PREFACE

Chapter 2H has been developed to provide a sample of the various sheets in the plan assembly. These samples are not all inclusive. They are provided to give the Engineer/Designer some insight as to what the basic sheets should encompass. Not all of these samples will be used in all sets of plans. For example, on small projects the Pavement, Incidental and Drainage summaries could be on the same sheet.

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6/20/2016
9:51:15 AM

Title Sheet.dgn
Plotted By: stewartwillis

FOR INDEX OF SHEETS SEE SHEET ___

THIS PROJECT WAS DEVELOPED UTILIZING THE DEPARTMENT'S ENGINEERING DESIGN PACKAGE (GEOPAK).
GEOPAK Computer Identification No. (UPC number)

COMMONWEALTH OF VIRGINIA

DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE OF PROPOSED STATE HIGHWAY

_____ COUNTY/CITY
FROM: RTE. XXX
TO: 0.000 Mi. N. OF RTE. XXX

FHWA XXX DATA XXXXX

STATE	FEDERAL AID PROJECT	STATE ROUTE	STATE PROJECT	SHEET NO.
VA.		XXX	(NFO) XXXX-XXX-XXX (SEE TABULATION BELOW FOR SECTION NUMBERS)	1

FUNCTIONAL CLASSIFICATION AND TRAFFIC DATA	
NHS-RURAL COLLECTOR - ROLLING - 30 MPH MIN. DESIGN SPEED	
	Fr: To:
ADT 2XXX	XXX
ADT	XXX
DHV	XXX
D (%) (design hour)	XX%
T (%) (design hour)	XX%
V (MPH)	*

*SEE PLAN AND PROFILE SHEETS FOR HORIZONTAL AND VERTICAL CURVE DESIGN SPEEDS.

NOTE: THESE PLANS WERE DESIGNED IN ACCORDANCE WITH VIRGINIA RRR GUIDELINES.

PROJECT MANAGER <Project Mgr. Name (000).000-0000 (District)>
SURVEYED BY <Surveyor Name (000).000-0000 (District)>
DESIGN SUPERVISED BY <Supervisor Name (000).000-0000 (District)>
DESIGNED BY <Designer Name (000).000-0000 (District)>

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

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT- OF-WAY SHOWN ON THESE PLANS.

CONVENTIONAL 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
TRAVELED WAY
GUARD RAIL
RETAINING WALL
RAILROADS
BASE OR SURVEY LINE

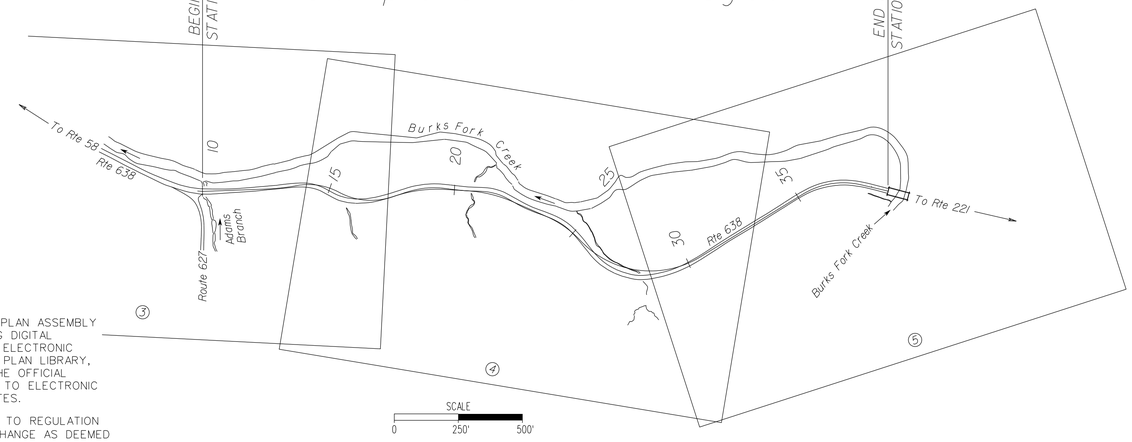
LEVEE OR EMBANKMENT
BRIDGES
CULVERTS
DROP INLET
POWER POLES
TELEPHONE OR TELEGRAPH POLES
TELEPHONE OR TELEGRAPH LINES
HEDGE
TREES
HEAVY WOODS
GROUND ELEVATION
GRADE ELEVATION

PROJ. XXXX-XXX-XXX,PE-10X,RW-20X,C-50X

BEGIN PROJECT STATION 10+00.00

END PROJECT STATION 38+65.15

Sample of Tier I Project



SCALE
0 250' 500'

COUNTY OF _____ POPULATION - XXXXX (2010 CENSUS)

STATE PROJECT NO.	SECTION	FEDERAL AID PROJECT NO.	TYPE CODE	UPC NO.	LENGTH INCLUDING BRIDGE(S) FEET	LENGTH INCLUDING BRIDGE(S) MILES	LENGTH EXCLUDING BRIDGE(S) FEET	LENGTH EXCLUDING BRIDGE(S) MILES	BRIDGE PROJECT NO.	TYPE PROJECT	DESCRIPTION
XXXX-XXX-XXX	C-50X		XXXX	XXXXX	XXXX.XX	X.XX Mi.	XXXX.XX	X.XX Mi.		CONSTRUCTION	FROM: RTE. XXX
											TO: X.XXMI. N. OF RTE. XXX
	RW-20X			XXXXX	XXXX.XX	X.XX Mi.	XXXX.XX	X.XX Mi.		R/W	FROM: RTE. XXX
											TO: X.XXMI. N. OF RTE. XXX
	PE-10X			XXXXX	XXXX.XX	X.XX Mi.	XXXX.XX	X.XX Mi.		PREL. ENGR.	FROM: RTE. XXX
											TO: X.XXMI. N. OF RTE. XXX

NOTE: LENGTH OF PROJECT BASED ON CONSTRUCTION BASELINE

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

THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE DEPARTMENT'S 2007 ROAD AND BRIDGE SPECIFICATIONS, 2008 ROAD AND BRIDGE STANDARDS, 2005 WORK AREA PROTECTION MANUAL AND AS AMENDED BY CONTRACT PROVISIONS AND THE COMPLETE ELECTRONIC .PDF VERSION OF THE PLAN ASSEMBLY.

ALL CURVES ARE TO BE SUPERELEVATED, TRANSITIONED AND WIDENED IN ACCORDANCE WITH STANDARD _____, EXCEPT WHERE OTHERWISE NOTED.

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

REVISED

TIER 1 PROJECT

NOTE: SEE IIM-LD-204 FOR SIGNATURE BLOCK INFORMATION

PROJECT	SHEET NO.
0638-017-356	1

FIGURE 2H - 1 SAMPLE TITLE SHEET

6/20/2016
9:53:40 AM

Title Sheet.dgn
Plotted By: stewartwillis

LIMITED ACCESS HIGHWAY By Resolution of the Commonwealth Transportaion Board, dated _____

STATE	FEDERAL AID PROJECT	ROUTE	STATE PROJECT	SHEET NO.
VA.	STP-XXX-X(xxx) See Tabulation Below For Section Numbers	X	(FO) XXXX-XXX-XXX See Tabulation Below For Section Numbers	1

FHWA-DATA-XXXXX

FOR INDEX OF SHEETS SEE SHEET ___

THIS PROJECT WAS DEVELOPED UTILIZING THE DEPARTMENT'S ENGINEERING DESIGN PACKAGE (GEOPAK).
GEOPAK Computer Identification No. UPC Number

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

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT- OF-WAY SHOWN ON THESE PLANS.

PROJECT MANAGER _____
SURVEYED BY, DATE _____
DESIGNED BY _____
SUBSURFACE UTILITY BY, DATE _____

CONVENTIONAL 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
TRAVELED WAY
GUARD RAIL
RETAINING WALL
RAILROADS
BASE OR SURVEY LINE

LEVEE OR EMBANKMENT
BRIDGES
CULVERTS
DROP INLET
POWER POLES
TELEPHONE OR TELEGRAPH POLES
TELEPHONE OR TELEGRAPH LINES
HEDGE
TREES
HEAVY WOODS
GROUND ELEVATION
GRADE ELEVATION

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

THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE DEPARTMENT'S 2007 ROAD AND BRIDGE SPECIFICATIONS, 2008 ROAD AND BRIDGE STANDARDS, 2005 WORK AREA PROTECTION MANUAL AND AS AMENDED BY CONTRACT PROVISIONS AND THE COMPLETE ELECTRONIC .PDF VERSION OF THE PLAN ASSEMBLY.

ALL CURVES ARE TO BE SUPERELEVATED, TRANSITIONED AND WIDENED IN ACCORDANCE WITH STANDARD _____, EXCEPT WHERE OTHERWISE NOTED.

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

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

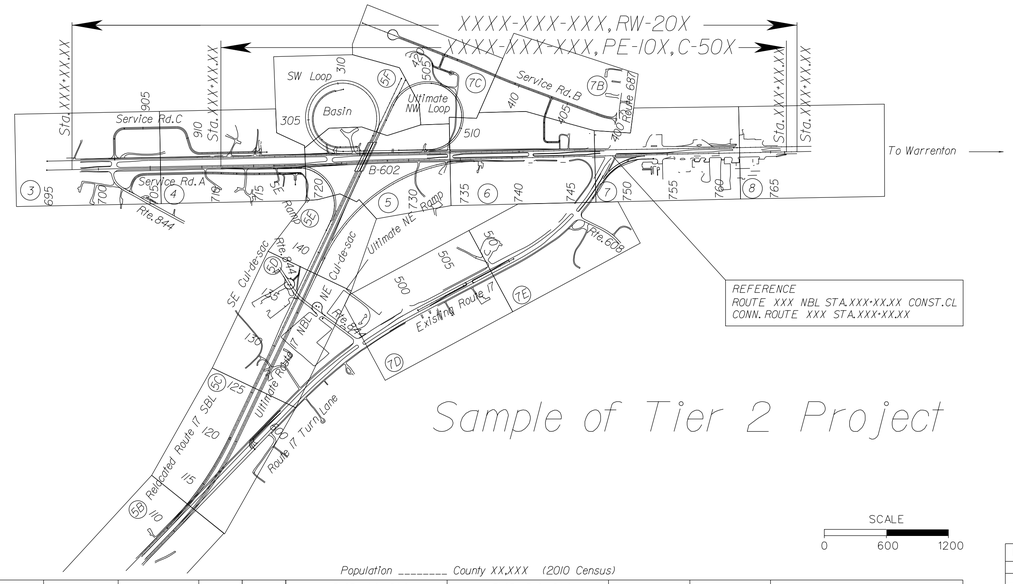
PLAN AND PROFILE OF PROPOSED STATE HIGHWAY

_____ COUNTY/CITY

FROM: 0.000 Mi. SOUTH INT. ROUTE XXX
TO: 0.000 Mi. NORTH INT. ROUTE XXX

FUNCTIONAL CLASSIFICATION AND TRAFFIC DATA	
NHS-RURAL OTHER PRINCIPAL ARTERIAL-ROLLING-__MPH MIN. DES. SPEED	
	FROM: 0.000 Mi. SOUTH INT. ROUTE XXX TO: 0.000 Mi. NORTH INT. ROUTE XXX
ADT (Year)	XX,XXX
ADT (Year)	XX,XXX
DHV	X,XXX
D (%) (design hour)	XX%
T (%) (design hour)	XX%
V (MPH)	x

*See Plan and Profile sheets for Horizontal and Vertical Curve Design Speed



Sample of Tier 2 Project

SCALE
0 600 1200

TIER 2 PROJECT

NOTE: SEE IIM-LD-204 FOR SIGNATURE BLOCK INFORMATION

REVISED

Population _____ County XX,XXX (2010 Census)

STATE PROJECT NO.	SECTION	FEDERAL AID PROJECT NO.	TYPE CODE	UPC NO.	LENGTH INCLUDING BRIDGE(S) FEET	LENGTH INCLUDING BRIDGE(S) MILES	LENGTH EXCLUDING BRIDGE(S) FEET	LENGTH EXCLUDING BRIDGE(S) MILES	BRIDGE PLAN NO.	TYPE PROJECT	DESCRIPTION
XXXX-XXX-XXX	C-50X	NH/STP-XXX-X( )	XXXX	XXXXX	XXXX.XX	X.XXX	XXXX.XX	X.XXX		CONST.	From: X.XXX Mi. S. Int. Route XXX To: X.XXX Mi. N. Int. Route XXX
	PE-10X	STP-XXX-X(XXX)		XXXXX	XXXX.XX	X.XXX	XXXX.XX	X.XXX		PREL. ENGR.	From: X.XXX Mi. S. Int. Route XXX To: X.XXX Mi. N. Int. Route XXX
	RW-20X	STP-XXX-X(XXX)		XXXXX	XXXX.XX	X.XXX	XXXX.XX	X.XXX		R/W	From: X.XXX Mi. S. Int. Route XXX To: X.XXX Mi. N. Int. Route XXX
	B-60X	NH/STP-XXX-X( )	XXXX	XXXXX	XXX.XXX	X.XXX				BRIDGE	Rte. XXX Bridge over XXXXXX
	D-60X	NH/STP-XXX-X( )	XXXX	XXXXX	XXX.XXX	X.XXX				PREL. ENGR.	Rte. XXX Bridge over XXXXXX

PROJECT LENGTH BASED ON RTE. XXX NBL CONSTRUCTION BASELINE.

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
	XXXX-XXX-XXX		1

FIGURE 2H - 2 SAMPLE TITLE SHEET

9/9/2014
8:41:09 AM

Project Location Mapdgn
Plotted By: stewartwillis

PROJECT MANAGER _____
SURVEYED BY, DATE _____
DESIGN BY _____
SUBSURFACE UTILITY BY, DATE _____

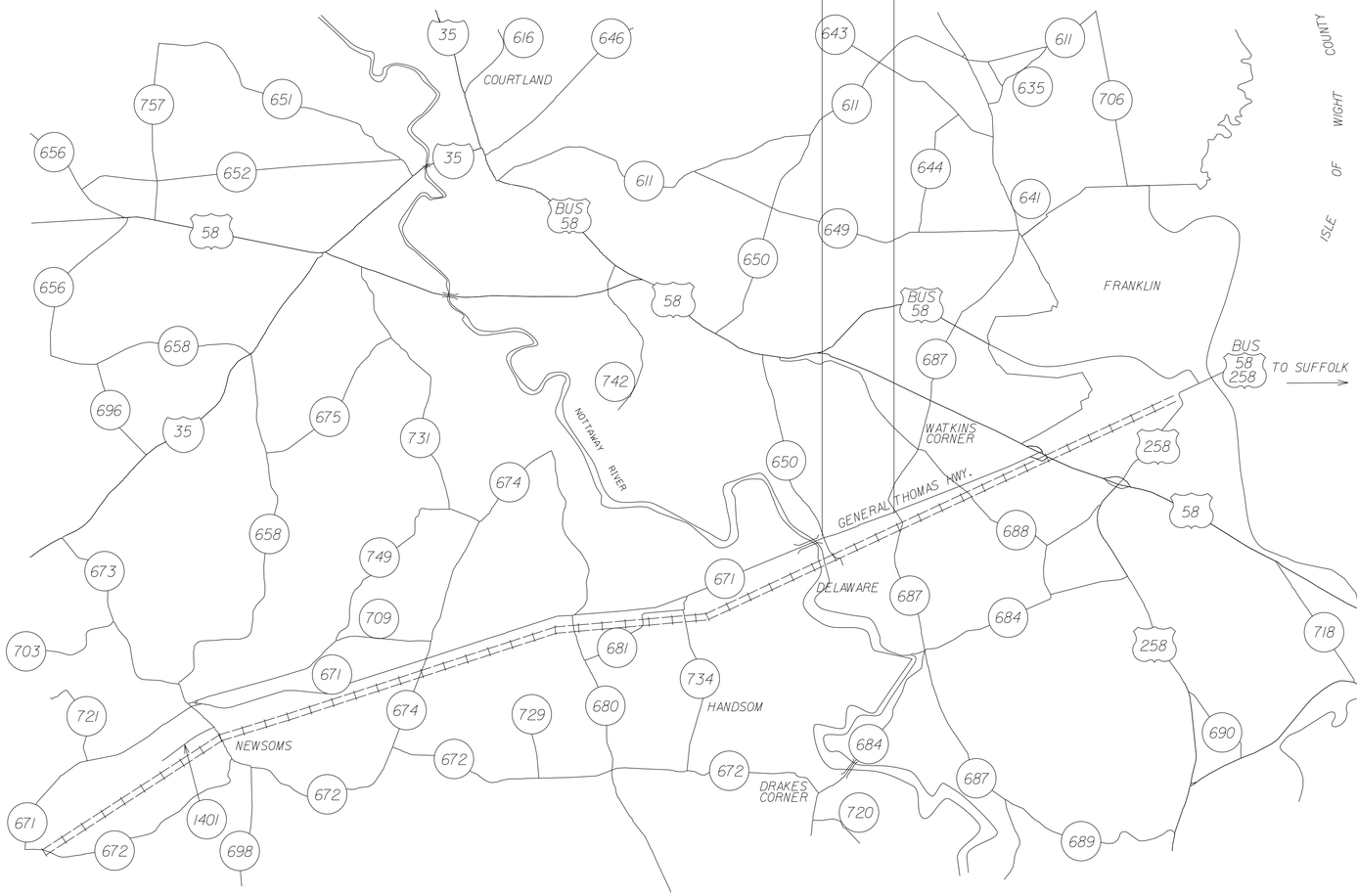
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED	STATE	FEDERAL AID PROJECT	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.		XXX	XXXX-XXX-XXX,C-XXX	1A

LOCATION MAP

_____ COUNTY

PROPOSED PROJECT
XXXX-XXX-XXX, C-XXX



COUNTY OF _____
POPULATION XX,XXX
(YEAR) CENSUS

SCALE
0 0.5 Mi. 1 Mi.

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
	XXXX-XXX-XXX		1A

FIGURE 2H - 3 SAMPLE LOCATION MAP SHEET

7/30/2014
9:32:46 AM

Indexofsheets.dgn
Plotted By: stewartwillis

PROJECT MANAGER (Project Mgr. Name (000) 000-0000 (District))
SURVEYED BY (Surveyor Name (000) 000-0000 (District))
DESIGN SUPERVISED BY (Supervisor Name (000) 000-0000 (District))
DESIGNED BY (Designer Name (000) 000-0000 (District))

INDEX OF SHEETS

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	00	0000-000-000, RW-000 C-000	0

SHEET	DESCRIPTION	STATIONS
1	Title Sheet	
1A	Location Map	
1B	Index of Sheets	
1C	Right of Way Data Sheet	
1D	Revision Data Sheet	
1E	Stream Flow Hydrograph Sheet	
1F-1G	Survey and Construction Alignment Data Sheets	
1H	Underground Utility Test Hole Information Sheet	
1J(1)- 1J(18)	Maintenance of Traffic / Sequence of Construction Sheets	
2	General Notes	
2A - 2E	Typical Sections	
2F - 2J	Drainage Summary	
2K	Roadside Developement / Erosion Control Summary	
2L	Box Culvert Summary, Stormwater Management Summary	
2M	Pavement Summary	
2N	Grading Diagram and Summary	
2O	Incidental Summary	
2P - 2AAA	Detail Sheets	
3 - 3B	Plan, Profile and Drainage Descriptions	643+14.15 to 644+20.00
3C	Phased Erosion and Sediment Control Plan	
3RW	Right of Way Plan Sheet	
4 - 4G	Plan, Profile and Drainage Descriptions	644+20.00 to 646+20.00
4H	Phased Erosion and Sediment Control Plan	
4RW	Right of Way Plan Sheet	
5 - 5C	Plan, Profile and Drainage Descriptions	646+20.00 to 648+20.00
5D	Phased Erosion and Sediment Control Plan	
5RW	Right of Way Plan Sheet	
6 - 6C	Plan, Profile and Drainage Descriptions	648+20.00 to 650+20.00
6D	Phased Erosion and Sediment Control Plan	
6RW	Right of Way Plan Sheet	
7 - 7B	Plan and Profile	650+20.00 to 652+20.00
7C	Phased Erosion and Sediment Control Plan	
7RW	Right of Way Plan Sheet	
8 - 8B	Plan, Profile and Drainage Descriptions	652+20.00 to 654+20.00
8C	Phased Erosion and Sediment Control Plan	
8RW	Right of Way Plan Sheet	
9 - 9A	Plan and Profile	654+20.00 to 656+20.00
9B	Phased Erosion and Sediment Control Plan	
9RW	Right of Way Plan Sheet	
10 - 10B	Plan, Profile and Drainage Descriptions	656+20.00 to 658+20.00
10C	Phased Erosion and Sediment Control Plan	
10RW	Right of Way Plan Sheet	
11(1) - 11(4)	Entrance Profiles	
12(1) - 12(8)	Storm Sewer Profile Sheets	
13(1) - 13(8)	Sign Plans	
14(1) - 14(8)	Lighting Plans	
15(1) - 15(8)	Signal Plans	
16(1) - 16(8)	Pavement Marking and Marker Plans	
17(1) - 17(8)	Utility Plans	
18(1) - 18(8)	Landscape Plans	

Total Cross Section Sheets 49 (See cross section sheet number 1 for Index of Cross Sections)

Special Design Bridge Plans Sheets, B-601, Plan No. 19 (1) - 19 (20), Rte. 143 Over Litte Creek

	PROJECT	SHEET NO.
	0000-000-000	0

FIGURE 2H - 4 SAMPLE INDEX OF SHEET

5/15/2017
I:\25\U\PRM

Right of Way Data Sheet.dgn
Plotted By: stewartwillis

PROJECT MANAGER <Project Mgr. Name (000) 000-0000 (District)>
SURVEYED BY <Surveyor Name (000) 000-0000 (District)>
DESIGN SUPERVISED BY <Supervisor Name (000) 000-0000 (District)>
DESIGNED BY <Designer Name (000) 000-0000 (District)>

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.		XXXX-XXX-XXX, RW-20X	IC

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

PRELIMINARY
RIGHT OF WAY DATA SHEET

Parcel Information					Area: Areas greater than or equal to 1 acre will be shown in acres to 3 decimal places (x.xxx AC). Areas less than 1 acre will be shown in square feet (xx,xxx SF).														
Number	Landowner Name	Sheet Number	Deed Acreage	Remainder	Fee Take Summary			Permanent Easements						Utility Easements			Temporary			Proffers
					Total	Prescriptive	Non-Prescr.	(Dr)ainage	(Sl)ope						Electric	VDOT	Construction			Yes/NO
001																				
002																				
003																				
004																				
005																				
006																				
007																				
008																				
009																				
010																				
011																				
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045																				
046																				
047																				
048																				
049																				
050																				

	PROJECT	SHEET NO.
	XXXX-XXX-XXX	IC

FIGURE 2H - 5 SAMPLE RIGHT OF WAY DATA SHEET

6/2/2016
9:37:30 AM

Revision Data Sheet.dgn
Plotted By: stewart.willis

PROJECT MANAGER <Project_Mgr_Name_(000).000-0000_(District)>
SURVEYED BY, DATE <Surveyor_Name_(000).000-0000_(District)>
DESIGN BY <Designer_Name_(000).000-0000_(District)>
SUBSURFACE UTILITY BY, DATE <Surveyor_Name_(000).000-0000_(District)>

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.		XXXX-XXX-XXX, RW-20X	1D

REVISION DATA SHEET

State Project: 0625-042-348, RW-201, C-501
Federal Project: BR-5A27( )
From: 0.055 MI. East of Henrico County
To: 0.048 MI. West of Hanover County
UPC Number: 82399

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

R1 Date: August 11, 2015 Project 0625-042-348, RW-201

Sheet 1B: Updated to reflect revisions to Sheet 3RW.

Sheet 3: Removed D-700 from Parcel 006. Sign to be removed intact and restored at project completion. Parcel 002 and 005.

Sheet 3RW: Added quit claim take for Parcel 004.
Added Prescriptive Right-Of-Way for Parcel 002 and 005.

This revision was made in accordance with a request from Mr. Winston Phillips, PMP, Richmond District Location and Design Division, dated July 22, 2015.

R2 Date: December 2, 2015 Project 0625-042-348, RW-201

Sheet 1B: Updated to reflect revisions to Sheet 3RW.

Sheet 3: Property line added to Parcel 001 along the south bank of the Chickahominy River.

Sheet 3RW: Property line added to Parcel 001 along the south bank of the Chickahominy River.
Added quit claim take for Parcel 001.

This revision was made in accordance with a request from Mr. Winston Phillips, PMP, Richmond District Location and Design Division, dated December 2, 2015.

R3 Date: December 17, 2015 Project 0625-042-348, RW-201

Sheet 1B: Updated to reflect revisions to Sheet 3RW.

Sheet 3: Revised proposed right-of-way on Parcel 004.
Added proposed combination easement for construction, maintenance, slope and drainage on Parcel 004.
Revised Private Entrance 1.

Sheet 3A: Revised Private Entrance 1 profile.

Sheet 3C: Revised Private Entrance 1.

Sheet 3RW: Revised proposed right-of-way on Parcel 004.
Added proposed combination easement for construction, maintenance, slope and drainage on Parcel 004.

This revision was made in accordance with a request from Mr. Adam Brooks, Richmond District Project Management Office, dated December 16, 2015.

R4 Date: February 12, 2016 Project 0625-042-348, RW-201

Sheet 1B: Updated to reflect revisions to Sheet 3RW.

Sheet 3: Revised proposed right-of-way on Parcel 004
to tie to property line.

Sheet 3RW: Revised proposed right-of-way line on Parcel 004
to tie to property line and updated tabulate areas.

This revision was made in accordance with a request from Mr. David Burch, L.S., Richmond District Location and Design Division, Survey Section, dated February 11, 2016.

PROJECT	SHEET NO.
XXXX-XXX-XXX	1D

Cell Revised 12/11/12

FIGURE 2H - 6 SAMPLE REVISION DATA SHEET

7/28/2016
3:27:43 PM

Hydrological Data Sheet.dgn
Plotted By: stewart.willis

PROJECT MANAGER <Project_Mgr._Name_(000).000-0000._(District)>_ _ _ _ _ _.
SURVEYED BY, DATE <Surveyor_Name_(000).000-0000_(District)>_ _ _ _ _ _.
DESIGN BY <Designer_Name_(000).000-0000_(District)>_ _ _ _ _ _ _ _ _ _ _ _
SUBSURFACE UTILITY BY, DATE <Surveyor_Name_(000).000-0000_(District)>

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.		XXXX-XXX-XXX, RW-20X C-50X	1E

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

HYDROLOGIC DATA

The data presented herein was statistically derived by empirical methods and from field observations. It is presented as an estimate of the hydraulic performance of these facilities during the passage of actual flood events.

1. Estimated 100 year frequency flood data (unless otherwise noted.) This magnitude of flooding may pass through the proposed facility or it may obtain the necessary hydraulic conveyance by partial inundation of roadways and/or partial by pass of the facility.

2. Specified frequency flood data. It is anticipated that this magnitude of flooding will be conveyed through the proposed hydraulic facility under estimated conditions which satisfy the design criteria applicable to the site.

3. This data was obtained from observations by persons familiar with the area and/or official records combined with an evaluation by empirical methods. The reliability of this data is relative to the accuracy of the source. A future flood of the same magnitude may achieve a significantly different stage elevation from that shown due to changes in the physical characteristics of the watershed.

FIELD INSPECTION STAGE ☐ FINAL DESIGN STAGE ☐

					BASE FLOOD 1.		DESIGN FLOOD 2.			OVERTOPPING FLOOD		HISTORICAL DATA 3.		
Sheet No.	Station	Stream Name	Drainage Area	Structure Size	Discharge (C.F.S.)	Stage Elevation (Ft.)	Discharge (C.F.S.)	Estimated Exceedance Probability %	Stage Elevation (Ft.)	Stage Elevation (Ft.)	Estimated Exceedance Probability %	Date	Stage Elevation (Ft.)	Estimated Exceedance Probability %
REMARKS					Source of Information and Other Related Data									

	PROJECT	SHEET NO.
	XXXX-XXX-XXX	1E

Cell Revised 12/1/12

FIGURE 2H - 7 SAMPLE HYDROLOGIC DATA SHEET

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Survey & Constr Alignment Data Sheets.dgn
Plotted By: stewartwillis

PROJECT MANAGER _____
SURVEYED BY, DATE _____
DESIGN BY _____
SUBSURFACE UTILITY BY, DATE _____

Note: To Convert VA State Plane Coordinates NAD 83 Metric Values to VDOT Project Coordinates,
1. Reduce the Easting 2.5 Million Meters and the South and North Zone Northing by 1 and 2 Million Respectively.
2. Multiply by the US Survey Foot (3.2808333333333)
3. Multiply These Values by the Combined Scale and Elevation Factor (1.00005) for this County.
A Reverse of This Procedure will Transform VDOT Project Coordinates to NAD 83 Values.

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

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	XXX	XXXX-XXX-XXX, C-50X R-XXX	IF

LD-200 (REV. 8/2000)

Virginia Department of Transportation Horizontal Control

Control Station I. D. 36 - 0053 Project 0615-036-156,P101,R201,C501

Route 615 City/County Gloucester Date Nov. 2011

Established By VDOT

Vertical Datum Based On NAVD 88 Geoid 2009

Horizontal Datum Based On NAD 83 (2007)

Azimuth to Station 36-0054 ~ 66°16'09"

Latitude: 37°23'47.62968" N (5 Decimal Places)

Longitude: 76°33'32.60557" W (5 Decimal Places)

Geoid Separation (N) : -35.292m

Ellipsoid Height (h) : -10.969m (WGS 84)

Control Based On: Station "040" (PID #GV5950) Horizontal
"H 457" (PID #GV0579) Vertical

Virginia State Plane Coordinates - NAD 83 Metric Values

East (X) 3671843.7337 m

North (Y) 1119758.4958 m

Ortho. Elevation (H) 24.323 m

VDOT Project Coordinates

East (X) 3844816.2142 ft.

North (Y) 392927.3104 ft.

Elevation 79.80 ft.

