(703) 464-7369

SUBSURFACE UTILITY BY, DATE JMI_AUGUSI_2024

GENERAL NOTES

- I. IT IS NOT THE INTENT OF THIS PLAN TO ENUMERATE EVERY DETAIL WHICH MUST BE CONSIDERED IN THE CONSTRUCTION OF EACH STAGE, BUT ONLY TO SHOW THE GENERAL FEATURES NECESSARY TO PROVIDE THE PROPER HANDLING OF TRAFFIC.
- 2. THE CONTRACTOR SHALL SUBMIT REVISED TRAFFIC CONTROL PLANS TO THE ENGINEER FOR APPROVAL PRIOR TO THE BEGINNING OF ANY REVISED PHASE. THE TRAFFIC CONTROL PLAN SHALL SHOW ALL NECESSARY TRAFFIC CONTROL DEVICES INCLUDING SIGNS, PAVEMENT MARKINGS, AND CHANNELIZING DEVICES.
- 3. THE CLEAR ZONE AS DEFINED IN THE VA WAPM SHALL BE FREE OF STORED MATERIALS AND PARKED EQUIPMENT. HORIZONTAL AND VERTICAL SIGHT DISTANCES SHALL NOT BE IMPACTED BY PARKED CONSTRUCTION EQUIPMENT.
- 4. ALL AREAS EXCAVATED MORE THAN 2" BELOW PAVEMENT SURFACE SERVING PUBLIC TRAFFIC WITHIN THE CLEAR ZONE AND NOT PROTECTED BY A POSITIVE BARRIER AT THE CONCLUSION OF EACH WORKDAY, SHALL BE BACKFILLED TO FORM AN APPROXIMATE 6:I SAFETY WEDGE DESIRABLE (4:I MINIMUM), AGAINST THE PAVEMENT SURFACE FOR THE SAFETY AND PROTECTION OF PUBLIC TRAFFIC. ALL COSTS FOR PLACING, MAINTAINING AND REMOVING THE 6:I DESIRABLE (4:I MINIMUM), SAFETY WEDGE SHALL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS IN THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- ALL TRAFFIC CONTROL DEVICES SHALL BE APPROXIMATELY PLACED AND MOVED AS NECESSARY TO MAINTAIN ADEQUATE PROPERTY OWNER ACCESS AT ALL TIMES. WORK MAY REQUIRE ADDITIONAL TRAFFIC CONTROL DEVICES, GRADING, AND TEMPORARY PAVEMENT FOR PASSAGE OF PEDESTRIAN, VEHICULAR, AND EMERGENCY TRAFFIC THROUGH THE WORK AREAS, BOTH DURING AND AFTER WORKING HOURS, TO MAINTAIN SUCH ACCESS.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ANY EXISTING SIGNS, UNLESS OTHERWISE ADVISED BY THE ENGINEER TO REMOVE OR RELOCATE.
- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE CONSTRUCTION, SIGNING, AND TRAFFIC MANAGEMENT PLAN WITH OTHER ADJACENT PROJECTS UNDER CONSTRUCTION.
- 8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE CONSTRUCTION MANAGER AND RESIDENCY ADMINISTRATOR OF ANY SCHEDULED WORK PLANS AND TRAFFIC DELAYS.
- 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE CONSTRUCTION MANAGER, RESIDENCY ADMINISTRATOR, REGIONAL OPERATIONS MANAGER, AND THE PUBLIC AFFAIRS STAFF OF ANY UNSCHEDULED TRAFFIC DELAYS.
- IO. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING PUBLIC SAFETY, EMERGENCY MANAGEMENT, AND MASS TRANSIT ORGANIZATIONS OF DETOUR ROUTE(S) AND AVAILABLE ALTERNATE ROUTES DURING CONSTRUCTION.
- II. THE CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE FOR THE DURATION OF THE PROJECT.
 THE CONTRACTOR SHALL ADD ANY ADDITIONAL TEMPORARY MEASURES NECESSARY TO FACILITATE PROPER, POSITIVE DRAINAGE FOR THE DURATION OF CONSTRUCTION.
- 12. UNLESS SPECIFIED ON THE PLANS, ALL EXISTING TURN LANES SHALL BE MAINTAINED AT ALL TIMES FOR THE DURATION OF CONSTRUCTION.
- 13. WHERE GROUP 2 CHANNELIZING DEVICES ARE USED TO SEPARATE THE CONSTRUCTION AREA AND TRAFFIC, A MINIMUM CLEAR ZONE AREA AS DEFINED IN THE VA WAPM IS TO BE MAINTAINED.
- 14. TRAFFIC BARRIER SERVICE SHALL BE INSTALLED AND REMOVED SO AS NOT TO PRESENT ANY BLUNT END OR HAZARD TO THE MOTORING PUBLIC. THE PLACEMENT AND REMOVAL OF THE TRAFFIC BARRIER SERVICE AND BARRICADES ARE TO BE COORDINATED BY THE PROJECT SAFETY OFFICER.
- 15. CONTRACTOR SHALL EXPEDITE WORK BEHIND BARRIER IN THE INFLUENCE OF INTERSECTIONS TO RESTORE SIGHT DISTANCE AS SOON AS POSSIBLE.
- 16. THE CONTRACTOR SHALL ENSURE THAT PERSONNEL ASSIGNED TO THE PROJECT ARE TRAINED IN TRAFFIC CONTROL TO A LEVEL COMMENSURATE WITH THEIR RESPONSIBILITIES IN ACCORDANCE WITH VDOT'S WORK ZONE TRAFFIC CONTROL TRAINING GUIDELINES.
- 17. THE CONTRACTOR SHALL INFORM THE ENGINEER OF ANY WORK REQUIRING LANE SHIFTS, LANE CLOSURES, AND/OR PHASE CHANGES A MINIMUM OF TWO WORKING DAYS PRIOR TO IMPLEMENTING THIS ACTIVITY.
- 18. THE CONTRACTOR SHALL PERFORM REVIEWS OF THE CONSTRUCTION AREA TO ENSURE COMPLIANCE WITH CONTRACT DOCUMENTS TO RESULT IN REGULARLY SCHEDULED INTERVALS AND AT THE DIRECTION OF THE ENGINEER. THE CONTRACTOR SHALL MAINTAIN A COPY OF THE TEMPORARY TRAFFIC CONTROL PLAN AT THE WORK SITE AT ALL TIMES.
- 19. UNDER NO CIRCUMSTANCES WILL CONCURRENT CONSTRUCTION LEFT AND RIGHT OF ANY LANE BE ALLOWED UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR SHOWN ON THESE PLANS.
- 20. EXISTING SURFACE, AGGREGATE BASE AND SUBBASE MATERIAL, WHICH WILL BE DEMOLISHED OR OBLITERATED DURING CONSTRUCTION AND WHICH IS SUITABLE FOR MAINTENANCE OF TRAFFIC AS DETERMINED BY THE ENGINEER SHALL BE SALVAGED AND UTILIZED FOR MAINTENANCE OF TRAFFIC PRIOR TO THE USE OF COMMERCIAL MATERIALS. WHEN NOT SPECIFIED AS A SEPARATE PAY ITEM, THE REMOVAL AND SALVAGING OF EXISTING SURFACES AND AGGREGATE BASE AND SUBBASE MATERIAL AND REUSE OF MATERIALS WILL BE MEASURED AND PAID FOR AS REGULAR EXCAVATION IN ACCORDANCE WITH SECTION 303 OF THE ROAD AND BRIDGE SPECIFICATIONS.
- 21. ACCESS TO ADJACENT RESIDENTIAL AND COMMERCIAL PROPERTIES SHALL BE MAINTAINED AT ALL TIMES OR AS DIRECTED BY THE ENGINEER.
- 22. 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.
- 23. IF REQUIRED, THE CONTRACTOR SHALL PLACE PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) AT LOCATIONS APPROVED BY VDOT AND SHALL BE IN ACCORDANCE WITH THE VA WAPM.
- 24. ALL EXISTING SIGNS, WHETHER SHOWN ON THE PLANS OR NOT, SHALL BE MAINTAINED AND RELOCATED AS NECESSARY THROUGHOUT THE LIFE OF THE PROJECT OR AS DIRECTED BY THE ENGINEER.
- 25. SIGN SPACING SHALL BE ADJUSTED TO FIT FIELD CONDITIONS WITH APPROVAL OF THE ENGINEER.
- 26. ALL EXISTING SIGNS, WHETHER SHOWN ON THE PLANS OR NOT, THAT ARE TO REMAIN AND CONVEY A CONFLICTING MESSAGE TO THE TEMPORARY TRAFFIC CONTROL SHALL BE COMPLETELY COVERED AT ALL TIMES FOR THE DURATION OF TEMPORARY TRAFFIC CONTROL SETUP.
- 27. ALL SIGNING FOR THE PROJECT LIMITS SHALL BE DONE IN ACCORDANCE WITH THE LATEST REVISION OF THE VA WAPM. THESE SIGNS SHALL BE INSTALLED ON ALL STATE MAINTAINED ROADWAYS AND REMAIN IN PLACE FOR THE DURATION OF THE PROJECT.
- 28. ALL CONSTRUCTION SIGNING SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH THE LATEST REVISION OF THE FOLLOWING DOCUMENTS:

VIRGINIA WORK AREA PROTECTION MANUAL (WAPM)
MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)
VIRGINIA SUPPLEMENT TO THE MUTCD
VIRGINIA ROAD AND BRIDGE SPECIFICATIONS
VIRGINIA ROAD AND BRIDGE STANDARDS
VDOT IIM-LD-24I / IIM-TE-351.5
VDOT IIM-TE-392 (IF APPLICABLE)

MOT & SOC PLANS GENERAL NOTES

PUBLIC COMMUNICATIONS

- I. THE PUBLIC SHALL BE NOTIFIED OF THE EXPECTED SCHEDULE ON VDOT'S WEBSITE FOR THIS PROJECT.
 INFORMATION OF THE POTENTIAL FOR BACK-UPS DURING THE PEAK HOURS OF OPERATION IS PROVIDED BY
 THE REGIONAL TRAFFIC OPERATIONS CENTER.
- 2. THE CONTRACTOR SHALL PROVIDE ADVANCE NOTICE OF ALL CLOSURES TO THE ENGINEER WHO WILL COMMUNICATE WITH THE VDOT DISTRICT PUBLIC AFFAIRS SECTION, LOCAL AGENCY, FEDERAL AGENCIES AND SCHOOLS IN CLOSE PROXIMITY, RADIO AND TELEVISION, EMERGENCY SERVICES, AND VDOT TRAFFIC OPERATION CENTER AS DEEMED NECESSARY.
- 3. THE CONTRACTOR SHALL NOTIFY TRANSPORTATION OPERATIONS CENTER OF ANY LANE CLOSURES BY 8:00 AM OF THE THURSDAY PRIOR TO THE WEEK OF CLOSURE IN ORDER TO PLACE LANE CLOSURE INFORMATION ON THE 5II SYSTEM AND VA-TRAFFIC.

TRANSPORTATION OPERATIONS

- . THE PUBLIC AFFAIRS SECTION AND THE TRAFFIC OPERATIONS CENTER SHALL BE NOTIFIED BY THE CONSTRUCTION PROJECT MANAGER OF LANE CLOSURE INFORMATION FOR DISTRIBUTION ON THE 511 SYSTEM AND VOIS.
- 2. THE CONSTRUCTION PROJECT MANAGER SHALL BE NOTIFIED ONE WEEK IN ADVANCE OF LANE CLOSURES.
- EMERGENCY RESPONSE PROFESSIONALS SHALL RESPOND TO TRAFFIC INCIDENTS IN THE WORK ZONE AS SOON AS POSSIBLE.
- 4. BY NOON ON EACH THURSDAY, THE CONTRACTOR WILL SUBMIT TO THE CONSTRUCTION PROJECT MANAGER IN WRITING, A REQUEST FOR LANE CLOSURES FOR THE FOLLOWING WEEK.
- 5. 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 - 9II TRAFFIC OPERATIONS CENTER - (703) 877-3449 VIRGINIA STATE POLICE - (703) 79I-3IOI LOCAL AGENCY - (703) 792-6825

- 6. FOLLOWING ANY TRAFFIC INCIDENTS, THE SITE SHALL BE CLEARED AND RESTORED FOR NORMAL TRAFFIC OPERATIONS AS SOON AS POSSIBLE.
- 7. TRAFFIC INCIDENTS SHALL BE INVESTIGATED AND MEASURES INTRODUCED TO REDUCE OCCURRENCES.IF
 NECESSARY,THE TRANSPORTATION MANAGEMENT PLAN MAY BE REVISED IN CONSULTATION WITH THE ENGINEER.

TEMPORARY TRAFFIC CONTROL

PEAK HOURS:

- THIS TRANSPORTATION MANAGEMENT PLAN HAS BEEN DESIGNED IN CONFORMANCE WITH A TYPE B. CATEGORY III PROJECT.
- 2. LANE CLOSURES OR WORK THAT RESTRICTS TRAFFIC FLOW WILL NOT BE PERMITTED FROM NOON THE DAY BEFORE A HOLIDAY UNTIL NOON THE DAY AFTER A HOLIDAY UNLESS APPROVED BY THE ENGINEER.
- 3. WHEN A HOLIDAY FALLS ON A FRIDAY, LANE CLOSURES ARE NOT PERMITTED FROM NOON ON THURSDAY TO NOON ON MONDAY. WHEN A HOLIDAY FALLS ON MONDAY, LANE CLOSURES ARE NOT PERMITTED FROM NOON ON FRIDAY TO NOON ON TUESDAY. FURTHER, AS THE THANKSGIVING DAY HOLIDAY OCCURS ON A THURSDAY, THE LANE CLOSURE WILL NOT BE PERMITTED FROM NOON ON WEDNESDAY UNTIL NOON ON THE FOLLOWING MONDAY.
- 4. THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER FOR ANY PLANNED CLOSURE NOT ANTICIPATED BY THIS TRANSPORTATION MANAGEMENT PLAN.
- 5. THE CONTRACTOR SHALL SUBMIT REQUESTS FOR LANE CLOSURE TO VDOT A MINIMUM OF ONE WEEK IN ADVANCE OF THE LANE CLOSURE.
- 6. PRIOR TO CLOSING LANES OF A ROADWAY OR DETOURING TRAFFIC, LOCAL FIRE, RESCUE, AND LAW ENFORCEMENT SHALL BE NOTIFIED BY THE ENGINEER. IN THE EVENT AN ACCEPTABLE ALTERNATE ROUTING FOR EMERGENCY SERVICES CANNOT BE OBTAINED, THE CONTRACTOR SHALL MAKE ACCOMMODATIONS TO ROUTE EMERGENCY VEHICLES SAFELY THROUGH THE WORK ZONE UNDER APPROVAL AND DIRECTION OF THE ENGINEER.
- 7. THE CONTRACTOR SHALL START LANE CLOSURE ACTIVITIES WITHIN THE SPECIFIED OFF PEAK HOURS, NO ROAD PREPARATION ACTIVITY ALLOWED DURING THE PEAK HOURS. THE CONTRACTOR SHALL CLEAR THE TEMPORARY LANE CLOSURE SET-UP WITHIN THE OFF PEAK HOURS.
- 8. LANE CLOSURES WILL NOT BE PERMITTED DURING THE PEAK HOURS UNLESS DIRECTED BY THE ENGINEER.

6:00 AM TO 9:00 AM AND 3:30 PM TO 6:30 PM

NON-PEAK HOURS: 9:00 AM TO 3:30 PM AND 6:30 PM TO 6:00 AM

	ALLOWABLE LANE	CLOSURE HOURS (SIN	IGLE LANE)	
WEE	KDAY		WEEKEND	
MONDAY - THURSDAY	FRIDAY	1	SATURDAY - SUNDAY	SUNDAY - MONDAY
9:00 AM TO 3:30 PM 9:00 PM TO 5:00 AM	9:00 AM TO 2:00 PM	9:00 PM TO 9:00 AM	9:00 PM TO 9:00 AM	10:00 PM TO 5:00 AM

	ALLOWABLE LANE	CLOSURE HOURS (MULT	IPLE LANES)	
WEE	KDAY		WEEKEND	
MONDAY - THURSDAY	FRIDAY	FRIDAY - SATURDAY	SATURDAY - SUNDAY	SUNDAY - MONDAY
9:00 PM TO 5:00 AM	10:00 PM TO 12:00 AM	10:00 PM TO 6:00 AM	10:00 PM TO 6:00 AM	10:00 PM TO 5:00 AM

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

Johnson, Mirmiran & Thompson Herndon, Virginia ROADWAY ENGINEER

TYPICAL TRAFFIC CONTROL FIGURES

THE FOLLOWING TYPICAL TRAFFIC CONTROL (TTC) FIGURES FROM THE VA WAPM HAVE BEEN PROPOSED FOR THE USE, GUIDANCE, AND APPLICATION ON THIS PROJECT:

FIGURE TTC-13.2 MOVING/MOBILE OPERATIONS ON A MULTI-LANE ROADWAY
FIGURE TTC-15.2 SHORT DURATION OPERATION ON A MULTI-LANE ROADWAY
FIGURE TTC-16.2 OUTSIDE LANE CLOSURE OPERATION ON A FOUR-LANE ROADWAY
FIGURE TTC-27.2 INSIDE LANE CLOSURE OPERATION ON A FOUR-LANE ROADWAY
FIGURE TTC-27.2 LANE CLOSURE OPERATION - FAR SIDE OF AN INTERSECTION
TURN LANE CLOSURE OPERATION
FIGURE TTC-35.1 SIDEWALK CLOSURE AND BYPASS SIDEWALK OPERATION
CROSSWALK CLOSURE AND PEDESTRIAN DETOUR OPERATION

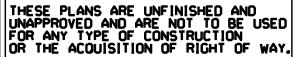
FIGURE TTC-53.0 SIGNING FOR PROJECT LIMITS

FIGURE TTC-57.2 END OF DAY SIGNING FOR PARTIAL PAVING OPERATIONS ON A MULTI-LANE ROADWAY

FIGURE TTC-58.J END OF DAY SIGNING FOR FULL PAVING OPERATIONS ON A MULTI-LANE ROADWAY

N/A

PROJECT 0639-076-348



SHEET NO

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Ø% PLANS

PROJECT MANAGER_MEKDES_TABOR_(703-792-8137) SURVEYED BY, DATE JMT. AUGUST 2024 DESIGN BY _JMT_(703) 464-7369______ SUBSURFACE UTILITY BY, DATE JMI, AUGUSI 2024 ______

MOT & SOC PLANS

SEQUENCE OF CONSTRUCTION AND SIGN SCHEDULE

REVISED STATE ROUTE PROJECT 0639-076-348 VA. R-201,C-501

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

Johnson, Mirmiran & Thompson Herndon, Virginia **ROADWAY ENGINEER**

			SIGN SC
SIGN	STD.NO.	PANEL SIZE	QUANTITY
ROAD WORK AHEAD	W20-1	48" x48"	3
END ROAD WORK	G20-2 (V)	48" x 30"	3
LEFT LANE CLOSED AHEAD	W9-3L	48" x48"	2
RIGHT LANE CLOSED AHEAD	W9-3R	48"x48"	2
LANE ENDS MERGE LEFT	W9-2L	48" x48"	/
	W4-2L	48"x48"	2
	W4-2R	48"x48"	2
KEEP LEFT	R4-V7L	48" x 48"	3
KEEP RIGHT	R4-V7R	48"x48"	2
ROAD CLOSED	RII-2	48"x30"	10
BEGIN LEFT TURN LANE	R3-20L	24"x36"	/
BEGIN RIGHT TURN LANE	R3-20R	24"x36"	/

SIGN	STD.NO.	PANEL SIZE	QUANTITY
SIDEWALK CLOSED	R9-9	30"x18"	4
CONSTRUCTION ENTRANCE	WII-V2	48" x 48"	/
RIGHT LANE MUST TURN RIGHT	R3-7R	30"x30"	/
	R3-2	48" x 48"	/
LEFT TURN LANE CLOSED AHEAD	W20-VI3L	48" x48"	/

RIGHT TURN LANE W20-VI3R CLOSED

> **PROJECT** SHEET NO. 0639-076-348

SIGN SCHEDULE

SEQUENCE OF CONSTRUCTION

- PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES, SIGNING FOR PROJECT LIMITS SHALL BE INSTALLED AS SHOWN IN FIGURE TTC-53.0 OF THE VA WAPM FOR PROJECT DURATIONS EQUAL TO OR GREATER THAN 60 DAYS.
- ALL EROSION AND SEDIMENT CONTROL MEASURES AND TEMPORARY DRAINAGE SHALL BE IN PLACE PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR SHALL SCHEDULE ALL PHASES OF CONSTRUCTION IN SUCH A MANNER THAT WATER, SANITARY SEWER, CABLE, FIBER CABLE/OPTIC CABLE, AND ANY OVERHEAD OR UNDERGROUND UTILITY SERVICES WILL NOT BE INTERRUPTED.

UNLESS OTHERWISE APPROVED OR DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL PLAN AND EXECUTE THE WORK IN ACCORDANCE WITH THE FOLLOWING SUGGESTED SEQUENCE OF CONSTRUCTION:

PHASE I:

CLOSE GORDON BLVD RTE 123 NORTHBOUND RIGHT TURN LANE AND RTE 123 SOUTHBOUND LEFT TURN LANE AT LOCATIONS SHOWN ON PLANS IN ACCORDANCE WITH FIGURE TTC-16,2 AND FIGURE TTC-29,2 RESPECTIVELY.

- 2. CLOSE EXISTING GORDON PLAZA EXIT LANES AND ENTRANCE LANES AT LOCATIONS SHOWN ON PLANS
- CLOSE HORNER ROAD EASTBOUND THRU LANE AT LOCATIONS SHOWN ON PLANS IN ACCORDANCE WITH FIGURE TTC-27.2,NO CONSTRUCTION VEHICLES SHALL USE THE HORNER ROAD THRU LANE TO ACCESS THE MARINA WAY CONSTRUCTION SITE OR ADJACENT GORDON PLAZA CONSTRUCTION SITE.
- 4. CLOSE ANNAPOLIS WAY SOUTHBOUND OUTSIDE LANE AT LOCATIONS SHOWN ON PLANS IN ACCORDANCE WITH FIGURE TTC-16**.2.**
- 5. INSTALL ADVANCE WARNING SIGNS AND GROUP 2 CHANNELIZING DEVICES AS SHOWN ON PLANS.
- INSTALL TEMPORARY ESC DRAINAGE DITCH AND SEDIMENT POND AT LOCATIONS SHOWN ON PLANS.
- 7. INSTALL TEMPORARY ACCESS POINT FOR CONSTRUCTION OF ADJACENT GORDON DEVELOPMENT AT STA. 103.80 AS SHOWN ON PLANS.

8. MODIFY LOCATION OF WESTBOUND TRAFFIC SIGNAL HEADS AT RTE 123 INTERSECTION TO ALIGN WITH EXISTING GORDON PLAZA ENTRANCE LANES.

- OPEN EXISTING GORDON PLAZA ENTRANCE LANES TO 2-WAY CONSTRUCTION TRAFFIC.
- 10. DEMO EXISTING SIDEWALK, CURB & GUTTER, RAISED MEDIAN, AND PAVEMENT AS SHOWN IN PLANS.
- INSTALL THE PROPOSED SIDEWALK, CURBS, GUTTERS, RAISED CONCRETE MEDIAN, DROP INLETS, STORM SEWER PIPES, AND FULL DEPTH PAVEMENT AT LOCATIONS SHOWN ON PLANS,
- 12. INSTALL PROPOSED TRAFFIC SIGNING AND PAVEMENT MARKINGS AS SHOWN ON PLANS.TRAFFIC CONTROL FOR STRIPING OPERATIONS SHALL BE IN ACCORDANCE WITH FIGURE TTC-15.2.

PHASE 2:

- CLOSE EXISTING GORDON PLAZA ENTRANCE LANES AT LOCATIONS SHOWN ON PLANS.
- CLOSE GORDON BLVD RTE 123 SOUTHBOUND INSIDE THRU LANE AT LOCATIONS SHOWN ON PLANS IN ACCORDANCE WITH FIGURE TTC-17.2.
- 3. INSTALL ADVANCE WARNING SIGNS AND GROUP 2 CHANNELIZING DEVICES AS SHOWN ON PLANS.
- MODIFY LOCATION OF WESTBOUND TRAFFIC SIGNAL HEADS AT RTE 123 INTERSECTION TO ALIGN WITH PROPOSED MARINA WAY WESTBOUND LANES.
- 5. OPEN PROPOSED MARINA WAY WESTBOUND LANES TO 2-WAY TRAFFIC AT RTE 123 INTERSECTION. OPEN PROPOSED MARINA WAY WESTBOUND AND EASTBOUND LANES FROM ENTRANCE ITO ENTRANCE 6.0PEN PROPOSED ENTRANCES I-6 FOR ACCESS TO GORDON PLAZA DEVELOPMENT.
- DEMO EXISTING SIDEWALK,CURB & GUTTER,RAISED MEDIAN,AND PAVEMENT AS SHOWN IN PLANS.EXISTING SIGNAL POLES TO REMAIN IN OPERATION UNTIL CONSTRUCTION OF PROPOSED SIGNAL POLES IS COMPLETE.
- 7. INSTALL THE PROPOSED SIDEWALK, CURBS, GUTTERS, RAISED CONCRETE MEDIAN, TRAFFIC EQUIPMENT, CONDUITS, SIGNAL POLES, DROP INLETS, STORM SEWER PIPES, AND FULL DEPTH PAVEMENT AT LOCATIONS SHOWN ON PLANS.
- 8. INSTALL PROPOSED TRAFFIC SIGNING AND PAVEMENT MARKINGS AS SHOWN ON PLANS.TRAFFIC CONTROL FOR STRIPING OPERATIONS SHALL BE IN ACCORDANCE WITH FIGURE TTC-15.2.
- 9. DEMO EXISTING SIGNAL POLES AT HORNER RD RTE 123 INTERSECTION AS SHOWN ON PLANS.RETAIN EXISTING CONCRETE SIGNAL FOUNDATION LOCATED AIN RAISED MEDIAN ISLAND AT SOUTH QUADRANT OF HORNER RD - RTE 123 INTERSECTION.

PHASE 3A:

- I. OPEN PROPOSED MARINA WAY EASTBOUND LANES AT RTE 123 INTERSECTION.
- 2. CLOSE ANNAPOLIS WAY SOUTHBOUND INSIDE LANE AT LOCATIONS SHOWN ON PLANS IN ACCORDANCE WITH FIGURE TTC-17.2 AND FIGURE TTC-27.2.
- 3. CLOSE ANNAPOLIS WAY NORTHBOUND LEFT TURN LANE AT LOCATIONS SHOWN ON PLANS IN ACCORDANCE WITH FIGURE TTC-29.2
- 4. INSTALL ADVANCE WARNING SIGNS AND GROUP 2 CHANNELIZING DEVICES AS SHOWN ON PLANS.
- 5. DEMO EXISTING RAISED MEDIAN AND PAVEMENT AS SHOWN IN PLANS.
- 6. INSTALL THE PROPOSED RAISED CONCRETE MEDIAN AND FULL DEPTH PAVEMENT AS SHOWN ON PLANS.
- 7. INSTALL PROPOSED TRAFFIC SIGNING AND PAVEMENT MARKINGS ON SHOWN ON PLANS.TRAFFIC CONTROL FOR STRIPING OPERATIONS SHALL BE IN ACCORDANCE WITH FIGURE TTC-15.2.

PHASE 3B:

OPEN ANNAPOLIS WAY SOUTHBOUND INSIDE LANE AND NORTHBOUND LEFT TURN LANE AT LOCATIONS SHOWN ON PLANS.

2. CLOSE ANNAPOLIS WAY SOUTHBOUND OUTSIDE LANE AT LOCATIONS SHOWN ON PLANS IN ACCORDANCE WITH FIGURE TTC-16.2.

- 3. INSTALL ADVANCE WARNING SIGNS AND GROUP 2 CHANNELIZING DEVICES AS SHOWN ON PLANS. 4. CLOSE EXISTING SIDEWALKS AT LOCATIONS SHOWN ON PLANS.INSTALL SIDEWALK DIVERSIONS WITH
- TEMPORARY TRAFFIC BARRIERS IN ACCORDANCE WITH TTC FIGURE 35.1. 5. DEMO EXISTING SIDEWALK, CURB & GUTTERS, RETAINING WALL, AND PAVEMENT AS SHOWN IN PLANS. 6. INSTALL THE PROPOSED SIDEWALK, CURBS, GUTTERS, AND FULL DEPTH PAVEMENTAT LOCATIONS SHOWN

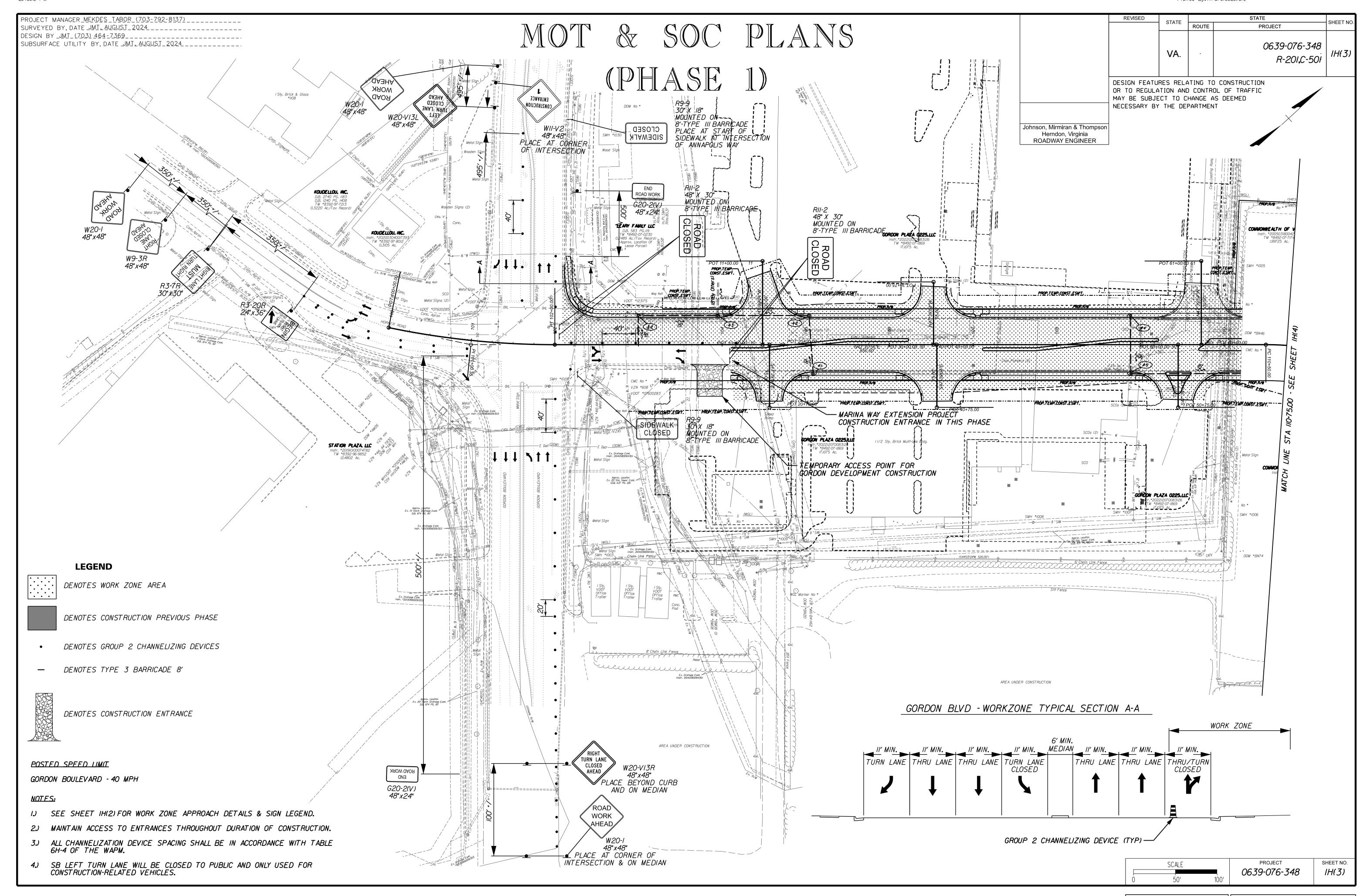
PHASE 4:

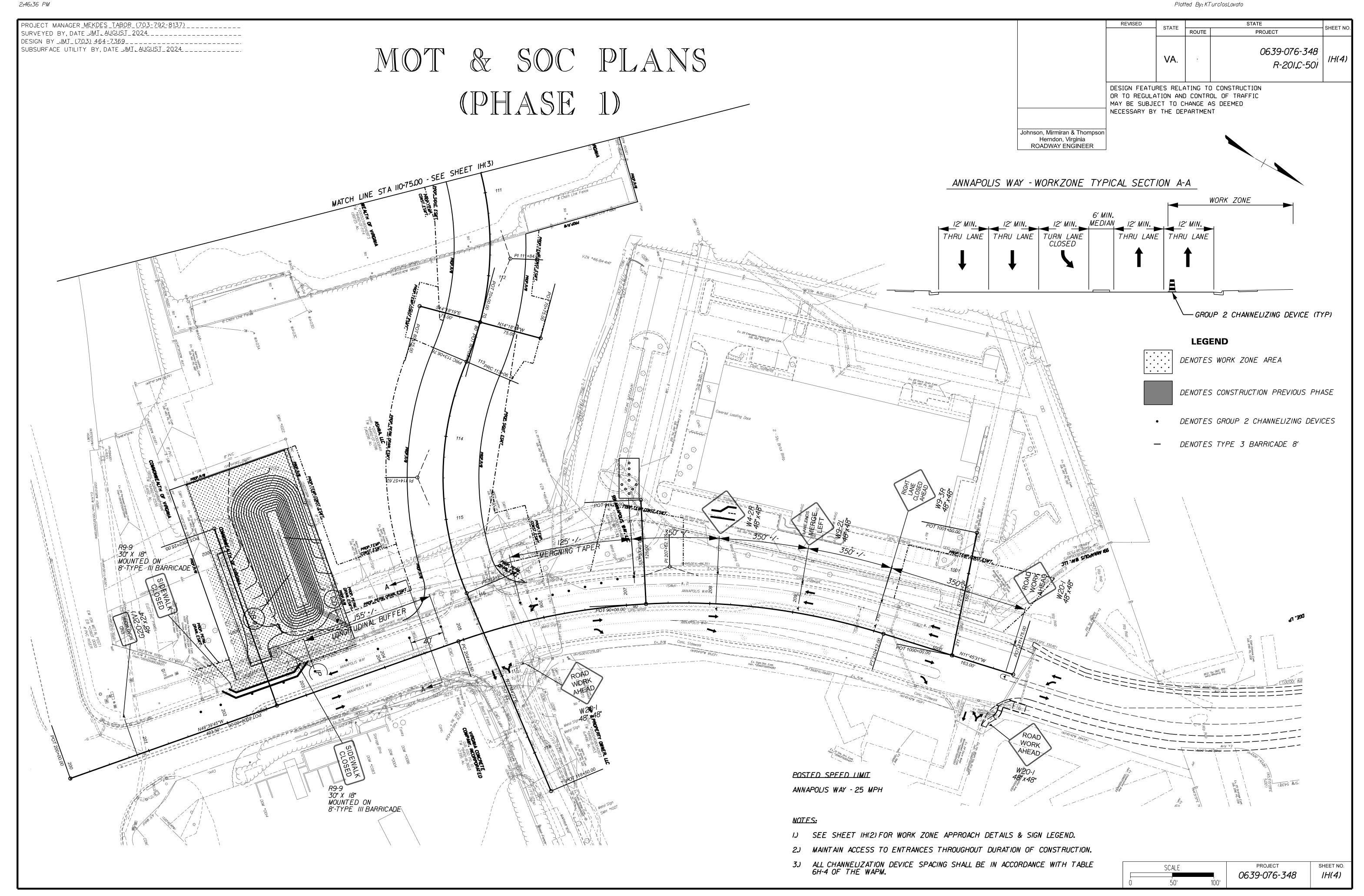
ON PLANS.

