PROJECT MANAGER Laurie Murphy,PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements,Inc.(757) 368-0945,12/08/2017
DESIGN BY Rummel,Klepper & Kahl,LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements,Inc.(757) 368-0945

FOR INDEX OF SHEETS SEE SHEET 1B

THIS PROJECT WAS DEVELOPED UTILIZING VDOT ENGINEERING DESIGN PACKAGE (OPEN ROADS/GEOPAK).
GEOPAK Computer Identification No. 109381

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

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, INCLUDING ALL SUBSEQUENT REVISIONS, WILL BE THE OFFICIAL CONSTRUCTION PLANS. FOR INFORMATION RELATIVE TO ELECTRONIC FILES AND LAYERED PLANS, SEE GENERAL NOTES.

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

ALL TRAFFIC CONTROL METHODS AND DEVICES SHALL CONFORM TO "FEDERAL HIGHWAY ADMINISTRATION, MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, 2009 EDITION", AND THE "VIRGINIA WORK AREA PROTECTION MANUAL, STANDARDS AND GUIDELINES FOR TEMPORARY TRAFFIC CONTROL, AUGUST 2011" WITH "REVISION 1-APRIL 1, 2015".

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

ALL CONSTRUCTION METHODS AND MATERIALS WILL CONFORM TO THE CURRENT CITY OF VIRGINIA BEACH DEPARTMENT OF PUBLIC WORKS STANDARDS AND SPECIFICATIONS, DEPARTMENT OF PUBLIC UTILITIES SEWER AND WATER SPECIFICATIONS AND DETAILS, DEPARTMENT OF PUBLIC UTILITIES DESIGN STANDARDS MANUAL (2014), CITY OF VIRGINIA BEACHAMENDMENTS TO VDOT ROAD AND BRIDGE SPECIFICATIONS (2016), VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE SPECIFICATIONS (2016), VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE STANDARDS (2016), VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, 3RD EDITION, 1992, VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY, AND ANY OTHER APPLICABLE CITY OF VIRGINIA BEACH OR STATE ORDINANCES, CODES, AND LAWS PRIOR TO CONSTRUCTION.

CONTACT MISS UTILITY OF VIRGINIA AT LEAST 48 HOURS BEFORE GROUND PENETRATION OR EXCAVATION AT 811.

This Project Includes the Following Design Variances

Design Waivers:

None

Design Exceptions:

None

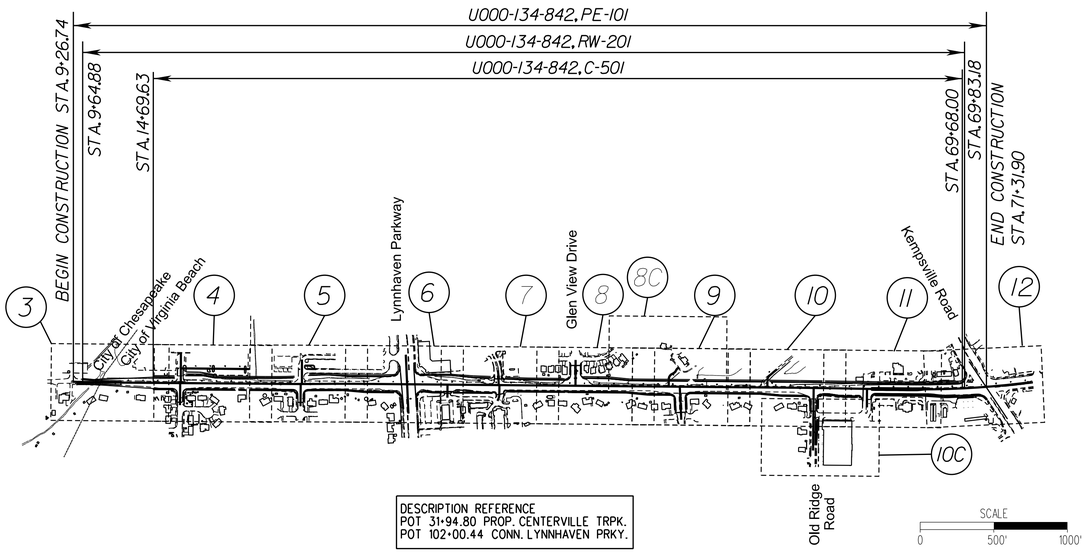
CITY OF VIRGINIA BEACH, VIRGINIA

DEPARTMENT OF PUBLIC WORKS

ENGINEERING DIVISION
CITY OF VIRGINIA BEACH, VIRGINIA

CENTERVILLE TURNPIKE PHASE III
PWCN- -
ROADWAY CIP NO. 2-419

FROM: 0.43 MILE SOUTH OF LYNNHAVEN PARKWAY
TO: 0.75 MILE NORTH OF LYNNHAVEN PARKWAY



DESCRIPTION REFERENCE
POT 31+94.80 PROP. CENTERVILLE TRPK.
POT 102+00.44 CONN. LYNNHAVEN PRKY.

STATE	FEDERAL AID PROJECT	STATE ROUTE	STATE PROJECT	SHEET NO.
VA.		915	U000-134-842, PE-101 RW-201, C-501 SEE TABULATIONS BELOW FOR SECTION NUMBERS	1

FHWA 534 14003

FUNCTIONAL CLASSIFICATION AND TRAFFIC DATA	
CENTERVILLE TRPK. - URBAN MINOR ARTERIAL - LEVEL - 45 MPH DESIGN SPEED	
	Fr: 0.43 MILE SOUTH OF LYNNHAVEN PARKWAY To: 0.75 MILE NORTH OF LYNNHAVEN PARKWAY
(E) ADT	17,680 (2017)
(P) ADT	29,385 (2045)
DHV	2,685 (2045)
D (%) (design hour)	51%
T (%) (design hour)	4%
V (MPH)	See Plan & Profile Sheets for Design Speed for Horizontal & Vertical Curves

Rummel, Klepper & Kahl, LLP Virginia Beach, Virginia (HYDRAULIC ENGINEER)	Rummel, Klepper & Kahl, LLP Virginia Beach, Virginia (ROADWAY ENGINEER)

PROJECT AREA	OWNER/APPLICANT NAME	OWNER/APPLICANT ADDRESS	TOTAL AREA OF PROJECT LIMITS	TOTAL AREA OF LAND DISTURBANCE	GRANDFATHERED? (YES OR NO)	VSMP DESIGN CRITERIA (IIB OR IIC)	WATERSHED/ HUC CODE	JPA/WETLAND REQUIRED? (YES OR NO)
CENTERVILLE TURNPIKE	CITY OF VIRGINIA BEACH	CITY OF VIRGINIA BEACH	23.05 AC	15.19 AC	NO	IIB	AS12	YES

POPULATION 437,994 (2010 CENSUS)

STATE PROJECT NO.	SECTION	FEDERAL AID PROJECT NO.	TYPE CODE	PPMS NO.	LENGTH INCLUDING BRIDGE(S) FEET	LENGTH INCLUDING BRIDGE(S) MILES	LENGTH EXCLUDING BRIDGE(S) FEET	LENGTH EXCLUDING BRIDGE(S) MILES	TYPE PROJECT	DESCRIPTION
U000-134-842	PE-101		PENG	109381	6205.16	1.18	6205.16	1.18	PREL. ENGINEERING	FROM: 0.43 MILE SOUTH OF LYNNHAVEN PARKWAY TO: 0.75 MILE NORTH OF LYNNHAVEN PARKWAY
	RW-201		ROWA	109381	6018.30	1.14	6018.30	1.14	RIGHT OF WAY	
	C-501		1000	109381	5498.37	1.04	5498.37	1.04	CONSTRUCTION	

NOTE: PROJECT LENGTH BASED ON CENTERVILLE CONSTRUCTION BASELINE

RECOMMENDED FOR APPROVAL FOR CONSTRUCTION

PUBLIC WORKS

DATE — DIRECTOR OF PUBLIC WORKS

DATE — CITY ENGINEER

DATE — OPERATIONS ENGINEER

DATE — REAL ESTATE

PUBLIC UTILITIES

DATE — DIRECTOR OF PUBLIC UTILITIES

DATE — UTILITIES OPERATIONS MANAGER

DATE — UTILITIES ENGINEERING MANAGER

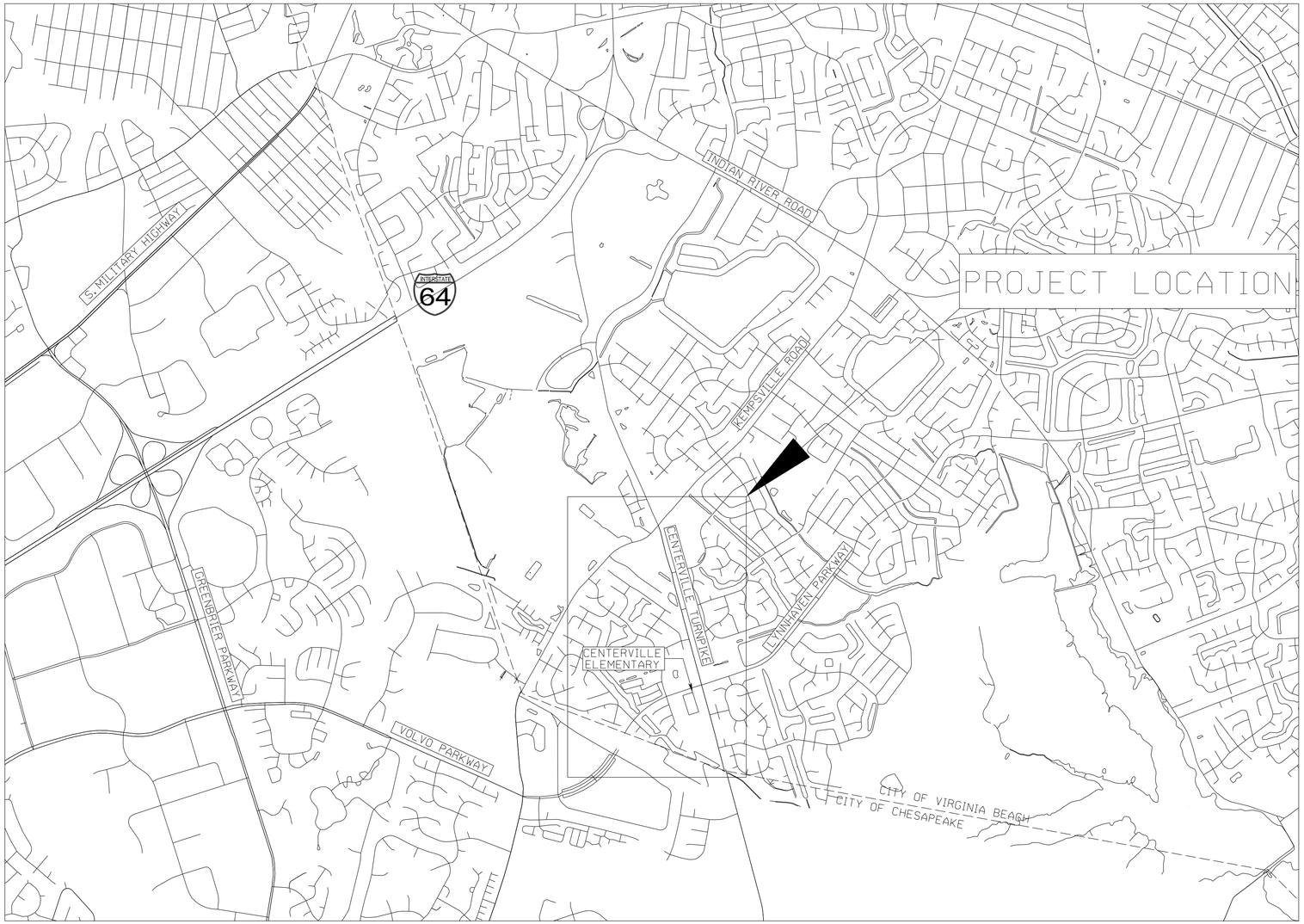
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	1A

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

PROJECT LOCATION MAP

CITY OF VIRGINIA BEACH



SCALE	PROJECT	SHEET NO.
0 1500' 3000'	U000-134-842	1A

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

INDEX OF SHEETS

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	1B

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

SHEET NO.	DESCRIPTION
1	TITLE SHEET
1A	LOCATION MAP
1B	INDEX OF SHEETS
1C - 1C(1)	RIGHT OF WAY DATA SHEET
1D	REVISION DATA SHEET
1E	SURVEY DATA SHEETS
1F - 1F(1)	EXISTING UTILITY NOTES
1F(2)	EXISTING DRAINAGE DESCRIPTION SHEET
1F(3)	EXISTING SANITARY SEWER DESCRIPTIONS
1G - 1G(3)	CONSTRUCTION ALIGNMENT DATA
1H - 1H(11)	EXISTING CONDITION SHEETS
1J - 1J(43)	TRANSPORTATION MANAGEMENT PLAN
1K	UNDERGROUND UTILITY TEST HOLE INFORMATION
2	GENERAL NOTES
2A - 2A(8)	TYPICAL SECTIONS
2B(1) - 2B(2)	DRAINAGE DESCRIPTION SHEETS
2C(1) - 2C(4)	DETAILS
2D(1) - 2D(5)	CURB RAMP DETAIL SHEETS (NOT INCLUDED)
3 - 12	PLAN SHEETS
3A - 12A	PROFILE SHEETS
13 - 13A	ENTRANCE PROFILE SHEET
14	SIGNING AND PAVEMENT MARKING PLAN SHEETS
15	LIGHTING PLAN SHEETS
16	TRAFFIC SIGNAL PLAN SHEETS
17	LANDSCAPE PLAN SHEETS
18	NOISE WALL PLAN SHEETS
19	UTILITY PLAN SHEETS
20	STORMWATER PROFILES
21	STORMWATER MANAGEMENT PLAN SHEETS (NOT INCLUDED)
22	DEMOLITION PLAN SHEETS (NOT INCLUDED)
1 - 76	CENTERVILLE TURNPIKE CROSS SECTIONS
100 - 103	LYNNHAVEN PARKWAY CROSS SECTIONS
104 - 105	LIVINGSTON OAK DRIVE CROSS SECTIONS
106 - 107	WOODHILL ROAD CROSS SECTIONS
108 - 109	GLEN VIEW DRIVE CROSS SECTIONS
110 - 111	HIDDEN VALLEY DRIVE CROSS SECTIONS
112 - 116	OLD RIDGE ROAD CROSS SECTIONS

	PROJECT	SHEET NO.
	U000-134-842	1B

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurement, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurement, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	IC

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

City/County: Virginia Beach

UPC No.: 109381

PRELIMINARY
RIGHT OF WAY DATA SHEET

LANDOWNER

PARCEL NO.	LANDOWNER	SHEET NO.	AREA							EASEMENTS								PROFFERS
			TOTAL	FEE TAKING		PRESCRIPTIVE R/W		FEE REMAINDER		PERMANENT		UTILITY		TEMPORARY		TEMPORARY(ENTRANCES)		
			ACRES OR SQUARE FEET	ACRES OR SQ. FEET	HECTARES/ OR SQ. METERS	ACRES OR SQ. FEET	HECTARES/ OR SQ. METERS	ACRES OR SQ. FEET	HECTARES/ OR SQ. METERS	ACRES OR SQ. FEET	HECTARES/ OR SQ. METERS	ACRES OR SQ. FEET	HECTARES/ OR SQ. METERS	ACRES OR SQ. FEET	HECTARES/ OR SQ. METERS	ACRES OR SQ. FEET	HECTARES/ OR SQ. METERS	YES / NO
001	RESURRECTION UNITED METHODIST CHURCH	3												372				
002	COLONIAL BAPTIST CHURCH	3/4/4C	435,600	8,116				427,484						39,292				
003	ROBERT E.BURTON & ROSEANN J.BURTON	3	12,368	1,382				10,986		1,570								
004	KECIA LAWRENCE	3	10,504	32				10,472		119								
005	JAMES R.EMERICK & CATHERINE M.EMERICK	3	12,969	440				12,529		614								
006	MIKE D.RIKARD & KATHLEEN M.RIKARD	3	10,618	117				10,498		1,229								
007	GEOFFREY T.TIMLIN & DEBBIE M.TIMLIN	3	12,547							357								
008	NED W.BROWN, III	3/4	8,307							537				466				
009	MANUEL B.GAPUZ & JOSEFINA J.GAPUZ	4	8,650	764				7,886		905				328				
010	VINCENT KUBAT & AMANDA GROVES KUBAT	4	7,879	633				7,246		750								
011	DENTON G.MILES & DEMETRIA M.MILES	4	13,051	1,140				11,911		1,512								
012	ROBERTO B.LEANDADO,JR & ROBERTO O.LEANDADO & BEATRIZ B.LEANDARO	4	12,152	134				12,018		199								
013	AMADEO SAN ANTONIO	4	49,354	1,549				47,805		565				2,141				
014	PAT W.O'BRIAN & PATRICIA Y.O'BRIAN	4/5	13,472	431				13,041		1,299								
015	THE SCHOOL BOARD OF THE CITY OF VIRGINIA BEACH	4/4C /5/6	641,813	6,915				634,898										
016	WALLY A.BULOSAN & CARMELITA R.BULOSAN	5	8,372							563								
017	VALERIE G.ALLEN REVOCABLE LIVING TRUST	5	10,175							609				146				
018	JAMES W.HARRELL,JR.& GLORIA E.HARRELL	5	11,196	601				10,595		916				183				
019	CHARITO MEDRANO & TRINIDAD M.MEDRANO	5	9,926	434				9,492		750								
020	JEROLD E.DYE & BARBARA M.DYE	5	10,514	444				10,070		1,237								
021	JESSIE MILLER	5/6	15,339	2				15,337		731								
022	CHARLES FERGUSON & KIMBERLY D.FERGUSON	6	9,723	0J				9,723		48								
023	ROBERT J.CABRAL,JR.& SULMA B.CABRAL	6	11,656	583				11,073		1,515								
024	CARSON D.ENTREKIN	6	15,279	541				14,738		1,301								
025	WOODS CREEK CORNER,LLC	6/7	84,554	1,131				83,423		506				4,528				
026	BPMS CASCADES,LLC	6/7	507,605	2,882				504,723						5,311				
027	BPMS CASCADES 2,LLC	7	48,100	2,753				45,347						1,984				
029	JERRY J.NG & JULIE Y.ZHU	7	11,028	922				10,106		893								
030	QIAOLING LIN	7	7,386	893				6,493		813								
031	AARON C.MACK & CONSTANCE L.MACK	7/8	5,360	496				4,864		475								
032	BRG CASCADES EAST,LLC	7	451,282	744				455,538						5,496				
033	MUHAMMAD A.ANJUM & SURIYA BIBI	7	19,898	797				19,101		1,590								
034	JEFFREY H.JOHNSON	7/8	9,000	375				8,625		750								
035	JAMES H.HANNEY JR.& KASSANDRA D.HANNEY	8	10,897	550				10,347		1,075								
036	CLAUDE R.REYNOLDS & JUNE S.REYNOLDS	8	12,083							25								
037	RAYMOND J.WILLIAMS & VALERIE A.WILLIAMS	8	10,829	831				9,998		1,535								
038	DAVID J.WALKER & JEANETT G.WALKER	8	12,633	648				11,985		1,305								
040	DANIEL CARL RILES & SUSAN CHARLOTTE RILES	8	14,536	738				13,798		1,634								
041	LINDA WEAVER	8/9	10,100	259				9,841		716								
042	BILLY D.GENES	8	5,359	494				4,865		475								
043	VALENTINO I.BALANCIO & LUTGARDA E.BALANCIO	8	6,484	798				5,686		387				422				

PROJECT	SHEET NO.
000-134-842	IC

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurement, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurement, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	1C(1)

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

City/County: Virginia Beach

UPC No.: 109381

PRELIMINARY
RIGHT OF WAY DATA SHEET

LANDOWNER

PARCEL NO.	LANDOWNER	SHEET NO.	AREA															PROFFERS
			TOTAL	FEE TAKING		PRESCRIPTIVE R/W		FEE REMAINDER		EASEMENTS								
										PERMANENT		UTILITY		TEMPORARY		TEMPORARY(ENTRANCES)		
			ACRES OR SQUARE FEET	ACRES OR SQ. FEET	HECTARES/ OR SQ. METERS	ACRES OR SQ. FEET	HECTARES/ OR SQ. METERS	ACRES OR SQ. FEET	HECTARES/ OR SQ. METERS	ACRES OR SQ. FEET	HECTARES/ OR SQ. METERS	ACRES OR SQ. FEET	HECTARES/ OR SQ. METERS	ACRES OR SQ. FEET	HECTARES/ OR SQ. METERS	ACRES OR SQ. FEET	HECTARES/ OR SQ. METERS	YES / NO
044	JOSE A.COLON,JR.& MEGAN K.COLON	8	5,880	915				4,965		678				358				
045	EUSULA F.HENNINGAN	8	5,438	777				4,661		571								
046	RIGOBERTO SOSA & BLANCA D.FUENTES	8	6,226	874				5,352		640								
047	TOBY A.LARIVIERE & CHRISTOPHER M.WULF	8	6,550	250				6,300		364								
048	CITY OF VIRGINIA BEACH	8/8C/9	71,799	3,088				68,711										
049	CITY OF VIRGINIA BEACH	9	35,924	733				35,191										
050	TRAVIS CHESTER RUPP	9/10	84,097	4,294				79,803						5,452				
051	ROBERT EUGENE DEXTER	9	9,679	451				9,228		751								
052	JOSEPH G.BODNAR & SHELLEY M.KARPMAN BODNAR	9	12,169	1,121				11,048		1,085				631				
053	JESUS A.MURILLO & NORMA N.MURILLO	9	10,524	1,108				9,416		1,103				665				
054	MATTHEW W.THOMAS BRANDEE M.THOMAS	9	13,440	640				12,800		1,290								
055	PEDRO R.MORAZO & FEMIA G.MORAZO	9/10	15,053	729				14,324		1,459								
056	JOHN H.MCKENNEY JR.	10	14,724	752				13,972		1,479								
057	BENNY L.MILLS	10	16,165	761				15,404		1,566								
058	TIMOTHY B.PURSEL & EMILY D.PURSEL	10	9,345	441				8,904		739								
059	EMILIANO G.LABRADOR & AURORA L.LABRADOR	10/10C	11,090	1,141				9,949		942				657				
060	WCSC,LLC	10/10C/11	45,587	2,353				43,234						4,129				
061	JULIET CHANNELL	10	42,427	1,683				40,744						3,409				
062	THE CHESAPEAKE AND POTOMAC TELEPHONE CO.	10	19,602	244				19,358						1,435				
063	ATHENS OF TIDEWATER,INC.	10/11	119,659	4,071				115,588		255				6,013				
064	DARRYL H.ROADCAP	10/11	19,315	19,315				0										
065	WCSC,LLC	10C/11	671,129	1,877				669,252						6,761				
066	WCSC,LLC	11	35,423	434				34,989						974				
067	SONIC RESTAURANTS,INC.	11/12	34,500	595				33,905						997				
068	ATHEN'S OF TIDEWATER,INC.	11	38,332	2,014				36,318						1,557				
069	RTR REAL ESTATE ASSOCIATES	11/12	58,109	968				57,141						1,115				
070	TIDEWATER INVESTMENTS,LLC	12	24,998	1,324				23,674						1,922				
071	THE ANNE D.WOOD EXEMPT TRUST	12	9,793	279				9,514						254				
072	PAPCO,INC.	12	43,432					43,432						544				

PROJECT	SHEET NO.
000-134-842	1C(1)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurement, Inc. (757) 368-0946, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurement, Inc. (757) 368-0946, 12/08/2017

REVISION DATA SHEET

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	ID

State Project: U000-134-842, PE-101, RW-201, C-501
Federal Project: 000-000-0( )
FROM: 0.43 MILE SOUTH OF LYNNHAVEN PARKWAY
TO: 0.75 MILE NORTH OF LYNNHAVEN PARKWAY
UPC Number: 109381

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.
	U000-134-842	ID

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	1E

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

SURVEY DATA

CENTERVILLE SURVEY ALIGNMENT

POINT	STATION	BEARING	VIRGINIA STATE PLANE COORDINATES NORTH (Y)	EAST (X)
105	100+00		3,445,222.118	12,160,529.668
		N 15°28'19" W		
213	105+57.21		3,445,759.135	12,160,381.022
		N 07°50'39" W		
212	110+65.28		3,446,262.448	12,160,311.680
		N 24°21'13" W		
211	115+00.21		3,446,658.682	12,160,132.327
		N 14°19'09" W		
210	119+75.40		3,447,119.106	12,160,014.801
		N 18°42'30" W		
209	124+02.43		3,447,523.577	12,159,877.828
		N 15°51'09" W		
208	128+63.98		3,447,967.570	12,159,751.751
		N 04°19'53" E		
207	131+93.13		3,448,295.781	12,159,776.609
		N 16°25'25" W		
206	136+49.19		3,448,733.229	12,159,647.665
		N 14°48'48" W		
205	141+15.94		3,449,184.462	12,159,528.330
		N 14°54'29" W		
204	145+36.65		3,449,591.025	12,159,420.090
		N 13°49'02" W		
203	148+39.56		3,449,885.160	12,159,347.749
		N 16°23'20" W		
202	152+52.53		3,450,281.355	12,159,231.225
		N 14°45'20" W		
201	161+61.27		3,451,160.123	12,158,999.772
		N 13°05'07" W		
89	166+43.13		3,451,629.468	12,158,890.678
		N 21°12'22" W		
200	170+84.51		3,452,040.956	12,158,731.021

SURVEY CONTROL VALUES

POINT	NORTH (Y)	EAST (X)	ELEVATION	DESCRIPTION
89	3451629.468	12158890.678	16.31	Disk 134-0089
105	3445222.118	12160529.668	11.56	Disk 105
200	3452040.956	12158731.021	17.39	Pin & Cap 200
201	3451160.123	12158999.772	16.20	Pin & Cap 201
202	3450281.355	12159231.225	15.95	Pin & Cap 202
203	3449885.160	12159347.749	14.94	Pin & Cap 203
204	3449591.025	12159420.090	14.83	Pin & Cap 204
205	3449184.462	12159528.330	14.25	Pin & Cap 205
206	3448733.229	12159647.665	13.86	Pin & Cap 206
207	3448295.781	12159776.609	13.63	Pin & Cap 207
208	3447967.570	12159751.751	14.06	Pin & Cap 208
209	3447523.577	12159877.828	13.09	Pin & Cap 209
210	3447119.106	12160014.801	11.01	Pin & Cap 210
211	3446658.682	12160132.327	11.96	Pin & Cap 211
212	3446262.448	12160311.680	12.12	Pin & Cap 212
213	3445759.135	12160381.022	11.94	Pin & Cap 213

TOPOGRAPHIC SURVEY OF CENTERVILLE TURNPIKE PHASE 3
VIRGINIA BEACH, VIRGINIA
SCALE: 1" = 25'
PMI PROJECT #17-064

SURVEY NOTES:

1. THE MERIDIAN SOURCE OF THIS TOPOGRAPHIC SURVEY IS BASED ON THE CITY OF VIRGINIA BEACH, VIRGINIA GEODETIC CONTROL NETWORK, VIRGINIA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, NORTH AMERICAN DATUM 1983 (1993 HARN). VALUES ARE EXPRESSED IN U.S. SURVEY FEET.
2. ELEVATIONS REFER TO NAVD88 AND WERE ESTABLISHED USING DIFFERENTIAL LEVELING METHODS INITIATED AT:
   CITY OF VIRGINIA BEACH CONTROL STATION 134-0089 ELEVATION = 16.31.
3. THIS SURVEY WAS PREPARED TO SHOW EXISTING FEATURES AS OF 11/07/2017 AND DOES NOT CERTIFY TO CHANGES TO SITE CONDITIONS WHICH OCCUR SUBSEQUENT TO THIS DATE AND OR TO PROPOSED IMPROVEMENTS.
4. THIS SURVEY DOES NOT CONSTITUTE A BOUNDARY SURVEY NOR A SUBDIVISION OF LAND.
5. THIS SURVEY DOES NOT INTEND TO DEPICT ANY HAZARDOUS WASTE AND ENVIRONMENTAL FEATURES THAT MAY AFFECT SAID PROPERTY SHOWN HEREON EXCEPT AS SHOWN.
6. THE UNDERGROUND UTILITIES SHOWN, IF ANY HAVE BEEN DESIGNATED AND LOCATED BY "PMI". THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THE SURVEYOR DOES GUARANTEE THAT THE PHYSICAL LOCATION HAS BEEN CORRECTLY RECORDED. THE SURVEYOR FURTHER NOTIFIES ALL PARTIES THAT VIRGINIA LAW REQUIRES "VA811" TO BE CONTACTED PRIOR TO ANY EXCAVATION.
7. THE TOPOGRAPHY AND PHYSICAL FEATURES SHOWN ON THIS MAP WERE OBTAINED UNDER THE DIRECT AND RESPONSIBLE CHARGE AND SUPERVISION OF IVAN R. LINEBERRY, L.S. FROM AN ACTUAL GROUND SURVEY MADE UNDER MY SUPERVISION; RIGHT-OF-WAY, EASEMENTS AND PROPERTY DATA WERE PREPARED UNDER THE DIRECT AND RESPONSIBLE CHARGE AND SUPERVISION OF FRANK WINEINGER, L.S. FROM AN ACTUAL GROUND SURVEY MADE UNDER MY SUPERVISION; THE ORIGINAL DATA WAS OBTAINED BETWEEN AUGUST 2017 AND NOVEMBER 2017 THIS PLAT, MAP, OR DIGITAL GEOSPATIAL DATA INCLUDING METADATA MEETS ACCURACY STANDARDS UNLESS OTHERWISE NOTED.

PRECISION MEASUREMENTS, INC.
SURVEYORS - GPS - GIS - MAPPING - 3-D LASER SCANNING
629 PHOENIX DRIVE, SUITE 100
VIRGINIA BEACH, VA. 23452
(757) 368-0945
WWW.PRECISIONMEASUREMENTS.COM
VIRGINIA BEACH - NEWPORT NEWS - RICHMOND, VIRGINIA

EASEMENT INFORMATION FOR VARIOUS EASEMENTS SHOWN IN EXISTING CONDITION SHEETS:

(A) 15' Reservation For Street Widening (M.B. 88, Pg. 61)

(B) 5' no Ingress/Egress Easement No Vehicular Access Permitted (M.B. 150, Pg. 166)

(C) 10' Landscape Buffer (M.B. 150, Pg. 166)

(D) 5' Drainage & Utility Easement (M.B. 240, Pg. 76)

(E) 87.5' Drainage Easement (M.B. 161, Pg. 34)

(F) 15' maintenance Easement (M.B. 211, Pg. 79)

(G) 1' Public No Ingress/Egress Easement (Inst.# 200812220014379 60)

(H) Variable Width Right-of-way Reservation (Inst.# 200812220014379 60)

(I) Variable Width Private Reciprocal Cross Access Easement (Inst.# 200812220014379 60)

(J) 10' private Drainage Easement (Inst.# 200812220014379 60)

BENCHMARKS

TBM "H"
CUT SQUARE IN CURB
STA. 105+06.19 LT. 34.14 FT.
ELEV. = 11.59

TBM "G"
CUT SQUARE IN CURB
STA. 113+98.97 LT. 65.02 FT.
ELEV. = 10.80

TBM "F"
CUT SQUARE IN CURB
STA. 128+43.43 LT. 71.81 FT.
ELEV. = 12.29

TBM "E"
CUT SQUARE IN CURB
STA. 141+17.64 LT. 168.13 FT.
ELEV. = 14.73

TBM "D"
CUT SQUARE IN CURB
STA. 148+47.89 RT. 103.82 FT.
ELEV. = 13.83

TBM "C"
CITY OF VIRGINIA BEACH
CONTROL DISK C-11-1
STA. 157+96.70 RT. 4.81 FT.
ELEV. = 15.28

TBM "B"
CUT SQUARE IN CURB
STA. 164+83.85 RT. 53.25 FT.
ELEV. = 16.53

12/17/2020
3:54:46 PM

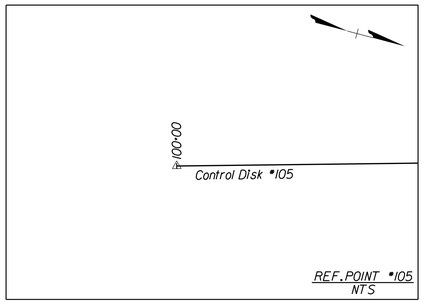
Plotted By: RK&K - JMK

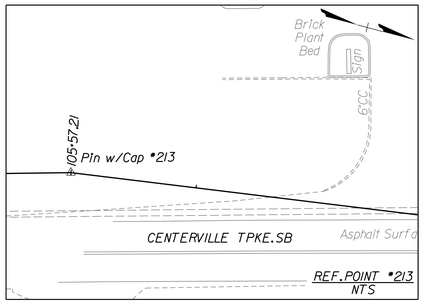
PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

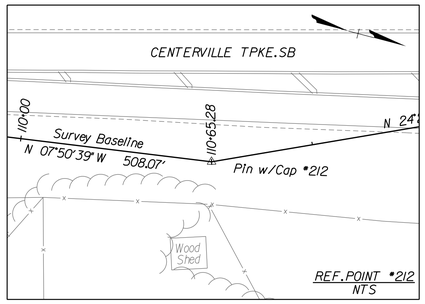
REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	1E(1)

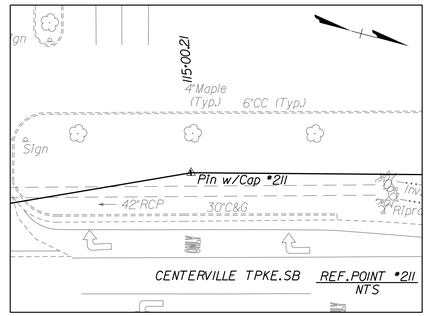
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

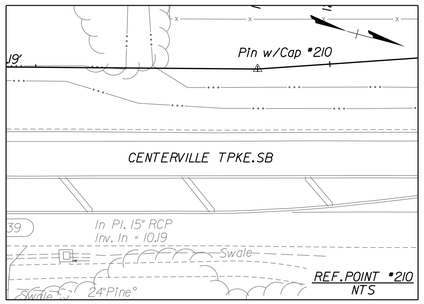
SURVEY DATA

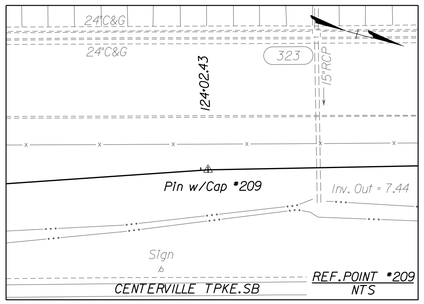


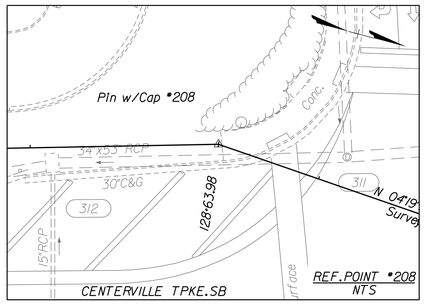


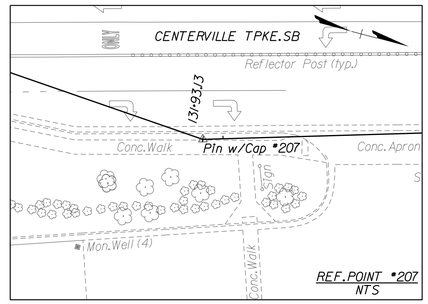


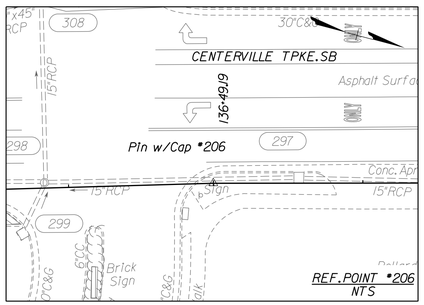


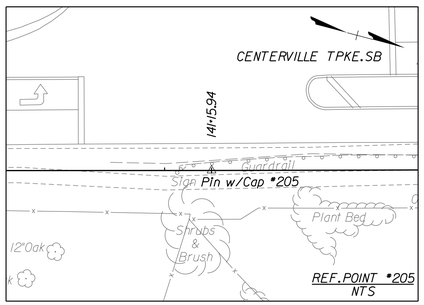


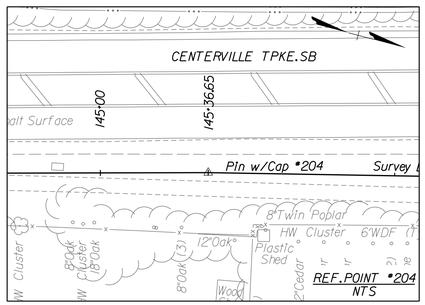


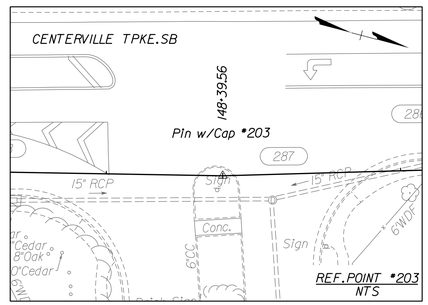


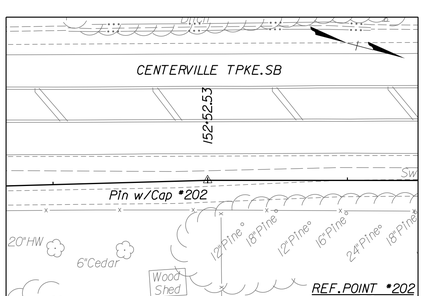


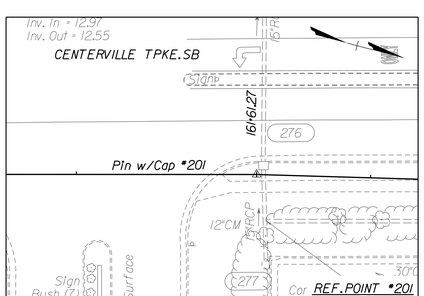


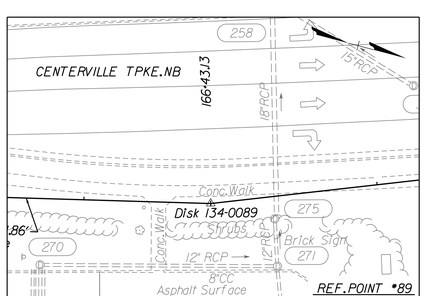


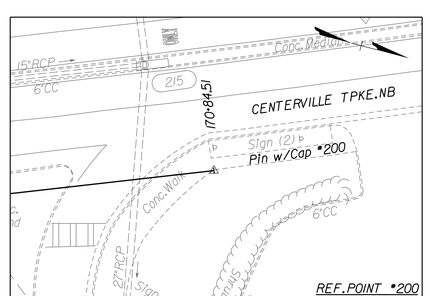












12/1/2020

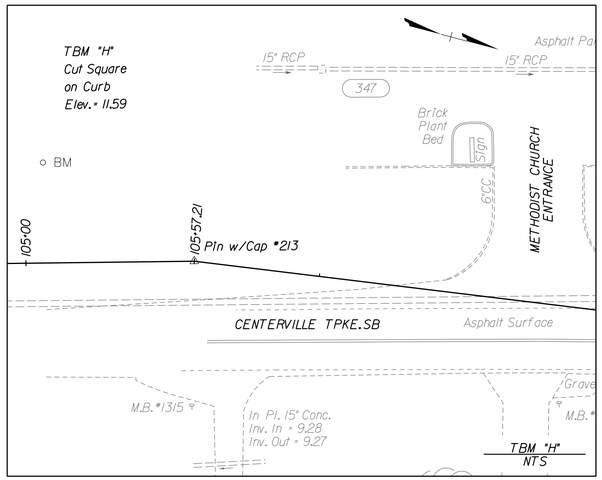
	PROJECT	SHEET NO.
	U000-134-842	1E(1)

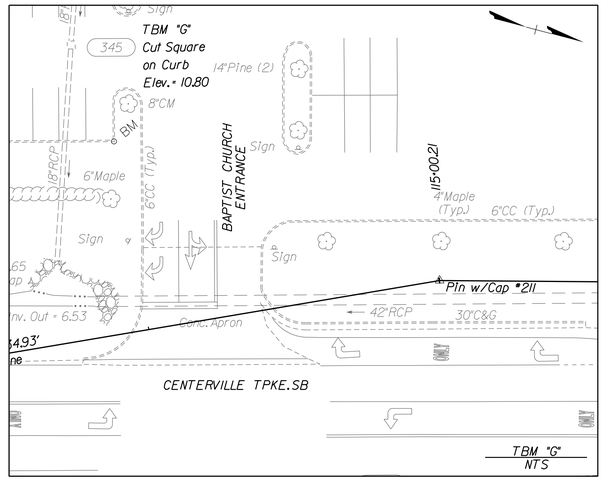
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

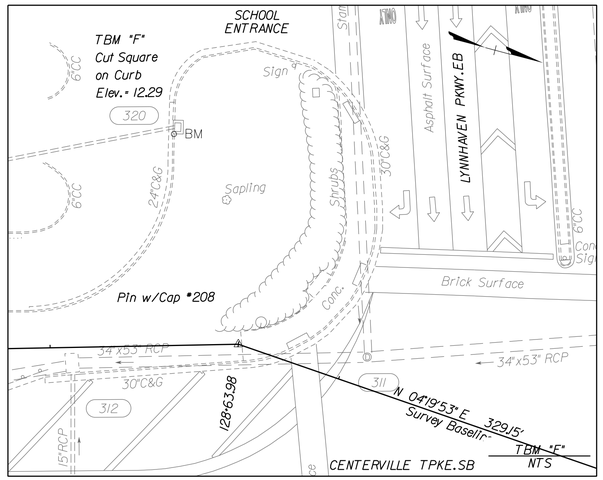
SURVEY DATA

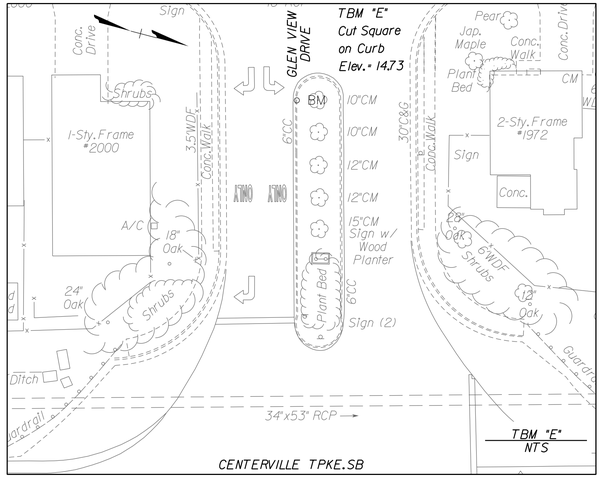
REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	1E(2)

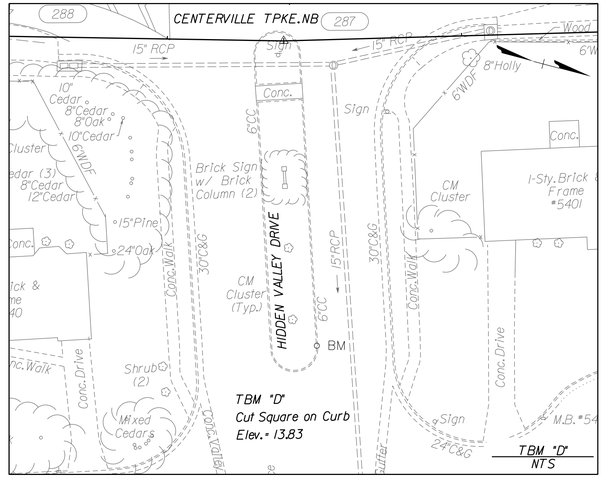
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

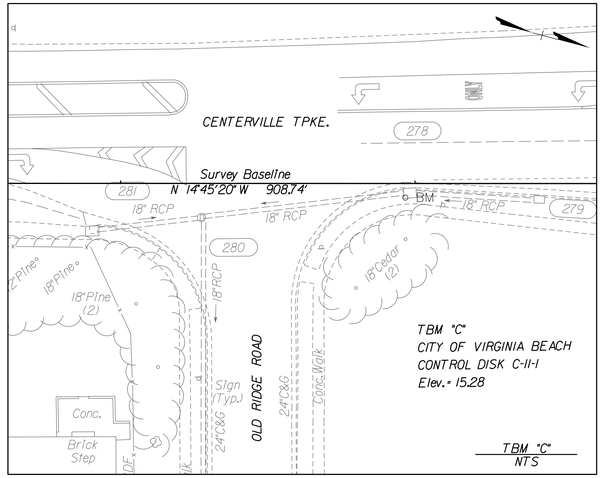


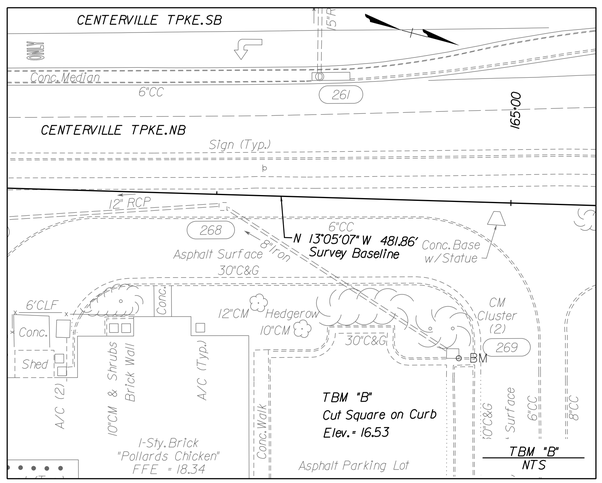












	PROJECT	SHEET NO.
	U000-134-842	1E(2)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

EXISTING UTILITY NOTES

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	1F

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

UTILITY DESIGNATION NOTES

GENERAL NOTES:

GN1. A limited underground utility designation was performed by Precision Measurements, Inc. dated November 1, 2017 within the specified limits and is depicted herein. The utility designation performed was performed in accordance with Quality Level B (location shown based on electronic information) unless otherwise noted herein. Where electronic signals could not be obtained, the approximate location of such utilities are shown at Quality Level C/D based on records and/or verbal informationprovided by the utility owner as well as physical features.

GN2. The utility sizes indicated in the designation information are based on information supplied by the utility owner (either by written records or by verbal information).

GN3. The Quality Level B utility designation was limited as follows: *R.O.W. Coorldors: the designation effort was limited to identifying and designating only the known utilities shown on records (or visibly identified in the field).

GN4. Virginia Department of Transportation owned facilities (electric, traffic management system, etc.). exist within the project limits have been designated.

GN5. City owned facilities may exist within the project limits have been designated based on records and/or verbal.

GN6. Base topographic survey/mapping was not available at the time of the utility designation/survey. Utility features shown at Quality Level C/D are approximated basedon surveyed utility features, aerial imagery, and/or GIS mapping information.

GN7. Public and/or franchise utilities exist adjacent to and within the project limits but have not been designated except as otherwise shown hereon. See General Note GN3.

GN8. In some cases electronic signals either could not be obtained or the signal obtained was weak or questionable (possibly due to the depth of the facility). The approximate location is shown at Quality Level C/D.

FIBER OPTIC NOTES:

FO1. Telephone & Cable records indicate the presence of fiber optic facilities.

GAS/PETROLEUM NOTES:

G1. Approximate location of (OLC/D) is shown based on schematic record information.

SANITARY SEWER FORCE MAIN NOTES:

FM1. City GIS records indicate a Sanitary Force Main within this area.

TELEPHONE NOTES:

T1. Verizon TMH *53502 vault full of water on field inspection.

T2. Verizon TMH *53503 vault full of water on field inspection.

T3. Verizon TMH *53504 vault full of water on field inspection.

T4. Verizon TMH *53434 vault partly covered. Did not open on field inspection.

T5. Verizon TMH *53462 vault approximate depth 10.6'+/-. Cables visible on field inspection.

T6. Verizon TMH *53479 vault approximate depth 9.9'+/-. Cables visible on field inspection.

UTILITY LEGEND

EB	Electric Box	TB	Telephone Booth
	Electric Guy Pole		Telephone Guy Pole
	Electric Ground Light		Telephone Guy Wire
	Electric Guy Wire		Test Holes (All Utilities)
E	Electric Hand Hole		Telephone Cell Tower
	Electric Meter	T	Telephone Hand Hole
E	Electric Manhole	T	Telephone Manhole
	Electric Marker Post		Telephone Marker Post
E	Electric Pedestal		Telephone Pole
	Electric Stub	T	Telephone Pedestal
	Electric Power Pole		Telephone Riser Pole
	Electric Power Riser Pole		Television Satellite Dish
	Electric Light Pole		Tower Anchor
	Electric Luminaire		Traffic Camera Pole
	End of Information (All Utilities)	TC	Traffic Control Hand Hole
	Fire Hydrant	TC	Traffic Control Manhole
F	Fiber Optic Hand Hole		Traffic Control Guy Wire
	Fiber Optic Marker	TC	Traffic Control Pedestal
FO	Fiber Optic Manhole		Traffic Signal Guy Pole
FO	Fiber Optic Pedestal		Traffic Signal Pole
	Gas Meter		Traffic Signal Pole w/Luminaire
G	Gas Manhole		Telephone Stub
	Gas Marker Post	TV	Television Hand Hole
MW	Gas Monitoring Well	TV	Television Manhole
	Gas Stub		Television Marker Post
GT	Gas Test Station	TV	Television Pedestal
	Gas Valve		Television Stub
	Gas Vent		Water Blow Off
	Gas Well	W	Water Well
	Sanitary Air Release Valve		Water Meter
	Sanitary Flow Arrow	WM	Water Manhole
	Sanitary Stub		Water Marker Post
	Sewer Clean Out		Water Spigot
	Sanitary Force Main Valve		Water Siamese Connection
	Sanitary Marker Post		Water Stub
S	Sanitary Manhole		Water Valve
	Sewer Vent Pipe		Water Post Inspection Valve
	Unknown Clean Out		Water Irrigation Valve
U	Unknown Hand Hole	ST	Water Steam Manhole
UK	Unknown Manhole		Water Steam Vent Pipe

CAFO	Fiber Optic Cable Television
CHEM	Chemical Line (above or below ground)
FO Duct	Underground Fiber Optic Duct
FUEL	Fuel Line (above or below ground)
G	Gas Line *
G Duct	Gas Line Duct
SAN	Gravity Sewer *
SFM	Sanitary Force Main *
TCFO	Traffic Control Fiber Optic
T/FO	Telephone Fiber Optic
FO	Underground Fiber Optic
Unk	Unknown Utility Line
E	Underground Power Cable
E Duct	Underground Power Cable Duct
T/Tg	Underground Telephone Cable
T/Tg Duct	Underground Telephone Cable Duct
TC	Underground Traffic Control
TC Duct	Underground Traffic Control Duct
CATV	Underground Television Cable
CATV Duct	Underground Television Cable Duct
VS	Vacuum Sewer
W	Water Line *
W Duct	Water Line Duct
Unk	Depicted According To Utility Records **
Unk	Abandoned According To Utility Records **
Unk	According To Miss Utility Information **

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

GCO	Gas Cut-Off
MCO	Mainline Cleanout

UTILITY OWNERS

Electric:
Dominion Energy
2700 Cromwell Drive
Norfolk Virginia 23509
Contact: facilitylocaterequest@dom.com
Telephone: 757-857-2372

Nautral Gas:
Virginia Natural Gas
544 South Independence Boulevard
Virginia Beach, Virginia 23452
Contact: Charlotte Ware
Telephone: 757-616-7527

Cable TV - Fiber Optic:
Cox Communications
5200 Cleveland Street,
Virginia Beach, Virginia 23462
Contact: Vicki Kincaid
Telephone: 757-222-6579

Telephone - Fiber Optic:
Verizon
3131-B Sewells Point Road
Norfolk, VA 23513
Contact: Wayne Hixenbaugh
Telephone: 757-855-9511

Sewer:
City of Virginia Beach
Public Utilities
2405 Courthouse Drive,
Virginia Beach, Virginia 23456
Contact: Christopher Johnson
Telephone: 757-385-4171

Hampton Roads Sanitation District
1434 Air Rail Avenue
Virginia Beach, Virginia 23455
Contact:
Telephone:

Traffic Control:
City of Virginia Beach
Traffic Management Center
3556 Dam Neck Road
Virginia Beach, Virginia 23453
Contact:
Telephone:

Water:
City of Virginia Beach
Public Utilities
2405 Courthouse Drive,
Virginia Beach, Virginia 23456
Contact: Christopher Johnson
Telephone: 757-385-4171

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

UTILITY NOTES

GENERAL CONSTRUCTION NOTES:

1. The Contractor will contact Virginia 811 prior to beginning work in order to determine the extent and location of all underground utilities within the Project limits. Utility companies will be notified through Virginia 811 48 hours prior to any excavation within the proximity of their utilities. The Contractor will be responsible for repairingor replacing at his own expense, any utilities, pavement, concrete items, pipes, etc. that are damaged during construction.
2. The contractor is responsible for obtaining all permits required to complete the construction of the Project. The contractor is responsible for locating and securing a staging and storage area.
3. All construction methods and materials shall be in accordance with the Hampton Roads Planning District Commission (HRPDC) Regional Construction Standards, 5th Edition.
4. All piping or materials being replaced or removed as part of this contract shall be disposed of at the Contractor's expense.
5. The Contractor shall be required and agrees to comply with all the provisions of the "Virginia Underground Utility Damage Prevention Act" (Section 56-265.14 et seq., Code of Virginia, 1950, as amended) and hereby agrees to hold the City of Virginia Beach harmless against any loss, damages or claims of any nature whatsoever arising out of the Contractor's failure to comply with the requirements of said act.
6. Contractor shall conform to the "Overhead High Voltage Line Safety Act" (effective July 1, 2003) and shall contact the necessary authorities prior to start of construction.
7. The Contractor shall coordinate construction adjacent to all streets lights and poles with Dominion Virginia Power.
8. Contractor shall have a set of Specifications & Contract Documents and a complete set of Drawings on site at all times. The Contractor must have a local contact available to respond to emergencies during construction.
9. The Contractor shall work within the Right-of-Way, City property and areas defined on the drawings unless specifically authorized to work in easements.
10. The Contractor is responsible for construction stakeout. The structures, force main, other utilities, and all appurtenances shall be located.
11. The Contractor must contact Public Utility/Inspections at (757-385-4175) at least 48 hours prior to construction (public or private) located within the City's right-of-way or easement.
12. Contractor shall maintain access through Project area for mail delivery, school buses, emergency vehicles, etc.
13. The Contractor shall keep the Project area in a clean condition free of debris and trash.
14. The Contractor shall be responsible for pavement patching. The Pavement Patch Details are provided on the Detail Sheets and specified in the Project Manual.
15. When utilities are installed parallel to the roadway and the distance between the edge of pavement and the saw-cut edge of the trench is 2 feet or less, the remaining pavement strip shall be removed and replaced as part of the pavement patch.
16. Unless specified otherwise, all roadway cuts shall be backfilled only with suitable sub-base material, and mechanically tamped in 6" maximum layers. Backfill shall be placed and compacted in accordance with Specifications. The Engineer may, at any time, require testing other than the required testing as specified, to ensure compliance with the Specifications of this contract. All tests will be performed by a recognized testing laboratory selected by the Engineer, qualified in the field of materials to be tested. If applicable, all tests shall be conducted in accordance with the Virginia Department of Transportation's "Manual for Virginia Test Methods" (current edition as revised). Payment for all tests performed will be in accordance with the following:
    A) The cost of all tests failing to meet minimum requirements will be borne by the Contractor.
    B) The cost of all tests that either meet or exceed minimum requirements will be borne by the City of Virginia Beach.
17. The Contractor shall inspect temporary pavement patches at the end of each day and after rainfall for damage. The Contractor shall make the repairs required to provide a smooth, stable riding surface.
18. The Contractor shall replace all damaged or removed sidewalks daily. The temporary sidewalk shall be 1" cold mix over compacted subgrade and sloped to provide positive drainage. The permanent sidewalk replacement shall be in accordance with the Detail Sheets.
19. At night or during non-construction hours, all excavated areas are to be backfilled or secured and protected by using approved safety devices or materials.
20. The Contractor shall locate all utilities that may cross the proposed pipeline alignment in advance and make vertical and horizontal adjustments to the plan alignment as required to prevent conflicts with existing private utilities. All alignment adjustments shall be approved in advance by the Owner.

GENERAL CONSTRUCTION NOTES (CONT.):

21. When it is necessary to disturb existing driveways beyond the proposed construction limits, concrete driveways shall be replaced to the next joint past the disturbance, as approved by the Owner. Asphalt driveways shall be replaced for the full width of the driveway to a point past the disturbance, as approved by the Owner. The Contractor shall match the existing driveway design when constructing the tie-in.
22. Location of water, gas, cable and electric utilities are based on best available information. Vertical elevations of utilities are assumed based on as-built information obtained by the Engineer. Contractor is encouraged to test pit as necessary to confirm utility locations and depth.
23. Water meters must be placed at the Right-of-Way or at the Public Utility Easement Line, (within the Right-of-Way/Easement), outside of entrances and sidewalks.
24. Type "K" soft drawn copper will be used for water service lines two-inch (2") and under, in Right-of-Ways and Public Utility Easements.
25. The Contractor shall maintain full access to valves and hydrants.
26. The Contractor shall maintain a minimum of four foot horizontal clearance between utility lines and other appurtenances, unless otherwise noted on the plans.
27. All ductile iron pipe will be lined with Protecto 401.
28. The Contractor shall replace any valve boxes, risers, or lids lost or damaged during construction at his expense.
29. All valves, water meters, and cleanouts impacted by the Project shall be adjusted to grade. All valve boxes and manholes within the limits of construction will not be adjusted to grade with riser rings, valve boxes will be excavated and elevation adjusted accordingly, manholes require the casting to be removed and the elevation change by building up with bricks and mortar, unless otherwise directed by Owner.
30. The Contractor is to fill all abandoned pipe with flowable fill, per the City of Virginia Beach and HRPDC Standards. It is not acceptable for the Contractor to simply plug each end of the line with grout. The entire abandoned line needs to be filled. The Contractor shall prepare an "Abandoned Pipe with Flowable Fill" Plan to be reviewed and approved by the Owner prior to any pipe abandonment activity. Pipe to be abandoned shall be properly vented and flowable fill shall be pumped into the pipes.
31. It is the Contractor's responsibility to determine the active sanitary sewer laterals by dye test method or other methods approved by the Engineer. The Contractor shall advise the Public Utilities/Operations Division (757.385.1470) of any illicit discharge connections (storm or sanitary sewer) discovered during construction. Contractor shall replace active sanitary sewer laterals from the new sewer mains to the public Right-of-Way line unless otherwise noted or directed. Sanitary laterals may be located adjacent to water service lines and may, therefore, require hand excavation. Contractor shall also locate and replace or install new Right-of-Way line cleanouts for active laterals, unless otherwise noted or directed.
32. The Contractor shall advise the Owner of any illicit discharge connections (storm or sanitary sewer) discovered during construction.
33. Prior to installation of piping for connections to existing force mains, the Contractor shall excavate to determine pipe material, pipe diameter, pipe roundness, pipe location and elevation, pipe alignment, and location of existing joints at the connection points and report this information to the Engineer. The tie-in locations are to be approved by the Engineer in the field. The Contractor shall adjust the installation of the proposed replacement piping as required to provide for proper alignment and connection with the existing force main and to accommodate installations of line stops.
34. The Contractor shall install and connect to the existing facilities under partial flow conditions and shall be responsible for managing sewage flows within the Project area. All sewage flows from construction activities shall be directed to an approved city collection facility.
35. The Contractor is responsible for dewatering and pumping and hauling of pipelines to complete the work. Provide provisions during shutdown operations to remove sewage if full closure of valves is not achieved.
36. New and existing (active and inactive) laterals shown are illustrative only. Actual lateral locations shall be verified by the Contractor. Existing laterals to be replaced (shown and not shown) shall be abandoned or removed as necessary.
37. Where water lines and storm pipes pass over or under sewer, there must be 18 inches vertical separation, or the sewer must be a 18 foot section of DJP sewer pipe must be positioned so the water line or storm pipe is centered as much as possible on the pipe section. Joining of sewer pipe sections near the water line or storm pipe will not be allowed.
38. All locations where sewer pipe crosses under existing storm drains, the Contractor shall be responsible for removal and replacement with new pipe, if damaged, at no additional cost.

GENERAL CONSTRUCTION NOTES (CONT.):

39. For new sewer main installations or point repairs, sewer laterals shall match the material of the new main or point repair.
40. Unless specifically designated on the plans as C900/905 DR18 PVC, sewer mains designated as PVC shall be SDR26 PVC. All sanitary sewer PVC pipe shall be green.
41. All new manholes shall be constructed to accommodate manhole inserts. Acceptable inserts include "22-inch Model C Rainstopper" manufactured by Southwestern Packing and Seals, Inc. or "22-inch Lockdry" manufactured by Barton Southern Company or approved equal.
42. Post CCTV of new sanitary sewer mains and laterals must be provided by the Contractor.
43. All curb & gutter, sidewalks, and like items damaged during construction will be repaired by the Contractor, per the City of Virginia Beach and HRPDC Standards, at no additional cost to the owner.
44. If an existing Control or Boundary Monument is damaged or destroyed during construction a new Monumentation shall be installed within the contract by a Land Surveyor, licensed in the Commonwealth of Virginia, as required by the Virginia Department of Professional and Occupational Regulations - Rule and Regulations Section 18-vac-10-20-370 paragraph C-4. The Monument shall be installed in accordance with the Public Works Specifications and Standards at no additional cost to the owner.
45. The Contractor shall place a minimum of four inches of topsoil on all disturbed areas, outside of pavement.
46. The Contractor shall fine grade, fertilize, mulch and seed all disturbed areas unless otherwise directed by the Owner or noted by the plans. Use the seeding Schedule shown in the plans.

CITY OF VIRGINIA BEACH - GENERAL NOTES DEVELOPMENT & COMPLIANCE CRITERIA:

1. Development in the City of Virginia Beach shall conform to the latest edition of: The City of Virginia Beach, Public Works Specifications and Standards Manual, The City of Virginia Beach Department of Public Utilities Design Standards Manual, The City of Virginia Beach Department of Public Utilities Standard Details, The Virginia Erosion and Sediment Control Regulations, The Virginia Erosion and Sediment Control Handbook, The Virginia Stormwater Management Handbook, The Virginia Department of Transportation Road and Bridge Specifications, The Virginia Department of Transportation Road and Bridge Standards, The American Standard for Nursery Stock and The Landscaping Guide City of Virginia Beach, and all other applicable ordinances and regulations unless otherwise noted.
2. An Erosion and Sediment Control Surety and/or Stormwater Management Surety will be posted with the Development Services Center (DSC) and before the issuance of any permits, following plan approval, in the appropriate amount, to be determined during plan review.
3. The Contractor will obtain a Right-of-Way Permit from the DSC, City of Virginia Beach, Virginia, prior to construction within any existing Public Right-of-Way or Public Easement. A copy of the approved Traffic Control Plan must be submitted with the Right-of-Way Permit Application.
4. The Contractor/Responsible Land Disturber (RLD) will contact each appropriate Inspections Bureau to schedule an on-site pre-construction meeting and/or Inspection activity 48 hours prior to the commencement of any land disturbance or construction activity.
5. N/A
6. Horizontal datum: this (plat, plan, drawing, survey, etc.) is based on the Virginia State Plane Coordinate System, South Zone, NAD 1983/1993 (HARN). Coordinate values shown are expressed in U.S. survey feet. vertical control: this (survey, drawing, etc.) is based on NAVD, 1988.
7. The City of Virginia Beach shall assume no responsibilities or liabilities for the damage or injury that may be incurred as a result of any encroachment into a Public Easement or Right-of-Way. Since an encroachment is considered to be temporary in nature, the current Owner(s) are required to remove the encroachment at their expense when deemed necessary by the City of Virginia Beach, as the Easement runs with the land, the Owner(s) will give notification to the heirs, assigns, successors in title or lessee of the existence of any encroachment and the rights of the City of Virginia Beach.
8. The Contractor will be responsible for driveways, walks, curbs, pavement markings, etc., that must be cut, removed, or damaged during construction.
9. N/A

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	1F(1)

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

EROSION & SEDIMENT CONTROL & TREE PROTECTION:

See Drainage Sheets for Erosion and Sediment Control Notes and Details.

STORMWATER MANAGEMENT:

See Drainage Sheets for Erosion and Sediment Control Notes and Details.

UTILITIES:

1. Prior to construction or excavation, the Contractor will be responsible for locating all underground utilities (public or private) that may exist and cross through the area of construction. 7/32 Miss Utility 9/32 of Virginia must be contacted a minimum of 72 hours prior to excavating at 7/32 811 9/32 or (1-800-552-7001). The Contractor is responsible for repairing any existing utilities that are damaged during construction, at his own expense.
2. The relocation of any utilities (public or private) located within the City's Right-of-Way, will be at the Developer's expense, and completed prior to the placement of any proposed roadway base material or pavement in conjunction with the site work. All new utility line installations must be underground (such as telephone, power, cable television, etc.).
3. Water meters and sewer cleanouts must be placed at the Right-of-Way or at the Public Utility Easement Line, (within the Right-of-Way/Easement), outside of entrances and sidewalks.
4. Deflecting, offsetting, or relocating existing utility mains will not be allowed except under extreme circumstances, such exemptions will be submitted to the DSC's Public Utilities Engineer for approval.
5. Type 7/32 K 9/32 soft drawn copper will be used for off-site water service lines, two-inch (2 9/32) lines and under, in Right-of-Ways and Public Utility Easements.
6. The Owner/Developer/Contractor must contact Public Utility/Inspections at (757-385-4175) at least 48 hours prior to construction (public or private) located within the City's Right-of-Way or Easement.
45. The Contractor shall fine grade, fertilize, mulch and seed all disturbed areas unless otherwise directed by the Owner or noted by the plans. Use the seeding Schedule shown in the plans.

INCIDENTAL DRAINAGE:

See Drainage Sheets for Erosion and Sediment Control Notes and Details.

INCIDENTAL CONCRETE:

See General Notes for Concrete Notes.

PAVEMENT AND OPEN CUTS:

See Typical Sections for Pavement Design.

TRAFFIC MAINTENANCE CONTROL & LIGHTING:

See Maintenance of Traffic Sheets and Lighting Sheets.

BUILDING FOUNDATION:

1-8. N/A

	PROJECT	SHEET NO.
	U000-134-842	1F(1)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

EXISTING DRAINAGE DESCRIPTIONS

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	1F(2)

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

In Pl. SDMH #210
Rim = 17.11
Inv. In = 11.19
Inv. In = 11.16
Inv. Out = 11.01

In Pl. CDI #211
Rim = 16.22
Inv. In = 11.66
Inv. In = 10.48
Inv. Out = 10.48

In Pl. CDI #212
Rim = 15.41
Inv. In = 10.16
Inv. In = 11.16
Inv. Out = 9.86

In Pl. CDI #213
Rim = 15.38
Inv. Out = 11.42

In Pl. CDI #214
Rim = 16.62
Inv. Out = 12.26

In Pl. CDI #215
Rim = 16.57
Inv. In = 11.16
Inv. In = 9.62
Inv. Out = 9.59

In Pl. CDI #216
Rim = 17.34
Inv. Out = 12.90

In Pl. CDI #217
Rim = 15.36
Inv. In = 9.01
Inv. Out = 9.01

In Pl. DI #218
Rim = 14.32
Inv. In = 12.14
Inv. Out = 11.97

In Pl. CDI #219
Rim = 15.19
Inv. In = 10.29
Inv. Out = 10.23

In Pl. DI #220
Rim = 14.97
Inv. Out = 12.77

In Pl. CDI #228
Rim = 15.85
Inv. In = 13.10
Inv. Out = 6.81
(Conflict Top = 6.81)

In Pl. DI #229
Rim = 16.67
Inv. Out = 14.34

In Pl. CDI #230
Rim = 14.25
Inv. In = 7.83
Inv. Out = 7.46

In Pl. CDI #231
Rim = 14.19
Inv. Out = 10.61

In Pl. SDMH #232
Rim = 15.60
Inv.In = 9.86
Inv.Out = 9.79

In Pl. SDMH #233
Rim = 17.84
Inv.In = 13.77
Inv.In = 10.59
Inv.Out = 10.59

In Pl. CDI #234
Rim = 15.16
Inv. Out = 10.90

In Pl. CDI #246
Rim = 15.87
Inv. In = 8.57
Inv. In = 9.93
Inv. Out = 8.57

In Pl. CDI #247
Rim = 15.92
Inv. Out = 9.06

In Pl. CDI #248
Rim = 15.56
Inv. In = 6.10
Inv. In = 6.23
Inv. Out = 6.07

In Pl. CDI #249
Rim = 15.37
Inv.In = 6.45
Inv. Out = 6.32

In Pl. CDI #250
Rim = 14.64
Inv.In = 9.85
Inv. Out = 6.69

In Pl. DI #251
Rim = 15.61
Inv.In = 13.16
Inv.In = 11.91
Inv. Out = 11.85

In Pl. DI #252
Rim = 16.35
Inv. In = 10.71
Inv. Out = 10.42
1' Standing Water

In Pl. DI #253
Rim = 15.21
Inv.In = 12.97
Inv.In = 10.88
Inv. Out = 10.45

In Pl. CDI #254
Rim = 14.93
Inv.In = 6.84
Inv.In = 9.60
Inv. Out = 6.83

In Pl. CDI #255
Rim = 15.48
Inv. Out = 11.20

In Pl. CDI #256
Rim = 15.57
Inv.In = 11.00
Inv. Out = 10.97

In Pl. CDI #257
Rim = 15.86
Inv.In = 10.90
Inv. Out = 10.90

In Pl. CDI #258
Rim = 15.81
Inv.In = 7.41
Inv.In = 7.46
Inv. Out = 7.23

In Pl. CDI #259
Rim = 15.44
Inv. Out = 10.58

In Pl. CDI #260
Rim = 14.70
Inv. In = 10.42
Inv. In = 9.65
Inv.In = 9.60
Inv. Out = 9.60

In Pl. CDI #261
Rim = 15.55
Inv. Out = 10.22

In Pl. CDI #262
Rim = 15.40
Inv.In = 9.68
Inv. Out = 9.64

In Pl. CDI #263
Rim = 14.47
Inv.In = 10.13
Inv.In = 9.89
Inv. Out = 9.87

In Pl. DI #264
Rim = 15.31
Inv. Out = 11.34

In Pl. DI #265
Rim = 14.83
Inv. Out = 11.78

In Pl. CDI #266
Rim = 15.27
Inv. Out = 13.42

In Pl. SDMH #267
Rim = 16.23
Inv.In = 13.38
Inv.In = 13.33
Inv. Out = 13.31

In Pl. CDI #268
Rim = 17.11
Inv.In = 13.25
Inv. Out = 13.20

In Pl. CDI #269
Rim = 16.50
Inv. Out = 14.00

In Pl. SDMH #270
Rim = 17.57
Inv.In = 10.34
Inv.In = 12.49
Inv.In = 13.22
Inv. Out = 10.25

In Pl. SDMH #271
Rim = 17.61
Inv.In = 10.09
Inv.In = 10.07
Inv. Out = 10.06

In Pl. DI #272
Rim = 16.09
Inv.In = 11.59
Inv. Out = 10.24

In Pl. DI #273
Rim = 16.88
Inv. Out = 14.74

In Pl. DI #274
Rim = 16.22
Inv. Out = 11.99

In Pl. SDMH #275
Rim = 15.57
Inv.In = 9.87
Inv. Out = 7.51

In Pl. CDI #276
Rim = 15.96
Inv.In = 12.96
Inv. Out = 12.78

In Pl. CDI #277
Rim = 15.26
Inv. Out = 13.04

In Pl. CDI #278
Rim = 15.29
Inv.In = 10.94
Inv. Out = 10.70

In Pl. CDI #279
Rim = 15.43
(Structure Full Of Sediment)

In Pl. SDMH #280
Rim = 14.97
Inv.In = 10.45
Inv.In = 10.73
Inv. Out = 10.29

In Pl. CDI #281
Rim = 14.94
Inv. Out = 10.78

In Pl. CDI #282
Rim = 14.57
Inv.In = 10.08
Inv. Out = 9.88

In Pl. CDI #283
Rim = 13.34
Inv.In = 7.44
Inv. Out = 7.26

In Pl. DI #284
Rim = 14.19
Inv.In = 11.79
Inv. Out = 10.52
2' Standing Water

In Pl. DI #284A
Rim = 14.21
Inv.In = 11.76
Inv.In = 11.81
Inv.In = 10.66
Inv. Out = 10.60
2' Standing Water

In Pl. DI #285
Rim = 13.18
Inv.In = 11.08
Inv. Out = 11.08
Inv. Out = 11.08
Bottom = 10.98

In Pl. CDI #286
Rim = 14.15
Inv.In = 11.95(Stubbed)
Inv. Out = 9.79

In Pl. SDMH #287
Rim = 14.14
Inv.In = 9.54
Inv.In = 9.54
Inv. Out = 9.26

In Pl. CDI (Dbl.) #288
Rim = 14.25
Inv. Out = 10.24

In Pl. SDMH #289
Rim = 12.65
Inv.In = 7.42
Inv. Out = 7.23

In Pl. CDI #290
Rim = 11.60
Inv.In = 5.31
Inv.In = 5.31

In Pl. CDI #290A
Rim = 11.53
Inv.Out = 4.58

In Pl. CDI #292
Rim = 12.56
Inv.In = 7.05
Inv.In = 8.95
Inv. Out = 7.01

In Pl. CDI #293
Rim = 12.53
Inv. Out = 9.13

In Pl. CDI #294
Rim = 12.74
Inv. Out = 9.75

In Pl. CDI #295
Rim = 12.71
Inv.In = 9.56
Inv. Out = 7.07

In Pl. SDMH #296
Rim = 13.27
Inv.In = 6.66
Inv. Out = 6.62

In Pl. CDI #297
Rim = 13.92
Inv.In = 11.51
Inv. Out = 10.73

In Pl. SDMH #298
Rim = 13.41
Inv.In = 10.56
Inv.In = 10.46
Inv.In = 10.46
Inv. Out = 10.46

In Pl. CDI #299
Rim = 13.64
Inv. Out = 10.54

In Pl. CDI #300
Rim = 12.48
Inv.In = 7.55
Inv. Out = 7.53

In Pl. DI #301
Rim = 11.24
Inv. Out = 7.80

In Pl. CDI #302
Rim = 13.45
Inv.In = 7.25
Inv. Out = 7.17

In Pl. CDI #303
Rim = 12.32
Inv.In = 6.85
Inv. Out = 6.67

In Pl. CDI #304
Rim = 14.00
Inv.In = 11.35
Inv. Out = 10.92

In Pl. CDI #305
Rim = 12.11
Inv. Out = 8.32

In Pl. CDI #306
Rim = 12.06
Inv.In = 6.36
Inv.In = 7.42
Inv. Out = 6.20

In Pl. CDI #307
Rim = 13.34
Inv.In = 9.13
Inv. Out = 8.92

In Pl. SDMH #308
Rim = 13.46
Inv.In = 9.69
Inv.In = 9.15
Inv.In = 9.23
Inv. Out = 9.15

In Pl. CDI #309
Rim = 13.42
Inv.In = 9.17
Inv. Out = 9.17

In Pl. CDI #310
Rim = 13.44
Inv.In = 8.66
Inv.In = 9.46
Inv. Out = 8.59

In Pl. SDMH #311
Rim = 14.03
Inv.In = 8.38
Inv.In = 8.40
Inv. Out = 8.26

In Pl. CDI #312
Rim = 13.38
Inv.In = 8.38
Inv.In = 8.18
Inv. Out = 8.16

In Pl. DI #313
Rim = 13.86
Inv.In = 11.85
Inv.In = 10.90
0.8' Standing Water

In Pl. DI #313A
Rim = 13.88
Inv.In = 10.94
Inv.In = 10.90
0.7' Standing Water

In Pl. CDI #314
Rim = 12.97
Inv.In = 8.80
Inv.In = 9.15
Inv.In = 8.69
Inv. Out = 8.67

In Pl. SDMH #315
Rim = 12.36
Inv.In = 9.68
Inv.In = 8.83
Inv. Out = 8.80

In Pl. SDMH #316
Rim = 12.45
Inv.In = 9.35
Inv.In = 9.32
Inv. Out = 9.25

In Pl. SDMH #317
Rim = 12.48
Inv.In = 9.52
Inv. Out = 9.52

In Pl. CDI #318
Rim = 12.14
Inv. Out = 9.79

In Pl. SDMH #319
Rim = 12.12
Inv.In = 9.51
Inv. Out = 9.49

In Pl. CDI #320
Rim = 12.34
Inv. Out = 8.19

In Pl. CDI #321
Rim = 13.28
Inv. Out = 9.23

In Pl. CDI #322
Rim = 12.28
Inv. In = 7.85
Inv. In = 7.76
Inv. Out = 7.75

In Pl. CDI #323
Rim = 12.29
Inv.In = 7.89
Inv. Out = 7.76

In Pl. CDI #324
Rim = 12.91
Inv. Out = 8.34

In Pl. CDI #325
Rim = 12.89
Inv.In = 7.77
Inv. Out = 7.69

In Pl. CDI #326
Rim = 13.52
Inv. Out = 8.66

In Pl. CDI #327
Rim = 12.27
Inv.In = 8.27
Inv. Out = 8.26

In Pl. CDI #328
Rim = 12.96
Inv. Out = 9.35

In Pl. CDI #329
Rim = 12.08
Inv.In = 8.79
Inv.In = 9.08
Inv. Out = 8.56

In Pl. CDI #330
Rim = 12.29
Inv.In = 9.54
Inv. Out = 7.64

In Pl. CDI #331
Rim = 10.88
Inv.In = 7.55
Inv.In = 7.53
Inv. Out = 7.48

In Pl. SDMH #332
Rim = 11.45
Inv.In = 7.73
Inv. Out = 7.71

In Pl. CDI #333
Rim = 11.07
Inv.In = 8.04
Inv.In = 7.81
Inv. Out = 7.77

In Pl. CDI #334
Rim = 11.07
Inv. Out = 8.54

In Pl. CDI #335
Rim = 11.20
Inv.In = 8.13
Inv. Out = 8.05

In Pl. CDI #336
Rim = 11.24
Inv. Out = 8.39

In Pl. CDI (Dbl.) #337
Rim = 10.44
Inv. Out = 7.96

In Pl. CDI (Dbl.) #338
Rim = 11.72
Inv.In = 7.77
Inv.In = 7.93
Inv. Out = 7.61

In Pl. CDI (Dbl.) #338A
Rim = 11.78
Bottom = 7.94
0.45' Standing Water

In Pl. DI #339
Rim = 12.03
Inv.In = 8.95
Inv. Out = 8.78

In Pl. CDI #340
Rim = 12.27
Inv.In = 8.12
Inv. Out = 8.01

In Pl. CDI #341
Rim = 11.02
Inv.In = 8.47
Inv. Out = 8.23

In Pl. CDI #342
Rim = 10.97
Inv. Out = 8.66

In Pl. CDI (Dbl.) #343
Rim = 8.94
Inv.In = 4.74
Inv. Out = 4.16

In Pl. CDI #344
Rim = 10.93
Inv. Out = 8.26

In Pl. DI #345
Rim = 9.85
Inv.In = 6.90
Inv. Out = 6.81

In Pl. DI #346
Rim = 10.41
Inv.In = 6.97
Inv. Out = 6.88

In Pl. DI #347
Rim = 10.41
Inv.In = 7.40
Inv. Out = 7.39

In Pl. SDMH #348
Rim = 12.73
Inv.In = 7.23
Inv. Out = 7.23

In Pl. SDMH #349
Rim = 12.08
Inv.In = 9.57
Inv.In = 8.40
Inv.In = 8.29
Inv. Out = 8.29

In Pl. CDI #350
Rim = 17.67
Inv. Out = 15.27

In Pl. CDI #351
Rim = 17.46
Inv. In = 14.78
Inv. Out = 14.75

In Pl. DI #356
Rim = 15.60
Inv. Out = 14.04

In Pl. SDMH #364
Rim = 14.37
Inv. In = 5.11
Inv. Out = 4.98

In Pl. SDMH #365
Rim = 14.76
Inv. In = 5.62
Inv. Out = 5.50

In Pl. SDMH #366
Rim = 14.99
Inv. In = 5.70
Inv. In = 8.69
Inv. In = 5.66
Inv. Out = 5.62

In Pl. SDMH #367
Rim = 14.44
Inv. In = 5.84
Inv. In = 7.24
Inv. In = 5.92
Inv. Out = 5.69

In Pl. SDMH #368
Rim = 15.19
Inv. In = 6.09
Inv. In = 6.32
Inv. In = 6.19
Inv. Out = 6.09

In Pl. SDMH #369
Rim = 14.72
Inv. In = 9.40
Inv. In = 9.42
Inv. Out = 7.76

In Pl. SDMH #370
Rim = 15.49
Inv. In = 6.59
Inv. In = 9.74
Inv. In = 11.49
Inv. Out = 5.99

In Pl. SDMH #376
Rim = 15.86
Inv. Out = 7.52

In Pl. CDI #388
Rim = 13.58
Inv. Out = 10.04

In Pl. CDI #389
Rim = 14.39
Inv. Out = 10.98

In Pl. DI #390
Rim = 14.97
Inv. In = 10.77
Inv. Out = 10.75

In Pl. DI #393
Rim = 13.46
Inv.In = 11.84
Inv.In = 10.67
Inv. Out = 10.52

In Pl. DI #394
Rim = 14.59
Inv. In = 8.80
Inv. In = 8.87
Inv. Out = 8.54

In Pl. DI #395
Rim = 14.60
Inv. In = 8.06
Inv. Out = 7.90

In Pl. DI #396
Rim = 14.72
Inv. In = 7.22
Inv. Out = 7.22

In Pl. DI #397
Rim = 11.90
Inv. In = 5.53
Inv. Out = 5.02
Inv. Out = 5.01

In Pl. DI #398
Rim = 13.22
Inv. Out = 7.61

In Pl. DI #399
Rim = 13.30
Inv. In = 7.18
Inv. Out = 6.94

In Pl. SDMH #400
Rim = 13.50
Inv. In = 9.10
Inv. Out = 9.03

In Pl. SDMH #401
Rim = 13.57
Inv. In = 9.21
Inv. Out = 9.15

In Pl. SDMH #402
Rim = 12.08
Inv. In = 5.71
Inv. Out = 5.70

In Pl. SDMH #403
Rim = 11.99
Inv. In = 6.49
Inv. In = 6.60
Inv. In = 9.19
Inv. Out = 6.44

In Pl. CDI #40
Rim = 12.57
Inv. In = 6.57
Inv. In = 6.45
Inv. Out = 6.07

In Pl. DI #407
Rim = 12.70
Bottom = 6.8+/-
2'+/- Standing Water
Pipe Size Not Verified

In Pl. DI #408
Rim = 12.93
Bottom = 7.7+/-
2'+/- Standing Water
Pipe Size Not Verified

In Pl. DI #409
Rim = 12.36
Bottom = 7.0+/-
2'+/- Standing Water
Pipe Size Not Verified

In Pl. CDI #410
Rim = 12.53
Bottom = 7.1+/-
2'+/- Standing Water
Pipe Size Not Verified

In Pl. DI #500
Rim = 12.20
Inv. In = 7.38

In Pl. DI #501
Rim = 11.56
Inv. In = 7.38
Inv. Out = 7.29

In Pl. DI #502
Rim = 11.58
Inv. In = 7.08
Inv. Out = 7.08

In Pl. DI #503
Rim = 11.13
Inv. In = 7.78
Inv. In = 7.78
Inv. Out = 7.73

In Pl. DI #504
Rim = 14.56
Inv. In = 10.95
Inv. In = 10.70
Inv. In = 10.59
Inv. In = 7.96
Inv. Out = 7.84

In Pl. CDI #505
Rim = 13.22
Inv. In = 6.62

In Pl. CDI #505A
Rim = 13.19
Bottom = 6.74

In Pl. CDI #507
Rim = 13.18
Inv. In = 6.53
Inv. In = 6.17
Inv. Out = 6.17

In Pl. CDI #509
Rim = 11.95
Inv. In = 8.66

In Pl. CDI #510
Rim = 12.29
Inv. In = 8.93
Inv. Out = 8.97

In Pl. CDI #511
Rim = 111.2.96
Inv. In = 9.26

In Pl. CDI #512
Rim = 12.69
Inv. In = 8.10
Inv. In = 7.95
Inv. In = 7.39
Inv. Out = 3.39

In Pl. CDI #513
Rim = 12.24
Inv. In = 8.29
Inv. Out = 8.14

In Pl. DI #514
Rim = 12.53
Inv. In = 8.73
Inv. In = 8.70
Inv. Out = 8.54

In Pl. DI #516
Rim = 11.95
Inv. In = 8.30
Inv. In = 8.30
Inv. Out = 7.92

In Pl. SDMH #517
Rim = 12.07
Bottom = 3.14
4'+/- Standing Water
Pipes Not Verified

In Pl. CDI #518
Rim = 13.80
Inv. Out = 11.47

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

EXISTING SANITARY SEWER DESCRIPTIONS

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	1F(3)

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

SMH *352
Rim = 18.18
Inv. In = 8.19
Inv. Out = 8.16

SMH *353
Rim = 15.70
Inv. In = 7.19
Inv. Out = 7.18

SMH *354
Rim = 15.47
Inv. In = 7.14
Inv. Out = 7.13

SMH *355
Rim = 14.71
Inv. In = 5.66(Drop)
Inv. In = 3.13
Inv. Out = 2.23

SMH *357
Rim = 15.42
Inv. In = 12.52
Inv. In = 12.52
Inv. In = 12.53
Inv. Out = 12.41

SMH *358
Rim = 14.38
Inv. In = 11.55
Inv.In = 11.66
Inv. In = 12.33
Inv. In = 11.62
Inv. Out = 11.53

SMH *359
Rim = 13.75
Inv. In = 11.07
Inv. In = 11.20
Inv. Out = 11.04

SMH *360
Rim = 14.05
Inv. In = 7.69
Inv. In = 7.70
Inv. Out = 7.63

SMH *361
Rim = 13.42
Inv. In = 9.15
Inv. In = 9.13
Inv. In = 9.14
Inv. In = 9.14
Inv. Out = 9.06

SMH *362
Rim = 12.86
Inv. In = 8.45
Inv. In = 8.46
Inv. Out = 8.32

SMH *363
Rim = 13.26
Inv. In = 6.90
Inv. In = 7.55
Inv. Out = 6.85

SMH *371
Rim = 15.04
Inv. Out = 2.95

SMH *372
Rim = 14.94
Inv. In = 2.18
Inv.In = 2.16
Inv.In = 2.19
Inv. Out = 2.12

SMH *373
Rim = 15.52
Inv. In = 1.80
Inv. Out = 1.70

SMH *374
Rim = 16.47
Inv. In = 1.29
Inv. Out = 1.12

SMH *375
Rim = 14.70
Inv. Out = 2.80

SMH *377
Rim = 12.55
Inv. In = 6.93
Inv. In = 6.97
Inv. Out = 6.86

SMH *378
Rim = 11.54
Inv. In = 5.89
Inv. In = 5.94
Inv. In = 5.90
Inv. Out = 5.86

SMH *379
Rim = 11.43
Inv. In = 4.83
Inv. In = 4.85
Inv. In = 4.82
Inv. Out = 4.77

SMH *380
Rim = 12.47
Inv. In = 7.70
Inv. In = 7.69
Inv. In = 7.75
Inv. In = 7.74
Inv. Out = 7.62

SMH *381
Rim = 12.22
Inv. In = 6.88
Inv. In = 6.87
Inv. In = 6.92
Inv. In = 6.92
Inv. Out = 6.78

SMH *382
Rim = 11.80
Inv. In = 8.35
Inv. In = 9.06
Inv. Out = 8.29

SMH *383
Rim = 11.40
Inv. In = 3.48
Inv. In = 2.68
Inv. In = 3.22
Inv. Out = 2.60

SMH *384
Rim = 10.77
Inv. In = 4.02
Inv. In = 3.96
Inv. In = 3.97
Inv. Out = 3.63

SMH *385
Rim = 11.98
Inv. In = 1.85
Inv. In = 2.27
Inv. In = 1.86
Inv. Out = 1.72

SMH *386
Rim = 11.53
Inv. In = 1.17
Inv. Out = 1.10

SMH *387
Rim = 10.83
Inv. In = 4.53
Inv. In = 4.46
Inv. In = 4.43
Inv. Out = 3.13

SMH *405
Rim = 12.34
Inv. In = 8.64
Inv. Out = 8.48

SMH *406
Rim = 12.61
Inv. In = 8.33
Inv. In = 7.97
Inv. In = 7.90
Inv. Out = 7.87

SMH *411
Rim = 13.31
Inv. In = 9.49
Inv. In = 8.47
Inv. Out = 8.49

SMH *412
Rim = 14.58
Inv. In = 10.58
Inv. In = 10.55
Inv.In = 10.58
Inv. Out = 10.18

SMH *413
Rim = 13.94
Inv. In = 10.33
Inv. In = 10.31
Inv.In = 10.33
Inv. Out = 10.06

SMH *414
Rim = 11.65
Inv. In = 7.21
Inv. In = 7.15
Inv.In = 7.17
Inv. Out = 7.13

SMH *506
Rim = 13.56
Inv. In = 10.31
Inv. In = 10.26
Inv. Out = 10.21

SMH *507
Rim = 12.09
Unable to Open

	PROJECT	SHEET NO.
	U000-134-842	1F(3)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

CONSTRUCTION ALIGNMENT

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	1G

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

VDOT (Division) or Co. Name (Location), Virginia (TECHNICAL DISCIPLINE)	Rummel, Klepper & Kahl, LLP Virginia Beach, Virginia ROADWAY ENGINEER

POT STA. 16+56.96
CENTERVILLE CONSTR. ℄ =
POT STA. 20+00.00
CHURCH ENTRANCE CONSTR. ℄
△ = 90° 14' 54" LT

BEGIN PROJECT U000-134-842
STA. 14+69.63
CENTERVILLE CONSTR. ℄

POT 9+20.00
PC 11+18.64
PT 12+12.63
PI 11+65.64
N 14° 22' 36" W
15
POT 22+08.00
CHURCH ENTRANCE
S 74° 42' 07" W
POT STA. 16+52.42
CENTERVILLE CONSTR. ℄ =
POT STA. 10+00.00
LIVINGSTON OAK CONSTR. ℄
△ = 90° 02' 49" RT
N 74° 59' 50" E
LIVINGSTON OAK DRIVE
POT 11+50.00
POT STA. 21+00.32
CHURCH ENTRANCE CONSTR. ℄ =
POT 30+00.00
PARK-LOT-C CONSTR. ℄
△ = 90° 23' 18" RT
N 14° 54' 35" W
20
POT 34+65.00
N 15° 02' 59" W
POC STA. 24+79.70
CENTERVILLE CONSTR. ℄ =
POT STA. 20+00.00
SCHOOL ENTRANCE CONSTR. ℄
△ = 89° 42' 06" LT
POT 21+66.43
PC 23+34.99
SCHOOL ENTRANCE
S 74° 38' 00" W
25
PT 25+35.19
POC STA. 24+71.63
CENTERVILLE CONSTR. ℄ =
POT STA. 10+00.00
WOODHILL CONSTR. ℄
△ = 90° 40' 32" RT
PI 24+35.09
N 75° 02' 22" E
WOODHILL ROAD
POT 11+50.69
N 15° 53' 58" W
PC 27+03.66
PI 28+03.66
PT 29+03.66
POT STA. 31+94.80
CENTERVILLE CONSTR. ℄ =
POT STA. 102+00.44
LYNNHAVEN CONSTR. ℄
△ = 86° 51' 02" RT
30
POT 100+00.00
LYNNHAVEN PKWY
POT 104+00.00
MATCHLINE SEE BELOW
STA. 35+00.00

POT STA. 38+17.46
CENTERVILLE CONSTR. ℄ =
POT STA. 20+00.00
AMBERBROOKE CONSTR. ℄
△ = 92° 49' 15" LT
AMBERBROOKE WAY
MATCHLINE SEE ABOVE
STA. 35+00.00
PT 20+00.00
PC 20+66.17
40
PC 10+62.31
PT 11+10.00
INFINITY LANE
POT STA. 38+22.20
CENTERVILLE CONSTR. ℄ =
POT STA. 10+00.00
INFINITY CONSTR. ℄
△ = 90° 00' 00" RT
POT 21+75.00
GLEN VIEW DRIVE
POT STA. 43+38.98
CENTERVILLE CONSTR. ℄ =
POT STA. 20+00.00
GLEN VIEW CONSTR. ℄
△ = 90° 17' 01" LT
45
N 15° 01' 05" W
POT 21+57.43
PT 21+49.41
PI 21+41.78
PC 21+33.87
PT 21+28.72
PI 21+16.58
PC 21+03.64
PT 20+93.20
PI 20+74.44
PC 20+51.02
PARK SW
50
POT STA. 49+72.72
CENTERVILLE CONSTR. ℄ =
POT STA. 20+00.00
PARK SW CONSTR. ℄
△ = 90° 00' 00" LT
HIDDEN VALLEY DRIVE
N 77° 50' 00" E
POT 12+25.00
POT STA. 50+47.65
CENTERVILLE CONSTR. ℄ =
POT STA. 10+00.00
HIDDEN VALLEY CONSTR. ℄
△ = 86° 51' 04" RT
55
PC 20+51.34
PI 20+69.75
PT 20+85.85
POT 21+51.49
ENTRANCE 5643
POT STA. 56+43.15
CENTERVILLE CONSTR. ℄ =
POT STA. 20+00.00
ENTRANCE 5643 CONSTR. B
△ = 90° 00' 00" LT
PC 58+64.43
60
PI 59+66.68
POC STA. 59+57.45
CENTERVILLE CONSTR. ℄ =
POT STA. 10+00.00
OAK RIDGE CONSTR. ℄
△ = 89° 45' 02" RT
MATCHLINE SEE BELOW
STA. 60+00.00
OLD RIDGE ROAD
N 14° 59' 11" E
POT 14+25.00

MATCHLINE SEE ABOVE
STA. 60+00.00
PT 60+68.92
N 14° 27' 36" W
PC 62+11.72
PI 63+12.97
N 74° 54' 24" E
PT 64+14.22
65
PC 66+31.49
N 14° 59' 59" W
POC STA. 63+20.07
CENTERVILLE CONSTR. ℄ =
POT STA. 10+00.00
70
PI 70+24.39
PT 74+16.06
POT 74+39.33
N 22° 52' 00" W
END PROJECT U000-134-842
STA. 71+34.61
CENTERVILLE CONSTR. ℄

SCALE	PROJECT	SHEET NO.
0 100' 200'	U000-134-842	1G

12/1/2020

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

CONSTRUCTION ALIGNMENT DATA

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	1G(1)

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
Virginia Beach, VA
ROADWAY ENGINEER

CONSTRUCTION ℄ CENTERVILLE

Chain CENTERVILLE contains:
CENTERVILLE1 CUR CENTERVILLE_3 CUR CENTERVILLE_6 CUR CENTERVILLE_9 CUR CENTERVILLE_12 CUR CENTERVILLE_15 CUR CENTERVILLE_18 CENTERVILLE20

Beginning chain CENTERVILLE description
****

Point CENTERVILLE1 N 3,445,882.2674 E 12,160,376.5291 Sta 9+20.00

Course from CENTERVILLE1 to PC CENTERVILLE_3 N 14° 22' 35.68" W Dist 198.6376

Curve Data

Curve CENTERVILLE_3
P.I. Station 11+65.64 N 3,446,120.2109 E 12,160,315.5393
Delta = 0° 40' 23.48" (LT)
Degree = 0° 42' 58.31"
Tangent = 46.9980
Length = 93.9949
Radius = 8,000.0000
External = 0.1380
Long Chord = 93.9944
Mid.Ord. = 0.1380
P.C. Station 11+18.64 N 3,446,074.6847 E 12,160,327.2086
P.T. Station 12+12.63 N 3,446,165.5969 E 12,160,303.3359
C.C. N 3,444,088.3335 E 12,152,577.7307
Back = N 14° 22' 35.68" W
Ahead = N 15° 02' 59.16" W
Chord Bear = N 14° 42' 47.42" W

Course from PT CENTERVILLE_3 to PC CENTERVILLE_6 N 15° 02' 59.16" W Dist 1,122.3584

Curve Data

Curve CENTERVILLE_6
P.I. Station 24+35.09 N 3,447,346.1253 E 12,159,985.9150
Delta = 0° 50' 58.76" (LT)
Degree = 0° 25' 27.89"
Tangent = 100.0994
Length = 200.1951
Radius = 13,500.0000
External = 0.3711
Long Chord = 200.1933
Mid.Ord. = 0.3711
P.C. Station 23+34.99 N 3,447,249.4592 E 12,160,011.9067
P.T. Station 25+35.19 N 3,447,442.3953 E 12,159,958.4929
C.C. N 3,443,744.0771 E 12,146,974.9478
Back = N 15° 02' 59.16" W
Ahead = N 15° 53' 57.91" W
Chord Bear = N 15° 28' 28.54" W

Course from PT CENTERVILLE_6 to PC CENTERVILLE_9 N 15° 53' 57.91" W Dist 168.4769

Curve Data

Curve CENTERVILLE_9
P.I. Station 28+03.66 N 3,447,700.6026 E 12,159,884.9434
Delta = 0° 52' 53.29" (RT)
Degree = 0° 26' 26.65"
Tangent = 100.0014
Length = 199.9988
Radius = 13,000.0000
External = 0.3846
Long Chord = 199.9969
Mid.Ord = 0.3846
P.C. Station 27+03.66 N 3,447,604.4269 E 12,159,912.3387
P.T. Station 29+03.66 N 3,447,797.1884 E 12,159,859.0309
C.C. N 3,451,165.7703 E 12,172,415.0118
Back = N 15° 53' 57.91" W
Ahead = N 15° 01' 04.63" W
Chord Bear = N 15° 27' 31.27" W

Course from PT CENTERVILLE_9 to PC CENTERVILLE_12 N 15° 01' 04.63" W Dist 2,960.7693

Curve Data

Curve CENTERVILLE_12
P.I. Station 59+66.68 N 3,450,755.5848 E 12,159,065.3374
Delta = 0° 33' 28.52" (RT)
Degree = 0° 16' 22.21"
Tangent = 102.2453
Length = 204.4890
Radius = 21,000.0000
External = 0.2489
Long Chord = 204.4882
Mid.Ord. = 0.2489
P.C. Station 58+64.43 N 3,450,656.8317 E 12,159,091.8314
P.T. Station 60+68.92 N 3,450,854.5911 E 12,159,039.8063
C.C. N 3,456,098.3870 E 12,179,374.5697
Back = N 15° 01' 04.63" W
Ahead = N 14° 27' 36.11" W
Chord Bear = N 14° 44' 20.37" W

Course from PT CENTERVILLE_12 to PC CENTERVILLE_15 N 14° 27' 36.11" W Dist 142.8049

Curve Data

Curve CENTERVILLE_15
P.I. Station 63+12.97 N 3,451,090.9122 E 12,158,978.8653
Delta = 0° 32' 22.66" (LT)
Degree = 0° 15' 59.37"
Tangent = 101.2473
Length = 202.4931
Radius = 21,500.0000
External = 0.2384
Long Chord = 202.4923
Mid.Ord. = 0.2384
P.C. Station 62+11.72 N 3,450,992.8723 E 12,159,004.1472
P.T. Station 64+14.22 N 3,451,188.7098 E 12,158,952.6612
C.C. N 3,445,624.2241 E 12,138,185.2227
Back = N 14° 27' 36.11" W
Ahead = N 14° 59' 58.77" W
Chord Bear = N 14° 43' 47.44" W

Course from PT CENTERVILLE_15 to PC CENTERVILLE_18 N 14° 59' 58.77" W Dist 217.2699

Curve Data

Curve CENTERVILLE_18
P.I. Station 70+24.39 N 3,451,778.0937 E 12,158,794.7400
Delta = 7° 52' 01.65" (LT)
Degree = 1° 00' 09.81"
Tangent = 392.9042
Length = 784.5735
Radius = 5,714.0000
External = 13.4924
Long Chord = 783.9573
Mid.Ord. = 13.4607
P.C. Station 66+31.49 N 3,451,398.5767 E 12,158,896.4288
P.T. Station 74+16.06 N 3,452,140.1199 E 12,158,642.0614
C.C. N 3,449,919.7176 E 12,153,377.1198
Back = N 14° 59' 58.77" W
Ahead = N 22° 52' 00.42" W
Chord Bear = N 18° 55' 59.59" W

Course from PT CENTERVILLE_18 to CENTERVILLE20 N 22° 52' 00.42" W Dist 23.2680

Point CENTERVILLE20 N 3,452,161.5593 E 12,158,633.0197 Sta 74+39.33

****
Ending chain CENTERVILLE description

CONSTRUCTION ℄ LIVINGSTON OAK

Chain LIVGNOAK contains:
LIVGNOAK1 LIVGNOAK2

Beginning chain LIVGNOAK description
****

Point LIVGNOAK1 N 3,446,590.2977 E 12,160,189.1422 Sta 10+00.00

Course from LIVGNOAK1 to LIVGNOAK2 N 74° 59' 49.88" E Dist 149.9971

Point LIVGNOAK2 N 3,446,629.1269 E 12,160,334.0264 Sta 11+50.00

****
Ending chain LIVGNOAK description

CONSTRUCTION ℄ CHURCH ENTRANCE

Chain ENT-1657 contains:
47 48

Beginning chain ENT-1657 description
****

Point 47 N 3,446,594.6867 E 12,160,187.9621 Sta 20+00.00

Course from 47 to 48 S 74° 42' 06.90" W Dist 207.9955

Point 48 N 3,446,539.8090 E 12,159,987.3367 Sta 22+08.00

****
Ending chain ENT-1657 description

CONSTRUCTION ℄ PARK-LOT-C

Chain PARK-LOT-C contains:
49 50

Beginning chain PARK-LOT-C description
Feature: - 25 Scale Baselines
****

Point 49 N 3,446,568.2182 E 12,160,091.1968 Sta 30+00.00

Course from 49 to 50 N 14° 54' 35.05" W Dist 465.0000

Point 50 N 3,447,017.5627 E 12,159,971.5537 Sta 34+65.00

****
Ending chain PARK-LOT-C description

CONSTRUCTION ℄ SCHOOL ENTRANCE

Chain ENT-SCHOOL contains:
35 36

Beginning chain ENT-SCHOOL description
****

Point 35 N 3,447,388.9989 E 12,159,973.5841 Sta 20+00.00

Course from 35 to 36 S 74° 38' 00.26" W Dist 166.4251

Point 36 N 3,447,344.8972 E 12,159,813.1087 Sta 21+66.43

****
Ending chain ENT-SCHOOL description

CONSTRUCTION ℄ WOODHILL

Chain WOODHILL contains:
WOODHILL1 WOODHILL2

Beginning chain WOODHILL description
****

Point WOODHILL1 N 3,447,381.2324 E 12,159,975.7593 Sta 10+00.00

Course from WOODHILL1 to WOODHILL2 N 75° 02' 22.32" E Dist 150.6938

Point WOODHILL2 N 3,447,420.1344 E 12,160,121.3452 Sta 11+50.69

****
Ending chain WOODHILL description

CONSTRUCTION ℄ LYNNHAVEN

Chain LYNNHAVEN contains:
LYNNHAVEN1 LYNNHAVEN2

Beginning chain LYNNHAVEN description
****

Point LYNNHAVEN1 N 3,448,015.8885 E 12,159,593.1420 Sta 100+00.00

Course from LYNNHAVEN1 to LYNNHAVEN2 N 71° 49' 57.38" E Dist 400.0000

Point LYNNHAVEN2 N 3,448,140.6062 E 12,159,973.2018 Sta 104+00.00

****
Ending chain LYNNHAVEN description

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

CONSTRUCTION ALIGNMENT DATA

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	1G(2)

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
Virginia Beach, VA
ROADWAY ENGINEER

CONSTRUCTION ℄ INFINITY

Chain INFINITY contains:
INFINITY1 CUR INFINITY_3

Beginning chain INFINITY description
Feature: - 25 Scale Baselines
****

Point INFINITY1 N 3,448,684.3514 E 12,159,621.0183 Sta 10+00.00

Course from INFINITY1 to PC INFINITY_3 N 74° 58' 55.37" E Dist 62.3076

Curve Data

Curve INFINITY_3
P.I. Station 10+81.58 N 3,448,705.4913 E 12,159,699.8148
Delta = 25° 15' 56.26" (RT)
Degree = 66° 37' 18.23"
Tangent = 19.2754
Length = 37.9240
Radius = 86.0016
External = 2.1336
Long Chord = 37.6175
Mid.Ord. = 2.0820
P.C. Station 10+62.31 N 3,448,700.4966 E 12,159,681.1978
P.T. Station 11+00.23 N 3,448,702.0621 E 12,159,718.7827
C.C. N 3,448,617.4324 E 12,159,703.4827
Back = N 74° 58' 55.37" E
Ahead = S 79° 45' 08.37" E
Chord Bear = N 87° 36' 53.50" E

****
Ending chain INFINITY description

CONSTRUCTION ℄ GLEN VIEW

Chain GLENVIEW contains:
GLENVIEW1 GLENVIEW2

Beginning chain GLENVIEW description
****

Point GLENVIEW1 N 3,449,183.4802 E 12,159,487.1095 Sta 20+00.00

Course from GLENVIEW1 to GLENVIEW2 S 74° 41' 54.53" W Dist 169.1365

Point GLENVIEW2 N 3,449,138.8453 E 12,159,323.9689 Sta 21+69.14

****
Ending chain GLENVIEW description

CONSTRUCTION ℄ AMBERBROOKE

Chain AMBWAY contains:
AMBWAY1 CUR AMBWAY_3

Beginning chain AMBWAY description
Feature: - 25 Scale Baselines
****

Point AMBWAY1 N 3,448,679.7710 E 12,159,622.2472 Sta 20+00.00

Course from AMBWAY1 to PC AMBWAY_3 S 72° 09' 40.52" W Dist 66.1690

Curve Data

Curve AMBWAY_3
P.I. Station 20+82.14 N 3,448,654.6074 E 12,159,544.0534
Delta = 5° 34' 42.98" (LT)
Degree = 17° 28' 31.33"
Tangent = 15.9740
Length = 31.9227
Radius = 327.8659
External = 0.3889
Long Chord = 31.9101
Mid.Ord. = 0.3884
P.C. Station 20+66.17 N 3,448,659.5009 E 12,159,559.2594
P.T. Station 20+98.09 N 3,448,648.2590 E 12,159,529.3951
C.C. N 3,448,347.3980 E 12,159,659.6975
Back = S 72° 09' 40.52" W
Ahead = S 66° 34' 57.55" W
Chord Bear = S 69° 22' 19.04" W

****
Ending chain AMBWAY description

CONSTRUCTION ℄ HIDDEN VALLEY

Chain HIDDENVALLEY contains:
HIDDENVALLEY1 HIDDENVALLEY2

Beginning chain HIDDENVALLEY description
Feature: - 25 Scale Baselines
****

Point HIDDENVALLEY1 N 3,449,867.9444 E 12,159,303.4780 Sta 10+00.00

Course from HIDDENVALLEY1 to HIDDENVALLEY2 N 71° 49' 59.54" E Dist 185.0000

Point HIDDENVALLEY2 N 3,449,925.6241 E 12,159,479.2549 Sta 11+85.00

****
Ending chain HIDDENVALLEY description

CONSTRUCTION ℄ OLD RIDGE

Chain OLDRIDGE contains:
OLDRIDGE1 OLDRIDGE2

Beginning chain OLDRIDGE description
****

Point OLDRIDGE1 N 3,450,746.7249 E 12,159,067.9276 Sta 10+00.00

Course from OLDRIDGE1 to OLDRIDGE2 N 74° 59' 10.59" E Dist 425.0000

Point OLDRIDGE2 N 3,450,856.8213 E 12,159,478.4198 Sta 14+25.00

****
Ending chain OLDRIDGE description

CONSTRUCTION ℄ ENTRANCE 5643

Chain ENT-5643 contains:
45 CUR ENT-5643_3 46

Beginning chain ENT-5643 description
Feature: - 25 Scale Baselines
****

Point 45 N 3,450,443.1123 E 12,159,149.1691 Sta 20+00.00

Course from 45 to PC ENT-5643_3 S 74° 58' 55.37" W Dist 51.3412

Curve Data

Curve ENT-5643_3
P.I. Station 20+69.75 N 3,450,425.0385 E 12,159,081.8012
Delta = 49° 25' 34.11" (RT)
Degree = 143° 14' 22.02"
Tangent = 18.4090
Length = 34.5060
Radius = 40.0000
External = 4.0328
Long Chord = 33.4459
Mid.Ord. = 3.6635
P.C. Station 20+51.34 N 3,450,429.8087 E 12,159,099.5814
P.T. Station 20+85.85 N 3,450,435.4412 E 12,159,066.6131
C.C. N 3,450,468.4425 E 12,159,089.2165
Back = S 74° 58' 55.37" W
Ahead = N 55° 35' 30.52" W
Chord Bear = N 80° 18' 17.57" W

Course from PT ENT-5643_3 to 46 N 55° 35' 30.52" W Dist 65.6387

Point 46 N 3,450,472.5326 E 12,159,012.4591 Sta 21+51.49

****
Ending chain ENT-5643 description

CONSTRUCTION ℄ WOODS CORNER ENTRANCE

Chain ENT-SHOPCEN contains:
22 23

Beginning chain ENT-SHOPCEN description
****

Point 22 N 3,451,097.7169 E 12,158,976.8287 Sta 10+00.00

Course from 22 to 23 N 74° 54' 24.31" E Dist 125.1291

Point 23 N 3,451,130.2994 E 12,159,097.6413 Sta 11+25.13

****
Ending chain ENT-SHOPCEN description

CONSTRUCTION ℄ PARK SW

Chain PARKSW contains:
PARKSW1 CUR PARKSW_3 CUR PARKSW_6 CUR PARKSW_9 PARKSW11

Beginning chain PARKSW description
Feature: - 25 Scale Baselines
****

Point PARKSW1 N 3,449,795.5788 E 12,159,322.8926 Sta 20+00.00

Course from PARKSW1 to PC PARKSW_3 S 74° 58' 55.37" W Dist 51.0198

Curve Data

Curve PARKSW_3
P.I. Station 20+74.44 N 3,449,776.2907 E 12,159,250.9985
Delta = 61° 57' 48.81" (RT)
Degree = 146° 54' 44.12"
Tangent = 23.4167
Length = 42.1773
Radius = 39.0000
External = 6.4900
Long Chord = 40.1517
Mid.Ord. = 5.5641
P.C. Station 20+51.02 N 3,449,782.3585 E 12,159,273.6154
P.T. Station 20+93.20 N 3,449,793.4014 E 12,159,235.0121
C.C. N 3,449,820.0264 E 12,159,263.5097
Back = S 74° 58' 55.37" W
Ahead = N 43° 03' 15.82" W
Chord Bear = N 74° 02' 10.22" W

Course from PT PARKSW_3 to PC PARKSW_6 N 43° 03' 15.82" W Dist 10.4443

Curve Data

Curve PARKSW_6
P.I. Station 21+16.58 N 3,449,810.4911 E 12,159,219.0454
Delta = 35° 02' 29.51" (LT)
Degree = 139° 44' 44.89"
Tangent = 12.9436
Length = 25.0752
Radius = 41.0000
External = 1.9946
Long Chord = 24.6862
Mid.Ord. = 1.9021
P.C. Station 21+03.64 N 3,449,801.0331 E 12,159,227.8819
P.T. Station 21+28.72 N 3,449,813.1610 E 12,159,206.3802
C.C. N 3,449,773.0428 E 12,159,197.9230
Back = N 43° 03' 15.82" W
Ahead = N 78° 05' 45.33" W
Chord Bear = N 60° 34' 30.58" W

Course from PT PARKSW_6 to PC PARKSW_9 N 78° 05' 45.33" W Dist 5.1534

Curve Data

Curve PARKSW_9
P.I. Station 21+41.78 N 3,449,815.8557 E 12,159,193.5974
Delta = 26° 11' 41.13" (RT)
Degree = 168° 31' 01.19"
Tangent = 7.9104
Length = 15.5443
Radius = 34.0000
External = 0.9081
Long Chord = 15.4093
Mid.Ord. = 0.8845
P.C. Station 21+33.87 N 3,449,814.2240 E 12,159,201.3376
P.T. Station 21+49.41 N 3,449,820.7366 E 12,159,187.3723
C.C. N 3,449,847.4928 E 12,159,208.3510
Back = N 78° 05' 45.33" W
Ahead = N 51° 54' 04.20" W
Chord Bear = N 64° 59' 54.76" W

Course from PT PARKSW_9 to PARKSW11 N 51° 54' 04.21" W Dist 8.0207

Point PARKSW11 N 3,449,825.6855 E 12,159,181.0604 Sta 21+57.43

****
Ending chain PARKSW description

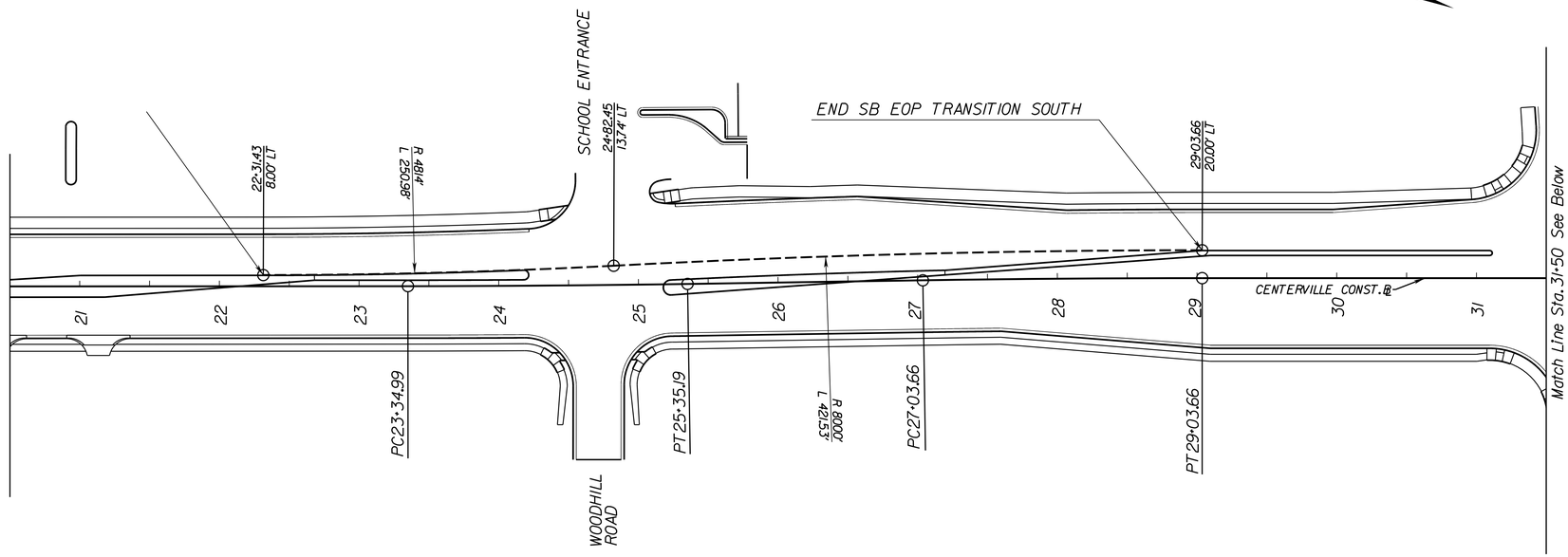
d10938101g3.dgn
Plotted By: RK&K - JMK

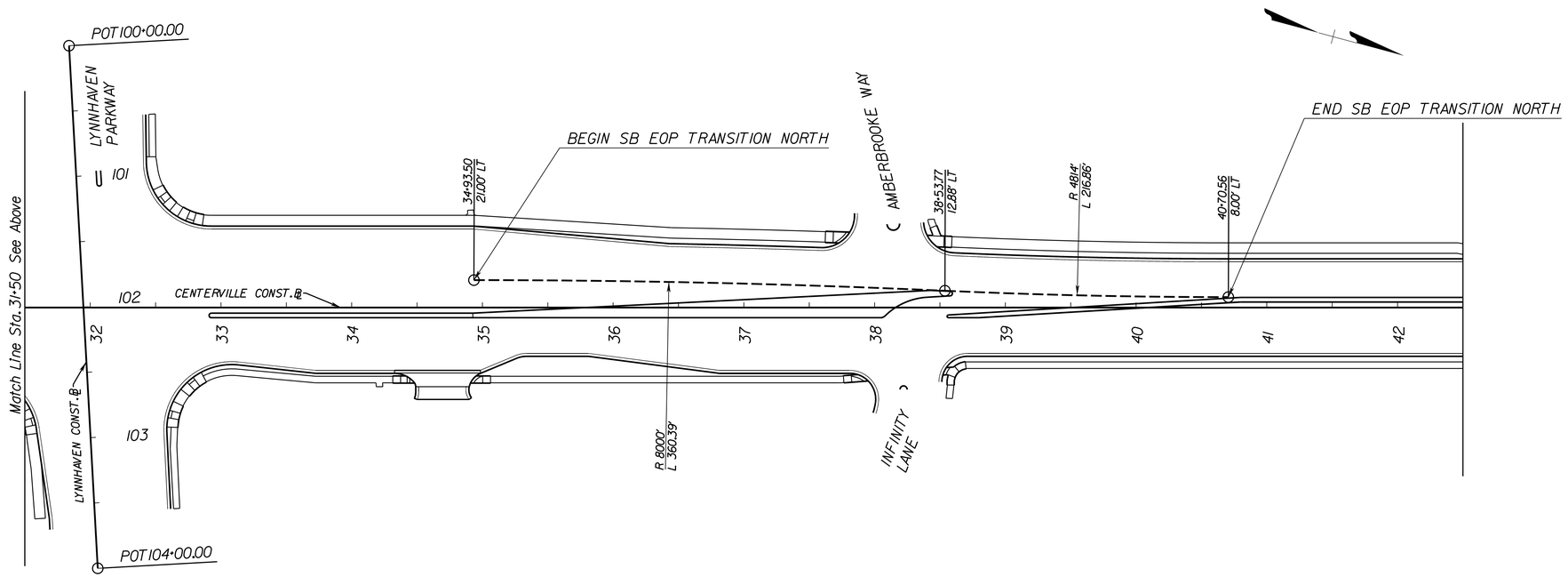
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	1G(3)

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

CONSTRUCTION ALIGNMENT
EB EOP TRANSITIONS





SCALE	PROJECT	SHEET NO.
0 50' 100'	U000-134-842	1G(3)

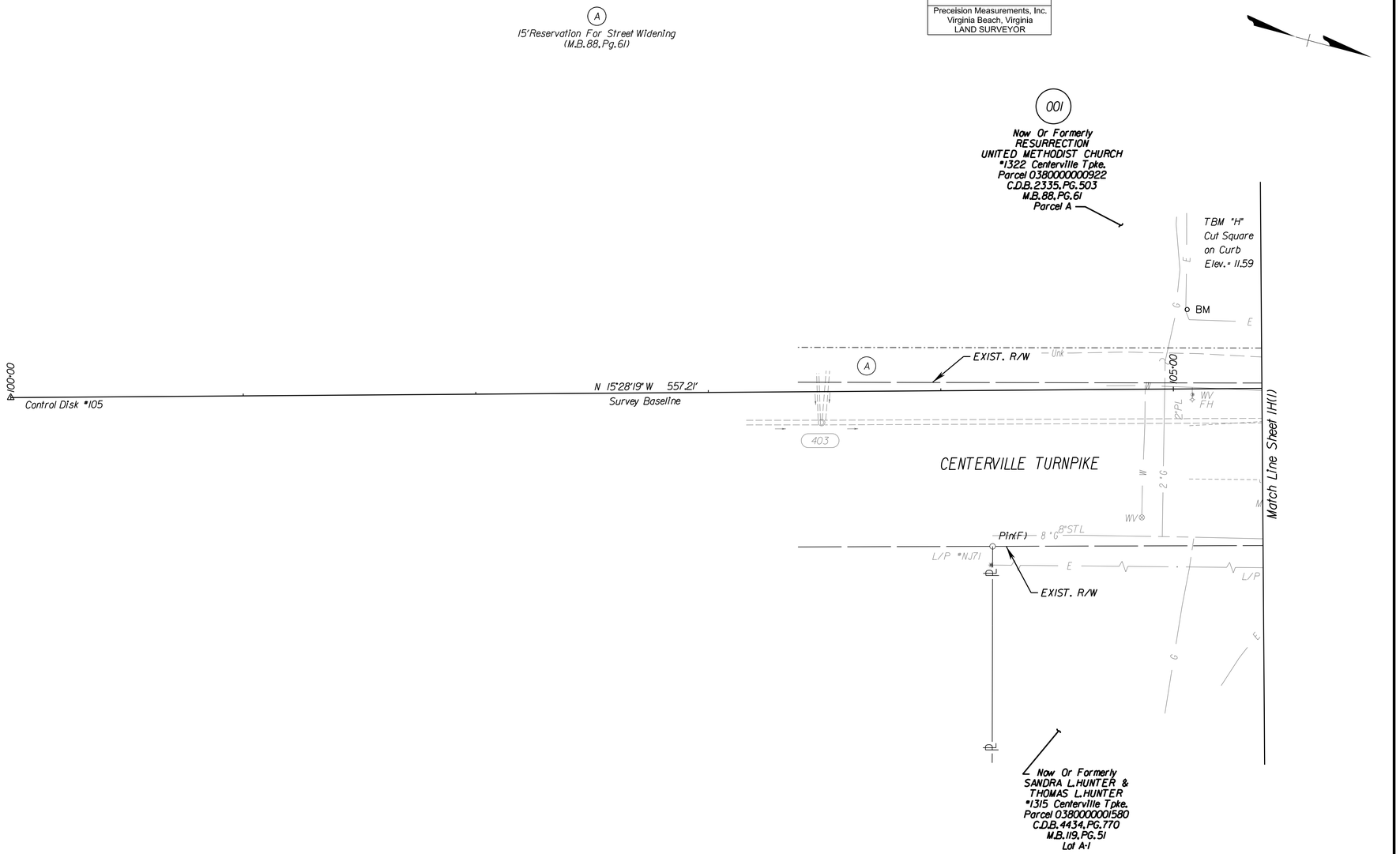
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

EXISTING CONDITIONS

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	1H

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

Precision Measurements, Inc.
Virginia Beach, Virginia
LAND SURVEYOR



NOTES:

1. FOR EXISTING DRAINAGE DESCRIPTIONS SEE SHEET 1F(2).
2. FOR EXISTING SANITARY SEWER DESCRIPTIONS SEE SHEET 1F(3).
3. CONSTRUCTION BASELINES ARE SHOWN FOR REFERENCE ONLY. PRECISION MEASUREMENTS, INC. IS NOT RESPONSIBLE FOR THE BASELINE INFORMATION SHOWN.

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)	
Mainline Profile	X
Entrance Profile	X
Drainage Descriptions	X
Sign & Pave. Mark. Plan	X
Signal Plan	X
Landscaping Plan	X
Utility Plan	X
SWM Plan	X
Existing Conditions	X

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1H

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

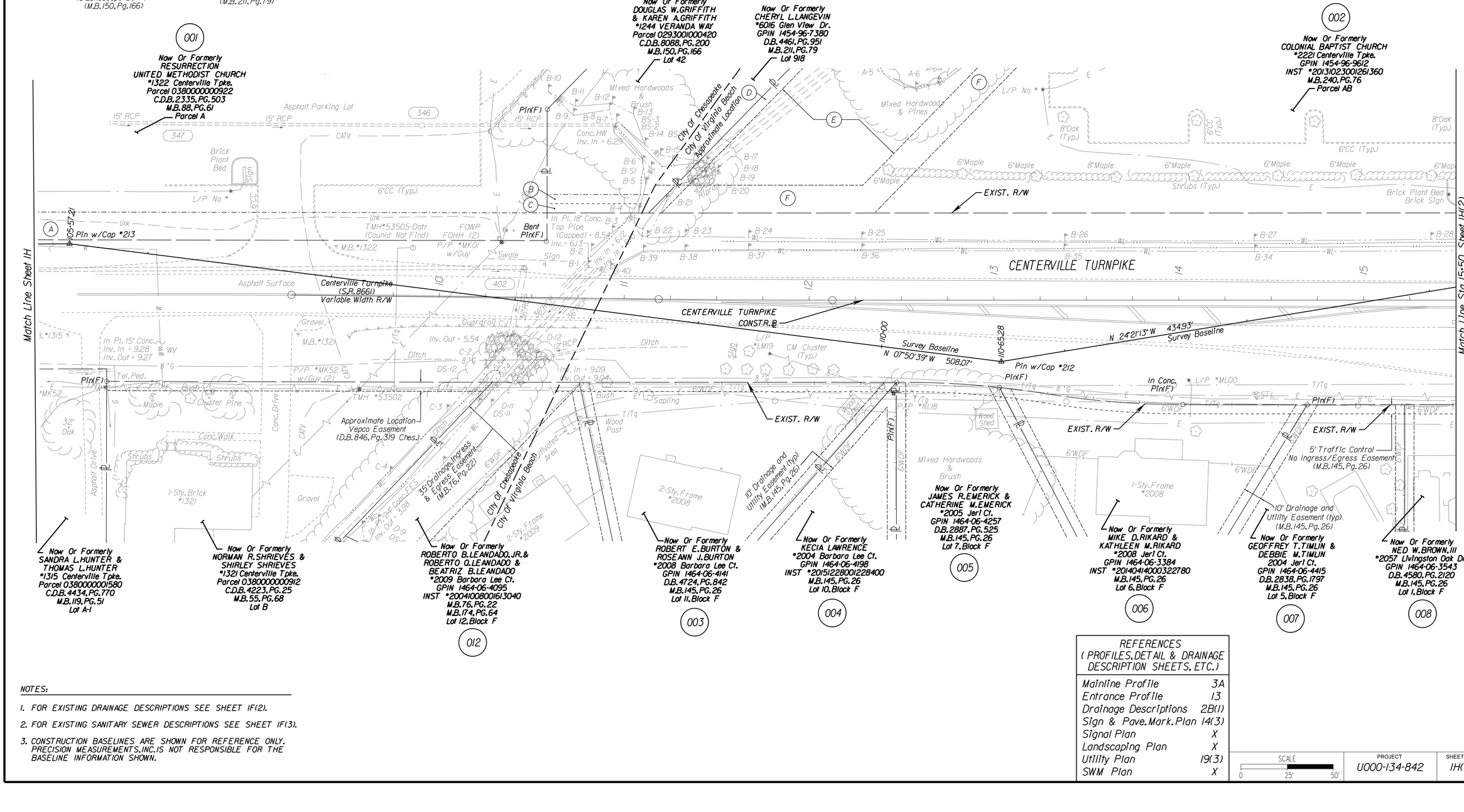
EXISTING CONDITIONS

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	1H(1)

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

Precision Measurements, Inc.
Virginia Beach, Virginia
LAND SURVEYOR

(A) 15' Reservation For Street Widening (M.B. 88, Pg. 61)
(B) 5' no Ingress/Egress Easement No Vehicular Access Permitted (M.B. 150, Pg. 166)
(C) 10' Landscape Buffer (M.B. 150, Pg. 166)
(D) 5' Drainage & Utility Easement (M.B. 240, Pg. 76)
(E) 87.5' Drainage Easement (M.B. 161, Pg. 34)
(F) 15' maintenance Easement (M.B. 211, Pg. 79)



NOTES:

1. FOR EXISTING DRAINAGE DESCRIPTIONS SEE SHEET IF(2).
2. FOR EXISTING SANITARY SEWER DESCRIPTIONS SEE SHEET IF(3).
3. CONSTRUCTION BASELINES ARE SHOWN FOR REFERENCE ONLY. PRECISION MEASUREMENTS, INC. IS NOT RESPONSIBLE FOR THE BASELINE INFORMATION SHOWN.