Zone North (South) (circle one)

Horizontal Closure

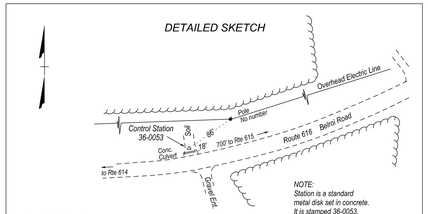
To convert state plane metric units to VDOT project values, use the following formula.

1. Reduce the Easting Metric Values By 2.5 Million Meters. The South and North Zone Northing Metric Values By 1 and 2 Million Respectively.
2. Multiply These Values by the U. S. Survey Foot (3.280833333)
3. Multiply These Values by Combined Scale and Elevation Factor (1.00005) for the County.

Reverse This Procedure to Transform VDOT Project Coordinates to NAD 83 Metric Plane Coordinates

* Sketch and Detailed Description Below *

DETAILED SKETCH



NOTE:
Station is a standard metal disk set in concrete. It is stamped 36-0053.

Not To Scale

LD-200 (REV. 8/2000)

Virginia Department of Transportation Horizontal Control

Control Station I. D. 36 - 0054 (aka 069) Project 0615-036-156,P101,R201,C501

Route 615 City/County Gloucester Date Nov. 2011

Established By VDOT

Vertical Datum Based On NAVD 88 Geoid 2009

Horizontal Datum Based On NAD 83 (2007)

Azimuth to Station 36-0053 ~ 246°16'09"

Latitude: 37°23'49.19869" N (5 Decimal Places)

Longitude: 76°33'27.87004" W (5 Decimal Places)

Geoid Separation (N) : -35.294m

Ellipsoid Height (h) : -10.834m (WGS 84)

Control Based On: Station "040" (PID #GV5950) Horizontal
"H 457" (PID #GV0579) Vertical

Virginia State Plane Coordinates - NAD 83 Metric Values

East (X) 3671959.1849 m

North (Y) 1119809.2495 m

Ortho. Elevation (H) 24.460 m

VDOT Project Coordinates

East (X) 3845195.0093 ft.

North (Y) 393093.8331 ft.

Elevation 80.25 ft.

Zone North (South) (circle one)

Horizontal Closure

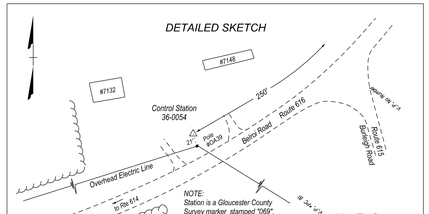
To convert state plane metric units to VDOT project values, use the following formula.

1. Reduce the Easting Metric Values By 2.5 Million Meters. The South and North Zone Northing Metric Values By 1 and 2 Million Respectively.
2. Multiply These Values by the U. S. Survey Foot (3.280833333)
3. Multiply These Values by Combined Scale and Elevation Factor (1.00005) for the County.

Reverse This Procedure to Transform VDOT Project Coordinates to NAD 83 Metric Plane Coordinates

* Sketch and Detailed Description Below *

DETAILED SKETCH



NOTE:
Station is a Gloucester County Survey marker stamped "069". Originally set in Jan. 1992

Not To Scale

LD-200 (REV. 8/2000)

Virginia Department of Transportation Horizontal Control

Control Station I. D. 36 - 0055 Project 0615-036-156,P101,R201,C501

Route 615 City/County Gloucester Date Nov. 2011

Established By VDOT

Vertical Datum Based On NAVD 88 Geoid 2009

Horizontal Datum Based On NAD 83 (2007)

Azimuth to Station 36-0056 ~ 358°52'39"

Latitude: 37°23'05.64837" N (5 Decimal Places)

Longitude: 76°32'01.78621" W (5 Decimal Places)

Geoid Separation (N) : -35.364m

Ellipsoid Height (h) : -11.559m (WGS 84)

Control Based On: Station "040" (PID #GV5950) Horizontal
"H 457" (PID #GV0579) Vertical

Virginia State Plane Coordinates - NAD 83 Metric Values

East (X) 3674103.9212 m

North (Y) 1118510.8189 m

Ortho. Elevation (H) 23.805 m

VDOT Project Coordinates

East (X) 3852231.8834 ft.

North (Y) 388833.6857 ft.

Elevation 78.10 ft.

Zone North (South) (circle one)

Horizontal Closure

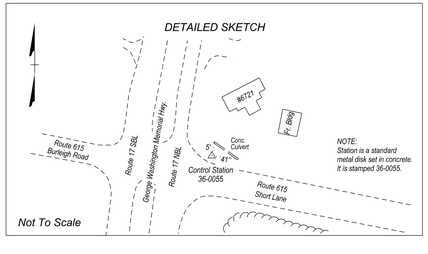
To convert state plane metric units to VDOT project values, use the following formula.

1. Reduce the Easting Metric Values By 2.5 Million Meters. The South and North Zone Northing Metric Values By 1 and 2 Million Respectively.
2. Multiply These Values by the U. S. Survey Foot (3.280833333)
3. Multiply These Values by Combined Scale and Elevation Factor (1.00005) for the County.

Reverse This Procedure to Transform VDOT Project Coordinates to NAD 83 Metric Plane Coordinates

* Sketch and Detailed Description Below *

DETAILED SKETCH



NOTE:
Station is a standard metal disk set in concrete. It is stamped 36-0055.

Not To Scale

LD-200 (REV. 8/2000)

Virginia Department of Transportation Horizontal Control

Control Station I. D. 36 - 0056 Project 0615-036-156,P101,R201,C501

Route 615 City/County Gloucester Date Nov. 2011

Established By VDOT

Vertical Datum Based On NAVD 88 Geoid 2009

Horizontal Datum Based On NAD 83 (2007)

Azimuth to Station 36-0055 ~ 178°52'39"

Latitude: 37°23'09.37420" N (5 Decimal Places)

Longitude: 76°32'01.78044" W (5 Decimal Places)

Geoid Separation (N) : -35.362m

Ellipsoid Height (h) : -11.204m (WGS 84)

Control Based On: Station "040" (PID #GV5950) Horizontal
"H 457" (PID #GV0579) Vertical

Virginia State Plane Coordinates - NAD 83 Metric Values

East (X) 3674101.6711 m

North (Y) 1118625.6549 m

Ortho. Elevation (H) 24.158 m

VDOT Project Coordinates

East (X) 3852224.5009 ft.

North (Y) 389210.4623 ft.

Elevation 79.26 ft.

Zone North (South) (circle one)

Horizontal Closure

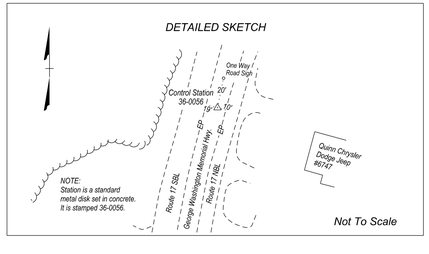
To convert state plane metric units to VDOT project values, use the following formula.

1. Reduce the Easting Metric Values By 2.5 Million Meters. The South and North Zone Northing Metric Values By 1 and 2 Million Respectively.
2. Multiply These Values by the U. S. Survey Foot (3.280833333)
3. Multiply These Values by Combined Scale and Elevation Factor (1.00005) for the County.

Reverse This Procedure to Transform VDOT Project Coordinates to NAD 83 Metric Plane Coordinates

* Sketch and Detailed Description Below *

DETAILED SKETCH



NOTE:
Station is a standard metal disk set in concrete. It is stamped 36-0056.

Not To Scale

Horizontal Datum NAD 83/07
South Zone

SURVEY ALIGNMENTS

POINT ID.	STATION	BEARING	VDOT PROJECT COORDINATES NORTH (Y)	EAST (X)
		Rte 615 Traverse		
SS	10+00.000		393,179.482	3,845,448.908
PI	15+52.195	S 17° 30' 55" E	392,652.888	3,845,615.096
PI	20+50.100	S 56° 05' 52" E	392,375.168	3,846,028.353
PI	24+59.059	S 62° 02' 09" E	392,183.399	3,846,389.562
PI	30+75.058	S 55° 11' 54" E	391,831.826	3,846,895.379
PI	34+74.772	N 88° 29' 57" E	391,842.295	3,847,294.956
PI	38+67.181	S 35° 39' 04" E	391,523.431	3,847,523.671
PI	43+19.003	S 55° 52' 46" E	391,269.987	3,847,897.716
PI	47+45.936	S 42° 39' 14" E	390,955.995	3,848,186.992
PI	51+19.651	S 64° 52' 16" E	390,797.295	3,848,525.337
PI	55+15.198	S 54° 18' 09" E	390,566.491	3,848,846.564
PI	62+47.970	S 57° 29' 37" E	390,172.704	3,849,464.534
PI	68+83.614	S 61° 52' 15" E	389,873.023	3,850,025.100
PI	72+79.229	S 14° 20' 42" E	389,489.742	3,850,123.117
PI	78+23.949	S 44° 17' 12" E	389,099.802	3,850,503.467
PI	84+12.608	N 88° 23' 37" E	389,116.304	3,851,091.895
PI	89+90.685	S 68° 38' 43" E	388,905.802	3,851,630.283
PI	95+96.591	S 83° 09' 51" E	388,833.684	3,852,231.882

Benchmarks ~ NAVD 88 Datum

Elev.	Benchmark Description / Location
79.80'	VDOT Control Station 36-0053
80.25'	VDOT Control Station 36-0054
72.70'	NE corner of first brick step (#5802) ; 111' Rt. of Sta. 22+33 Rte 615 Traverse
36.40'	RR Spike set in base of 24" Ash ; 92' Lt. of Sta. 35+93 Rte 615 Traverse
47.01'	RR Spike set in base of 20" Sycamore ; 60' Rt. of Sta. 47+60 Rte 615 Traverse
79.87'	RR Spike set in base of Twin 48" Maple ; 89' Lt. of Sta. 57+84 Rte 615 Traverse
79.91'	RR Spike set in base of 12" Beech ; 34' Rt. of Sta. 73+10 Rte 615 Traverse
78.82'	SE corner of first brick step (#6433) ; 91' Rt. of Sta. 85+66 Rte 615 Traverse
78.10'	VDOT Control Station 36-0055
79.26'	VDOT Control Station 36-0056

	PROJECT	SHEET NO.
	XXXX-XXX-XXX	IF

Cell Revised 12/11/12

FIGURE 2H - 8 SAMPLE SURVEY ALIGNMENT DATA SHEET

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Construction Alignment Data Sheets.dgn
Plotted By: stewart.willis

PROJECT MANAGER _____
SURVEYED BY, DATE _____
DESIGN BY _____
SUBSURFACE UTILITY BY, DATE _____

CONSTRUCTION ALIGNMENT

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	XXX	XXXX-XXX-XXX,C-50X R-20X	IG

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

Location & Design
Fredericksburg, Virginia
ROADWAY ENGINEER

```
*        1   DESCRIBE CHAIN 79094

Chain 79094 contains:
 D001 CUR C41 CUR C42 D006 D007 D010 D011

Beginning chain 79094 description
Feature: Adjusted Alignment
Description: 700'r 485'r
================================================================================

Point D001            N       391,998.64 E     3,846,650.05 Sta      28+00.00

Course from D001 to PC C41 S 57° 12' 38.02" E Dist 219.90

                                Curve Data
                               *----------*
Curve C41
P.I.  Station              31+27.64  N          391,821.20  E        3,846,925.48
Delta       =      17° 29' 58.00" (LT)
Degree      =       8° 11' 06.40"
Tangent     =              107.74
Length      =              213.80
Radius      =              700.00
External    =                8.24
Long Chord  =              212.97
Mid. Ord.   =                8.15
S. E.       =               7.200
V           =                  40
P.C.  Station              30+19.90  N          391,879.55  E        3,846,834.91
P.T.  Station              32+33.70  N          391,792.79  E        3,847,029.41
C.C.                                 N          392,468.01  E        3,847,214.00
Back        = S  57° 12' 38.02" E
Ahead       = S  74° 42' 36.02" E
Chord Bear  = S  65° 57' 37.02" E

Course from PT C41 to PC C42 S 74° 42' 36.02" E Dist 193.48

                                Curve Data
                               *----------*
Curve C42
P.I.  Station              35+35.62  N          391,713.17  E        3,847,320.64
Delta       =      25° 12' 26.24" (RT)
Degree      =      11° 48' 48.83"
Tangent     =              108.44
Length      =              213.38
Radius      =              485.00
External    =               11.98
Long Chord  =              211.66
Mid. Ord.   =               11.69
S. E.       =               8.000
V           =                  40
P.C.  Station              34+27.18  N          391,741.77  E        3,847,216.04
P.T.  Station              36+40.56  N          391,642.75  E        3,847,403.11
C.C.                                 N          391,273.94  E        3,847,088.14
Back        = S  74° 42' 36.02" E
Ahead       = S  49° 30' 09.78" E
Chord Bear  = S  62° 06' 22.90" E

Course from PT C42 to D006 S 49° 30' 09.78" E Dist 258.73

Point D006            N       391,474.73 E     3,847,599.86 Sta      38+99.29

Course from D006 to D007 S 48° 33' 09.83" E Dist 52.06

Point D007            N       391,440.27 E     3,847,638.88 Sta      39+51.34

Course from D007 to D010 S 54° 47' 55.71" E Dist 263.75

Point D010            N       391,288.23 E     3,847,854.40 Sta      42+15.10

Course from D010 to D011 S 45° 20' 25.86" E Dist 236.89

Point D011            N       391,121.72 E     3,848,022.90 Sta      44+51.99

================================================================================
Ending chain 79094 description
```

	PROJECT	SHEET NO.
	XXXX-XXX-XXX	IG

Cell Revised 12/11/12

FIGURE 2H - 9 SAMPLE CONSTRUCTION ALIGNMENT DATA SHEET

PROJECT MANAGER_____
SURVEYED BY _____
DESIGN SUPERVISED BY_____
DESIGNED BY _____

UNDERGROUND UTILITIES TEST HOLE INFORMATION

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	XX	XXXX-XXX-XXX, RW-20X C-50X	IH

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

PLAN SHEET	TEST HOLE	DISTANCE (FEET)	(1) STATION & BASELINE	OWNER	TYPE OF FACILITY	(2) ELEV. (FEET)	(3) CONFLICT YES/NO	(4) REMARKS	UTILITY (5) ADJUSTMENT REQUIRED
3	1	84.9 RT.	56+91.8 ± (a)	A	2.75"± O.D. METALLIC WATER	205.84		NO CLEARANCE	
					1"± O.D METALLIC WATER	205.90			
7	2	67.7 RT.	86+55.1 ± (c)	A	13"± O.D METALLIC WATER	205.61		0.5' CLEARANCE ABOVE STORM DRAIN	
4	3	47.1 LT.	60+07.9 ± (a)	B	TOP OF FOUR 4"± O.D. NON-MET. CONDUITS	202.73		0.9' CLEARANCE BELOW STORM DRAIN	
					BOTTOM OF 4"± O.D. NON-MET. CONDUITS	201.91		1.7' CLEARANCE BELOW STORM DRAIN	
4	4	15.2 LT.	60+57.1 ± (a)	B	TOP OF T/Tg DUCT	203.42		1.75' CLEARANCE BELOW STRUCTURE 4-17 (SEE TH FORM FOR REMARKS)	
4	4A	26.8 LT.	60+56.2 ± (a)	B	TOP OF T/Tg DUCT	204.12		NO STORM DRAIN CROSSING (SEE TH FORM FOR REMARKS)	
4	5	57.5 RT.	59+74.2 ± (a)	B	23.0"± O.D. METALLIC CASING PIPE	201.68		NO STORM DRAIN CROSSING	
4	6	78.5 RT.	59+74.1 ± (a)		1"± O.D. CONDUIT	205.22		(SEE TEST HOLE FORM FOR REMARKS)	
				B	TOP OF CONC. CAP	203.60		NO STORM DRAIN CROSSING	
					1.5"± O.D. BLACK CABLE	200.61			
4	7	83.1 RT.	59+31.8 ± (a)	B	1.5"± O.D. NON-METALLIC CONDUIT	206.20		2.1' CLEARANCE ABOVE STORM DRAIN	
4	8	50.2 RT.	85+79.5 ± (c)	B	TOP OF CONC. CAP	201.29		(SEE TEST HOLE FORM FOR REMARKS)	
					BOTTOM OF BOTTOM CONDUIT	199.88		1.5' CLEARANCE BELOW STORM DRAIN (STORM DRAIN CROSSES UTILITY 27' WEST OF TEST HOLE)	
--	9	--	--	--	CANCELLED BY DEPARTMENT	--			
4	10	81.0 RT.	60+51.0 ± (a)	B	TWO 4"± O.D. NON-METALLIC CONDUITS	201.73		2.6' CLEARANCE BELOW STORM DRAIN	
--	11	--	--	--	CANCELLED BY DEPARTMENT	--			
--	12	--	--	--	CANCELLED BY DEPARTMENT	--			
3	13	82.7 RT.	55+08.2 ± (a)	C	2.5"± O.D. NON-METALLIC GAS	202.44		0.4' CLEARANCE BELOW STORM DRAIN	
5	14	80.1 RT.	64+10.2 ± (a)	C	2.5"± O.D. NON-METALLIC GAS	202.77		2.4' CLEARANCE BELOW MANHOLE	
6	15	28.3 LT.	453+04.0 ± (b)	C	1.5"± O.D. NON-METALLIC GAS	214.94		NO STORM DRAIN CROSSING	
--	16	--	--	--	CANCELLED BY DEPARTMENT	--			
--	17	--	--	--	CANCELLED BY DEPARTMENT	--			
3	18	89.9 RT.	56+46.6 ± (a)	A	6.5"± O.D. METALLIC SANITARY SEWER	206.32		NO CLEARANCE	
--	19	--	--	--	CANCELLED BY DEPARTMENT	--			
--	20	--	--	--	CANCELLED BY DEPARTMENT	--			
4	21	52.2 LT.	60+35.3 ± (a)	A	1"± O.D. METALLIC PIPE	207.15		1.6' CLEARANCE ABOVE STORM DRAIN	
					1.25"± O.D. METALLIC PIPE	206.97		1.4' CLEARANCE ABOVE STORM DRAIN	
--	22	--	--	--	CANCELLED BY DEPARTMENT	--			
3	23	112.2 RT.	55+11.5 ± (a)	A	12.75"± O.D. METALLIC WATER (SEE NOTE 6)	201.61		NO CLEARANCE	
					12.75"± O.D. METALLIC WATER (SEE NOTE 6)	201.45			
3	24	79.4 RT.	56+34.9 ± (a)	A	12.75"± O.D. METALLIC WATER	206.10		NO STORM DRAIN CROSSING	
--	25	--	--	--	CANCELLED BY DEPARTMENT	--			
4	26	132.4 RT.	59+59.5 ± (a)	B	TOP OF CONCRETE CAP	201.26		1.5' CLEARANCE BELOW STORM DRAIN	
					BOTTOM OF CONCRETE CAP	200.88			
					BOTTOM OF BOTTOM CONDUIT	199.21			
4	27	76.7 RT.	61+13.9 ± (a)	B	TOP OF T/Tg DUCT	204.22		0.25' CLEARANCE BELOW STORM DRAIN	
					BOTTOM OF T/Tg DUCT	202.04			

PLAN SHEET	TEST HOLE	DISTANCE (FEET)	(1) STATION & BASELINE	OWNER	TYPE OF FACILITY	(2) ELEV. (FEET)	(3) CONFLICT YES/NO	(4) REMARKS	UTILITY (5) ADJUSTMENT REQUIRED

UTILITY OWNERS

A Water and Sanitary Sewer:
County of Hanover
Dept. of Public Utilities
P.O. Box 470
7516 County Complex Road
Hanover, Virginia 23069-0470

B Telephone and Telephone Fiber Optic:
Verizon
2600 Brittons Hill Road
Richmond, Virginia 23230

C Natural Gas:
Virginia Natural Gas
3719 Virginia Beach Boulevard
Norfolk, Virginia 23502

NOTES:

(1) TEST HOLE LOCATIONS ARE REFERENCED FROM THE FOLLOWING BASELINE / CENTERLINE SURVEY DATA:
(a) ROUTE 1 BASELINE
(b) ROUTE 54 WEST CENTERLINE
(c) ROUTE 54 EAST CENTERLINE

(2) ELEVATIONS SHOWN HEREON ARE TO THE TOP OF THE FACILITY UNLESS OTHERWISE NOTED.

(3) YES OR NO: NO INDICATES NO DIRECT CONFLICT, HOWEVER, CLEARANCE MAY BE LESS THAN ACCEPTABLE TO UTILITY OWNER.

(4) REMARKS TO INCLUDE CLEARANCE DIMENSION (REGARDLESS OF DISTANCE).

(5) YES OR NO: INFORMATION TO BE PROVIDED BY THE VDOT DISTRICT UTILITY ENGINEER.

JOHNSON, MIRMIRAN & THOMPSON
Engineering A Brighter Future®
272 Bendix Road, Suite 260 Virginia Beach, VA 23452

Route 1
Hanover County, Virginia
VDOT Project #001-166-V06, C501, UPC #13463

TEST HOLE SUMMARY SHEET

		SCALE: N/A
DRAWN BY: ELW	CADFILE #: 10-0866-017_SUM	JOB #: 10-0866-017
CHECKED BY: JDF	DATE: 05/02/12	SHEET #: N/A

	PROJECT	SHEET NO.
	XXXX-XXX-XXX	IH

FIGURE 2H - 10 SAMPLE UNDERGROUND UTILITY TEST HOLE INFORMATION SHEET

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TMP Plans.dgn
Plotted By: stewartwillis

PROJECT MANAGER _____
SURVEYED BY, DATE _____
DESIGN BY _____
SUBSURFACE UTILITY BY, DATE _____

TEMPORARY TRAFFIC CONTROL
GENERAL NOTES
SEQUENCE OF CONSTRUCTION

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	XXX	XXXX-XXX-XXX,C-50X R-20X	1J(1)

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

GENERAL NOTES

Road Closures by Contractor are to be coordinated with the Saluda Residency Administrator Sean Trapani (804) 758-2322 and the Gloucester County school system. All road closures shall be prohibited during school operating days.

Apply Transportation Management Plan Type "B"

Work Zone Location - Sta. 28+63.81 to Sta. 38+50.00.

Length and Width of Work Zone - 986.19' L X 22' and variable W.

Both travel lanes will be affected by project work.

Potential location for construction equipment and material storage is Rt. Sta 32+00+/- and 38+00+/-.

Not to exclude other standard layouts or modifications thereof, the following typical traffic control figures apply to the daily safety features employed by the Contractor:

TTC-4.0 Stationary Operation on a Shoulder
TTC-23.0 Lane Closure on a Two Lane Roadway Using Flaggers
TTC-53.0 Signing for Project Limits

Access to adjacent residential and commercial properties shall be maintained at all times, or as directed by the Engineer.

The Contractor shall notify each affected property owner at least 24 hours in advance of the start of any work that will require the temporary closure of access.

Traffic control devices which conflict with private entrances will be placed in a manner to eliminate that conflict.

Alternate routes which will be utilized for detours are Route 17, George Washington Memorial Hwy., Route 614, Hickory Fork Rd. and Route 616, Beirol Rd.

The major types of travelers impacted by the construction of Route 615, Burleigh Rd. are residents and commuters.

TEMPORARY TRAFFIC CONTROL

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.

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.

The clear zone is to be free of stored materials and parked equipment. Horizontal and vertical sight distances shall not be impacted by parked construction equipment.

All areas excavated more than 2" below pavement surface which public traffic is on and within the clear zone and not protected by a positive barrier at the conclusion of each workday, shall be backfilled to form an approximate 6:1 safety wedge desirable, 4:1 minimum, against the pavement surface for the safety and protection of the public traffic. All costs for placing, maintaining and removing the 6:1 desirable, 4:1 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.

The Contractor shall be responsible for maintaining any existing signs, unless otherwise advised by the Engineer to remove or relocate.

The Contractor is responsible for coordinating the construction, signing and traffic management plan with other adjacent projects under construction.

SEQUENCE OF CONSTRUCTION

Unless otherwise approved or directed by the Engineer, the Contractor shall plan and prosecute the work in accordance with the following:

Place Project Limit Signing
Place all erosion and sediment controls
Place Bioretention Basin and associated structures
Remove cut between 32+00+/- and 37+50+/-
Construct new alignment up to 21B
Place additional erosion and sediment controls
Place Detour signs and Detour traffic
Construct D605 and transition tie-in's
Pave
Complete shoulder/ditch/guardrail and slope work

Guardrail must be completely installed prior to opening the road to traffic.

The phases in this sequence of construction shall be followed unless the Contractor submits an alternate sequence and secures the approval of the Engineer for a sequence which shall both expedite construction and lessen the effect of such construction upon the travelling public.

All work is to be performed in accordance with the current MUTCD, the 2007 Road and Bridge Specifications, the 2008 Road and Bridge Standards, the 2011 Virginia Work Area Protection Manual, 2011 Supplement to the MUTCD including each manual's subsequent revisions and as directed by the Engineer.

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.

Under no circumstances will the concurrent construction left and right of any lane be allowed unless otherwise directed by the Engineer or shown on these plans.

All erosion and sediment control measures and temporary drainage shall be in place prior to beginning any new phases of construction.

The Contractor shall provide temporary drainage, if required, to prevent ponding of water on the roadway and adjacent properties. Temporary drainage on the project is the Contractor's responsibility. The cost of the temporary drainage, other than the items that have been quantified in these plans, is included in the price bid for other drainage items and no additional compensation will be allowed.

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 will be measured and paid for as Regular Excavation in accordance with Section 303 of the Specifications.

All proposed full depth asphalt pavement will be constructed up to the intermediate layer. The final surface course will be applied in the final phase of construction when approved by the Engineer.

When proceeding from one stage of construction to another stage of construction, any existing or construction pavement markings that do not align with the new traffic patterns and/or necessary markings shall be eradicated and re-striped.

MAINTENANCE OF TRAFFIC

All signing for the project limits shall be done in accordance with the 2011 Virginia Work Area Protection Manual. These signs shall be installed on all state maintained roadways and remain in place for the duration of the project.

All construction signing shall be fabricated and installed in accordance with the May 2011 Virginia Work Area Protection Manual, the 2009 MUTCD, The Virginia Supplement to the MUTCD, the Standard Highway Sign Manual, The 2007 Virginia Road and Bridge Specifications and the 2008 Virginia Road and Bridge Standards.

Sign spacing shall be adjusted to fit field conditions with approval of the Engineer.

Contractor shall install "NEW TRAFFIC PATTERN AHEAD" signs the day of all traffic shifts and remove them two weeks after the new traffic pattern has been established.

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.

All unneeded traffic control devices shall be removed from the roadway immediately.

TRANSPORTATION OPERATIONS PLAN - CENTRAL REGION OPERATIONS

All Construction Signs as shown on TTC-53.0 shall be in place prior to commencement of Phase I construction activities.

Due to road closure the Regional Transportation Operations Center shall be reached as follows:
TRANSPORTATION OPERATIONS PLAN
1) The process to notify the Regional Traffic Operation Center to place road/lane closure information on the 511 system and VA.Traffic will be:
   a) Contractor is to advise the VDOT project inspector and/or Construction Manager of planned road/lane closures a minimum of 24 hours in advance of proposed road/lane closure.
   b) Construction Manager to advise Residency Maintenance Manager of proposed road/lane closure. Maintenance Manager is to have (VA.Traffic) operator enter data into VA Traffic, and also advise Smart Traffic Center.

2) The following is a list of local emergency contact agencies:
   Virginia State Police - (800) 582-8350
   Haz-Mat Center (if spill involved) - 911

3) Procedures to respond to traffic incidents that may occur in the work zone:
   a) Contractor to notify Virginia State Police and VDOT Inspector in charge and Regional Traffic Operation Center.
   b) Depending upon severity of incident, contractor may have to shut down work.
   c) Upon arrival on scene, Virginia State Police will determine the response necessary to allow traveling public around incident.
   d) Inspector to notify Construction Manager/Residency Administrator of incident and take pictures as necessary, especially pictures of contractor's work zone to verify the proper setup.

4) Process of notification of incident to be followed is:
   Contractor to call: Construction Manager Bill Collins, (804) 690-4574
   Construction Manager shall notify the following:
   a) Regional Traffic Operation Center, Shift Supervisor (804) 796-4520 or 1-866-378-7743
   b) Project Maintenance of Traffic Coordinators, Michael Caffey, (540) 899-4214
   c) Residency Administrator: Sean Trepani (804) 758-2322 x113
   d) Area Construction Engineer, Michael Caffey, (540) 899-4214
   e) District Work Zone Safety Coordinator, Jeff Stone (540) 899-4547 or (540) 907-8621
   f) Regional Traffic Engineer, Dale Totten, P.E. (804) 524-6119
   g) Central Area Traffic Engineer, Peter Hedrich (540) 899-4540
   h) District Public Affairs Manager, Kelly Hannon (540) 374-3344
   i) Gloucester County Sheriff's Office, Sheriff, D.W. Warren, Jr., (804) 693-3890
      Gloucester County Fire & Rescue (804) 693-3890

5) The Virginia State Police will take control of the incident and direct its clearing and restoration to normal traffic conditions.

6) The Virginia State Police report of the incident will be reviewed by the Residency Administrator to determine if any modification of the Temporary Traffic Control Plan is necessary. If it is determined that it is necessary to alter the plan, a meeting will be called with the contractor, VDOT project personnel, VDOT traffic safety representatives and the Virginia State Police (if necessary) to discuss modification and implementation of an improved traffic control plan.

The Contractor is responsible for coordinating the construction signing and Traffic Management Plan with other adjacent projects under construction.