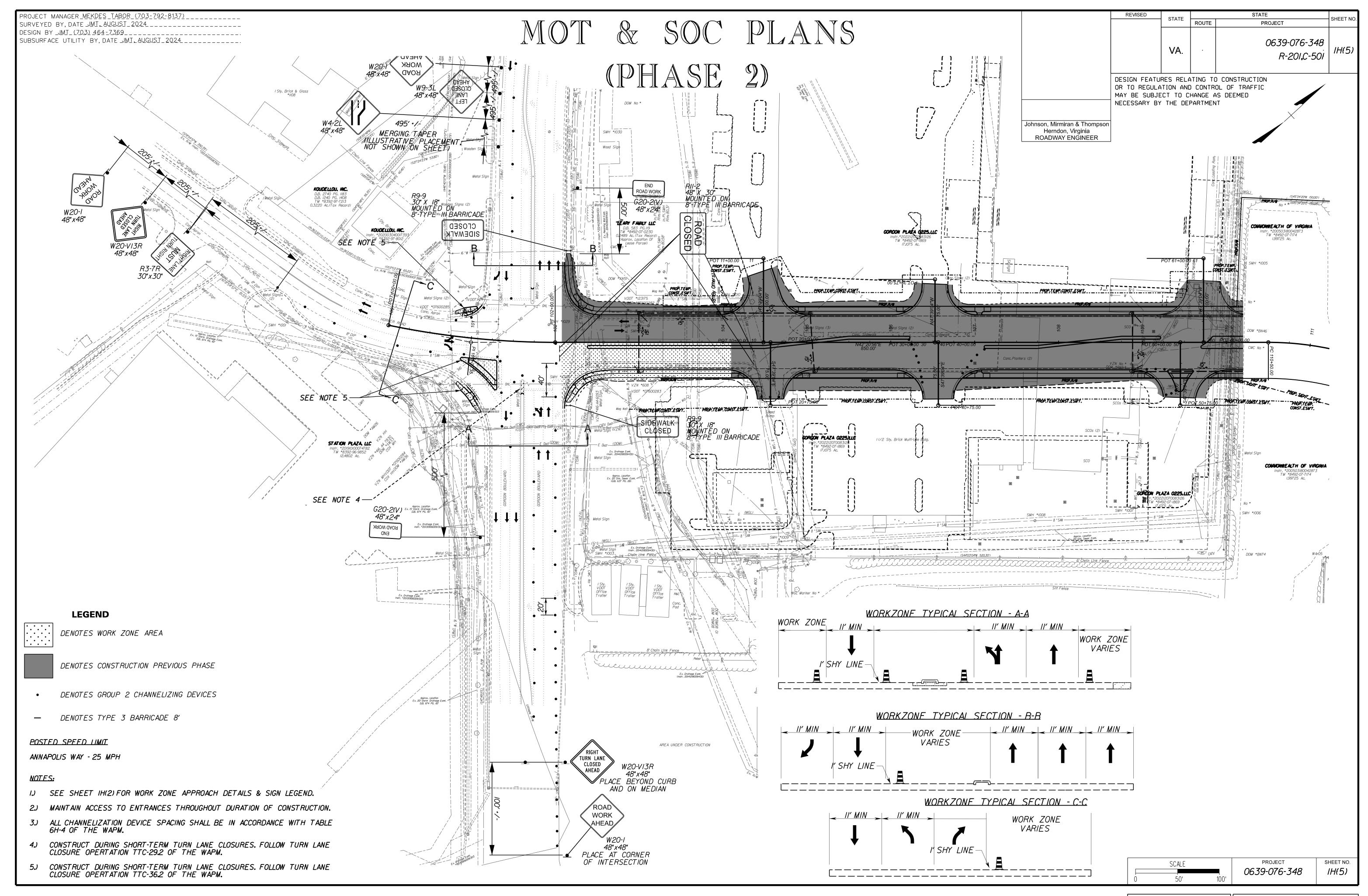
- I. OPEN ANNAPOLIS WAYSOUTH BOUND LANE AT LOCATIONS SHOWN ON PLANS.
- 2. OPEN PROPOSED ENTRANCES 9 10 FOR ACCESS TO 991 ANNAPOLIS WAY PROPERTY.
- 3. CLOSE ANNAPOLIS WAY SOUTHBOUND OUTSIDE LANE AT LOCATIONS SHOWN ON PLANS IN ACCORDANCE WITH FIGURE TTC-16.2.
- 4. CLOSE ANNAPOLIS WAY NORTHBOUND TURN LANE AT LOCATIONS SHOWN ON PLANS IN ACCORDANCE WITH FIGURE TTC-29.2.
- 4. INSTALL ADVANCE WARNING SIGNS AND GROUP 2 CHANNELIZING DEVICES AS SHOWN ON PLANS.
- DEMO EXISTING SIDEWALK.CURB & GUTTER.AND FULL DEPTH PAVEMENT AS SHOWN IN PLANS.CLEAR AND GRUB LAND AT LOCATIONS OF PROPOSED MARINA WAY RUADWAY
- 6. INSTALL THE PROPOSED SIDEWALK, CURBS, GUTTERS, RAISED CONCRETE MEDIAN, DROP INLETS, STORM SEWER PIPES, STORMWATER MANAGEMENT POND, AND FULL DEPTH PAVEMENT AT LOCATIONS SHOWN ON PLANS.
- 7. INSTALL PROPOSED TRAFFIC SIGNING AND PAVEMENT MARKINGS AS SHOWN ON PLANS.TRAFFIC CONTROL FOR STRIPING OPERATIONS SHALL BE IN ACCORDANCE WITH FIGURE TTC-15.2.
- 8. OPEN ANNAPOLIS WAY SOUTHBOUND OUTSIDE LANE AT LOCATIONS SHOWN ON PLANS.
- 9. OPEN PROPOSED MARINA WAY AT ANNAPOLIS WAY INTERSECTION.OPEN PROPOSED ENTRANCES 7 8.
- 10. OPEN PROPOSED STORMWATER MANAGEMENT POND ENTRANCE.

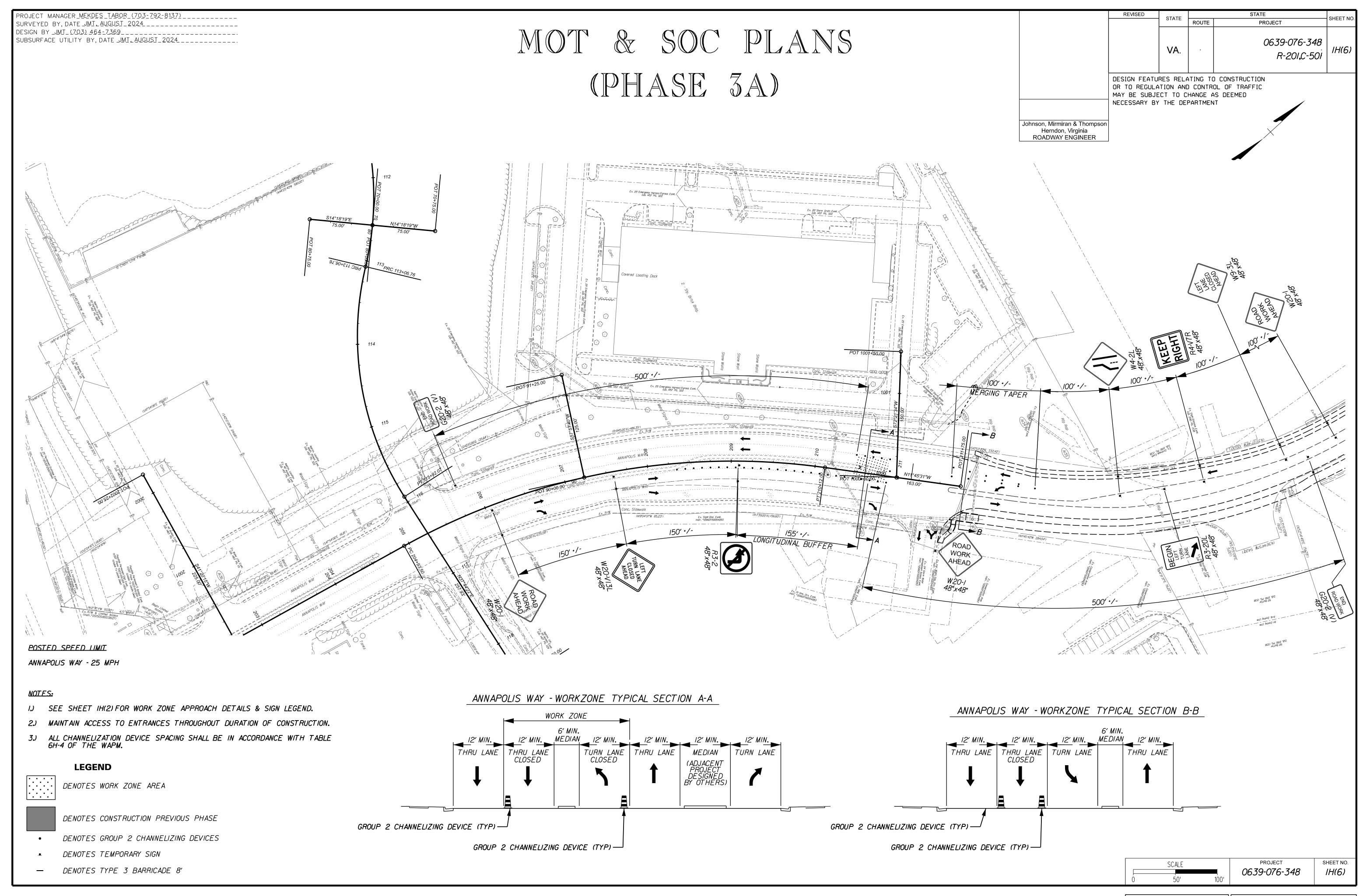
EAD/						
ND WORK	G20-2 (V)	48" x 30"	3	CONSTRUCTION ENTRANCE	WII-V2	48";
EFT ANE DSED EAD	W9-3L	48"x48"	2	RIGHT LANE MUST TURN RIGHT	R3-7R	30";
GHT ANE DSED EAD	W9-3R	48" x 48"	2		R3-2	48";
RGE EFT	W9-2L	48" x 48"	/	LEFT TURN LANE CLOSED AHEAD	W20-V13L	48";
	W4-2L	48" x48"	2	RIGHT TURN LANE CLOSED AHEAD	W20-VI3R	48";
	W4-2R	48" x 48"	2		TYPE 3 BARRICADE	
EP FT	R4-V7L	48"x48"	3			
EP	R4-V7R	48"x48"	2			
)AD	D.U. 0	40117011				

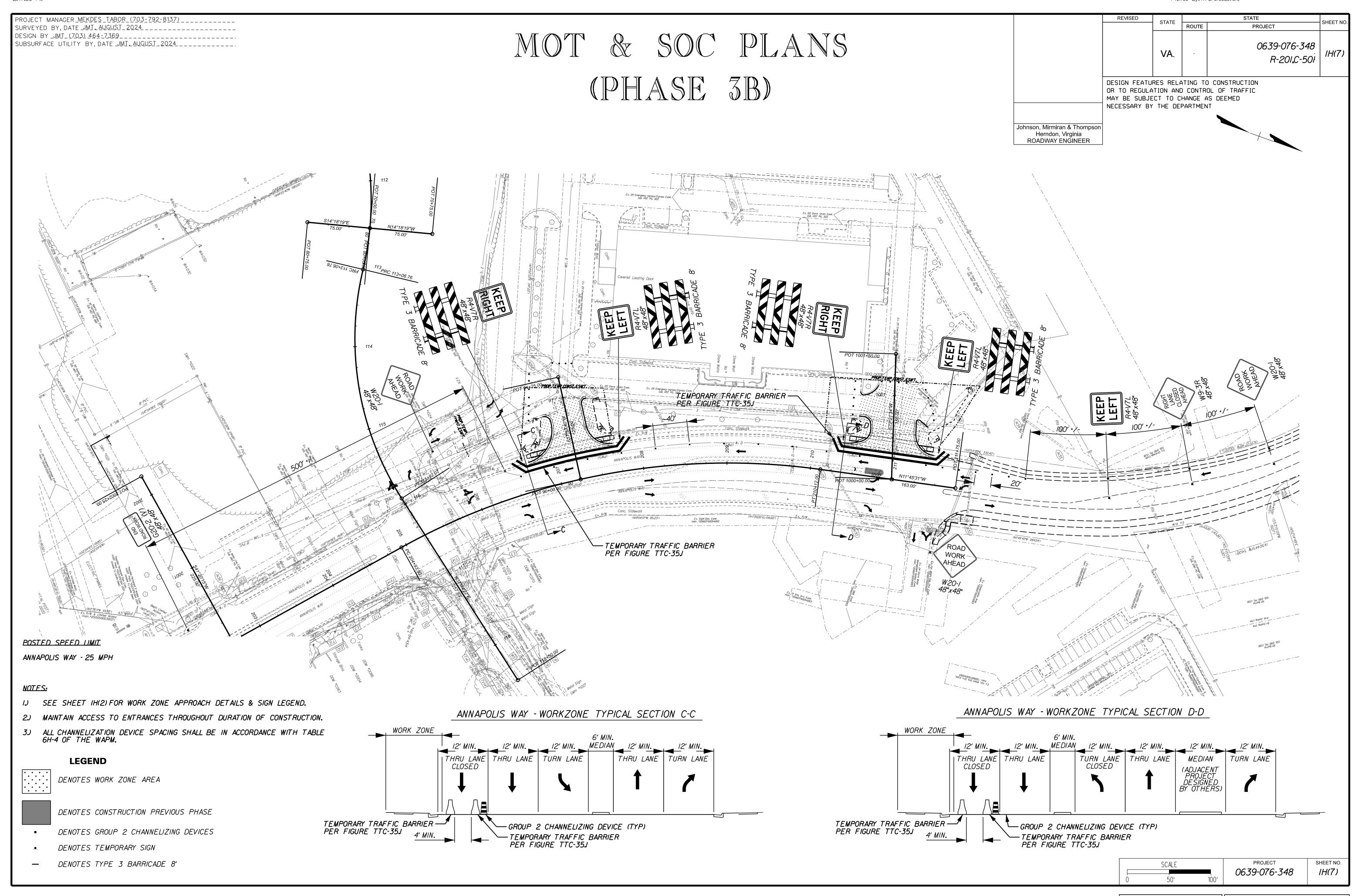
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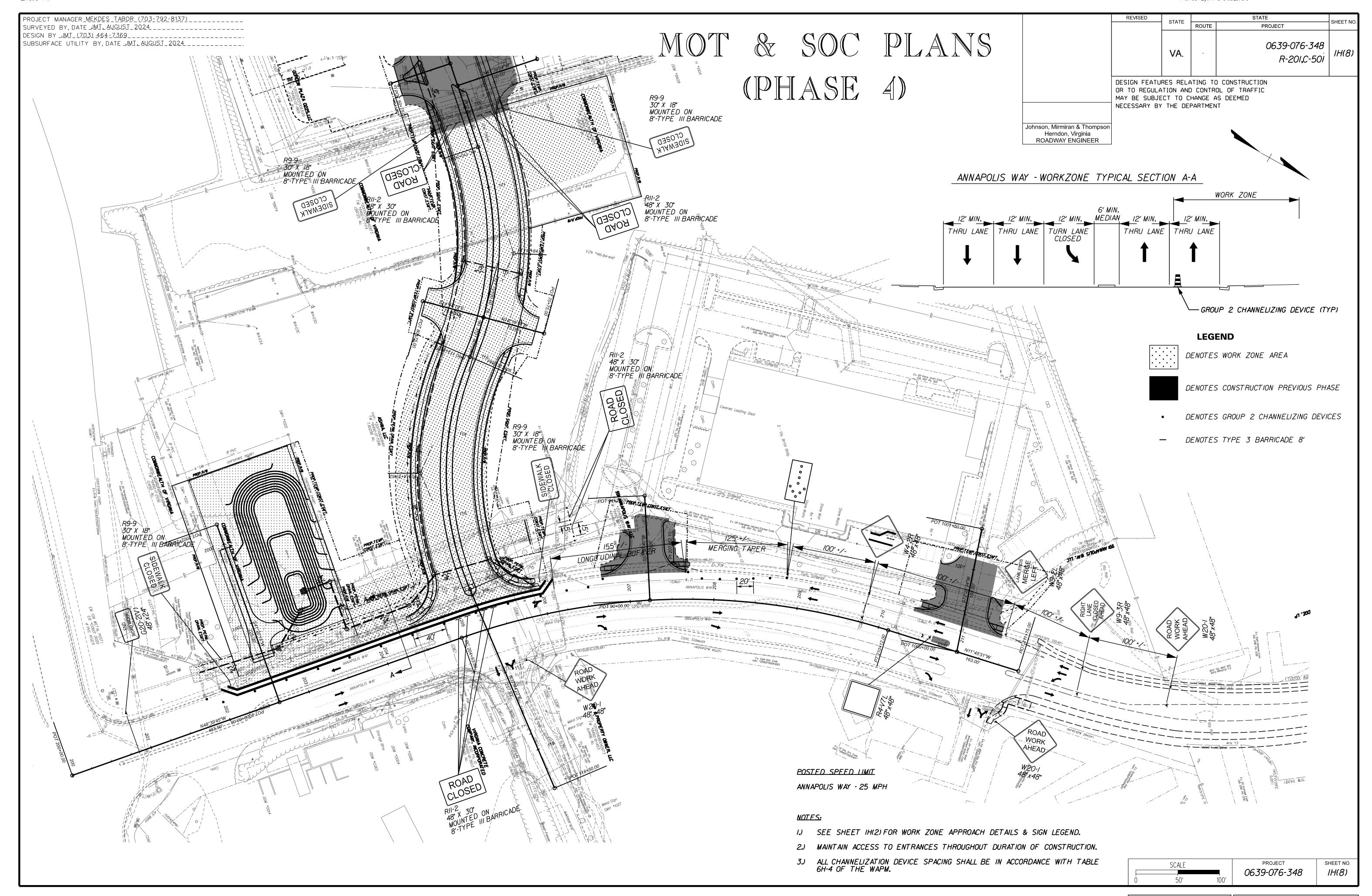












PROJECT MANAGER MEKDES TABOR (703-792-8137)

SURVEYED BY, DATE JMT, AUGUST 2024

DESIGN BY JMT (703) 464-7369

SUBSURFACE UTILITY BY, DATE JMT, AUGUST 2024

GRADING

- G-1 The grade line denotes top of finished pavement unless shown otherwise on typical sections or plans.
- 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: curb, gutter, drainage structure, sign island, light pole foundation.
- G-6 The borrow material for this project shall be a minimum CBR_____ or as approved by the Materials Engineer.

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

- 1-4 All trees located within the Clear Zone or within a minimum of 30 feet of the edge of pavement, within the limits of the right of way or construction easement, unless otherwise noted on plans or directed by the Engineer, shall be removed, as provided for a Section 301 of the applicable VDOT Road and Bridge Specifications.
- I-2 Two Reflectorized Railroad Advance Warning Signs W10-1 complete with two approved posts, WILL BE FURNISHED AND ERECTED BY STATE FORCES.
- I-6 Certain trees shall be preserved as noted on plans or as directed by the Engineer.
- 1-7 Where Standard slope roundoffs would damage trees, bushes or other desirable vegetation, they shall be omitted when so ordered by the Engineer.
- I-16 The "underground utilities" survey data on this project has been provided by consultant and copies are available from the Department.
- I-17 For method of constructing Straight-Line Taper Lanes in curb and/or curb and gutter sections, see typical details on Sheet 2A(1)-2A(2).
- I-18 All pavement markings and traffic flow arrows shown on the roadway construction plans are schematic only. The actual location and application of pavement markings shall be in accordance with Section 704 of the applicable VDOT Road and Bridge Specifications, MUTCD, sequence of construction/traffic control plans, pavement marking plan sheet series 9 and 10 and as directed by the Engineer.
- I-19 The following outside sources, under contract with VDOT, have provided information on this project.

Hydraulic Design - JMT
Roadway Design - JMT
Utility Design Utility Designation Utility Location Survey -JMT
Bridge Design - NOT APPLICABLE
Traffic Design - JMT
Landscape Design - NOT APPLICABLE

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.

I-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.

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.

GENERAL NOTES

- D-4 At Station (specify station number), the fill shall be placed and allowed to settle and displace all soft materials. Any necessary temporary drainage shall be installed. When directed by the Engineer, that part of the fill where the permanent drainage structure is to reside shall be removed and the structure placed. The cost of installing and removing the temporary drainage facility, the cost of removing the fill above the original ground for installation of permanent drainage structure and the cost of backfill shall be included in the unit price bid for regular excavation. Excavation below the original ground necessary for the installation of the permanent drainage structure will be measured and paid for in accordance with Section 303 of the applicable VDOT Road and Bridge Specifications.
- D-5 At locations where Structural Plate Steel Pipe or Pipe Arch with a concrete invert is required or is allowable as an option to Corrugated Steel Pipe or Pipe Arch, the concrete invert is to be field applied and shall cover, at a minimum, the bottom 25% of the circumference of a circular shape structure or the bottom and corner plates of an arch shape structure. As an option to providing the concrete invert, the plates along the bottom 25% (minimum) of the circumference of the Structural Plate Steel Pipe or the bottom and corner plates (minimum) of the Structural Plate Steel Pipe Arch shall be a minimum of two sheet thickness (gages) heavier than the sheet thickness (gage) indicated in the applicable VDOT Road and Bridge Standard PC-1 for the specified height of cover for the structure. Example: For a pipe with height of cover requiring 0.109" sheet thickness (12 gage) plates, the bottom plates shall be 0.168" sheet thickness (8 gage). The sheet thickness (gage) of the remainder of the pipe plates shall either conform to those specified in Standard PC-1 for the applicable height of cover or to the heavier plates used in the bottom of the pipe.
- Pipes shall conform to any of the allowable types shown on sheet number <u>2B(1)</u>, 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 <u>Road and Bridge Standard</u> 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-8 Where open joint pipe is to be used, no joint shall be opened a distance exceeding 25% of the spigot length. Sealing of the pipe joint shall be in accordance with Section 302 of the applicable VDOT Road and Bridge Specifications.
- 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-11 The proposed granular filter blanket for the proposed riprap may be omitted by the Engineer if the slope on which it is to be placed is found to be comprised of material which is coarser than that specified for the proposed granular filter blanket.
- D-12 All existing drainage facilities labeled "To Be Abandoned" shall be left in place, backfilled and plugged in accordance with the VDOT <u>Road and Bridge Standard</u> PP-1. Basis of Payment will be C.Y. of Flowable Backfill.
- 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-14 Proposed drop inlets with a height (H) less than the standard minimum shown in the VDOT Road and Bridge Standards shall be considered and paid for as Standard Drop Inlets for the type specified. Pipes with less than standard minimum finished height of cover shall be noted as such in the drainage description for the pipe. Specific pipe bedding and cover requirements are provided in the applicable PB-1 and PC-1 standard drawings of the VDOT Road and Bridge Standards.
- 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.
- D-17 St'd. SL-1 Safety Slab locations are based on the assumed use of precast structures. If cast-in-place structures are utilized, and the interior chamber dimensions (length and width, or diameter) are less than 4 feet, the safety slabs shall not be installed.

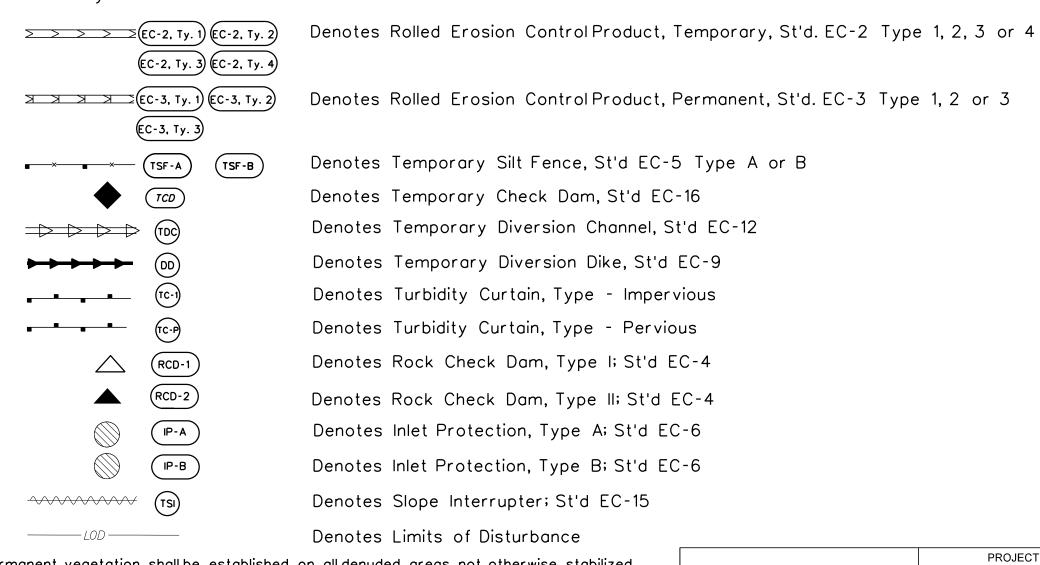
STORMWATER MANAGEMENT

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

- S-1 CLEARING AND GRUBBING OF SWM BASIN SITE The area where the dam is to be constructed and the area upstream of the dam, to an elevation equal to the crest of the dam (maximum ponded water elevation), shall be cleared and grubbed in accordance with Section 301 of the applicable VDOT Road and Bridge Specifications.
- S-2M SWM BASIN DAM CONSTRUCTION The dam for detention basins (no permanent pool) shall conform to the details contained in the plans and shall be constructed in accordance with Section 303 of the applicable VDOT Road and Bridge Specifications. The native material on which the dam will set shall meet the specifications for AASHTO Type A-4 or finer material. Where the native material does not meet this requirement, the area beneath the dam is to be excavated a minimum of 1.2 m and backfilled with a material meeting finer classification unless otherwise specified in the plans. The material used for the embankment of the dam shall be AASHTO Type A-4 or finer or otherwise specified in the plans. Dams with foundation and embankment material not meeting the above requirements or dams greater than 4.6 m in height, or dams for retention basins (permanent pool) shall incorporate a membrane-lined trench, a homogenous embankment with seepage controls, a zoned embankment or other such approved designs as specified in the plans.
- S-3 SWM BASIN OUTLET PIPE The pipe culvert under or through the dam for detention basins (no permanent pool) shall be reinforced concrete pipe with rubber gaskets in accordance with Section 232 and 212 of the applicable VDOT Road and Bridge Specifications. A concrete cradle shall extend the full length of the pipe culvert in accordance with the Standard Drawings. The connection between the pipe culvert and the SWM-1 Drainage Structure (or other control structure) shall be made watertight as approved by the Engineer and the cost shall be included in the price bid for pipe.
- S-4 The SWM-1 Drainage Structure (or other control structure) shall have 4" high numbers and 1" wide stripes painted at 1 intervals as shown on the Standard Drawings or detail sheets. The numbers and stripes are to be installed at the time of the initial installation of the SWM-1 Drainage Structure (or other control structure). Paint and application shall be in accordance with Section 231 and 411 of the applicable VDOT Road and Bridge Specifications and the cost is to be included in the price bid for the applicable structure.
- S-5 All SWM Basins designated for use as temporary sediment basins shall be constructed during the initial phase of earth moving activities or as specified by the plans or directed by the Engineer. During project construction, the SWM-1 Drainage Structure (or other control structure) shall be modified in accordance with the Standard Drawings or plan details in order to provide a temporary sediment basin with both a "wet" storage volume (permanent pool) and a "dry" storage volume. Sediment accumulated in the basin shall be removed when the volume of the "wet" storage (permanent pool) has been reduced by 50%. Sediment shall be disposed of in accordance with Section 106.04 of the applicable VDOT Road and Bridge Specifications. When project construction is complete to a stage where no additional sediment from the project is expected to enter the basin, as determined by the Engineer, the basin shall be cleaned out and restored to the original design elevations, the area stabilized and all temporary modifications to the SWM-1 Drainage Structure (or other control structure) removed.

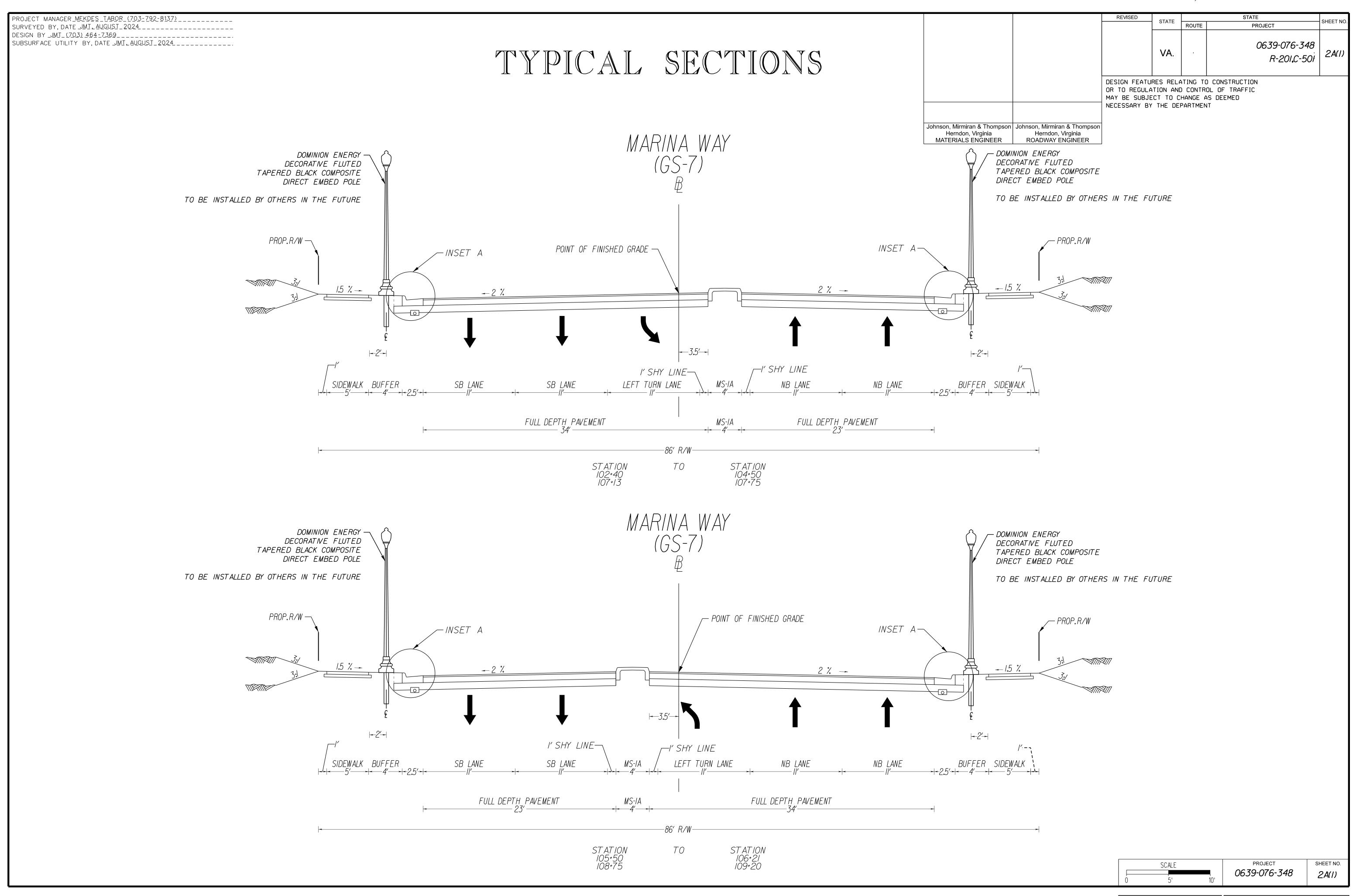
EROSION AND SEDIMENT CONTROL (ESC)

- 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:

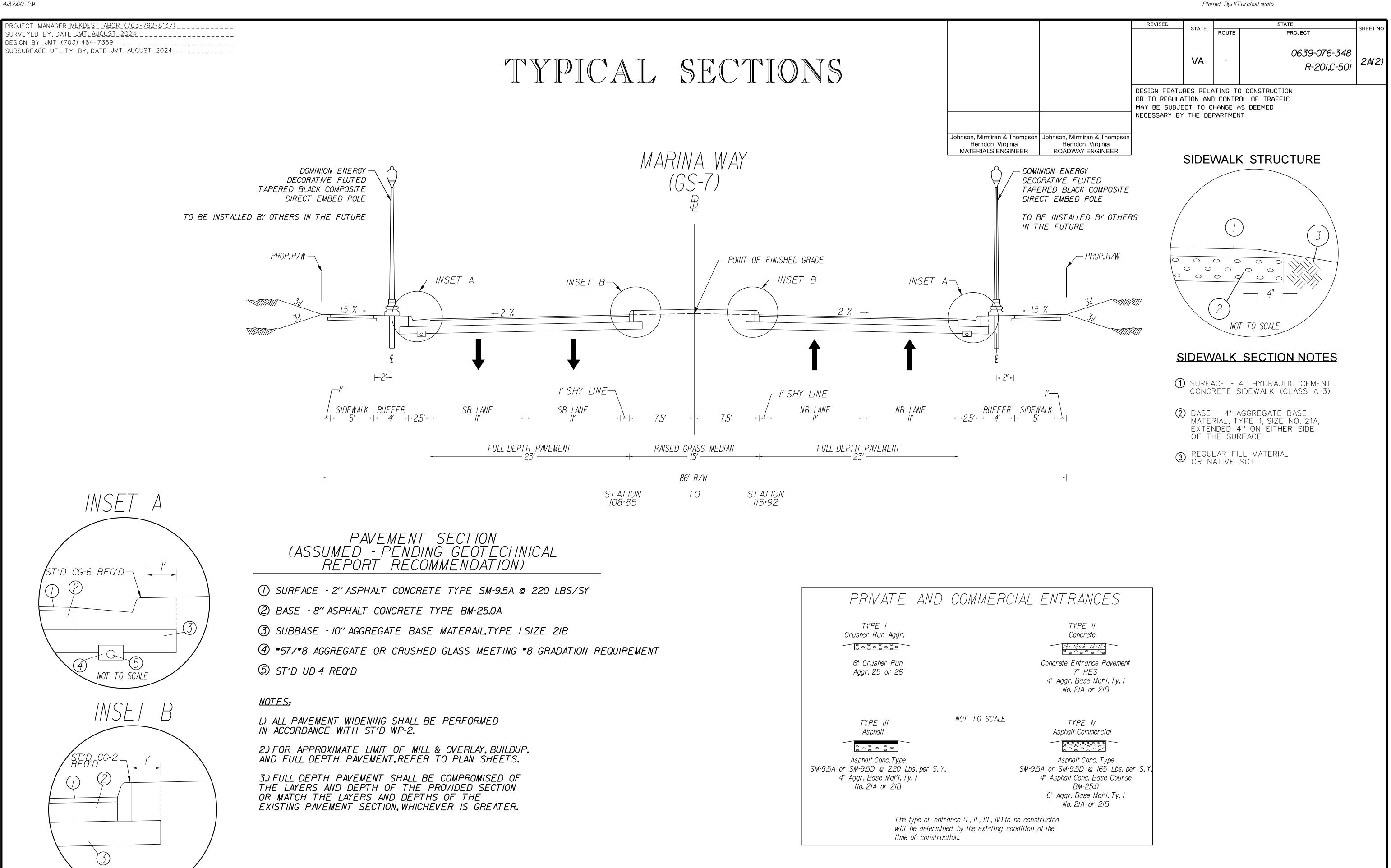


E-4 Permanent vegetation shall be established on all denuded areas not otherwise stabilized with non-erodible materials. See the Roadside Development sheet for details on permanent vegetation establishment.