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

Mainline Profile	3A
Entrance Profile	13
Drainage Descriptions	2B(1)
Sign & Pave. Mark. Plan	14(3)
Signal Plan	X
Landscaping Plan	X
Utility Plan	19(3)
SWM Plan	X

SCALE: 0 25' 50'

PROJECT	SHEET NO.
U000-134-842	1H(1)

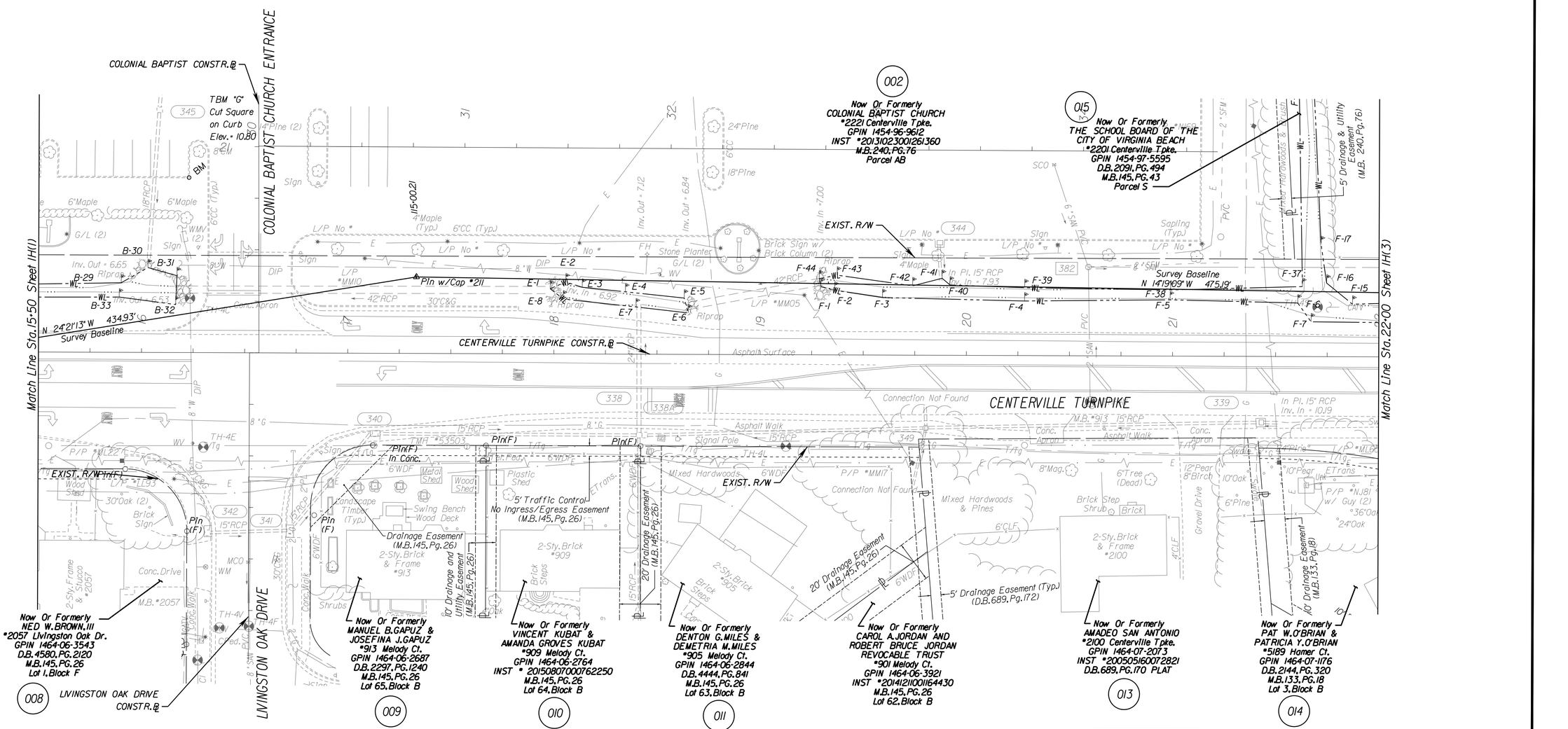
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8665 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0845, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0845, 12/08/2017

EXISTING CONDITIONS

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	1H(2)

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

Precision Measurements, Inc.
Virginia Beach, Virginia
LAND SURVEYOR



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

Mainline Profile	4A
Entrance Profile	13
Drainage Descriptions	2B(1)
Sign & Pave. Mark. Plan	14(4)
Signal Plan	X
Landscaping Plan	X
Utility Plan	19(4)
SWM Plan	21(1)

NOTES:

1. FOR EXISTING DRAINAGE DESCRIPTIONS SEE SHEET 1F(2).
2. FOR EXISTING SANITARY SEWER DESCRIPTIONS SEE SHEET 1F(3).
3. CONSTRUCTION BASELINES ARE SHOWN FOR REFERENCE ONLY. PRECISION MEASUREMENTS, INC. IS NOT RESPONSIBLE FOR THE BASELINE INFORMATION SHOWN.

SCALE 0 25' 50'

PROJECT	SHEET NO.
U000-134-842	1H(2)

12/1/2020
3:55:12 PM

dl0938l01h3.dgn
Plotted By: RK&K - JMK

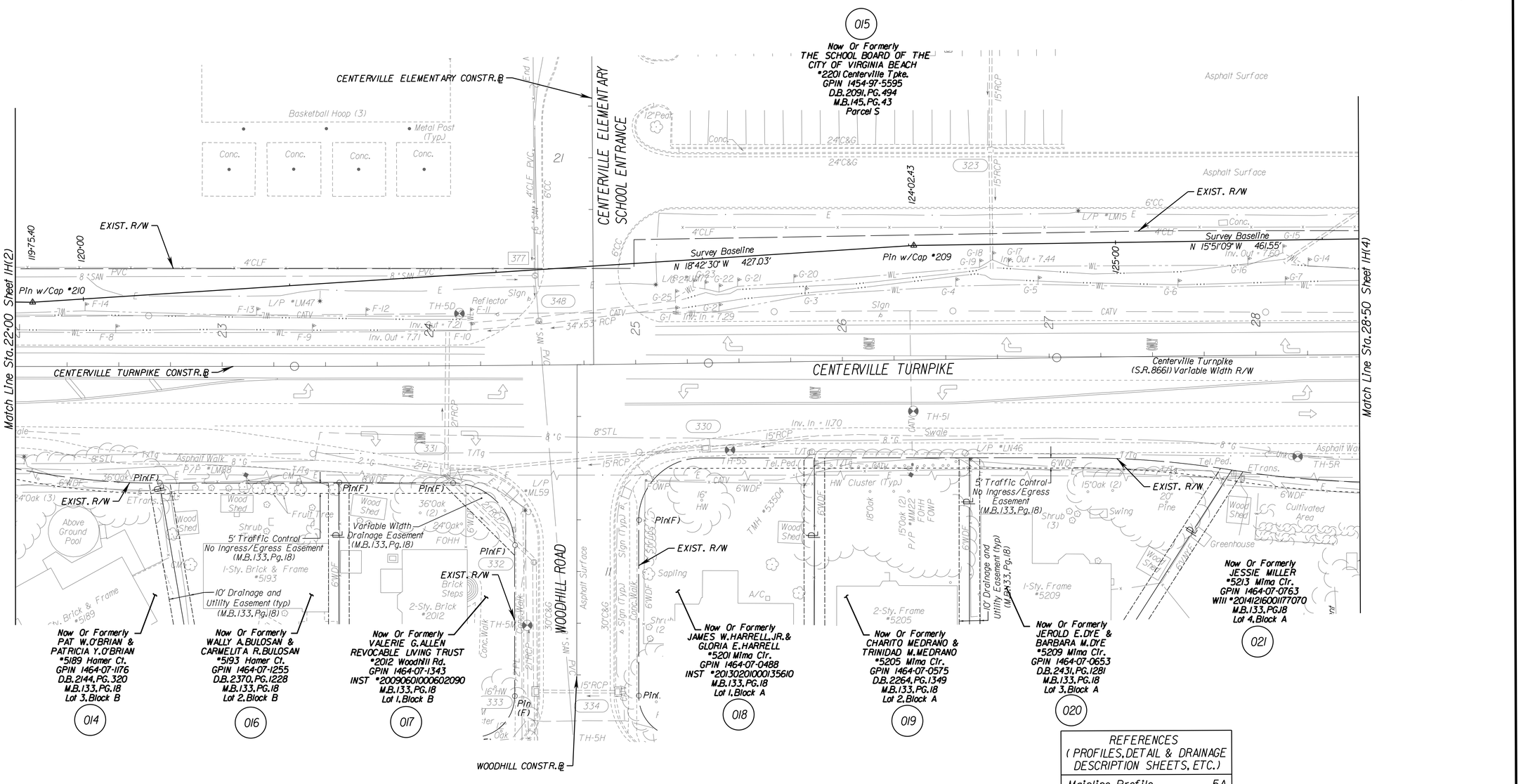
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Bummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

EXISTING CONDITIONS

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	1H(3)

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

Precision Measurements, Inc.
Virginia Beach, Virginia
LAND SURVEYOR



NOTES:

1. FOR EXISTING DRAINAGE DESCRIPTIONS SEE SHEET 1F(2).
2. FOR EXISTING SANITARY SEWER DESCRIPTIONS SEE SHEET 1F(3).
3. CONSTRUCTION BASELINES ARE SHOWN FOR REFERENCE ONLY. PRECISION MEASUREMENTS, INC. IS NOT RESPONSIBLE FOR THE BASELINE INFORMATION SHOWN.

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

Mainline Profile	5A
Entrance Profile	13
Drainage Descriptions	2B(1)
Sign & Pave. Mark. Plan	14(5)
Signal Plan	X
Landscaping Plan	X
Utility Plan	19(5)
SWM Plan	21(1)

SCALE 0 25' 50'

PROJECT	SHEET NO.
U000-134-842	1H(3)

12/1/2020

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

EXISTING CONDITIONS

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	1H(4)

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

Precision Measurements, Inc.
Virginia Beach, Virginia
LAND SURVEYOR

Match Line Sta. 28+50 Sheet 1H(3)

Match Line Sta. 35+00 Sheet 1H(5)

LYNNHAVEN PARKWAY

Lynnhaven Parkway (S.R. 877) Variable Width R/W

CENTERVILLE TURNPIKE

Survey Baseline

N 15°51'09" W 461.55'

N 04°19'53" E 329.15'

128.63.98

130.00

CENTERVILLE CONSTR.@

LYNNHAVEN CONSTR.@

EXIST. R/W

TBM "F"
Cut Square
on Curb
Elev.= 12.29

BM

Pin w/Cap "208

Pin w/Cap "207

Pin(F)

Dominion Virginia Power Easement
(VDOT Plans U000-134-v39,rw-201)

I' Public
No Ingress/Egress
Easement
(Inst.#200812220014379 60)

I' No Ingress/Egress Easement
(Inst.#20141209001156990)

5' Traffic Control
No Ingress/Egress Easement
(M.B.137, Pg.11)

Barrier Maintenance Easement
(VDOT Plans U000-134-v39,rw-201)

10' Drainage and Utility Easement (typ.)
(M.B.137, Pg.11)

Verizon Easement
(VDOT Plans U000-134-v39,rw-201)

015
Now Or Formerly
THE SCHOOL BOARD OF THE
CITY OF VIRGINIA BEACH
#2201 Centerville Tpke.
GPIN 1454-97-5595
D.B. 2091, PG. 494
M.B. 145, PG. 43
Parcel S

026
Now Or Formerly
BPWS CASCADES, LLC
#5705 Lynnhaven Pkwy.
GPIN 1454-98-1390
INST #200902120001429 00
INST #200812220014379 60 PLAT
Parcel A

021
Now Or Formerly
JESSIE MILLER
#5213 Mima Cir.
GPIN 1464-07-0763
WIII #20141216001177070
M.B. 133, PG. 18
Lot 4, Block A

022
Now Or Formerly
CHARLES FERGUSON &
KIMBERLY D. FERGUSON
#2121 Barten Ct.
GPIN 1464-07-0873
INST #20141202001131870
M.B. 137, PG. 11
Lot 17, Block A

023
Now Or Formerly
ROBERT J. CABRAL, JR. &
SULMA B. CABRAL
#2124 Barten Ct.
GPIN 1454-97-9885
D.B. 4452, PG. 1627
M.B. 137, PG. 11
Lot 18, Block A

024
Now Or Formerly
CARSON D. ENTREKIN
#2120 Barten Ct.
GPIN 1454-97-9958
INST #20080904001048530
M.B. 137, PG. 11
Lot 19, Block A

025
Now Or Formerly
WOODS CREEK CORNER, LLC
#2150 Centerville Tpke.
GPIN 1454-98-9315
INST #20150323000244720
INST #20141209001156990 PLAT
Lot B

Now Or Formerly
MICAHEL D. ROULEAU &
BRENDA J. ROULEAU
#2116 Barten Ct.
GPIN 1464-08-0043
INST #20040915014748 2
M.B. 137, PG. 11
Lot 20, Block A

NOTES:

1. FOR EXISTING DRAINAGE DESCRIPTIONS SEE SHEET 1F(2).
2. FOR EXISTING SANITARY SEWER DESCRIPTIONS SEE SHEET 1F(3).
3. CONSTRUCTION BASELINES ARE SHOWN FOR REFERENCE ONLY. PRECISION MEASUREMENTS, INC. IS NOT RESPONSIBLE FOR THE BASELINE INFORMATION SHOWN.

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

Mainline Profile	6A
Entrance Profile	13
Drainage Descriptions	2B(1)
Sign & Pave. Mark. Plan	14(6)
Signal Plan	16(3)
Landscaping Plan	X
Utility Plan	19(6)
SWM Plan	X

SCALE 0 25' 50'

PROJECT	SHEET NO.
U000-134-842	1H(4)

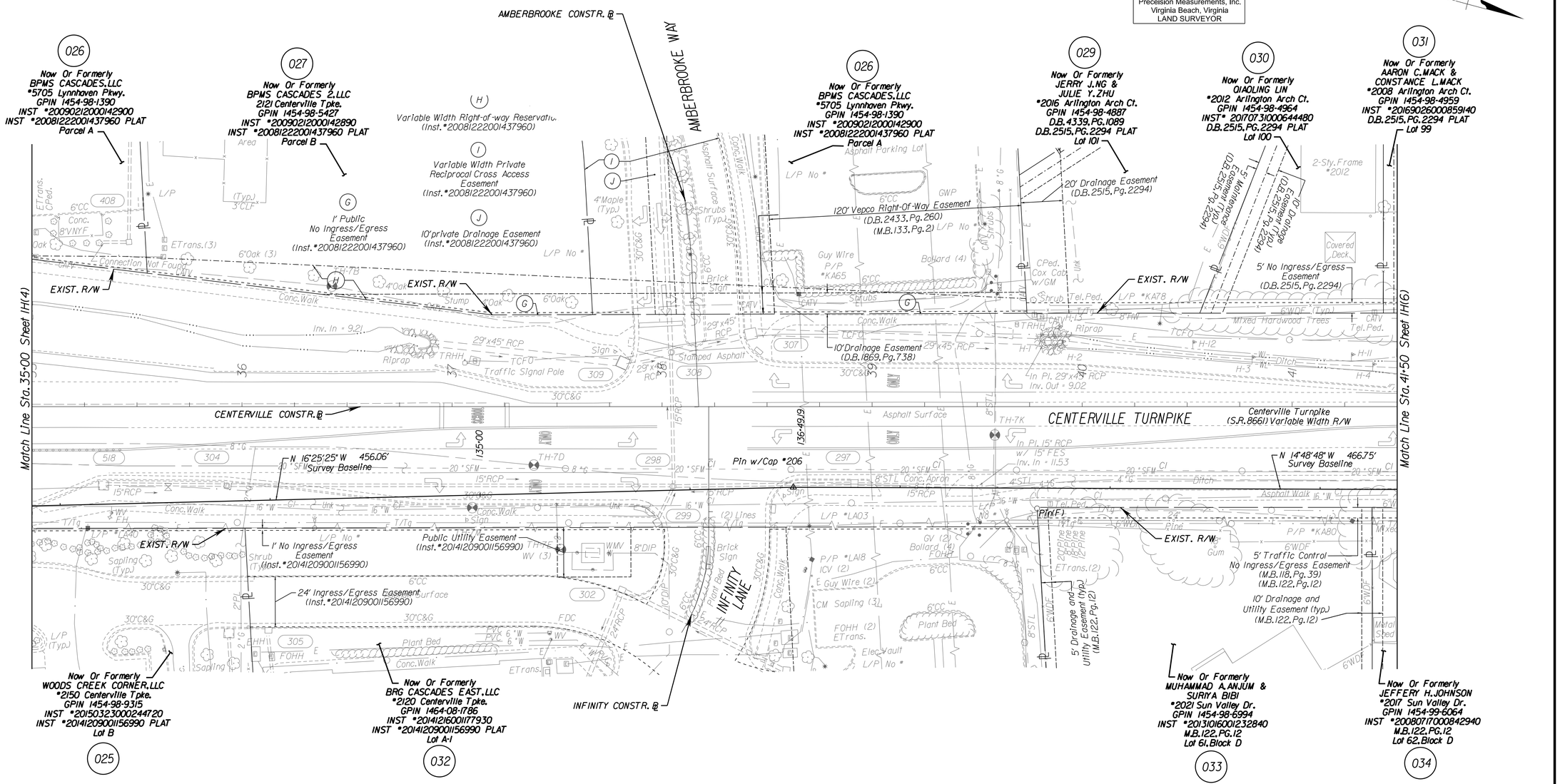
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

EXISTING CONDITIONS

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	1H(5)

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

Precision Measurements, Inc.
Virginia Beach, Virginia
LAND SURVEYOR



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

Mainline Profile	7A
Entrance Profile	13
Drainage Descriptions	2B(1)
Sign & Pave. Mark. Plan	14(7)
Signal Plan	X
Landscaping Plan	X
Utility Plan	19(7)
SWM Plan	X

NOTES:

1. FOR EXISTING DRAINAGE DESCRIPTIONS SEE SHEET 1F(2).
2. FOR EXISTING SANITARY SEWER DESCRIPTIONS SEE SHEET 1F(3).
3. CONSTRUCTION BASELINES ARE SHOWN FOR REFERENCE ONLY. PRECISION MEASUREMENTS, INC. IS NOT RESPONSIBLE FOR THE BASELINE INFORMATION SHOWN.

SCALE: 0 25' 50'

PROJECT	SHEET NO.
U000-134-842	1H(5)

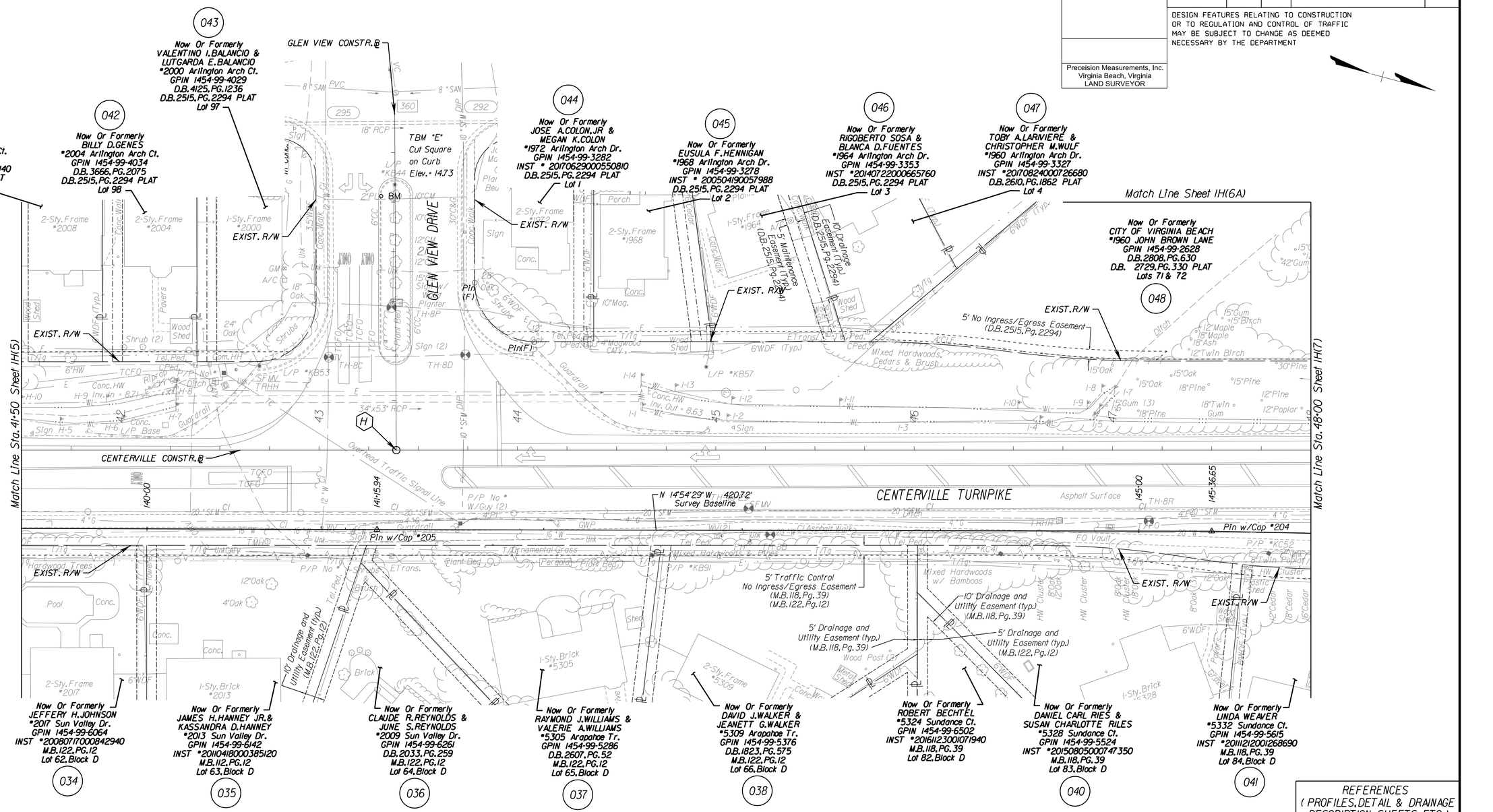
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP, (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017

EXISTING CONDITIONS

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	1H(6)

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

Precision Measurements, Inc.
Virginia Beach, Virginia
LAND SURVEYOR



NOTES:

1. FOR EXISTING DRAINAGE DESCRIPTIONS SEE SHEET 1F(2).
2. FOR EXISTING SANITARY SEWER DESCRIPTIONS SEE SHEET 1F(3).
3. CONSTRUCTION BASELINES ARE SHOWN FOR REFERENCE ONLY. PRECISION MEASUREMENTS, INC. IS NOT RESPONSIBLE FOR THE BASELINE INFORMATION SHOWN.

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

Mainline Profile	8A
Entrance Profile	13
Drainage Descriptions	2B(1)
Sign & Pave. Mark. Plan	14(8)
Signal Plan	16(4)
Landscaping Plan	X
Utility Plan	19(8)
SWM Plan	21(2)

SCALE 0 25' 50'

PROJECT	SHEET NO.
U000-134-842	1H(6)

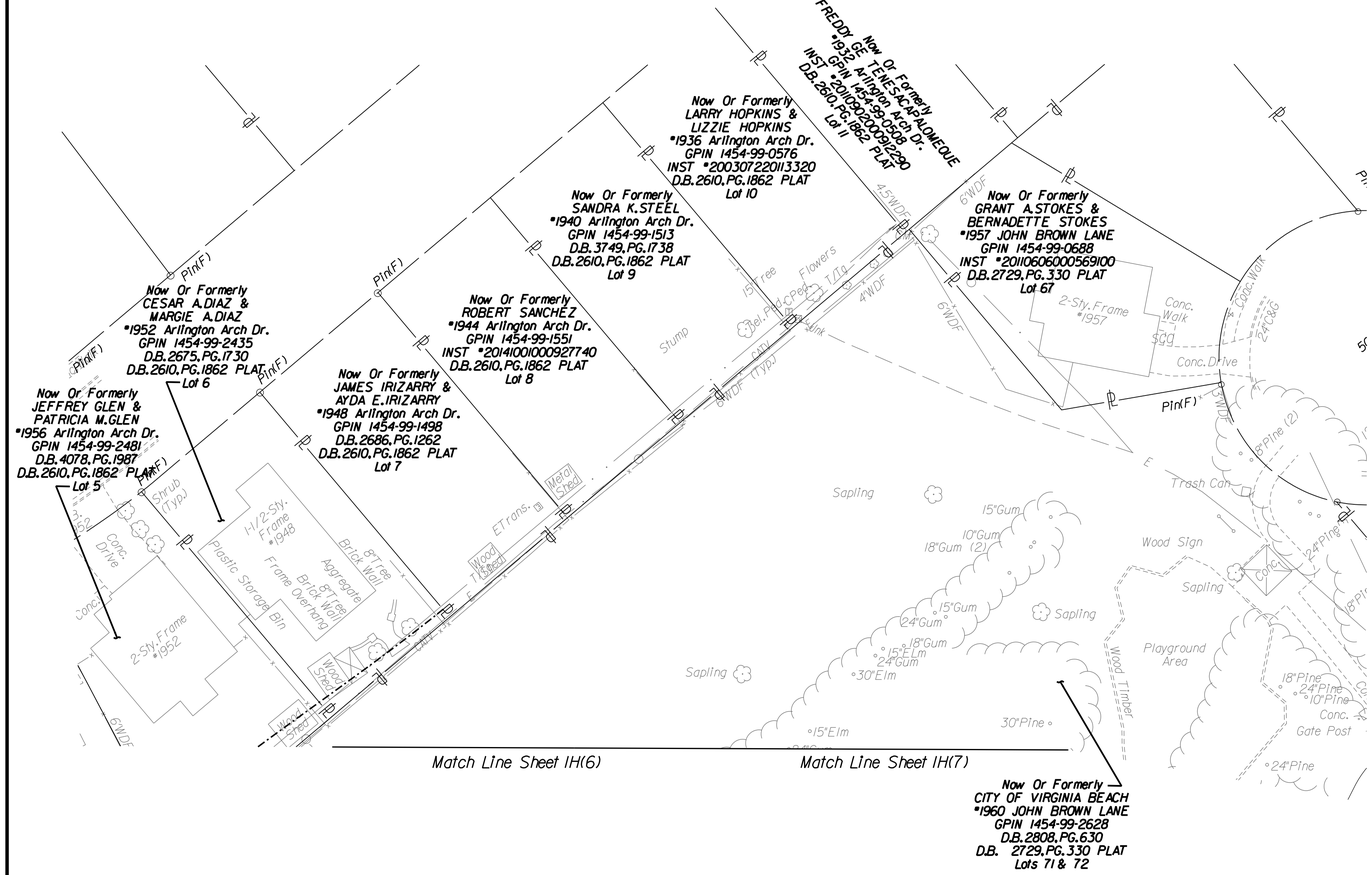
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017

EXISTING CONDITIONS

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	IH(6A)

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

Precision Measurements, Inc.
Virginia Beach, Virginia
LAND SURVEYOR



NOTES:

1. FOR EXISTING DRAINAGE DESCRIPTIONS SEE SHEET IF(2).
2. FOR EXISTING SANITARY SEWER DESCRIPTIONS SEE SHEET IF(3).
3. CONSTRUCTION BASELINES ARE SHOWN FOR REFERENCE ONLY. PRECISION MEASUREMENTS, INC. IS NOT RESPONSIBLE FOR THE BASELINE INFORMATION SHOWN.

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	IH(6A)

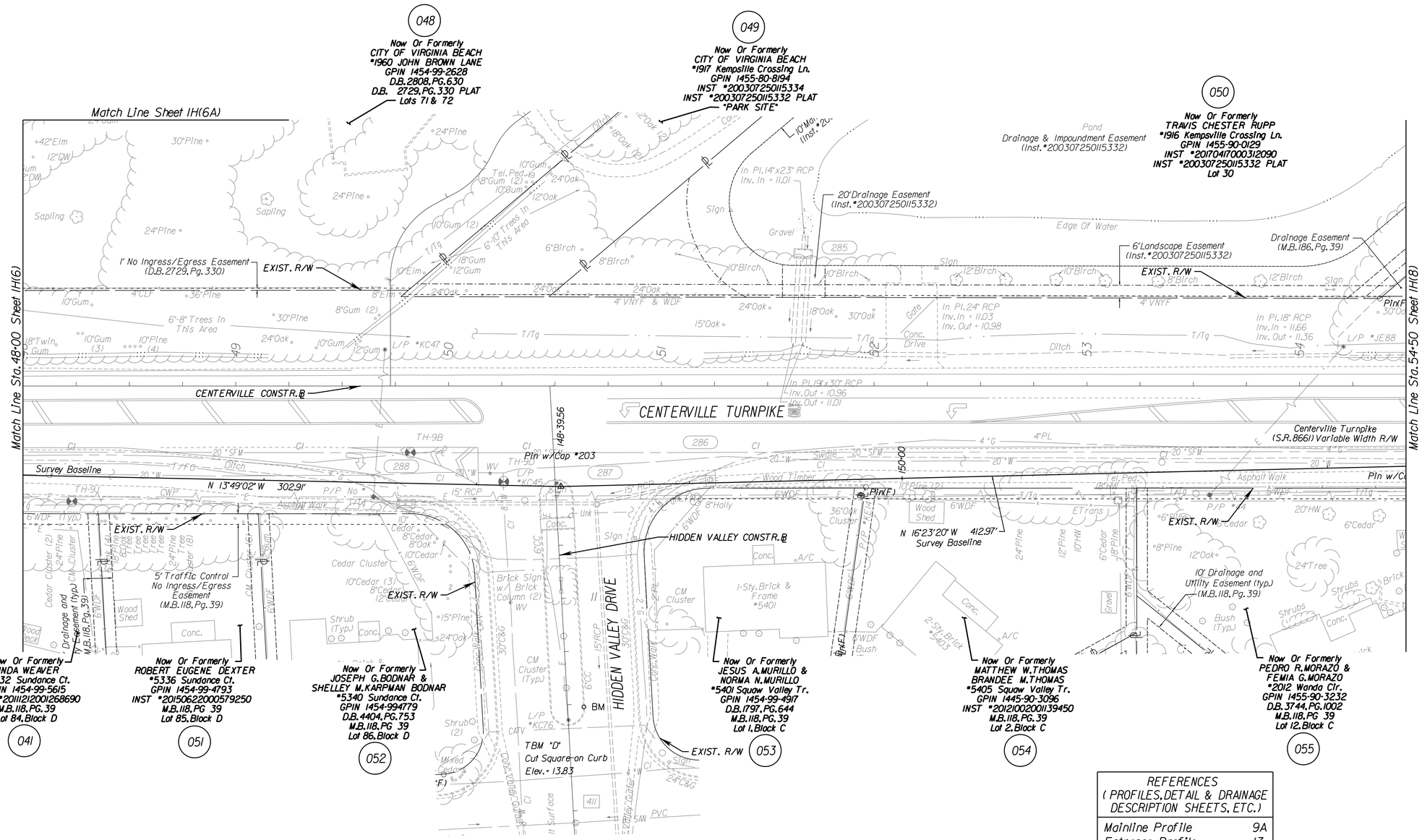
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP, (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017

EXISTING CONDITIONS

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	1H(7)

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

Precision Measurements, Inc.
Virginia Beach, Virginia
LAND SURVEYOR



REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)	
Mainline Profile	9A
Entrance Profile	13
Drainage Descriptions	2B(1)
Sign & Pave. Mark. Plan	14(9)
Signal Plan	16(5)
Landscaping Plan	X
Utility Plan	19(9)
SWM Plan	21(2)

SCALE 0 25' 50'

PROJECT	SHEET NO.
U000-134-842	1H(7)

NOTES:

1. FOR EXISTING DRAINAGE DESCRIPTIONS SEE SHEET 1F(2).
2. FOR EXISTING SANITARY SEWER DESCRIPTIONS SEE SHEET 1F(3).
3. CONSTRUCTION BASELINES ARE SHOWN FOR REFERENCE ONLY. PRECISION MEASUREMENTS, INC. IS NOT RESPONSIBLE FOR THE BASELINE INFORMATION SHOWN.

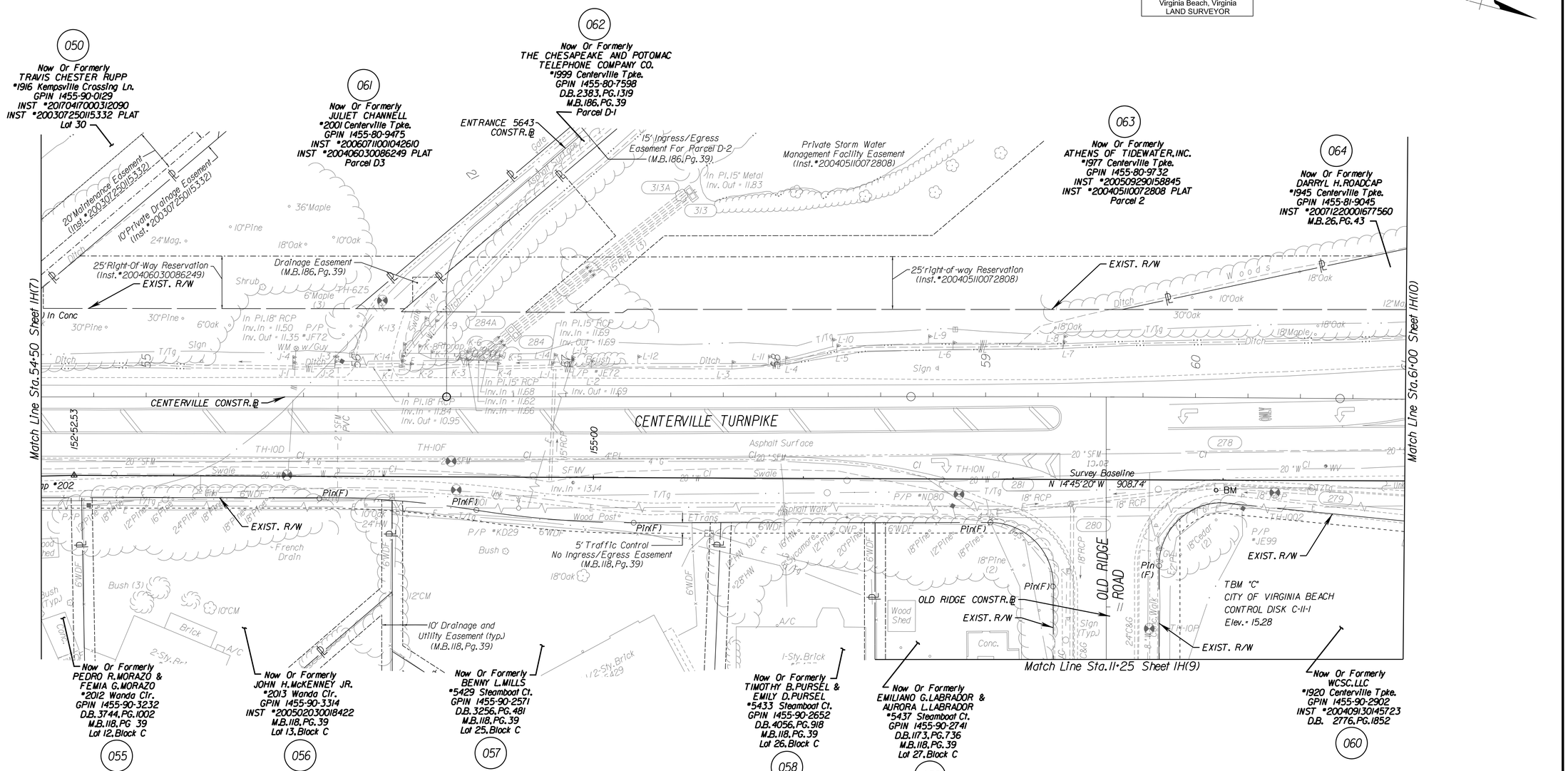
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017

EXISTING CONDITIONS

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	1H(8)

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

Precision Measurements, Inc.
Virginia Beach, Virginia
LAND SURVEYOR



REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)	
Mainline Profile	10A
Entrance Profile	13
Drainage Descriptions	2B(1)
Sign & Pave. Mark. Plan	14(10)
Signal Plan	X
Landscaping Plan	X
Utility Plan	19(10)
SWM Plan	X

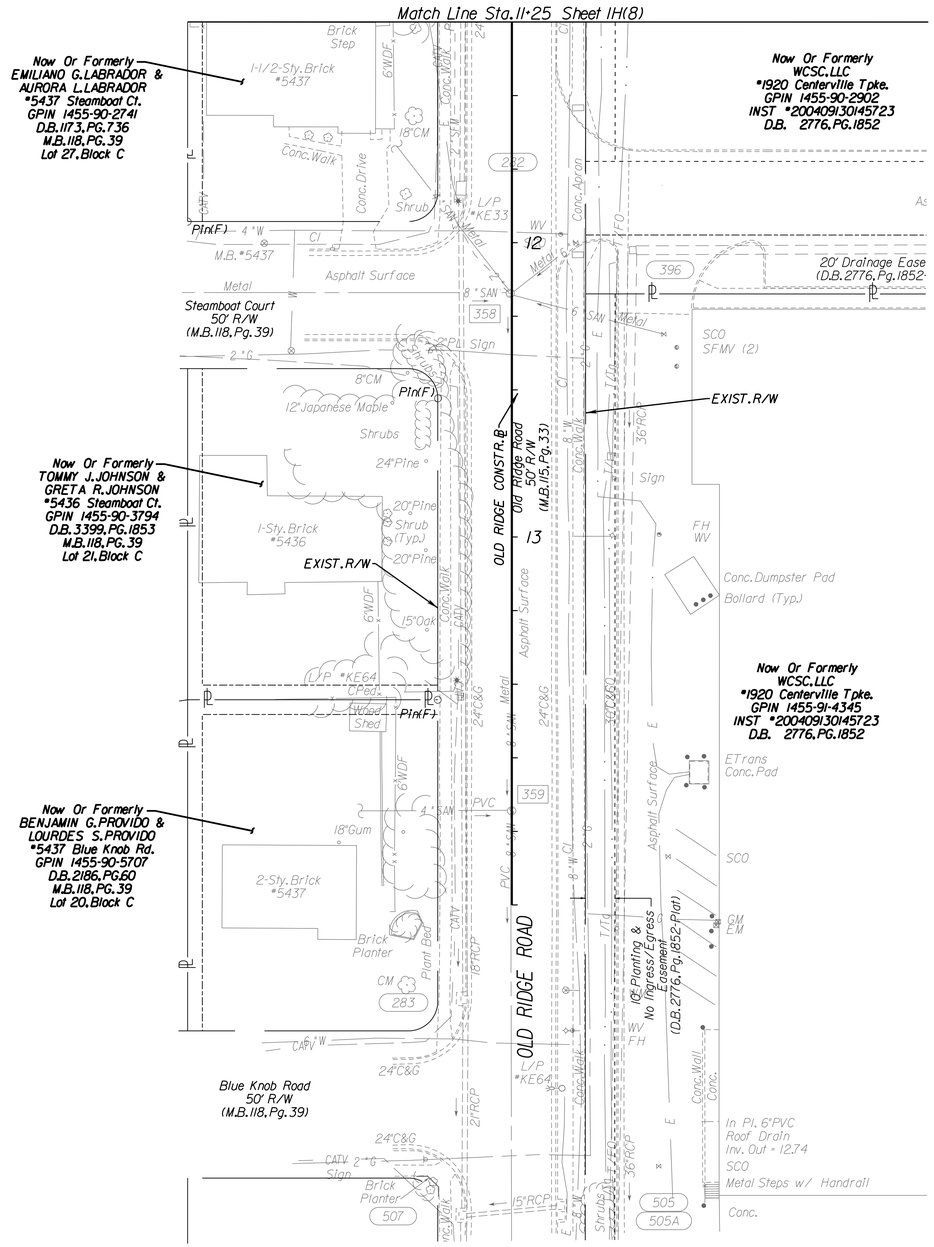
NOTES:

1. FOR EXISTING DRAINAGE DESCRIPTIONS SEE SHEET 1F(2).
2. FOR EXISTING SANITARY SEWER DESCRIPTIONS SEE SHEET 1F(3).
3. CONSTRUCTION BASELINES ARE SHOWN FOR REFERENCE ONLY. PRECISION MEASUREMENTS, INC. IS NOT RESPONSIBLE FOR THE BASELINE INFORMATION SHOWN.

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1H(8)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

EXISTING CONDITIONS



NOTES:

1. FOR EXISTING DRAINAGE DESCRIPTIONS SEE SHEET IF(2).
2. FOR EXISTING SANITARY SEWER DESCRIPTIONS SEE SHEET IF(3).
3. CONSTRUCTION BASELINES ARE SHOWN FOR REFERENCE ONLY. PRECISION MEASUREMENTS, INC. IS NOT RESPONSIBLE FOR THE BASELINE INFORMATION SHOWN.

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	1H(9)

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

Precision Measurements, Inc.
Virginia Beach, Virginia
LAND SURVEYOR

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)	
Mainline Profile	X
Entrance Profile	X
Drainage Descriptions	X
Sign & Pave. Mark. Plan	X
Signal Plan	X
Landscaping Plan	X
Utility Plan	X
SWM Plan	X

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1H(9)

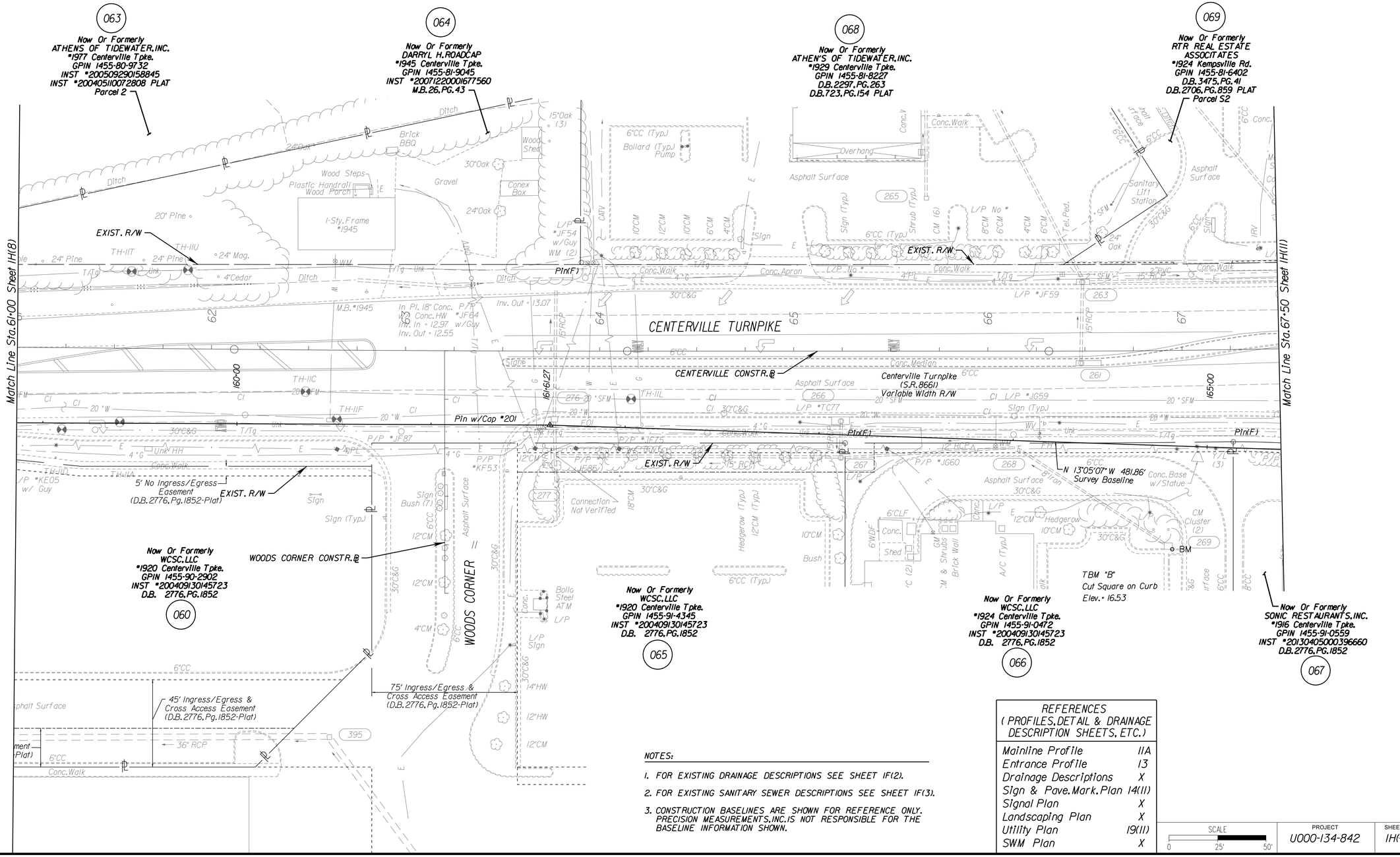
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP, (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017

EXISTING CONDITIONS

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	1H(10)

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

Precision Measurements, Inc.
Virginia Beach, Virginia
LAND SURVEYOR



REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)	
Mainline Profile	11A
Entrance Profile	13
Drainage Descriptions	X
Sign & Pave. Mark. Plan	14(11)
Signal Plan	X
Landscaping Plan	X
Utility Plan	19(11)
SWM Plan	X

NOTES:

1. FOR EXISTING DRAINAGE DESCRIPTIONS SEE SHEET 1F(2).
2. FOR EXISTING SANITARY SEWER DESCRIPTIONS SEE SHEET 1F(3).
3. CONSTRUCTION BASELINES ARE SHOWN FOR REFERENCE ONLY. PRECISION MEASUREMENTS, INC. IS NOT RESPONSIBLE FOR THE BASELINE INFORMATION SHOWN.

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1H(10)

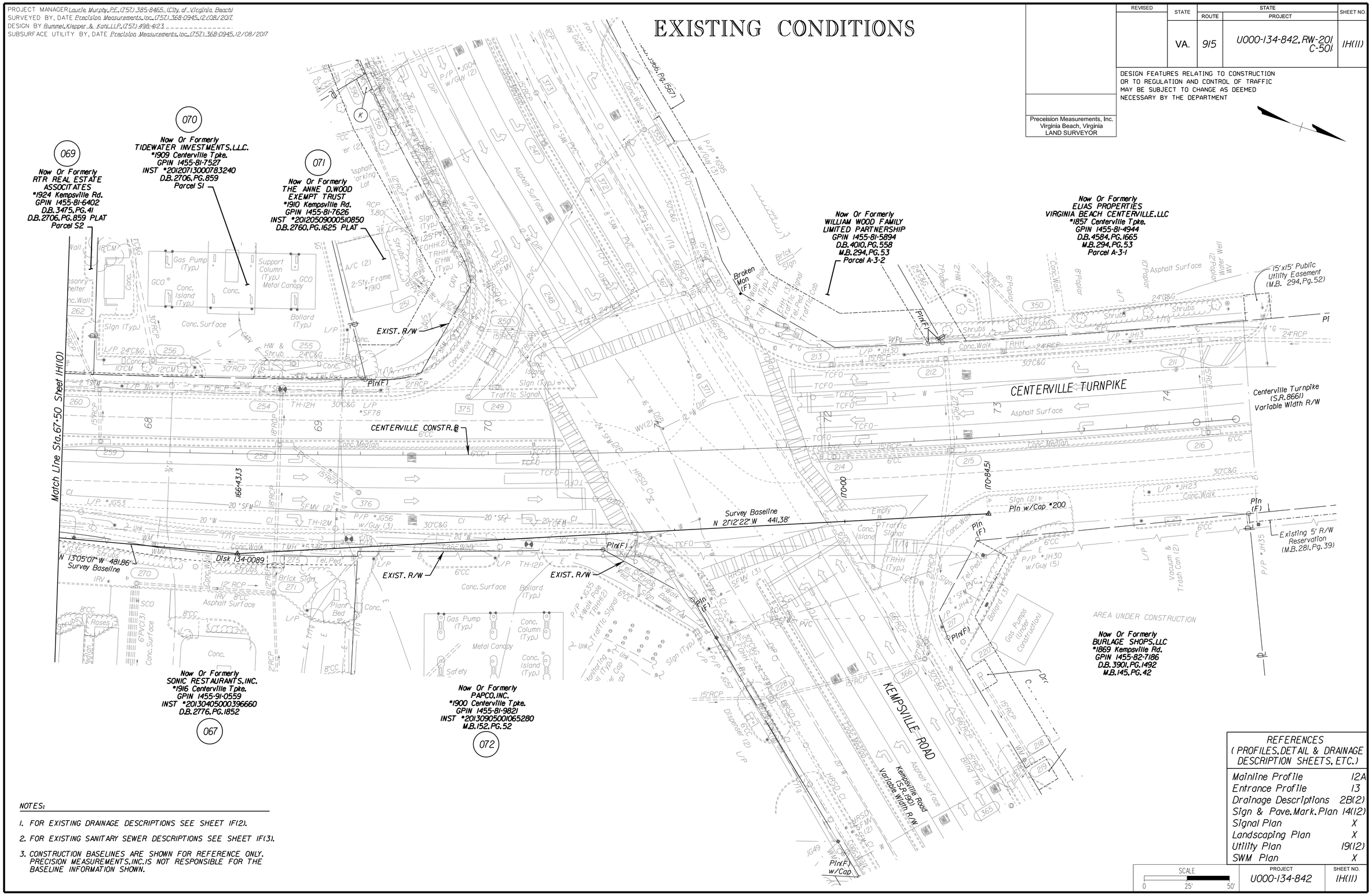
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

EXISTING CONDITIONS

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	1H(11)

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

Preceision Measurements, Inc.
Virginia Beach, Virginia
LAND SURVEYOR



NOTES:

1. FOR EXISTING DRAINAGE DESCRIPTIONS SEE SHEET 1F(2).
2. FOR EXISTING SANITARY SEWER DESCRIPTIONS SEE SHEET 1F(3).
3. CONSTRUCTION BASELINES ARE SHOWN FOR REFERENCE ONLY. PRECISION MEASUREMENTS, INC. IS NOT RESPONSIBLE FOR THE BASELINE INFORMATION SHOWN.

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

Mainline Profile	12A
Entrance Profile	13
Drainage Descriptions	2B(2)
Sign & Pave. Mark. Plan	14(12)
Signal Plan	X
Landscaping Plan	X
Utility Plan	19(12)
SWM Plan	X

SCALE 0 25' 50'

PROJECT	SHEET NO.
U000-134-842	1H(11)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501,	IJ

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

TRAFFIC CONTROL GENERAL NOTES
TRANSPORTATION MANAGEMENT PLAN

1). Project Category (Minimum TMP Requirements)
- A). This project will be a "Type B Category III" project.
  - 1). Construction will occur outside of roadway, with shifting traffic and detours and inside of roadway with temporary daytime lane closures, or flagging operations.
- B). The length of the work zone will be 6055 feet. The width of the work zone will vary.
- C). The work zone may be active between the hours of 9:00 A.M. to 4:00 P.M. Monday through Saturday.
- D). The traffic in this area consists of local commuters and residential traffic.

2). Temporary Traffic Control (TTC) Plan (Component 1)
- A). Major components will consist of General Notes, Typical Sections, and special details as necessary.
- B). Specific traffic control figures and notes from the Virginia Department Transportation Work Area Protection Manual 2011, Revision 2 September 1, 2019 use for Traffic Control are:
  - Pg. 6H-52 and 6H-53 Figure TTC-23.0
  - Pg. 6H-54 and 6H-55 Figure TTC-24.0
  - Pg. 6H-62 and 6H-63 Figure TTC-28.0
  - Pg. 6H-76 and 6H-77 Figure TTC-35.0
  - Pg. 6H-112 and 6H-113 Figure TTC-53.0
  - Pg. 6H-124 and 6H-125 Figure TTC-59.0
- C). Holiday Restrictions are outlined in Section 108.02 of the 2016 Road and Bridge Specifications. Lane closures will not be permitted from 12:00 P.M. the day before a holiday until 12:00 P.M. the day after a holiday. If a holiday occurs on a Sunday, then from 12:00 P.M. Friday until 12:00 P.M. Tuesday will be applicable, unless otherwise directed by the Engineer.

3). Public Communications Plan

Project Description:
The purpose of the project is to improve Centerville Turnpike by providing additional travel lanes.

Traffic Impacts:
During construction, motorists should watch for flaggers, signs, and changing traffic patterns.

Goals:
To inform the public about the project.
To minimize the disruption through proactive information dissemination efforts.
To gather public support for the project.
To establish a crisis communications plan.

Messages:
Benefits and purpose of this project.
Traffic Impacts and information on alternate routes.
Contacts for more information.

Crisis Communications Plan:
As with any crisis, emergency responders (911) should be notified immediately if necessary.

The Construction Engineer or his designee should be notified immediately.

If the emergency is traffic related, the Construction Engineer or his designee should immediately notify the Traffic Management Operations Group (TMO) at 757-385-1470. The TMO Center should immediately notify Public Affairs.

The Construction Engineer, Public Affairs, and Traffic Management Operations Group will work together to inform the traveling public, emergency responders, and the media about delays and unexpected changes in traffic patterns using the contact list, and other resources if necessary.

4). Transportation Operations (TO) Plan
- A). This plan is not required on this project, however, a contact list of local emergency response agencies must be kept and maintained throughout the project life cycle.
- B). Traffic Backup Notification
  Emergency contact for this project shall be 911.

  The Traffic Management Operations Group (757-385-1470) shall be notified of lane closures and traffic related to the work by the project staff.

  The TMO will utilize available systems (cameras, sensors, etc.) to monitor the work area and all adjacent areas. The TMO will make all entries into systems the feed this information into 511. The TMO will utilize assets such as variable message signs to alert motorists of lane closures and other incidents that may impact travel.

  The TMO will also make notifications to City staff of any incidents and expected traffic delays.

  The TMO shall be responsible for intra-agency notifications to entities such as but not limited to VDOT, VSP, Local 911, and other affected agencies.

  A review of all major incidents, as determined by the Regional Incident Management Coordinator, shall be accomplished within 72 hours of clearance of the incident. Traffic Management Operations, VDOT Project Staff, Contractor Staff, and emergency responders shall be represented at these meetings.

TARGET AUDIENCE	CONTACT METHOD	PHONE NO., E-MAIL OR ADDRESS	RESPONSIBLE CHARGE
MOTORISTS	NEWS RELEASES, WEEKLY TRAFFIC INFORMATION (ROADWATCH), 511, VMS	SEE PUBLIC AFFAIRS NEWS RELEASE DISTRIBUTION LIST (E-MAIL AND FAX)	PUBLIC AFFAIRS OFFICE: Name 757-385-4097
POLICE State Police	Phone	Emergency 911 757-424-6820	CONSTRUCTION ENGINEER Name **********
VIRGINIA BEACH Sheriff	Phone	Emergency 911 757-385-4555	CONSTRUCTION ENGINEER Name **********
VIRGINIA BEACH Dept. of Public Safety	Phone	Emergency 911 757-385-3111	CONSTRUCTION ENGINEER Name **********
FIRE Chesapeake Fire Department Station 14	Phone	Emergency 911 757-382-6297	CONSTRUCTION ENGINEER Name **********
RESCUE Kempsville Rescue Squad	Phone	Emergency 911 757-340-5877	CONSTRUCTION ENGINEER Name **********
RESIDENTIAL NEIGHBORHOODS	NEWS RELEASES, WEEKLY TRAFFIC INFORMATION (ROADWATCH), 511, VMS		CONSTRUCTION ENGINEER Name **********
CITY OFFICIALS	Phone		CONSTRUCTION ENGINEER Name **********
CENTERVILLE ELEMENTARY SCHOOL	Phone	717-898-5575	CONSTRUCTION ENGINEER Name **********
VIRGINIA BEACH ADMINISTRATIVE OFFICES	Phone	757-385-1100	CONSTRUCTION ENGINEER Name **********

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TRAFFIC CONTROL GENERAL NOTES
TEMPORARY TRAFFIC CONTROL NOTES

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501,	IJ(1)

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

CITY OF VIRGINIA BEACH TEMPORARY TRAFFIC CONTROL NOTES

1. TYPE III BARRICADES WITH PUBLIC NOTICE OF STREET EXTENSION SIGNS ARE REQUIRED AT THE TERMINATION OF STREETS, AS DIRECTED BY PUBLIC WORKS/TRAFFIC ENGINEERING.
2. WHERE PARKING AREAS WILL BE ILLUMINATED, ALL SOURCES OF ILLUMINATION MUST BE SHIELDED TO PREVENT ANY DIRECT REFLECTION TOWARDS RESIDENTIAL AREAS AND CITY STREETS.
3. ALL STRIPING IN THE PUBLIC RIGHT-OF-WAY MUST BE OF THERMOPLASTIC MATERIAL FOR LANE LINES, STOP BARS, CROSSWALKS, ETC. ALL LEGENDS AND ARROWS MUST BE OF VDOT APPROVED TYPE B, CLASS VI PREFORMED PAVEMENT MESSAGE MARKING MATERIAL.
4. THE CITY OF VIRGINIA BEACH, TRAFFIC ENGINEERING BUREAU IS RESPONSIBLE FOR REVIEWING AND APPROVING ALL TRAFFIC MAINTENANCE AND CONTROL PLANS AND REVIEWING THE SEQUENCE OF CONSTRUCTION PLANS ESSENTIAL TO COMPLETE THIS PROJECT.
5. ALL TRAFFIC MAINTENANCE AND CONTROL DEVICES, METHODS AND APPLICATIONS WILL CONFORM TO THE FOLLOWING PUBLICATIONS INCLUDING ALL CURRENT EDITIONS AND REVISIONS:
   - A. MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREET AND HIGHWAYS ISSUED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION (MUTCD)
   - B. VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE STANDARDS (2016)
   - C. VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE SPECIFICATIONS (2016)
   - D. VIRGINIA DEPARTMENT OF TRANSPORTATION WORK AREA PROTECTION MANUAL (VWAPM) (2011 - REVISION 2: SEPTEMBER 1, 2019)
   - E. CITY IF VIRGINIA BEACH, PUBLIC WORKS SPECIFICATIONS AND STANDARDS MANUAL.
6. WORK HOURS IN ROADWAY OPEN TO TRAFFIC AND/OR PEDESTRIAN AREA:
   - A. MONDAY THROUGH SATURDAY: WORK WILL BE COMPLETED BETWEEN THE HOURS OF 9:00AM AND 4:00PM ONLY, UNLESS OTHERWISE NOTED OR APPROVED IN WRITING BY THE OWNER.
   - B. SUNDAYS AND HOLIDAYS: NO WORK MAY BE COMPLETED IN THE ROADWAY OR PEDESTRIAN AREAS UNLESS OTHERWISE NOTED OR APPROVED IN WRITING BY THE OWNER.
   - C. ADDITIONAL RESTRICTIONS MAY APPLY BASED ON TRAFFIC CONDITIONS. EXTENDED WORK HOURS AND WORKDAYS MAY BE REQUESTED WITH A WRITTEN REQUEST TO THE OWNER. THIS REQUEST MUST BE SUBMITTED AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE EXTENDED WORK PERIODS.
7. TRAFFIC CONTROL PLANS:
   TRAFFIC CONTROL PLANS ARE INCLUDED IN THE CONSTRUCTION PLANS FOR THE REFERENCED PROJECT; HOWEVER, FIELD CONDITIONS MAY REQUIRE MODIFICATIONS. IF THE CONTRACTOR FEELS THAT THE TRAFFIC CONTROL PLAN(S) INCLUDED WITH THIS PROJECT DOES NOT SUIT CONDITIONS AT A WORK SITE, THEN THE CONTRACTOR SHALL SUBMIT TO THE OWNER A REVISED PLAN TO MAINTAIN TRAFFIC. THE REVISED PLAN SHALL INCLUDE SITE -SPECIFIC TRAFFIC DETAILS AND SHALL IDENTIFY THE SEQUENCE OF CONSTRUCTION. THE CONTRACTOR WILL SUBMIT THE REVISED TRAFFIC CONTROL PLAN(S) A MINIMUM 10 CALENDAR DAYS PRIOR TO THE START OF WORK. THE CONTRACTOR WILL NOT DISRUPT TRAFFIC PATTERNS UNTIL THE OWNER HAS APPROVED THE REVISED TRAFFIC CONTROL PLAN. THE OWNER RESERVES THE RIGHT TO MODIFY ANY TRAFFIC CONTROL PLAN(S) AS NECESSARY IN THE INTEREST OF PUBLIC SAFETY OR TRAFFIC EFFICIENCY. PRIOR TO BEGINNING WORK, IT IS THE CONTRACTORS RESPONSIBILITY TO INSURE THAT ALL REQUIREMENTS HAVE BEEN MET AND THAT ALL TRAFFIC CONTROL DEVICES HAVE BEEN INSTALLED ACCORDING TO THE APPROVED TRAFFIC CONTROL PLAN(S).
8. THE CONTRACTOR SHALL CHECK ALL TRAFFIC MAINTENANCE AND CONTROL DEVICES AND WORK ZONES BEFORE, DURING, AND AFTER EACH WORKDAY TO ENSURE PROPER OPERATION. ON WEEKENDS, HOLIDAYS, OR ANY NON-WORKING DAY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING THE TRAFFIC MAINTENANCE AND CONTROL DEVICES DAILY FOR PROPER OPERATION.
9. TWO-WAY TRAFFIC WILL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION UNLESS TRAFFIC ENGINEERING HAS APPROVED ANOTHER ALTERNATIVE FOR TRAFFIC CONTROL, SUCH AS A LANE CLOSURE OR A TEMPORARY STREET CLOSURE. RESIDENT AND EMERGENCY ACCESS WILL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION REGARDLESS IF A STREET CLOSURE IS IN EFFECT OR NOT.
10. IF THERE IS AN APPROVAL FROM TRAFFIC ENGINEERING FOR A LANE CLOSURE OR A TEMPORARY STREET CLOSURE, ALL LANES OF TRAFFIC WILL BE REOPENED TO TRAFFIC AT THE CONCLUSION OF EACH CONSTRUCTION DAY, UNLESS A 24-HOUR TEMPORARY STREET CLOSURE IS APPROVED AND IN EFFECT.
11. IN ALL CASES IN WHICH EXISTING OR ESTABLISHED TRAFFIC PATTERNS WILL BE DISRUPTED, THE CONTRACTOR WILL NOTIFY ALL AFFECTED RESIDENTS AND/OR BUSINESSES A MINIMUM OF 48 HOURS IN ADVANCE OF THE ANTICIPATED DISRUPTION BY DISTRIBUTING DOOR-TO-DOOR NOTICES. A COPY OF THE NOTICE SHALL BE FORWARDED TO TRAFFIC ENGINEERING FOR REVIEW AND APPROVAL PRIOR TO BEGINNING WORK.
12. AT NIGHT OR DURING NON-CONSTRUCTION HOURS, ALL EXCAVATED AREAS ARE TO BE BACKFILLED OR SECURED AND PROTECTED BY USING APPROVED SAFETY DEVICES OR MATERIALS.
13. IN ACCORDANCE WITH THE VIRGINIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS (CONSTRUCTION INDUSTRIAL) 29 CFR, PART 1929, 1989 EDITION. ALL CONTRACTOR EMPLOYEES AND SUBCONTRACTOR(S) EMPLOYEES EXPOSED TO VEHICULAR TRAFFIC WILL BE PROVIDED WITH AND REQUIRED TO WEAR WARNING VESTS MARKED WITH OR MADE OF REFLECTORIZED OR HIGH VISIBILITY MATERIALS.
14. FOR CONSTRUCTION OPERATIONS LASTING MORE THAN 14 DAYS, THE CONTRACTOR WILL INSTALL ROAD WORK AHEAD (W21-4, 48" X 48") AND END ROAD WORK (G20-2A, 48" X 24") WARNING SIGNS ON 6" X 6" WOODEN GROUND MOUNTED POSTS. THESE SIGNS MUST BE INSTALLED PRIOR TO BEGINNING CONSTRUCTION WORK AND WILL BE REMOVED AFTER COMPLETION OF ALL CONSTRUCTION ACTIVITIES.
15. FOR ALL APPROVED CONSTRUCTION/TRUCK ENTRANCES, THE CONTRACTOR WILL INSTALL "TRUCKS ENTERING HIGHWAY" (48" X 48" ORANGE AND BLACK) WARNING SIGNS ON 6" X 6" WOODEN GROUND MOUNTED POSTS. THESE SIGNS WILL BE INSTALLED 500 FEET IN ADVANCE OF ALL APPROVED CONSTRUCTION ACCESS/ENTRANCE POINTS.
16. ANY TRAFFIC CONTROL DEVICES INCLUDING BUT NOT LIMITED TO PAVEMENT MARKINGS, SIGNS, AND TRAFFIC CONTROL SIGNAL EQUIPMENT DAMAGED OR DESTROYED BY THE CONTRACTOR MUST BE REPLACED AT THE CONTRACTORS EXPENSE UNLESS THEIR REMOVAL OR DESTRUCTION IS CALLED FOR BY THE PLANS.
17. FOR ANY FURTHER INFORMATION ON TRAFFIC MAINTENANCE AND CONTROL REQUIREMENTS, PLEASE CONTACT THE TRAFFIC ENGINEERING BUREAU, 2405 COURTHOUSE DRIVE, VIRGINIA BEACH, VIRGINIA 23456-9031, (757) 385-4131 FAX: (757) 385-4913.

NOTES:

1. BARRELS TO BE SPACED 40' O.C. AND 20' O.C. AROUND CURVES.
2. CONTRACTOR TO MAINTAIN PEDESTRIAN ROUTES AT ALL TIMES. IF SIDEWALK IS CLOSED, A SIGNED PAVED PEDESTRIAN DETOUR MEETING ADA GUIDELINES IS REQUIRED. SEE TTC-35.0 AND TTC-36J OF THE VWAPM.
3. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ACCESS TO ALL RESIDENTIAL AND COMMERCIAL DRIVES/ENTRANCES AT ALL TIMES. THE CONTRACTOR SHALL COORDINATE WITH THE PROPERTY OWNER FOR ALLOWABLE TIMES TO INSTALL NEW ENTRANCE
4. TEMPORARY RAISED PAVEMENT MARKERS TO BE INSTALLED WITH ALL TEMPORARY PAVEMENT MARKINGS THAT WILL REMAIN IN PLACE FOR 14 DAYS OR LONGER PER VWAPM SECTION 6F-59.
5. CONTRACTOR TO HAVE EMERGENCY STEEL PLATES IN ACCORDANCE WITH OSHA SHORING STANDARDS ON SITE AT ALL TIMES IN THE EVENT THAT UTILITY WORK IS NOT COMPLETED BY THE TIME TRAFFIC RESTRICTIONS ARE TO BE LIFTED.
6. DURING NON-CONSTRUCTION HOURS GRAVEL WEDGING FOR ALL DROP OFF AREAS PER VWAPM ARE REQUIRED.
7. DURING NON-WORKING HOURS REMOVE ALL HAZARDS AND EQUIPMENT FROM THE CLEAR ZONE.
8. DURING NON-CONSTRUCTION HOURS, ALL EXCAVATED AREAS INSIDE OF CLEAR ZONE ARE TO BE BACKFILLED UNLESS GRAVEL WEDGING CAN BE UTILIZED.

	PROJECT	SHEET NO.
	U000-134-842	IJ(1)

12/2/2020

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 1A

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501,	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

Rummel, Klepper & Kahl, LLP
Virginia Beach, Virginia
ROADWAY ENGINEER

SEQUENCE OF CONSTRUCTION

PHASE IA

WIDENING OF PAVEMENT ON THE RIGHT LANE OF SOUTHBOUND CENTERVILLE TURNPIKE FROM APPROXIMATELY STA.60+00 TO STA.70+00. WORK WILL BE DONE INSIDE OF ROADWAY AND WILL REQUIRE A DAILY OUTSIDE LANE CLOSURE UNTIL WORK IS COMPLETED. WORK WILL INCLUDE BUT NOT LIMITED TO INSTALLATION OF CURB & GUTTER, SIDEWALK, CONCRETE ENTRANCES, DRIANAGE PIPES, DRAINAGE STRUCTURES AND PAVEMENT WIDENING.

1. PRIOR TO ANY WORK, THE CONTRACTOR WILL INSTALL THE PROJECT IDENTIFICATION SIGNS PER THE SPECIFICATIONS AND WILL INSTALL THE SIGNING FOR THE PROJECT LIMITS IN ACCORDANCE WITH TTC-53.0. THE SIGNS SHALL REMAIN IN PLACE THROUGH THE ENTIRETY OF THE CONSTRUCTION SCHEDULE.
2. INSTALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE IA.
3. INSTALL OUTSIDE LEFT TURN LANE CLOSURE FOR WESTBOUND KEMPSVILLE ROAD AS SHOWN IN PLANS AND IN ACCORDANCE WITH VWAPM.
4. INSTALL INSIDE LANE CLOSURE FOR SOUTHBOUND CENTERVILLE TURNPIKE BEGINNING NORTH OF THE KEMPSVILLE ROAD INTERSECTION, THROUGH THE INTERSECTION AND ENDING AT THE END OF THE WORK ZONE, AS SHOWN IN THE PHASE IA PLANS AND IN ACCORDANCE WITH TTC-16.2 AND THE VWAPM. ACCESS WILL BE MAINTAINED TO THE TURN LANES AT THE KEMPSVILLE ROAD INTERSECTION.
5. BEGIN CONSTRUCTION OF THE PAVEMENT WIDENING OPERATIONS ON THE RIGHT LANE OF SOUTHBOUND CENTERVILLE TURNPIKE FROM APPROXIMATELY STA.60+00 TO STA.70+00 AS SHOWN IN THE PLANS. WORK WILL BE DONE INSIDE ROADWAY DURING THE ALLOWABLE INSIDE ROAD WORK HOURS.
6. INSTALL GRAVEL WEDGING FOR ALL DROP OFF AREAS PER VWAPM. REMOVE ALL HAZARDS FROM THE CLEAR ZONE.
7. AT THE END OF THE WORK DAY, THE GROUP 2 CHANNELIZING DEVICES ALONG THE WORK AREA WILL BE MOVED OUTSIDE OF ROADWAY TO ALLOW TRAFFIC TO USE ROADWAY. SOUTHBOUND CENTERVILLE ROAD INSIDE LANE CLOSURE AND OUTSIDE LEFT TURN LANE CLOSURE ON WESTBOUND KEMPSVILLE ROAD WILL BE REMOVED.
8. REPEAT OPERATION DAILY UNTIL WORK HAS BEEN COMPLETED. FINAL PAVEMENT SURFACE COURSE WILL NOT BE INSTALLED DURING THIS PHASE OF CONSTRUCTION.

TYPICAL SECTIONS FOR PHASE

INSIDE ROADWAY WORK HOURS:

MONDAY THROUGH SATURDAY: WORK WILL BE COMPLETED BETWEEN THE HOURS OF 9:00AM AND 4:00PM ONLY, UNLESS OTHERWISE NOTED OR APPROVED IN WRITING BY THE OWNER.

SUNDAYS AND HOLIDAYS: NO WORK MAY BE COMPLETED IN THE ROADWAY OR PEDESTRIAN AREAS UNLESS OTHERWISE NOTED OR APPROVED IN WRITING BY THE OWNER.

	PROJECT	SHEET NO.
	U000-134-842	IJ(2)

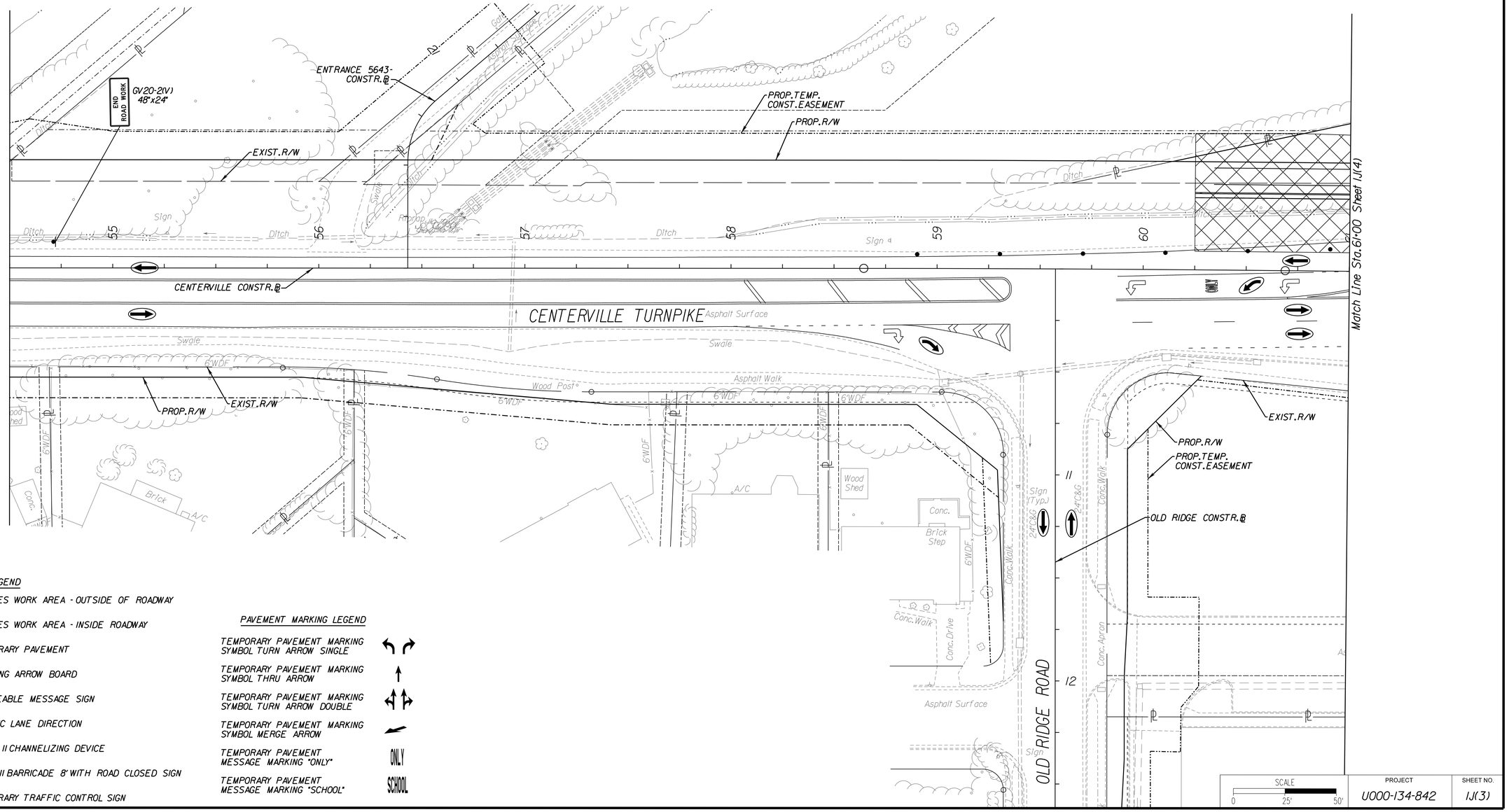
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 1A

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	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

Rummel, Klepper & Kahl, LLP
Virginia Beach, Virginia
ROADWAY ENGINEER



LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- CHANGEABLE MESSAGE SIGN (PCMS)
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE
- TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW
- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE
- TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW
- TEMPORARY PAVEMENT MESSAGE MARKING "ONLY" — ONLY
- TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL" — SCHOOL

SCALE 0 25' 50'

PROJECT	SHEET NO.
U000-134-842	1J(3)

12/2/2020
10:06:25 AM

d10938101j4.dgn
Plotted By: RK&K - JMK

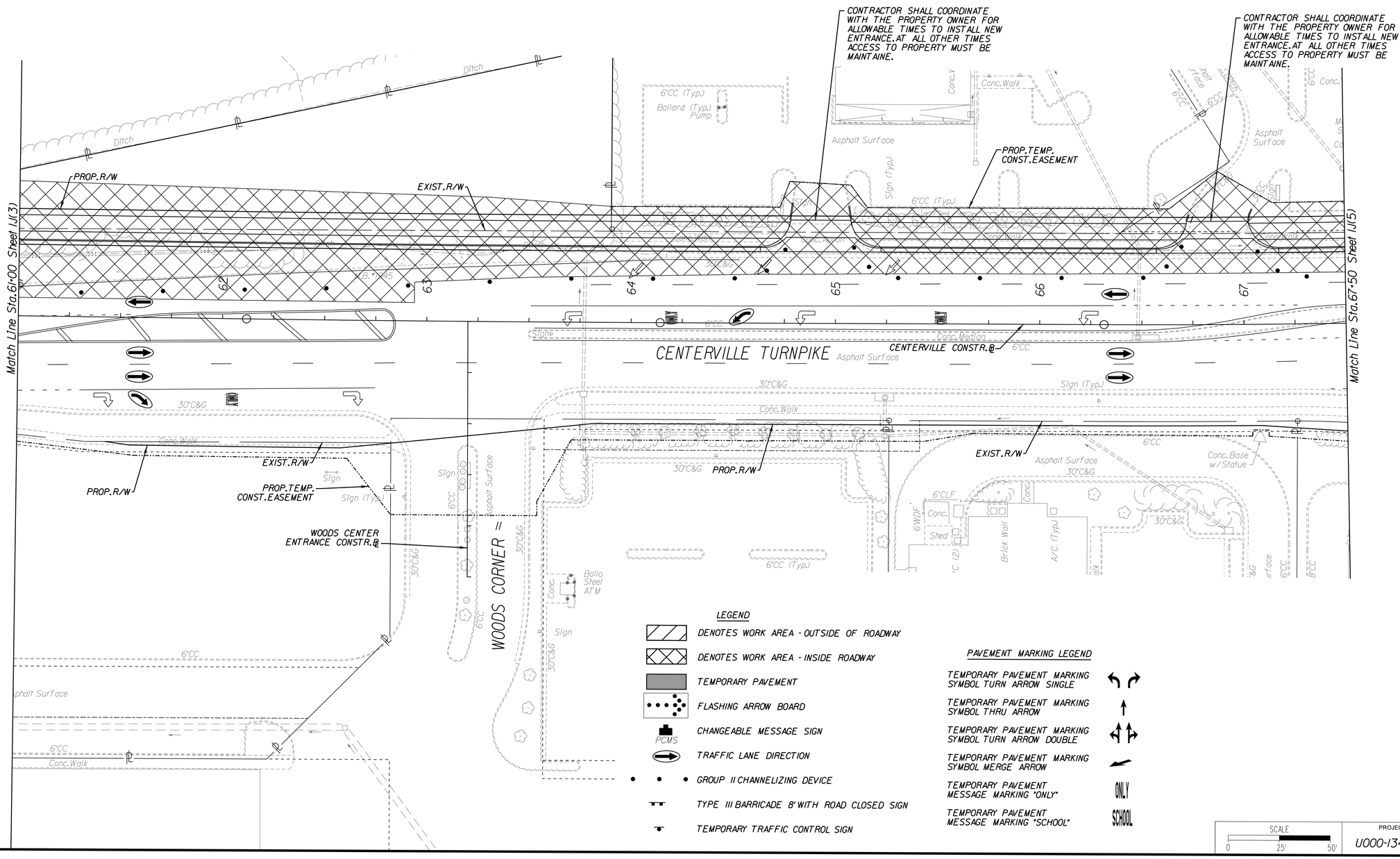
PROJECT MANAGER Laurie Murphy, P.E., (757) 385-8465, (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP, (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 1A

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	1J(4)

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
Virginia Beach, Virginia
ROADWAY ENGINEER



SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1J(4)

12/2/2020

12/2/2020
10:06:27 AM

d109381015.dgn
Plotted By: RK&K - JMK

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 1A

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	1J(5)

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
Virginia Beach, Virginia
ROADWAY ENGINEER

W20-1 48"x48" ROAD WORK AHEAD

INSTALL EB KEMPSVILLE RD 400' WEST FROM INTERSECTION STOP BAR PER TTC-53.0

GV20-2(V) 48"x24" END ROAD WORK

INSTALL WB KEMPSVILLE RD 400' WEST FROM INTERSECTION STOP BAR PER TTC-53.0

CONTRACTOR SHALL COORDINATE WITH THE PROPERTY OWNER FOR ALLOWABLE TIMES TO INSTALL NEW ENTRANCE. AT ALL OTHER TIMES ACCESS TO PROPERTY MUST BE MAINTAINE.

Match Line Sta.67+50 Sheet 1J(4)

CENTERVILLE CONSTR. ℄

PROP.TEMP. CONST.EASEMENT

PROP.R/W

EXIST.R/W

CENTERVILLE TURNPIKE

KEMPSVILLE ROAD

W12-1 48"x48"

LEFT TURN LANE CLOSED AHEAD W20-V13L 48"x48"

INSTALL SB CENTERVILLE TRN 550' NORTH FROM INTERSECTION STOP BAR PER TTC-53.0

INSTALL SB CENTERVILLE TRN AT BEGINNING OF LEFT TURN TAPER

GV20-1(V) 48"x24" ROAD WORK NEXT 1 1/2 MILES

BEGIN RIGHT TURN LANE R3-20R 24"x36"

OUTSIDE LANE CLOSURE FOR SB CENTERVILLE TRN REQUIRED, LANE CLOSURE SHALL CONFORM TO TTC-16.2 ACCESS TO RIGHT TURN LANES WILL BE PROVIDED

GV20-2(V) 48"x24" END ROAD WORK

INSTALL NB CENTERVILLE TRN 550' NORTH FROM INTERSECTION STOP BAR PER TTC-53.0

AREA UNDER CONSTRUCTION

Gas Pumps (Under Construction)

LEFT TURN LANE CLOSED AHEAD W20-V13L 48"x48"

INSTALL WB KEMPSVILLE RD AT BEGINNING OF LEFT TURN TAPER DOUBLE INDICATE SIGN

ROAD WORK AHEAD W20-1 48"x48"

INSTALL WB KEMPSVILLE RD 400' EAST FROM INTERSECTION STOP BAR PER TTC-53.0

GV20-2(V) 48"x24" END ROAD WORK

INSTALL EB KEMPSVILLE RD 400' EAST FROM INTERSECTION STOP BAR PER TTC-53.0

LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- CHANGEABLE MESSAGE SIGN (PCMS)
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE
- TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW
- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE
- TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW
- TEMPORARY PAVEMENT MESSAGE MARKING "ONLY" — ONLY
- TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL" — SCHOOL

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1J(5)

12/2/2020

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 1B

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501,	1J(6)

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
Virginia Beach, Virginia
ROADWAY ENGINEER

PHASE 1B

CONSTRUCTION OF NEW SOUTHBOUND LANES AND INTERSECTIONS ON CENTERVILLE TURNPIKE FROM APPROXIMATELY STA.9+20 TO STA.60+50.THE MAJORITY OF THE WORK WILL BE DONE OUTSIDE OF ROADWAY WITH SOME WORK DONE INSIDE OF ROADWAY REQUIRING LANE CLOSURES.TWO SIDE ROAD DETOURS WILL BE REQUIRED FOR THE REPLACEMENT OF THE EXISTING PAVEMENT.WORK WILL INCLUDE BUT NOT LIMITED TO INSTALLATION OF CURB & GUTTER,SIDEWALK,CONCRETE ENTRANCES,DRIANAGE PIPES,DRAINAGE STRUCTURES, SIGNAL POLE FOUNDATIONS,DEMOLITION OF EXISTING PAVEMENT,TEMPORARY PAVEMENT AND PAVEMENT WIDENING.

1. INSTALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE IB.
2. INSTALL TEMPORARY ASPHALT SIDEWALK NORTHBOUND CENTERVILLE TURNPIKE FROM STA.17+82.40 TO STA.19+85.90 AS SHOWN IN THE PHASE IB PLANS.DEMOLISH EXISTING ASPHALT SIDEWALK NORTHBOUND CENTERVILLE TURNPIKE FROM 17+75.30 TO 19+90.20.THIS WORK WILL BE DONE USING LANE CLOSURE ON TWO LANE ROADWAY USING FLAGGERS IN ACCORDANCE WITH TTC-23.2 AND THE VWAPM.
3. INSTALL TEMPORARY PAVEMENT ALONG NORTHBOUND CENTERVILLE TURNPIKE AS SHOWN IN THE PHASE IB PLANS.THE TEMPORARY PAVEMENT WILL BE INSTALLED INSIDE OF ROADWAY USING LANE CLOSURE ON TWO LANE ROADWAY USING FLAGGERS IN ACCORDANCE WITH TTC-23.2 AND THE VWAPM.
4. REMOVE EXISTING RAISED MEDIAN ON GLEN VIEW DRIVE FROM APPROXIMATELY STA.20+38 TO STA.21+36 AND REPLACE WITH TEMPORARY PAVEMENT AS SHOWN IN THE PLANS.THE REMOVAL OF THE EXISTING MEDIAN AND REPLACEMENT WITH TEMPORARY PAVEMENT WORK WILL BE DONE OUTSIDE OF ROADWAY BY SHIFTING TRAFFIC TO THE OUTSIDE AND USING LANE CLOSURE WITH FLAGGERS WHEN WORKING INSIDE ROADWAY IN ACCORDANCE WITH TTC-23.2 AND THE VWAPM.
5. ERADICATE EXISTING CONFLICTING PAVEMENT MARKINGS AND INSTALL TEMPORARY PAVEMENT MARKINGS AND MARKERS AS SHOWN IN THE PHASE IB PLANS.TRAFFIC WILL UTILIZE THE EXISTING TRAVEL LANES WITH LANE SHIFTS AS NECESSARY TO MAINTAIN TRAFFIC.THE WORK WILL BE DONE INSIDE OF ROADWAY USING VARIOUS TYPES OF LANE CLOSURES IN ACCORDANCE WITH TTC-16.2,TTC-17.2,TTC-18.2, TTC-23.2,TTC-29.2 AND THE VWAPM.
6. ESTABLISH WORK ZONE FOR PHASE IB AND INSTALL CONSTRUCTION SIGNING,GROUP 2 CHANNELIZING DEVICES,TYPE III BARRICADES AND ALL OTHER TEMPORARY TRAFFIC CONTROL DEVICES NECESSARY TO MAINTAIN THE WORK ZONE AS SHOWN IN THE PHASE IB PLANS AND IN ACCORDANCE WITH THE VWAPM.
7. INSTALL DETOUR SIGNING FOR AMBERBROOKE WAY AND CLOSE AMBERBROOKE WAY AT THE INTERSECTION OF CENTERVILLE TURNPIKE AS SHOWN IN THE DETOUR PLANS.
8. CONSTRUCT NEW SOUTHBOUND LANES ON CENTERVILLE TURNPIKE FROM APPROXIMATELY STA.12+00 TO STA.31+45 AND STA.32+45 TO 60+30,COLONIAL BAPTIST CHURCH ENTRANCE AND PARKING LOT MODIFICATIONS,CENTERVILLE ELEMENTARY SCHOOL ENTRANCE AND PARKING LOT MODIFICATIONS, AMBERBROOK WAY INTERSECTION AND GLEN VIEW DRIVE OUTSIDE ROADWAY WORK, AS SHOWN IN THE PLANS.THE WORK IN THIS AREA WILL BE DONE OUTSIDE OF ROADWAY.WORK WILL INCLUDE BUT NOT LIMITED TO INSTALLATION OF CURB & GUTTER,SIDEWALK,CONCRETE ENTRANCES,DRAINAGE PIPES, DRAINAGE STRUCTURES,DEMOLITION OF EXISTING PAVEMENT AND PAVEMENT WIDENING.
9. CONSTRUCT SOUTHBOUND LANES ON CENTERVILLE TURNPIKE FROM STA.APPROXIMATELY 9+20 TO STA. 12+50 AS SHOWN IN THE PLANS.THIS WORK WILL BE DONE INSIDE OF ROADWAY USING LANE CLOSURE WITH FLAGGERS IN ACCORDANCE WITH TTC-23.2 AND THE VWAPM.WORK WILL INCLUDE BUT NOT LIMITED TO DRAINAGE STRUCTURES,DRAINAGE PIPES,PAVEMENT WIDENING AND PAVEMENT BUILD-UP.
10. CONSTRUCT THE EAST SIDE OF LYNNHAVEN PARKWAY'S OUTSIDE ROAD WORK, AS SHOWN IN THE PLANS. THIS WORK WILL BE DONE INSIDE OF ROADWAY WITH OUTSIDE LANE CLOSURE AND TURN LANE LANE CLOSURES IN ACCORDANCE WITH TTC-16.2,TTC-29.2 AND THE VWAPM.WORK WILL INCLUDE BUT NOT LIMITED TO INSTALLATION OF CURB & GUTTER,SIDEWALK,DRAINAGE PIPES,DRAINAGE STRUCTURES, DEMOLITION OF EXISTING PAVEMENT AND PAVEMENT WIDENING.AT THE END OF THE WORK DAY,THE GROUP 2 CHANNELIZING DEVICES ALONG THE WORK AREA,WILL BE MOVED OUTSIDE OF ROADWAY TO ALLOW TRAFFIC TO USE ROADWAY AND GRAVEL WEDGING WILL BE INSTALLED FOR ALL DROP OFF AREAS PER VWAPM.REMOVE ALL HAZARDS FROM THE CLEAR ZONE.
11. INSTALL ASPHALT WEDGING (BUILD-UP) ON THE EAST SIDE OF LYNNHAVEN PARKWAY BETWEEN THE NEW SOUTHBOUND PAVEMENTS, AS SHOWN IN THE PLANS.THIS WORK WILL BE DONE INSIDE OF ROADWAY WITH OUTSIDE,INSIDE AND MULTI LANE CLOSURES IN ACCORDANCE WITH TTC-16.2,TTC-17.2,TTC-26.2,TTC-27.2 AND THE VWAPM.WORK WILL INCLUDE BUT NOT LIMITED TO PAVEMENT PLANNING AND INSTALLATION OF ASPHALT WEDGING (BUILD-UP).AT THE END OF THE WORK DAY,THE TEMPORARY TRAFFIC CONTROL DEVICES USED FOR THIS WORK WILL BE REMOVED AND ALL LANES REOPENED TO TRAFFIC.
12. INSTALL DETOUR SIGNING FOR GLEN VIEW DRIVE AND CLOSE GLEN VIEW DRIVE AT CENTERVILLE TURNPIKE AS SHOWN IN THE DETOUR PLANS.REMOVE THE EXISTING PAVEMENT,REMOVE TEMPORARY PAVEMENT,CONSTRUCT NEW PAVEMENT FROM INTERSECTION AT CENTERVILLE TURNPIKE TO THE TIE-IN POINT AND CONSTRUCT NEW RAISED MEDIAN.THE WORK WILL INCLUDE BUT NOT LIMITED TO THE DEMOLITION OF THE EXISTING PAVEMENT,REPLACEMENT OF THE PAVEMENT AND NEW RAISED MEDIAN.
13. FINAL PAVEMENT SURFACE COURSE WILL NOT BE INSTALLED DURING THIS PHASE OF CONSTRUCTION WITH THE EXCEPTION OF THE PARKING LOT FOR COLONIAL BAPTIST CHURCH.
14. INSTALL TEMPORARY PAVEMENT FOR PHASE 2 ALONG SOUTHBOUND CENTERVILLE TURNPIKE AS SHOWN IN THE PHASE 2 PLANS.THE TEMPORARY PAVEMENT WILL BE INSTALLED OUTSIDE OF ROADWAY IN THE PHASE IB WORK ZONE.
15. CONSTRUCT TEMPORARY VERTICAL PAVEMENT TRANSITIONS BETWEEN THE NEW SOUTHBOUND LANES AND THE EXISTING PAVEMENT THAT WILL BE USED FOR TRAFFIC IN PHASE 2.THE TEMPORARY VERTICAL PAVEMENT TRANSITIONS WILL BE DONE USING EITHER ASPHALT WEDGES (BUILD-UP) OR PAVEMENT PLANNING AND OVERLAY.THE WIDTH OF THE TEMPORARY VERTICAL PAVEMENT TRANSITION IS APPROXIMATELY 18 FEET WITH DEPTHS RANGING FROM 0 INCHES TO 12 INCHES.
16. INSTALL TEMPORARY PAVEMENT MARKINGS AND MARKERS AS SHOWN IN THE PHASE 2 PLANS.THE WORK WILL BE DONE OUTSIDE OF ROADWAY IN THE PHASE IB WORK ZONE AND INSIDE OF ROADWAY USING VARIOUS TYPES OF LANE CLOSURES IN ACCORDANCE WITH TTC-16.2,TTC-17.2,TTC-18.2,TTC-23.2,TTC-29.2 AND THE VWAPM.
17. ESTABLISH WORK ZONE FOR PHASE 2 AND INSTALL CONSTRUCTION SIGNING,GROUP 2 CHANNELIZING DEVICES,TYPE III BARRICADES AND ALL OTHER TEMPORARY TRAFFIC CONTROL DEVICES NECESSARY TO MAINTAIN THE WORK ZONE AS SHOWN IN THE PLANS AND IN ACCORDANCE WITH THE VWAPM.
18. SHIFT TRAFFIC TO THE NEW SOUTHBOUND LANES AS SHOWN IN THE PHASE 2 PLANS.

TYPICAL SECTIONS FOR PHASE

INSIDE ROADWAY WORK HOURS:

MONDAY THROUGH SATURDAY: WORK WILL BE COMPLETED BETWEEN THE HOURS OF 9:00AM AND 4:00PM ONLY,UNLESS OTHERWISE NOTED OR APPROVED IN WRITING BY THE OWNER.

SUNDAYS AND HOLIDAYS: NO WORK MAY BE COMPLETED IN THE ROADWAY OR PEDESTRIAN AREAS UNLESS OTHERWISE NOTED OR APPROVED IN WRITING BY THE OWNER.

	PROJECT	SHEET NO.
	U000-134-842	1J(6)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

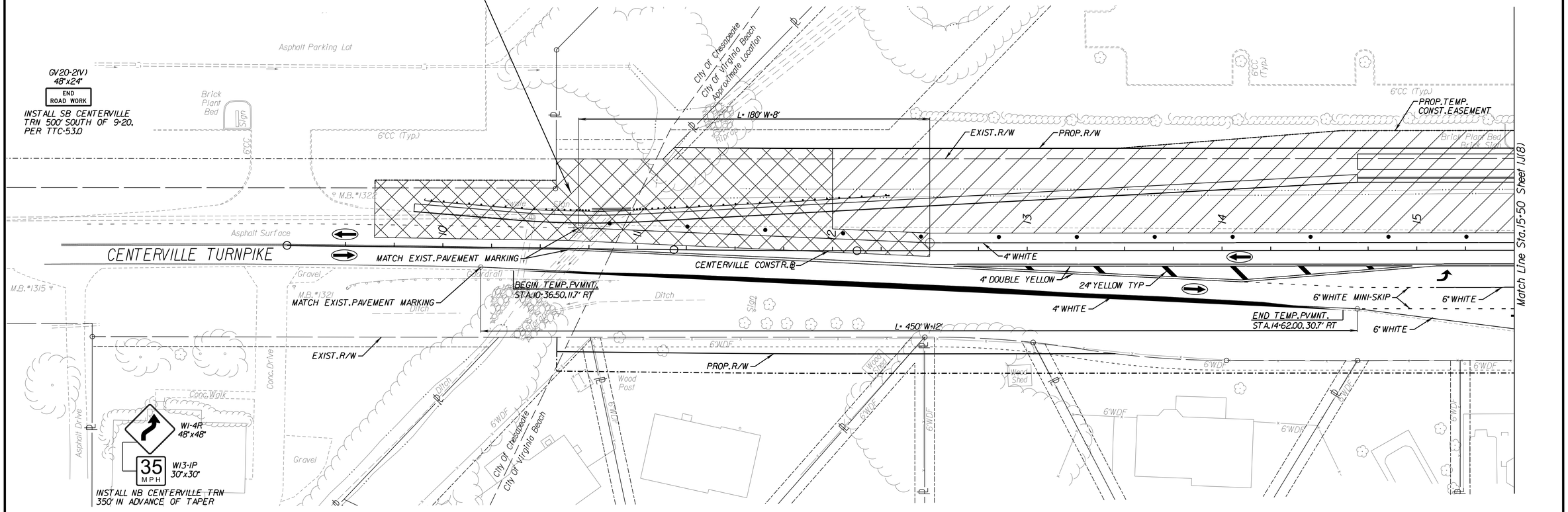
TEMPORARY TRAFFIC CONTROL PLAN
PHASE 1B

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	1J(7)

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
Virginia Beach, Virginia
ROADWAY ENGINEER

THE WORK AREA INSIDE OF ROADWAY WILL BE DONE WITH A LANE CLOSURE USING FLAGGERS IN ACCORDANCE WITH TTC-23.2. ALL WORK WILL BE DONE MONDAY THROUGH STAURDAY BETWEEN THE HOURS OF 9:00 A.M. AND 4:00 P.M.



LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- PCMS — CHANGEABLE MESSAGE SIGN
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE
- TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW
- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE
- TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW
- TEMPORARY PAVEMENT MESSAGE MARKING "ONLY" — ONLY
- TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL" — SCHOOL

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1J(7)

12/2/2020

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8665 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0845, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0845, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 1B

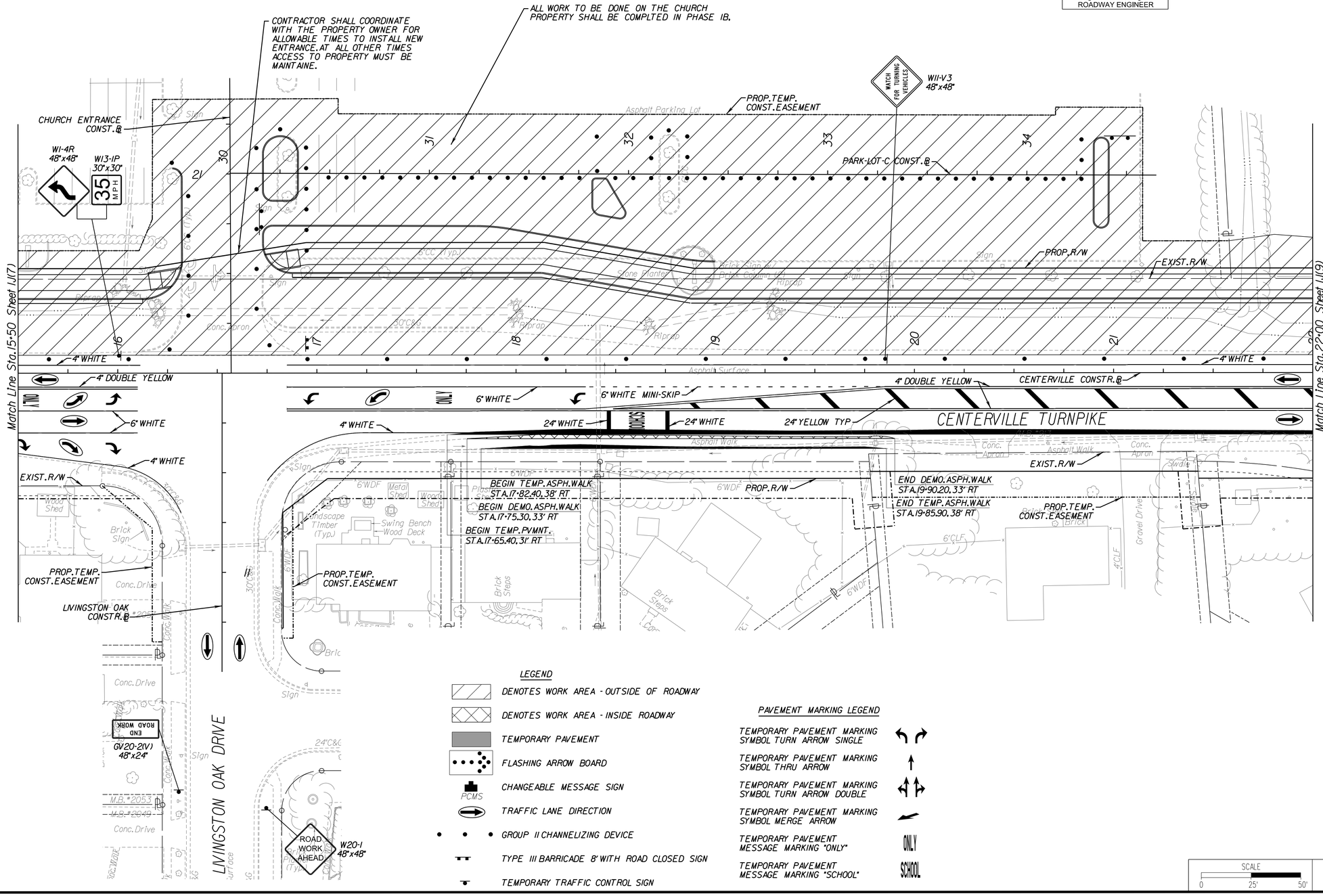
REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	1J(8)

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
Virginia Beach, Virginia
ROADWAY ENGINEER

CONTRACTOR SHALL COORDINATE WITH THE PROPERTY OWNER FOR ALLOWABLE TIMES TO INSTALL NEW ENTRANCE. AT ALL OTHER TIMES ACCESS TO PROPERTY MUST BE MAINTAINE.

ALL WORK TO BE DONE ON THE CHURCH PROPERTY SHALL BE COMPLTED IN PHASE 1B.



LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- PCMS — CHANGEABLE MESSAGE SIGN
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE	
TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW	
TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE	
TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW	
TEMPORARY PAVEMENT MESSAGE MARKING "ONLY"	ONLY
TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL"	SCHOOL

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1J(8)

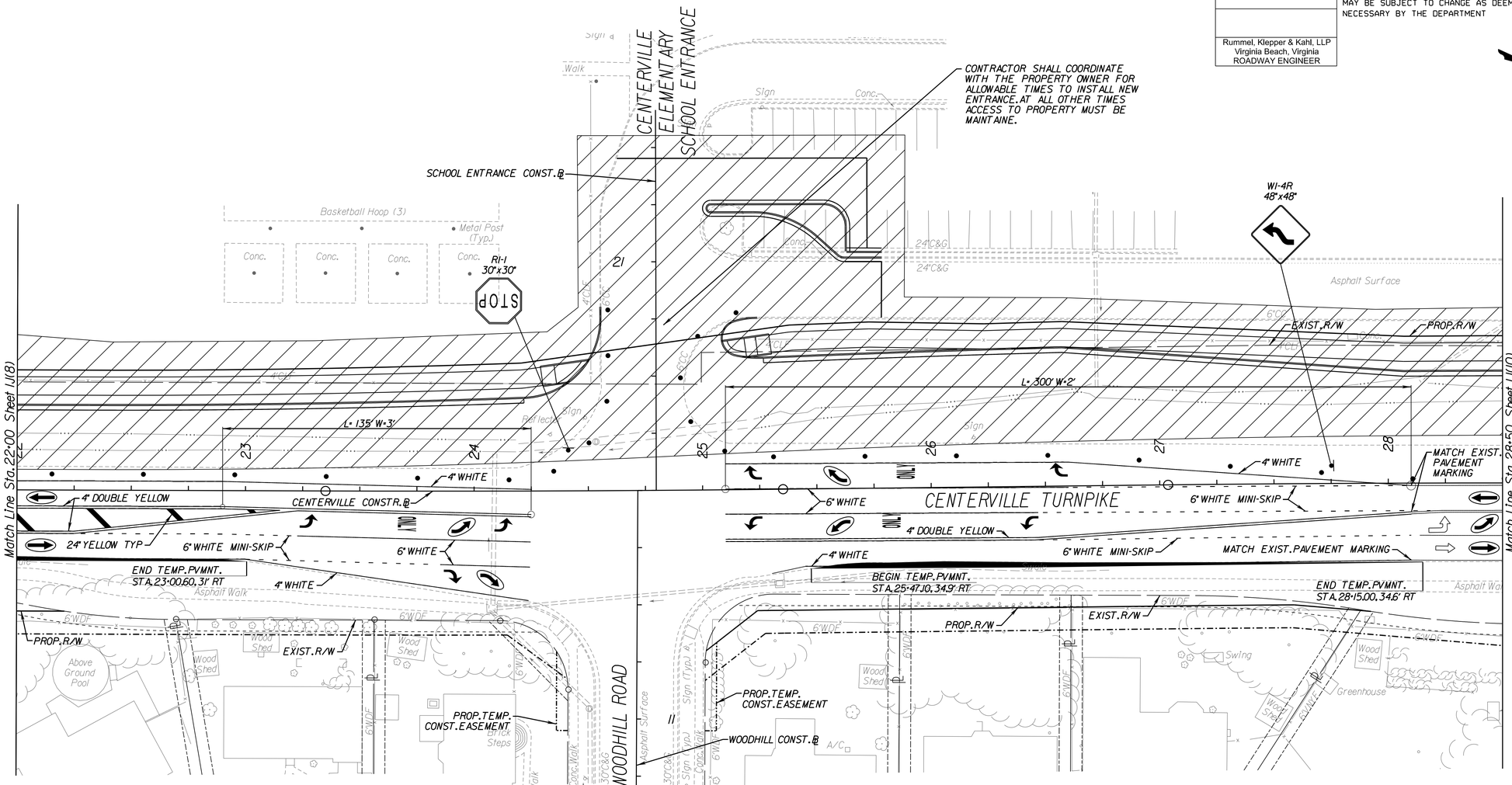
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 1B

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	1J(9)

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
Virginia Beach, Virginia
ROADWAY ENGINEER



LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- CHANGEABLE MESSAGE SIGN (PCMS)
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE
- TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW
- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE
- TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW
- TEMPORARY PAVEMENT MESSAGE MARKING "ONLY" — ONLY
- TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL" — SCHOOL

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1J(9)

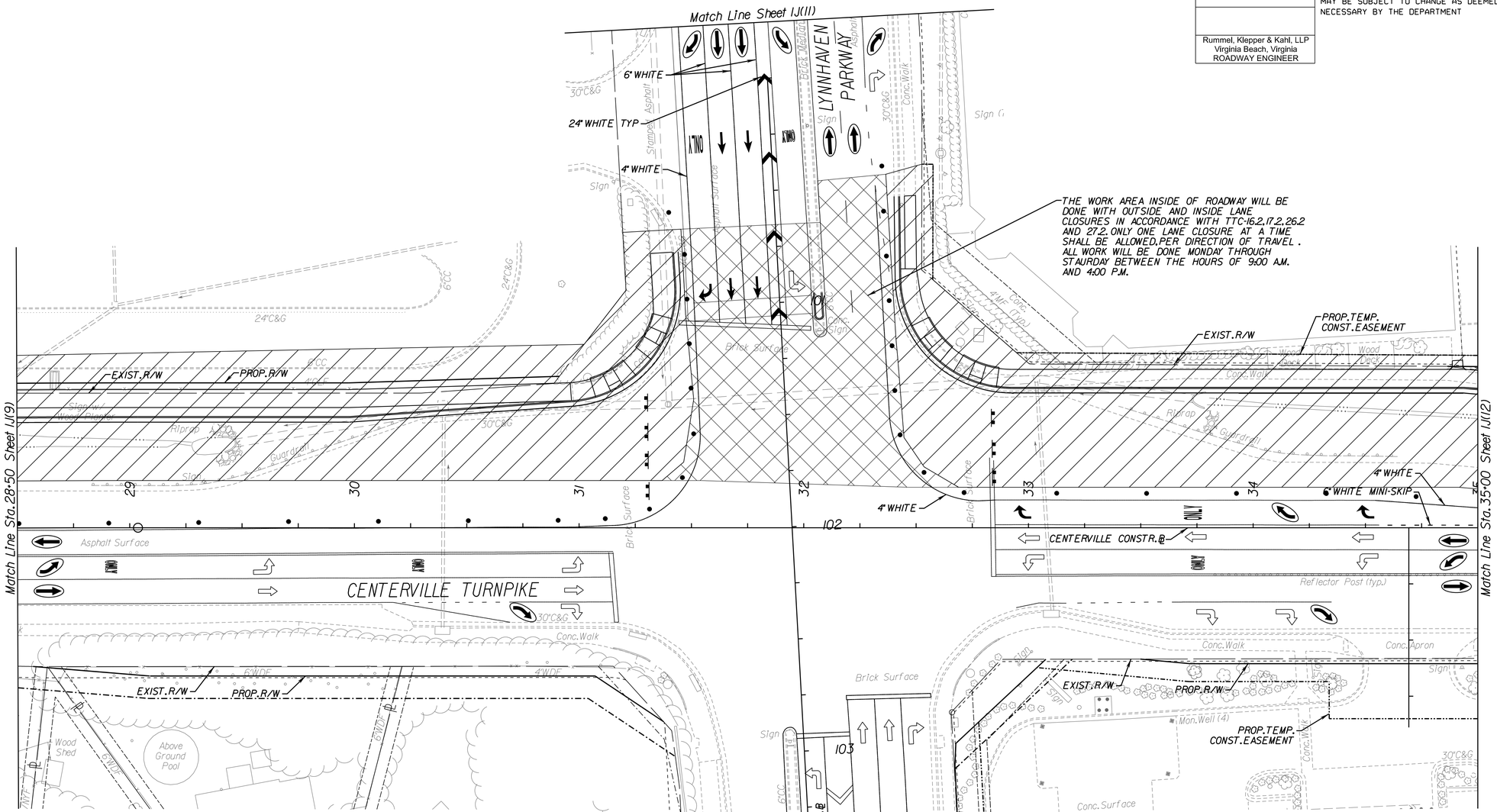
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 1B

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	IJ(10)

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
Virginia Beach, Virginia
ROADWAY ENGINEER



LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- PCMS — CHANGEABLE MESSAGE SIGN
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE
- TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW
- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE
- TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW
- TEMPORARY PAVEMENT MESSAGE MARKING "ONLY" — ONLY
- TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL" — SCHOOL

G V20-2(V)
48"x24"
END ROAD WORK

INSTALL EB LYNNHAVEN PKY
650' EAST FROM INTERSECTION
STOP BAR OER TTC-53.0

ROAD WORK AHEAD — W20-1 48"x48"

INSTALL WB LYNNHAVEN PKY
800' EAST FROM INTERSECTION
STOP BAR PER TTC-53.0

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	IJ(10)

12/2/2020

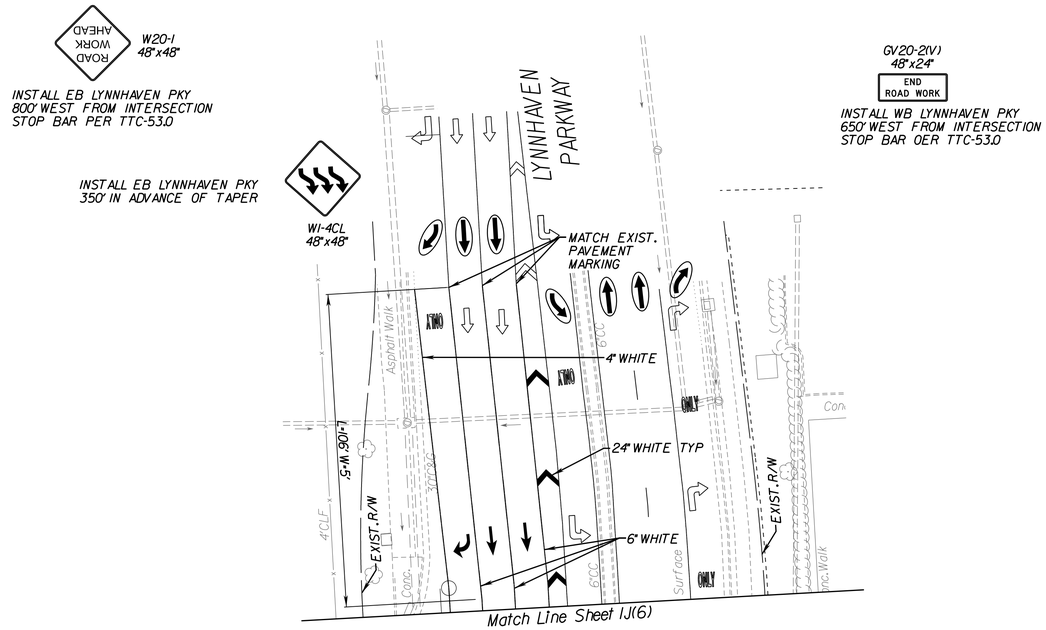
PROJECT MANAGER Laurie Murphy, P.E., (757) 385-8465, (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP, (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 1B

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	1J(11)

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
Virginia Beach, Virginia
ROADWAY ENGINEER



LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- CHANGEABLE MESSAGE SIGN (PCMS)
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE
- TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW
- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE
- TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW
- TEMPORARY PAVEMENT MESSAGE MARKING "ONLY" — ONLY
- TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL" — SCHOOL

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1J(11)

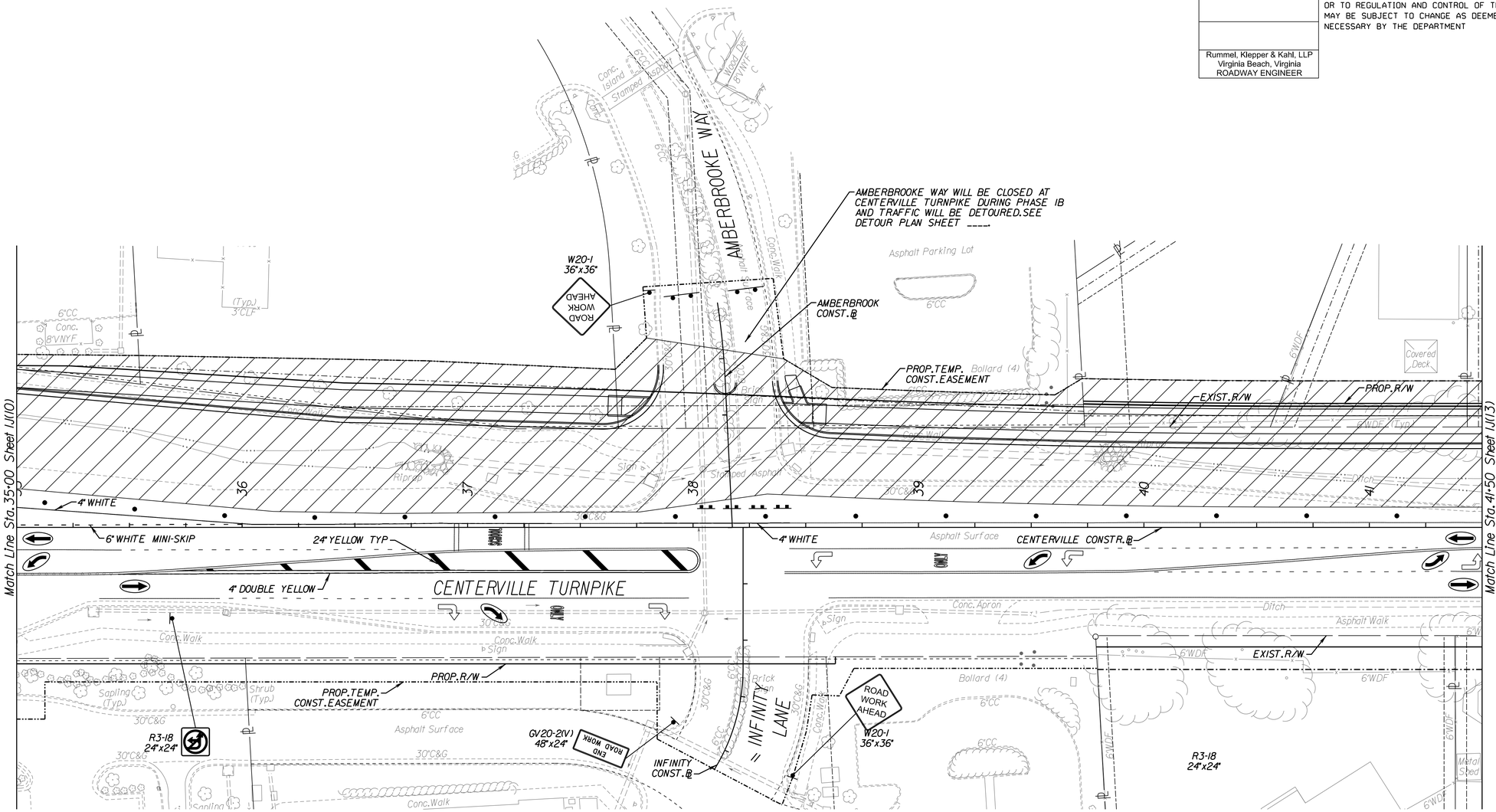
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 1B

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	1J(12)

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
Virginia Beach, Virginia
ROADWAY ENGINEER



LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- PCMS — CHANGEABLE MESSAGE SIGN
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE
- TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW
- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE
- TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW
- TEMPORARY PAVEMENT MESSAGE MARKING "ONLY" — ONLY
- TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL" — SCHOOL

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1J(12)

12/2/2020

d1093801J13.dgn
Plotted By: RK&K - JMK

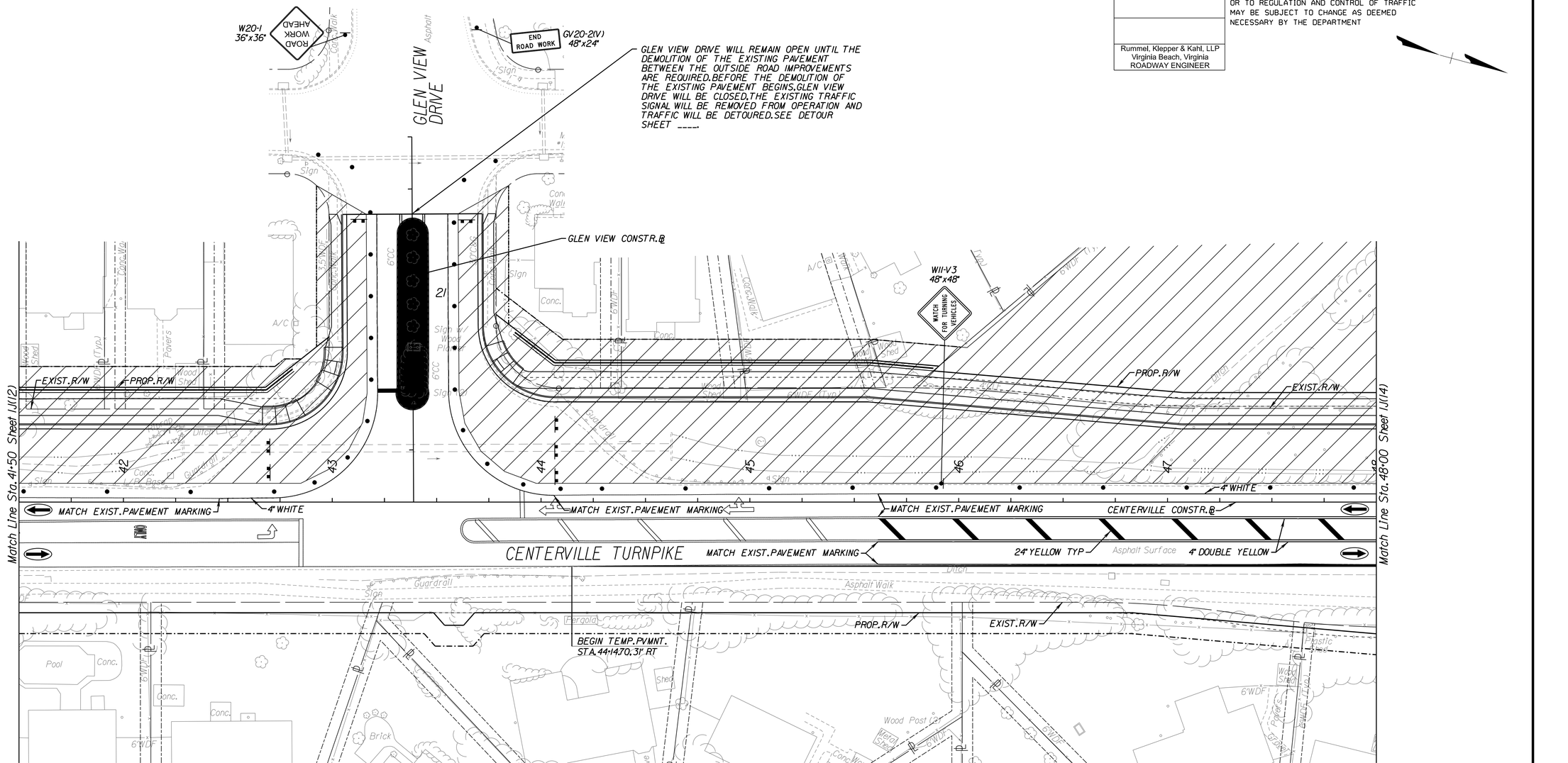
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 1B

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	1J(13)

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
Virginia Beach, Virginia
ROADWAY ENGINEER



LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- CHANGEABLE MESSAGE SIGN (PCMS)
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE
- TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW
- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE
- TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW
- TEMPORARY PAVEMENT MESSAGE MARKING "ONLY" — ONLY
- TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL" — SCHOOL

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1J(13)

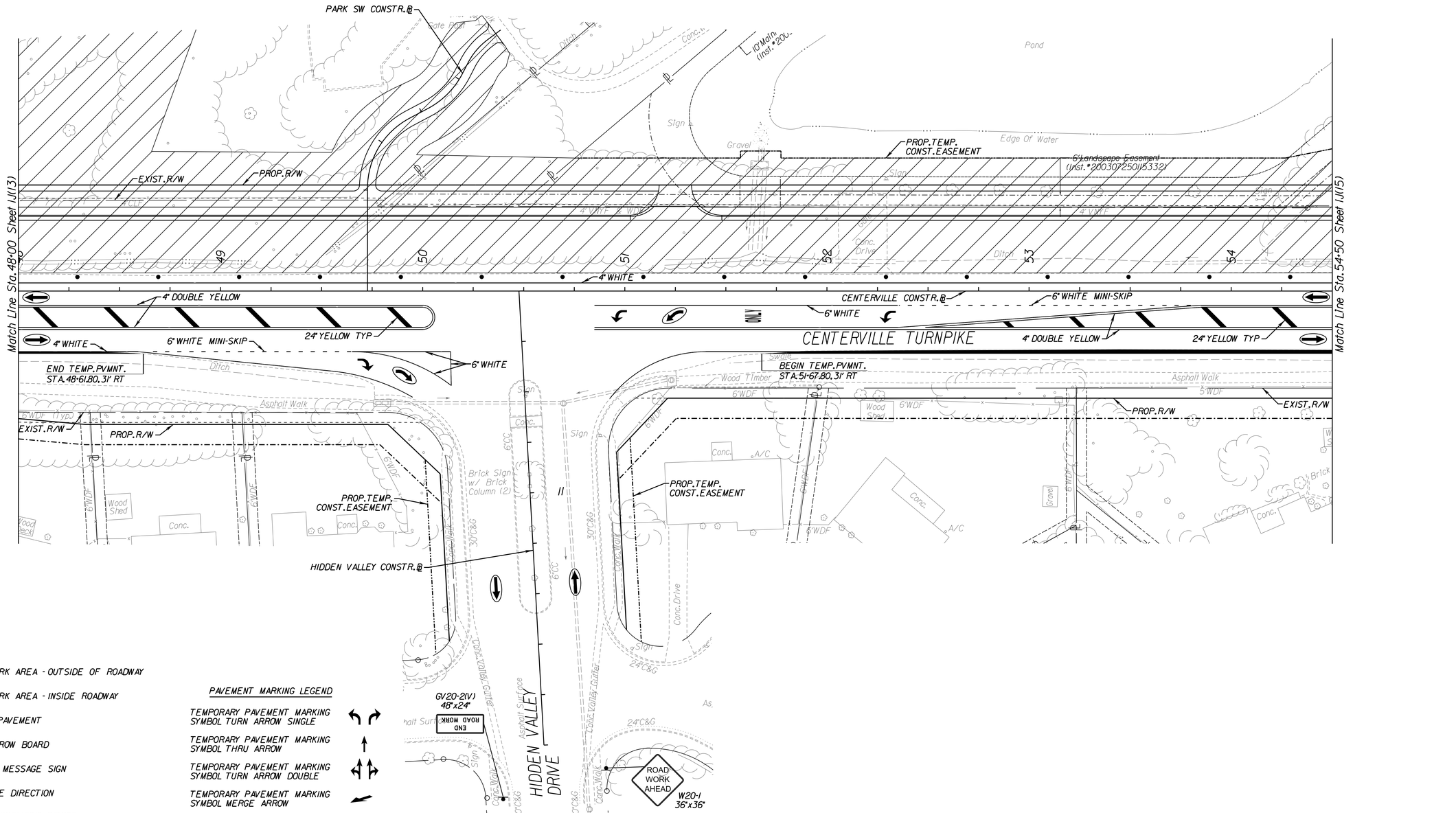
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 1B

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	1J(14)

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
Virginia Beach, Virginia
ROADWAY ENGINEER



LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- PCMS — CHANGEABLE MESSAGE SIGN
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE
- TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW
- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE
- TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW
- TEMPORARY PAVEMENT MESSAGE MARKING "ONLY" — ONLY
- TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL" — SCHOOL

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1J(14)

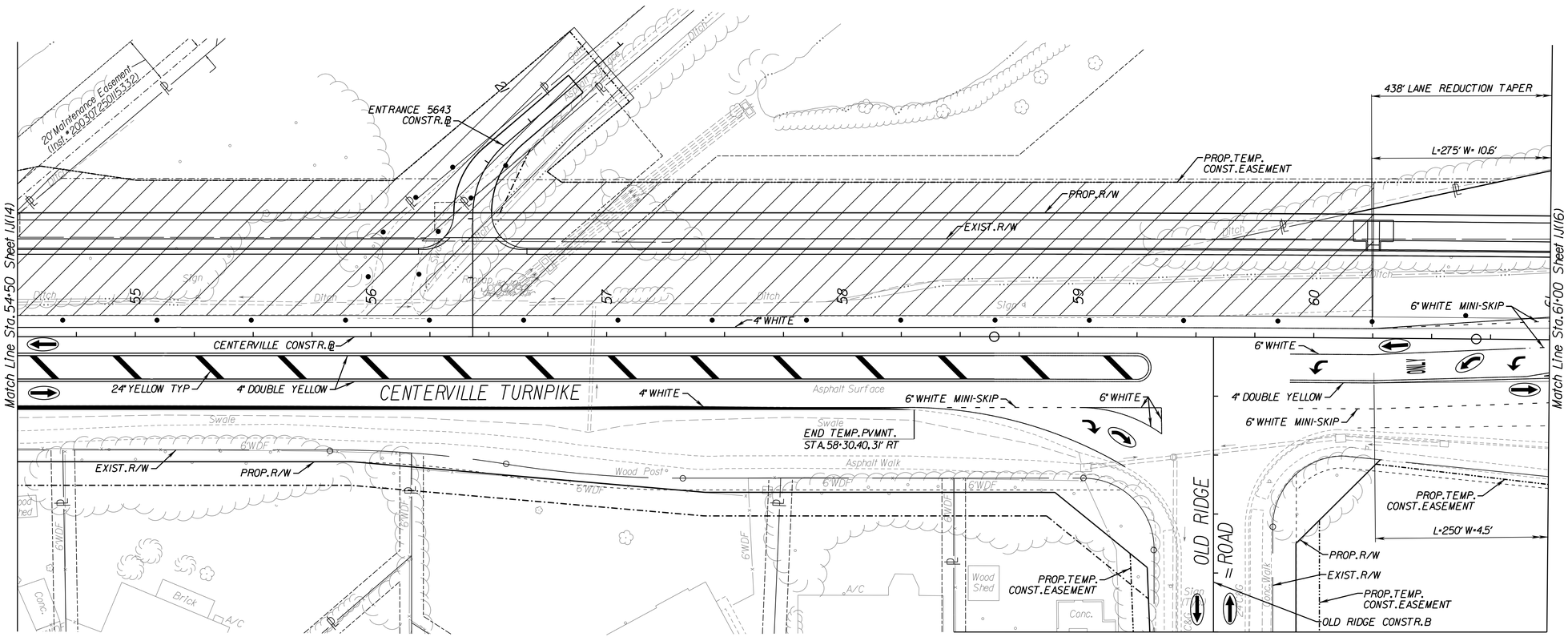
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 1B

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	1J(15)

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
Virginia Beach, Virginia
ROADWAY ENGINEER



LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- PCMS — CHANGEABLE MESSAGE SIGN
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE
- TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW
- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE
- TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW
- TEMPORARY PAVEMENT MESSAGE MARKING "ONLY" — ONLY
- TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL" — SCHOOL

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1J(15)

d1093801J16.dgn
Plotted By: RK&K - JMK

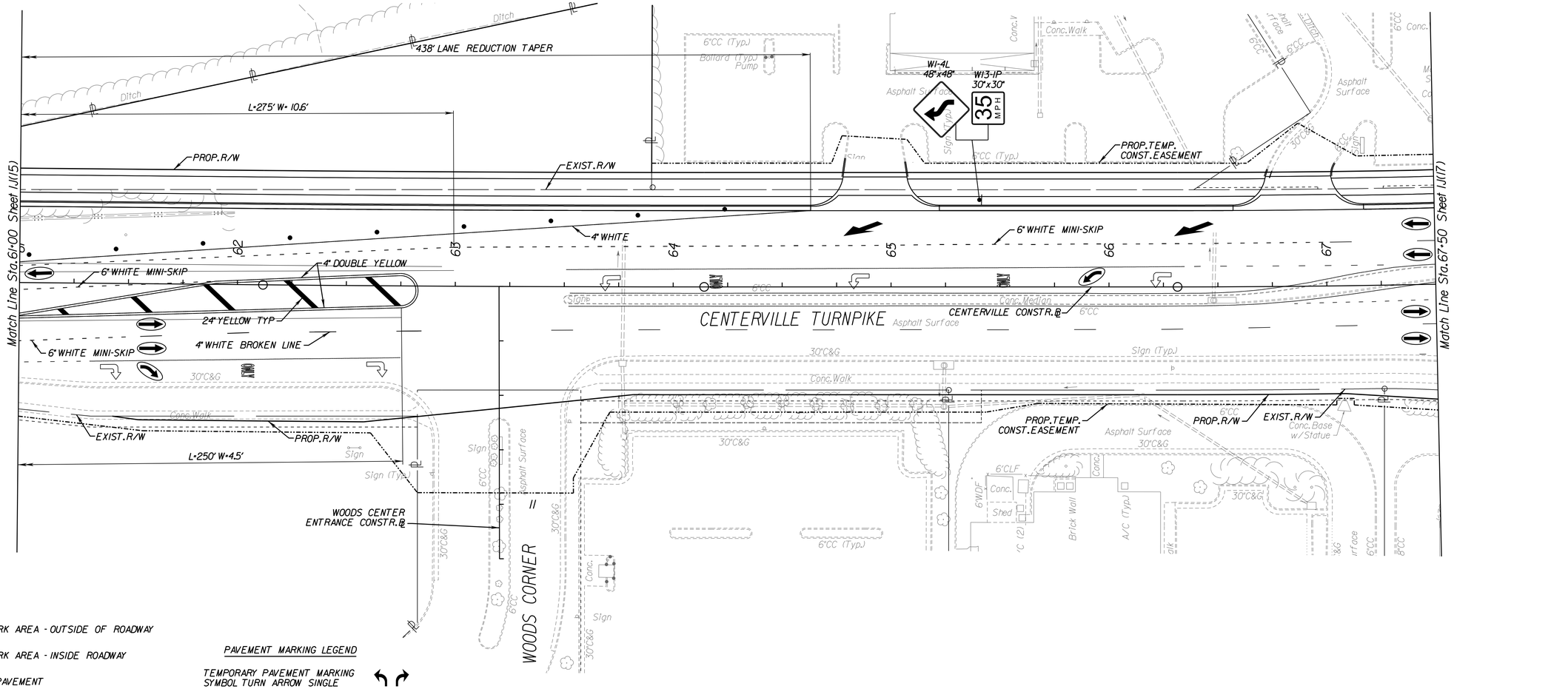
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 1B

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	1J(16)

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
Virginia Beach, Virginia
ROADWAY ENGINEER



LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- PCMS — CHANGEABLE MESSAGE SIGN
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE
- TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW
- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE
- TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW
- TEMPORARY PAVEMENT MESSAGE MARKING "ONLY" — ONLY
- TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL" — SCHOOL

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1J(16)

12/2/2020

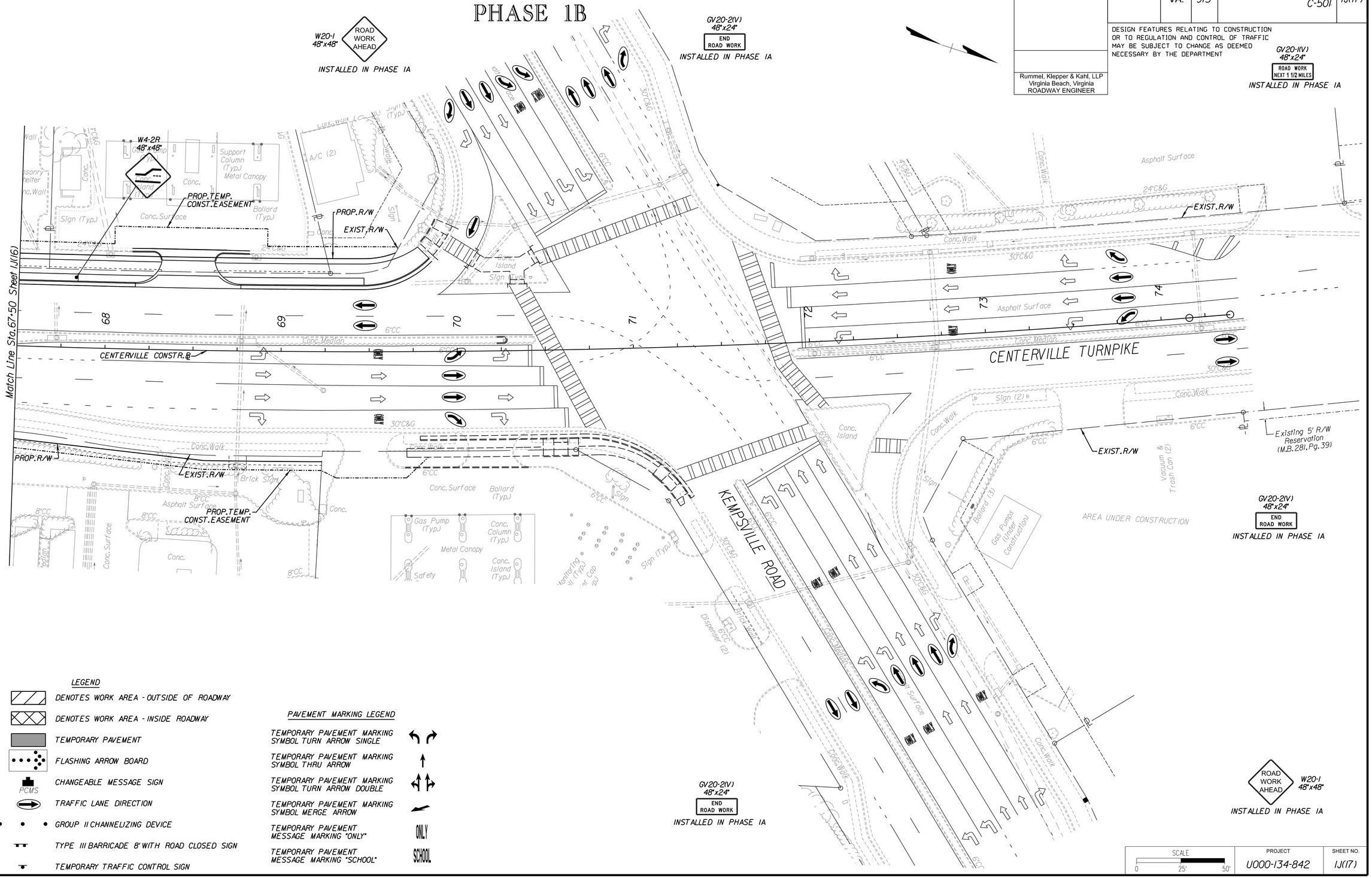
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 1B

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	1J(17)

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
Virginia Beach, Virginia
ROADWAY ENGINEER



LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- PCMS — CHANGEABLE MESSAGE SIGN
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE
- TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW
- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE
- TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW
- TEMPORARY PAVEMENT MESSAGE MARKING "ONLY" — ONLY
- TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL" — SCHOOL

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1J(17)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 2

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501,	1J(18)

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
Virginia Beach, Virginia
ROADWAY ENGINEER

PHASE 2

CONSTRUCTION OF NEW NORTHBOUND LANES AND INTERSECTIONS ON CENTERVILLE TURNPIKE FROM APPROXIMATELY STA.9+20 TO STA.69+90.THE MAJORITY OF THE WORK WILL BE DONE OUTSIDE OF ROADWAY WITH SOME WORK DONE INSIDE OF ROADWAY REQUIRING LANE CLOSURES.FOUR SIDE ROAD DETOURS WILL BE REQUIRED FOR THE REPLACEMENT OF THE EXISTING PAVEMENT.WORK WILL INCLUDE BUT NOT LIMITED TO INSTALLATION OF CURB & GUTTER,SIDEWALK,CONCRETE ENTRANCES,DRIANAGE PIPES,DRAINAGE STRUCTURES, SIGNAL POLE FOUNDATIONS,DEMOLITION OF EXISTING PAVEMENT,AND PAVEMENT WIDENING.

1. INSTALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 2.
2. REMOVE EXISTING RAISED MEDIAN ON HIDDEN VALLEY DRIVE FROM APPROXIMATELY STA.10+43 TO STA. 11+60 AND REPLACE WITH TEMPORARY PAVEMENT AS SHOWN IN THE PHASE 2 PLANS.THE REMOVAL OF THE EXISTING MEDIAN AND REPLACEMENT WITH TEMPORARY PAVEMENT WORK WILL BE DONE OUTSIDE OF ROADWAY BY SHIFTING TRAFFIC TO THE OUTSIDE AND USING LANE CLOSURE WITH FLAGGERS WHEN WORKING INSIDE ROADWAY IN ACCORDANCE WITH TTC-23.2 AND THE VWAPM.
3. INSTALL DETOUR SIGNING FOR OLD RIDGE ROAD AND CLOSE OLD RIDGE ROAD AT CENTERVILLE TURNPIKE AS SHOWN IN THE DETOUR PLANS. ACCESS TO STEAMBOAT COURT WILL BE PROVIDED THROUGH OUT THE CONSTRUCTION OF OLD RIDGE ROAD.
4. CONSTRUCT NEW NORTHBOUND LANES ON CENTERVILLE TURNPIKE FROM APPROXIMATELY STA.11+65 TO STA.31+50 AND STA.32+50 TO 64+25,LIVINGSTON OAK DRIVE OUTSIDE ROADWAY WORK,WOODHILL ROAD OUTSIDE ROADWAY WORK, INFINITY LANE INTERSECTION,HIDDEN VALLEY DRIVE OUTSIDE ROADWAY WORK AND OLD RIDGE ROAD FROM THE CENTERVILLE TURNPIKE INTERSECTION TO APPROXIMATELY STA.14+00 AS SHOWN IN THE PLANS.THE WORK IN THIS AREA WILL BE DONE OUTSIDE OF ROADWAY.WORK WILL INCLUDE BUT NOT LIMITED TO INSTALLATION OF CURB & GUTTER,SIDEWALK,CONCRETE ENTRANCES, DRAINAGE PIPES,DRAINAGE STRUCTURES,DEMOLITION OF EXISTING PAVEMENT AND PAVEMENT WIDENING.
5. CONSTRUCT NORTHBOUND LANES ON CENTERVILLE TURNPIKE FROM STA.APPROXIMATELY 9+20 TO STA. 16+65 AS SHOWN IN THE PLANS.THIS WORK WILL BE DONE INSIDE OF ROADWAY USING LANE CLOSURE WITH FLAGGERS IN ACCORDANCE WITH TTC-23.2 AND THE VWAPM.WORK WILL INCLUDE BUT NOT LIMITED TO DRAINAGE STRUCTURES,DRAINAGE PIPES,PAVEMENT WIDENING AND PAVEMENT BUILD-UP.
6. CONSTRUCT NORTHBOUND LANES ON CENTERVILLE TURNPIKE FROM APPROXIMATELY STA.64+25 TO STA. 69+90.AS SHOWN IN THE PLANS.THIS WORK WILL BE DONE INSIDE OF ROADWAY WITH A OUTSIDE CLOSURE IN ACCORDANCE WITH TTC-17.2 AND THE VWAPM.WORK WILL INCLUDE BUT NOT LIMITED TO INSTALLATION OF CURB & GUTTER,SIDEWALK,DRAINAGE PIPES,DRAINAGE STRUCTURES,DEMOLITION OF EXISTING PAVEMENT,CONCRETE ENTRANCE AND PAVEMENT WIDENING.AT THE END OF THE WORK DAY, THE GROUP 2 CHANNELIZING DEVICES ALONG THE WORK AREA,WILL BE MOVED OUTSIDE OF ROADWAY TO ALLOW TRAFFIC TO USE ROADWAY AND GRAVEL WEDGING WILL BE INSTALLED FOR ALL DROP OFF AREAS PER VWAPM.REMOVE ALL HAZARDS FROM THE CLEAR ZONE.
7. CONSTRUCT THE WEST SIDE OF LYNNHAVEN PARKWAY'S OUTSIDE ROAD WORK,AS SHOWN IN THE PLANS. THIS WORK WILL BE DONE INSIDE OF ROADWAY WITH OUTSIDE LANE CLOSURE AND TURN LANE LANE CLOSURES IN ACCORDANCE WITH TTC-16.2,TTC-29.2 AND THE VWAPM.WORK WILL INCLUDE BUT NOT LIMITED TO INSTALLATION OF CURB & GUTTER,SIDEWALK,DRAINAGE PIPES,DRAINAGE STRUCTURES, DEMOLITION OF EXISTING PAVEMENT AND PAVEMENT WIDENING.AT THE END OF THE WORK DAY,THE GROUP 2 CHANNELIZING DEVICES ALONG THE WORK AREA,WILL BE MOVED OUTSIDE OF ROADWAY TO ALLOW TRAFFIC TO USE ROADWAY AND GRAVEL WEDGING WILL BE INSTALLED FOR ALL DROP OFF AREAS PER VWAPM.REMOVE ALL HAZARDS FROM THE CLEAR ZONE.
8. INSTALL ASPHALT WEDGING (BUILD-UP) ON THE WEST SIDE OF LYNNHAVEN PARKWAY BETWEEN THE NEW NORTHBOUND PAVEMENTS,AS SHOWN IN THE PLANS.THIS WORK WILL BE DONE INSIDE OF ROADWAY WITH OUTSIDE,INSIDE AND MULTI LANE CLOSURES IN ACCORDANCE WITH TTC-16.2,TTC-17.2,TTC-26.2,TTC-27.2 AND THE VWAPM.WORK WILL INCLUDE BUT NOT LIMITED TO PAVEMENT PLANNING AND INSTALLATION OF ASPHALT WEDGING (BUILD-UP).AT THE END OF THE WORK DAY,THE TEMPORARY TRAFFIC CONTROL DEVICES USED FOR THIS WORK WILL BE REMOVED AND ALL LANES REOPENED TO TRAFFIC.
9. INSTALL DETOUR SIGNING FOR LIVINGSTON OAK DRIVE AND CLOSE LIVINGSTON OAK DRIVE AT CENTERVILLE TURNPIKE AS SHOWN IN THE DETOUR PLANS.REMOVE THE EXISTING PAVEMENT AND CONSTRUCT NEW PAVEMENT FROM INTERSECTION AT CENTERVILLE TURNPIKE TO THE TIE-IN POINT.THE WORK WILL INCLUDE BUT NOT LIMITED TO THE DEMOLITION OF THE EXISTING PAVEMENT AND REPLACEMENT OF THE PAVEMENT.
10. INSTALL DETOUR SIGNING FOR WOODHILL ROAD AND CLOSE WOODHILL ROAD AT CENTERVILLE TURNPIKE AS SHOWN IN THE DETOUR PLANS.REMOVE THE EXISTING PAVEMENT AND CONSTRUCT NEW PAVEMENT FROM INTERSECTION AT CENTERVILLE TURNPIKE TO THE TIE-IN POINT.THE WORK WILL INCLUDE BUT NOT LIMITED TO THE DEMOLITION OF THE EXISTING PAVEMENT AND REPLACEMENT OF THE PAVEMENT.
11. INSTALL DETOUR SIGNING FOR HIDDEN VALLEY DRIVE AND CLOSE HIDDEN VALLEY DRIVE AT CENTERVILLE TURNPIKE AS SHOWN IN THE DETOUR PLANS.REMOVE THE EXISTING PAVEMENT.REMOVE TEMPORARY PAVEMENT.CONSTRUCT NEW PAVEMENT FROM INTERSECTION AT CENTERVILLE TURNPIKE TO THE TIE-IN POINT AND CONSTRUCT NEW RAISED MEDIAN.THE WORK WILL INCLUDE BUT NOT LIMITED TO THE DEMOLITION OF THE EXISTING PAVEMENT.REPLACEMENT OF THE PAVEMENT AND NEW RAISED MEDIAN.
12. FINAL PAVEMENT SURFACE COURSE WILL NOT BE INSTALLED DURING THIS PHASE OF CONSTRUCTION.
13. CONSTRUCT TEMPORARY VERTICAL PAVEMENT TRANSITIONS BETWEEN THE NEW SOUTHBOUND LANES AND THE NEW NORTHBOUND LANES IN THE MEDIAN CROSSOVERSFOR TRAFFIC IN PHASE 3.THE TEMPORARY VERTICAL PAVEMENT TRANSITIONS WILL BE DONE USING ASPHALT WEDGES (BUILD-UP).THE WIDTH OF THE TEMPORARY VERTICAL PAVEMENT TRANSITION IS APPROXIMATELY 18 FEET WITH DEPTHS RANGING FROM 0 INCHES TO 12 INCHES.
14. INSTALL TEMPORARY PAVEMENT MARKINGS AND MARKERS AS SHOWN IN THE PHASE 3 PLANS.THE WORK WILL BE DONE OUTSIDE OF ROADWAY IN THE PHASE 2 WORK ZONE AND INSIDE OF ROADWAY USING VARIOUS TYPES OF LANE CLOSURES IN ACCORDANCE WITH TTC-16.2,TTC-17.2,TTC-18.2,TTC-23.2,TTC-29.2 AND THE VWAPM.
15. ESTABLISH WORK ZONE FOR PHASE 3 AND INSTALL CONSTRUCTION SIGNING,GROUP 2 CHANNELIZING DEVICES,TYPE III BARRICADES AND ALL OTHER TEMPORARY TRAFFIC CONTROL DEVICES NECESSARY TO MAINTAIN THE WORK ZONE AS SHOWN IN THE PLANS AND IN ACCORDANCE WITH THE VWAPM.
16. SHIFT TRAFFIC TO THE SOUTHBOUND AND NORTHBOUND LANES AS SHOWN IN THE PHASE 3 PLANS.

TYPICAL SECTIONS FOR PHASE

INSIDE ROADWAY WORK HOURS:

MONDAY THROUGH SATURDAY: WORK WILL BE COMPLETED BETWEEN THE HOURS OF 9:00AM AND 4:00PM ONLY,UNLESS OTHERWISE NOTED OR APPROVED IN WRITING BY THE OWNER.

SUNDAYS AND HOLIDAYS: NO WORK MAY BE COMPLETED IN THE ROADWAY OR PEDESTRIAN AREAS UNLESS OTHERWISE NOTED OR APPROVED IN WRITING BY THE OWNER.

	PROJECT	SHEET NO.
	U000-134-842	1J(18)

12/2/2020

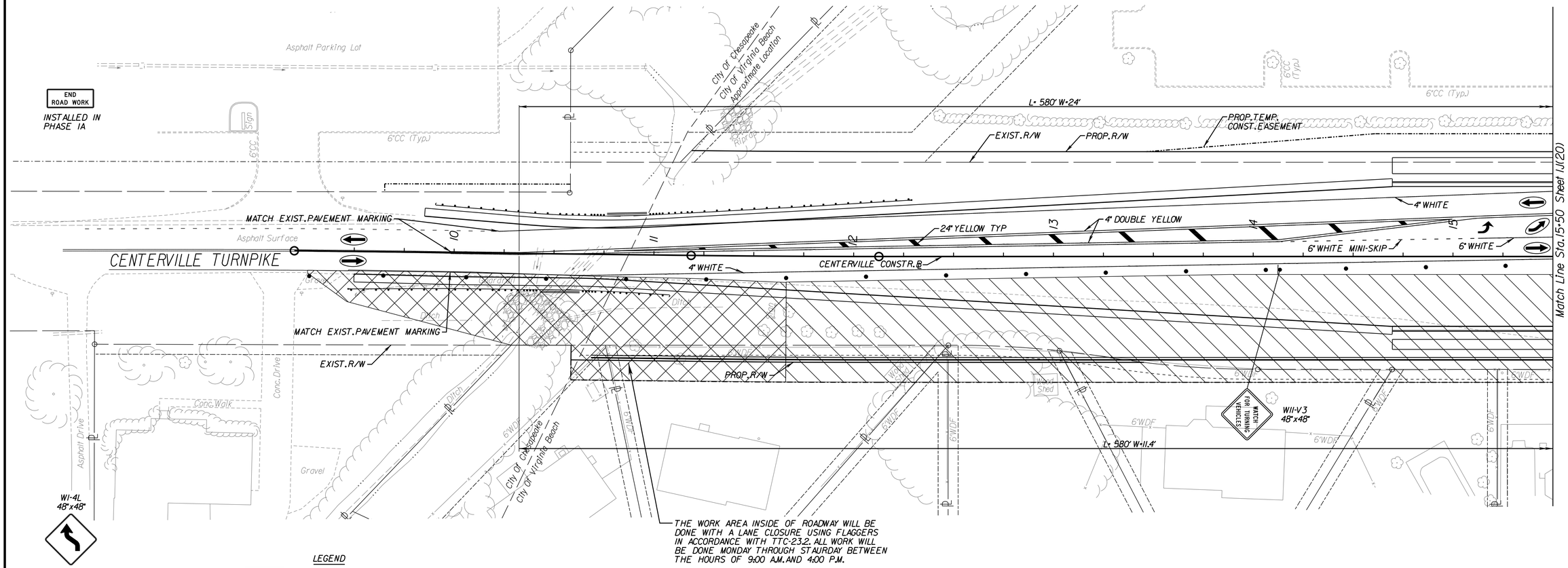
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 2

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	1J(19)

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
Virginia Beach, Virginia
ROADWAY ENGINEER



ROAD WORK NEXT 1 1/2 MILES
INSTALLED IN PHASE IA

LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- PCMS — CHANGEABLE MESSAGE SIGN
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE
- TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW
- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE
- TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW
- TEMPORARY PAVEMENT MESSAGE MARKING "ONLY" — ONLY
- TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL" — SCHOOL

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1J(19)

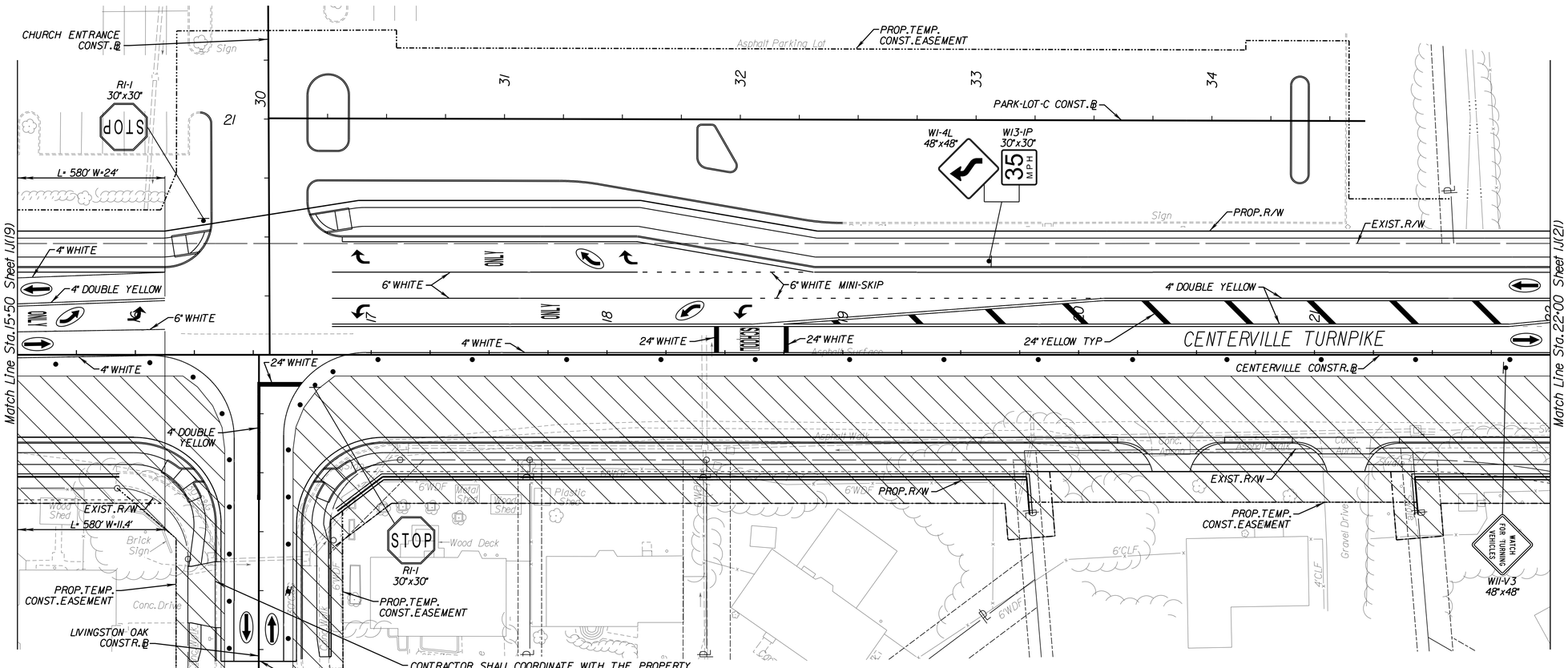
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8466 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0845, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0845, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 2

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	1J(20)

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
Virginia Beach, Virginia
ROADWAY ENGINEER



LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- CHANGEABLE MESSAGE SIGN (PCMS)
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE
- TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW
- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE
- TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW
- TEMPORARY PAVEMENT MESSAGE MARKING "ONLY" (ONLY)
- TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL" (SCHOOL)

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1J(20)

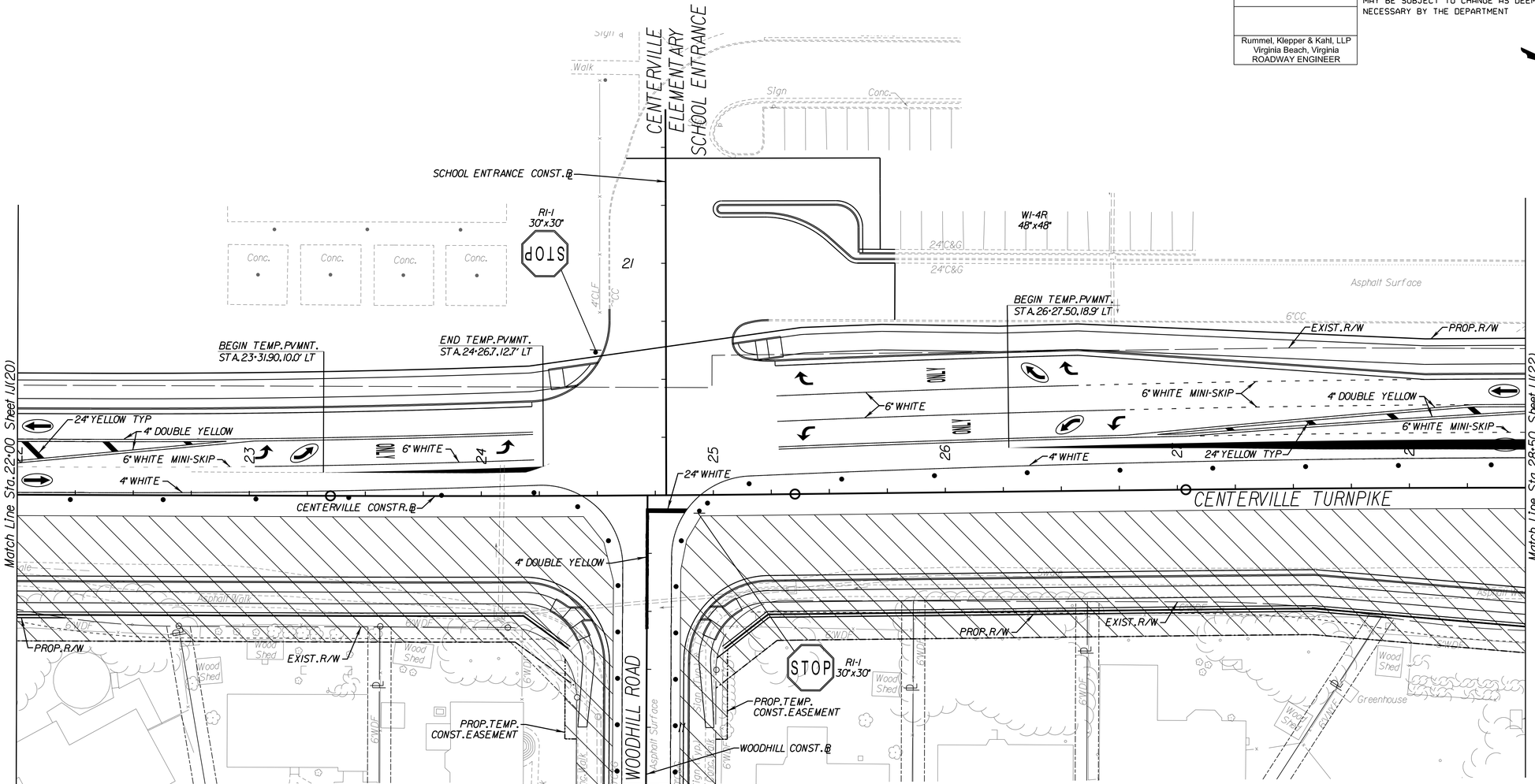
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 2

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	1J(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
Virginia Beach, Virginia
ROADWAY ENGINEER



LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- PCMS — CHANGEABLE MESSAGE SIGN
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE
- TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW
- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE
- TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW
- TEMPORARY PAVEMENT MESSAGE MARKING "ONLY" — ONLY
- TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL" — SCHOOL

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1J(21)

12/2/2020
10:07:16 AM

dl0938101122.dgn
Plotted By: RK&K - JMK

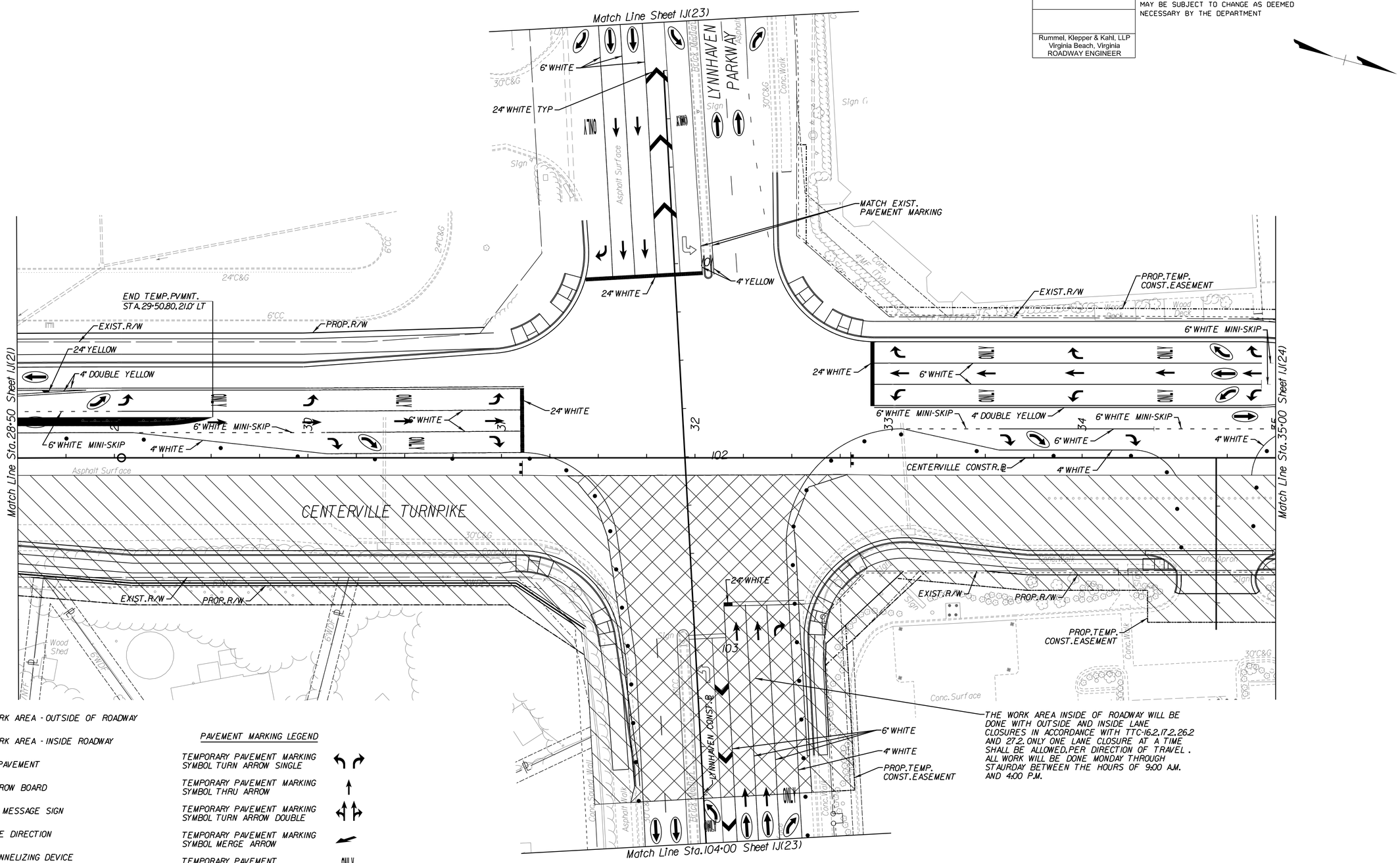
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 2

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	1J(22)

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
Virginia Beach, Virginia
ROADWAY ENGINEER



LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- PCMS — CHANGEABLE MESSAGE SIGN
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE	
TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW	
TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE	
TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW	
TEMPORARY PAVEMENT MESSAGE MARKING "ONLY"	ONLY
TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL"	SCHOOL

12/2/2020

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1J(22)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 2

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	1J(23)

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

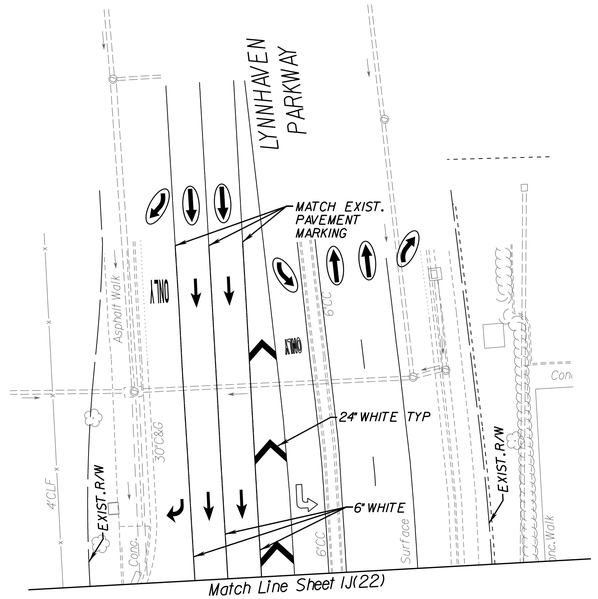
Rummel, Klepper & Kahl, LLP
Virginia Beach, Virginia
ROADWAY ENGINEER

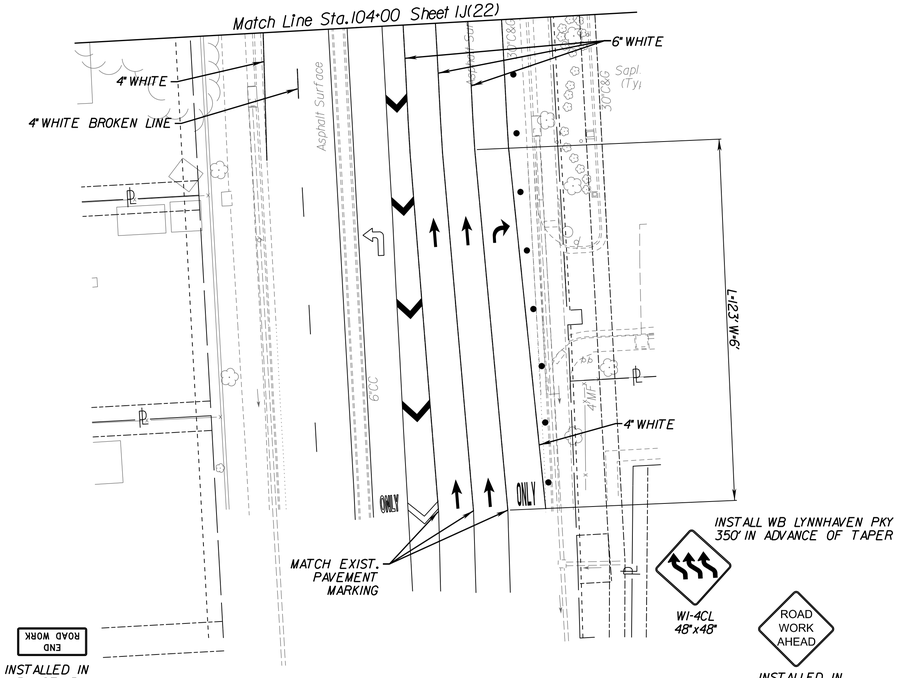


INSTALLED IN PHASE IB



INSTALLED IN PHASE IB





INSTALLED IN PHASE IB

INSTALLED IN PHASE IB

LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- CHANGEABLE MESSAGE SIGN (PCMS)
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE
- TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW
- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE
- TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW
- TEMPORARY PAVEMENT MESSAGE MARKING "ONLY" — ONLY
- TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL" — SCHOOL

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1J(23)

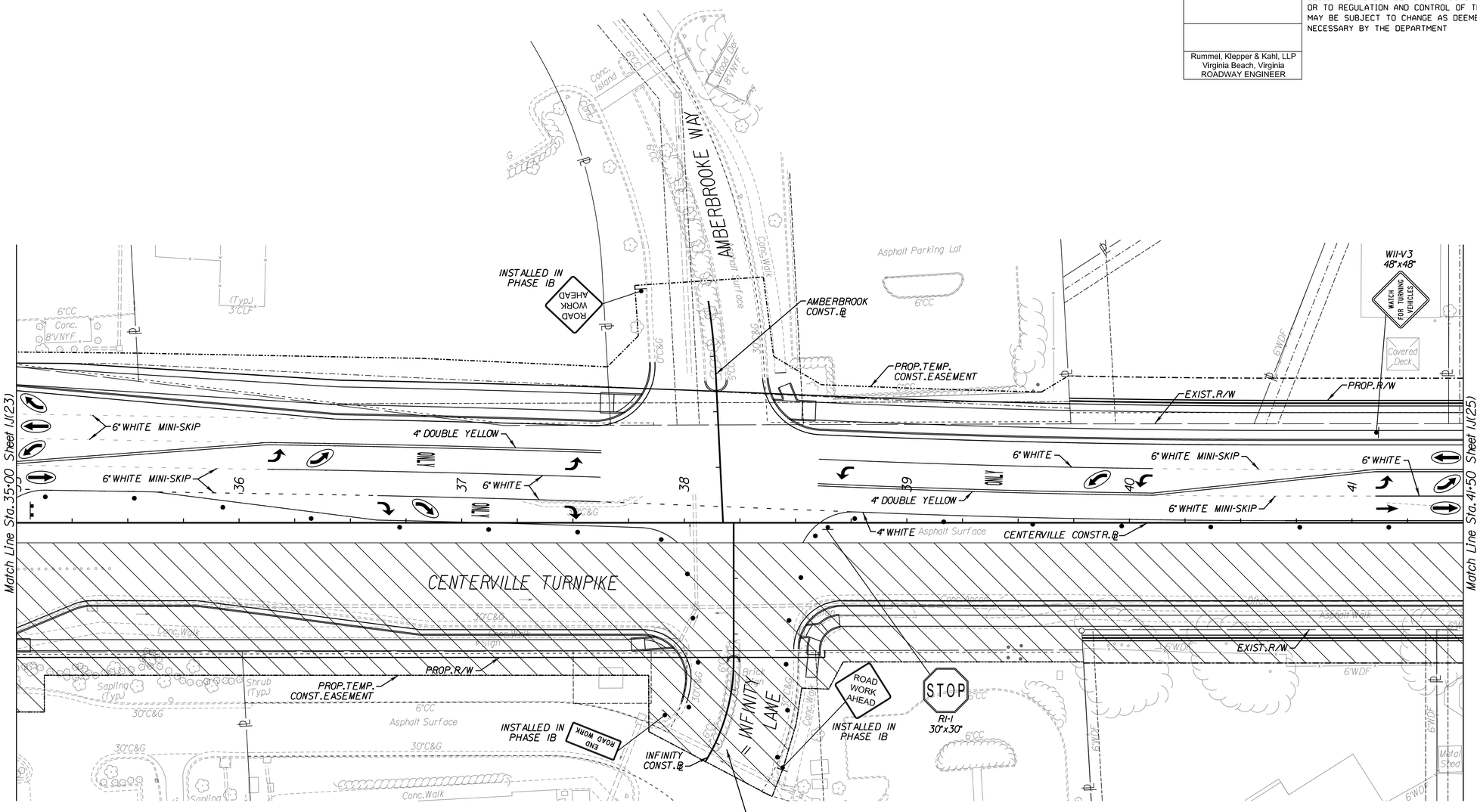
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 2

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	1J(24)

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
Virginia Beach, Virginia
ROADWAY ENGINEER



LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- PCMS — CHANGEABLE MESSAGE SIGN
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE
- TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW
- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE
- TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW
- TEMPORARY PAVEMENT MESSAGE MARKING "ONLY" — ONLY
- TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL" — SCHOOL

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1J(24)

12/2/2020

d1093801125.dgn
Plotted By: RK&K - JMK

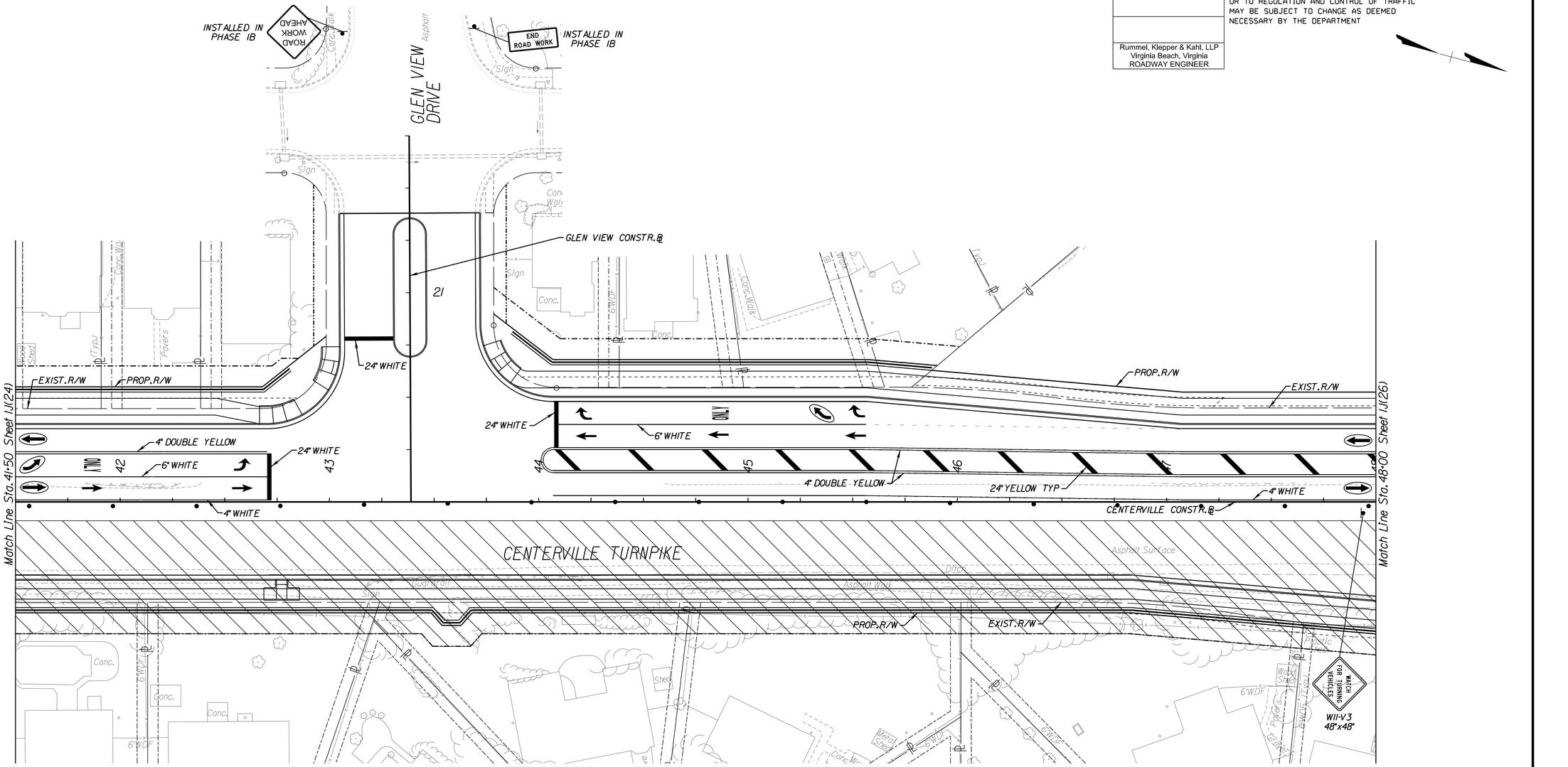
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 2

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	1J(25)

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
Virginia Beach, Virginia
ROADWAY ENGINEER



LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- CHANGEABLE MESSAGE SIGN (PCMS)
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE
- TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW
- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE
- TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW
- TEMPORARY PAVEMENT MESSAGE MARKING "ONLY" — ONLY
- TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL" — SCHOOL

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1J(25)

12/2/2020

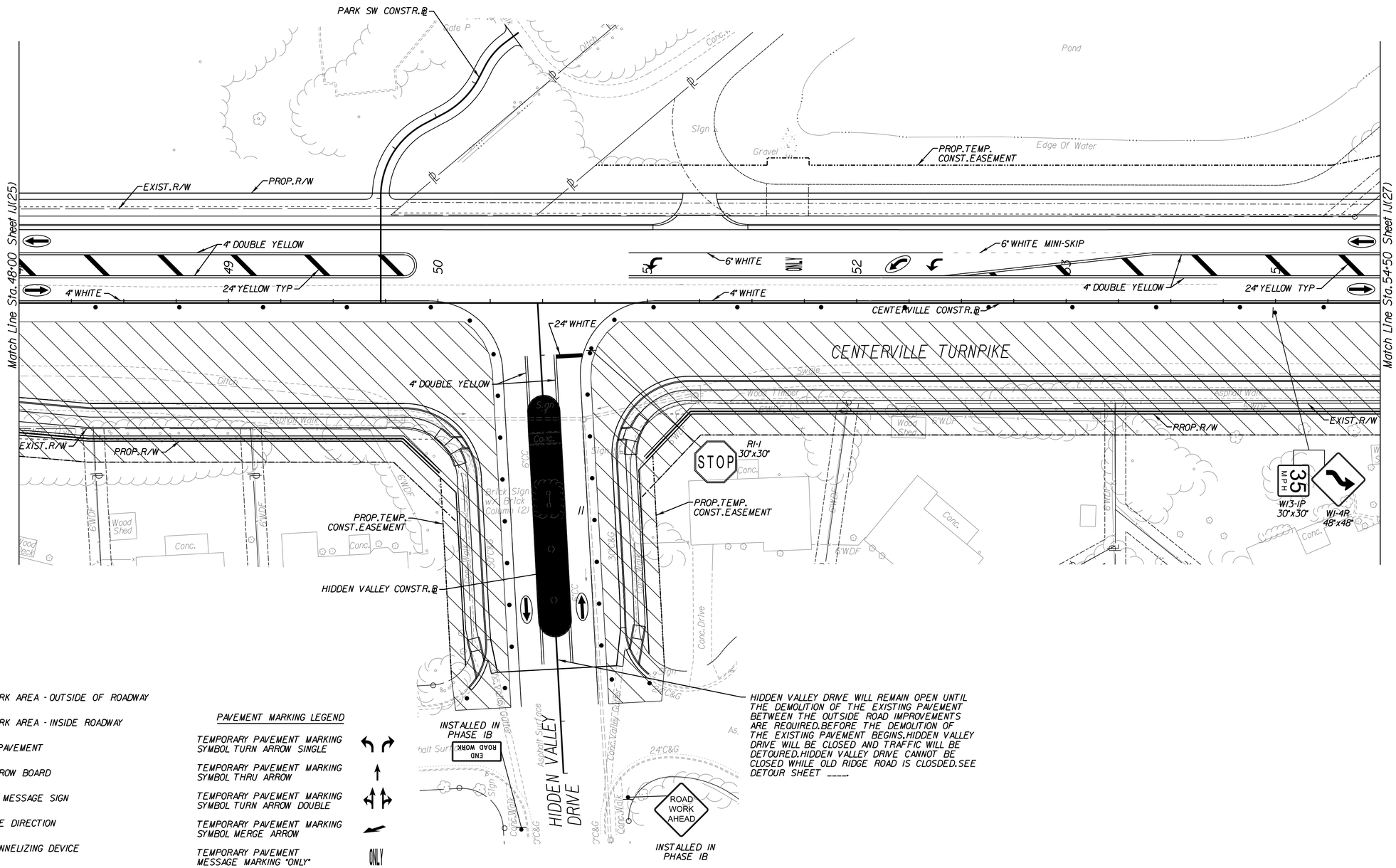
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 2

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501,	1J(26)

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
Virginia Beach, Virginia
ROADWAY ENGINEER



LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- PCMS — CHANGEABLE MESSAGE SIGN
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE	
TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW	
TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE	
TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW	
TEMPORARY PAVEMENT MESSAGE MARKING "ONLY"	ONLY
TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL"	SCHOOL

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1J(26)

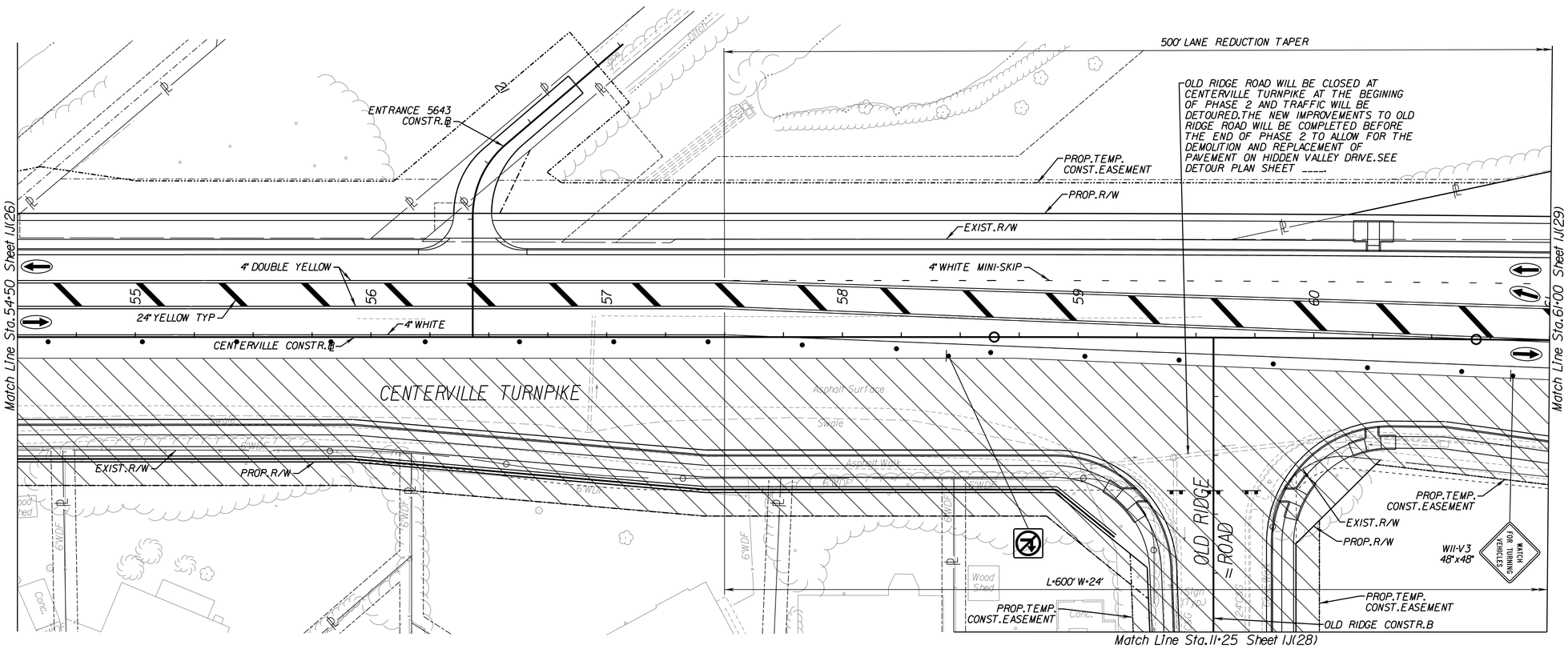
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 2

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	IJ(27)

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
Virginia Beach, Virginia
ROADWAY ENGINEER



LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- CHANGEABLE MESSAGE SIGN (PCMS)
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE
- TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW
- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE
- TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW
- TEMPORARY PAVEMENT MESSAGE MARKING "ONLY" — ONLY
- TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL" — SCHOOL

SCALE: 0 25' 50'	PROJECT	SHEET NO.
	U000-134-842	IJ(27)

12/2/2020

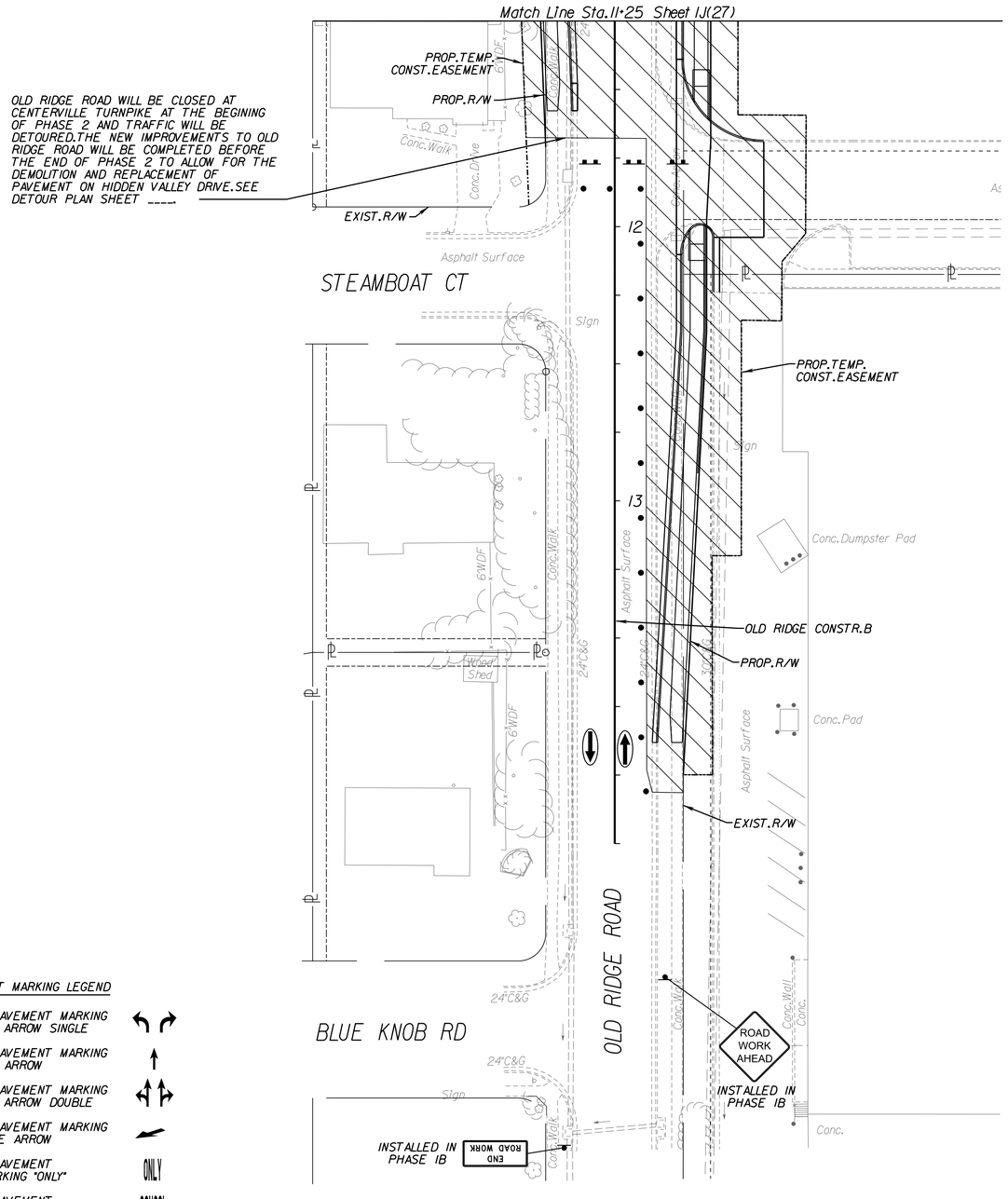
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 2

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501,	1J(28)

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
Virginia Beach, Virginia
ROADWAY ENGINEER



LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- PCMS — CHANGEABLE MESSAGE SIGN
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE
- TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW
- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE
- TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW
- TEMPORARY PAVEMENT MESSAGE MARKING "ONLY" — ONLY
- TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL" — SCHOOL

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1J(28)

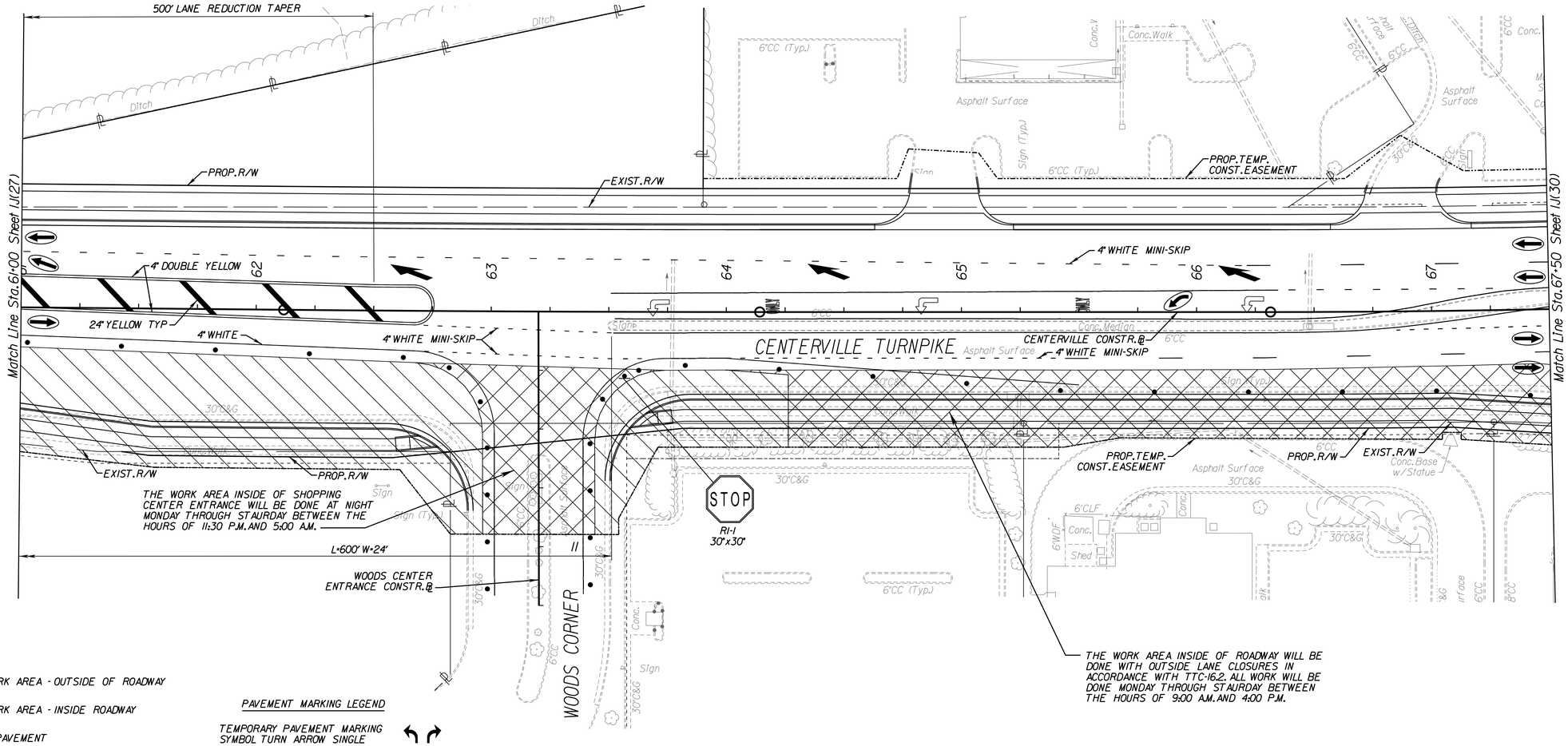
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 2

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501,	1J(29)

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
Virginia Beach, Virginia
ROADWAY ENGINEER



LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- PCMS — CHANGEABLE MESSAGE SIGN
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE
- TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW
- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE
- TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW
- TEMPORARY PAVEMENT MESSAGE MARKING "ONLY" — ONLY
- TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL" — SCHOOL

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1J(29)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP, (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 2

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	1J(30)

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
Virginia Beach, Virginia
ROADWAY ENGINEER

W20-1 48"x48" ROAD WORK AHEAD
INSTALLED IN PHASE IA

GV20-2(V) 48"x24" END ROAD WORK
INSTALLED IN PHASE IA

GV20-1(V) 48"x24" ROAD WORK NEXT 1 1/2 MILES
INSTALLED IN PHASE IA

W4-2R 48"x48"

PROP.TEMP. CONST.EASEMENT

PROP.R/W

EXIST.R/W

CENTERVILLE CONSTR.@

CENTERVILLE TURNPIKE

KEMPSVILLE ROAD

Match Line Sta.67+50 Sheet 1J(29)

THE WORK AREA INSIDE OF ROADWAY WILL BE DONE WITH OUTSIDE LANE CLOSURES IN ACCORDANCE WITH TTC-16.2. ALL WORK WILL BE DONE MONDAY THROUGH STAURDAY BETWEEN THE HOURS OF 9:00 A.M. AND 4:00 P.M.

CONTRACTOR SHALL COORDINATE WITH THE PROPERTY OWNER FOR ALLOWABLE TIMES TO INSTALL NEW ENTRANCE. AT ALL OTHER TIMES ACCESS TO PROPERTY MUST BE MAINTAINE.

GV20-2(V) 48"x24" END ROAD WORK
INSTALLED IN PHASE IA

GV20-2(V) 48"x24" END ROAD WORK
INSTALLED IN PHASE IA

W20-1 48"x48" ROAD WORK AHEAD
INSTALLED IN PHASE IA

LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- PCMS — CHANGEABLE MESSAGE SIGN
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE
- TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW
- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE
- TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW
- TEMPORARY PAVEMENT MESSAGE MARKING "ONLY" — ONLY
- TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL" — SCHOOL

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1J(30)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 3

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501,	1J(31)

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
Virginia Beach, Virginia
ROADWAY ENGINEER

PHASE 3

CONSTRUCTION OF NEW MEDIANS, MEDIAN CROSSOVERS AND LEFT TURN LANES ON CENTERVILLE TURNPIKE FROM APPROXIMATELY STA. 12+50 TO STA. 68+75. THE MAJORITY OF THE WORK WILL BE DONE OUTSIDE OF ROADWAY WITH MEDIAN CROSSOVER WORK DONE INSIDE OF ROADWAY REQUIRING LANE CLOSURES. WORK WILL INCLUDE BUT NOT LIMITED TO INSTALLATION OF CURB, MEDIAN PAVERS, GRASS MEDIAN, DRIANAGE PIPES, DRAINAGE STRUCTURES, TRAFFIC SIGNALS, DEMOLITION OF EXISTING PAVEMENT, REPLACEMENT OF PAVEMENT AND PAVEMENT WIDENING.

1. INSTALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 3.
2. CONSTRUCT NEW MEDIANS AND LEFT TURN LANES ON CENTERVILLE TURNPIKE FROM APPROXIMATELY STA. 12+50 TO STA. 31+55 AND STA. 32+55 TO 62+93, AS SHOWN IN THE PLANS. THE WORK IN THIS AREA WILL BE DONE OUTSIDE OF ROADWAY. WORK WILL INCLUDE BUT NOT LIMITED TO INSTALLATION OF CURB, MEDIAN PAVERS, GRASS MEDIANS, DRAINAGE PIPES, DRAINAGE STRUCTURES, DEMOLITION OF EXISTING PAVEMENT, PAVEMENT REPLACEMENT AND PAVEMENT WIDENING.
3. CONSTRUCT MEDIAN ON CENTERVILLE TURNPIKE FROM APPROXIMATELY STA. 62+93 TO STA. 68+75. AS SHOWN IN THE PLANS. THIS WORK WILL BE DONE INSIDE OF ROADWAY CLOSING THE NORTHBOUND INSIDE LANE WITH GROUP 2 CHANNELIZING DEVICES. INSTALL INSIDE LEFT TURN LANE CLOSURE FOR WESTBOUND KEMPSVILLE ROAD. INSTALL INSIDE LANE CLOSURE FOR SOUTHBOUND CENTERVILLE TURNPIKE BEGINNING NORTH OF THE KEMPSVILLE ROAD INTERSECTION. THROUGH THE INTERSECTION AND ENDING AT STA. 62+90. IN ACCORDANCE WITH TTC-17.2 AND THE VWAPM. ACCESS WILL BE MAINTAINED TO THE TURN LANES AT THE KEMPSVILLE ROAD INTERSECTION. WORK WILL INCLUDE BUT NOT LIMITED TO INSTALLATION OF CURB, DEMOLITION OF EXISTING PAVEMENT, RAISED GRASS MEDIAN AND PAVEMENT WIDENING. AT THE END OF THE WORK DAY, THE GROUP 2 CHANNELIZING DEVICES ALONG THE WORK AREA, WILL BE MOVED OUTSIDE OF ROADWAY TO ALLOW TRAFFIC TO USE ROADWAY AND GRAVEL WEDGING WILL BE INSTALLED FOR ALL DROP OFF AREAS PER VWAPM. REMOVE ALL HAZARDS FROM THE CLEAR ZONE.
4. INSTALL TRAFFIC SIGNALS AT CENTERVILLE TURNPIKE / LYNNHAVEN PARKWAY INTERSECTION, CENTERVILLE TURNPIKE / GLEN VIEW DRIVE INTERSECTION AND CENTERVILLE TURNPIKE / OLD RIDGE ROAD INTERSECTION. WORK WILL BE DONE INSIDE OF ROADWAY USING OUTSIDE LANE CLOSURES, LANE CLOSURE AT INTERSECTION AND LANE CLOSURE USING FLAGGERS IN ACCORDANCE WITH TTC-16.2, TTC-23.2, TTC-26.2, TTC-27.2 AND THE VWAPM.
5. INSTALL ASPHALT WEDGING (BUILD-UP) IN THE MIDDLE OF LYNNHAVEN PARKWAY BETWEEN THE NEW LEFT TURN LANE PAVEMENTS, AS SHOWN IN THE PLANS. THIS WORK WILL BE DONE INSIDE OF ROADWAY WITH OUTSIDE, INSIDE AND MULTI LANE CLOSURES IN ACCORDANCE WITH TTC-16.2, TTC-17.2, TTC-26.2, TTC-27.2 AND THE VWAPM. WORK WILL INCLUDE BUT NOT LIMITED TO PAVEMENT PLANNING AND INSTALLATION OF ASPHALT WEDGING (BUILD-UP). AT THE END OF THE WORK DAY, THE TEMPORARY TRAFFIC CONTROL DEVICES USED FOR THIS WORK WILL BE REMOVED AND ALL LANES REOPENED TO TRAFFIC.
6. INSTALL DETOUR SIGNING FOR MEDIAN CROSSOVER AT LIVINGSTON OAK DRIVE TO DIRECT TRAFFIC TO WOODHILL ROAD CROSSOVER. CLOSE LEFT TURN LANES AND MEDIAN CROSSOVER AT LIVINGSTON OAK DRIVE. REMOVE THE EXISTING PAVEMENT AND CONSTRUCT NEW PAVEMENT AT THE LIVINGSTON OAK DRIVE MEDIAN CROSSOVER. THIS WORK WILL BE DONE INSIDE OF ROADWAY USING TURN LANE CLOSURE TTC-29.2, CLOSING CROSSOVER USING TYPE III BARICAGES AND DETOURING TRAFFIC TO THE NEXT MEDIAN CROSSOVER, IN ACCORDANCE WITH THE VWAPM. THE WORK WILL INCLUDE BUT NOT LIMITED TO THE DEMOLITION OF THE EXISTING PAVEMENT AND REPLACEMENT OF THE PAVEMENT.
7. INSTALL DETOUR SIGNING FOR MEDIAN CROSSOVER AT WOODHILL ROAD TO DIRECT TRAFFIC TO WOODHILL ROAD CROSSOVER AND LYNNHAVEN PARKWAY INTSERSECTION. CLOSE LEFT TURN LANES AND MEDIAN CROSSOVER AT WOODHILL ROAD. REMOVE THE EXISTING PAVEMENT AND CONSTRUCT NEW PAVEMENT AT THE WOODHILL ROAD MEDIAN CROSSOVER. THIS WORK WILL BE DONE INSIDE OF ROADWAY USING TURN LANE CLOSURE TTC-29.2, CLOSING CROSSOVER USING TYPE III BARICAGES AND DETOURING TRAFFIC TO THE NEXT MEDIAN CROSSOVER, IN ACCORDANCE WITH THE VWAPM. THE WORK WILL INCLUDE BUT NOT LIMITED TO THE DEMOLITION OF THE EXISTING PAVEMENT AND REPLACEMENT OF THE PAVEMENT.
8. INSTALL DETOUR SIGNING FOR MEDIAN CROSSOVER AT GLEN VIEW DRIVE TO DIRECT TRAFFIC TO HIDDEN VALLEY DRIVE CROSSOVER AND LYNNHAVEN PARKWAY INTSERSECTION. CLOSE LEFT TURN LANES AND MEDIAN CROSSOVER AT GLEN VIEW DRIVE. REMOVE THE EXISTING PAVEMENT AND CONSTRUCT NEW PAVEMENT AT THE GLEN VIEW DRIVE MEDIAN CROSSOVER. THIS WORK WILL BE DONE INSIDE OF ROADWAY USING TURN LANE CLOSURE TTC-29.2, CLOSING CROSSOVER USING TYPE III BARICAGES AND DETOURING TRAFFIC TO THE NEXT MEDIAN CROSSOVER, IN ACCORDANCE WITH THE VWAPM. THE WORK WILL INCLUDE BUT NOT LIMITED TO THE DEMOLITION OF THE EXISTING PAVEMENT AND REPLACEMENT OF THE PAVEMENT.
9. INSTALL DETOUR SIGNING FOR MEDIAN CROSSOVER AT HIDDEN VALLEY DRIVE TO DIRECT TRAFFIC TO GLEN VIEW DRIVE CROSSOVER AND OLD RIDGE ROAD. CLOSE LEFT TURN LANES AND MEDIAN CROSSOVER AT HIDDEN VALLEY DRIVE. REMOVE THE EXISTING PAVEMENT AND CONSTRUCT NEW PAVEMENT AT THE HIDDEN VALLEY DRIVE MEDIAN CROSSOVER. THIS WORK WILL BE DONE INSIDE OF ROADWAY USING TURN LANE CLOSURE TTC-29.2, CLOSING CROSSOVER USING TYPE III BARICAGES AND DETOURING TRAFFIC TO THE NEXT MEDIAN CROSSOVER, IN ACCORDANCE WITH THE VWAPM. THE WORK WILL INCLUDE BUT NOT LIMITED TO THE DEMOLITION OF THE EXISTING PAVEMENT AND REPLACEMENT OF THE PAVEMENT.
10. INSTALL DETOUR SIGNING FOR MEDIAN CROSSOVER AT OLD RIDGE ROAD TO DIRECT TRAFFIC TO HIDDEN VALLEY DRIVE CROSSOVER AND KEMPSVILLE ROAD INTSERSECTION. CLOSE LEFT TURN LANES AND MEDIAN CROSSOVER AT OLD RIDGE ROAD. REMOVE THE EXISTING PAVEMENT AND CONSTRUCT NEW PAVEMENT AT THE OLD RIDGE ROAD MEDIAN CROSSOVER. THIS WORK WILL BE DONE INSIDE OF ROADWAY USING TURN LANE CLOSURE TTC-29.2, CLOSING CROSSOVER USING TYPE III BARICAGES AND DETOURING TRAFFIC TO THE NEXT MEDIAN CROSSOVER, IN ACCORDANCE WITH THE VWAPM. THE WORK WILL INCLUDE BUT NOT LIMITED TO THE DEMOLITION OF THE EXISTING PAVEMENT AND REPLACEMENT OF THE PAVEMENT.
11. FINAL PAVEMENT SURFACE COURSE WILL NOT BE INSTALLED DURING THIS PHASE OF CONSTRUCTION.

PHASE 4

INSTALLATION OF THE FINAL ASPHALT PAVEMENT SURFACE COURSE, INSTALLATION OF PERMANENT PAVEMENT MARKINGS AND MARKERS, REMOVAL OF EROSION AND SEDIMENT CONTROL MEASURES, AND REMOVAL OF TEMPORARY TRAFFIC CONTROL DEVICES THROUGH OUT THE CENTERVILLE TURNPIKE PHASE III PROJECT AREA. THE MAJORITY OF THE WORK WILL BE DONE INSIDE OF ROADWAY WITH SOME PAVING OPERATIONS DONE OUTSIDE OF ROADWAY IN THE PHASE III WORK ZONE. WORK INSIDE OF ROADWAY WILL REQUIRE DAILY LANE CLOSURES UNTIL THE WORK IS COMPLETED.

1. MAINTAIN TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 3.
2. INSTALL FINAL SURFACE COURSE ASPHALT PAVEMENT. WORK WILL BE DONE OUTSIDE OF ROADWAY AND INSIDE OF ROADWAY USING THE WORK ZONE AND TEMPORARY TRAFFIC CONTROL DEVICES FOR PHASE III, LEFT TURN LANE CLOSURES, LANE CLOSURE OPERATION IN AN INTERSECTION, OUTSIDE LANE CLOSURES, INSIDE LANE CLOSURES, LANE CLOSURES WITH FLAGGERS AND FLAGGING OPERATION AT SIGNALIZED INTERSECTION IN ACCORDANCE WITH TTC-16.2, TTC-17.2, TTC-23.2, TTC-29.2, TTC-28.2, TTC-30.2 AND VWAPM.
3. AT THE END OF EVERY WORK DAY, INSTALL TEMPORARY PAVEMENT MARKINGS FOR LANES OPEN TO TRAFFIC AND INSTALL END OF DAY SIGNING FOR PAVING OPERATIONS IN ACCORDANCE WITH TTC-57.2 AND/OR TTC-58J AND THE VWAPM.
4. INSTALL PERMANENT SIGNING AND PERMANENT PAVEMENT MARKINGS AND MARKERS. WORK WILL BE DONE INSIDE OF ROADWAY USING LEFT TURN LANE CLOSURES, LANE CLOSURE OPERATION IN AN INTERSECTION, OUTSIDE LANE CLOSURES, INSIDE LANE CLOSURES, LANE CLOSURES WITH FLAGGERS AND FLAGGING OPERATION AT SIGNALIZED INTERSECTION IN ACCORDANCE WITH TTC-16.2, TTC-17.2, TTC-23.2, TTC-29.2, TTC-28.2, TTC-30.2 AND VWAPM.
5. REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES.
6. REMOVE TEMPORARY TRAFFIC CONTROL DEVICES AND OPEN ROADWAY UP TO TRAFFIC.

TYPICAL SECTIONS FOR PHASE

INSIDE ROADWAY WORK HOURS:

MONDAY THROUGH SATURDAY: WORK WILL BE COMPLETED BETWEEN THE HOURS OF 9:00AM AND 4:00PM ONLY, UNLESS OTHERWISE NOTED OR APPROVED IN WRITING BY THE OWNER.

SUNDAYS AND HOLIDAYS: NO WORK MAY BE COMPLETED IN THE ROADWAY OR PEDESTRIAN AREAS UNLESS OTHERWISE NOTED OR APPROVED IN WRITING BY THE OWNER.

PROJECT	SHEET NO.
U000-134-842	1J(31)

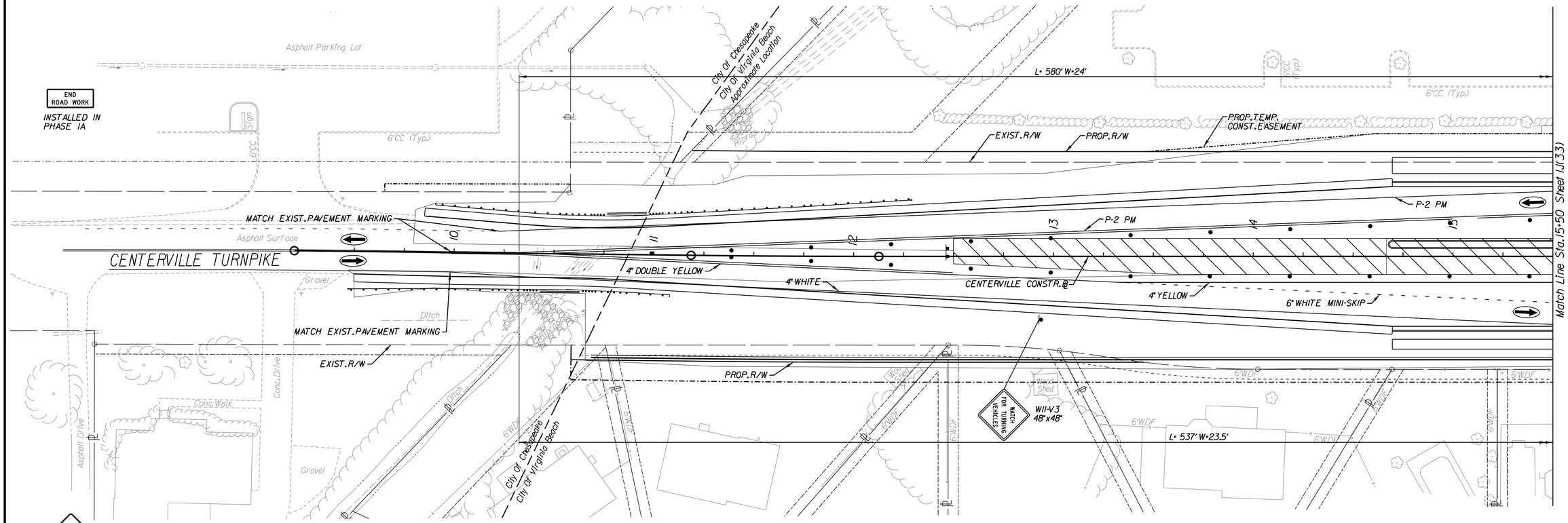
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 3

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	1J(32)

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
Virginia Beach, Virginia
ROADWAY ENGINEER



LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- PCMS — CHANGEABLE MESSAGE SIGN
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE
- TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW
- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE
- TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW
- TEMPORARY PAVEMENT MESSAGE MARKING "ONLY" — ONLY
- TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL" — SCHOOL

P-2 PM — DENOTES PAVEMENT MARKINGS INSTALLED IN PHASE 2

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1J(32)

12/2/2020

PROJECT MANAGER Laurie Murphy, P.E. (757) 395-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

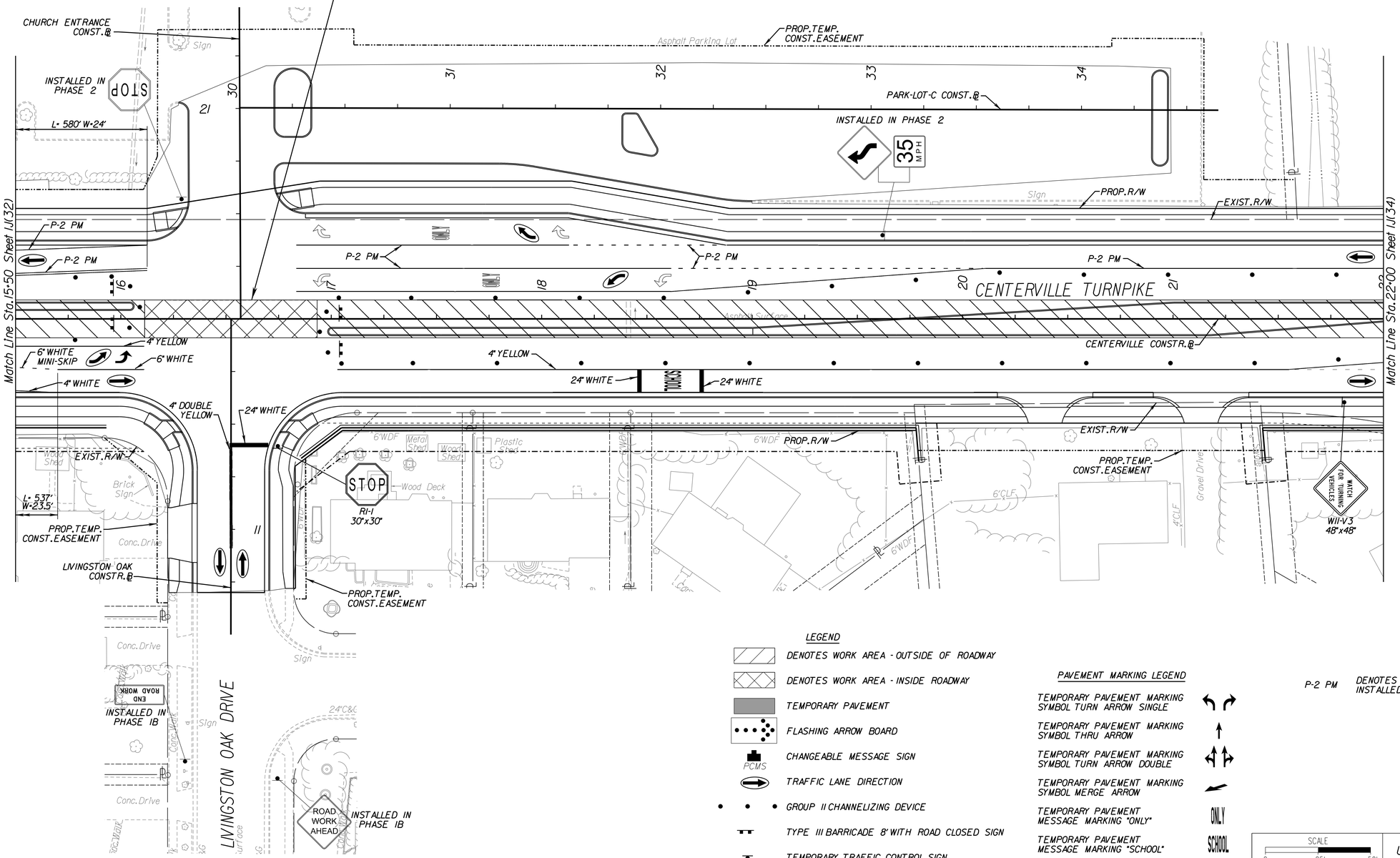
TEMPORARY TRAFFIC CONTROL PLAN
PHASE 3

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	1J(33)

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
Virginia Beach, Virginia
ROADWAY ENGINEER

THE WORK AREA INSIDE OF ROADWAY IS FOR THE REMOVAL AND REPLACEMENT OF THE CROSSOVER PAVEMENT. THE WORK WILL BE DONE BY CLOSING THE LEFT TURN LANES WITH A TURN LANE CLOSURE OPERATION IN ACCORDANCE WITH TTC-29.2, CLOSING CROSSOVER USING TYPE III BARRICADES AND DETOURING TRAFFIC TO THE NEAREST CROSSOVER. ALL WORK WILL BE DONE MONDAY THROUGH STAURDAY BETWEEN THE HOURS OF 9:00 A.M. AND 4:00 P.M.



LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- PCMS — CHANGEABLE MESSAGE SIGN
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE
- TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW
- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE
- TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW
- TEMPORARY PAVEMENT MESSAGE MARKING "ONLY" — ONLY
- TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL" — SCHOOL

P-2 PM — DENOTES PAVEMENT MARKINGS INSTALLED IN PHASE 2

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1J(33)

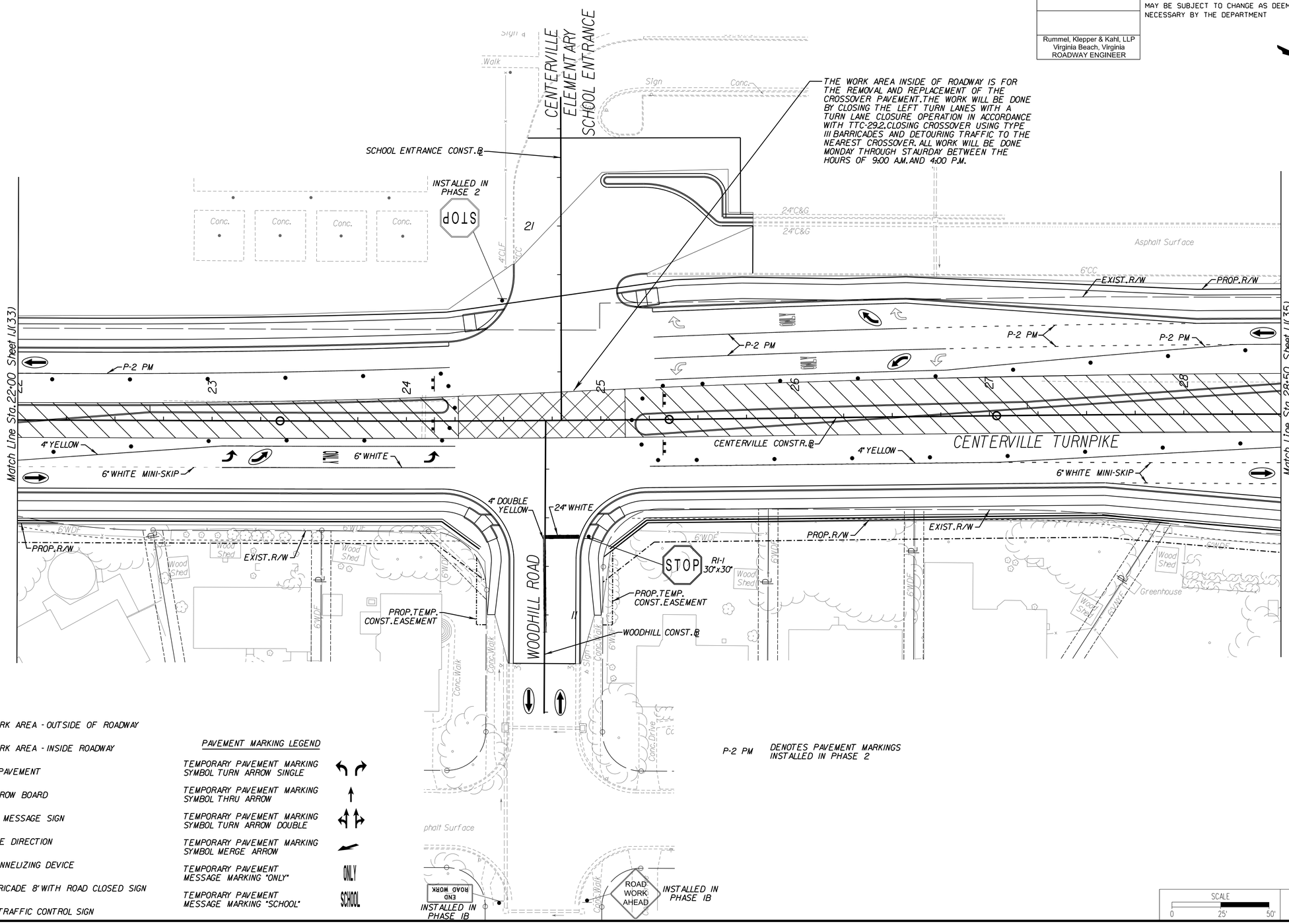
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 3

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	1J(34)

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
Virginia Beach, Virginia
ROADWAY ENGINEER



LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- PCMS — CHANGEABLE MESSAGE SIGN
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE
- TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW
- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE
- TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW
- TEMPORARY PAVEMENT MESSAGE MARKING "ONLY" — ONLY
- TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL" — SCHOOL

P-2 PM DENOTES PAVEMENT MARKINGS INSTALLED IN PHASE 2

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1J(34)

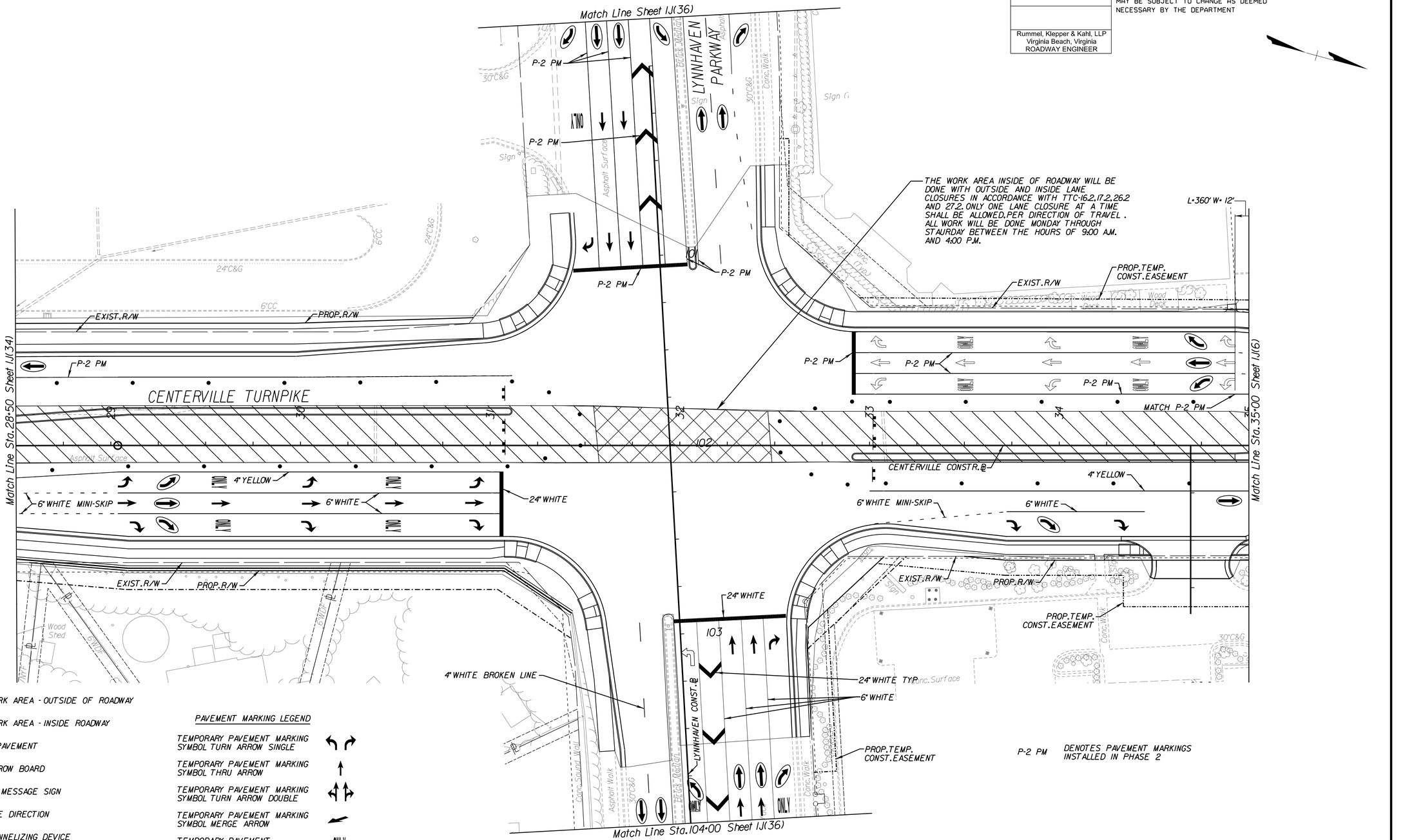
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 3

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	1J(35)

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
Virginia Beach, Virginia
ROADWAY ENGINEER



LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- PCMS — CHANGEABLE MESSAGE SIGN
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE
- TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW
- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE
- TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW
- TEMPORARY PAVEMENT MESSAGE MARKING "ONLY" — ONLY
- TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL" — SCHOOL

P-2 PM DENOTES PAVEMENT MARKINGS INSTALLED IN PHASE 2

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1J(35)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 3

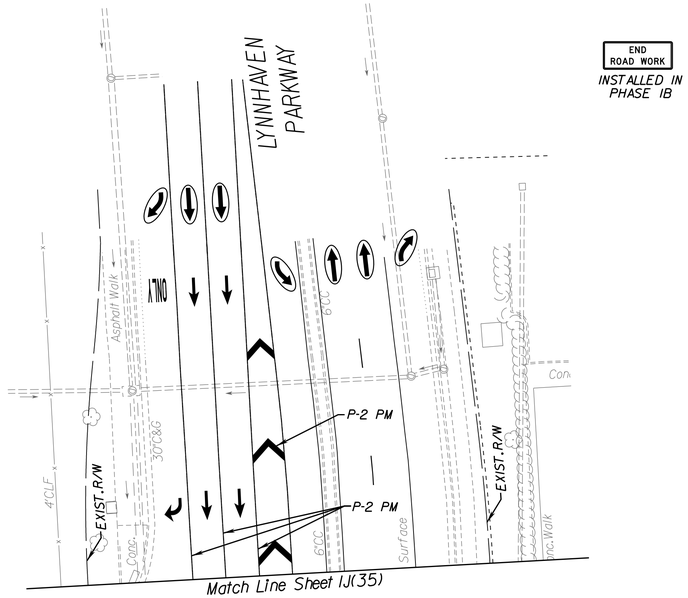
REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	1J(36)

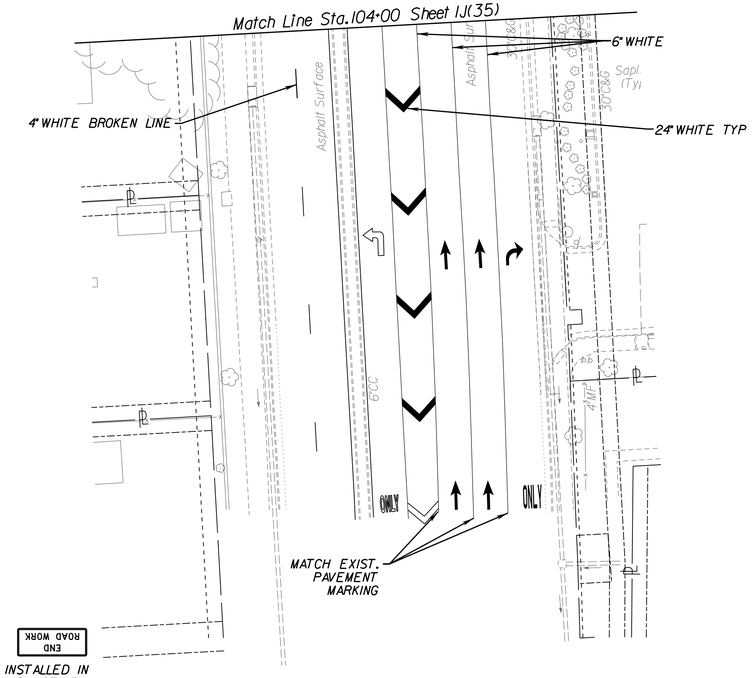
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Rummel, Klepper & Kahl, LLP
Virginia Beach, Virginia
ROADWAY ENGINEER

ROAD WORK AHEAD
INSTALLED IN PHASE 1B

END ROAD WORK
INSTALLED IN PHASE 1B





ROAD WORK AHEAD
INSTALLED IN PHASE 1B

P-2 PM DENOTES PAVEMENT MARKINGS INSTALLED IN PHASE 2

LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- PCMS — CHANGEABLE MESSAGE SIGN
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE
- TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW
- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE
- TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW
- TEMPORARY PAVEMENT MESSAGE MARKING "ONLY" — ONLY
- TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL" — SCHOOL

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1J(36)

12/2/2020

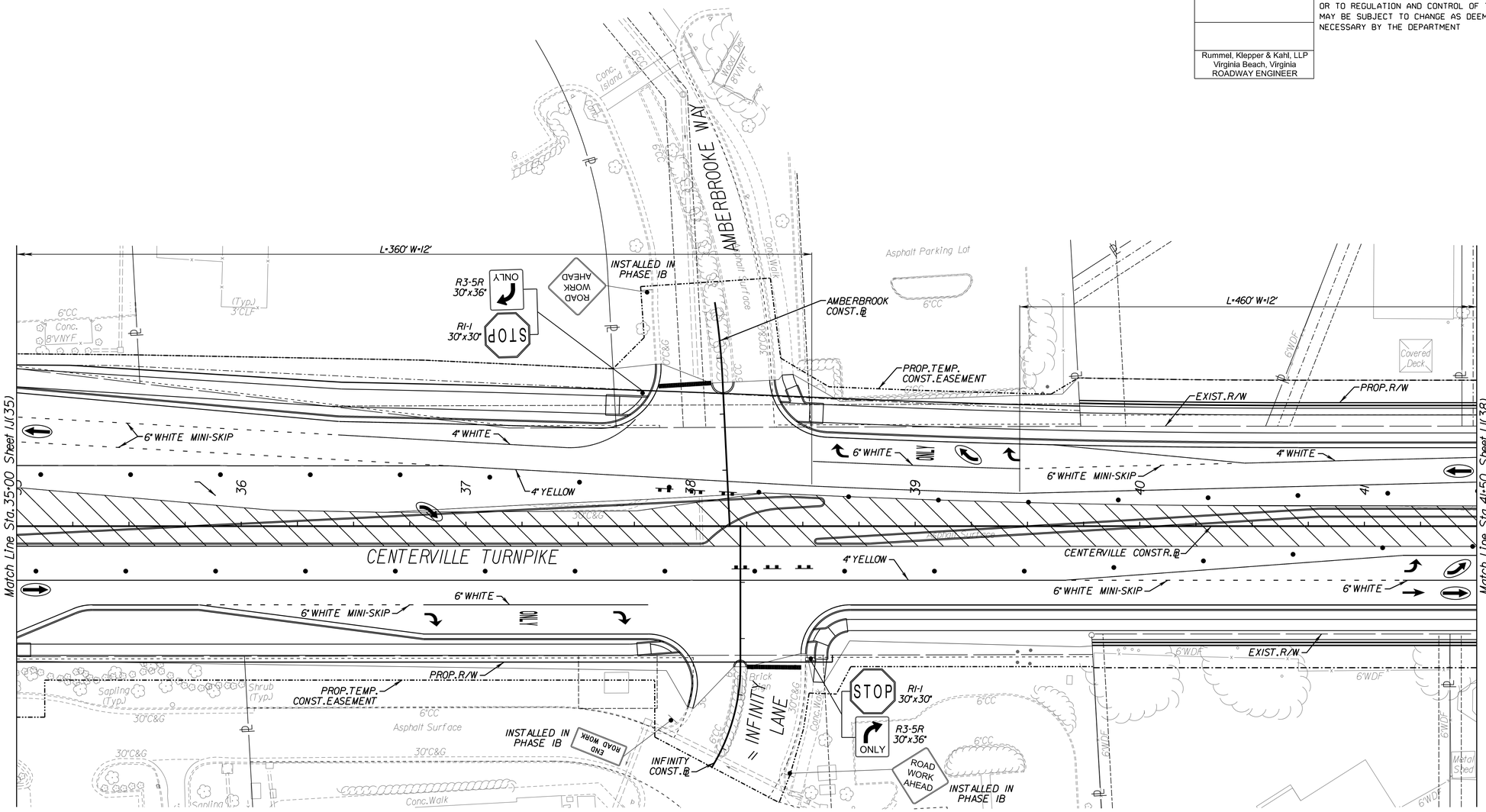
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 3

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	1J(37)

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
Virginia Beach, Virginia
ROADWAY ENGINEER



LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- PCMS — CHANGEABLE MESSAGE SIGN
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE
- TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW
- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE
- TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW
- TEMPORARY PAVEMENT MESSAGE MARKING "ONLY" — ONLY
- TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL" — SCHOOL

P-2 PM DENOTES PAVEMENT MARKINGS INSTALLED IN PHASE 2

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1J(37)

12/2/2020

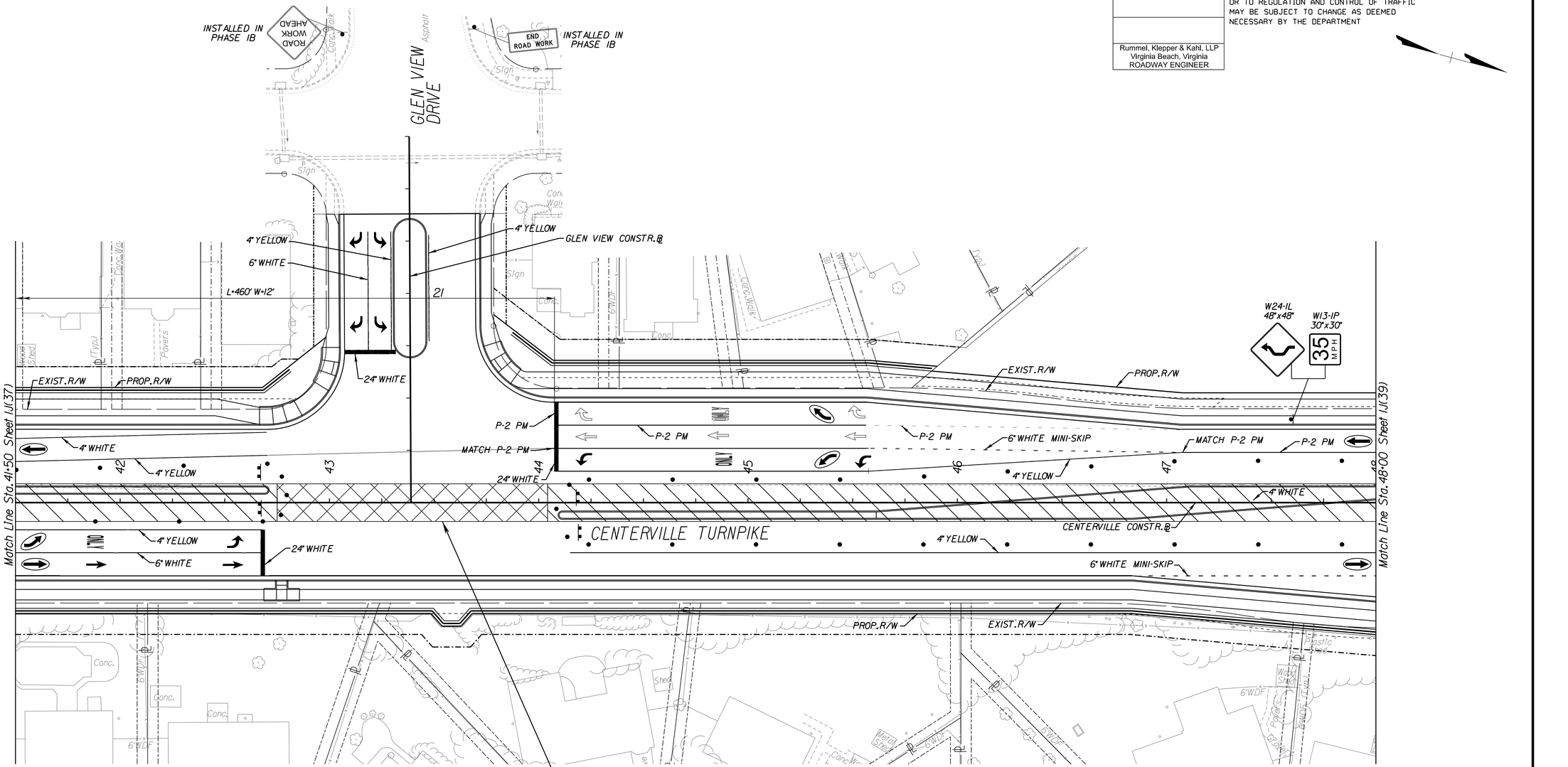
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 3

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	1J(38)

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
Virginia Beach, Virginia
ROADWAY ENGINEER



THE WORK AREA INSIDE OF ROADWAY IS FOR THE REMOVAL AND REPLACEMENT OF THE CROSSOVER PAVEMENT. THE WORK WILL BE DONE BY CLOSING THE LEFT TURN LANES WITH A TURN LANE CLOSURE OPERATION IN ACCORDANCE WITH TTC-29.2. CLOSING CROSSOVER USING TYPE III BARRICADES AND DETOURING TRAFFIC TO THE NEAREST CROSSOVER. TRAFFIC SIGNAL WILL BE SET TO FLASH. ALL WORK WILL BE DONE MONDAY THROUGH STAURDAY BETWEEN THE HOURS OF 9:00 A.M. AND 4:00 P.M.

LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- PCMS — CHANGEABLE MESSAGE SIGN
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE
- TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW
- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE
- TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW
- TEMPORARY PAVEMENT MESSAGE MARKING "ONLY" — ONLY
- TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL" — SCHOOL

P-2 PM DENOTES PAVEMENT MARKINGS INSTALLED IN PHASE 2

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1J(38)

12/2/2020

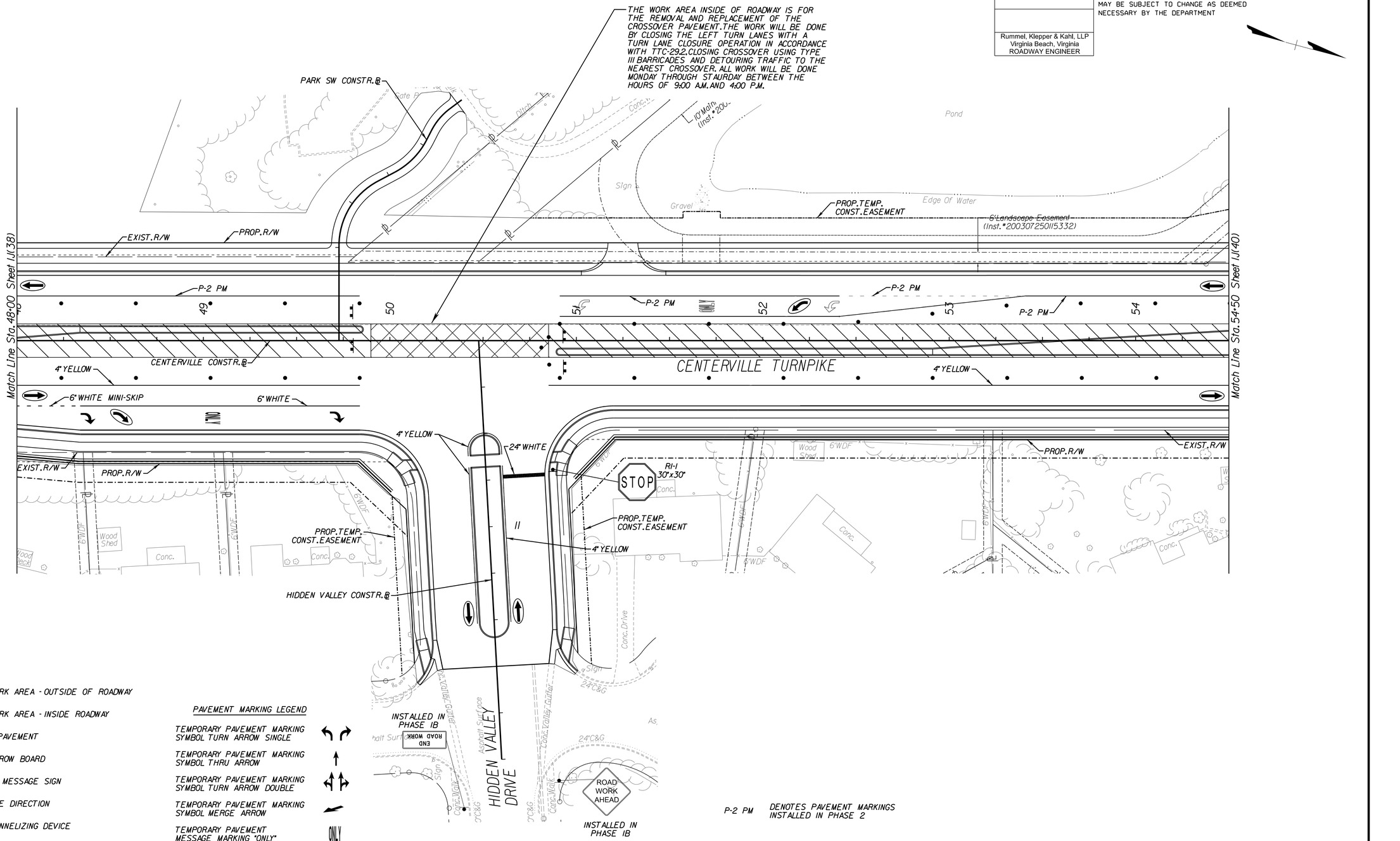
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 3

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	1J(39)

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
Virginia Beach, Virginia
ROADWAY ENGINEER



LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- PCMS — CHANGEABLE MESSAGE SIGN
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE
- TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW
- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE
- TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW
- TEMPORARY PAVEMENT MESSAGE MARKING "ONLY" — ONLY
- TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL" — SCHOOL

P-2 PM DENOTES PAVEMENT MARKINGS INSTALLED IN PHASE 2

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1J(39)

12/2/2020

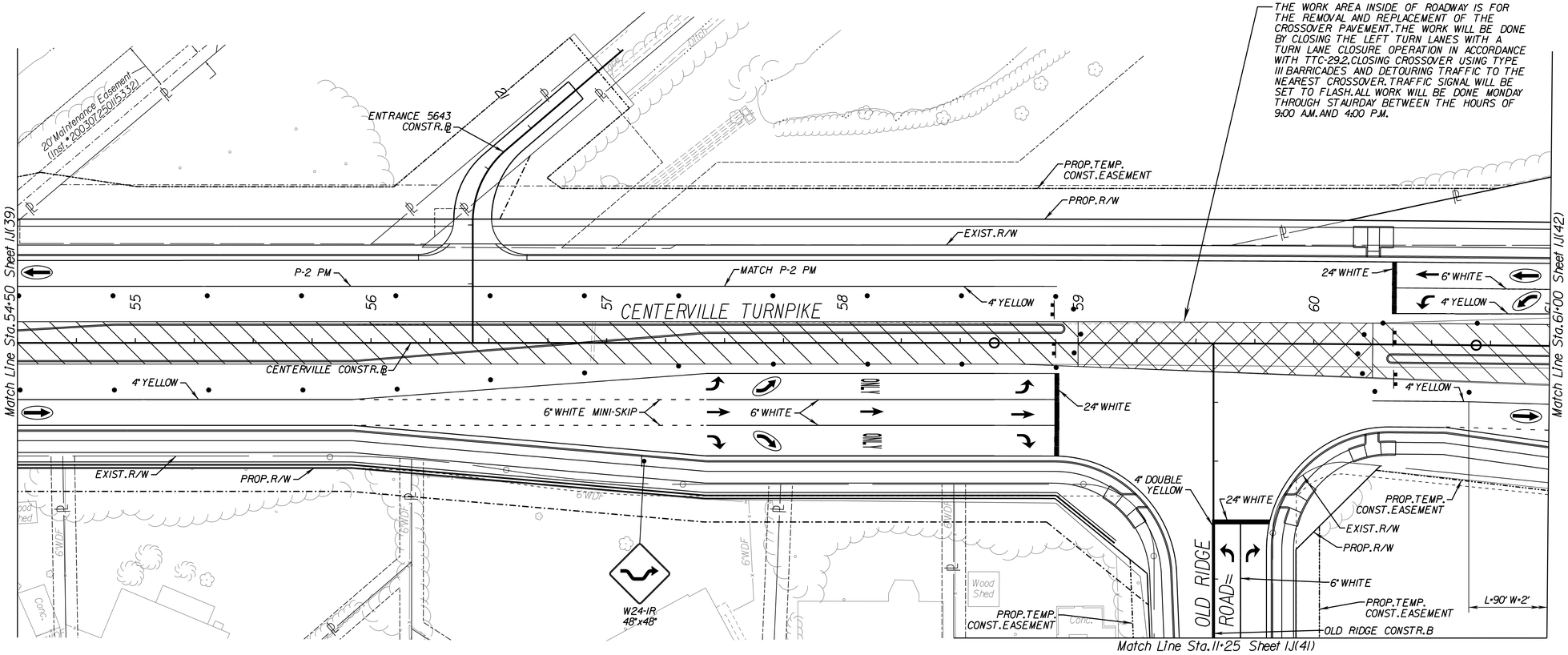
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 3

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	1J(40)

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
Virginia Beach, Virginia
ROADWAY ENGINEER



LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- PCMS — CHANGEABLE MESSAGE SIGN
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE
- TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW
- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE
- TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW
- TEMPORARY PAVEMENT MESSAGE MARKING "ONLY" — ONLY
- TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL" — SCHOOL

P-2 PM — DENOTES PAVEMENT MARKINGS INSTALLED IN PHASE 2

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1J(40)

12/2/2020

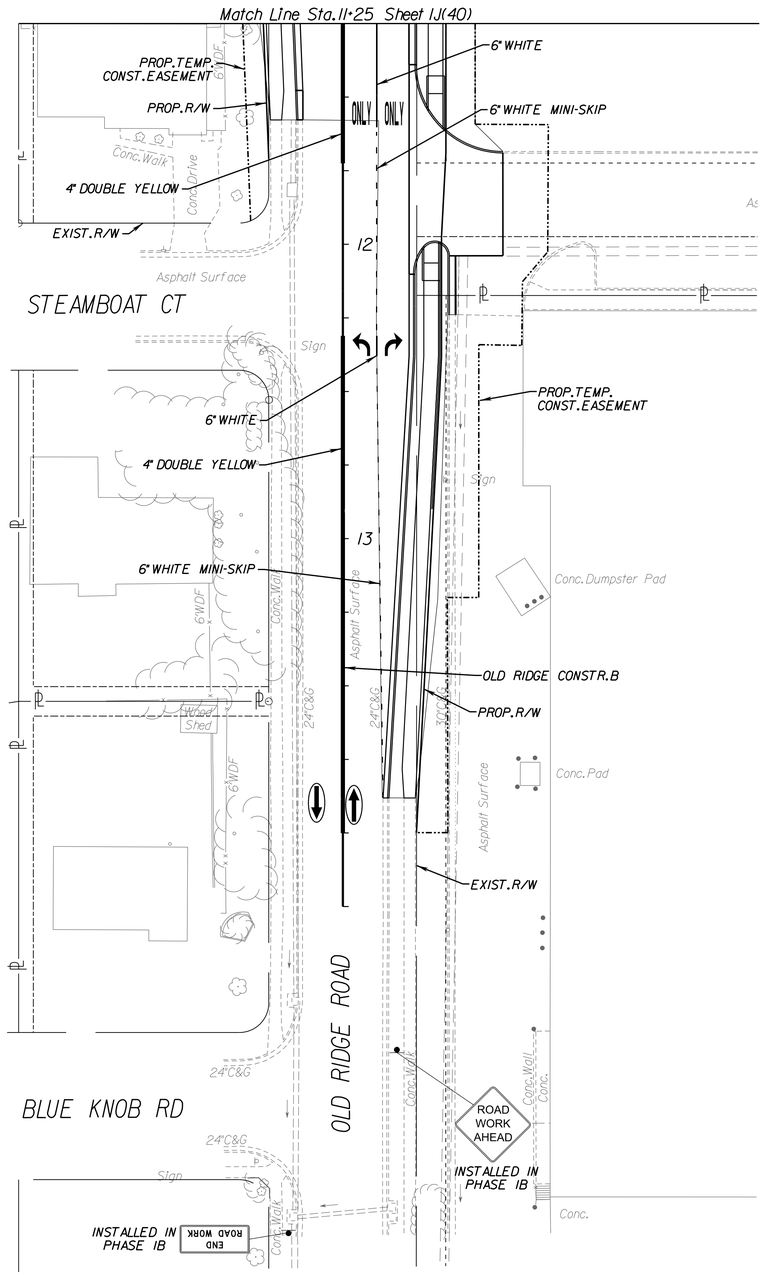
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 3

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	1J(41)

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
Virginia Beach, Virginia
ROADWAY ENGINEER



LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- PCMS — CHANGEABLE MESSAGE SIGN
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE
- TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW
- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE
- TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW
- TEMPORARY PAVEMENT MESSAGE MARKING "ONLY" — ONLY
- TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL" — SCHOOL

P-2 PM DENOTES PAVEMENT MARKINGS INSTALLED IN PHASE 2

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1J(41)

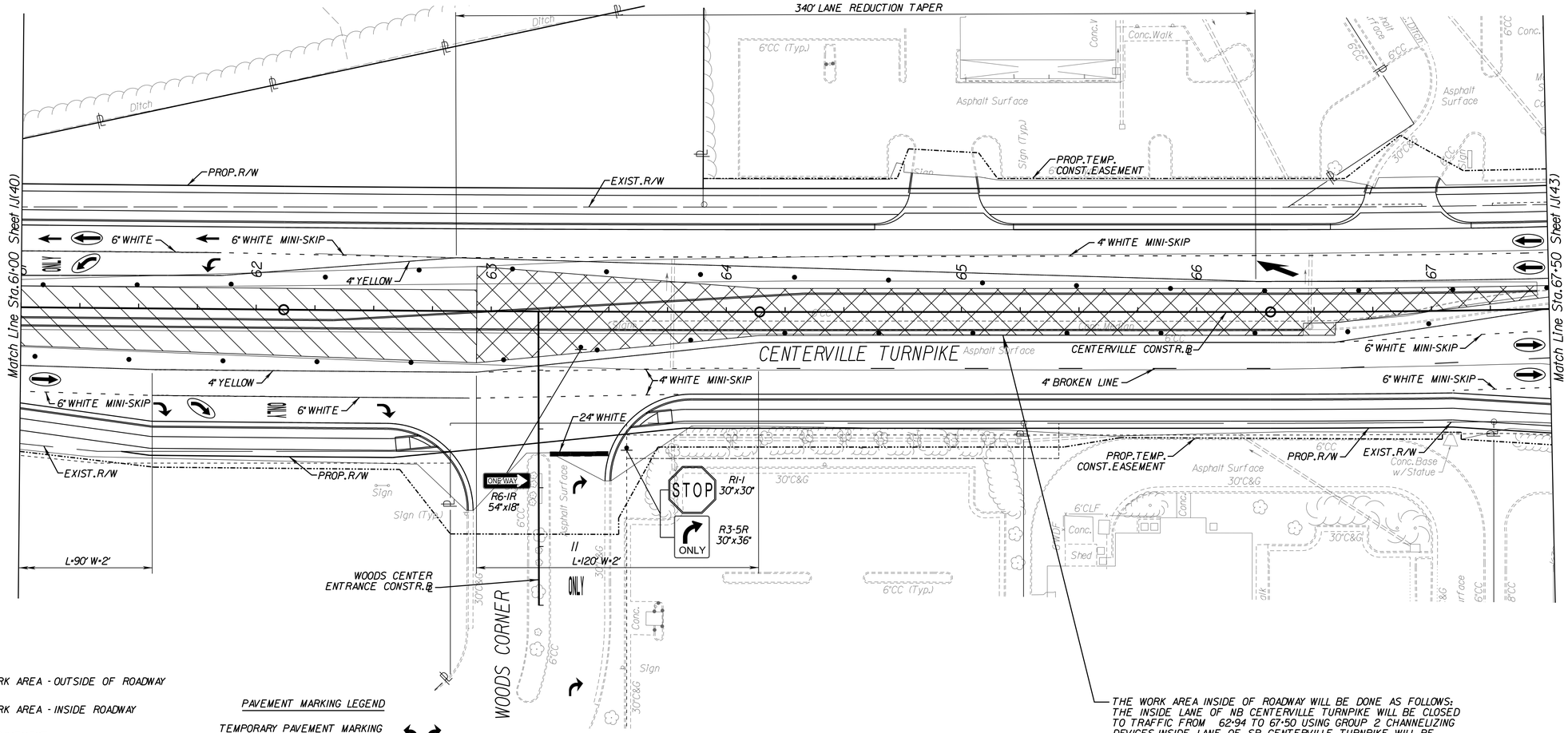
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 3

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	1J(42)

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
Virginia Beach, Virginia
ROADWAY ENGINEER



THE WORK AREA INSIDE OF ROADWAY WILL BE DONE AS FOLLOWS: THE INSIDE LANE OF NB CENTERVILLE TURNPIKE WILL BE CLOSED TO TRAFFIC FROM 62+94 TO 67+50 USING GROUP 2 CHANNELIZING DEVICES. INSIDE LANE OF SB CENTERVILLE TURNPIKE WILL BE CLOSED IN ADVANCE OF THE KEMPSVILLE ROAD INTERSECTION THROUGH THE WORK AREA USING INSIDE LANE CLOSURES IN ACCORDANCE WITH TTC-17.2 AND THE INSIDE WB LEFT TURN LANE ON KEMPSVILLE ROAD WILL BE CLOSED TO TRAFFIC. ALL WORK WILL BE DONE MONDAY THROUGH STAURDAY BETWEEN THE HOURS OF 9:00 A.M. AND 4:00 P.M.

LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- CHANGEABLE MESSAGE SIGN (PCMS)
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE
- TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW
- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE
- TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW
- TEMPORARY PAVEMENT MESSAGE MARKING "ONLY" — ONLY
- TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL" — SCHOOL

P-2 PM DENOTES PAVEMENT MARKINGS INSTALLED IN PHASE 2

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1J(42)

12/2/2020

12/2/2020
10:08:15 AM

d109381011143.dgn
Plotted By: RK&K - JMK

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TEMPORARY TRAFFIC CONTROL PLAN
PHASE 3

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	1J(43)

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
Virginia Beach, Virginia
ROADWAY ENGINEER

THE WORK AREA INSIDE OF ROADWAY WILL BE DONE AS FOLLOWS: THE INSIDE LANE OF NB CENTERVILLE TURNPIKE WILL BE CLOSED TO TRAFFIC FROM 62+94 TO 67+50 USING GROUP 2 CHANNELIZING DEVICES, INSIDE LANE OF SB CENTERVILLE TURNPIKE WILL BE CLOSED IN ADVANCE OF THE KEMPSVILLE ROAD INTERSECTION THROUGH THE WORK AREA USING INSIDE LANE CLOSURES IN ACCORDANCE WITH TTC-17.2 AND THE INSIDE WB LEFT TURN LANE ON KEMPSVILLE ROAD WILL BE CLOSED TO TRAFFIC. ALL WORK WILL BE DONE MONDAY THROUGH STAURDAY BETWEEN THE HOURS OF 9:00 A.M. AND 4:00 P.M.

W20-1 48"x48" ROAD WORK AHEAD
INSTALLED IN PHASE IA

GV20-2(V) 48"x24" END ROAD WORK
INSTALLED IN PHASE IA

GV20-1(V) 48"x24" ROAD WORK NEXT 1 1/2 MILES
INSTALLED IN PHASE IA

W4-2L 48"x48"

PROP. TEMP. CONST. EASEMENT
PROP. R/W
EXIST. R/W
4" WHITE MINI-SKIP
4" YELLOW
4" BROKEN LINE
CENTERVILLE CONSTR. @
MATCH EXIST. PAVEMENT MARKING
6" WHITE MINI-SKIP
Match Line Sta. 67+50 Sheet 1J(42)
CENTERVILLE TURNPIKE
KEMPSVILLE ROAD
Existing 5' R/W Reservation (M.B. 281, Pg. 39)

GV20-2(V) 48"x24" END ROAD WORK
INSTALLED IN PHASE IA

GV20-2(V) 48"x24" END ROAD WORK
INSTALLED IN PHASE IA

W20-1 48"x48" ROAD WORK AHEAD
INSTALLED IN PHASE IA

LEGEND

- DENOTES WORK AREA - OUTSIDE OF ROADWAY
- DENOTES WORK AREA - INSIDE ROADWAY
- TEMPORARY PAVEMENT
- FLASHING ARROW BOARD
- PCMS — CHANGEABLE MESSAGE SIGN
- TRAFFIC LANE DIRECTION
- GROUP II CHANNELIZING DEVICE
- TYPE III BARRICADE 8' WITH ROAD CLOSED SIGN
- TEMPORARY TRAFFIC CONTROL SIGN

PAVEMENT MARKING LEGEND

- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW SINGLE
- TEMPORARY PAVEMENT MARKING SYMBOL THRU ARROW
- TEMPORARY PAVEMENT MARKING SYMBOL TURN ARROW DOUBLE
- TEMPORARY PAVEMENT MARKING SYMBOL MERGE ARROW
- TEMPORARY PAVEMENT MESSAGE MARKING "ONLY" — ONLY
- TEMPORARY PAVEMENT MESSAGE MARKING "SCHOOL" — SCHOOL

P-2 PM DENOTES PAVEMENT MARKINGS INSTALLED IN PHASE 2

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	1J(43)

12/2/2020

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)>

UNDERGROUND UTILITIES TEST HOLE INFORMATION

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	1K

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 & ROADWAY	OWNER	TYPE OF FACILITY	(2) ELEV. (FEET)	(3) CONFLICT YES/NO	(4) REMARKS	UTILITY (5) ADJUSTMENT REQUIRED
4	4C	7.25 LT	113+89.17 CENTERVILLE TPK	VAB	WATER	4.00'	X	SIZE AND MATERIAL UNKNOWN DUE TO WATER IN TEST HOLE	X
4	4D	168.98 RT	113+93.23 CENTERVILLE TPK	VAB	8" WATER	7.83'	X		X
4	4E	66.15 RT	114+95.73 CENTERVILLE TPK	N/A	NONE	N/A	X	NO UTILITY FOUND	X
4	4F	156.55 RT	114+18.37 CENTERVILLE TPK	VAB	SANITARY SEWER	4.14'	X	SIZE AND MATERIAL UNKNOWN DUE TO WATER IN TEST HOLE	X
4	4L	79.14 RT	116+80.66 CENTERVILLE TPK	VZN	(3) 4" FIBER OPTIC	9.64'	X		X
4	4N	55.25 RT	118+27.86 CENTERVILLE TPK	N/A	NONE	N/A	X	NO UTILITY FOUND	X
4	4S	7.52 RT	119+37.42 CENTERVILLE TPK	N/A	NONE	N/A	X	NO UTILITY FOUND	X
4	4V	153.01 RT	113+78.91 CENTERVILLE TPK	COX	2" CATV	8.67'	X		X
5	5D	18.81 RT	121+80.93 CENTERVILLE TPK	N/A	NONE	N/A	X	NO UTILITY FOUND	X
5	5H	232.44 RT	122+31.59 CENTERVILLE TPK	VAB	6" WATER	7.24'	X		X
5	5I	79.99 RT	123+97.07 CENTERVILLE TPK	N/A	NONE	N/A	X	NO UTILITY FOUND	X
5	5M	171.32 RT	122+04.03 CENTERVILLE TPK	UNK	2" UNKNOWN	8.53'	X		X
5	5R	104.75 RT	125+86.57 CENTERVILLE TPK	UNK	NONE	N/A	X	NO UTILITY FOUND	X
5	5S	92.98 RT	123+07.38 CENTERVILLE TPK	UNK	NONE	N/A	X	NO UTILITY FOUND	X
6	6F	41.68 RT	130+05.98 CENTERVILLE TPK	VAB	WATER	6.48'	X	SIZE AND MATERIAL UNKNOWN DUE TO WATER IN TEST HOLE	X
6	6H	40.93 LT	129+74.30 CENTERVILLE TPK	UNK	UNKNOWN	10.83'	X	SIZE AND MATERIAL UNKNOWN DUE TO WATER IN TEST HOLE	X
6	6I	55.24 RT	130+19.73 CENTERVILLE TPK	VAB	WATER	7.70'	X	SIZE AND MATERIAL UNKNOWN DUE TO THICKNESS OF ASPHALT	X
6	6J	37.32 RT	130+10.14 CENTERVILLE TPK	N/A	NONE	N/A	X	NO UTILITY FOUND	X
6	6P	93.72 LT	131+08.54 CENTERVILLE TPK	VZN	1" TELEPHONE	10.20'	X		X
6	6ZI	96.42 LT	131+01.90 CENTERVILLE TPK	DOM	2" ELECTRIC	12.37'	X		X
6	6Z2	43.92 RT	131+00.89 CENTERVILLE TPK	DOM	0.75" ELECTRIC	13.54'	X		X
6	6Z3	97.21 RT	129+53.27 CENTERVILLE TPK	N/A	NONE	N/A	X	NO UTILITY FOUND	X
6	6Z4	8.76 RT	127+18.09 CENTERVILLE TPK	DOM	2" ELECTRIC	12.30'	X		X
6	33+30	2.01 RT	131+23.28 CENTERVILLE TPK	VAB	20" FORCE MAIN	9.93'	X		X
7	7B	101.15 LT	134+31.92 CENTERVILLE TPK	COX	2" CATV	10.33'	X		X
7	7D	13.58 LT	135+25.98 CENTERVILLE TPK	VNG	8" GAS	9.31'	X	8" GAS FOUND 1.6' FROM REQUESTED LOCATION	X
7	7E	27.03 RT	135+37.91 CENTERVILLE TPK	VAB	WATER	10.06'	X	TEST HOLE MOVED 4' FROM REQUESTED LOCATION. SIZE UNKNOWN DUE TO WATER.	X
7	7K	25.22 LT	137+45.04 CENTERVILLE TPK	COX	2" CATV	11.44'	X		X
7	7M	5.96 RT	134+96.14 CENTERVILLE TPK	UNK	UNKNOWN	8.92'	X	SIZE UNKNOWN DUE TO WATER IN TEST HOLE	X
8	8B	2.10 RT	143+14.18 CENTERVILLE TPK	UNK	UNKNOWN	10.36'	X	SIZE AND MATERIAL UNKNOWN DUE TO WATER IN TEST HOLE	X
8	8C	86.92 LT	140+97.50 CENTERVILLE TPK	VAB	UNKNOWN	6.79'	X	SIZE AND MATERIAL UNKNOWN DUE TO WATER IN TEST HOLE AND SAND CAVE-INS	X
8	8D	88.23 LT	141+60.31 CENTERVILLE TPK	VAB	FORCE MAIN	7.87'	X	SIZE AND MATERIAL UNKNOWN DUE TO WATER IN TEST HOLE AND SAND CAVE-INS	X
8	8P	112.09 LT	141+23.08 CENTERVILLE TPK	DOM	1.75" ELECTRIC	11.05'	X		X
8	8R	5.09LT	145+04.99 CENTERVILLE TPK	VZN	UNKNOWN	12.31'	X	SIZE AND MATERIAL UNKNOWN DUE TO WATER IN TEST HOLE	X
8	45+25	11.06 LT	143+03.25 CENTERVILLE TPK	VAB	UNKNOWN	10.13'	X	SIZE AND MATERIAL UNKNOWN DUE TO WATER IN TEST HOLE	X
9	9B	14.48 LT	147+68.49 CENTERVILLE TPK	N/A	NONE	N/A	X	NO UTILITY FOUND	X
9	9D	1.69 LT	148+12.66 CENTERVILLE TPK	VAB	WATER	8.89'	X	SIZE UNKNOWN DUE TO CAVE-INS (APPROX.8")	X
9	9J	11.77 RT	146+09.92 CENTERVILLE TPK	VZN	2.5" TELEPHONE	12.61'	X		X
10	10D	0.53 LT	153+53.98 CENTERVILLE TPK	VAB	WATER	10.70'	X	SIZE UNKNOWN DUE TO WATER IN TEST HOLE	X
10	10F	7.47 LT	154+32.19 CENTERVILLE TPK	N/A	NONE	N/A	X	NO UTILITY FOUND	X
10	10N	7.24 RT	156+74.21 CENTERVILLE TPK	VZN	0.5" TELEPHONE	13.98'	X		X
10	100-1	6.20 RT	154+34.66 CENTERVILLE TPK	VZN	3" FIBER OPTIC	13.15'	X		X
10	100-2	5.80 RT	158+24.69 CENTERVILLE TPK	VZN	3" FIBER OPTIC	13.15'	X		X
10	10P	70.87 RT	157+65.17 CENTERVILLE TPK	VAB	8" WATER	10.28'	X		X
10	6Z5	83.90 LT	153+99.10 CENTERVILLE TPK	DOM	0.5" ELECTRIC	12.99'	X		X
11	11A	0.64 LT	159+39.62 CENTERVILLE TPK	UNK	4" UNKNOWN	12.76'	X		X
11	11C	16.69 LT	160+35.27 CENTERVILLE TPK	VAB	20" FORCE MAIN	11.76'	X	TEST HOLE MOVED 6' FROM REQUESTED LOCATION	X
11	11D	3.39 RT	159+09.75 CENTERVILLE TPK	N/A	NONE	N/A	X	NO UTILITY FOUND	X
11	11F	2.58 LT	160+51.40 CENTERVILLE TPK	VAB	20" WATER	11.36'	X	TEST HOLE MOVED 5' FROM REQUESTED LOCATION	X
11	11L	14.81 LT	162+02.61 CENTERVILLE TPK	VAB	20" FORCE MAIN	11.99'	X		X
11	11T	78.25 LT	159+45.42 CENTERVILLE TPK	VZN	2" TELEPHONE	12.67'	X		X
11	11U	79.06 LT	159+74.49 CENTERVILLE TPK	VZN	2" TELEPHONE	12.03'	X		X
12	12H	94.90 LT	166+74.71 CENTERVILLE TPK	PVT	2" FORCE MAIN	13.18'	X		X
12	12M	5.18 LT	167+08.91 CENTERVILLE TPK	VZN	2" FIBER OPTIC	15.54'	X		X
12	12P	3.59 RT	168+14.17 CENTERVILLE TPK	VAB	20" WATER	11.06'	X		X

LEGEND

COX	COX COMMUNICATIONS
DOM	DOMINION ENERGY
PVT	PRIVATE
UNK	UNKNOWN
VAB	CITY OF VIRGINIA BEACH
VNG	VIRGINIA NATURAL GAS
VZN	VERIZON

NOTES:

(1) ALL TEST HOLES ARE REFERENCED FROM THE SURVEY BASELINE UNLESS OTHERWISE NOTED.