	PROJECT	SHEET NO.
	XXXX-XXX-XXX	1J(1)

Cell Revised 12/11/12

FIGURE 2H - 11 SAMPLE TRAFFIC MAINTENANCE PLAN (TMP) SHEET

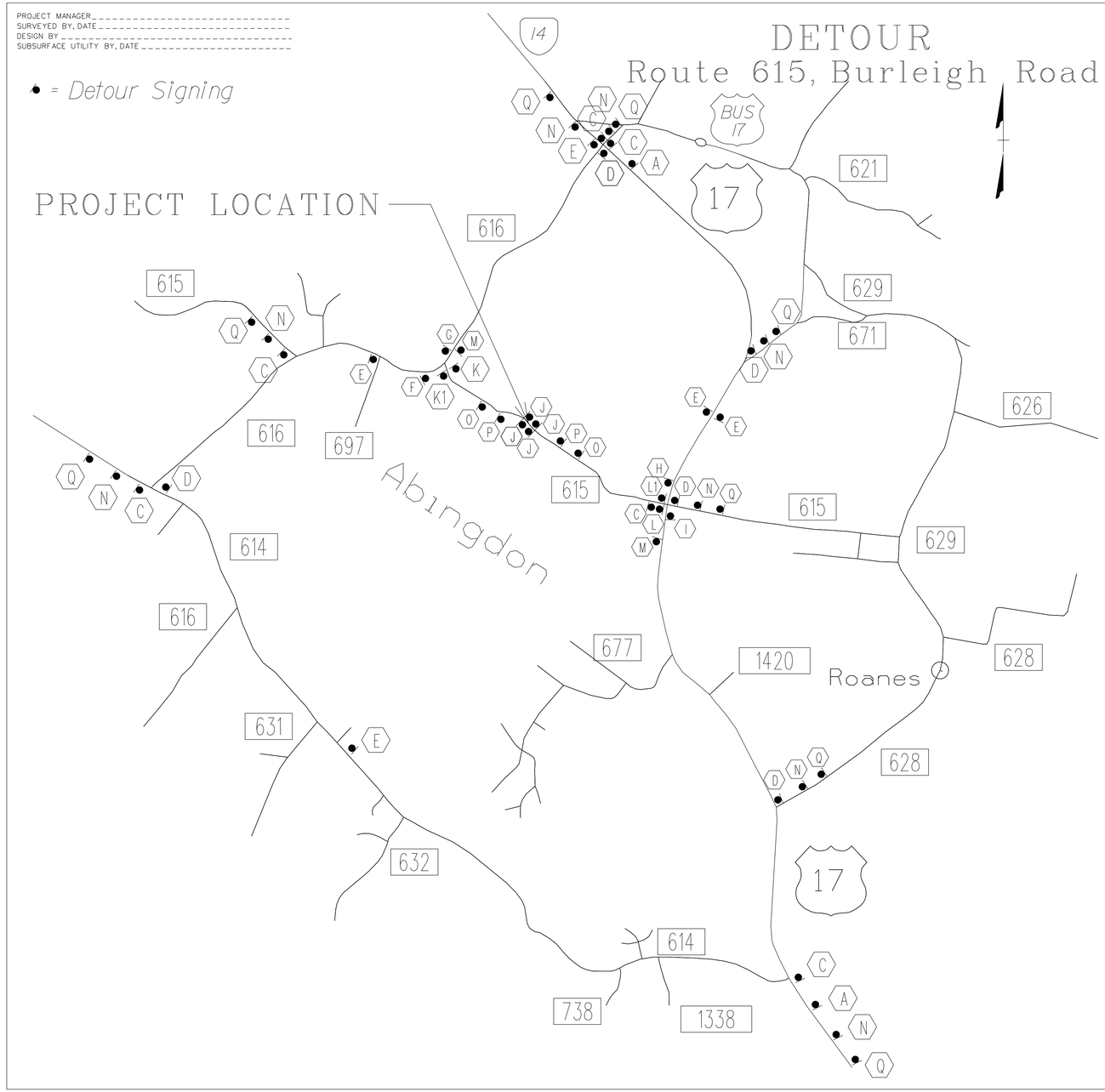
8/26/2014
2:05:26 PM

TMP Plansdgn
Plotted By: stewartwillis

PROJECT MANAGER _____
SURVEYED BY, DATE _____
DESIGN BY _____
SUBSURFACE UTILITY BY, DATE _____

● = Detour Signing

DETOUR
Route 615, Burleigh Road



REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	XXX	XXXX-XXX-XXX,C-50X R-20X	IJ(2)

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

Location & Design
Fredericksburg, Virginia
TRAFFIC ENGINEER

M4-8 24" X 12" — DETOUR
M1-V2a 24" X 24" — 615
M5-1L, M6-1, M6-3 21" X 15"
A C D E

Type B Warning Light
615 M4-V5a 36"x42" — CLOSED 0.5MILES AHEAD LOCAL TRAFFIC ONLY R11-V2 60"x30" — W16-5pIR 24"x18" — F
615 M4-V5a 36"x42" — CLOSED 0.5 MILES AHEAD LOCAL TRAFFIC ONLY R11-V2 60"x30" — W16-5pIL 24"x18" — G
615 M4-V5a 36"x42" — CLOSED 1.4 MILES AHEAD LOCAL TRAFFIC ONLY R11-V2 60"x30" — W16-5pIR 24"x18" — H
615 M4-V5a 36"x42" — CLOSED 1.4 MILES AHEAD LOCAL TRAFFIC ONLY R11-V2 60"x30" — W16-5pIL 24"x18" — I

These signs will need to be fabricated out of crashworthy material

Type B Warning Light
ROAD CLOSED R11-2 (Crashworthy) Type III Barricade — ROAD CLOSED — J
ROAD CLOSED 0.4 MILES AHEAD LOCAL TRAFFIC ONLY R11-3a — DETOUR — K
ROAD CLOSED 0.4 MILES AHEAD LOCAL TRAFFIC ONLY R11-3a — DETOUR — K1

These signs will need to be fabricated out of crashworthy material

ROAD CLOSED 1.2 MILES AHEAD LOCAL TRAFFIC ONLY R11-3a — DETOUR — L
ROAD CLOSED 1.2 MILES AHEAD LOCAL TRAFFIC ONLY R11-3a — DETOUR — L1

END DETOUR M4-8a 24"x18" — M

RT. 615 BURLEIGH RD. CLOSED AT FOX MILL RUN BRIDGE — Custom Sign 72"x30" — N

ROAD CLOSED 1000 FT W20-2 48"x48" — O
ROAD CLOSED 500 FT W20-2 48"x48" — P
DETOUR AHEAD W20-2 48"x48" — Q

See Constr. Sign Sch. Sheet IK(7) for Summary

NOT TO SCALE	PROJECT XXXX-XXX-XXX	SHEET NO. IJ(2)

Cell Revised 12/11/12

FIGURE 2H - 12 SAMPLE TRAFFIC MAINTENANCE PLAN (TMP) SHEET

8/26/2014
2:06:21 PM

TMP Plans.dgn
Plotted By: stewart.willis

PROJECT MANAGER
SURVEYED BY, DATE
DESIGN BY
SUBSURFACE UTILITY BY, DATE

TEMPORARY TRAFFIC CONTROL

and Sequence of Construction

PHASE 1

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	XXX	XXXX-XXX-XXX, C-50X R-20X	1J(3)

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

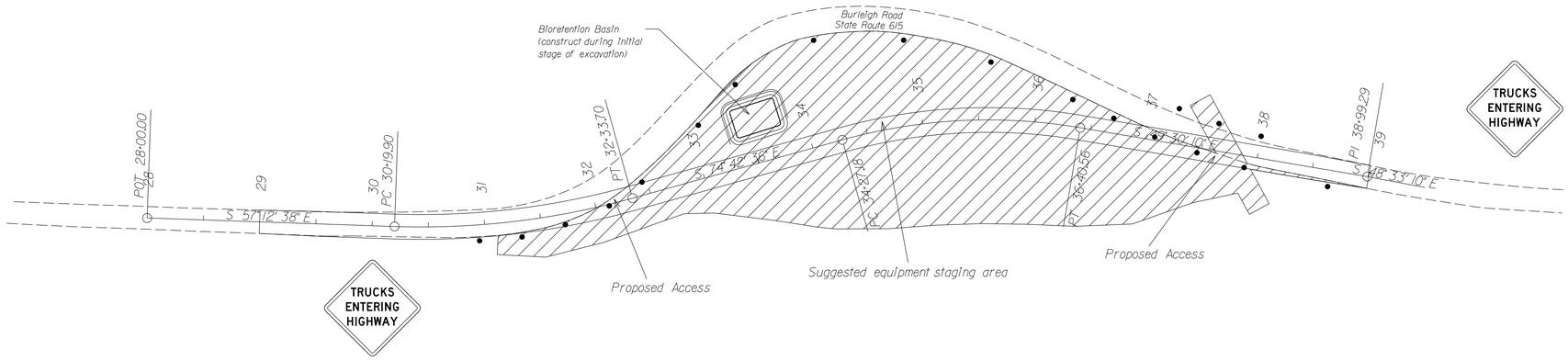
Location & Design
Fredericksburg, Virginia
ROADWAY ENGINEER

BURLEIGH ROAD

PURPOSE:
Reconstruction of sharp curve.

LEGEND:
Phase 1
● = Group 2 Channelizing Device (Top)

SUGGESTED SEQUENCE OF OPERATIONS:
1. Place all sediment and erosion controls prior to commencement of excavation activities.
2. Place "TRUCKS ENTERING HIGHWAY" signs. Place 350' to 500' from entrance location.
3. Remove cut between Sta. 32+/- and 37+30+/-.
4. Place detour signing - detour traffic.



	TTC DETAILS - SEQUENCE OF CONSTRUCTION	
PHASE	SEQUENCE	TTC
1	Place Project Limits signing Place all E&S controls. Remove cut between Sta 32+/- and 37+30+/-	TTC-53.0 Signing for Project Limits TTC-4.0 Stationary Operation on a Shoulder TTC-63.0 Work Truck/Excavation Entrance

Trucks Entering Highway signs shall be removed or covered in accordance with the 2011 Work Area Protection Manual on a daily basis during non-working hours. These signs shall only be visible to traffic during work operations in which trucks are required to enter and exit the work zone and while such work is actively occurring.

SCALE	PROJECT	SHEET NO.
0 50' 100'	XXXX-XXX-XXX	1J(3)

Cell Revised 12/11/12

FIGURE 2H - 13 SAMPLE TRAFFIC MAINTENANCE PLAN (TMP) SHEET

8/26/2014
2:07:04 PM

TMP Plansdgn
Plotted By: stewartwillis

PROJECT MANAGER _____
SURVEYED BY, DATE _____
DESIGN BY _____
SUBSURFACE UTILITY BY, DATE _____

TEMPORARY TRAFFIC CONTROL

and Sequence of Construction

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	XXX	XXXX-XXX-XXX,C-50X R-20X	IJ(4)

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

Location & Design
Fredericksburg, Virginia
ROADWAY ENGINEER

BURLEIGH ROAD

PURPOSE:
Reconstruction of sharp curve.

LEGEND:

Phase 2

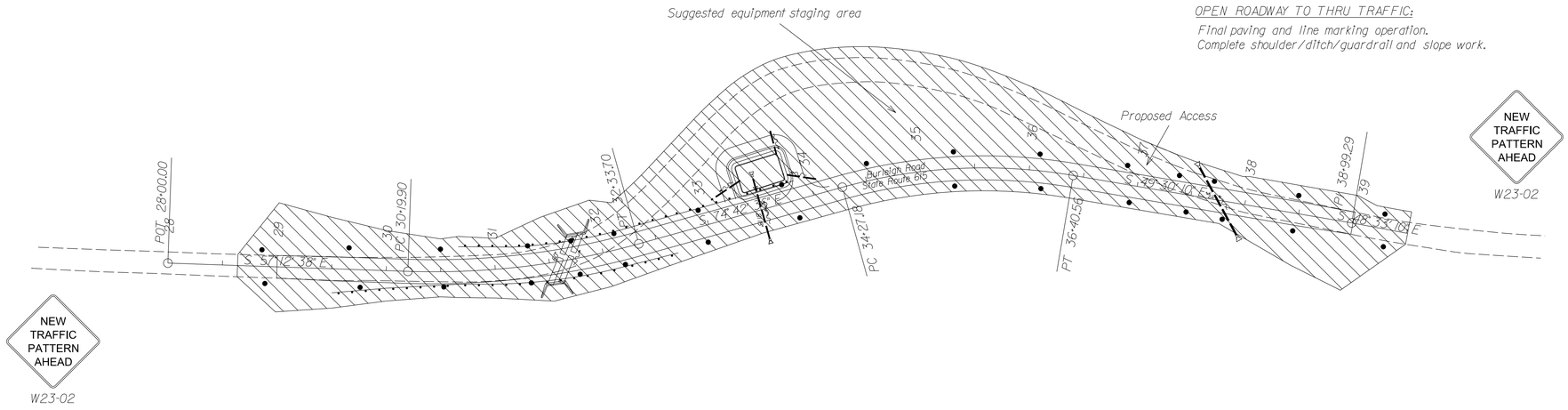
• = Group 2 Channelizing Device (Top)

PHASE 2 (if necessary)

DETOUR OF TRAFFIC: 3 weeks See Detour Signing Sheet IK(2)

SUGGESTED SEQUENCE OF OPERATIONS:
Place additional drainage and erosion & sediment controls.
While placing D605, construct road transitions.
Place roadway items - pavement structure to IM-19.0A.
Set up temporary traffic control as necessary.

OPEN ROADWAY TO THRU TRAFFIC:
Final paving and line marking operation.
Complete shoulder/ditch/guardrail and slope work.



	TTC DETAILS - SEQUENCE OF CONSTRUCTION	
PHASE	SEQUENCE	TTC
2	Place additional E&S controls. Complete all road/paving items. Complete guardrail/shoulder/ditch and slope work. Remove E&S controls, seed all areas.	TTC-4.0 Stationary Operation on a Shoulder TTC-23.0 Lane Closure on a Two-Lane Roadway using Flaggers

SCALE	PROJECT	SHEET NO.
0 50' 100'	XXXX-XXX-XXX	IJ(4)

Cell Revised 12/11/12

FIGURE 2H - 14 SAMPLE TRAFFIC MAINTENANCE PLAN (TMP) SHEET

8/27/2014
8:36:52 AM

General Notes Sheet.dgn
Plotted By: stewartwillis

PROJECT MANAGER _____
SURVEYED BY, DATE _____
DESIGN BY _____
SUBSURFACE UTILITY BY, DATE _____

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	xx	XXXX-XXX-XXX, RW-20X, C-50X	2

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

GENERAL NOTES

GRADING

G-1 The grade line denotes top of finished pavement unless shown otherwise on typical sections or plans.

G-3 Earthwork quantities on this project are based on anticipated settlement and may require adjusting during construction. Payment will be made only for quantities actually moved.

G-4 The cost of removal and disposal 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: sidewalks, curb, curb and gutter, drainage pipes.

G-5 The excavation of unsuitable material as specified on these plans is based on previously conducted subsurface soil investigation. If, during construction, it is deemed necessary to change the depth more than one foot, or the limits of such excavation, such change is to be made at the direction of the Engineer and measurement and payment shall be made in accordance with Section 303 of the applicable VDOT Road and Bridge Specifications.

G-6 The borrow material for this project shall be a minimum CBR_____ or as approved by the Materials Engineer.

G-7 Material from regular excavation which is suitable for stabilization with hydraulic cement (lime) shall be placed in the top portion of the subgrade.

DRAINAGE

D-1 The locations of all drainage structures shown on these plans are approximate only, with the exception of structures showing specific stations, special design bridges and storm sewers. The "H" dimensions shown on the plans for drop inlets and junction boxes and the L. F. dimensions shown for manholes are approximate.

D-2 If, during construction, the culvert invert elevations shown on the plans are found to differ significantly from the elevations of the stream or swale in which the culvert shall be placed, the Engineer will confer with the Project Drainage Designer before installing the culvert.

D-6 Pipes shall conform to any of the allowable types shown on sheet number 2D , within the applicable fill height limitations. For strength, sheet thickness, or class designation; available sizes; height of fill limitations; and method of bedding required for a particular height of cover, see Standards PC-1 and PB-1. Structural plate pipe may be substituted for corrugated pipe of the same size and a structural plate pipe arch may be substituted for a corrugated pipe arch of the same size, provided the substitution complies with the applicable VDOT Road and Bridge Standards PC-1 and PB-1.

D-10 The proposed riprap may be omitted by the Engineer if the slope designated for placement of riprap is found to be comprised of solid rock or closely consolidated boulders with soundness, size and weight equal to, or exceeding, the specifications for the proposed riprap.

D-12 All existing drainage facilities labeled "To Be Abandoned" shall be left in place, backfilled and plugged in accordance with the VDOT Road and Bridge Standard 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 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-15 Drop inlets with "H" less than standard minimum shall be considered as standard and quantities adjusted accordingly. Where noted on the plans or as directed by the Engineer, concrete pipe with less than standard minimum cover shall have bedding material placed up to half the pipe diameter and shall be minimum of Class III.

D-16 When CG-6 or CG-7 is specified on a radius (such as at a street intersection), the Engineer may approve a decrease in the cross slope of the gutter to facilitate proper drainage.

PAVEMENT

P-1 If any settlement occurs in concrete pavement adjacent to bridges prior to acceptance of the project by the Department, the contractor shall restore the pavement to the original grade either by the mud jack method or by replacing the pavement. In the event the pavement cracks or becomes damaged, it shall be replaced, if directed by the Engineer.

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

I-1 Two Reflectorized Railroad Grade Crossing Crossbuck Signs, complete with posts, SHALL BE FURNISHED AND ERECTED BY THE RAILROAD COMPANY.

I-2 Two Reflectorized Railroad Advance Warning Signs W10-1 complete with two approved posts, WILL BE FURNISHED AND ERECTED BY STATE FORCES.

I-3 Service Roads are to be constructed, and private entrances connected thereto prior to the permanent severing of private entrances by other phases of the proposed construction.

I-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-5 That portion of the right of way lying within the Clear Zone or within a minimum of 10 feet from the edge of pavement or surfacing or within the limits of the construction slopes beyond 10 feet, shall be cleared and grubbed in accordance with the applicable VDOT Road and Bridge Specifications, Section 301, where sufficient right of way or construction easement is provided.

I-6 Certain trees shall be preserved as noted on plans or as directed by the Engineer.

I-7 Where Standard slope roundoffs would damage trees, bushes or other desirable vegetation, they shall be omitted when so ordered by the Engineer.

I-8A Clearing and grubbing shall be confined to those areas needed for construction. No trees or shrubs in ungraded areas on this project shall be cut without permission of the Engineer.

I-10 St'd. RM-1 Right of Way monuments shall be set by the Contractor.

I-13 Salvaged guardrail materials not used in the new construction shall become the property of the Department and the Contractor shall deliver and store, at no additional cost to the Department, the unused materials at the Department's maintenance yard at _____ during the Department's normal working hours.

I-14 Salvaged guardrail materials not used in the new construction shall become the property of the Contractor and shall be disposed of at a licensed landfill, recycled or be retained by the Contractor.

I-15 Where Guardrail GR-2 or GR-8 is shown on the plans and in the summaries, either new guardrail or reused guardrail beam shall be used as provided elsewhere in these plans. The total quantities have been proportioned between new and reuse guardrail based on an estimate of the amount of existing beam that is reuseable. The Contractor will be paid for the actual quantities of Guardrail, St'd. GR-2 or St'd. GR-8 or Reuse Guardrail, St'd. GR-2 or St'd. GR-8 as determined 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 ____.

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 sheets ... thru ... and as directed by the Engineer.

I-19 The following sources, under contract with VDOT, have provided information on this project:

Utility Designation - So-Deep Inc.

If questions or problems arise during construction, please contact the Project Designer. DO NOT CONTACT THE OUTSIDE SOURCES.

I-20 The Official Electronic .tif 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 construction of the project electronic files will be available to the prime contractor after award of the contract.

I-21 All electonic plan assemblies will include the construction plans in two formats: .tif files and MicroStation format (.dgn) files. Only the .tif 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. 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 levels are turned on. A MicroStation Software license is required to be able to read these files.

EROSION AND SILTATION CONTROL

E-1 The temporary erosion and siltation control items shown on the E&S Control Plan are intended to provide a general plan for controlling erosion and siltation within the project limits. The E&S Control Plan is based on field conditions at the time of plan development and an assumed sequence of construction. The contractor, in conjunction with the Project Engineer and/or Environmental Monitor, shall adjust the location, quantity and type of erosion and siltation control items required based on the actual field conditions encountered at the time of construction and the selected sequence of construction.

E-2 The areas beyond the project's construction area are to be protected from siltation. Perimeter controls such as filter barrier, silt fence, diversion dikes, turbidity curtains, etc. shall be installed prior to any grubbing operations or other earth moving activities.

STORMWATER MANAGEMENT

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-2 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 4' and backfilled with a material meeting the AASHTO Type A-4 or 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 15' 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.

MAINTENANCE OF TRAFFIC

Maintenance of traffic during construction shall be in accordance with section 104.04 of the 2002 VDOT Road and Bridge Specifications.

There will be no lane closures during rush hours (5:30 AM to 9:00 AM and 3:30 PM to 6:00 PM) unless otherwise directed by the engineer.

Lane closures or work that restricts traffic flow will not be permitted on Saturdays, Sundays & holidays from noon the day before a holiday until noon the day after a holiday unless approved by the engineer. When a holiday falls on a Friday, lane closures will not be permitted from noon on Thursday until noon on Monday. When a holiday falls on a Monday, lane closures are not permitted from noon on Friday until noon on Tuesday.

Once the surface course is placed, no equipment exceeding 4 tons is to be put on the trail and must be approved by the engineer.

	PROJECT	SHEET NO.
	XXXX-XXX-XXX	2

FIGURE 2H - 15 SAMPLE GENERAL NOTES SHEET

12/20/2016
8:45:22 AM

Typical Section 1.dgn
Plotted By: stewartwillis

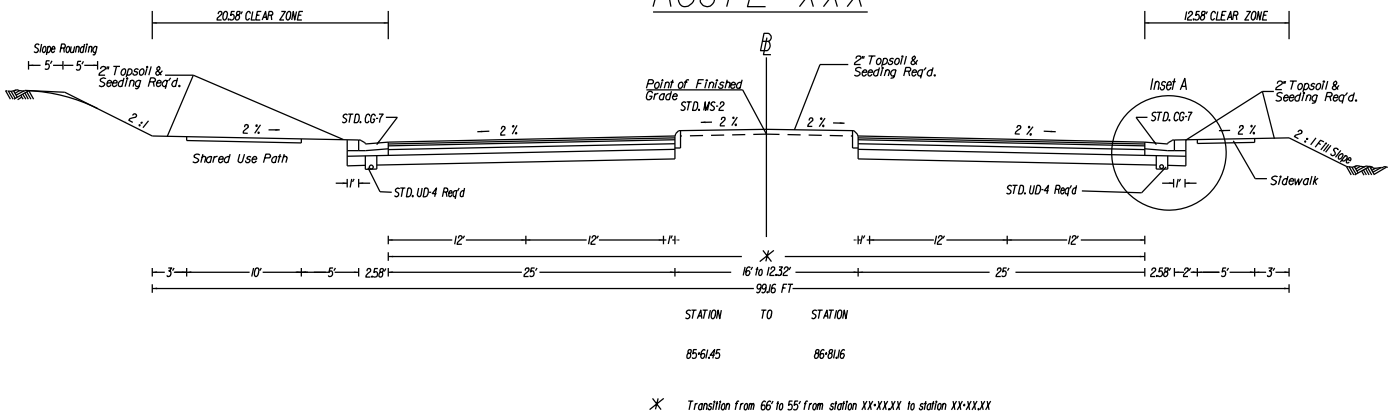
PROJECT MANAGER
SURVEYED BY, DATE
DESIGNED BY
SUBSURFACE UTILITY BY, DATE

TYPICAL SECTION SHEET

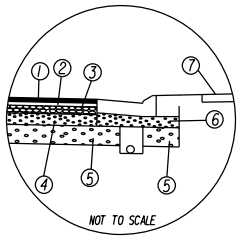
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED	STATE	FEDERAL AID PROJECT	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.		XXX	XXXX-XXX-XXX, R-20X C-50X	2A

ROUTE XXX

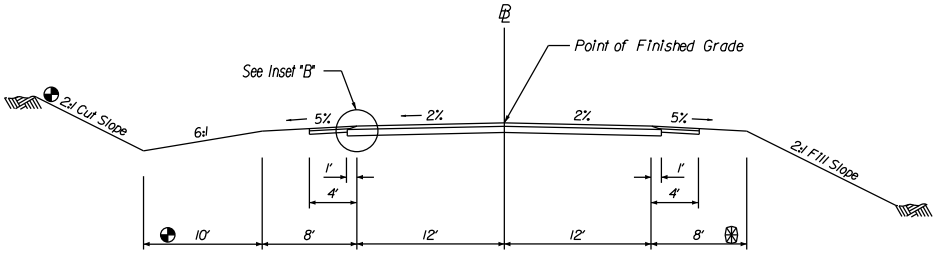


✳ Transition from 66' to 55' from station XX+XX.XX to station XX+XX.XX



1. ASPHALT CONC. TYPE SM-12.5A @ 220 LBS PER SQ.YD.
2. 2" ASPHALT CONC. TYPE IM-19.0A
3. 4" ASPHALT CONC. BASE TYPE BM-25.0A
4. 6" AGGREGRATE BASE MATERIAL, TYPE I, NO. 21B
5. 10" SELECT MATERIAL (SEE SPECIAL PROVISION)
6. 4" & VAR AGGRREGRATE BASE MATERIAL, TYPE I, NO. 21B
7. 4" HYDRULIC CEMENT CONCRETE SIDEWALK
8. ASPHALT CONC. TYPE SM-9.5A @ 165 LBS PER SQ.YD.

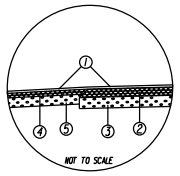
ROUTE XXX



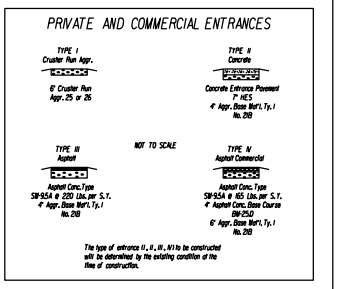
Stations: XX+XX.XX to XX+XX.XX
(Stations XX+XX.XX to XX+XX.XX to be resurfaced)

✳ 11' Shoulder where guardrail is required.