PROJECT SHEET NO. 0639-076-348 2



NOT TO SCALE



PROJECT

0639-076-348

SHEET NO.

2A(2)

SCALE

FULL BEVEL)

INV.(IN) 78.00, INV.(OUT) 74.00

2:49:10 PM PROJECT MANAGER MEKDES TABOR (703-792-8137) SURVEYED BY, DATE JMI, AUGUST 2024 DESIGN BY JMT (703) 464-7369 ______ SUBSURFACE UTILITY BY, DATE JMT, AUGUST 2024 SHEET 3 SHEET 5 I STD.DI-3B REQ'D. L=6',H= 4.0',INV.75.50 CONNECT UD-4 TO STRUCTURE I STD.DI-3B REQ'D. L=6',H= 4.9',INV.74.25 68'-15" STORM SEWER PIPE REQ'D.(3' COVER) CONNECT UD-4 TO STRUCTURE INV.(IN) 75.50, INV.(OUT) 75.00 68'-15" STORM SEWER PIPE REQ'D.(4' COVER) I STD.DI-3B REQ'D. /NV.(/N) 74.25,/NV.(OUT) 73.90 L=6',H= 4.6',INV.74.90 CONNECT UD-4 TO STRUCTURE I STD.DI-3B REQ'D. L=6', H= 5.5', INV.73.80 93'-15" STORM SEWER PIPE REQ'D.(6' COVER) CONNECT UD-4 TO STRUCTURE INV.(IN) 74.90, INV.(OUT) 74.40 232'-15" STORM SEWER PIPE REQ'D.(4' COVER) INV.(IN) 73.80, INV.(OUT) 69.90 SHEET 4 I STD.DI-3B REQ'D. I STD.DI-3B REQ'D. L=6',H= 5.2',INV.69.80 L=4'.H= 4.1'.1NV.80.00 CONNECT UD-4 TO STRUCTURE CONNECT UD-4 TO STRUCTURE 74'-15" STORM SEWER PIPE REQ'D.(4' COVER) 149'-18" CONC. RADIAL PIPE CLASS III REQ'D. (4' COVER) /NV.(/N) 80.00,/NV.(OUT) 79.00 (390' RADIUS - USING 8' PIPE JOINT LENGTHS WITH FULL BEVEL) I STD.DI-3A REQ'D. INV.(IN) 69.80, INV.(OUT) 69.00 H= 4.9', INV. 78.90 CONNECT UD-4 TO STRUCTURE I STD.DI-3B REQ'D. L=6',H= 5.9',INV.68.90 108'-15" STORM SEWER PIPE REQ'D.(6' COVER) INV.(IN) 78.90, INV.(OUT) 74.40) 60'-18" STORM SEWER PIPE REQ'D.(4' COVER) INV.(IN) 68.90, INV.(OUT) 68.60 I STD.DI-3A REQ'D. H= 7.3′, INV.74.40 I STD.DI-3C REQ'D. CONNECT UD-4 TO STRUCTURE L=6',H= 5.2',INV.68.50 CONNECT UD-4 TO STRUCTURE I STD.DI-3B REQ'D. L=4',H= 4.3',INV.78.98 CONNECT UD-4 TO STRUCTURE 67'-18" STORM SEWER PIPE REQ'D.(4' COVER) INV.(IN) 68.50, INV.(OUT) 68.15) 68'-15" STORM SEWER PIPE REQ'D.(4' COVER) INV.(IN) 78.98, INV.(OUT) 78.10 I STD.DI-3B REQ'D. L=4',H= 5.7',INV.68.05 ISTD.DI-3B REQ'D. CONNECT UD-4 TO STRUCTURE L=4', H= 4.9', INV.78.00 CONNECT UD-4 TO STRUCTURE 44'-24" STORM SEWER PIPE REQ'D.(4' COVER) 5-6 286'-15" CONC. RADIAL PIPE CLASS III REQ'D. (4' COVER) INV.(IN) 68.05, INV.(OUT) 67.20 (126' RADIUS - USING 8' PIPE JOINT LENGTHS WITH

DRAINAGE DESCRIPTIONS

) 4.8 LF STD. MH-IOR 2 REQ.

INV.(IN) 67.10, INV.(OUT) 66.65

/NV = 67./0

ISTD. MH-IFRAME & COVER REQ.

76'-24" STORM SEWER PIPE REQ'D.(3' COVER)

SHEET 6

4.2 LF STD. MH-IOR 2 REQ. ISTD. MH-IFRAME & COVER REQ. /NV = 66.55

56'-24" STORM SEWER PIPE REQ'D.(5' COVER) /NV.(/N) 66.55,/NV.(OUT) 66.25

> 7.3 LF STD. MH-IOR 2 REQ. ISTD. MH-IFRAME & COVER REQ. /NV = 66./5

23'-24" STORM SEWER PIPE REQ'D.(5' COVER) INV.(IN) 66.15, INV.(OUT) 66.00 ST'D EC-I, TYPE A INSTALLATION REQ'D

> STD.24" ES-I REQ'D. INV.66.00

6.25' STD. SWM-I REQ'D. BOTTOM ELEV = 65.50 6" DIAMETER ORIFICE REQ., INV = 65.50

47'-24" STORM SEWER PIPE REQ'D.(6' COVER) INV.(IN) 65.50, INV.(OUT) 64.60

> ISTD.DI-5 REQ'D.TYPE IGRATE REQ. STD. PG-2A TYPE E COVER H = 5.7,/NV = 64.60

97'-24" STORM SEWER PIPE REQ'D.(6' COVER) 6-5 INV.(IN) 64.50, INV.(OUT) 63.72

ROUTE PROJECT 0639-076-348 VA. R-201,C-501

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

NOTE: IN ADDITION TO THE VISUAL INSPECTION PERFORMED BY THE DEPARTMENT DURING THE INITIAL INSTALLATION OF STORM SEWER PIPES AND PIPE CULVERTS, A POST INSTALLATION VISUAL/VIDEO CAMERA INSPECTION SHALL BE CONDUCTED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THIS SPECIFICATION AND VTM 123 ON ALL STORM SEWER PIPE AND A SELECTED NUMBER OF PIPE CULVERTS.

ALLOWABLE TYPE ((SEE ROAD AND BRIDG								VS)
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
PRINCE WILLIAM COUNTY						V		

PROJECT 0639-076-348

PROJECT MANAGER_MEKDES_TABOR_(703-792-8137)

SURVEYED BY, DATE JMT_AUGUST_2024

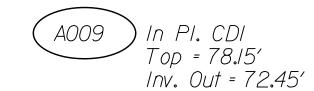
DESIGN BY JMT_(703) 464-7369

SUBSURFACE UTILITY BY, DATE JMT_AUGUST_2024

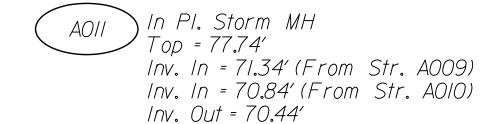
EXISTING DRAINAGE DESCRIPTIONS

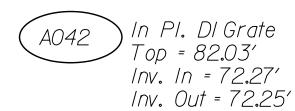
DESIGN FEATURES RELATING TO CONSTRUCTION
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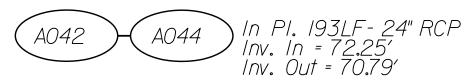
A008 In Pl. CDI Top = 78.56' Inv. Out = 73.71' (Full Of De	ebris)
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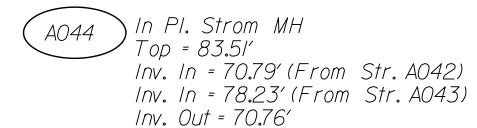








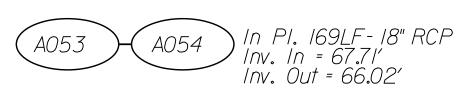












A054 | In Pl. CDI Top = 72.96' Inv. In = 66.02' (From Str. A053) Inv. Out = 65.84'



AII7 — AII8 In Pl. 26LF-18" RCP Inv. In = 63.94' Inv. Out = 63.74'

> AII8 In Pl. DI Grate Top = 69.27' Inv. = 63.74' (From Str. AII7) Inv. = 64.52' (From Str. AI36) Inv. Out = 63.72'

Al28 In Pl. CDI Top = 71.15' Inv. Out = 66.07'

A128 | A129 | In Pl. 27LF-15" RCP | Inv. In = 66.07' | Inv. Out = 65.42'

> A129 In Pl. CDI Top = 71.32' Inv. In = 65.42' (From Str. A128) Inv. Out = 62.63'

Al32 | In Pl. Storm MH Top = 63.06' Inv. In = 49.67' (From Str. Al31) Inv. In = xx.xx' (From Str. Al33) Inv. Out = 48.83' (24" RCP To North)

A/33 In Pl. CDI Top = 62.27' Inv. Out = 55.09'

A/33 - (A/32) In Pl. 7/LF - 15" RCP Inv. In = 55.09' Inv. Out = xx.xx'

> Al36 In Pl. CDI (Not In Use - Sealed At Face Of Curb) Top = 70.55' Inv. Out = 65.54'

PROJECT 0639-076-348 SHEET NO.

2B(2)

PROJECT MANAGER_MEKDES_TABOR_(703-792-8137)
SURVEYED BY, DATE <u>JMT.AUGUST 2024</u>
DESIGN BY <u>JMT (703) 464-7369</u>
SUBSURFACE UTILITY BY, DATE <u>JMT. AUGUST 2024</u>

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.

Icertify 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 General VPDES Permit for Discharges of Stormwater from Construction Activities (VAR10) when applicable. 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"

R&B - Road and Bridge

RLD - Responsible Land Disturber

TMDL - Total Maximum Daily Load

SWPPP - Stormwater Pollution Prevention Plan

VDOT - Virginia Department of Transportation

VESMP - Virginia Erosion and Stormwater Management

VPDES - Virginia Pollutant Discharge Elimination System

SWM - Stormwater Management

Program

WLA - Waste Load Allocation

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

SECTION I GENERAL INFORMATION

- 1. Activity Description Connect Marina Way to Horner Road with a four-lane divided roadway in order to lessen the load on the surrounding facilities, i.e. Route 1 and Route 123. The project is located in Prince William County.
- 2. This land disturbance (construction) activity site is located in Prince William County and approximately 5.49 acres will be disturbed by excavation, grading or other construction activities.
- 3. This proposed activity disturbs one acre or greater and requires coverage under the CGP as issued by the DEQ. A copy of the CGP (VAR10), the registration information (Registration Statement, 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, TMDI's, 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: NONE

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 □ Yes

> > List TMDL(s) and pollutant(s) here: N/A

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: N/A

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 sheet.

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. Locations of surface waters and locations where concentrated stormwater is discharged from this land disturbance (construction) activity are identified in the construction plan set (or other such site maps) for this land disturbance(construction) activity. (List name of surface waters and locations here if not shown in construction plan or other such documents).
- 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
TBD	RLD		Certify the SWPPP (with date & sig.)
TBD	Certified Contractor		Sign (C-107) Inspection Form Part 1
TBD	Certified Inspector		Sign (C-107) Inspection Form Part 1
TBD	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	CTATE		STATE	CHEET NO
	STATE	ROUTE	PROJECT	SHEET NO
	VA.	·	0639-076-348 R-201,C-501	2C(I)

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	Pawan Sarang Dist. Hyd. Engineer		District Hydraulic Engineer or designee(s)responsible for the review & the coordination approval of ESC SWM plan modification(s).
TBD	ACE		Project Manager during Construction

X 14. 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 IIH, including keeping any records of the condition and how it was corrected under Part IIC: 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.
- XX15. 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: (Construction trailor).

The rain gage shall be observed daily at " 8 am " 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

Revised 7/25/24 SWPPP Sheet 1 of 4

** Denotes information that is to be

X Denotes information that is to be

provided/completed by the RLD.

SHEET NO. 0639-076-348



PROJECT MANAGER MEKDES TABOR (703-792-8137) SURVEYED BY, DATE JMT. AUGUST 2024 DESIGN BY _JMT_(703) 464-7369______ SUBSURFACE UTILITY BY, DATE JMT, AUGUST 2024

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

REVISED	STATE	STATE			
	SIAIL	ROUTE	PROJECT	SHEET NO.	
	VA.	00	0639-076-348; R-201,C-50i	20(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 the 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 Northern Virginia 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
 - 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

- (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.)

- 1. (Include one of the following notes as appropriate)
- X B. This land disturbance activity utilizes the technical criteria contained in Article 3 (9VAC25-875-570, et seq.) of the VESMP Regulations (Formerly Part IIB of the technical criteria).
- 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). N/A
- 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. N/A

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 (insert appropriate location, i.e., VDOT Central Office Hydraulics Section or the VDOT (specify) District Hydraulics Section or the VDOT (specify) Residency Office) 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.
- **XX** Denotes information that is to be provided/completed by the contractor.

Revised 7/25/24 SWPPP Sheet 2 of 4 2C(2)

0639-076-348

PROJECT MANAGER_MEKDES_TABOR_(703-792-8137)

SURVEYED BY, DATE JMI_AUGUSI_2024

DESIGN BY JMI_(703) 464-7369

SUBSURFACE UTILITY BY, DATE JMI_AUGUSI_2024

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) GENERAL INFORMATION SHEET (3)

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 month.

SECTION V - POLLUTION PREVENTION PLAN

- 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, curing compounds and other construction materials.
 - c. Fuels, oils or other pollutants used in vehicle and equipment operation and maintenance.
 - 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.

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

- 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.

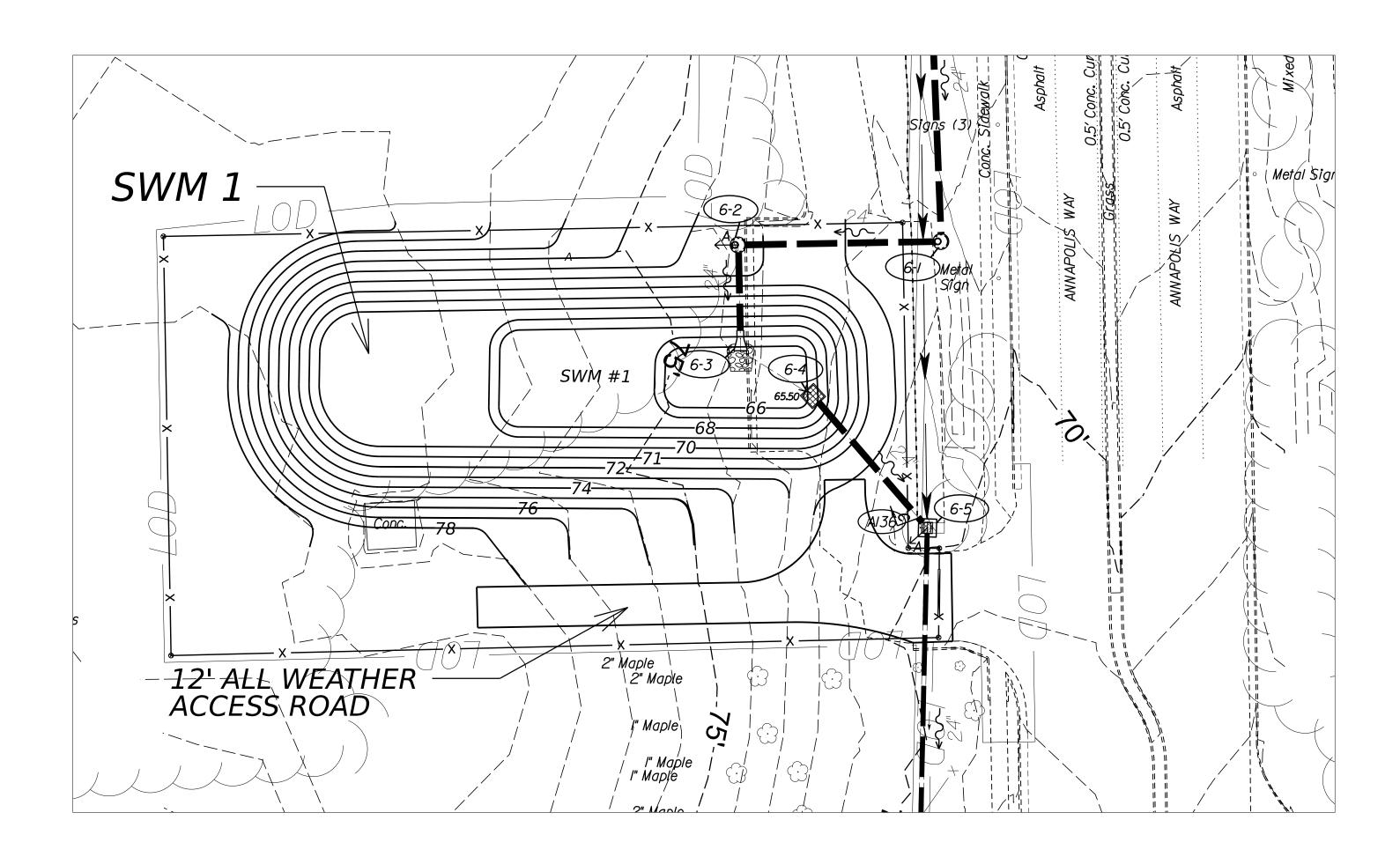
Revised 7/25/24 SWPPP Sheet 3 of 4

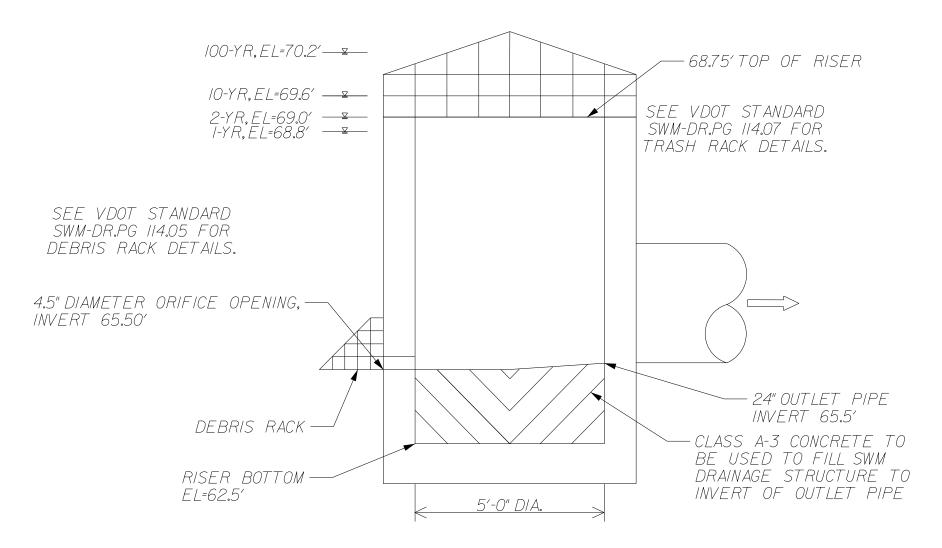
PROJECT SHEET NO. 0639-076-348 2C(3)



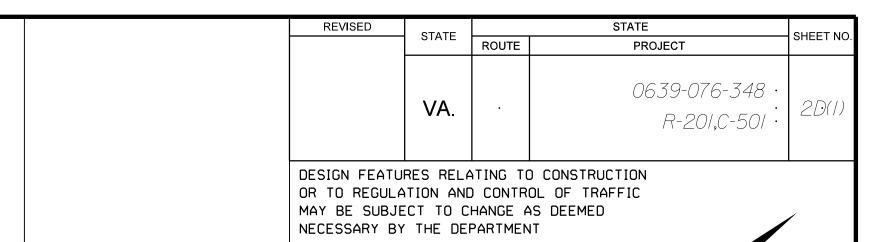
PROJECT MANAGER_MEKDES_TABOR_(703-792-8137)
SURVEYED BY, DATE_JMI_AUGUST_2024

STORMWATER MANAGEMENT SWM 1 WATER QUANTITY DETENTION





RISER STRUCTURE 6-4
(SWM-I) (NTS)



Johnson, Mirmiran & Thompson Herndon, Virginia HYDRAULIC ENGINEER

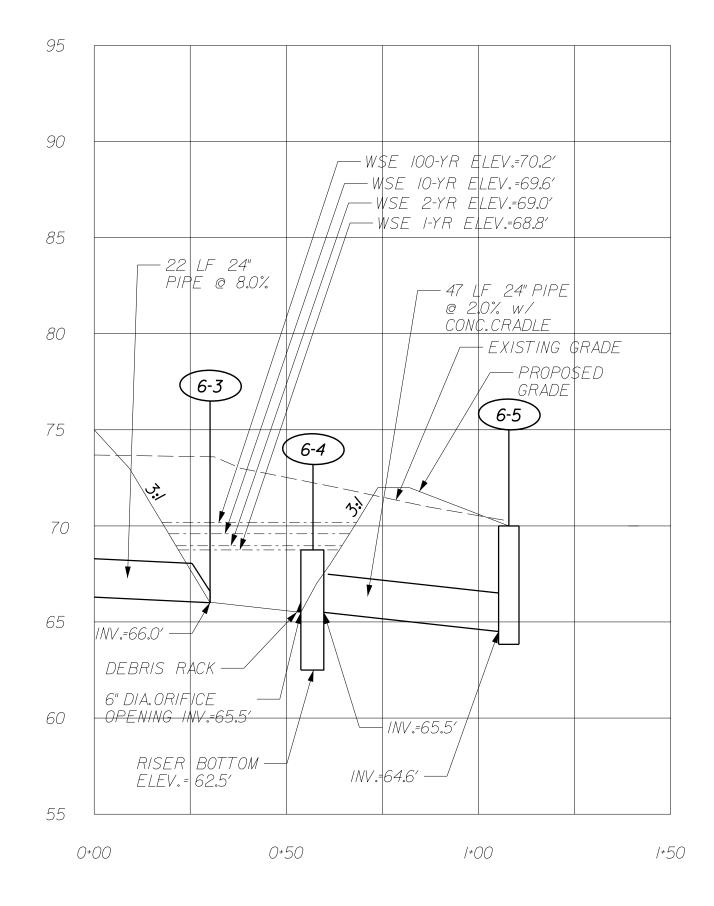
Notes:

I.WHEN INSTALLING THE STEPS AND TRASH RACK TO THE CONTROL STRUCTURE, THE CONTRACTOR SHALL ENSURE THAT THE STEPS AND TRASH RACK ACCESS DOOR ARE ORIENTED TO THE EMBANKMENT SIDE OF THE CONTROL STRUCTURE, AND TO THE EXTENT POSSIBLE, ARE IN DIRECT ALIGNMENT WITH EACH OTHER.

2.STEPS ARE TO BE INSTALLED ON THE INSIDE OF THE RISER STRUCTURE AND ACCESSIBLE FROM THE EMBANKMENT SIDE ON THE OUTSIDE OF THE STRUCTURE.

3. A HINGED, LOCKABLE ACCESS DOOR WITH A MINIMUM 2'X2' CLEAR OPENING, SHALL BE PROVIDED ON ALL TRASH RACKS AND ALIGNED DIRECTLY OVER THE STEPS.

4.THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE PROPOSED BMPS ONCE ALL CONNECTIONS HAVE BEEN COMPLETED, AND SHALL CERTIFY THAT THE BMPS HAVE BEEN MAINTAINED PER MANUFACTURER'S MAINTENANCE GUIDELINES OR IN ACCORDANCE WITH THE TYPICAL INDUSTRY MAINTENANCE STANDARDS. THE BMPS WILL ULTIMATELY BE OWNED AND MAINTAINED BY VDOT ONCE THE PROJECT IS COMPLETE.



SECTION A-A

SWM IWATER QUANTITY DETENTION

HORIZONT AL I"=25'
VERTICAL I"=5'

SCALE 25' 50' PROJECT 0639-076-348

20(1)

SURVEYED BY, DATE JMT. AUGUST 2024 DESIGN BY JMT (703) 464-7369 SUBSURFACE UTILITY BY, DATE <u>JMT_AUGUST_2024</u>_______

EROSION & SEDIMENT CONTROL GENERAL NOTES

EROSION & SEDIMENT CONTROL NARRATIVE

PROJECT DESCRIPTION

This project is located in Prince William County and approximately 5.32 acres will be disturbed by the proposed construction/maintenance activity. Roadway extension project connecting Marina Way to Horner Road and is being phased in 2 segments (Segment A and Segment B). Roadway typical section will be closed curb and gutter with a raised median. This project is covered under the DCROLVSMP General Permit for Discharges of Stormwater from Construction Activities.

EXISTING SITE CONDITIONS

The topography is gradually sloping falling from a high point in the center of the site to the easterly and westerly portion of the site. The site is a mixture of pavement with portions of grassy and wooded areas along the proposed roadway corridor.

The existing site drainage consists of existing inlets discharging into receiving storm sewer

ADJACENT PROPERTY

Adjacent to Route I on both sides are primarily commercial developed properties with undeveloped parcels directly to the North of the center of the proposed road.

OFF-SITE AREAS

There are no anticipated Off-Site borrow areas and/or surplus material disposal areas associated with this project. Therefore off site-borrow is not covered by this Erosion and Sediment Control Plan. In the event that the above statement is not valid the contractor shall submit a supplementary E&S plan to the owner covering the off-site borrow area which would have to be approved by the authority before any off-site activity commences.

According to the Soil Survey of Prince William County, Virginia, the soils in the project area primarily consist of Urban Land _ Udorthents complex (54B). This designation describes areas where 85 percent or more of the surface layer is covered by asphalt, concrete or other impervious surfaces and areas of variable depth and slope which are well draining to moderately well drained soils. The Udorthents are areas where the existing soils have been altered by excavation or covered by fill. Also included are undisturbed soils and fill area containing material, such as concrete, wood and asphalt.

CRITICAL EROSION AREAS

There are mo critical erosion areas in the project area.

EROSION AND SEDIMENT CONTROL MEASURES

Unless otherwise indicated, all vegetative and structural erosion and sediment control practices shall be constructed and maintained according to minimum standards and specifications of the Virginia Erosion and Sediment Control Handbook (1992) and the VDOT Road and Bridge Specifications (2007). See sheet 2D(I) and 2D(2) for a list of E&S controls used and General E&S notes.

PERMANENT STABILIZATION

Permanent stabilization shall be done in accordance with the VESCH and VDOT Road & Bridge Specifications (2016). All areas disturbed by construction shall be stabilized with permanent seeding immediately following finish grading. Seeding shall be done in accordance with these plans unless otherwise directed by the engineer.

STORMWATER MANAGEMENT

Calculation of runoff before and after development indicates that there will be a net increase in peak runoff as a result of the project. Therefore stormwater management has been designed and controls have been put in place to address stormwater management. See drainage report for more

POST CONSTRUCTION

In addition to the visual inspection performed by the Department during the initial installation of storm sewer pipes and pipe culverts, a post installation visual/video camera inspection shall be conducted by the Contractor in accordance with the requirements of this specification and VTM 123 on all storm sewer pipe and a selected number of pipe culverts.

CALCULATIONS

Detailed calculations for the design of this priect are provided in the separate Drainage and Stormwater Management Report.

VEGETATIVE PRACTICES

I. <u>Temporary Seeding - 3.31</u>

Permanent or temporary soil stabilization shall be applied to denuded areas within seven days after final grade is reached on any portion of the site. Temporary soil stabilization shall be applied with in seven days to denuded areas that may not be at final grade but will remain dormant for longer than 30 days. Permanent stabilization shall be applied to areas that are to be left dormant for more than one year.

2. Permanent Seeding 3.32

Permanent or temporary soil stabilization shall be applied on rough-graded areas that will not be brought to final grade for a year or more or where permanent, long-lived, vegetative cover, is needed on fine-graded areas. Permanent seeding shall consist of perennial vegetative cover and shall be determined by the slopes, soil types, and maintenance requirements.

MANAGEMENT STRATEGIES

The first step in this Erosion and Sediment Control Plan for this multi-phase project is to install all perimeter controls. All perimeter controls will be in place prior to any excavation.

Phase I of the Erosion and Sediment Control Plan shall:

I. Flag limits of clearing and grading and hold pre-construction meeting. 2. Install construction entrances with wash racks as needed. Water for the wash racks to be provided by private water truck if no hydrant is available.

3. Provide minimum grading to allow Phase I measures to be installed. 4. Install perimeter controls as shown to include diversion dikes and silt fence. These sediment trapping measures shall be installed as a first step in grading per the Phase I Erosion and Sediment Control Plan and will be seeded and mulched immediately following installation. 5. Gradina operations may commence once perimeter controls diversions and trappina measures are

installed to the satisfaction of the inspector. 6. Temporary seeding or other stabilization will follow immediately after grading. 7. Once all of Phase I controls are in place, the Contractor is to contact the county inspector for sign-off. Once sign-off is obtained by the county, the Contractor can proceed with general clearing and earthworks activities.

8. Install proposed utilities.

9. Fine grade excavated areas. 10. Lime, fertilize and permanently seed and mulch all areas that will not receive impervious

II. For vegetative stabilization of all denuded areas see erosion control measures and vegetative

12. Once all areas are stabilized to the satisfaction of the county inspector the control shall remove perimeter controls.

MAINTENANCE STRATEGIES - SEDIMENT & EROSION CONTROL

I. It will be the responsibility of the Contractor to ensure that all downstream areas are protected against erosion and sedimentation. In doing so, the Contractor must coordinate with the county inspector throughout the duration of this project. 2. In general, all erosion and sediment control measures will be checked daily and after each significant rainfall. Refer to the attached erosion and sediment control standard notes for

detailed maintenance and revegetation/stabilization requirements. 3. All new seeded and mulch areas will be inspected after each rainfall event to ensure the new seed has not been washed away. If so, the areas shall be re-seeded and mulched immediately. 4. The inspector has the authority to add or delete erosion and sediment controls as needed in the field, as site conditions warrant. The Contractor does have the authority to add additional sediment and erosion control measures as the Contractor deems necessary to prevent erosion and movement of sediment to off-site areas. Additional measures should be authorized by the project

5. All temporary erosion and sediment control measures shall be removed within 30 days after final site stabilization, in accordance with minimum standard *18.

TWO PHASE EROSION & SEDIMENT CONTROL PLAN Phase I controls shall be placed as indicated on the Erosion & Sediment Plans, prior to any land disturbing activities. Mud and debris will be washed from all construction vehicles and equipment before leaving the site. See land disturbing/construction sequence, this sheet.

Phase II work will not commence until Phase I work has been approved by the county inspector. Phase II includes the adjustment of silt fence and perimeter controls, providing the cut and fill areas are near final grade and storm sewer is functional. The utilities curb and autter and roads also should be near final arade. Base stone for the roads and parking areas should be completed within seven (7) days after reaching final grade for subgrade. Inlet protection shall be provided for all proposed and existing inlet storm structures. Additionally, any stock piles (location of which will be coordinated in the field with the site inspector) will be provided with perimeter silt fence. Topsoil, stockpiles and all areas to be rough graded during initial phase of construction shall be seeded with fast germinating temporary vegetation immediately following grading. Mixture of seed will depend on the time of year. 3:1 slope areas not adequately stabilized by seeding are to be sodded and pegged at the direction of the inspector After all construction operations have ended and all disturbed areas have been stabilized, mechanical sediment controls shall be removed and the ground permanently stabilized with vegetation upon the approval of the site inspector. See land disturbing/construction sequence, this sheet.

The implementation of Phase II controls cannot begin until the Phase II controls have been approved by the Prince William County Inspector.

LAND DISTURBING/CONSTRUCTION SEQUENCE PHASE I A Pre-Construction meeting shall be held prior to commencement of work.

Prior to clearing and grubbing, all perimeter controls are to be installed as shown and as necessary. Construct temporary sediment traps at proposed locations. The contractor shall install and maintain all necessary temporary pipes to provide adequate drainage throughout construction. Construct proposed drainage outfalls and channel relocations or improvements as shown on the plans. For all ditches constructed during Phase I, the required check dams shall be installed at the time ditches are constructed. Obtain County Site Inspector's approval of perimeter controls.

LAND DISTURBING/CONSTRUCTION SEQUENCE PHASE II

After the County Site Inspector's approval of Phase IE&S controls, clear and arub remainder of the site as necessary. Construct the proposed drainage system as shown and as necessary, install inlet protection as shown and as needed. All silt fence is to be installed as shown and as necessary, drop inlet silt traps shall be installed as shown and as needed, rock check dams shown shall be installed at the same time the ditch is constructed. All ditches shall be constructed and stabilized according to the plans, once stabilization has been completed direct flow to the ditches and remove temporary diversion dikes. Install all curb & gutter and place base stone pavement except where this would interfere with the temporary sediment traps. Fine grade site and install all landscaping, including permanent seeding and fertilizing as shown in the plan. Install base course asphalt paving and finial paving. Clean site of all trash and debris. Have the County Inspector inspect all areas to determine if they are adequately stabilized.

CHECKLIST

FOR EROSION AND SEDIMENT CONTROL PLANS

<u>2</u> <u>Minimum Standards</u> - All applicable Minimum Standards must be addressed.

Narrative

<u>3C(1)</u> <u>Project description</u> - briefly describes the nature and purpose of the land-disturbing activity, and the area (acres) to be disturbed.

<u>3C(1)</u> <u>Existing site conditions</u> - a description of the existing topography, vegetation and drainage.

Adjacent areas - A description of neighboring areas such as streams, lakes, residential areas, road. etc...which might be affected by the land disturbance.

Off-site areas - Describe any off-site land-disturbing activities that will occur(including borrow sites, waste or surplus areas, etc.). Will any other areas be disturbed?

Soils - a brief description to the soils on the site giving such information as soil name, mapping unit.erodibility.permeability.depth.texture and soil structure.

(e.g., steep slopes, channels, wet weather/underground springs, etc.).

<u>Critical areas</u> - A description of areas on the site which have potentially serious erosion problems

<u>Erosion and sediment control measures</u> - A description of the methods which will be used to control erosion and sedimentation on the site. (Controls should meet the specifications in Chapter 3.)

Permanent stabilization - A brief description, including specifications, of how the site will be stabilized after construction is completed.