(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

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

	PROJECT	SHEET NO.
	U000-134-842	1K

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

GENERAL NOTES

GRADING

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

G-2 Earthwork quantities on this project are based on anticipated settlement and may require adjusting during construction.

G-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-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 horizontal location of all drainage structures shown on these plans is approximate only, with the exception of structures showing specific stations, special design bridges and storm sewer systems.

D-2 The horizontal location and invert elevations shown for proposed culverts and storm sewer outfall pipes are based on existing survey data and required design criteria. If during construction, it is found that the horizontal location or invert elevations shown on the plans differ significantly from the horizontal location or elevations of the stream or swale in which the culvert or storm sewer outfall pipe is to be placed, the Engineer shall confer with, and get approval from, the applicable District Drainage Engineer before installing the culvert or storm sewer outfall pipe.

D-3 The "H" dimensions shown on plans for drop inlets and junction boxes and the "L.F." dimensions shown for manholes are for estimating purposes and are based on the proposed invert elevations shown for the structure and the anticipated top (rim) elevation based on existing or proposed finished grade. The actual "H" or "L.F." dimensions are to be determined by the contractor from field conditions.

D-6 Pipes shall conform to any of the allowable types shown on sheet number (specify sheet number), within the applicable height of cover limitations. For strength, sheet thickness, or class designation; available sizes; height of cover limitations; and other restrictions for a particular pipe type or height of cover, see the VDOT Road and Bridge Standard PC-1. Structural plate pipe may be substituted for corrugated pipe of the same size, provided the substitution complies with the applicable sections of the VDOT Road and Bridge Standards PC-1.

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

D-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 Proposed drop inlets with a height (H) less than the standard minimum shown in the VDOT Road and Bridge Standards shall be considered and paid for as Standard Drop Inlets for the type specified. Pipes with less than standard minimum finished height of cover shall be noted as such in the drainage description for the pipe. Specific pipe bedding and cover requirements are provided in the applicable PB-1 and PC-1 standard drawings of the VDOT Road and Bridge Standards.

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

INCIDENTALS

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-9 When no centerline alignment is shown for a proposed entrance, the entrance shall be constructed in the same location as the existing entrance.

I-12 St'd. RM-2 right of way monuments shall be set by the Contractor.

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 14(1) thru 14(12) and as directed by the Engineer.

PAVEMENT

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

UTILITIES

U-1 Water meters and sewer cleanouts must be place at the right-of-way or at the public utility easement line, (within the right-of-way/easement), outside of entrances and sidewalks.

U-2 Deflecting, offsetting, or relocating existing utility mains will not be allowed except under extreme circumstances, such exemptions will be submitted to the Public Utilities engineer for review and approval.

U-3 Type "K" soft drawn copper will be used for off-site water service lines, two-inch (2") lines and under, in right-of-way and public utility easements.

U-4 The contractor must contact public utility/inspections at (757-385-4175) at least 48 hours prior to construction (public or private) located within the city's right-of-way or easement.

U-5 Force main connections will be supervised by public utility/inspections. Contractor shall provide for pumping and hauling of sewage during connections if required.

HRSD STANDARD CONSTRUCTION NOTES:

HRSD1. All persons must contact Miss Utility at phone 1-800-552-7001 a minimum of 48 hours prior to excavation.

HRSD2. Contact Hampton Roads Sanitation District (HRSD) Interceptor Operations
During Business Hours Office: (757)460-7072
Emergency (After Hours) Office: (757)460-3200
And provide a minimum of two working days prior to excavation of, or in the vicinity of HRSD infrastructure. Miss Utility calls do not fulfill this requirement.

HRSD3. Provide minimum separation of 5 feet from HRSD infrastructure. Any proposed deviation from the minimum separation of 5 feet will require review and approval by HRSD engineering prior to construction.

HRSD4. If the HRSD infrastructure will be exposed during construction, a detail describing the means and methods of supporting the HRSD infrastructure shall be submitted to HRSD for review and approval prior to construction.

HRSD5. Contractor shall note that six months after completion of construction and or final site work, HRSD shall reinspect the construction location to indentify poor backfill or installation. Contractor shall be expected to warranty and repair any discrepancies noted.

INCIDENTAL CONCRETE

1. All concrete will be Class "A-3" Air Entrained (3,000 PSI) in accordance with Section 207 of the Virginia Deaprtment of Transportation Road and Bridge Specifications (2016) unless otherwise specified.
2. Both curb and gutter will be constructed in sections of uniform lengths, approximately ten feet (10') (no sections will be less than six feet (6'). Expansion joints will be formed at intervals of 100 feet using 1/2-inch premolded bituminous fiber joint filler. Construction joints are required as follows:
   a. Curb & Gutter 100'
   b. Five feet (5') wide sidewalk 50'
   c. Ten feet (10') wide 50'
3. All entrances will be made of a minimum of seven inches (7") thick concrete from the edge of pavement to the right-of-way line.
4. All concrete work performed in the right-of-way will be inspected by the owner or the owner's representitive.

INCIDENTAL DRAINAGE

1. Temporary drainage during construction will be provided by the owner/developer/contractor to relieve areas that may cause damage to roadways and/or adjacent properties as directed by owner or the owner's representitive.
2. The owner or the owner's representitive will perform an on-site inspection of storm sewer pipe installation prior to any backfilling of the installed pipe.
3. If precast drainage structures are used, shop drawings will be submitted to the DSC's Engineer by the owner/developer/contractor's design consultant, along with the proper certifications, unless previously approved by the City Engineer's Office.
4. All proposed public storm drainage structures shall utilize inlet shaping with paved inverts, unless otherwise noted, on the plans for each structure.
5. Minimum final height of cover, for all storm sewer pipes, shall be two feet (2') or manufacture's recommendation. See the PWSS, Section 2.2.7 "Pipe Cover", for further requirements.
6. All concrete storm sewer pipes in the City right-of-ways and easements will be tongue and groove. Pipes subject to traffic loading will be reinforced concrete pipe and conform to the specifications for concrete storm sewer pipe, AASHTO designation M-170, with the modification that all pipes will be manufactured with 4,000-PSI concrete. All pipe joints will be sealed in accordance with Section 302.03 of the Virginia Department of Transportation Road and Bridge Specifications (2016).
7. All storm sewer pipe joints will be installed, slit free, or will be completely wrapped with two feet (2') wide approved filter fabric, secured in place prior to backfilling.
8. All pipe culverts (water, sewer, and storm sewer), located within right-of-way excavation areas that are subject to traffic loads will be backfilled with select or granular materials and placed in six-inch (6") layers and compacted to 95 percent theoretical AASHTO density in accordance with Section 302.03 of the Virginia Department of Transportation Road and Bridge Specifications (2016).
9. All metal pipe culverts and storm sewers will be installed in accordance with drawings PB-1 of the Virginia Department of Transportation Road and Bridge Standards (2016).
10. If corrugated metal pipe is used, the owner/developer/contactor will furnish pH certifications of the backfill material if the backfill material has not been previously tested.
11. All non-concrete storm sewer pipes placed in the City right-of-way or in City drainage easements will incorporate the use and installation of locator tape/wire to aid in future detection.

PAVEMENT AND OPEN CUTS

1. No open cuts of a public roadway will be allowed except under extreme circumstances. Open cutting of public roadways will be permitted with prior written permission by the DSC's Engineer.
2. Minimum on-site (private property) pavement replacement and design will be 2-inches, SM-2A bituminous concrete surface, over a six-inch (6") Type I or II aggregate base. Pavement replacement and design in City right-of-ways will be in accordance with the Section 515 "Pavement Replacement and Patching" of the PWSS.
3. Materials that are determined unsuitable for foundations, subgrades, or other roadway purposes within the limits of construction, will be excavated by the contactor, at his own expense, below the grade shown on the plans. Excavated areas will be backfilled with approved suitable materials. Excavated materials suitable for backfill will be stockpiled so as not to interfere with drainage. Unsuitable material will be removed from the site and shall be disposed of in a lawful manner.
4. The replacement of pavement will be in accordance with standard pavement patching detail standards drawings C-3 "Pavement Patching Detail for Flexible Pavements" or C-4 "Pavement Patching Details for Rigid Pavements" and Section 515 of the PWSS.
5. Certification of materials and the test results (eg., CBR and Proctor, etc.) from each source of supply for select borrow and select material will be submitted to the owner or the owner's representitive by the contractor prior to installation.
6. Certification of materials and test results on the following items will be submitted to the owner or the owner's representitive by the contactor before any road construction is performed:
   a. The proctor test on the native subgrade materials.
   b. The optimum moisture content of the aggregate.
   c. The theoretical maximum density of the aggregate.

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	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

1. The Contractor will contact "Miss Utility of Virginia" (1-800-552-7001) prior to beginning work in order to determine the extent and location of all underground utilities within the project limits, utility companies will be notified through "miss utility of virginia" 48 hours prior to any excavation within the proximity of their utilities. The contractor will be responsible for repairing or replacing at his own expense any existing utilities, pavement, concrete items, pipes, etc that are damaged during construction.
2. The location and extent of existing utility facilities are shown based upon information available at the time of design.
3. The Contractor will contact the Hampton Roads Sanitation District systems engineer Chris Everton at 757-318-4327 (cell - 757-893-4454) or Doug Joyner at 757-460-4234 (cell - 757-803-5641) at least two working days prior to any work around district lines. Miss Utility calls do not fulfill this requirement.
4. Unless otherwise noted, utilities are adjusted or relocated by the respective owner relocation of utilities must be completed prior to placement of any roadway base
5. The Contractor is responsible for locating and identifying all valves and air vents of existing utilities prior to starting construction.
6. The Contractor will maintain full access to valves and hydrants.
7. When it is necessary to disturb existing driveways beyond the proposed construction limits, the Owner will direct how the Contractor will tie-into the existing driveways. The Contractor will match existing driveway design when constructing the tie-in.
8. The Contractor will keep the project area in a clean condition free of debris and trash.
9. When material unsuitable for foundations, subgrade or the roadway purpose occur within the limits of street construction, the Contractor will excavate such material below the grade shown on the plans and will place backfill in those excavated areas with approved materials. The extent of undercut and backfill is determined by the owner.
10. The Contractor will grade disturbed areas to the following slopes unless otherwise directed by the owner or noted by the plans, cut slopes 3:1 (hw) and fill slopes 3:1 (hw).
11. The Contractor will place a minimum of four inches of topsoil on all disturbed areas.
12. The Contractor will fine grade, fertilize, mulch and seed all disturbed areas unless otherwise directed by the owner or noted by the plans, use the seeding schedule shown in the plans.
13. The Contractor will replace any valve boxes, risers, or lids lost or damaged during construcion at his expense.
14. The Contractor shall maintain a minimum of four foot horizontal clearance betweenutility lines and other appurtenances, unless otherwise noted on the plans.
15. All valve boxes and manholes within the limits of constructon will not be adjusted to grade with riser rings, valve boxes will be excavated and elevation adjusted accordingly. Manholes require the casting to be removed and the elevation change by building up the bricks, unless otherwise directed by Owner.
16. All valves, water meters, and cleanouts impacted by the project shall be adjusted to grade.
17. The Contractor shall coordinate construction adjacent to all streets lights and poles with Dominion Virginia Power, poc Bill Mifflin @ 757-393-3815.
18. All sanitary lateral service connections, service wyes and sanitary cleanouts shall be replaced to the right of way line and connected to the existing house lateral.
19. The Contractor shall carefully excavate down to the existing utility lines or storm drain pipes and verify the outside diameter of the utility or storm drain pipe for each connection to existing utility or storm drain. The Contractor shall ensure that fittings and joining material are properly sized to perform the function of the existing utility storm drain pipe.
20. The Contractor shall work within the right-of-way unless specifically authorized to work in easements.
21. Unless otherwise noted, dimensions are to edge of pavement.
22. The Contractor shall inspect temporary pavement patches at the end of each day and after rainfall for damage. The Contractor shall make the repairs required to provide a smooth, stable riding surface. Temporary pavement patch shall be included in the cost of other items and will not be paid for separately.
23. Proposed roadway drainage system contruction intent is to match existing elevations. The Contractor shall verify the existing top of curb and pavement elevations prior to any demolition at drainage structure and bulbout/narrowing locations. The new roadway elevation and slope after new construction, flexible pavement planing and pavement overlay. Proposed grades convey drainage intent and grades may vary slightly based on field conditions. Positive drainage must be maintained at all times. All concrete items such as sidewalk, curb and gutter, and drainage structures shall be checked and verified for correct elevation in the field before they are constructed.
24. The Contractor should maintain 18 inches minimum vertical seperation from HRSD infrastructure.
25. Rim elevations for drain and sewer manholes water valve covers, gas gates, electric and telephone pull boxes and other such items, are approximate and shall set/rest flushwith proposed surfaces. The cost of all resetting shall be incidental to asphalt.
26. Concrete sidewalk shall be 4" thick 3,000 psi concrete excluding CG-12 ramps which shall be 7" thick.
27. The Contractor shall maintain 24" minimum cover between 4" conduits and top/bottom of water and sanitary sewer utilities and forcemains.
28. Right-of-Way and Property Monumentation shall be installed within the project construction contract. All Monumentation shall be installed by a Land Surveyor licensed within the Commonwealth of Virginia.
29. If an existing Control or Boundary Monument is damaged or destroyed during construction new Monumentation shall be installed within the contract by a Land Surveyor, licensed in the Commonwealth of Virginia, as required by the Virginia Department of Professional and Occupational Regulations - Rules and Regulations Section 18-VAC-10-20-370 Paragraph C-4. The Monument shall be installed in accordance with the Public Works Specifications and Standards.

PROJECT	SHEET NO.
U000-134-842	2

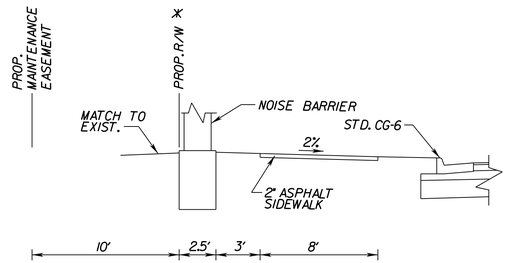
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	2A

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

TYPICAL SECTIONS

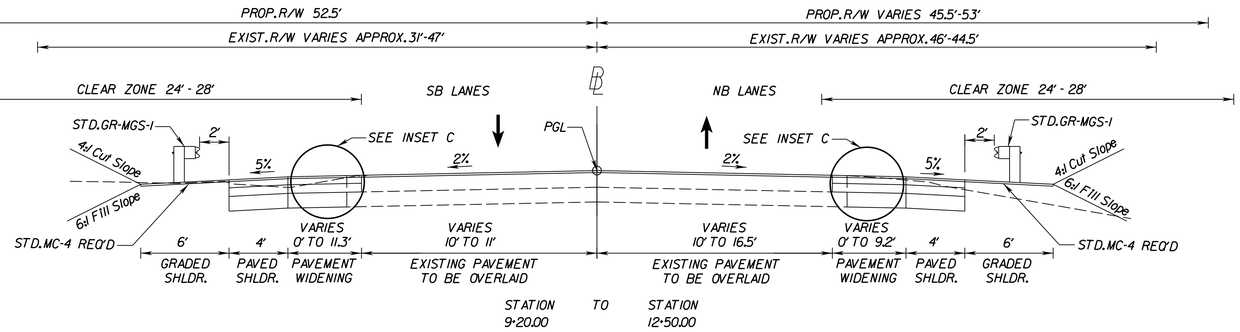
CENTERVILLE TURNPIKE



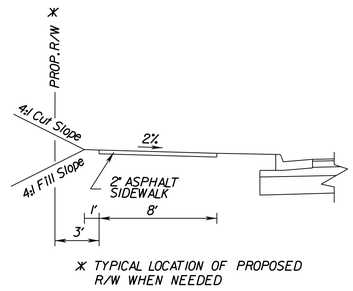
* TYPICAL LOCATION OF PROPOSED R/W WHEN NEEDED

STATION	TO	STATION
39+73.26		42+80.96
43+87.44		45+87.85

TYPICAL NOISE BARRIER AT ASPHALT SIDEWALK

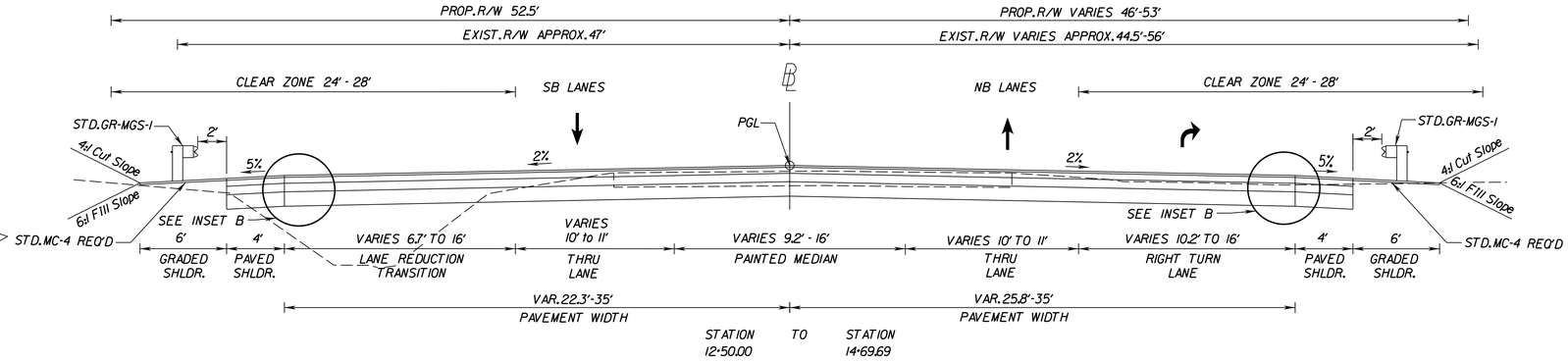


STATION	TO	STATION
9+20.00		12+50.00



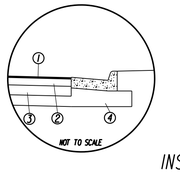
* TYPICAL LOCATION OF PROPOSED R/W WHEN NEEDED

TYPICAL PROP. R/W LOCATION AT ASPHALT SIDEWALK

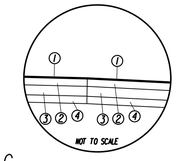


STATION	TO	STATION
12+50.00		14+69.69

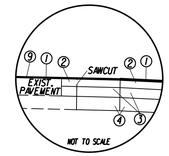
INSET A

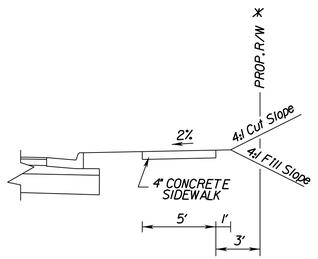


INSET B



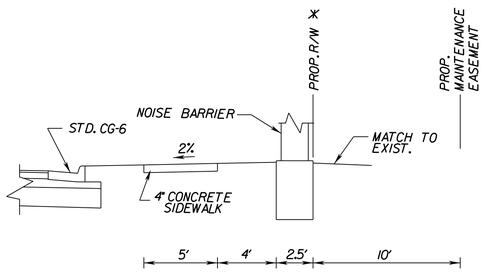
INSET C





* TYPICAL LOCATION OF PROPOSED R/W WHEN NEEDED

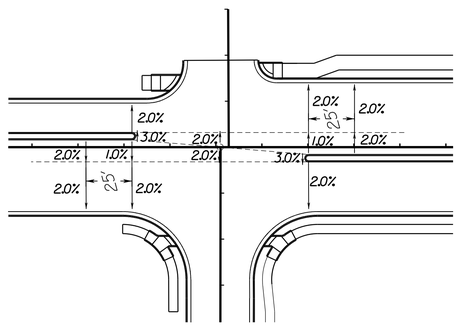
TYPICAL PROP. R/W LOCATION AT CONCRETE SIDWALK



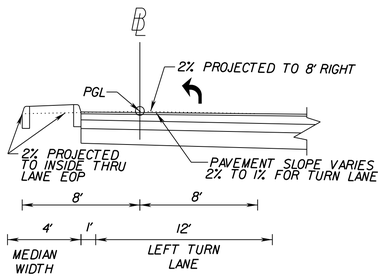
* TYPICAL LOCATION OF PROPOSED R/W WHEN NEEDED

STATION	TO	STATION
10+69.11		15+93.17
16+85.70		19+79.19
21+42.58		24+37.31
25+04.11		31+42.88
39+78.83		50+00.75
50+99.39		59+15.66

TYPICAL NOISE BARRIER AT CONCRETE SIDEWALK



PLAN



SECTION

CROSS SLOPE TRANSITION DETAIL

① 2" Asphalt Concrete, Type SM-9.5D
② 3" Asphalt Concrete, Type IM-19.0A
③ 6" Asphalt Concrete Type BM-25.0A
④ 8" Aggregate Base Material, Type I, Size No.21A or 21B
⑤ 4" Hydraulic Cement Concrete
⑥ Compacted and Stabilized Subgrade
⑦ 2" Asphalt Concrete, Type SM-9.5A
⑧ 6" Aggregate Base Material, Type I, Size No.21A or 21B extended 6" beyond the edge of surface material
⑨ Geotextile Fiber Glass Paving Grid

NOTES:

1. A 2% SLOPE IS PROJECTED FROM THE PROFILE GRADE LINE (PGL) 8' RIGHT AND 8' LEFT OF THE CONSTRUCTION BASELINE TO ESTABLISH THE PAVEMENT ELEVATIONS FOR CENTERVILLE TURNPIKE.
2. SEE SHEET 2A FOR CROSS SLOPE TRANSITION DETAIL FOR SINGLE LEFT TURN LANES.
3. VDOT STANDARD WP-2 SHALL BE USED FOR CONSTRUCTION JOINTS BETWEEN EXISTING ASPHALT PAVEMENT AND NEW ASPHALT PAVEMENT
4. ALL PAVED SHOULDERS SHALL BE FULL DEPTH MATCHING THE TRAVEL LANE PAVEMENT SECTION.

NTS	PROJECT U000-134-842	SHEET NO. 2A

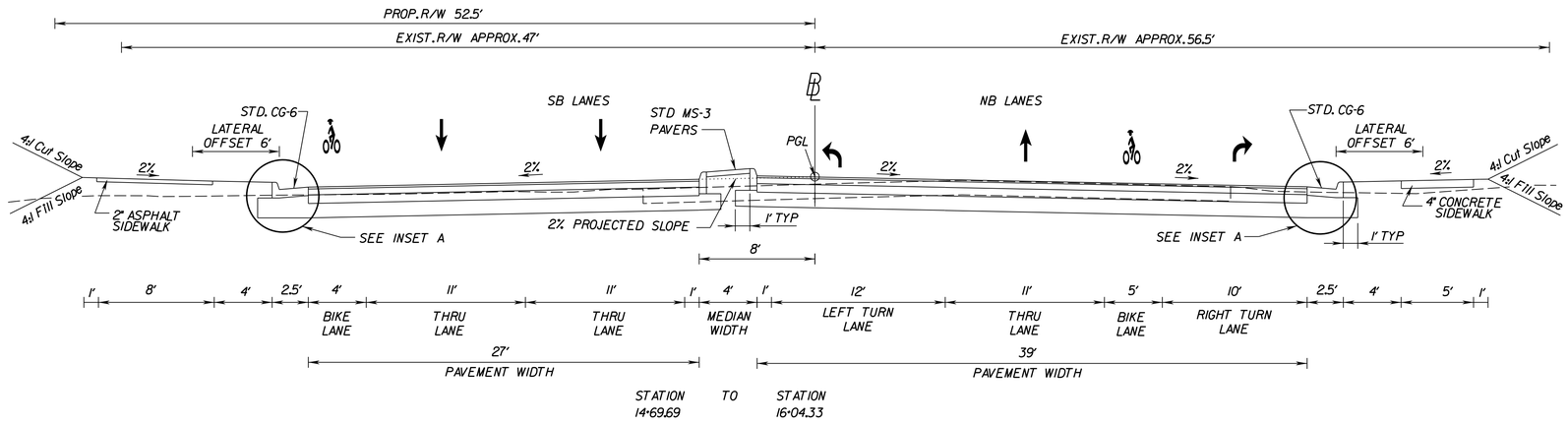
PROJECT MANAGER Laurie Murphy, P.E. (757)385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757)368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757)498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757)368-0945, 12/08/2017

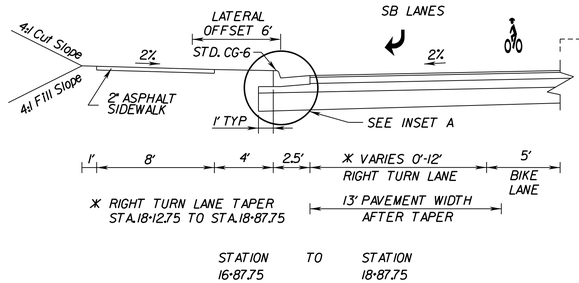
REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	2A(1)

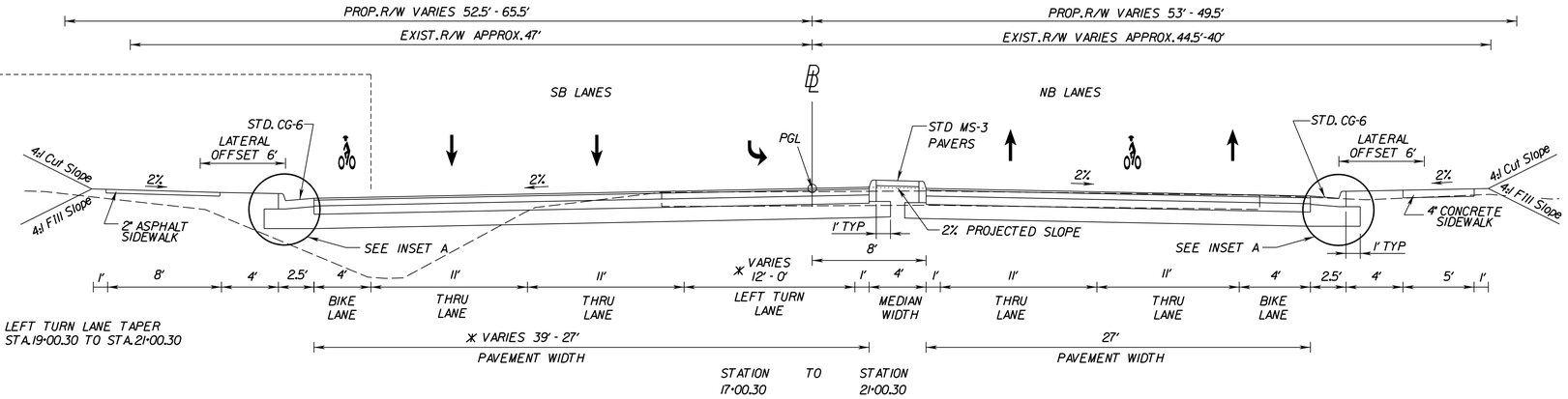
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

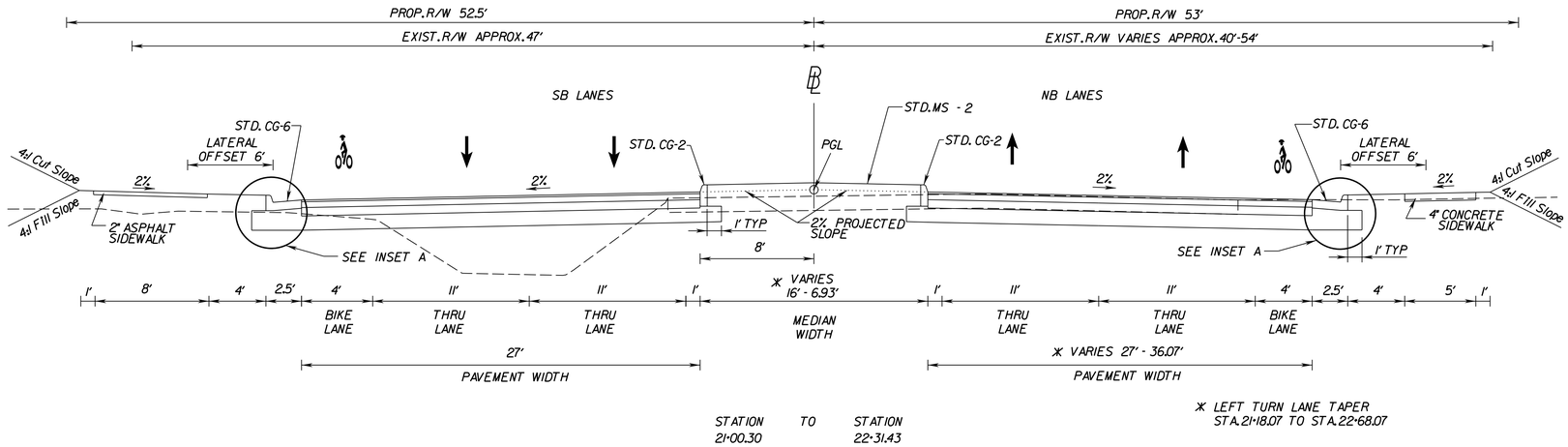
TYPICAL SECTIONS

CENTERVILLE TURNPIKE

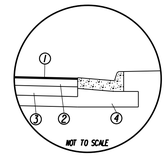




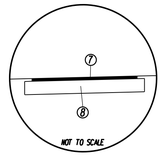




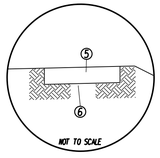
INSET A



ASPHALT SIDEWALK



CONCRETE SIDEWALK



① 2" Asphalt Concrete, Type SM-9.5D
② 3" Asphalt Concrete, Type IM-19.0A
③ 6" Asphalt Concrete Type BM-25.0A
④ 8" Aggregate Base Material, Type I, Size No.21A or 21B
⑤ 4" Hydraulic Cement Concrete
⑥ Compacted and Stabilized Subgrade
⑦ 2" Asphalt Concrete, Type SM-9.5A
⑧ 6" Aggregate Base Material, Type I, Size No.21A or 21B extended 6" beyond the edge of surface material
⑨ Geotextile Fiber Glass Paving Grid

NOTES:

1. A 2% SLOPE IS PROJECTED FROM THE PROFILE GRADE LINE (PGL) 8' RIGHT AND 8' LEFT OF THE CONSTRUCTION BASELINE TO ESTABLISH THE PAVEMENT ELEVATIONS FOR CENTERVILLE TURNPIKE.
2. SEE SHEET 2A FOR CROSS SLOPE TRANSITION DETAIL FOR SINGLE LEFT TURN LANES.
3. VDOT STANDARD WP-2 SHALL BE USED FOR CONSTRUCTION JOINTS BETWEEN EXISTING ASPHALT PAVEMENT AND NEW ASPHALT PAVEMENT
4. ALL PAVED SHOULDERS SHALL BE FULL DEPTH MATCHING THE TRAVEL LANE PAVEMENT SECTION.

NTS	PROJECT U000-134-842	SHEET NO. 2A(1)

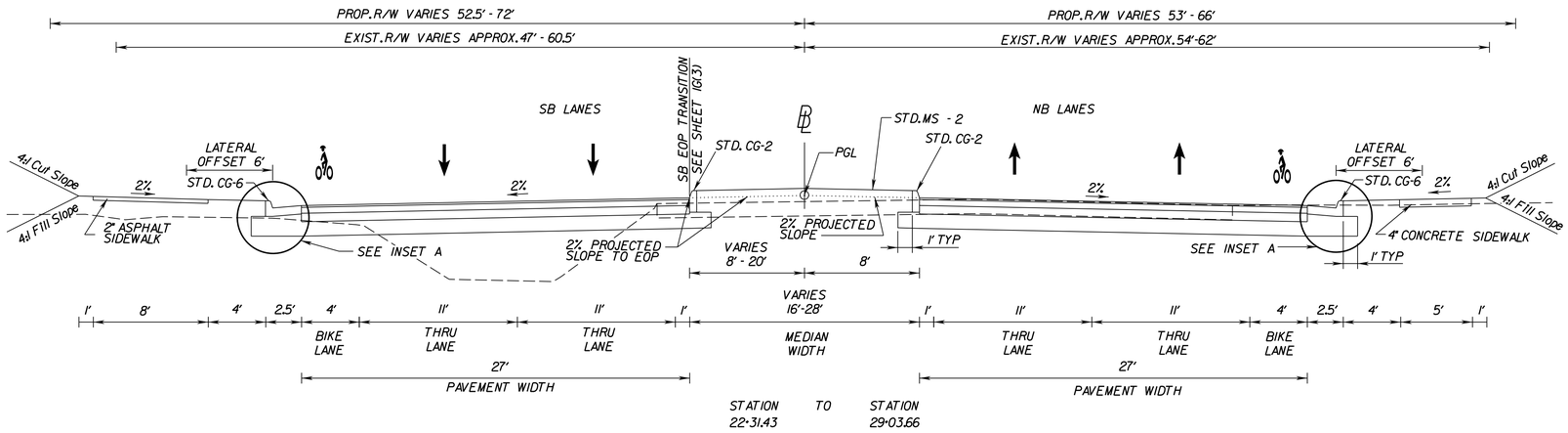
PROJECT MANAGER Laurie Murphy, P.E. (757)385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757)368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757)498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757)368-0945, 12/08/2017

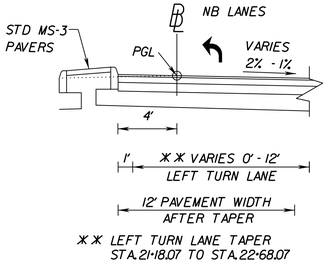
REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	2A(2)

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

TYPICAL SECTIONS

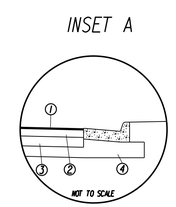
CENTERVILLE TURNPIKE





** LEFT TURN LANE TAPER
STA.21+18.07 TO STA.22+68.07

STATION 21+18.07 TO STATION 24+18.07



1. 2" Asphalt Concrete, Type SM-9.5D
2. 3" Asphalt Concrete, Type IM-19.0A
3. 6" Asphalt Concrete Type BM-25.0A
4. 8" Aggregate Base Material, Type I, Size No.21A or 21B
5. 4" Hydraulic Cement Concrete
6. Compacted and Stabilized Subgrade
7. 2" Asphalt Concrete, Type SM-9.5A
8. 6" Aggregate Base Material, Type I, Size No.21A or 21B extended 6" beyond the edge of surface material
9. Geotextile Fiber Glass Paving Grid

* RIGHT TURN LANE TAPER
STA.26+57.72 TO STA.28+06.85

STATION 25+15.06 TO STATION 28+06.85

* LEFT TURN LANE TAPER
STA.27+19.55 TO STA.29+03.66

STATION 25+23.52 TO STATION 29+03.66

** LEFT TURN LANE TAPER
STA.25+23.52 TO STA.29+09.59

STATION 25+23.52 TO STATION 29+09.59

** RIGHT TURN LANE TAPER
STA.27+59.18 TO STA.29+09.59

STATION 27+59.19 TO STATION 31+11.59

*** PAVEMENT CROSS SLOPE TRANSTION FROM 2% TO 1% FROM STA.30+49.59 TO STA.31+09.59

STATION 29+03.66 TO STATION 31+11.59

NOTES:

1. A 2% SLOPE IS PROJECTED FROM THE PROFILE GRADE LINE (PGL) 8' RIGHT AND 8' LEFT OF THE CONSTRUCTION BASELINE TO ESTABLISH THE PAVEMENT ELEVATIONS FOR CENTERVILLE TURNPIKE.
2. SEE SHEET 2A FOR CROSS SLOPE TRANSITION DETAIL FOR SINGLE LEFT TURN LANES.
3. VDOT STANDARD WP-2 SHALL BE USED FOR CONSTRUCTION JOINTS BETWEEN EXISTING ASPHALT PAVEMENT AND NEW ASPHALT PAVEMENT
4. ALL PAVED SHOULDERS SHALL BE FULL DEPTH MATCHING THE TRAVEL LANE PAVEMENT SECTION.

NTS	PROJECT U000-134-842	SHEET NO. 2A(2)

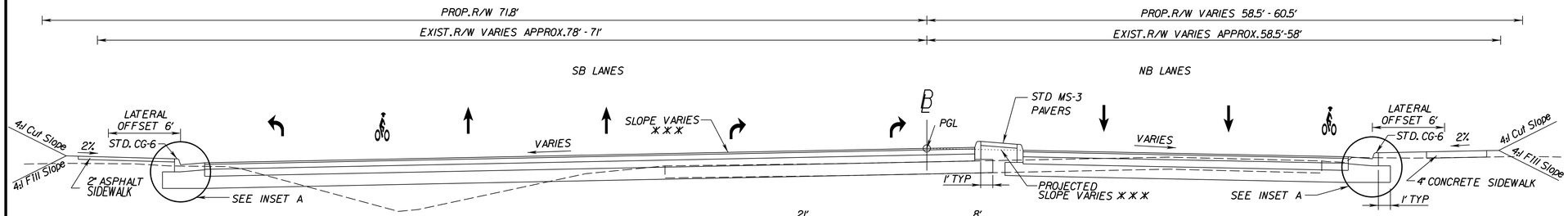
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

TYPICAL SECTIONS

CENTERVILLE TURNPIKE

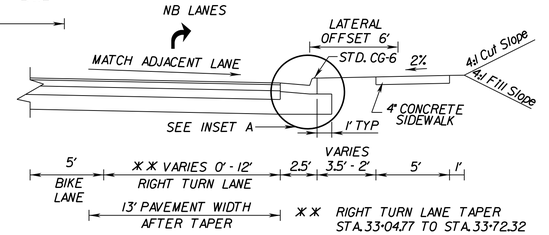
REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	2A(3)

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



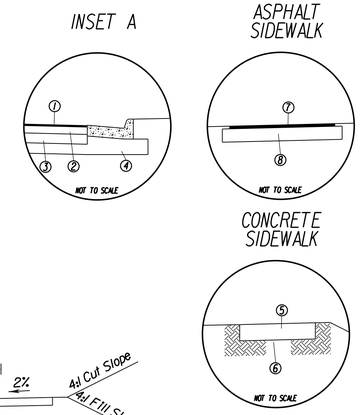
*** PAVEMENT CROSS SLOPE TRANSTION FROM 2% TO 1% FROM STA. 32+92.66 TO STA. 33+52.66

STATION	TO	STATION
32+92.66		34+93.50

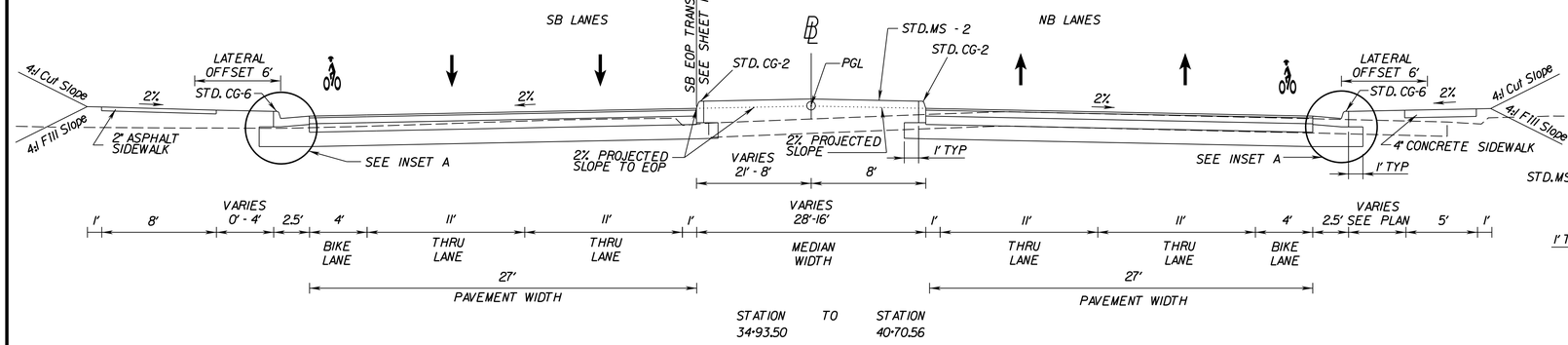


** RIGHT TURN LANE TAPER STA. 33+04.77 TO STA. 33+72.32

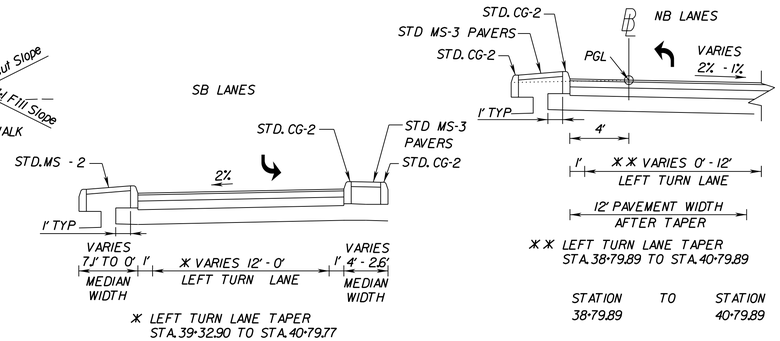
STATION	TO	STATION
33+04.77		34+45.60



1. 2" Asphalt Concrete, Type SM-9.5D
2. 3" Asphalt Concrete, Type IM-19.0A
3. 6" Asphalt Concrete Type BM-25.0A
4. 8" Aggregate Base Material, Type I, Size No.21A or 21B
5. 4" Hydraulic Cement Concrete
6. Compacted and Stabilized Subgrade
7. 2" Asphalt Concrete, Type SM-9.5A
8. 6" Aggregate Base Material, Type I, Size No.21A or 21B extended 6" beyond the edge of surface material
9. Geotextile Fiber Glass Paving Grid



STATION	TO	STATION
34+93.50		40+70.56

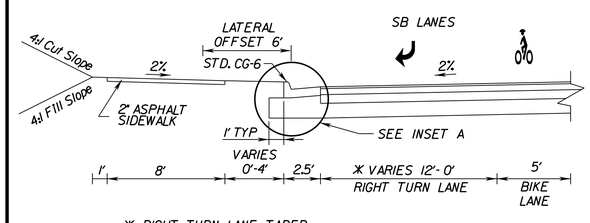


** LEFT TURN LANE TAPER STA. 38+79.89 TO STA. 40+79.89

STATION	TO	STATION
38+79.89		40+79.89

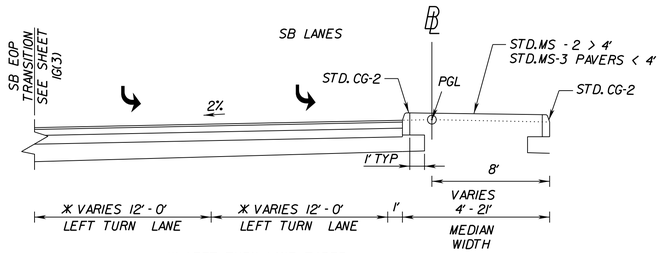
* LEFT TURN LANE TAPER STA. 39+32.90 TO STA. 40+79.77

STATION	TO	STATION
38+57.80		40+79.77



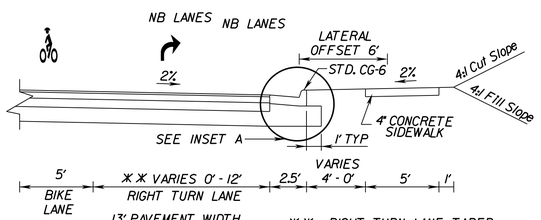
* RIGHT TURN LANE TAPER STA. 34+93.50 TO STA. 36+43.61

STATION	TO	STATION
34+93.50		36+43.61



* LEFT TURN LANE TAPER STA. 34+92.66 TO STA. 38+42.66

STATION	TO	STATION
34+93.50		38+42.66



** RIGHT TURN LANE TAPER STA. 35+81.07 TO STA. 36+81.07

STATION	TO	STATION
35+81.07		37+98.15

NOTES:

1. A 2% SLOPE IS PROJECTED FROM THE PROFILE GRADE LINE (PGL) 8' RIGHT AND 8' LEFT OF THE CONSTRUCTION BASELINE TO ESTABLISH THE PAVEMENT ELEVATIONS FOR CENTERVILLE TURNPIKE.
2. SEE SHEET 2A FOR CROSS SLOPE TRANSITION DETAIL FOR SINGLE LEFT TURN LANES.
3. VDOT STANDARD WP-2 SHALL BE USED FOR CONSTRUCTION JOINTS BETWEEN EXISTING ASPHALT PAVEMENT AND NEW ASPHALT PAVEMENT
4. ALL PAVED SHOULDERS SHALL BE FULL DEPTH MATCHING THE TRAVEL LANE PAVEMENT SECTION.

NTS	PROJECT U000-134-842	SHEET NO. 2A(3)

d109381102a4.dgn
Plotted By: RK&K - JMK

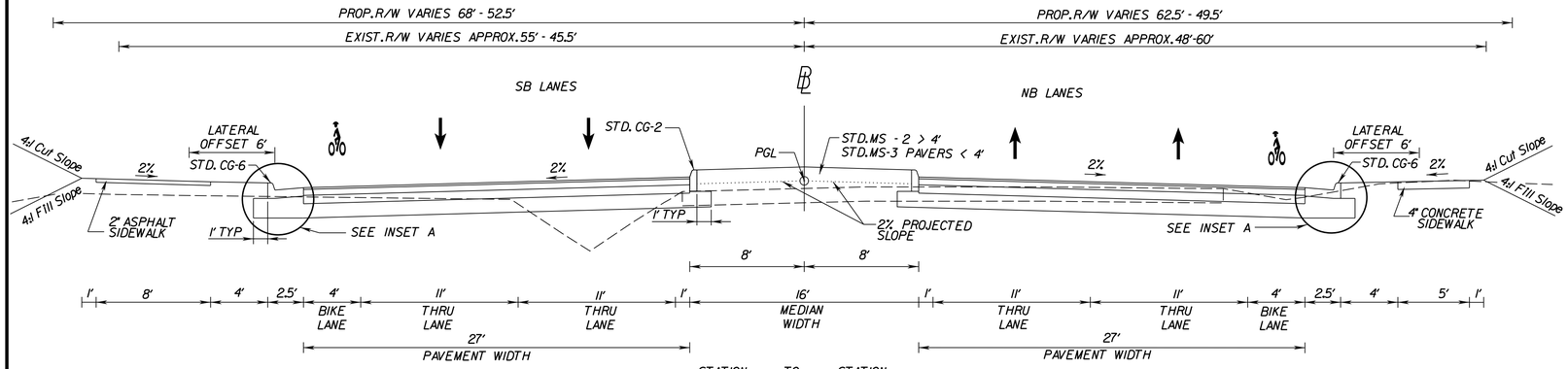
PROJECT MANAGER Laurie Murphy, P.E. (757)385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757)368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757)498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757)368-0945, 12/08/2017

TYPICAL SECTIONS

CENTERVILLE TURNPIKE

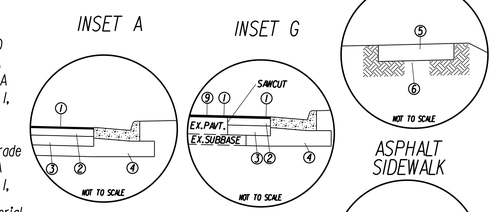
REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	2A(4)

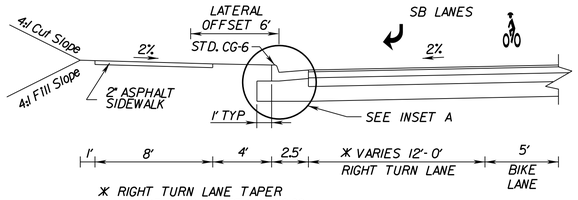
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



STATION 40+70.56 TO STATION 62+93.82

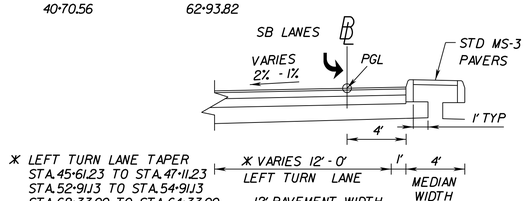
1. 2" Asphalt Concrete, Type SM-9.5D
2. 3" Asphalt Concrete, Type IM-19.0A
3. 6" Asphalt Concrete Type BM-25.0A
4. 8" Aggregate Base Material, Type 1, Size No.21A or 21B
5. 4" Hydraulic Cement Concrete
6. Compacted and Stabilized Subgrade
7. 2" Asphalt Concrete, Type SM-9.5A
8. 6" Aggregate Base Material, Type 1, Size No.21A or 21B extended 6" beyond the edge of surface material
9. Geotextile Fiber Glass Paving Grid





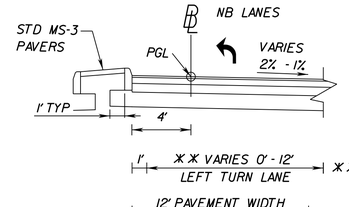
* RIGHT TURN LANE TAPER
STA.45+56.80 TO STA.47+06.80

STATION 44+06.88 TO STATION 47+06.80



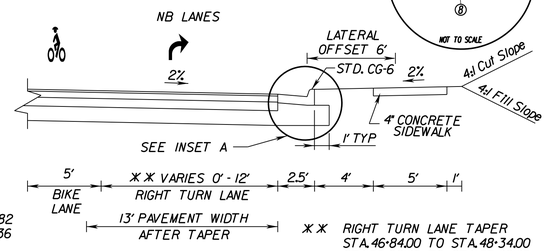
* LEFT TURN LANE TAPER
STA.45+61.23 TO STA.47+11.23
STA.52+91.13 TO STA.54+91.13
STA.62+33.00 TO STA.64+33.00

STATION	TO	STATION
44+11.23		47+11.23
50+91.13		54+91.13
60+33.00		64+33.00



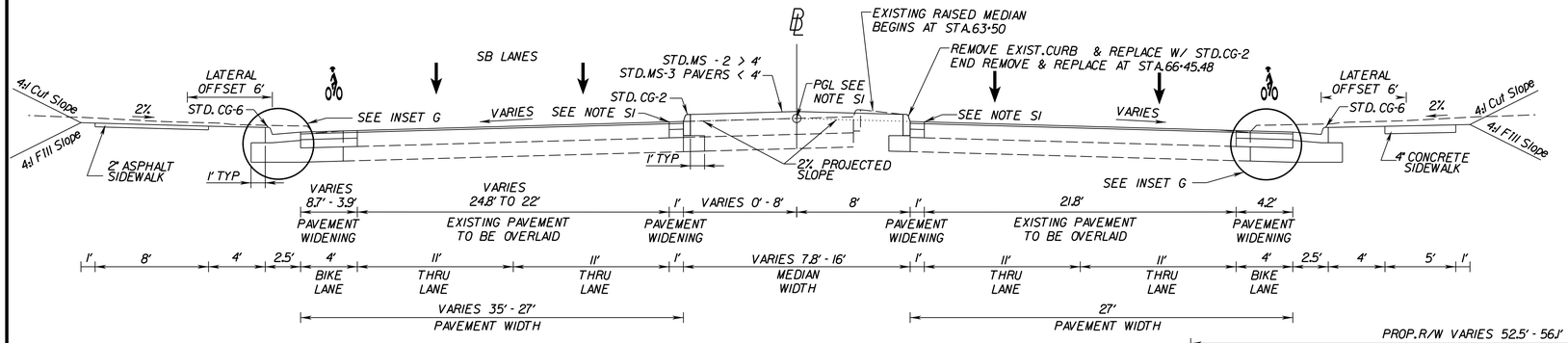
** LEFT TURN LANE TAPER
STA.46+83.82 TO STA.48+33.82
STA.55+92.36 TO STA.57+42.36

STATION	TO	STATION
40+79.89		42+69.18
46+83.82		49+83.82
55+92.36		58+92.36

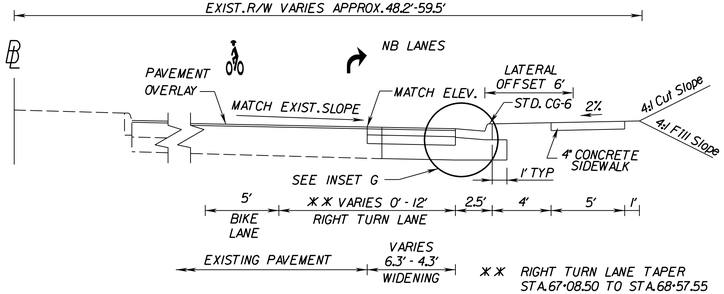


** RIGHT TURN LANE TAPER
STA.46+84.00 TO STA.48+34.00
STA.55+92.45 TO STA.57+42.45
STA.60+56.13 TO STA.61+56.13

STATION	TO	STATION
46+84.00		49+83.82
55+92.45		58+90.00
60+56.13		62+55.90

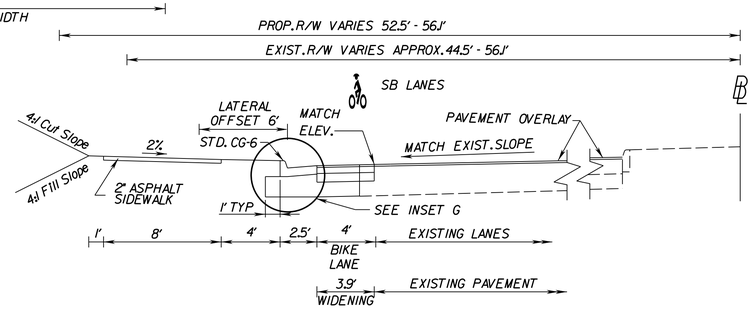


STATION 62+93.82 TO STATION 67+45.00



** RIGHT TURN LANE TAPER
STA.67+08.50 TO STA.68+57.55

STATION	TO	STATION
67+45.00		69+21.09



STATION	TO	STATION
67+45.00		69+85.92

SPECIAL SECTION NOTES:

S1. THE EXISTING PAVEMENT ELEVATIONS AT THE SAWCUT LOCATION FOR THE PROPOSED MEDIAN CURBS WILL BE USED TO ESTABLISH THE PROPOSED EDGE OF PAVEMENT ELEVATIONS BEGINNING AT STA.63+85.50 FOR THE NB LANES AND AT STA.66+30.00 FOR THE SB LANES AND THE TYPICAL 2% PROJECTED SLOPE FRO THE PGL WILL NO LONGER BE USED TO ESTABLISH PROPOSED PAVEMENT ELEVATIONS.

S2. THE PROPOSED CROSS SLOPE FOR THE SB LANES WILL BE 2% FROM STA.62+93.82 TO STA.66+30.00.FROM STA. 66+30.00 TO THE END OF THE SB LANE IMPROVEMENTS THE CROSS SLOPE WILL MATCH THE EXISTING CROSS SLOPE.

S3. THE PROPOSED CROSS SLOPE FOR THE NB LANES WILL BE 2% FROM STA.62+93.82 TO STA.63+85.50.FROM STA. 63+85.50 TO THE END OF THE NB LANE IMPROVEMENTS THE CROSS SLOPE WILL MATCH THE EXISTING CROSS SLOPE.

NOTES:

1. A 2% SLOPE IS PROJECTED FROM THE PROFILE GRADE LINE (PGL) 8' RIGHT AND 8' LEFT OF THE CONSTRUCTION BASELINE TO ESTABLISH THE PAVEMENT ELEVATIONS FOR CENTERVILLE TURNPIKE.
2. SEE SHEET 2A FOR CROSS SLOPE TRANSITION DETAIL FOR SINGLE LEFT TURN LANES.
3. VDOT STANDARD WP-2 SHALL BE USED FOR CONSTRUCTION JOINTS BETWEEN EXISTING ASPHALT PAVEMENT AND NEW ASPHALT PAVEMENT
4. ALL PAVED SHOULDERS SHALL BE FULL DEPTH MATCHING THE TRAVEL LANE PAVEMENT SECTION.

NTS	PROJECT U000-134-842	SHEET NO. 2A(4)

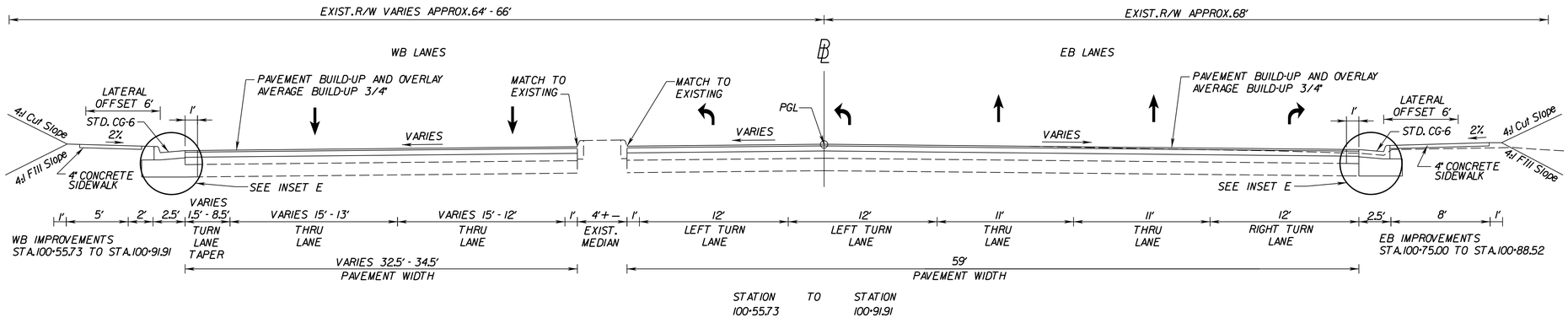
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

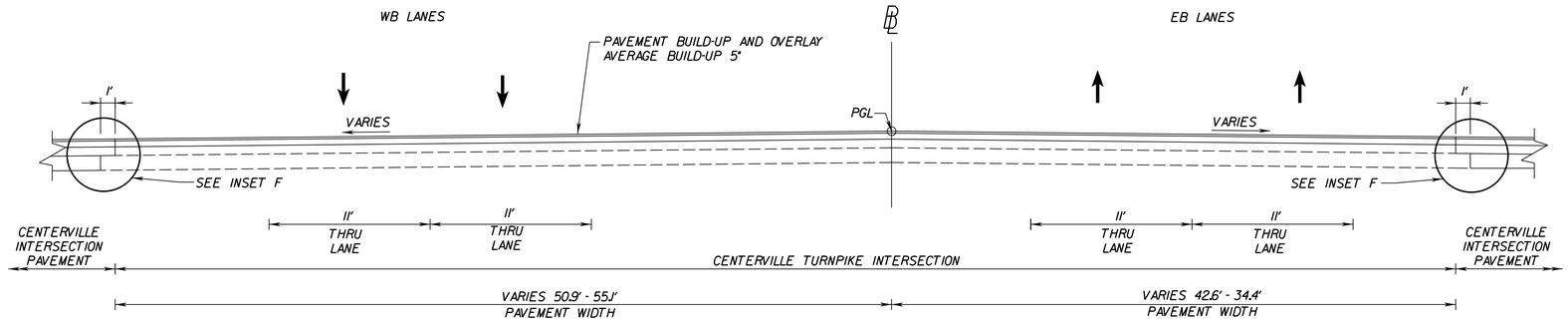
REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	2A(5)

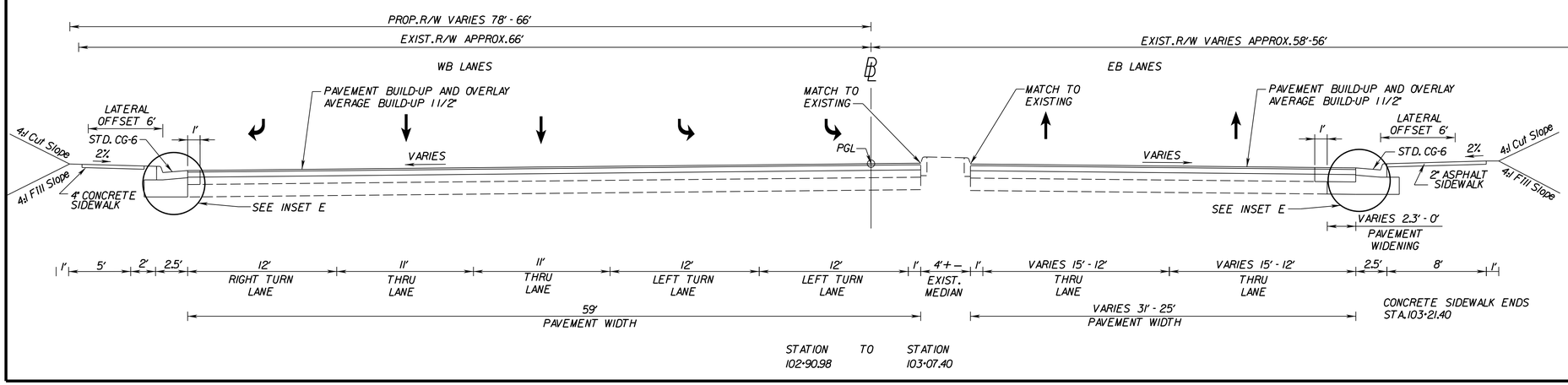
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

TYPICAL SECTIONS

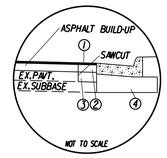
LYNNHAVEN PARKWAY



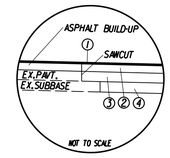




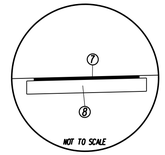
INSET E



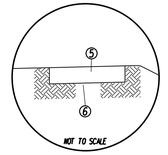
INSET F



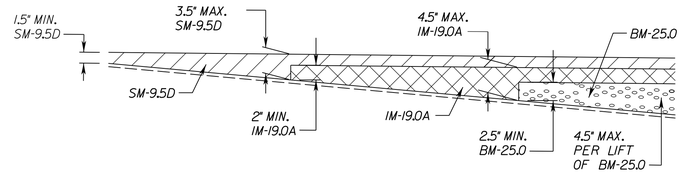
ASPHALT SIDEWALK



CONCRETE SIDEWALK



① 2" Asphalt Concrete, Type SM-9.5D
② 3" Asphalt Concrete, Type IM-19.0A
③ 6" Asphalt Concrete Type BM-25.0A
④ 8" Aggregate Base Material, Type I, Size No.21A or 21B
⑤ 4" Hydraulic Cement Concrete
⑥ Compacted and Stabilized Subgrade
⑦ 2" Asphalt Concrete, Type SM-9.5A
⑧ 6" Aggregate Base Material, Type I, Size No.21A or 21B extended 6" beyond the edge of surface material
⑨ Geotextile Fiber Glass Paving Grid



BUILD-UP DETAIL SECTION FOR RESURFACING EXISTING PAVEMENT

NOTES:

1. A 2% SLOPE IS PROJECTED FROM THE PROFILE GRADE LINE (PGL) 8' RIGHT AND 8' LEFT OF THE CONSTRUCTION BASELINE TO ESTABLISH THE PAVEMENT ELEVATIONS FOR CENTERVILLE TURNPIKE.
2. SEE SHEET 2A FOR CROSS SLOPE TRANSITION DETAIL FOR SINGLE LEFT TURN LANES.
3. VDOT STANDARD WP-2 SHALL BE USED FOR CONSTRUCTION JOINTS BETWEEN EXISTING ASPHALT PAVEMENT AND NEW ASPHALT PAVEMENT
4. ALL PAVED SHOULDERS SHALL BE FULL DEPTH MATCHING THE TRAVEL LANE PAVEMENT SECTION.

NTS	PROJECT U000-134-842	SHEET NO. 2A(5)

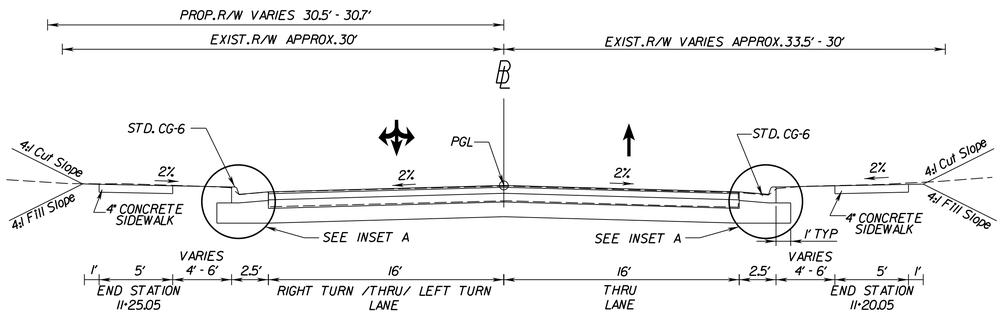
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	2A(6)

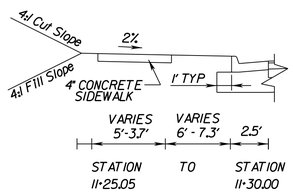
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

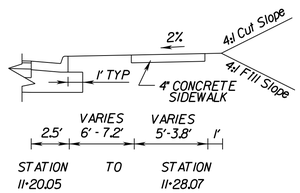
TYPICAL SECTIONS

LIVINGSTON OAK DRIVE

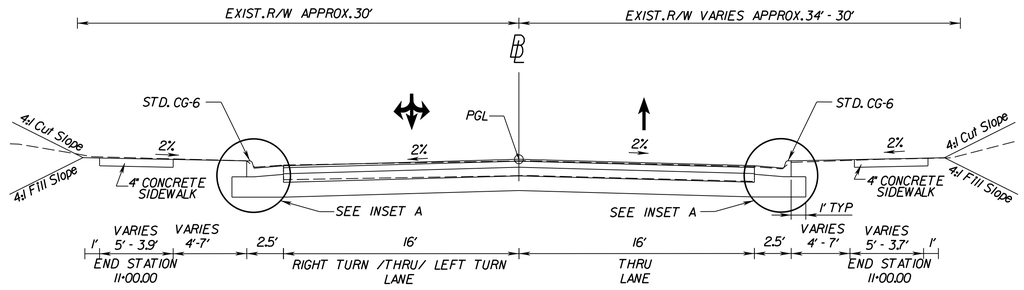


STATION 10+72.04 TO STATION 11+30.00

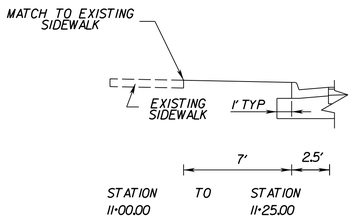


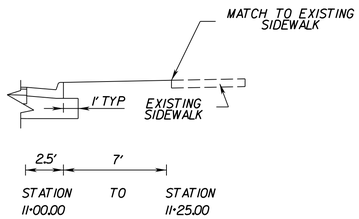


WOODHILL ROAD

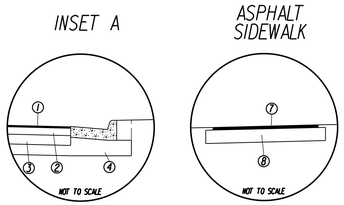


STATION 10+72.52 TO STATION 11+25.00





INSET A



① 2" Asphalt Concrete, Type SM-9.5D
② 3" Asphalt Concrete, Type IM-19.0A
③ 6" Asphalt Concrete Type BM-25.0A
④ 8" Aggregate Base Material, Type I, Size No.21A or 21B
⑤ 4" Hydraulic Cement Concrete
⑥ Compacted and Stabilized Subgrade
⑦ 2" Asphalt Concrete, Type SM-9.5A
⑧ 6" Aggregate Base Material, Type I, Size No.21A or 21B extended 6" beyond the edge of surface material
⑨ Geotextile Fiber Glass Paving Grid

NOTES:

1. A 2% SLOPE IS PROJECTED FROM THE PROFILE GRADE LINE (PGL) 8' RIGHT AND 8' LEFT OF THE CONSTRUCTION BASELINE TO ESTABLISH THE PAVEMENT ELEVATIONS FOR CENTERVILLE TURNPIKE.
2. SEE SHEET 2A FOR CROSS SLOPE TRANSITION DETAIL FOR SINGLE LEFT TURN LANES.
3. VDOT STANDARD WP-2 SHALL BE USED FOR CONSTRUCTION JOINTS BETWEEN EXISTING ASPHALT PAVEMENT AND NEW ASPHALT PAVEMENT
4. ALL PAVED SHOULDERS SHALL BE FULL DEPTH MATCHING THE TRAVEL LANE PAVEMENT SECTION.

NTS	PROJECT U000-134-842	SHEET NO. 2A(6)

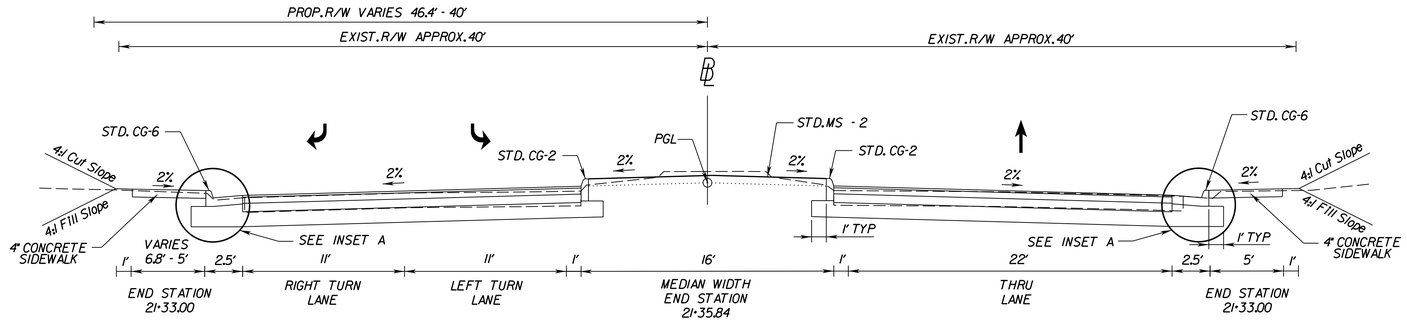
PROJECT MANAGER Laurie Murphy, P.E. (757)385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757)368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757)498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757)368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	2A(7)

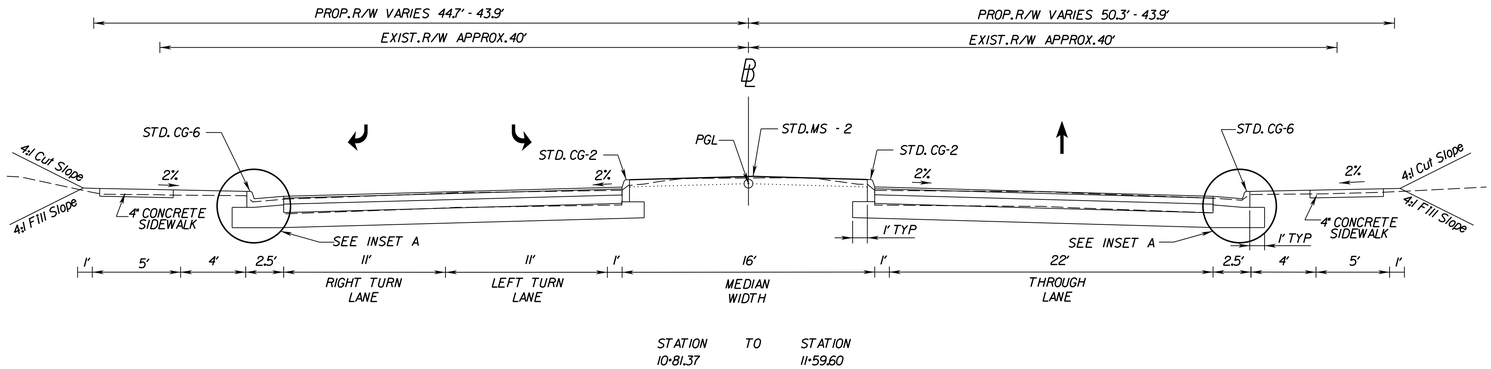
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

TYPICAL SECTIONS

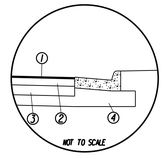
GLEN VIEW DRIVE



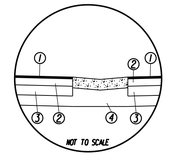
HIDDEN VALLEY DRIVE



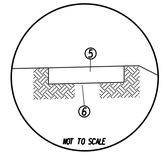
INSET A



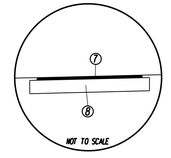
INSET D



CONCRETE SIDEWALK



ASPHALT SIDEWALK



① 2" Asphalt Concrete, Type SM-9.5D
② 3" Asphalt Concrete, Type IM-19.0A
③ 6" Asphalt Concrete Type BM-25.0A
④ 8" Aggregate Base Material, Type I, Size No.21A or 21B
⑤ 4" Hydraulic Cement Concrete
⑥ Compacted and Stabilized Subgrade
⑦ 2" Asphalt Concrete, Type SM-9.5A
⑧ 6" Aggregate Base Material, Type I, Size No.21A or 21B extended 6" beyond the edge of surface material
⑨ Geotextile Fiber Glass Paving Grid

NOTES:

1. A 2% SLOPE IS PROJECTED FROM THE PROFILE GRADE LINE (PGL) 8' RIGHT AND 8' LEFT OF THE CONSTRUCTION BASELINE TO ESTABLISH THE PAVEMENT ELEVATIONS FOR CENTERVILLE TURNPIKE.
2. SEE SHEET 2A FOR CROSS SLOPE TRANSITION DETAIL FOR SINGLE LEFT TURN LANES.
3. VDOT STANDARD WP-2 SHALL BE USED FOR CONSTRUCTION JOINTS BETWEEN EXISTING ASPHALT PAVEMENT AND NEW ASPHALT PAVEMENT
4. ALL PAVED SHOULDERS SHALL BE FULL DEPTH MATCHING THE TRAVEL LANE PAVEMENT SECTION.

NTS	PROJECT U000-134-842	SHEET NO. 2A(7)

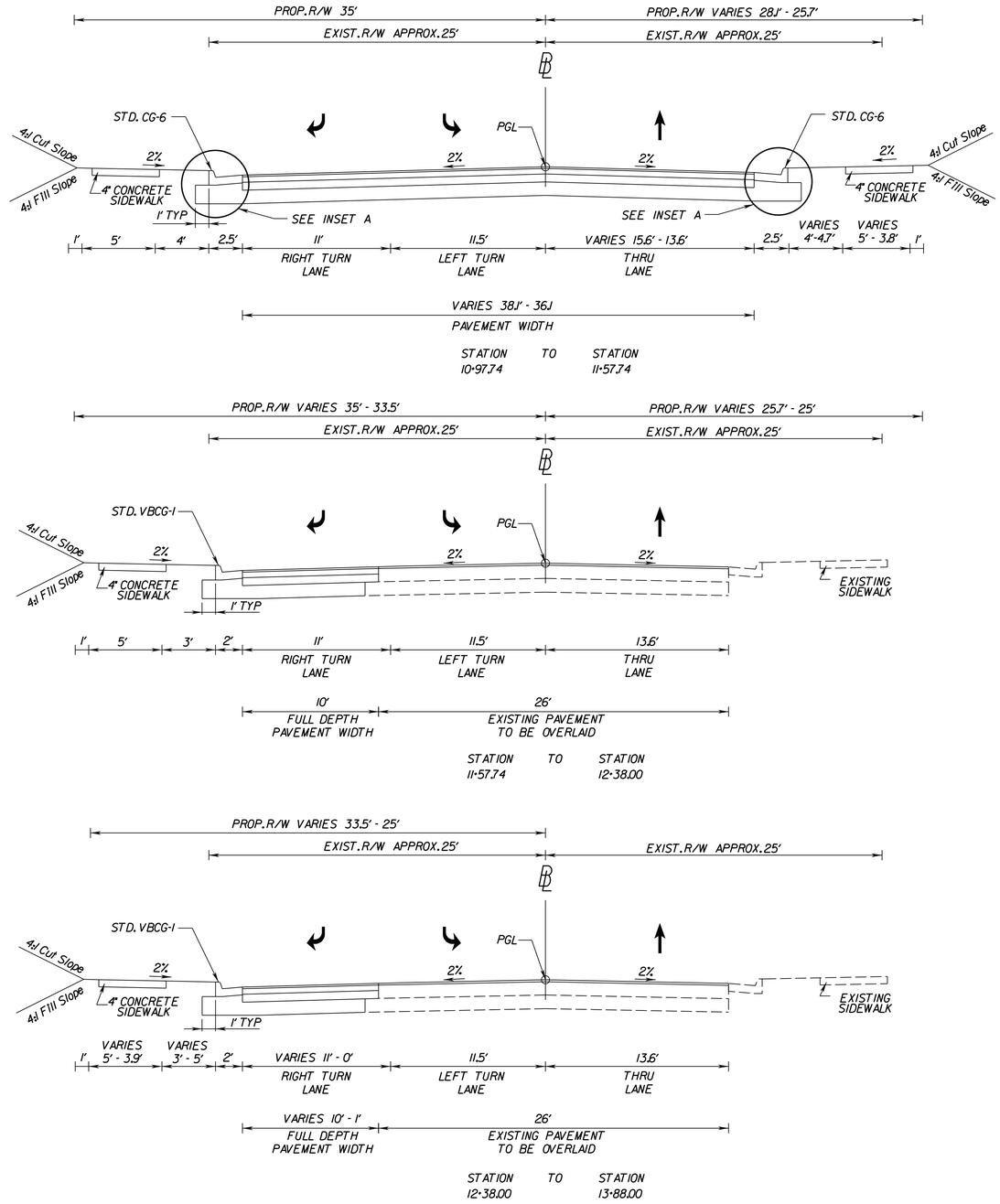
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

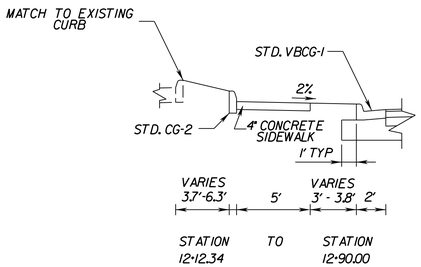
REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	2A(8)

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

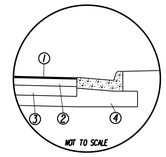
TYPICAL SECTIONS

OLD RIDGE ROAD

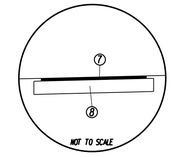




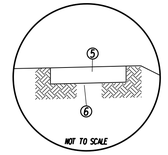
INSET A



ASPHALT SIDEWALK



CONCRETE SIDEWALK



1. 2" Asphalt Concrete, Type SM-9.5D
2. 3" Asphalt Concrete, Type IM-19.0A
3. 6" Asphalt Concrete Type BM-25.0A
4. 8" Aggregate Base Material, Type I, Size No.21A or 21B
5. 4" Hydraulic Cement Concrete
6. Compacted and Stabilized Subgrade
7. 2" Asphalt Concrete, Type SM-9.5A
8. 6" Aggregate Base Material, Type I, Size No.21A or 21B extended 6" beyond the edge of surface material
9. Geotextile Fiber Glass Paving Grid

NOTES:

1. A 2% SLOPE IS PROJECTED FROM THE PROFILE GRADE LINE (PGL) 8' RIGHT AND 8' LEFT OF THE CONSTRUCTION BASELINE TO ESTABLISH THE PAVEMENT ELEVATIONS FOR CENTERVILLE TURNPIKE.
2. SEE SHEET 2A FOR CROSS SLOPE TRANSITION DETAIL FOR SINGLE LEFT TURN LANES.
3. VDOT STANDARD WP-2 SHALL BE USED FOR CONSTRUCTION JOINTS BETWEEN EXISTING ASPHALT PAVEMENT AND NEW ASPHALT PAVEMENT
4. ALL PAVED SHOULDERS SHALL BE FULL DEPTH MATCHING THE TRAVEL LANE PAVEMENT SECTION.

NTS	PROJECT U000-134-842	SHEET NO. 2A(8)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

DRAINAGE DESCRIPTIONS

SHEET 11

(11-6) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=3.75' INV.=12.24 FLOWLINE=15.99

(11-6) TO (11-5) 74'-15" RCP REQ'D. INV. IN=12.24 INV. OUT=11.89

(11-5) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=4.08' INV.=11.88 FLOWLINE=15.96

(11-5) TO (11-3) 125'-19"x30" RCEP REQ'D. INV. IN=11.88 INV. OUT=11.65

(11-4) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=3.75' INV.=12.40 FLOWLINE=16.15

(11-4) TO (11-3) 90'-15" RCP REQ'D. INV. IN=12.40 INV. OUT=11.65

(11-3) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=4.76' INV.=11.65 FLOWLINE=16.41

(11-3) TO (11-1) 125'-19"x30" RCEP REQ'D. INV. IN=11.65 INV. OUT=11.44

(11-2) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=3.75' INV.=12.08 FLOWLINE=15.83

(11-2) TO (11-1) 87'-15" RCP REQ'D. INV. IN=12.08 INV. OUT=11.37

(11-1) 1-VDOT ST'D. DI-4B, L=6' REQ'D. H=4.64' INV.=11.37 FLOWLINE=16.01

(11-1) TO (10-9) 128'-24"x38" RCEP REQ'D. INV. IN=11.37 INV. OUT=11.21

SHEET 10

(10-10) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=3.75' INV.=11.95 FLOWLINE=15.70

(10-10) TO (10-9) 82'-15" RCP REQ'D. INV. IN=11.95 INV. OUT=11.21

(10-9A) 1-VDOT ST'D. ES-1 (15") REQ'D. INV.=13.30

(10-9A) TO (10-9) 15'-15" RCP REQ'D. INV. IN=13.30 INV. OUT=13.25

(10-9) 1-VDOT ST'D. DI-4C, L=12' REQ'D. H=4.49' INV.=11.21 FLOWLINE=15.70

(10-9) TO (10-5) 112'-24"x38" RCEP REQ'D. INV. IN=11.21 INV. OUT=11.09

(10-8) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=3.67' INV.=10.87 FLOWLINE=14.54

(10-8) TO (10-7) 34'-14"x23" RCEP REQ'D. INV. IN=10.87 INV. OUT=10.86

(10-7) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=3.68' INV.=10.86 FLOWLINE=14.54

(10-7) TO (10-6) 76'-14"x23" RCEP REQ'D. INV. IN=10.86 INV. OUT=10.85

(10-6) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=4.92' INV.=10.85 FLOWLINE=15.77

(10-6) TO (10-5) 90'-14"x23" RCEP REQ'D. INV. IN=10.85 INV. OUT=10.81

(10-5) 1-VDOT ST'D. DI-4B, L=6' REQ'D. H=5.22' INV.=10.81 FLOWLINE=16.03

(10-5) TO (10-3) 207'-29"x45" RCEP REQ'D. INV. IN=10.81 INV. OUT=10.63

(10-3) 1-VDOT ST'D. DI-4B, L=6' REQ'D. H=5.46' INV.=10.63 FLOWLINE=16.09 CONNECT TO EXISTING 3-15" RCPs

(10-3) TO (10-1) 33'-29"x45" RCEP REQ'D. INV. IN=10.63 INV. OUT=10.59

(10-1A) 1-VDOT ST'D. ES-1 (15") REQ'D. INV.=11.75

(10-1A) TO (10-1) 18'-15" RCP REQ'D. INV. IN=11.75 INV. OUT=11.65

(10-2) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=3.75' INV.=12.19 FLOWLINE=15.94

(10-2) TO (10-1) 82'-15" RCP REQ'D. INV. IN=12.19 INV. OUT=11.95

(10-1) 1-VDOT ST'D. DI-7 REQ'D. H=5.45' INV.=10.59 FLOWLINE=16.04

NOTE: MINIMUM STRUCTURE HEIGHT USED: 3.75'

SHEET 10 (CONT'D.)

(10-1) TO (9-12) 330'-29"x45" RCEP REQ'D. INV. IN=10.59 INV. OUT=10.06

SHEET 9

(9-13) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=3.75' INV.=11.92 FLOWLINE=15.67

(9-13) TO (9-12) 77'-15" RCP REQ'D. INV. IN=11.92 INV. OUT=11.63

(9-12) 1-VDOT ST'D. DI-4B, L=6' REQ'D. H=5.61' INV.=10.06 FLOWLINE=15.67

(9-12) TO (9-9) 150'-34"x53" RCEP REQ'D. INV. IN=10.06 INV. OUT=9.93

(9-11) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=3.75' INV.=11.51 FLOWLINE=15.26

(9-11) TO (9-9) 77'-15" RCP REQ'D. INV. IN=11.51 INV. OUT=11.23

(9-10) 2-VDOT ST'D. EW-1 (18") REQ'D. INV.=11.01

(9-10) TO (9-9) 25'- DUAL 18" RCP REQ'D. INV. IN=11.01 INV. OUT=10.98

(9-9) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=5.33' INV.=9.93 FLOWLINE=15.26

(9-9) TO (9-4) 190'-34"x53" RCEP REQ'D. INV. IN=9.93 INV. OUT=9.64

(9-5) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=5.33' INV.=10.16 FLOWLINE=15.49

(9-5) TO (9-4) 90'-14"x23" RCEP REQ'D. INV. IN=10.16 INV. OUT=10.15

(9-4A) 1-VDOT ST'D. ES-1 (15") REQ'D. INV.=15.50

(9-4A) TO (9-4) 15'-15" RCP REQ'D. INV. IN=15.50 INV. OUT=15.75

(9-4) 1-VDOT ST'D. DI-4B, L=6' REQ'D. H=6.11' INV.=9.64 FLOWLINE=15.75

(9-4) TO (9-2) 150'-38"x60" RCEP REQ'D. INV. IN=9.64 INV. OUT=9.53

(9-3) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=3.75' INV.=11.35 FLOWLINE=15.10

(9-3) TO (9-2) 90'-15" RCEP REQ'D. INV. IN=11.35 INV. OUT=11.30

(9-2) 1-VDOT ST'D. DI-4B, L=6' REQ'D. H=5.83' INV.=9.53 FLOWLINE=15.36

(9-2) TO (9-1) 57'-38"x60" RCEP REQ'D. INV. IN=9.53 INV. OUT=9.48

(9-1) 1-VDOT ST'D. EW-2A (38"x60") REQ'D. INV.=9.48

(9-2) TO (8-9) 150'-19"x30" RCEP REQ'D. INV. IN=9.53 INV. OUT=8.99

SHEET 8

(8-11) 2-VDOT ST'D. SWM-1 (DUAL 24") REQ'D. H=2.82' INV.=9.18 3-10" WQ ORIFICE INV.=10.00

(8-11) TO (8-9) 64'-DUAL 24" RCP REQ'D. INV. IN=9.18 INV. OUT=8.99

(8-10) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=3.75' INV.=11.08 FLOWLINE=14.83

(8-10) TO (8-9) 78'-15" RCP REQ'D. INV. IN=11.08 INV. OUT=11.03

(8-9) 1-VDOT ST'D. DI-4B, L=6' REQ'D. H=5.84' INV.=8.99 FLOWLINE=14.83

(8-9) TO (8-7) 150'-34'x53" RCEP REQ'D. INV. IN=8.99 INV. OUT=8.91

(8-8) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=3.75' INV.=10.67 FLOWLINE=14.42

(8-8) TO (8-7) 78'-15" RCP REQ'D. INV. IN=10.67 INV. OUT=10.59

(8-7) 1-VDOT ST'D. DI-4C, L=6' REQ'D. H=5.51' INV.=8.91 FLOWLINE=14.42

(8-7) TO (8-5) 97'-34"x53" RCEP REQ'D. INV. IN=8.91 INV. OUT=8.84

(8-6) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=3.75' INV.=10.89 FLOWLINE=14.64

SHEET 8 (CONT'D.)

(8-6) TO (8-5) 78'-15" RCP REQ'D. INV. IN=10.89 INV. OUT=10.87

(8-5) 1-VDOT ST'D. DI-4B, L=6' REQ'D. H=5.80' INV.=8.84 FLOWLINE=14.64

(8-5) TO (8-3) 187'-34"x53" RCEP REQ'D. INV. IN=8.84 INV. OUT=8.70

(8-4) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=3.75' INV.=10.89 FLOWLINE=14.64

(8-4) TO (8-3) 78'-15" RCP REQ'D. INV. IN=10.89 INV. OUT=10.87

(8-3) 1-VDOT ST'D. DI-4B, L=6' REQ'D. H=5.94' INV.=8.70 FLOWLINE=14.64

(8-3) TO (8-1) 86'-34"x53" RCEP REQ'D. INV. IN=8.70 INV. OUT=8.63

(8-2) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=3.75' INV.=10.69 FLOWLINE=14.44

(8-2) TO (8-1) 78'-15" RCP REQ'D. INV. IN=10.69 INV. OUT=10.58

(8-1) 1-VDOT ST'D. DI-4C, L=6' REQ'D. H=5.81' INV.=8.63 FLOWLINE=14.44

(8-1) TO (7-8) 296'-34"x53" RCEP REQ'D. INV. IN=8.63 INV. OUT=8.36

SHEET 7

(7-9) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=3.75' INV.=10.61 FLOWLINE=14.36

(7-9) TO (7-8) 83'-15" RCP REQ'D. INV. IN=10.61 INV. OUT=10.58

(7-8) 1-VDOT ST'D. DI-4B, L=6' REQ'D. H=5.87' INV.=8.36 FLOWLINE=14.23

(7-8) TO (7-6) 64'-34"x53" RCEP REQ'D. INV. IN=8.36 INV. OUT=8.30

(7-6) 1-VDOT ST'D. MH-1 REQ'D. H=5.48' INV.=8.30 FLOWLINE=13.78 CONNECT TO EXISTING 24" RCP

(7-6) TO (7-4) 47'-34"x53" RCEP REQ'D. INV. IN=8.30 INV. OUT=8.26

(7-5) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=3.75' INV.=10.02 FLOWLINE=13.77

(7-5) TO (7-4) 100'-15" RCP REQ'D. INV. IN=10.02 INV. OUT=9.89

(7-4) 1-VDOT ST'D. DI-4C, L=6' REQ'D. H=5.59' INV.=8.26 FLOWLINE=13.85

(7-4) TO (7-1) 246'-34"x53" RCEP REQ'D. INV. IN=8.26 INV. OUT=8.06

(7-3) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=3.88' INV.=10.17 FLOWLINE=14.05

(7-3) TO (7-2) 34'-15" RCP REQ'D. INV. IN=10.17 INV. OUT=10.11

(7-2) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=4.75' INV.=10.11 FLOWLINE=14.86

(7-2) TO (7-1) 68'-15" RCP REQ'D. INV. IN=10.11 INV. OUT=9.91

(7-1) 1-VDOT ST'D. DI-4C, L=10' REQ'D. H=5.52' INV.=8.06 FLOWLINE=13.58

(7-1) TO (6-11) 214'-34"x53" RCEP REQ'D. INV. IN=8.06 INV. OUT=7.85

SHEET 6

(6-15) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=3.75' INV.=10.22 FLOWLINE=13.97

(6-15) TO (7-3) 91'-15" RCP REQ'D. INV. IN=10.22 INV. OUT=10.17

(6-14) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=3.75' INV.=9.75 FLOWLINE=13.50

(6-14) TO (6-13) 62'-15" RCP REQ'D. INV. IN=9.75 INV. OUT=9.74

(6-13) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=3.99' INV.=9.74 FLOWLINE=13.73

(6-13) TO (6-12) 62'-15" RCP REQ'D. INV. IN=9.74 INV. OUT=9.71

SHEET 6 (CONT'D.)

(6-12) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=5.17' INV.=9.71 FLOWLINE=14.88

(6-12) TO (6-11) 113'-15" RCP REQ'D. INV. IN=9.71 INV. OUT=9.62

(6-11) 1-VDOT ST'D. DI-4B, L=6' REQ'D. H=6.80' INV.=7.85 FLOWLINE=14.65

(6-11) TO (6-9) 159'-34"x53" RCEP REQ'D. INV. IN=7.85 INV. OUT=7.68

(6-10) 1-CONNECT TO EXIST. 30" RCP INV.=8.67

(6-10) TO (6-9) 233'-30" RCP REQ'D. INV. IN=8.67 INV. OUT=8.38

(6-9) 1-VDOT ST'D. MH-1 REQ'D. H=6.98' INV.=7.68 FLOWLINE=14.66

(6-9) TO (6-4) 46'-34"x53" RCEP REQ'D. INV. IN=7.68 INV. OUT=7.60

(6-8) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=3.75' INV.=9.75 FLOWLINE=13.50

(6-8) TO (6-7) 68'-15" RCP REQ'D. INV. IN=9.75 INV. OUT=9.74

(6-7) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=4.38' INV.=9.74 FLOWLINE=14.12

(6-7) TO (6-7A) 55'-15" RCP REQ'D. INV. IN=9.74 INV. OUT=9.73

(6-7A) 1-VDOT ST'D. MH-1 REQ'D. H=5.30' INV.=9.73 FLOWLINE=15.03

(6-7A) TO (6-6) 50'-15" RCP REQ'D. INV. IN=9.73 INV. OUT=9.72

(6-6) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=5.31' INV.=9.72 FLOWLINE=15.03

(6-6) TO (6-5) 71'-15" RCP REQ'D. INV. IN=9.72 INV. OUT=9.67

(6-5) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=5.78' INV.=9.67 FLOWLINE=9.64

(6-5) TO (6-4) 42'-15" RCP REQ'D. INV. IN=9.67 INV. OUT=9.64

(6-4) 1-VDOT ST'D. DI-4B, L=6' REQ'D. H=7.22' INV.=7.60 FLOWLINE=14.82

(6-4) TO (6-1) 100'-34"x53" RCEP REQ'D. INV. IN=7.60 INV. OUT=7.43

(6-3) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=3.75' INV.=10.42 FLOWLINE=14.17

(6-3) TO (6-2) 71'-15" RCP REQ'D. INV. IN=10.42 INV. OUT=10.40

(6-2) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=4.58' INV.=10.40 FLOWLINE=14.98

(6-2) TO (6-1) 33'-15" RCP REQ'D. INV. IN=10.40 INV. OUT=10.38

(6-1) 1-VDOT ST'D. DI-4B, L=6' REQ'D. H=7.43' INV.=6.76 FLOWLINE=14.19

(6-1) TO (5-14) 172'-38"x60" RCEP REQ'D. INV. IN=6.76 INV. OUT=6.61

SHEET 5

(5-16) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=3.75' INV.=10.05 FLOWLINE=13.80

(5-16) TO (5-15) 57'-15" RCP REQ'D. INV. IN=10.05 INV. OUT=10.01

(5-15) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=4.57' INV.=10.01 FLOWLINE=14.58

(5-15) TO (5-14) 39'-15" RCP REQ'D. INV. IN=10.01 INV. OUT=9.97

(5-14) 1-VDOT ST'D. DI-4B, L=6' REQ'D. H=7.07' INV.=6.61 FLOWLINE=13.68 CONNECT TO EXISTING 15" RCP

(5-14) TO (5-12) 151'-38"x60" RCEP REQ'D. INV. IN=6.61 INV. OUT=6.47

(5-13) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=3.75' INV.=9.71 FLOWLINE=13.46

(5-13) TO (5-12) 100'-15" RCP REQ'D. INV. IN=9.71 INV. OUT=9.67

SHEET 5 (CONT'D.)

(5-12) 1-VDOT ST'D. DI-4B, L=6' REQ'D. H=6.56' INV.=6.47 FLOWLINE=13.03 CONNECT TO EXISTING 15" RCP

(5-12) TO (5-10) 143'-38"x60" RCEP REQ'D. INV. IN=6.47 INV. OUT=6.33

(5-11) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=3.75' INV.=9.28 FLOWLINE=13.03

(5-11) TO (5-10) 99'-15" RCP REQ'D. INV. IN=9.28 INV. OUT=9.25

(5-10) 1-VDOT ST'D. DI-4B, L=6' REQ'D. H=6.30' INV.=6.33 FLOWLINE=12.63

(5-10) TO (5-4) 118'-38"x60" RCEP REQ'D. INV. IN=6.33 INV. OUT=6.21

(5-8) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=3.75' INV.=7.75 FLOWLINE=11.50

(5-8) TO (5-7) 35'-15" RCP REQ'D. INV. IN=7.75 INV. OUT=7.00

(5-7) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=4.50' INV.=7.00 FLOWLINE=11.50

(5-7) TO (5-6) 87'-24" RCP REQ'D. INV. IN=7.00 INV. OUT=6.72

(5-6) 1-VDOT ST'D. MH-1 REQ'D. H=5.85' INV.=6.72 FLOWLINE=12.57

(5-6) TO (5-5) 41'-24" RCP REQ'D. INV. IN=6.72 INV. OUT=6.59

(5-5) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=6.18' INV.=6.59 FLOWLINE=12.77

(5-5) TO (5-4) 81'-36" RCP REQ'D. INV. IN=6.59 INV. OUT=6.55

(5-4) 1-VDOT ST'D. DI-4C, L=6' REQ'D. H=6.50' INV.=6.21 FLOWLINE=12.71

(5-4) TO (5-3) 164'-38"x60" RCEP REQ'D. INV. IN=6.21 INV. OUT=5.97

(5-3) 1-VDOT ST'D. DI-4B, L=6' REQ'D. H=6.99' INV.=5.97 FLOWLINE=12.96

(5-3) TO (5-2) 50'-38"x60" RCEP REQ'D. INV. IN=5.97 INV. OUT=5.89

(5-2) 1-VDOT ST'D. EW-2A (38"x60") REQ'D. INV.=5.89

(5-3) TO (4-13) 74'-19"x30" RCEP REQ'D. INV. IN=5.97 INV. OUT=5.50

(5-1) 2-VDOT ST'D. SWM-1 (DUAL 24") REQ'D. H=4.60' INV.=5.70 3-10" WQ ORIFICE INV.=9.00

(5-1) TO (4-13) 64'-DUAL 24" RCP REQ'D. INV. IN=5.70 INV. OUT=5.50

SHEET 4

(4-14) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=3.75' INV.=9.07 FLOWLINE=12.82

(4-14) TO (4-13) 78'-15" RCP REQ'D. INV. IN=9.07 INV. OUT=8.98

(4-13A) 1-VDOT ST'D. ES-1 (15") REQ'D. INV.=8.10

(4-13A) TO (4-13) 12'-15" RCP REQ'D. INV. IN=8.10 INV. OUT=8.05

(4-13) 1-VDOT ST'D. DI-4C, L=6' REQ'D. H=7.32' INV.=5.50 FLOWLINE=12.82

(4-13) TO (4-9A) 185'-48" RCP REQ'D. INV. IN=5.50 INV. OUT=5.34

(4-9A) 1-VDOT ST'D. MH-1 REQ'D. H=7.48' INV.=5.34 FLOWLINE=12.82 CONNECT TO EXISTING 15" RCP

(4-9A) TO (4-9) 80'-48" RCP REQ'D. INV. IN=5.34 INV. OUT=5.27

SHEET 4 (CONT'D.)

(4-11) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=3.75' INV.=9.22 FLOWLINE=12.97

(4-11) TO (4-10) 69'-15" RCP REQ'D. INV. IN=9.22 INV. OUT=8.45

(4-10) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=4.38' INV.=8.45 FLOWLINE=12.83

(4-10) TO (4-9) 78'-15" RCP REQ'D. INV. IN=8.45 INV. OUT=7.32

(4-9) 1-VDOT ST'D. DI-4C, L=6' REQ'D. H=7.56' INV.=5.27 FLOWLINE=12.83

(4-9) TO (4-7) 190'-48" RCP REQ'D. INV. IN=5.27 INV. OUT=5.14

(4-8) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=3.75' INV.=9.15 FLOWLINE=12.90

(4-8) TO (4-7) 80'-15" RCP REQ'D. INV. IN=9.15 INV. OUT=9.14

(4-7) 1-VDOT ST'D. DI-4B, L=6' REQ'D. H=7.80' INV.=5.14 FLOWLINE=12.94

(4-7) TO (4-1) 126'-48" RCP REQ'D. INV. IN=5.14 INV. OUT=5.05

(4-6) 1-VDOT ST'D. MH-1 REQ'D. H=6.16' INV.=6.65 FLOWLINE=12.81 CONNECT TO EXISTING 18" RCP

(4-6) TO (4-1) 75'-18" RCP REQ'D. INV. IN=6.65 INV. OUT=6.55

(4-5) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=3.75' INV.=7.75 FLOWLINE=11.50

(4-5) TO (4-4) 40'-15" RCP REQ'D. INV. IN=7.75 INV. OUT=7.73

(4-4) 1-VDOT ST'D. DI-3B, L=12' REQ'D. H=3.77' INV.=7.73 FLOWLINE=11.50

(4-4) TO (4-3) 92'-15" RCP REQ'D. INV. IN=7.73 INV. OUT=7.20

(4-3) 1-VDOT ST'D. MH-1 REQ'D. H=5.17' INV.=7.20 FLOWLINE=12.37

(4-3) TO (4-2) 38'-15" RCP REQ'D. INV. IN=7.20 INV. OUT=6.99

(4-2) 1-VDOT ST'D. DI-3B, L=6' REQ'D. H=5.60' INV.=6.99 FLOWLINE=12.59

(4-2) TO (4-1) 67'-15" RCP REQ'D. INV. IN=6.99 INV. OUT=6.37

(4-1) 1-VDOT ST'D. DI-4C, L=6' REQ'D. H=7.76' INV.=5.05 FLOWLINE=12.81

(4-1) TO (3-4) 345'-48" RCP REQ'D. INV. IN=5.05 INV. OUT=4.73

SHEET 3

(3-5) 1-VDOT ST'D. DI-7 REQ'D. H=3.75' INV.=8.87 FLOWLINE=12.62

(3-5) TO (3-4) 48'-15" RCP REQ'D. INV. IN=8.87 INV. OUT=8.80

(3-4) 1-VDOT ST'D. DI-7 REQ'D. H=7.97' INV.=4.73 FLOWLINE=12.70

(3-4) TO (3-3) 150'-48" RCP REQ'D. INV. IN=4.73 INV. OUT=4.59

(3-3) 1-VDOT ST'D. DI-7 REQ'D. H=7.67' INV.=4.59 FLOWLINE=12.26

(3-3) TO (3-2) 35'-48" RCP REQ'D. INV. IN=4.59 INV. OUT=4.55

(3-2) 1-VDOT ST'D. DI-7 REQ'D. H=7.71' INV.=4.55 FLOWLINE=12.26

(3-2) TO (3-1) 56'-48" RCP REQ'D. INV. IN=4.55 INV. OUT=4.50

(3-1) 1-VDOT ST'D. EW-1 (48") REQ'D. INV.=4.50

Rummel, Klepper & Kahl, LLP
Virginia Beach, Virginia
HYDRAULIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C501	2B(1)

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.
U000-134-842	2B(1)

12/1/2020

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

DRAINAGE DESCRIPTIONS

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C501,	2B(2)

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
Virginia Beach, Virginia
HYDRAULIC ENGINEER

SHEET 11 (CONT'D.)

(11-12) 1-VDOT ST'D. DI-3B, L=4' REQ'D.
H=6.15' INV.=8.70 FLOWLINE=14.75

(11-12) TO (11-13) 46'-15" RCP REQ'D.
INV. IN=8.70 INV. OUT=8.45

(11-13) 1-VDOT ST'D. DI-3C, L=6' REQ'D.
H=6.16' INV.=8.45 FLOWLINE=14.61

(11-13) TO (12-5) 46'-15" RCP REQ'D.
INV. IN=8.45 INV. OUT=8.20

(11-7) 1-VDOT ST'D. DI-3B, L=4' REQ'D.
H=4.72' INV.=10.13 FLOWLINE=14.85

(11-8) 1-VDOT ST'D. DI-3C, L=6' REQ'D.
H=5.17' INV.=9.60 FLOWLINE=14.77

(11-8) TO (12-6) 47'-15" RCP REQ'D.
INV. IN=9.80 INV. OUT=9.60

SHEET 12

(12-6) 1-VDOT ST'D. DI-3B, L=4' REQ'D.
H=5.17' INV.=9.60 FLOWLINE=14.77

(12-6) TO (12-1) 104'-15" RCP REQ'D.
INV. IN=9.60 INV. OUT=7.27

(12-5) 1-VDOT ST'D. DI-3B, L=4' REQ'D.
H=6.42' INV.=8.20 FLOWLINE=14.62

(12-5) TO (12-4) 98'-15" RCP REQ'D.
INV. IN=8.20 INV. OUT=7.60

(12-4) 1-VDOT ST'D. DI-3B, L=4' REQ'D.
H=7.11' INV.=7.60 FLOWLINE=14.71

(12-4) TO (12-3) 10'-15" RCP REQ'D.
INV. IN=7.60 INV. OUT=7.50

(12-3) 1-VDOT ST'D. MH-1 REQ'D.
H=7.12' INV.=7.50 FLOWLINE=14.62

(12-2) 1-VDOT ST'D. MH-1 REQ'D.
H=7.32' INV.=7.30 FLOWLINE=14.62

(12-2) TO (12-1) 5'-15" RCP REQ'D.
INV. IN=7.30 INV. OUT=7.27

(12-1) 1-VDOT ST'D. DI-3A, L=6' REQ'D.
H=7.73' INV.=7.27 FLOWLINE=15.00

NOTE: MINIMUM STRUCTURE HEIGHT USED: 3.75'

	PROJECT	SHEET NO.
	U000-134-842	2B(2)

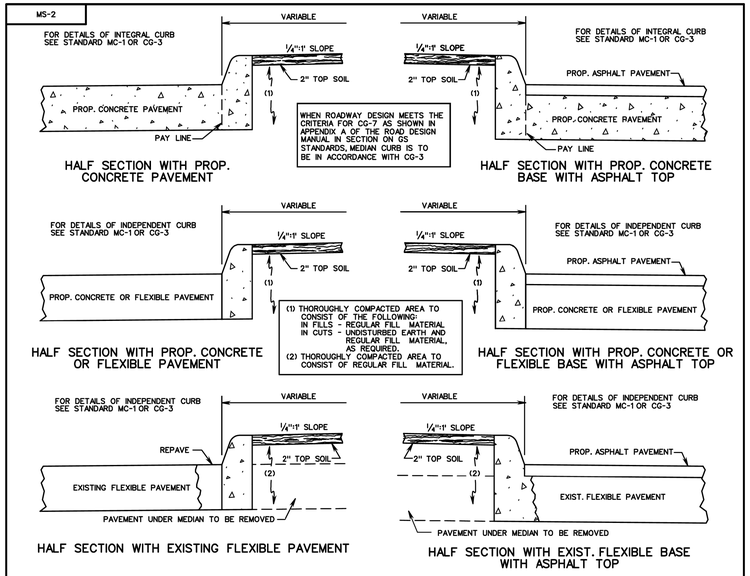
PROJECT MANAGER <Project Mgr. Name (000).000-0000 (District)>
SURVEYED BY, DATE <Surveyor Name (000).000-0000 (District)>
DESIGN BY <Designer Name (000).000-0000 (District)>
SUBSURFACE UTILITY BY, DATE <Surveyor Name (000).000-0000 (District)>

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	2C

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

2016 ROAD & BRIDGE STANDARDS

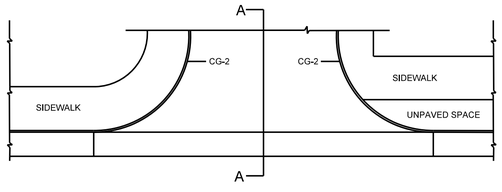
MS-2

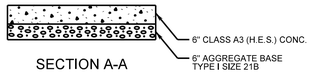


VDOT ROAD AND BRIDGE STANDARDS		STANDARD RAISED GRASS MEDIAN STRIPS	SPECIFICATION REFERENCE
SHEET 1 OF 1	REVISION DATE	VIRGINIA DEPARTMENT OF TRANSPORTATION	502
202.04			

2016 ROAD & BRIDGE STANDARDS

CG-11(MOD)





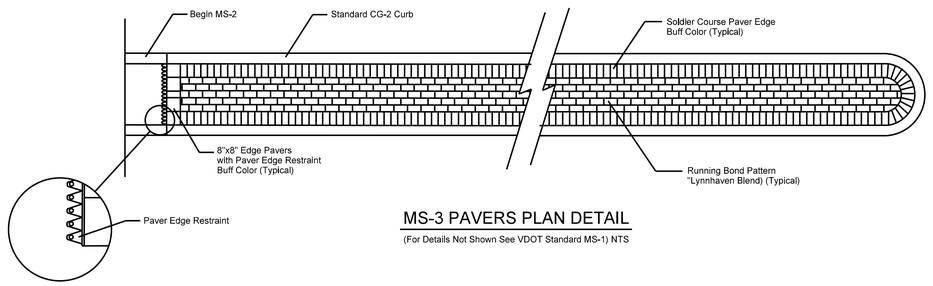
GENERAL NOTES

1. CG-11 (MOD) SHALL BE IN ACCORDANCE WITH VDOT STANDARD CG-11 WITH THE EXCEPTION THAT CLASS 3A (H.E.S.) CONCRETE IS TO BE USED.

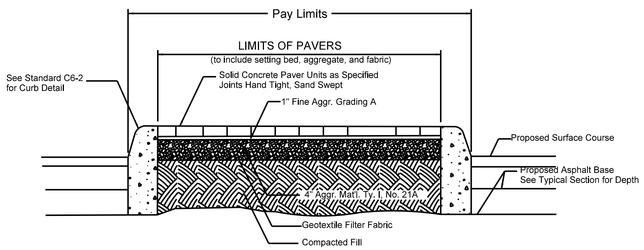
METHOD OF TREATMENT
(CONNECTION FOR STREET INTERSECTIONS AND COMMERCIAL ENTRANCES)

SHEET 1 OF 1

SOLID PAVING UNITS (MS-3 PAVERS)



MS-3 PAVERS PLAN DETAIL
(For Details Not Shown See VDOT Standard MS-1) NTS



MS-3 PAVERS SECTION DETAIL

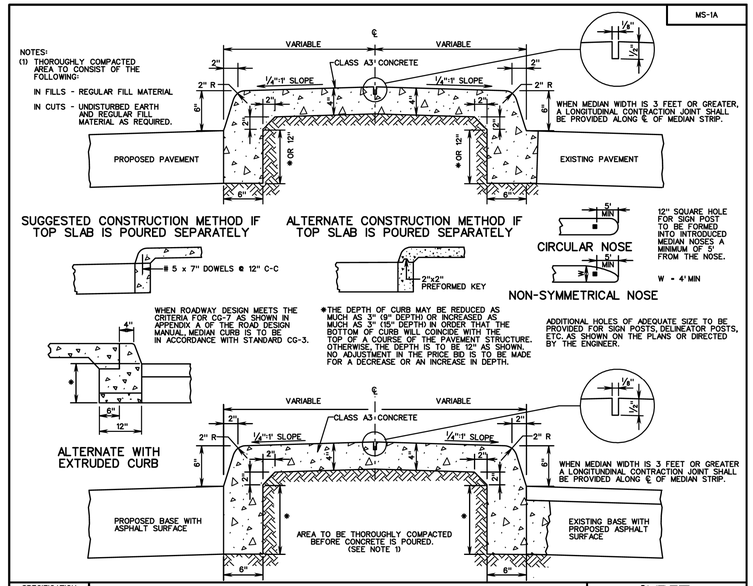
GENERAL NOTES

1. PAVING UNITS SHALL MATCH THE FORM AND COLOR USED ON THE PREVIOUSLY CONSTRUCTED PORTION OF LYNNHAVEN PRKWY. SEE ATTACHED SPECIAL PROVISIONS FOR MATERIALS SPECIFICATION. A SAMPLE OF THE PAVING UNITS TO BE USED SHALL BE SUBMITTED AND THE FINAL COLOR SELECTION SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT.
2. JOINTS (EXCEPT FOR EXPANSION JOINTS) BETWEEN PAVING UNITS SHALL BE HAND TIGHT, SAND SWEPT AND A MAX. OF ¼" WIDE FOR CONCRETE AND FOR BRICK.
3. PAVING WORK WILL BE PLUMB AND TRUE TO LINE AND GRADE AND SHALL BE INSTALLED TO PROPERLY COINCIDE WITH ADJACENT WORK AND ELEVATIONS. THE CUTTING OF THE PAVERS SHALL BE CLEAN WITH NO APPARENT SPALLS OR BREAKS.
4. CONSTRUCTION JOINTS SHALL BE FORMED AROUND ALL APPURTENANCES SUCH AS MANHOLES AND WATER METERS. THESE JOINTS SHALL BE FILLED WITH JOINT FILLER AND SEALED WITH SILICONE JOINT SEALANT ACCORDING TO STD/ PR-2
5. PATTERN FOR PAVING SHALL BE AS DETAILED WITH SOLDIER COURSE EDGER
6. PAVING UNITS SHALL BE PLACED AND VIBRATED ACCORDING TO MANUFACTURER'S RECOMMANDATIONS
7. HIGH WATER TABLE, WET SOILS OR POOR SOILS MAY REQUIRE ADDITIONAL DRAINAGE AS SHOWN ON PLANES OR DIRECTED BY THE ENGINEER

MEDIAN PAY ITEM	PAY UNIT
MS-3 PAVERS	SQUARE YARDS (S.Y.)

2016 ROAD & BRIDGE STANDARDS

MS-1A



SPECIFICATION REFERENCE	STANDARD SOLID CONCRETE RAISED MEDIAN STRIP	VDOT ROAD AND BRIDGE STANDARDS
502	VIRGINIA DEPARTMENT OF TRANSPORTATION	REVISION DATE / SHEET 1 OF 1 / 202.03

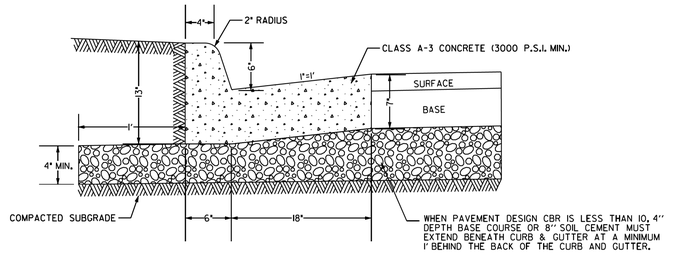
2016 ROAD & BRIDGE STANDARDS

NTS	PROJECT U000-134-842	SHEET NO. 2C

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.	915	U000-134-842, RW-201, C-501	2C(1)

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



NOTES:

1. VDOT CG-7 AND CG-3 ARE REQUIRED FOR USE IN CITY RIGHT-OF-WAY, OR OTHER VDOT STANDARD CURB AND GUTTER WHERE POSTED SPEED OF VEHICLES WILL BE ≥ 45 MPH.
2. VDOT CG-2 OR CITY VBCG-1 NOT REQUIRED, BUT PERMITTED TO BE USED AS THE REQUIRED PERIMETER CURB AROUND PARKING ON PRIVATE PROPERTY.
3. ALL STREETS IN R.O.W. MUST USE CG-6 OR CG-2 OR OTHER APPROPRIATE VDOT STANDARD CURBS AND GUTTERS. VBCG-1 AND OTHER SPECIAL DESIGNS MUST BE APPROVED BY THE CITY REVIEW ENGINEER.

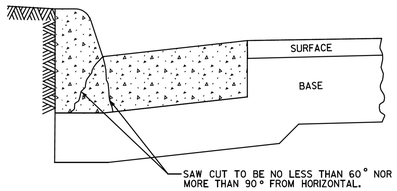
(N.T.S.)
REV. 5/14

CITY OF VIRGINIA BEACH
STANDARD
COMBINATION CURB & GUTTER VBCG-1
PUBLIC WORKS | B-15

2016 ROAD & BRIDGE STANDARDS

CONSTRUCTION NOTES

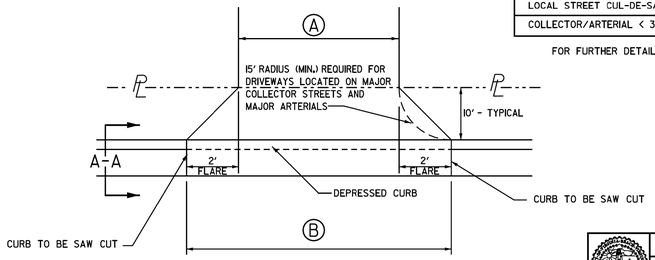
1. SAW CUT TO BE COATED WITH AN APPLICATION OF A TWO (2) COMPONENT EPOXY BONDING COMPOUND IN ACCORDANCE WITH THE V.D.O.T. SPECIFICATIONS.
2. THIS METHOD OF CONSTRUCTION WILL BE ALLOWED AS AN ALTERNATE IN AREAS WHERE CURB AND GUTTER WAS PREVIOUSLY INSTALLED, EXCEPT WHERE AN EXPANSION JOINT IS INSTALLED WITHIN THE LIMITS OF THE PROPOSED ENTRANCE OR IN CASE OF FAULTY WORKMANSHIP. IN THIS INSTANCE, COMPLETE REMOVAL OF THE CURB AND GUTTER.



SECTION A-A

	A	B
LOCAL STREET	9' - 20'	13' - 24'
LOCAL STREET CUL-DE-SAC	8' - 20'	12' - 24'
COLLECTOR/ARTERIAL < 35 MPH	12' - 20'	16' - 24'

FOR FURTHER DETAILS SEE SECTION 3.10.4



(N.T.S.)
4/2010

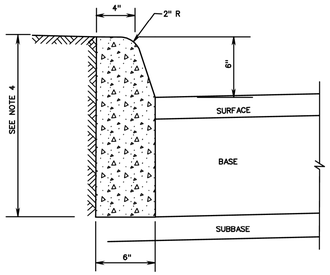
CITY OF VIRGINIA BEACH
STANDARD
RESIDENTIAL ENTRANCES
PUBLIC WORKS | D-5

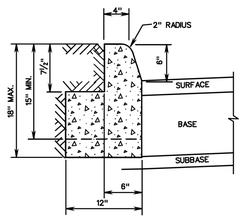
2016 ROAD & BRIDGE STANDARDS

CG-2

NOTES:

1. THIS ITEM MAY BE PRECAST OR CAST IN PLACE.
2. CONCRETE TO BE CLASS A3 IF CAST IN PLACE, 4000 PSI IF PRECAST.
3. CURB HAVING A RADIUS OF 300 FEET OR LESS (ALONG FACE OF CURB) WILL BE PAID FOR AS RADIAL CURB.
4. THE DEPTH OF CURB MAY BE REDUCED AS MUCH AS 3" (15" DEPTH) OR INCREASED AS MUCH AS 3" (21" DEPTH) IN ORDER THAT THE BOTTOM OF CURB WILL COINCIDE WITH THE TOP OF A COURSE OF THE PAVEMENT SUBSTRUCTURE. OTHERWISE, THE DEPTH IS TO BE 18" AS SHOWN. NO ADJUSTMENT IN THE PRICE BID IS TO BE MADE FOR A DECREASE OR AN INCREASE IN DEPTH.
5. CG-2 IS TO BE USED ON ROADWAYS MEETING THE REQUIREMENTS FOR CG-6 AS SHOWN IN APPENDIX A OF THE VDOT ROAD DESIGN MANUAL, IN THE SECTION ON GS URBAN STANDARDS.





ACCEPTABLE ALTERNATIVE IF CURB IS EXTRUDED

SPECIFICATION REFERENCE	STANDARD 6" CURB	VDOT ROAD AND BRIDGE STANDARDS
105, 502	VIRGINIA DEPARTMENT OF TRANSPORTATION	REVISION DATE: — SHEET 1 OF 1 — 201.01

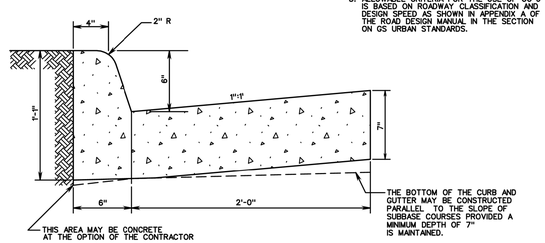
2016 ROAD & BRIDGE STANDARDS

2016 ROAD & BRIDGE STANDARDS

CG-6

NOTES:

1. THIS ITEM MAY BE PRECAST OR CAST IN PLACE.
2. CONCRETE TO BE CLASS A3 IF CAST IN PLACE, 4000 PSI IF PRECAST.
3. COMBINATION CURB & GUTTER HAVING A RADIUS OF 300 FEET OR LESS (ALONG FACE OF CURB) SHALL BE PAID FOR AS RADIAL COMBINATION CURB & GUTTER.
4. FOR USE WITH STABILIZED OPEN-GRADED DRAINAGE LAYER, THE BOTTOM OF THE CURB & GUTTER SHALL BE CONSTRUCTED PARALLEL TO THE SLOPE OF SUBBASE COURSES AND TO THE DEPTH OF THE PAVEMENT.
5. ALLOWABLE CRITERIA FOR THE USE OF CG-6 IS BASED ON ROADWAY CLASSIFICATION AND DESIGN SPEED AS SHOWN IN APPENDIX A OF THE ROAD DESIGN MANUAL IN THE SECTION ON GS URBAN STANDARDS.



SPECIFICATION REFERENCE	COMBINATION 6" CURB AND GUTTER	VDOT ROAD AND BRIDGE STANDARDS
105, 502	VIRGINIA DEPARTMENT OF TRANSPORTATION	REVISION DATE: — SHEET 1 OF 1 — 201.03

2016 ROAD & BRIDGE STANDARDS

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.	915	U000-134-842, RW-201, C-501	2C(2)

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

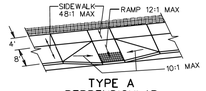
2016 ROAD & BRIDGE STANDARDS

CG-12

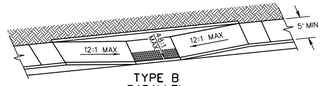
GENERAL NOTES:

1. THE DETECTABLE WARNING SHALL BE PROVIDED BY TRUNCATED DOMES.
2. ALL DETECTABLE WARNING SURFACE PRODUCTS SHALL MEET THE REQUIREMENTS OF SECTION 504 OF THE SPECIFICATIONS FOR CG-12 DETECTABLE WARNING SURFACE. DETECTABLE WARNING SURFACE PRODUCTS USED SHALL BE FROM THE MATERIALS APPROVED PRODUCT LIST NUMBER 72.
3. SLOPING SIDES OF CURB RAMP MAY BE POURED MONOLITHICALLY WITH RAMP FLOOR OR BY USING PERMISSIBLE CONSTRUCTION JOINT WITH REQUIRED BARS.
4. REQUIRED BARS ARE TO BE NO.5 X 8" PLACED 1' CENTER TO CENTER ALONG BOTH SIDES OF THE RAMP FLOOR, MID-DEPTH OF RAMP FLOOR. MINIMUM CONCRETE COVER 1½".
5. ROADWAY CURB / CURB AND GUTTER SLOPE TRANSITIONS ADJACENT TO CURB RAMPS ARE INCLUDED IN PAYMENT FOR CURB / CURB AND GUTTER.
6. CURB RAMPS ARE REQUIRED FOR SIDEWALKS AND SHARED USE PATHS. THE WIDTH OF THE CURB RAMP SHALL MATCH SIDEWALK WIDTH. WHEN CURB RAMPS ARE USED IN CONJUNCTION WITH A SHARED USE PATH, THE MINIMUM WIDTH SHALL BE THE WIDTH OF THE SHARED USE PATH.
7. DETECTABLE WARNINGS SHALL EXTEND THE FULL WIDTH OF THE CURB RAMP LANDING FLOOR.
8. CURB RAMPS WILL BE INSTALLED AND LOCATED WITHIN PEDESTRIAN CROSSWALKS AS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER. CURB RAMPS SHOULD NOT BE LOCATED BEHIND VEHICLE STOP LINES, LIGHT POLES, FIRE HYDRANTS, DROP INLETS, ETC.
9. RAMPS MAY BE PLACED ON RADIAL OR TANGENTIAL SECTIONS PROVIDED THAT THE CURB OPENING IS PLACED WITHIN THE LIMITS OF THE CROSSWALK AND THAT THE SLOPE AT THE CONNECTION OF THE CURB OPENING IS PERPENDICULAR TO THE CURB.
10. DETECTABLE WARNING SURFACE PANELS SHALL BE INSTALLED FLUSH WITH THE BACK OF CURB.
11. WHERE CURB RAMPS INTERSECT A RADIAL SECTION OF CURB AT ENTRANCES OR STREET CONNECTIONS THE DETECTABLE WARNING SURFACE SHALL HAVE A FACTORY RADIUS OR BE FIELD-MODIFIED AS RECOMMENDED BY THE MANUFACTURER TO MATCH THE BACK OF CURB. SEE CG-12-INS PAGES 204.06 AND 204.07 FOR METHODS OF INSTALLING DETECTABLE WARNINGS ON A RADIUS.

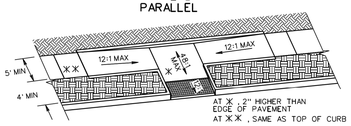
NOTE: COMPONENTS OF CURB RAMPS CONSIST OF THE FOLLOWING: HYDRAULIC CEMENT SIDEWALK (DEPTH IN INCHES, AREA IN SQUARE YARDS) CURB WHEN REQUIRED (CG-2 OR CG-3 IN LINEAR FEET) DETECTABLE WARNING SURFACE (AREA IN SQUARE YARDS) EACH OF THE ABOVE ITEMS IS A SEPARATE PAY ITEM AND SHOULD BE SUMMARIZED FOR EACH CURB CUT RAMP.



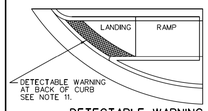
TYPE A
PERPENDICULAR



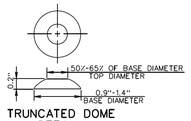
TYPE B
PARALLEL



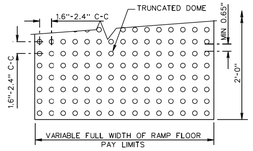
TYPE C
PARALLEL & PERPENDICULAR



DETECTABLE WARNING
INSTALLED ON A RADIUS



TRUNCATED DOME
DETAIL



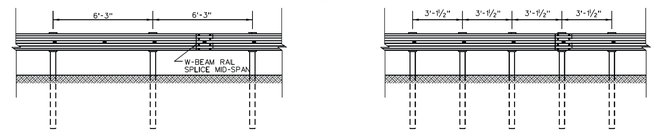
DETECTABLE WARNING
DETAIL

VDOT ROAD AND BRIDGE STANDARDS	A COPY OF THE ORIGINAL SEALED AND SIGNED DRAWING IS ON FILE IN THE CENTRAL OFFICE.	SPECIFICATION REFERENCE
SHEET 1 OF 5 / REVISION DATE 04/19	CG-12 DETECTABLE WARNING SURFACE (GENERAL NOTES)	105, 502, 504
204.01	VIRGINIA DEPARTMENT OF TRANSPORTATION	

2016 ROAD & BRIDGE STANDARDS

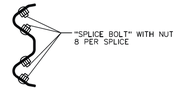
2016 ROAD & BRIDGE STANDARDS

GR-MGS1, 1A



GR-MGS1
(6'-3" POST SPACING)
MIN. DISTANCE FROM FACE OF RAIL TO FIXED OBJECT = 60"

GR-MGS1A
(3'-1½" POST SPACING)
MIN. DISTANCE FROM FACE OF RAIL TO FIXED OBJECT = 48"



SPLICE DETAIL
RAIL SPLICE SHALL BE PLACED MID-SPAN FOR STANDARD POST SPACING (6'-3")

FLARE RATES

DESIGN SPEED	INSIDE SHY LINE		BEYOND SHY LINE
MPH	SHY LINE LS	FLARE RATE	FLARE RATE
70	9'	30:1	15:1 *
60	8'	26:1	14:1 *
50	6.5'	21:1	11:1 *
40	5'	16:1	8:1 *
30	4'	13:1	7:1 *

* SUGGESTED MAXIMUM FLARE RATE FOR SEMI-RIGID BARRIER SYSTEMS.

NOTES:

1. GUARDRAIL LOCATIONS SHOWN ON PLANS ARE APPROXIMATE ONLY AND CAN BE ADJUSTED DURING CONSTRUCTION IF AND AS DIRECTED BY THE ENGINEER.
2. FOR DETAILS OF POST AND BLOCKOUTS SEE SHEET NO. 506.05.
3. FOR DETAILS OF RAIL ELEMENT, AND ASSOCIATED HARDWARE SEE SHEETS 506.01 AND 506.02.
4. RAIL ELEMENTS WITH RADII LESS THAN OR EQUAL TO 150 FEET SHALL BE SHOP CURVED AND PAID FOR AS RADIAL GR-MGS1, OR 1A.
5. ALL GR-MGS1 AND GR-MGS1A RAIL SHALL BE MAINTAINED AT A HEIGHT OF 30" MIN - 32" MAX AS MEASURED PER STANDARD GR-1NS.
6. ALL GUARDRAIL POSTS SHALL BE SET PLUMB. POST SHALL NOT BE SET WITH A VARIATION OF MORE THAN ½" PER FOOT FROM VERTICAL. W-BEAM, BLOCKOUTS, AND POSTS SHALL BE SET AND ALIGNED WITHOUT ALTERATION OR FORCE, AS PER SECTION 505 OF THE SPECIFICATIONS.
7. ALL W-BEAM RAILS SHALL BE LAPPED IN THE DIRECTION OF VEHICULAR TRAVEL FOR THE FINISHED ROADWAY.
8. ADJUSTING EXISTING GUARDRAIL TO MEET THE MGS1 STANDARD IS NOT PERMITTED.