◒ Use 1.5:1 Cut Slope W/No Slope Rounding and 6' Ditch Rt. of Station XX+XX.XX to XX+XX.XX



1. ASPHALT CONCRETE TYPE SM-9.5D @ 165 LBS PER SQ. YARD
2. 7 IN ASPHALT CONCRETE BASE COURSE TYPE BM 25.0
3. 10 IN AGGREGATE BASE MATERIAL, TYPE I, NO. 21B
4. 3 IN ASPHALT CONCRETE BASE COURSE TYPE BM 25.0
5. 6 IN AGGREGATE BASE MATERIAL, TYPE I, NO. 21B



PLAN NO.	PROJECT	FILE NO.	SHEET NO.
	XXXX-XXX-XXX		2A

FIGURE 2H - 16 SAMPLE TYPICAL SECTION SHEET

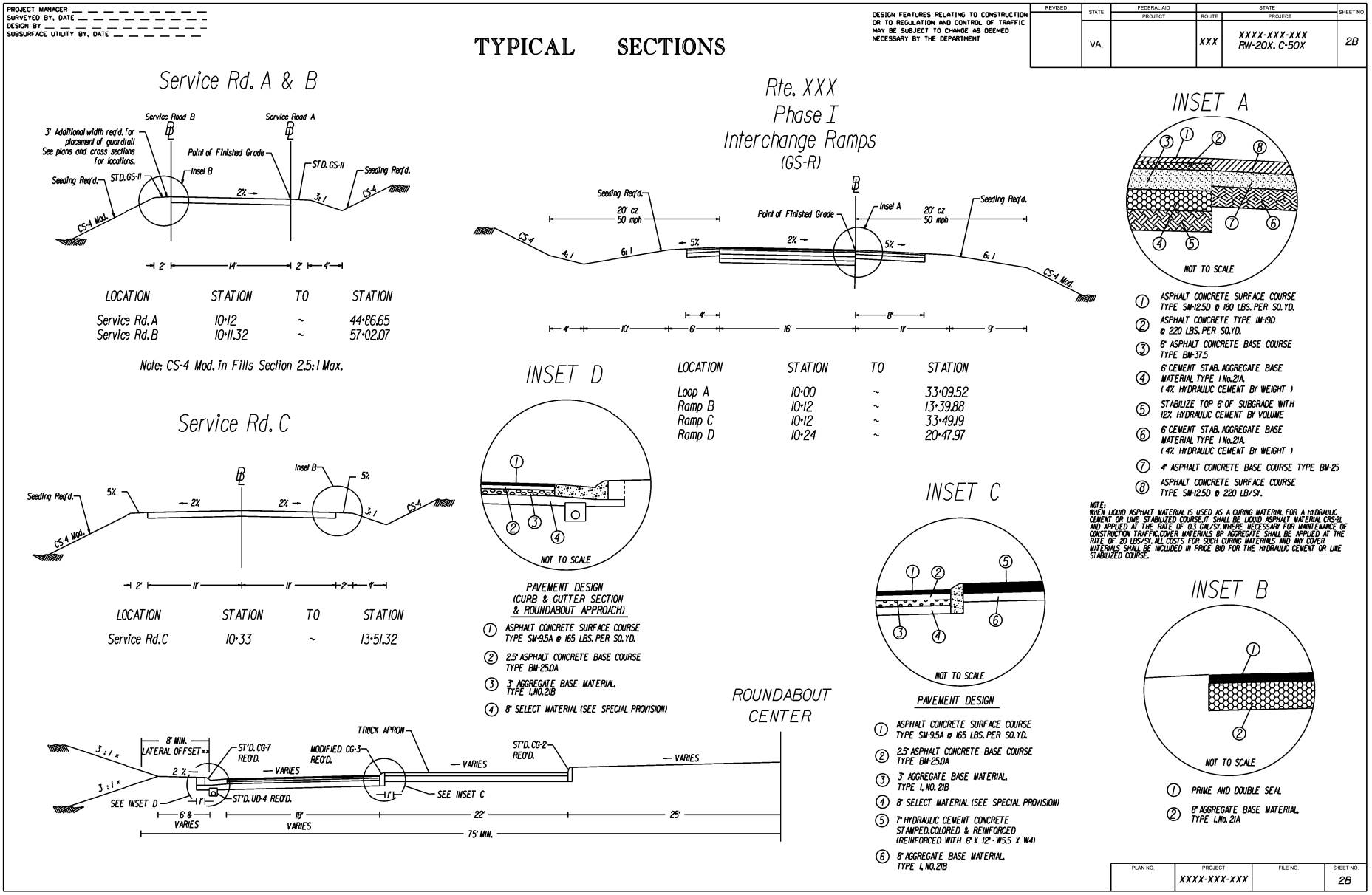


FIGURE 2H - 17 SAMPLE TYPICAL SECTION SHEET

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Drainage Summary Sheet.dgn
Plotted By: stewartwillis

PROJECT MANAGER <Project_Mgr._Name_(000).000-0000_(District)>
SURVEYED BY, DATE <Surveyor_Name_(000).000-0000_(District)>
DESIGN BY <Designer_Name_(000).000-0000_(District)>
SUBSURFACE UTILITY BY, DATE <Surveyor_Name_(000).000-0000_(District)>

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	XXX	XXXX-XXX-XXX,C-50X	2C

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

DRAINAGE SUMMARY

PROJECT	LOCATION	COVER	CONCRETE PIPE						HDPE PIPE				JACKED PIPE		PIPE		END SECTIONS ES-1				DROP INLET DI-12 TYPE I		A3 CL1 MISC. CONCRETE (INCLUDES ENDWALLS)	MINOR STRUCTURE EXCAV., PIPE CULVERT	BEDDING MATERIAL AGGR. NO.25 OR 26	MANHOLES		EROSION CONTROL STONE		BACKFILL MATERIAL		SEE NOTE(S)
			15 In	18 In	30 In	36 In	42 In	60 In	12 In				60 In		60 In		18 In	30 In	36 In	L-4'						MANHOLE MH-1 OR 2	MH-1 FRAME & COVER	EC-1, CLASS I		CLASS I ⊗	CLASS II ⊗	
			LF	LF	LF	LF	LF	LF	LF				LF		LF		EA	EA	EA	EA		EA	CY	CY	TON	LF	EA	TON		CY	CY	
0095-96A-105,C-504	3-1	15						104															8.5	435	53.4			47.9		34.4	84.2	Std. 60" EW-2 Req'd.
	3-2	7											168																			See Special Provisions
	3-3	13.0						62															8.5	260	19.5			47.9		22.2	54.3	Std. 60" EW-2 Req'd.
	3-4	5.4					191																		29.5			24.1		37.6	98.0	
	3-5																									9.3	1					
	3-5A	5.3					84																		14.6					18.6	48.4	
	3-6																									9.9	1					
	3-6A	2.7	24																						3.0					1.3	4.9	Connect To Exist. Pipe
	3-7	6.5				116												1							35.4			18.0		21.7	58.5	
	3-8	5.5			75												1								16.0			12.5		8.1	25.5	
	3-9																				1											
	3-10																									9.3	1					
	3-11	7.0	6																						0.8					0.3	1.2	
	3-14	6.1		23													1								0.8					1.1	3.9	Connect To Exist. Pipe
	3-15								64																			1.0				Cambered (12 Inches)
	3-16								34																			1.0				Cambered (12 Inches)
	3-17								43																			1.0				Cambered (12 Inches)
	3-18	5.3	18																						0.6					1.0	3.7	Connect To Exist. Pipe
	3-20	4.1		10																					1.4					0.6	2.3	Connect To Exist. Pipe
	3-21								87																			1.0				Cambered (12 Inches)
	3-22								92																			1.0				Cambered (12 Inches)
	3-23	18.2													48										14.0			47.9		15.9	38.9	Temporary Pipe
	SUBTOTAL SHEET 3		48	33	75	116	275	166	320				168		48		1	1	1		1		17	695	189	28.5	3	203.8		162.8	423.8	

ALLOWABLE PIPE TYPES (UNLESS OTHERWISE SHOWN ON PLANS) SEE STANDARD DRAWING PC-1 FOR HEIGHT OF COVER LIMITATIONS FOR EACH TYPE					
PIPE LOCATION	CONCRETE	UNCOATED CORRUGATED STEEL	CORRUGATED ALUMINUM ALLOY	POLYTHLENE CORRUGATED	HDPE
ALL ROADWAYS	X				
JACKED PIPE	X				
TEMPORARY DRAINAGE SYSTEM	X	X	X	X	X

⊗ DENOTES ITEM(S) TO BE PAID FOR ON BASIS OF PLAN QUANTITIES IN ACCORDANCE WITH CURRENT ROAD AND BRIDGE SPECIFICATIONS.

	PROJECT	SHEET NO.
	XXXX-XXX-XXX	2C

Cell Revised 12/11/12

FIGURE 2H - 18 SAMPLE DRAINAGE SUMMARY SHEET

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Roadside Development.dgn
Plotted By: stewartwillis

PROJECT MANAGER _____
SURVEYED BY, DATE _____
DESIGN BY _____
SUBSURFACE UTILITY BY, DATE _____

ROADSIDE DEVELOPMENT

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	XXX	XXXX-XXX-XXX, C-50X	2D

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

CORE MIX

MIX	LBS./ ACRES	DESCRIPTION
1	▲	✱ 100% CERTIFIED FINE FESCUE
2	▲	100% CERTIFIED TALL FESCUE
3	▲	50% CERTIFIED TALL FESCUE ✱ 50% CERTIFIED FINE FESCUE
4	▲	50% ORCHARDGRASS 50% CERTIFIED KENTUCKY BLUEGRASS
5	▲	100% BERMUDAGRASS
C 1, 2 & 3	▲	CUSTOM MIX
T1	▲	50% CERTIFIED TALL FESCUE 50% BARLEY, WINTER RYE OR WINTER WHEAT
T2	▲	50% FOXTAIL MILLET 50% CERTIFIED TALL FESCUE

ADDITIVES

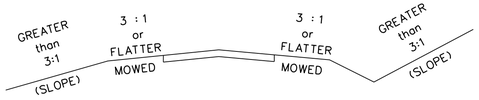
TYPE	LBS./ ACRES	DESCRIPTION
A	▲	100% LOVEGRASS
B	▲	100% BARLEY, WINTER RYE OR WINTER WHEAT
C	▲	100% FOXTAIL MILLET
D	▲	100% ANNUAL RYEGRASS
E	▲	100% BLUE GRAMA
F	▲	100% ALFALFA
G	▲	100% WHITE CLOVER
H	▲	✱✱ 100% CROWN VETCH (LEGUME)
I	▲	✱✱ 100% SEPICEA LESPEDEZA (LEGUME)
J	▲	✱✱ 100% BIRDSFOOT TREFOIL (LEGUME)
K	▲	POLLINATOR SEED MIX

✱ FINE FESCUES INCLUDE CHEWINGS, CREEPING RED, HARD, SHEEP. SEE SEEDING SCHEDULE FOR TYPE(S) SPECIFIED FOR THIS PROJECT.

▲ ALL RATES TO BE SPECIFIED BY THE DISTRICT ROADSIDE MANAGER

✱✱ THESE ADDITIVES ARE NOT TO BE USED IN AREAS THAT WILL BE MOWED. (SLOPES 3:1 OR FLATTER)

SECTION OF SEED LOCATIONS



SEEDING SCHEDULE

CODES LISTED IN TABLE REFER TO THE LISTS OF CORE MIXES & ADDITIVES, WHICH SHOW SEED NAMES & APPLICATION RATES FOR THIS PROJECT.	SLOPES SEED MIX WITH ADDITIVE	MOWED SEED MIX WITH ADDITIVE	SLOPES SEED MIX WITH ADDITIVE	MOWED SEED MIX WITH ADDITIVE	SLOPES SEED MIX WITH ADDITIVE	MOWED SEED MIX WITH ADDITIVE	SLOPES SEED MIX WITH ADDITIVE	MOWED SEED MIX WITH ADDITIVE
	SPRING MONTH & DATE		SUMMER MONTH & DATE		FALL MONTH & DATE		WINTER/DORMANT MONTH & DATE	
PROJECT NUMBERS AND/OR LOCATION								
✱ SPECIFIED TYPE(S) OF FINE FESCUE								

NOTES: (PROVIDED BY DISTRICT ROADSIDE MANAGER)

ROADSIDE DEVELOPMENT SUMMARY

PROJECT NUMBERS AND/OR LOCATION DESC.	REGULAR SEED	OVER SEEDING	LEGUME SEED	LEGUME OVER SEEDING	TEMPORARY SEED	⊗ TOPSOIL (CLASS & DEPTH)	LIME	FERTILIZER N NITROGEN	FERTILIZER P PHOSPHORUS	FERTILIZER K POTASSIUM	HECP (TYPE 1)	HECP (TYPE 2)	HECP (TYPE 3)	HECP (TYPE 4)
	LBS.	LBS.	LBS.	LBS.	LBS.	C.Y./ACRES	TONS	LBS.	LBS.	LBS.	S. Y.	S. Y.	S. Y.	S. Y.

⊗ DENOTES ITEM(S) TO BE PAID FOR ON THE BASIS OF PLAN QUANTITIES IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE CURRENT ROAD AND BRIDGE SPECIFICATIONS.

	PROJECT	SHEET NO.
	XXXX-XXX-XXX	2D

FIGURE 2H - 19 SAMPLE ROADSIDE DEVELOPMENT SHEET

7/28/2016
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Stormwater Management Summary Sheet.dgn
Plotted By: stewartwillis

PROJECT MANAGER <Project_Mgr_Name_(000).000-0000_(District)>
SURVEYED BY, DATE <Surveyor_Name_(000).000-0000_(District)>
DESIGN BY <Designer_Name_(000).000-0000_(District)>
SUBSURFACE UTILITY BY, DATE <Surveyor_Name_(000).000-0000_(District)>

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) GENERAL INFORMATION SHEET

See Sheet 2 of 3 for Acronyms

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	00	0000-000-000, RW-000 C-000	0

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

The information contained in the SWPPP General Information sheets is intended to comply with the requirements of the VPDES General Permit For Discharges Of Stormwater From Construction Activities (the VPDES Construction Permit) issued July 1, 2014 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, 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.

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

SECTION I GENERAL INFORMATION

1. Activity Description - (insert appropriate text)

2. This land disturbance (construction) activity site is located in (insert the appropriate County/City) and approximately (insert the appropriate number to the nearest one hundredth of an acre) acres will be disturbed by excavation, grading or other construction activities.

3. (Include one of the following notes as appropriate)
This proposed activity disturbs one acre or greater and requires coverage under the VPDES General Permit For Discharges Of Stormwater From Construction Activities (the VPDES Construction Permit) as issued by the DEQ. A copy of the VPDES Construction Permit (VAR10), the registration information (LD-445 form) and the permit coverage letter received from DEQ shall be maintained with other SWPPP documents for this land disturbing (construction) activity.

This proposed activity disturbs less than one acre and is exempt from coverage under the VPDES General Permit For Discharges Of Stormwater From Construction Activities (the VPDES Construction Permit) as issued by the DEQ.

This proposed activity is exempt from coverage under the VPDES General Permit For Discharges Of Stormwater From Construction Activities (the VPDES Construction Permit) as issued by the DEQ because it is considered a routine maintenance activity (i.e., the proposed activity is intended to maintain the original line and grade, hydraulic capacity or original construction of the project or involves the paving of an existing roadway with a compacted or impervious surface and the reestablishment of associated ditches and shoulders).

XX 4. The location of on-site support facilities that will be covered under the VPDES Construction Permit coverage for this land disturbance (construction) activity shall be provided by the contractor and identified on the record set of plans or in other appropriate contract documents. 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.

XX 5. 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 Construction General Permit coverage letter: (List permit number when applicable)

6. List the surface waters that have been identified as impaired in the DEQ 2012 305(b)/303(d) Water Quality Assessment Integrated Report for sediment, total suspended solids, turbidity, nitrogen or phosphorus. These pollutants are considered benthic impairments:
(List the impaired surface waters, when applicable)

7. Identify the TMDLs where stormwater from construction activities discharges into a watershed with a TMDL waste load allocation established and approved by the State Water Control Board prior to July 1, 2014 for sediment, total suspended solids, turbidity, nitrogen or phosphorus:
(List the TMDL and pollutant(s), when applicable)

8. This land disturbance (construction) activity discharges stormwater to the following surface waters that have been identified as exceptional in Section 9VAC25-260-30 A 3 c of the Virginia Administrative Code:
(List name of surface waters)

9.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 documents) for this land disturbance (construction) activity.

10. 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.

11. (a) List the RLD for the land disturbance activity. (b) The following individual(s) has delegated authority to sign all reports required by the construction permit including the SWPPP (LD445E) and inspection reports. The individual(s) has overall responsibility for environmental matters for the project: (required only for permitted projects)

Name	Position

X 12. The name of the individual(s) responsible for the inspection of the erosion and sediment control and pollution prevention measures on this land disturbance (construction) activity is identified on the LD-445E form which will be maintained with the other SWPPP documents for this land disturbance (construction) activity (Note: Individual(s) shall be certified through the DEQ ESC Inspector Certification Program and shall be knowledgeable in the area of pollution prevention at construction sites and shall be a VDOT employee or an agent working for VDOT.)

X 13. The ESC and P2 inspections for this land disturbing (construction) activity shall follow either Schedule 1 or 2 as defined in Section 107.16(e) of the VDOT Road & Bridge Specifications Special Provision S107J31. Rain gage notes apply only to Inspection Schedule 1.

XX 14. 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 (construction) activity:
(List location of rain gage)

The rain gage shall be observed daily at (insert time) 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.
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.

15. The following VDOT documents serve the purpose of permitted projects, non-permitted projects requiring a SWPPP and non-permitted projects in Chesapeake Bay Preservation Areas (CBPA) with 2,500 S.F. to 1.0 acre of land disturbance as follows:
VDOT LD-445: All projects that require a permit or SWPPP.
VDOT LD-445A: Permitted projects only.
VDOT LD-445B: Permitted projects only.
VDOT LD-445C: All projects that require a permit or SWPPP.
VDOT LD-445D: Permitted projects and CBPA projects reporting a BMP
VDOT LD-445E: All projects that require a permit or SWPPP.
VDOT LD-445F: Emergency work projects (when applicable)
VDOT LD-445G: Permitted and CBPA projects requesting a Water Quality Requirement Exception (when applicable).
VDOT LD-445H: Permitted projects only.
VDOT C-107 Part I and Part II: All projects that require a permit or SWPPP.

SECTION II EROSION AND SEDIMENT CONTROL

1. The following variances to the Virginia ESC Regulations have been approved by the DEQ for this land disturbance (construction) activity: (list all approved variances; include a brief description of the variance, the date approved and the approving DEQ Office)

XX 2. 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 Section 108.03 of the VDOT R&B Specifications and shall be included with the other SWPPP documents for this land disturbance (construction) activity.

3. Directions of stormwater flow and approximate slopes anticipated after major grading activities are identified in the construction plan set (or other such documents) for this land disturbance (construction) activity.

4. 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.

5. 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.

6. 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.

7. 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 III.

XX 8. A record of the dates when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the 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)

9.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 Sections 107.16 and 303.03 of the VDOT R&B Specifications.

10. Nutrients shall be applied in accordance with Sections 603 and 604 of the VDOT Road and Bridge Specifications. Nutrients shall not be applied during rainfall events.

11. 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 (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 business hours.

12. The temporary erosion and siltation control items 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 control items 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) 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.

13. The areas beyond the project's construction area 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.

14. 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.

15. 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.

16. The contractor shall plan and implement his land disturbance operations in order to:
a. Control the volume and velocity of stormwater runoff within the site to minimize erosion.
b. Control the peak flow rates, volume and velocity of stormwater discharges to minimize erosion at outlets and in downstream channels.
c. Minimize the amount of soil exposed.
d. Minimize the disturbance of steep slopes.
e. Minimize sediment discharge from the site.
f. Provide and maintain natural buffers around surface waters, direct stormwater runoff to vegetated areas and maximize stormwater infiltration, unless infeasible.
g. Minimize soil compaction (except in those areas where compaction is required by the contract documents) and preserve topsoil where feasible.

XX 17. 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.

18. Soil stockpiles temporarily placed within the project area or on VDOT right of way or easement shall be stabilized or protected with sediment trapping measures.

19. 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.

PROJECT	SHEET NO.
0000-000-000	0

Cell Revised 12/1/12

FIGURE 2H - 20 SAMPLE STORMWATER POLLUTION PREVENTION PLAN SHEET 1 0F 3

7/28/2016
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Stormwater Management Summary Sheet.dgn
Plotted By: stewartw1115

PROJECT MANAGER <Project Mgr. Name (000) 000-0000, (D)istrict>
SURVEYED BY, DATE <Surveyor Name (000) 000-0000 (D)istrict>
DESIGN BY <Designer Name (000) 000-0000 (D)istrict>
SUBSURFACE UTILITY BY, DATE <Surveyor Name (000) 000-0000 (D)istrict>

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) GENERAL INFORMATION SHEET

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	00	0000-000-000, RW-000 C-000	0

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

The information contained in the SWPPP General Information sheets is intended to comply with the requirements of the VPDES General Permit For Discharges Of Stormwater From Construction Activities (the VPDES Construction Permit) issued July 1, 2014 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, 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.

✳ Denotes information that is to be provided/completed by the VDOT RLD.
✳✳ Denotes information that is to be provided/completed by the contractor.

SECTION III 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 a copies of the VPDES Construction Permit coverage letter (when applicable) and the VPDES General Permit For Discharges Of Stormwater From Construction Activities (when applicable) and those required to be developed by the contractor for pollution prevention associated with any on-site support facilities being included in the VPDES Construction Permit 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 implemented from commencement of land disturbance until termination of VPDES Construction Permit coverage or completion of land disturbance (construction) activities where no VPDES Construction Permit coverage is required.

✳✳ 3. For all on-site support facilities that will be included in the VPDES Construction Permit coverage for this land disturbance (construction) activity, the contractor shall develop a SWPPP in accordance with, but not limited to, Section 106.08, 107.02 and 107.16 of the VDOT Road and Bridge Specifications. The SWPPP for the on-site 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, storageareas 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. By completing and submitting the SWPPP Certification form LD-445E, the RLD, or his authorized representative, certifies that all documents identified herein to be supplied by the contractor will be reviewed, approved (as applicable) and included with the other SWPPP documents for this land disturbance (construction) activity prior to start of work in those areas identified by such information.

5. For those land disturbing (construction) activities requiring coverage under the VPDES Construction Permit, the SWPPP shall be made available for review upon the request of the DEQ, the EPA, the VSMP Authority, the VESCP Authority, local government officials or the operator of a municipal separate storm sewer system (MS4) receiving discharge from the construction site.

✳ 6. For those land disturbing (construction) activities requiring coverage under the VPDES Construction Permit, the VDOT RLD shall post, or have posted, a copy of the General Permit 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. 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.

7. 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 VDOT and shall be scheduled during normal business hours and no less than once per month.

ACRONYMS

BMP - Best Management Practice
DEQ - Department of Environmental Quality
EPA - U.S. Environmental Protection Agency
ESC - Erosion and Sediment Control
IIM - Instructional and Informational Memorandum
R&B - Road and Bridge
RLD - Responsible Land Disturber
SWM - Stormwater Management
SWPPP - Stormwater Pollution Prevention Plan
TMDL - Total Maximum Daily Load
VDOT - Virginia Department of Transportation
VPDES - Virginia Pollutant Discharge Elimination System
VSMP - Virginia Stormwater Management Program
VESCP - Virginia Erosion and Sediment Control Program

SECTION IV POST CONSTRUCTION STORMWATER MANAGEMENT

Choose the appropriate note 1 or 2 that is applicable to the proposed post construction SWM Plan for this land disturbance (construction) activity. If note 1 is applicable, then choose the appropriate note(s) 1a through 1b). Delete, strikethrough or mark as NA those notes not applicable.)

1. This land disturbance (construction) activity is grandfathered under Section 9VAC25-870-48 of the VSMP Regulations and utilizes the Part IIC technical criteria (i.e., Performance or Technology Based, MS 19, etc.) in Section 9VAC25-870-93 et.seq. of the VSMP Regulations. As such:

   a. This land disturbance (construction) activity does not require permanent water quality SWM facilities because the post development percent impervious of the site is less than 16%.

   b. The following outfalls do not require a permanent water quality SWM facility because the post development percent impervious of the site draining to each noted outfall is less than 16%. (List all applicable locations)

2. This land disturbance (construction) activity utilizes the Part IIB technical criteria (i.e., Runoff Reduction Method, Energy Balance Equation, etc.) in Section 9VAC25-870-62 et seq. of the VSMP Regulations.

3. An exception for (number) pounds of phosphorus removal has been granted for this land disturbance (construction) activity by the DEQ in its letter dated (date).

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

5. The permanent onsite SWM facilities or offsite strategies proposed to meet the water quality/quantity requirements for this land disturbance (construction) activity are listed in Section VI.

6. 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.

7. 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.

SECTION V - POLLUTION PREVENTION PLAN

1. The following non-stormwater discharges from this land disturbing (construction) activity and any on-site support facilities are prohibited:
   a. Wastewater from concrete washouts.
   b. Wastewater from the washout and cleanout of stucco, paint, form 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 on-site support facilities are allowed when discharged in compliance with the VPDES Construction Permit:
   a. Discharges from fire fighting activities.
   b. Fire hydrant flushings.
   c. Waters used to wash vehicles or equipment where soaps, solvents or detergents have not been used and the wash water has been filtered, settled or similarly treated prior to discharge.
   d. Water used to control dust that has been filtered, settled or similarly treated prior to discharge.
   e. Potable water sources including uncontaminated waterline flushings.
   f. Routine external building wash down where soaps, solvents or detergents have not been used and the wash water has been filtered, settled or similarly treated prior to discharge.
   g. Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (or where all spilled or leaked material has been removed prior to washing), where soaps, solvents or detergents have not been used and where the wash water has been 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 where flows are not contaminated with process materials such as solvents.
   k. Uncontaminated excavation dewatering, including dewatering trenches and excavations that have been filtered, settled or similarly treated prior to discharge.
   l. Landscape irrigation.

✳✳ 3. The contractor shall develop a Pollution Prevention Plan to address any of his on-site 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 106.08, 107.02 and 107.16 of the VDOT Road and Bridge Specifications and shall include a narrative with appropriate plan detail and shall be provided on standard 8.5 x 11 inch paper or larger 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 practice or practices for each pollutant-generating activity.
   e. Describe the pollution prevention practices and procedures that will be implemented to:
      1) Prevent and respond to leaks, spills, and other releases, including procedures for expeditiously stopping, containing, and cleaning up spills, leaks, and other releases, and procedures for reporting leaks, spills, and other releases in accordance with Section 107.16 of the VDOT Road and Bridge Specifications and the requirements within the VPDES Construction Permit.
      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 leak-proof container or leak-proof settling basin. The container or basin shall be 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.
      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, and sanitary wastes.
      8) Address any other discharge from any potential pollutant-generating activity not listed herein.
      9) 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.

Revised August 2016

PROJECT	SHEET NO.
0000-000-000	0

Cell Revised 12/11/12

FIGURE 2H - 21 SAMPLE STORMWATER POLLUTION PREVENTION PLAN SHEET 2 0F 3

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Stormwater Management Summary Sheet.dgn
Plotted By: stewartwillis

PROJECT MANAGER <Project Mgr. Name (000) 000-0000, (District)>
SURVEYED BY, DATE <Surveyor Name (000) 000-0000 (District)>
DESIGN BY <Designer Name (000) 000-0000 (District)>
SUBSURFACE UTILITY BY, DATE <Surveyor Name (000) 000-0000 (District)>

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	00	0000-000-000, RW-000 C-000	0

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) GENERAL INFORMATION SHEET

The information contained in the SWPPP General Information sheets is intended to comply with the requirements of the VPDES General Permit For Discharges Of Stormwater From Construction Activities (the VPDES Construction Permit) issued July 1, 2014 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, 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.

✳ Denotes information that is to be provided/completed by the VDOT RLD.
✳✳ Denotes information that is to be provided/completed by the contractor.

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

ACRONYMS

BMP - Best Management Practice
DEQ - Department of Environmental Quality
EPA - U.S. Environmental Protection Agency
ESC - Erosion and Sediment Control
IIM - Instructional and Informational Memorandum
R&B - Road and Bridge
RLD - Responsible Land Disturber
SWM - Stormwater Management
SWPPP - Stormwater Pollution Prevention Plan
TMDL - Total Maximum Daily Load
VDOT - Virginia Department of Transportation
VPDES - Virginia Pollutant Discharge Elimination System
VSMP - Virginia Stormwater Management Program
VESCP - Virginia Erosion and Sediment Control Program

SECTION VI - PERMANENT BMP INFORMATION △

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

INSTALLED BMP INFORMATION
Table A
(VDOT Owned/Operated)

Plan Sheet(s)	BMP Type (See Table 1 and 3)	County or City	Latitude/Longitude (1) LAT	Latitude/Longitude (1) LONG	State Hydrologic Unit Code (7)	Receiving Stream Name (2)	Name of Impaired Water (9)	Acres Treated Per BMP (3) Impervious	Acres Treated Per BMP (3) Pervious	Acres Treated Per BMP (3) TOTAL	BMP Maintenance ID Number (10)	BMP Maintenance Manual (11) SECTION	BMP Inspection Manual (11) SECTION

ALTERNATIVE BMP INFORMATION
Table B

BMP Type (See Table 2)	Name of Nutrient Bank or Broker (6)	County or City (5)	Latitude/Longitude (1) (5) LAT	Latitude/Longitude (1) (5) LONG	State Hydrologic Unit Code (5) (7)	Project Acres Treated Per BMP (3) Impervious	Project Acres Treated Per BMP (3) Pervious	Project Acres Treated Per BMP (3) TOTAL	Nutrient Credits (lbs./acre/year) Acquired (3) (6)

( ) See note referenced by number in parentheses.

Table 1: Permanent BMP Types (1999 Va. SWM Handbook)
Bio-Retention Basin
Bio-Retention Filter
Constructed Stormwater Wetlands
Extended Detention Basin
Extended Detention Basin Enhanced
Grassed Swale
Infiltration Basin
Infiltration Trench
Manufactured Treatment Device (MTD) (8)
Retention Basin I
Retention Basin II
Retention Basin III
Sand Filter
Vegetated Filter Strip
Other Approved Types (List Type)

Table 2: Alternative BMP Types
Comprehensive SWM Plan (Regional) Facility
Pollutant Loading Pro Rata Share Program
Purchase of Nutrients Credits
Other Approved Options (List Type) (4)

Table 3: Permanent BMP Types (BMP Clearing House)
Sheet Flow to Vegetated Filter Strip
Grass Channel
Soil Compost Amendment
Permeable Pavement
Infiltration Practice
Bioretention
Dry Swale
Wet Swale
Filtering Practice
Constructed Wetlands
Biorention Conservation
Extended Detention Pond
Wet Pond
Manufactured Treatment Device (MTD)(8)
Other Approved Types (List Type) (4)

NOTES:
(1) In decimal degrees to the nearest one ten-thousandth of a degree.

(2) For streams with no names, list "(Unnamed Tributary to (closest stream name)".

(3) Show acres treated to the nearest one tenth or pounds purchased to the nearest one hundredth.

(4) Include agreements with off-site BMP owners.

(5) Information pertains to the alternative BMP option location, where applicable. Exception - Not required for nutrient credit purchase option.

(6) Applies to the purchase of nutrient credits only.

(7) Virginia 6th Order HUC (VAHU6) Example - YO30.

(8) Final approved shop drawings of Manufactured Treatment Devices (MTDs) are to be included with the BMP information submitted with the LD-445D form.

(9) List the name of any impaired water to which the BMP discharges. The determination of impaired water shall be based on those streams listed as impaired in the DEQ 2012 305(b)/303(d) Water Quality Assessment Integrated Report and shall be the first named waterbody to which the BMP discharges. The impaired waters are those impaired by sediment, total suspended solids, turbidity, nitrogen or phosphorus. These pollutants are considered benthic impairments.

(10) BMP Maintenance ID Number is to be assigned by the District Infrastructure Manager at project completion.

(11) Provide the section of each manual that pertains to the type of BMP. The manual location is not provided for this sample sheet.
Example: Chapter 4 would be noted for both the inspection and maintenance manuals for a Bioretention II infiltration BMP.