<u>Stormwater runoff considerations</u> - Will the development site cause an increase in peak runoff rates? Will the increase in run off cause flooding or channel degradation down stream? Describe the strategy to control stormwater runoff.

DRAINAGE AND STORMWATER REPORT Calculations - Detailed calculations for the design of temporary sediment basins, permanent basins, permane stormwater detentions basins, diversions, channels, etc. Include calculations for pre- and post-

SITE PLAN

<u>Vicinity map</u> - A small map locating the site in relation to the surrounding area. Include any landmarks which might assist in locating the site.

<u>Indicate north</u> - The direction of north in relation to the site.

<u>Limits of clearing and grading</u> - Areas which are to be cleared and graded.

3-7 <u>Existing contours</u> - the existing contours of the site.

3-7 <u>Final contours</u> - Changes to the existing contours, including final drainage patterns.

3-7 <u>Existing vegetation</u> - The existing tree lines, grassed areas, or unique vegetation.

<u>2E(3)</u> <u>Soils</u> - The boundaries of different soil types.

3B(1)-7B(2) Existing drainage patterns - The dividing lines and the direction of flow for the different drainage areas. Include the size (acreage) of each drainage area.

<u>Critical erosion areas</u> - Areas with potentially serous erosion problems. (See Chapter 6 for

<u>Site Development</u> - Show all improvements such as buildings, parking lots, access roads, utility

3B(1)-7B(2) <u>Location of practices</u> - The locations of erosions and sediment controls and stormwater management practices used on the site. Use the standard symbols and abbreviations in Chapter 3 of the

Off-site areas - Identify any off-site land-disturbing activities (e.g., borrow sites, waste areas, etc.). Show locations of erosion controls. (Is there sufficient information to assure adequate protection and stabilization?)

<u>Detail drawings</u> - Any structural practices used that are not referenced to the E&S hand book or local handbooks should be explained and illustrated with detail drawinas.

Maintenance - A schedule of regular inspections and repair of erosion and sediment control structures should be set forth.

REVISED SHEET N ROUTE PROJECT 0639-076-348 2E(I) VA. R-201, C-501.

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

STRUCTURAL PRACTICES

I. <u>Silt Fence Barrier - 3.05</u>

Silt fence sediment barriers will be installed down slope of areas with minimal grades to filter sediment-laden runoff from the sheet flow as indicated on the plans.

2. Storm Drain Inlet Protection - 3.07

All storm sewer inlets shall be protected during construction. Sediment-laden water shall be filtered before entering the storm sewer inlets.

3. <u>Diversion Dike - 3.0</u>9

Sediment-laden runoff will be diverted from a disturbed area to a sediment-trapping facility such as a sediment trap or sediment basin.

Rock check dams will be installed in the temporary ditch to reduce the velocity of the

stormwater flows and reduce the erosion of the ditch. 5. Fiber Roll - VDOT STD, EC-15

Fiber roll will be installed to slow the runoff and reduce the sediment entering the pond.

PROJECT 0639-076-348

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



PROJECT MANAGER_MEKDES_TABOR_(703-792-8137)______ SURVEYED BY, DATE JMI, AUGUST 2024 ______ DESIGN BY <u>JMT (703) 464-7369</u>_______ SUBSURFACE UTILITY BY, DATE JMT.AUGUST 2024 ______

EROSION & SEDIMENT CONTROL GENERAL NOTES

1	REVISED	STATE		SHEET NO.	
		SIAIL	ROUTE	PROJECT	SHEET NO.
		VA.		0639-076-348 R-201,C-501.	2E(2)

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

4VAC50-30-40 MINIMUM STANDARDS. (MS-19)

AN EROSION AND SEDIMENT CONTROL PROGRAM ADOPTED BY A DISTRICT OR LOCALITY MUST BE CONSISTENT WITH THE FOLLOWING CRITERIA, TECHNIQUES AND METHODS:

- I. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE 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 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.
- 2. DURING CONSTRUCTION OF THE PROJECT, SOIL STOCKPILES AND BORROW AREAS SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE APPLICANT IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOILS STOCKPILES ON SITE AS WELL AS BORROW AREAS AND SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.
- 3. A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT, IS UNIFORM, MATURE ENOUGH TO SURVIVE AND
- 4. SEDIMENT BASINS AND TRAPS.PERIMETER DIKES.SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UP SLOPE LAND DISTURBANCE
- 5. STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS,DIKES AND DIVERSIONS IMMEDIATELY AFTER
- 6. SEDIMENT TRAPS AND SEDIMENT BASINS SHALL BE DESIGNED AND CONSTRUCTED BASED UPON THE TOTAL DRAINAGE AREA TO BE SERVED BY THE TRAP OR BASIN.
- a. THE MINIMUM STORAGE CAPACITY OF A SEDIMENT TRAP SHALL BE 134 CUBIC YARDS PER ACRE OF DRAINAGE AND THE TRAP SHALL ONLY CONTROL DRAINAGE AREAS LESS THAN THREE ACRES.
- b. SURFACE RUNOFF FROM DISTURBED AREAS THAT IS COMPRISED OF FLOW FROM DRAINAGE AREAS GREATER THAN OR EQUAL TO THREE ACRES SHALL BE CONTROLLED BY A SEDIMENT BASIN. THE MINIMUM STORAGE CAPACITY OF A SEDIMENT BASIN SHALL BE 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA, THE OUTFALL SYSTEM SHALL, AT A MINIMUM, MAINTAIN THE STRUCTURAL INTEGRITY OF THE BASIN DURING A TWENTY- MINIMUM STANDARDS (MS-19) NARRATIVE FIVE YEAR STORM OF 24-HOUR DURATION.RUNOFF COEFFICIENTS USED IN RUNOFF CALCULATIONS SHALL CORRESPOND TO A BARE EARTH CONDITION OR THOSE CONDITIONS EXPECTED TO EXIST WHILE THE SEDIMENT BASIN IS UTILIZED.
- 7. CUT AND FILL SLOPES SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. SLOPES THAT ARE FOUND TO BE ERODING EXCESSIVELY WITHIN ONE YEAR OF PERMANENT STABILIZATION SHALL BE PROVIDED WITH ADDITIONAL SLOPE STABILIZING MEASURES UNTIL THE PROBLEM IS CORRECTED.
- 8. CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME OR SLOPE DRAIN STRUCTURE.
- 9. WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.
- IO. ALL STORM SEWER INLETS THAT ARE MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.
- II. BEFORE NEWLY CONSTRUCTED STORMWATER CONVEYANCE CHANNELS OR PIPES ARE MADE OPERATIONAL, ADEQUATE OUTLET PROTECTION AND ANY REQUIRED TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED IN BOTH THE CONVEYANCE CHANNEL AND RECEIVING CHANNEL.
- I2. WHEN WORK IN A LIVE WATERCOURSE IS PERFORMED, PRECAUTIONS SHALL BE TAKEN TO MINIMIZE ENCROACHMENT, CONTROL SEDIMENT TRANSPORT AND STABILIZE THE WORK AREA TO THE GREATEST EXTENT POSSIBLE DURING CONSTRUCTION. NON ERODIBLE MATERIAL SHALL BE USED FOR THE CONSTRUCTION OF CAUSEWAYS AND COFFERDAMS. EARTHEN FILL MAY BE USED FOR THESE STRUCTURES IF ARMORED BY NON ERODIBLE COVER MATERIALS.
- I3. WHEN A LIVE WATERCOURSE MUST BE CROSSED BY CONSTRUCTION VEHICLES MORE THAN TWICE IN ANY SIX-MONTH PERIOD, A TEMPORARY VEHICULAR STREAM CROSSING CONSTRUCTED OF NON ERODIBLE MATERIAL SHALL BE PROVIDED.
- 14. ALL APPLICABLE FEDERAL,STATE AND LOCAL REGULATIONS PERTAINING TO WORKING IN OR CROSSING LIVE WATERCOURSES SHALL BE MET.

IS. THE BED AND BANKS OF A WATERCOURSE SHALL BE STABILIZED IMMEDIATELY AFTER WORK IN THE WATERCOURSE IS COMPLETED.

- IG. UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA:
- a. NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.
- b. EXCAVATED MATERIAL SHALL BE PLACED ON UPHILL SIDE OF TRENCHES. c. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE.OR BOTH.
- AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.
- e. RESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THESE REGULATIONS.
- f. APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH.
- 17. WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED OR PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY VEHICULAR TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PAVED OR PUBLIC ROAD SURFACE, THE ROAD SURFACE SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA, STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER. THIS PROVISION SHALL APPLY TO INDIVIDUAL DEVELOPMENT LOTS AS WELL AS TO LARGER LAND-DISTURBING ACTIVITIES.
- IB. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE AUTHORIZED BY THE LOCAL PROGRAM AUTHORITY. TRAPPED MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.
- 19. PROPERTIES AND WATERWAYS DOWNSTREAM FROM DEVELOPMENT SITE SHALL BE PROTECTED FROM SEDIMENT DEPOSITION, EROSION AND DAMAGE DUE TO INCREASE IN VOLUME. VELOCITY AND PEAK FLOW RATE OF STORMWATER RUNOFF FOR THE STATED FREQUENCY STORM OF 24-HOUR DURATION IN ACCORDANCE WITH THE FOLLOWING STANDARDS AND CRITERIA:
- a. CONCENTRATED STORMWATER RUNOFF LEAVING A DEVELOPMENT SITE SHALL BE DISCHARGED DIRECTLY INTO AN ADEQUATE NATURAL OR MAN-MADE RECEIVING CHANNEL.PIPE OR STORM SEWER SYSTEM. FOR THOSE SITES WHERE RUNOFF IS DISCHARGED INTO A PIPE OR PIPE SYSTEM, DOWNSTREAM STABILITY ANALYSES AT THE OUTFALL OF THE PIPE OR PIPE SYSTEM SHALL BE PERFORMED. b. ADEQUACY OF ALL CHANNELS AND PIPES SHALL BE VERIFIED IN THE FOLLOWING MANNER:
- (I) THE APPLICANT SHALL DEMONSTRATE THAT THE TOTAL DRAINAGE AREA TO THE POINT OF ANALYSIS WITHIN THE CHANNEL IS ONE HUNDRED TIMES GREATER THAN THE CONTRIBUTING DRAINAGE AREA OF THE PROJECT IN QUESTION; OR
- (2)
- (a) NATURAL CHANNELS SHALL BE ANALYZED BY THE USE OF A TWO-YEAR STORM TO VERIFY THAT STORMWATER WILL NOT OVERTOP CHANNEL BANKS NOR CAUSE EROSION OF CHANNEL BED AND BANKS; AND
- (b) ALL PREVIOUSLY CONSTRUCTED MAN-MADE CHANNELS SHALL BE ANALYZED BY THE USE OF A TEN-YEAR STORM TO VERIFY THAT STORMWATER WILL NOT OVERTOP ITS BANKS AND BY THE USE OF A TWO-YEAR STORM TO DEMONSTRATE THAT STORMWATER WILL NOT CAUSE EROSION OF CHANNEL BED OR BANKS; AND
- (c) PIPES AND STORM SEWER SYSTEMS SHALL BE ANALYZED BY THE USE OF A TEN-YEAR STORM TO VERIFY THAT STORMWATER WILL BE CONTAINED WITHIN THE PIPE OR SYSTEM.

- c. IF EXISTING NATURAL RECEIVING CHANNELS OR PREVIOUSLY CONSTRUCTED MAN-MADE CHANNELS OR PIPES ARE NOT ADEQUATE, THE APPLICANT SHALL:
- (I) IMPROVE THE CHANNEL TO A CONDITION WHERE A TEN-YEAR STORM WILL NOT OVERTOP THE BANKS AND A TWO-YEAR STORM WILL NOT CAUSE EROSION TO THE CHANNEL BED OR BANKS; OR
- (2) IMPROVE THE PIPE OR PIPE SYSTEM TO A CONDITION WHERE THE TEN-YEAR STORM IS CONTAINED WITHIN THE
- APPURTENANCES; OR (3) DEVELOP A SITE DESIGN THAT WILL NOT CAUSE THE PRE-DEVELOPMENT PEAK RUNOFF RATE FROM A TWO-YEAR TO INCREASE WHEN RUNOFF OUTFALLS INTO A NATURAL CHANNEL OR WILL NOT CAUSE THE PRE-DEVELOPMENT PEAK RUNOFF RATE FROM A TEN-YEAR STORM TO INCREASE WHEN RUNOFF OUTFALLS INTO A MAN-MADE CHANNEL; OR
- (4) PROVIDE A COMBINATION OF CHANNEL IMPROVEMENT, STORMWATER DETENTION OR OTHER MEASURES WHICH IS SATISFACTORY TO THE PLAN-APPROVING AUTHORITY TO PREVENT DOWNSTREAM EROSION.
- d. THE APPLICANT SHALL PROVIDE EVIDENCE OF PERMISSION TO MAKE THE IMPROVEMENTS. e. ALL HYDROLOGIC ANALYSES SHALL BE BASED ON EXISTING WATERSHED CHARACTERISTICS AND THE ULTIMATE DEVELOPMENT OF
- THE SUBJECT PROJECT. f. IF THE APPLICANT CHOOSES AN OPTION THAT INCLUDES STORMWATER DETENTION HE SHALL OBTAIN APPROVAL FROM THE LOCALITY OF PLAN FOR MAINTENANCE OF THE DETENTION FACILITIES. THE PLAN SHALL SET FORTH THE MAINTENANCE
- REQUIREMENTS OF THE FACILITY AND THE PERSON RESPONSIBLE FOR PERFORMING THE MAINTENANCE. q. OUTFALL FROM A DETENTION FACILITY SHALL BE DISCHARGED TO A RECEIVING CHANNEL, AND ENERGY DISSIPATERS SHALL BE PLACED AT THE OUTFALL OF ALL DETENTION FACILITIES AS NECESSARY TO PROVIDE A STABILIZED TRANSITION FROM THE FACILITY TO THE RECEIVING CHANNEL.
- h. ALL ON-SITE CHANNELS MUST BE VERIFIED TO BE ADEQUATE. i. INCREASED VOLUMES OF SHEET FLOWS THAT MAY CAUSE EROSION OR SEDIMENTATION ON ADJACENT PROPERTY SHALL BE
- DIVERTED TO A STABLE OUTLET, ADEQUATE CHANNEL, PIPE OR PIPE SYSTEM, OR TO A DETENTION FACILITY. j. IN APPLYING THESE STORMWATER RUNOFF CRITERIA,INDIVIDUAL LOTS OR PARCELS IN A RESIDENTIAL,COMMERCIAL,OR INDUSTRIAL DEVELOPMENT SHALL NOT BE CONSIDERED TO BE SEPARATE DEVELOPMENT PROJECTS. INSTEAD, THE DEVELOPMENT, AS A WHOLE,
- DEVELOPMENT CONDITION SHALL BE USED IN ALL ENGINEERING CALCULATIONS. k. ALL MEASURES USED TO PROTECT PROPERTIES AND WATERWAYS SHALL BE EMPLOYED IN A MANNER WHICH MINIMIZES IMPACTS ON PHYSICAL, CHEMICAL AND BIOLOGICAL INTEGRITY OF RIVERS, STREAMS AND OTHER WATERS OF THE STATE.

SHALL BE CONSIDERED TO BE A SINGLE DEVELOPMENT PROJECT. HYDROLOGIC PARAMETERS THAT REFLECT THE ULTIMATE

- I. INSTRUCTION FOR TEMPORARY SOIL STABILIZATION REQUIREMENTS ARE PROVIDED ON THE PLANS, SEE THE E&S NARRATIVE VEGETATIVE PRACTICES *ION SHEET *2E(I) AND SEED MIXTURES AND APPLICATION RATES IN TABLE 3.3I-B ON SHEET *2E(4). INSTRUCTION FOR PERMANENT STABILIZATION REQUIREMENTS ARE PROVIDED ON THE PLANS, SEE THE E&S NARRATIVE - VEGETATIVE PRACTICES *2 ON SHEET *2E(I).
- 2. DURING CONSTRUCTION OF THE PROJECT, ANY SOIL STOCKPILES AND BORROW AREAS SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES.THE CONTRACTOR IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOILS STOCKPILES ON SITE AS WELL AS BORROW AREAS AND SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.
- 3. A NOTE STATING THE DEFINITION OF PERMANENT STABILIZATION IS PROVIDED ON THE PLANS, SEE THE E&S NARRATIVE -VEGETATIVE PRACTICES *2 ON SHEET *2E(I) AND TABLE 3.32-D ON SHEET *2E(4).
- 4. ALL SEDIMENT TRAPPING MEASURES SHALL BE CONSTRUCTED AS A FIRST STEP PRIOR TO UP SLOPE LAND DISTURBANCE.
- 5. STABILIZATION MEASURES ARE PROVIDED FOR THE EARTHEN STRUCTURES, SEE THE E&S NARRATE MANAGEMENT STRATEGIES, ITEM 4 AND SEED MIXTURES AND APPLICATION RATES IN TABLE 3.31-B ON SHEET 2E(4).
- 6a. THE SEDIMENT TRAPS ARE CONTROLLING LESS THAN THREE ACRES AND ARE DESIGNED WITH A MINIMUM STORAGE CAPACITY OF 134 CUBIC YARDS PER ACRE, SEE STRUCTURAL PRACTICES ON SHEET 2E(1).

- 7. CUT AND FILL SLOPES SHOWN ON THIS PLAN HAVE BEEN EVALUATED BY A GEOTECHNICAL ENGINEER AND DESIGNED TO PREVENT EROSION.INSTRUCTION FOR PERMANENT STABILIZATION REQUIREMENTS ARE PROVIDED ON THE PLANS, SEE THE E&S NARRATIVE -VEGETATIVE PRACTICES *2 ON SHEET *IJ.PROVIDE SURFACE ROUGHENING OR CRIMPING TO ENHANCE SEED GERMINATION.
- 8. ANY CONCENTRATED RUNOFF FROM THIS SITE IS OUTLET INTO AN ADEQUATE OUTFALL CHANNEL CHANNEL ADEQUACY WILL BE VERIFIED WITH THE SUBMISSION OF THE ROADWAY CONSTRUCTION PLANS AND DRAINAGE CALCULATIONS.
- 9. IT IS NOT KNOWN AT THIS TIME IF THERE WILL BE ANY SEEPAGE OF WATER FROM UNDERGROUND. WHENEVER WATER SEEPS FROM A SLOPE FACE ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.
- IO. INLET PROTECTION HAS BEEN PROVIDE FOR ALL STORM SEWER INLETS DOWN SLOPE OF THE DISTURBANCE ACTIVITIES, SEE PLAN SHEETS 3C/D THRU 6C/D.
- d. MATERIAL USED FOR BACK FILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION. II. OUTLET PROTECTIONS ARE PROVIDED ON THE PLAN AT THE APPROPRIATE LOCATIONS, SEE EROSION AND SEDIMENT CONTROL SHEETS 3C/D THRU 6C/D.
 - I2. ENCROACHMENT IN THE WATERCOURSE SHALL BE LIMITED TO THE LIMITS OF DISTURBANCE, WHICH ARE AT A MINIMUM TO CONSTRUCT THE ROAD. SILT FENCE AND DIVERSION DIKES ARE PROVIDED TO CONTROL SEDIMENT TRANSPORT. I3. WHERE IT IS NECESSARY TO CROSS A LIVE WATERCOURSE, A TEMPORARY OR PERMANENT VEHICULAR STREAM CROSSING, IN
 - ACCORDANCE WITH VESCH 3.24, SHALL BE PROVIDED. 14. ALL APPLICABLE FEDERAL,STATE AND LOCAL REGULATIONS PERTAINING TO WORKING IN OR CROSSING LIVE WATERCOURSES SHALL BE
 - 15. THE BED AND BANKS OF THE DISTURBED WATERCOURSES ARE TO BE IMMEDIATELY STABILIZED AFTER WORK IS COMPLETED.

 - 16 UNDERGROUND UTILITIES a.NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME. b. EXCAVATED MATERIAL SHALL BE PLACED ON UPHILL SIDE OF TRENCHES.
 - c. EFFLUENT FROM DEWATERING OPERATION SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES ONT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.

d. MATERIAL USED FOR BACK FILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE

- ST ABILIZATION. e, TEMPORARY AND PERMANENT SEEDING SCHEDULES ARE PROVIDED ON SHEET *2E(4), SEE TABLES 3.3IB & 3.32D.
- 17. A NOTE REQUIRING THE CLEANING OF ADJACENT TRAVELWAYS IS SHOWN ON THE PLAN, SEE STRUCTURAL PRACTICES TEMPORARY CONSTRUCTION ENTRANCE 3.02 SEE SHEET *2E(I).
- 18. A NOTE REQUIRING THE REMOVAL OF ALL TEMPORARY FROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS PROVIDED ON THE PLAN, SEE MAINTENANCE STRATEGIES-SEDIMENT & EROSION CONTROL SEE SHEET *2E(I).
- 19. STORMWATER OUTFALL ADEQUACY WILL BE VERIFIED WITH THE SUBMISSION OF THE ROADWAY CONSTRUCTION PLANS AND DRAINAGE CALCULATIONS.

EROSION & SEDIMENT CONTROL STANDARD NOTES:

- I. THE OWNER/DEVELOPER MUST NOTIFY THE DEPARTMENT OF PUBLIC WORKS AT 792-7070 AT LEAST 24 HOURS PRIOR TO THE START OF CONSTRUCTION IN ACCORDANCE WITH APPLICABLE COUNTY ORDINANCES AND POLICIES.
- 2. THE OWNER/DEVELOPER GRANTS THE RIGHT-OF-ENTRY ON TO THIS PROPERTY TO THE DESIGNATED PRINCE WILLIAM COUNTY PERSONNEL FOR THE PURPOSE OF INSPECTING AND MONITORING FOR COMPLIANCE WITH TITLE IO.OI, CHAPTER 5, ARTICLE 4 OF THE CODE OF VIRGINIA, EROSION AND SEDIMENT CONTROL LAW AND THE DESIGN AND CONSTRUCTION STANDARDS MANUAL SECTION 750.04 (C).
- 3. ALL EROSION CONTROL MEASURES SHOWN ON THE APPROVED PLAN MUST BE IN PLACE AND INSPECTED AND APPROVED BY THE DEPARTMENT OF PUBLIC WORKS PRIOR TO CLEARING, STRIPPING OF TOPSOIL OR GRADING.
- 4. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN AND PERMIT SHALL BE KEPT ON THE SITE AT ALL TIMES.
- 5. THE DEVELOPER/DEVELOPER'S REPRESENTATIVE IS RESPONSIBLE FOR THE INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY PRINCE WILLIAM COUNTY.
- 6. ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL COMPLETE AND ADEQUATE STABILIZATION IS
- 7. WATER MUST BE PUMPED INTO AN APPROVED FILTERING DEVICE DURING DEWATERING OPERATIONS.
- 8. ALL EROSION AND SEDIMENT CONTROL PRACTICES MUST BE CONSTRUCTED AND MAINTAINED ACCORDING TO THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND THE VIRGINIA REGULATIONS VR 625-02-00 EROSION AND SEDIMENT CONTROL REGULATIONS AND TO THE PRINCE WILLIAM COUNTY DESIGN AND CONSTRUCTION STANDARDS MANUAL.
- 9. THE DEVELOPER/DEVELOPER'S REPRESENTATIVE WILL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL PRACTICES AT ALL TIMES.

THE DEVELOPER/DEVELOPER'S REPRESENTATIVE SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL MEASURES DAILY AND AFTER EACH SIGNIFICANT RAINFALL. THE FOLLOWING ITEMS WILL BE CHECKED IN PARTICULAR:

- A. SEDIMENT BASINS WILL BE CLEANED OUT WHEN THE LEVEL OF SEDIMENT BUILDUP REACHES THE CLEANOUT ELEVATION INDICATED ON THE RISER PIPE. SEDIMENT SHALL BE DISPOSED IN SUITABLE AREAS AND IN SUCH A MANNER THAT WILL NOT ERODE OR CAUSE SEDIMENTATION PROBLEMS. THE BASIN EMBANKMENT SHOULD BE CHECKED REGULARLY TO ENSURE THAT IT STRUCTURALLY SOUND AND HAS NOT BEEN DAMAGED BY EROSION OR CONSTRUCTION EQUIPMENT. EMERGENCY SPILLWAYS SHOULD BE CHECKED REGULARLY TO ENSURE THAT ITS LINING IS WELL ESTABLISHED AND EROSION RESISTANT. (N/A)
- B. SEDIMENT TRAPS WILL BE CHECKED REGULARLY FOR SEDIMENT CLEANOUT. SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE HALF THE DESIGN VOLUME OF THE WET STORAGE. SEDIMENT REMOVED FROM THE TRAP SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE AND CAUSE SEDIMENTATION PROBLEMS.
- C. GRAVEL OUTLETS WILL BE CHECKED REGULARLY FOR SEDIMENT BUILDUP WHICH WILL PREVENT DRAINAGE. IF THE GRAVEL IS CLOGGED BY SEDIMENT, IT SHALL BE REMOVED AND CLEANED OR REPLACED.
- D. SILT FENCE BARRIERS WILL BE CHECKED REGULARLY FOR UNDERMINING OR DETERIORATION OF THE FABRIC. SEDIMENT SHALL BE REMOVED WHEN THE LEVEL OF SEDIMENT DEPOSITION REACHES HALF WAY TO THE TOP OF THE
- E. SEEDED AREAS WILL BE CHECKED REGULARLY TO ENSURE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED AND RESEEDED AS NEEDED.
- F. STREAM DIVERSION AND STORM CONVEYANCE CHANNELS SHALL BE INSPECTED DAILY AND AFTER EACH RAIN TO ENSURE THEY ARE FUNCTIONING PROPERLY AND THAT THE INTEGRITY OF THE LININGS ARE NOT IMPAIRED. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVISES MUST BE MADE IMMEDIATELY AFTER THE INSPECTION.
- IO. SEDIMENT TRAPPING MEASURES WILL BE INSTALLED AS A FIRST STEP IN GRADING AND WILL BE SEEDED AND MULCHED IMMEDIATELY FOLLOWING INSTALLATION.
- II. PERMANENT SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN (7) DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN UNDISTURBED FOR LONGER THAN FOURTEEN (14) DAYS. SEEDING AND SELECTION OF THE SEED MIXTURE SHALL BE IN ACCORDANCE WITH THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK STANDARD AND SPECIFICATION 3.32. ROADS AND PARKING AREAS SHALL BE STABILIZED WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS REACHED.
- 12. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES WILL BE REMOVED WITHIN 30 DAYS AFTER ADEQUATE SITE STABILIZATION AND AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, AS AUTHORIZED BY THE PRINCE WILLIAM COUNTY INSPECTORS.TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES WILL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION
- 13. WHEN SEDIMENT IS TRANSPORTED ONTO A PAVED ROAD SURFACE, THE ROAD WILL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT WILL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA STREET WASHING WILL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER.
- 14. AREAS WHICH ARE NOT TO BE DISTURBED WILL BE CLEARLY MARKED BY FLAGS, SIGNS, ETC.
- 15. RPA AND FLOODPLAIN LIMITS SHALL BE CLEARLY MARKED IN THE FIELD BY FLAGS, SIGNS, ETC. 16. TREE SAVE AREAS SHALL BE CLEARLY MARKED IN THE FIELD BY ORANGE SAFETY FENCE.
- I7. ORANGE SAFETY FENCE MUST BE INSTALLED AROUND ALL SILT TRAPS AND SEDIMENT BASINS.

PROJECT 0639-076-348

2E(2)

PROJECT MANAGER_MEKDES_TABOR_(703-792-8137)______ SURVEYED BY, DATE JMI. AUGUST 2024 DESIGN BY JMT (703) 464-7369

SUBSURFACE UTILITY BY, DATE JMT, AUGUST 2024

SOILS MAP

Hydrologic Soil Group—Fairfax County, Virginia, and Prince William County, Virginia

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
7В	Beltsville silt loam, 2 to 7 percent slopes	С	31.7	0.8%
29A	Codorus silt loam, 0 to 2 percent slopes, occasionally flooded		3.7	0.1%
30A	Codorus and Hatboro soils, 0 to 2 percent slopes, occasionally flooded	B/D	61.9	1.7%
36A	Elkton silt loam, 0 to 2 percent slopes, occasionally ponded		63.2	1.7%
37B Elsinboro loam, 2 to 7 percent slopes, rarely flooded		В	3.9	0.1%
40 Grist Mill sandy loam, 0 to 25 percent slopes		С	77.4	2.1%
43A Grist Mill-Gunston complex, 0 to 2 percent slopes		C/D	32.3	0.9%
46A	Grist Mill-Mattapex complex, 0 to 2 percent slopes	С	7.0	0.2%
46B	Grist Mill-Mattapex complex, 2 to 7 percent slopes	С	13.7	0.4%
47B	Grist Mill-Woodstown complex, 2 to 7 percent slopes	С	13.7	0.4%
48A	Gunston silt loam, 0 to 2 percent slopes	C/D	10.0	0.3%
49A	Hatboro silt loam, 0 to 2 percent slopes, frequently flooded	B/D	4.2	0.1%
60A	Honga peat, 0 to 1 percent slopes, very frequently flooded, tidal	C/D	79.6	2.1%
67B	Kingstowne-Beltsville complex, 2 to 7 percent slopes	С	16.1	0.4%
69B	Kingstowne-Elsinboro complex 2 to 7 percent slopes	С	67.1	1.8%
70B	Kingstowne-Sassafras complex, 2 to 7 percent slopes	С	21.9	0.6%

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Hydrologic Soil Group—Fairfax County, Virginia, and Prince William County, Virginia

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
71C	Kingstowne-Sassafras- Marumsco complex, 7 to 15 percent slopes	С	20.4	0.5%
71D	Kingstowne-Sassafras- Marumsco complex, 15 to 25 percent slopes	С	11.0	0.3%
71E	Kingstowne-Sassafras- Marumsco complex, 25 to 45 percent slopes	С	17.7	0.5%
74B	Lunt-Marumsco complex, 2 to 7 percent slopes	В	68.5	1.8%
76B Matapeake silt loam, 2 to 7 percent slopes		В	1.2	0.0%
77A	77A Mattapex loam, 0 to 2 percent slopes		13.5	0.4%
77B	Mattapex loam, 2 to 7 percent slopes	С	20.0	0.5%
88D	Rhodhiss-Rock outcrop complex, 15 to 25 percent slopes	A	4.9	0.19
88E	Rhodhiss-Rock outcrop complex, 25 to 45 percent slopes	A	36.0	1.09
90B	Sassafras sandy loam, 2 to 7 percent slopes	В	53.2	1.49
90C	Sassafras sandy loam, 7 to 15 percent slopes	В	6.9	0.29
91C	Sassafras-Marumsco complex, 7 to 15 percent slopes	В	74.4	2.0%
91D	Sassafras-Marumsco complex, 15 to 25 percent slopes	В	56.4	1.5%
91E	Sassafras-Marumsco complex, 25 to 45 percent slopes	В	91.0	2.49
95	Urban land		95.5	2.6%
109B	Woodstown sandy loam, 2 to 7 percent slopes	В	13.1	0.4%
W	Water		258.0	6.9%
Subtotals for Soil Surv	rey Area		1,349.4	36.29
Totals for Area of Inter	est		3,729.7	100.09
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
1A	Aden silt loam, 0 to 2	C/D	8.9	0.29
IA	Auen siit ioani, 0 to 2	0.0	0.9	0

percent slopes USDA Natural Resources
Conservation Service Web Soil Survey

National Cooperative Soil Survey

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REVISED STATE PROJECT ROUTE 0639-076-348 R-201,C-501. 2E(3) VA.