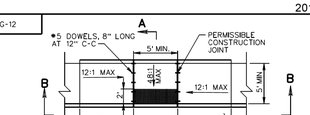
DESCRIPTION	ITEM CODE	
GUARDRAIL GR-MGS1	13280	LF
GUARDRAIL GR-MGS1A	13281	LF
GUARDRAIL GR-MGS1, 9' POST	13282	LF
GUARDRAIL RADIAL GR-MGS1	13283	LF
GUARDRAIL RADIAL GR-MGS1A	13284	LF
GUARDRAIL RADIAL GR-MGS1, 9' POST	13285	LF

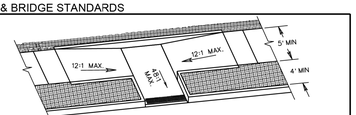
SPECIFICATION REFERENCE	A COPY OF THE ORIGINAL SEALED AND SIGNED DRAWING IS ON FILE IN THE CENTRAL OFFICE.	VDOT ROAD AND BRIDGE STANDARDS
221, 236, 505	MIDWEST GUARDRAIL SYSTEM (STANDARD AND REDUCED POST SPACING)	REVISION DATE NEW 02/17 / SHEET 1 OF 2
	VIRGINIA DEPARTMENT OF TRANSPORTATION	506.04

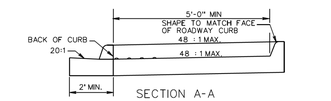
2016 ROAD & BRIDGE STANDARDS

2016 ROAD & BRIDGE STANDARDS

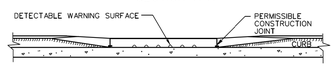
CG-12







SECTION A-A



SECTION B-B

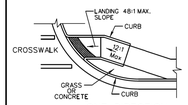
NOTES:

1. FOR GENERAL NOTES ON THE DETECTABLE WARNING SURFACE, SEE SHEET 1 OF 5.
2. THE REQUIRED LENGTH OF A PARALLEL RAMP IS LIMITED TO 15 FEET, REGARDLESS OF THE SLOPE.
3. GUTTER PAN SHALL BE A MAXIMUM SLOPE OF 20:1 AT THE RAMP OPENING.
4. DIAGONAL PLACEMENT IS NOT PERMITTED.

TYPE B PARALLEL APPLICATION

ROADWAY GRADE IN PERCENT	MINIMUM RAMP LENGTH IN FEET	
	4" CURB	6" CURB
0	4	6
1	5	7
2	5	8
3	6	9
4	8	12
5	10	15
6	14	15

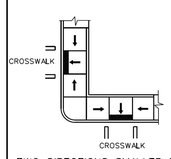
EXAMPLE INSTALLATION METHODS - SEE PLANS FOR LAYOUT



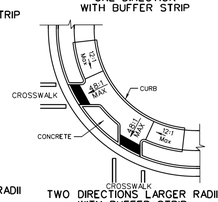
ONE DIRECTION
WITHOUT BUFFER STRIP



ONE DIRECTION
WITH BUFFER STRIP



TWO DIRECTIONS SMALLER RADII
WITHOUT BUFFER STRIP



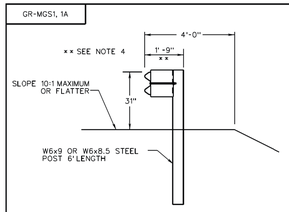
TWO DIRECTIONS LARGER RADII
WITH BUFFER STRIP

VDOT ROAD AND BRIDGE STANDARDS	A COPY OF THE ORIGINAL SEALED AND SIGNED DRAWING IS ON FILE IN THE CENTRAL OFFICE.	SPECIFICATION REFERENCE
SHEET 3 OF 5 / REVISION DATE 04/19	CG-12 DETECTABLE WARNING SURFACE TYPE B (PARALLEL) APPLICATION	105, 502, 504
204.03	VIRGINIA DEPARTMENT OF TRANSPORTATION	

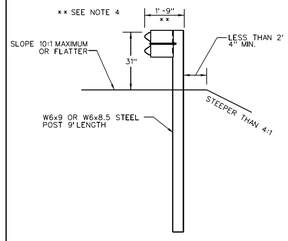
2016 ROAD & BRIDGE STANDARDS

2016 ROAD & BRIDGE STANDARDS

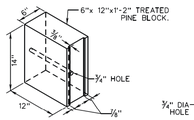
GR-MGS1, 1A

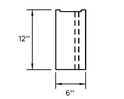


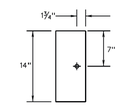
STANDARD INSTALLATION
6' STEEL POST



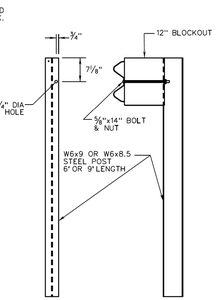
GUARDRAIL INSTALLATION
SITES REQUIRING 9'
GUARDRAIL POSTS







6" WIDE ROUTED
WOOD BLOCKOUT



STEEL POST

NOTES:

1. ALL BOLTS, NUTS, WASHERS, AND OTHER STEEL ITEMS ARE TO BE GALVANIZED.
2. BLOCKOUTS OTHER THAN SHOWN SHALL BE A VDOT APPROVED PRODUCT MEETING MASH TESTING CRITERIA. BLOCKOUTS SHALL BE FROM THE VDOT APPROVED PRODUCTS LIST. APPROVED BLOCKOUTS MAY BE INTERCHANGED ON ANY ONE PROJECT WITH THE RESTRICTION THAT THE SAME TYPE OF BLOCKOUT MUST BE USED IN ANY SINGLE RUN OF GUARDRAIL.
3. WOOD BLOCKOUTS SHALL BE TREATED WITH A WOOD PRESERVATIVE IN ACCORDANCE WITH THE SPECIFICATIONS.
4. DIMENSION MAY VARY PLUS OR MINUS ¼" DUE TO MANUFACTURING TOLERANCES IN GUARDRAIL COMPONENTS.

VDOT ROAD AND BRIDGE STANDARDS	A COPY OF THE ORIGINAL SEALED AND SIGNED DRAWING IS ON FILE IN THE CENTRAL OFFICE.	SPECIFICATION REFERENCE
SHEET 2 OF 2 / REVISION DATE NEW 02/17	MIDWEST GUARDRAIL SYSTEM (STANDARD AND REDUCED POST SPACING)	221, 236, 505
506.05	VIRGINIA DEPARTMENT OF TRANSPORTATION	

2016 ROAD & BRIDGE STANDARDS

12/1/2020

NTS	PROJECT U000-134-842	SHEET NO. 2C(2)

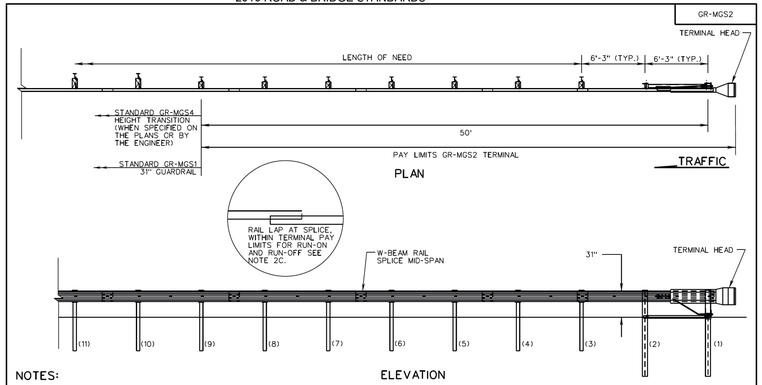
PROJECT MANAGER <Project Mgr. Name (000).000-0000 (District)> _____
SURVEYED BY, DATE <Surveyor Name (000).000-0000 (District)> _____
DESIGN BY <Designer Name (000).000-0000 (District)> _____
SUBSURFACE UTILITY BY, DATE <Surveyor Name (000).000-0000 (District)>.

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	2C(3)

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

2016 ROAD & BRIDGE STANDARDS

GR-MGS2



NOTES:

1. TANGENT END TERMINAL (GR-MGS2) SHALL BE A VDOT APPROVED PRODUCT MEETING MASH TESTING CRITERIA ANY TERMINAL USED FOR THE GR-MGS2 SHALL BE FROM THE VDOT APPROVED PRODUCTS LIST.
2. ALL TERMINALS SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND THE FOLLOWING VDOT REQUIREMENTS:
   A. ALL STANDARD GR-MGS2 TERMINALS (SIMILAR TO AS SHOWN ABOVE) SHALL BE INSTALLED WITHOUT AN OFFSET.
   B. INSTALLING GR-MGS2 TERMINAL ON A RADIUS IS NOT PERMITTED.
   C. DIRECTION OF THE REFLECTIVE TAPE ON THE TERMINAL HEAD SHALL CONFORM TO MUTCD APPLICATION FOR DIAGONAL STRIPES ON OBJECT MARKERS AND BRIDGE END PANELS. (SEE NOTE 4)
   D. DO NOT CHANGE THE LAPPING OF TERMINAL FOR ANY INSTALLATIONS. INSTALL AS SHOWN IN THE MANUFACTURER'S INSTALLATION INSTRUCTIONS REGARDLESS OF ADJACENT TRAFFIC DIRECTION. (SEE DETAIL THIS SHEET)
   E. HEIGHT MEASURED AT TOP OF W-BEAM IS 30" MIN. - 32" MAX.
3. THIS DRAWING IS REPRESENTATIONAL ONLY. DETAILS, DIMENSIONS, QUANTITIES, AND OTHER INFORMATION NOT SHOWN WILL VARY FOR EACH MANUFACTURER. SEE INDIVIDUAL MANUFACTURER'S PLANS FOR THIS INFORMATION.
4. FLUORESCENT PRISMATIC LENS YELLOW SHEETING SHALL BE USED ON THE REFLECTIVE MARKERS. ALL REFLECTIVE SHEETING IS TO BE IN ACCORDANCE WITH SECTION 701 OF THE ROAD AND BRIDGE SPECIFICATIONS. STRIPES SHALL SLOPE DOWN TOWARD THE SIDE OF THE OBSTRUCTION ON WHICH TRAFFIC IS TO PASS.

COLOR:
FIELD - YELLOW (REFLECTORIZED)
MESSAGE - BLACK STRIPES (NON-REFLECTORIZED)


THROUGH ROADWAY MARKER POSITION LEFT OF TRAFFIC


THROUGH ROADWAY MARKER POSITION RIGHT OF TRAFFIC

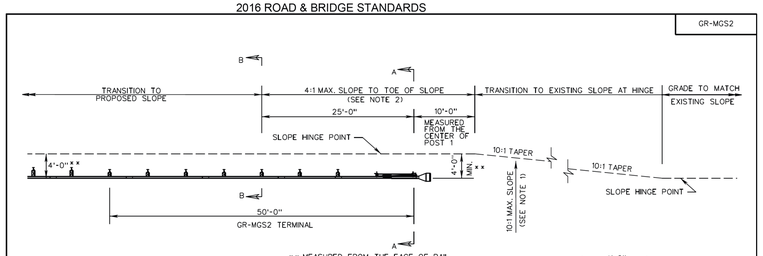
ITEM CODE 13286 EACH

SPECIFICATION REFERENCE	A COPY OF THE ORIGINAL SEALED AND SIGNED DRAWING IS ON FILE IN THE CENTRAL OFFICE. MIDWEST GUARDRAIL SYSTEM (TANGENT END TERMINAL) VIRGINIA DEPARTMENT OF TRANSPORTATION	VDOT ROAD AND BRIDGE STANDARDS
221, 236, 505		REVISION DATE 09/17 · SHEET 1 OF 3 · 506.06

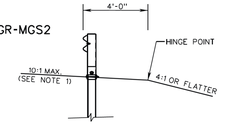
2016 ROAD & BRIDGE STANDARDS

2016 ROAD & BRIDGE STANDARDS

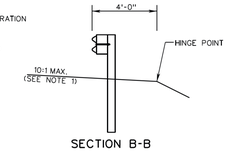
GR-MGS2



LIMITED USE SITE PREPARATION REQUIREMENTS FOR GR-MGS2
NOT FOR USE ON INTERSTATES, FREEWAYS, OR NEW CONSTRUCTION. UNLESS APPROVED BY THE ENGINEER.



SECTION A-A



SECTION B-B

NOTES:

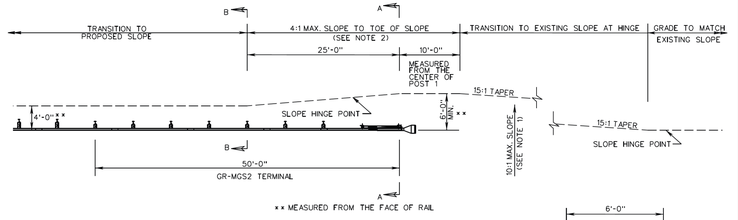
1. THE CROSS SLOPE OF THE GRADE APPROACHING THE GUARDRAIL TERMINAL, AND ADJACENT TO FOR ITS FULL LENGTH, MUST BE A MAXIMUM OF 10:1. IF THE EXISTING GRADE IS FLAT OR IS A POSITIVE SLOPE DUE TO THE SUPERELEVATION OF THE ROADWAY PAVEMENT, THE MINIMUM OFFSET FROM THE FACE OF RAIL TO THE HINGE POINT, AS SHOWN, IS REQUIRED.
2. THE AREA IMMEDIATELY BEHIND AND BEYOND THE TERMINAL SHOULD BE TRAVERSABLE AND FREE FROM FIXED OBJECTS. IF A CLEAR RUN OUT IS NOT ATTAINABLE THIS AREA SHOULD AT LEAST BE SIMILAR IN CHARACTER TO THE UPSTREAM UNSHIELDED ROADSIDE AREAS.
3. NOT FOR USE ON INTERSTATES, FREEWAYS, OR NEW CONSTRUCTION, UNLESS APPROVED BY THE ENGINEER. MAY BE USED WHEN SPECIFIED IN THE PLANS FOR 3R WORK THAT CANNOT CONFORM TO THE SITE PREPERATION REQUIREMENTS ON PAGE 506.07.
4. FOR LIMITED APPLICATIONS AS DESCRIBED IN NOTE 3, THE GRADING SHOULD BE AS CLOSE AS POSSIBLE TO THE SITE PREPARATION REQUIREMENTS ON PAGE 506.07. THE SLOPE SHALL EXTEND A MINIMUM OF 4'-0" FROM THE FACE OF RAIL AND GRADING SHALL CONFORM TO THE DETAILS ABOVE. USE 21B AGGREGATE, OR OTHER SUITABLE MATERIAL AS APPROVED BY THE ENGINEER.

SPECIFICATION REFERENCE	A COPY OF THE ORIGINAL SEALED AND SIGNED DRAWING IS ON FILE IN THE CENTRAL OFFICE. MIDWEST GUARDRAIL SYSTEM (TANGENT END TERMINAL) VIRGINIA DEPARTMENT OF TRANSPORTATION	VDOT ROAD AND BRIDGE STANDARDS
221, 236, 505		REVISION DATE 09/17 · SHEET 3 OF 3 · 506.08

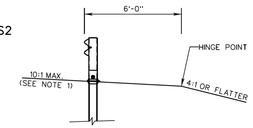
2016 ROAD & BRIDGE STANDARDS

2016 ROAD & BRIDGE STANDARDS

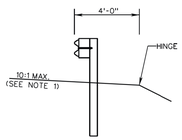
GR-MGS2



SITE PREPARATION REQUIREMENTS FOR GR-MGS2



SECTION A-A



SECTION B-B

NOTES:

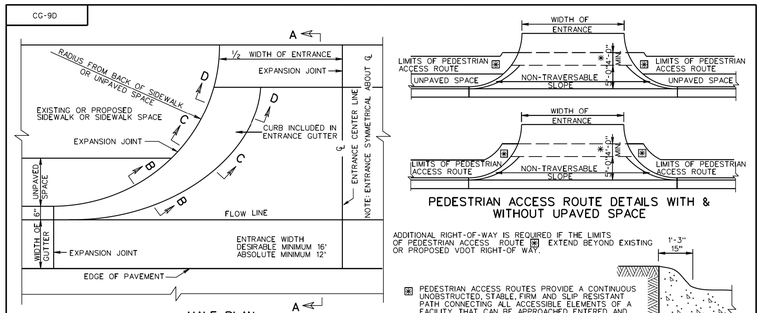
1. THE CROSS SLOPE OF THE GRADE APPROACHING THE GUARDRAIL TERMINAL, AND ADJACENT TO FOR ITS FULL LENGTH, MUST BE A MAXIMUM OF 10:1. IF THE EXISTING GRADE IS FLAT OR IS A POSITIVE SLOPE DUE TO THE SUPERELEVATION OF THE ROADWAY PAVEMENT, THE MINIMUM OFFSET FROM THE FACE OF RAIL TO THE HINGE POINT, AS SHOWN, IS REQUIRED.
2. THE AREA IMMEDIATELY BEHIND AND BEYOND THE TERMINAL SHALL BE TRAVERSABLE AND FREE FROM FIXED OBJECTS. IF A CLEAR RUN OUT IS NOT ATTAINABLE THIS AREA SHALL AT LEAST BE SIMILAR IN CHARACTER TO THE UPSTREAM UNSHIELDED ROADSIDE AREAS.
3. FOR NEW CONSTRUCTION AND RECONSTRUCTION, THE 10:1 SLOPE GRADING SHALL EXTEND A MINIMUM OF 6'-0" MEASURED FROM THE FACE OF RAIL.
4. FOR PROPRIETARY GUARDRAIL TERMINALS, THE MANUFACTURER'S SITE PREPARATION REQUIREMENTS TAKE PRECEDENCE OVER THIS STANDARD IF ADDITIONAL GRADING IS REQUIRED.

VDOT ROAD AND BRIDGE STANDARDS	A COPY OF THE ORIGINAL SEALED AND SIGNED DRAWING IS ON FILE IN THE CENTRAL OFFICE. MIDWEST GUARDRAIL SYSTEM (TANGENT END TERMINAL) VIRGINIA DEPARTMENT OF TRANSPORTATION	SPECIFICATION REFERENCE
SHEET 2 OF 3 · REVISION DATE 09/17 · 506.07		221, 236, 505

2016 ROAD & BRIDGE STANDARDS

2016 ROAD & BRIDGE STANDARDS

CG-9D



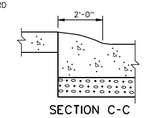
ADDITIONAL RIGHT-OF-WAY IS REQUIRED IF THE LIMITS OF PEDESTRIAN ACCESS ROUTE Ⓟ EXTEND BEYOND EXISTING OR PROPOSED VDOT RIGHT-OF-WAY.

Ⓟ PEDESTRIAN ACCESS ROUTES PROVIDE A CONTINUOUS UNOBSTRUCTED, STABLE, FIRM AND SLIP RESISTANT PATH CONNECTING ALL ACCESSIBLE ELEMENTS OF A FACILITY THAT CAN BE APPROACHED, ENTERED AND USED BY PEDESTRIANS.

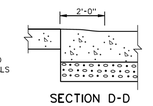
* IF PEDESTRIAN ACCESS ROUTES Ⓟ ARE BEING PROVIDED, A MINIMUM 4' TRAVERSABLE WIDTH IS REQUIRED WITH A MAX. 2% CROSS SLOPE.

WHEN USED IN CONJUNCTION WITH STANDARD CG-3 OR CG-7, THE CURB FACE ON THIS STANDARD IS TO BE ADJUSTED TO MATCH THE MOUNTABLE CURB CONFIGURATION.

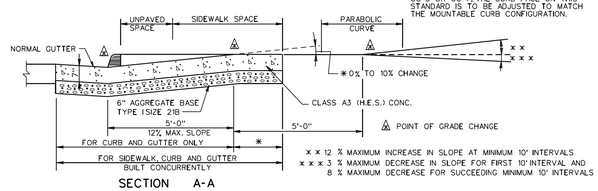
SECTION B-B



SECTION C-C



SECTION D-D



SECTION A-A

x x 12 % MAXIMUM INCREASE IN SLOPE AT MINIMUM 10' INTERVALS
x x x 3 % MAXIMUM DECREASE IN SLOPE FOR FIRST 10' INTERVAL AND
8 % MAXIMUM DECREASE FOR SUCCEEDING MINIMUM 10' INTERVALS

VDOT ROAD AND BRIDGE STANDARDS	STANDARD ENTRANCE GUTTER VIRGINIA DEPARTMENT OF TRANSPORTATION	SPECIFICATION REFERENCE
SHEET 1 OF 1 · REVISION DATE 07/15 · 203.03		502

2016 ROAD & BRIDGE STANDARDS

12/1/2020

NTS	PROJECT U000-134-842	SHEET NO. 2C(3)

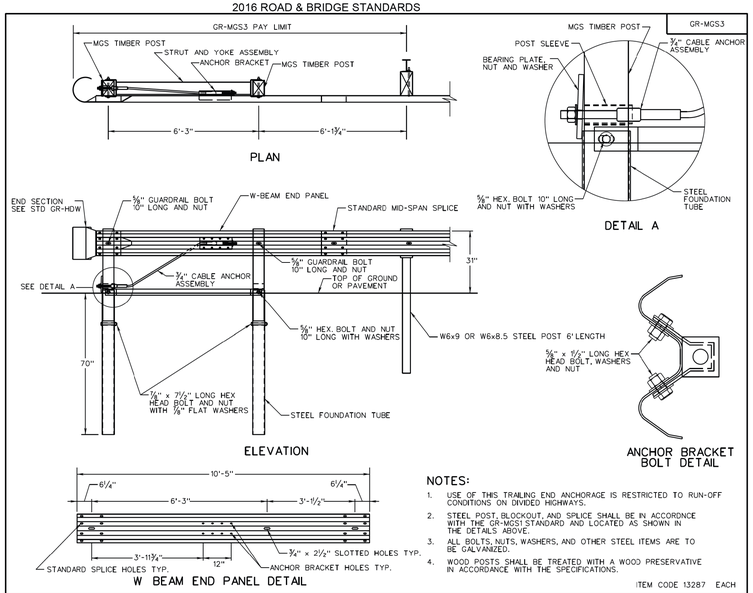
PROJECT MANAGER <Project_Mgr. Name (000).000-0000 (District)>
SURVEYED BY, DATE <Surveyor Name (000).000-0000 (District)>
DESIGN BY <Designer Name (000).000-0000 (District)>
SUBSURFACE UTILITY BY, DATE <Surveyor Name (000).000-0000 (District)>

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	2C(4)

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

2016 ROAD & BRIDGE STANDARDS

GR-MGS3



NOTES:

1. USE OF THIS TRAILING END ANCHORAGE IS RESTRICTED TO RUN-OFF CONDITIONS ON DIVIDED HIGHWAYS.
2. STEEL POST, BLOCKOUT, AND SPLICE SHALL BE IN ACCORDNCE WITH THE GR-MGS1 STANDARD AND LOCATED AS SHOWN IN THE DETAILS ABOVE.
3. ALL BOLTS, NUTS, WASHERS, AND OTHER STEEL ITEMS ARE TO BE GALVANIZED.
4. WOOD POSTS SHALL BE TREATED WITH A WOOD PRESERVATIVE IN ACCORDANCE WITH THE SPECIFICATIONS.

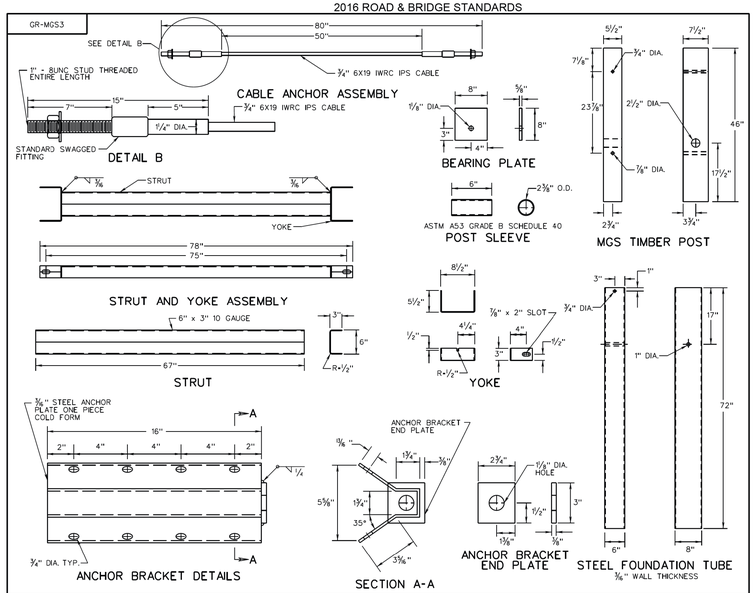
ITEM CODE 13287 EACH

SPECIFICATION REFERENCE	A COPY OF THE ORIGINAL SEALED AND SIGNED DRAWING IS ON FILE IN THE CENTRAL OFFICE.	VDOT ROAD AND BRIDGE STANDARDS
221 236 505	MIDWEST GUARDRAIL SYSTEM (TRAILING END ANCHORAGE) VIRGINIA DEPARTMENT OF TRANSPORTATION	REVISION DATE: NEW 02/17 — SHEET 1 OF 2 — 506.09

2016 ROAD & BRIDGE STANDARDS

2016 ROAD & BRIDGE STANDARDS

GR-MGS3



VDOT ROAD AND BRIDGE STANDARDS	A COPY OF THE ORIGINAL SEALED AND SIGNED DRAWING IS ON FILE IN THE CENTRAL OFFICE.	SPECIFICATION REFERENCE
SHEET 2 OF 2 — REVISION DATE: NEW 02/17	MIDWEST GUARDRAIL SYSTEM (TRAILING END ANCHORAGE) VIRGINIA DEPARTMENT OF TRANSPORTATION	505 221
506.10		

2016 ROAD & BRIDGE STANDARDS

12/1/2020

NTS	PROJECT U000-134-842	SHEET NO. 2C(4)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	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 Virginia Beach, Virginia HYDRAULIC ENGINEER	Rummel, Klepper & Kahl, LLP Virginia Beach, Virginia ROADWAY ENGINEER

Curve CENTERVILLE_3
PI = 11+65.64
DELTA = 0° 40' 23.48" (LT)
D = 0° 42' 58"
T = 47.00'
L = 93.99'
R = 8,000.00'
PC = 11+18.64
PT = 12+12.63
E = NC
V = 50 MPH

BEGIN PROJECT U000-134-842, RW-201
POT STA. 9+64.88
CENTERVILLE CONSTR. ℄

BEGIN PROJECT U000-134-842, C-501
POT STA. 14+69.63
CENTERVILLE CONSTR. ℄

BEGIN CONSTRUCTION
POT STA. 9+26.74
CENTERVILLE CONSTR. ℄

CENTERVILLE TURNPIKE

Match Line Sta. 15+50 Sheet 4

001 — Now Or Formerly RESURRECTION UNITED METHODIST CHURCH #1322 Centerville Tpke. Parcel 0380000000922 C.D.B. 2335, PG. 503 M.B. 88, PG. 61 Parcel A

002 — Now Or Formerly COLONIAL BAPTIST CHURCH #2221 Centerville Tpke. GPIN 1454-96-9612 INST #20131023001261360 M.B. 240, PG. 76 Parcel AB

Now Or Formerly DOUGLAS W. GRIFFITH & KAREN A. GRIFFITH #1244 VERANDA WAY Parcel 02930010004 20 C.D.B. 8088, PG. 200 M.B. 150, PG. 166 Lot 42

Now Or Formerly CHERYL L. LANGEVIN #6016 Glen View Dr. GPIN 1454-96-7380 D.B. 4461, PG. 951 M.B. 211, PG. 79 Lot 918

Now Or Formerly SANDRA L. HUNTER & THOMAS L. HUNTER #1315 Centerville Tpke. Parcel 0380000001580 C.D.B. 4434, PG. 770 M.B. 119, PG. 51 Lot A-1

Now Or Formerly NORMAN R. SHRIEVES & SHIRLEY SHRIEVES #1321 Centerville Tpke. Parcel 0380000000912 C.D.B. 4223, PG. 25 M.B. 55, PG. 68 Lot B

Now Or Formerly ROBERTO B. LEANDADO, JR. & ROBERTO O. LEANDADO & BEATRIZ B. LEANDADO #2009 Barbara Lee Ct. GPIN 1464-06-4095 INST #20041008001613040 M.B. 76, PG. 22 M.B. 174, PG. 64 Lot 12, Block F — 012

Now Or Formerly ROBERT E. BURTON & ROSEANN J. BURTON #2008 Barbara Lee Ct. GPIN 1464-06-4141 D.B. 4724, PG. 842 M.B. 145, PG. 26 Lot 11, Block F — 003

Now Or Formerly KECIA LAWRENCE #2004 Barbara Lee Ct. GPIN 1464-06-4198 INST #20151228001228400 M.B. 145, PG. 26 Lot 10, Block F — 004

Now Or Formerly JAMES R. EMERICK & CATHERINE M. EMERICK #2005 Jerl Ct. GPIN 1464-06-4257 D.B. 2887, PG. 525 M.B. 145, PG. 26 Lot 7, Block F — 005

Now Or Formerly MIKE D. RIKARD & KATHLEEN M. RIKARD #2008 Jerl Ct. GPIN 1464-06-3384 INST #20140414000322780 M.B. 145, PG. 26 Lot 6, Block F — 006

Now Or Formerly GEOFFREY T. TIMLIN & DEBBIE M. TIMLIN 2004 Jerl Ct. GPIN 1464-06-4415 D.B. 2838, PG. 1797 M.B. 145, PG. 26 Lot 5, Block F — 007

Now Or Formerly NED W. BROWN, III #2057 Livingston Oak Dr. GPIN 1464-06-3543 D.B. 4580, PG. 2120 M.B. 145, PG. 26 Lot 1, Block F — 008

LEGEND

1 Std. CG-2 Req'd.	7 Std. CG-12, Type B
2 Std. CG-6 Req'd.	8 5' Concrete Sidewalk
3 Std. CG-9D Req'd.	9 8' Asphalt Sidewalk
4 Std MS-3 Pavers Req'd.	10 Std. CG-11 Modified
5 Std. MS-2 Req'd.	11 8' Concrete Sidewalk
6 Std. MS-1A Req'd.	12 Std VBCG-1

C ___ Denotes Construction Limits In Cuts
F ___ Dentoes Construction Limits In Fills
Denotes Temporary Easement
Denotes Permanent Easement
Denotes Demolition of Pavement
Denotes Area of Proposed Pavement
Denotes Mill and Overlay
Denotes Asphalt Sidewalk

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)	
Mainline Profile	3A
Drainage Descriptions	2B(1)
Sign & Pave. Mark. Plan	14(3)
Landscaping Plan	17(3)
Utility Plan	19(3)
Existing Conditions	1H(1)

SCALE 0 25' 50'

PROJECT	SHEET NO.
U000-134-842	3

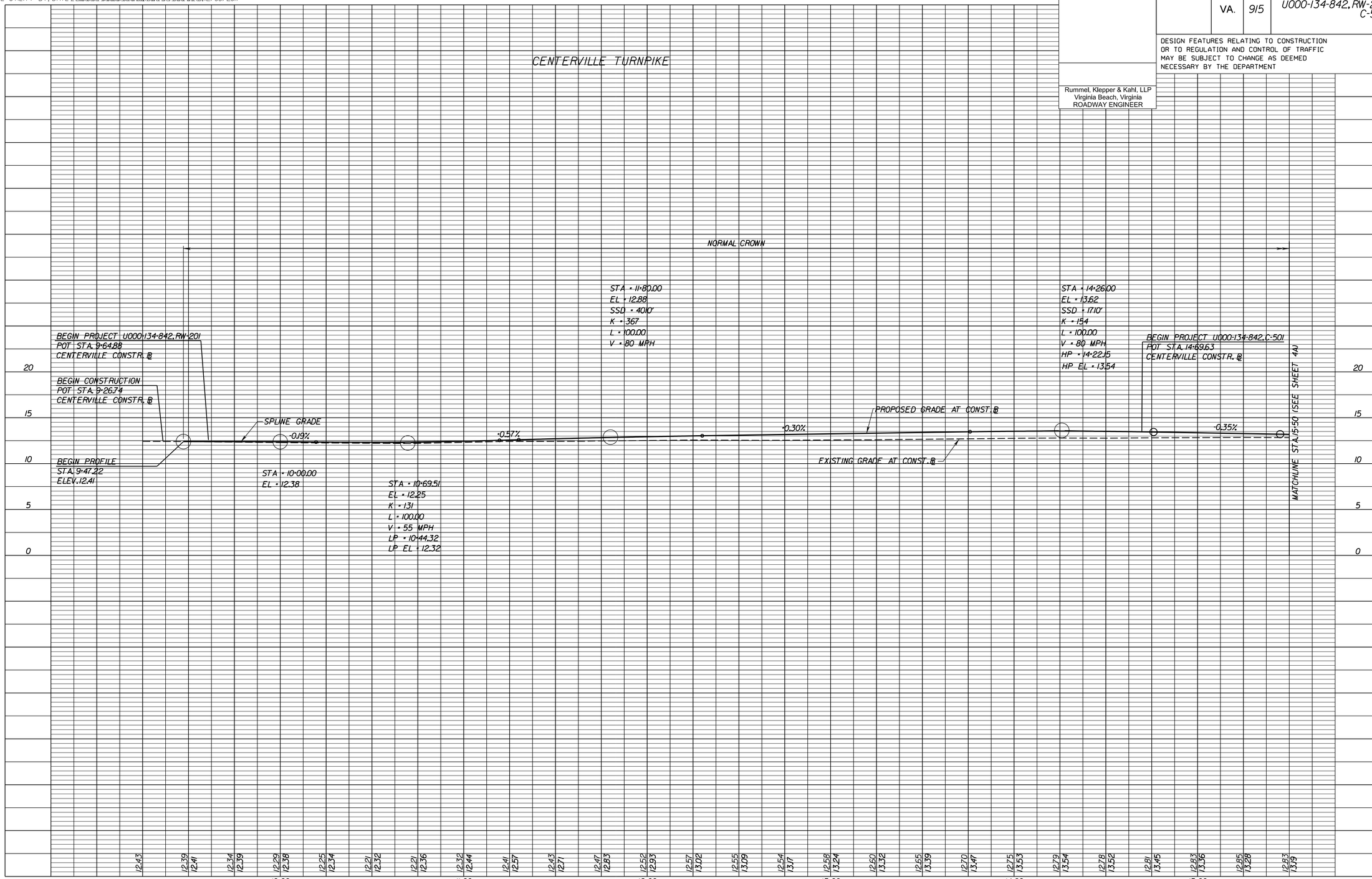
12/1/2020

PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	3A

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
Virginia Beach, Virginia
ROADWAY ENGINEER



NOTE:
CREST VERTICAL CURVE DESIGN SPEED BASED ON STOPPING SIGHT DISTANCE (SSD)
SAG VERTICAL CURVES DESIGN SPEED BASED ON "K" VALUE

HORIZ. 1" = 25' VERT. 1" = 5'	PROJECT U000-134-842	SHEET NO. 3A

12/1/2020

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP, (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017

4-A	15.17 / 24.17'	4-F	91.20 / 16.18'
4-B	98.16 / 24.12'	4-G	101.11 / 16.26'
4-C	03.16 / 29.05'	4-H	21.24 / 14.00'
4-D	64.93 / 16.07'	4-I	29.24 / 14.00'
4-E	69.20 / 16.08'	4-J	21.29 / 26.00'

(A) POT STA. 16+52.42
CENTERVILLE CONSTR. ℄ •
POT STA. 10+00.00
LIVINGSTON OAK CONSTR. ℄
△ = 90° 02' 49" RT

(B) POT STA. 16+56.96
CENTERVILLE CONSTR. ℄ •
POT 20+00.00
CHURCH ENTRANCE CONSTR. ℄
△ = 90° 14' 54" LT

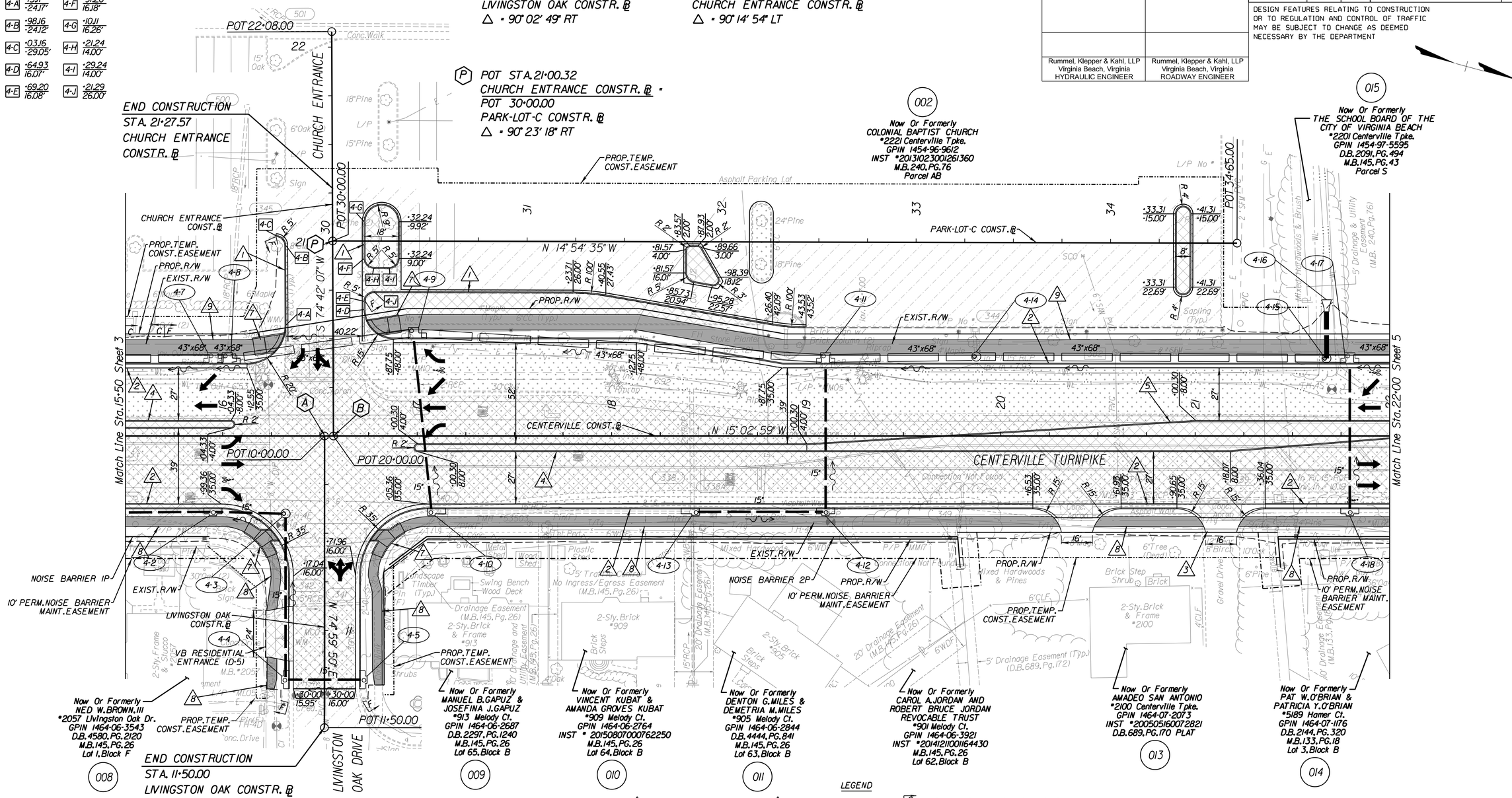
(P) POT STA. 21+00.32
CHURCH ENTRANCE CONSTR. ℄ •
POT 30+00.00
PARK-LOT-C CONSTR. ℄
△ = 90° 23' 18" RT

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	4

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
Virginia Beach, Virginia
HYDRAULIC ENGINEER

Rummel, Klepper & Kahl, LLP
Virginia Beach, Virginia
ROADWAY ENGINEER



LEGEND

1	St'd. CG-2 Req'd.
2	St'd. CG-6 Req'd.
3	St'd. CG-9D Req'd.
4	St'd MS-3 Pavers Req'd.
5	St'd. MS-2 Req'd.
6	St'd. MS-1A Req'd.
7	St'd. CG-12, Type B
8	5' Concrete Sidewalk
9	8' Asphalt Sidewalk
10	St'd. CG-11 Modified
11	8' Concrete Sidewalk
12	St'd VBCG-1

C ___ Denotes Construction Limits In Cuts
F ___ Dentoes Construction Limits In Fills
Denotes Temporary Easement
Denotes Permanent Easement
Denotes Demolition of Pavement
Denotes Area of Proposed Pavement
Denotes Mill and Overlay
Denotes Asphalt Sidewalk

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

Mainline Profile	4A
Entrance Profile	13
Drainage Descriptions	2B(1)
Sign & Pave. Mark. Plan	14(4)
Landscaping Plan	17(4)
Utility Plan	19(4)
Existing Conditions	1H(2)

SCALE 0 25' 50'

PROJECT	SHEET NO.
U000-134-842	4

PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	4A

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
Virginia Beach, Virginia
ROADWAY ENGINEER

CENTERVILLE TURNPIKE

NORMAL CROWN

POT STA.16+56.96
CENTERVILLE CONSTR. ℄ +
POT 20+00.00
CHURCH ENTRANCE CONSTR. ℄

POT STA.16+52.42
CENTERVILLE CONSTR. ℄ +
POT STA.10+00.00
LIVINGSTON OAK CONSTR. ℄

STA = 17+25.00
EL = 13.49
SSD = 1591'
K = 143
L = 100.00
V = 80 MPH
HP = 17+25.00
HP EL = 13.40

STA = 20+60.00
EL = 13.36
SSD = 1710'
K = 154
L = 100.00
V = 80 MPH
HP = 20+63.84
HP EL = 13.28

PROPOSED GRADE AT CONST.℄

EXISTING GRADE AT CONST.℄

-0.35%
-0.35%
0.35%
-0.35%
-0.35%
-0.30%

MATCHLINE STA.15+50 (SEE SHEET 4A)

STA = 15+95.00
EL = 13.03
K = 143
L = 100.00
V = 60 MPH
LP = 15+95.00
LP EL = 13.12

STA = 19+10.00
EL = 12.84
K = 143
L = 100.00
V = 60 MPH
LP = 19+10.00
LP EL = 12.93

STA = 21+90.00
EL = 12.97
K = 132
L = 100.00
V = 60 MPH
LP = 21+79.51
LP EL = 13.06

MATCHLINE STA.22+00 (SEE SHEET 5A)

20
15
10
5
0

12.83 13.09 | 12.83 13.13 | 12.70 13.12 | 12.71 13.15 | 12.79 13.22 | 12.81 13.31 | 12.80 13.36 | 12.83 13.40 | 12.85 13.38 | 12.83 13.31 | 12.82 13.22 | 12.81 13.14 | 12.77 13.05 | 12.76 12.97 | 12.76 12.93 | 12.73 12.93 | 12.71 12.98 | 12.76 13.07 | 12.81 13.15 | 12.82 13.23 | 12.80 13.28 | 12.83 13.28 | 12.87 13.24 | 12.90 13.17 | 12.97 13.10 | 12.95 13.06 | 12.93 13.08

16+00 17+00 18+00 19+00 20+00 21+00 22+00

NOTE:
CREST VERTICAL CURVE DESIGN SPEED BASED ON STOPPING SIGHT DISTANCE (SSD)
SAG VERTICAL CURVES DESIGN SPEED BASED ON "K" VALUE

HORIZ. 1" = 25' VERT. 1" = 5'	PROJECT U000-134-842	SHEET NO. 4A

12/1/2020

12/1/2020
3:58:38 PM

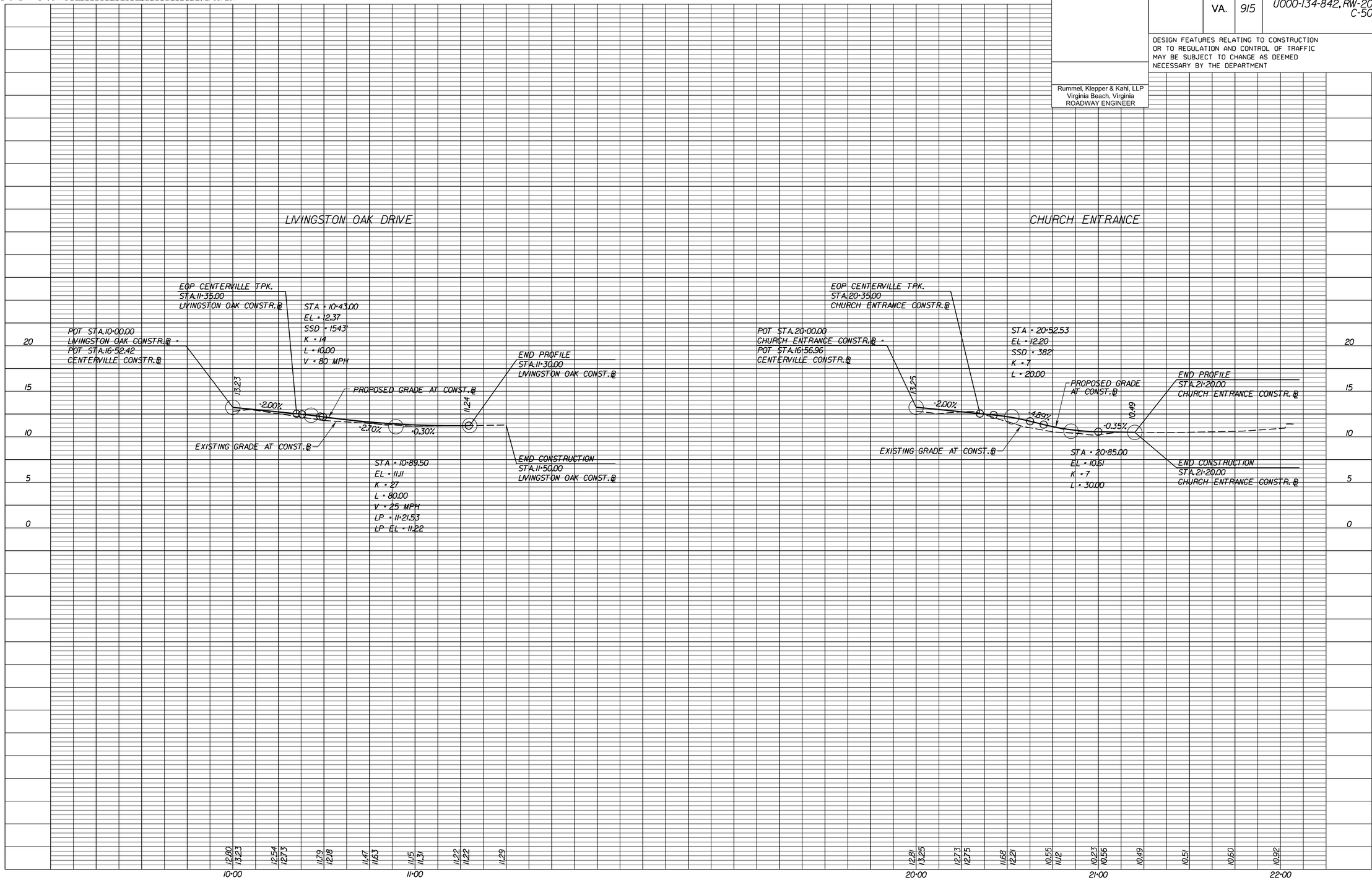
dl0938104b.dgn
Plotted By: RK&K - JMK

PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	4B

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
Virginia Beach, Virginia
ROADWAY ENGINEER



NOTE:
CREST VERTICAL CURVE DESIGN SPEED BASED ON STOPPING SIGHT DISTANCE (SSD)
SAG VERTICAL CURVES DESIGN SPEED BASED ON "K" VALUE

HORIZ. 1" = 25' VERT. 1" = 5'	PROJECT U000-134-842	SHEET NO. 4B

12/1/2020

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	5

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 Virginia Beach, Virginia HYDRAULIC ENGINEER	Rummel, Klepper & Kahl, LLP Virginia Beach, Virginia ROADWAY ENGINEER

Ⓒ POC STA. 24+71.63
CENTERVILLE CONSTR. ℄ •
POT STA. 10+00.00
WOODHILL CONSTR. ℄
△ = 90° 40' 32" RT

Ⓓ POC STA. 24+79.70
CENTERVILLE CONSTR. ℄ •
POT 20+00.00
SCHOOL ENTRANCE CONSTR. ℄
△ = 89° 42' 06" LT

END CONSTRUCTION
STA. 21+45.27
SCHOOL ENTRANCE
CONSTR. ℄

Curve CENTERVILLE_6
PI = 24+35.09
DELTA = 0° 50' 58.76" (LT)
D = 0° 25' 28"
T = 100.10'
L = 200.20'
R = 13,500.00'
PC = 23+34.99
PT = 25+35.19
E = NC
V = 60 MPH

POT 21+66.43

SCHOOL ENTRANCE CONST. ℄

SCHOOL ENTRANCE

74° 38' 00" W

Now Or Formerly
THE SCHOOL BOARD OF THE
CITY OF VIRGINIA BEACH
•2201 Centerville Tpke.
GPIN 1454-97-5595
D.B. 2091, PG. 494
M.B. 145, PG. 43
Parcel S
015

PROP. TEMP. CONST. EASEMENT

PROP. R/W

EXIST. R/W

CENTERVILLE TURNPIKE

Centerville Turnpike
(S.R. 868) Variable Width R/W

CENTERVILLE CONST. ℄

N 15° 02' 59" W

N 15° 53' 58" W

N 75° 02' 22" E

POC 10+00.00

POC 20+00.00

POC 27+03.66

POT 11+50.69

END CONSTRUCTION
STA. 11+50.00
WOODHILL CONSTR. ℄

WOODHILL ROAD

Match Line Sta. 22+00 Sheet 4

Match Line Sta. 28+50 Sheet 6

PC 23+34.99

PT 25+35.19

R 3.68'

R 35'

R 4785

R 4914

R 8040'

R 7988'

R 8029

R 50'

R 42'

R 10'

R 8'

43'x68'

Curve CENTERVILLE_9
PI = 28+03.66
DELTA = 0° 52' 53.29" (RT)
D = 0° 26' 27"
T = 100.00'
L = 200.00'
R = 13,000.00'
PC = 27+03.66
PT = 29+03.66
E = NC
V = 50 MPH

Now Or Formerly
PAT W. O'BRIAN &
PATRICIA Y. O'BRIAN
•5189 Hamer Ct.
GPIN 1464-07-1176
D.B. 2144, PG. 320
M.B. 133, PG. 18
Lot 3, Block B
014

Now Or Formerly
WALLY A. BULOSAN &
CARMELITA R. BULOSAN
•5193 Hamer Ct.
GPIN 1464-07-1255
D.B. 2370, PG. 1228
M.B. 133, PG. 18
Lot 2, Block B
016

Now Or Formerly
VALERIE G. ALLEN
REVOCABLE LIVING TRUST
•2012 Woodhill Rd.
GPIN 1464-07-1343
INST #200906010006020 90
M.B. 133, PG. 18
Lot 1, Block B
017

Now Or Formerly
JAMES W. HARRELL, JR. &
GLORIA E. HARRELL
•5201 Mimo Clr.
GPIN 1464-07-0488
INST #201302010001356 10
M.B. 133, PG. 18
Lot 1, Block A
018

Now Or Formerly
CHARITO MEDRANO &
TRINIDAD M. MEDRANO
•5205 Mimo Clr.
GPIN 1464-07-0575
D.B. 2264, PG. 1349
M.B. 133, PG. 18
Lot 2, Block A
019

Now Or Formerly
JEROLD E. DYE &
BARBARA M. DYE
•5209 Mimo Clr.
GPIN 1464-07-0653
D.B. 2431, PG. 1281
M.B. 133, PG. 18
Lot 3, Block A
020

Now Or Formerly
JESSIE MILLER
•5213 Mimo Clr.
GPIN 1464-07-0763
Will #201412160011770 70
M.B. 133, PG. 18
Lot 4, Block A
021

LEGEND

1 St'd. CG-2 Req'd.
2 St'd. CG-6 Req'd.
3 St'd. CG-9D Req'd.
4 St'd MS-3 Pavers Req'd.
5 St'd. MS-2 Req'd.
6 St'd. MS-1A Req'd.
7 St'd. CG-12, Type B
8 5' Concrete Sidewalk
9 8' Asphalt Sidewalk
10 St'd. CG-11 Modified
11 8' Concrete Sidewalk
12 St'd VBCG-1

C Denotes Construction Limits In Cuts
F Denotes Construction Limits In Fills
Denotes Temporary Easement
Denotes Permanent Easement
Denotes Demolition of Pavement
Denotes Area of Proposed Pavement
Denotes Mill and Overlay
Denotes Asphalt Sidewalk

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

Mainline Profile	5A
Entrance Profile	13
Drainage Descriptions	2B(1)
Sign & Pave. Mark. Plan	14(5)
Signal Plan	X
Landscaping Plan	X
Utility Plan	19(5)
SWM Plan	21(1)
Existing Conditions	1H(3)

SCALE 0 25' 50'

PROJECT	SHEET NO.
U000-134-842	5

12/1/2020
3:58:47 PM

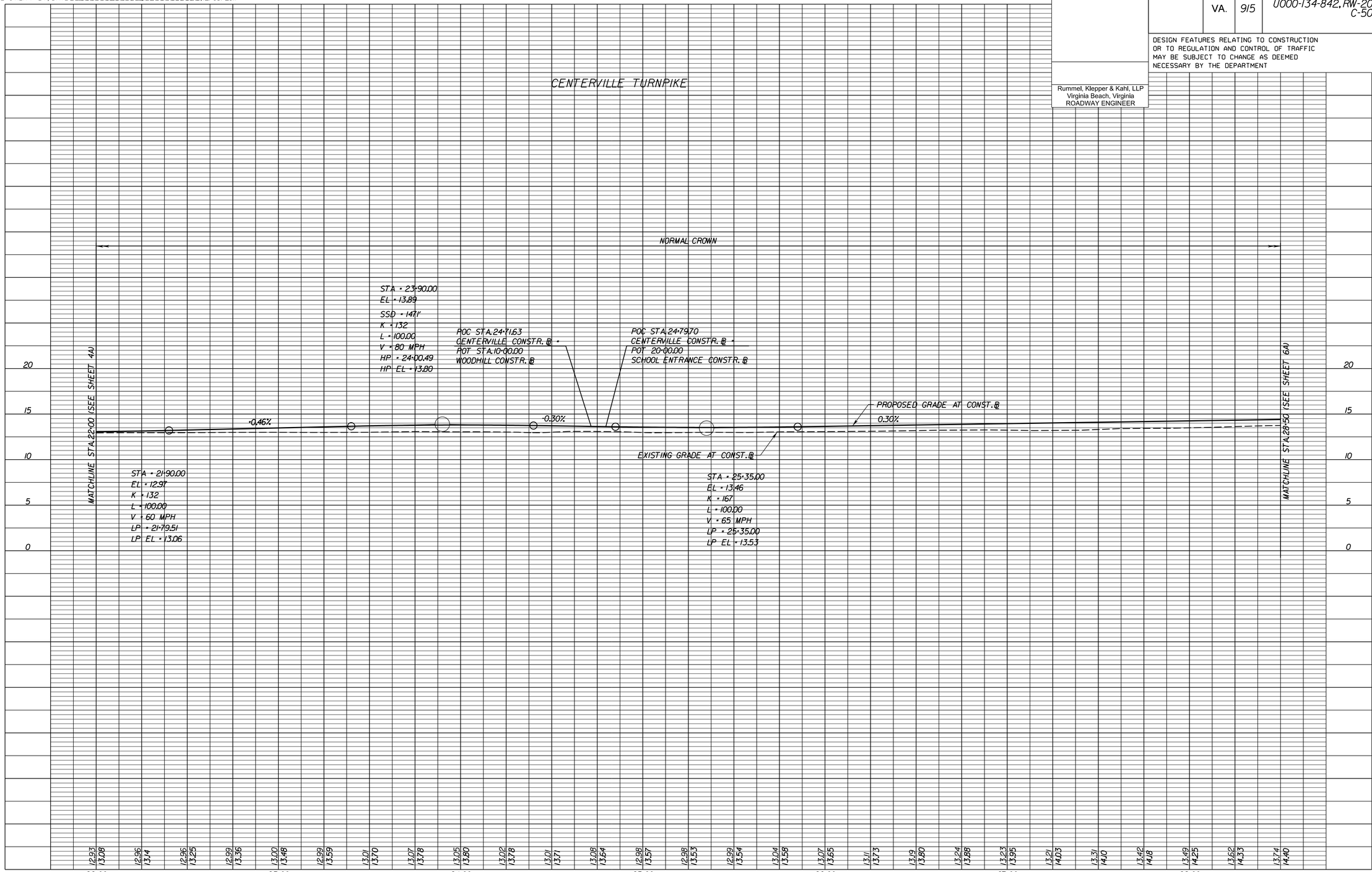
d10938105adgn
Plotted By: RK&K - JMK

PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	5A

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
Virginia Beach, Virginia
ROADWAY ENGINEER



NOTE:
CREST VERTICAL CURVE DESIGN SPEED BASED ON STOPPING SIGHT DISTANCE (SSD)
SAG VERTICAL CURVES DESIGN SPEED BASED ON "K" VALUE

HORIZ. 1" = 25' VERT. 1" = 5'	PROJECT U000-134-842	SHEET NO. 5A

12/1/2020

12/1/2020
3:58:48 PM

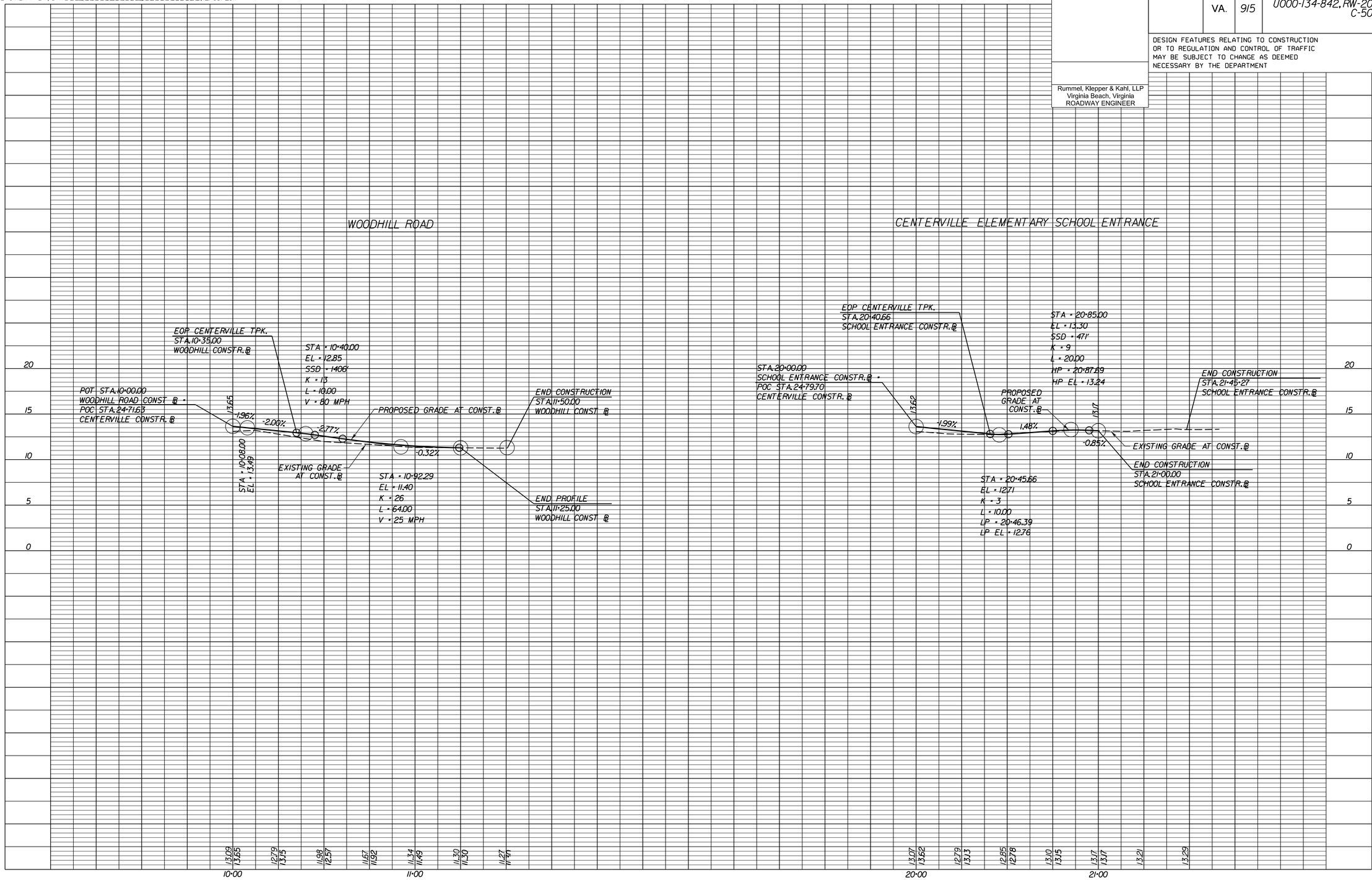
d109381105b.dgn
Plotted By: RK&K - JMK

PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	5B

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
Virginia Beach, Virginia
ROADWAY ENGINEER



NOTE:
CREST VERTICAL CURVE DESIGN SPEED BASED ON STOPPING SIGHT DISTANCE (SSD)
SAG VERTICAL CURVES DESIGN SPEED BASED ON "K" VALUE

HORIZ. 1" = 25' VERT. 1" = 5'	PROJECT U000-134-842	SHEET NO. 5B

12/1/2020

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	6

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 Virginia Beach, Virginia HYDRAULIC ENGINEER	Rummel, Klepper & Kahl, LLP Virginia Beach, Virginia ROADWAY ENGINEER

(E) POT STA. 31+94.80
CENTERVILLE CONSTR. ℄ -
POT STA. 102+00.44
LYNNHAVEN CONSTR. ℄
△ = 86° 51' 02" RT

(N) POT STA. 34+69.28
CENTERVILLE CONSTR. ℄ -
POT STA. 10+00.00
ENTRANCE 3469 CONSTR. ℄
△ = 90° 00' 00" RT

Curve CENTERVILLE_9
PI = 28+03.66
DELTA = 0° 52' 53.29" (RT)
D = 0° 26' 27"
T = 100.00'
L = 200.00'
R = 13,000.00'
PC = 27+03.66
PT = 29+03.66
E = NC
V = 60 MPH

BEGIN CONSTRUCTION
STA. 100+54.98
LYNNHAVEN PARKWAY
CONSTR. ℄

END CONSTRUCTION
STA. 103+68.49
LYNNHAVEN PARKWAY
CONSTR. ℄

015
Now Or Formerly
THE SCHOOL BOARD OF THE CITY OF VIRGINIA BEACH
*2201 Centerville Tpke.
GPIN 1454-97-5595
D.B. 2091, PG. 494
M.B. 145, PG. 43
Parcel S

026
Now Or Formerly
BPMS CASCADES, LLC
*5705 Lynnhaven Pkwy.
GPIN 1454-98-1390
INST *200902120001420 00
INST *200812220014379 60 PLAT
Parcel A

Now Or Formerly
JESSIE MILLER
*5213 Mima Clr.
GPIN 1464-07-0763
Will *201412160011770 70
M.B. 133, PG. 18
Lot 4, Block A
021

Now Or Formerly
CHARLES FERGUSON & KIMBERLY D. FERGUSON
*2121 Barten Ct.
GPIN 1464-07-0873
INST *201412020011318 70
M.B. 137, PG. 11
Lot 17, Block A
022

Now Or Formerly
ROBERT J. CABRAL, JR. & SULMA B. CABRAL
*2124 Barten Ct.
GPIN 1454-97-9885
D.B. 4452, PG. 1627
M.B. 137, PG. 11
Lot 18, Block A
023

Now Or Formerly
CARSON D. ENTREKIN
*2120 Barten Ct.
GPIN 1454-97-9958
INST *200809040010485 30
M.B. 137, PG. 11
Lot 19, Block A
024

Now Or Formerly
MICAHEL D. ROULEAU & BRENDA J. ROULEAU
*2116 Barten Ct.
GPIN 1464-08-0043
INST *200409150147482
M.B. 137, PG. 11
Lot 20, Block A

Now Or Formerly
WOODS CREEK CORNER, LLC
*2150 Centerville Tpke.
GPIN 1454-98-9315
INST *201503230002447 20
INST *201412090011569 90 PLAT
Lot B
025

LEGEND

1 St'd. CG-2 Req'd.	7 St'd. CG-12, Type B
2 St'd. CG-6 Req'd.	8 5' Concrete Sidewalk
3 St'd. CG-9D Req'd.	9 8' Asphalt Sidewalk
4 St'd MS-3 Pavers Req'd.	10 St'd. CG-11 Modified
5 St'd. MS-2 Req'd.	11 8' Concrete Sidewalk
6 St'd. MS-1A Req'd.	12 St'd VBCG-1

C ___ Denotes Construction Limits in Cuts
F ___ Dentoes Construction Limits in Fills
Denotes Temporary Easement
Denotes Permanent Easement
Denotes Demolition of Pavement
Denotes Area of Proposed Pavement
Denotes Mill and Overlay
Denotes Asphalt Sidewalk

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)	
Mainline Profile	6A
Entrance Profile	13
Drainage Descriptions	2B(1)
Sign & Pave. Mark. Plan	14(6)
Signal Plan	16(3)
Landscaping Plan	X
Utility Plan	19(6)
SWM Plan	X
Existing Conditons	1H(4)

SCALE 0 25' 50'	PROJECT	SHEET NO.
	U000-134-842	6

12/1/2020
3:59:00 PM

d109381106a.dgn
Plotted By: RK&K - JMK

PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	6A

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
Virginia Beach, Virginia
ROADWAY ENGINEER

CENTERVILLE TURNPIKE

NOTE:
BOTH SB EOP AND NB EOP ROTATE FROM NORMAL CROSS SLOPE OF -2% TO -1%

30+49.59 | 31+09.59 | 31+53.68 | 32+49.42 | 32+82.39 | 33+42.90

NORMAL CROSS | TRANSITION -2% TO -1% | TRANSITION TO MATCH LYNNHAVEN PKWY. EOP | LYNNHAVEN PARKWAY INTERSECTION | TRANSITION TO MATCH LYNNHAVEN PKWY. EOP | TRANSITION -1% TO -2% | NORMAL CROSS

STA = 30+96.64
EL = 15.14

STA = 32+82.90
EL = 15.17

POT STA 31+94.80
CENTERVILLE CONSTR. ℄ =
POT STA 102+00.44
LYNNHAVEN CONSTR. ℄

PROPOSED GRADE AT CONST. ℄
SPLINE GRADE
EXISTING GRADE AT CONST. ℄
0.30%
-0.30%

MATCHLINE STA 28+50 (SEE SHEET 5A)
MATCHLINE STA 35+00 (SEE SHEET 7A)

20
15
10
5
0

29+00	30+00	31+00	32+00	33+00	34+00	35+00
13.74 / 14.40	13.82 / 14.55	14.08 / 14.85	14.59 / 15.16	14.68 / 15.21	14.49 / 15.19	14.26 / 15.05
13.79 / 14.48	13.82 / 14.53	14.12 / 14.93	14.62 / 15.18	14.55 / 15.20	14.47 / 15.18	14.18 / 14.97
	13.87 / 14.70	14.20 / 15.00	14.70 / 15.20		14.37 / 15.12	14.06 / 14.90
	13.97 / 14.78	14.31 / 15.08				13.96 / 14.82
		14.38 / 15.14				13.94 / 14.75
						13.91 / 14.67
						13.88 / 14.60
						13.87 / 14.57

NOTE:
CREST VERTICAL CURVE DESIGN SPEED BASED ON STOPPING SIGHT DISTANCE (SSD)
SAG VERTICAL CURVES DESIGN SPEED BASED ON "K" VALUE

HORIZ. 1" = 25' VERT. 1" = 5'	PROJECT U000-134-842	SHEET NO. 6A

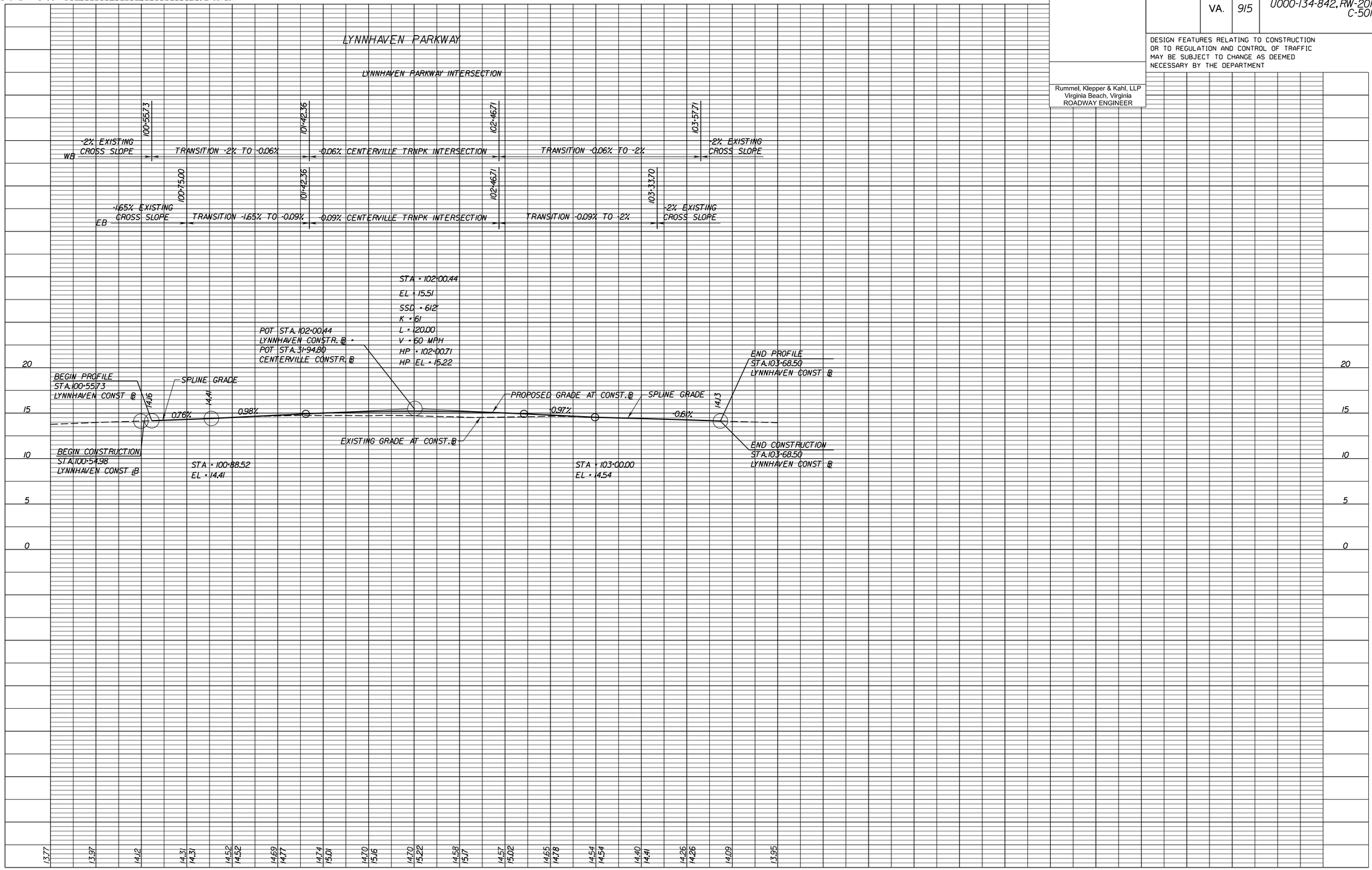
12/1/2020

PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	6B

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
Virginia Beach, Virginia
ROADWAY ENGINEER



NOTE:
CREST VERTICAL CURVE DESIGN SPEED BASED ON STOPPING SIGHT DISTANCE (SSD)
SAG VERTICAL CURVES DESIGN SPEED BASED ON "K" VALUE

HORIZ. 1" = 25' VERT. 1" = 5'	PROJECT U000-134-842	SHEET NO. 6B

12/1/2020

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	7

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 Virginia Beach, Virginia HYDRAULIC ENGINEER	Rummel, Klepper & Kahl, LLP Virginia Beach, Virginia ROADWAY ENGINEER

(F) POT STA. 38+17.46
CENTERVILLE CONSTR. ℄ •
POT STA. 20+00.00
AMBERBROOKE CONSTR. B
△ • 92° 49' 15" LT

(G) POT STA. 38+22.20
CENTERVILLE CONSTR. ℄ •
POT STA. 10+00.00
INFINITY CONSTR. ℄
△ • 90° 00' 00" RT

(G) 1' Public No Ingress/Egress Easement (Inst.#200812220001437960)

(H) Variable Width Right-of-way Reservation (Inst.#200812220001437960)

(I) Variable Width Private Reciprocal Cross Access Easement (Inst.#200812220001437960)

(J) 10'private Drainage Easement (Inst.#200812220001437960)

Curve AMBWAY_3
PI • 20+82.14
DELTA • 5° 34' 42.98" (LT)
D • 17° 28' 31"
T • 15.97'
L • 31.92'
R • 327.87'
PC • 20+66.17
PT • 20+98.09

END CONSTRUCTION
STA. 20+98.09
AMBERBROOKE WAY
CONSTR. ℄

026
Now Or Formerly
BPMS CASCADES, LLC
•5705 Lynnhaven Pkwy.
GPIN 1454-98-1390
INST #200902120002900
INST #200812220001437960 PLAT
Parcel A

027
Now Or Formerly
BPMS CASCADES 2, LLC
2121 Centerville Tpke.
GPIN 1454-98-5427
INST #200902120002890
INST #200812220001437960 PLAT
Parcel B

026
Now Or Formerly
BPMS CASCADES, LLC
•5705 Lynnhaven Pkwy.
GPIN 1454-98-1390
INST #200902120002900
INST #200812220001437960 PLAT
Parcel A

029
Now Or Formerly
JERRY J. NG &
JULIE Y. ZHU
•2016 Arlington Arch Ct.
GPIN 1454-98-4887
D.B. 4339, PG. 1089
D.B. 2515, PG. 2294 PLAT
Lot 101

030
Now Or Formerly
QIAOLING LIN
•2012 Arlington Arch Ct.
GPIN 1454-98-4964
INST# 201707310006444480
D.B. 2515, PG. 2294 PLAT
Lot 100

031
Now Or Formerly
AARON C. MACK &
CONSTANCE L. MACK
•2008 Arlington Arch Ct.
GPIN 1454-98-4959
INST #201690260008591140
D.B. 2515, PG. 2294 PLAT
Lot 99

Now Or Formerly
WOODS CREEK CORNER, LLC
•2150 Centerville Tpke.
GPIN 1454-98-9315
INST #201503230002447 20
INST #201412090011569 90 PLAT
Lot B
025

Now Or Formerly
BRG CASCADES EAST, LLC
•2120 Centerville Tpke.
GPIN 1464-08-1786
INST #201412160011779 30
INST #201412090011569 90 PLAT
Lot A-1
032

Now Or Formerly
MUHAMMAD A. ANJUM &
SURIYA BIBI
•2021 Sun Valley Dr.
GPIN 1454-98-6994
INST #201310160012328 40
M.B. 122, PG. 12
Lot 61, Block D
033

Now Or Formerly
JEFFERY H. JOHNSON
•2017 Sun Valley Dr.
GPIN 1454-99-6064
INST #200807170008429 40
M.B. 122, PG. 12
Lot 62, Block D
034

END CONSTRUCTION
STA. 11+08.84
INFINITY LANE
CONSTR. ℄

Curve INFINITY_3
PI • 10+81.58
DELTA • 25° 15' 56.26" (RT)
D • 66° 37' 18"
T • 19.28'
L • 37.92'
R • 86.00'
PC • 10+62.31
PT • 11+00.23

Match Line Sta. 35+00 Sheet 6

Match Line Sta. 41+50 Sheet 8

CENTERVILLE CONST. ℄

CENTERVILLE TURNPIKE

INFINITY LANE

AMBERBROOKE WAY

POT 20+00.00

POT 10+00.00

PC 20+66.17

PT 21+00.00

PC 10+62.31

PT 11+10.00

PROP. TEMP. CONST. EASEMENT

EXIST. R/W

PROP. R/W

AMBERBROOK CONST. ℄

INFINITY CONST. ℄

10' PERM. NOISE BARRIER MAINT. EASEMENT

NOISE BARRIER 7P

NOISE BARRIER 4P

LEGEND

1	Std. CG-2 Req'd.	7	Std. CG-12, Type B
2	Std. CG-6 Req'd.	8	5' Concrete Sidewalk
3	Std. CG-9D Req'd.	9	8' Asphalt Sidewalk
4	Std MS-3 Pavers Req'd.	10	Std. CG-11 Modified
5	Std. MS-2 Req'd.	11	8' Concrete Sidewalk
6	Std. MS-1A Req'd.	12	Std VBCG-1

C ___ Denotes Construction Limits in Cuts
F ___ Dentoes Construction Limits in Fills
Denotes Temporary Easement
Denotes Permanent Easement
Denotes Demolition of Pavement
Denotes Area of Proposed Pavement
Denotes Mill and Overlay
Denotes Asphalt Sidewalk

7-A	•62.57 3.03'	7-F	•74.31 26.95'
7-B	•86.54 18.58'	7-G	•64.06 5.11'
7-C	•56.76 26.98'	7-H	•64.06 5.10'
7-D	•67.41 32.62'	7-J	•64.00 20.94'
7-E	•62.61 2.94'	7-K	•53.77 12.88'

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

Mainline Profile	7A
Entrance Profile	13
Drainage Descriptions	2B(1)
Sign & Pave. Mark. Plan	14(7)
Signal Plan	X
Landscaping Plan	X
Utility Plan	19(7)
SWM Plan	X
Existing Conditions	1H(5)

SCALE 0 25' 50'

PROJECT	SHEET NO.
U000-134-842	7

12/1/2020
3:59:12 PM

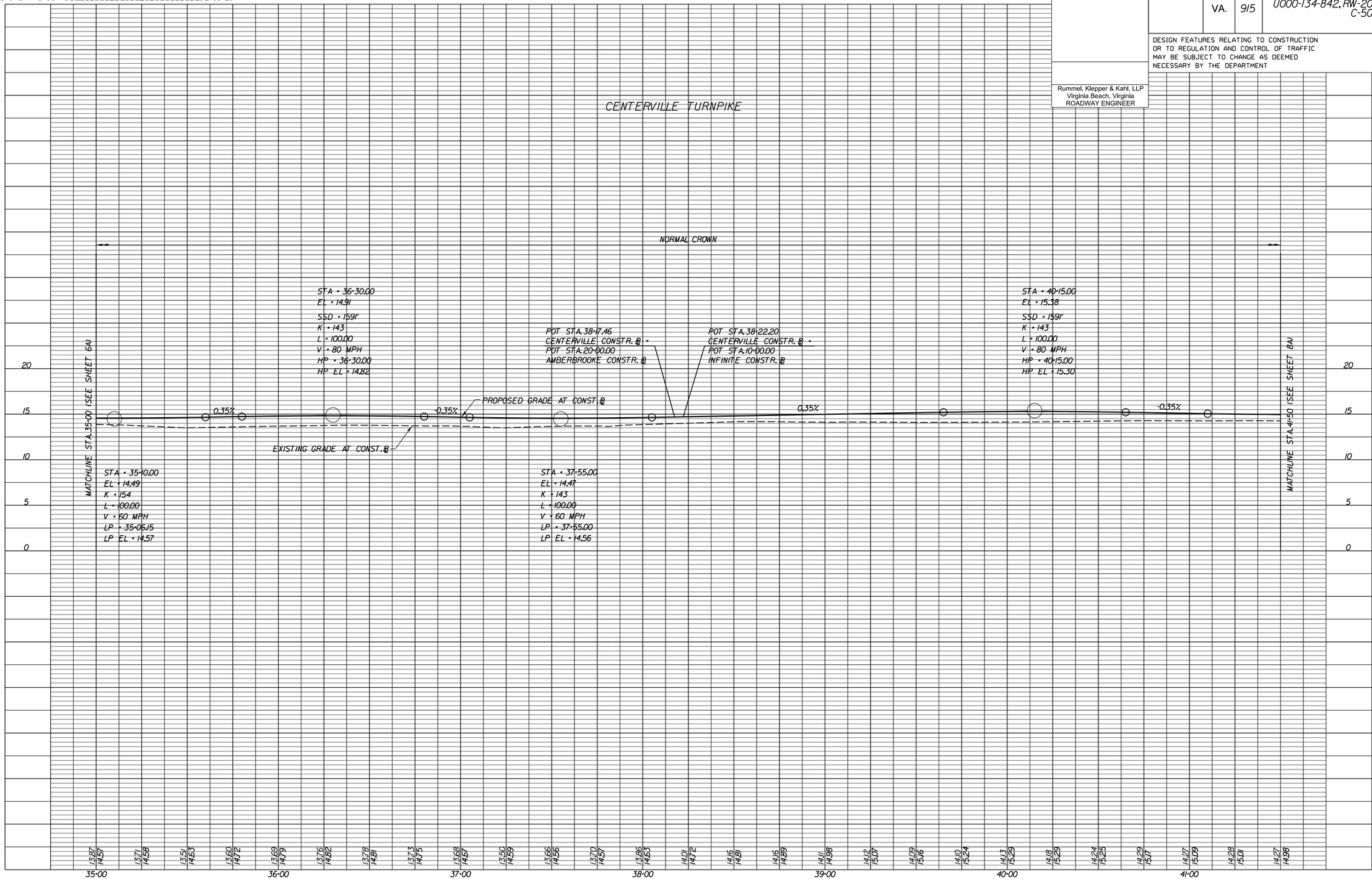
d109381107a.dgn
Plotted By: RK&K - JMK

PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	7A

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
Virginia Beach, Virginia
ROADWAY ENGINEER



NOTE:
CREST VERTICAL CURVE DESIGN SPEED BASED ON STOPPING SIGHT DISTANCE (SSD)
SAG VERTICAL CURVES DESIGN SPEED BASED ON "K" VALUE

HORIZ. 1" = 25' VERT. 1" = 5'	PROJECT U000-134-842	SHEET NO. 7A

12/1/2020

12/1/2020
3:59:13 PM

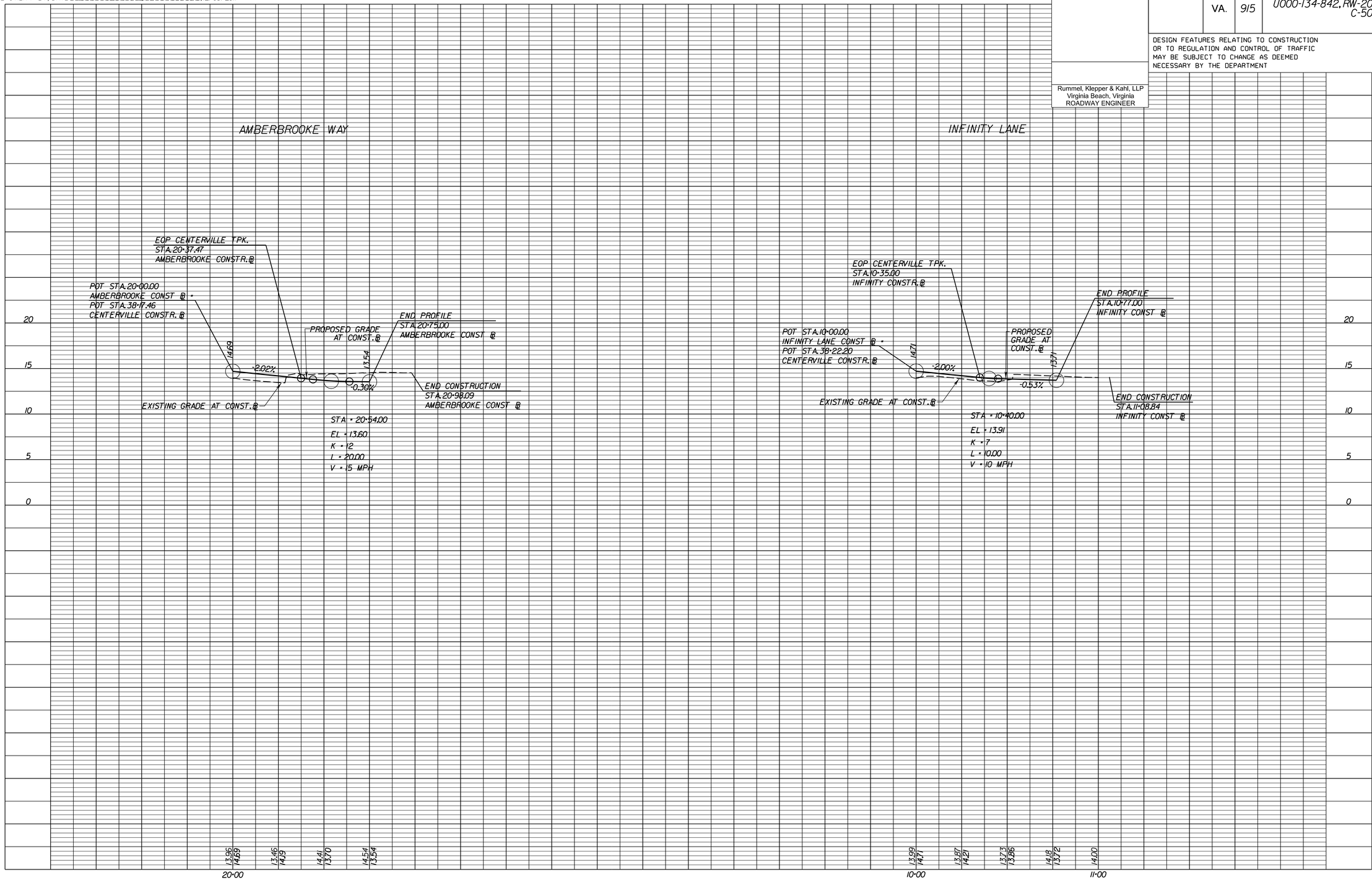
d109381107b.dgn
Plotted By: RK&K - JMK

PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	7B

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
Virginia Beach, Virginia
ROADWAY ENGINEER



NOTE:
CREST VERTICAL CURVE DESIGN SPEED BASED ON STOPPING SIGHT DISTANCE (SSD)
SAG VERTICAL CURVES DESIGN SPEED BASED ON "K" VALUE

HORIZ. 1" = 25' VERT. 1" = 5'	PROJECT U000-134-842	SHEET NO. 7B

12/1/2020

12/1/2020
3:59:25 PM

d109381108.dgn
Plotted By: RK&K - JMK

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	8

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 Virginia Beach, Virginia HYDRAULIC ENGINEER	Rummel, Klepper & Kahl, LLP Virginia Beach, Virginia ROADWAY ENGINEER

(H) POT STA. 43+38.98
CENTERVILLE CONSTR. ℄ •
POT STA. 20+00.00
GLEN VIEW CONSTR. ℄
△ • 90° 17' 01" LT

END CONSTRUCTION
STA. 21+68.50
GLEN VIEW DRIVE
CONSTR. B

GLEN VIEW CONSTR. ℄
POT 21+75.00

031 — Now Or Formerly AARON C. MACK & CONSTANCE L. MACK • 2008 Arlington Arch Ct. GPIN 1454-98-4959 INST • 201690260008591 40 D.B. 2515, PG. 2294 PLAT Lot 99

042 — Now Or Formerly BILLY D. GENES • 2004 Arlington Arch Ct. GPIN 1454-99-4034 D.B. 3666, PG. 2075 D.B. 2515, PG. 2294 PLAT Lot 98

043 — Now Or Formerly VALENTINO I. BALANCIO & LUTGARDA E. BALANCIO • 2000 Arlington Arch Ct. GPIN 1454-99-4029 D.B. 4125, PG. 1236 D.B. 2515, PG. 2294 PLAT Lot 97

044 — Now Or Formerly JOSE A. COLON, JR & MEGAN K. COLON • 1972 Arlington Arch Dr. GPIN 1454-99-3282 INST • 201706290005508 10 D.B. 2515, PG. 2294 PLAT Lot 1

045 — Now Or Formerly EUSULA F. HENNIGAN • 1968 Arlington Arch Dr. GPIN 1454-99-3278 INST • 200504190057988 0 D.B. 2515, PG. 2294 PLAT Lot 2

046 — Now Or Formerly RIGOBERTO SOSA & BLANCA D. FUENTES • 1964 Arlington Arch Dr. GPIN 1454-99-3353 INST • 201407220006657 60 D.B. 2515, PG. 2294 PLAT Lot 3

047 — Now Or Formerly TOBY A. LARIVIERE & CHRISTOPHER M. WULF • 1960 Arlington Arch Dr. GPIN 1454-99-3327 INST • 201708240007266 80 D.B. 2610, PG. 1862 PLAT Lot 4

Now Or Formerly JEFFREY GLEN & PATRICIA M. GLEN • 1956 Arlington Arch Dr. GPIN 1454-99-2481 D.B. 4078, PG. 1987 D.B. 2610, PG. 1862 PLAT Lot 5

048 — Now Or Formerly CITY OF VIRGINIA BEACH • 1960 JOHN BROWN LANE GPIN 1454-99-2628 D.B. 2808, PG. 630 D.B. 2729, PG. 330 PLAT Lots 71 & 72

Match Line Sheet 8C

Match Line Sta. 41+50 Sheet 7

Match Line Sta. 48+00 Sheet 9

CENTERVILLE TURNPIKE

CENTERVILLE CONSTR. ℄

N 15° 01' 05" W

POT 20+00.00

GLEN VIEW DRIVE

BRICK PAVER CROSSWALK

PROP. R/W

EXIST. R/W

PROP. TEMP. CONST. EASEMENT

10' PERM. NOISE BARRIER MAINT. EASEMENT

NOISE BARRIER 7P

NOISE BARRIER 6P

NOISE BARRIER 4P

38'x60'

34'x53'

19'x30'

No Ingress/Egress (D.B. 2515, Pg. 2294)

034 — Now Or Formerly JEFFERY H. JOHNSON • 2017 Sun Valley Dr. GPIN 1454-99-6064 INST • 200807170008429 40 M.B. 122, PG. 12 Lot 62, Block D

035 — Now Or Formerly JAMES H. HANNEY JR. & KASSANDRA D. HANNEY • 2013 Sun Valley Dr. GPIN 1454-99-6142 INST • 201110418000385 120 M.B. 112, PG. 12 Lot 63, Block D

036 — Now Or Formerly CLAUDE R. REYNOLDS & JUNE S. REYNOLDS • 2009 Sun Valley Dr. GPIN 1454-99-6261 D.B. 2033, PG. 259 M.B. 122, PG. 12 Lot 64, Block D

037 — Now Or Formerly RAYMOND J. WILLIAMS & VALERIE A. WILLIAMS • 5305 Arapahoe Tr. GPIN 1454-99-5286 D.B. 2607, PG. 52 M.B. 122, PG. 12 Lot 65, Block D

038 — Now Or Formerly DAVID J. WALKER & JEANETT G. WALKER • 5309 Arapahoe Tr. GPIN 1454-99-5376 D.B. 1823, PG. 575 M.B. 122, PG. 12 Lot 66, Block D

Now Or Formerly ROBERT BECHTEL • 5324 Sundance Ct. GPIN 1454-99-6502 INST • 201611230010719 40 M.B. 118, PG. 39 Lot 82, Block D

Now Or Formerly DANIEL CARL RIES & SUSAN CHARLOTTE RILES • 5328 Sundance Ct. GPIN 1454-99-5524 INST • 201508050007473 50 M.B. 118, PG. 39 Lot 83, Block D

040

Now Or Formerly LINDA WEAVER • 5332 Sundance Ct. GPIN 1454-99-5615 INST • 201112120026869 0 M.B. 118, PG. 39 Lot 84, Block D

041

LEGEND

1	Std. CG-2 Req'd.	7 Std. CG-12, Type B
2	Std. CG-6 Req'd.	8 5' Concrete Sidewalk
3	Std. CG-9D Req'd.	9 8' Asphalt Sidewalk
4	Std MS-3 Pavers Req'd.	10 Std. CG-11 Modified
5	Std. MS-2 Req'd.	11 8' Concrete Sidewalk
6	Std. MS-1A Req'd.	12 Std VBCG-1

C ___ Denotes Construction Limits In Cuts
F ___ Dentoes Construction Limits In Fills
Denotes Temporary Easement
Denotes Permanent Easement
Denotes Demolition of Pavement
Denotes Area of Proposed Pavement
Denotes Mill and Overlay
Denotes Asphalt Sidewalk

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

Mainline Profile	8A
Entrance Profile	13
Drainage Descriptions	2B(1)
Sign & Pave. Mark. Plan	14(8)
Signal Plan	16(4)
Landscaping Plan	X
Utility Plan	19(8)
SWM Plan	21(2)
Existing Conditions	1H(6)

SCALE 0 25' 50'

PROJECT	SHEET NO.
U000-134-842	8

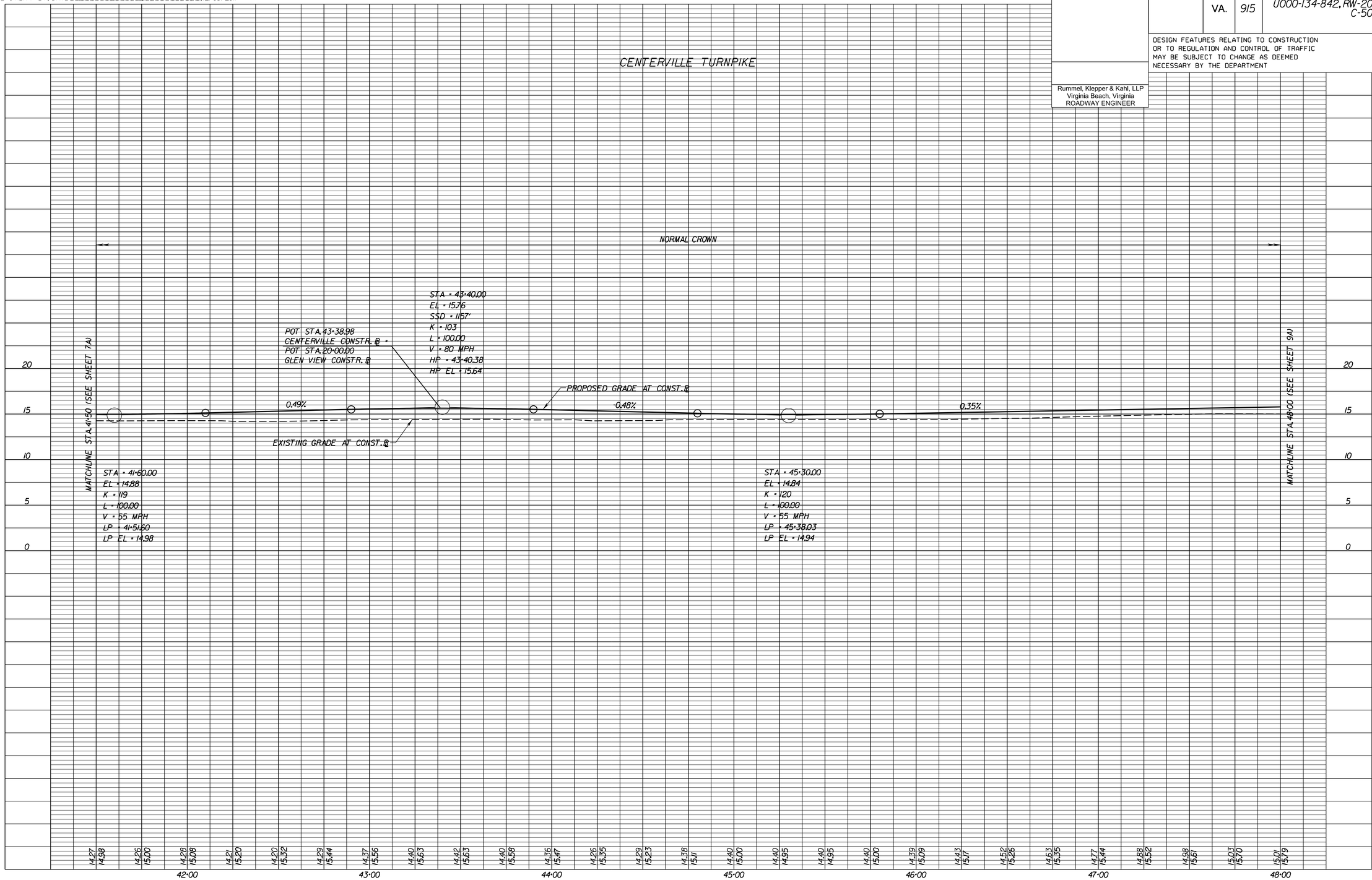
12/1/2020

PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-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

Rummel, Klepper & Kahl, LLP
Virginia Beach, Virginia
ROADWAY ENGINEER



NOTE:
CREST VERTICAL CURVE DESIGN SPEED BASED ON STOPPING SIGHT DISTANCE (SSD)
SAG VERTICAL CURVES DESIGN SPEED BASED ON "K" VALUE

HORIZ. 1" = 25' VERT. 1" = 5'	PROJECT U000-134-842	SHEET NO. 8A

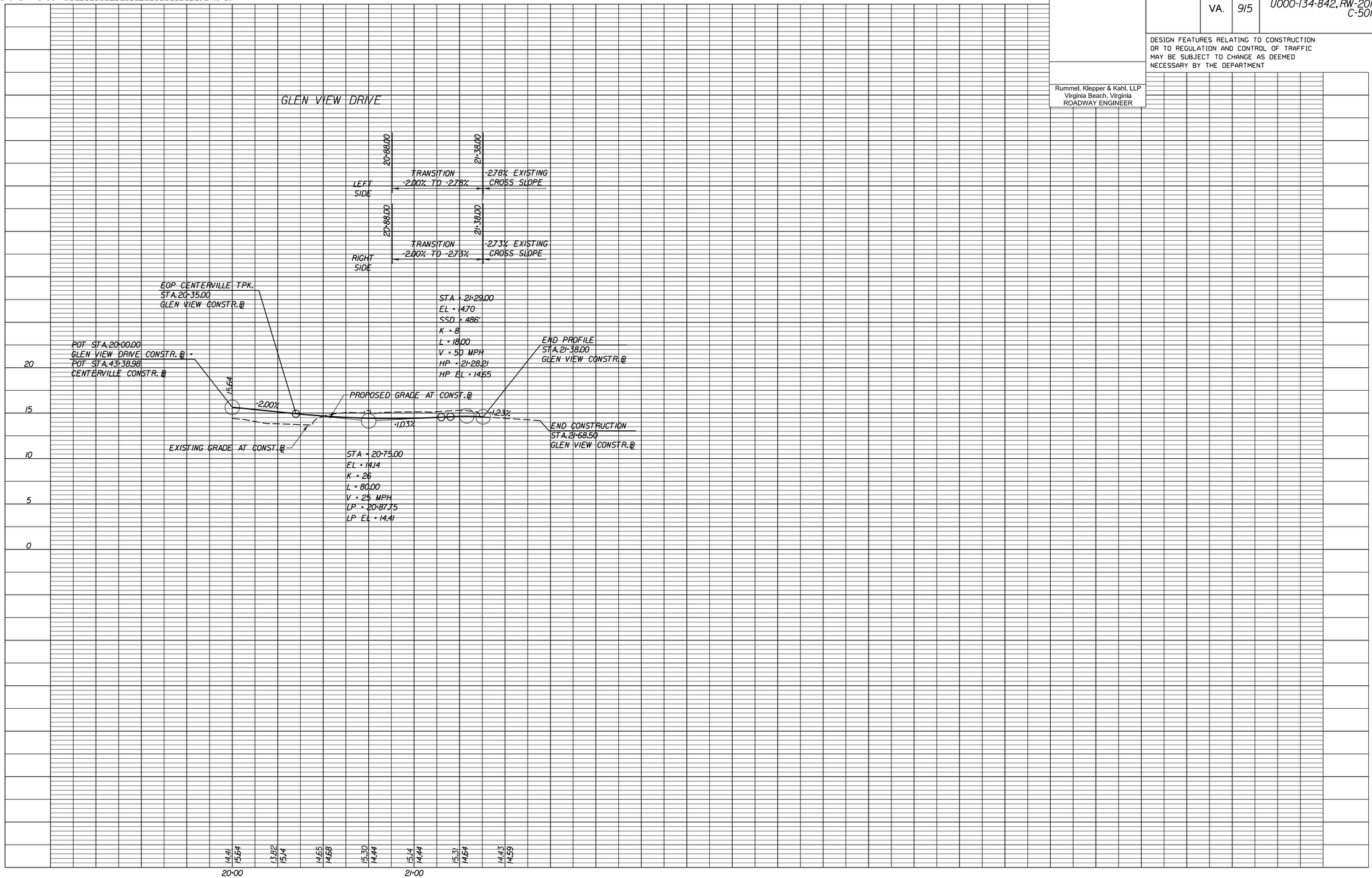
12/1/2020

PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	8B

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
Virginia Beach, Virginia
ROADWAY ENGINEER



NOTE:
CREST VERTICAL CURVE DESIGN SPEED BASED ON STOPPING SIGHT DISTANCE (SSD)
SAG VERTICAL CURVES DESIGN SPEED BASED ON "K" VALUE

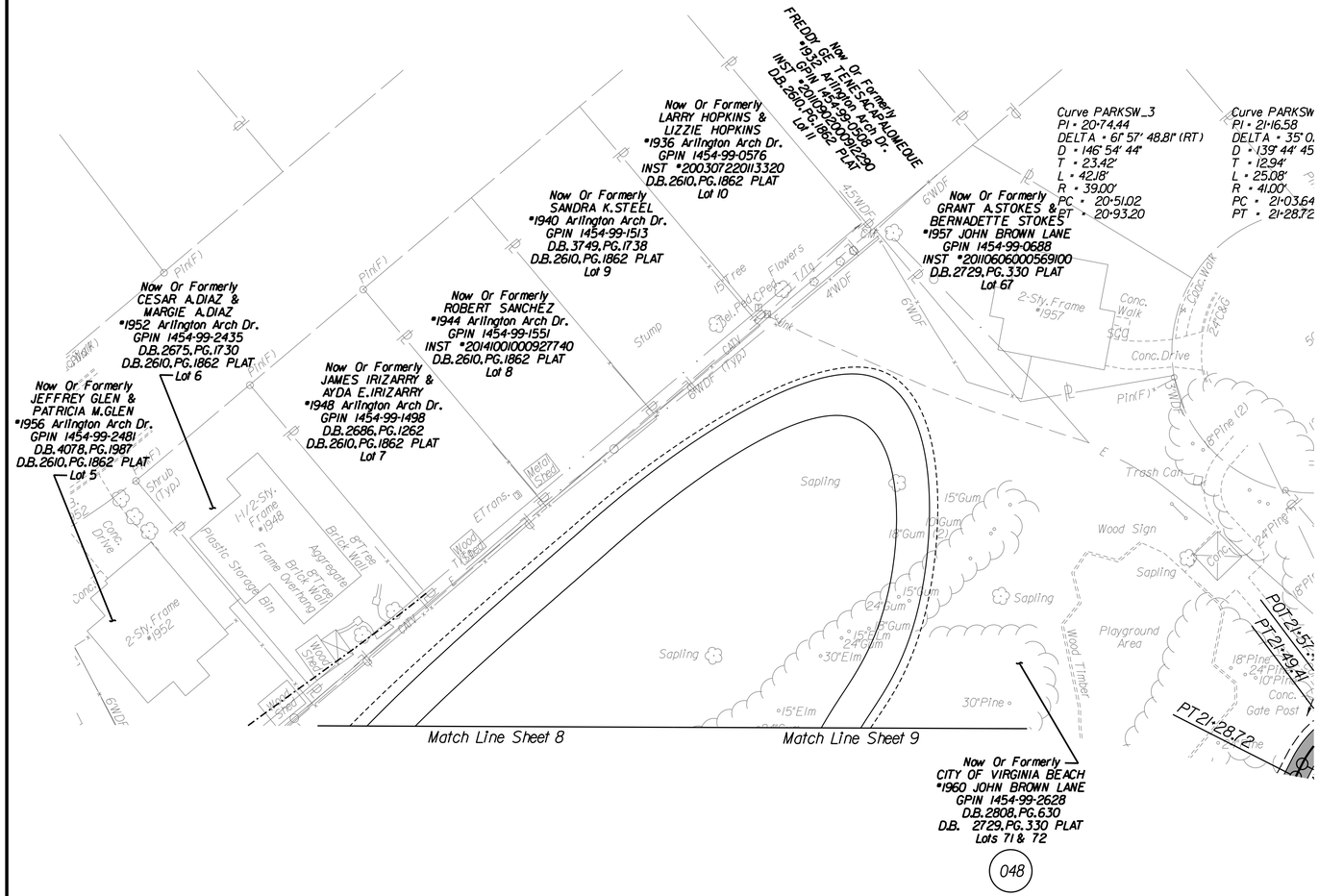
HORIZ. 1" = 25' VERT. 1" = 5'	PROJECT U000-134-842	SHEET NO. 8B

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

Rummel, Klepper & Kahl, LLP Virginia Beach, Virginia HYDRAULIC ENGINEER	Rummel, Klepper & Kahl, LLP Virginia Beach, Virginia ROADWAY ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	8C

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



LEGEND

1	Std. CG-2 Req'd.	7	Std. CG-12, Type B
2	Std. CG-6 Req'd.	8	5' Concrete Sidewalk
3	Std. CG-9D Req'd.	9	8' Asphalt Path
4	Std. MS-1A Req'd.	10	Std. UD-2 Req'd.
5	Std. MS-2 Req'd.	11	Std. UD-4 Req'd.
6	Std. MS-1 Req'd.	12	Std. CG-12, Type MI Req'd.

C ---- Denotes Construction Limits In Cuts
F ---- Dentoes Construction Limits In Fills
Denotes Temporary Easement
Denotes Permanent Easement
Denotes Demolition of Pavement
Denotes Area of Proposed Pavement
Denotes Mill and Overlay

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)	
Mainline Profile	8A
Entrance Profile	13
Drainage Descriptions	X
Sign & Pave. Mark. Plan	X
Signal Plan	X
Landscaping Plan	X
Utility Plan	X
SWM Plan	21(2)

SCALE 0 25' 50'

PROJECT	SHEET NO.
U000-134-842	8C

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

(J) POT STA. 50+47.65
CENTERVILLE CONSTR. ℄ •
POT STA. 10+00.00
HIDDEN VALLEY CONSTR. ℄
△ • 86° 51' 04" RT

(0) POT STA. 49+72.72
CENTERVILLE CONSTR. ℄ •
POT STA. 20+00.00
PARK SW CONSTR. ℄
△ • 90° 00' 00" LT

END CONSTRUCTION
STA. 21+54.43
PARK SW CONSTR. ℄

LEGEND

1 St'd.CG-2 Req'd.
2 St'd.CG-6 Req'd.
3 St'd.CG-9D Req'd.
4 St'd MS-3 Pavers Req'd.
5 St'd.MS-2 Req'd.
6 St'd.MS-1A Req'd.
7 St'd.CG-12,Type B
8 5' Concrete Sidewalk
9 8' Asphalt Sidewalk
10 St'd.CG-11 Modified
11 8' Concrete Sidewalk
12 St'd VBCG-1

C___ Denotes Construction Limits In Cuts
F___ Dentoes Construction Limits In Fills
Denotes Temporary Easement
Denotes Permanent Easement
Denotes Demolition of Pavement
Denotes Area of Proposed Pavement
Denotes Mill and Overlay
Denotes Asphalt Sidewalk

Rummel, Klepper & Kahl, LLP Virginia Beach, Virginia HYDRAULIC ENGINEER	Rummel, Klepper & Kahl, LLP Virginia Beach, Virginia ROADWAY ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	9

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

048
Now Or Formerly
CITY OF VIRGINIA BEACH
•1960 JOHN BROWN LANE
GPIN 1454-99-2628
D.B. 2808, PG. 630
D.B. 2729, PG. 330 PLAT
Lots 71 & 72

049
Now Or Formerly
CITY OF VIRGINIA BEACH
•1917 Kempsville Crossing Ln.
GPIN 1455-80-8194
INST •200307250115334
INST •200307250115332 PLAT
•PARK SITE•

050
Now Or Formerly
TRAVIS CHESTER RUPP
•1916 Kempsville Crossing Ln.
GPIN 1455-90-0129
INST •201704170003120 90
INST •200307250115332 PLAT
Lot 30

041
Now Or Formerly
LINDA WEAVER
•5332 Sundance Ct.
GPIN 1454-99-5615
INST •201112120012686 90
M.B. 118, PG. 39
Lot 84, Block D

051
Now Or Formerly
ROBERT EUGENE DEXTER
•5336 Sundance Ct.
GPIN 1454-99-4793
INST •201506220005792 50
M.B. 118, PG 39
Lot 85, Block D

052
Now Or Formerly
JOSEPH G. BODNAR &
SHELLEY M. KARPMAN BODNAR
•5340 Sundance Ct.
GPIN 1454-994779
D.B. 4404, PG. 753
M.B. 118, PG 39
Lot 86, Block D

053
Now Or Formerly
JESUS A. MURILLO &
NORMA N. MURILLO
•5401 Squaw Valley Tr.
GPIN 1454-99-4917
D.B. 1797, PG. 644
M.B. 118, PG. 39
Lot 1, Block C

054
Now Or Formerly
MATTHEW W. THOMAS
BRANDEE M. THOMAS
•5405 Squaw Valley Tr.
GPIN 1445-90-3096
INST •201210020011394 50
M.B. 118, PG. 39
Lot 2, Block C

055
Now Or Formerly
PEDRO R. MORAZO &
FEMIA G. MORAZO
•2012 Wanda Cir.
GPIN 1455-90-3232
D.B. 3744, PG. 1002
M.B. 118, PG 39
Lot 12, Block C

Match Line Sta. 48+00 Sheet 8
Match Line Sta. 54+50 Sheet 10
Match Line Sta. 49+00 Sheet 9

PC21+03.64
PT21+28.72
PT21+49.41
POT21+57.43
PC21+33.87
PT20+93.20
PC20+51.02
POT 10+00.00
POT 20+00.00
N 43° 03' 16" W
N 57° 54' 04" W
N 76° 05' 45" W
N 71° 50' 00" E
N 15° 01' 05" W
PROP. R/W
EXIST. R/W
PROP. TEMP. CONST. EASEMENT
CENTERVILLE CONSTR. ℄
CENTERVILLE TURNPIKE
HIDDEN VALLEY CONSTR. ℄
HIDDEN VALLEY DRIVE
VALLEY GUTTER
NOISE BARRIER 4P
NOISE BARRIER 5P
10' PERM. NOISE BARRIER MAINT. EASEMENT
Sr'd. CG-12, Type M2 Req'd.
END CONSTRUCTION
STA. 12+18.34
HIDDEN VALLEY DRIVE
CONSTR. ℄

9-A •49.44 31.40'
9-B •44.11 31.40'
9-C •59.23 31.23'
9-D •57.02 31.11'
9-E •75.00 28.88'
9-F •75.00 28.09'
9-G •82.70 41.61'
9-H •81.21 42.09'

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

Mainline Profile	9A
Entrance Profile	13
Drainage Descriptions	2B(1)
Sign & Pave. Mark. Plan	14(9)
Signal Plan	16(5)
Landscaping Plan	X
Utility Plan	19(9)
SWM Plan	21(2)
Existing Conditions	1H(7)

SCALE 0 25' 50'

PROJECT	SHEET NO.
U000-134-842	9

12/1/2020
3:59:47 PM

d1093809a.dgn
Plotted By: RK&K - JMK

PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	9A

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
Virginia Beach, Virginia
ROADWAY ENGINEER

CENTERVILLE TURNPIKE

NORMAL CROWN

STA = 50+00.00
EL = 16.49
SSD = 159.1'
K = 143
L = 100.00
V = 80 MPH
HP = 50+00.00
HP EL = 16.40

POT STA 50+47.65
CENTERVILLE CONSTR. ℄ =
POT STA 10+00.00
HIDDEN VALLEY CONSTR. ℄

0.35%

-0.35%

0.35%

PROPOSED GRADE AT CONST. ℄

EXISTING GRADE AT CONST. ℄

STA = 52+00.00
EL = 15.79
K = 143
L = 100.00
V = 60 MPH
LP = 52+00.00
LP EL = 15.87

MATCHLINE STA 48+00 (SEE SHEET 8A)

MATCHLINE STA 54+50 (SEE SHEET 10A)

20
15
10
5
0

15.01 15.79 | 15.01 15.87 | 15.03 15.96 | 15.02 16.05 | 15.04 16.14 | 15.08 16.22 | 15.12 16.31 | 15.15 16.38 | 15.16 16.40 | 15.21 16.38 | 15.24 16.31 | 15.25 16.22 | 15.28 16.14 | 15.32 16.05 | 15.32 15.96 | 15.33 15.90 | 15.33 15.87 | 15.36 15.90 | 15.43 15.96 | 15.44 16.05 | 15.46 16.14 | 15.48 16.22 | 15.49 16.31 | 15.50 16.40 | 15.54 16.49 | 15.55 16.57 | 15.57 16.65

48+00 | 49+00 | 50+00 | 51+00 | 52+00 | 53+00 | 54+00

NOTE:
CREST VERTICAL CURVE DESIGN SPEED BASED ON STOPPING SIGHT DISTANCE (SSD)
SAG VERTICAL CURVES DESIGN SPEED BASED ON "K" VALUE

HORIZ. 1" = 25' VERT. 1" = 5'	PROJECT U000-134-842	SHEET NO. 9A

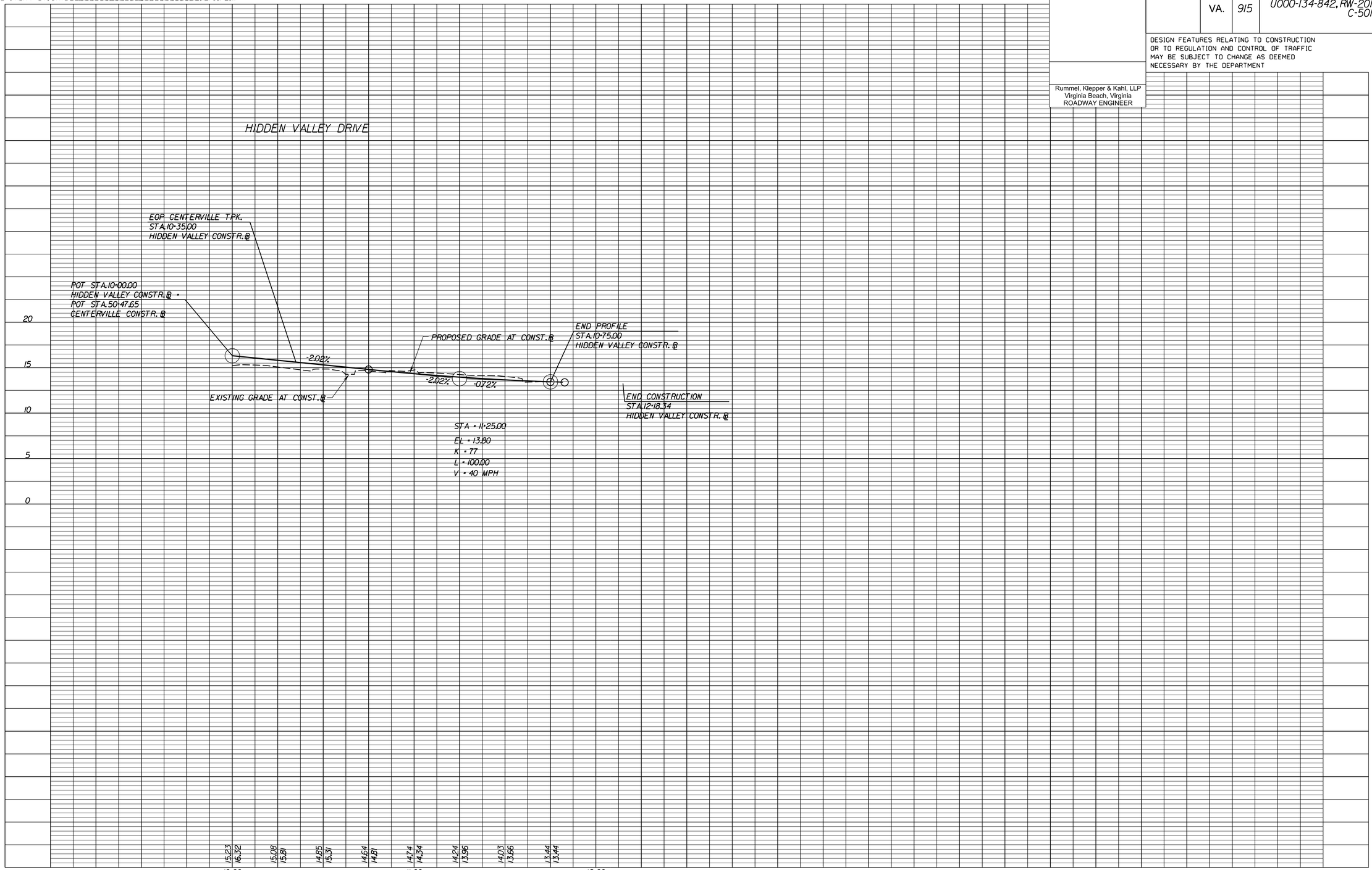
12/1/2020

PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	9B

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
Virginia Beach, Virginia
ROADWAY ENGINEER



HORIZ. 1" = 25' VERT. 1" = 5'	PROJECT U000-134-842	SHEET NO. 9B

NOTE:
CREST VERTICAL CURVE DESIGN SPEED BASED ON STOPPING SIGHT DISTANCE (SSD)
SAG VERTICAL CURVES DESIGN SPEED BASED ON "K" VALUE

12/1/2020

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	10

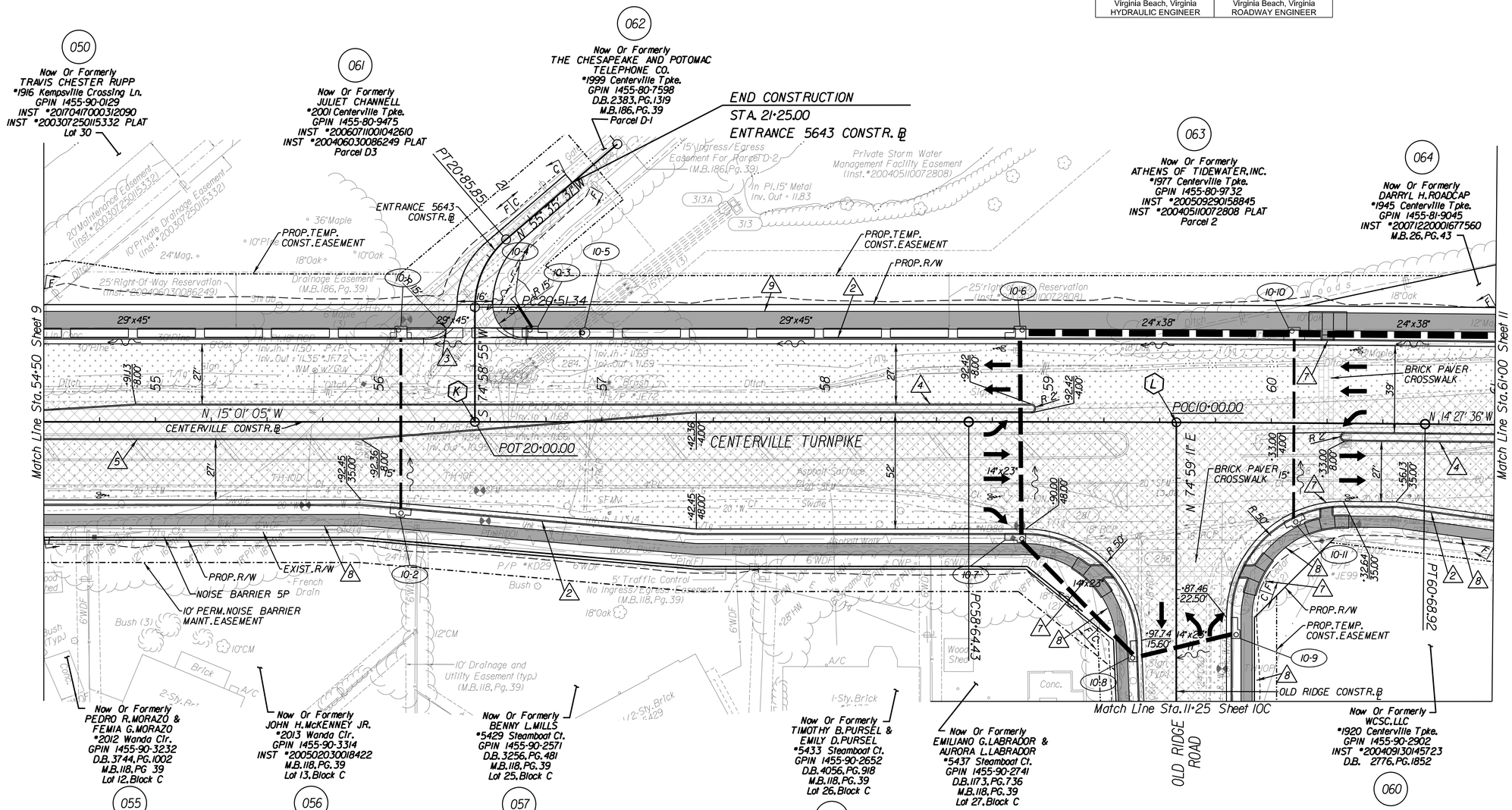
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Rummel, Klepper & Kahl, LLP Virginia Beach, Virginia HYDRAULIC ENGINEER	Rummel, Klepper & Kahl, LLP Virginia Beach, Virginia ROADWAY ENGINEER

(K) POT STA. 56+43.15
CENTERVILLE CONSTR. ℄ •
POT STA. 20+00.00
ENTRANCE 5643 CONSTR. ℄
△ • 90° 00' 00" LT

(L) POC STA. 59+57.45
CENTERVILLE CONSTR. ℄ •
POT STA. 10+00.00
OAK RIDGE CONSTR. ℄
△ • 89° 45' 02" RT

Curve ENT-5643_3
PI • 20+69.75
DELTA • 49° 25' 34.11" (RT)
D • 143° 14' 22"
T • 18.41'
L • 34.51'
R • 40.00'
PC • 20+51.34
PT • 20+85.85



LEGEND

1	Std. CG-2 Req'd.	7	Std. CG-12, Type B
2	Std. CG-6 Req'd.	8	5' Concrete Sidewalk
3	Std. CG-9D Req'd.	9	8' Asphalt Sidewalk
4	Std MS-3 Pavers Req'd.	10	Std. CG-11 Modified
5	Std. MS-2 Req'd.	11	8' Concrete Sidewalk
6	Std. MS-1A Req'd.	12	Std VBCG-1

C ___ Denotes Construction Limits In Cuts
F ___ Dentoes Construction Limits In Fills
Denotes Temporary Easement
Denotes Permanent Easement
Denotes Demolition of Pavement
Denotes Area of Proposed Pavement
Denotes Mill and Overlay
Denotes Asphalt Sidewalk

Curve CENTERVILLE_12
PI • 59+66.68
DELTA • 0° 33' 28.52" (RT)
D • 0° 16' 22"
T • 102.25'
L • 204.49'
R • 21,000.00'
PC • 58+64.43
PT • 60+68.92
E • NC
V • 60 MPH

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

Mainline Profile	10A
Entrance Profile	13
Drainage Descriptions	2B(1)
Sign & Pave. Mark. Plan	14(10)
Signal Plan	X
Landscaping Plan	X
Utility Plan	19(10)
SWM Plan	X
Existing Conditions	1H(8)

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	10

12/1/2020
3:59:58 PM

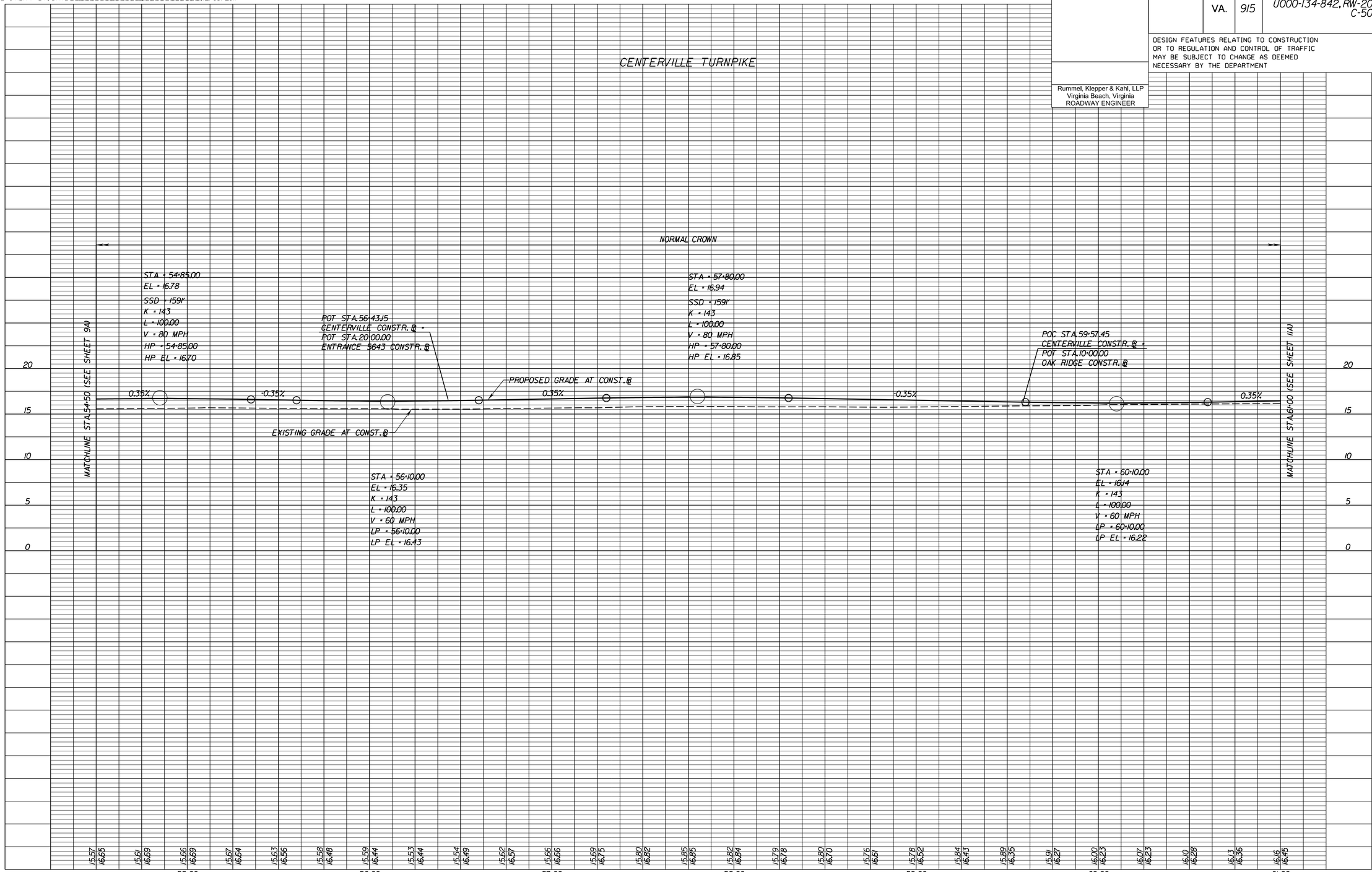
d109381l0a.dgn
Plotted By: RK&K - JMK

PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	10A

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
Virginia Beach, Virginia
ROADWAY ENGINEER



NOTE:
CREST VERTICAL CURVE DESIGN SPEED BASED ON STOPPING SIGHT DISTANCE (SSD)
SAG VERTICAL CURVES DESIGN SPEED BASED ON "K" VALUE

HORIZ. 1" = 25' VERT. 1" = 5'	PROJECT U000-134-842	SHEET NO. 10A

12/1/2020

12/1/2020
3:59:59 PM

d109381l0b.dgn
Plotted By: RK&K - JMK

PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	10B

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
Virginia Beach, Virginia
ROADWAY ENGINEER

OLD RIDGE ROAD

ENTRANCE 56-43

NORMAL CROWN

EOP CENTERVILLE TPK.
STA.10+35.00
OAK RIDGE CONSTR.℄

POT STA.10+00.00
OLD RIDGE CONSTR.℄ -
POC STA.59+57.45
CENTERVILLE CONSTR.℄

STA = 11+90.00
EL = 14.56
SSD = 535'
K = 247
L = 50.00

END PROFILE
STA.13+88.00
OLD RIDGE ROAD CONSTR.B

PROPOSED GRADE AT CONST.B

EXISTING GRADE AT CONST.℄

16.32
15.62
13.66
-2.00%
-0.30%
0.50%
-0.30%

STA = 10+70.00
EL = 14.92
K = 29
L = 50.00

STA = 13+40.00
EL = 13.81
K = 247
L = 50.00

END CONSTRUCTION
STA.14+13.11
OLD RIDGE ROAD CONSTR.℄

20 15 10 5 0

10+00		11+00		12+00		13+00		14+00
15.90	16.32	14.94	14.97	14.50	14.51	13.98	14.01	13.63
15.65	15.82	14.74	14.83	14.57	14.60	13.87	13.88	
15.6	15.32	14.69	14.75	14.67	14.68	13.76	13.78	
				14.33	14.38	13.70	13.70	
				14.24	14.26			
				14.11	14.13			