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

Revised August 2016
Sheet 3 of 3

	PROJECT	SHEET NO.
	0000-000-000	0

Cell Revised 12/11/12

FIGURE 2H - 22 SAMPLE STORMWATER POLLUTION PREVENTION PLAN SHEET 3 0F 3

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ESC Summary Sheet.dgn
Plotted By: stewartwillis

PROJECT MANAGER <Project_Mgr._Name_(000)_000-0000_(District)> _____
SURVEYED BY, DATE <Surveyor_Name_(000)_000-0000_(District)>_____
DESIGN BY <Designer_Name_(000)_000-0000_(District)>_____
SUBSURFACE UTILITY BY, DATE <Surveyor_Name_(000)_000-0000_(District)>_____

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	XXX	XXXX-XXX-XXX,C-50X	2D

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

EROSION AND SEDIMENT CONTROL SUMMARY

	Sheet Number	Rolled Erosion Control Product (RECP), Temporary Std. EC-2				Rolled Erosion Control Product (RECP), Permanent Std. EC-3			Rock Check Dams Std. EC-4		Temporary Silt Barriers Std. EC-5			Inlet Protection Std. EC-6		Sediment Basin Excavation (For use with Typical Sediment Trap Std. EC-7)	Temporary Sediment Basin Excavation (For use with sediment basins)	Dewatering Basin (Std. EC-8)	Temporary Diversion Dike (Std. EC-9)	Slope Drain (Temporary Berm & Slope Drain Std. EC-10)	Eros. Control Stone Cl. I, EC-1 (For use with Std. EC-10)	Stabilized Construction Entrance (Std. EC-11)	Temporary Diversion Channel Std. EC-12			Temporary Vehicular Watercourse Crossing (Std. EC-14)	Slope Interrupter (Std. EC-15)	Erosion Control Mulch	Temporary Sediment Riser Pipe (size)	Geotextile Fabric	Turbidity Curtain, Pervious	Turbidity Curtain, Impervious	Siltation Control Excavation		
		RECP, Std. EC-2, Ty. I	RECP, Std. EC-2, Ty. 2	RECP, Std. EC-2, Ty. 3	RECP, Std. EC-2, Ty. 4	RECP, Std. EC-3 Ty. I	RECP, Std. EC-3 Ty. 2	RECP, Std. EC-3 Ty. 3	Check Dam, Rock Ty. I	Check Dam (Rock) Ty. II	Temp. Filter Barrier	Temp. Silt Fence, Ty. A	Temp. Silt Fence, Ty. B	Inlet Protection, Type A	Inlet Protection, Type B							*	Temp. Dive. Channel Excavation	Temp. Dive. Channel Lining Class A	Temp. Dive. Channel Lining Class B										
		SY	SY	SY	SY	SY	SY	SY	EA	EA	LF	LF	LF	EA	EA	CY	CY	EA	Foot	EA	Ton	EA	CY	SY	SY	EA	LF	SY	LF	SY	LF	LF	CY		
Phase I	3C		48						2			2108										1											2230		
	4B											1914																					326		
	5D			48								660																					113		
	6B											3068																					522		
	7B											1760																					300		
	8B											534																					91		
	9B									20												1											0		
	10C									13		1466										1											250		
	10H																																		
Subtotal	--		48	48					2	33		11510										3											3832		
Phase II	3C(I)		2552						9	57		434		4	6						5						1092		6			225		
	4B(I)		155						2	17					3												708					30		
	5D(I)		233	120						9																	166					3		
	6B(I)		805	230						27		84									9						780		12			24		
	7B(I)		1378	1500		167			1	45				4							5						1210		6			80		
	8B(I)		1105			339			19	44		1420	800	3	3			1			9		790	870		1	1600	700		12			410		
	9B(I)		866						8	46											5						905		6			53		
	10C(I)		432			89	78			35		2130		5	2			1			9		247	445	121	2	942		12			463		
	10H(I)		81				53			36		1300		5	6			2			9		448	991		2	899		12			342		
Subtotal	--		7607	1850		595	131		39	316		5368	800	21	20			4			51		1485	2306	121	5	7402		66			1630		
Total	--		7655	1898		595	131		41	349		16878	800	21	20			4			51	3	1485	2306	121	5	7402		66			5462		

* Not a pay item.

	PROJECT	SHEET NO.
	XXXX-XXX-XXX	2D

Cell Revised 12/11/12

FIGURE 2H - 23 SAMPLE EROSION AND SEDIMENT CONTROL SUMMARY SHEET

9/2/2014
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Pavement Summary Sheet.dgn
Plotted By: stewartwillis

SURVEYED BY _____
SUPERVISED BY _____
DESIGNED BY _____

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

REVISED	STATE	FEDERAL AID PROJECT	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.		XXX	XXXX-XXX-XXX, RW-20X C-50X	2F

PAVEMENT SUMMARY

LOCATION	STATION FROM	STATION TO	PAVEMENT AREA	Surface: Asphalt Conc. Type SM-9.5D @ 175 lbs/sy	Intermediate: Asphalt Conc. Type IM-19.0 A @ 240 lbs/sy	Base: Asphalt Conc. Type BM-25.0A 9 " Depth	Base: Asphalt Conc. Type BM-25.0A 11 " Depth	Drainage Layer: 3" Stabilized Open Graded Material	Aggregate Material No. 25 or 26	Subbase: 6" Aggregate Base Material Type 1 Size No. 21A	Subbase: 6" Aggregate Base Material Type 1 Size No. 21B	Subbase: Hydraulic Cement 4% by Weight ⊗	Select Aggregate Material CBR-30	Milling & Resurfacing: FLEXIBLE PAVEMENT PLANING 1 in / sy	Milling & Resurfacing: Asphalt Conc. Type IM-19.0 A @ 3" 360 lbs/sy	Temporary Pavement: Surface Asphalt Conc. Type SM-9.5D @ 175 lbs/sy	Temporary Pavement: Intermediate Asphalt Conc. Type BM-25.0A @ 240 lbs/sy	Temporary Pavement: Base Aggregate Base Material Type 1 Size 21B @ 6"	Asphalt Conc. Type SM-9.5D @ 2 ton/cy	Asphalt Conc. Type IM-19.0 A @ 2 ton/cy
	FROM	TO	SF	TON	TON	TON	TON	TON	TON	TON	TON	TON	TON	SY	TON	TON	TON	TON	TON	TON
MAINLINE RTE. 28	490+00	527+66.37	284,077	2,762	3,788	15,624		5,749		11,647		468								
MAINLINE RTE. 28 Widening	485+00	490+00	8,593	84	115		578				357									
Rte. 28 Milling & Resurfacing	485+64.56	490+00	22,827	233										5,073	457					
Golf Academy Drive	20+00	20+77.23	1,953	19										326						
Piper Lane	10+38.13	11+25	3,917	38	52	215		79			163									
Hornbaker Road	10+38.16	10+90	4,504	44							10			750						
Chapel Springs	10+00	10+36.80	532	5																
Temporary Pavement			550													6	8	22		
Entrances									47											
Asphalt ramps on Bridge & at Begin of Project																			28	18
Maintain Entrances									300											
TOTAL			326,953	3,185	3,955	15,839	578	5,828	347	11,647	530	⊗ 468	8,671	6,149	457	6	8	22	28	18

⊗ DENOTES : ITEMS TO BE PAID FOR ON BASIS OF PLAN QUANTITIES IN ACCORDANCE WITH CURRENT ROAD AND BRIDGE SPECIFICATIONS.

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
	XXXX-XXX-XXX		2F

FIGURE 2H - 24 SAMPLE PAVEMENT SUMMARY SHEET

9/2/2014
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Grading Summary.dgn
Plotted By: stewartwillis

PROJECT MANAGER_____
SURVEYED BY _____
DESIGN SUPERVISED BY _____
DESIGNED BY _____

GRADING DIAGRAM AND SUMMARY

VDOT Location and Design
Culpeper, Virginia
ROADWAY DESIGN ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	XXX	XXXX-XXX-XXX, C-5OX	2G

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

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

⊢130⊣ Fill — Denotes fill quantity from computer listings and/or manual cross-sections.

⊢130⊣ Cut — Denotes cut quantity from computer listings and/or manual cross-sections. Quantity adjusted for demolition of pavement.

Denotes C.Y. root mat material in cut areas which is included in Regular Excavation quantities.

Denotes C.Y. root mat material removed from fill sections and backfilled with Regular Excavation and/or Borrow Excavation

Ⓒ Denotes C.Y. Regular Excavation from private entrances.

Ⓕ Denotes C.Y. fill for private entrances.

Denotes C.Y. unsuitable material above subgrade which is included in Regular Excavation.

Denotes C.Y. of excavation under the bridge (includes excavation of stream beyond the limits of the bridge).

Denotes C.Y. Excavation from Relocated Stream Channel (not Reg. Ex. see Sh. 21) Not included in CUT quantity.
Denotes C.Y. Minor Structure Excavation.

Denotes C.Y. existing pavement to be removed as "Demolition of Pavement" from fill sections and backfilled with Regular Excavation or Borrow

Denotes C.Y. existing pavement to be removed as Demolition of Pavement in cut sections within construction limits and is not included in the Regular Excavation or CUT quantities.

Denotes C.Y. Haul. (Haul Material shown will be C.Y. of mat'l. not compacted.)

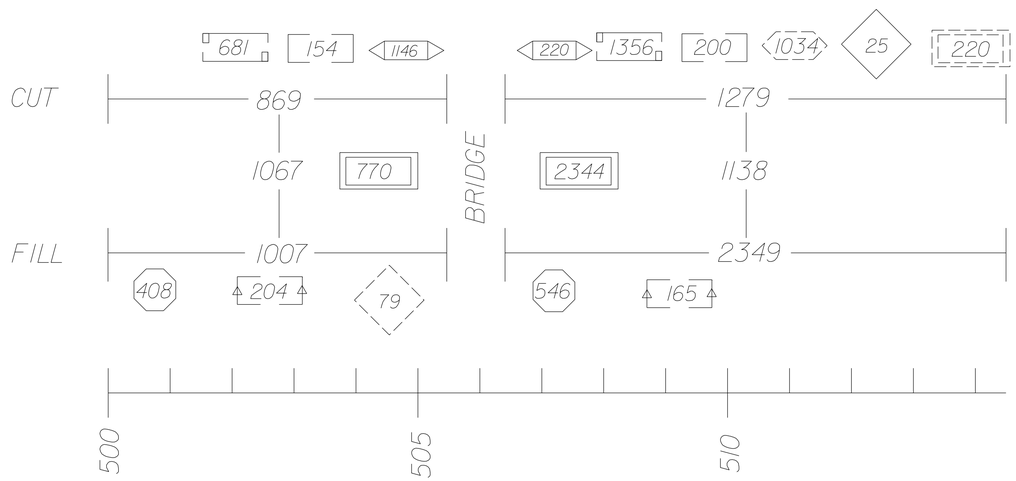
Denotes C.Y. fill for S.W.M. (Stormwater Management Basin)

Denotes C.Y. cut from S.W.M. (Stormwater Management Basin)

Denotes Borrow Material (Min. CBR, 3.6)

Denotes Surplus Material.

Denotes C.Y. fill for drainage ditches.



Location	⊗ Roadway Cut (1) (8)	Root Mat In Cut Sections	Root Mat In Fill Sections	⊗ (9) Excavation Under Bridge	(9) Exc. - Reloc. Channel ⊗	Unsuitable Material: Below Subgrade	Unsuitable Material: Above Subgrade	(10) Roadway Fill (8)	Entrances: Cut	Entrances: Fill	Total Regular Excavation (6)	Total Fill	(2) Demolition of Pavement	(2) Minor Structure Excavation	(5) Stormwater Management Basins: Cut	(2) Stormwater Management Basins: Fill	(6) Borrow (Min. CBR-3.6)
	C.Y.	C.Y.	C.Y.	C.Y.	C.Y.	C.Y.	C.Y.	C.Y.	C.Y.	C.Y.	C.Y.	C.Y.	C.Y.	C.Y.	C.Y.	C.Y.	C.Y.
BEFORE BRIDGE	869	681	408	1146				1211		79	2423	1698	358				770
AFTER BRIDGE	1279	1356	546	220	1034			2514	25		2070	3060	365	220			2344
FORMULAS	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
TOTALS	(3) 2148	(4) 2037	(3) (7) 954	(3) 1366	◯ 1034	(3) (7)	(4)	(7) 3725	(3) 25	(7) 79	4493	4758	723	220		(7)	3114

FORMULAS

Roadway Cut (C) = Unadjusted Cut from Computer Listings or Manual Cross-Sections minus (-) Demolition of Pavement.

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

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

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

Borrow (S) = [N - ([C + F + G + K + P + Q - D - I]x Compaction Factor)] $\frac{\%}{\%}$ Compaction Factor for Borrow Site

(Embankment) (S) = N - (C + F + K + P + Q - D - I) (Embankment = Total Fill - Usable Cut) Estimated Material to be obtained off-site.

The borrow quantity shown was computed on the basis of the average shrinkage or swell factor for the general vicinity of the project. The contractor will be responsible for determining the actual factor for the site(s) from which he proposes to secure borrow material needed to complete this project.

The embankment quantity shown has not been adjusted for shrinkage or swell factors. The contractor will be responsible for determining the effect of the shrinkage or swell factor of the embankment material, and no adjustment will be made in pay quantities for this factor. The contractor shall determine the actual quantity of embankment material needed to complete this project.

	PROJECT	SHEET NO.
	XXXX-XXX-XXX	2G

FIGURE 2H - 25 SAMPLE GRADING DIAGRAM AND SUMMARY SHEET

9/2/2014
9:10:46 AM

Incidental Summary Sheet.dgn
Plotted By: stewart.willis

SURVEYED BY _______________
SUPERVISED BY _______________
DESIGNED BY _______________

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

REVISED	STATE	FEDERAL AID PROJECT	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.		XXX	XXXX-XXX-XXX, RW-20X C-50X	2H

INCIDENTAL SUMMARY

SHEET NO.	MOBILIZATION	CONSTRUCTION SURVEYING	CLEARING & GRUBBING ⊗	ST'D COMBINATION CURB & GUTTER CG-7 ⊗	RADAIL COMBINATION CURB & GUTTER CG-7 ⊗	R/W MONUMENT RM-2	ST'D CURB CG-2 ⊗	RADIAL CURB CG-2 ⊗	CG-12 DETECTABLE WARNING SURFACE ⊗	DEMOLITION OF PAVEMENT ⊗	ST'D COMBINED CURB & GUTTERB CG-6 ⊗	RADIAL COMBINED CURB & GUTTER CG-6 ⊗	ALTERNATE BREAKWAY CABLE TERM.GR-9	GUARDRAIL TERMINAL GR-7	FIELD OFFICE TYPE I	HYDRAULIC CEMENT CONC. SIDEWALK 4" ⊗	NS REMOVE EXISTING GUARDRAIL	FIXED OBJECT ATTACH GR-FOA -2 Type I	FIXED OBJECT ATTACH GR-FOA -1 Type II	FIXED OBJECT ATTACH GR-FOA -1 Type I	GUARDRAIL GR-2	ASPHALT BACKUP MAT'L	ASPHALT CONCRETE CURB MC-3B	TRAFFIC BARRIER CONCRETE MB-7D ⊗	RADIAL GUARDRAIL GR-2	HYDRAULIC CEMENT CONC. SIDEWALK 7" ⊗	SAW CUT (6")
	L.S.	L.S.	L.S.	LF.	LF.	EA.	LF.	LF.	SQ.YD.	SQ.YD.	LF.	LF.	EA.	EA.	MO.	SY	LF	EA.	EA.	EA.	LF	TON	LF	LF	LF.	SY	LF.
3										210																	
4										2704																	
5										4357			1								213						
6				74			13		2.0	3249			2	1		45	941	1	1		992	44	970		71	1	
7				366						1987			1				784		1	1	295	15	321	276			
8				397	89		49	7	3.2	4820	80		1			14					130	9	197		70	1.6	
9				439	76		68	13	8	3538	67	105				20										4.1	
Sequence of Con.																		2									
TOTAL	L.S.	L.S.	L.S.	1276	165	16	130	20	13.2	20,865	147	105	5	1	MO.	79	1725	3	2	1	1630	68	1488	276	141	6.7	557

MAINTENANCE OF TRAFFIC

SHEET NO.	FLAGGER SERVICE	ELECTRONIC ARROW	WARNING LIGHT (TYPE)A	GROUP 2 CHANNELIZING	TRAFFIC BARRIER CONCRETE MB-7D PC ⊗	PAVED DITCH PG-2A	IMPACT ATTENUATOR SERVI (TYPE) TL-3	IMPACT ATTENUATOR SERVI (TYPE 11-12)	ALLAYING DUST	CONST.PAVE MARKING TY.D WIDTH 4"	CONST.PAVE MARKING TY.D WIDTH 24"	CONST.PAVE MARKING TY.D WIDTH 8"	CONST.PAVE MESS.MARKING TYPE D,AND MESS., ARROW	ERADICATION OF EXISTING PAVEMENT MARKING	TEMPORARY PAVEMENT MARKER,TWO WAY	GEOTEXTILE (EMBANKMENT STABILIZATION)	TYPE III BARRICADE (WIDTH) 4 FT.	CONSTRUCTION SIGNS	TRUCK MOUNTED ATTENUAT	PORTABLE CHANGABLE MESSAGE SIGNS 2 EA.		
	HR	HR	DAY	DAY	LF	SY	EA	EA	HR.	LF	LF	LF	EA	LF	EA	SY	EA	SF	HR.	HR.		
3																						
4																						
5																						
6																						
7						155																
8																450						
9																						
Sequence of Con.																						
TOTAL	500	500	4,500	51,200	10,028	155	16	12	800	31,800	500	1,600	10	15,000	200	450	6	350	100	1,000		

⊗ Denotes : Items to be paid for on basis of Plan Quantities In accordance with Current Road and Bridge Specifications

DEMOLITION OF SIGNS TO BE INCLUDED IN HIGHWAY CONTRACT					
PARCEL NO.	DEMO.NO.	STATION	PARCEL OWNER	DESCRIPTION	PAY ITEM
008	D-701	526+60 LT	BOARD OF COUNTY SUPERVISORS OF PRINCE WILLIAM CO.,VIRGINIA	RELOCATE - SIGN ON WOOD POSTS	L.S.
010	D-702	527+30 RT	HUGILL,THOMAS B.& PAMELA S.	DEMO.- METAL SIGN ON METAL POSTS	L.S.
011	D-703	528+20 RT	L.& J.KLINE'S,L.L.C.	DEMO.- METAL SIGN ON METAL POSTS	L.S.
008	D-704	526+15 LT	BOARD OF COUNTY SUPERVISORS OF PRINCE WILLIAM CO.,VIRGINIA	RELOCATE - SIGN ON WOOD POSTS	L.S.

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
	XXXX-XXX-XXX		2H

FIGURE 2H - 26 SAMPLE INCIDENTAL SUMMARY SHEET

9/2/2014
9:43:00 AM

Roundabout Details(1).dgn
Plotted By: stewart.willis

PROJECT MANAGER _____
SURVEYED BY _____
DESIGN SUPERVISED BY _____
DESIGNED BY _____

ROUNDABOUT DETAILS

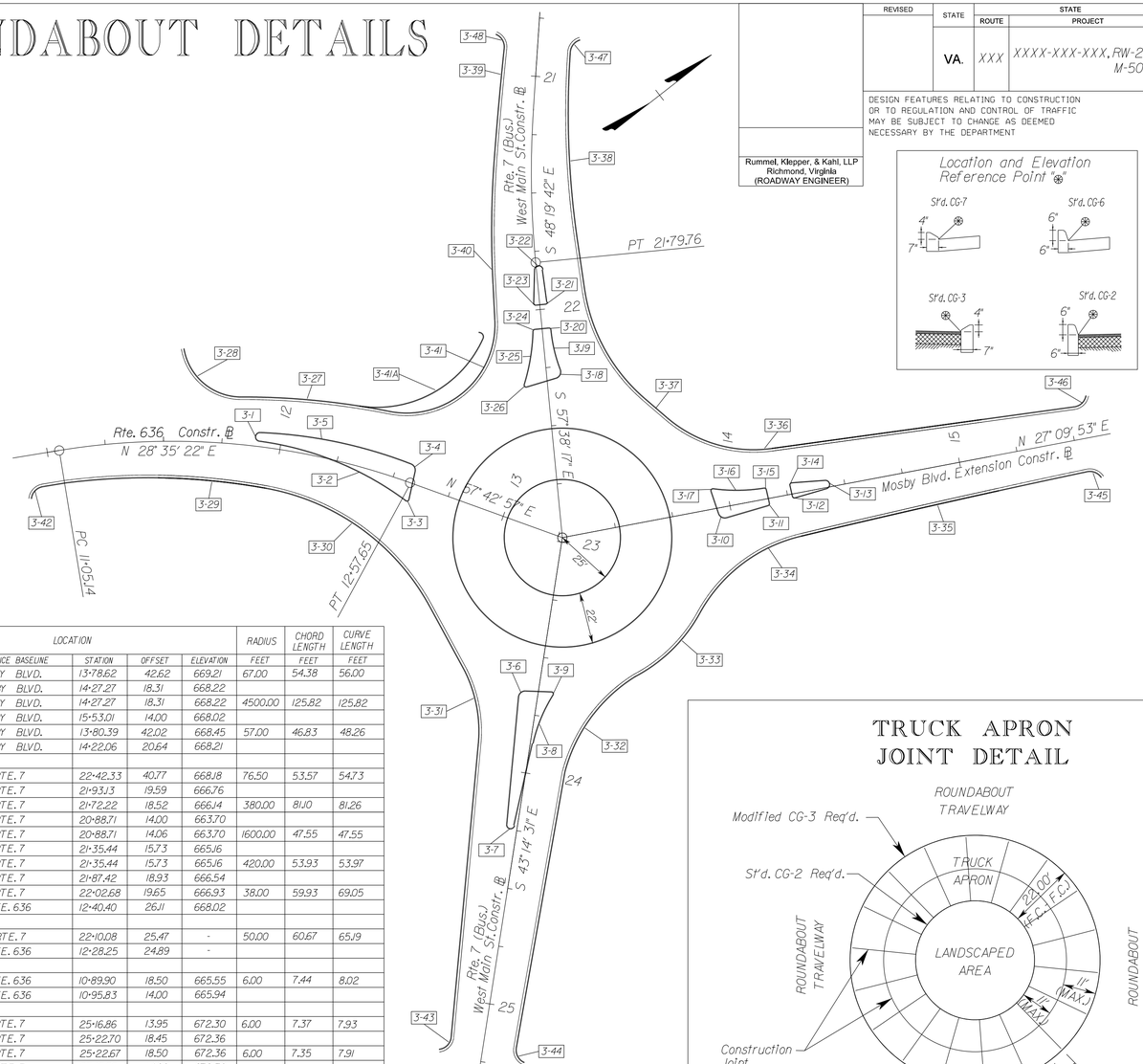
REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	XXX	XXXX-XXX-XXX, RW-20X M-50X	21

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

Rummel, Klepper, & Kahl, LLP
Richmond, Virginia
(ROADWAY ENGINEER)

REF. NO.	LOCATION				RADIUS	CHORD LENGTH	CURVE LENGTH
SHEET - ITEM	REFERENCE BASELINE	STATION	OFFSET	ELEVATION	FEET	FEET	FEET
3-1 (P.C.C.)	RTE. 636	11+90.71	6.17	668.42	2.00	4.00	6.10
3-1 (P.R.C.)	RTE. 636	11+90.85	2.17	668.50			
3-2 (P.R.C.)	RTE. 636	11+90.85	2.17	668.50	135.00	67.60	68.21
3-2 (P.R.C.)	RTE. 636	12+58.47	7.98	668.94			
3-3 (P.R.C.)	RTE. 636	12+58.47	7.98	668.94	2.00	1.68	1.99
3-3 (P.T.)	RTE. 636	12+59.75	6.90	668.89			
3-4 (P.C.)	RTE. 636	12+58.19	5.23	668.73	3.00	3.90	4.25
3-4 (P.C.C.)	RTE. 636	12+55.35	7.85	668.64			
3-5 (P.C.C.)	RTE. 636	12+55.35	7.85	668.64	200.00	66.04	66.35
3-5 (P.C.C.)	RTE. 636	11+90.71	2.17	668.42			
3-6 (P.C.)	RTE. 7	23+65.22	5.55	670.31	3.00	4.12	4.54
3-6 (P.T.)	RTE. 7	23+68.38	8.18	670.29			
3-7 (P.C.)	RTE. 7	24+22.89	4.78	671.17	1.82	3.64	5.71
3-7 (P.T.)	RTE. 7	24+22.94	1.14	671.25			
3-8 (P.C.)	RTE. 7	23+87.13	1.29	670.70	66.00	22.49	22.60
3-8 (P.R.C.)	RTE. 7	23+65.27	6.56	670.31			
3-9 (P.R.C.)	RTE. 7	23+65.27	6.56	670.31	2.00	1.73	2.10
3-9 (P.T.)	RTE. 7	23+63.88	5.52	670.33			
3-10 (P.C.)	MOSBY BLVD.	13+94.39	2.30	668.90	3.00	4.15	4.58
3-10 (P.T.)	MOSBY BLVD.	13+97.65	4.85	668.85			
3-11 (P.C.)	MOSBY BLVD.	14+15.99	3.11	668.73	1.00	1.37	1.51
3-11 (P.T.)	MOSBY BLVD.	14+16.90	2.07	668.74			
3-12 (P.C.)	MOSBY BLVD.	14+26.86	1.00	668.69	1.00	1.46	1.63
3-12 (P.T.)	MOSBY BLVD.	14+27.96	1.96	668.66			
3-13 (P.C.)	MOSBY BLVD.	14+41.86	0.62	668.61	1.93	3.86	5.78
3-13 (P.T.)	MOSBY BLVD.	14+42.01	3.23	668.56			
3-14 (P.C.)	MOSBY BLVD.	14+27.80	4.85	668.60	1.00	1.52	1.72
3-14 (P.T.)	MOSBY BLVD.	14+26.69	3.82	668.63			
3-15 (P.C.)	MOSBY BLVD.	14+16.68	3.91	668.71	1.00	1.37	1.51
3-15 (P.R.C.)	MOSBY BLVD.	14+15.71	4.87	668.69			
3-16 (P.R.C.)	MOSBY BLVD.	14+15.71	4.87	668.69	74.50	21.72	21.80
3-16 (P.R.C.)	MOSBY BLVD.	13+94.32	8.66	668.83			
3-17 (P.R.C.)	MOSBY BLVD.	13+94.32	8.66	668.83	1.00	1.70	2.03
3-17 (P.T.)	MOSBY BLVD.	13+93.01	7.57	668.88			
3-18 (P.C.)	RTE. 7	22+30.07	3.87	667.85	3.00	4.43	4.98
3-18 (P.C.C.)	RTE. 7	22+26.29	6.17	667.83			
3-19 (P.C.C.)	RTE. 7	22+26.29	6.17	667.83	64.59	17.35	17.41
3-19 (P.R.C.)	RTE. 7	22+09.09	3.86	667.49			
3-20 (P.R.C.)	RTE. 7	22+09.09	3.86	667.49	1.00	1.42	1.57
3-20 (P.T.)	RTE. 7	22+08.09	2.86	667.48			
3-21 (P.C.)	RTE. 7	21+98.09	2.47	667.25	1.00	1.44	1.61
3-21 (P.T.)	RTE. 7	21+97.05	3.46	667.21			
3-22 (P.C.)	RTE. 7	21+83.09	2.90	666.87	1.91	3.82	5.75
3-22 (P.T.)	RTE. 7	21+82.82	0.91	666.90			
3-23 (P.C.)	RTE. 7	21+96.97	2.65	667.20	1.00	1.50	1.69
3-23 (P.T.)	RTE. 7	21+98.09	1.66	667.25			
3-24 (P.C.)	RTE. 7	22+08.09	3.14	667.48	1.00	1.32	1.45
3-24 (P.R.C.)	RTE. 7	22+08.96	4.13	667.47			
3-25 (P.R.C.)	RTE. 7	22+08.96	4.13	667.47	85.11	23.03	23.10
3-25 (P.R.C.)	RTE. 7	22+31.22	10.04	668.00			
3-26 (P.R.C.)	RTE. 7	22+31.22	10.04	668.00	1.00	1.76	2.16
3-26 (P.T.)	RTE. 7	22+32.59	8.93	668.00			
3-27 (P.R.C.)	RTE. 636	12+28.25	24.89	667.89	320.00	50.41	50.47
3-27 (P.R.C.)	RTE. 636	11+81.51	20.15	667.86			
3-28 (P.R.C.)	RTE. 636	11+18.51	20.15	667.86	25.00	32.36	35.19
3-28 (P.T.)	RTE. 636	11+58.05	39.70	666.43			
3-29 (P.C.)	RTE. 636	11+05.14	14.00	666.25	283.00	86.59	86.93
3-29 (P.C.C.)	RTE. 636	11+96.70	17.16	668.15			
3-30 (P.C.C.)	RTE. 636	11+96.70	17.16	668.15	100.00	86.32	89.52
3-30 (P.T.)	RTE. 636	12+83.54	46.84	669.42			
3-31 (P.C.)	RTE. 7	23+60.20	32.84	669.80	58.00	32.49	32.93
3-31 (P.T.)	RTE. 7	23+90.76	21.81	670.22			
3-32 (P.C.)	RTE. 7	23+97.09	16.36	670.44	69.00	51.03	52.27
3-32 (P.R.C.)	RTE. 7	23+51.85	39.95	669.82			
3-33 (P.R.C.)	RTE. 7	23+51.85	39.95	669.82	66.94	38.60	39.15
3-33 (P.R.C.)	RTE. 7	23+20.89	63.00	669.21			

REF. NO.	LOCATION				RADIUS	CHORD LENGTH	CURVE LENGTH
SHEET - ITEM	REFERENCE BASELINE	STATION	OFFSET	ELEVATION	FEET	FEET	FEET
3-34 (P.R.C.)	MOSBY BLVD.	13+78.62	42.62	669.21	67.00	54.38	56.00
3-34 (P.C.C.)	MOSBY BLVD.	14+27.27	18.31	668.22			
3-35 (P.C.C.)	MOSBY BLVD.	14+27.27	18.31	668.22	4500.00	125.82	125.82
3-35 (P.C.C.)	MOSBY BLVD.	15+53.01	14.00	668.02			
3-36 (P.C.)	MOSBY BLVD.	13+80.39	42.02	668.45	57.00	46.83	48.26
3-36 (P.T.)	MOSBY BLVD.	14+22.06	20.64	668.21			
3-37 (P.C.)	RTE. 7	22+42.33	40.77	668.18	76.50	53.57	54.73
3-37 (P.T.)	RTE. 7	21+93.13	19.59	666.76			
3-38 (P.C.)	RTE. 7	21+72.22	18.52	666.14	380.00	81.10	81.26
3-38 (P.C.C.)	RTE. 7	20+88.71	14.00	663.70			
3-39 (P.R.C.)	RTE. 7	20+88.71	14.06	663.70	1600.00	47.55	47.55
3-39 (P.C.C.)	RTE. 7	21+35.44	15.73	665.16			
3-40 (P.C.C.)	RTE. 7	21+35.44	15.73	665.16	420.00	53.93	53.97
3-40 (P.R.C.)	RTE. 7	21+87.42	18.93	666.54			
3-41 (P.R.C.)	RTE. 7	22+02.68	19.65	666.93	38.00	59.93	69.05
3-41 (P.R.C.)	RTE. 636	12+40.40	26.11	668.02			
3-41A (P.C.)	RTE. 7	22+10.08	25.47	-	50.00	60.67	65.19
3-41A (P.R.C.)	RTE. 636	12+28.25	24.89	-			
3-42 (P.C.)	RTE. 636	10+89.90	18.50	665.55	6.00	7.44	8.02
3-42 (P.T.)	RTE. 636	10+95.83	14.00	665.94			
3-43 (P.C.)	RTE. 7	25+16.86	13.95	672.30	6.00	7.37	7.93
3-43 (P.T.)	RTE. 7	25+22.70	18.45	672.36			
3-44 (P.T.)	RTE. 7	25+22.67	18.50	672.36	6.00	7.35	7.91
3-44 (P.C.)	RTE. 7	25+16.86	14.00	672.30			
3-45 (P.C.C.)	MOSBY BLVD.	15+53.01	14.00	668.02	6.00	6.69	7.10
3-45 (P.T.)	MOSBY BLVD.	15+58.56	17.73	667.94			
3-46 (P.C.)	MOSBY BLVD.	15+58.65	17.95	667.95	6.00	6.89	7.33
3-46 (P.T.)	MOSBY BLVD.	15+53.01	14.00	668.02			
3-47 (P.C.C.)	RTE. 7	20+88.71	14.00	663.70	6.00	6.89	7.34
3-47 (P.T.)	RTE. 7	20+83.07	17.95	663.37			
3-48 (P.C.)	RTE. 7	20+83.02	18.16	663.37	6.00	7.02	7.50
3-48 (P.C.C.)	RTE. 7	20+88.71	14.06	663.70			



Location and Elevation Reference Point "⊛"

TRUCK APRON JOINT DETAIL

Note: Outer Truck Apron shall have a minimum of three construction joints evenly spaced. Detail for construction joints at Outer Truck Apron not shown.