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

Hydrologic Soil Group—Fairfax County, Virginia, and Prince William County, Virginia

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
15A	Comus loam, 0 to 2 percent slopes	В	5.7	0.2%
16A	Delanco fine sandy loam, 0 to 4 percent slopes	C/D	42.7	1.1%
18C	Dumfries sandy loam, 7 to 15 percent slopes	A	4.0	0.1%
18D	Dumfries sandy loam, 15 to 25 percent slopes	А	140.0	3.8%
18E	Dumfries sandy loam, 25 to 50 percent slopes	A	88.2	2.4%
20B	Elsinboro sandy loam, 2 to 7 percent slopes	В	168.0	4.5%
22A	Featherstone mucky silt loam, 0 to 1 percent slopes	B/D	26.5	0.7%
27A	Hatboro-Codorus complex, 0 to 2 percent slopes		50.6	1.4%
36D	Marr very fine sandy loam, 7 to 25 percent slopes	В	5.7	0.2%
37A	Marumsco loam, 0 to 4 percent slopes	C/D	75.0	2.0%
38B	Meadowville loam, 0 to 5 percent slopes	А	12.9	0.3%
42B	Neabsco-Quantico complex, 2 to 7 percent slopes	D	103.8	2.8%
47B	Quantico sandy loam, 2 to 7 percent slopes	В	64.1	1.7%
47C	Quantico sandy loam, 7 to 15 percent slopes	В	92.5	2.5%
47D	Quantico sandy loam, 15 to 25 percent slopes	В	70.6	1.9%
54B	Urban land-Udorthents complex, 0 to 7 percent slopes		1,143.0	30.6%
55D	Watt channery silt loam, 15 to 25 percent slopes		32.8	0.9%
55E	Watt channery silt loam, 25 to 50 percent slopes	В	45.0	1.2%
W	Water		199.7	5.4%
Subtotals for Soil Surv	rey Area	1	2,380.0	63.8%
	est	3,729.7		

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Conservation Service Web Soil Survey National Cooperative Soil Survey

Hydrologic Soil Group

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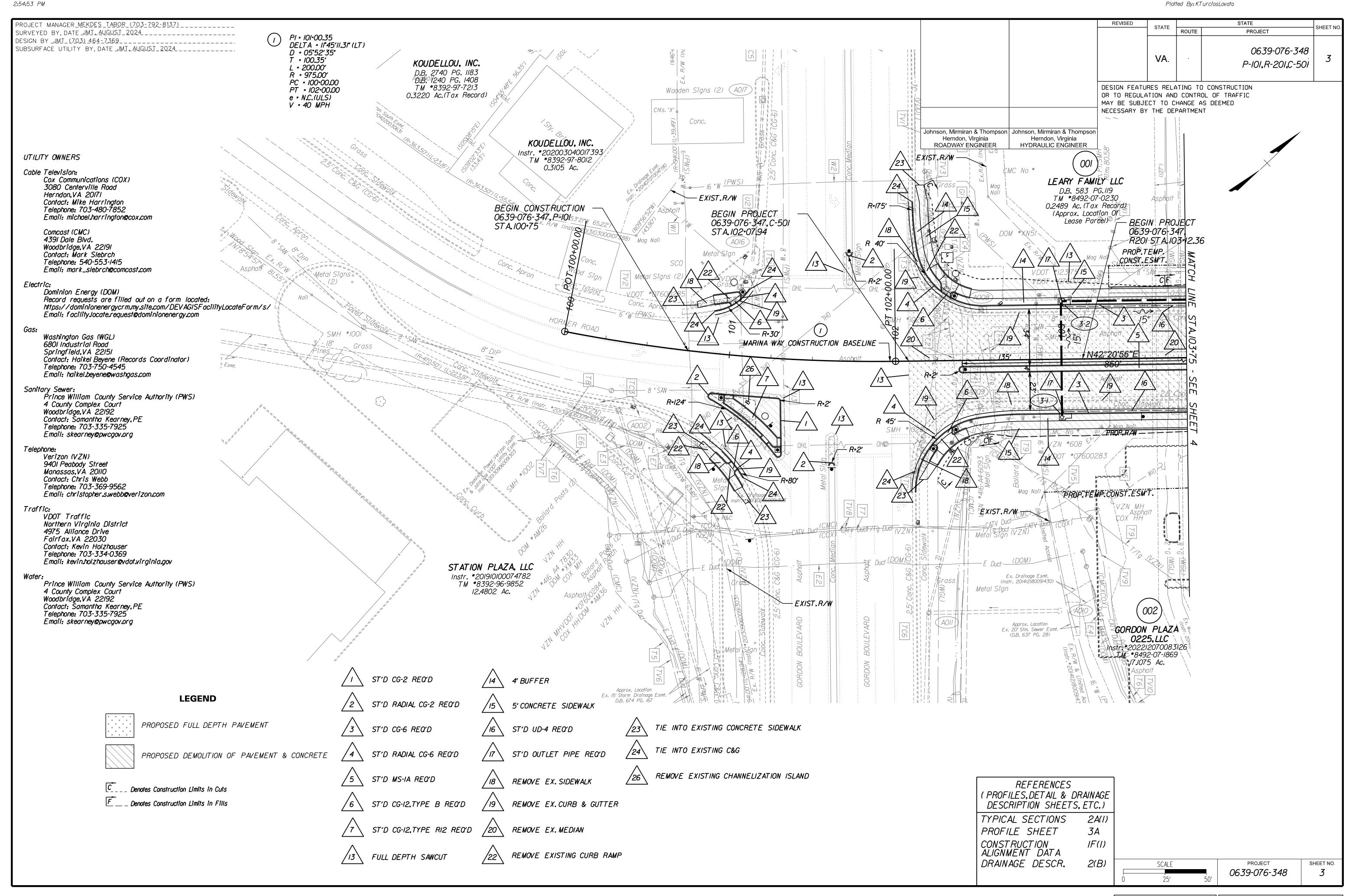
Hydrologic Soil Group—Fairfax County, Virginia, and Prince William County, Virginia

MAP LEGEND	
Area of Interest (AOI) Area of Interest (AOI) Soils Soil Rating Polygons A A/D B B/D C C/D D Not rated or not available Soil Rating Lines A A/D B B/D C C/D D Not rated or not available Soil Rating Lines A A/D B A/D B A/D A/D B Not rated or not available	

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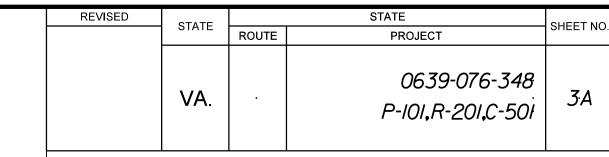
Web Soil Survey National Cooperative Soil Survey 7/17/2024 Page 2 of 6

SHEET NO. PROJECT 2E(3) 0639-076-348



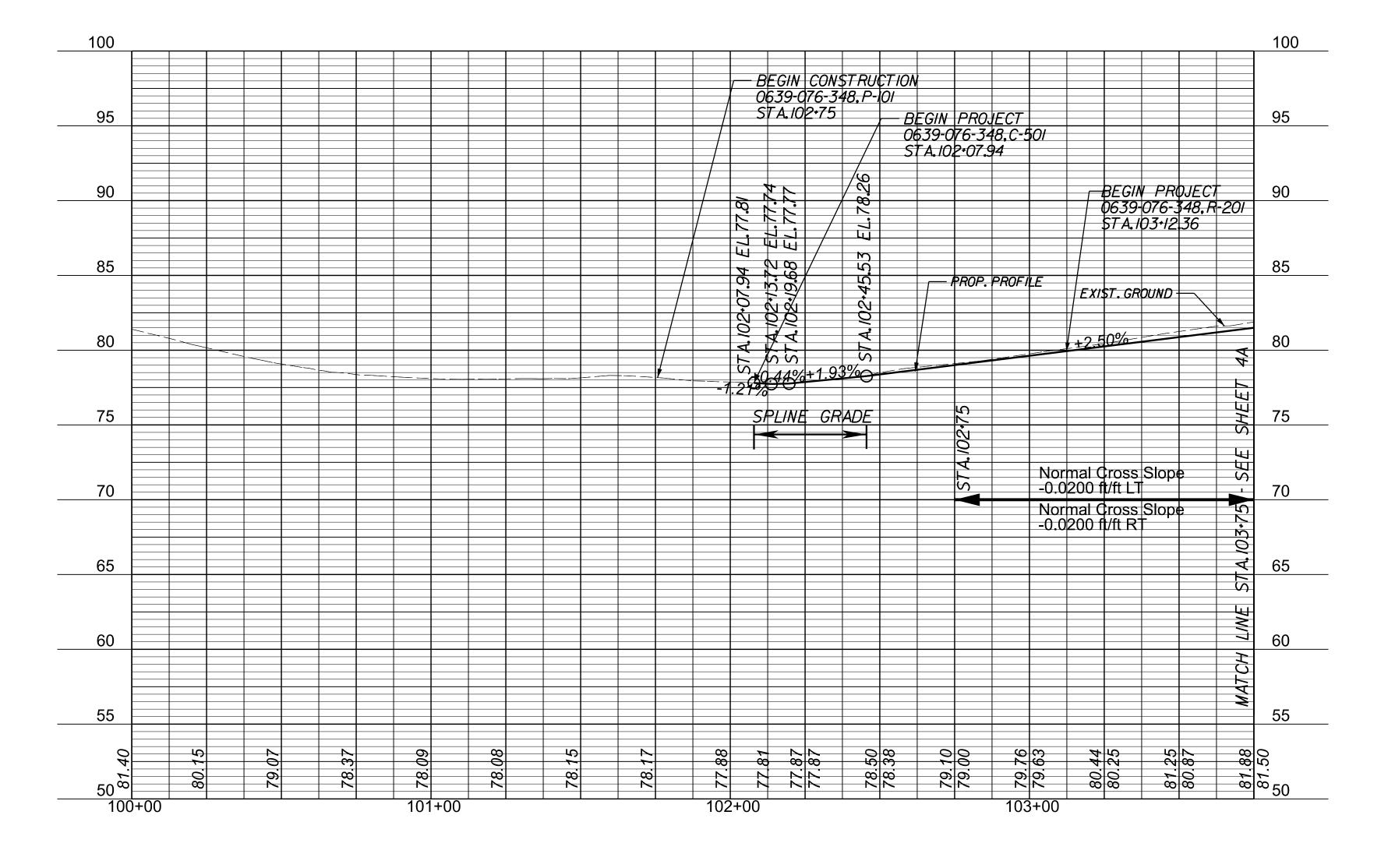
PROJECT MANAGER_MEKDES_TABOR_(703-792-8137) SURVEYED BY, DATE JMI_AUGUSI_2024_____ DESIGN BY JMT (703) 464-7369______ SUBSURFACE UTILITY BY, DATE JMT. AUGUST 2024

MARINA WAY



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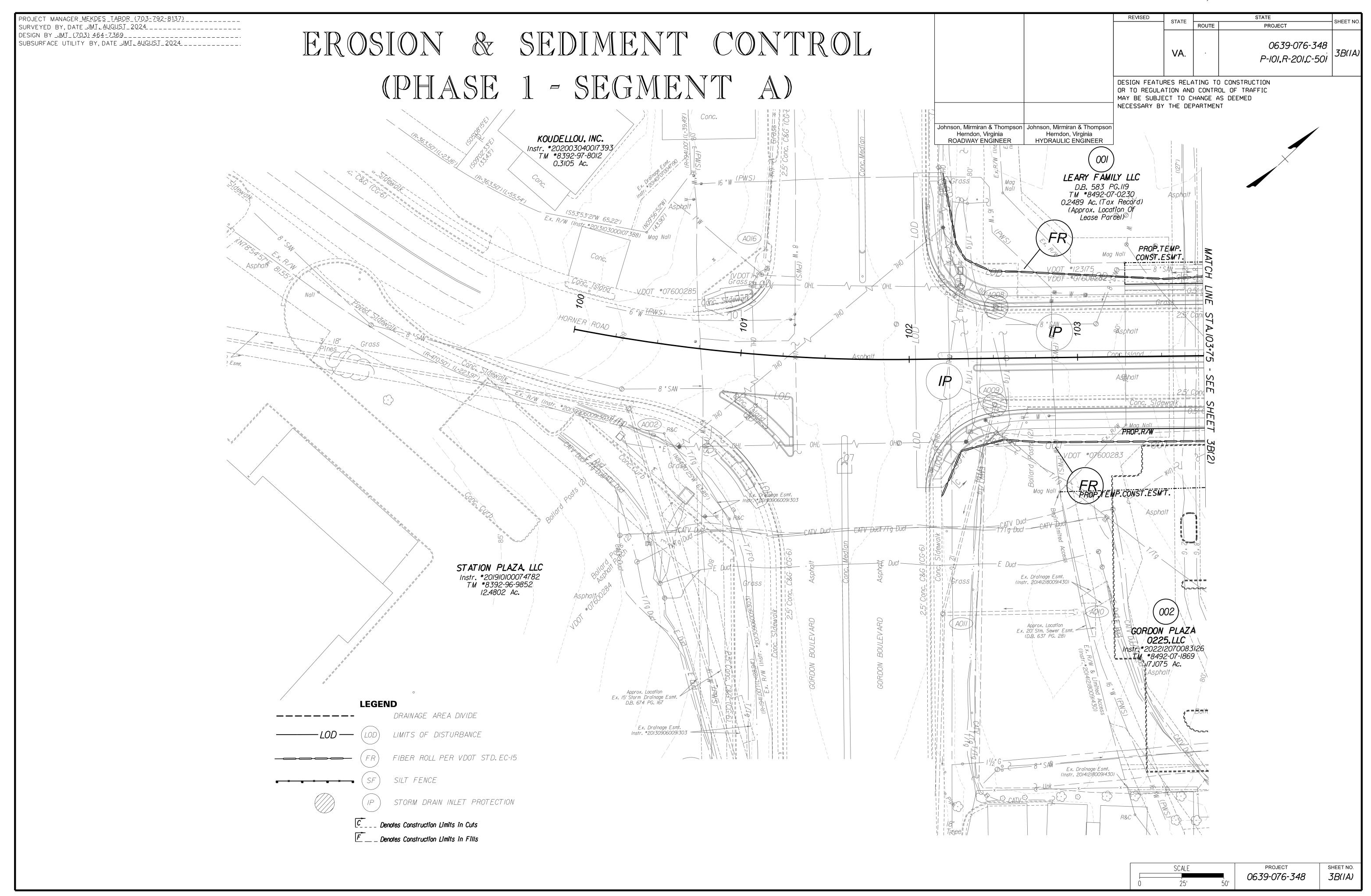
Johnson, Mirmiran & Thompson Herndon, Virginia ROADWAY ENGINEER

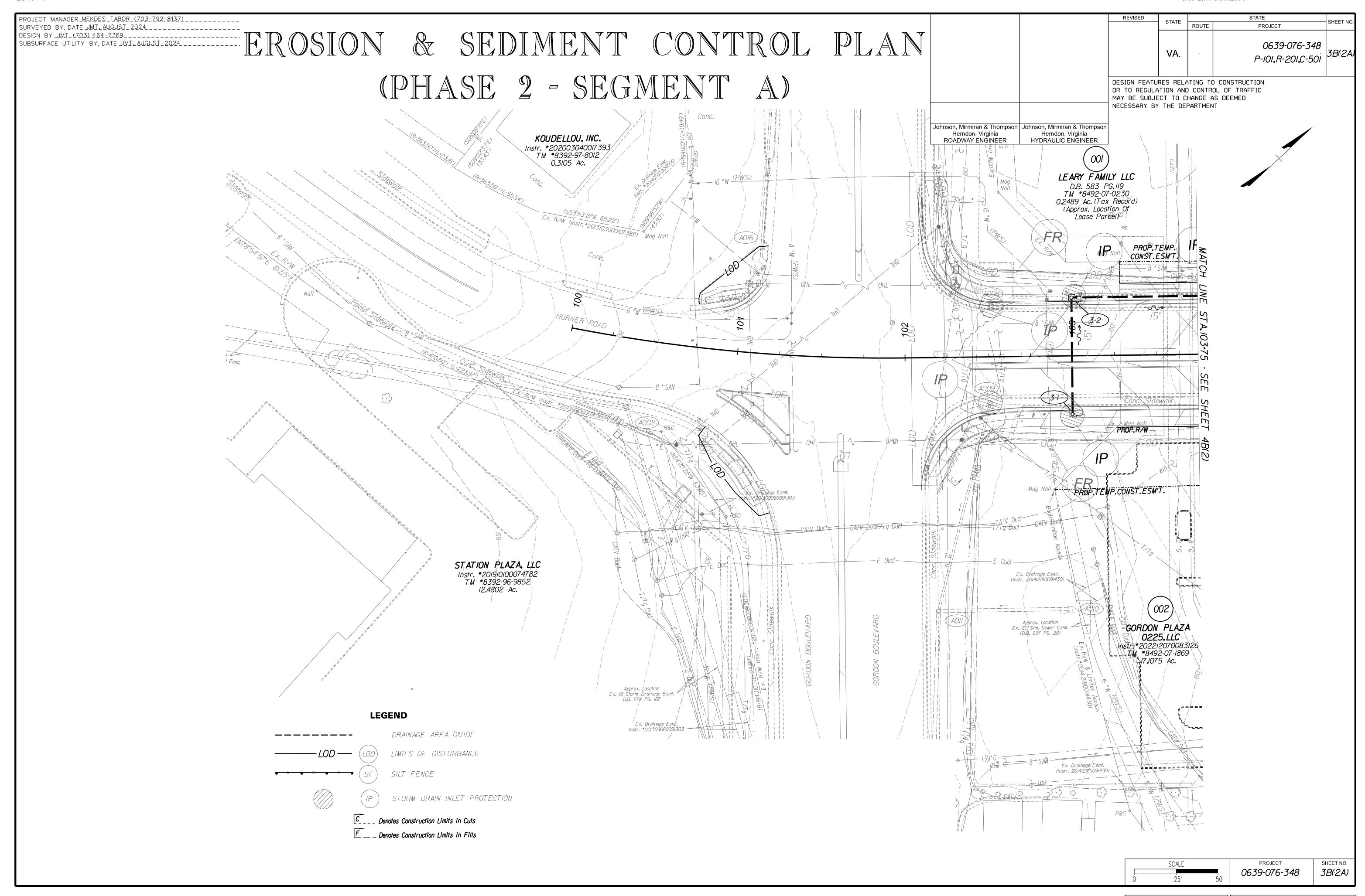


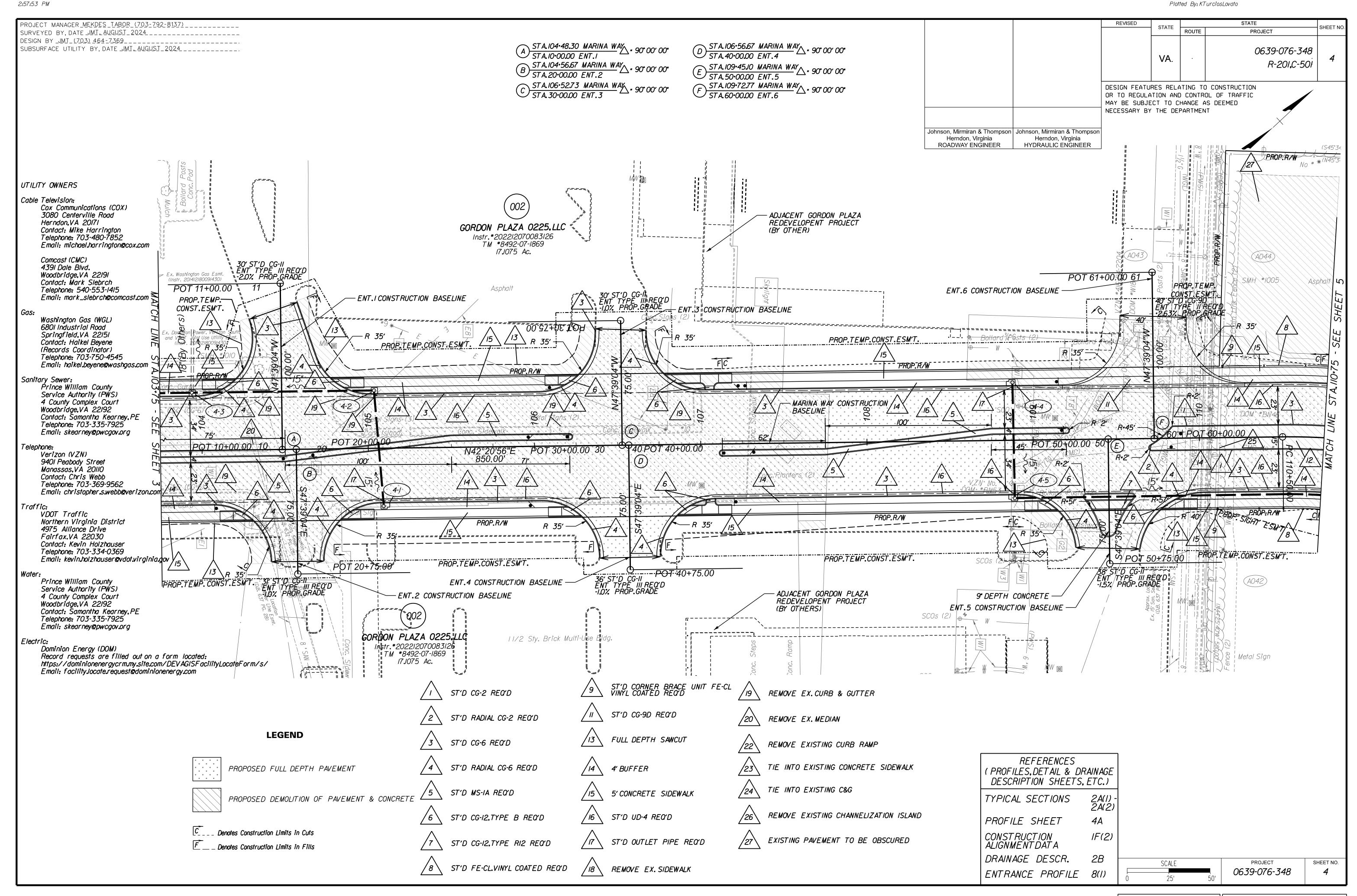
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PROJECT 0639-076-348 SHEET NO.

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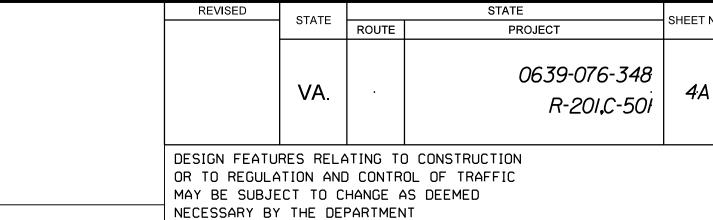
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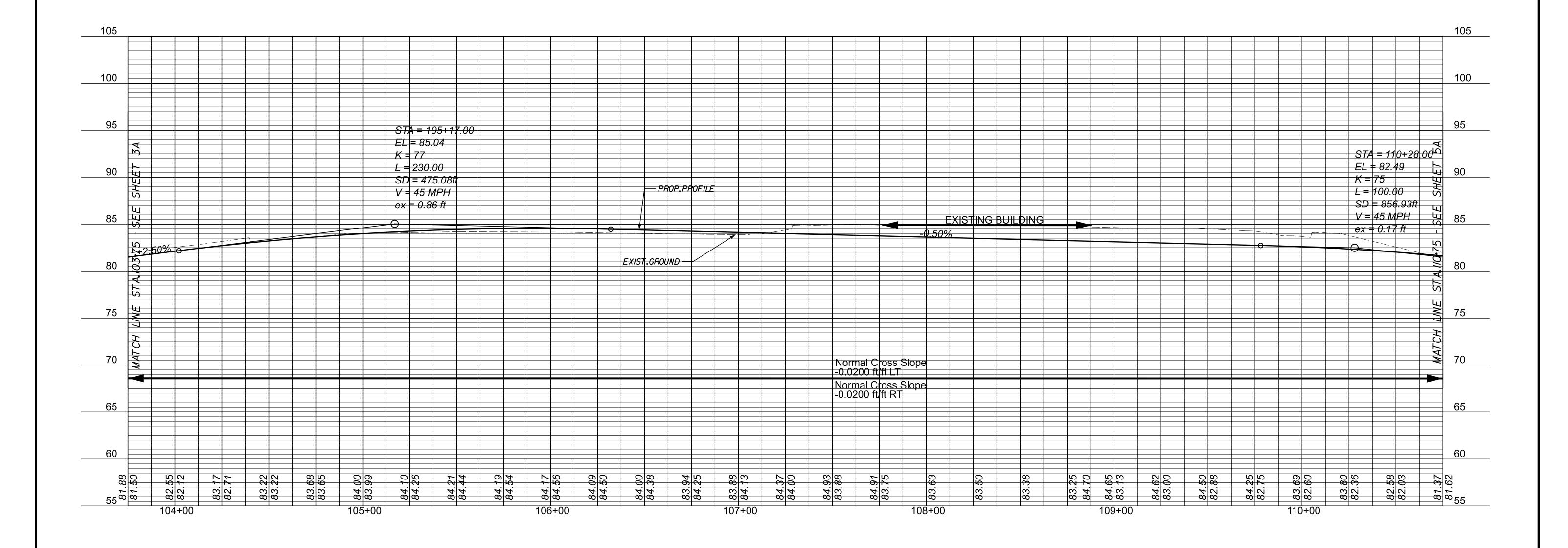
DESIGN BY JMT_(703) 464-7369

SUBSURFACE UTILITY BY, DATE JMI_AUGUST_2024

MARINA WAY



Johnson, Mirmiran & Thompson
Herndon, Virginia
ROADWAY ENGINEER



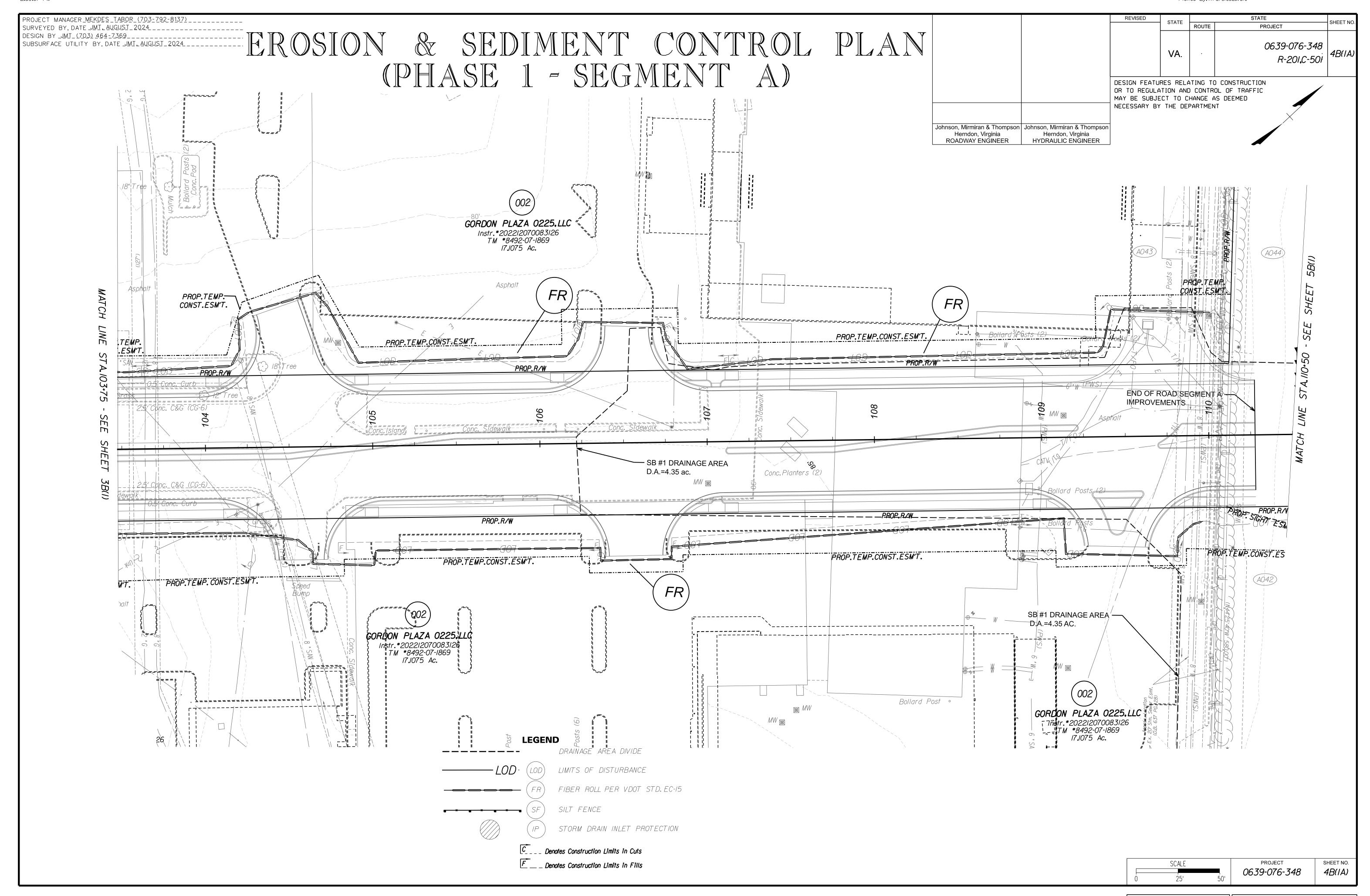
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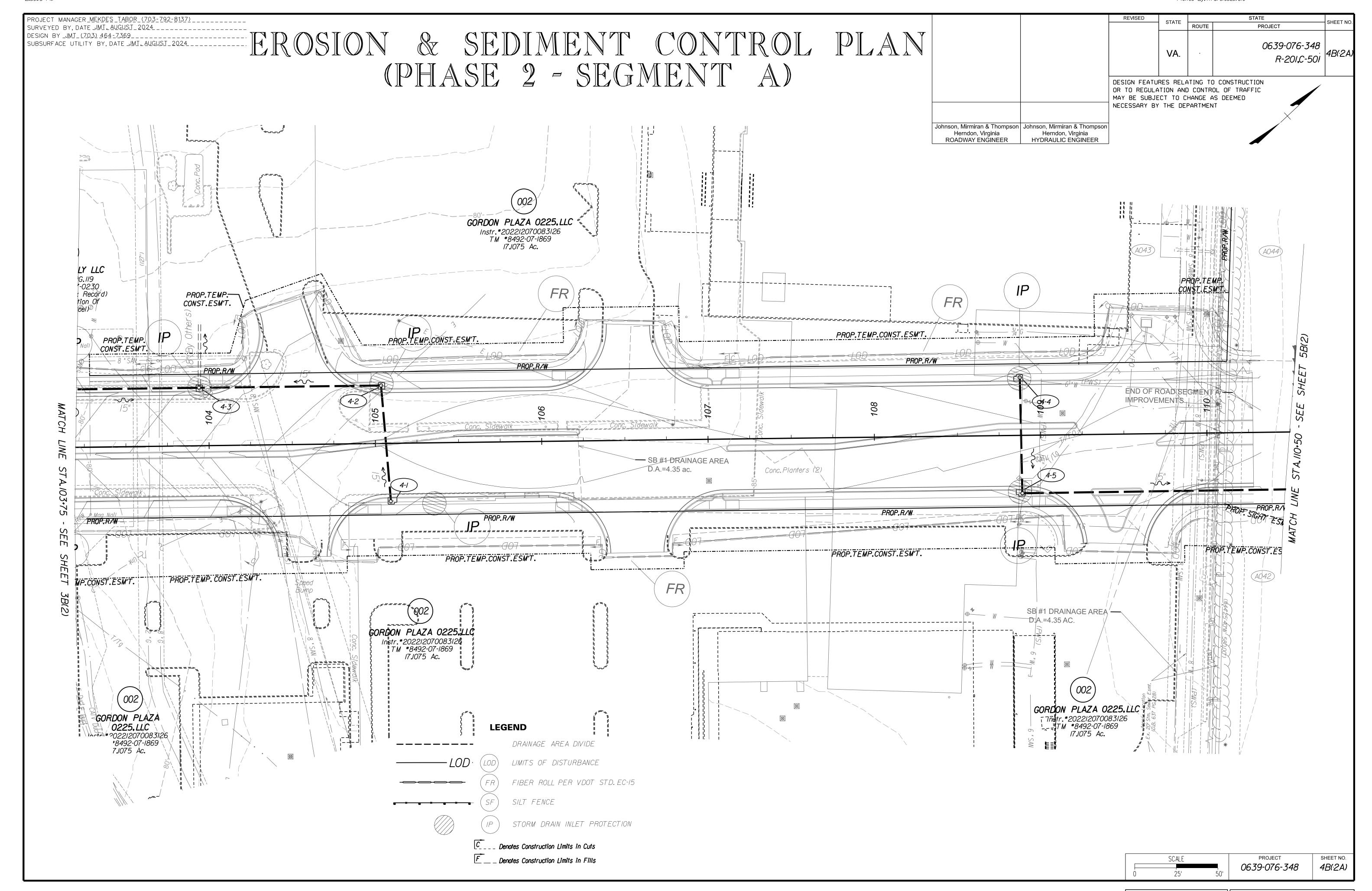
PROJECT 0639-076-348

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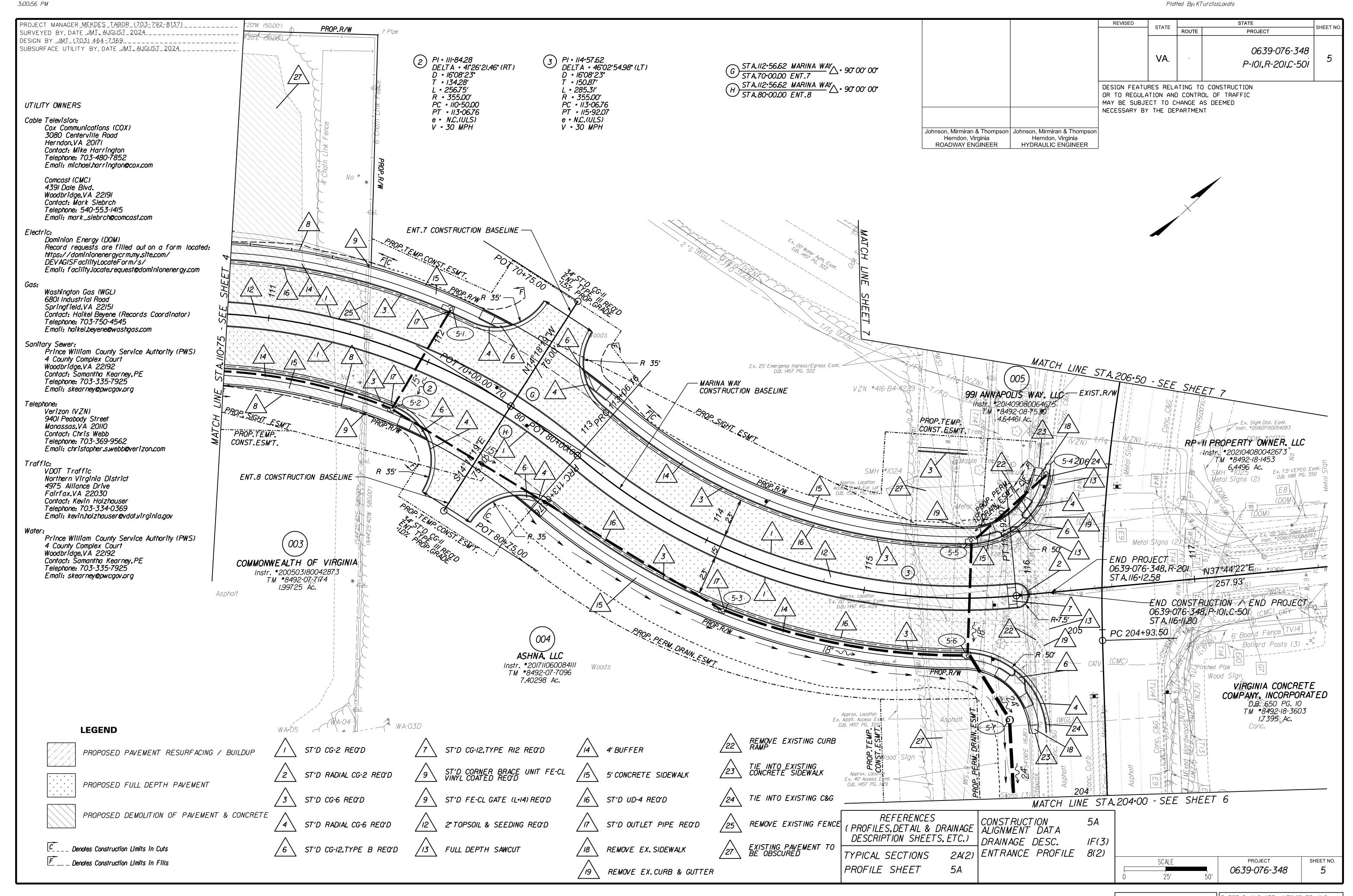
SHEET NO.