NOTE:
CREST VERTICAL CURVE DESIGN SPEED BASED ON STOPPING SIGHT DISTANCE (SSD)
SAG VERTICAL CURVES DESIGN SPEED BASED ON "K" VALUE

HORIZ. 1" = 25' VERT. 1" = 5'	PROJECT U000-134-842	SHEET NO. 10B

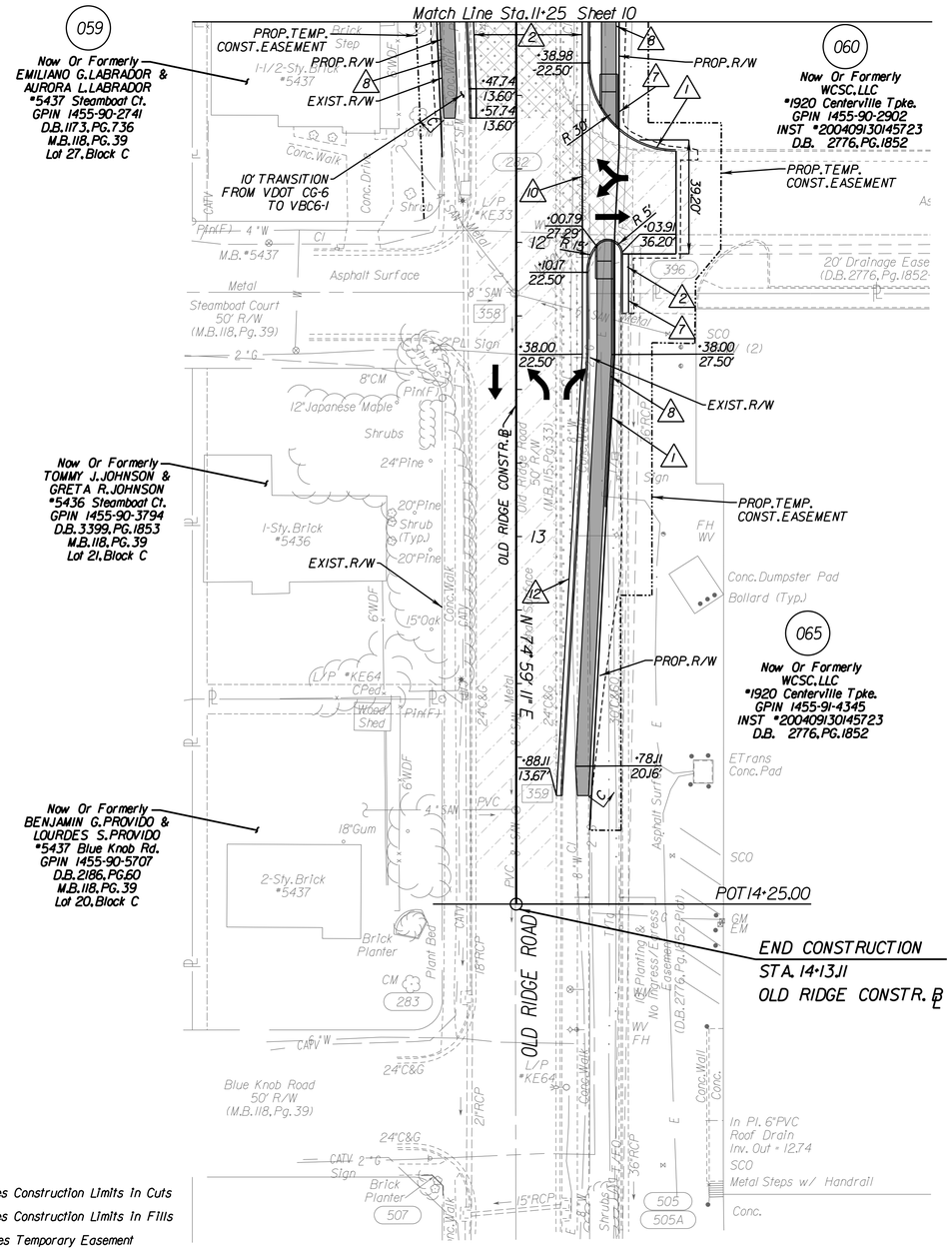
12/1/2020

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	10C

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 Virginia Beach, Virginia HYDRAULIC ENGINEER	Rummel, Klepper & Kahl, LLP Virginia Beach, Virginia ROADWAY ENGINEER



LEGEND

1	St'd.CG-2 Req'd.
2	St'd.CG-6 Req'd.
3	St'd.CG-9D Req'd.
4	St'd MS-3 Pavers Req'd.
5	St'd.MS-2 Req'd.
6	St'd.MS-1A Req'd.
7	St'd.CG-12, Type B
8	5' Concrete Sidewalk
9	8' Asphalt Sidewalk
10	St'd.CG-11 Modified
11	8' Concrete Sidewalk
12	St'd VBCG-1

C ---- Denotes Construction Limits In Cuts
F __ Dentoes Construction Limits In Fills
Denotes Temporary Easement
Denotes Permanent Easement
Denotes Demolition of Pavement
Denotes Area of Proposed Pavement
Denotes Mill and Overlay
Denotes Asphalt Sidewalk

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

Mainline Profile	10B
Entrance Profile	13
Drainage Descriptions	X
Sign & Pave. Mark. Plan	X
Signal Plan	X
Landscaping Plan	X
Utility Plan	X
SWM Plan	

SCALE 0 25' 50'

PROJECT	SHEET NO.
U000-134-842	10C

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

Ⓜ POC STA. 63+20.07
CENTERVILLE CONSTR. ℄ +
POT STA. 10+00.00
WOODS CORNER ENTRANCE CONSTR. ℄
△ = 89° 39' 47" RT

LEGEND

1 St'd. CG-2 Req'd.
2 St'd. CG-6 Req'd.
3 St'd. CG-9D Req'd.
4 St'd MS-3 Pavers Req'd.
5 St'd. MS-2 Req'd.
6 St'd. MS-1A Req'd.
7 St'd. CG-12, Type B
8 5' Concrete Sidewalk
9 8' Asphalt Sidewalk
10 St'd. CG-11 Modified
11 8' Concrete Sidewalk
12 St'd VBCG-1

C ___ Denotes Construction Limits in Cuts
F ___ Dentoes Construction Limits in Fills
Denotes Temporary Easement
Denotes Permanent Easement
Denotes Demolition of Pavement
Denotes Area of Proposed Pavement
Denotes Mill and Overlay
Denotes Asphalt Sidewalk

Rummel, Klepper & Kahl, LLP Virginia Beach, Virginia HYDRAULIC ENGINEER	Rummel, Klepper & Kahl, LLP Virginia Beach, Virginia ROADWAY ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	11

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

063
Now Or Formerly
ATHENS OF TIDEWATER, INC.
*1977 Centerville Tpke.
GPIN 1455-80-9732
INST *200509290158845
INST *200405110072808 PLAT
Parcel 2

064
Now Or Formerly
DARRYL H. ROADCAP
*1945 Centerville Tpke.
GPIN 1455-81-9045
INST *200712200017560
M.B. 26, PG. 43

068
Now Or Formerly
ATHENS OF TIDEWATER, INC.
*1929 Centerville Tpke.
GPIN 1455-81-8227
D.B. 2297, PG. 263
D.B. 723, PG. 154 PLAT

Curve CENTERVILLE_15
PI = 63+12.97
DELTA = 0° 32' 22.66" (LT)
D = 0° 15' 59"
T = 101.25'
L = 202.49'
R = 21,500.00'
PC = 62+11.72
PT = 64+14.22
E = NC
V = 60 MPH

Curve CENTERVILLE_18
PI = 70+24.39
DELTA = 7° 52' 01.65" (LT)
D = 1° 00' 10"
T = 392.90'
L = 784.57'
R = 5,714.00'
PC = 66+31.49
PT = 74+16.06
E = 2.0%
V = 50 MPH

069
Now Or Formerly
RTR REAL ESTATE ASSOCIATES
*1924 Kempsville Rd.
GPIN 1455-81-6402
D.B. 3475, PG. 41
D.B. 2706, PG. 859 PLAT
Parcel S2

PROP. ACQUISITION LINE
PROP. R/W
EXIST. R/W
PROP. TEMP. CONST. EASEMENT
PROP. TEMP. CONST. EASEMENT
PROP. TEMP. CONST. EASEMENT
PROP. R/W
EXIST. R/W
EXIST. R/W
PROP. R/W
PROP. TEMP. CONST. EASEMENT
PROP. ACQUISITION LINE
PROP. R/W
PROP. TEMP. CONST. EASEMENT
EXIST. R/W

PC62+11.72
PT64+14.22
PC66+31.49
POC10+00.00
POT11+25.13
END CONSTRUCTION STA. 10+84.75 WOODS CORNER CONSTR. ℄
WOODS CORNER ENTRANCE CONSTR. ℄
CENTERVILLE CONSTR. ℄
CENTERVILLE TURNPIKE
N 14° 27' 36" W
N 14° 59' 59" W
N 74° 54' 24" E
WOODS CORNER SHOPPING CENTER

Match Line Sta. 61+00 Sheet 10
Match Line Sta. 67+50 Sheet 12

Now Or Formerly
WCSC, LLC
*1920 Centerville Tpke.
GPIN 1455-90-2902
INST *200409130145723
D.B. 2776, PG. 1852
060

Now Or Formerly
WCSC, LLC
*1920 Centerville Tpke.
GPIN 1455-91-4345
INST *200409130145723
D.B. 2776, PG. 1852
065

Now Or Formerly
WCSC, LLC
*1924 Centerville Tpke.
GPIN 1455-91-0472
INST *200409130145723
D.B. 2776, PG. 1852
066

Now Or Formerly
SONIC RESTAURANTS, INC.
*1916 Centerville Tpke.
GPIN 1455-91-0559
INST *201304050039660
D.B. 2776, PG. 1852
067

75' Ingress/Egress & Cross Access Easement (D.B. 2776, Pg. 1852-Plat)
45' Ingress/Egress & Cross Access Easement (D.B. 2776, Pg. 1852-Plat)

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

Mainline Profile	11A
Entrance Profile	13
Drainage Descriptions	X
Sign & Pave. Mark. Plan	14(11)
Signal Plan	X
Landscaping Plan	X
Utility Plan	19(11)
SWM Plan	X
Existing Conditions	1H(10)

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	11

PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	IIA

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
Virginia Beach, Virginia
ROADWAY ENGINEER

CENTERVILLE TURNPIKE

MATCHLINE STA.61+00 (SEE SHEET 10A)

NORMAL CROWN

NB

-85.50

STA = 62+40.00
EL = 16.94
SSD = 1710'
K = 154
L = 100.00
V = 80 MPH
HP = 62+43.85
HP EL = 16.86

PROPOSED GRADE AT CONST.℄

EXISTING GRADE AT CONST.℄

0.35%

POC STA.63+20.07
CENTERVILLE CONSTR.℄ =
POT STA.10+00.00
WOODS CORNER ENTRANCE CONSTR.℄

-0.30%

END PROFILE NB
STA.63+85.50
CENTERVILLE CONST.℄

STA = 64+40.00
EL = 16.34

-0.72%

BEGIN SPLINE GRADE

STA = 65+00.00
EL = 15.91

SPLINE GRADE

-0.65%

-30.00

MATCH EXISTING CROSS SLOPE

MATCH EXISTING CROSS SLOPE

END PROFILE SB
STA.66+30.00
CENTERVILLE CONST.℄

EL = 15.07

MATCHLINE STA.67+50 (SEE SHEET 12A)

THE EXISTING PAVEMENT ELEVATIONS AT THE SAW CUT LINES WILL BE USED TO ESTABLISH ELEVATIONS FOR THE PROPOSED PAVEMENT WIDENING BEGINING AT THE END OF PROPOSED PROFILE.SEE TYPICAL SEE SECTION SHEET 2A(4)

20 15 10 5 0

61+00 62+00 63+00 64+00 65+00 66+00 67+00

16.16 16.45 | 16.25 16.54 | 16.31 16.63 | 16.28 16.71 | 16.26 16.80 | 16.27 16.85 | 16.31 16.86 | 16.36 16.83 | 16.36 16.76 | 16.36 16.69 | 16.34 16.61 | 16.33 16.54 | 16.28 16.46 | 16.18 16.39 | 16.08 16.27 | 15.96 16.09 | 15.81 15.91 | 15.62 15.75 | 15.45 15.59 | 15.34 15.42 | 15.20 15.26 | 15.12 15.10 | 15.08 | 15.15 | 15.58 | 15.55 | 15.08

NOTE:
CREST VERTICAL CURVE DESIGN SPEED BASED ON STOPPING SIGHT DISTANCE (SSD)
SAG VERTICAL CURVES DESIGN SPEED BASED ON "K" VALUE

HORIZ. 1" = 25' VERT. 1" = 5'	PROJECT U000-134-842	SHEET NO. IIA

12/1/2020

12/1/2020
4:00:09 PM

d109381IIb.dgn
Plotted By: RK&K - JMK

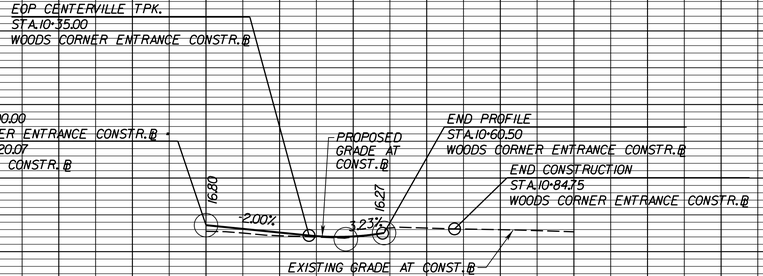
PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	IIB

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
Virginia Beach, Virginia
ROADWAY ENGINEER

WOODS CORNER ENTRANCE



NOTE:
CREST VERTICAL CURVE DESIGN SPEED BASED ON STOPPING SIGHT DISTANCE (SSD)
SAG VERTICAL CURVES DESIGN SPEED BASED ON "K" VALUE

HORIZ. 1" = 25' VERT. 1" = 5'	PROJECT U000-134-842	SHEET NO. IIB

12/1/2020

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

Rummel, Klepper & Kahl, LLP Virginia Beach, Virginia HYDRAULIC ENGINEER	Rummel, Klepper & Kahl, LLP Virginia Beach, Virginia ROADWAY ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	12

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

069
Now Or Formerly
RTR REAL ESTATE ASSOCITATES
*1924 Kempsville Rd.
GPIN 1455-81-6402
D.B. 3475, PG. 41
D.B. 2706, PG. 859 PLAT
Parcel S2

070
Now Or Formerly
TIDEWATER INVESTMENTS, L.L.C.
*1909 Centerville Tpke.
GPIN 1455-81-7527
INST *201207130008324 0
D.B. 2706, PG. 859
Parcel S1

071
Now Or Formerly
THE ANNE D. WOOD EXEMPT TRUST
*1910 Kempsville Rd.
GPIN 1455-81-7626
INST *201205090005 10850
D.B. 2760, PG. 1625 PLAT

END PROJECT U000-134-842, C-501
POC STA. 69+68.00
CENTERVILLE CONSTR. ℄

END PROJECT U000-134-842, RW-201
POC STA. 69+83.18
CENTERVILLE CONSTR. ℄

PROP. TEMP. CONST. EASEMENT
PROP. R/W
EXIST. R/W

Now Or Formerly
WILLIAM WOOD FAMILY LIMITED PARTNERSHIP
GPIN 1455-81-5894
D.B. 4010, PG. 558
M.B. 294, PG. 53
Parcel A-3-2

Now Or Formerly
ELIAS PROPERTIES VIRGINIA BEACH CENTERVILLE, LLC
*1857 Centerville Tpke.
GPIN 1455-81-4944
D.B. 4584, PG. 1665
M.B. 294, PG. 53
Parcel A-3-1

CENTERVILLE TURNPIKE
CENTERVILLE CONSTR. ℄
Match Line Sta. 67+50 Sheet 11
N 22° 52' 00" W
POT 74+16.06
PT 74+39.33
15' x 15' Public Utility Easement (M.B. 294, Pg. 52)
Centerville Turnpike (S.R. 8661) Variable Width R/W

END CONSTRUCTION
POC STA. 71+31.90
CENTERVILLE CONSTR. ℄

END SIDEWALK STA. 69+71.19 EXIST. R/W

PROP. TEMP. CONST. EASEMENT
PROP. R/W
EXIST. R/W

Now Or Formerly
SONIC RESTAURANTS, INC.
*1916 Centerville Tpke.
GPIN 1455-91-0559
INST *201304050003966 60
D.B. 2776, PG. 1852
067

Now Or Formerly
PAPCO, INC.
*1900 Centerville Tpke.
GPIN 1455-81-9821
INST *201309050010652 80
M.B. 152, PG. 52
072

AREA UNDER CONSTRUCTION

Now Or Formerly
BURLAGE SHOPS, LLC
*1869 Kempsville Rd.
GPIN 1455-82-7186
D.B. 3901, PG. 1492
M.B. 145, PG. 42

KEMPSVILLE ROAD
Kempsville Road (S.R. 130) Variable Width R/W

Curve CENTERVILLE_18
PI = 70+24.39
DELTA = 7° 52' 01.65" (LT)
D = 1° 00' 10"
T = 392.90'
L = 784.57'
R = 5,714.00'
PC = 66+31.49
PT = 74+16.06
E = 2.0%
V = 50 MPH

LEGEND

1 St'd.CG-2 Req'd.
2 St'd.CG-6 Req'd.
3 St'd.CG-9D Req'd.
4 St'd MS-3 Pavers Req'd.
5 St'd.MS-2 Req'd.
6 St'd.MS-1A Req'd.
7 St'd.CG-12, Type B
8 5' Concrete Sidewalk
9 8' Asphalt Sidewalk
10 St'd.CG-11 Modified
11 8' Concrete Sidewalk
12 St'd VBCG-1

C ___ Denotes Construction Limits In Cuts
F __ Dentoes Construction Limits In Fills
Denotes Temporary Easement
Denotes Permanent Easement
Denotes Demolition of Pavement
Denotes Area of Proposed Pavement
Denotes Mill and Overlay
Denotes Asphalt Sidewalk

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

Mainline Profile	12A
Entrance Profile	13
Drainage Descriptions	2B(2)
Sign & Pave. Mark. Plan	14(12)
Signal Plan	X
Landscaping Plan	X
Utility Plan	19(12)
SWM Plan	X
Existing Conditions	1H(11)

SCALE 0 25' 50'

PROJECT	SHEET NO.
U000-134-842	12

PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	12A

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
Virginia Beach, Virginia
ROADWAY ENGINEER

CENTERVILLE TURNPIKE

SB
MATCH EXIST CROSS SLOPE
-1.9574

NB
MATCH EXIST CROSS SLOPE
-1.7875

END PROJECT U000-134-842,C-501
POC STA.69+68.00
CENTERVILLE CONST ℄

END PROJECT U000-134-842,RW-201
POC STA.69+83.18
CENTERVILLE CONST ℄

END CONSTRUCTION
POC STA.71+31.90
CENTERVILLE CONST ℄

EXISTING GRADE AT CONST.℄

MATCHLINE STA.67+50 (SEE SHEET 11A)

20
15
10
5
0

15.08 15.04 15.11 15.22 15.31 15.34 15.45 15.50 15.42 15.44 15.50 15.58 15.70 15.73 15.74 15.74 15.87 15.78 15.97

68+00 69+00 70+00 71+00 72+00

THE EXISTING PAVEMENT ELEVATIONS AT THE SAW CUT LINES WILL BE USED TO ESTABLISH ELEVATIONS FOR THE PROPOSED PAVEMENT WIDENING BEGINING AT THE END OF PROPOSED PROFILE.SEE TYPICAL SEE SECTION SHEET 2A(4)

NOTE:
CREST VERTICAL CURVE DESIGN SPEED BASED ON STOPPING SIGHT DISTANCE (SSD)
SAG VERTICAL CURVES DESIGN SPEED BASED ON "K" VALUE

HORIZ. 1" = 25' VERT. 1" = 5'	PROJECT U000-134-842	SHEET NO. 12A

12/2/2020
10:58:18 AM

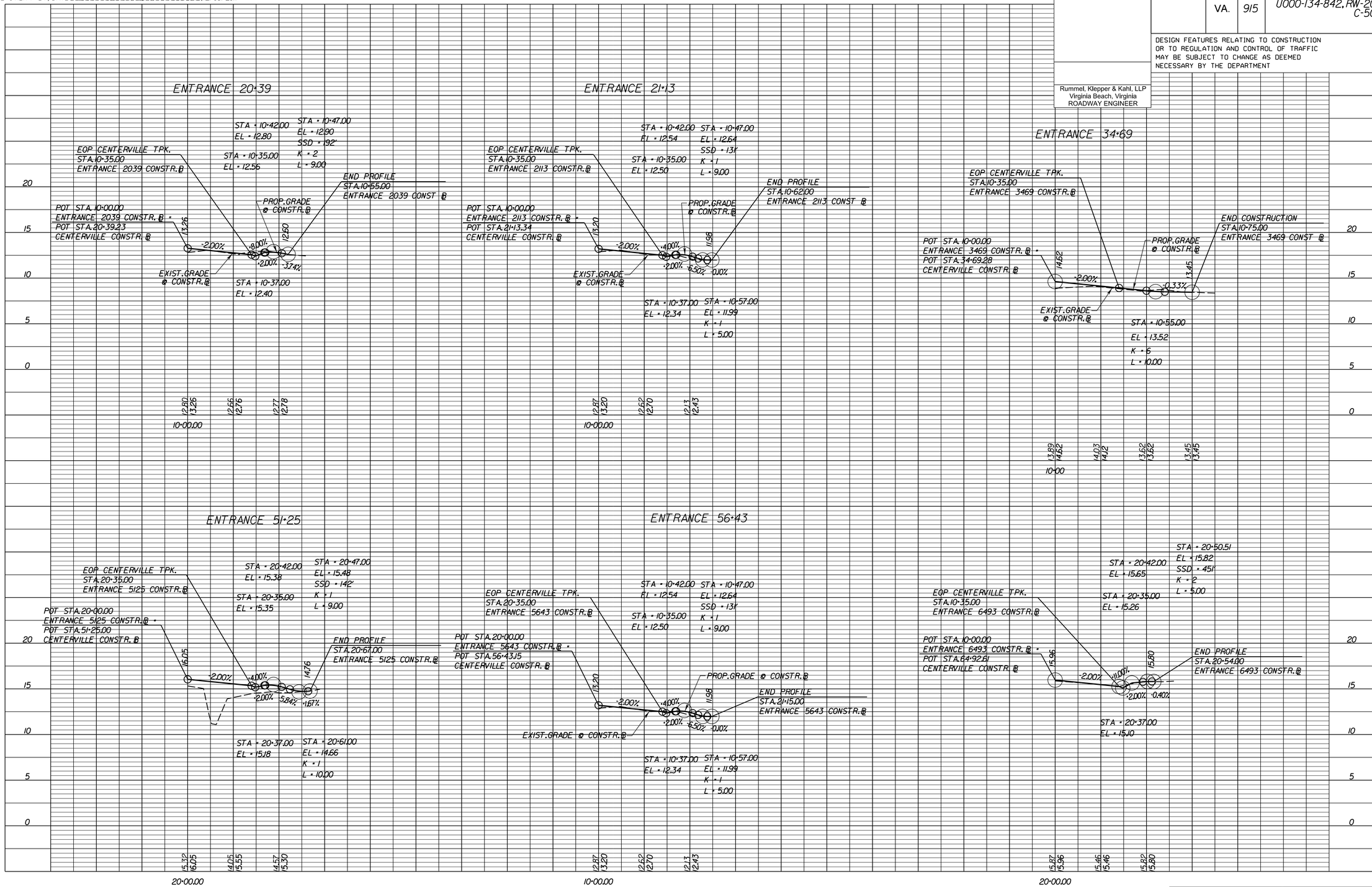
d1093113.dgn
Plotted By: JInnes

PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	13

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
Virginia Beach, Virginia
ROADWAY ENGINEER



NOTE:
CREST VERTICAL CURVE DESIGN SPEED BASED ON STOPPING SIGHT DISTANCE (SSD)
SAG VERTICAL CURVES DESIGN SPEED BASED ON "K" VALUE

HORIZ. 1" = 25' VERT. 1" = 5'	PROJECT U000-134-842	SHEET NO. 13

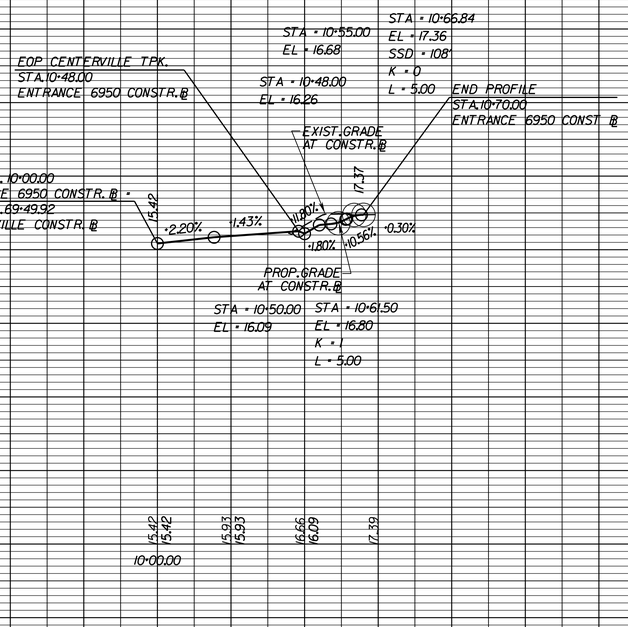
PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	13A

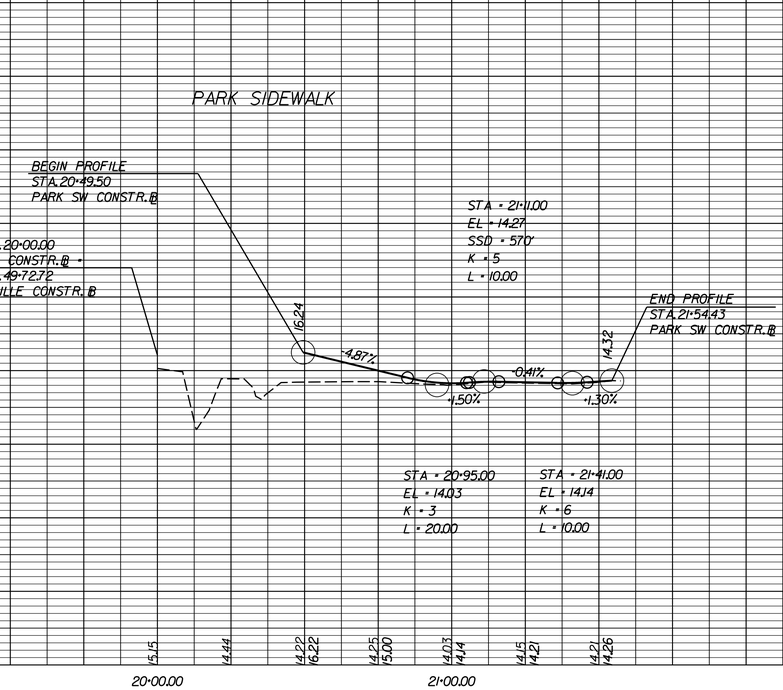
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Rummel, Klepper & Kahl, LLP
Virginia Beach, Virginia
ROADWAY ENGINEER

ENTRANCE 20+39



PARK SIDEWALK



NOTE:
CREST VERTICAL CURVE DESIGN SPEED BASED ON STOPPING SIGHT DISTANCE (SSD)
SAG VERTICAL CURVES DESIGN SPEED BASED ON "K" VALUE

HORIZ. 1" = 25' VERT. 1" = 5'	PROJECT U000-134-842	SHEET NO. 13A

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

GENERAL NOTES

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	14(1)

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
Virginia Beach, Virginia
TRAFFIC ENGINEER

1. All traffic control items will be constructed and installed in accordance with the edition of the following documents adopted at the time of contract award:
   - 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). REVISIONS 1 AND 2.
   - 2011 VIRGINIA SUPPLEMENT TO THE 2009 MUTCD, REVISION 1.
   - 2016 VDOT ROAD AND BRIDGE STANDARDS.
   - 2016 VDOT ROAD AND BRIDGE SPECIFICATIONS.
   - VDOT SPECIAL PROVISIONS.
   - VIRGINIA STANDARD HIGHWAY SIGNS.
   - VDOT WORK AREA PROTECTION MANUAL.
   - CITY OF VIRGINIA BEACH AMENDMENTS TO THE VDOT ROAD AND BRIDGE SPECIFICATIONS, AND THE
   - CITY OF VIRGINIA BEACH DPW/ENGINEERING DIVISION SPECIFICATIONS AND STANDARDS.
2. Unless otherwise approved by the Engineer or indicated in the Maintenance of Traffic and Sequence of Construction plans, existing traffic signs which are to be relocated or removed shall remain in place until the new sign structure is in place or conditions are such that the sign can be safely removed.
3. The removal or modification of existing sign panels, structures, or foundations shall conform to Section 510 of the Specifications.
4. New materials and items required to complete the removal or modification of existing items shall be submitted to the Engineer for the review and approval in accordance with Section 105 of the Specifications.
5. All existing and proposed sign locations are approximate and shall be field verified by the Contractor.
6. The Contractor shall relocate street name signs, no parking signs and other traffic signs within the construction limits that conflict with construction work. Signs that are not needed for the safe and orderly control of traffic during construction shall be removed and stored at a designated location within the project limits. The removed signs shall be stored above ground in a manner that will preclude damage and shall be reinstalled in their permanent location prior to final acceptance. If any of the removed signs are not to be reinstalled, the Contractor shall return the signs to the City of Virginia Beach Traffic Control Shop, 3556 Dam Neck Road. Any sign that is damaged or lost because of the fault of the Contractor shall be repaired or replaced at his expense. Costs for removing, storing, protecting, and reinstalling such signs shall be included in the price bid for other items in the contract and no additional compensation will be made.
8. Existing pavement markings that conflict with the proposed markings shown herein shall be eradicated.
9. All pavement markings shall be installed in accordance with Virginia Beach Pavement Marking Standards.
10. All lane widths shall be 11' unless otherwise noted.

STANDARD SIGN LEGEND

PLAN ITEM	PLAN SYMBOL PROPOSED	PLAN SYMBOL EXISTING
Single Post Sign Support		
Double Post Sign Support		
Triple Post Sign Support		
Flashing Beacon		
O/H Cantilever Sign Support		
O/H Span Sign Support		

SIGN CALL-OUTS

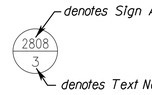
Existing Sign to Remain or to be Relocated — NORTHAM 95

Existing Sign to be Removed — NORTHAM 95

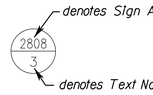
Proposed Sign Panel — NORTHAM 95

SIGN LABELS

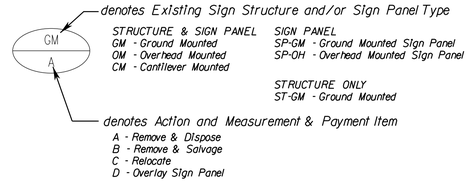
Proposed Sign Assemblies



Relocated Sign Assemblies



Sign Relocation or Payable Sign Disposal/Salvage



Signs noted on plans to be removed that do not have an accompanying sign label shall not be measured separately for payment. Removal and disposal for such signs shall be incidental to other contract items.

TRAFFIC CONTROL DEVICE PLANS

SIGNING & PAVEMENT MARKING PLANS
INDEX OF SHEETS, GENERAL NOTES & LEGEND(S)
CITY OF VIRGINIA BEACH

PROJECT	SHEET NO.
U000-134-842	14(1)

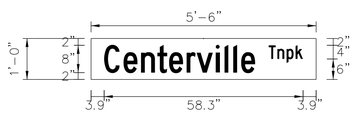
PROJECT MANAGER Laurie Murphy, PE, (757) 385-8465, (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP, (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	14(2A11

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
Virginia Beach, Virginia
TRAFFIC ENGINEER

SIGN DETAIL
1:20



SIGN NUMBER	name
WIDTH x HGHT.	5'-6" x 1'-0"
BORDER WIDTH	0"
CORNER RADIUS	0"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND&BORDER	TYPE: Reflective
	COLOR: White/Green

SYMBOL	ROT	X	Y	WID	HT

Panel Style: Post Mounted Street Name Sign.ssi
M.U.T.C.D.: 2009 Edition

Panel Style: Post Mounted Street Name Sign.ssi
Dimensions are in Inches,tenths
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

T	n	p	k																			LENGTH	SERIES/SIZE
52.1	54.6	57.3	60																			10.1	C 2000 4/3
C	e	n	t	e	r	v	i	l	l	e													
3.9	9.5	14.7	19.5	22.9	28	31	36.6	39.1	41.7	44												44.2	C 2000 8/6

SIGN DETAIL
1:20



SIGN NUMBER	name
WIDTH x HGHT.	6'-6" x 1'-0"
BORDER WIDTH	0"
CORNER RADIUS	0"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND&BORDER	TYPE: Reflective
	COLOR: White/Green

SYMBOL	ROT	X	Y	WID	HT

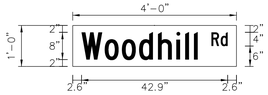
Panel Style: Post Mounted Street Name Sign.ssi
M.U.T.C.D.: 2009 Edition

Panel Style: Post Mounted Street Name Sign.ssi
Dimensions are in Inches,tenths
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

D	r																					LENGTH	SERIES/SIZE
69.5	72.5																					4.3	C 2000 4/3
L	i	v	i	n	g	s	t	o	n														
4.2	9.3	11.3	16.9	19.4	24.6	29.7	33.4	36.9	42.1													42	C 2000 8/6
O	a	k																					
50.2	56	61.2																				15.3	C 2000 8/6

SIGN DETAIL
1:20



SIGN NUMBER	name
WIDTH x HGHT.	4'-0" x 1'-0"
BORDER WIDTH	0"
CORNER RADIUS	0"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND&BORDER	TYPE: Reflective
	COLOR: White/Green

SYMBOL	ROT	X	Y	WID	HT

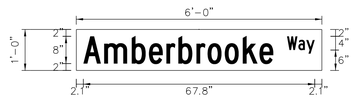
Panel Style: Post Mounted Street Name Sign.ssi
M.U.T.C.D.: 2009 Edition

Panel Style: Post Mounted Street Name Sign.ssi
Dimensions are in Inches,tenths
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

R	d																					LENGTH	SERIES/SIZE
40.7	43.4																					4.8	C 2000 4/3
W	o	o	d	h	i	l	i																
2.6	9.4	14.4	19.5	25	30.4	33	35.5															34.1	C 2000 8/6

SIGN DETAIL
1:20



SIGN NUMBER	name
WIDTH x HGHT.	6'-0" x 1'-0"
BORDER WIDTH	0"
CORNER RADIUS	0"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective
	COLOR: Yellow
LEGEND&BORDER	TYPE: Non-reflective
	COLOR: Black

SYMBOL	ROT	X	Y	WID	HT

Panel Style: Post Mounted Street Name Sign.ssi
M.U.T.C.D.: 2009 Edition

Panel Style: Post Mounted Street Name Sign.ssi
Dimensions are in Inches,tenths
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

W	o	y																				LENGTH	SERIES/SIZE
61.8	65.1	67.4																				8.1	C 2000 4/3
A	m	b	e	r	b	r	o	o	k	e													
2.1	8.2	16.3	21.3	26.4	29.9	35.2	38.5	43.5	48.8	53.7												55.7	C 2000 8/6

TRAFFIC CONTROL DEVICE PLANS
SIGN FACE LAYOUT

CITY OF VIRGINIA BEACH

PROJECT	SHEET NO.
U000-134-842	14(2A11

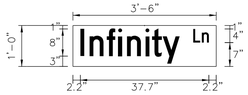
PROJECT MANAGER Laurie Murphy, PE, (757) 385-8465, (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP, (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	14(2A)2

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
Virginia Beach, Virginia
TRAFFIC ENGINEER

SIGN DETAIL
1:20



SIGN NUMBER	name
WIDTH x HGHT.	3'-6" x 1'-0"
BORDER WIDTH	0"
CORNER RADIUS	0"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective
	COLOR: White
LEGEND&BORDER	TYPE: Non-reflective
	COLOR: Black

SYMBOL	ROT	X	Y	WID	HT

Panel Style: Post Mounted Street Name Sign.ssi
M.U.T.C.D.: 2009 Edition

Panel Style: Post Mounted Street Name Sign.ssi
Dimensions are in inches,tenths
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

																						LENGTH	SERIES/SIZE
L	n																						C 2000
35.3	37.8																					4.6	4/3
I	n	f	i	n	i	t	y																C 2000
2.2	4.9	9.9	13.3	15.8	21.3	23.2	26.3															29.1	8/6

SIGN DETAIL
1:20



SIGN NUMBER	name
WIDTH x HGHT.	4'-6" x 1'-0"
BORDER WIDTH	0"
CORNER RADIUS	0"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND&BORDER	TYPE: Reflective
	COLOR: White/Green

SYMBOL	ROT	X	Y	WID	HT

Panel Style: Post Mounted Street Name Sign.ssi
M.U.T.C.D.: 2009 Edition

Panel Style: Post Mounted Street Name Sign.ssi
Dimensions are in inches,tenths
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

																						LENGTH	SERIES/SIZE
R	d																						C 2000
46.2	48.9																					4.8	4/3
O	i	d																					C 2000
3	9.2	11.5																				12.6	8/6
R	i	d	g	e																			C 2000
19.6	25.3	27.6	32.9	38.1																		22.6	8/6

SIGN DETAIL
1:20



SIGN NUMBER	name
WIDTH x HGHT.	6'-0" x 1'-0"
BORDER WIDTH	0"
CORNER RADIUS	0"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND&BORDER	TYPE: Reflective
	COLOR: White/Green

SYMBOL	ROT	X	Y	WID	HT

Panel Style: Post Mounted Street Name Sign.ssi
M.U.T.C.D.: 2009 Edition

Panel Style: Post Mounted Street Name Sign.ssi
Dimensions are in inches,tenths
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

																						LENGTH	SERIES/SIZE
D	r																						C 2000
64.5	67.5																					4.3	4/3
H	i	d	d	e	n																		C 2000
3.2	9.3	11.6	16.9	22.2	27.3																	28.2	8/6
V	a	l	l	e	y																		C 2000
35.4	40.9	46.1	48.7	51	55.5																	25.1	8/6

TRAFFIC CONTROL DEVICE PLANS

SIGN FACE LAYOUT

CITY OF VIRGINIA BEACH

PROJECT	SHEET NO.
U000-134-842	14(2A)2

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

SIGN SCHEDULE

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	14(2B)11

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
Virginia Beach, Virginia
TRAFFIC ENGINEER

TEXT NO.	SIGN ASSEMBLY NO(s).	TEXT	SIGN ASSEMBLY COMPONENTS: MUTCD ST'D.	PANEL SIZE W	PANEL SIZE H	QTY.	SIGN PANEL AREA (s.f.) per ASSEMBLY	SIGN PANEL AREA (s.f.) ALL ASSEMBLIES	PROP. SIGN STRUCTURE ST'D.	FOUNDATION TYPE	REMARKS
1	301	BEGIN / BIKE LANE	M4-14 R3-17	24" 24"	12" 18"	1 1	2 3	2 3	ONE POST 2" X 14 GA. STP-1	A	
2	302	END / BIKE LANE	M4-6 R3-17	24" 24"	12" 18"	1 1	2 3	2 3	ONE POST 2" X 14 GA. STP-1	A	
3	303, 702, 1103	SPEED LIMIT 45	R2-1	30"	36"	3	7.5	22.5	ONE POST 2½" X 12 GA. STP-1	A	
4	401, 402, 501, 503, 601, 602, 603, 604, 801, 802, 803, 901, 902, 903, 1002, 1003		R4-7	24"	30"	16	5	80	ONE POST 2" X 14 GA. STP-1	A	
5	403, 404		S1-1	36"	36"	2	6.7	13.4	ONE POST 2½" X 12 GA. STP-1	A	BACKGROUND SHALL BE FLUORESCENT-YELLOW
6	405, 703	SPEED LIMIT 45 / END SCHOOL ZONE	R2-1 S5-2	30" 24"	36" 30"	2 2	7.5 5	15 10	ONE POST 2½" X 10 GA. & 2 3/16" X 10 GA. STP-1	B	
7	406	Centerville Tnpk / STOP / Livingston Oak Dr	R1-1 SPECIAL SPECIAL	30" 66" 78"	30" 12" 12"	1 1 1	6.3 5.5 6.5	6.3 5.5 6.5	ONE POST 2½" X 10 GA. & 2 3/16" X 10 GA. STP-1	B	
8	407, 701	SCHOOL / SPEED LIMIT 25 / WHEN FLASHING	S5-1	24"	48"	2	8	16	PEDESTAL POLE	PF-2	SCHOOL BACKGROUND SHALL BE FLUORESCENT-YELLOW
9	1102	STOP	R1-1	30"	30"	1	5.2	5.2	ONE POST 2½" X 12 GA. STP-1	A	
10	406	Centerville Tnpk / STOP / Woodhill Rd	R1-1 SPECIAL SPECIAL	30" 66" 48"	30" 12" 12"	1 1 1	5.2 5.5 4	5.2 5.5 4	ONE POST 2½" X 10 GA. & 2 3/16" X 10 GA. STP-1	B	
11	704		R3-2	36"	36"	1	9	9	ONE POST 2½" X 12 GA. STP-1	A	
12	705, 1101	ONE WAY	R6-1R	54"	18"	1	6.8	6.8	ONE POST 2½" X 12 GA. STP-1	A	
13	706	Centerville Tnpk / STOP / Amberbrooke Way	R1-1 SPECIAL SPECIAL	30" 66" 72"	30" 12" 12"	1 1 1	5.2 5.5 6	5.2 5.5 6	ONE POST 2½" X 10 GA. & 2 3/16" X 10 GA. STP-1	B	
14	707	Centerville Tnpk / STOP / Infinity Ln	R1-1 SPECIAL SPECIAL	30" 66" 42"	30" 12" 12"	1 1 1	5.2 5.5 3.5	5.2 5.5 3.5	ONE POST 2½" X 10 GA. & 2 3/16" X 10 GA. STP-1	B	
15	805, 904, 1004	ONE WAY	R6-1L	54"	18"	1	6.8	6.8	ONE POST 2½" X 12 GA. STP-1	A	
16	905	Centerville Tnpk / STOP / Hidden Valley Dr	R1-1 SPECIAL SPECIAL	30" 66" 72"	30" 12" 12"	1 1 1	5.2 5.5 6	5.2 5.5 6	ONE POST 2½" X 10 GA. & 2 3/16" X 10 GA. STP-1	B	
17	1005	Centerville Tnpk / STOP / Old Ridge Rd	R1-1 SPECIAL SPECIAL	30" 66" 54"	30" 12" 12"	1 1 1	5.2 5.5 4.5	5.2 5.5 4.5	ONE POST 2½" X 10 GA. & 2 3/16" X 10 GA. STP-1	B	

NOTES:

1) ALL SIGNS SHALL BE ORIENTATED AS SHOWN ON THE PLANS.
2) SIGN COLOR COMBINATIONS SHALL BE IN ACCORDANCE WITH THE FHWA SHS BOOK AND THE 2011 VIRGINIA SHS BOOK OR AS NOTED IN THE PLANS.
3) ALL POSITIVE CONTRAST GUIDE AND SPECIFIC SERVICE SIGNS SHALL UTILIZE FABRICATION LETTER TYPE L-3 OR L-4 UNLESS OTHERWISE NOTED IN THE REMARKS. ALL OTHER SIGNS SHALL UTILIZE FABRICATION LETTER TYPE L-1 OR L-2 UNLESS OTHERWISE NOTED IN THE REMARKS.
4) ALL BLACK SHEETING SHALL BE NON-REFLECTIVE.
5) SIGN STRUCTURES SHALL BE INSTALLED PER THE NOTED SIGN ST'D.
6) ALL ST'D. STP-1 STRUCTURES TO BE SINGLE POST UNLESS OTHERWISE NOTED.
7) IF APPLICABLE, SEE SHEET 2D FOR NON-STANDARD TYPE VA AND VIA SIGN STRUCTURE DETAILS.

TRAFFIC CONTROL DEVICE PLANS
SIGN FACE LAYOUT

CITY OF VIRGINIA BEACH

PROJECT	SHEET NO.
U000-134-842	14(2B)11

t10938114102B12.dgn
Plotted By: jkiser

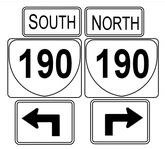
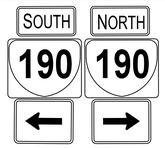
PROJECT MANAGER Laurie Murphy, PE, (757) 385-8465, (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP, (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	14(2B)12

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
Virginia Beach, Virginia
TRAFFIC ENGINEER

SIGN SCHEDULE

TEXT NO.	SIGN ASSEMBLY NO(s).	TEXT	SIGN ASSEMBLY COMPONENTS: MUTCD ST'D.	PANEL SIZE W	PANEL SIZE H	QTY.	SIGN PANEL AREA (s.f.): per ASSEMBLY	SIGN PANEL AREA (s.f.): ALL ASSEMBLIES	PROP. SIGN STRUCTURE ST'D.	FOUNDATION TYPE	REMARKS
18	1104		M3-3 M3-1 M1-V1c M5-1L M5-1R	24" 24" 36" 21" 21"	12" 12" 36" 15" 15"	1 1 2 1 1	2 2 18 4.4 4.4	2 2 18 4.4 4.4	ONE POST 2½" X 10 GA. & 2 3/16" X 10 GA. STP-1	B	
19	1201		M3-3 M3-1 M1-V1c M6-1	24" 24" 36" 21"	12" 12" 36" 15"	1 1 2 2	2 2 18 4.4	2 2 18 4.4	ONE POST 2½" X 10 GA. & 2 3/16" X 10 GA. STP-1	B	
20	408		R3-7R	36"	36"	1	9	9	ONE POST 2½" X 12 GA. STP-1	A	
21	605		W4-2R	36"	36"	1	9	9	ONE POST 2½" X 12 GA. STP-1	A	
22	715		W9-1R	36"	36"	1	9	9	ONE POST 2½" X 12 GA. STP-1	A	
E1	304		-	EXIST.	EXIST.	1	EXIST.	EXIST.	ONE POST 2½" X 10 GA. & 2 3/16" X 10 GA. STP-1	B	
E2	505		-	EXIST.	EXIST.	1	EXIST.	EXIST.	ONE POST 2½" X 12 GA. STP-1	A	
E3	806		R2-1 -	EXIST. EXIST.	EXIST. EXIST.	1 1	EXIST. EXIST.	EXIST. EXIST.	ONE POST 2½" X 12 GA. STP-1	A	
E4	1001		-	EXIST.	EXIST.	1	EXIST.	EXIST.	ONE POST 2½" X 12 GA. STP-1	A	

NOTES:

1) ALL SIGNS SHALL BE ORIENTATED AS SHOWN ON THE PLANS.
2) SIGN COLOR COMBINATIONS SHALL BE IN ACCORDANCE WITH THE FHWA SHS BOOK AND THE 2011 VIRGINIA SHS BOOK OR AS NOTED IN THE PLANS.
3) ALL POSITIVE CONTRAST GUIDE AND SPECIFIC SERVICE SIGNS SHALL UTILIZE FABRICATION LETTER TYPE L-3 OR L-4 UNLESS OTHERWISE NOTED IN THE REMARKS. ALL OTHER SIGNS SHALL UTILIZE FABRICATION LETTER TYPE L-1 OR L-2 UNLESS OTHERWISE NOTED IN THE REMARKS.
4) ALL BLACK SHEETING SHALL BE NON-REFLECTIVE.
5) SIGN STRUCTURES SHALL BE INSTALLED PER THE NOTED SIGN ST'D.
6) ALL ST'D. STP-1 STRUCTURES TO BE SINGLE POST UNLESS OTHERWISE NOTED.
7) IF APPLICABLE, SEE SHEET 2D FOR NON-STANDARD TYPE VA AND VIA SIGN STRUCTURE DETAILS.

TRAFFIC CONTROL DEVICE PLANS
SIGN FACE LAYOUT

CITY OF VIRGINIA BEACH

	PROJECT	SHEET NO.
	U000-134-842	14(2B)12

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

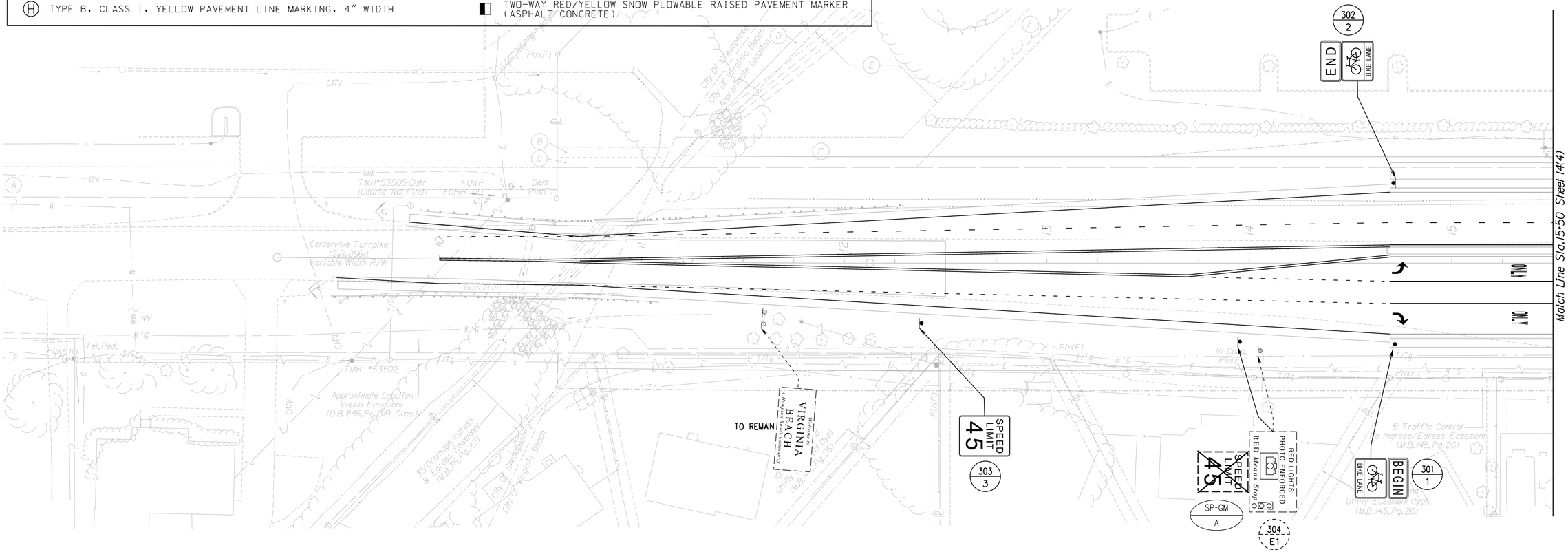
REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	14(3)

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
Virginia Beach, Virginia
TRAFFIC ENGINEER

PAVEMENT MARKING & PAVEMENT MARKERS LEGEND

- (A) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 4" WIDTH
- (B) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 6" WIDTH
- (C) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 8" WIDTH
- (D) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 24" WIDTH
- (E) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 4" WIDTH (10' LINE, 30' SPACE)
- (F) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 6" WIDTH (2' LINE, 4' SPACE)
- (G) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 8" WIDTH (3' LINE, 9' SPACE)
- (H) TYPE B, CLASS I, YELLOW PAVEMENT LINE MARKING, 4" WIDTH
- (I) TYPE B, CLASS 1, DOUBLE YELLOW PAVEMENT LINE MARKING, 4" WIDTH
- (J) PAVEMENT MESSAGE MARKING "ONLY"
- (K) PAVEMENT MESSAGE MARKING ELONGATED ARROW SINGLE
- (L) BICYCLE LANE MARKINGS (SEE VDOT ST'D. PM-6)
- ▷ ONE-WAY WHITE SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)
- ◀▷ TWO-WAY RED/WHITE SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)
- □ ONE-WAY YELLOW SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)
- ◧ TWO-WAY RED/YELLOW SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)



TRAFFIC CONTROL DEVICE PLANS

SIGNING & PAVEMENT MARKING PLANS

CITY OF VIRGINIA BEACH

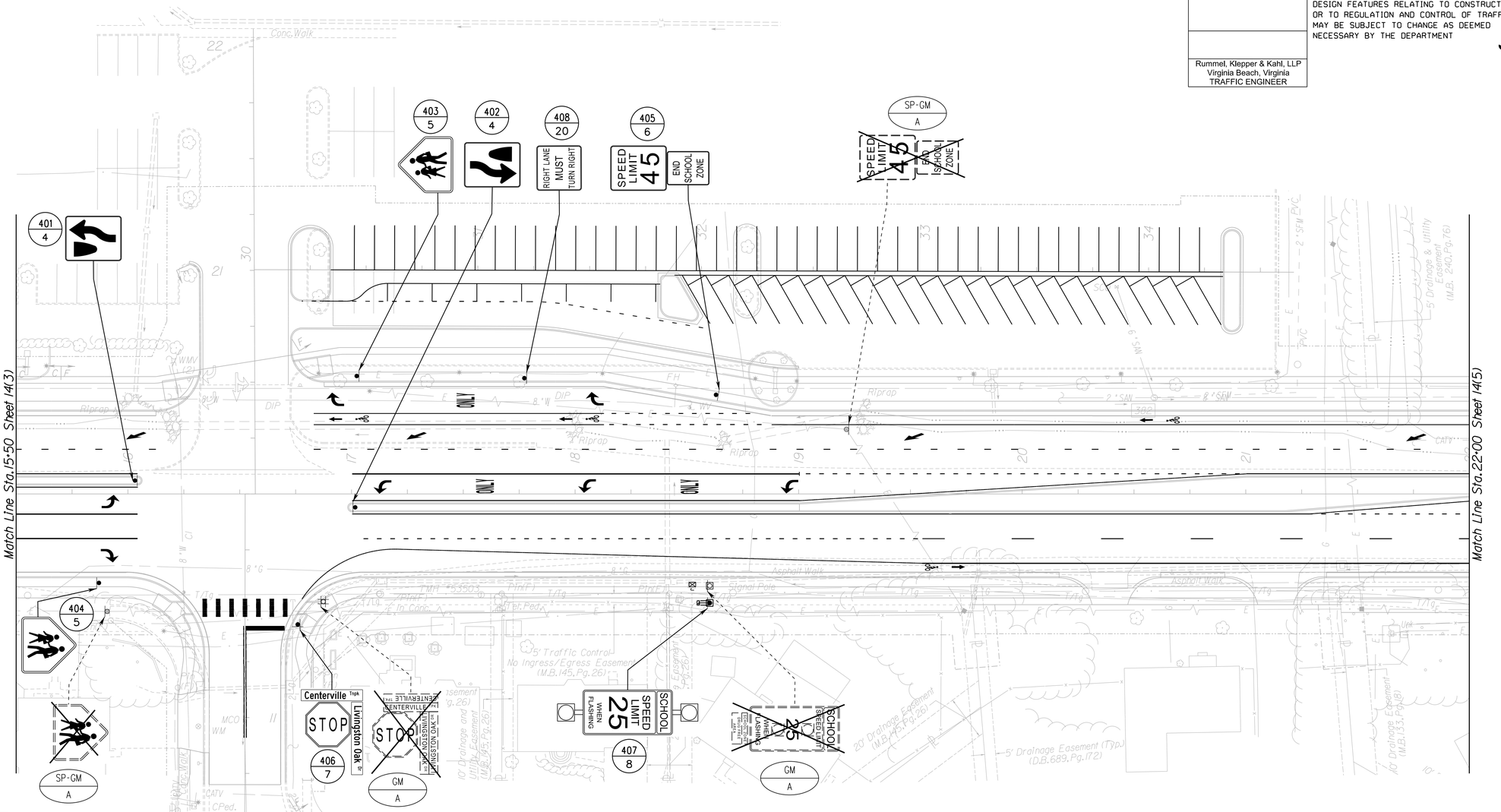
SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	14(3)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	14(4)

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
Virginia Beach, Virginia
TRAFFIC ENGINEER



PAVEMENT MARKING & PAVEMENT MARKERS LEGEND

- (A) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 4" WIDTH
- (B) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 6" WIDTH
- (C) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 8" WIDTH
- (D) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 24" WIDTH
- (E) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 4" WIDTH (10' LINE, 30' SPACE)
- (F) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 6" WIDTH (2' LINE, 4' SPACE)
- (G) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 8" WIDTH (3' LINE, 9' SPACE)
- (H) TYPE B, CLASS I, YELLOW PAVEMENT LINE MARKING, 4" WIDTH
- (I) TYPE B, CLASS 1, DOUBLE YELLOW PAVEMENT LINE MARKING, 4" WIDTH
- (J) PAVEMENT MESSAGE MARKING "ONLY"
- (K) PAVEMENT MESSAGE MARKING ELONGATED ARROW SINGLE
- (L) BICYCLE LANE MARKINGS (SEE VDOT ST'D. PM-6)
- ▷ ONE-WAY WHITE SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)
- ◀▷ TWO-WAY RED/WHITE SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)
- □ ONE-WAY YELLOW SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)
- ◧ TWO-WAY RED/YELLOW SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)

TRAFFIC CONTROL DEVICE PLANS

SIGNING & PAVEMENT MARKING PLANS

CITY OF VIRGINIA BEACH

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	14(4)

12/2/2020
1:45:53 PM

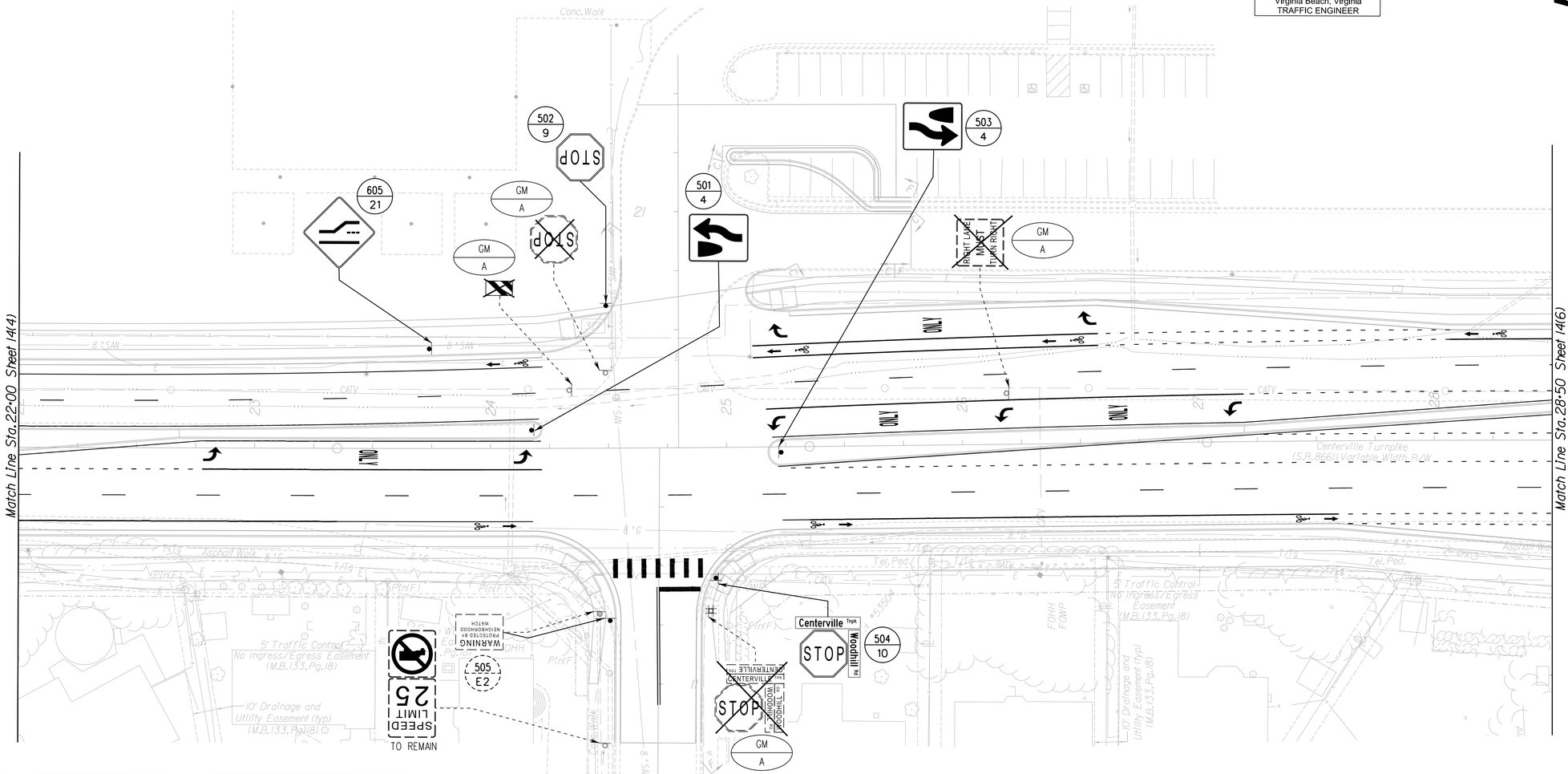
tl09381l4(05).dgn
Plotted By: jklser

PROJECT MANAGER Laurie Murphy, P.E., (757) 385-8465, (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP, (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	14(5)

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
Virginia Beach, Virginia
TRAFFIC ENGINEER



PAVEMENT MARKING & PAVEMENT MARKERS LEGEND

- (A) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 4" WIDTH
- (B) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 6" WIDTH
- (C) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 8" WIDTH
- (D) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 24" WIDTH
- (E) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 4" WIDTH (10' LINE, 30' SPACE)
- (F) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 6" WIDTH (2' LINE, 4' SPACE)
- (G) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 8" WIDTH (3' LINE, 9' SPACE)
- (H) TYPE B, CLASS I, YELLOW PAVEMENT LINE MARKING, 4" WIDTH
- (I) TYPE B, CLASS 1, DOUBLE YELLOW PAVEMENT LINE MARKING, 4" WIDTH
- (J) PAVEMENT MESSAGE MARKING "ONLY"
- (K) PAVEMENT MESSAGE MARKING ELONGATED ARROW SINGLE
- (L) BICYCLE LANE MARKINGS (SEE VDOT ST'D. PM-6)
- ▷ ONE-WAY WHITE SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)
- ◀▷ TWO-WAY RED/WHITE SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)
- □ ONE-WAY YELLOW SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)
- ◧ TWO-WAY RED/YELLOW SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)

TRAFFIC CONTROL DEVICE PLANS

SIGNING & PAVEMENT MARKING PLANS

CITY OF VIRGINIA BEACH

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	14(5)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017

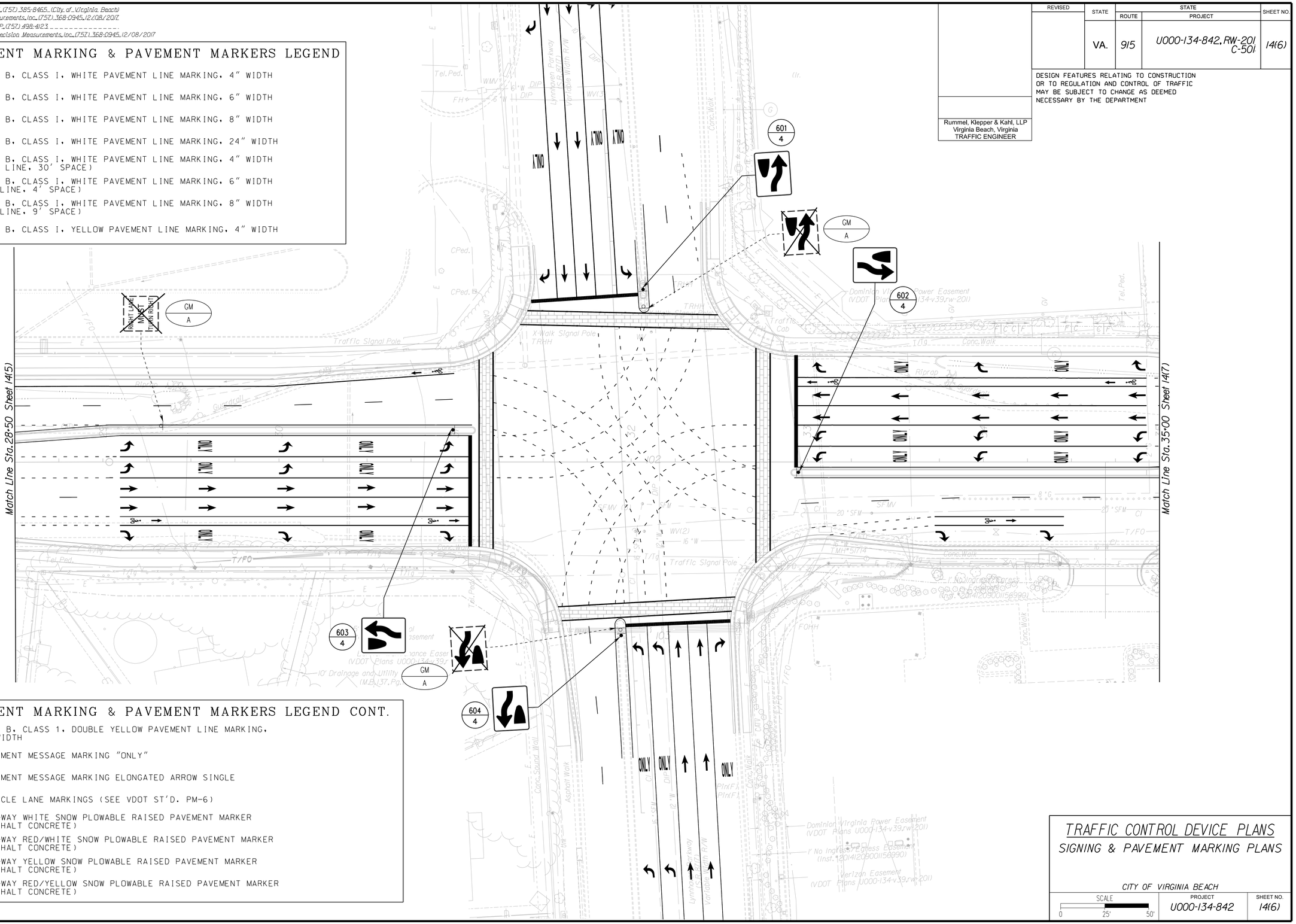
REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	14(6)

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
Virginia Beach, Virginia
TRAFFIC ENGINEER

PAVEMENT MARKING & PAVEMENT MARKERS LEGEND

- (A) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 4" WIDTH
- (B) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 6" WIDTH
- (C) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 8" WIDTH
- (D) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 24" WIDTH
- (E) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 4" WIDTH (10' LINE, 30' SPACE)
- (F) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 6" WIDTH (2' LINE, 4' SPACE)
- (G) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 8" WIDTH (3' LINE, 9' SPACE)
- (H) TYPE B, CLASS I, YELLOW PAVEMENT LINE MARKING, 4" WIDTH



PAVEMENT MARKING & PAVEMENT MARKERS LEGEND CONT.

- (I) TYPE B, CLASS 1, DOUBLE YELLOW PAVEMENT LINE MARKING, 4" WIDTH
- (J) PAVEMENT MESSAGE MARKING "ONLY"
- (K) PAVEMENT MESSAGE MARKING ELONGATED ARROW SINGLE
- (L) BICYCLE LANE MARKINGS (SEE VDOT ST'D. PM-6)
- ▷ ONE-WAY WHITE SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)
- ◀▶ TWO-WAY RED/WHITE SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)
- □ ONE-WAY YELLOW SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)
- ◧ TWO-WAY RED/YELLOW SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)

TRAFFIC CONTROL DEVICE PLANS
SIGNING & PAVEMENT MARKING PLANS

CITY OF VIRGINIA BEACH

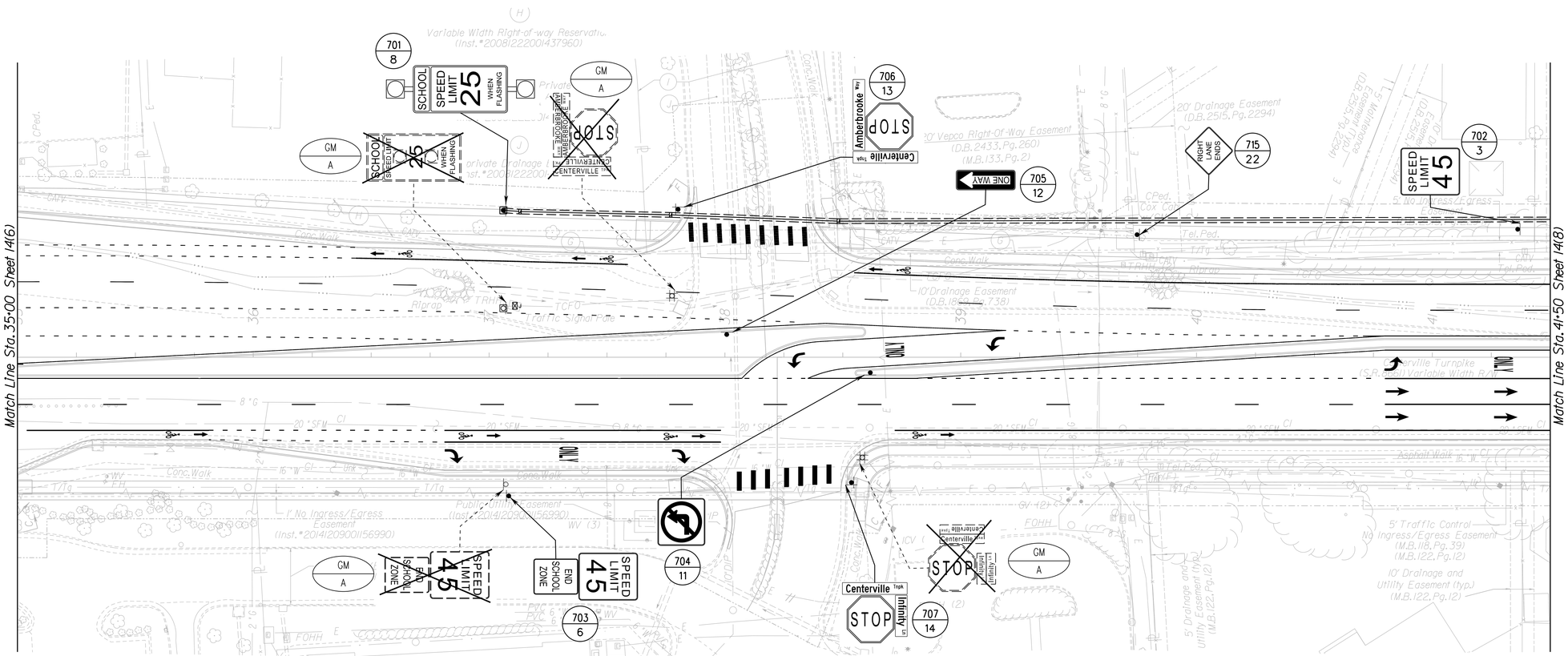
SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	14(6)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	14(7)

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
Virginia Beach, Virginia
TRAFFIC ENGINEER



PAVEMENT MARKING & PAVEMENT MARKERS LEGEND

- (A) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 4" WIDTH
- (B) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 6" WIDTH
- (C) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 8" WIDTH
- (D) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 24" WIDTH
- (E) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 4" WIDTH (10' LINE, 30' SPACE)
- (F) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 6" WIDTH (2' LINE, 4' SPACE)
- (G) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 8" WIDTH (3' LINE, 9' SPACE)
- (H) TYPE B, CLASS I, YELLOW PAVEMENT LINE MARKING, 4" WIDTH
- (I) TYPE B, CLASS 1, DOUBLE YELLOW PAVEMENT LINE MARKING, 4" WIDTH
- (J) PAVEMENT MESSAGE MARKING "ONLY"
- (K) PAVEMENT MESSAGE MARKING ELONGATED ARROW SINGLE
- (L) BICYCLE LANE MARKINGS (SEE VDOT ST'D. PM-6)
- ▷ ONE-WAY WHITE SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)
- ◀▶ TWO-WAY RED/WHITE SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)
- □ ONE-WAY YELLOW SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)
- ◧ TWO-WAY RED/YELLOW SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)

TRAFFIC CONTROL DEVICE PLANS
SIGNING & PAVEMENT MARKING PLANS

CITY OF VIRGINIA BEACH

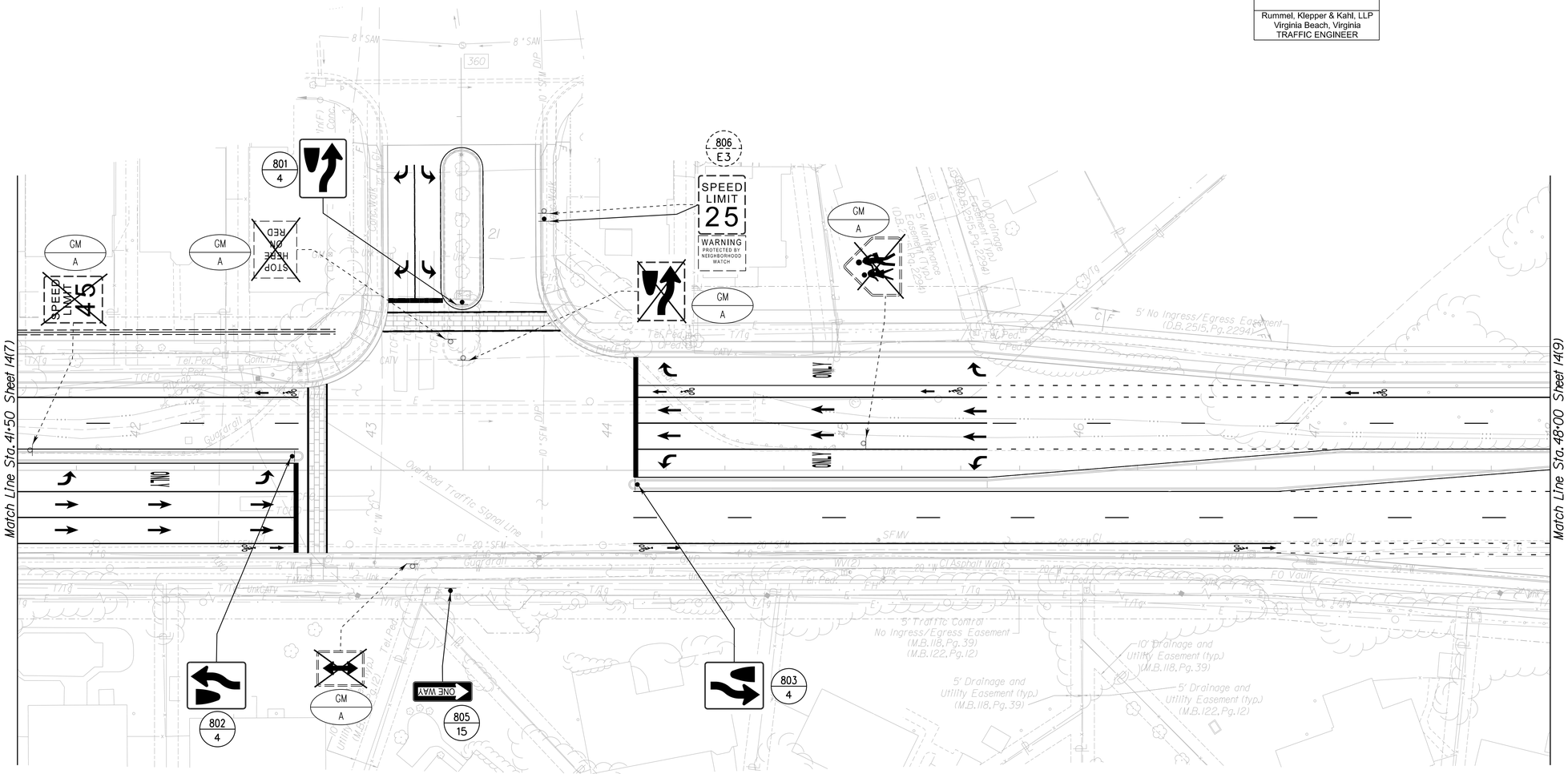
SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	14(7)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	14(8)

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
Virginia Beach, Virginia
TRAFFIC ENGINEER



PAVEMENT MARKING & PAVEMENT MARKERS LEGEND

- (A) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 4" WIDTH
- (B) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 6" WIDTH
- (C) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 8" WIDTH
- (D) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 24" WIDTH
- (E) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 4" WIDTH (10' LINE, 30' SPACE)
- (F) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 6" WIDTH (2' LINE, 4' SPACE)
- (G) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 8" WIDTH (3' LINE, 9' SPACE)
- (H) TYPE B, CLASS I, YELLOW PAVEMENT LINE MARKING, 4" WIDTH
- (I) TYPE B, CLASS 1, DOUBLE YELLOW PAVEMENT LINE MARKING, 4" WIDTH
- (J) PAVEMENT MESSAGE MARKING "ONLY"
- (K) PAVEMENT MESSAGE MARKING ELONGATED ARROW SINGLE
- (L) BICYCLE LANE MARKINGS (SEE VDOT ST'D. PM-6)
- ▷ ONE-WAY WHITE SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)
- ◀▶ TWO-WAY RED/WHITE SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)
- □ ONE-WAY YELLOW SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)
- ◧ TWO-WAY RED/YELLOW SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)

TRAFFIC CONTROL DEVICE PLANS
SIGNING & PAVEMENT MARKING PLANS

CITY OF VIRGINIA BEACH

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	14(8)

12/2/2020
1:46:21 PM

t10938114(09).dgn
Plotted By: jklser

PROJECT MANAGER Laurie Murphy, P.E., (757) 385-8465, (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP, (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017

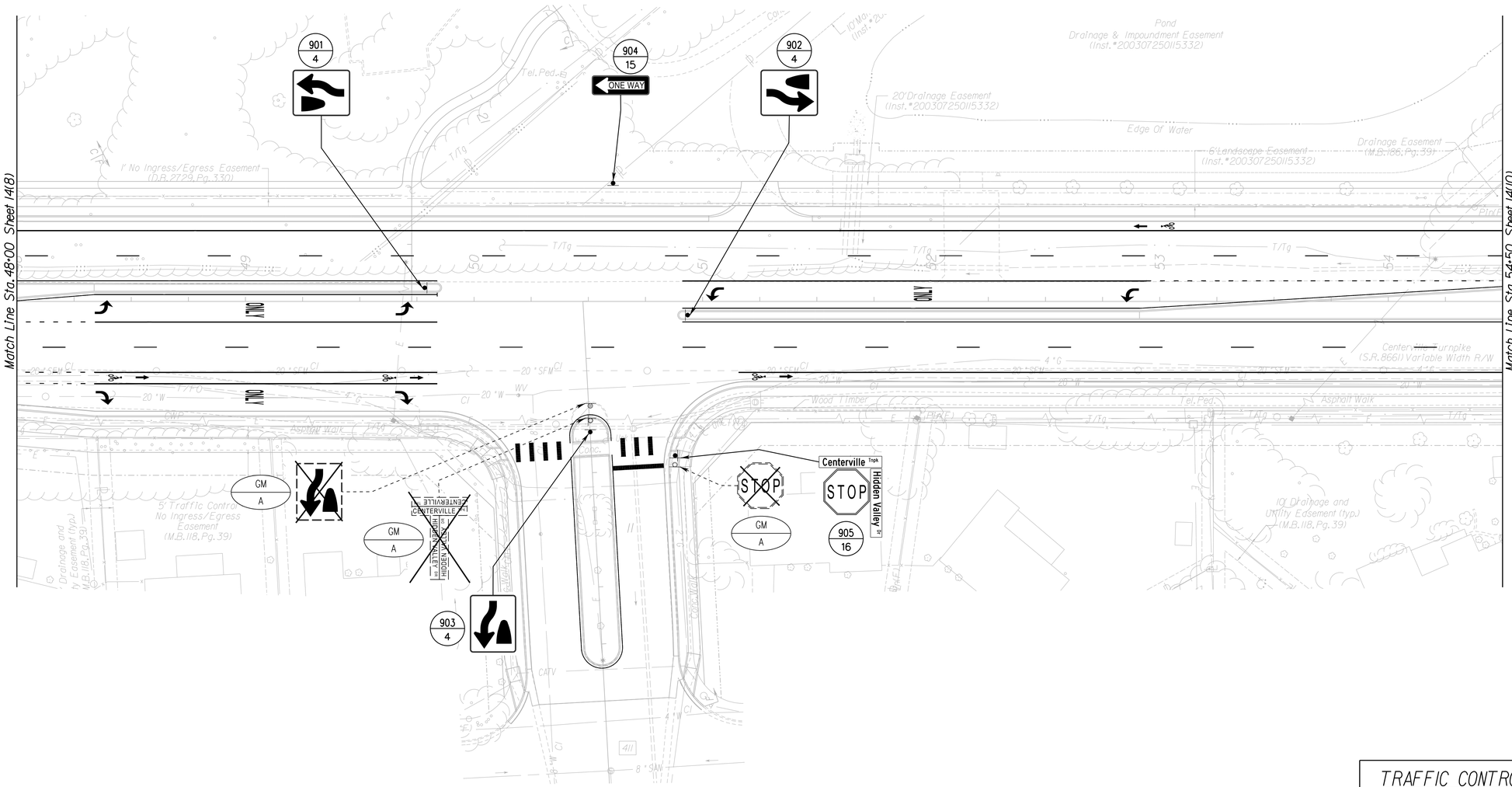
PAVEMENT MARKING & PAVEMENT MARKERS LEGEND

- (A) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 4" WIDTH
- (B) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 6" WIDTH
- (C) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 8" WIDTH
- (D) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 24" WIDTH
- (E) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 4" WIDTH (10' LINE, 30' SPACE)
- (F) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 6" WIDTH (2' LINE, 4' SPACE)
- (G) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 8" WIDTH (3' LINE, 9' SPACE)
- (H) TYPE B, CLASS I, YELLOW PAVEMENT LINE MARKING, 4" WIDTH
- (I) TYPE B, CLASS 1, DOUBLE YELLOW PAVEMENT LINE MARKING, 4" WIDTH
- (J) PAVEMENT MESSAGE MARKING "ONLY"
- (K) PAVEMENT MESSAGE MARKING ELONGATED ARROW SINGLE
- (L) BICYCLE LANE MARKINGS (SEE VDOT ST'D. PM-6)
- ▷ ONE-WAY WHITE SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)
- ◀▷ TWO-WAY RED/WHITE SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)
- □ ONE-WAY YELLOW SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)
- ◧ TWO-WAY RED/YELLOW SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	14(9)

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
Virginia Beach, Virginia
TRAFFIC ENGINEER



TRAFFIC CONTROL DEVICE PLANS

SIGNING & PAVEMENT MARKING PLANS

CITY OF VIRGINIA BEACH

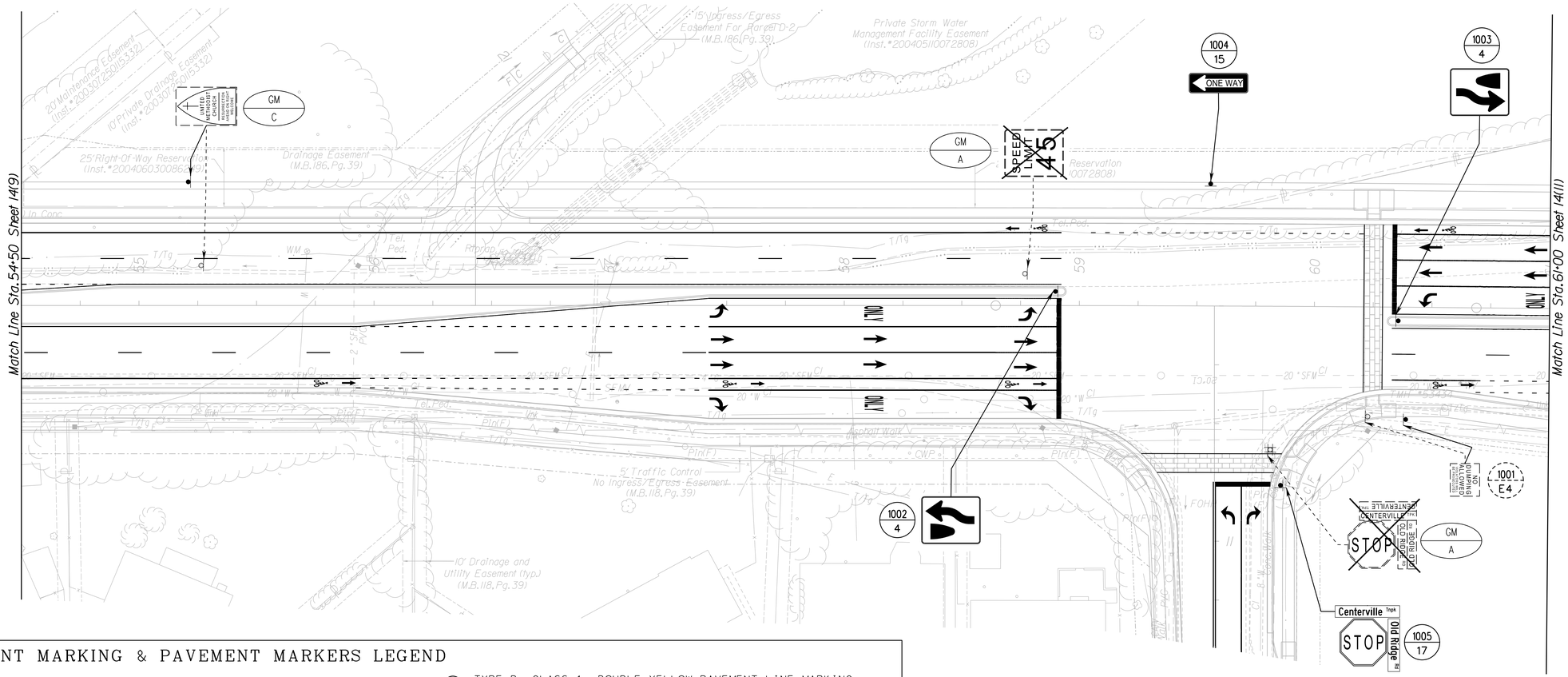
SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	14(9)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	14(10)

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
Virginia Beach, Virginia
TRAFFIC ENGINEER



PAVEMENT MARKING & PAVEMENT MARKERS LEGEND

- (A) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 4" WIDTH
- (B) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 6" WIDTH
- (C) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 8" WIDTH
- (D) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 24" WIDTH
- (E) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 4" WIDTH (10' LINE, 30' SPACE)
- (F) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 6" WIDTH (2' LINE, 4' SPACE)
- (G) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 8" WIDTH (3' LINE, 9' SPACE)
- (H) TYPE B, CLASS I, YELLOW PAVEMENT LINE MARKING, 4" WIDTH
- (I) TYPE B, CLASS 1, DOUBLE YELLOW PAVEMENT LINE MARKING, 4" WIDTH
- (J) PAVEMENT MESSAGE MARKING "ONLY"
- (K) PAVEMENT MESSAGE MARKING ELONGATED ARROW SINGLE
- (L) BICYCLE LANE MARKINGS (SEE VDOT ST'D. PM-6)
- ▷ ONE-WAY WHITE SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)
- ◀▷ TWO-WAY RED/WHITE SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)
- □ ONE-WAY YELLOW SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)
- ◧ TWO-WAY RED/YELLOW SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)

TRAFFIC CONTROL DEVICE PLANS

SIGNING & PAVEMENT MARKING PLANS

CITY OF VIRGINIA BEACH

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	14(10)

12/2/2020
1:46:35 PM

t10938114(11).dgn
Plotted By: jklser

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

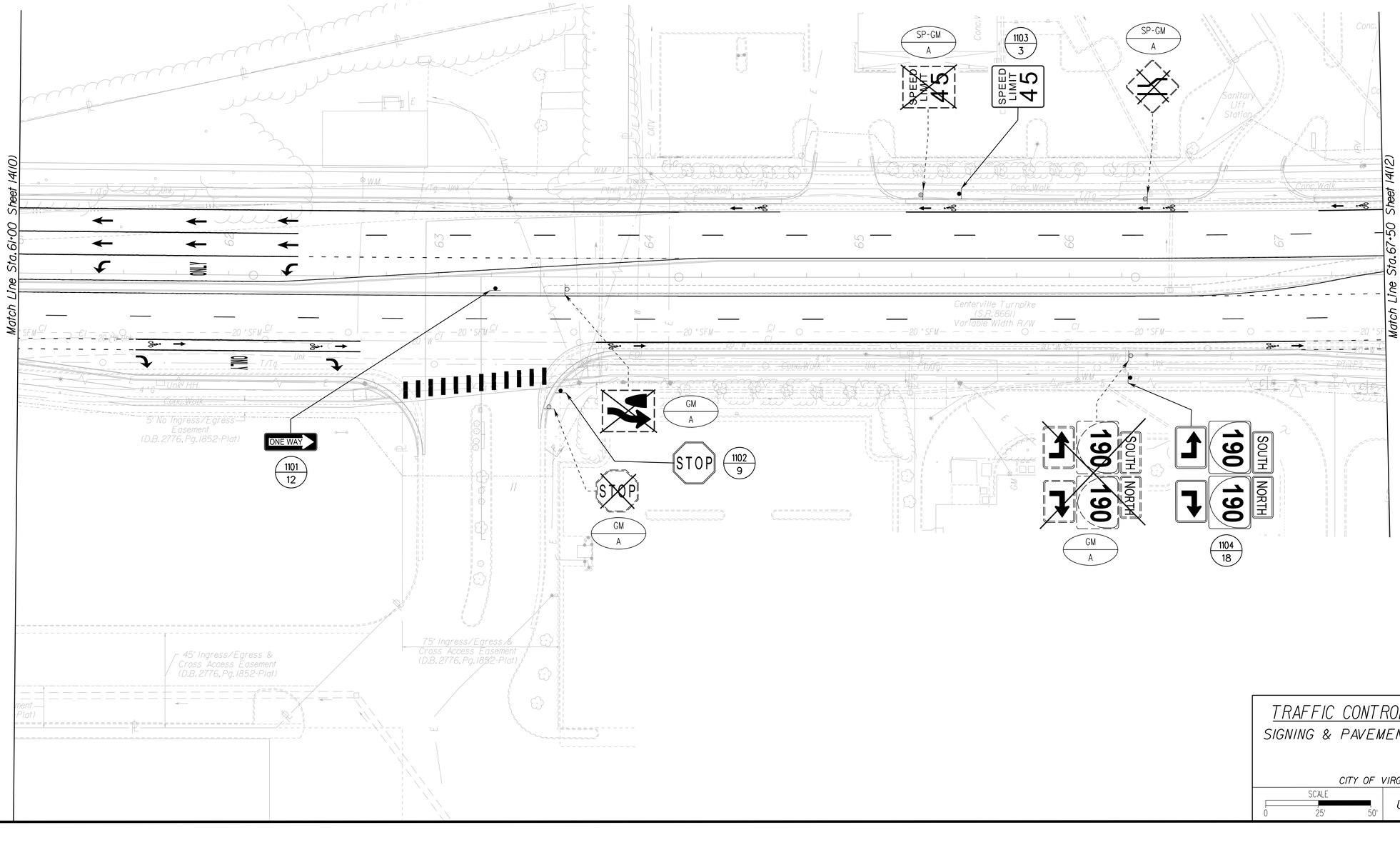
PAVEMENT MARKING & PAVEMENT MARKERS LEGEND

- (A) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 4" WIDTH
- (B) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 6" WIDTH
- (C) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 8" WIDTH
- (D) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 24" WIDTH
- (E) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 4" WIDTH (10' LINE, 30' SPACE)
- (F) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 6" WIDTH (2' LINE, 4' SPACE)
- (G) TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 8" WIDTH (3' LINE, 9' SPACE)
- (H) TYPE B, CLASS I, YELLOW PAVEMENT LINE MARKING, 4" WIDTH
- (I) TYPE B, CLASS 1, DOUBLE YELLOW PAVEMENT LINE MARKING, 4" WIDTH
- (J) PAVEMENT MESSAGE MARKING "ONLY"
- (K) PAVEMENT MESSAGE MARKING ELONGATED ARROW SINGLE
- (L) BICYCLE LANE MARKINGS (SEE VDOT ST'D. PM-6)
- ▷ ONE-WAY WHITE SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)
- ◀▷ TWO-WAY RED/WHITE SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)
- □ ONE-WAY YELLOW SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)
- ◧ TWO-WAY RED/YELLOW SNOW PLOWABLE RAISED PAVEMENT MARKER (ASPHALT CONCRETE)

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	14(11)

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
Virginia Beach, Virginia
TRAFFIC ENGINEER



TRAFFIC CONTROL DEVICE PLANS
SIGNING & PAVEMENT MARKING PLANS

CITY OF VIRGINIA BEACH

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	14(11)

12/2/2020
1:46:42 PM

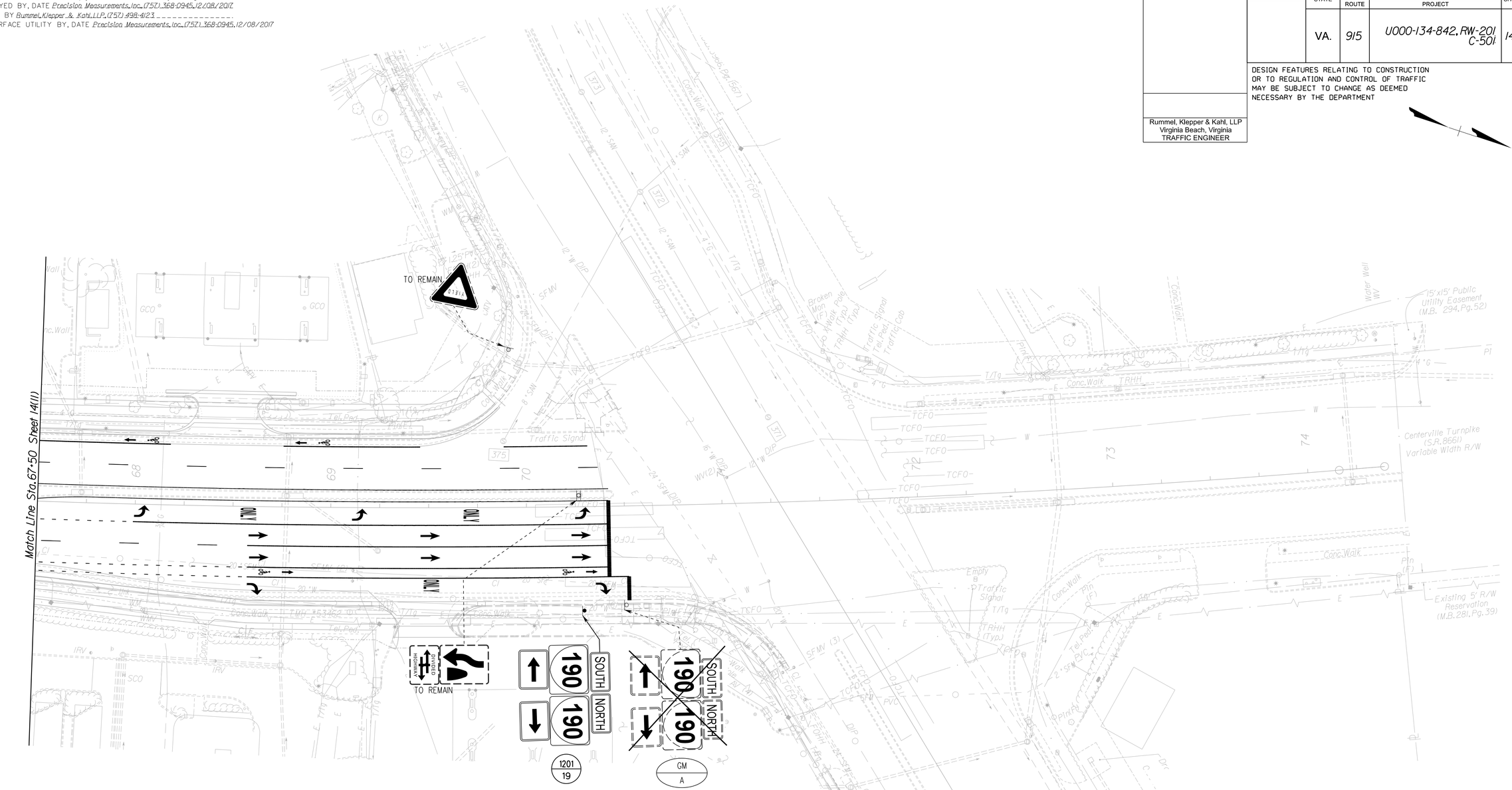
t10938114(12).dgn
Plotted By: jklser

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	14(12)

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
Virginia Beach, Virginia
TRAFFIC ENGINEER

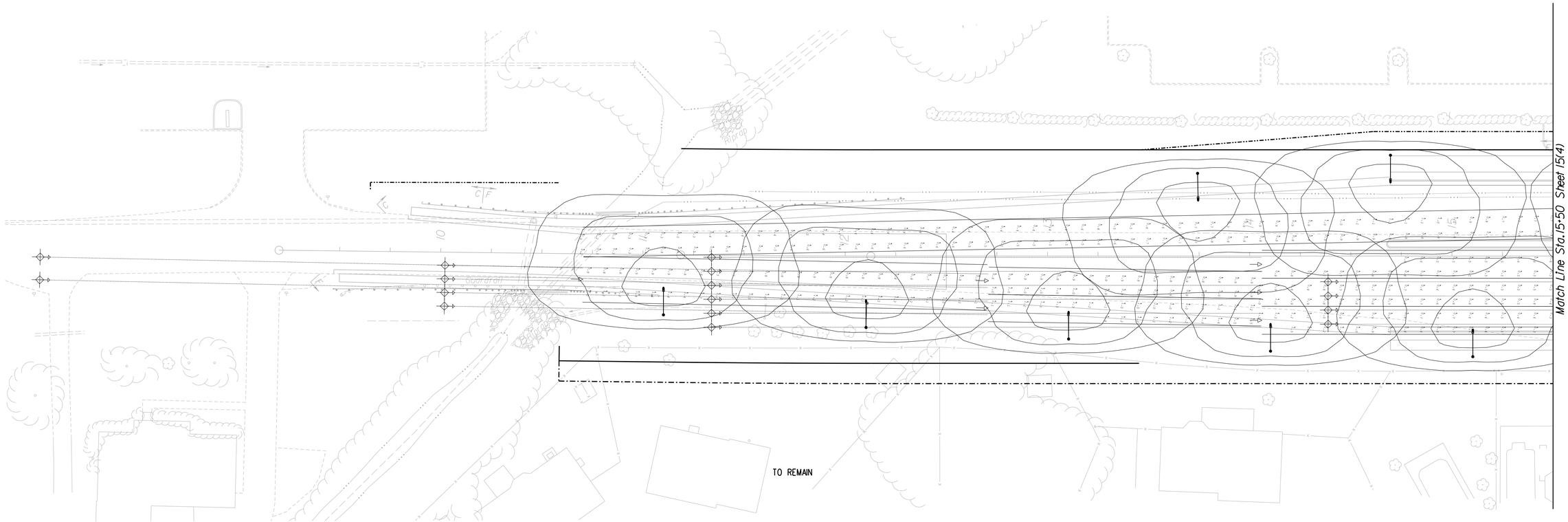

Match Line Sta.67+50 Sheet 14(11)
TO REMAIN
TO REMAIN
HIGH WATER BOARD
190 SOUTH
190 NORTH
190 SOUTH
190 NORTH
1201
19
GM
A
Centerville Turnpike
(S.R.8661)
Variable Width R/W
15'x15' Public
Utility Easement
(M.B. 294, Pg.52)
Existing 5' R/W
Reservation
(M.B.281, Pg.39)
Kempsville Road
(S.R.190)
Variable Width R/W
Conc.Walk
TRHH
T/Tg
Traffic Signal
Tel.Ped.
Traffic Cab
Broken Mon (VF)
SO Knock Pole (Typ.)
Water Well
Pin (F)
Empty
Conc.Walk
TCFO
SFMW
SCO
IRV
WM
WV
DIP
Cl
Ex.Walk
GCO
Tel.Ped.
Traffic Signal
Conc.Walk
TRHH
T/Tg
Pin (F)
Pin (F)
Conc.Walk
Empty
Traffic Signal
T/Tg
TRHH (Typ.)
Tel.Ped.
Pin (F)
Conc.Walk
Pin (F)
Existing 5' R/W
Reservation
(M.B.281, Pg.39)
Kempsville Road
(S.R.190)
Variable Width R/W
Pin (F) w/Cap
WM
WV
Cl
Dr
Ex.Walk
Conc.Walk
Water Well
WV
Pin (F)
Pin (F)
Pin (F)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	15(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
Virginia Beach, Virginia
TRAFFIC ENGINEER



TRAFFIC CONTROL DEVICE PLANS
LIGHTING PLANS

CITY OF VIRGINIA BEACH

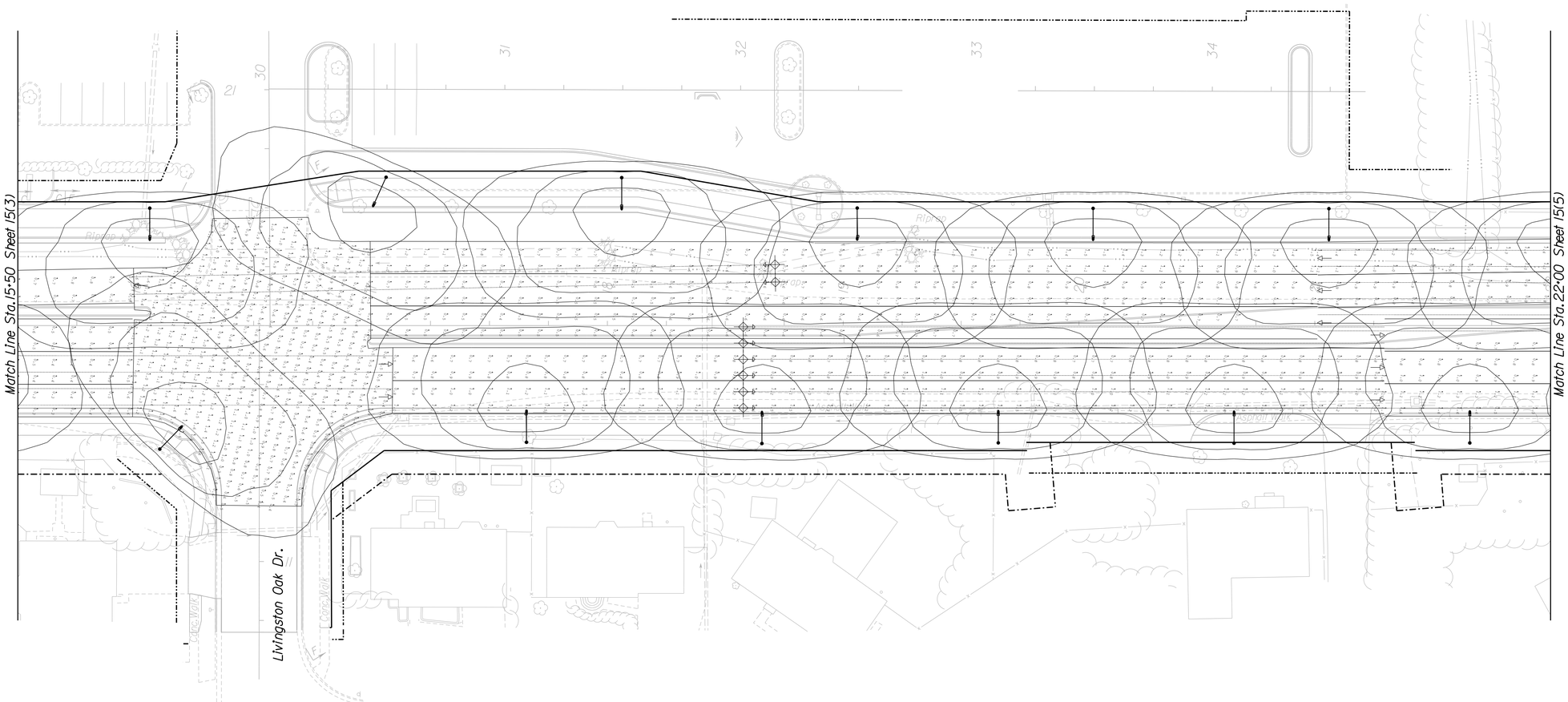
SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	15(3)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	15(4)

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
Virginia Beach, Virginia
TRAFFIC ENGINEER



	Average	Max.	Min.	Avg./Min.
Intersection Criteria	1.50–1.80			3.00
Centerville Turnpike @ Livingston Oak Dr	1.68	2.30	0.70	2.40

TRAFFIC CONTROL DEVICE PLANS

LIGHTING PLANS

CITY OF VIRGINIA BEACH

SCALE 0 25' 50'

PROJECT U000-134-842

SHEET NO. 15(4)

12/1/2020
4:04:42 PM

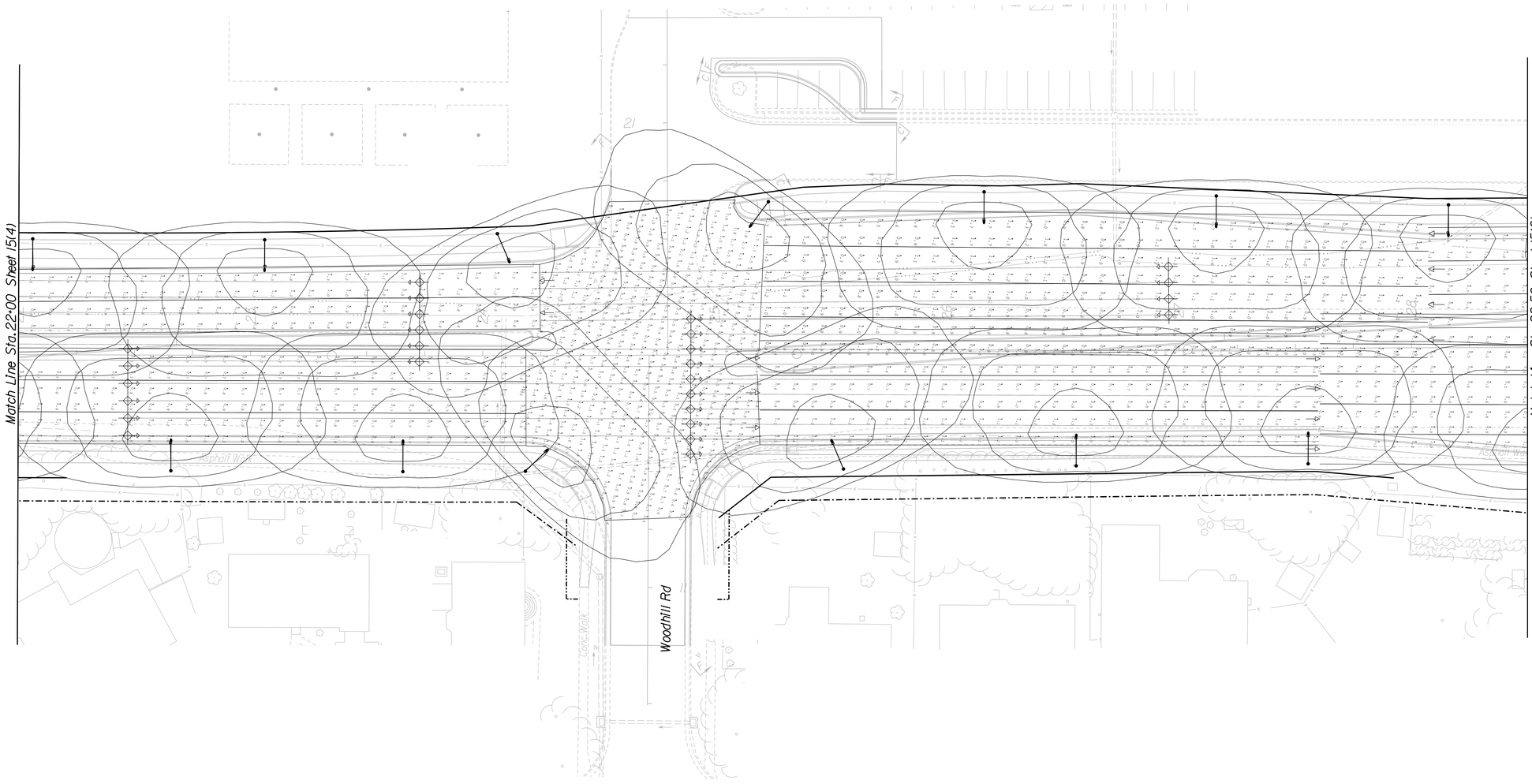
tl0938115(05).dgn
Plotted By: jklser

PROJECT MANAGER Laurie Murphy, P.E., (757) 385-8465, (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP, (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	15(5)

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
Virginia Beach, Virginia
TRAFFIC ENGINEER



	Average	Max.	Min.	Avg./Min.
Intersection Criteria	1.50-1.80			3.00
Centerville Turnpike @ Woodhill Rd	1.51	2.20	1.00	1.51

TRAFFIC CONTROL DEVICE PLANS
LIGHTING PLANS

CITY OF VIRGINIA BEACH

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	15(5)

12/1/2020
4:04:48 PM

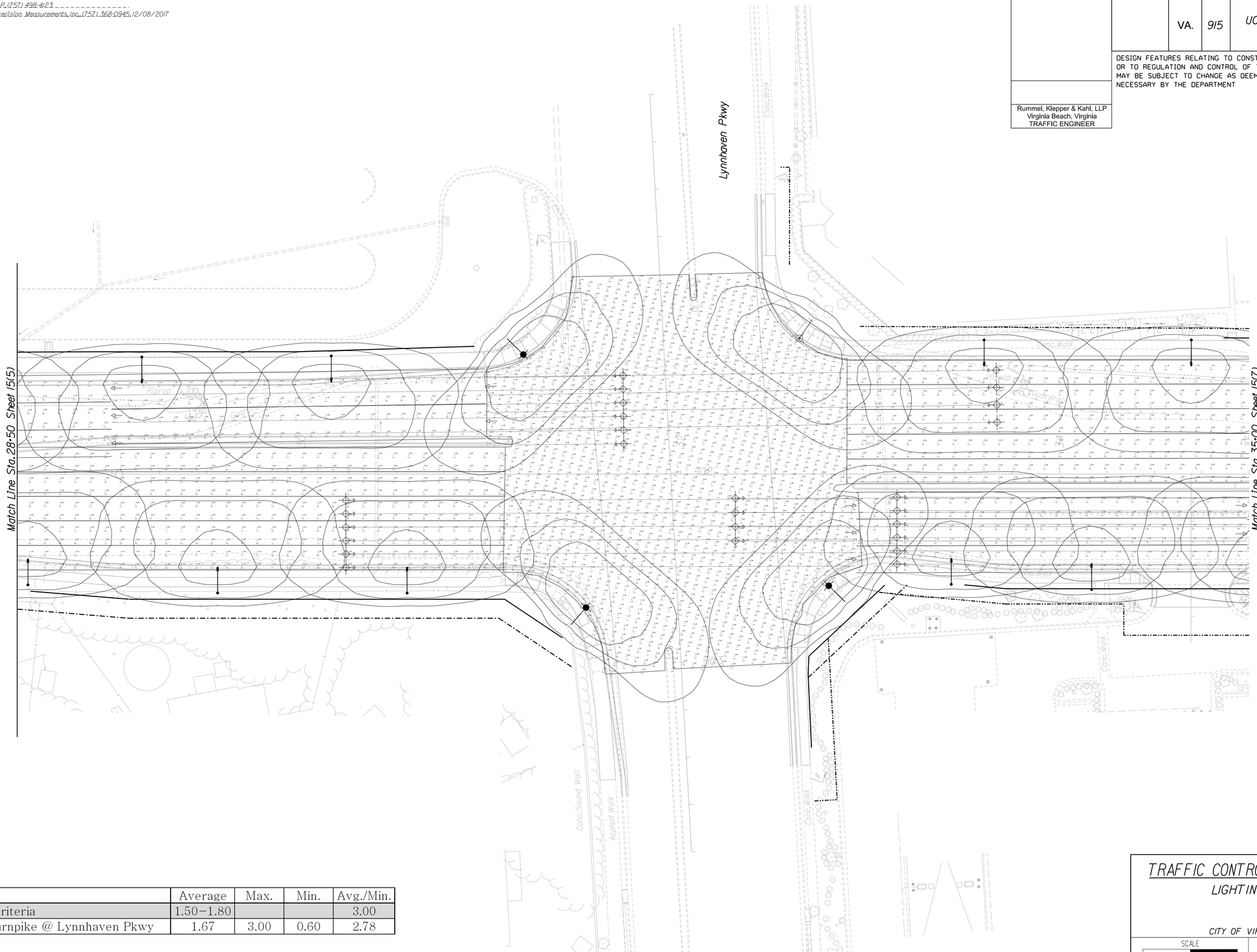
t1093811506l.dgn
Plotted By: jklser

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	15(6)

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
Virginia Beach, Virginia
TRAFFIC ENGINEER



	Average	Max.	Min.	Avg./Min.
Intersection Criteria	1.50-1.80			3.00
Centerville Turnpike @ Lynnhaven Pkwy	1.67	3.00	0.60	2.78

TRAFFIC CONTROL DEVICE PLANS

LIGHTING PLANS

CITY OF VIRGINIA BEACH

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	15(6)

12/1/2020
4:04:55 PM

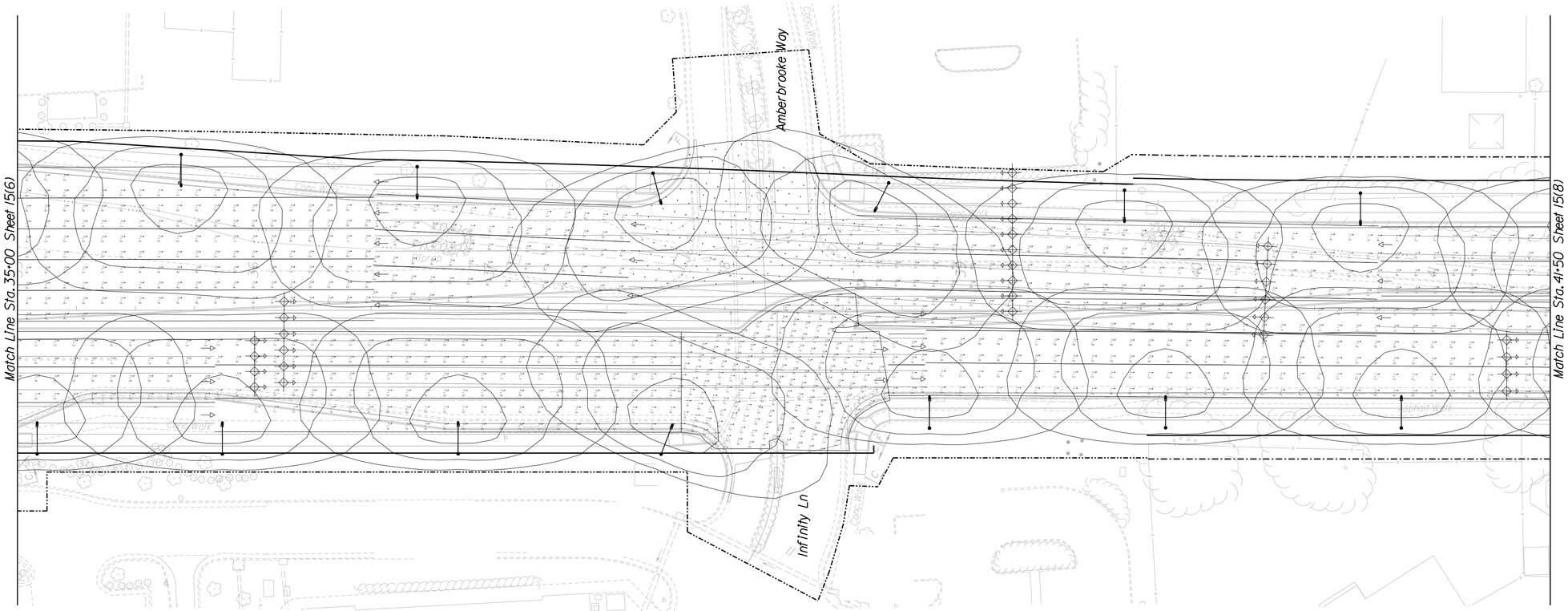
t1093811507).dgn
Plotted By: jklser

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	15(7)

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
Virginia Beach, Virginia
TRAFFIC ENGINEER



	Average	Max.	Min.	Avg./Min.
Intersection Criteria	1.50-1.80			3.00
Centerville Turnpike @ Amberbrooke Way	1.60	2.40	0.60	2.67

	Average	Max.	Min.	Avg./Min.
Intersection Criteria	1.50-1.80			3.00
Centerville Turnpike @ Infinity Ln	1.66	2.30	1.00	1.66

TRAFFIC CONTROL DEVICE PLANS
LIGHTING PLANS

CITY OF VIRGINIA BEACH

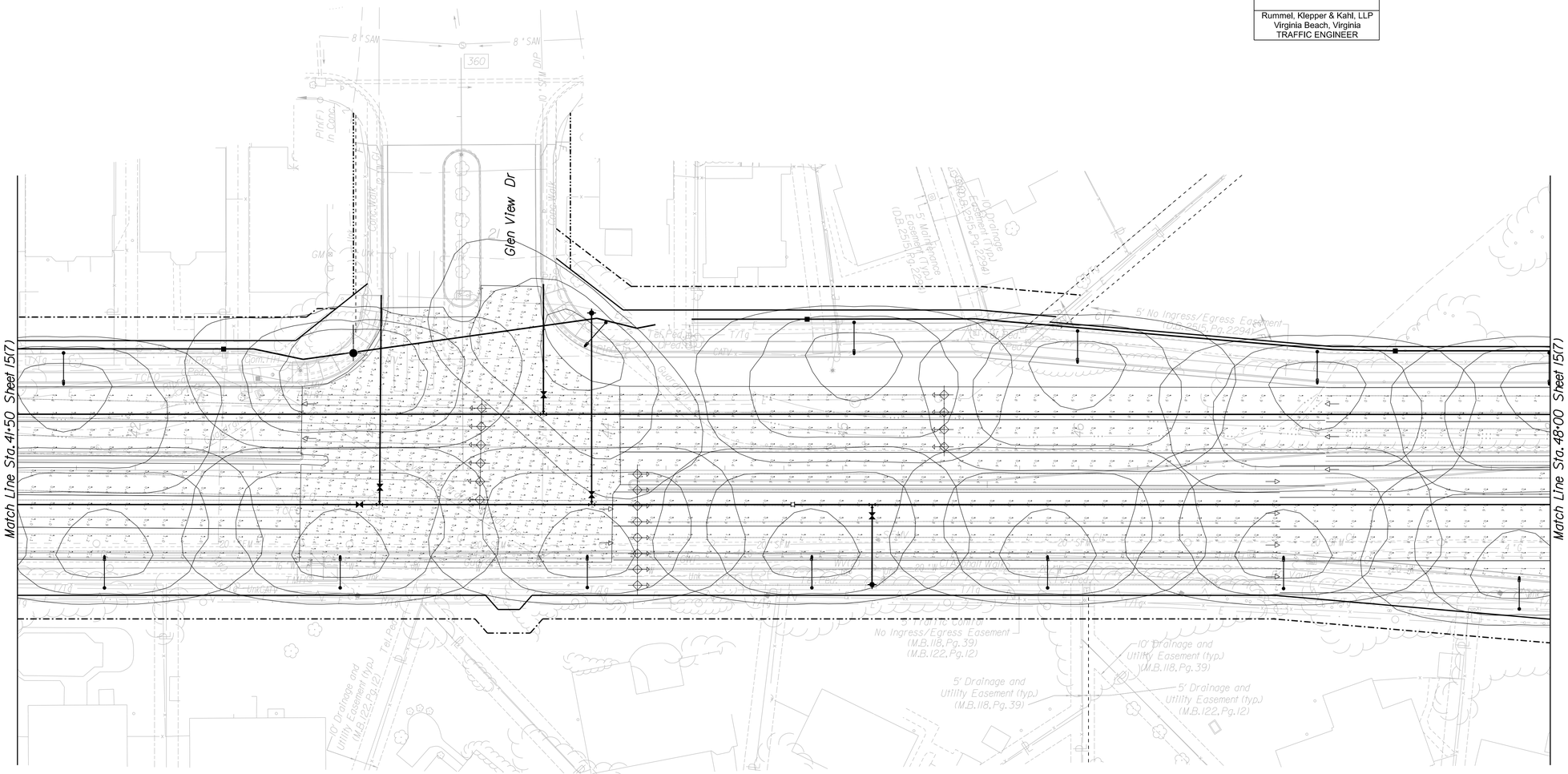
SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	15(7)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	15(8)

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
Virginia Beach, Virginia
TRAFFIC ENGINEER



	Average	Max.	Min.	Avg./Min.
Intersection Criteria	1.50-1.80			3.00
Centerville Turnpike @ Glen View Dr	1.73	2.40	0.60	2.88

TRAFFIC CONTROL DEVICE PLANS

LIGHTING PLANS

CITY OF VIRGINIA BEACH

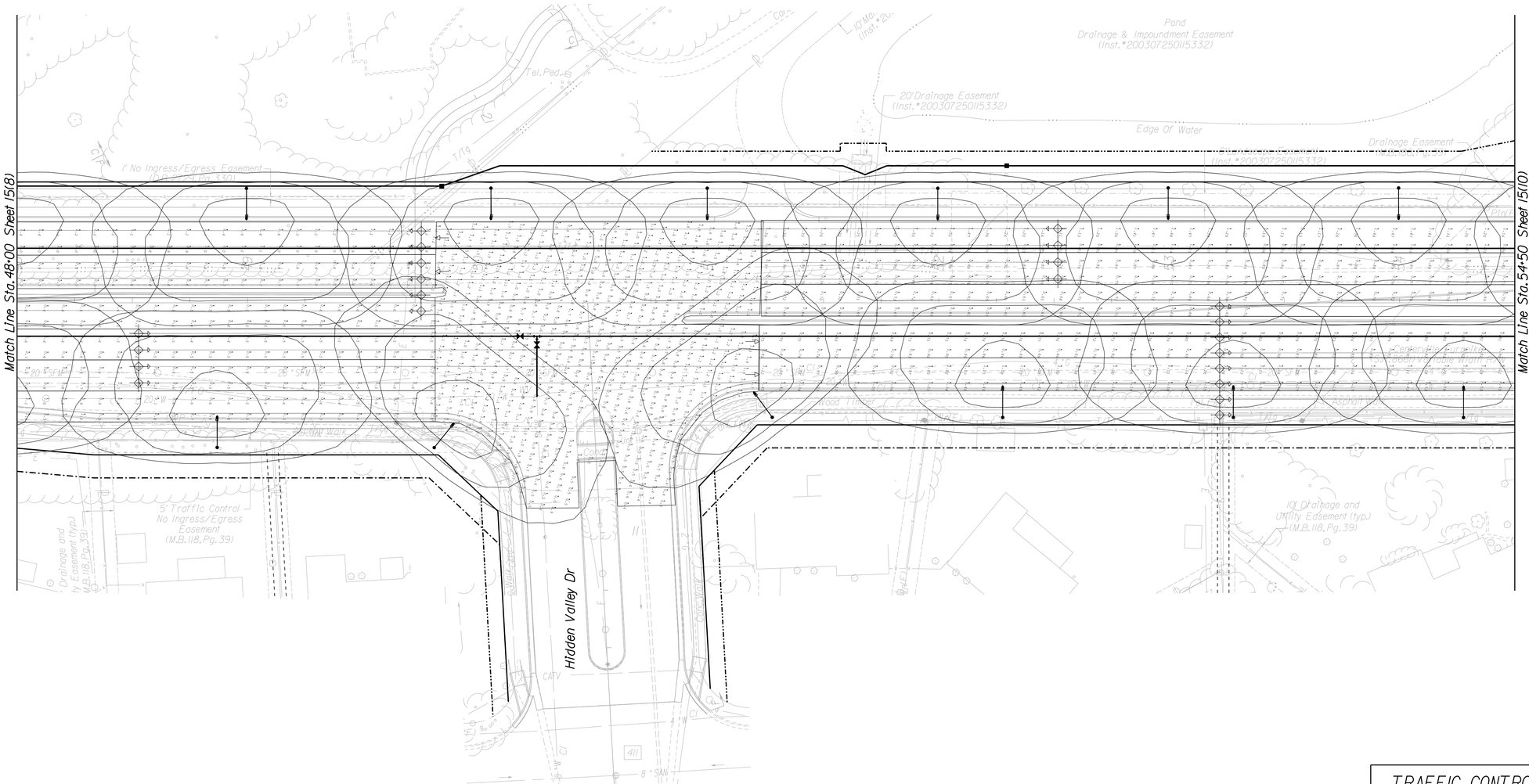
SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	15(8)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	15(9)

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
Virginia Beach, Virginia
TRAFFIC ENGINEER



	Average	Max.	Min.	Avg./Min.
Intersection Criteria	1.50-1.80			3.00
Centerville Turnpike @ Hidden Valley Dr	1.51	2.30	0.70	2.16

TRAFFIC CONTROL DEVICE PLANS
LIGHTING PLANS

CITY OF VIRGINIA BEACH

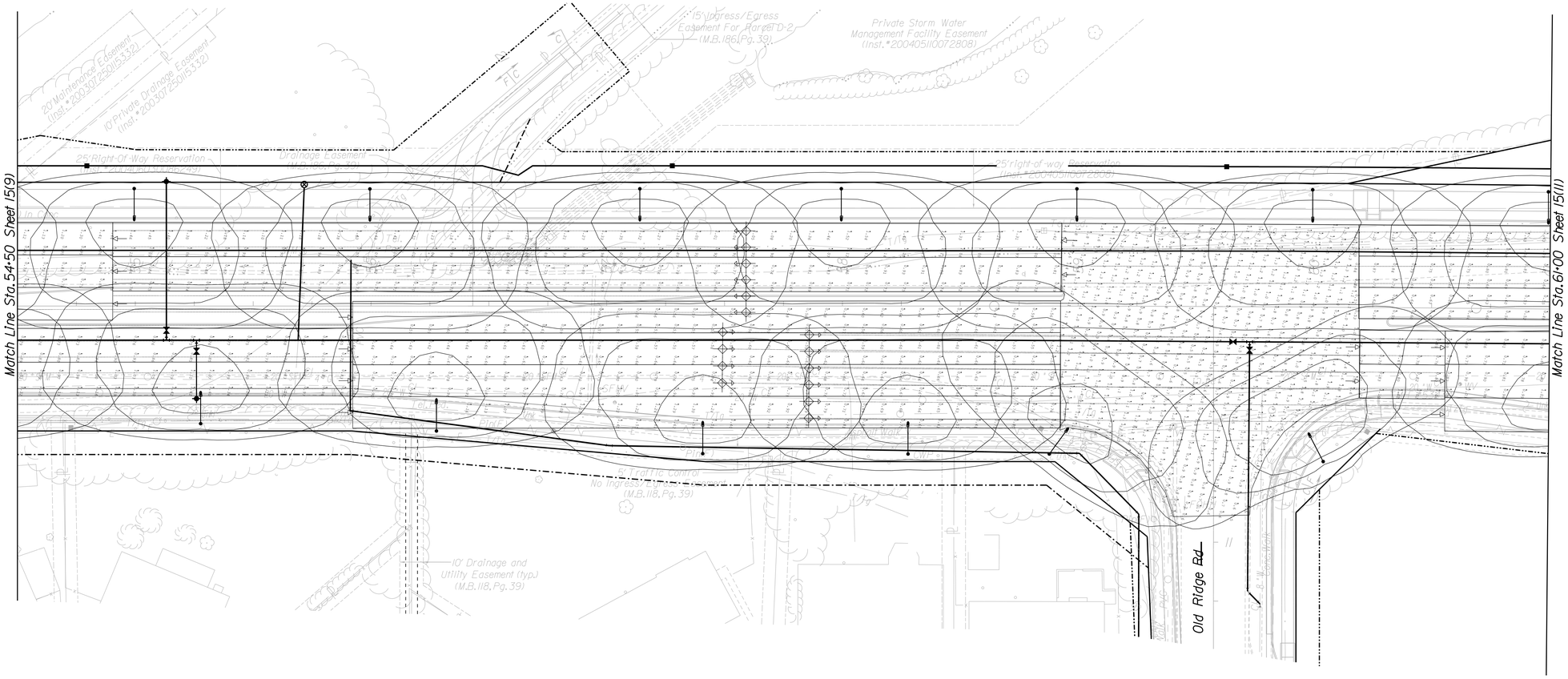
SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	15(9)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	15(10)

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
Virginia Beach, Virginia
TRAFFIC ENGINEER



	Average	Max.	Min.	Avg./Min.
Intersection Criteria	1.50-1.80			3.00
Centerville Turnpike @ Old Ridge Rd	1.54	2.20	0.80	1.93

TRAFFIC CONTROL DEVICE PLANS
LIGHTING PLANS

CITY OF VIRGINIA BEACH

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	15(10)

12/1/2020
4:05:24 PM

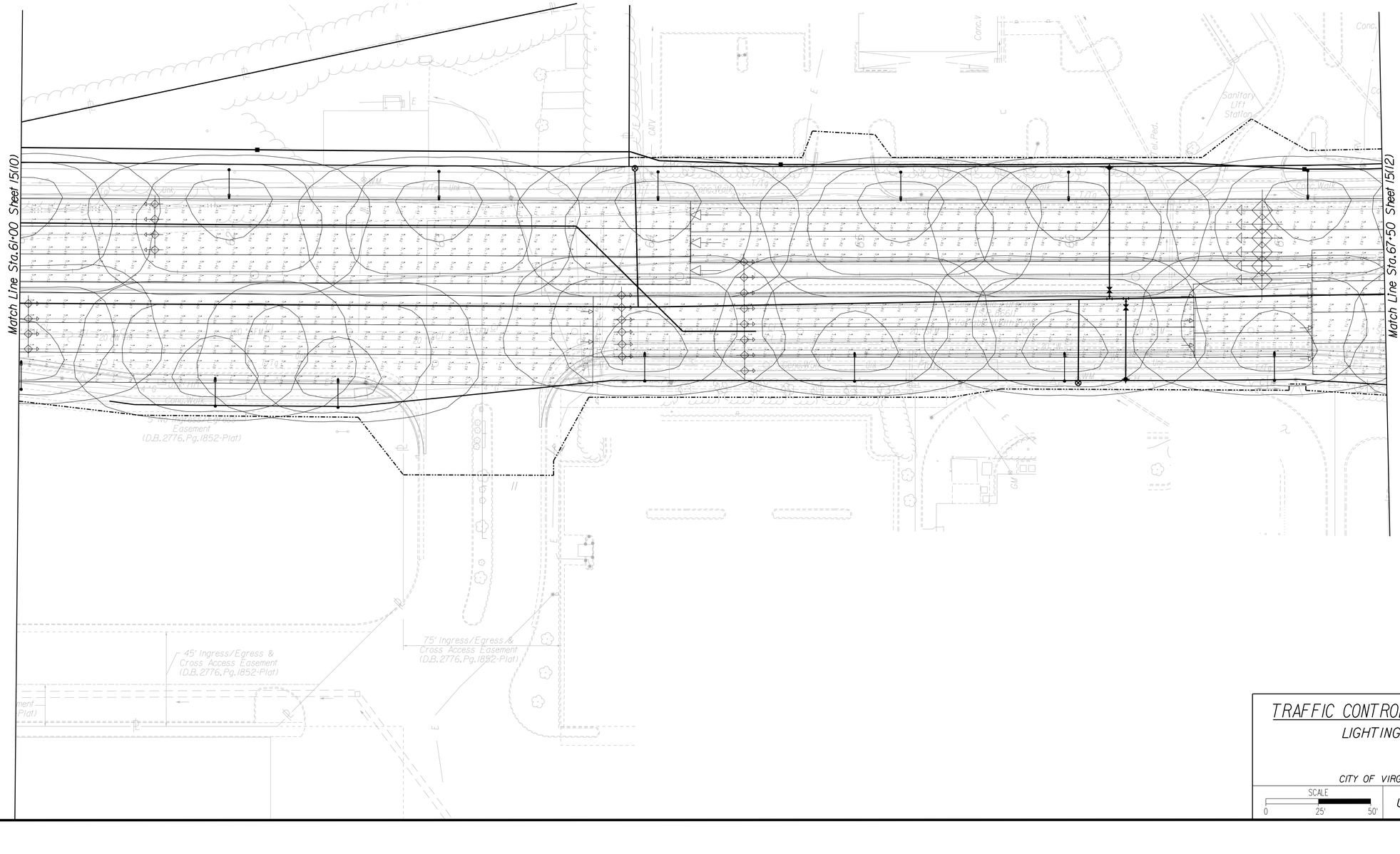
1109381151111.dgn
Plotted By: jklser

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	15(11)

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
Virginia Beach, Virginia
TRAFFIC ENGINEER



TRAFFIC CONTROL DEVICE PLANS
LIGHTING PLANS

CITY OF VIRGINIA BEACH

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	15(11)

12/1/2020
4:05:31 PM

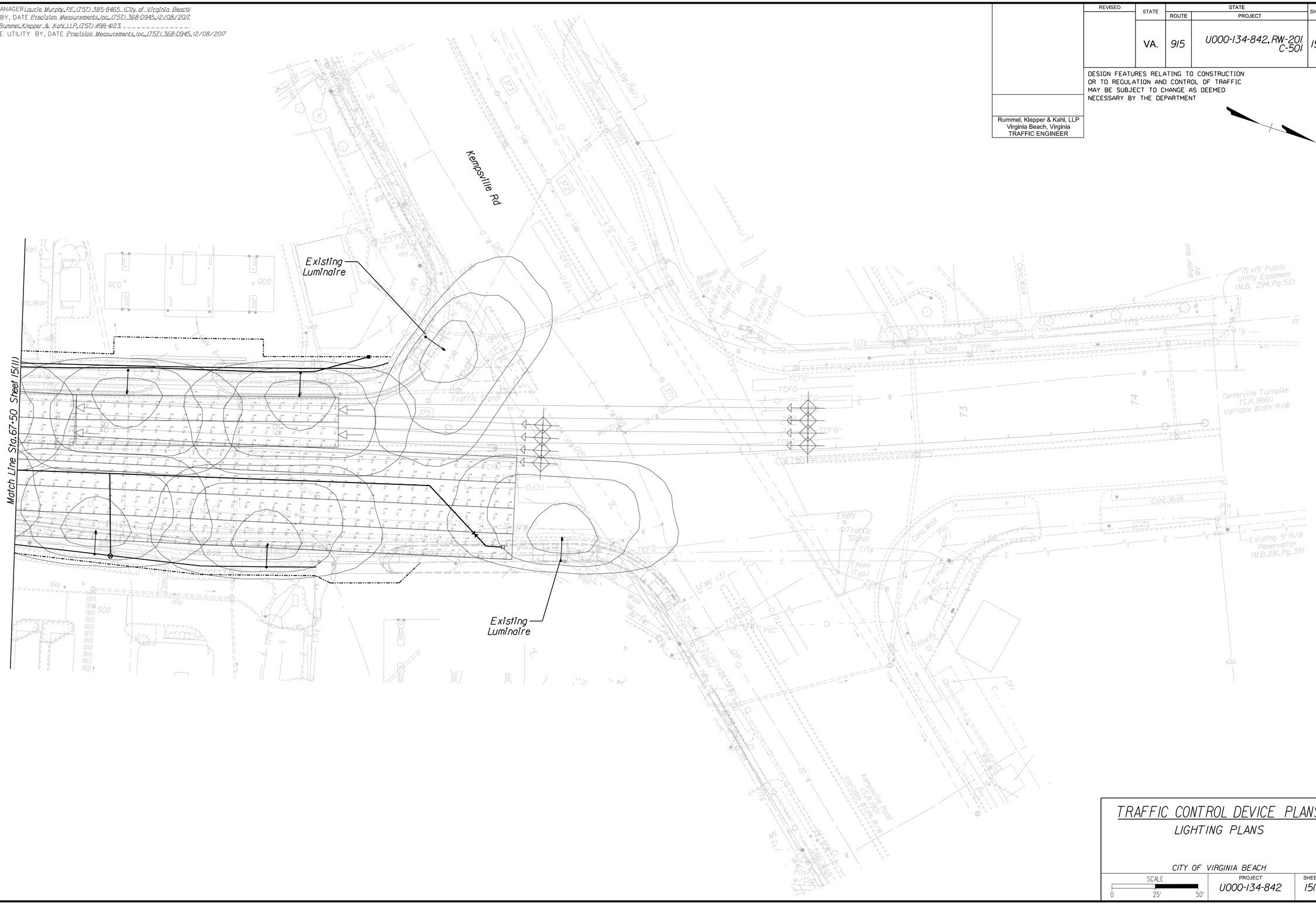
t10938115(12).dgn
Plotted By: jklser

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	15(12)

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
Virginia Beach, Virginia
TRAFFIC ENGINEER



TRAFFIC CONTROL DEVICE PLANS

LIGHTING PLANS

CITY OF VIRGINIA BEACH

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	15(12)

PROJECT MANAGER Laurie Murphy, PE, (757) 385-8465, (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP, (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017

GENERAL NOTES

1. The Contractor shall contact "Miss Utility of Virginia" (1-800-552-7001 or 811) prior to beginning work. In order to determine the extent and location of all underground utilities within the project limits. Utility companies will be notified through "Miss Utility of Virginia" 48 hours prior to any excavation within the proximity of their utilities. The Contractor will be responsible for repairing or replacing, at his own expense, any existing utilities, pavement, concrete items, pipes, etc. that are damaged during construction.