(Not To Scale)

SCALE
0 25' 50'

PROJECT	SHEET NO.
XXXX-XXX-XXX	21

FIGURE 2H - 27 SAMPLE ROUNDABOUT DETAIL SHEET

9/2/2014
9:45:07 AM

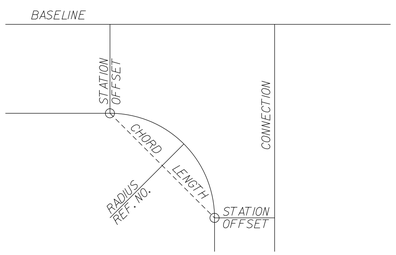
Radial Offset Sheet.dgn
Plotted By: stewart.willis

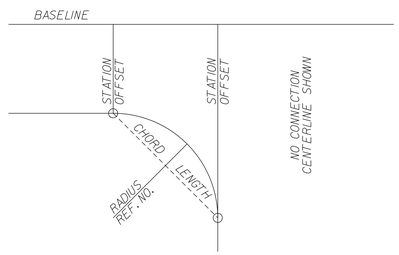
PROJECT MANAGER <Project_Mgr._Name_(000).000-0000_(District1)>_ _ _ _ _
SURVEYED BY, DATE <Surveyor_Name_(000).000-0000_(District1)> _ _ _ _ _
DESIGN BY <Designer_Name_(000).000-0000_(District1)>_ _ _ _ _ _ _ _ _ _ _
SUBSURFACE UTILITY BY, DATE <Surveyor_Name_(000).000-0000_(District1)>

REVISED	STATE	STATE		SHEET NO.
		ROUTE	PROJECT	
	VA.	XXX	XXXX-XXX-XXX, C-50X	2J

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

RADIAL OFFSETS





LOCATION (REF. NO.)	BASELINE		CONNECTION		RADIUS LENGTH	CHORD LENGTH	CURVE LENGTH	LOCATION (REF. NO.)	BASELINE		CONNECTION		RADIUS LENGTH	CHORD LENGTH	CURVE LENGTH
SHEET - ITEM	STATION	OFFSET	STATION	OFFSET	FEET	FEET	FEET	SHEET - ITEM	STATION	OFFSET	STATION	OFFSET	FEET	FEET	FEET
9-1	148+92.33	19.00' Lt	50+57.52	14.00' Lt	50.00	64.00	69.45	12-1	171+28.94	19.00' Lt	90+58.69	12.00' Lt	40.00	56.35	62.59
9-2	150+33.21	19.00' Lt	50+58.77	31.03' Rt	50.00	58.02	61.90	12-2	172+32.94	19.00' Lt	90+59.00	12.00' Rt	40.00	56.57	62.83
9-3	152+18.91	19.00' Rt			30.00	42.46	47.12								
	152+48.95	60.25' Rt						13-1	178+32.53	19.00' Rt	10+69.03	18.50' Rt	50.00	70.62	78.41
9-4	152+86.36	54.00' Rt			35.00	49.50	54.98	13-2	179+69.24	19.00' Rt	10+68.97	18.50' Lt	50.00	70.59	78.37
	153+21.36	19.00' Rt													
10-1	155+99.92	19.00' Lt	60+75.18	18.50' Lt	50.00	71.79	80.07	14-2	192+17.00	16.30' Lt			943.05	159.63	159.82
10-2	157+23.69	19.00' Lt	60+57.83	18.50' Rt	50.00	61.26	65.93		193+80.00	18.70' Lt					
10-3	157+60.26	26.37' Rt			35.00	69.87	105.64								
	157+63.17	96.18' Rt													
10-4	157+63.17	96.18' Rt			35.00	43.13	44.79								
	157+98.90	121.62' Rt													
10-5	157+88.45	143.10' Rt			34.88	49.19	54.77								
	157+36.27	119.69' Rt													
10-6	157+36.27	119.69' Rt			34.88	49.38	54.77								
	157+05.36	162.09' Rt													
10-7	156+62.06	50.91' Rt			35.00	47.96	52.84								
	156+24.73	19.00' Rt													
10-8	158+17.78	19.40' Rt			35.00	5.33	5.34								
	158+23.14	19.00' Rt													
10-9	159+74.44	19.00' Lt	70+69.00	18.50' Lt	50.00	70.71	78.54								
10-10	161+11.44	19.00' Lt	70+69.00	18.50' Rt	50.00	70.71	78.54								
11-1	162+85.14	19.00' Rt			35.00	48.44	53.50								
	163+18.31	53.08' Rt													
11-1	163+56.03	51.83' Rt			35.00	47.16	51.75								
	163+88.08	19.00' Rt													
11-3	165+29.17	19.00' Rt	80+56.36	18.50' Rt	50.00	61.38	66.08								
11-4	166+49.52	19.00' Rt	80+79.51	18.50' Lt	50.00	72.82	81.57								

	PROJECT	SHEET NO.
	XXXX-XXX-XXX	2J

Cell Revised 12/11/12

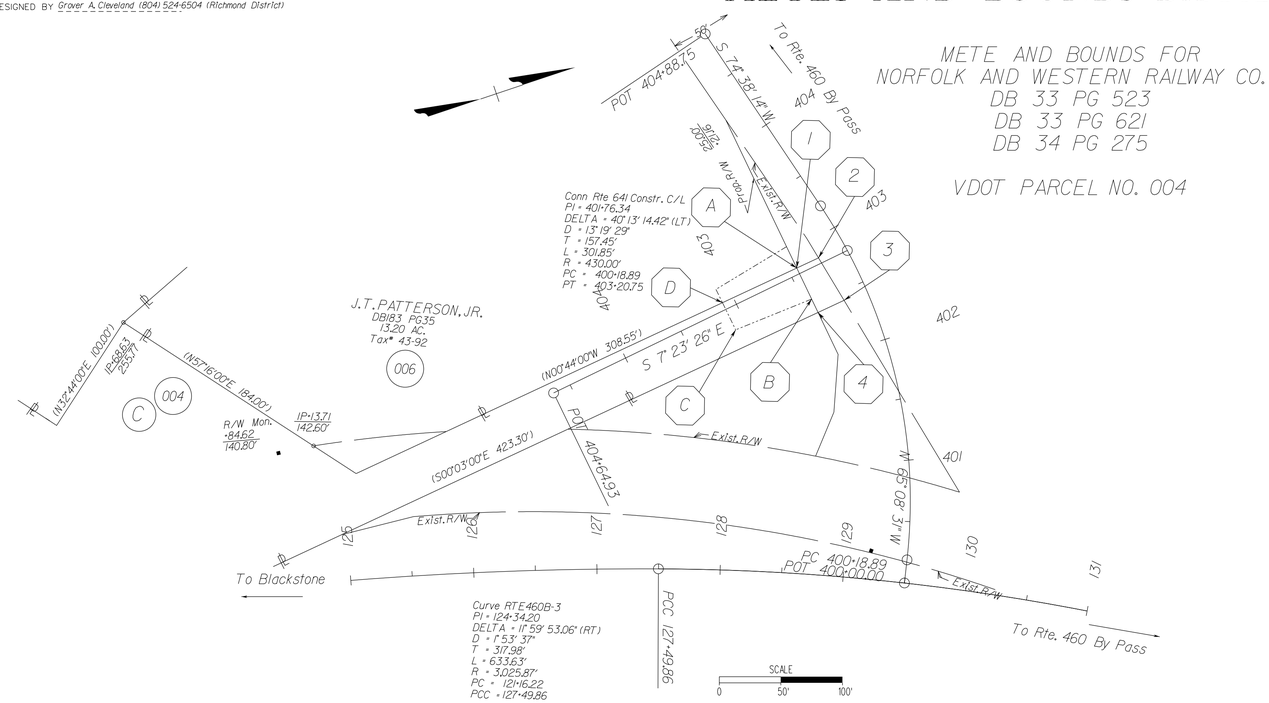
FIGURE 2H - 28 SAMPLE RADIAL OFFSET SHEET

9/2/2014
9:18:07 AM

Metes and Bound Data.dgn
Plotted By: stewartwillis

PROJECT MANAGER M. Tatop, P.E. (804) 524-6407 (Richmond District)
SURVEYED BY Steve Barnard (804) 524-6157 (Richmond District)
DESIGN SUPERVISED BY A. Wilkerson, P.E. (804) 524-6150 (Richmond District)
DESIGNED BY Grover A. Cleveland (804) 524-6504 (Richmond District)

METES AND BOUNDS DATA



VDOT (Division) or Co. Name (Location), Virginia (TECHNICAL DISCIPLINE)	VDOT (Division) or Co. Name (Location), Virginia (TECHNICAL DISCIPLINE)

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	XXX	XXXX-XXX-XXX, C50X R20X	2K

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

PARCEL 004

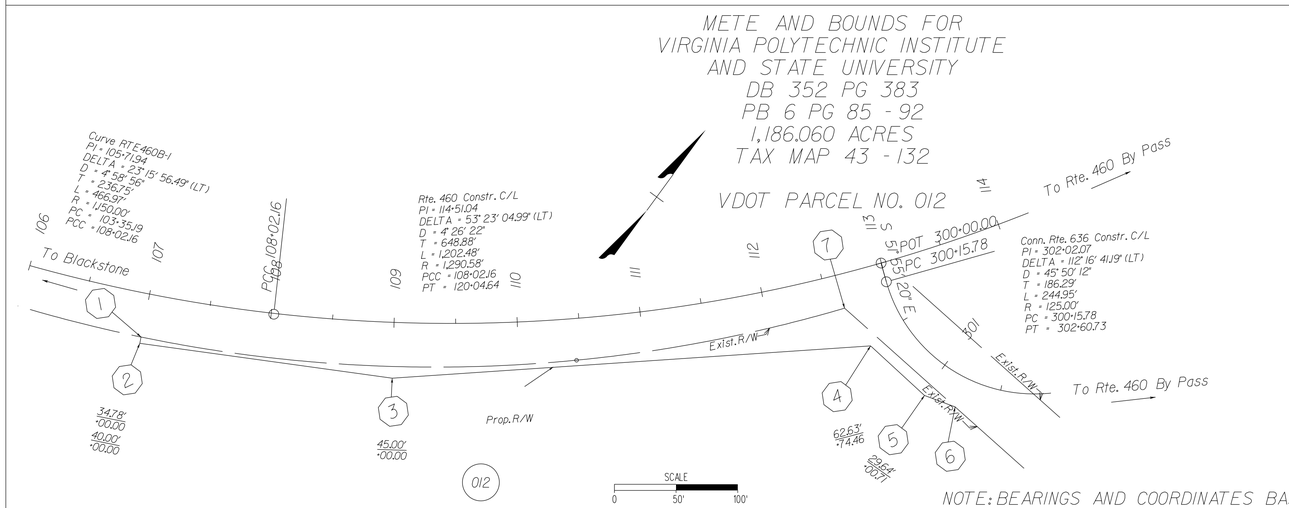
PROJECT COORDINATES PROP. RIGHT OF WAY	
POINT 1	POINT 3
N 281,457.1270	N 281,437.7459
E 3,437,845.7156	E 3,437,847.9292
POINT 1 TO POINT 3	S6°30'57"W 19.507'

PARCEL 004

PROJECT COORDINATES TEMPORARY CONSTR. EASEMENT	
POINT A	POINT C
N 281,457.1270	N 281,394.2016
E 3,437,845.7156	E 3,437,877.5987
POINT A TO POINT C	S26°52'14"E 70.542'

SECTION	LINE	BEARING	LENGTH	CORD LENGTH	DELTA	RADIUS	ARC LENGTH	SQ. FT.	ACRES
	1 - 2	N77°26'58"E	40.223'						
	2 - 3	S6°30'57"E	23.331'						
	3 - 4	S82°54'15"W	40.002'						
	4 - 1	N6°30'57"W	19.507'						
	TOTAL ACRES OF PROPOSED RIGHT OF WAY							856.7600	0.0197
	A - B	N82°54'15"E	27.932'						
	B - C	S3°35'27"E	66.506'						
	C - D	S82°36'34"W	24.539'						
	D - A	N6°30'57"W	66.512'						
	TOTAL ACRES OF TEMPORARY CONSTRUCTION EASEMENT							1743.0600	0.0400

POINT	PLUS	OFFSET
1	402+85.11 CONN RTE 641	42.86' LT.
2	402+84.59 CONN RTE 641	23.40' LT.
3	402+42.36 CONN RTE 641	20.02' LT.
4	402+41.64 CONN RTE 641	43.34' RT.
A	402+86.11 CONN RTE 641	42.86' RT.
B	402+55.07 CONN RTE 641	43.63' RT.
C	402+59.77 CONN RTE 641	110.03' RT.
D	402+82.69 CONN RTE 641	109.15' RT.



PARCEL 012

PROJECT COORDINATES PROP. RIGHT OF WAY	
POINT 1	POINT 6
N 279,885.3556	N 279,842.7511
E 3,437,821.8628	E 3,437,742.3568
POINT 1 TO POINT 6	N58°45'12"W 66.3.098'

SECTION	LINE	BEARING	LENGTH	CORD LENGTH	DELTA	RADIUS	ARC LENGTH	SQ. FT.	ACRES
	1 - 2	S24°49'46"E	5.216'						
	2 - 3	N67°42'12"E	206.812'						
	3 - 4	N49°59'41"E	389.098'						
	4 - 5	S83°33'37"E	59.360'						
	5 - 6	N7°41'91"E	26.582'						
	6 - 7	N84°24'00"W	120.296'						
	7 - 1	S5°30'02"W		571.404'	28°02'52"	1179.000'	577.149'		
	TOTAL ACRES PROPOSED RIGHT OF WAY							6,074.1230	0.1394

POINT	PLUS	OFFSET
1	305+17.09 CONN RTE 636	25.00' RT.
2	307+13.94 CONN RTE 636	25.00' RT.
3	309+39.66 CONN RTE 636	25.00' RT.
4	309+76.49 CONN RTE 636	25.00' RT.
5	313+60.56 CONN RTE 636	25.00' RT.
6	311+86.61 CONN RTE 636	35.42' LT.
7	310+07.62 CONN RTE 636	70.82' LT.

NOTE: BEARINGS AND COORDINATES BASED ON PROJECT COORDINATES

	PROJECT	SHEET NO.
	XXXX-XXX-XXX	2K

FIGURE 2H - 29 SAMPLE METES AND BOUNDS DATA SHEET

9/5/2014
8:26:12 AM

PROJECT MANAGER LAURENCE FARRELL P.E. (540) 829-7627
SURVEYED BY PRECISION MEASUREMENTS, INC. (804) 340-5229
DESIGN SUPERVISED BY JOSHUA S. WADE, P.E. (703) 352-7188
DESIGNED BY PARSONS TRANSPORTATION GROUP, INC. (703) 934-2300

CROSSOVER-1 DETAIL

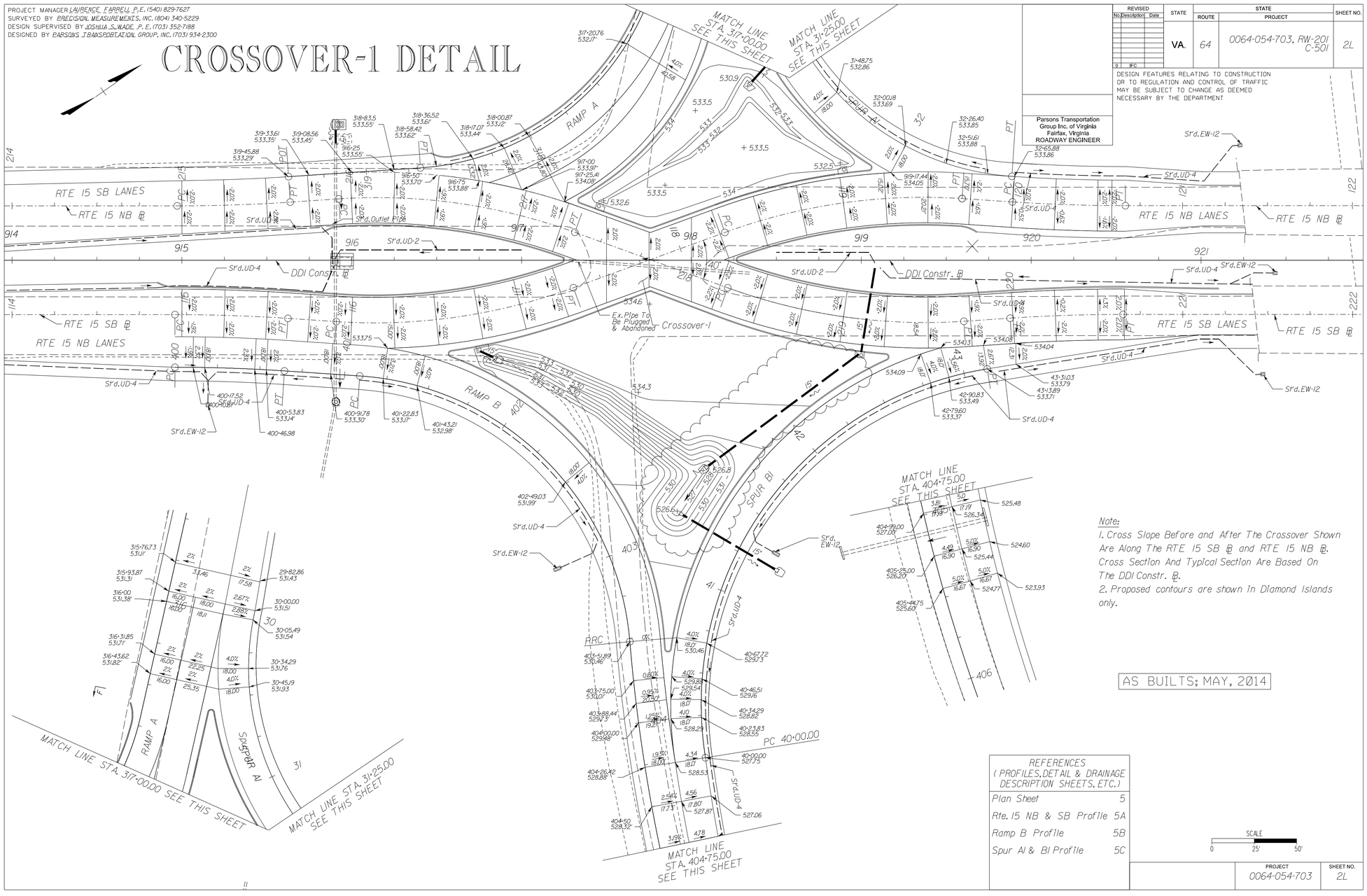
LIMITED ACCESS HIGHWAY — By Resolution of Highway Commision dated Oct, 04 1956

REVISED No.	Description	Date
0	IFC	

STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
VA.	64	0064-054-703, RW-201 C-501	2L

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

Parsons Transportation Group Inc. of Virginia
Fairfax, Virginia
ROADWAY ENGINEER



Note:
1. Cross Slope Before and After The Crossover Shown Are Along The RTE 15 SB Ⓟ and RTE 15 NB Ⓟ. Cross Section And Typical Section Are Based On The DDI Constr. Ⓟ.
2. Proposed contours are shown in Diamond Islands only.

AS BUILTS; MAY, 2014

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)	
Plan Sheet	5
Rte. 15 NB & SB Profile	5A
Ramp B Profile	5B
Spur A1 & B1 Profile	5C

SCALE 0 25' 50'

PROJECT	SHEET NO.
0064-054-703	2L

FIGURE 2H - 30 SAMPLE DIVERSION DIAMOND INTERCHANGE DETAIL SHEET

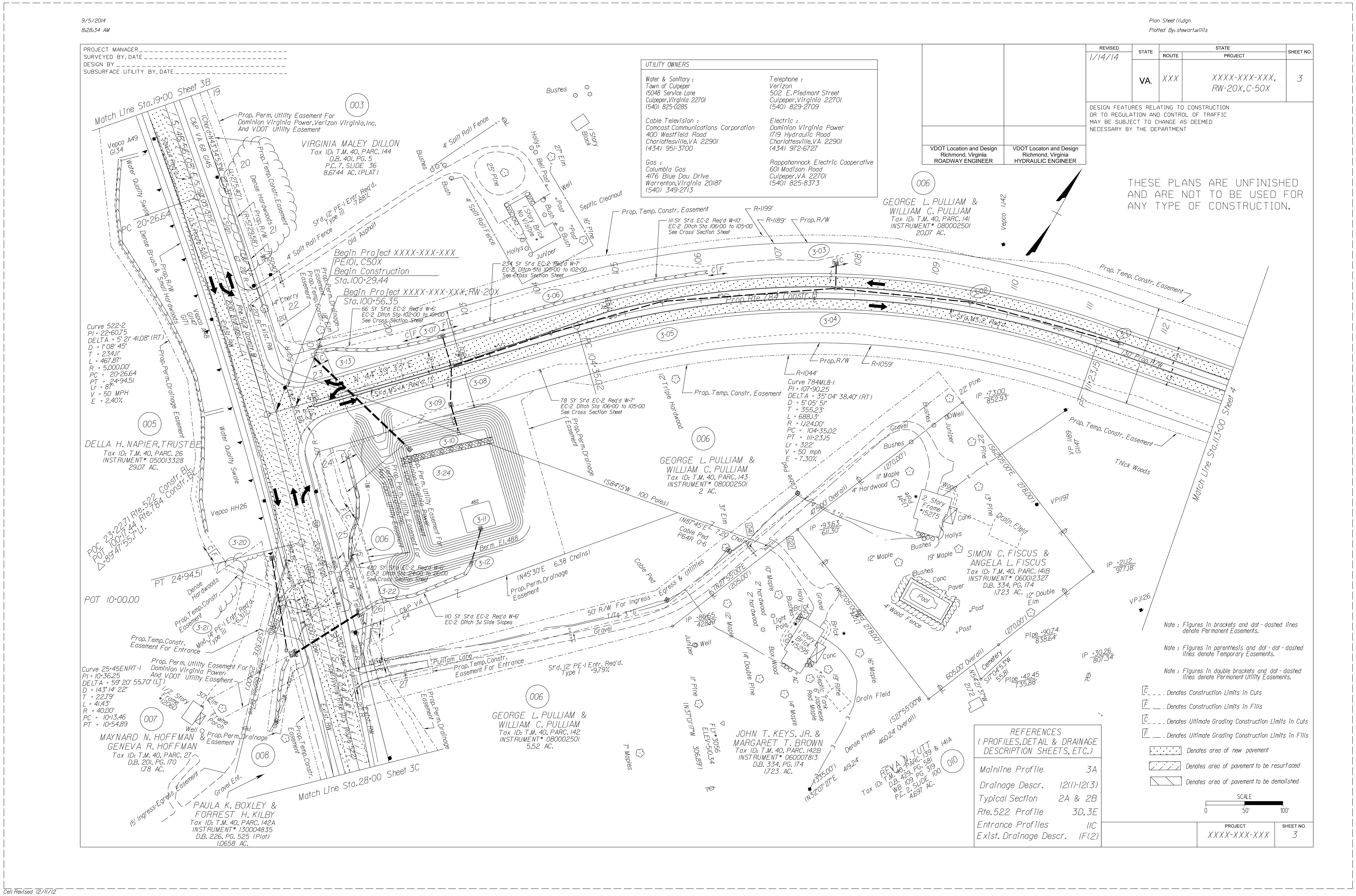


FIGURE 2H - 31 SAMPLE 1 PLAN SHEET

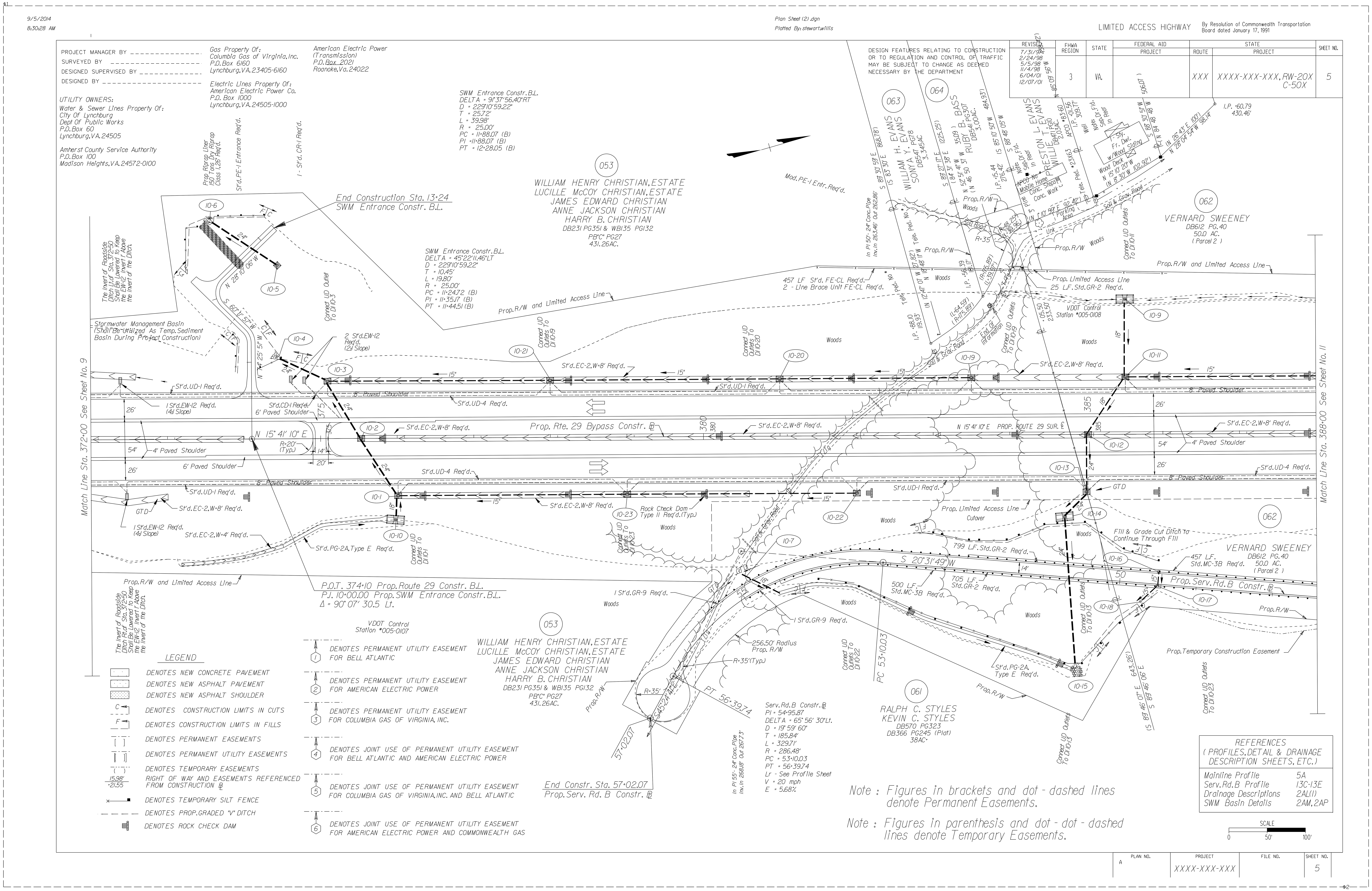


FIGURE 2H - 32 SAMPLE 2 PLAN SHEET

9/5/2014
8:32:05 AM

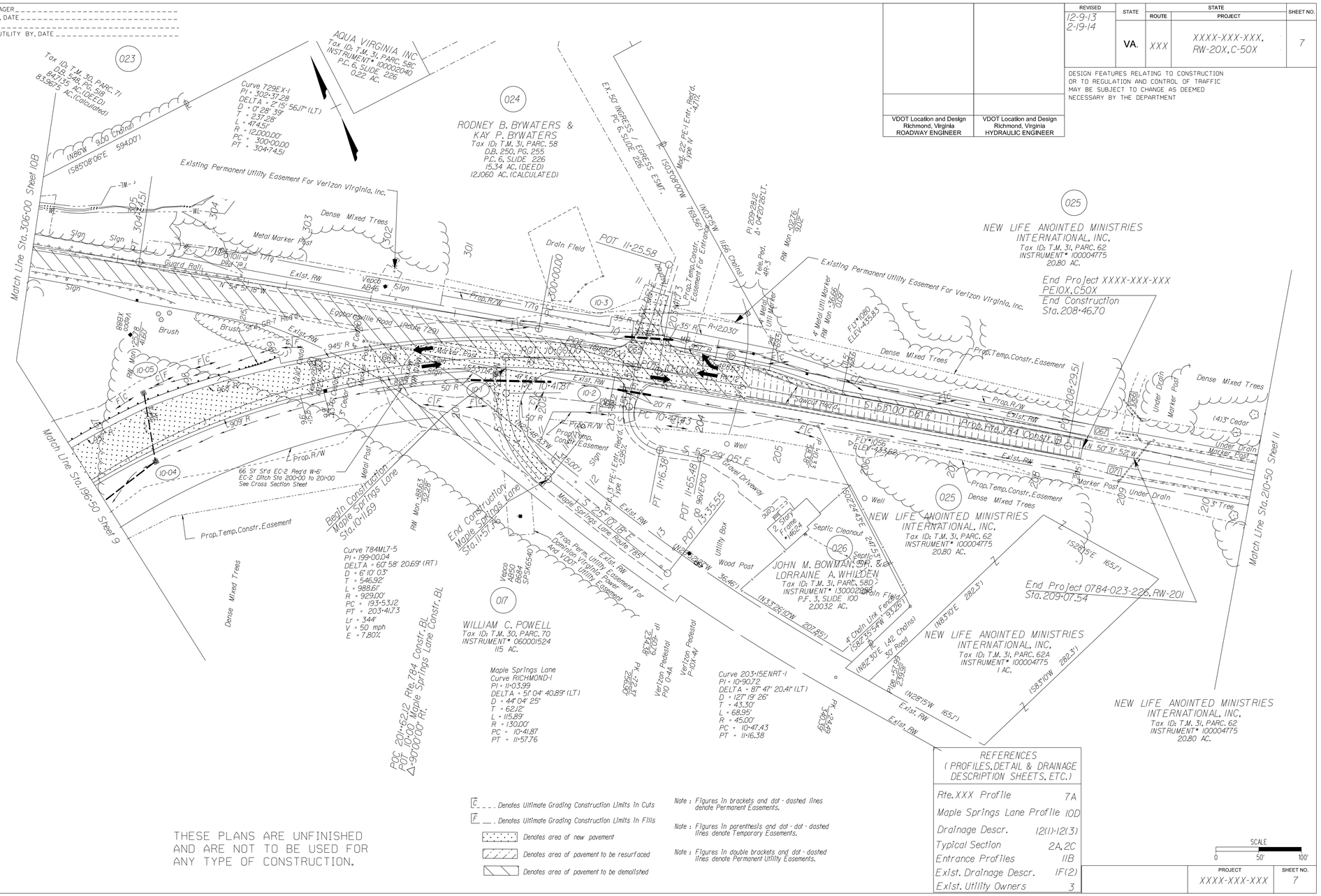
Plan Sheet (3).dgn
Plotted By: stewartwillis

PROJECT MANAGER _____
SURVEYED BY, DATE _____
DESIGN BY _____
SUBSURFACE UTILITY BY, DATE _____

REVISED	STATE	STATE		SHEET NO.
		ROUTE	PROJECT	
12-9-13 2-19-14	VA.	XXX	XXXX-XXX-XXX, RW-20X, C-50X	7

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

VDOT Location and Design Richmond, Virginia ROADWAY ENGINEER	VDOT Location and Design Richmond, Virginia HYDRAULIC ENGINEER



THESE PLANS ARE UNFINISHED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION.