THESE PLANS ARE UNFINISHED AN UNAPPROVED AND ARE NOT TO BE FOR ANY TYPE OF CONSTRUCTION



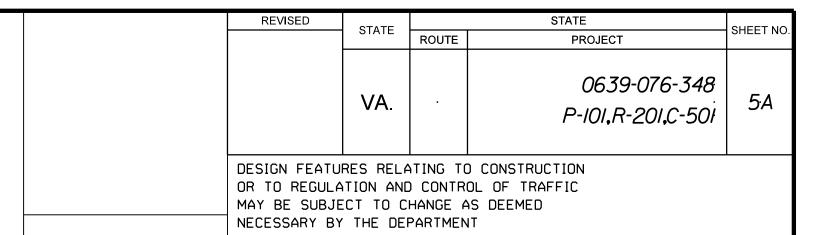


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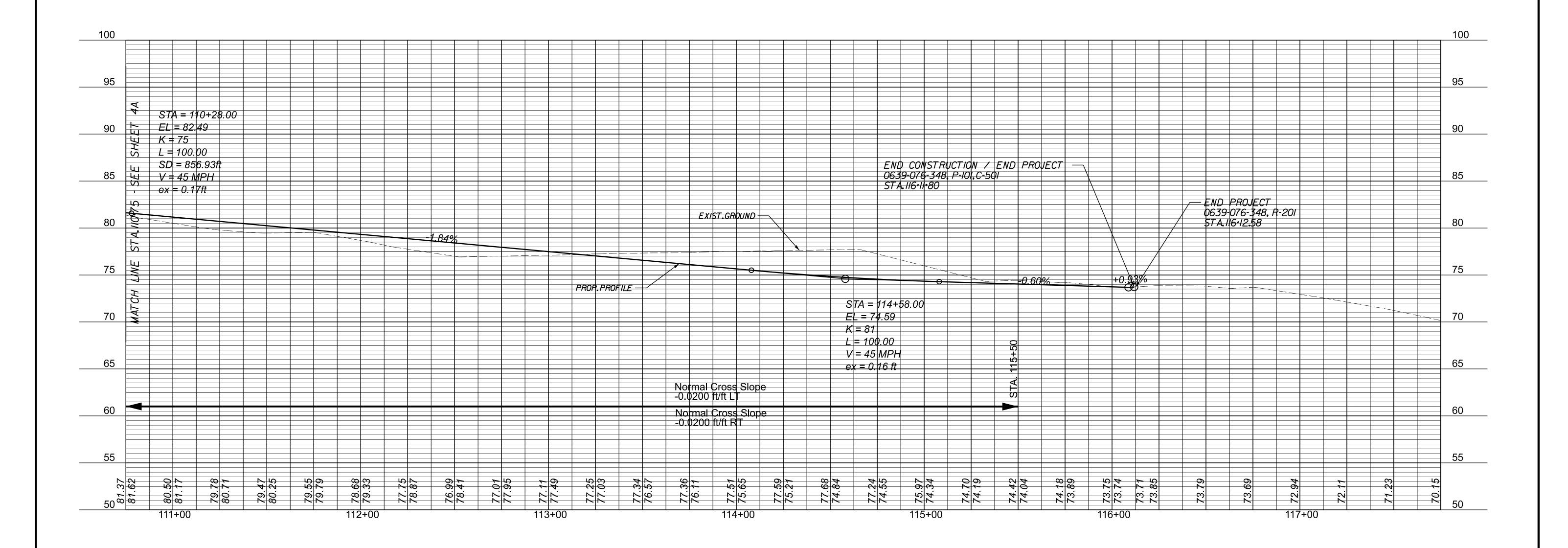


PROJECT MANAGER MEKDES TABOR (703-792-8137) SURVEYED BY, DATE JMI. AUGUSI 2024 DESIGN BY JMT (703) 464-7369________ SUBSURFACE UTILITY BY, DATE JMT. AUGUST 2024

MARINA WAY



Johnson, Mirmiran & Thompson Herndon, Virginia ROADWAY ENGINEER

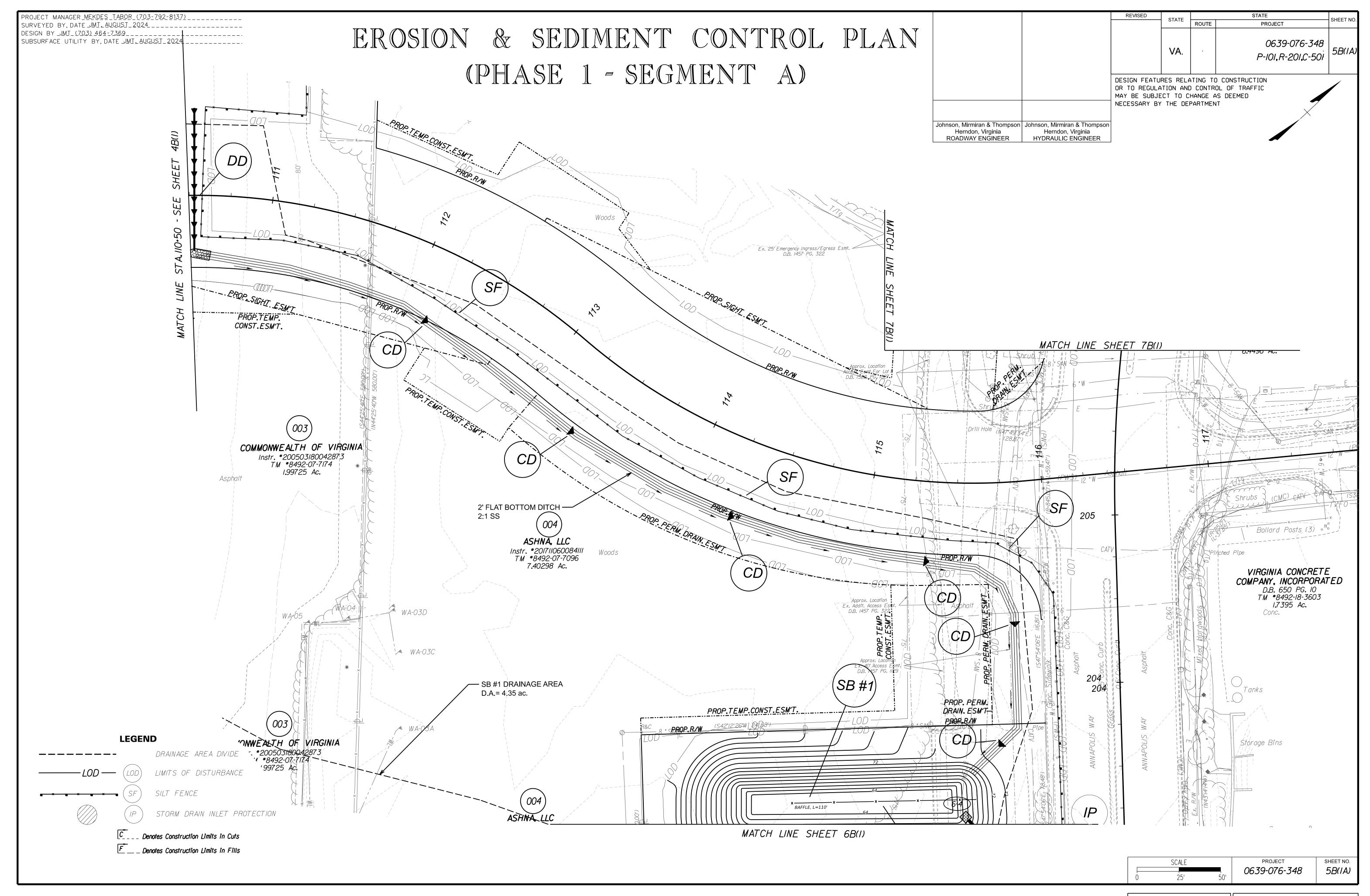


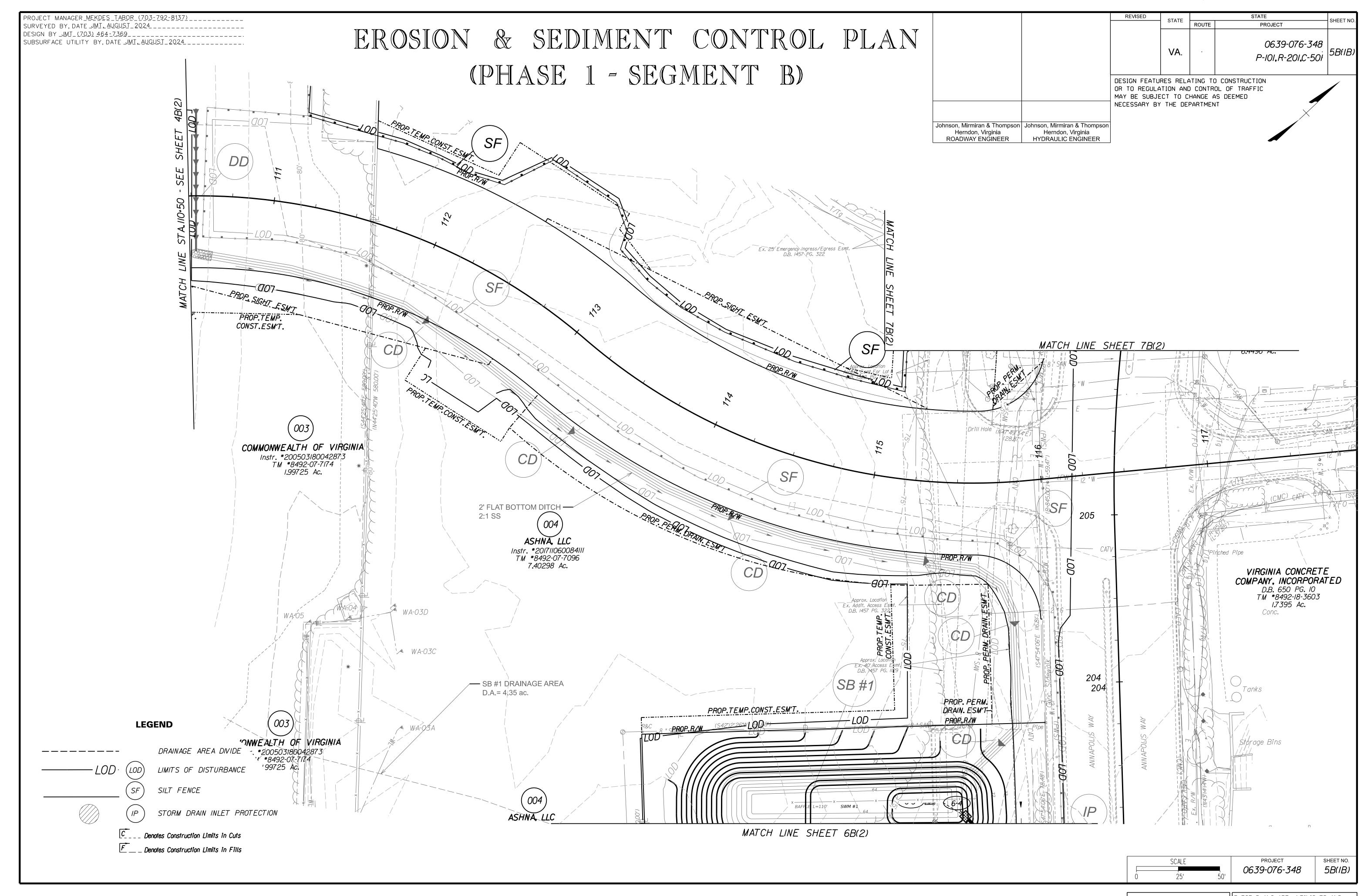
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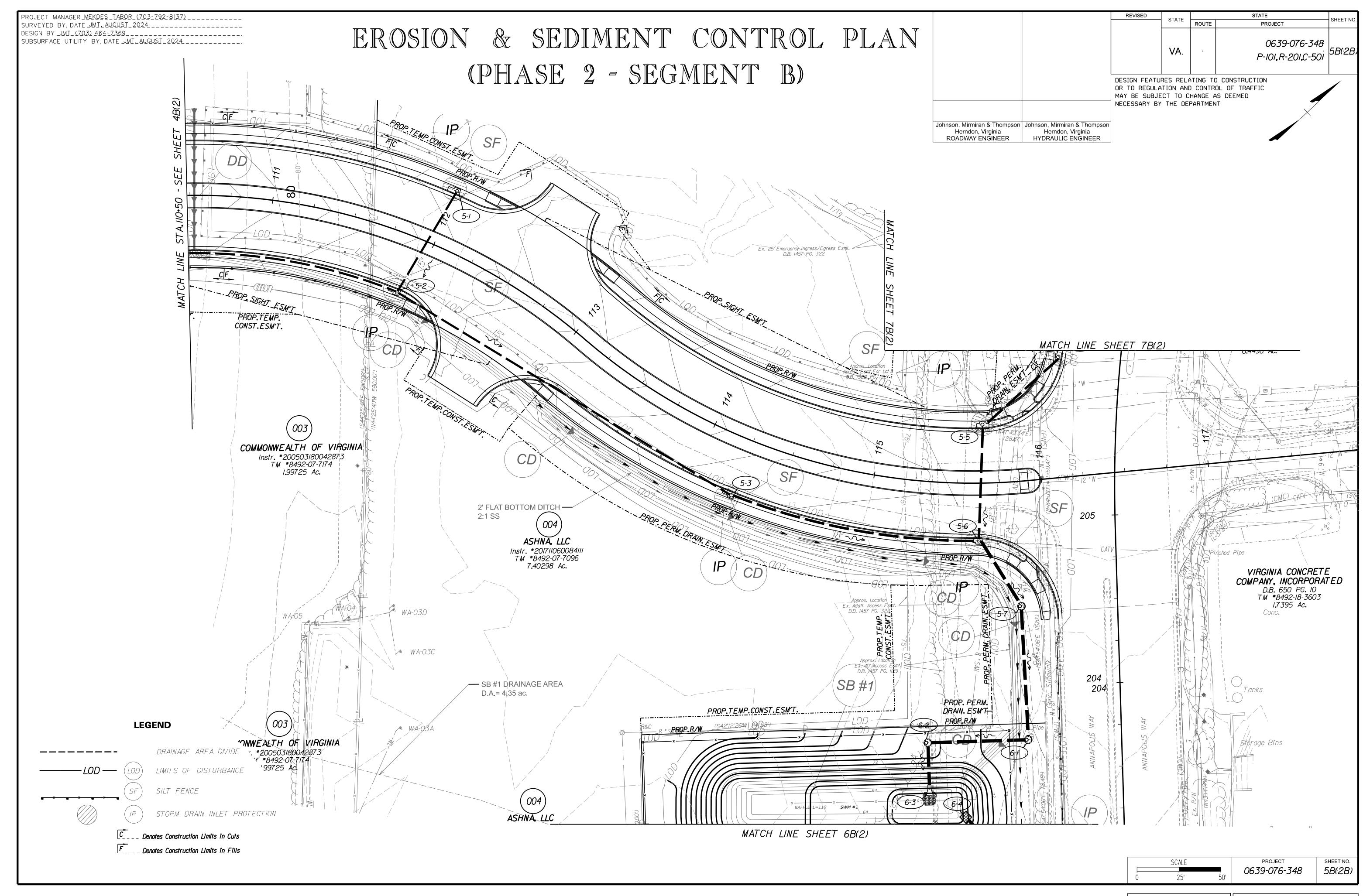
PROJECT 0639-076-348

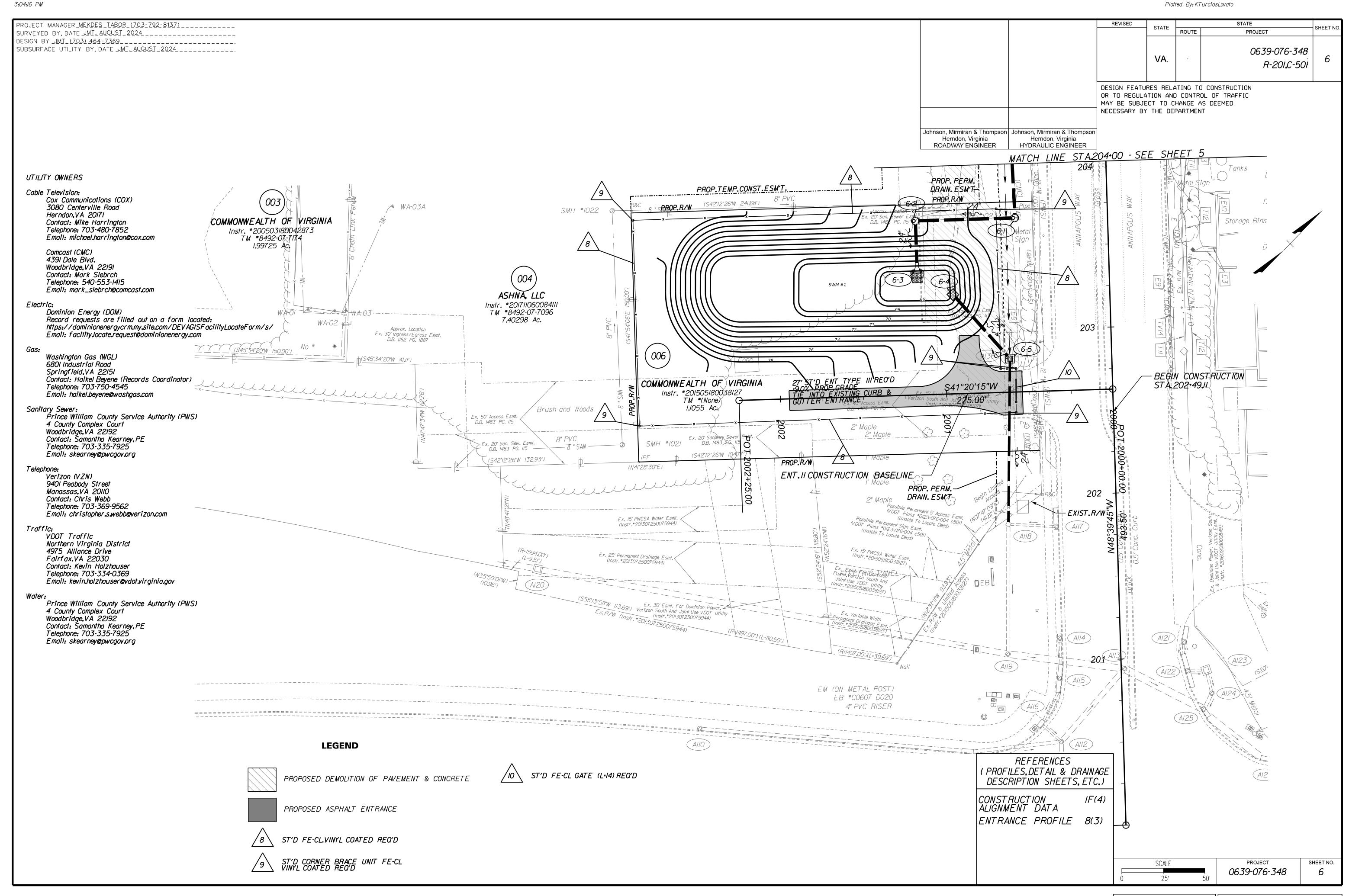
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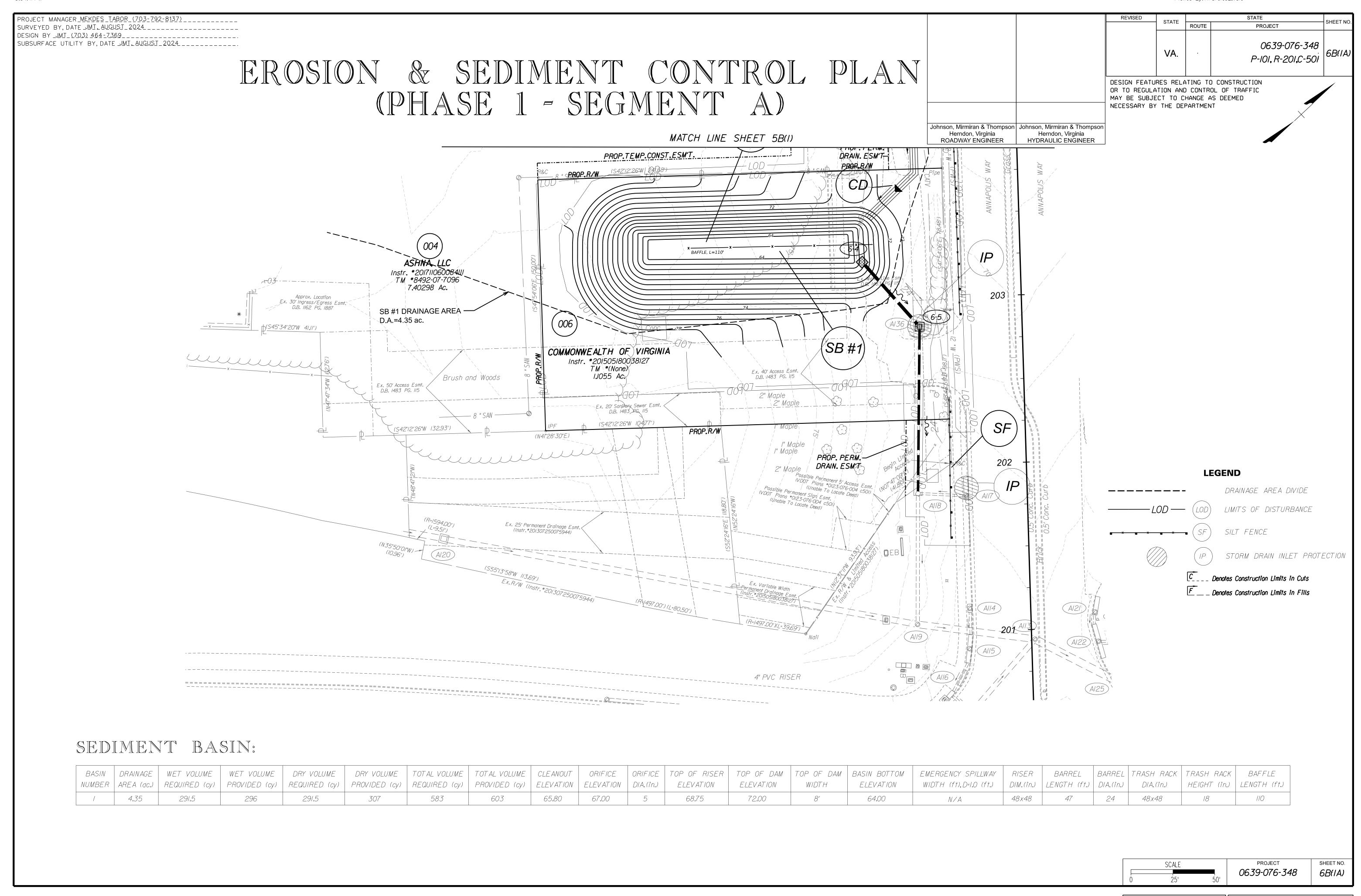
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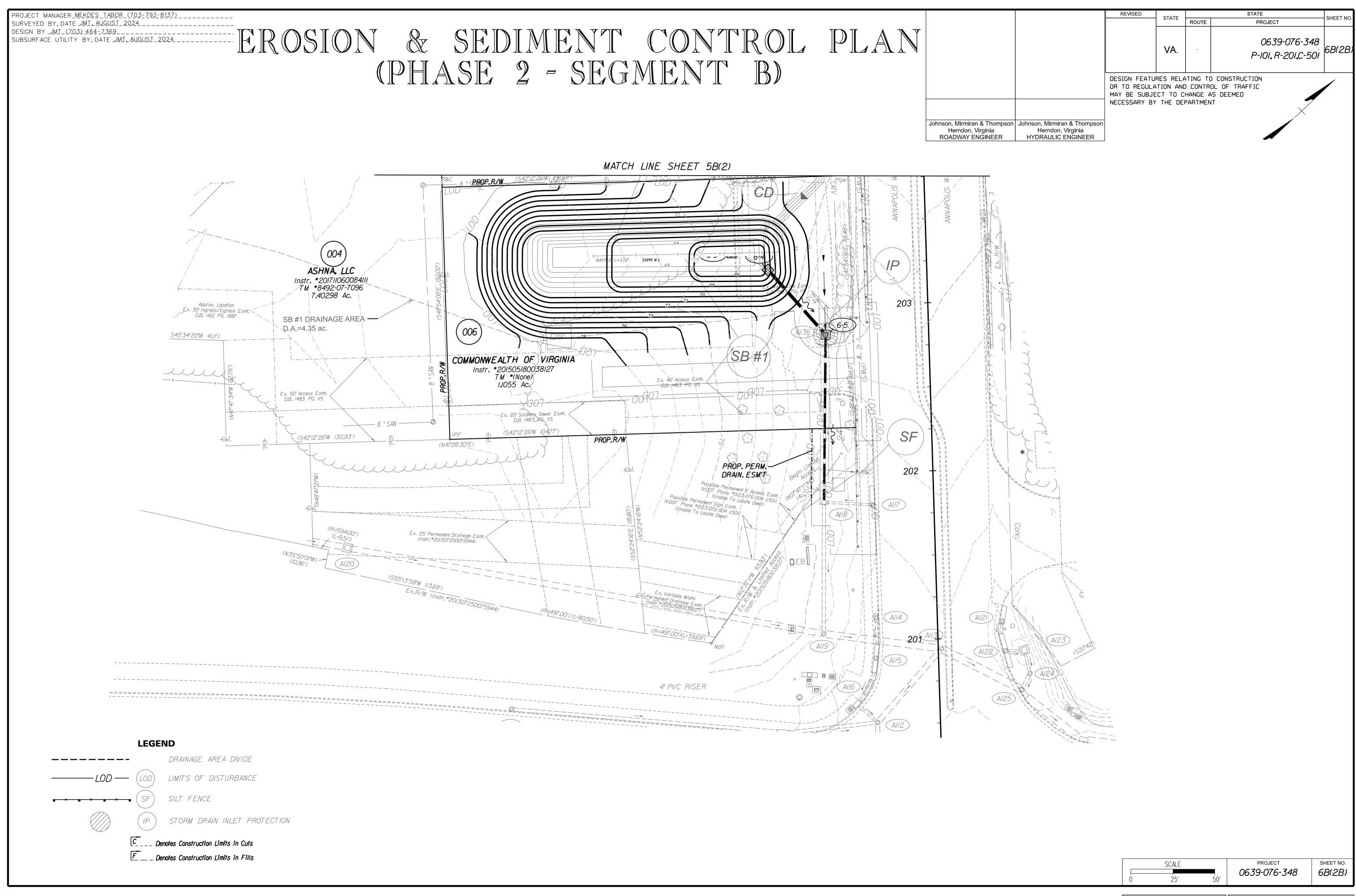


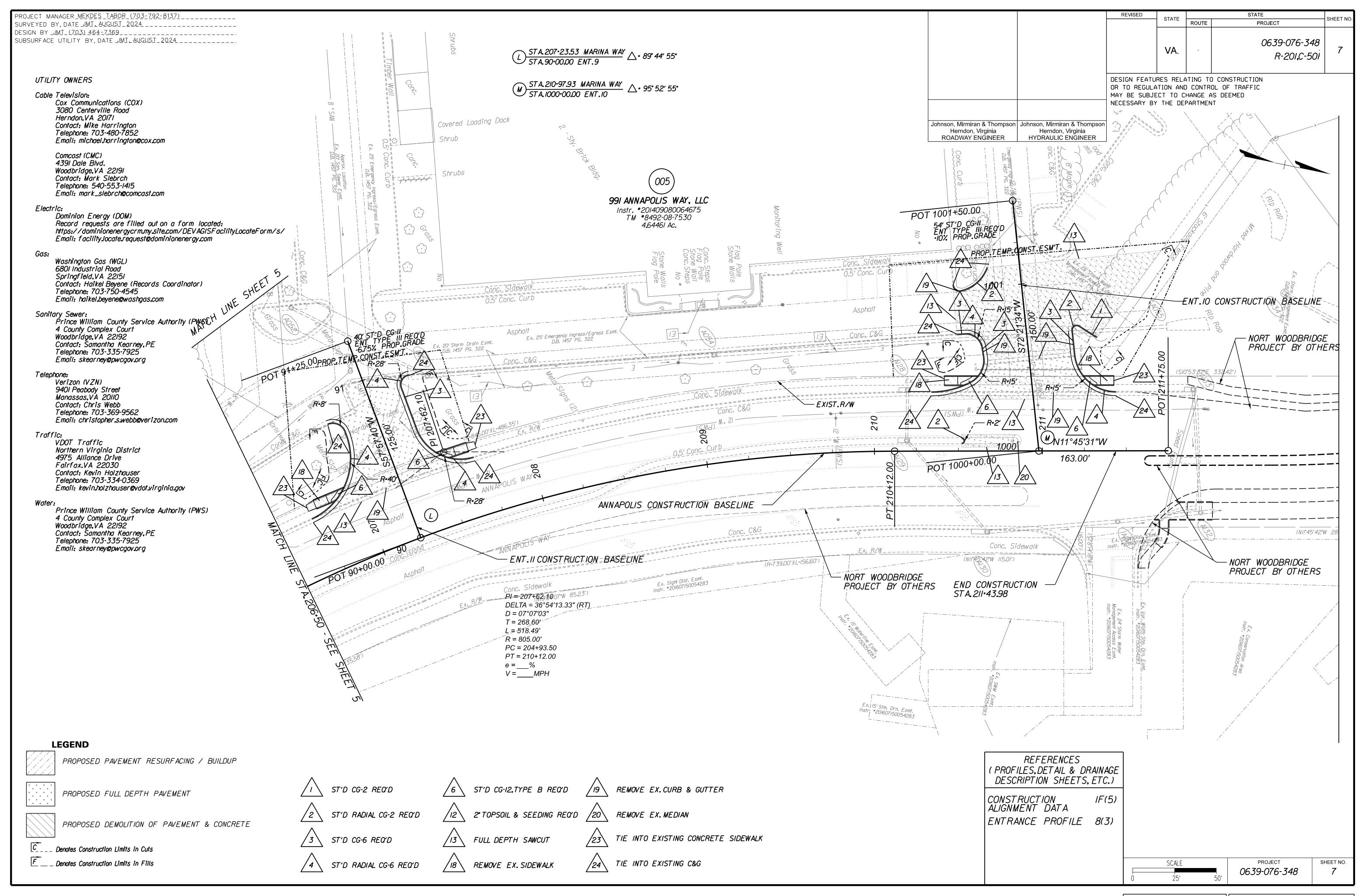


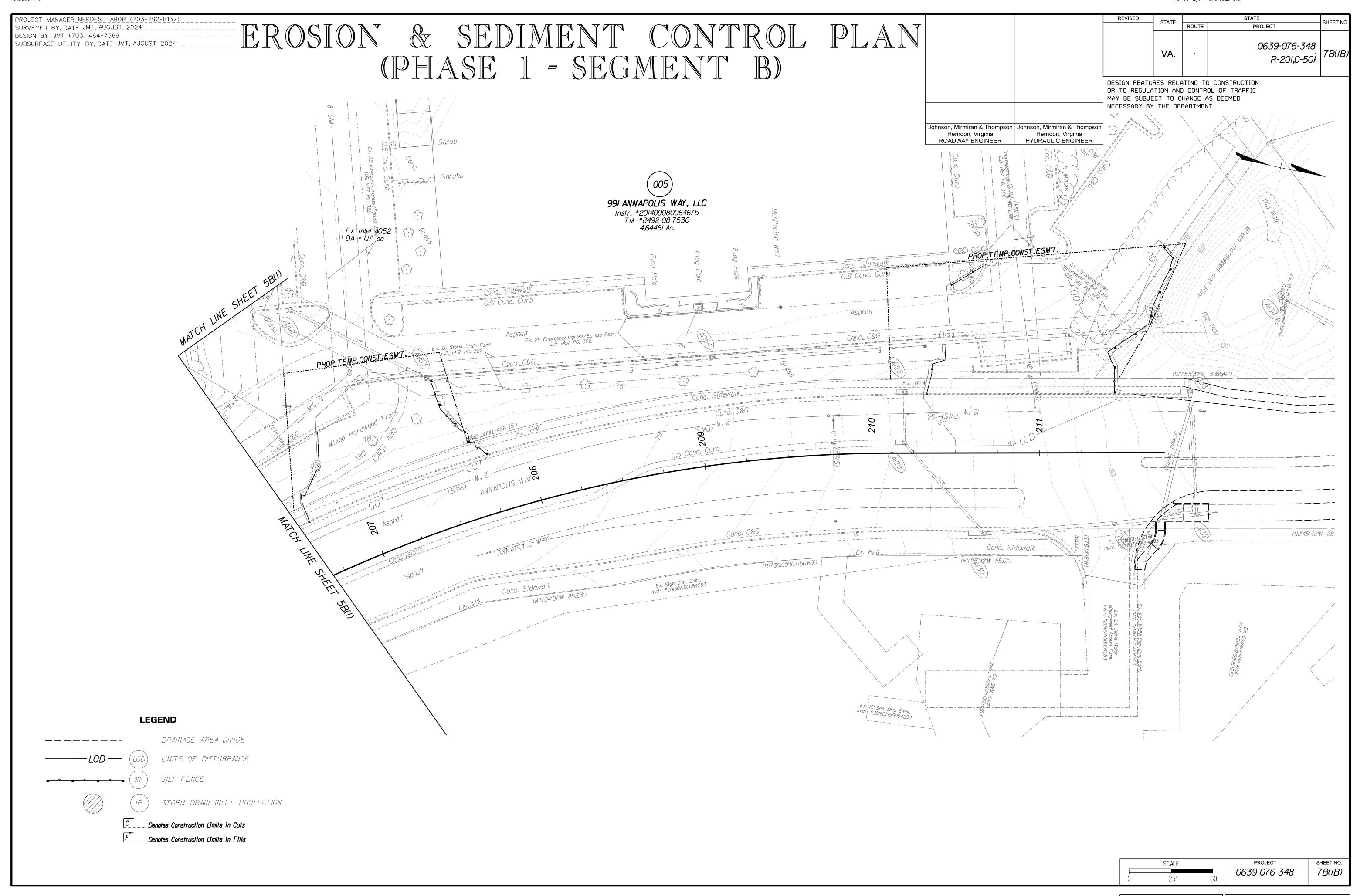


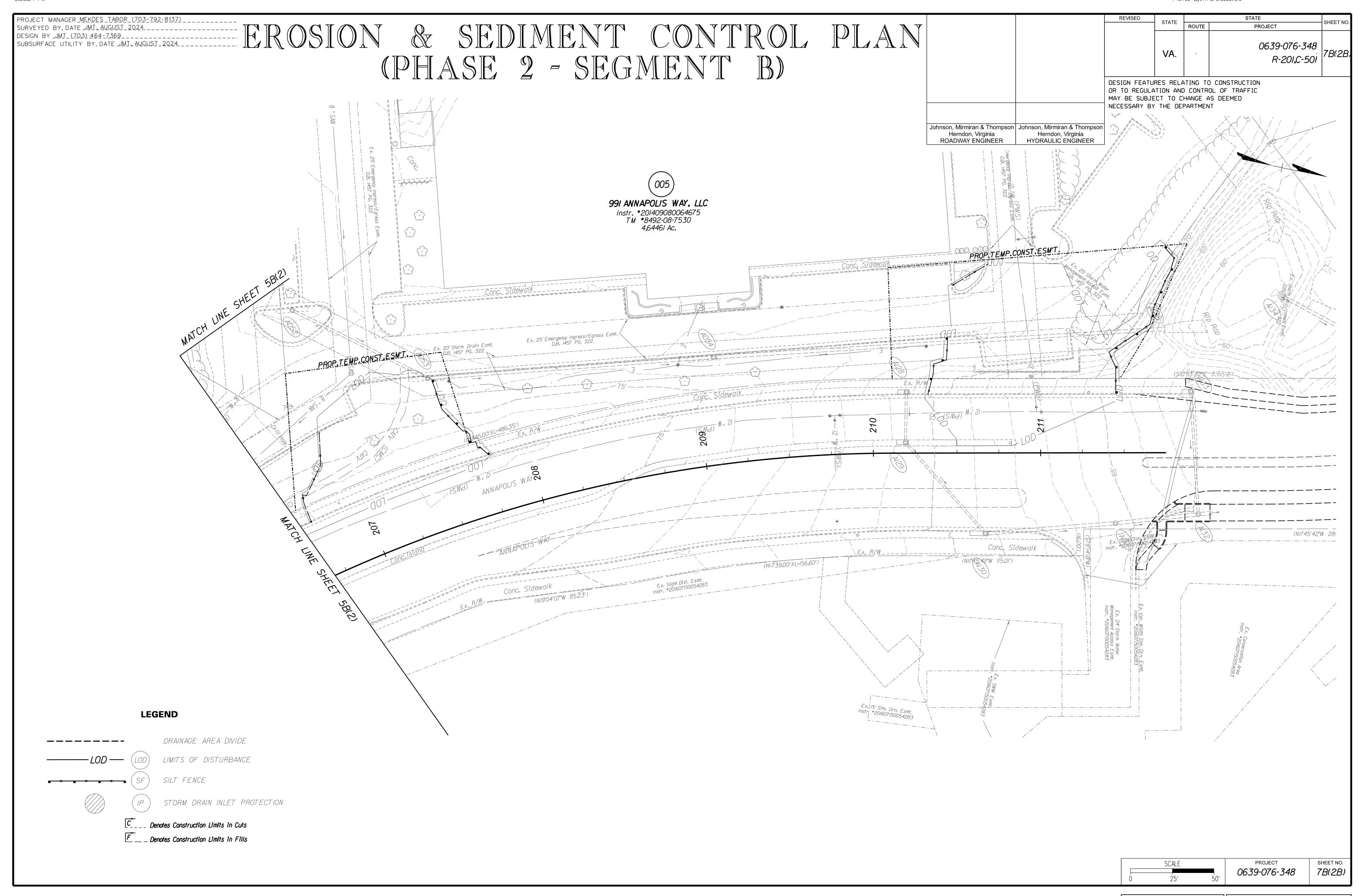






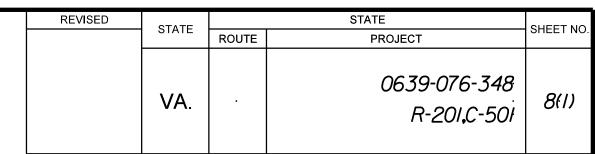






PROJECT MANAGER_MEKDES_TABOR_(703-792-8137)______ SURVEYED BY, DATE JMT. AUGUST 2024 DESIGN BY JMT (703) 464-7369 ______ SUBSURFACE UTILITY BY, DATE JMI_AUGUST_2024______