2. Prior to beginning any traffic signal construction work, the Contractor will contact the City Traffic Management Operations Group (385-1470) and the City Traffic Engineering Group (385-4131) and schedule a preconstruction meeting. The Contractor will contact the City staff a minimum of 10 working days prior to the beginning of any planned signal construction.

3. The Contractor will contact the City of Virginia Beach Traffic Signal Supervisor at the Traffic Management Operations Group (385-1470) 72 hours prior to beginning work.

4. All traffic control items will be constructed and installed in accordance with the edition of the following documents adopted at the time of contract award:
   - 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). REVISIONS 1 AND 2.
   - 2011 VIRGINIA SUPPLEMENT TO THE 2009 MUTCD, REVISION 1.
   - 2016 VDOT ROAD AND BRIDGE STANDARDS.
   - 2016 VDOT ROAD AND BRIDGE SPECIFICATIONS.
   - VDOT SPECIAL PROVISIONS.
   - VIRGINIA STANDARD HIGHWAY SIGNS.
   - VDOT WORK AREA PROTECTION MANUAL.
   - CITY OF VIRGINIA BEACH AMENDMENTS TO THE VDOT ROAD AND BRIDGE SPECIFICATIONS, AND THE
   - CITY OF VIRGINIA BEACH DPW/ENGINEERING DIVISION SPECIFICATIONS AND STANDARDS.

5. The Contractor is responsible for all work zone signing, pavement marking delineation and any other traffic control devices necessary to perform the work. Upon completion of the project, the Contractor will immediately remove all such temporary devices.

6. Replacement/reconstruction of damaged sidewalks, entrances, curb and gutter, landscaping and other items is the responsibility of the Contractor, including areas where proposed construction is shown.

7. New traffic signal installations will be placed into flashing operation for 48 hours before being placed into full operation.

8. All existing traffic control equipment, including signalization and signing, which is removed by the Contractor shall not be reused with the project and shall be returned to the City of Virginia Beach, Traffic Control Shop, 3556 Dam Neck Road.

9. The Contractor shall contact the Hampton Roads Sanitation District Systems Engineer (385-2261) at least two (2) working days prior to any work on or around the district force main.

10. The Contractor shall stub and cap two (2) ea. 2 inch PVC conduits for future use from each mast arm pole and controller cabinet foundation. In addition, the Contractor will also stub and cap a 2 inch PVC conduit and a 1 inch PVC conduit from the foundations of joint use signalization/street lighting poles.

11. The Contractor will be responsible for furnishing all labor, equipment, materials and costs associated with this signal installation, including traffic signal controller, cabinet, and traffic signal poles. The controller unit must be a NAZTEC TS-2 Type 1 980 Secondary Controller with a TS-2 Type 1 Virginia Beach P Cabinet to ensure compatibility with the City's traffic computer system.

12. The City will provide the Contractor with signal timings for the controller when the traffic signal installation is ready to be placed into service. The Contractor shall notify Traffic Management Operations in writing 10 working days in advance of the final signal timing requirement.

13. Emergency vehicle preemption equipment shall be optically activated and shall completely interface with and have the same features and function of existing City of Virginia Beach Emergency Preemption Systems. The existing system consists of the 3M, Model 700 Series detectors, system chassis, phase selectors and emitters, with vehicle identification and logging features. Confirmation lights are not required.

14. Video detection equipment shall be installed as shown on the plans, as directed by the Engineer and in accordance with the October 1, 2017, City of Virginia Beach amendments to the 2016 VDOT Road and Bridge Specifications.

15. Unless otherwise specified on the plans, all mast arm signal mountings will be in accordance with VDOT standard SM-3.

16. Unless otherwise specified, mast arm mounted signs shall be rigidly mounted to the mast arm.

17. Unless otherwise specificed on the plans, backplates shall be installed on all mast arm mounted signal heads. Backplates are not required on pedestal or side pole mounted signal heads unless otherwise noted on the plans.

18. Unless otherwise specified on the plans, all 12 inch signal head sections shall have tunnel visors.

19. All signals, backplates, mounting hardware, pushbutton assemblies, and related hardway shall be black in color.

20. Rigid mount hanger assemblies for traffic signals and signs must have a 42 inch stainless steel strap that ensures adequate length for attachment to Owner's mast arm poles.

21. The Contractor shall position the signal heads as shown on the plan and as directed by the City's representative, and make final adjustments necessary to the alignment and location of each signal as necessary.

22. For mast arm and span wire installations/removals over roadways open to traffic, a minimum of two weeks' notice must be provided to Public Works/Traffic Maintenance Operations and Public Works/Traffic Engineering. Work shall take place on a Sunday starting at 7:00 am unless otherwise approved by Traffic Engineering, with an off duty City of Virginia Beach police officer until the mast arm installation is complete. No work shall take place over traffic. Message boards must be put out 10 days in advance of the scheduled work.

23. Each cabinet and pole foundation will be permanently marked, indicating the locations of all conduits that are cast in the foundation. The markings will consist of an arrow, four (4) to six (6) inches long, with a letter designation as follows: (S) - spare conduit; (T) - conduit with signal or detector cables; (E) - conduit with electrical service conductors for the traffic signal; (L) - conduits installed for luminaire conductors on joint use poles; (G) - conduit for grounding conductor(s). The markings will be etched with a trowel 1/4 inches deep into the concrete while the concrete is being finished.

24. Prior to installing the pedestrian pushbuttons on the pole, the Contractor shall have the Engineer field verify the location and orientation for each pushbutton. On each corner, the pushbutton and sign shall be oriented to face the crosswalk to which it applies, so as to be visible to a pedestrian standing on the sidewalk at the beginning of the crosswalk. The message on these signs shall include the name of the street crossing. Pushbutton signs located in the median shall be oriented parallel with the median crosswalk and have a double-headed arrow in lieu of the street name.

25. Pedestrian pushbutton signs shall conform to Virginia Beach Standard D-52A.

26. Unless otherwise specified, all pedestal poles shall be 10 feet in height.

27. Bracket signal head mountings will be in accordance with VDOT Standard SMB-3 and post top signal head mountings will be in accordance with VDOT Standard SMB-1.

28. Conductor cable for pedestrian pushbuttons and internally illuminated street name signs shall conform to IMSA specification 20-1.

29. Pedestrian signal heads shall be VDOT standard SP-8.

30. All pedestrian signal heads shall be single units with countdown hand/man symbol assembly and Z-crate type visors.

31. Unless otherwise specified, all junction boxes will be fiberglass reinforced polymer concrete and conform to VDOT standard JB-S1, S2, or S3 (size as specified in the plans).

32. Junction boxes for electrical service and street lighting conductors shall have "ELECT" on the cover. Junction boxes for traffic signal conductors and fiber optic cable shall have "TRAF" on the cover.

33. Existing juncton boxes identified to be removed from grassy areas must be backfilled, compacted, and seeded to match surrounding conditions. Existing junction boxes identified to be removed from concrete islands must be filled with concrete and finished to match surrounding conditions.

34. The Contractor shall verify the elevations of all underground utilities to be crossed, prior to jacking or boring conduits.

35. The Contractor will hand dig when crossing water lines and sewer force mains.

36. All conduits stubbed from junction boxes and foundations must extend a minimum of six (6) inches beyond the box or foundation and must be capped.

37. 12-Gauge tracer wire (grounded at one end) shall be installed through all conduits that do not contain a continuous metallic conductor. The tracer wire is to be used to locate underground utilities in the future.

38. Trench excavation shall be in accordance with VDOT Standard EC1-1 modified to a 24 inch minimum depth.

39. The Contractor shall provide and install Metro Street Name signs as shown on the plans. Existing street name blade installations will be maintained by the Contractor throughout the duration of the project or until the new Metro Street Name Blades have been installed. The Contractor will furnish and install all other signing as required by the plans.

40. All existing street name blades shall be removed and returned to the City of Virginia Beach.

41. Unless otherwise approved by the Traffic Management Operations, splicing of active interconnect cable will only be permitted during periods when the affected sections of the VMS computerized traffic signal system are in scheduled non-coordinated standby operation.

42. The Contractor shall notify Traffic Engineering (385-4131) and Traffic Management Operations (385-1470) 72 hours prior to planned interconnect cable splicing work.

43. The Contractor shall furnish Traffic Management Operations three (3) copies of the drawings, detailing the exact location(s) of any direct buried splice.

44. Splicing will not be permitted unless a Traffic Management Operations representative is present.

45. Buried splices to direct burial interconnect cable shall be constructed using approved telephone and communications industry materials and methods. Individual conductors shall be spliced with sealed moisture resistant connectors. A heat shrinkable wrap around splice sleeve must enclose the splice. The Contractor shall submit three (3) copies of material specifications to Traffic Engineering for review and approval.

46. The Contractor shall perform megger and fault tests on the section of spliced cable before it is placed into service. These tests shall be made from the nearest access points on either side of the splice(s). Tests shall be made in the presense of the Engineer or his designated representative.

47. The Contractor shall contact the City of Virginia Beach Traffic Management Operations (385-1470) 72 hours prior to any work that will affect existing traffic control facilities.

48. Additonal test pits, silt fence, straw bale sediment barrier and temporary removable preformed plastic tape are not listed in the quantities. They are contingency items and will be utilitized at the discretion and direction of the City Representative.

49. The PA-3 shall be installed 1.5' behind face of curb with a minimum 5' clearance between the pole and back of curb.

50. Contractor will deliver and pick up the controller, cabinet, and control equipment at the Traffic Management Operations Maintenance Yard, 3556 Dam Neck Road, for inspection and testing proceddures.

51. The Engineer will be responsible for contacting Dominion Energy to verify that electrical service can be furnished to the traffic signal from the source that is shown on the signal plan.

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	16(1)

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
Virginia Beach, Virginia
TRAFFIC ENGINEER

PLAN ITEM	PLAN SYMBOL PROPOSED	PLAN SYMBOL EXISTING
Metal Signal Pole & Foundation and Mast Arm (As noted in Signal Pole Legend)		
Pedestal Pole and Foundation (St'd. PF-2)		
Traffic Signal Head w/ Backplate		
Pedestrian Signal Head		
Traffic Signal Sign Mast Arm or Span Wire Mt'd.		
Illuminated Traffic Mast Arm Signal Sign		
Emergency Vehicle Pre-emption (EVP) Sensor w/o Conf. Light		
Video Detection Camera		
Signal Luminaire (Size TBD) and Arm		
Video Detection Zone (Size as noted on plans)	VDZ 6'x20'	VDZ 6'x20'
Conduit		
Junction Box (St'd. as noted on plans)		
Electrical Service Meter	SM	SM
Controller Cabinet Ground Mounted		
Controller Cabinet & Foundation Std. CF-1		
Uninterruptible Power Supply Cabinet	UPS	UPS

LABELS	
Signal Pole or Controller	(A)
Signal Phasing	Ø2
Proposed Signal Head	(2)
Existing Signal Head	(2)
Denotes Relocated Item	(*)

TRAFFIC CONTROL DEVICE PLANS
GENERAL NOTES & LEGEND

CITY OF VIRGINIA BEACH

PROJECT	SHEET NO.
U000-134-842	16(1)

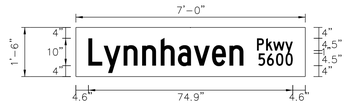
PROJECT MANAGER Laurie Murphy, PE, (757) 385-8465, (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP, (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501,	16(2A11

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
Virginia Beach, Virginia
TRAFFIC ENGINEER

SIGN DETAIL



SIGN NUMBER	S-1
WIDTH x HGHT.	7'-0" x 1'-6"
BORDER WIDTH	0"
CORNER RADIUS	0"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND&BORDER	TYPE: Reflective
	COLOR: White/Green

SYMBOL	ROT	X	Y	WID	HT

Dimensions are in Inches,tenths

Letter locations are panel/edge to lower left corner

LETTER POSITIONS (X)

P	k	w	y																		LENGTH	SERIES/SIZE
66.4	69.7	72.3	76.7																		13.1	C 2000 4.5/3.4
L	y	n	n	h	o	v	e	n														
4.6	10.2	17.5	24.3	31.1	37.4	43.2	49.9	56.3													56.8	C 2000 10/7.5
5	6	0	0																			
66.8	70	73.3	76.8																		12.7	C 2000 4.5

SIGN DETAIL



SIGN NUMBER	S-3
WIDTH x HGHT.	6'-6" x 1'-6"
BORDER WIDTH	0"
CORNER RADIUS	0"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND&BORDER	TYPE: Reflective
	COLOR: White/Green

SYMBOL	ROT	X	Y	WID	HT

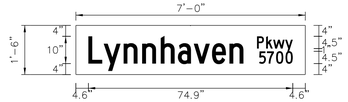
Dimensions are in Inches,tenths

Letter locations are panel/edge to lower left corner

LETTER POSITIONS (X)

T	n	p	k																		LENGTH	SERIES/SIZE
63.5	66.3	69.4	72.3																		11.3	C 2000 4.5/3.4
C	e	n	t	e	r	v	i	l	l	e												
3.1	10.2	16.6	22.6	26.9	33.3	37	44	47.2	50.4	53.3											55.3	C 2000 10/7.5
2	1	0	0																			
63.5	66.7	68.5	72																		11.2	C 2000 4.5

SIGN DETAIL



SIGN NUMBER	S-2
WIDTH x HGHT.	7'-0" x 1'-6"
BORDER WIDTH	0"
CORNER RADIUS	0"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND&BORDER	TYPE: Reflective
	COLOR: White/Green

SYMBOL	ROT	X	Y	WID	HT

Dimensions are in Inches,tenths

Letter locations are panel/edge to lower left corner

LETTER POSITIONS (X)

P	k	w	y																		LENGTH	SERIES/SIZE
66.4	69.7	72.3	76.7																		13.1	C 2000 4.5/3.4
L	y	n	n	h	o	v	e	n														
4.6	10.2	17.5	24.3	31.1	37.4	43.2	49.9	56.3													56.8	C 2000 10/7.5
5	7	0	0																			
67.1	70	73.4	76.8																		12.4	C 2000 4.5

SIGN DETAIL



SIGN NUMBER	S-7
WIDTH x HGHT.	6'-6" x 1'-6"
BORDER WIDTH	0"
CORNER RADIUS	0"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND&BORDER	TYPE: Reflective
	COLOR: White/Green

SYMBOL	ROT	X	Y	WID	HT

Dimensions are in Inches,tenths

Letter locations are panel/edge to lower left corner

LETTER POSITIONS (X)

T	n	p	k																		LENGTH	SERIES/SIZE
63.4	66.3	69.3	72.3																		11.3	C 2000 4.5/3.4
C	e	n	t	e	r	v	i	l	l	e												
3.1	10.2	16.6	22.6	26.9	33.3	37	44	47.2	50.4	53.3											55.3	C 2000 10/7.5

TRAFFIC CONTROL DEVICE PLANS
SIGN FACE LAYOUT

CITY OF VIRGINIA BEACH

PROJECT	SHEET NO.
U000-134-842	16(2A11

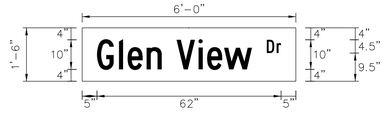
PROJECT MANAGER Laurie Murphy, PE, (757) 385-8465, (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP, (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	16(2A)12

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
Virginia Beach, Virginia
TRAFFIC ENGINEER

SIGN DETAIL



SIGN NUMBER	S-8
WIDTH x HGHT.	6'-0" x 1'-6"
BORDER WIDTH	0"
CORNER RADIUS	0"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White/Green

SYMBOL	ROT	X	Y	WID	HT

Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

																				LENGTH	SERIES/SIZE
D	r																				C 2000
62.2	65.5																			4.8	4.5/3.4
G	l	e	n	V	i	e	w														C 2000
5	12.4	15.3	21.7	31.8	39.2	42.1	47.8													52.2	10/7.5

TRAFFIC CONTROL DEVICE PLANS
SIGN FACE LAYOUT

CITY OF VIRGINIA BEACH

PROJECT	SHEET NO.
U000-134-842	16(2A)12

12/1/2020
4:06:46 PM

t10938116(03).dgn
Plotted By: jkiser

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	16(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
Virginia Beach, Virginia
TRAFFIC ENGINEER

Proposed Signs

S-1: Lynnhaven Pkwy 5600 — SPECIAL 84" x 18" QTY: 2

S-2: Lynnhaven Pkwy 5700 — SPECIAL 84" x 18" QTY: 2

S-3: Centerville Tnpk 2100 — SPECIAL 78" x 18" QTY: 2

S-4: LEFT TURN YIELD ON FLASHING YELLOW ARROW — R10-V1 36" x 42" QTY: 2

S-5*: R10-31 9" x 15" QTY: 4

S-6*: R10-31 9" x 15" QTY: 4

*NOTE: ARROW SHALL POINT IN DIRECTION OF CROSSWALK.

Existing Signals

R Y G — P2E, P4E — 2, 4

ALL EXISTING VEHICULAR SIGNAL HEADS SHALL BE RETROFITTED WITH ALUMINUM, HIGH VISIBILITY BACKPLATES

Proposed Signals

R Y G — 6, 8

R -Y -G — 1, 5

R Y F -G — 3, 7

SP-8 — P2, P4, P6, P8

ALL VEHICULAR SIGNAL HEADS SHALL BE 12" LED WITH FULL TUNNEL VISORS AND ALUMINUM, HIGH VISIBILITY BACKPLATES

JUNCTION BOX LEGEND

(S3) DENOTES ST'D. JB-S3

SPEED LIMITS

Centerville Tnpk	45 MPH
Lynnhaven Pkwy	35 MPH

UNDERGROUND UTILITY RELOCATION REQ'D FOR PROPOSED SIGNAL POLE

PROP. PERMANENT TRAFFIC CONTROL DEVICE EASEMENT

TRAFFIC CONTROL DEVICE PLANS

PRELIMINARY TRAFFIC SIGNAL PLAN

CENTERVILLE TURNPIKE & LYNNHAVEN PARKWAY
CITY OF VIRGINIA BEACH

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	16(3)

Last Revised 12/1/2020

PROJECT MANAGER Laurie Murphy, PE, (757) 385-8465, (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP, (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	16(3A)

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
Virginia Beach, Virginia
TRAFFIC ENGINEER

POLE SCHEDULE

POLE ID	TYPE	POLE STATION & OFFSET (FROM CENTERVILLE TPK BASELINE)	POLE HEIGHT	MAST ARM LENGTH	LUMINAIRE ARM LENGTH	LUMINAIRE MOUNT. HT.	EQUIPMENT MOUNTING (DISTANCE FROM POLE)								
							SIGNAL HEADS				SIGNS			VDC	EVP
A	EXIST.	EXIST.	26'	79'	15'	EX.	42'	53'	77'	-	25'	74'	-	71'	59'
B	MP-3	32+86.83 - 65.98' RT	26'	78'	15'	30'	40'	51'	63'	75'	24'	-	-	55'	59'
C	MP-3	31+42.16 - 77.87' RT	26'	70'	15'	30'	31'	43'	67'	-	16'	64'	-	56'	51'
D	MP-3	31+08.51 - 72.91' LT	26'	75'	15'	30'	35'	48'	59'	70'	11'	-	-	40'	43'
E	PA-3	32+72.68 - 69.27' LT	5.5'												
F	PA-3	32+53.53 - 86.57' LT	5.5'												
G	PF-2	31+28.18 - 88.28' LT	8'												
H	PA-3	32+75.37 - 60.47' RT	5.5'												
J	PF-2	31+16.82 - 60.86' RT	8'												
K	PA-3	31+55.33 - 91.73' RT	5.5'												
L	PA-3	32+64.58 - 78.09' RT	5.5'												
M	PA-3	31+19.06 - 66.87' LT	5.5'												

CONDUIT CONDUCTOR SCHEDULE

			PROPOSED CONDUITS							
CONDUCTOR NUMBER ◇			1	2	3	4	5	6	7	8
SIZE			2"	2"	2-3"	2"	2-4"	2-3"	2-4"	2"
	TYPE		PVC	PVC	HDPE	PVC	HDPE	HDPE	PVC	PVC
CONDUCTOR TYPE	#12 AWG	3C	2	-	2	2	4	2	8	-
	#14 AWG	3C	1	2	4	2	8	4	16	1
		5C	1	-	1	1	2	1	4	-
		7C	1	-	1	1	2	1	4	-
	VIDEO DETECTION (VDC)		1	-	1	1	2	1	4	-
	PRE-EMPTION (EVP)		1	-	1	1	2	1	4	-
	#10 AWG BONDING WIRE		1	1	2	1	2	2	2	1

COLOR SEQUENCE CHART

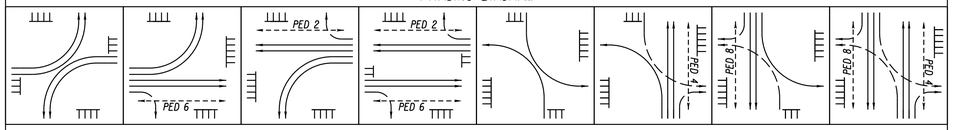
SIGNALS	SIGNAL	PHASES								COMBINATIONS								FLASH
		1	2	3	4	5	6	7	8	1-5	1-6	2-5	2-6	3-7	3-8	4-7	4-8	
	1	→G								→G	→G							→R
	2		G									G	G					Y
	3			→G										→G	→G	→FY	→FY	→R
	4				G											G	G	R
	5					→G				→G		→G						→R
	6						G				G		G					Y
	7							→G						→G	→FY	→G	→FY	→R
	8								G						G		G	R
	2P		W									W	W					BLANK
	4P				W											W	W	BLANK
	6P						W				W		W					BLANK
	8P								W						W		W	BLANK

Empty box denotes RED indication or DON'T WALK (Red Ball, Red Arrow, or Hand Symbol as appropriate).

CLEARANCE CHART

R/W	CLEARANCE		
	1	2	NEXT PHASE
G	G	G	G
G	Y	R	R
→G	→G	→G	→G
→G	→Y	→R	→R
W	FDW	DW	DW

PHASING DIAGRAM



Ø1-5 | Ø1-6 (EVP-6) | Ø2-5 (EVP-2) | Ø2-6 MIN. RECALL | Ø3-7 | Ø4-7 (EVP-4) | Ø3-8 (EVP-8) | Ø4-8

TRAFFIC CONTROL DEVICE PLANS

PRELIMINARY TRAFFIC SIGNAL PLAN

CENTERVILLE TURNPIKE &
LYNNHAVEN PARKWAY
CITY OF VIRGINIA BEACH

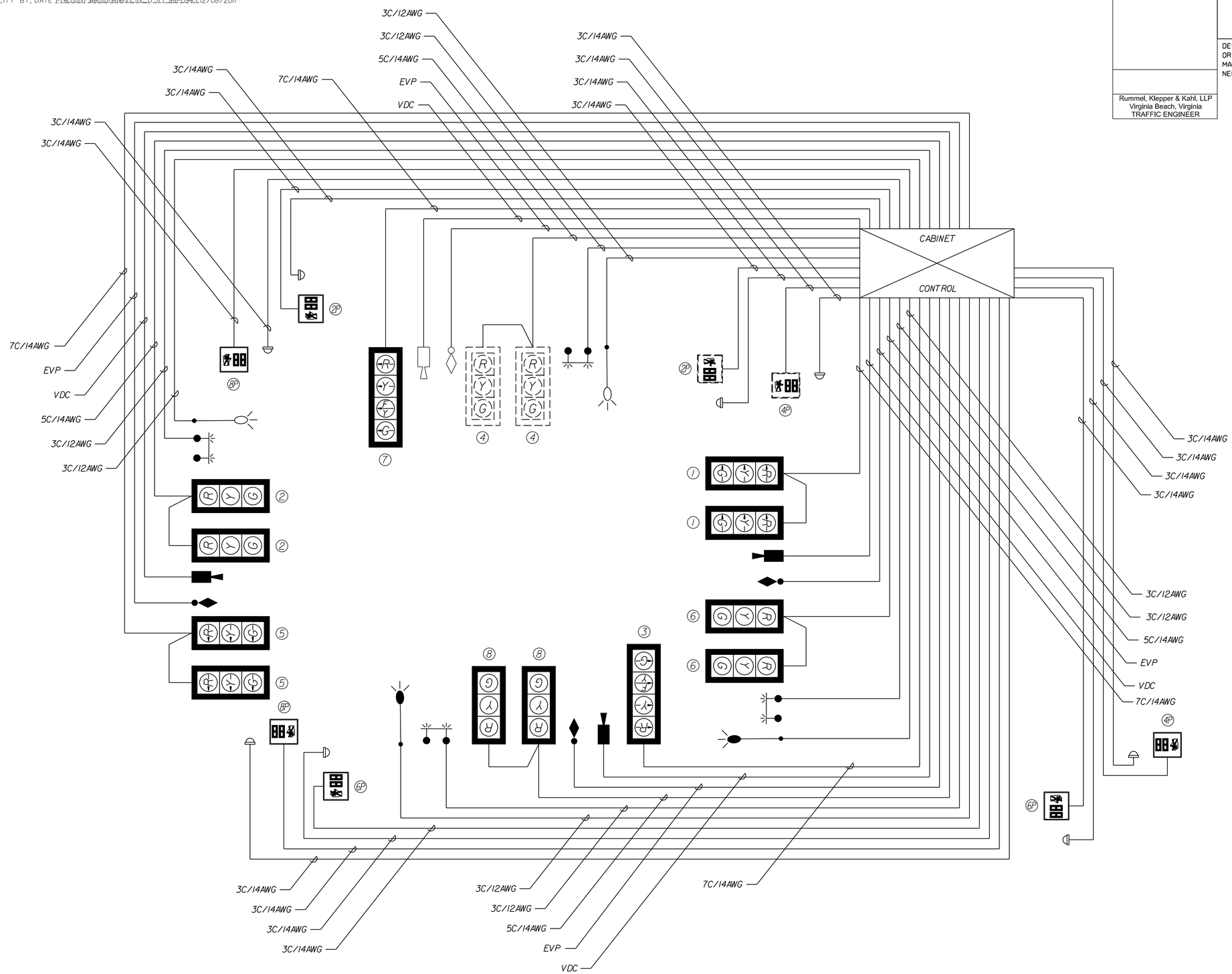
PROJECT	SHEET NO.
U000-134-842	16(3A)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	16(3B)

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
Virginia Beach, Virginia
TRAFFIC ENGINEER



TRAFFIC CONTROL DEVICE PLANS

SIGNAL DISPLAY & WIRING DIAGRAM

CENTERVILLE TURNPIKE &
LYNNHAVEN PARKWAY
CITY OF VIRGINIA BEACH

	PROJECT	SHEET NO.
	U000-134-842	16(3B)

PROJECT MANAGER Laurie Murphy, PE, (757) 385-8465, (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP, (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017

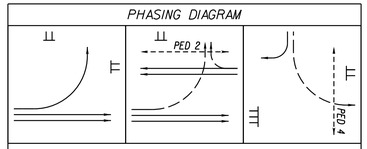
CONDUIT CONDUCTOR SCHEDULE

		PROPOSED CONDUITS								
CONDUCTOR NUMBER ◇		1	2	3	4	5	6	7	8	9
SIZE		2"	2"	3"	2-3"	2-3"	1 1/4"	2-4"	2"	2"
TYPE		PVC	PVC	PVC	HDPE	HDPE	GRS	PVC	PVC	PVC
CONDUCTOR TYPE	#8 AWG 1C	-	-	-	-	-	3	-	-	-
	#12 AWG 3C	1	-	2	2	-	-	3	-	-
	#14 AWG 3C	2	2	-	2	4	-	8	1	3
	5C	1	-	2	2	-	-	3	-	-
	7C	-	-	1	1	-	-	1	-	-
	VIDEO DETECTION (VDC)	1	-	2	2	-	-	4	-	-
	PRE-EMPTION (EVP)	1	-	2	2	-	-	4	-	-
	#10 AWG BONDING WIRE	1	1	1	2	2	-	2	1	1

SPEED LIMITS

Centerville Tnpk	45 MPH
Glen View Dr	25 MPH

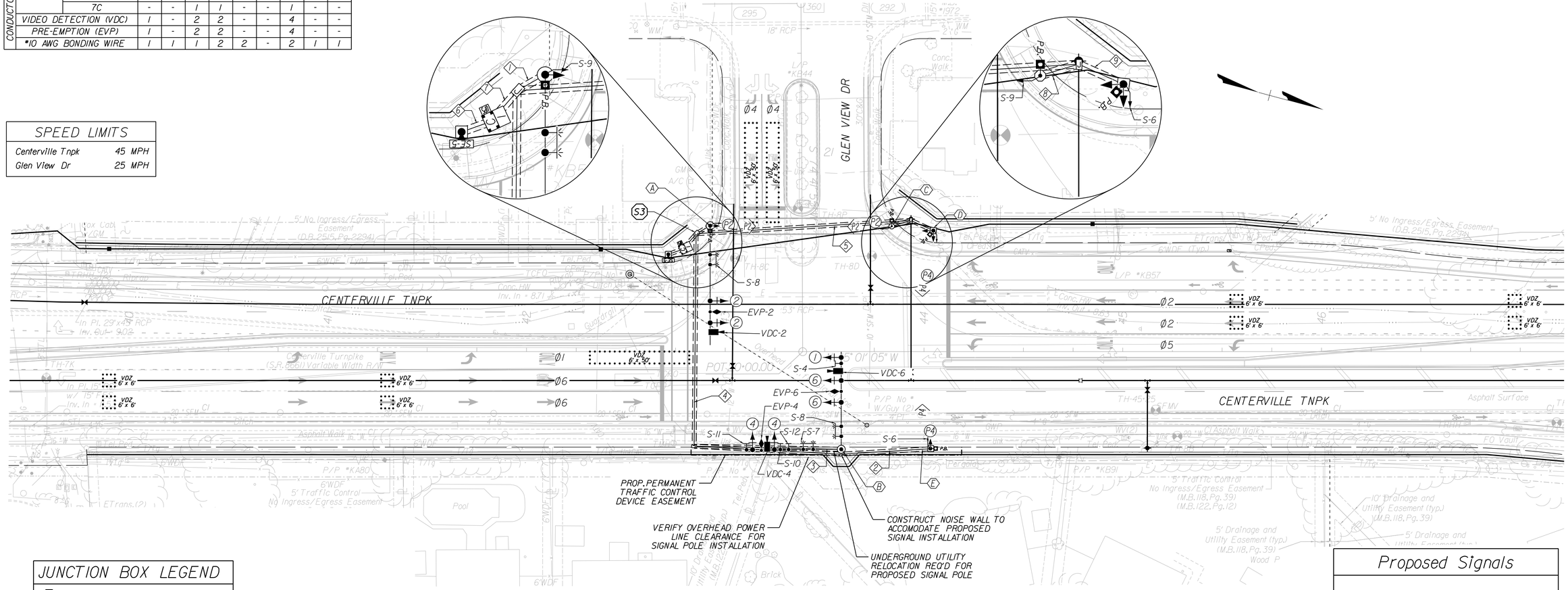
PHASING DIAGRAM



REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	16(4)

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
Virginia Beach, Virginia
TRAFFIC ENGINEER



JUNCTION BOX LEGEND

(S3) DENOTES ST'D. JB-S3

POLE SCHEDULE

POLE ID	TYPE	POLE STATION & OFFSET (FROM CENTERVILLE TPK BASELINE)	POLE HEIGHT	EQUIPMENT MOUNTING (DISTANCE FROM POLE)									
				MAST ARM LENGTH	LUMINAIRE ARM LENGTH	LUMINAIRE MOUNT. HT.	SIGNAL HEADS			SIGNS			VDC	EVP
(A)	MP-3	42+92.51 - 63.29' LT	20'	60'	-	-	38'	49'	-	30'	-	-	54'	43'
(B)	MP-3	43+58.36 - 49.06' RT	20'	49'	-	-	34'	45'	-	16'	31'	48'	37'	40'
				49'			23'	34'	46'	16'	43'	-	39'	29'
(C)	PA-3	43+83.79 - 63.05' LT	6'											
(D)	PA-3	44+04.71 - 60.89' LT	6'											
(E)	PF-2	43+98.96 - 48.51' RT	8'											

COLOR SEQUENCE CHART

SIGNALS	PHASES				COMBINATIONS		FLASH
	1	2	4	6	1-6	2-6	
1	→G				→G	→FY	→R
2		G				G	Y
4			G				R
6				G	G	G	Y
2P		W					BLANK
4P			W				BLANK

Empty box denotes RED indication or DON'T WALK (Red Ball, Red Arrow, or Hand Symbol as appropriate).

CLEARANCE CHART

R/W	CLEARANCE 1	CLEARANCE 2	NEXT PHASE
G	G	G	G
G	Y	R	R
→G	→G	→G	→G
→G	→Y	→R	→R
W	FDW	DW	DW

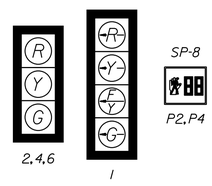
Proposed Signs

S-7: Centerville Tnpk — SPECIAL 78" x 18" QTY: 1
S-8: Glen View Dr — SPECIAL 72" x 18" QTY: 2

S-4	S-6*	S-9*	S-10	S-11	S-12
LEFT TURN YIELD ON FLASHING YELLOW ARROW			ONLY	ONLY	TURNING VEHICLES TO
R10-VI 36" x 42" QTY: 1	R10-3I 9" x 15" QTY: 2	R10-3I 9" x 15" QTY: 2	R3-5L 30" x 36" QTY: 1	R3-5R 30" x 36" QTY: 1	R10-15L 30" x 30" QTY: 1

*NOTE: ARROW SHALL POINT IN DIRECTION OF CROSSWALK.

Proposed Signals



ALL SIGNAL HEADS SHALL BE 12" LED WITH FULL TUNNEL VISORS AND ALUMINUM, HIGH VISIBILITY BACKPLATES

TRAFFIC CONTROL DEVICE PLANS

PRELIMINARY TRAFFIC SIGNAL PLAN

CENTERVILLE TURNPIKE & GLEN VIEW DRIVE
CITY OF VIRGINIA BEACH

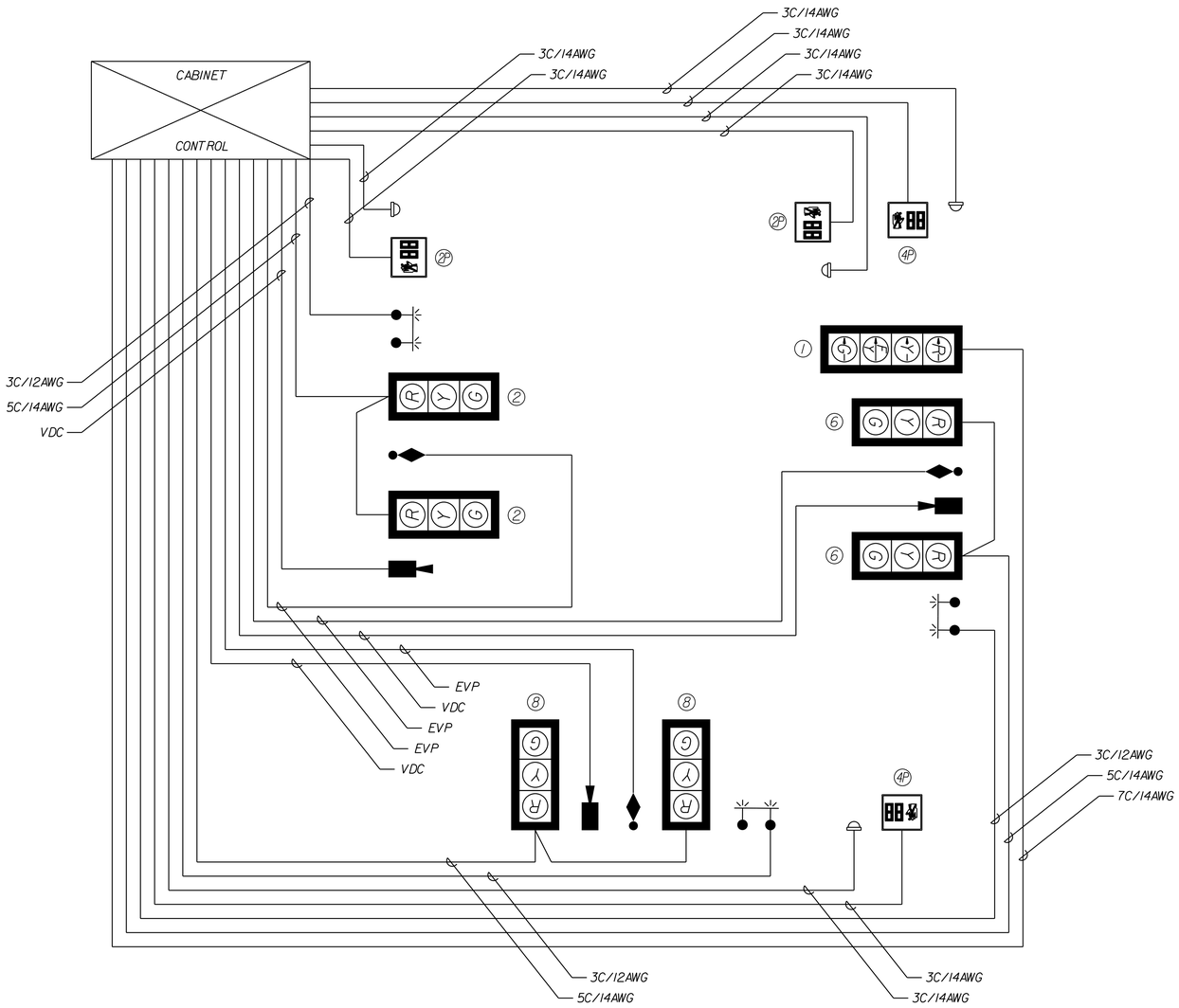
SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	16(4)

PROJECT MANAGER Laurie Murphy, PE, (757) 385-8465, (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP, (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C-501	16(4A)

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
Virginia Beach, Virginia
TRAFFIC ENGINEER



TRAFFIC CONTROL DEVICE PLANS

SIGNAL DISPLAY & WIRING DIAGRAM

CENTERVILLE TURNPIKE &
GLEN VIEW DRIVE
CITY OF VIRGINIA BEACH

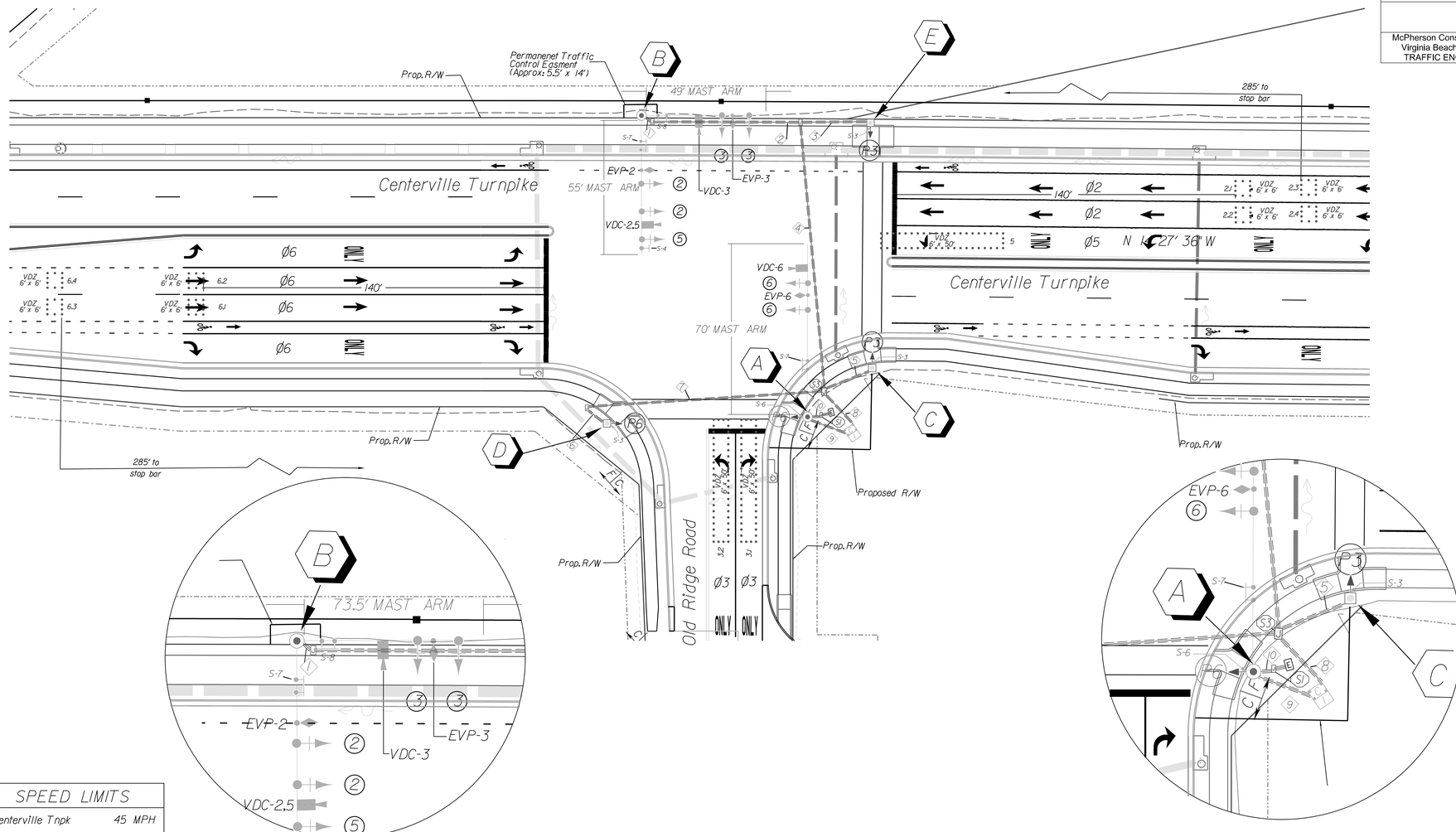
PROJECT	SHEET NO.
U000-134-842	16(4A)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017
DESIGN BY McPherson Consulting, LLC, (757) 580-5279
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, P01, R201, C501	16(5)

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

McPherson Consulting, LLC
Virginia Beach, Virginia
TRAFFIC ENGINEER



SPEED LIMITS

Centerville Tnpk	45 MPH
Glen View Dr	25 MPH

Proposed Signs

S-8: Centerville Tnpk — 84" x 18" QTY: 1

S-7: Old Ridge Rd — 84" x 18" QTY: 2

S-4: LEFT TURN YIELD ON FLASHING — D-57, 30" x 30", QTY: 1

S-6: D-46, 9" x 12", QTY: 2

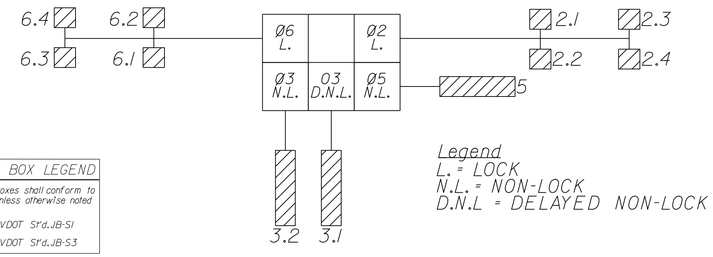
S-3: D-46, 9" x 12", QTY: 2

*NOTE: ARROW SHALL POINT IN DIRECTION OF CROSSWALK.

CONDUIT CONDUCTOR SCHEDULE

		PROPOSED CONDUITS									
CONDUCTOR NUMBER ◇		1	2	3	4	5	6	7	8	9	10
SIZE		3"	3"	3"	2-3"	3"	3"	2-3"	2-3"	3"	1-1.25"
TYPE		PVC	PVC	PVC	HDPE	PVC	PVC	HDPE	PVC	PVC	GRS
CONDUCTOR TYPE	#8 AWG IC	-	-	-	-	-	-	-	-	-	3
	#12 AWG 3C	-	-	-	-	-	-	-	-	-	-
	#14 AWG 3C	-	-	2	2	2	2	2	6	-	-
	5C	2	2	-	2	-	-	-	2	1	-
	7C	1	1	-	1	-	-	-	1	-	-
VIDEO DETECTION (VDC)		2	2	-	2	-	-	-	2	1	-
PRE-EMPTION (EVP)		2	2	-	2	-	-	-	2	1	-
#10 AWG BONDING WIRE		1	1	1	2	1	1	2	2	1	1

PVC - PVC SCHEDULE 40
HDPE - HDPE SCHEDULE 80
GRS - GALVANIZED RIGID STEEL PIPE

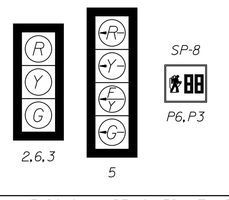


Legend
L. = LOCK
N.L. = NON-LOCK
D.N.L = DELAYED NON-LOCK

JUNCTION BOX LEGEND

All Junction Boxes shall conform to Std.JB-S2 unless otherwise noted on the plans.
(S1) Denotes VDOT Std.JB-S1
(S3) Denotes VDOT Std.JB-S3

Proposed Signals



ALL SIGNAL HEADS SHALL BE 12" LED WITH FULL TUNNEL VISORS AND ALUMINUM, HIGH VISIBILITY BACKPLATES

TRAFFIC CONTROL DEVICE PLANS

TRAFFIC SIGNAL PLAN

Centerville Turnpike &
Old Ridge Road
City of Virginia Beach

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	16(5)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017
DESIGN BY McPherson Consulting, LLC, (757) 580-5279
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, P01, R201, C501	I6(5A)

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

McPherson Consulting, LLC
Virginia Beach, Virginia
TRAFFIC ENGINEER

POLE SCHEDULE

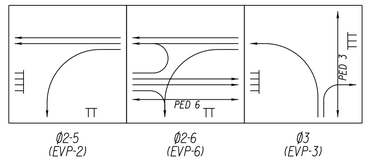
POLE ID	TYPE	POLE STATION & OFFSET (FROM CENTERVILLE TPK BASELINE)	POLE HEIGHT	MAST ARM LENGTH	MSAT ARM ANGLE (DEGREES)	LUMINAIRE MOUNT. HT.	LUMINAIRE ARM LENGTH	LUMINAIRE ARM ORIENTATION	LUMINAIRE TYPE	EQUIPMENT MOUNTING (DISTANCE FROM FACE OF POLE) SIGNAL HEADS				SIGNS			VDC	EVP
(A)	MP-3	59+97.59 - 68.72 RT	20'	65'	90	-				43'	54'	(*) 65'	-	20'	-	-	60'	49'
(B)	MP-3	59+30.6 - 52.49 LT	20'	49'	0	-				32'	43'	-	-	8'	-	-	22'	36'
				55'	90					27'	38'	50'	-	12'	53'	-	44'	21'
(C)	PF-2	60+24.28 - 48.49 RT	10'															
(D)	PF-2	59+15.35 - 71.75 RT	10'															
(E)	PF-2	60+22.45 - 49.5 LT	10'															

*NOTE: DISTANCES ARE MEASURED FROM FACE OF POLE

*NOTE: MAST ARM SHALL BE INSTALLED PERPENDICULAR TO CENTERVILLE TURNPIKE. FOR POLE B, MAST ARM FOR OLD RIDGE ROAD SHALL BE PARALLEL CENTERVILLE TURNPIKE SUCH THAT ARMS ARE INSTALLED AT 90 DEGREES.

*NOTE: POLE A TO BE DESIGNED WITH FUTURE LOADING TO ACCOMODATE PHASE 1 FLASHING YELLOW ARROW. (*)

Phasing Diagram



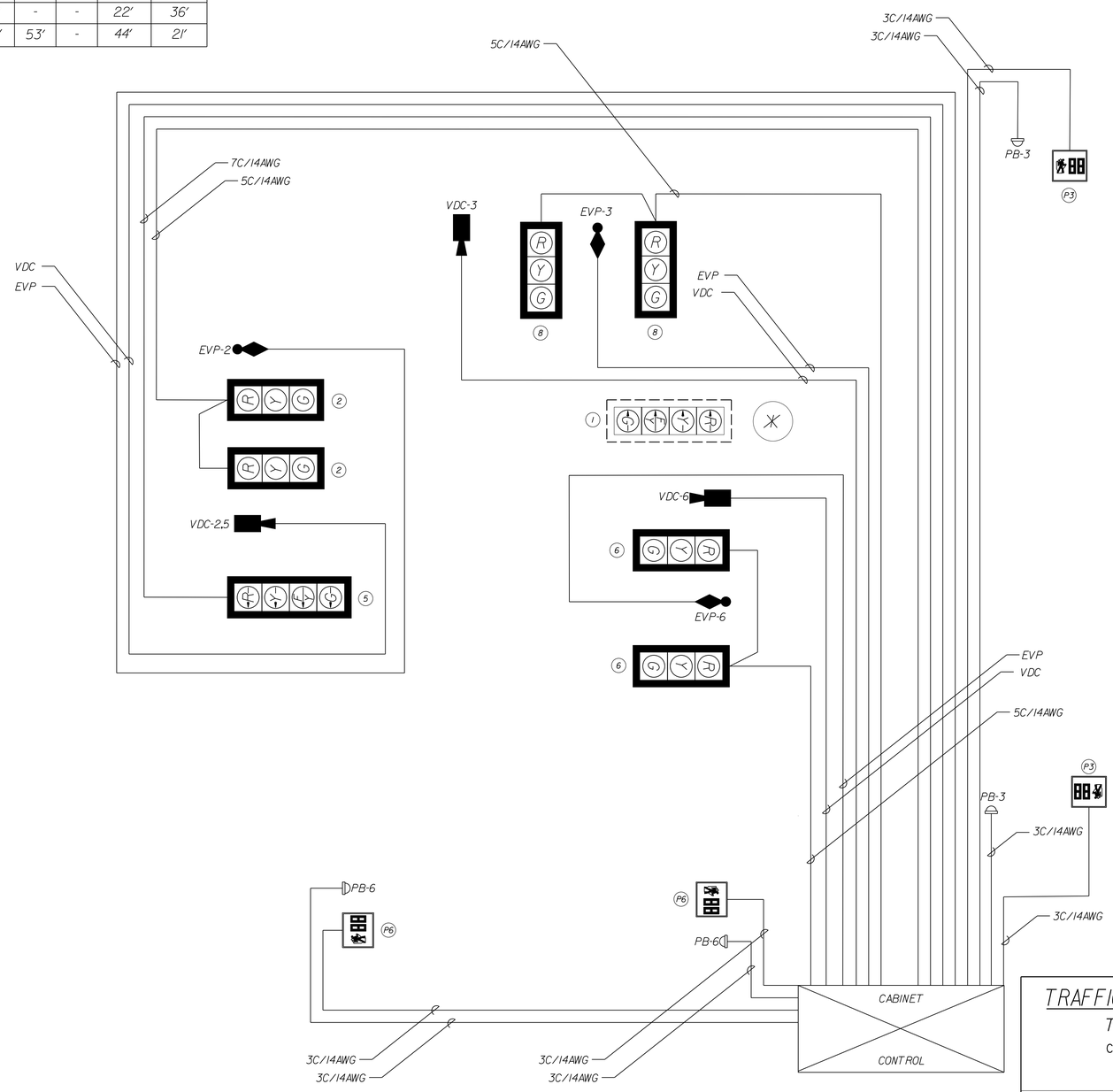
CLEARANCE CHART

R/W	CLEARANCE 1	CLEARANCE 2	NEXT PHASE
G	G	G	G
G	Y	R	R
◄G	◄Y	◄R	◄R
◄G	◄Y	◄FY	◄FY
◄FY	◄Y	◄R	◄R
W	FDW	DW	DW

COLOR SEQUENCE CHART

	SIGNAL	PHASES 2	3	5	6	COMBINATIONS 2-6	2-5	FLASH
SIGNALS	2	G				G	G	Y
	3		G					
	5			◄G		◄FY	◄G	◄FY
	6				G	G		Y
	P3		W					BLANK
	P6				W			BLANK

Empty box denotes RED indication or DON'T WALK (Red Ball, Red Arrow, or Hand Symbol as appropriate).



TRAFFIC CONTROL DEVICE PLANS

TRAFFIC SIGNAL PLAN

Centerville Turnpike &
Old Ridge Road
CITY OF VIRGINIA BEACH

PROJECT	SHEET NO.
U000-134-842	I6(5A)

PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

wpl
Landscape Architecture
Land Surveying 757-431-1041
Civil Engineering wplslle.com
242 MUSTANG TRAIL, SUITE B
VIRGINIA BEACH, VIRGINIA 23452

Rummel, Klepper & Kahl, LLP
Virginia Beach, Virginia
ROADWAY ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, P01, RW-201, C-501	17(1)

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

PLANT SCHEDULE

TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	HEIGHT	SPREAD	SPACING	METHOD	REMARKS
AB	31	ACER BUERGERIANUM	TRIDENT MAPLE	1 1/2" – 2" CAL.	10'–12'	---	15' O.C.	1	SINGLE STEM, PRUNE TO 6' ABOVE GRADE
AG	32	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE'	'AUTUMN BRILLIANCE' SERVICEBERRY	1 1/2" – 2" CAL	10'–12'	---	15' O.C.	2	MULTI-STEM, PRUNE TO 6' ABOVE GRADE
IO	24	ILEX OPACA	AMERICAN HOLLY	1 1/2" – 2" CAL.	10'–12'	---	12' O.C.	1	PRUNE TO 6' ABOVE GRADE
JV	21	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	1"– 1 1/2" CAL.	8'–10'	---	12' O.C.	3	FULL TO GROUND
MG	31	MAGNOLIA GRANDIFLORA 'LITTLE GEM'	LITTLE GEM SOUTHERN MAGNOLIA	3/4" – 1" CAL,	6' – 8'	---	10' O.C.	1	FULL TO GROUND
MV	28	MAGNOLIA VIRGINIANA	SWEET BAY	1 1/2" – 2" CAL	10'–12'	---	15' O.C.	2	MULTI-STEM, PRUNE TO 6' ABOVE GRADE
PT	16	PINUS TAEDA	LOBLOLLY PINE	2 1/2" – 3" CAL.	12'–14'	---	20' O.C.	3	PRUNE TO 6' ABOVE GRADE
QM	36	QUERCUS MUEHLENBERGII	CHINKAPIN OAK	2 1/2" – 3" CAL.	12'–14'	---	30' O.C.	1	PRUNE TO 6' ABOVE GRADE
QS	35	QUERCUS SHUMARDII	SHUMARD RED OAK	2 1/2" – 3" CAL.	12'–14'	---	30' O.C.	1	PRUNE TO 6' ABOVE GRADE
SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	HEIGHT	SPREAD	SPACING	METHOD	REMARKS
CA	117	CALLICARPA AMERICANA	AMERICAN BEAUTYBERRY	3 GAL.	18"–24"	---	5' O.C.	4	---
IG	50	ILEX GLABRA 'NIGRA'	NIGRA INKBERRY	3 GAL.	18"–24"	---	4' O.C.	4	FULL TO GROUND
IB	111	ILEX VERTICILLATA 'BERRY NICE'	BERRY NICE WINTERBERRY HOLLY	3 GAL.	24"–30"	---	5' O.C.	4	---
IV	84	ILEX VERTICILLATA 'JIM DANDY'	JIM DANDY WINTERBERRY	3 GAL.	24"–30"	---	5' O.C.	4	MALE POLLINATOR
IL	67	ILEX X 'OAK LEAF'	OAK LEAF HOLLY	7 GAL.	3'–4'	---	6' O.C.	4	FULL TO GROUND
IT	64	ITEA VIRGINICA 'LITTLE HENRY' TM	VIRGINIA SWEETSPIRE	3 GAL.	15" –18"	---	3' O.C.	4	---
JI	46	JUNIPERUS VIRGINIANA 'IDYLLWILD'	IDYLLWILD RED CEDAR	7 GAL.	3'–4'	---	6' O.C.	4	FULL TO GROUND
GRASSES / PERENNIALS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	HEIGHT	SPREAD	SPACING	METHOD	REMARKS
CL	1,369	CHASMANTHIUM LATIFOLIUM	RIVER OATS	1 GAL.	---	---	3' O.C.	5	ALTERNATE SPACING
HM	389	HIBISCUS MOSCHEUTOS 'LUNA RED'	LUNA RED HARDY HIBISCUS	1 GAL.	---	---	3' O.C.	5	ALTERNATE SPACING
IV2	549	IRIS VERSICOLOR	BLUE FLAG	4" POT	---	---	24" O.C.	5	ALTERNATE SPACING
JE	1,430	JUNCUS EFFUSUS	SOFT RUSH	1 GAL.	---	---	24" O.C.	5	ALTERNATE SPACING
PN	701	PANICUM VIRGATUM 'NORTHWIND'	NORTHWIND SWITCH GRASS	1 GAL.	---	---	3' O.C.	5	ALTERNATE SPACING
PS	668	PANICUM VIRGATUM 'SHENANDOAH'	SHENANDOAH SWITCH GRASS	1 GAL.	---	---	3' O.C.	5	ALTERNATE SPACING
PC	445	PONTEDERIA CORDATA	PICKEREL WEED	4" POT	---	---	24" O.C.	5	ALTERNATE SPACING

PLANTING NOTES

1. ALL PLANT MATERIAL SHALL MEET THE MINIMUM SPECIFICATIONS AND STANDARDS DESCRIBED IN THE "AMERICAN STANDARD FOR NURSERY STOCK, 2014" (ANSI Z60.1–2014) PUBLISHED BY AMERICANHORT®, 2130 STELLA COURT, COLUMBUS, OH 43215.
2. PLANTING SEASON RESTRICTIONS: ALL BALLED AND BURLAPPED PLANTS SHALL BE INSTALLED BETWEEN OCTOBER 15 AND MARCH 31 UNLESS OTHERWISE AUTHORIZED BY THE LANDSCAPE ARCHITECT. ALL CONTAINER GROWN PLANTS SHALL BE INSTALLED BETWEEN SEPTEMBER 15 AND MAY 15 UNLESS OTHERWISE AUTHORIZED BY THE LANDSCAPE ARCHITECT.
3. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT IN WRITING OF ANY CONFLICTS AND/OR DISCREPENCIES PRIOR TO INSTALLATION.
4. ALL TREE AND SHRUB LOCATIONS ARE TO BE STAKED OUT AND REVIEWED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
5. VERIFICATION OF TOTAL QUANTITIES AS SHOWN IN THE "PLANT SCHEDULE" SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE PLANTING PLAN SHALL GOVERN.
6. ALL PLANTING PITS AND BEDS SHALL BE BACKFILLED WITH PREPARED SOIL MIXTURE TO THE REQUIRED DEPTH AS SPECIFIED IN THE METHODS BELOW. WHERE A SHRUB OR GROUND COVER BED OCCURS AND FOR ALL HEDGES, THE ENTIRE BED SHALL BE PREPARED CONTINUOUSLY WITH SOIL MIXTURE TO THE REQUIRED DEPTH AS SPECIFIED.
7. PREPARED SOIL MIXTURE SHALL SHALL BE COMPRISED OF THE FOLLOWING:
   (3)–PARTS TOPSOIL
   (1)–PART COARSE SAND
   (1)–PART PEAT
   5% – 10% ORGANIC MATTER CONTENT FOR EACH CUBIC YARD OF PREPARED SOIL MIXTURE
8. FINISHED GRADES ON GRADING PLAN THAT OCCUR IN SHRUB BEDS SPECIFY TOP OF FINISHED MULCH GRADES. LANDSCAPE CONTRACTOR SHALL NOT EXCEED THESE GRADES WHEN BEDS ARE COMPLETE WITH MULCH INSTALLED. IF LANDSCAPE CONTRACTOR ENCOUNTERS EARTHWORK CONDITIONS THAT WILL RESULT IN FINISHED MULCH TREATMENT EXCEEDING GRADES SPECIFIED ON GRADING PLAN, THEN THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE GENERAL CONTRACTOR OF SUCH CONDITIONS. UNDER NO CIRCUMSTANCES SHALL FINISHED BED GRADES INCLUDING TOP OF MULCH EXCEED THE GRADE ELEVATIONS AS PROVIDED FOR BY THE GRADING PLAN.
9. TOP OF MULCH SHALL FINISH 1" BELOW ADJACENT CONCRETE.
10. NEW PLANTING SHALL BE LOCATED AS SHOWN ON PLANS. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL SITE ELEMENTS AND UTILITIES. IF DISCREPANCIES OCCUR, OR IF OBSTRUCTIONS BELOW GROUND OR OVERHEAD ARE ENCOUNTERED, THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT. NECESSARY ADJUSTMENTS SHALL BE MADE ONLY UPON APPROVAL OF THE LANDSCAPE ARCHITECT.
11. ALL SHRUBS AND GROUND COVERS ARE TO BE MAINTAINED SO AS TO GROW TOGETHER AND FORM A MASS. PRUNING (TRIMMING, SHEARING, ETC..) SHALL BE LIMITED TO THINNING AS NECESSARY. THE NATURAL GROWTH AND FORM OF THE PLANT SHALL BE MAINTAINED WITHOUT DAMAGE TO PRIMARY AND SECONDARY LEADERS.
12. ALL TREES SHALL BE SINGLE LEADER SPECIMENS UNLESS OTHERWISE NOTED.
13. THE OWNER OF THE PROPERTY SHALL BE RESPONSIBLE FOR THE CONTINUED PROPER MAINTENANCE, REPAIR, AND REPLACEMENT OF ALL LANDSCAPING MATERIALS, AND AREAS IN ACCORDANCE WITH THE APPROVED LANDSCAPE PLAN AND SHALL KEEP THEM IN A PROPER, NEAT, AND ORDERLY APPEARANCE, FREE FROM REFUSE AND DEBRIS AT ALL TIMES. ALL UNHEALTHY, FIFTY (50) PERCENT OR MORE DEAD OR COMPLETELY DEAD, PLANTS SHALL BE REPLACED AS DIRECTED BY THE PLANNING DIRECTOR OR HIS DESIGNEE. ALL LANDSCAPED AREAS SHOULD BE PROVIDED WITH A READILY AVAILABLE WATER SUPPLY. MAINTENANCE SHOULD INCLUDE WEEDING, CULTIVATING, MULCHING, TIGHTENING, REPAIRING OF GUYS AND STAKES, REMOVAL OF GUYS AND STAKES AFTER 6 – 12 MONTHS, AND RESETTING PLANTS TO PROPER GRADES OR UPRIGHT POSITION, RESTORATION OF THE PLANTING SAUCER, FERTILIZING, PRUNING, AND OTHER NECESSARY OPERATIONS. MAINTENANCE SHOULD BEGIN IMMEDIATELY FOLLOWING THE LAST OPERATION OF INSTALLATION FOR EACH PORTION OF LAWN AND FOR EACH PLANT. THE PLANNING DEPARTMENT DESIGNEE MAY PERIODICALLY INSPECT THE PROJECT AND INDICATE WHETHER OR NOT THE LANDSCAPING CONTINUES TO MEET THE MINIMUM REQUIREMENTS OF THIS ORDINANCE. ANY VIOLATION WILL BE NOTED AND PROPERTY OWNERS WILL HAVE NINETY (90) DAYS IN WHICH TO CORRECT ALL VIOLATIONS, EXCEPT IN THOSE CASES WHEN PLANT MATERIAL REPLACEMENT SHOULD BE DELAYED BECAUSE OF SEASONAL FACTORS UNTIL THE NEXT PLANTING SEASON WHICH REQUIRES WRITTEN APPROVAL BY THE PLANNING DIRECTOR OR HIS DESIGNEE. FAILURE OF THE OWNER TO PROVIDE MAINTENANCE AS DESCRIBED ABOVE SHALL CONSTITUTE A VIOLATION OF THE SITE PLAN ORDINANCE, APPENDIX C, VIRGINIA BEACH CITY CODE.

NOTES:
1. ALL NEW TREES SHALL BE MULCHED WITHIN A MINIMUM TWO AND ONE HALF (2 ½) FOOT RADIUS PLANTING AREA. ALL SHRUBS SHALL BE MULCHED WITHIN A ONE HALF FOOT AREA OF THE PLANT, OR AS SHOWN.
2. PLANT SUBSTITUTIONS REQUIRE A WRITTEN REQUEST FROM THE CONTRACTOR AND WRITTEN APPROVAL FROM CITY OF VIRGINIA BEACH ,LANDSCAPE MANAGEMENT DIVISION.
3. ALL TREES TO BE LIMBED UP TO 6' MIN. BRANCHING HEIGHT.
4. IF ANY TREES MARKED 'TO REMAIN' MUST BE REMOVED FOR CONSTRUCTION PURPOSES, CONTRACTOR SHALL NOTIFY OWNER AND LANDSCAPE ARCHITECT. TREES SHALL BE REPLACED BY TWO NEW FOR EVERY ONE REMOVED AND CONTRACTOR SHALL VERIFY SPECIES, SIZE, AND LOCATION OF NEW TREES WITH OWNER AND LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
5. SEE EROSION AND SEDIMENT CONTROL PLAN FOR TREE PROTECTION.

PLANTING NOTES & SCHEDULE

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	17(1)

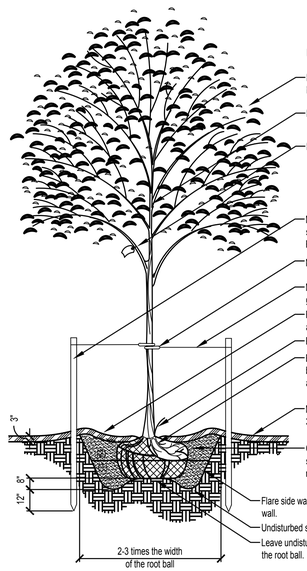
PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

wpl
Landscape Architecture
Land Surveying 757-431-1041
Civil Engineering wplsite.com
242 MUSTANG TRAIL, SUITE B
VIRGINIA BEACH, VIRGINIA 23452

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, P01, RW-201, C-501	17(2)

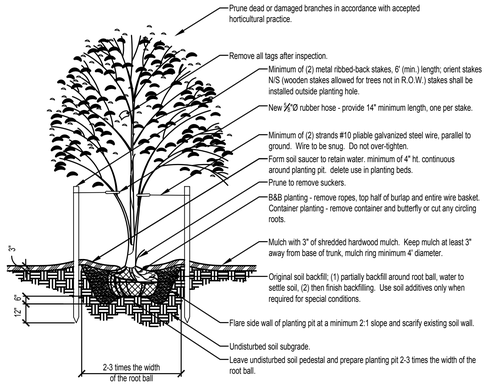
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Rummel, Klepper & Kahl, LLP
Virginia Beach, Virginia
ROADWAY ENGINEER



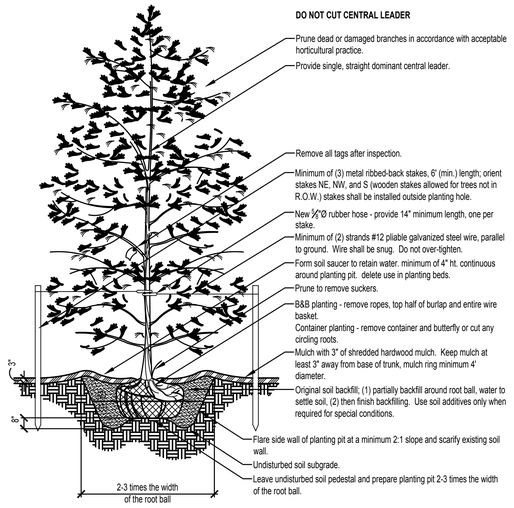
GENERAL NOTES:
-THIS DETAIL IS THE MINIMUM PLANTING STANDARD FOR CONTAINER or BALLED & BURLAPPED TREES UP TO A 3" CALIPER.
-ALL TREES SHALL BE PLANTED SO THAT THE TOP OF THE ROOT COLLAR IS AT THE SAME GRADE, OR SLIGHTLY HIGHER, THAN EXISTING GRADE IN ACCORDANCE WITH ACCEPTED HORTICULTURAL PRACTICE.

TREE PLANTING DETAIL - MINIMUM REQUIRED STANDARDS Revised 2015-03-24
SECTION SCALE: N.T.S.
METHOD 1
METHOD 1



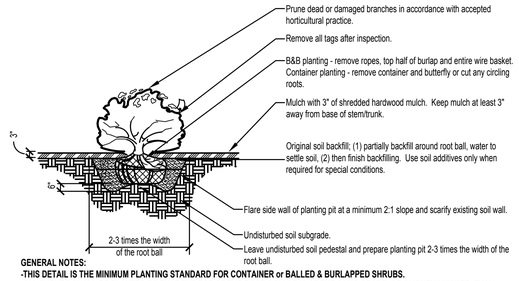
GENERAL NOTES:
-THIS DETAIL IS THE MINIMUM PLANTING STANDARD FOR CONTAINER or BALLED & BURLAPPED MULTI-TRUNK TREES.
-ALL TREES SHALL BE PLANTED SO THAT THE TOP OF THE ROOT COLLAR IS AT THE SAME GRADE, OR SLIGHTLY HIGHER, THAN EXISTING GRADE IN ACCORDANCE WITH ACCEPTED HORTICULTURAL PRACTICES.

MULTI-TRUNK TREE PLANTING DETAIL - MINIMUM REQUIRED STANDARDS Revised 2015-03-24
SECTION SCALE: N.T.S.
METHOD 2



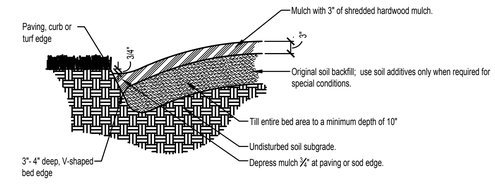
GENERAL NOTES:
-THIS DETAIL IS THE MINIMUM PLANTING STANDARD FOR CONTAINER or BALLED & BURLAPPED CONIFEROUS TREES UP TO A 3" CALIPER.
-ALL TREES SHALL BE PLANTED SO THAT THE TOP OF THE ROOT COLLAR IS AT THE SAME GRADE, OR SLIGHTLY HIGHER, THAN EXISTING GRADE IN ACCORDANCE WITH ACCEPTED HORTICULTURAL PRACTICE.

CONIFEROUS TREE PLANTING DETAIL - MINIMUM REQUIRED STANDARDS Revised 2015-03-24
SECTION SCALE: N.T.S.
METHOD 3

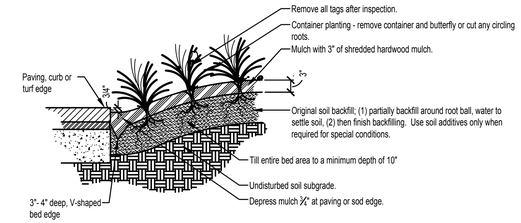


GENERAL NOTES:
-THIS DETAIL IS THE MINIMUM PLANTING STANDARD FOR CONTAINER or BALLED & BURLAPPED SHRUBS.
-ALL SHRUBS SHALL BE PLANTED SO THAT THE TOP OF THE ROOT COLLAR IS AT THE SAME GRADE, OR SLIGHTLY HIGHER, THAN EXISTING GRADE IN ACCORDANCE WITH ACCEPTED HORTICULTURAL PRACTICE.

SHRUB PLANTING DETAIL - MINIMUM REQUIRED STANDARDS Revised 2015-03-24
SECTION SCALE: N.T.S.
METHOD 4



TYPICAL BED EDGE DETAIL - MINIMUM REQUIRED STANDARDS
SECTION SCALE: N.T.S.



GENERAL NOTES:
-THIS DETAIL IS THE MINIMUM PLANTING STANDARD FOR CONTAINER ORNAMENTAL GRASSES, GROUNDCOVERS and PERENNIALS.
-ALL ORNAMENTAL GRASSES, GROUNDCOVERS and PERENNIALS SHALL BE PLANTED SO THAT THE TOP OF THE ROOT COLLAR IS AT THE SAME GRADE, OR SLIGHTLY HIGHER, THAN EXISTING GRADE IN ACCORDANCE WITH ACCEPTED HORTICULTURAL PRACTICE.

ORNAMENTAL GRASS, GROUNDCOVER AND PERENNIAL PLANTING DETAIL - MINIMUM REQUIRED STANDARDS
SECTION SCALE: N.T.S. Revised 2015-03-24
METHOD 5

PLANTING METHODS

PROVIDED BY CITY OF VIRGINIA BEACH

PLANTING DETAILS

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	17(2)

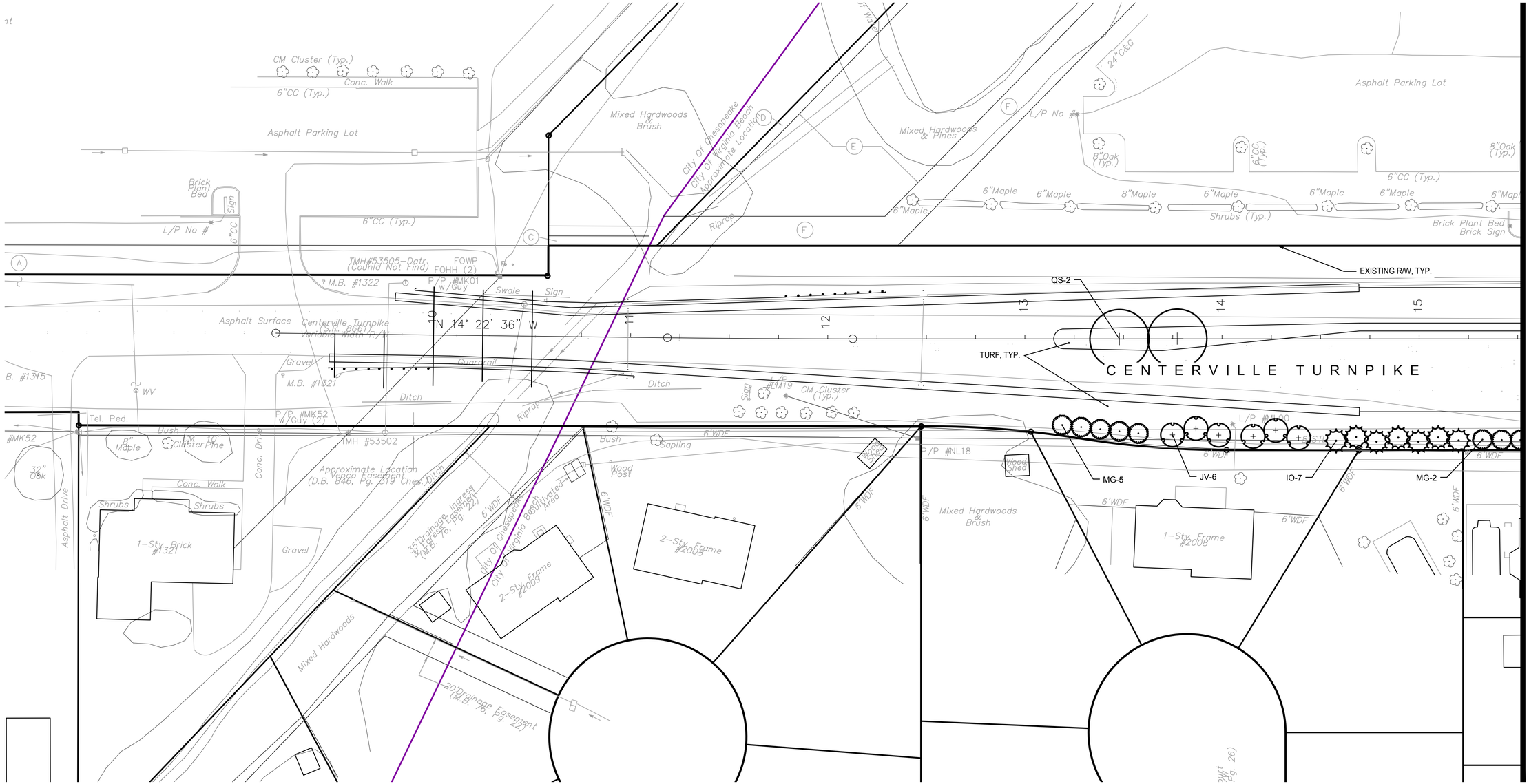
PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

wpl
Landscape Architecture
Land Surveying
Civil Engineering
757-431-1041
wplslle.com
242 MUSTANG TRAIL, SUITE B
VIRGINIA BEACH, VIRGINIA 23452

Rummel, Klepper & Kahl, LLP
Virginia Beach, Virginia
ROADWAY ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, P01, RW-201, C-501	17(3)

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



PLANTING PLAN

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	17(3)

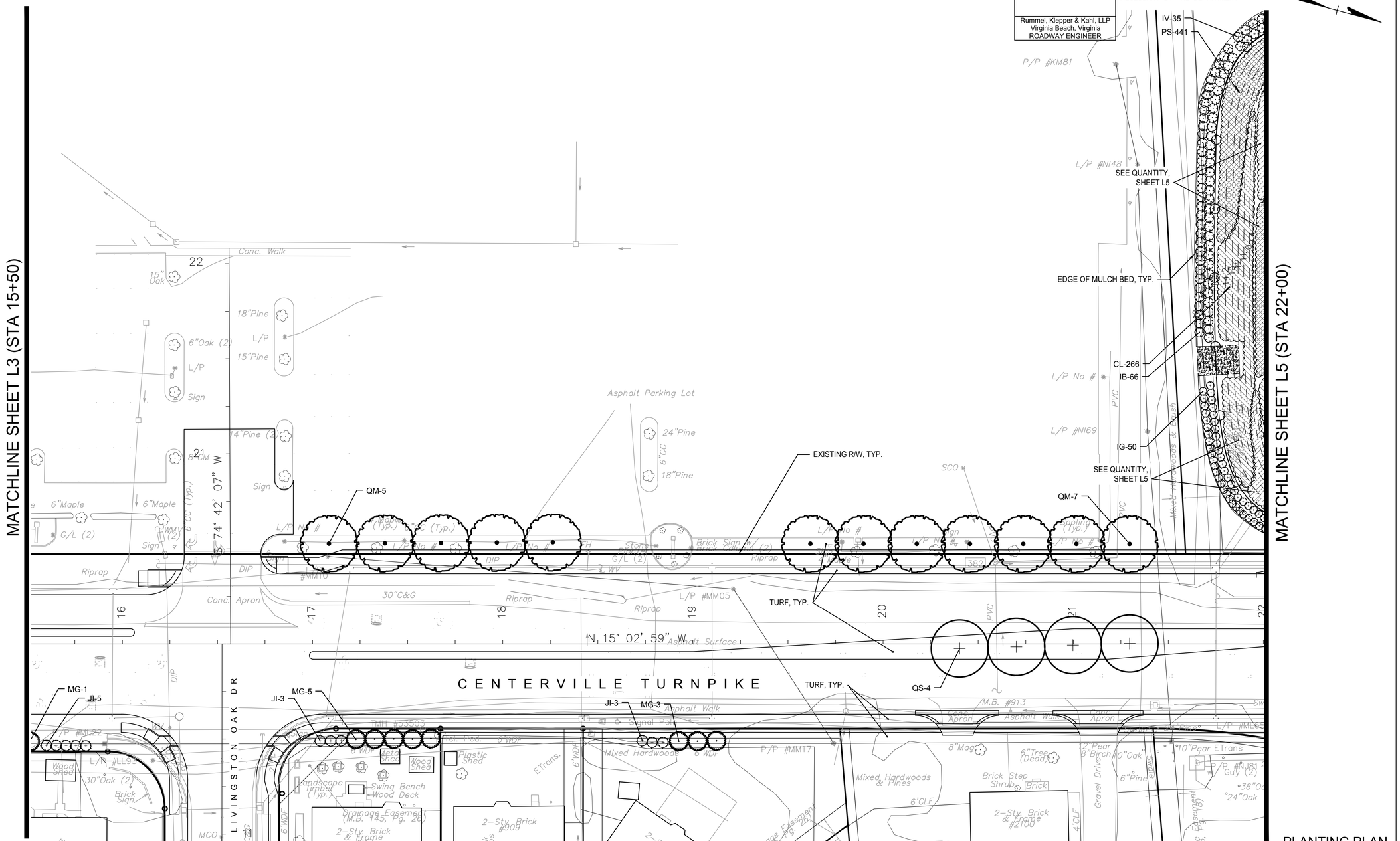
PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

wpl
Landscape Architecture
Land Surveying
Civil Engineering
757-431-1041
wplslle.com
242 MUSTANG TRAIL, SUITE B
VIRGINIA BEACH, VIRGINIA 23452

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, P01, RW-201, C-501	17(4)

Rummel, Klepper & Kahl, LLP
Virginia Beach, Virginia
ROADWAY ENGINEER

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



PLANTING PLAN

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	17(4)

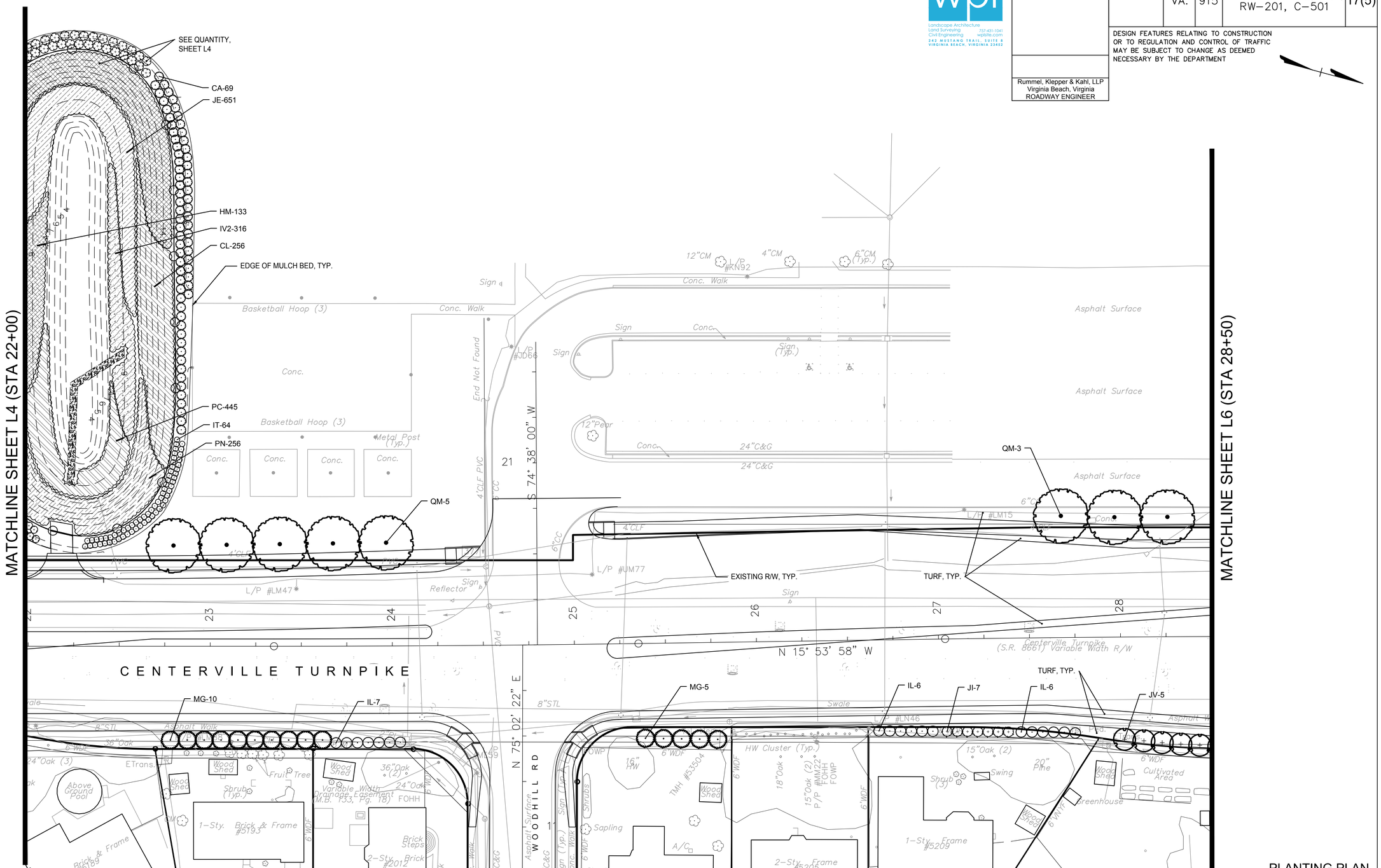
PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

wpl
Landscape Architecture
Land Surveying
Civil Engineering
757-431-1041
wplslle.com
242 MUSTANG TRAIL, SUITE B
VIRGINIA BEACH, VIRGINIA 23452

Rummel, Klepper & Kahl, LLP
Virginia Beach, Virginia
ROADWAY ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, P01, RW-201, C-501	17(5)

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



PLANTING PLAN

SCALE 0 25' 50'

PROJECT	SHEET NO.
U000-134-842	17(5)

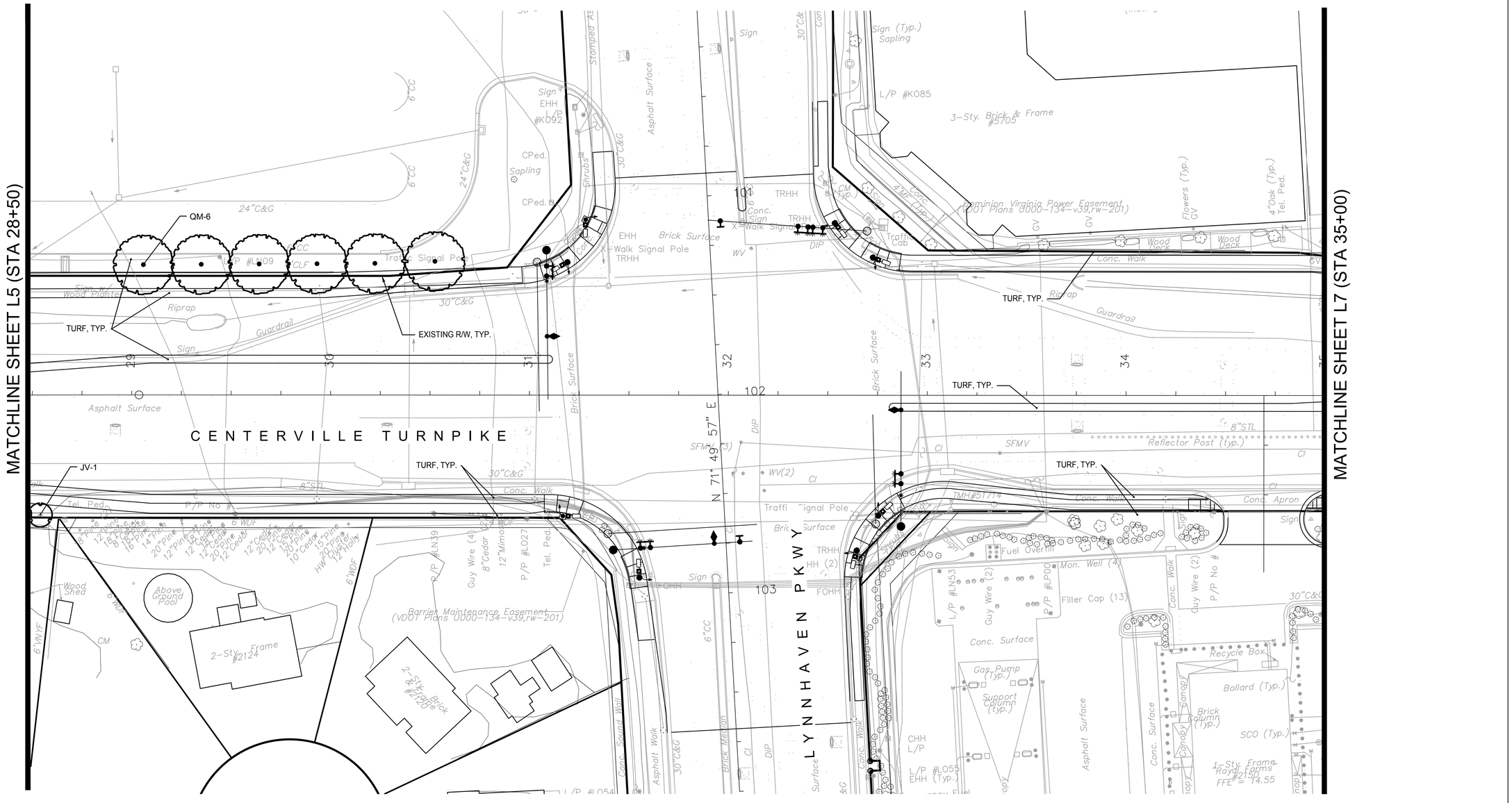
PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

wpl
Landscape Architecture
Land Surveying 757-431-1041
Civil Engineering wplsite.com
242 MUSTANG TRAIL, SUITE B
VIRGINIA BEACH, VIRGINIA 23452

Rummel, Klepper & Kahl, LLP
Virginia Beach, Virginia
ROADWAY ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, P01, RW-201, C-501	17(6)

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



PLANTING PLAN

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	17(6)

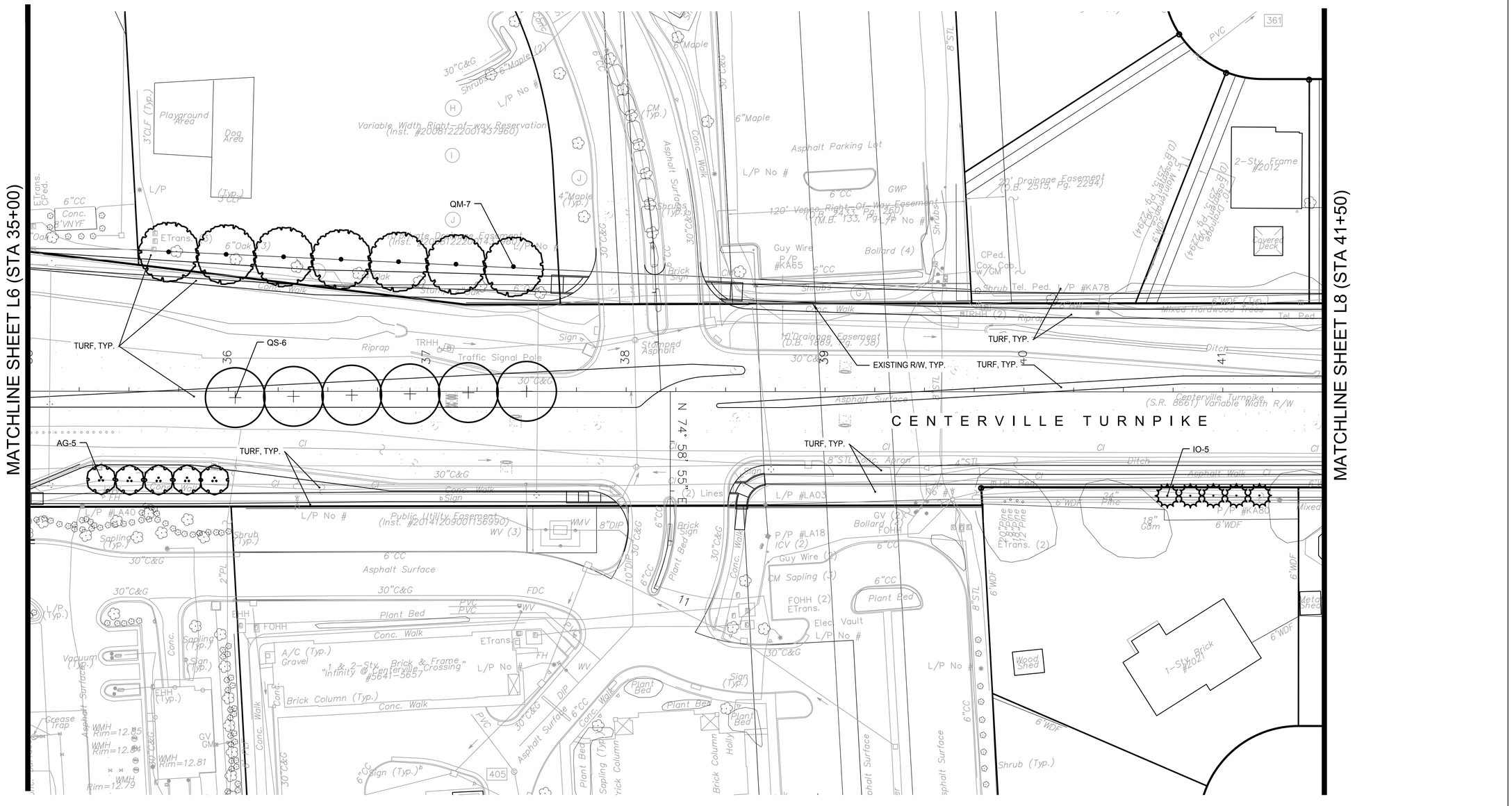
PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

wpl
Landscape Architecture
Land Surveying 757-431-1041
Civil Engineering wplsite.com
242 MUSTANG TRAIL, SUITE B
VIRGINIA BEACH, VIRGINIA 23452

Rummel, Klepper & Kahl, LLP
Virginia Beach, Virginia
ROADWAY ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, P01, RW-201, C-501	17(7)

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


MATCHLINE SHEET L6 (STA 35+00)
MATCHLINE SHEET L8 (STA 41+50)
CENTERVILLE TURNPIKE
Centerville Turnpike (S.R. 8661) Variable Width R/W
N 74° 58' 55" E
TURF, TYP.
QS-6
AG-5
IO-5
EXISTING R/W, TYP.
Variable Width Right-of-way Reservation (Inst. #200812220014379960)
Public Utility Easement (Inst. #201412090011356990)
Private Drainage Easement (Inst. #200812220014379960)
20' Drainage Easement (D.B. 2515, Pg. 2294)
10' Drainage Easement (D.B. 1689, Pg. 738)
"Infinity @ Centerville Crossing" #5641-5657
1 & 2-Sty. Brick & Frame
1-Sty. Brick #2021
2-Sty. Frame #2012
Playground Area
Dog Area
Asphalt Parking Lot
Asphalt Surface
Conc. Walk
Brick Sign
Plant Bed
Wood Shed
Metal Shed
Covered Deck
Guy Wire P/P #KA65
Bollard (4)
Shrubs
Sign
Traffic Signal Pole
Stamped Asphalt
Riprap
Ditch
Vacuum (Typ.)
Grease Trap
Brick Column (Typ.)
Sapling (Typ.)
Shrub (Typ.)
Holly
Pine
Maple
Oak
Cedar
Gum
Crape Myrtle
Dogwood
Mixed Hardwoods
Tel. Ped.
Cox Cab. W/GM
Elec. Vault
FOHH (2) ETrans.
CM Sapling (3)
GV (2)
ICV (2)
P/P #LA18
P/P #LA03
P/P #LA40
P/P #KA78
P/P #KA80
L/P No #
Lines
Cl
FH
WV
WMV
FDC
EHH
TRHH (2)
WMH Rim=12.85
WMH Rim=12.84
WMH Rim=12.81
WMH Rim=12.79
GV
GM
Gas
Mixed
PVC
DIP
CPed.
ETrans.
Ped.
Tel.
Gas
Mixed
Ditch
Riprap
Asphalt Surface
Asphalt Walk
Plant Bed
Brick Column
Holly
Sapling (Typ.)
Brick Column
Shrub (Typ.)
Sign (Typ.)
Grease Trap
Vacuum (Typ.)
Wood Shed
1-Sty. Brick #2021
Metal Shed
Covered Deck
2-Sty. Frame #2012
Asphalt Surface
Asphalt Parking Lot
Conc. Walk
Brick Sign
Plant Bed
Guy Wire (2)
Bollard (2)
Elec. Vault
Shrubs
Sign
Stamped Asphalt
Riprap
Ditch
Asphalt Surface
Asphalt Walk
Centerville Turnpike (S.R. 8661) Variable Width R/W
Mixed Hardwoods
Tel. Ped.
Cox Cab. W/GM

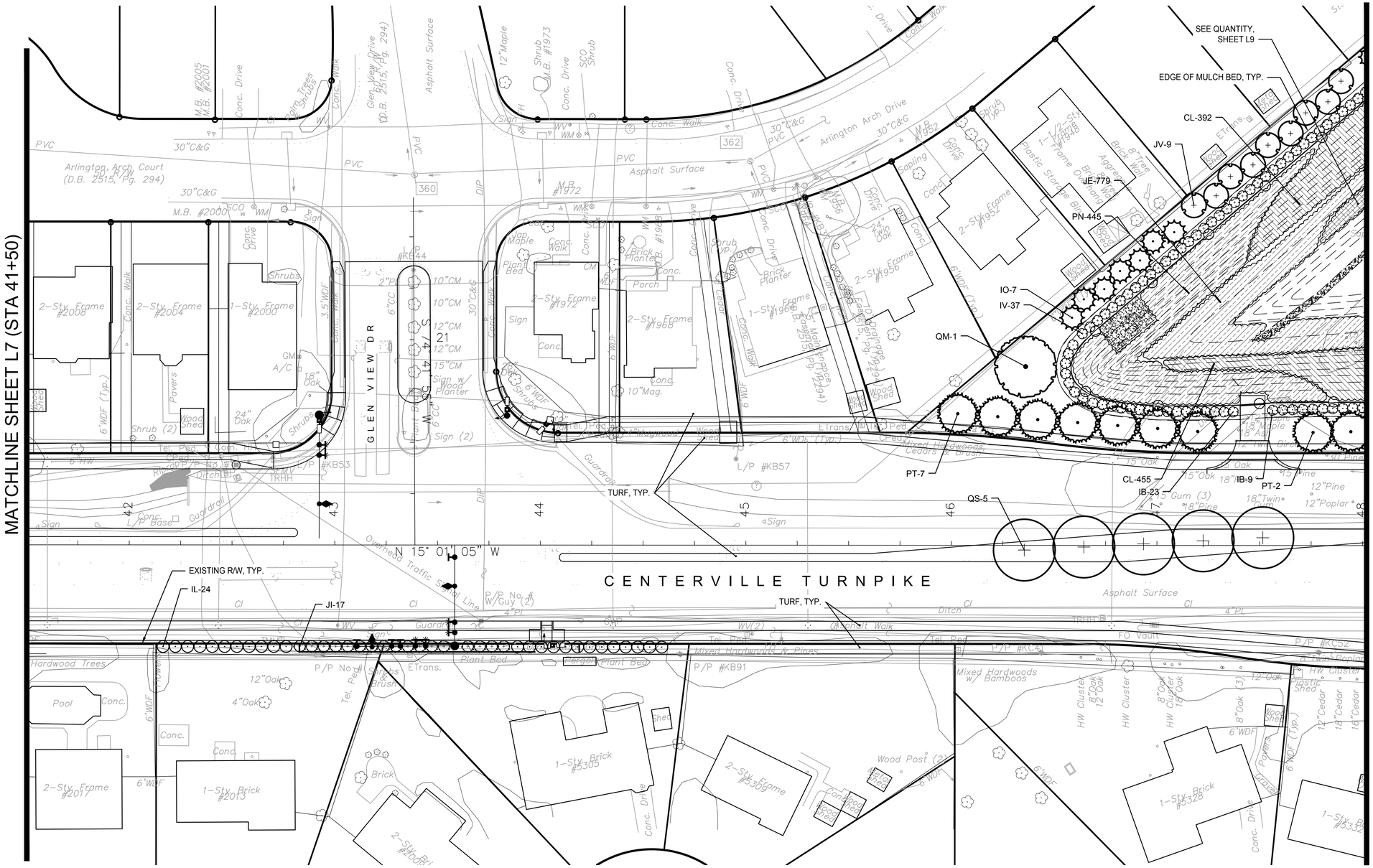
PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

wpl
Landscape Architecture
Land Surveying 757-431-1041
Civil Engineering wplsite.com
242 MUSTANG TRAIL, SUITE B
VIRGINIA BEACH, VIRGINIA 23452

Rummel, Klepper & Kahl, LLP
Virginia Beach, Virginia
ROADWAY ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, P01, RW-201, C-501	17(8)

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


MATCHLINE SHEET L7 (STA 41+50)
MATCHLINE SHEET L9 (STA 48+00)
SEE QUANTITY, SHEET L9
EDGE OF MULCH BED, TYP.
CL-392
JV-9
JE-779
PN-445
IO-7
IV-37
QM-1
PT-7
CL-455
IB-23
IB-9
PT-2
QS-5
TURF, TYP.
EXISTING R/W, TYP.
IL-24
JI-17
CENTERVILLE TURNPIKE
N 15° 01' 05" W
GLEN VIEW DRIVE
Arlington Arch Court (D.B. 2515, Pg. 294)
Arlington Arch Drive
Glen View Drive (D.B. 2515, Pg. 294)
Asphalt Surface
Conc. Drive
Conc. Walk
Overhead Traffic Signal Line
2-Sty. Frame #2008
2-Sty. Frame #2004
1-Sty. Frame #2000
2-Sty. Frame #1972
2-Sty. Frame #1968
1-Sty. Frame #1966
2-Sty. Frame #1956
2-Sty. Frame #1952
1-Sty. Brick #5305
2-Sty. Frame #5308
1-Sty. Brick #5328
2-Sty. Frame #2017
1-Sty. Brick #2013
Mixed Hardwoods & Cedars
Mixed Hardwoods w/ Bamboos
Brick Planter
Brick Patio
Pool
Shed
Wood Shed
Plastic Shed
Sign
Sign (2)
Sign w/ Wood Planter
Guardrail
Ditch
Swale
Retaining Wall
Brick & Stone Wall
Aggregate Wall
Wood Fence
Chain Link Fence
Rip Rap
Plant Bed
Hedge
Shrubs
Trees
Hardwood Trees
Tel. Ped.
ETrans.
FO Vault
P/P #KB44
P/P #KB53
P/P #KB57
P/P #KB91
P/P #KC42
P/P #KC52
L/P #KB53
L/P #KB57
L/P Base
P/P No. # W/Guy (2)
TRHH
Cl
Porch
Deck
Gazebo
Fence
Drainage Easement (D.B. 2515, Pg. 294)
Mixed Hardwoods & Pines
Mixed Hardwoods & Bamboos
HW Cluster
Wood Post (2)
Rail Fence
Conc. Drive
Conc. Walk
Asphalt Walk
Gravel Drive
Pavers
Brick Walk
Brick Steps
Conc. Steps
Ret. Wall
Conc. Wall
Curb & Gutter
Drainage Ditch
Drainage Inlet
Drainage Pipe
Utility Pole
Light Pole
Traffic Signal
Fire Hydrant
Water Valve
Water Meter
Gas Valve
Gas Meter
Air Conditioner
Mailbox
Flag Pole
Basketball Goal
Clothesline
Fence Post
Boulder
Rock Outcrop
Shrub Bed
Shrub (2)
Shrubs
Trees
Ornamental Trees
Shade Trees
Evergreen Trees
Deciduous Trees
Hedge
Vegetable Garden
Lawn
Grass
Ground Cover
Mulch
Gravel
Concrete
Asphalt
Brick
Stone
Wood
Metal
Water
Sand
Soil
Rock
Earth
Fill
Cut
Slope
Grade
Elevation
Contour
Survey Line
Property Line
Right of Way
Easement
Building
Structure
Foundation
Roof
Window
Door
Stairs
Ramp
Handrail
Guardrail
Fence
Gate
Wall
Column
Beam
Slab
Footing
Pile
Pier
Abutment
Bridge
Culvert
Pipe
Conduit
Wire
Cable
Antenna
Transformer
Meter
Valve
Hydrant
Manhole
Inlet
Outlet
Catch Basin
Storm Drain
Sanitary Sewer
Water Main
Gas Main
Electric Line
Telephone Line
Cable TV Line
Fiber Optic Line
Overhead Line
Underground Line
Service Line
Lateral
Main
Trunk
Branch
Loop
Dead End
Cap
Plug
Flange
Coupling
Reducer
Elbow
Tee
Cross
Valve
Meter

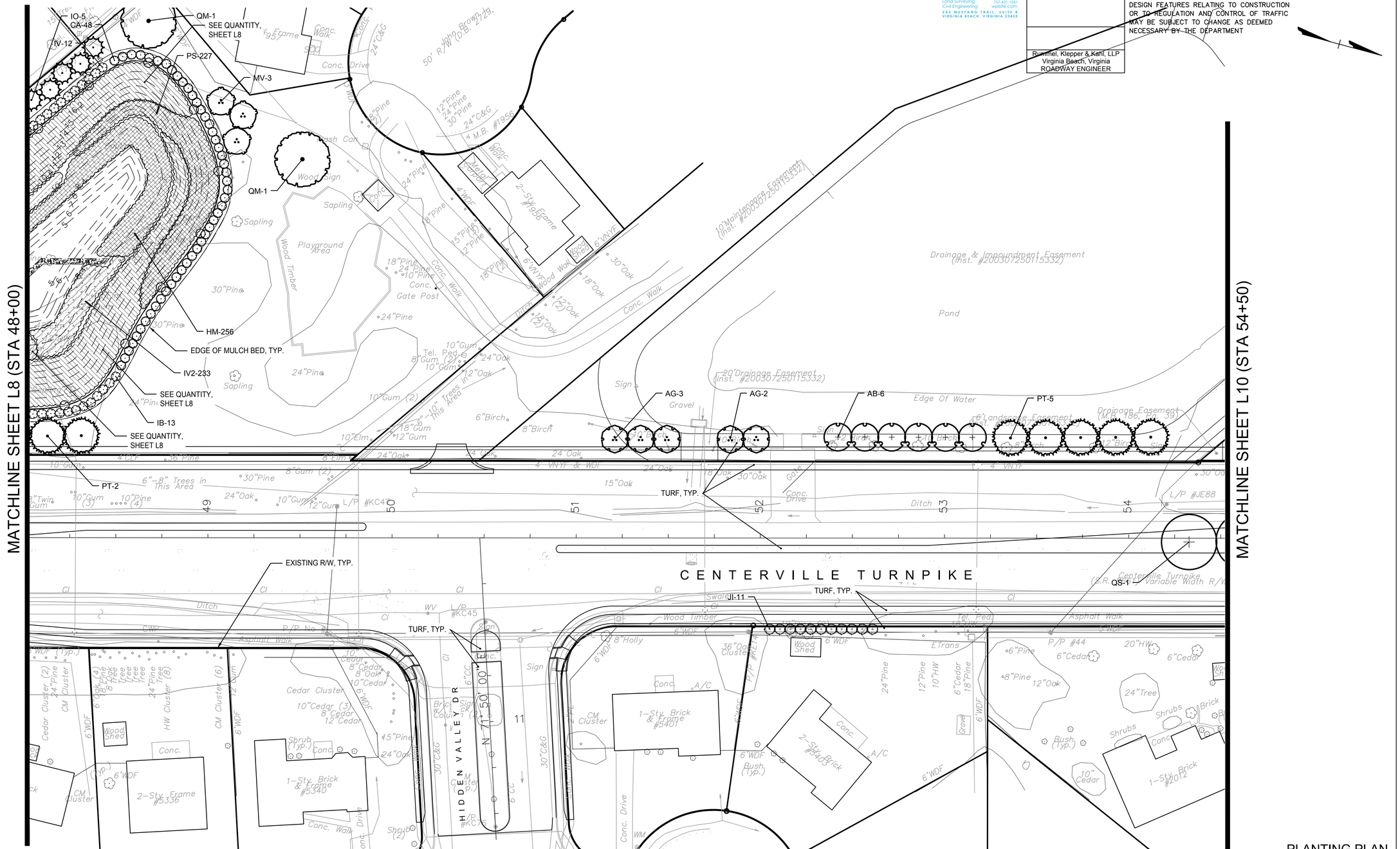
PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

wpl
Landscape Architecture
Land Surveying
Civil Engineering
757-431-1041
wplslle.com
242 MUSTANG TRAIL, SUITE B
VIRGINIA BEACH, VIRGINIA 23452

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, P01, RW-201, C-501	17(9)

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
Virginia Beach, Virginia
ROADWAY ENGINEER



PLANTING PLAN

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	17(9)

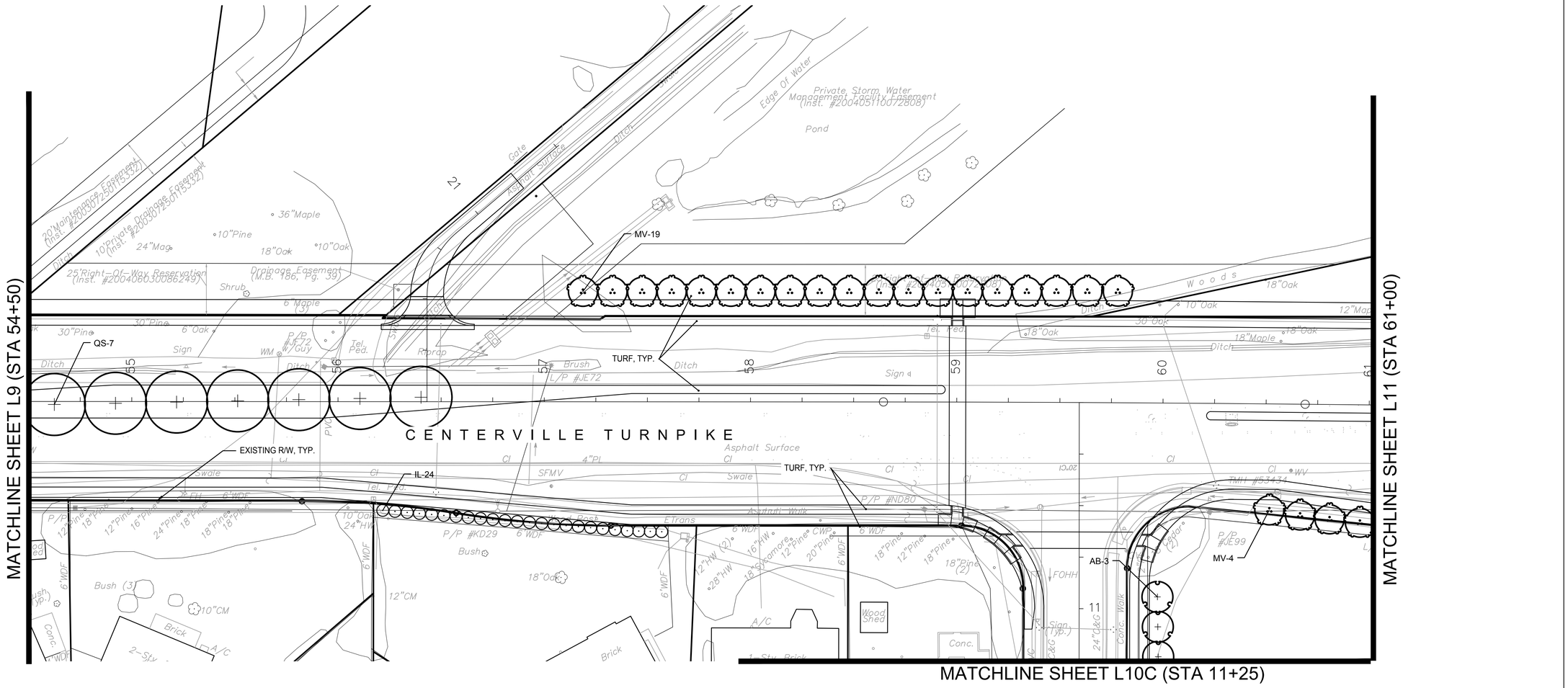
PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

wpl
Landscape Architecture
Land Surveying 757-431-1041
Civil Engineering wplsite.com
242 MUSTANG TRAIL, SUITE B
VIRGINIA BEACH, VIRGINIA 23452

Rummel, Klepper & Kahl, LLP
Virginia Beach, Virginia
ROADWAY ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, P01, RW-201, C-501	17 (10)

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



PLANTING PLAN

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	17(10)

PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

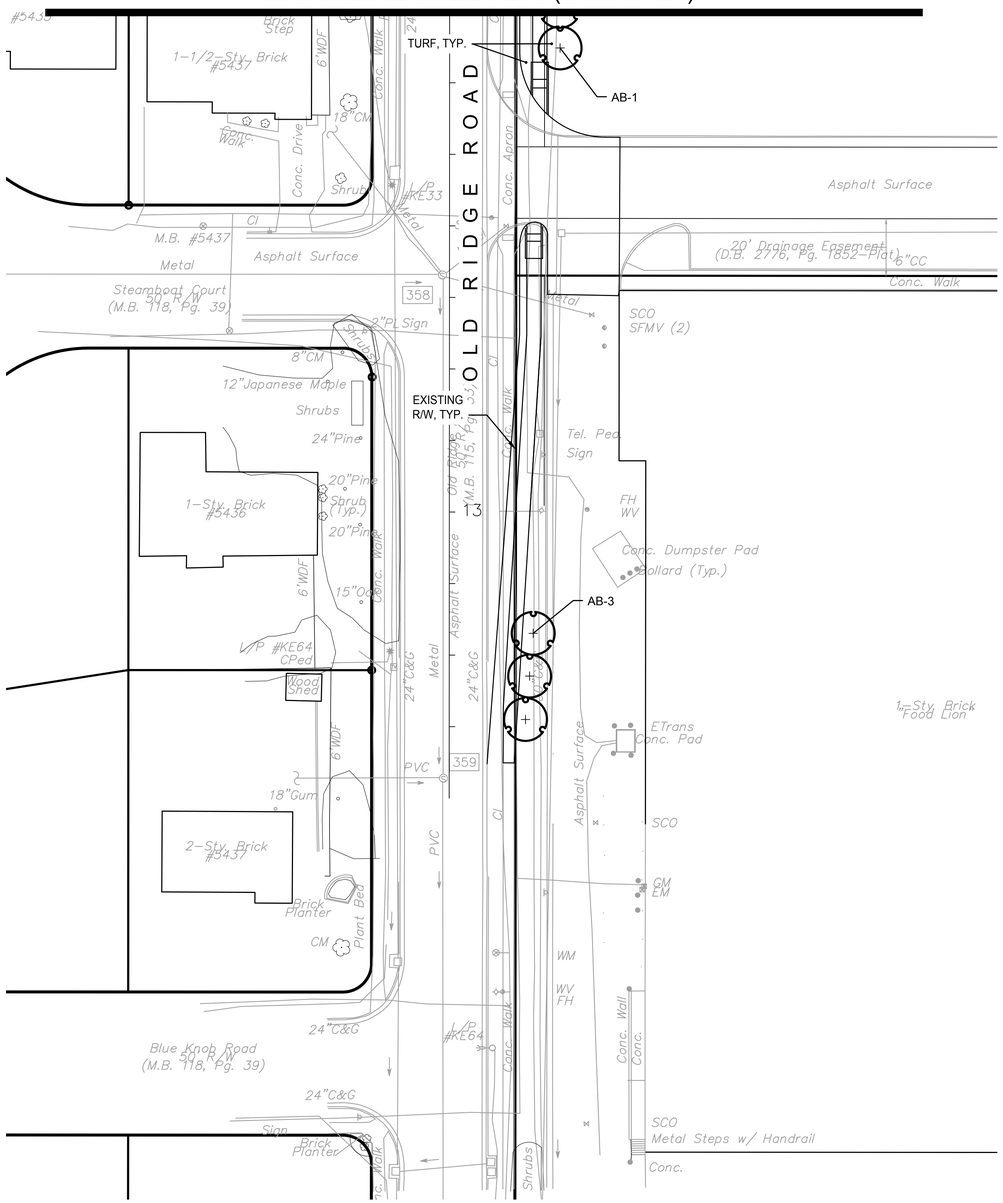
wpl
Landscape Architecture
Land Surveying
Civil Engineering
757-431-1041
wplsite.com
242 MUSTANG TRAIL, SUITE 8
VIRGINIA BEACH, VIRGINIA 23452

Rummel, Klepper & Kahl, LLP
Virginia Beach, Virginia
ROADWAY ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, P01, RW-201, C-501	17 (10C)

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

MATCHLINE SHEET L10 (STA 11+25)



PLANTING PLAN

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	17(10C)

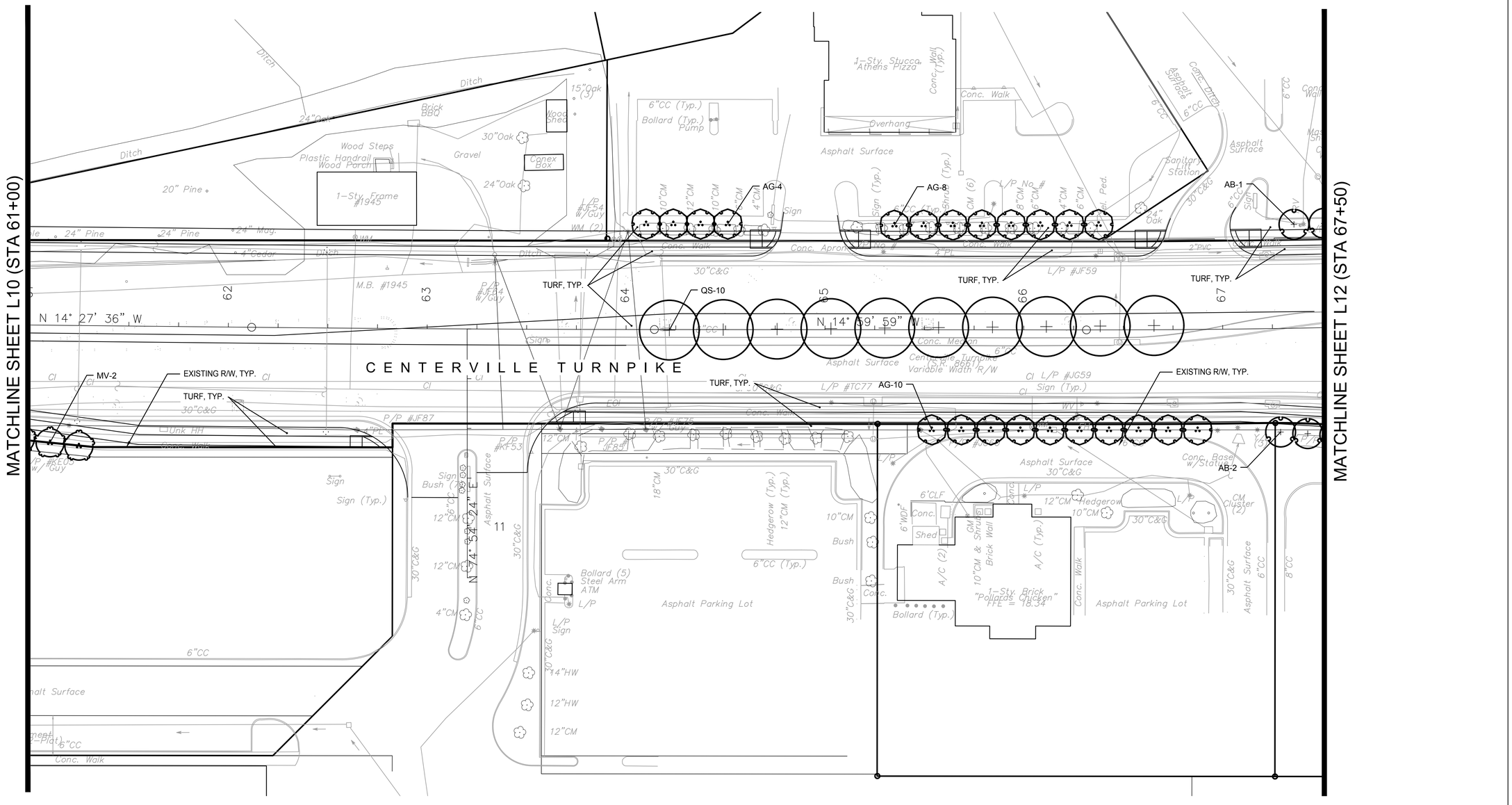
PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

wpl
Landscape Architecture
Land Surveying 757-431-1041
Civil Engineering wplsite.com
242 MUSTANG TRAIL, SUITE B
VIRGINIA BEACH, VIRGINIA 23452

Rummel, Klepper & Kahl, LLP
Virginia Beach, Virginia
ROADWAY ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, P01, RW-201, C-501	17 (11)

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



PLANTING PLAN

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	17(11)

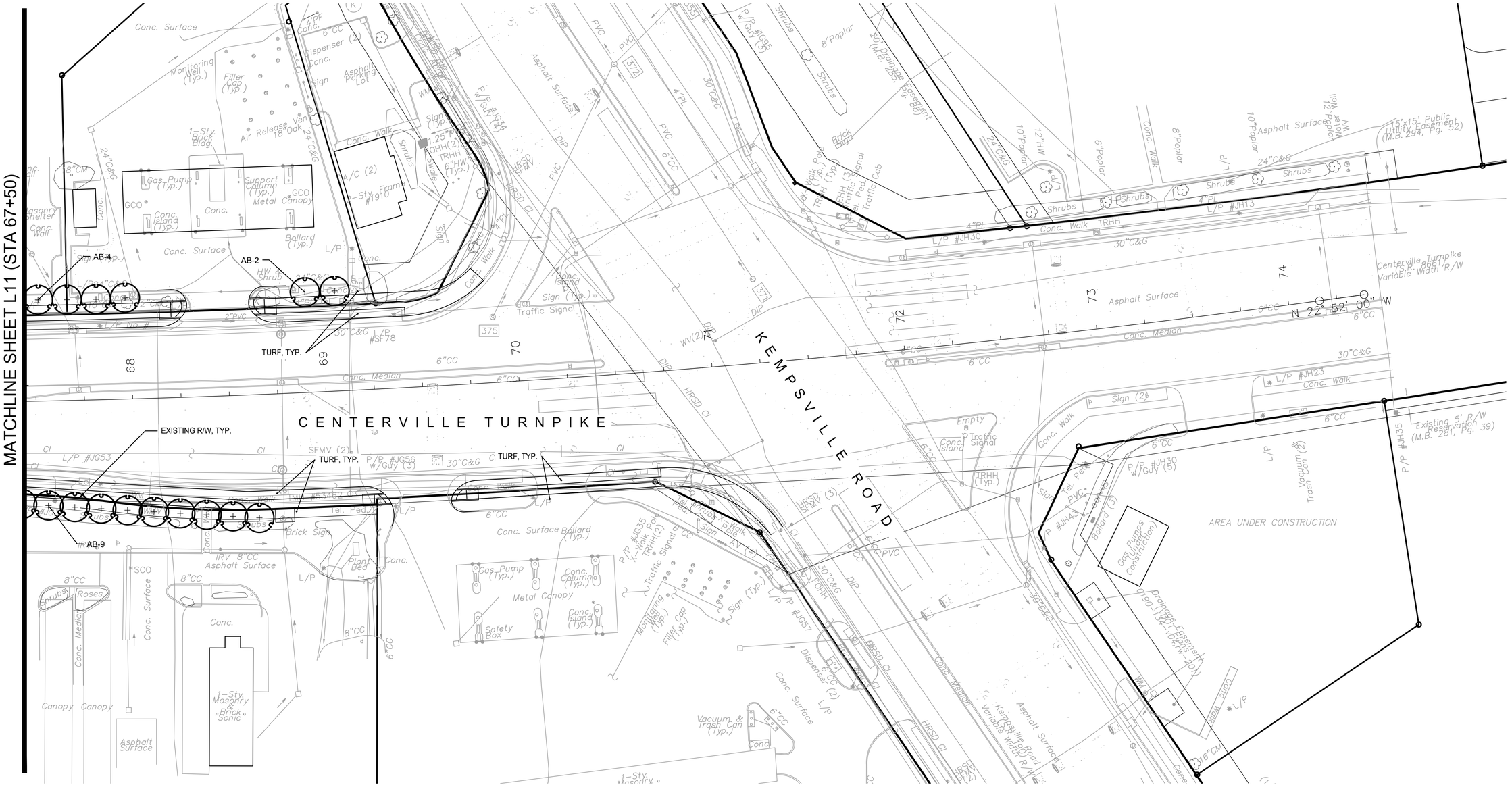
PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

wpl
Landscape Architecture
Land Surveying 757-431-1041
Civil Engineering wplville.com
242 MUSTANG TRAIL, SUITE B
VIRGINIA BEACH, VIRGINIA 23452

Rummel, Klepper & Kahl, LLP
Virginia Beach, Virginia
ROADWAY ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, P01, RW-201, C-501	17 (12)

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



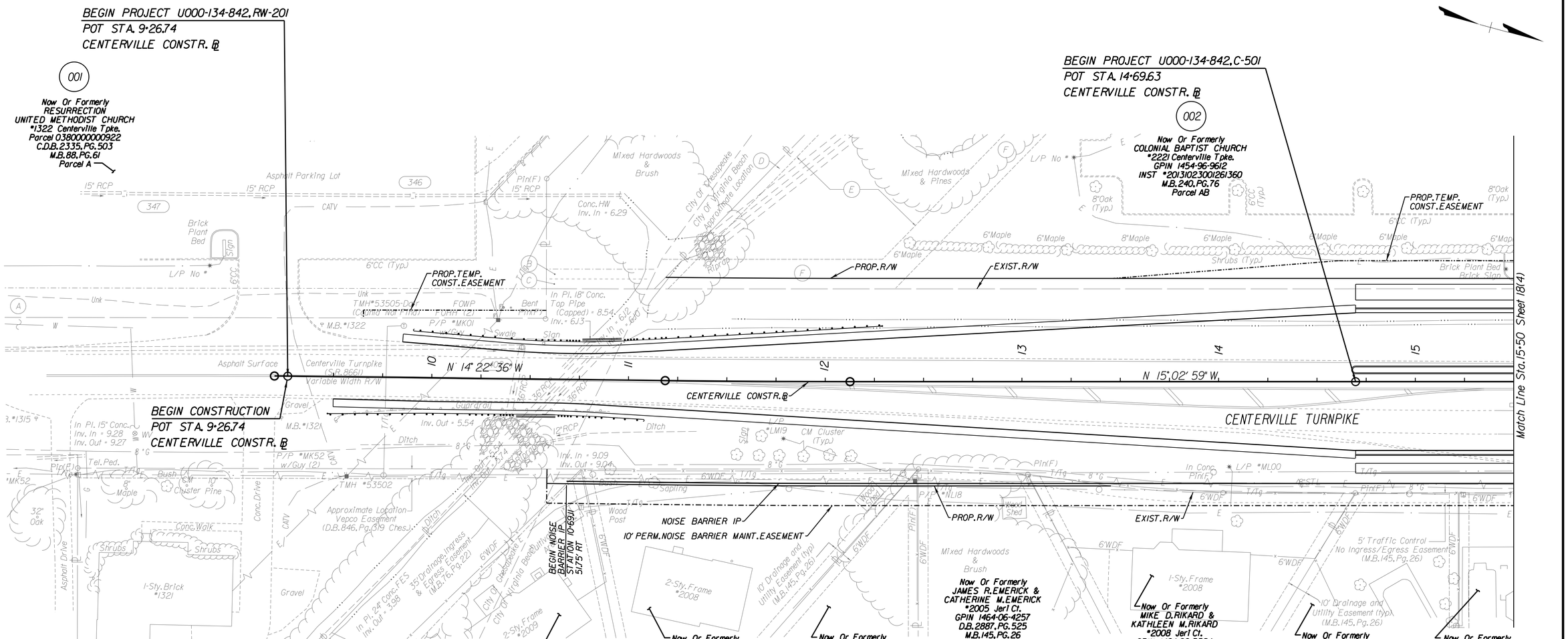
PLANTING PLAN

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	17(12)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	18(3)

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



NOTE:
ONLY NOISE BARRIER CENTER LINE SHOWN FOR CLARITY.