C _ _ _ Denotes Ultimate Grading Construction Limits In Cuts
F __ . Denotes Ultimate Grading Construction Limits In Fills
Denotes area of new pavement
Denotes area of pavement to be resurfaced
Denotes area of pavement to be demolished

Note : Figures in brackets and dot - dashed lines denote Permanent Easements.

Note : Figures in parenthesis and dot - dot - dashed lines denote Temporary Easements.

Note : Figures in double brackets and dot - dashed lines denote Permanent Utility Easements.

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

Rte. XXX Profile	7A
Maple Springs Lane Profile	10D
Drainage Descr.	12(1)-12(3)
Typical Section	2A, 2C
Entrance Profiles	11B
Exist. Drainage Descr.	1F(2)
Exist. Utility Owners	3

SCALE
0 50' 100'

	PROJECT	SHEET NO.
	XXXX-XXX-XXX	7

Cell Revised 12/17/12

FIGURE 2H - 33 SAMPLE 3 PLAN SHEET

9/8/2014
8:28:12 AM

Plan Sheet Roundabout (4).dgn
Plotted By: stewartwillis

PROJECT MANAGER
SURVEYED BY
DESIGN SUPERVISED BY
DESIGNED BY

Utility Owners :

Mr. Art Coleman
Comcast Cable Communications
195 Rainville Road
Winchester, VA 22602
(540) 504-0942

Mr. John Dailey
Rappahannock Electric Cooperative
137 Kelley Court
Front Royal, VA 22630
(540) 622-5162

Mr. Steve Heltzel
Shenandoah Telephone Company
P. O. Box 459
Edinburg, VA 22824
(540) 984-5363

Mr. Rick Boor
Town Of Berryville
23 East Main St.
Berryville, VA 22611
(540) 955-4843

Mr. Mike Wallace
Verizon Virginia, Inc.
404 Hillandale Lane
Winchester, VA 22602
(540) 665-3153

Mr. Wayne France
Washington Gas and Light Company
350 Hillandale Lane
P. O. Box 2400
Winchester, VA 22604
(540) 868-7923

Mr. Bob Levi
Clarke County
County Maintenance Director
129 Ramsburg Lane
Berryville, VA 22611
(540) 955-5123

REVISED	STATE	STATE		SHEET NO.
		ROUTE	PROJECT	
	VA.	XXX	XXXX-XXX-XXX RW20X, M50X	3

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

Rummel, Klepper, & Kahl, LLP
Richmond, Virginia
ROADWAY/HYDRO ENGINEER

Brick School Building (D. G. Cooley)

001
COUNTY SCHOOL BOARD OF CLARKE COUNTY, VIRGINIA
DB 74 PG 218
46.79 AC.
Tax# 13-A-61

002
WESTWOOD FARM INCORPORATED
DB 136 PG 260
303.18 AC.
Tax# 13-A-70

003
SCHOOL BOARD OF CLARKE COUNTY, VIRGINIA
DB 501 PG 353
PB 9 PG 42
44.984 AC.
Tax# 14-A-7A

004
TOWN OF BERRYVILLE
DB 17 PG 166
4.366 AC.
Tax# 14-A-8

005
PAUL R. HOWELL
DB 233 PG 247
DB 205 PG 275
2.0763 AC.
Tax# 14-A-5

Begin Proj. : 0636-021-152, PE-101, RW-201, M-501
Sta. 10+00.00 Rte. 636 Constr. ℄

MATCHLINE STA. 21+50.00 SEE SHEET 3C

MATCHLINE STA. 16+00.00 SEE SHEET 4

MATCHLINE STA. 25+00.00 SEE SHEET 3C

Curve RTE7_ALT_DI
PI = 21+47.34
DELTA = 9°18' 35.06" (LT)
D = 14°19' 26"
T = 32.57'
L = 64.99'
R = 400.00'
PC = 21+14.77
PT = 21+79.76
SE = NORMAL CROWN
V = 32 MPH

Curve MOSBY_ALT_DI
PI = 11+83.08
DELTA = 29°07' 34.57" (RT)
D = 19°05' 55"
T = 77.94'
L = 152.50'
R = 300.00'
PC = 11+05.14
PT = 12+57.65
SE = NORMAL CROWN
V = 30 MPH

POT Sta. 13+26.92 Rte. 636 / Mosby Blvd. Constr. ℄ *
POT Sta. 22+98.07 Rte. 7 (BUS) Constr. ℄
Δ = 84° 48' 10" (LT)

Denotes Temporary Easement
Denotes Permanent Easement
C . . . Denotes Construction Limits In Cuts
F . . . Denotes Construction Limits In Fills
Denotes Mill & Overlay Pavement
Denotes Demolition of Pavement
Denotes Proposed Pavement
Denotes Truck Apron & Splitter Islands

INCIDENTAL LEGEND
1 Std. CG-2 Req'd.
2 Std. CG-3 Req'd.
3 Modified CG-3 Req'd.
4 Std. CG-7 Req'd.
5 Modified CG-7 Req'd.
6 Std. CG-12, Type A Req'd.
7 Std. CG-12, Type C Req'd.
8 Std. UD-4 Req'd.
13 Std. CR-1 Cable Barricade Req'd.

1 Proposed Permanent Utility Easement For Rappahannock Electric Cooperative, Verizon Virginia, Inc., Washington Gas and Light Company and Shenandoah Telephone Company

2 Proposed Permanent Utility Easement For Rappahannock Electric Cooperative, and Verizon Virginia, Inc.

ALERT: SITE PLAN PROPOSED FOR THIS AREA. CHECK FOR THE SITE PLAN CONSTRUCTION AT EACH STAGE OF PROJECT DEVELOPMENT AND ORDER ADDITIONAL SURVEY WHEN CONSTRUCTED. PROFFERED R/W (PERM. EASEMENT) SHOULD BE CHECKED AT R/W STAGE.

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

RTE. 636 PROFILE	3A
MOSBY BLVD. EXT. PROFILE	3A
RTE. 7 PROFILE	3D
ENTRANCE PROFILE	7
DITCH DETAILS	2D(1) - 2D(2)
DRAINAGE DESCRIPTIONS	3B
E&S PLANS	1G(1) - 1G(4)

SCALE 0 25' 50'

PROJECT	SHEET NO.
XXXX-XXX-XXX	3

FIGURE 2H - 34 SAMPLE 4 PLAN SHEET

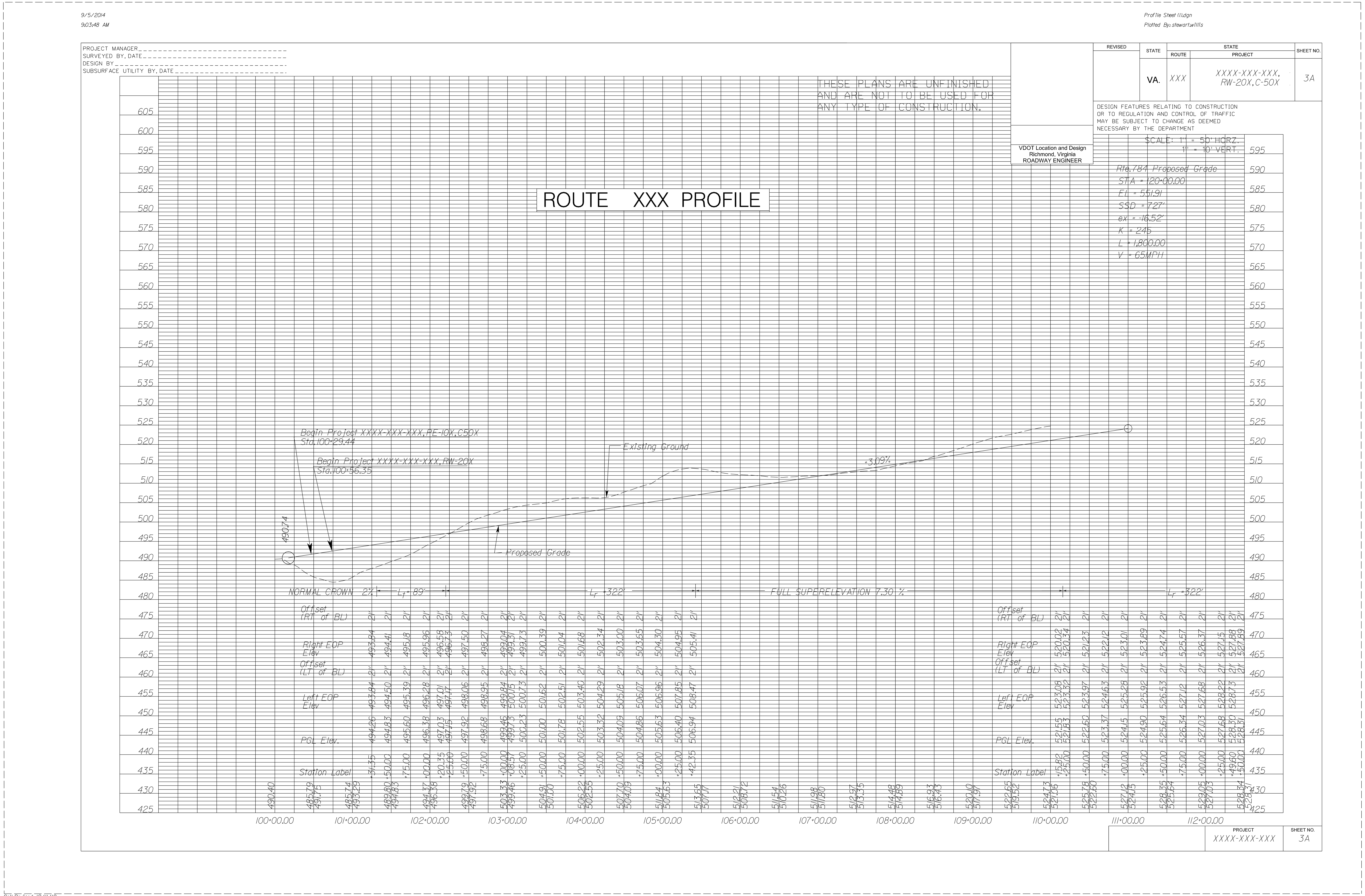


FIGURE 2H - 35 SAMPLE 1 PROFILE SHEET

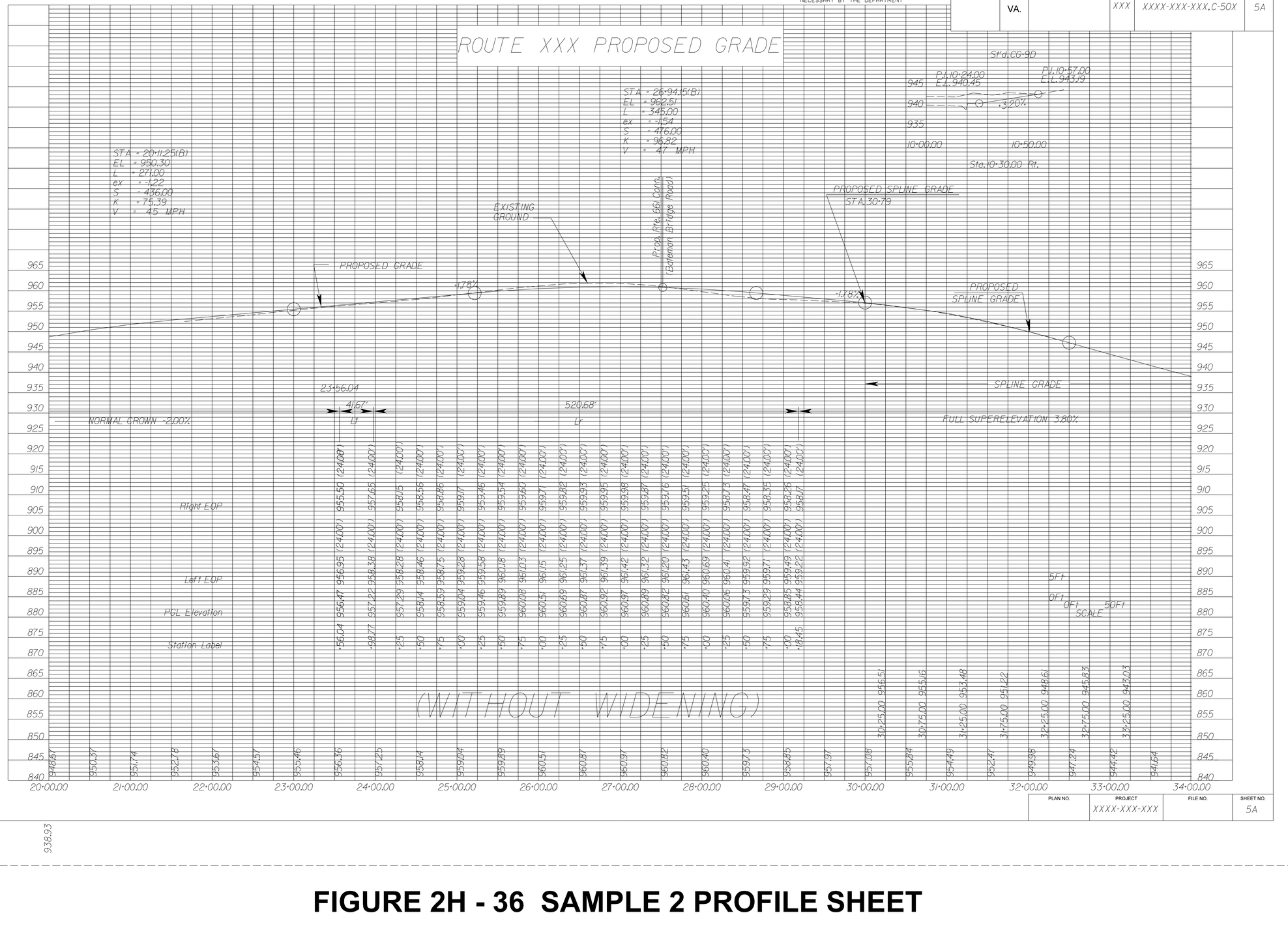
9/5/2014
8:39:52 AM

Profile Sheet (2).dgn
Plotted By: stewartwillis

SURVEYED BY _____
SUPERVISED BY _____
DESIGNED BY _____

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

REVISED	STATE	FEDERAL AID PROJECT	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.		XXX	XXXX-XXX-XXX,C-50X	5A



PLAN NO.	PROJECT	FILE NO.	SHEET NO.
	XXXX-XXX-XXX		5A

FIGURE 2H - 36 SAMPLE 2 PROFILE SHEET

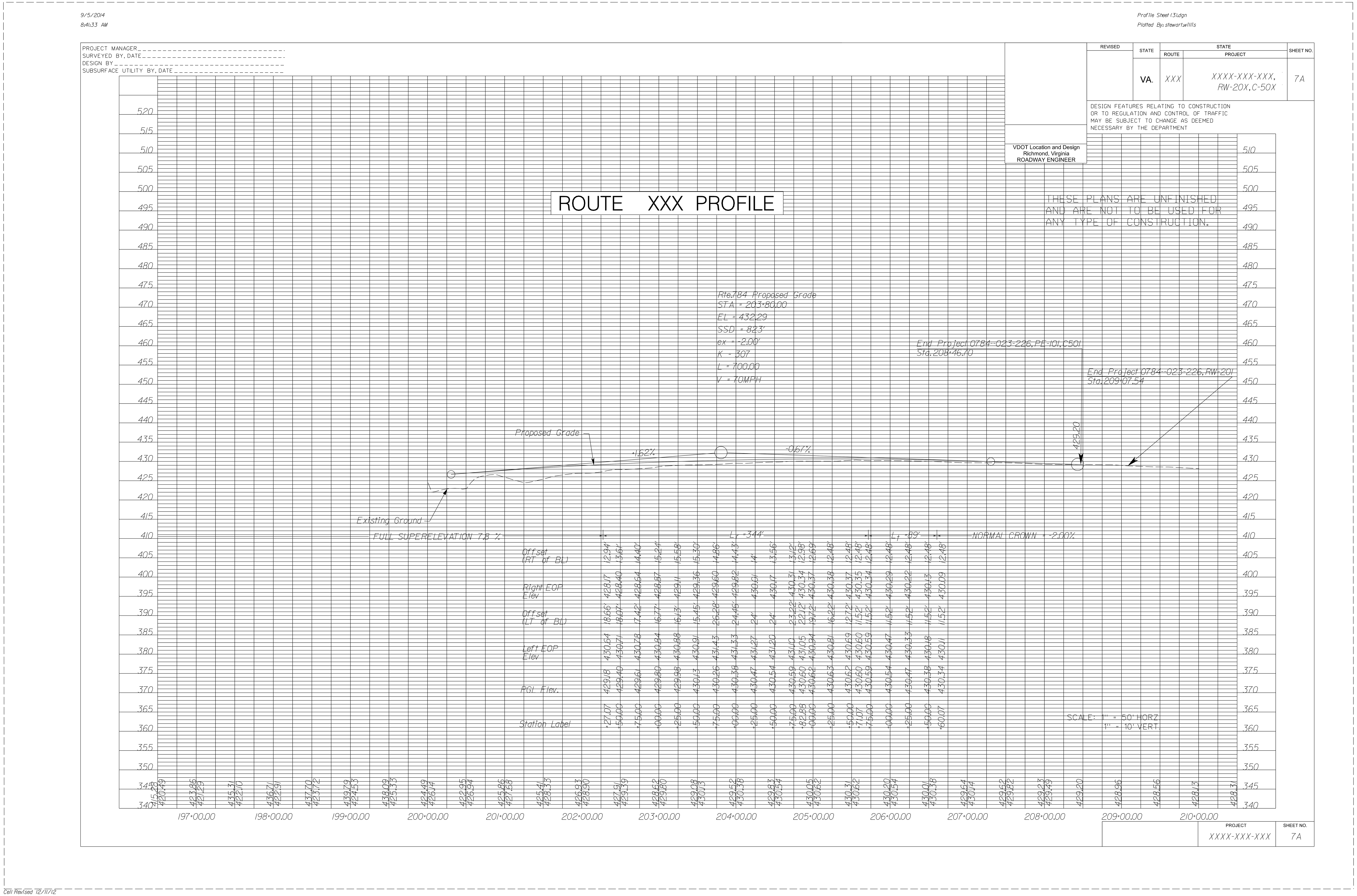


FIGURE 2H - 37 SAMPLE 3 PROFILE SHEET

9/5/2014
9:12:35 AM

Drainage Description Sht.dgn
Plotted By: stewart.willis

SURVEYED BY _____
SUPERVISED BY AAA _____
DESIGNED BY BBB _____

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

REVISED	STATE	FEDERAL AID PROJECT	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.		XXX	XXXX-XXX-XXX, RW-20X, C-50X	3B

DRAINAGE DESCRIPTION

SHEET 3

3-1 — 1 - St'd. DI-3A Req'd. (precast) H=1.22m Inv.10.50

3-1 — 4-10 — 53m - 0.375m Conc. Pipe Req'd. (0.8m cover) Inv.(in) 10.50 Inv.(out) 10.15

SHEET 4

4-1 — 1 - St'd. DI-3B Req'd. L=1.8m (precast) H=1.20 Inv.9.40

4-1a — 2.89m - St'd. MH-1 or MH-2 Req'd. Inv.7.52 St'd. IS-1 Req'd. 1 - St'd. MH-1 Frame & Cover Req'd.

4-1 — 4-1a — 1m - 0.375m Conc. Pipe Req'd. (0.8m cover) Inv.(in) 9.40 Inv.(out) 9.39

4-1a — 5-8a — 49m - 0.60m Conc. Pipe Req'd. (2.7m cover) Inv.(in) 7.52 Inv.(out) 7.17

4-2 — 1 - St'd. DI-3A Req'd. (precast) H=1.20 Inv.9.85

4-2 — 4-13 — 1m - 0.375m Conc. Pipe Req'd. (0.8m cover) Inv.(in) 9.85 Inv.(out) 9.84

4-13 — 4-1a — 73m - 0.60m Conc. Pipe Req'd. (2.5m cover) Inv.(in) 8.05 Inv.(out) 7.55

4-3 — 1 - St'd. DI-3A Req'd. (precast) H=1.20 Inv.10.00

4-3 — 4-12 — 1m - 0.375m Conc. Pipe Req'd. (0.8m cover) Inv.(in) 10.00 Inv.(out) 9.99

4-12 — 4-13 — 16m - 0.60m Conc. Pipe Req'd. (2.5m cover) Inv.(in) 8.15 Inv.(out) 8.08

4-4 — 1 - St'd. DI-3A Req'd. (precast) H=1.20 Inv.10.25

4-4 — 4-4a — 1m - 0.375m Conc. Pipe Req'd. (0.8m cover) Inv.(in) 10.25 Inv.(out) 10.24

4-4a — 2.98m- St'd. MH-1 or MH-2 Req'd. Inv.8.27 St'd. IS-1 Req'd. 1-St'd. MH-1 Frame & Cover Req'd.

4-4a — 4-12 — 23m - 0.60m Conc. Pipe Req'd. (2.3m cover) Inv.(in) 8.27 Inv.(out) 8.15

4-5 — 1 - St'd. DI-3B Req'd. L=1.2m (precast) H= 1.21m Inv.10.30

4-5 — 4-11 — 1m - 0.375m Conc. Pipe Req'd. (0.8m cover) Inv.(in) 10.30 Inv.(out) 10.29

4-11 — 4-4a — 19m - 0.60m Conc. Pipe Req'd. (2.3m cover) Inv.(in) 8.37 Inv.(out) 8.30

4-6 — 1 - St'd. DI-3B Req'd. L=1.8m (precast) H= 1.43m Inv.9.05 St'd. IS-1 Req'd.

4-6 — 5-14 — 42.5m - 0.60m Conc. Pipe Req'd. (0.9m cover) Inv.(in) 9.05 Inv.(out) 8.84

4-7 — 1 - St'd. DI-3B Req'd. L=1.2m (precast) H= 1.33m Inv.9.29 St'd. IS-1 Req'd.

4-7 — 4-6 — 23m - 0.450m Conc. Pipe Req'd. (0.9m cover) Inv.(in) 9.29 Inv.(out) 9.17

4-8 — 1 - St'd. DI-3B Req'd. L=1.8m (precast) H= 1.30m Inv.9.55 St'd. IS-1 Req'd.

4-8 — 4-7 — 42m - 0.450m Conc. Pipe Req'd. (0.8m cover) Inv.(in) 9.55 Inv.(out) 9.32

4-9 — 1 - St'd. DI-3B Req'd. L=1.2m (precast) H= 1.20m Inv.9.80 St'd. IS-1 Req'd.

SHEET 4 (CONTINUED)

4-9 — 4-8 — 23m - 0.375m Conc. Pipe Req'd. (0.9m cover) Inv.(in) 9.80 Inv.(out) 9.65

4-10 — 1 - St'd. DI-3B Req'd. L=1.2m (precast) H= 1.22m Inv.10.13 St'd. IS-1 Req'd.

4-10 — 4-9 — 51m - 0.375m Conc. Pipe Req'd. (0.8m cover) Inv.(in) 10.13 Inv.(out) 9.80

4-11 — 3m - St'd MH-1 or MH-2 Req'd. Inv.8.37 (connect to exist. pipes) 1- St'd MH-1 Frame & Cover Req'd. St'd. IS-1 Req'd.

4-12 — 2.87m - St'd MH-1 or MH-2 Req'd. Inv.8.15 (connect to exist.0.38m pipe) 1- St'd MH-1 Frame & Cover Req'd. St'd. IS-1 Req'd.

4-13 — 2.89m - St'd MH-1 or MH-2 Req'd. Inv.8.05 (connect to exist.0.30m pipe) 1- St'd MH-1 Frame & Cover Req'd. St'd. IS-1 Req'd.

SHEET 4C

4C-2 — 4C-1 — 12m - DBL 1.20m Conc. Pipe Req'd. (0.8m cover) Inv.(in) 7.40 Inv.(out) 7.30 2-St'd.EW-7S Req'd. 35 m.Tons Erosion Control Stone Class 1,St'd.EC-1 Placement Excavate 0.75m and Backfill with 72 M. Tons (0.6 m depth) No.3 Stone Cap with 18 M. Tons (0.15 m depth) Bedding Mat'l. Aggr. No.25 or 26 Extend Bedding Mat'l. Aggr. No.25 or 26 as Class 1 Backfill per 2001 PB-1 Standards,80 M.Tons Req'd 24 Square Meters Geotextile (Embankment Stabilization) Fabric Req'd. 61 Cubic Meters Minor Structure Excavation 1-Dewatering Basin Req'd.

SHEET 5

5-2 — 5B-1 — 83m - St'd. 2.13m x 1.82m BDDI.5 Req'd. Inv.(in) 6.52 Inv.(out) 6.30 4 - St'd. BW-21 Req'd. 10 deg.inlet & 5 deg.outlet skew.Debris Rack Req'd at inlet end. Excavate 1.0 m and Backfill with 1205 M.Tons Bedding Mat'l. Aggr. No. 25 or 26 3482 Cubic Meters Minor Structure Excavation 107 Metric Tons Erosion Control Stone Class 1 Req'd. St'd. EC-1 Placement 1-Dewatering Basin Req'd. Sleeve exist. san. sewer thru box, see sheet 16(5) St'd. HR-1 on Wingwalls & Headwalls Req'd. (connect to exist. 375mm pipe) See Sheet 16(25) for Waterline Crossing Details

5-3 — 1 - St'd. DI-3AA Req'd. H= 3.01m Inv.6.99 St'd. IS-1 Req'd.

5-3 — Box — 28.5m - 0.60m Conc. Pipe Req'd. (2.4m cover) Inv.(in) 6.99 Inv.(out) 6.81 (tie into proposed box culvert)

5-4 — 1 - St'd. DI-3AA Req'd. (precast) H= 2.69m Inv.7.20 St'd. IS-1 Req'd.

5-4 — 5-3 — 36m - 0.60m Conc. Pipe Req'd. (2.4m cover) Inv.(in) 7.20 Inv.(out) 7.02

5-5 — 1 - St'd. DI-3AA Req'd. (precast) H= 2.44m Inv.7.40 St'd. IS-1 Req'd.

5-5 — 5-4 — 35m - 0.60m Conc. Pipe Req'd. (2.0m cover) Inv.(in) 7.40 Inv.(out) 7.23

5-6 — 5-5 — 16m - 0.60m Conc. Pipe Req'd. (1.8m cover) Inv.(in) 7.50 Inv.(out) 7.40

5-6 — 1 - St'd. DI-3C Req'd. L=1.8m (precast) H= 2.34m Inv.7.50 St'd. IS-1 Req'd.

5-7 — 1 - St'd. DI-3AA Req'd. (precast) H= 3.34m Inv.6.91 1 - St'd. SL-1 Req'd. St'd. IS-1 Req'd.

5-7 — Box — 15m - 0.60m Conc. Pipe Req'd. (2.7m cover) Inv.(in) 6.91 Inv.(out) 6.81 (tie into proposed box culvert)

5-8 — 1 - St'd. DI-3BB Req'd. L=1.8m (precast) H= 3.25m Inv.7.04 1 - St'd. SL-1 Req'd. St'd. IS-1 Req'd.

5-8 — 5-7 — 15m - 0.60m Conc. Pipe Req'd. (2.7m cover) Inv.(in) 7.04 Inv.(out) 6.94

SHEET 5 (CONTINUED)

5-8a — 3.06m- St'd. MH-1 or MH-2 Req'd. Inv.7.14 1 - St'd. MH-1 Frame & Cover Req'd. St'd. IS-1 Req'd.