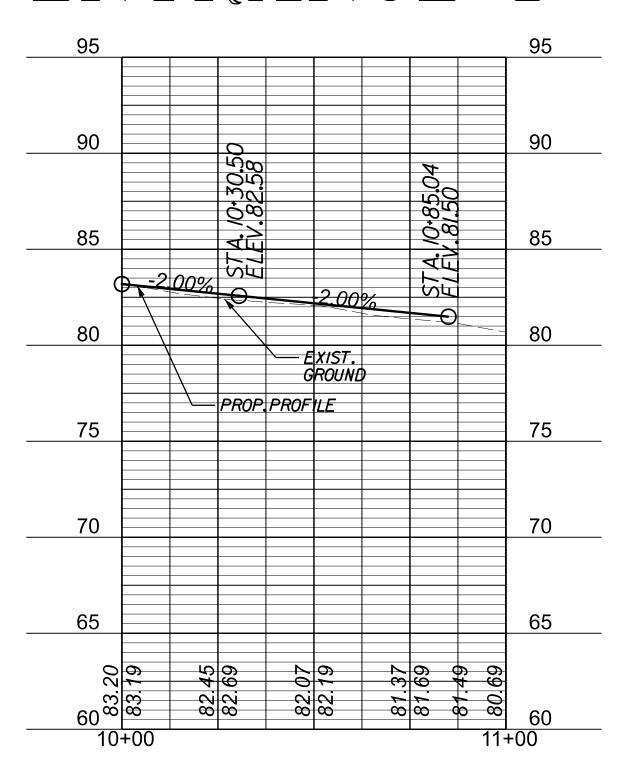
ENTRANCE PROFILES



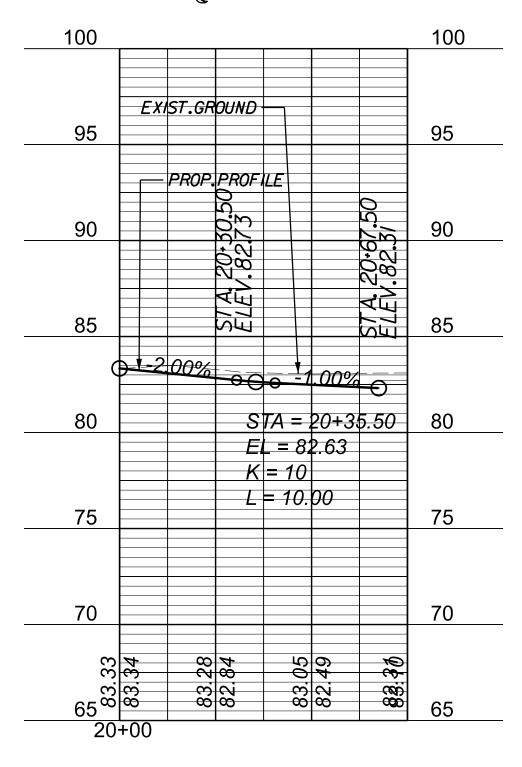
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Johnson, Mirmiran & Thompson Herndon, Virginia ROADWAY ENGINEER

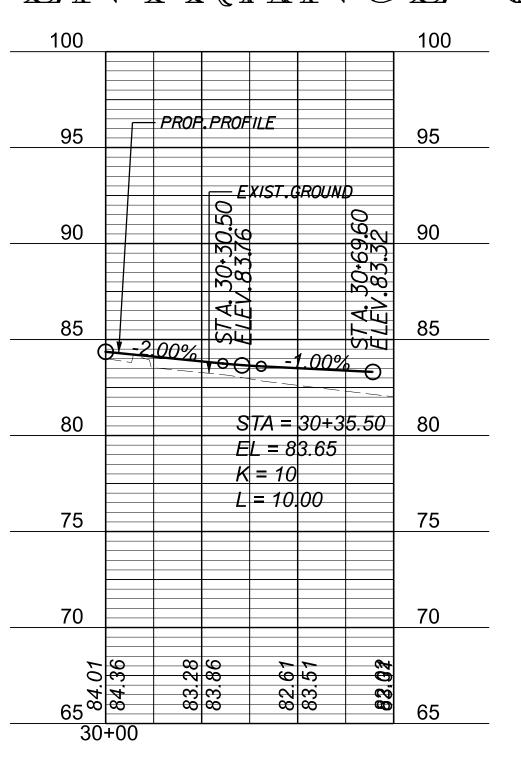
ENTRANCE 1

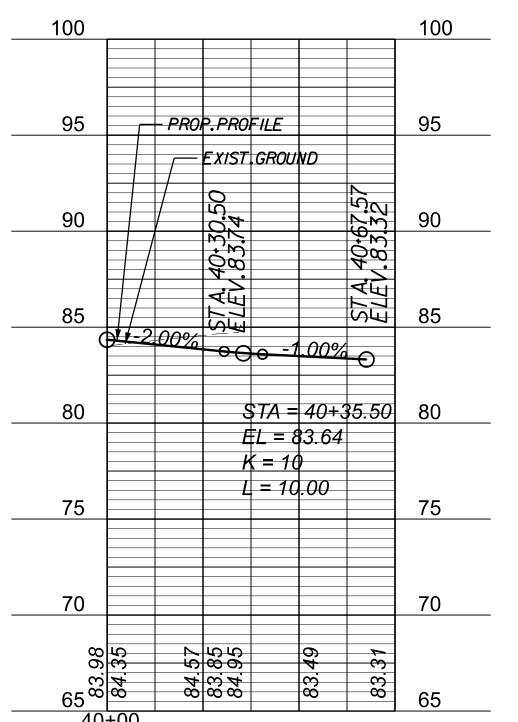


ENTRANCE 2



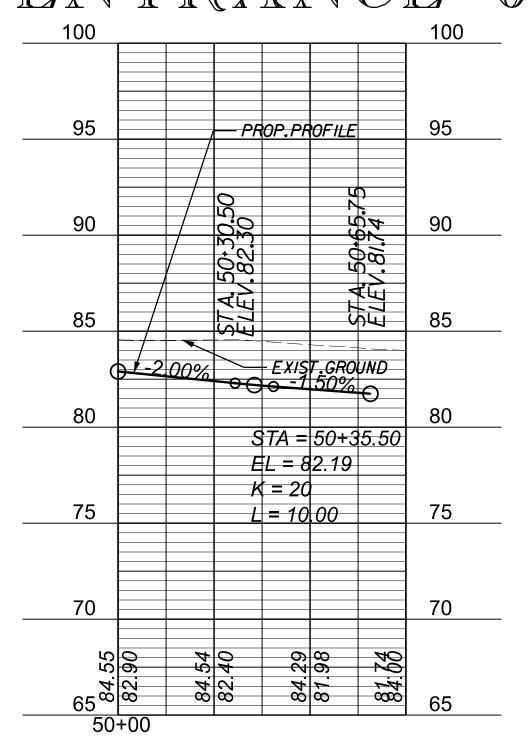
ENTRANCE 3

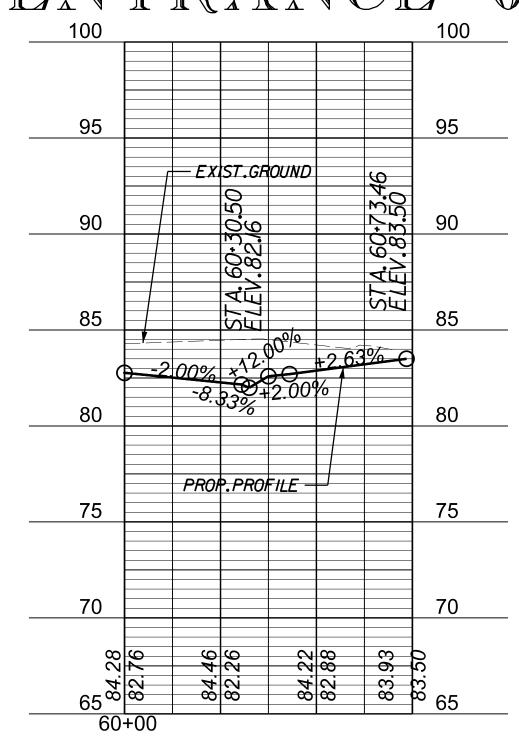




Left Superelevation







NOTES: I) GORDON PLAZA REDEVELOPMENT PROJECT WILL TIE INTO PROPOSED ENTRANCE PROFILES.

H: I" = 25' / V: I" = 5'

0639-076-348

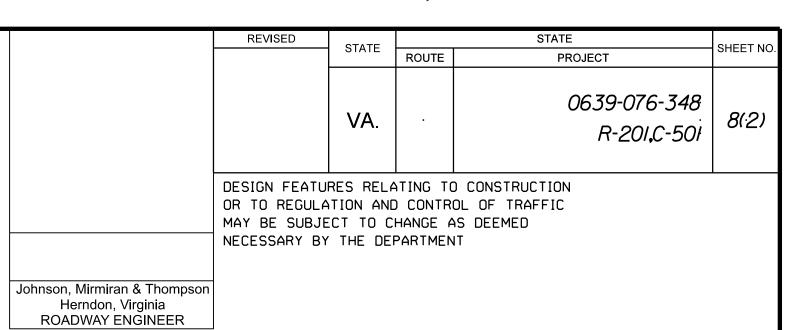
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PROJECT MANAGER <u>MEKDES TABOR (703-792-8137)</u>
SURVEYED BY, DATE <u>JMI_AUGUSI 2024</u>

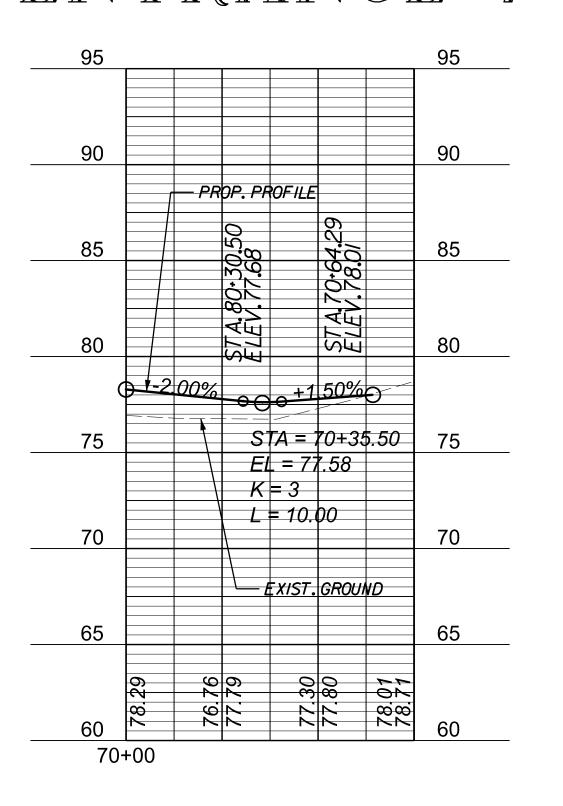
DESIGN BY <u>JMI_(703) 464-7369</u>

SUBSURFACE UTILITY BY, DATE <u>JMI_AUGUSI 2024</u>

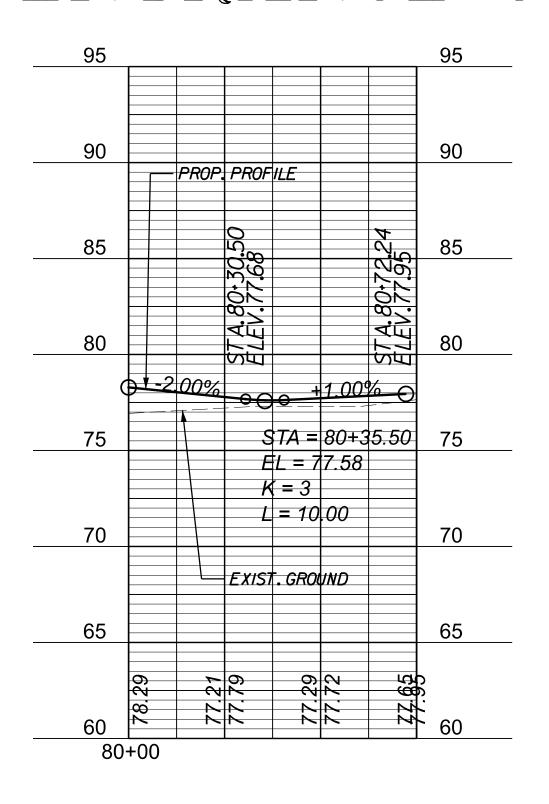
ENTRANCE PROFILES



ENTRANCE 7



ENTRANCE 8



NOTES:

I) REDEVELOPMENT OF PARCEL
OO4 WILL TIE INTO PROPOSED
ENTRANCES PROFILES 7 & 8.

H: I" = 25' / V: I" = 5'

PROJECT 0639-076-348

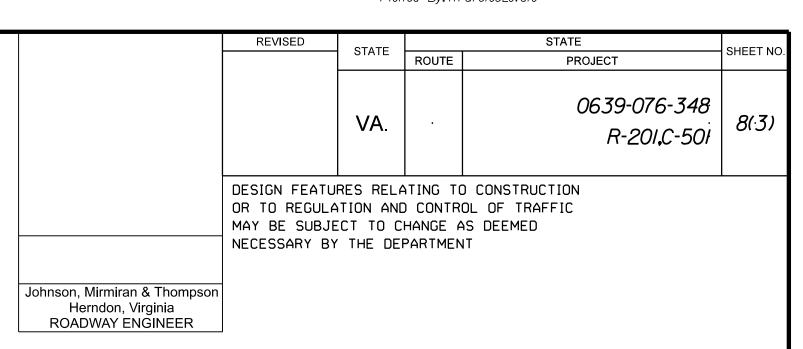
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SHEET NO.

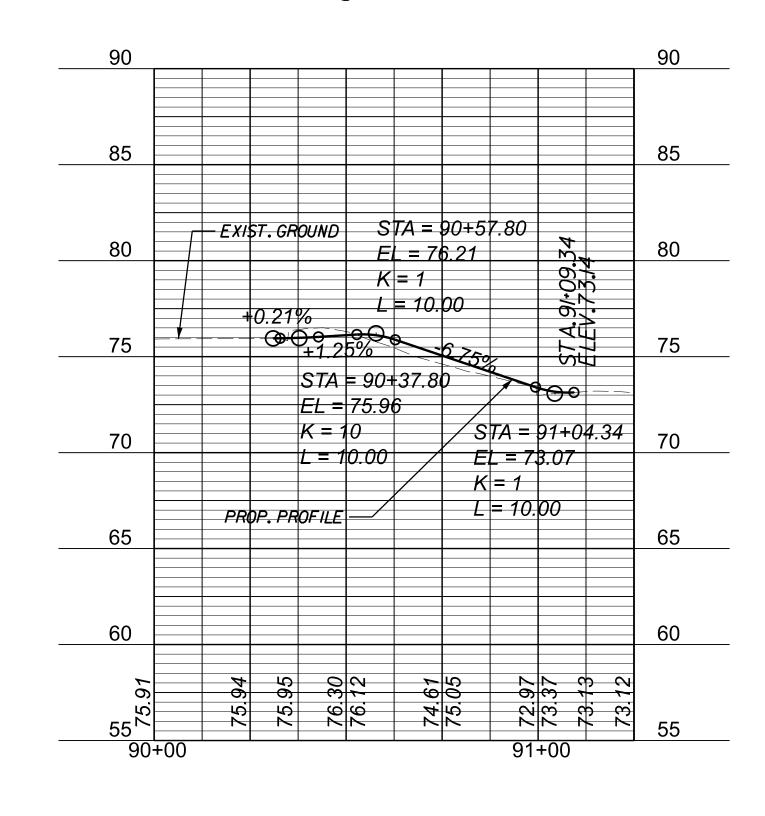
PROJECT MANAGER_MEKDES_TABOR_(703-792-8137)______ SURVEYED BY, DATE JMT. AUGUST 2024 DESIGN BY <u>JMT (703) 464-7369</u>

SUBSURFACE UTILITY BY, DATE JMI_AUGUST_2024______

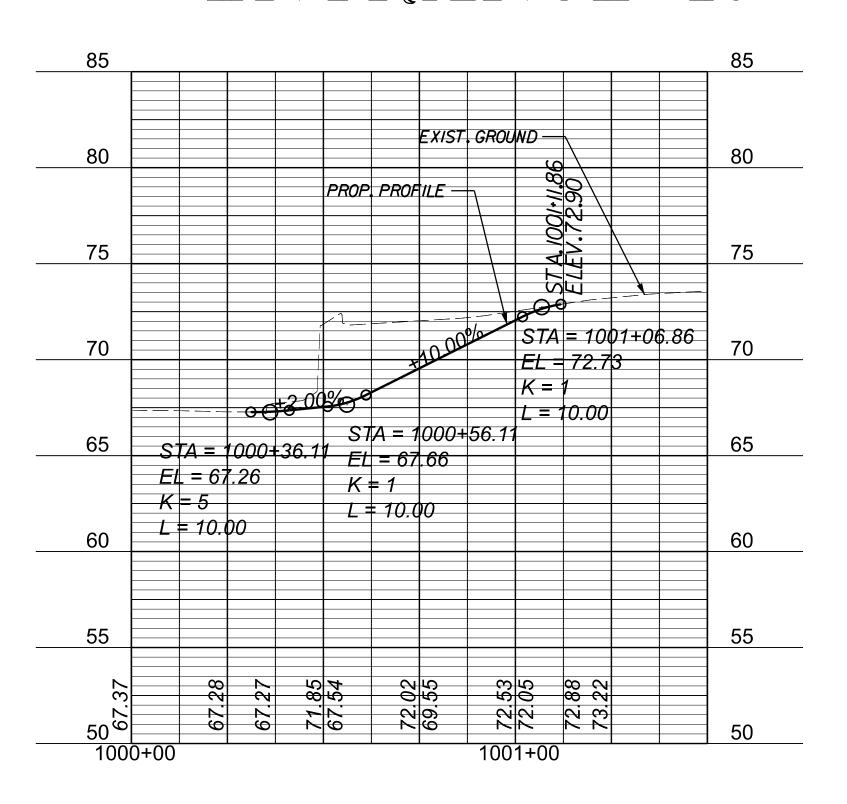
ENTRANCE PROFILES



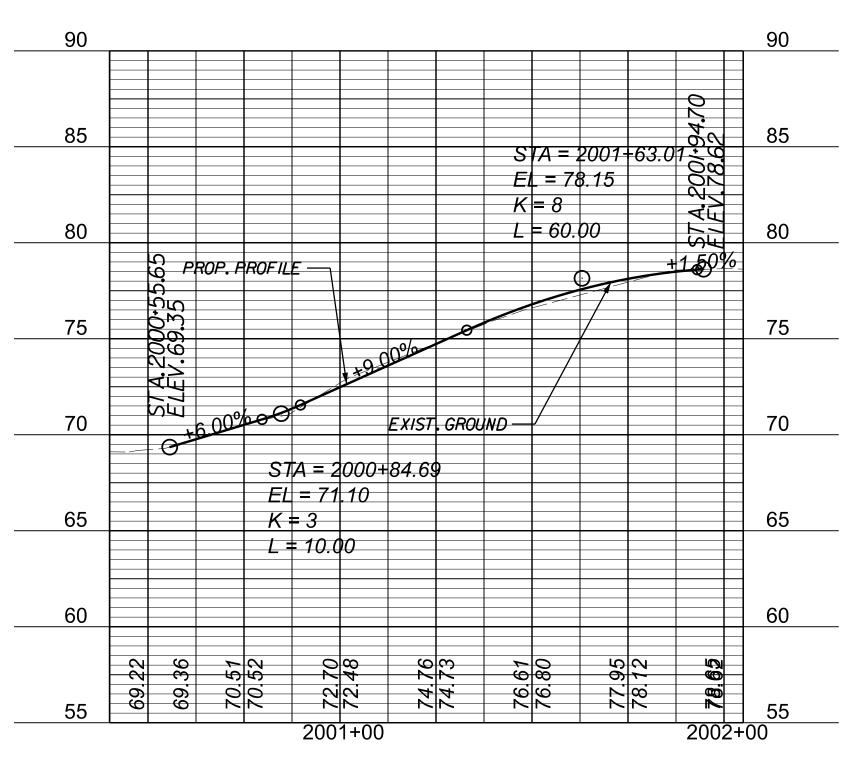
ENTRANCE 9



ENTRANCE 10



ENTRANCE 11



H: I" = 25' / V: I" = 5'

0639-076-348

SHEET NO.

8(·3)

PROJECT MANAGER_MEKDES_TABOR_(703-792-8137)

SURVEYED BY, DATE JMI_AUGUSI_2024

DESIGN BY JMI_(703) 464-7369

SUBSURFACE UTILITY BY, DATE JMI_AUGUSI_2024

SIGNING AND PAVEMENT MARKING INDEX OF SHEETS AND GENERAL NOTES

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

Johnson, Mirmiran & Thompson Richmond, Virginia TRAFFIC ENGINEER

GENERAL NOTES

- 1. ALL SIGNING AND PAVEMENT MARKING WORK SHALL BE IN CONFORMANCE WITH THE FOLLOWING DOCUMENTS:
 - 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), REVISION 1 AND 2 - 2011 VIRGINIA SUPPLEMENT TO THE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL
 - 2011 VIRGINIA SUPPLEMENT TO THE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (REVISION 1),
 - 2016 VDOT ROAD AND BRIDGE STANDARDS, AS REVISED,
 - 2020 VDOT ROAD AND BRIDGE SPECIFICATIONS, AND
 - ALL SPECIAL PROVISIONS, SUPPLEMENTAL SPECIFICATIONS, AND SPECIAL PROVISION COPIED NOTES INCLUDED IN THE CONTRACT.
- 2. NEW MATERIALS AND ITEMS REQUIRED TO COMPLETE THE REMOVAL OR MODIFICATION OF EXISTING ITEMS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL IN ACCORDANCE WITH SECTION 510 (2020 ROAD AND BRIDGE STDS.).
- THE REMOVAL, MODIFICATION, OR RELOCATION OF EXISTING SIGN PANELS, STRUCTURES, AND FOUNDATIONS SHALL CONFORM TO SECTION 510 OF THE SPECIFICATIONS.
- 4. UNLESS OTHERWISE APPROVED BY THE ENGINEER OR INDICATED IN THE MAINTENANCE OF TRAFFIC AND SEQUENCE OF CONSTRUCTION PLANS, EXISTING TRAFFIC SIGNS WHICH ARE TO BE RELOCATED OR REPLACED SHALL REMAIN IN PLACE UNTIL THE NEW SIGN STRUCTURE AND CRITICAL SIGN MESSAGE ARE IN PLACE.
- 5. ALL EXISTING AND PROPOSED SIGN LOCATIONS ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR. ALL PROPOSED SIGN LOCATIONS SHALL BE STAKED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER PRIOR TO PLACEMENT.
- 6. SIGN PANEL DESIGN FOR SIGNS MOUNTED ON SQUARE TUBE POSTS SHALL CONFORM TO ST'D. SPD-5. THE CONTRACTOR SHALL VERIFY THE DESIGN OF ALL SIGN PANEL ASSEMBLY TYPES NOT SHOWN IN THIS ST'D. WITH THE ENGINEER.
- 7. ALL EXISTING AND PROPOSED PAVEMENT MARKINGS ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR. ALL PROPOSED STOP BAR, YIELD LINE AND CROSSWALK LOCATIONS SHALL BE IDENTIFIED AND STAKED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
- 8. ALL PROPOSED PAVEMENT MARKINGS, WHERE TYING INTO EXISTING PAVEMENT MARKINGS, SHALL BE DONE IN A MANNER APPROVED BY THE ENGINEER.
- 9. EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH THE PROPOSED PAVEMENT MARKINGS SHOWN HEREIN SHALL BE ERADICATED IN ACCORDANCE WITH SECTION 512.03(I) OF THE SPECIFICATIONS. ERADICATION SHALL BE CONSIDERED INCIDENTAL TO THE PAVEMENT MARKINGS AND SHALL NOT BE MEASURED SEPARATELY FOR PAYMENT.
- 10. ALL TRAVEL LANES SHALL BE 12' WIDE AND STRIPED WITH 4" WIDTH LINES UNLESS OTHERWISE NOTED OR AS DIRECTED BY THE ENGINEER.
- 11. LONGITUDINAL PAVEMENT LINE MARKINGS SHALL BE TYPE B, CLASS I.

 ALL OTHER PAVEMENT MARKINGS SHALL BE TYPE B, CLASS IUNLESS OTHERWISE NOTED.

- 12. INTERSECTION STRIPING SHALL BE COORDINATED WITH THE TRAFFIC SIGNAL INSTALLATION.
- 13. ALL UTILITY LOCATIONS SHOWN ON THESE PLANS ARE APPROXIMATE AND MAY NOT BE ACCURATE OR COMPLETE. THE CONTRACTOR SHALL COMPLY WITH THE VIRGINIA "UNDERGROUND UTILITY DAMAGE PREVENTION ACT" AND THE STATE CORPORATION COMMISSION'S "RULES FOR ENFORCEMENT OF THE ACT". IF THE CONTRACTOR IS AWARE OF ANY UTILITIES WITHIN THE PROJECT LIMITS THAT ARE NOT IDENTIFIED BY THE NOTIFICATION CENTER, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNER(S) AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION. THE CONTRACTOR SHALL NOTIFY VDOT AT 800-367-7623 A MINIMUM OF 72 HOURS PRIOR TO ANY EXCAVATION TO DETERMINE THE EXTENT AND LOCATION OF VDOT OWNED EQUIPMENT. IF THE CONTRACTOR PERCEIVES A CONFLICT BETWEEN UTILITIES AND THE PROPOSED WORK, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE REVIEWED.

SIGNING AND MARKING PLAN SHEET INDEX

SHEET NO. DESCRIPTION

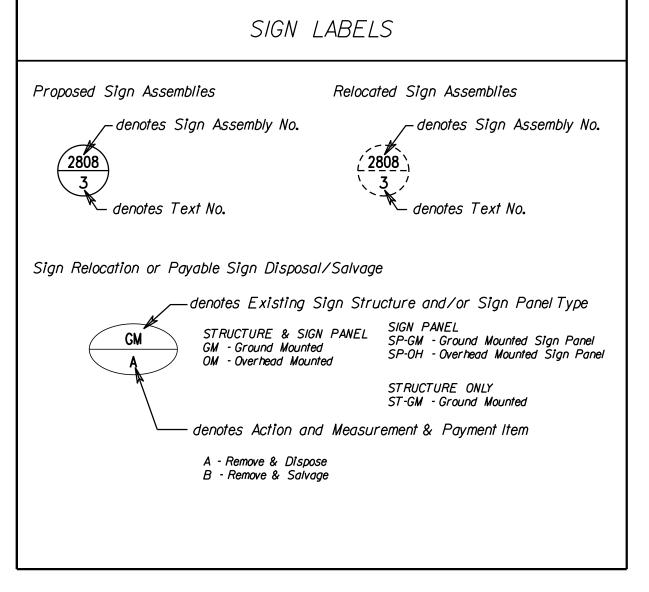
9(01) INDEX OF SHEETS, GENERAL NOTES & LEGEND

9(02) PROPOSED SIGN SCHEDULE

9(03)-9(05) SIGNING AND PAVEMENT MARKING PLAN SHEETS

STANDARD SIGN LEGEND

PLAN ITEM	PLAN SYMBOL				
FLAN II EW	PROPOSED	EXISTING			
Single Post Sign Support	T	- 0			
Double Post Sign Support	• •	0 0			
Triple Post Sign Support	•••	000			
O/H Cantilever Sign Support	• -	<u> </u>			
O/H Span Sign Support	⊕ ——●	<u> </u>			
O/H Flashers and Gong	* 0*	* 0*			
SIGN CALL-OUTS					
Existing Sign to Remain or to be Relocated	NIERSTATE 95/				
Existing Sign to be Removed	NIERSIATI /				
Proposed Sign Panel	95				



PROJECT 0639-076-348

IISHED AND

SHEET NO.

PROJECT MANAGER MEKDES TABOR (703-792-8137) SURVEYED BY, DATE JMI. AUGUST 2024 DESIGN BY <u>JMT (703) 464-7369</u> SUBSURFACE UTILITY BY, DATE JMI. AUGUST 2024

SIGN SCHEDULE - PROPOSED SIGNS

REVISED STATE ROUTE PROJECT 0639-076-348 VA.

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

Johnson, Mirmiran & Thompson Richmond, Virginia TRAFFIC ENGINEER

			SIGN ASSEMBLY COMPONENTS			SIGN AREA	PANEL (s.f.)			
TEXT NO.	SIGN ASSEMBLY	TEXT	MUTCD ST'D.		L SIZE	QTY.	per ASSEMBLY	ALL ASSEM- BLIES	PROP.SIGN STRUCTURE ST'D.	PROP. FOUNDATION
	NO(s).	ONE WAY	R6-IR	W 54"	/8"	2	6.75	AS		
110	402,406		R4-7	24"	30"	2	5	23.5	STP-1 2" -14 GA	STP-I TYPE A
		DO NOT	R5-/	36"	36"	/	9		STP-I	
///	407	ONE WAY	R6-IR	54"	18"	/	6.75	17.75	2 1/2" - 12 GA	STP-I TYPE A
			R4-7	24"	30"	/	2			
301	408,416		WII-2	36"	36"	2	9		STP-1	STP-1 1/2" - STP-1 12 GA
	,,,,,	AHEAD	W16-9P	24"	12"	2	2		12 GA	
7.0.0	302 405		W11-2	36"	36"	3	9	フフ	STP-I	STP-I
302	302,405 412		W16-7P	24"	12"	3	2	33	2 1/2" - 12 GA	STP-1 TYPE A
303	301		W11-2	36"	36"	/	9	//	STP-1	STP-1
	501		W16-7P	24"	12"	/	2	11	2 1/2" - 12 GA	TYPE A

NOT	EC.
1001	LJ:

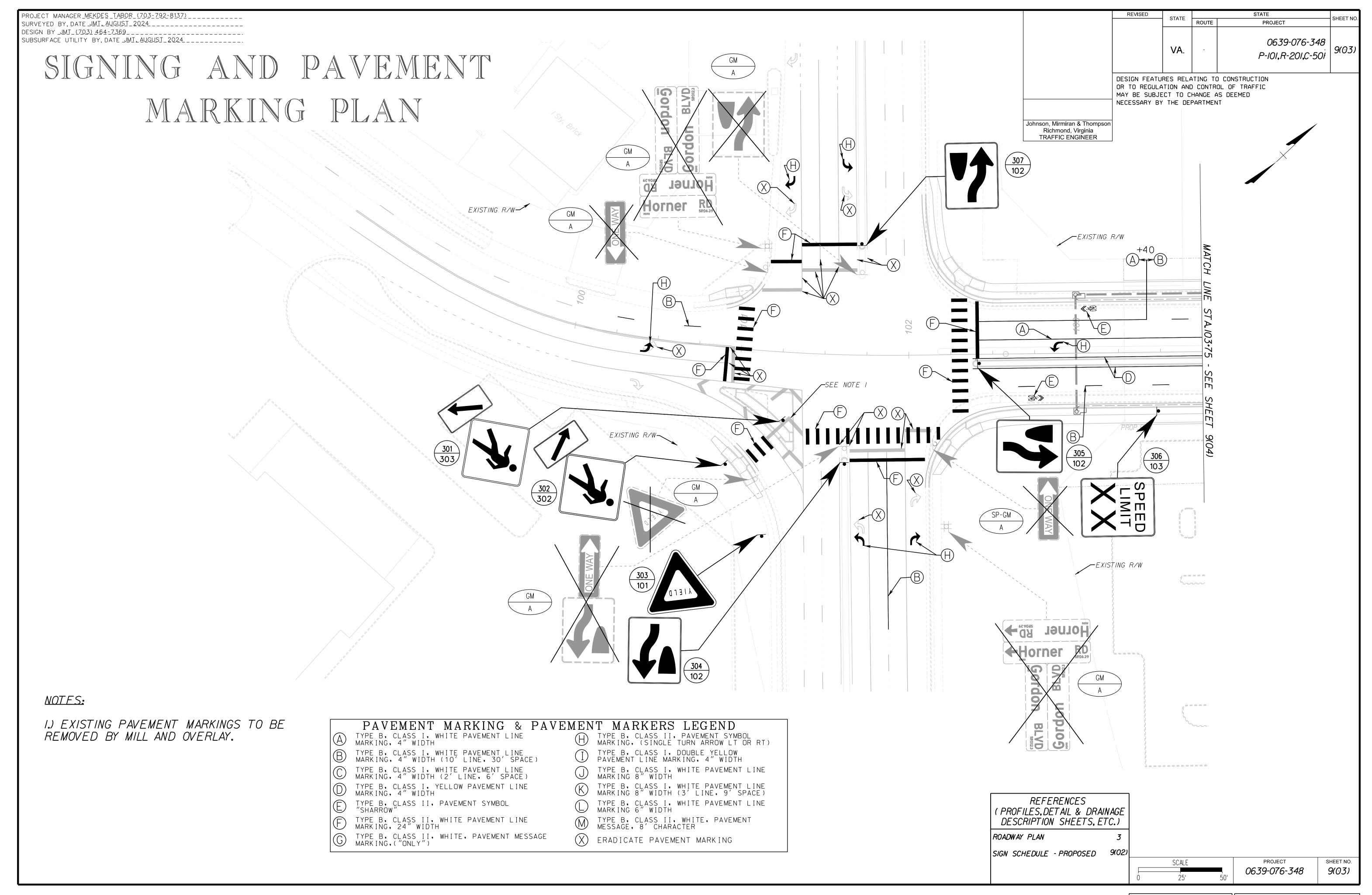
- I) ALL SIGNS SHALL BE ORIENTATED AS SHOWN ON THE PLANS. 4) ALL BLACK SHEETING SHALL BE NON-REFLECTIVE.
- THE FHWA SHS BOOK AND THE 2011 VIRGINIA SHS BOOK OR AS NOTED IN THE PLANS.
- 3) ALL POSITIVE CONTRAST GUIDE AND SPECIFIC SERVICE SIGNS SHALL UTILIZE FABRICATION LETTER TYPE L-3 OR L-4 UNLESS OTHERWISE NOTED IN THE REMARKS.ALL OTHER SIGNS SHALL UTILIZE FABRICATION LETTER TYPE L-I OR L-2 UNLESS OTHERWISE NOTED IN THE REMARKS.
- 2) SIGN COLOR COMBINATIONS SHALL BE IN ACCORDANCE WITH 5) SIGN STRUCTURES SHALL BE INSTALLED PER THE NOTED SIGN ST'D.
 - 6) ALL ST'D.STP-I STRUCTURES TO BE SINGLE POST UNLESS OTHERWISE NOTED.

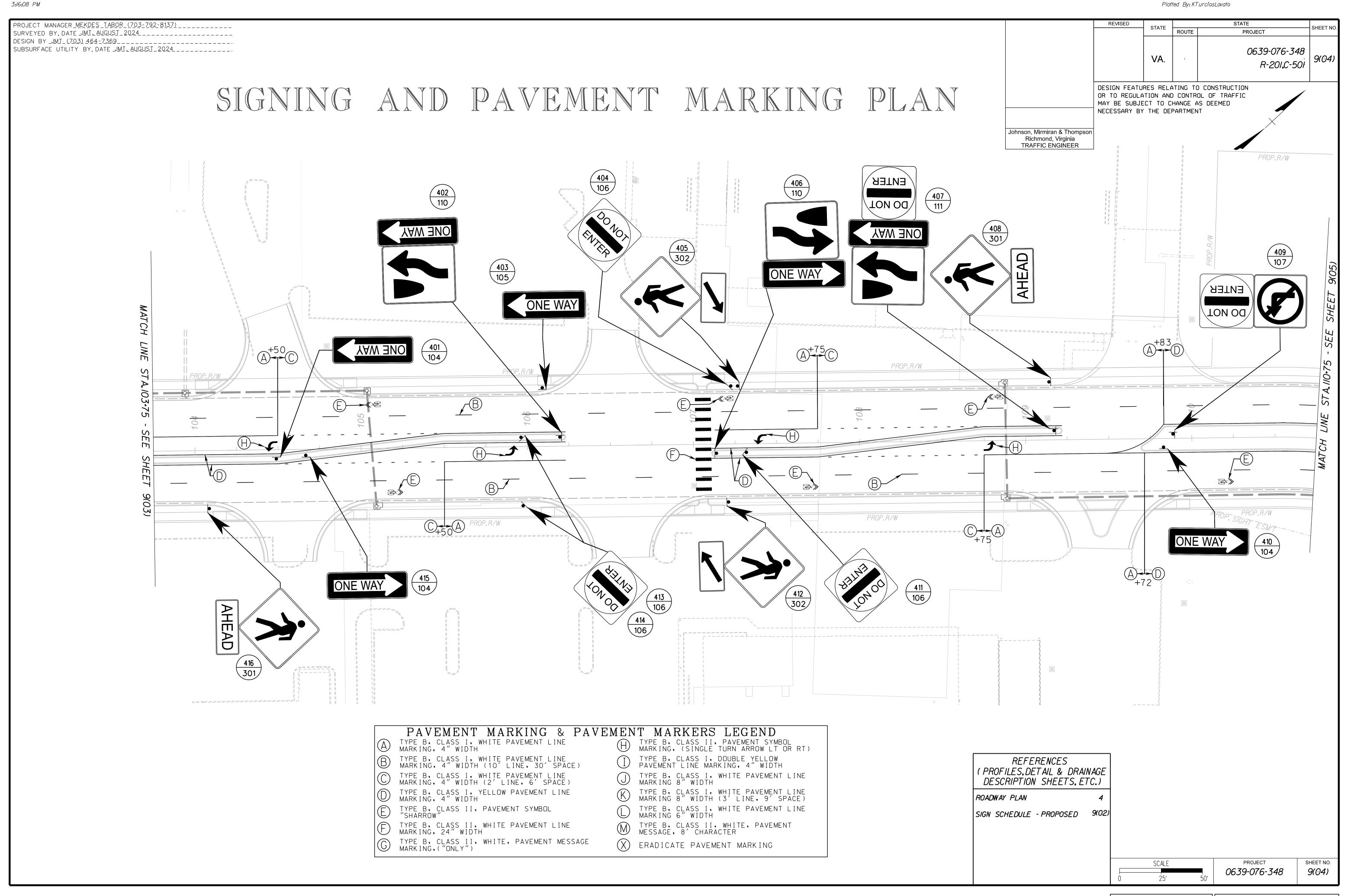
REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

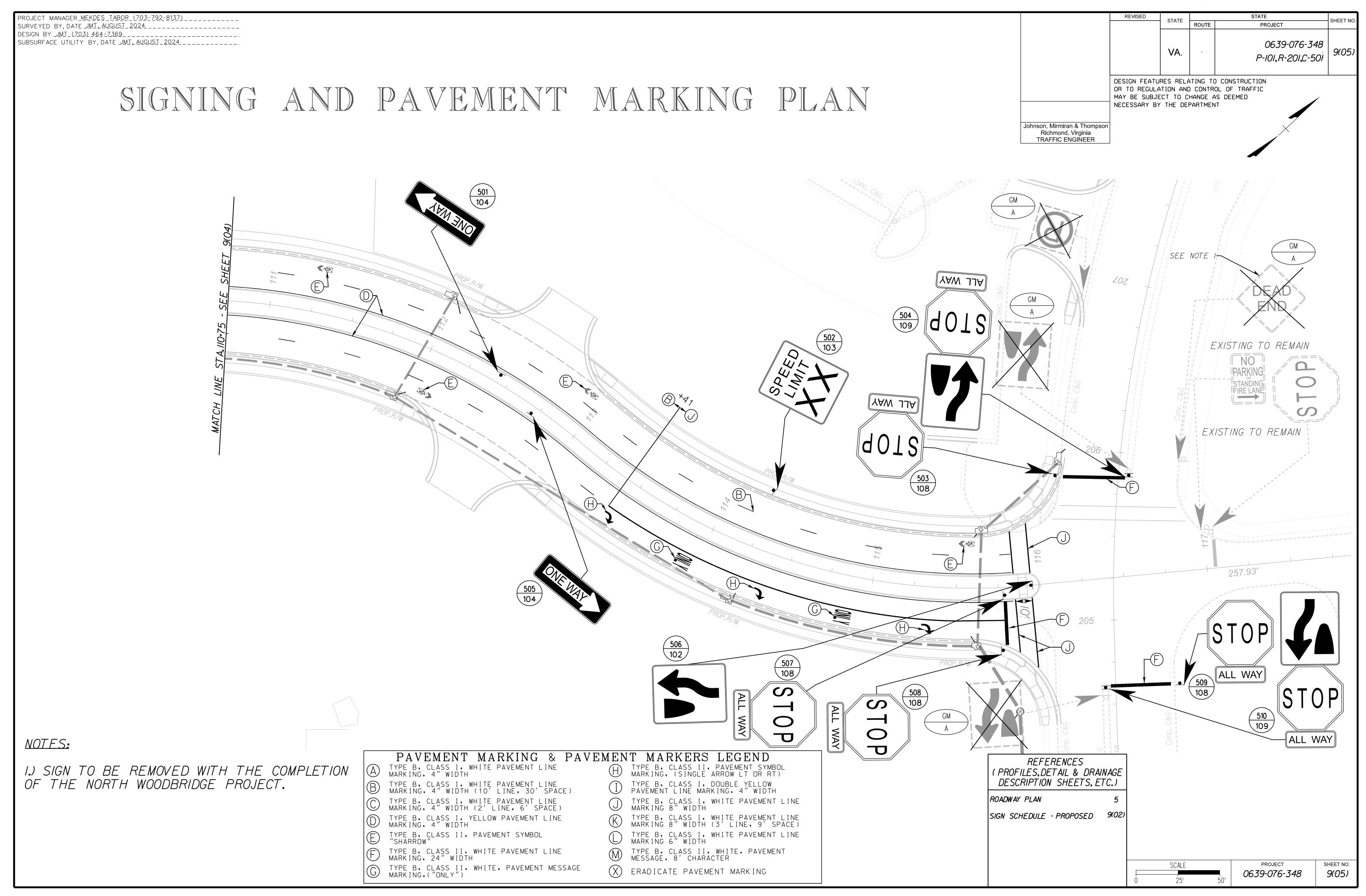
0639-076-348

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

			SIGN ASSEMBLY COMPONENTS			Г	SIGN PANEL AREA (s.f.)			
TEXT NO.	SIGN ASSEMBLY NO(s).	TEXT	MUTCD ST'D.		SIZE	QTY.	ЕАСН	TOT AL	PROP.SIGN STRUCTURE ST'D.	PROP. FOUNDATIO
101	303	Y I E L D	RI-2	W 36"	Н 36"	/	3.9	3.9	STP-1 2" - 14 GA	STP-1 TYPE A
102	304, 305, 307, 506		R4-7	24"	30"	4	5	20	STP-1 2" - 14 GA	STP-1 TYPE ,
103	306, 502	SPEED LIMIT XX	R2-I	30"	36"	2	7.5	15	STP-1 2" -14 GA	STP-I TYPE A CONTRACTO SHALL OBTA THE SPEE LIMIT TO E DISPLAYED FROM VDO
104	401, 410, 415, 501, 505	ONE WAY	R6-IR	54"	18"	5	6.75	33.75	STP-1 2" -14 GA	STP-I TYPE /
105	403	ONE WAY	R6-IL	54"	18"	/	6.75	6.75	STP-1 2" -14 GA	STP-I TYPE ,
106	404,411, 413,414	DO NOT	R5-I	36"	36"	4	9	36	STP-1 2" - 14 GA	STP-I TYPE ,
107	409	DO NOT ENTER	R5-1 R3-2	36" 36"	36" 36"	/	9	18	STP-1 2 1/2" - 12 GA	STP-I TYPE ,
108	503,507, 508,509	STOP ALL WAY	RI-I RI-3P	36" 18"	36" 6"	4	6.36 0.75	28.5	STP-1 2" - 14 GA	STP-I TYPE /
109	504, 510	STOP ALL WAY	R4-7 R1-1 R1-3P	24" 36" 18"	30" 36"	2 2	5 6.36 0.75	24.2	STP-1 2 1/2" - 12 GA	STP-1 TYPE 4







PROJECT MANAGER MEKDES TABOR (703-792-8137) SURVEYED BY, DATE JMI, AUGUST 2024 DESIGN BY JMT (703) 464-7369 SUBSURFACE UTILITY BY, DATE <u>JMT, AUGUST 2024</u>

SIGNAL INDEX OF SHEETS AND GENERAL NOTES

GENERAL NOTES

- THE FOLLOWING ITEMS SHALL BE IN ACCORDANCE WITH STANDARDS LISTED BELOW:
 - SIGNAL POLE FOUNDATION . PF-8 - CONDUIT INSTALLATION . ECI-1 OR BORED - SIGNAL HEAD HANGERS SM-3
 - SIGN HANGER SMD-2 - JUNCTION BOX JB-S1,JB-S2,JB-S3,JB-S4 - CONTROLLER CABINET FOUNDATION CF-5
 - ELECTRICAL SERVICE . . SE-5
- TRAFFIC SIGNAL FOUNDATION DEPTHS AND ABOVE GROUND FOUNDATION PROJECTION/REVEAL (IF NEEDED) SHALL BE DETERMINED BY THE CONTRACTOR IN ACCORDANCE WITH PF-8 STANDARDS AFTER THE SIGNAL POLE SOIL TEST BORES ARE COMPLETED. SIGNAL POLES AND FOUNDATIONS SHALL BE IN ACCORDANCE WITH SPECIAL PROVISIONS INCLUDING MAXIMUM LOADING CONDITIONS. THE POLE SUPPLIER SHALL PROVIDE FOUNDATIONS DESIGNS AND SHOP DRAWINGS THAT ARE SIGNED SEALED BY A PROFESSIONAL ENGINEER. THE TOP OF ALL SIGNAL POLE FOUNDATIONS SHALL BE INSTALLED 4" ABOVE THE HIGHEST POINT OF THE ROADWAY PAVEMENT IN WHICH THE MAST IS EXTENDING OVER. TO ALLOW FOR REQUIRED SIGNAL HEAD TO PAVEMENTS DISTANCES PER THE MUTCD.
- SIGNAL POLE FOUNDATIONS MAY BE FIELD ADJUSTED WITHIN THE DESIGNATED CORNERS NO MORE THAN 2'IN ANY DIRECTION FROM THE PLAN LOCATIONS, PROVIDED THAT THE REVISED FOUNDATION LOCATIONS:
 - REMAIN OUT OF THE CLEAR ZONE AND PAVEMENT SECTIONS.
 - REMAIN WITHIN THE RIGHT OF WAY OR PROPOSED EASEMENT
 - DO NOT CONFLICT WITH UTILITIES - DO NOT LIMIT SIGHT DISTANCE
 - DO NOT AFFECT DRAINAGE.
 - ALLOW THE SIGNAL HEADS TO BE ADJUSTED WITH THE SAME ALIGNMENT WITH THE DESIGNATED TRAVEL LANES AS SHOWN ON THE PLANS, AND IS IN ACCORDANCE WITH THE PF-8 CONCRETE FOUNDATION STANDARDS DETAIL REFERENCED TO THE INSTALLATION
- THE CONTRACTOR SHALL VERIFY MAST ARM LENGTHS AND SIGNAL HEAD LANE COVERAGE PRIOR TO THE INSTALLATION OF SIGNAL POLE FOUNDATIONS.
- ALL POLES SHALL BE FIELD STAKED BY THE CONTRACTOR AND INSPECTED BY THE ENGINEER AND CONTRACTOR PER SECTION 700 PRIOR TO INSTALLATION OF FOUNDATIONS
- TRAFFIC SIGNAL HEADS AND MAST ARM SIGNS MAY BE FIELD ADJUSTED NO MORE THAN 2'IN EITHER DIRECTION ON THE MAST ARMS, PROVIDED THEY REMAIN WITHIN THE DESIGNATED TRAVEL LANE ASSIGNMENTS. IF FURTHER ADJUSTMENT IS NEEDED, THE PROJECT INSPECTOR SHALL CONTACT THE VDOT ENGINEER.
- ALL UNUSED WIRES IN THE SIGNAL HEADS SHALL BE CAPPED INDIVIDUALLY USING CRIMP TYPE CAPS.
- THE CONTROLLER CABINET & CF-5 FOUNDATION MAY BE RELOCATED WITHIN THE DESIGNATED CORNER PROVIDED IT REMAINS WITHIN THE RIGHT OF WAY OR PROPOSED EASEMENT, OUTSIDE OF THE CLEAR ZONE AND PAVEMENTS SECTIONS, DOES NOT CONFLICT WITH UTILITIES, DOES NOT LIMIT SIGHT DISTANCE, AND IS IN ACCORDANCE WITH THE ELECTRIC SERVICE STANDARD DETAIL REFERENCED TO THE INSTALLATION.
- JUNCTION BOXES MAY BE RELOCATED IN THE FIELD AS NECESSARY PROVIDED THEY REMAIN WITHIN THE RIGHT OF WAY, DO NOT CONFLICT WITH UTILITIES AND REMAIN OUTSIDE THE PAVEMENT SECTION.
- THE PLACEMENT OF 6'X 40'LOOPS SHOWN ON THE PLANS SHALL BE 5'IN 10. FRONT OF STOP BARS AND ALL 6'X 6'LOOPS SHALL BE INSTALLED AT THE DISTANCES SPECIFIED ON THE PLANS.
- THE ELECTRIC SERVICE CONNECTION AND SERVICE LINE LOCATIONS MAY BE FIELD ADJUSTED AS NECESSARY PROVIDED ALL EQUIPMENT REMAINS WITHIN THE RIGHT OF WAY OR PROPOSED EASEMENT, DOES NOT CONFLICT WITH UTILITIES AND REMAINS OUTSIDE THE PAVEMENT SECTIONS.
- ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY AND MAY NOT BE COMPLETE. AT LEAST 72 HOURS PRIOR TO BEGINNING SIGNAL WORK, THE CONTRACTOR SHALL CONTACT "MISS UTILITY OF VIRGINIA" AT 1-800-552-7001 IN ORDER TO DETERMINE THE EXTENT, LOCATION, AND IDENTIFY ALL OF THE UTILITIES WITHIN THE WORK AREA. AT LEAST 4 FULL WORKING DAYS PRIOR TO BEGINNING SIGNAL WORK, THE CONTRACTOR SHALL CONTACT VDOT AT (800) 367-7623 IN ORDER TO DETERMINE THE EXTENT AND LOCATION OF ALL UNDERGROUND SIGNAL EQUIPMENT OWNED BY VDOT WITH THE PROJECT LIMITS. IF THE CONTRACTOR PERCEIVES A CONFLICT BETWEEN UTILITIES AND THE PROPOSED TRAFFIC SIGNAL EQUIPMENT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE REVIEWED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING, AT THEIR OWN EXPENSE, ANY EXISTING UTILITIES, PAVEMENT, CONCRETE ITEMS, ETC. THAT ARE DAMAGED OR DISTURBED DURING CONSTRUCTION.

- CONDUIT SYSTEMS SHALL BE BONDED IN ACCORDANCE WITH SECTION 700 OF THE ROAD AND BRIDGE SPECIFICATIONS.
- PAVEMENT MARKINGS SHOWN ON THE SIGNAL PLANS ARE FOR REPRESENTATION ONLY. ACTUAL PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE PAVEMENT MARKING PLANS.
- ALL EQUIPMENT IS TO BE INSTALLED WITHIN THE EXISTING OR PROPOSED R/W OR EASEMENT.
- THE CONTRACTOR WILL PROVIDE SIGNAL TIMINGS IN ACCORDANCE WITH NOTE 19. THE CONTRACTOR SHALL CONTACT THE VDOT ENGINEER AT LEAST TWO WEEKS IN ADVANCE OF SIGNAL TIMINGS IMPLEMENTATION.
- ALL TRAFFIC SIGNAL AND SIGNING WORK AND ADJUSTMENTS TO PROPOSED SIGNALS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS, AND THE LATEST EDITIONS OF THE VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT) ROAD & BRIDGE SPECIFICATIONS DATED 2020, VDOT ROAD & BRIDGE STANDARDS DATED 2016, THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, 2009 EDITION (MUTCD), THE 2011 VIRGINIA SUPPLEMENT TO THE MUTCD, THE 2023 NATIONAL ELECTRICAL CODE, SPECIAL PROVISION COPIED NOTES AND SPECIAL PROVISIONS AT THE TIME OF ADVERTISEMENT.
- EMERGENCY PREEMPTION DETECTORS AND CONFIRMATION LIGHTS SHALL BE LOCATED AS SHOWN ON THE PLANS, HOWEVER, MAY BE FIELD ADJUSTED AS NECESSARY TO PROVIDE OPTIMAL DETECTION CAPABILITIES. WIRING SHALL BE ADJUSTED AS NECESSARY IF THE DETECTOR AND LIGHT LOCATIONS ARE MODIFIED.
- ALL PROPOSED COMMUNICATIONS SHALL COMPLY WITH THE LATEST VITA ITRM STANDARD SEC501 - INFORMATION SECURITY STANDARD, AND BE APPROVED BY DISTRICT/REGIONAL OPERATIONS REPRESENTATIVE PRIOR TO OPENING SIGNAL FOR TRAFFIC USE.
- THE PROJECT IS RESPONSIBLE FOR SUBMITTING TRAFFIC SIGNAL TIMING DATA NEEDED FOR COORDINATION NO MORE THAN SIX (6) MONTHS PRIOR TO PROJECT COMPLETION AND NO LESS THAN SIXTY (60) DAYS PRIOR TO THE ACTIVATION OF THE TRAFFIC SIGNAL. SIGNAL OPERATIONS SECTION REQUEST THE LATEST DATA FOR THE IMPLEMENTATION AND HAVE ENOUGH TIME TO REVIEW. IN ADDITION. THE APPROVED TIMINGS ARE VALID FOR 6 MONTHS ONLY. AND SHOULD REFLECT THE CURRENT OPERATION CONDITION AS THEY WILL BE IMPLEMENTED IN THE FIELD AT THAT TIME. THIS INCLUDES EIGHT (8) TIME OF DAY TIMING PLANS TO REFLECT CYCLE LENGTHS NECESSARY TO ACCOMMODATE CHANGES IN TRAFFIC PATTERNS FOR PERIODS INCLUDING A.M. PEAK, MID-DAY, P.M. PEAK, OFF PEAK AND WEEKENDS (WEEK-AM, SAT PEAK, SUN PEAK AND WEEK-PM). THESE TIMING PLANS ARE TO BE SUBMITTED TO THE VDOT PERMITS SECTION FOR REVIEW AND APPROVAL BY THE SIGNAL OPERATIONS SECTION TO BE PROVIDED IN AN ELECTRONIC FILE FORMAT COMPATIBLE WITH THE SYNCHRO PROGRAM USED BY VDOT.
- AT LOCATIONS WHERE APS PUSHBUTTONS ARE WITHIN 10 FEET OF EACH OTHER, WALK INTERVAL SPEECH MESSAGE SHALL BE USED.
- ACCESSIBLE PEDESTRIAN SIGNALS AND DETECTORS SHALL BE USED. PUSHBUTTONS SHALL BE LOCATED A MAXIMUM OF 10" FROM THE PEDESTRIAN TRAVELWAY (SIDEWALK). PROPOSED ACCESSIBLE PEDESTRIAN SIGNAL DETECTORS (APD) AND ACCESSIBLE PEDESTRIAN SIGNALS (APS) SHALL MEET VDOT'S REQUIREMENTS.
- SIGNAL PLANS ARE VALID FOR EIGHTEEN MONTHS FROM THE DATE OF APPROVAL. PLANS WITH EXPIRED APPROVAL MUST BE SUBMITTED TO VDOT FOR RE-APPROVAL
- THE PROJECT SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING COMMUNICATION TO THE TRAFFIC SIGNAL CONTROLLER AT ALL TIMES. THE PROJECT IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH PROVIDING COMMUNICATION TO THE TRAFFIC SIGNAL. THE PROJECT SHALL BE RESPONSIBLE FOR COORDINATING THE LOCATION AND THE INSTALLATION OF THE COMMUNICATION CIRCUIT CONDUIT(S) AND EQUIPMENT TO THE TRAFFIC SIGNAL CONTROLLER CABINET FOR THE DESIGNATED COMMUNICATION PLATFORM.
- THE PROJECT SHALL CONTACT VDOT'S NORTHERN REGION OPERATIONS COMMUNICATIONS GROUP AT NOVATFOCOMM@VDOT.VIRGINIA.GOV 90 DAYS PRIOR TO THE START OF THE TRAFFIC SIGNAL CONSTRUCTION TO IDENTIFY THE DESIGNATED COMMUNICATION PLATFORM AND INITIATE THE BROADBAND CIRCUIT ORDERING PROCESS.

- THE TRAFFIC SIGNAL PROJECT MAY UTILIZE VDOT'S NORTHERN REGION RADIO COMMUNICATIONS PLATFORM. THE PROJECT SHALL CONTACT VDOT'S COMM GROUP AT NOVATFOCOMM@VDOT.VIRGINIA.GOV REGARDING THE INSTALLATION REQUIREMENTS AND WIRELESS RADIO COMMUNICATIONS EQUIPMENT DETAILS.
- THE 3" PVC COMMUNICATION CONDUIT THAT IS INSTALLED AS DETAILED IN VDOT R&B ST'D 1301.50 SHALL TERMINATE INTO THE COMMUNICATION JB-S4. THE COMMUNICATION JB-S4 SHALL BE INSTALLED, WITH CONCRETE COLLAR, WITHIN 10 FEET OF THE CF-5 FOUNDATION AND SHALL BE ON THE SAME SIDE OF THE FOUNDATION AS THE 3" CONDUITS EXIST FROM THE FOUNDATION. THE REQUIRED GROUND ELECTRODE FOR THE COMMUNICATION CIRCUIT SHALL BE INSTALLED IN THIS JB-S4. THE JUNCTION BOX LID SHALL HAVE "COMM" CAST IN THE DEPRESSION ON TOP. PULL ROPE RATED AT 1,100 LBS. SHALL BE INSTALLED IN ALL COMMUNICATION CONDUITS.
- NO TRAFFIC SIGNAL SHALL BE PLACED INTO OPERATION UNTIL THE TRAFFIC SIGNAL COMMUNICATION REQUIREMENTS HAVE BEEN MET AND APPROVED BY THE ENGINEER.
- FIELD ADJUSTMENTS MADE OF ANY KIND WILL REQUIRE A RED LINED SIGNAL MODIFICATION PLAN FOR VDOT TE REVIEW AND APPROVAL.

STATE REVISED SHEET N ROUTE PROJECT 0639-076-348 VA. P-101,R-201,C-501

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

Johnson, Mirmiran & Thompson Richmond, Virginia TRAFFIC ENGINEER

TRAFFIC SIGNAL PLAN SHEET INDEX

SHEET NO. DESCRIPTION

10(01) INDEX OF SHEETS, GENERAL NOTES & LEGEND

10(02A) SIGN FIGURE DETAILS

TRAFFIC SIGNAL PLAN - INT. OF MARINA WAY

AND GORDON BLVD

STANDARD TRAFFIC SIGNAL LEGEND

10(03)

PLAN ITEM		PLAN S	PLAN SYMBOL				
	TLAN IIEM	PROPOSED	EXISTING				
Metal Signal Pole & Fo (As noted in Signal Po	oundation and Mast Arm ole Legend)	• —	©				
Signal Pole and Found (St'd.MP-3)	dation	•	©				
Pedestal Pole and Fou (St'd.PF-2)	undation	•	O				
Traffic Signal Head	w/ Backplate w/o Backplate	+ +►	0 				
Pedestrian Signal Hea	od .	-	-⊳				
Pedestrian Pushbuttor	- □ P.B.	-@ <i>P.B</i> .					
Traffic Signal Sign	Mast Arm or Span Wire Mt'd. Pole Mounted	+ ⊢ ⊢	Ο ⊣ - <i>ε</i>				
Emergency Vehicle Pre	e-emption (EVP) Sensor						
	w/ Conf.Light w/o Conf.Light	•••	≪				
Closed-Circuit Televisi	•	■-					
Junction Box (St'd.as	noted on plans)	Q Q	⊠ı				
Signal Luminaire (250	W) and Arm	*	—				
Signal Luminaire (400		*	; —				
Loop Detector (Size as	s noted on plans)	6' x 20'	6' <u>x 2</u> 0'				
Conduit		===					

PLAN ITEM	PLAN SYMBOL			
FLAN II LIVI	PROPOSED	EXISTING		
Electrical Service Meter	▽ sw	₩ sw		
Electrical Service Safety Switch (Disconnect)	▽ sø	⊗ so		
Electrical Service Meter & Foundation Std.SE-5	SE-51 MB	N/A		
Controller Cabinet & Foundation Std.CF-5	[C] 5	N/A		
Uninterruptible Power Supply Cabinet	•	⊠#		
Dynamic Messaging Sign (DMS)		N/A		

LABELS S-1 $\langle A \rangle$ Signal Pole or Controller Proposed Signal Head Signal Phasing Cable and Conduit Existing Signal Head Pedestrian Phasing Video Detection Camera Emergency Preemption Detector FVP-/ Proposed Pedestrian Signal Head Junction Box Existing Pedestrian Signal Head

> **PROJECT** 0639-076-348

SHEET NO. *10(01)*

PROJECT MANAGER MEKDES TABOR (703-792-8137)

SURVEYED BY, DATE JMT. AUGUST 2024

DESIGN BY JMT (703) 464-7369

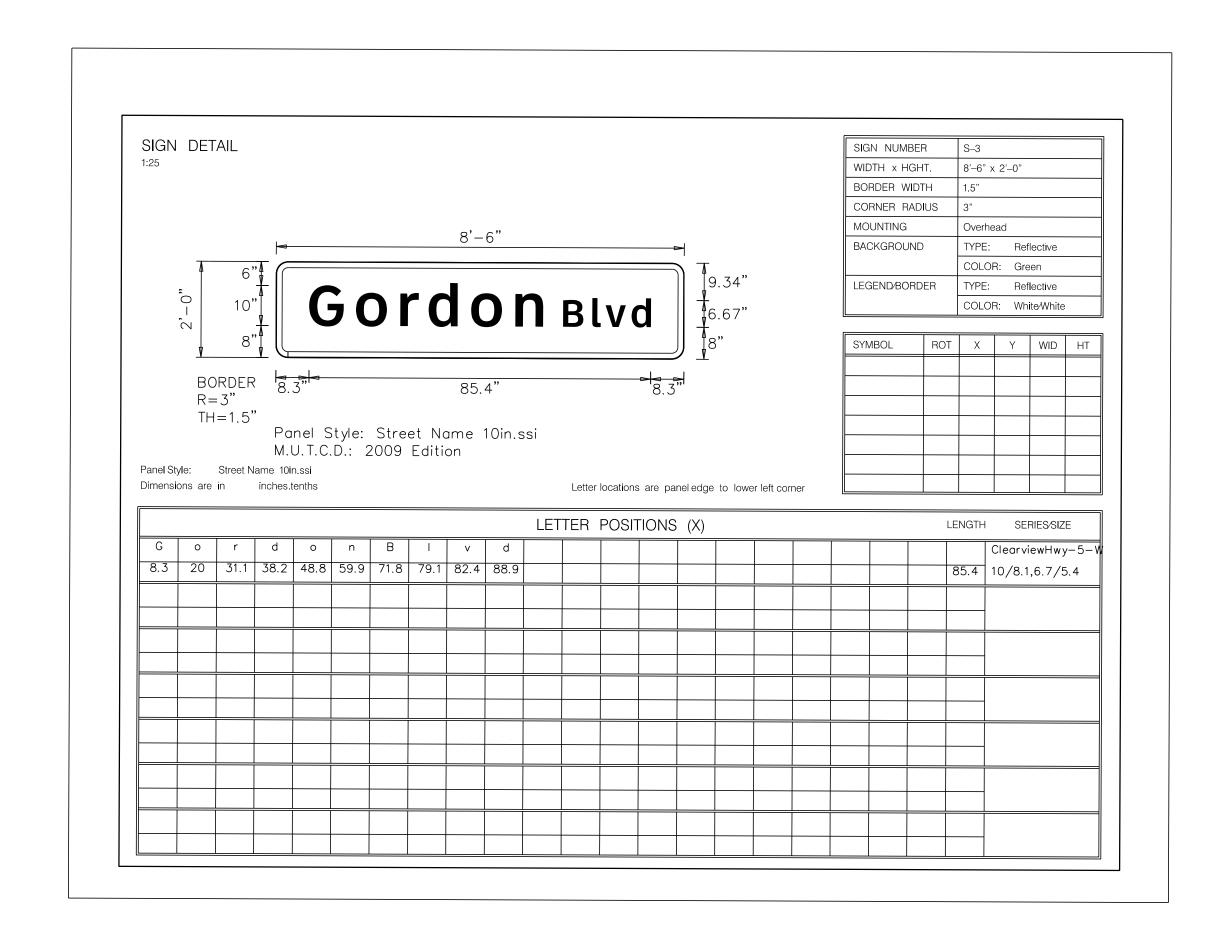
SUBSURFACE UTILITY BY, DATE JMT. AUGUST 2024

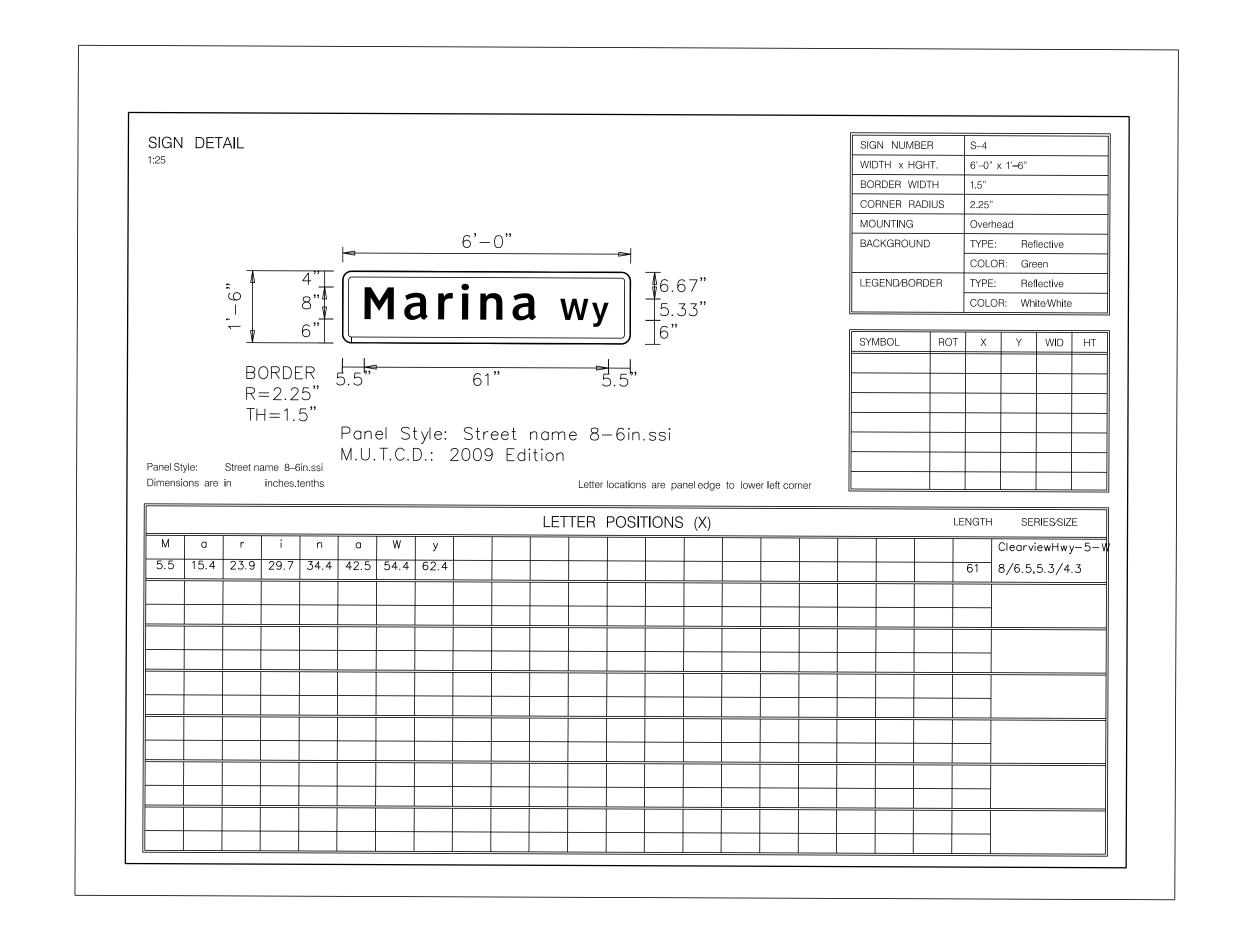
REVISED

STATE

ROUTE

Johnson, Mirmiran & Thompson Richmond, Virginia TRAFFIC ENGINEER





PROJECT SHEET NO. 10(02A)