5-8a — 5-8 — 12.5m - 0.60m Conc. Pipe Req'd. (2.4m cover) Inv.(in) 7.14 Inv.(out) 7.07

5-9 — 1 - St'd. DI-4B Req'd. L=1.8m (precast) H= 2.40m Inv.7.65 St'd. IS-1 Req'd.

5-9 — Box — 27m - 0.90m Conc. Pipe Req'd. (2.2m cover) Inv.(in) 7.65 Inv.(out) 6.98 Excavate 0.6m and Backfill with 83 M.Tons Bedding Mat'l. Aggr. No.25 or 26 (tie into proposed box culvert) 54 Square Meters Geotextile (Embankment Stabilization) Fabric Req'd.

5-10 — 1 - St'd. DI-4B Req'd. L=1.8m (precast) H= 2.20m Inv.7.73 St'd. IS-1 Req'd.

5-10 — 5-9 — 32m - 0.90m Conc. Pipe Req'd. (1.5m cover) Inv.(in) 7.73 Inv.(out) 7.68 Excavate 0.6m and Backfill with 98 M.Tons Bedding Mat'l. Aggr. No.25 or 26 64 Square Meters Geotextile (Embankment Stabilization) Fabric Req'd.

5-11 — 1 - St'd. DI-4A Req'd. (precast) H= 2.10m Inv.7.76 St'd. IS-1 Req'd.

5-11 — 5-10 — 22.5m - 0.90m Conc. Pipe Req'd. (1.3m cover) Inv.(in) 7.76 Inv.(out) 7.73 Excavate 0.6m and Backfill with 69 M.Tons Bedding Mat'l. Aggr. No.25 or 26 45 Square Meters Geotextile (Embankment Stabilization) Fabric Req'd.

5-12 — 1 - St'd. DI-4C Req'd. L=2.4m (precast) H= 1.94m Inv.7.83 St'd. IS-1 Req'd.

5-12 — 5-11 — 27.5m - 0.90m Conc. Pipe Req'd. (1m cover) Inv.(in) 7.83 Inv.(out) 7.79 Excavate 0.6m and Backfill with 85 M.Tons Bedding Mat'l. Aggr. No.25 or 26 55 Square Meters Geotextile (Embankment Stabilization) Fabric Req'd.

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
	XXXX-XXX-XXX		3B

FIGURE 2H - 38 SAMPLE DRAINAGE DESCRIPTION SHEET

9/5/2014
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RWPlanSheet.dgn
Plotted By: stewartwillis

PROJECT MANAGER_____
SURVEYED BY _____
DESIGN SUPERVISED BY_____
DESIGNED BY _____

CURVE DATA

CHICKEN CITY RD
Curve CHICK-1
PI = 114+15.75
DELTA = 19° 56' 32.87" (LT)
D = 17° 12' 21"
T = 58.54'
L = 115.90'
R = 333.00'
PC = 113+57.20
N = 595,607.734
E = 4,184,210.247
PT = 114+73.11
N = 595,694.089
E = 4,184,286.678
e = NC
V = 30mph

CHICKEN CITY RD
Curve CHICK-2
PI = 115+30.19
DELTA = 19° 27' 09.76" (RT)
D = 17° 12' 21"
T = 57.08'
L = 113.06'
R = 333.00'
PC = 114+73.11
N = 595,694.089
E = 4,184,286.678
PT = 115+86.17
N = 595,778.661
E = 4,184,360.889
e = NC
V = 30mph

CURVE DATA TABLE						
CURVE	DELTA	RADIUS	ARC	TANGENT	CH. BEARING	CHORD
1	19° 56' 33"	313.00'	108.94'	55.03'	N 41° 30' 41" E	108.39'
2	08° 04' 08"	353.00'	49.71'	24.90'	N 35° 34' 28" E	49.67'

APPROXIMATE AREAS			
Parcel #	R/W Take	Perm. Drainage Ease.	Temp. Construction Ease.
003	4129 Sq. Ft		
004	8712 Sq. Ft	871 Sq. Ft	1307 Sq. Ft
005	2265 Sq. Ft	1812 Sq. Ft	
006	808 Sq. Ft	765 Sq. Ft	
007	2529 Sq. Ft		
008	1832 Sq. Ft		
009	1246 Sq. Ft		
010	1725 Sq. Ft		

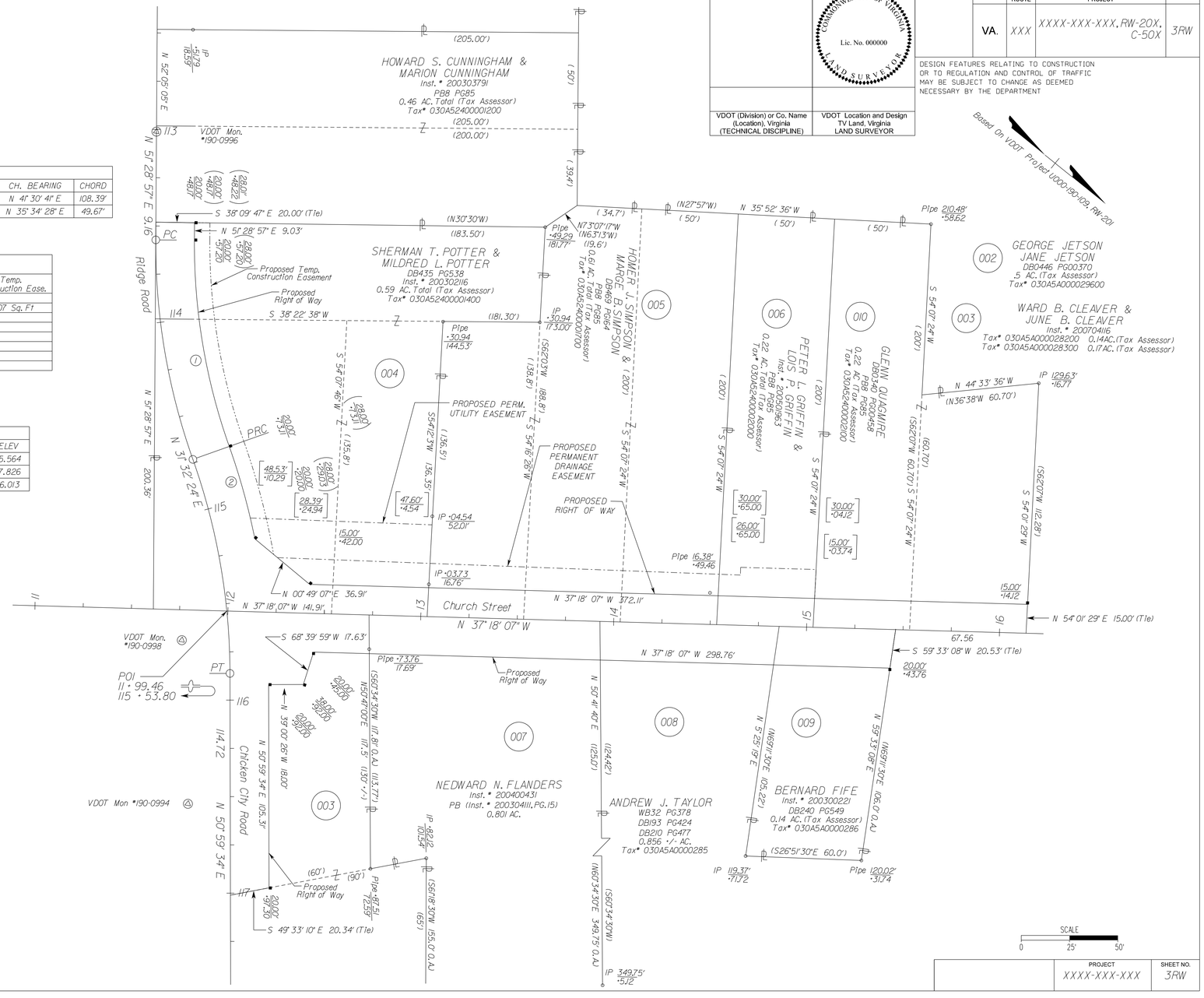
VDOT MONUMENTS			
MONUMENT	NORTH	EAST	ELEV
190-0994	595,804.100	4,184,427.152	15.564
190-0996	595,572.778	4,184,166.381	17.826
190-0998	595,748.429	4,184,363.169	16.013

SYMBOL LEGEND

- Proposed R/W Monument

NOTES:

1. THIS RIGHT OF WAY SHEET REPRESENTS A FIELD RUN PERIMETER SURVEY OF THE PROPOSED R/W LIMITS. ALL OTHER ADJOINING/DEPARTING BOUNDARY LINES SHOWN ARE COMPILED FROM VARIOUS SOURCES: FOUND FIELD MONUMENTATION, METES AND BOUNDS DESCRIPTIONS, AND RECORDED PLATS. THE ADJOINING LINES DO NOT REPRESENT A FIELD RUN SURVEY OF THE ADJOINING PROPERTIES AND ARE A BEST FIT BASED ON COMPILED DATA. ALL AREAS SHOWN FOR R/W TAKES AND EASEMENTS ARE APPROXIMATE ONLY.
2. ALL OF THE PROPERTIES PHYSICAL IMPROVEMENTS ARE NOT SHOWN HEREON.
3. THIS PLAN SHEET WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT AND MAY NOT SHOW ALL EASEMENTS WHICH MAY AFFECT THE PROPERTY SHOWN HEREON.
4. NO DESIGNATION OR LOCATION OF SUBSURFACE UTILITIES WAS PERFORMED DURING PREPARATION OF THIS PLAN SHEET.
5. THIS SURVEY DATUM IS BASED ON VDOT PROJECT # U000-190-109, R-201, UPC # 12345.
6. ALL MONUMENTATION TO BE SET UPON COMPLETION OF CONSTRUCTION.
7. NO CEMETERY SITES WERE OBSERVED ON THE SUBJECT PROPERTY. THIS DOES NOT PRECLUDE THEIR EXISTENCE.



VDOT (Division) or Co. Name (Location), Virginia (TECHNICAL DISCIPLINE)	VDOT Location and Design TV Land, Virginia LAND SURVEYOR

COMMONWEALTH OF VIRGINIA
Lic. No. 000000
LAND SURVEYOR

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	XXX	XXXX-XXX-XXX, RW-20X, C-50X	3RW

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

PROJECT	SHEET NO.
XXXX-XXX-XXX	3RW

FIGURE 2H - 39 SAMPLE RIGHT OF WAY PLAN SHEET

6/16/2016
1:58:39 PM

ut4632007ut.dgn
Plotted By: localuser

PROJECT MANAGER: Catherine Coffey, P.E. (540) 899-4280 (Fredericksburg)
SURVEYED BY: Rice Assoc.
DESIGN SUPERVISED BY: Mowoa Ha, P.E. (804) 371-2772 (CO)
DESIGNED BY: P.K. Das, P.E. (804) 786-4364 (CO)

1 Std. CG-7 Req'd
2 Std. MS-2 Req'd
3 Std. MS-1A Req'd
4 Mod. CG-12 Req'd
5 10' Shared Use Path Req'd
6 5' Sidewalk Req'd
11 CG-7 Radial Req'd
13 Std. CG-6 Req'd

7 Proposed R/W
7A Proposed Perpetual Easement
8 Prop. Temp. Constr. Ease.
10 Prop. Perm. Drainage Ease.
15 Prop. Perm. Slope Ease.
18 Prop. Perm. VDOT Utility Easement
14 Transition from CG-7 to CG-6 from Sta. 401+00 to 401+10 on both sides of Woodcutter's Road
19 Prop. Perm. VDOT Utility and Dominion Power Easement
21 Prop. Perm. VDOT Utility and Columbia Gas Easement

For Utility Owners, See Sheet 3.

FOR INFORMATION ONLY
SHEET IS NOT TO BE INCLUDED IN THE CONSTRUCTION PLAN ASSEMBLY

VDOT (Division) or Co. Name (Location), Virginia (TECHNICAL DISCIPLINE)	VDOT (Division) or Co. Name (Location), Virginia (TECHNICAL DISCIPLINE)

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
11/26/13 2/19/14 5/29/14 7/29/15 10/05/15	VA.	630	0630-089-202 RW-201, C-501	7UT

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

019

Matchline Sheet 7B

TRICORD, INCORPORATED A/K/A TRICORD, INC.
Inst. # 050006565
PB 28 PG 264
30.244 AC.
Tax# 29 17

TILSON HERNANDEZ
Inst. # 140001451
0.6836 AC.
Tax# 29 25A

TILSON HERNANDEZ
Inst. # 140001451
1.0455 AC.
Tax# 29 25B

COLONIAL FORGE COMMUNITY ASSOCIATION, INC.
INST. # 120022731
INST. #110022093
PM 110000123
2.758 AC.
Tax# 29J 1B A

THE COUNTY SCHOOL BOARD OF STAFFORD COUNTY, VIRGINIA
DB 1114 PG 667
PM 040000051
617291 AC.
Tax# 29 27A

POT 128+82.48 Const. B/L
PI 400+00 Woodcutters Rd
Δ = 89°06'20.48" Rt.

Ex. Variable Width Columbia Gas Pipeline Esmt. Inst. # 130017571

Ex. 10' Radius Contrd Mounted Access Esmt. Inst. No. 100000040

Temp. Constr. Esmt. 100000040

Ex. 50' Esmt. for Const. Slope Maint. Drainage & Utilities DB 1114 PG 667

Ex. R/W

ROUTE 630 BL

Begin Woodcutter's Road Sta. 400+40.00

End Woodcutter's Road Sta. 401+60.00

PC 400+99.26

Lighting Assembly (Typical)

Station 133+00 Match Line Sheet 8

Curve: CH_COLONIAL-1
PI = 402+38.14
DELTA = 26° 55' 56.24" (LT)
D = 9° 52' 43"
T = 138.88'
L = 272.63'
R = 580.00'
PC = 400+99.26
PT = 403+71.89
e = NC
Lr = Refer to Cross Sections

F ___ Denotes Construction Limits In Fills
C ___ Denotes Construction Limits In Cuts

Planing & Overlay Existing Pavement
Proposed Pavement
Demolition of Existing Pavment
Proposed Shared Use Path and Sidewalk

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)	
Mainline Profile	7A
Entrance Profiles	20(1)-20(6)
Basin Detail	7B
Drainage Descriptions	6DJ2C
Connection Profile	7C
Utility Owner Information	3

RIGHT OF WAY PLANS

THESE PLANS ARE UNFINISHED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION.

SCALE 0 25' 50' | PROJECT 0630-089-202 | SHEET NO. .

FIGURE 2H-40 SAMPLE UTILITY SHEET

6/16/2016
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Entrance Profile Sheet.dgn
Plotted By: stewartwillis

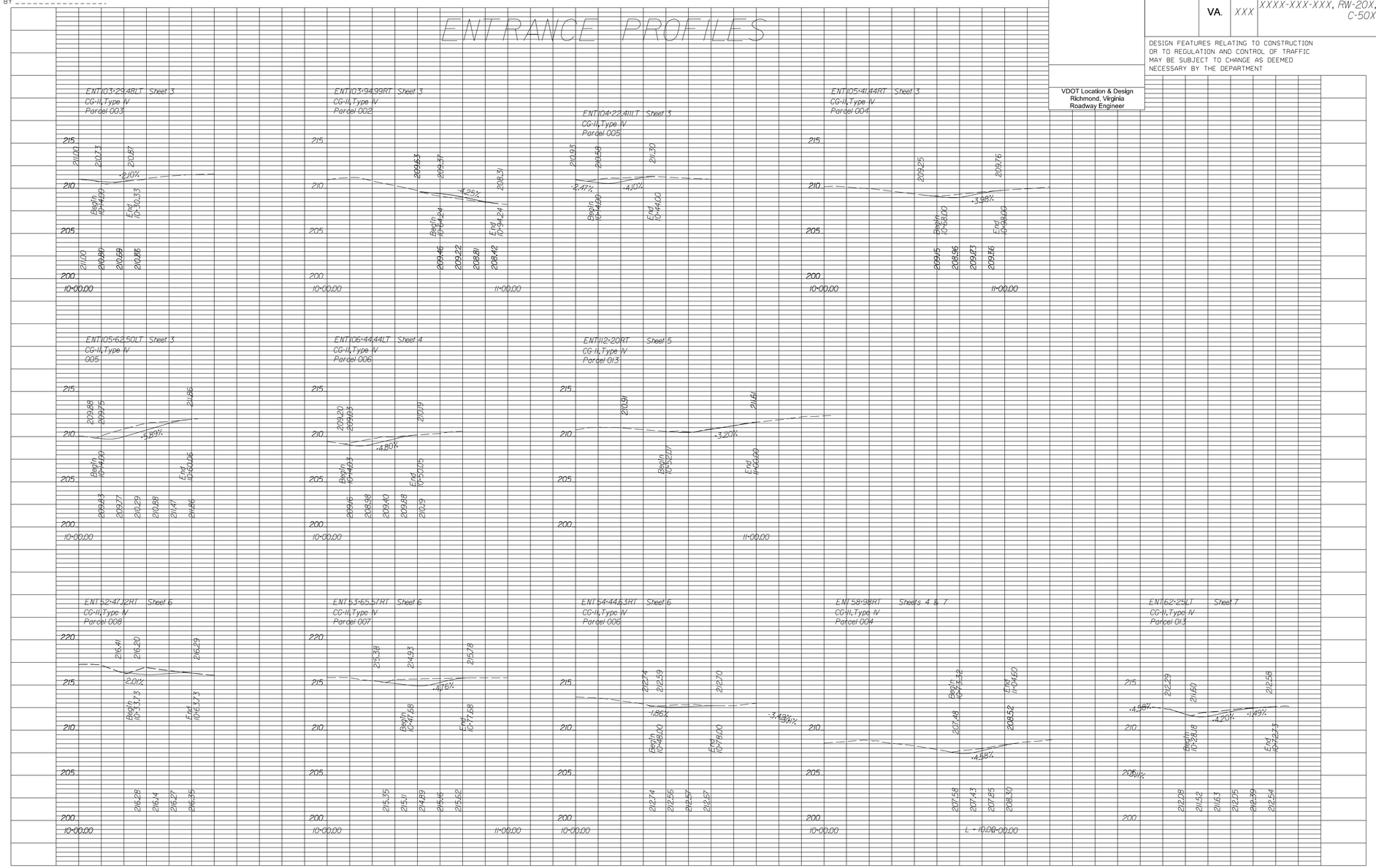
PROJECT MANAGER _____
SURVEYED BY _____
DESIGN SUPERVISED BY _____
DESIGNED BY _____

ENTRANCE PROFILES

VDOT Location & Design
Richmond, Virginia
Roadway Engineer

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	XXX	XXXX-XXX-XXX, RW-20X, C-50X	8

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



	PROJECT	SHEET NO.
	XXXX-XXX-XXX	8

FIGURE 2H - 41 SAMPLE ENTRANCE PROFILE SHEET

3/26/2018
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d10624008a.dgn
Plotted By: k.montgomery

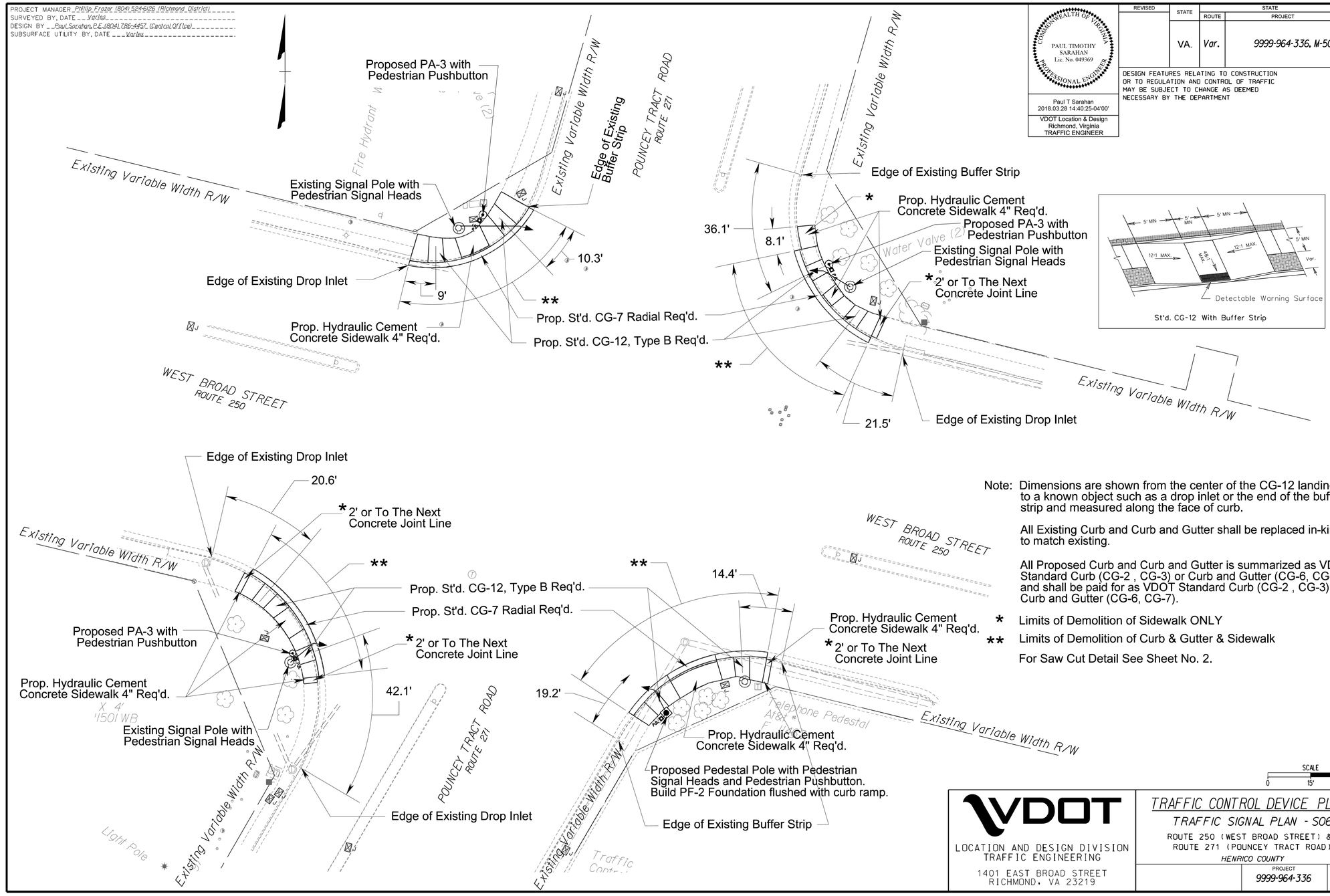
PROJECT MANAGER Phillip Frazer (804) 524-6126 (Richmond District)
SURVEYED BY, DATE Varies
DESIGN BY Paul Sarahan, P.E. (804) 786-4457 (Central Office)
SUBSURFACE UTILITY BY, DATE Varies

COMMONWEALTH OF VIRGINIA
PAUL TIMOTHY SARAHAN
Lic. No. 049369
PROFESSIONAL ENGINEER

Paul T Sarahan
2018.03.28 14:40:25-04'00'
VDOT Location & Design
Richmond, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	Var.	9999-964-336, M-501	8A

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



Note: Dimensions are shown from the center of the CG-12 landing to a known object such as a drop inlet or the end of the buffer strip and measured along the face of curb.

All Existing Curb and Curb and Gutter shall be replaced in-kind to match existing.

All Proposed Curb and Curb and Gutter is summarized as VDOT Standard Curb (CG-2 , CG-3) or Curb and Gutter (CG-6, CG-7) and shall be paid for as VDOT Standard Curb (CG-2 , CG-3) and Curb and Gutter (CG-6, CG-7).

* Limits of Demolition of Sidewalk ONLY

** Limits of Demolition of Curb & Gutter & Sidewalk

For Saw Cut Detail See Sheet No. 2.

SCALE 0 15' 30'

VDOT
LOCATION AND DESIGN DIVISION
TRAFFIC ENGINEERING
1401 EAST BROAD STREET
RICHMOND, VA 23219

TRAFFIC CONTROL DEVICE PLANS
TRAFFIC SIGNAL PLAN - S06
ROUTE 250 (WEST BROAD STREET) & ROUTE 271 (POUNCEY TRACT ROAD)
HENRICO COUNTY

PROJECT	SHEET NO.
9999-964-336	8A

FIGURE 2H - 42 SAMPLE PEDESTRIAN CROSSWALK PLAN (FOR ALTERATION PROJECTS ONLY)

3/26/2018
2:19:44 PM

d1062400IIa.dgn
Plotted By: kmontgomery

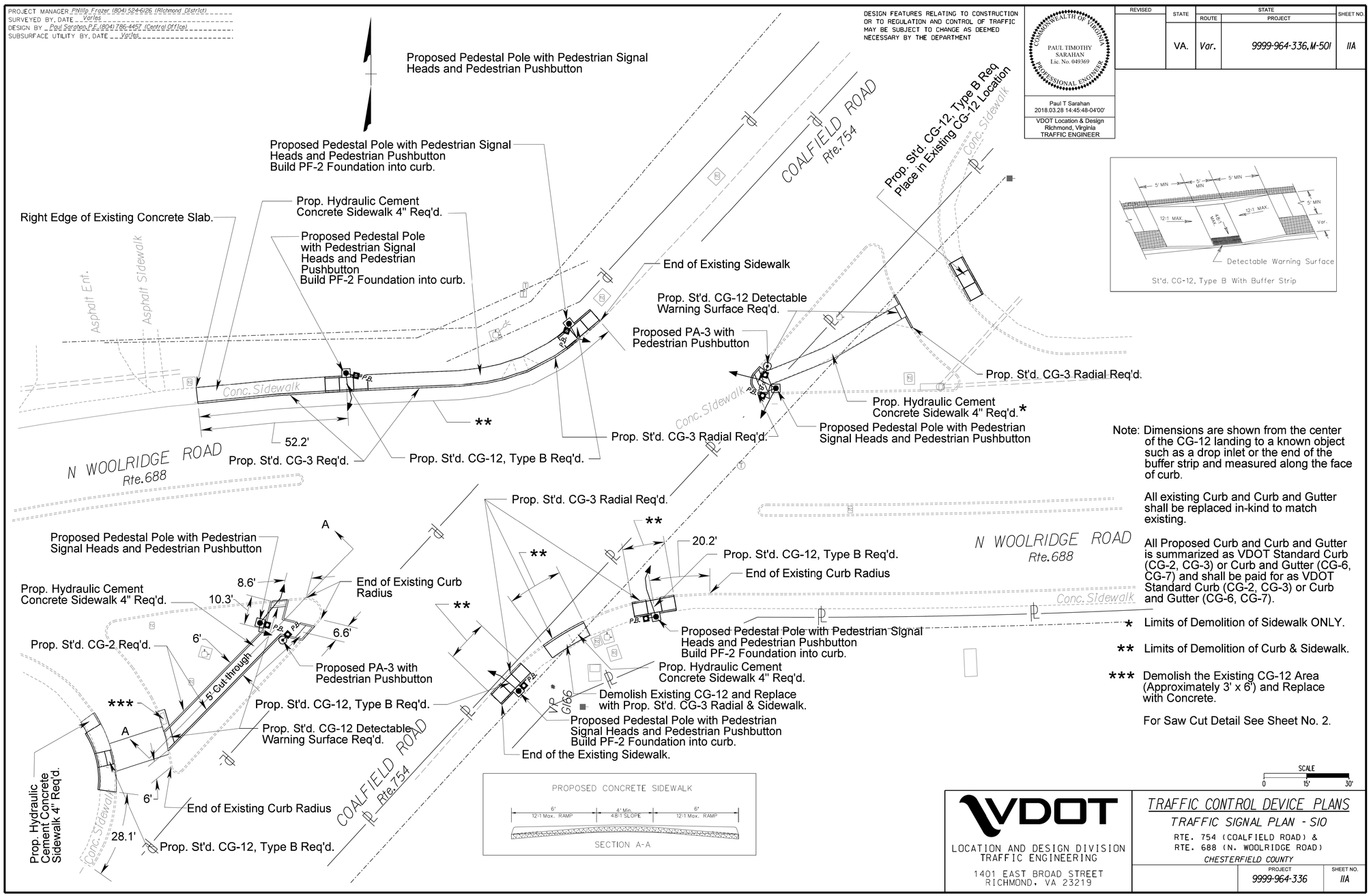
PROJECT MANAGER: Phillip Frazier (804) 524-6126 (Richmond District)
SURVEYED BY, DATE: Varies
DESIGN BY: Paul Sarahan, P.E. (804) 786-4457 (Central Office)
SUBSURFACE UTILITY BY, DATE: Varies

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

COMMONWEALTH OF VIRGINIA
PAUL TIMOTHY SARAHAN
Lic. No. 049369
PROFESSIONAL ENGINEER

Paul T Sarahan
2018.03.28 14:45:48-04'00'
VDOT Location & Design
Richmond, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	Var.	9999-964-336, M-501	IIA



Note: Dimensions are shown from the center of the CG-12 landing to a known object such as a drop inlet or the end of the buffer strip and measured along the face of curb.

All existing Curb and Curb and Gutter shall be replaced in-kind to match existing.

All Proposed Curb and Curb and Gutter is summarized as VDOT Standard Curb (CG-2, CG-3) or Curb and Gutter (CG-6, CG-7) and shall be paid for as VDOT Standard Curb (CG-2, CG-3) or Curb and Gutter (CG-6, CG-7).

* Limits of Demolition of Sidewalk ONLY.

** Limits of Demolition of Curb & Sidewalk.

*** Demolish the Existing CG-12 Area (Approximately 3' x 6') and Replace with Concrete.

For Saw Cut Detail See Sheet No. 2.

SCALE
0 15' 30'

VDOT
LOCATION AND DESIGN DIVISION
TRAFFIC ENGINEERING
1401 EAST BROAD STREET
RICHMOND, VA 23219

TRAFFIC CONTROL DEVICE PLANS
TRAFFIC SIGNAL PLAN - SIO
RTE. 754 (COALFIELD ROAD) &
RTE. 688 (N. WOOLRIDGE ROAD)
CHESTERFIELD COUNTY

PROJECT	SHEET NO.
9999-964-336	IIA

FIGURE 2H - 43 SAMPLE PEDESTRIAN CROSSWALK PLAN (FOR ALTERATION PROJECTS ONLY)