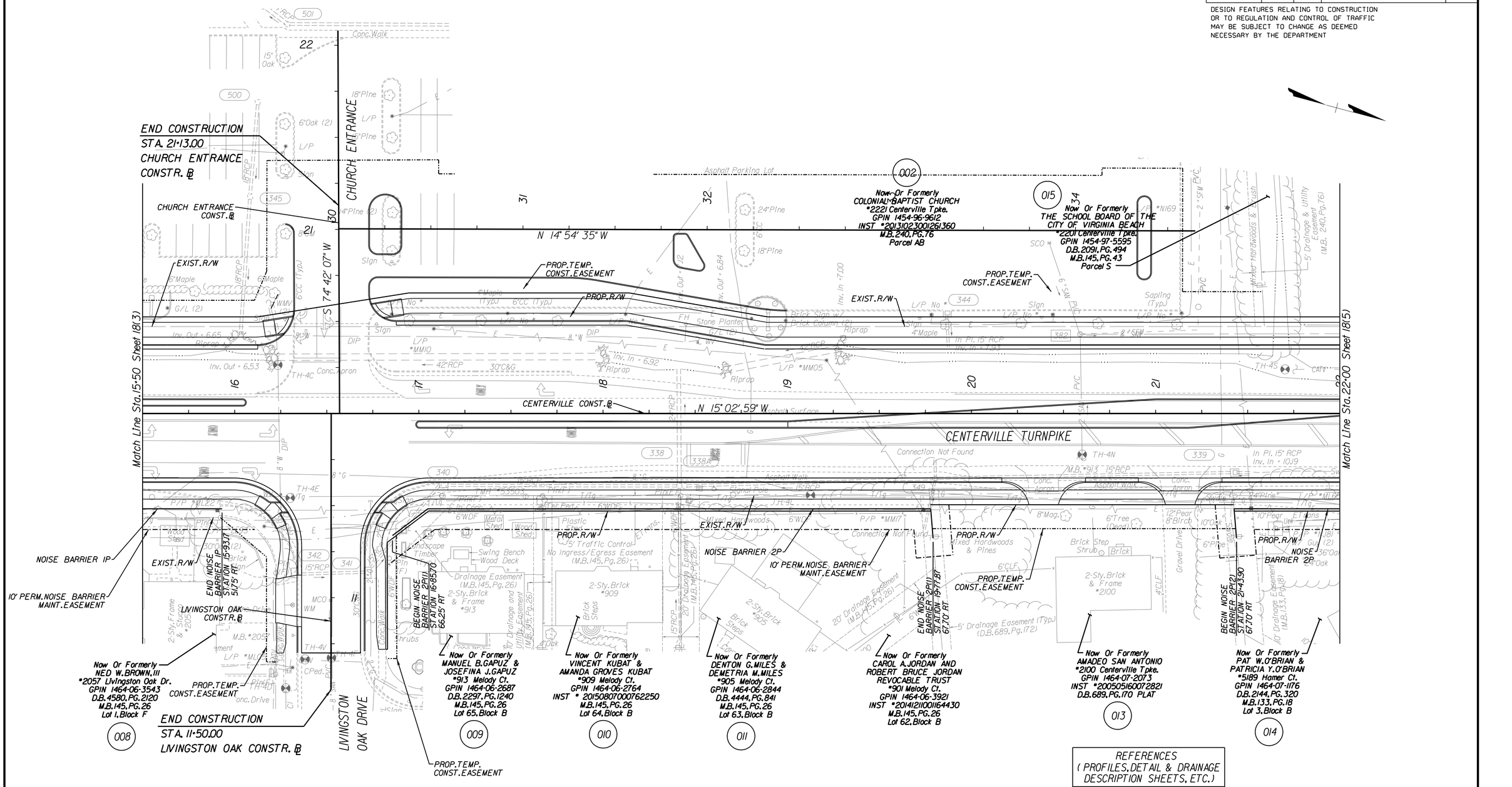
REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)	
Plan	3
Mainline Profile	3A
Entrance Profile	13
Drainage Descriptions	2B(1)
Sign & Pave. Mark. Plan	14(3)
Signal Plan	X
Landscaping Plan	X
Utility Plan	19(3)
SWM Plan	X
Existing Conditions	1H(1)

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	18(3)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	18(4)

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



NOTE:
ONLY NOISE BARRIER CENTER LINE SHOWN FOR CLARITY.

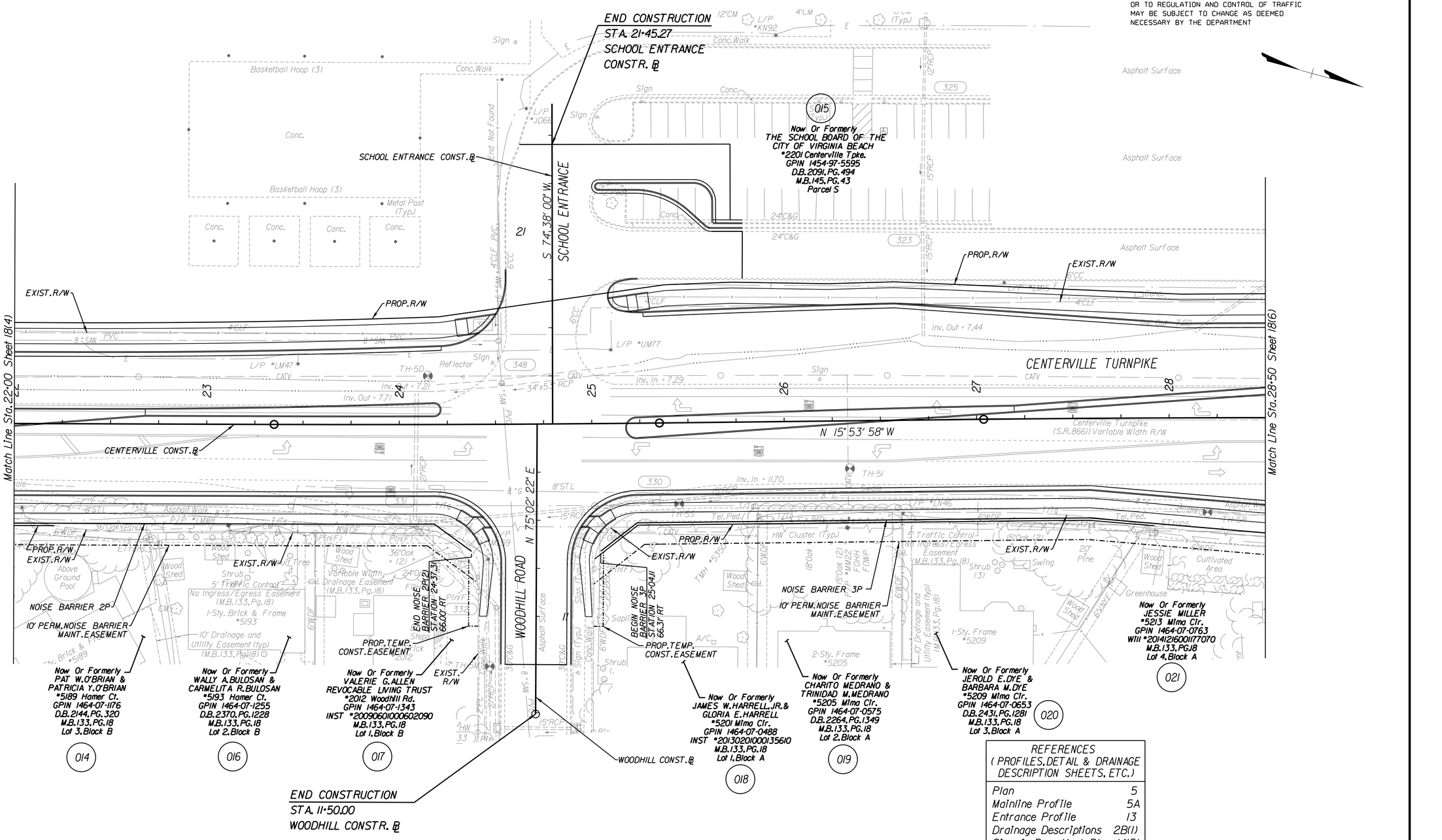
REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)	
Plan	4
Mainline Profile	4A
Entrance Profile	13
Drainage Descriptions	2B(1)
Sign & Pave. Mark. Plan	14(4)
Landscaping Plan	17(4)
Utility Plan	19(4)
Existing Conditions	1H(2)

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	18(4)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP, (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	18(5)

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



NOTE:
ONLY NOISE BARRIER CENTER LINE SHOWN FOR CLARITY.

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)	
Plan	5
Mainline Profile	5A
Entrance Profile	13
Drainage Descriptions	2B(1)
Sign & Pave. Mark. Plan	14(5)
Signal Plan	X
Landscaping Plan	X
Utility Plan	19(5)
SWM Plan	21(1)
Existing Conditions	1H(3)

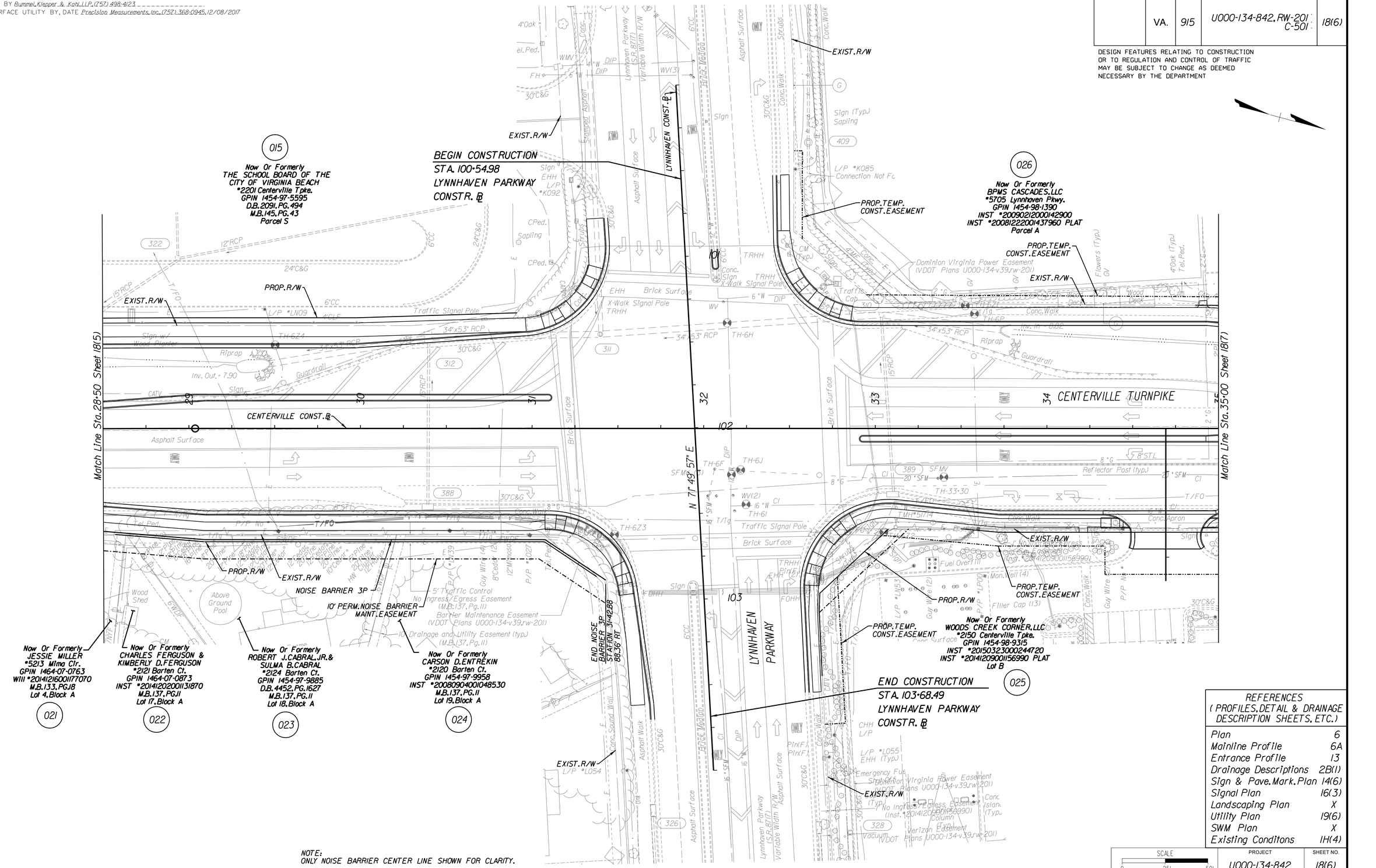
SCALE 0 25' 50'

PROJECT	SHEET NO.
U000-134-842	18(5)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	18(6)

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



REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)	
Plan	6
Mainline Profile	6A
Entrance Profile	13
Drainage Descriptions	2B(1)
Sign & Pave. Mark. Plan	14(6)
Signal Plan	16(3)
Landscaping Plan	X
Utility Plan	19(6)
SWM Plan	X
Existing Conditions	1H(4)

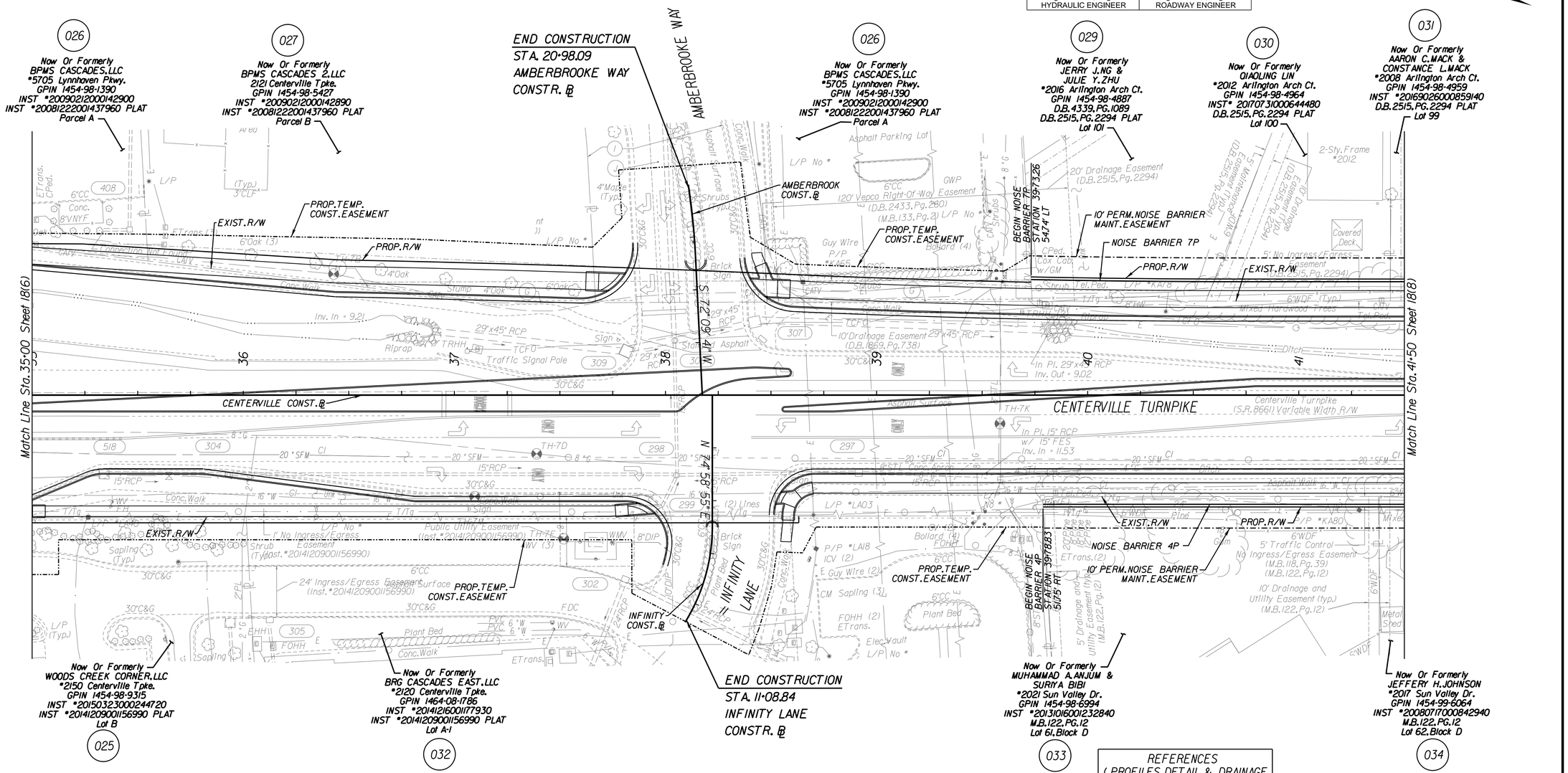
SCALE 0 25' 50'	PROJECT	SHEET NO.
	U000-134-842	18(6)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	18(7)

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 Virginia Beach, Virginia HYDRAULIC ENGINEER	Rummel, Klepper & Kahl, LLP Virginia Beach, Virginia ROADWAY ENGINEER



NOTE:
ONLY NOISE BARRIER CENTER LINE SHOWN FOR CLARITY.

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)	
Plan	7
Mainline Profile	7A
Entrance Profile	13
Drainage Descriptions	2B(1)
Sign & Pave. Mark. Plan	14(7)
Signal Plan	X
Landscaping Plan	X
Utility Plan	19(7)
SWM Plan	X
Existing Conditions	1H(5)

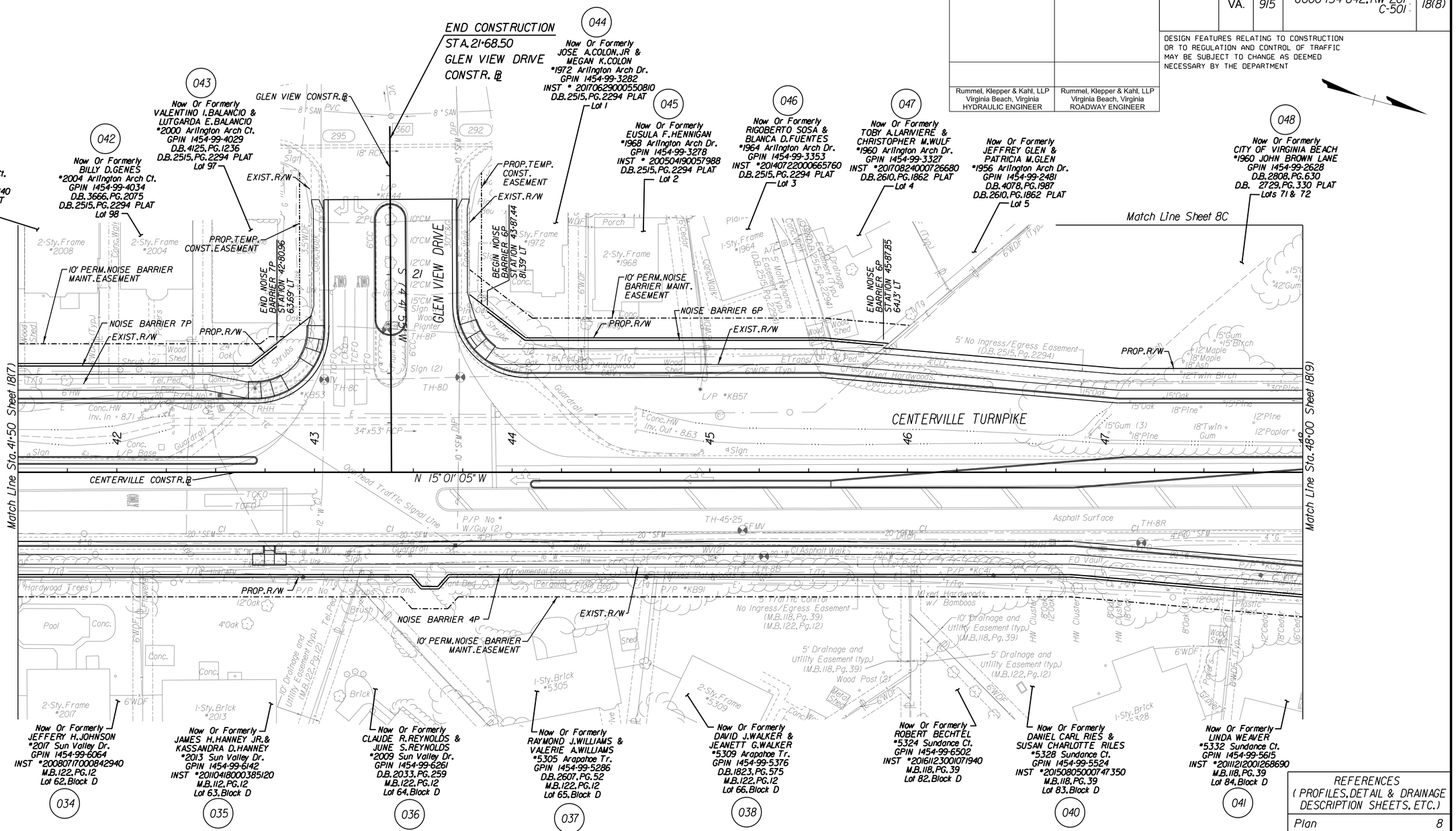
SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	18(7)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP, (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	18(8)

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 Virginia Beach, Virginia HYDRAULIC ENGINEER	Rummel, Klepper & Kahl, LLP Virginia Beach, Virginia ROADWAY ENGINEER



NOTE:
ONLY NOISE BARRIER CENTER LINE SHOWN FOR CLARITY.

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)	
Plan	8
Mainline Profile	8A
Entrance Profile	13
Drainage Descriptions	2B(1)
Sign & Pave. Mark. Plan	14(8)
Signal Plan	16(4)
Landscaping Plan	X
Utility Plan	19(8)
SWM Plan	21(2)
Existing Conditions	1H(6)

SCALE 0 25' 50'	PROJECT	SHEET NO.
	U000-134-842	18(8)

12/1/2020
4:18:51 PM

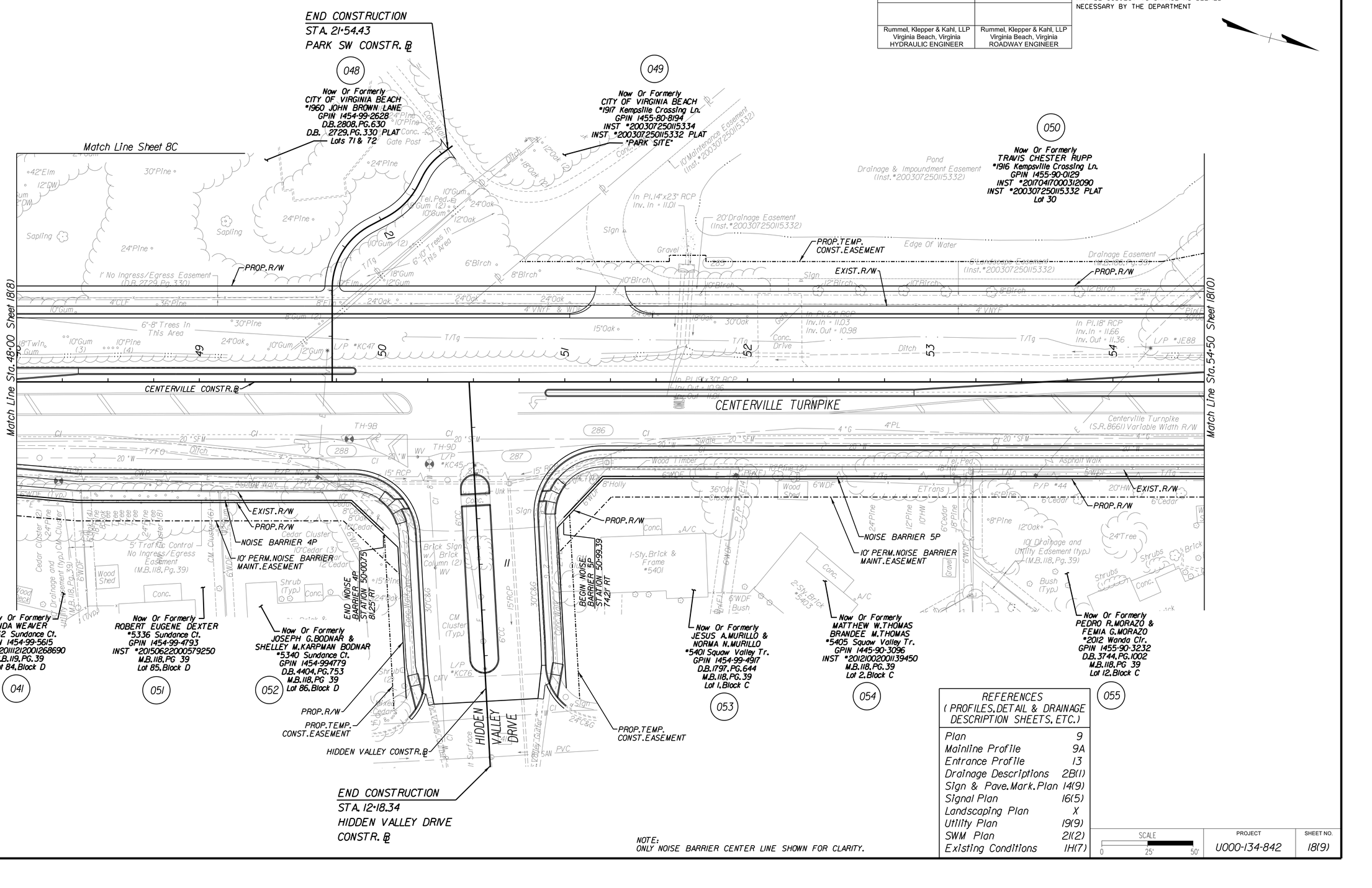
nl0938118(9).dgn
Plotted By: RK&K - JMK

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

Rummel, Klepper & Kahl, LLP Virginia Beach, Virginia HYDRAULIC ENGINEER	Rummel, Klepper & Kahl, LLP Virginia Beach, Virginia ROADWAY ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	18(9)

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



NOTE:
ONLY NOISE BARRIER CENTER LINE SHOWN FOR CLARITY.

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)	
Plan	9
Mainline Profile	9A
Entrance Profile	13
Drainage Descriptions	2B(1)
Sign & Pave. Mark. Plan	14(9)
Signal Plan	16(5)
Landscaping Plan	X
Utility Plan	19(9)
SWM Plan	21(2)
Existing Conditions	1H(7)

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	18(9)

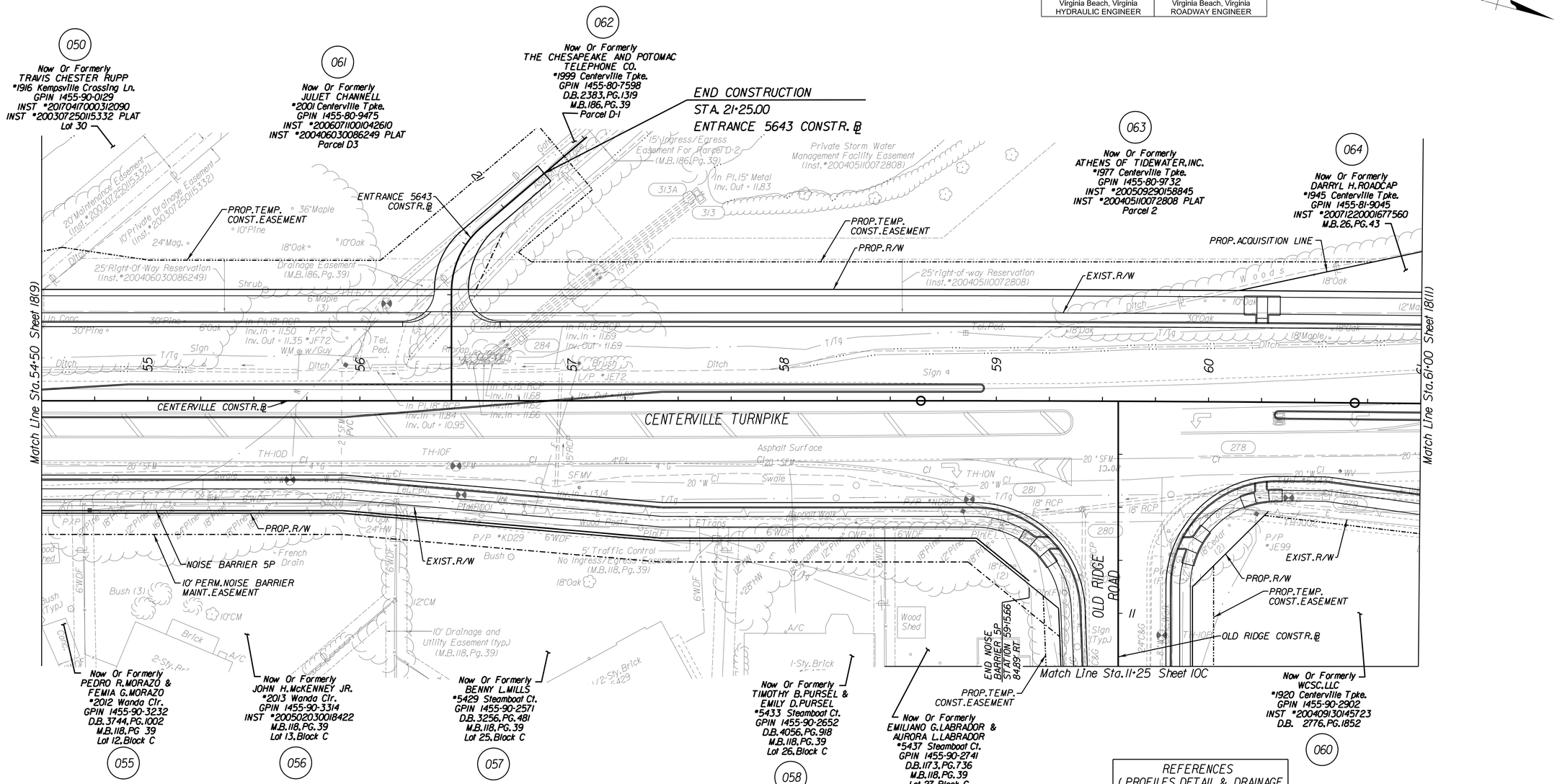
12/1/2020

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

Rummel, Klepper & Kahl, LLP Virginia Beach, Virginia HYDRAULIC ENGINEER	Rummel, Klepper & Kahl, LLP Virginia Beach, Virginia ROADWAY ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	18(10)

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


050
Now Or Formerly
TRAVIS CHESTER RUPP
*1916 Kempsville Crossing Ln.
GPIN 1455-90-0129
INST *200407000312090
INST *200307250115332 PLAT
Lot 30
061
Now Or Formerly
JULIET CHANNELL
*2001 Centerville Tpke.
GPIN 1455-80-9475
INST *200607110010426IO
INST *200406030086249 PLAT
Parcel D3
062
Now Or Formerly
THE CHESAPEAKE AND POTOMAC TELEPHONE CO.
*1999 Centerville Tpke.
GPIN 1455-80-7598
D.B.2383, PG.1319
M.B.186, PG.39
Parcel D-1
END CONSTRUCTION
STA. 21+25.00
ENTRANCE 5643 CONSTR. ℄
063
Now Or Formerly
ATHENS OF TIDEWATER, INC.
*1977 Centerville Tpke.
GPIN 1455-80-9732
INST *200509290158845
INST *200405110072808 PLAT
Parcel 2
064
Now Or Formerly
DARRYL H. ROADCAP
*1945 Centerville Tpke.
GPIN 1455-81-9045
INST *200712200016775GO
M.B.26, PG.43
Match Line Sta. 54+50 Sheet 18(9)
Match Line Sta. 61+00 Sheet 18(11)
Match Line Sta. 11+25 Sheet 10C
CENTERVILLE TURNPIKE
OLD RIDGE ROAD
ENTRANCE 5643 CONSTR. ℄
CENTERVILLE CONSTR. ℄
OLD RIDGE CONSTR. ℄
PROP. TEMP. CONST. EASEMENT
PROP. R/W
EXIST. R/W
PROP. ACQUISITION LINE
NOISE BARRIER 5P
10' PERM. NOISE BARRIER MAINT. EASEMENT
END NOISE BARRIER 5P STATION 59+15.66 8489' RT
20' Maintenance Easement (Inst.*200307250115332)
10' Private Drainage Easement (Inst.*200307250115332)
25' Right-Of-Way Reservation (Inst.*200406030086249)
Drainage Easement (M.B.186, Pg.39)
15' Ingress/Egress Easement For Parcel D-2 (M.B.186, Pg.39)
Private Storm Water Management Facility Easement (Inst.*200405110072808)
25' Right-of-way Reservation (Inst.*200405110072808)
No Ingress/Egress Easement (M.B.118, Pg.39)
10' Drainage and Utility Easement (typ.) (M.B.118, Pg.39)
Now Or Formerly
PEDRO R. MORAZO & FEMIA G. MORAZO
*2012 Wanda Clr.
GPIN 1455-90-3232
D.B. 3744, PG.1002
M.B.118, PG 39
Lot 12, Block C
055
Now Or Formerly
JOHN H. McKENNEY JR.
*2013 Wanda Clr.
GPIN 1455-90-3314
INST *200502030018422
M.B.118, PG.39
Lot 13, Block C
056
Now Or Formerly
BENNY L. MILLS
*5429 Steamboat Ct.
GPIN 1455-90-2571
D.B. 3256, PG.481
M.B.118, PG.39
Lot 25, Block C
057
Now Or Formerly
TIMOTHY B. PURSEL & EMILY D. PURSEL
*5433 Steamboat Ct.
GPIN 1455-90-2652
D.B. 4056, PG.918
M.B.118, PG.39
Lot 26, Block C
058
Now Or Formerly
EMILIANO G. LABRADOR & AURORA L. LABRADOR
*5437 Steamboat Ct.
GPIN 1455-90-2741
D.B. 1173, PG.736
M.B.118, PG.39
Lot 27, Block C
059
Now Or Formerly
WCSC, LLC
*1920 Centerville Tpke.
GPIN 1455-90-2902
INST *200409130145723
D.B. 2776, PG.1852
060
Wood Shed
Brick
1-Sty. Brick
2-Sty. Brick
A/C
Bush (Typ.)
French Drain
Asphalt Surface
Asphalt Walk
Concrete Walk
Swale
Ditch
Sign
Tel. Ped.
Brush
Wood Fence
Chain Link Fence
Guard Rail
Traffic Control
Shrub
Bush
Bush (3)
Wood Posts
Tel. Trans
Tel. Pole
Sign (Typ.)
Sign (Typ.) C&G
Inl. Pl. 15" Metal Inv. Out = 11.83
In Pl. 18" RCP Inv. In = 11.50 P/P Inv. Out = 11.35 *JF72
In Pl. 18" RCP Inv. In = 11.69 Inv. Out = 11.69
In Pl. 18" RCP Inv. In = 11.68
In Pl. 18" RCP Inv. In = 11.84 Inv. Out = 10.95
In Pl. 15" RCP Inv. In = 11.82
In Pl. 15" RCP Inv. In = 11.66
In Pl. 15" RCP Inv. In = 13.14
P/P *KD29
P/P *ND89
P/P *JE99
L/P *JE72
TH-10D
TH-10F
TH-10N
TH-10O
TH-10P
TH-10Q
TH-10R
TH-10S
TH-10T
TH-10U
TH-10V
TH-10W
TH-10X
TH-10Y
TH-10Z
TH-11A
TH-11B
TH-11C
TH-11D
TH-11E
TH-11F
TH-11G
TH-11H
TH-11I
TH-11J
TH-11K
TH-11L
TH-11M
TH-11N
TH-11O
TH-11P
TH-11Q
TH-11R
TH-11S
TH-11T
TH-11U
TH-11V
TH-11W
TH-11X
TH-11Y
TH-11Z
TH-12A
TH-12B
TH-12C
TH-12D
TH-12E
TH-12F
TH-12G
TH-12H
TH-12I
TH-12J
TH-12K
TH-12L
TH-12M
TH-12N
TH-12O
TH-12P
TH-12Q
TH-12R
TH-12S
TH-12T
TH-12U
TH-12V
TH-12W
TH-12X
TH-12Y
TH-12Z
TH-13A
TH-13B
TH-13C
TH-13D
TH-13E
TH-13F
TH-13G
TH-13H
TH-13I
TH-13J
TH-13K
TH-13L
TH-13M

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP, (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017

REVISED	STATE	ROUTE	PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C501	19(1)

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

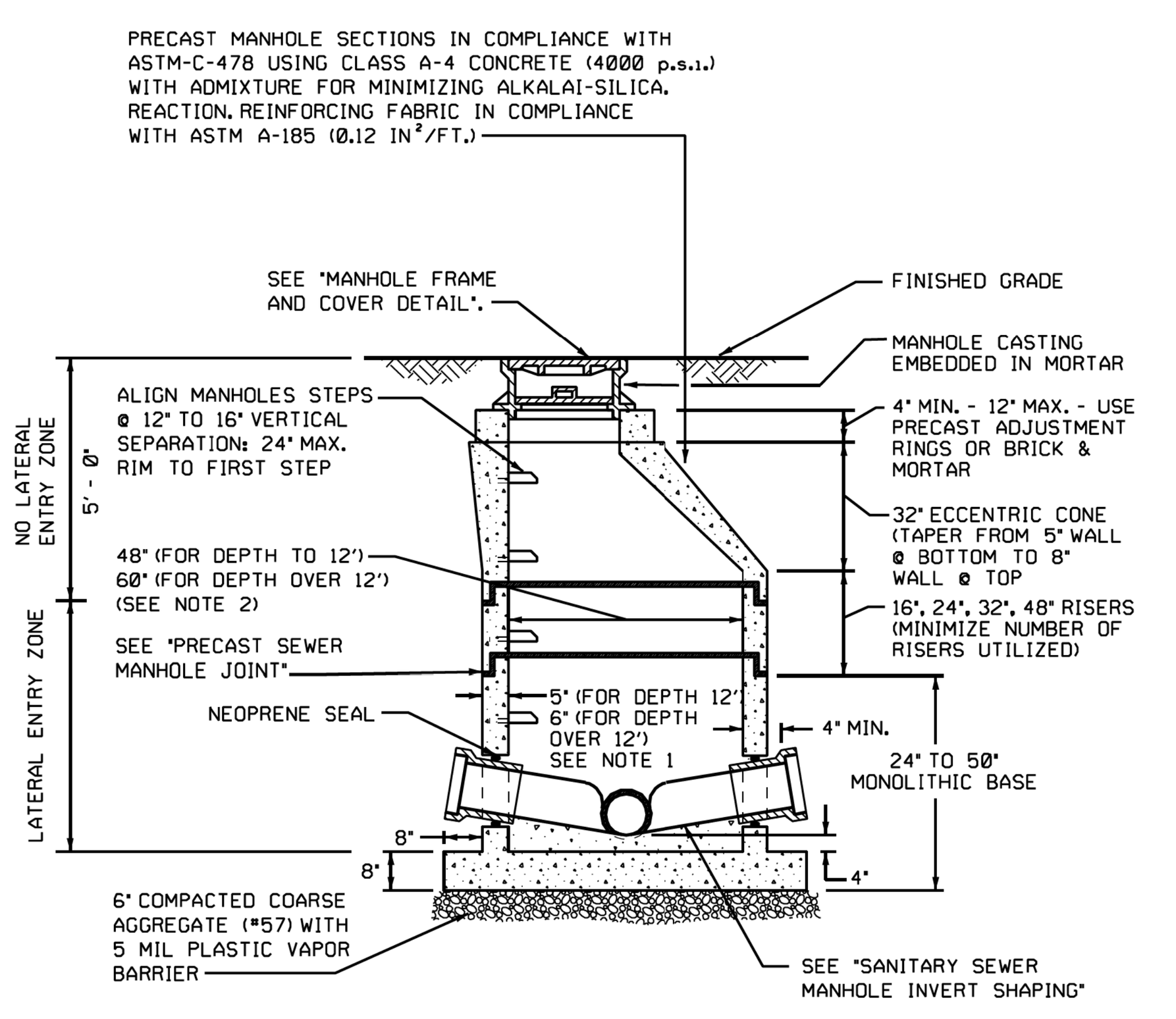
Rummel, Klepper & Kahl, LLP
Virginia Beach, Virginia
UTILITY ENGINEER

NOTES:

1. This sheet for Utility Relocation/Adjustment for Water and Sewer only.

precastmh.dgn

REVISED: / / DATE | PU DETAIL NO. 1
APPROVED: 04/13/01 DATE | GARY L. JONES, P.E ENGINEERING MANAGER



NOTES:
1. FOR MANHOLE DEPTH GREATER THAN 25' (RIM TO INVERT) STRUCTURAL ANALYSIS BY PROFESSIONAL ENGINEER TO BE PROVIDED.
2. SPECIFIED DIAMETER TO BE UTILIZED THROUGHOUT STRUCTURE (i.e. DO NOT REDUCE DIAMETER @ THRESHOLD DEPTH).
3. PROVIDE PROTECTIVE COATING WITH APPROVED EPOXY-RESIN BASED HIGH BUILD SYSTEM.
4. LATERAL ENTRY SHALL BE NO CLOSER THAN 6-INCHES TO ANY JOINT LINE.

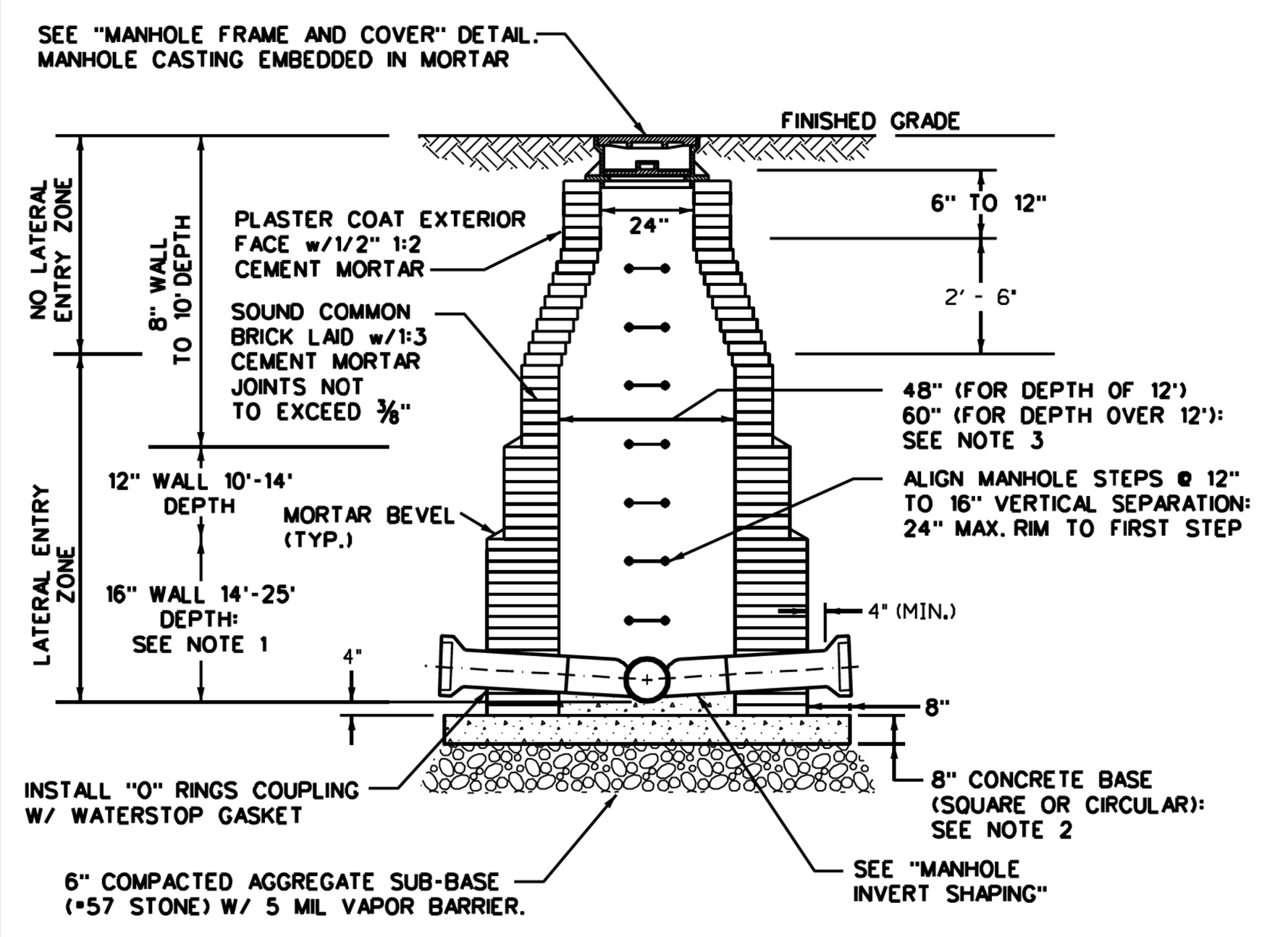
PRECAST SANITARY SEWER MANHOLE

CITY OF VIRGINIA BEACH • DEPARTMENT OF PUBLIC UTILITIES

brkmh.dgn

REVISED: / / DATE | PU DETAIL NO. 5
APPROVED: 04/13/01 DATE | GARY L. JONES, P.E ENGINEERING MANAGER

Rescinded 4/16/06



NOTES:
1. BRICK MANHOLE DEPTH NOT TO EXCEED 25' (RIM TO INVERT)
2. CONCRETE BASE TO BE CONSTRUCTED USING CLASS A-3, 3000 p.s.i. CONCRETE USING 6 x 6 - W2.9 x W2.9 WIRE FABRIC REINFORCEMENT FOR IN-PLACE CONSTRUCTION OR #4 REBAR E.W. @ 12" O.C. FOR PRECAST CONSTRUCTION.
3. SPECIFIED DIAMETER TO BE UTILIZED THROUGHOUT STRUCTURE (i.e. DO NOT REDUCE DIAMETER @ THRESHOLD DEPTH.)
4. NO STEPS REQUIRED FOR DEPTHS 48" OR LESS.

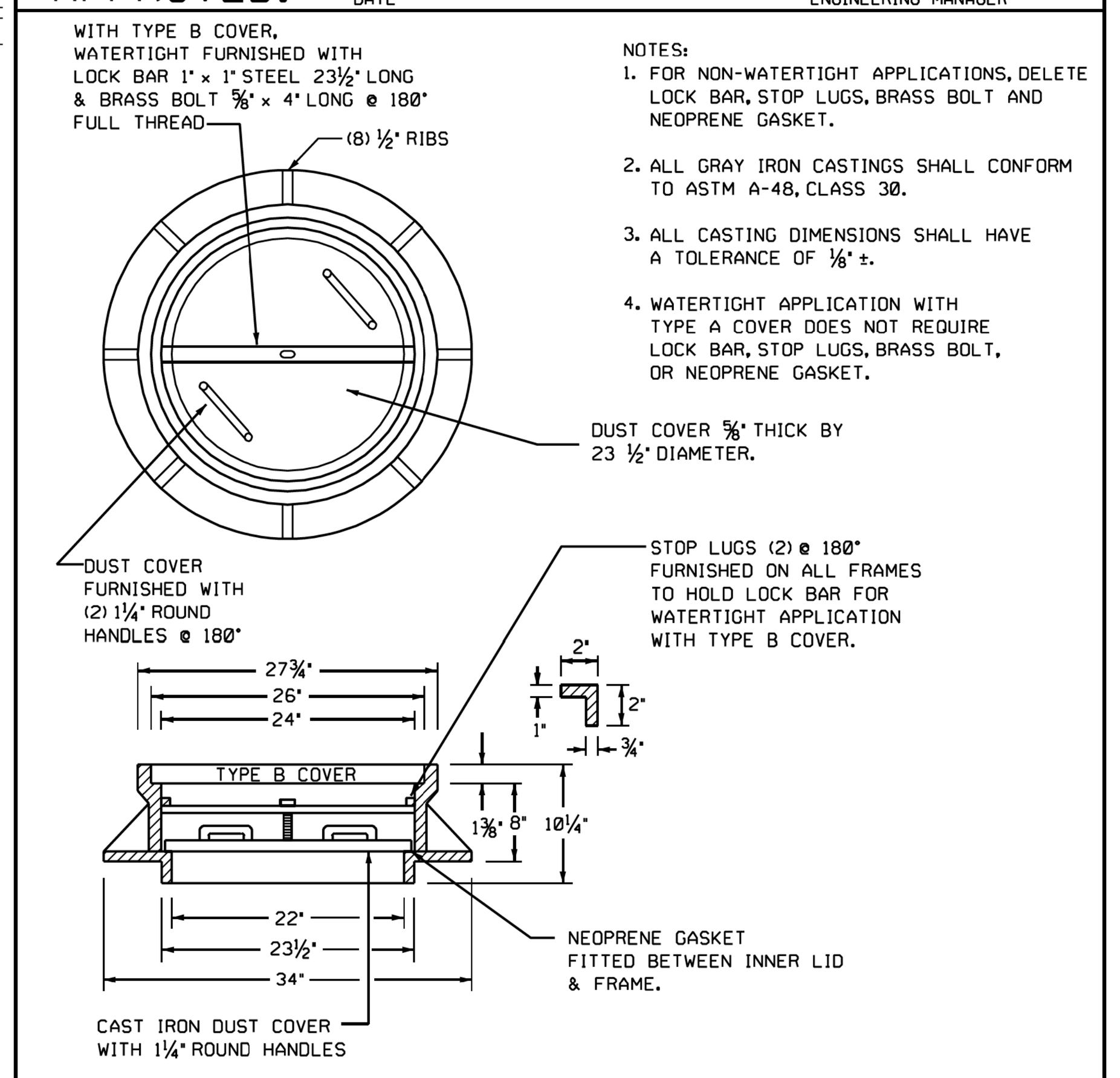
BRICK SANITARY SEWER MANHOLE

CITY OF VIRGINIA BEACH • DEPARTMENT OF PUBLIC UTILITIES

wtrtghtmhb.dgn

REVISED: / / DATE | PU DETAIL NO. 7-1
APPROVED: 04/13/01 DATE | GARY L. JONES, P.E ENGINEERING MANAGER

NOTES:
1. FOR NON-WATERTIGHT APPLICATIONS, DELETE LOCK BAR, STOP LUGS, BRASS BOLT AND NEOPRENE GASKET.
2. ALL GRAY IRON CASTINGS SHALL CONFORM TO ASTM A-48, CLASS 30.
3. ALL CASTING DIMENSIONS SHALL HAVE A TOLERANCE OF 1/8" ±.
4. WATERTIGHT APPLICATION WITH TYPE A COVER DOES NOT REQUIRE LOCK BAR, STOP LUGS, BRASS BOLT, OR NEOPRENE GASKET.



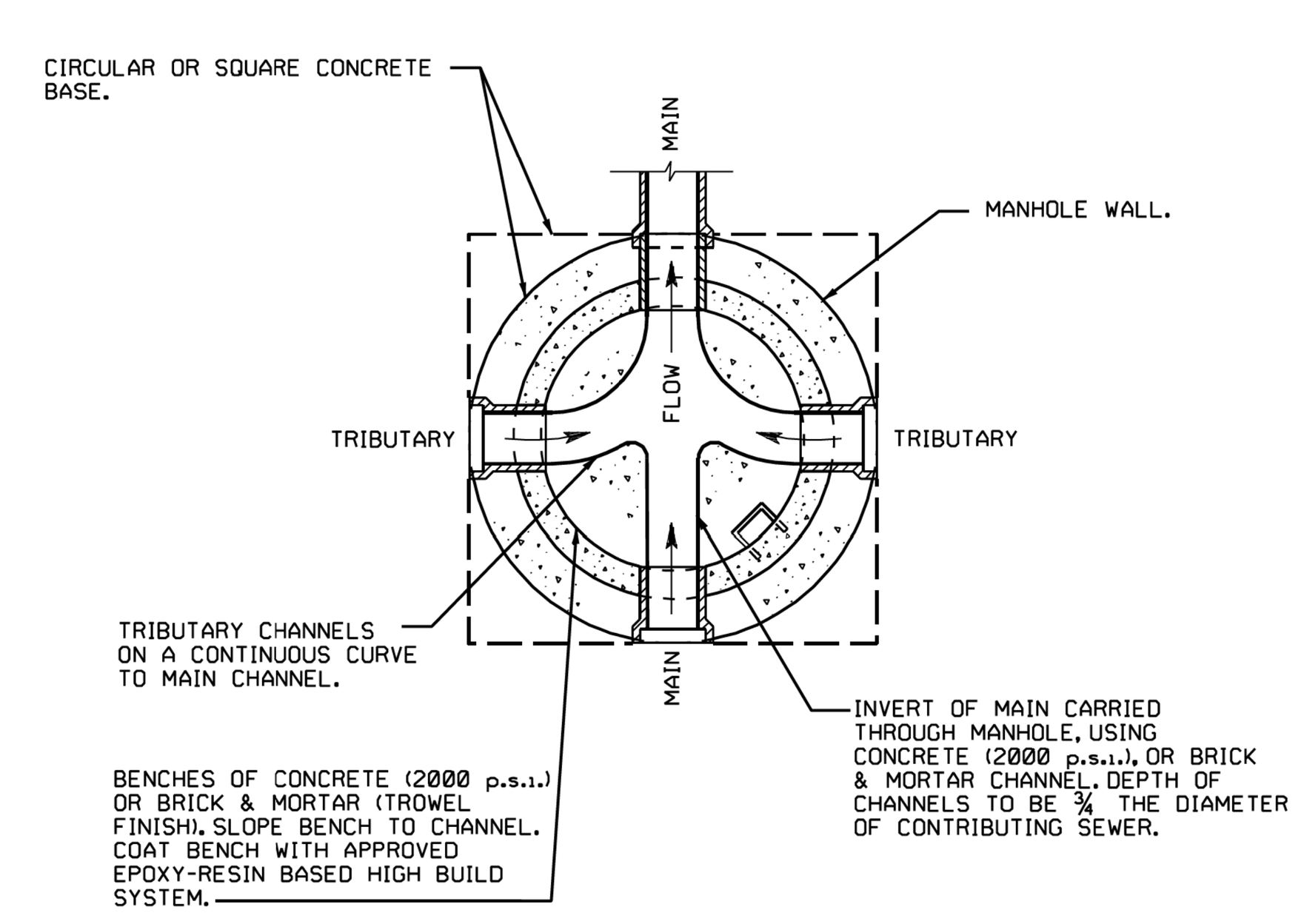
ALTERNATE COVERS AVAILABLE
1. SAME AS ABOVE WITH 23 1/2" DIAMETER SKIRT 1 1/2" DEEP EXCEPT WITH SOLID COVER LETTERED 'SANITARY SEWER'.
2. AS ABOVE EXCEPT WITHOUT SKIRT. UNDERSIDE TO HAVE 6 CROSS RIBS 21 1/2" LONG TO ALLOW FOR USE OF INSERTS.

MANHOLE FRAME AND COVER

CITY OF VIRGINIA BEACH • DEPARTMENT OF PUBLIC UTILITIES

mhinvert.dgn

REVISED: / / DATE | PU DETAIL NO. 8
APPROVED: 04/13/01 DATE | GARY L. JONES, P.E ENGINEERING MANAGER

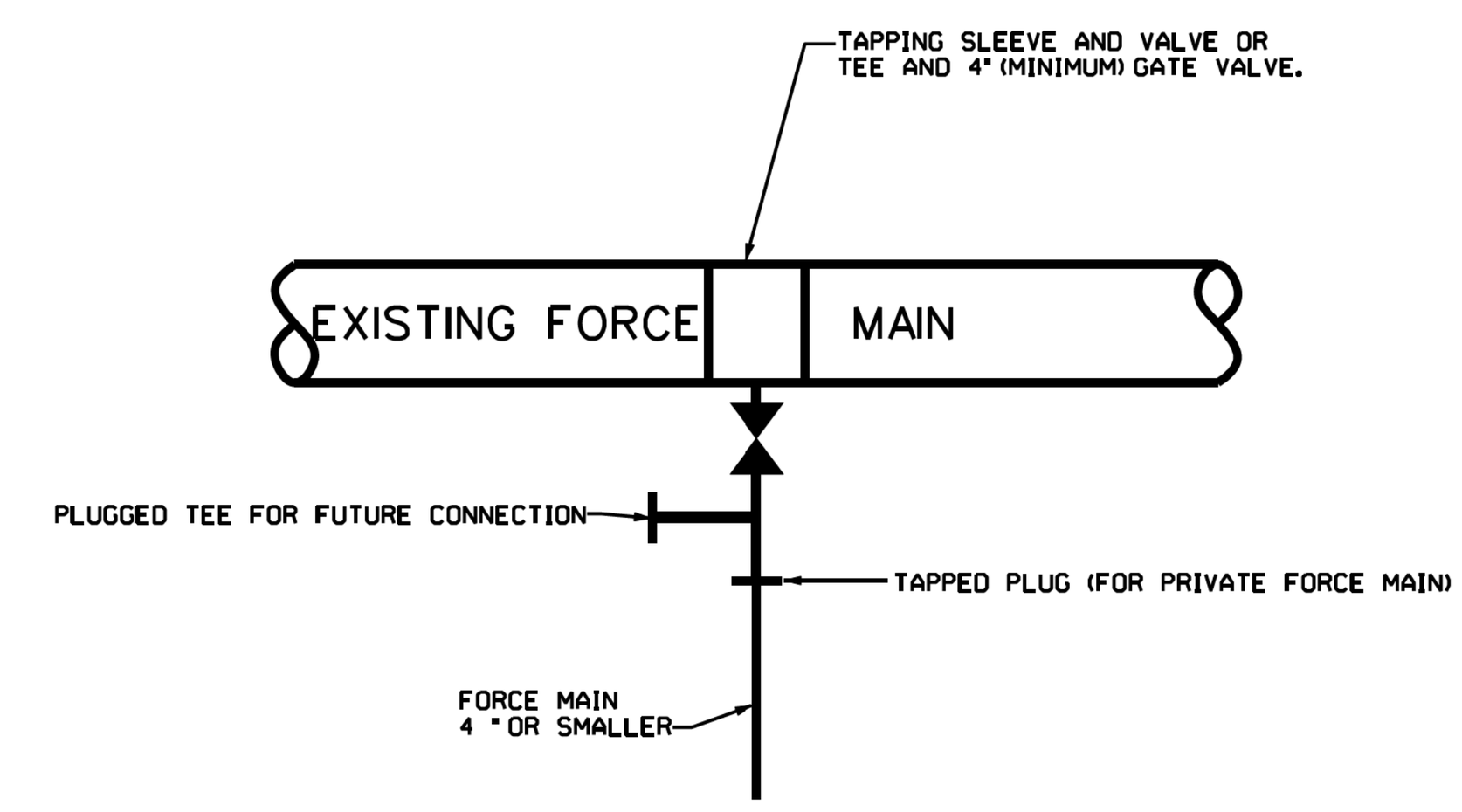


SANITARY SEWER MANHOLE INVERT SHAPING

CITY OF VIRGINIA BEACH • DEPARTMENT OF PUBLIC UTILITIES

4fmcon.dgn

REVISED: 08/23/12 DATE | PU DETAIL NO. 13-1
APPROVED: 04/13/01 DATE | ROBERT E. CLARK, P.E. ENGINEERING MANAGER



NOTE: IF PRIVATE FORCE MAIN IS CONNECTED, CITY MAINTENANCE WILL BE FROM THE TAPPED PLUG TO THE EXISTING PUBLIC FORCE MAIN.

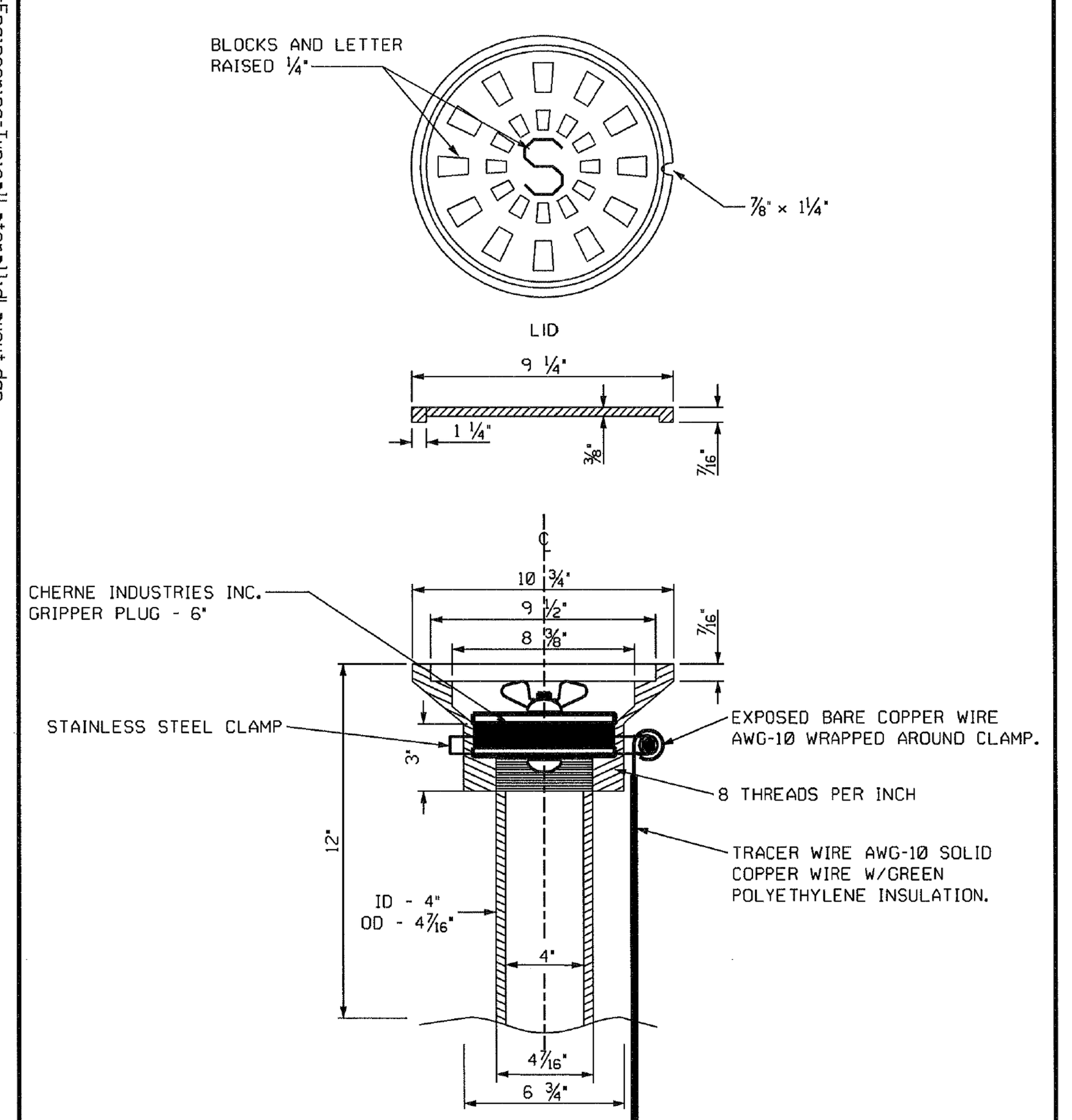
FORCE MAIN CONNECTIONS 4" AND SMALLER

CITY OF VIRGINIA BEACH • DEPARTMENT OF PUBLIC UTILITIES

...\REVIEWED4fmcon.dgn 08/22/2012 12:07:32 PM

20130311-PUD-Engineering-TypicalLateralLidLayout.dgn

REVISED: 12/27/13 DATE | PU DETAIL NO. 10
APPROVED: 12/31/13 DATE | ROBERT E. CLARK, P.E. ENGINEERING MANAGER



• SEE GENERAL NOTES - PU DETAIL NO 11A & 12A

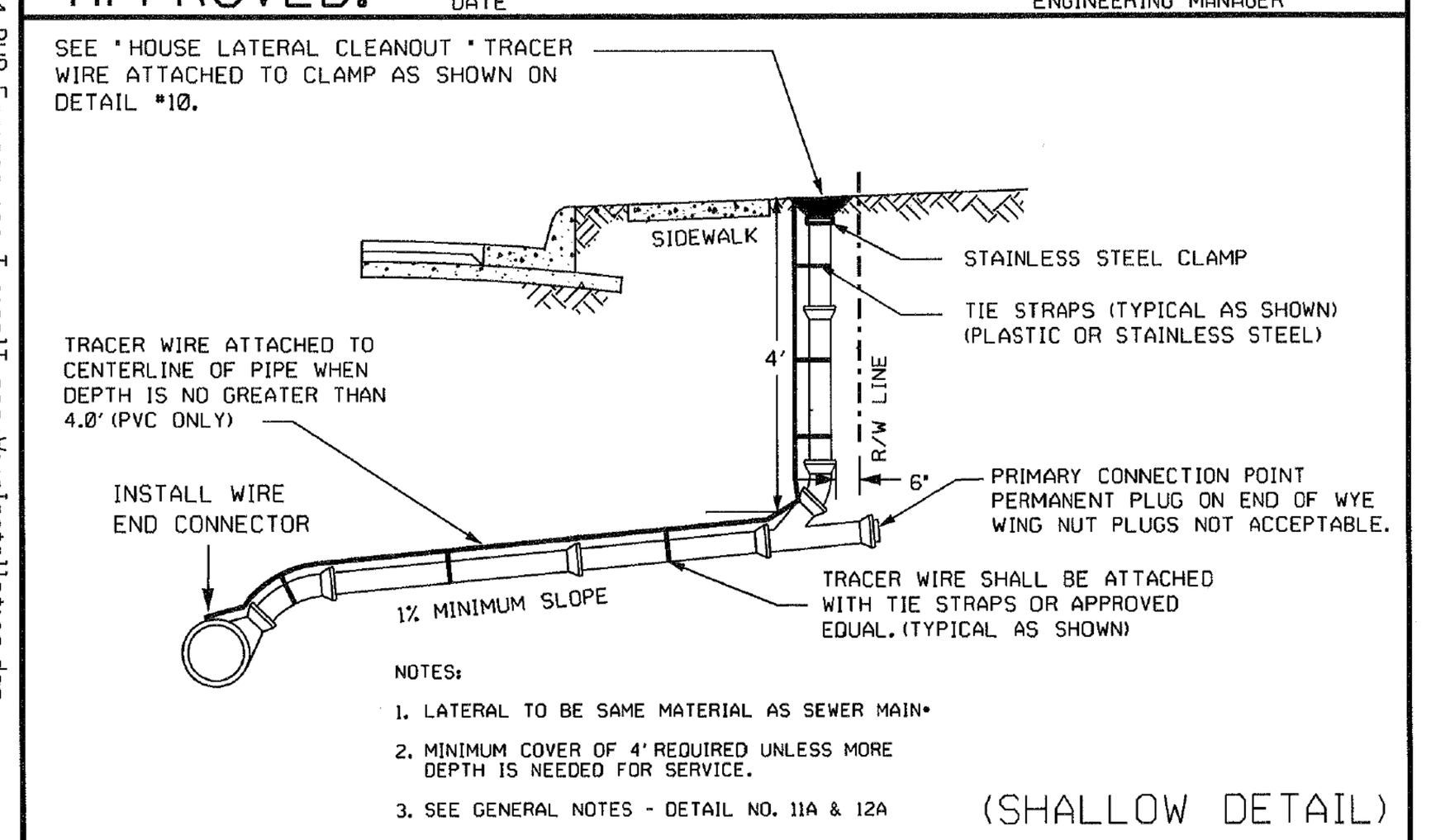
HOUSE LATERAL CLEANOUT

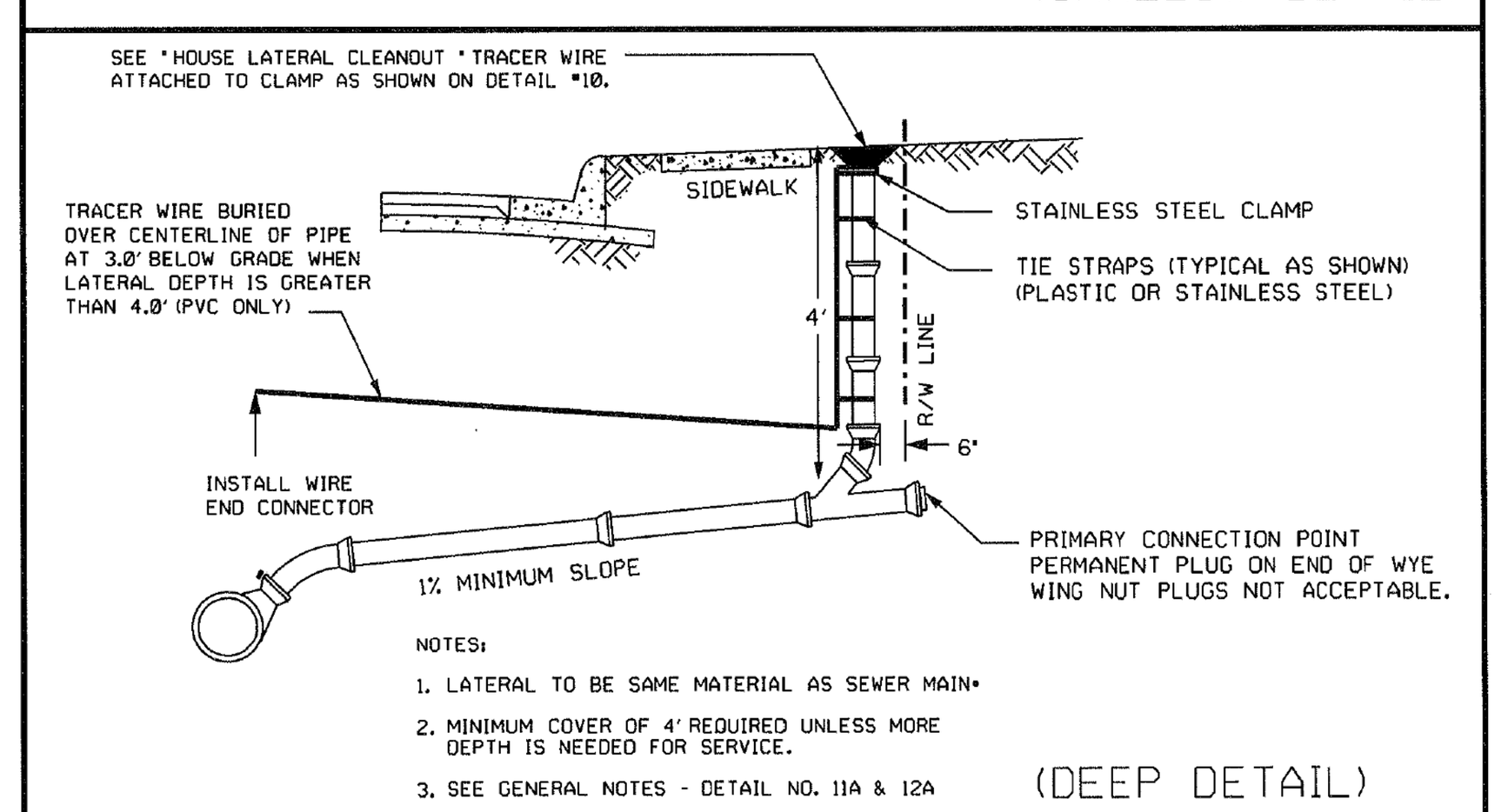
CITY OF VIRGINIA BEACH • DEPARTMENT OF PUBLIC UTILITIES

...\20130311-PUD-Engineering-Typic 12/26/2013 2:49:33 PM

20120824-PUD-Engineering-TypicalTracerWireInstallation.dgn

REVISED: 12/27/13 DATE | PU DETAIL NO. 11
APPROVED: 12/31/13 DATE | ROBERT E. CLARK, P.E. ENGINEERING MANAGER





TYPICAL LATERAL LAYOUT

CITY OF VIRGINIA BEACH • DEPARTMENT OF PUBLIC UTILITIES

...\20120824-PUD-Engineering-Typic 12/27/2013 12:33:56 PM

20120824-PUD-Engineering-TypicalLayoutForDeveloperProjects.dgn

REVISED: 12/27/13 DATE | PU DETAIL NO. 11A
APPROVED: 12/31/13 DATE | ROBERT E. CLARK, P.E. ENGINEERING MANAGER

House Lateral Cleanout - PU Detail NO. 10

6" Cherne Industries Inc. Gripper plug required. An exposed /bare AWG 10 solid copper. Tracer wire shall be fastened aroundthe exterior of the house lateral cleanout with a stainless steel clamp. The Green Polyethylene insulation shall only be removed where the tracer wire is wrapped around the stainless steel clamp.

Typical Lateral Layout - PU Detail NO. 12 (Plumbing Contractor)

The plumber may utilize the primary connection point, or install and utilize the secondary connection point. When installing the secondary connection point, the lateral riser assembly, House lateral cleanout and tracer wire shall be reinstalled by the plumbing contractor prior to occupancy. Cleanout riser assembly, and fittings shall be same material as the sewer lateral (P.V.C. Green in color ASTM D-3034 Schedule 26, or AWWA C900-Class150 (DR-18), D.I.-ANSI/AWWA C150/A21.50-91 Class52 w/401Protecto-ceramic epoxy lining). All Cleanout riser assembly fitting connections and the connection point to the private lateral shall be made with solid sleeves. Fernco couplings or equivalents are not permitted on the cleanout riser assembly, the riser fittings, and at the connection point to the private lateral (Right-of-Way line or where the easement ceases on private property).

Typical Lateral Layout - PU Detail NO. 11- (CIP Utility Contractor)

Shall only utilize the primary connection point when tying to an existing lateral. The connection point to the private lateral and to the house lateral cleanout shall be made with solid sleeves. Fernco couplings or equivalents are not permitted on the house lateral connection or at the connection point to the private lateral, unless the private lateral is VCP (Vitrified Clay pipe), or Orangeburg pipe (bituminized fiber sewer pipe). Cleanout riser assembly, and fittings shall be same material as the sewer lateral (P.V.C. Green in color ASTM D-3034 Schedule 26, or AWWA C900-Class 150 (DR-18), D.I.-ANSI/AWWA C150/A21.50-91 Class52 w/ 401 Protecto-ceramic epoxy lining).

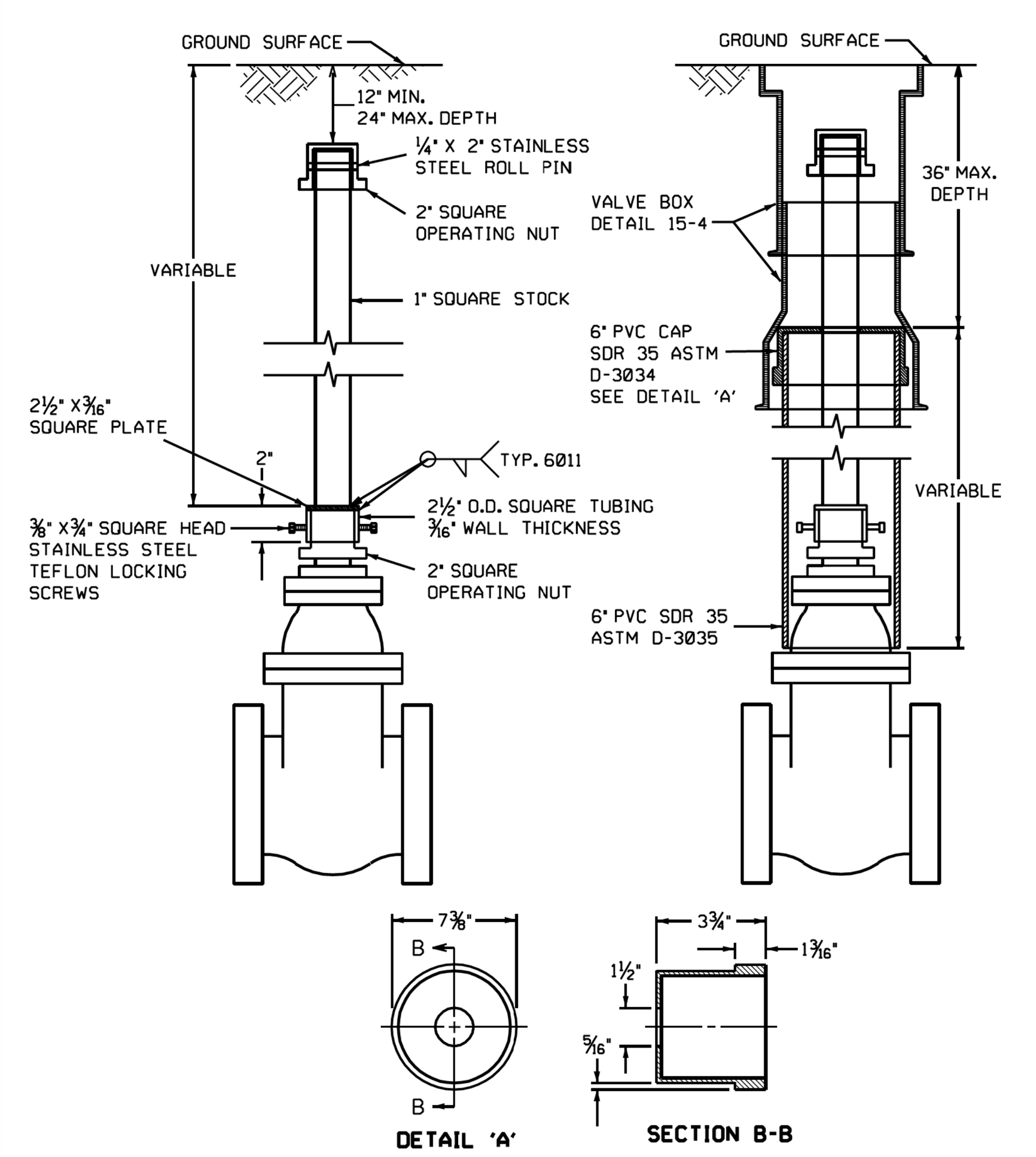
TYPICAL LATERAL LAYOUT GENERAL NOTES FOR CIP PROJECTS

CITY OF VIRGINIA BEACH • DEPARTMENT OF PUBLIC UTILITIES

...\LATERAL NOTES - B.dgn 12/31/2013 7:44:22 AM

valext.dgn

REVISED: / / DATE | PU DETAIL NO. 15-5
APPROVED: 04/13/01 DATE | GARY L. JONES, P.E ENGINEERING MANAGER



SCALE: NTS

VALVE STEM EXTENSION

CITY OF VIRGINIA BEACH • DEPARTMENT OF PUBLIC UTILITIES

12/1/2020

	PROJECT	SHEET NO.
	U000-134-842	19(1)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP, (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C501	19(2)

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

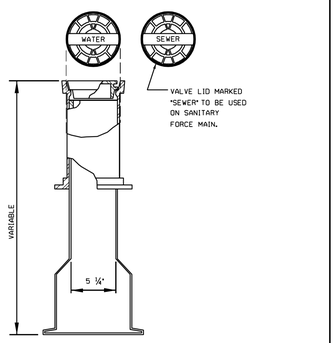
Rummel, Klepper & Kahl, LLP
Virginia Beach, Virginia
UTILITY ENGINEER

NOTES:

1. This sheet for Utility Relocation/Adjustment for Water and Sewer only.

valvebox.dgn

REVISED: DATE | PU DETAIL NO. 15-4
APPROVED: 04/13/01 DATE — GARY L. JONES, P.E. "ENGINEERING MANAGER"



NOTE:
1. BUFFALO PATTERN, TWO-PIECE SLIDING TYPE, ADJUSTABLE VALVE BOX, 5 ¼" SHAFT.

VALVE BOX
NOT TO SCALE

VALVE BOX

CITY OF VIRGINIA BEACH • DEPARTMENT OF PUBLIC UTILITIES

hydrsetting.dgn

REVISED: DATE | PU DETAIL NO. 18-1
APPROVED: 04/13/01 DATE — GARY L. JONES, P.E. "ENGINEERING MANAGER"

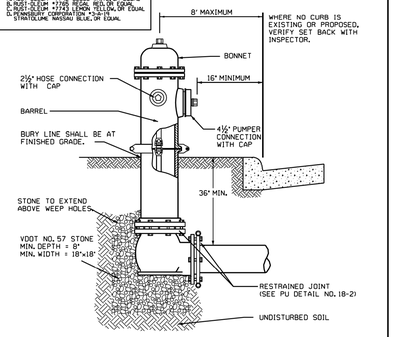
COLOR CODE

OWNER	BONNET	CAPS	BARREL
CITY	White	White	Red
CITY (COUNTER-CLOCKWISE)	Yellow	Yellow	Red
PRIVATE	Blue	Blue	Red
PRIVATE (COUNTER-CLOCKWISE)	Blue	Yellow	Red
DRY (DRAFTING)	Blue	Blue	Blue

HYDRANT PAINT

A. RUST-OLEUM #7792 GLOSS WHITE, OR EQUAL
B. RUST-OLEUM #7208 GLOSS YELLOW, OR EQUAL
C. RUST-OLEUM #7745 LEMON YELLOW, OR EQUAL
D. PENNSBURY CORPORATION #5-0-175 STRATOLOME MASSAU BLUE, OR EQUAL

NOTE:
HYDRANT SHALL BE VERTICALLY PLUMB, PUMPER CONNECTION SHALL FACE 90° TO STREET (C UNLESS OTHERWISE SPECIFIED.

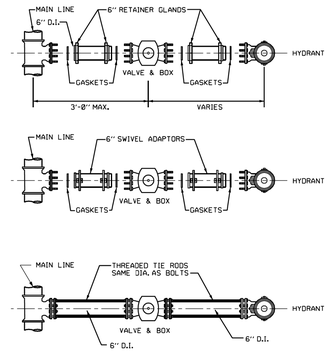


FIRE HYDRANT SETTING

CITY OF VIRGINIA BEACH • DEPARTMENT OF PUBLIC UTILITIES

hydrconn.dgn

REVISED: DATE | PU DETAIL NO. 18-2
APPROVED: 04/13/01 DATE — GARY L. JONES, P.E. "ENGINEERING MANAGER"



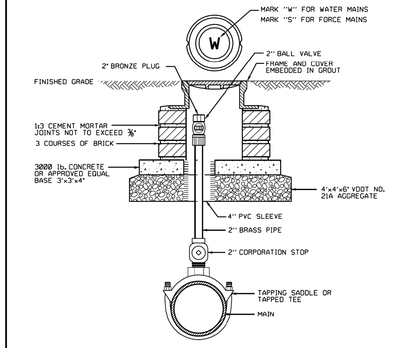
NOTE:
ALL HYDRANT CONNECTIONS MUST BE FIELD INSPECTED BY A PUBLIC UTILITIES INSPECTOR, PRIOR TO BACKFILLING.

FIRE HYDRANT CONNECTIONS

CITY OF VIRGINIA BEACH • DEPARTMENT OF PUBLIC UTILITIES

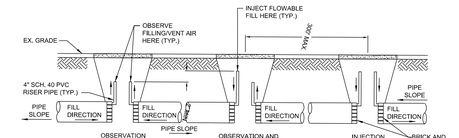
airvent.dgn

REVISED: DATE | PU DETAIL NO. 19
APPROVED: 04/13/01 DATE — GARY L. JONES, P.E. "ENGINEERING MANAGER"



AIR VENT/BLOW OFF ASSEMBLY

CITY OF VIRGINIA BEACH • DEPARTMENT OF PUBLIC UTILITIES

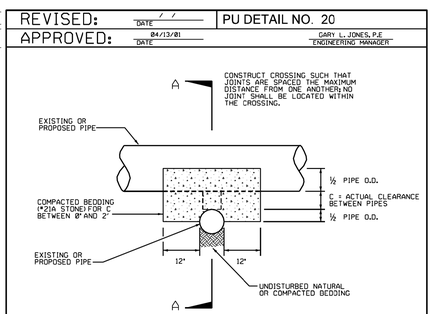


NOTES:
1. AT THE COMPLETION OF FILLING OPERATIONS, REMOVE RISER PIPES TO A MINIMUM OF 18" BELOW GRADE OR AS REQUIRED FOR PLACEMENT OF SURFACE FEATURES, WHICHEVER IS GREATER.
2. FLOWABLE FILL SHALL BE PUMPED.

CITY PRESSURE MAIN ABANDONMENT DETAIL
N.T.S.

pipebedding.dgn

REVISED: DATE | PU DETAIL NO. 20
APPROVED: 04/13/01 DATE — GARY L. JONES, P.E. "ENGINEERING MANAGER"



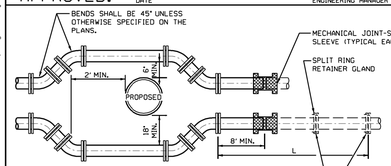
SECTION A-A

PIPE CROSSING BEDDING

CITY OF VIRGINIA BEACH • DEPARTMENT OF PUBLIC UTILITIES

watersewersetting.dgn

REVISED: DATE | PU DETAIL NO. 23
APPROVED: 04/13/01 DATE — GARY L. JONES, P.E. "ENGINEERING MANAGER"



SIZE (DIA.-INCHES)	4"	6"	8"	10"	12"	16"	18"	20"	24"
LENGTH ("L"-FEET)	12'	17'	22'	26'	31'	39'	43'	47'	55'

•DESIGN CONDITION
PRESSURE - 150 PSI
SOIL TYPE - SILT
DEPTH OF COVER - 3 FEET

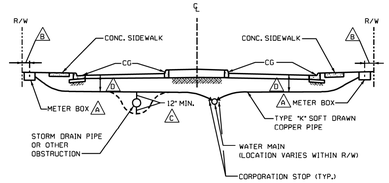
NOTES:
1. RETAINER GLANDS ARE REQUIRED AT EACH FITTING.
2. ALL PIPE AND FITTINGS SHALL BE DUCTILE IRON, MECHANICAL JOINT, CLASS 52 (MIN.). WATER MAIN AND FITTINGS SHALL BE CEMENT MORTAR LINED.
3. FOR 12" AND SMALLER LINES, MECHANICAL JOINT OFFSET FITTINGS MAY BE USED IN LIEU OF THE 45° BENDS SHOWN SUBJECT TO THE APPROVAL OF THE ENGINEER, IF USED, THE OFFSETS MUST RESULT IN THE CLEARANCES SHOWN BEING MET OR EXCEEDED.
4. EXISTING C.I. PIPE SHALL BE REPLACED WITH AN 8' MINIMUM LENGTH OF D.I. PIPE AT BOTH ENDS OF THE OFFSET AND RETAINER GLANDS INSTALLED.
5. THE EXISTING PIPE SHALL HAVE ALL JOINTS WITHIN THE LENGTH "L" RESTRAINED BY ADDING A SPLIT RING RETAINER GLAND ("MEG-A-LUG" OR EQUAL) WITH BOLTS TO THE M.J. BELL.
6. LENGTH "L" IN FEET SHALL CONFORM TO THE TABLE ABOVE.
7. SPLIT RING RETAINER GLANDS ARE FOR USE ON DUCTILE IRON MECHANICAL JOINT PIPE ONLY. IF EXISTING PIPE IS ANY OTHER MATERIAL, REMOVE AND REPLACE WITH D.I. MECHANICAL JOINT PIPE FOR THE LENGTH "L" SPECIFIED.
8. • REQUIRED RESTRAINING LENGTH (L) APPLIES FOR DESIGN CONDITION SPECIFIED.

VERTICAL OFFSET WATER AND SANITARY SEWER FACILITIES

CITY OF VIRGINIA BEACH • DEPARTMENT OF PUBLIC UTILITIES

watertitle.dgn

REVISED: DATE | PU DETAIL NO. 15-1
APPROVED: 04/13/01 DATE — GARY L. JONES, P.E. "ENGINEERING MANAGER"



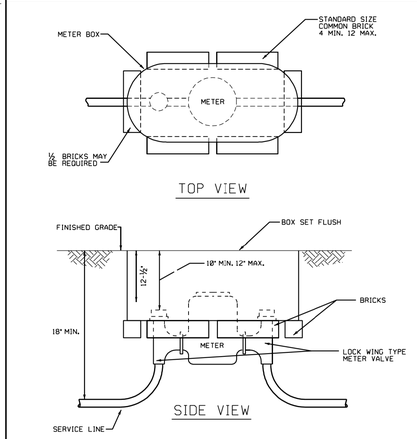
A SEE METER BOX SETTING DETAIL
B SEE PLAN FOR LOCATION
C GO OVER OBSTRUCTION IF MINIMUM COVER IS AVAILABLE
GO UNDER OBSTRUCTION IF MINIMUM COVER IS NOT AVAILABLE
D COVER WILL VARY WITHIN RIGHT-OF-WAY, 18" MINIMUM TO 38" MAXIMUM.

WATER METER BOX SERVICE LINE INSTALLATION

CITY OF VIRGINIA BEACH • DEPARTMENT OF PUBLIC UTILITIES

meterbox.dgn

REVISED: DATE | PU DETAIL NO. 15-2
APPROVED: 04/13/01 DATE — GARY L. JONES, P.E. "ENGINEERING MANAGER"



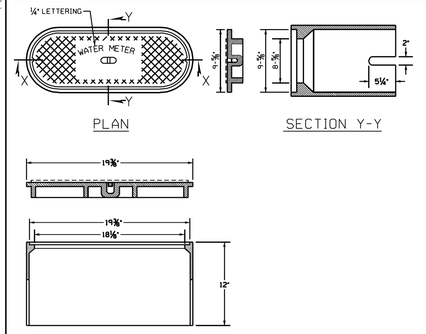
NOTES:
1. SET METER VALVE VERTICALLY PLUMB.
2. SEE METER BOX DETAIL.

5/8" AND 1" METER BOX SETTING

CITY OF VIRGINIA BEACH • DEPARTMENT OF PUBLIC UTILITIES

meterbox.dgn

REVISED: DATE | PU DETAIL NO. 15-3
APPROVED: 04/13/01 DATE — GARY L. JONES, P.E. "ENGINEERING MANAGER"



NOTES:
1. ASTM A-48 CLASS 30B CAST IRON.
2. ASPHALT COATED FINISH.

5/8" AND 1" METER BOX

CITY OF VIRGINIA BEACH • DEPARTMENT OF PUBLIC UTILITIES

NOTES:

1. Residential Services shall be provided with 1" Copper.

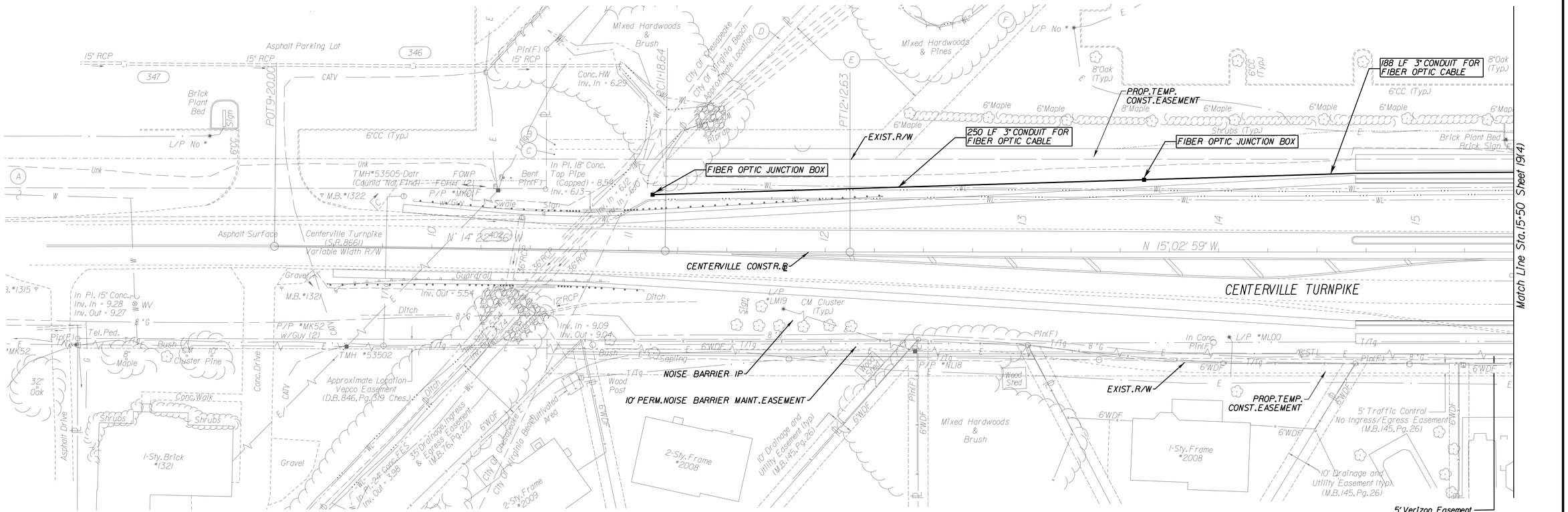
PROJECT	SHEET NO.
U000-134-842	19(2)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842,RW-201, C501	19(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
Virginia Beach, Virginia
UTILITY ENGINEER



UTILITY NOTES:
-WHEN RELOCATIONS OF WATER MAINS AND SEWER MAINS REQUIRE OFFSETS, REFER TO CITY OF VIRGINIA BEACH DPU DETAIL NO. 23.
-MAINTENANCE OF SERVICE IS REQUIRED DURING ALL PUBLIC UTILITY RELOCATIONS. CONTRACTOR SHALL COORDINATE UTILITY RELOCATIONS AND INSTALLATION WITH ROADWAY MAINTENANCE OF TRAFFIC REQUIREMENTS.
-ALL EXISTING UTILITY APPURTENANCES SHALL BE ADJUSTED TO FINAL GRADE.
-CONTACT PUBLIC UTILITIES BEFORE ADJUSTING ANY UTILITY APPURTENANCES SUCH AS WATER METERS, WATER VALVES, SANITARY SEWER CLEANOUTS, SANITARY SEWER MANHOLES, ETC.
-WATER MAINS SHALL MAINTAIN A MINIMUM HORIZONTAL SEPARATION OF 10' AND A MINIMUM VERTICAL SEPARATION OF 18" BETWEEN SANITARY AND STORM PIPES AND APPURTENANCES.

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)	
Mainline Profile	3A
Entrance Profile	13
Drainage Descriptions	2B(1)
Sign & Pave. Mark. Plan	X
Signal Plan	X
Landscaping Plan	X
Utility Plan	X
SWM Plan	X

SCALE 0 25' 50'

PROJECT	SHEET NO.
U000-134-842	19(3)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

SMH #382
Rim = 11.80
Inv. In = 8.35
Inv. In = 9.06
Inv. Out = 8.29

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842,RW-201, C501	19(4)

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
Virginia Beach, Virginia
UTILITY ENGINEER

CONNECT TO EXIST. 8" CI WATER MAIN

FIBER OPTIC JUNCTION BOX

62 LF 3" CONDUIT FOR FIBER OPTIC CABLE

RELOCATE (VERTICAL OFFSET) EXIST. 8" CI WATER SERVICE AND REMOVE EXIST. CONNECTION TO 8" CI WATER ABANDON OR REMOVE

215 LF 8" DI WATER MAIN
8"x8" TEE
8" GATE VALVE & BOX
(TYP OF 2)

NOISE BARRIER IP

EXIST. R/W

10' PERM. NOISE BARRIER MAINT. EASEMENT

RELOCATE EXIST. 8" CI WATER MAIN

RELOCATE EXIST. WATER METER BOX AND PROVIDE NEW 1" COPPER WATER SERVICE

PROP. TEMP. CONST. EASEMENT

LIVINGSTON OAK CONSTR. ℄

CONNECT TO EXIST. 8" CI WATER MAIN

REMOVE OR ABANDON EXIST. 8" CI WATER MAIN DURING INSTALLATION OF STORM PIPE

FIRE HYDRANT
75 LF 6" DI WATER MAIN
GATE VALVE & BOX
8"x6" TEE

250 LF 3" CONDUIT FOR FIBER OPTIC CABLE

PROP. TEMP. CONST. EASEMENT

PROP. R/W

FIBER OPTIC JUNCTION BOX

CENTERVILLE CONST. ℄

FIRE HYDRANT
23 LF 6" DI WATER MAIN
GATE VALVE & BOX
8"x6" TEE

575 LF 8" DI WATER MAIN

REMOVE OR ABANDON EXIST. 8" AND 6" SANITARY SEWER, 2" PVC SANITARY FORCE MAIN AND MANHOLE

MH #4
8' VF SANITARY SEWER MANHOLE
MANHOLE FRAME & COVER (WF&C-1)

246 LF 3" CONDUIT FOR FIBER OPTIC CABLE

EXIST. R/W

NOISE BARRIER 2P

10' PERM. NOISE BARRIER MAINT. EASEMENT

MH #3
8' VF SANITARY SEWER MANHOLE
MANHOLE FRAME & COVER (WF&C-1)

EXIST. 2" PVC SANITARY SERVICE LATERAL CONNECT TO MANHOLE

RELOCATE AND INSTALL 70 LF EXIST. 2" PVC PRIVATE SANITARY FORCE MAIN

FIBER OPTIC JUNCTION BOX

5' Verizon Easement

WATER METER & BOX
16 LF 1" COPPER WATER SERVICE

2.5' Verizon Easement

PROP. PERM. 20' MAINTENANCE EASE.

PROP. TEMP. CONST. EASEMENT

PROP. PERM. DRAINAGE / IMPOUNDMENT EASE.

93 LF 3" CONDUIT FOR FIBER OPTIC CABLE

141 LF 8" DI SANITARY SEWER PIPE

PROP. TEMP. CONST. EASEMENT

Match Line Sta. 15+50 Sheet 19(3)

Match Line Sta. 22+00 Sheet 19(5)

CHURCH ENTRANCE

CENTERVILLE TURNPIKE

LIVINGSTON OAK DRIVE

Asphalt Parking Lot

Asphalt Surface

Asphalt Walk

Concrete Apron

Brick Step

Brick Steps

Brick Column (2)

Stone Planter

Landscape Timber (Typ.)

Swing Bench
Wood Deck

Drainage Easement (M.B.145, Pg.26)

No Ingress/Egress Easement (M.B.145, Pg.26)

20' Drainage Easement (M.B.145, Pg.26)

5' Drainage Easement (Typ.) (D.B.689, Pg.172)

10' Drainage and Utility Easement (M.B.95, Pg.26)

10' Drainage Easement (M.B.133, Pg.18)

5' Traffic Control

Mixed Hardwoods

Mixed Hardwoods & Pines

Mixed Hardwoods & Brush

Gravel Drive

2-Sty. Brick #905

2-Sty. Brick #913

2-Sty. Frame & Stucco #2057

2-Sty. Brick & Frame #2100

Wood Shed

Metal Shed

Plastic Shed

Connection Not Found

Signal Pole

Sign

Shrubs

Riprap

Conc. Apron

Conc. Walk

Conc. Drive

Brick Sign

Landscape & Utility Easement (M.B.133, Pg.76)

5' Drainage Easement (M.B.133, Pg.76)

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)	
Mainline Profile	4A
Entrance Profile	13
Drainage Descriptions	2B(1)
Sign & Pave. Mark. Plan	X
Signal Plan	X
Landscaping Plan	X
Utility Plan	X
SWM Plan	21(1)

SCALE 0 25' 50'

PROJECT	SHEET NO.
U000-134-842	19(4)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017

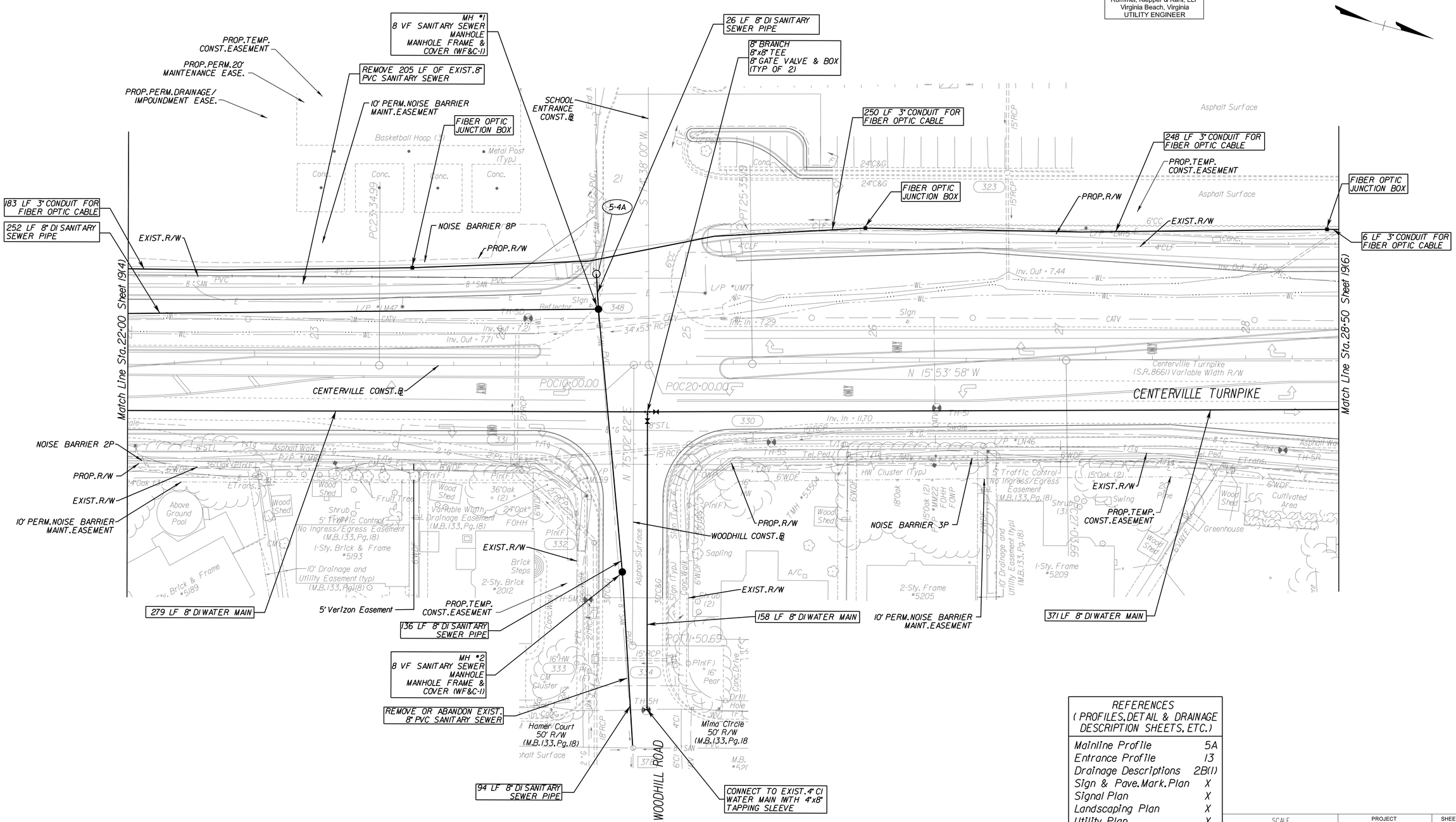
SMH #377
Rim = 12.55
Inv. In = 6.93
Inv. In = 6.97
Inv. Out = 6.86

SMH #378
Rim = 11.54
Inv. In = 5.89
Inv. In = 5.94
Inv. In = 5.90
Inv. Out = 5.86

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842,RW-201 C501	19(5)

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
Virginia Beach, Virginia
UTILITY ENGINEER


MH #1
8 VF SANITARY SEWER MANHOLE
MANHOLE FRAME & COVER (WF&C-1)
PROP.TEMP. CONST.EASEMENT
PROP.PERM.20' MAINTENANCE EASE.
PROP.PERM.DRAINAGE/ IMPOUNDMENT EASE.
REMOVE 205 LF OF EXIST.8" PVC SANITARY SEWER
10' PERM.NOISE BARRIER MAINT.EASEMENT
FIBER OPTIC JUNCTION BOX
SCHOOL ENTRANCE CONST.℄
26 LF 8" DI SANITARY SEWER PIPE
8" BRANCH
8"x8" TEE
8" GATE VALVE & BOX (TYP OF 2)
250 LF 3" CONDUIT FOR FIBER OPTIC CABLE
248 LF 3" CONDUIT FOR FIBER OPTIC CABLE
PROP.TEMP. CONST.EASEMENT
FIBER OPTIC JUNCTION BOX
6 LF 3" CONDUIT FOR FIBER OPTIC CABLE
183 LF 3" CONDUIT FOR FIBER OPTIC CABLE
252 LF 8" DI SANITARY SEWER PIPE
EXIST.R/W
NOISE BARRIER 8P
PROP.R/W
Match Line Sta.22+00 Sheet 19(4)
Match Line Sta.28+50 Sheet 19(6)
CENTERVILLE CONST.℄
CENTERVILLE TURNPIKE
Centerville Turnpike (S.R.866) Variable Width R/W
NOISE BARRIER 2P
PROP.R/W
EXIST.R/W
10' PERM.NOISE BARRIER MAINT.EASEMENT
279 LF 8" DI WATER MAIN
5' Verizon Easement
PROP.TEMP. CONST.EASEMENT
136 LF 8" DI SANITARY SEWER PIPE
MH #2
8 VF SANITARY SEWER MANHOLE
MANHOLE FRAME & COVER (WF&C-1)
REMOVE OR ABANDON EXIST. 8" PVC SANITARY SEWER
94 LF 8" DI SANITARY SEWER PIPE
WOODHILL ROAD
CONNECT TO EXIST.4" CI WATER MAIN WITH 4"x8" TAPPING SLEEVE
WOODHILL CONST.℄
EXIST.R/W
PROP.R/W
158 LF 8" DI WATER MAIN
NOISE BARRIER 3P
10' PERM.NOISE BARRIER MAINT.EASEMENT
EXIST.R/W
PROP.TEMP. CONST.EASEMENT
371 LF 8" DI WATER MAIN
Homer Court 50' R/W (M.B.133, Pg.18)
Mima Circle 50' R/W (M.B.133, Pg.18
Above Ground Pool
Basketball Hoop (2)
Metal Post (Typ.)
Asphalt Surface
Asphalt Walk
Brick Steps
Sapling
Shrub
Fruit Tree
Cultivated Area
Greenhouse
Wood Shed
Swing
Sign
Reflector
Drill Hole (Typ.)
Inv. Out = 7.21
Inv. Out = 7.71
Inv. Out = 7.44
Inv. Out = 7.60
Inv. In = 7.29
Inv. In = 11.70
N 15° 53' 58" W
N 75° 02' 22" E
POC19+00.00
POC20+00.00
POC1+50.69
PC23+34.99
PT25+54.19
S 14° 38' 00" W
5-4A
348
323
330
331
332
333
334
21
25
TH-5D
TH-5M
TH-5H
TH-5I
TH-5R
TH-5S
TH-5S
TH-5S

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C501,	19(6)

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
Virginia Beach, Virginia
UTILITY ENGINEER

Match Line Sta.28+50 Sheet 19(5)

Match Line Sta.35+00 Sheet 19(7)

237 LF 3" CONDUIT FOR FIBER OPTIC CABLE

PROP.TEMP. CONST.EASEMENT

PROP.R/W

EXIST.R/W

FIBER OPTIC JUNCTION BOX

CONNECT TO EXIST.12" DI WATER MAIN WITH 8" TAPPING SLEEVE AND VALVE & BOX

EXIST.R/W

LYNNHAVEN CONST.℄

PROP.TEMP. CONST.EASEMENT

RELOCATE EXIST. 6" DI WATER MAIN AND FIRE HYDRANT

FIRE HYDRANT 63 LF 6" DI WATER MAIN 6" GATE VALVE & BOX 12"X6" TEE

208 LF 3" CONDUIT FOR FIBER OPTIC CABLE

FIBER OPTIC JUNCTION BOX

305 LF 20" DI SANITARY SEWER FORCE MAIN

278 LF 16" DI WATER MAIN

204 LF 3" CONDUIT FOR FIBER OPTIC CABLE

PROP.TEMP. CONST. EASEMENT

EXIST.R/W

FIBER OPTIC JUNCTION BOX

6 LF 3" CONDUIT FOR FIBER OPTIC CABLE

RELOCATE (VERTICAL OFFSET) 120 LF EXIST.12" DI WATER MAIN

CENTERVILLE TURNPIKE

CENTERVILLE CONST.℄

370 LF 8" DI WATER MAIN

PROP.R/W

EXIST.R/W

NOISE BARRIER 3P

10' PERM. NOISE BARRIER MAINT. EASEMENT

PROP.TEMP. CONST.EASEMENT

5' Verizon Easement

FIRE HYDRANT 44 LF 6" DI WATER MAIN 6" GATE VALVE & BOX 8"x6" TEE

TIE-IN TO EXIST.20" CI SFM

TIE-IN TO EXIST.16" CI WATER MAIN

EXIST.R/W

PROP.R/W

PROP.TEMP. CONST.EASEMENT

ABANDON EXIST.16" CI WATER MAIN AND 20" CI SEWER FORCE MAIN

16" CI SFM FOR CITY OF VIRGINIA BEACH SERVICE AREAS 463 AND 471

EXIST.R/W

PROP.TEMP. CONST.EASEMENT

LYNNHAVEN PARKWAY

EXIST.R/W

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)	
Mainline Profile	6A
Entrance Profile	13
Drainage Descriptions	2B(1)
Sign & Pave. Mark. Plan	X
Signal Plan	X
Landscaping Plan	X
Utility Plan	X
SWM Plan	

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	19(6)

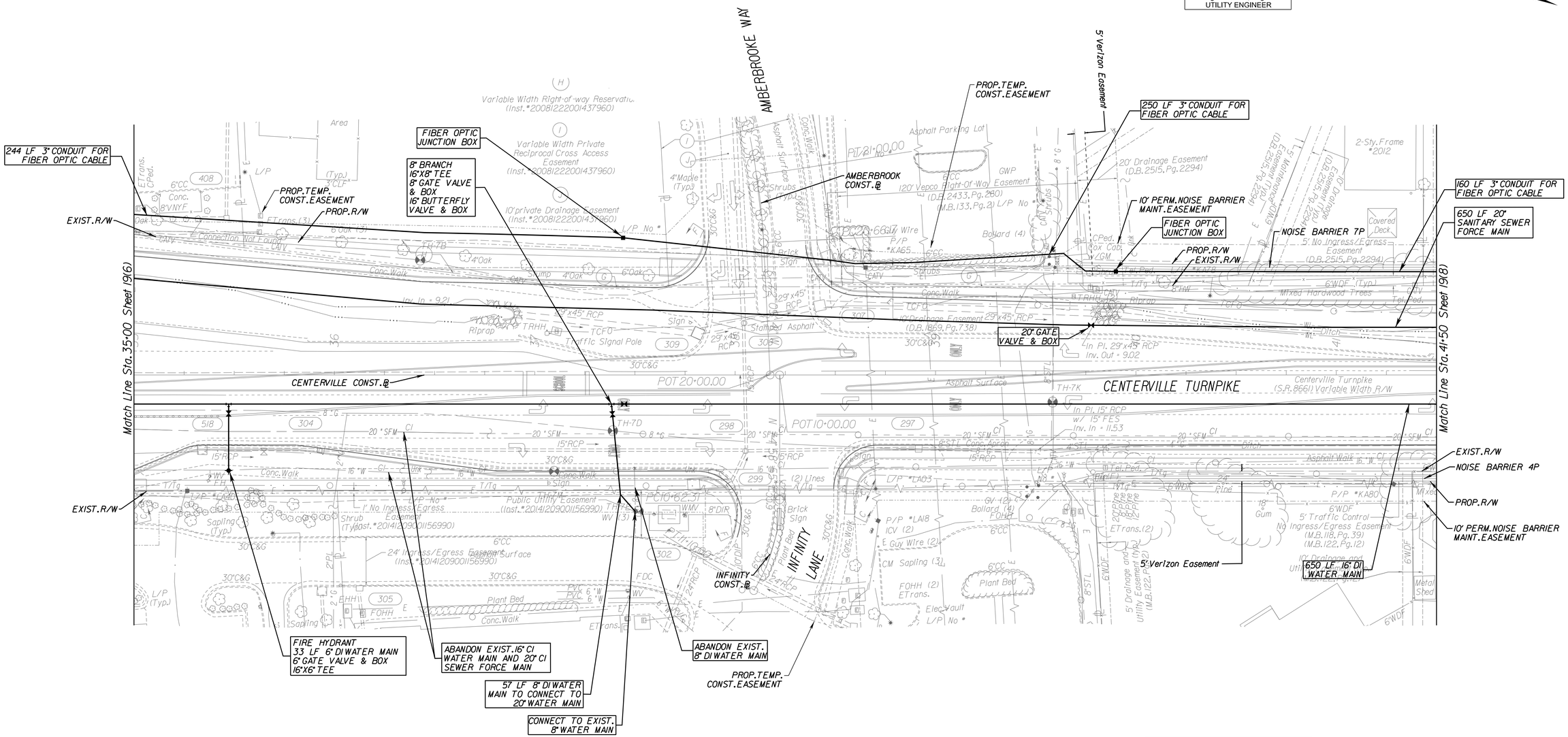
12/1/2020

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, P01, R201, C501	19(7)

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
Virginia Beach, Virginia
UTILITY ENGINEER



REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)	
Mainline Profile	7A
Entrance Profile	13
Drainage Descriptions	2B(1)
Sign & Pave. Mark. Plan	X
Signal Plan	X
Landscaping Plan	X
Utility Plan	X
SWM Plan	

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	19(7)

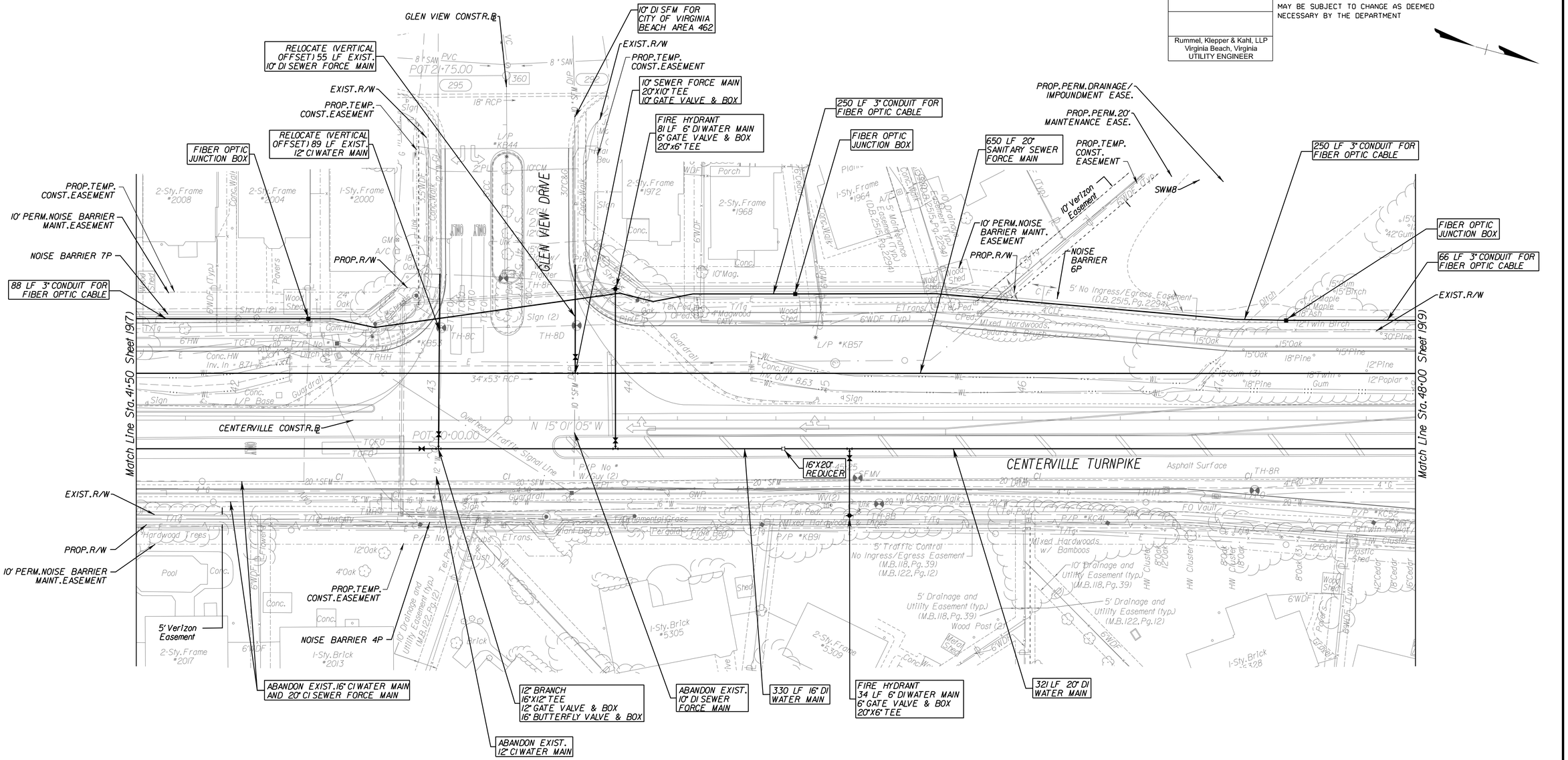
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

SMH #360
Rim = 14.05
Inv. In = 7.69
Inv. In = 7.70
Inv. Out = 7.63

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C501	19(8)

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
Virginia Beach, Virginia
UTILITY ENGINEER



REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)	
Mainline Profile	8A
Entrance Profile	13
Drainage Descriptions	X
Sign & Pave. Mark. Plan	X
Signal Plan	X
Landscaping Plan	X
Utility Plan	X
SWM Plan	X

SCALE 0 25' 50'

PROJECT	SHEET NO.
U000-134-842	19(8)

12/1/2020

12/1/2020
4:9:54 PM

ul0938119(09).dgn
Plotted By: RK&K - JMK

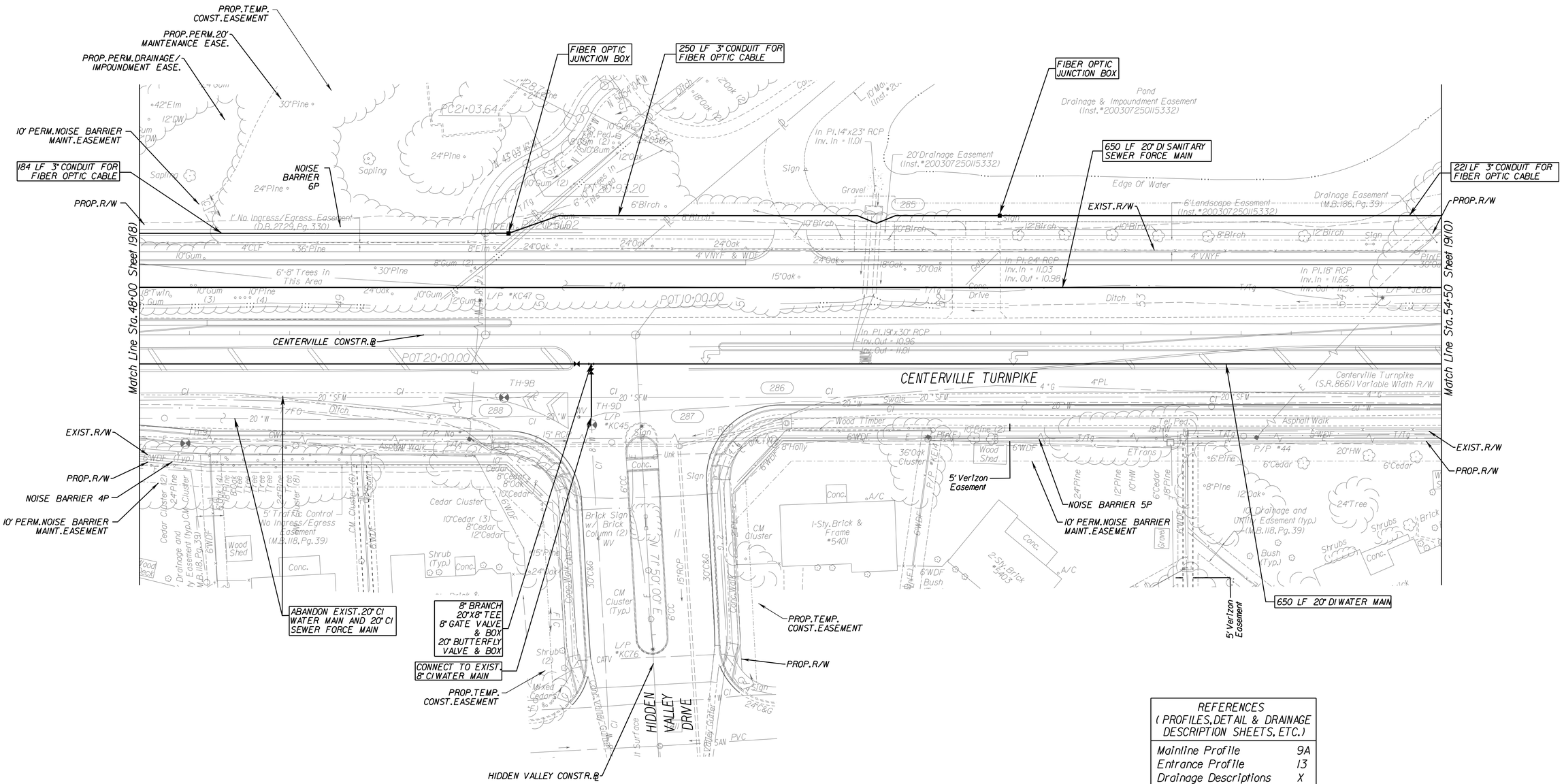
PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

SMH #411
Rim = 13.31
Inv. In = 9.49
Inv. In = 8.47
Inv. Out = 8.49

Rummel, Klepper & Kahl, LLP
Virginia Beach, Virginia
UTILITY ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C501	19(9)

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



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

Mainline Profile	9A
Entrance Profile	13
Drainage Descriptions	X
Sign & Pave. Mark. Plan	X
Signal Plan	X
Landscaping Plan	X
Utility Plan	X
SWM Plan	X

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	19(9)

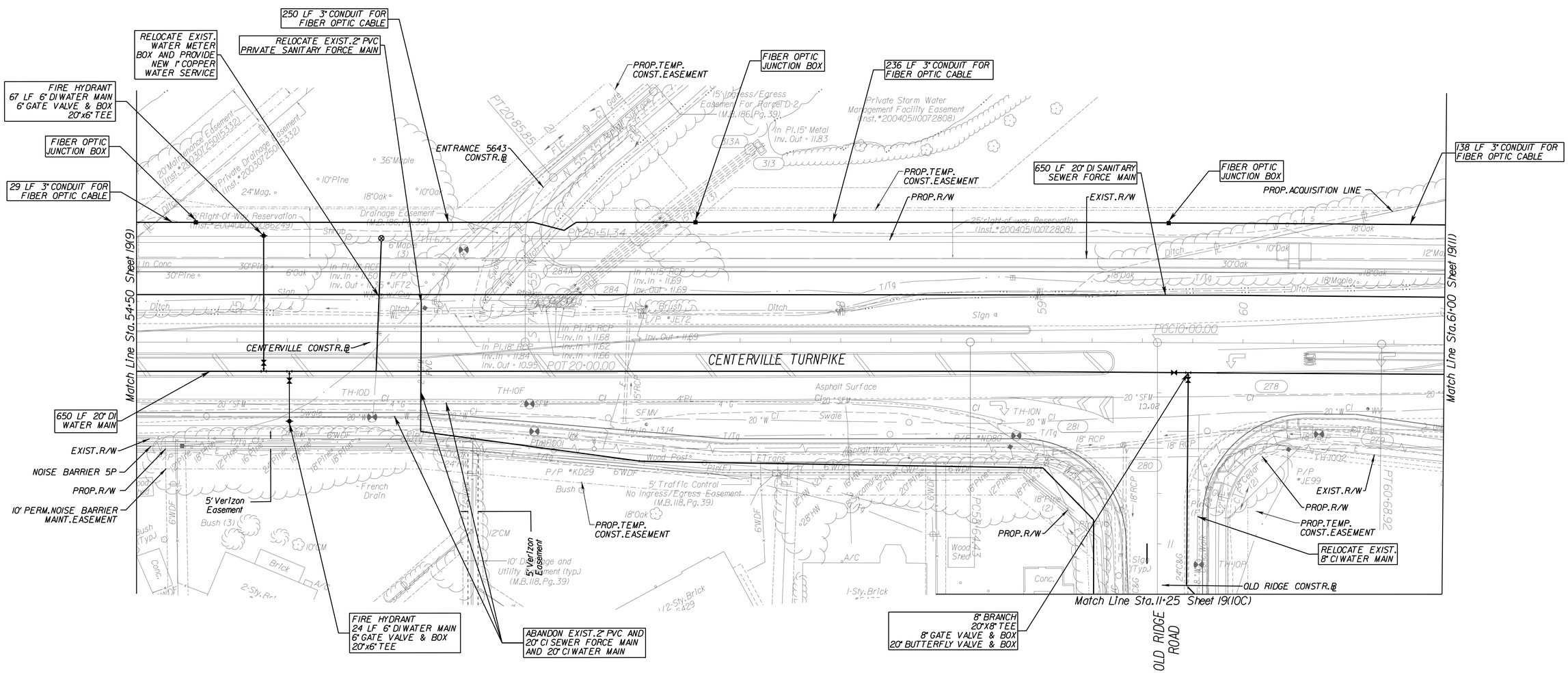
12/1/2020

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C501	19(10)

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
Virginia Beach, Virginia
UTILITY ENGINEER



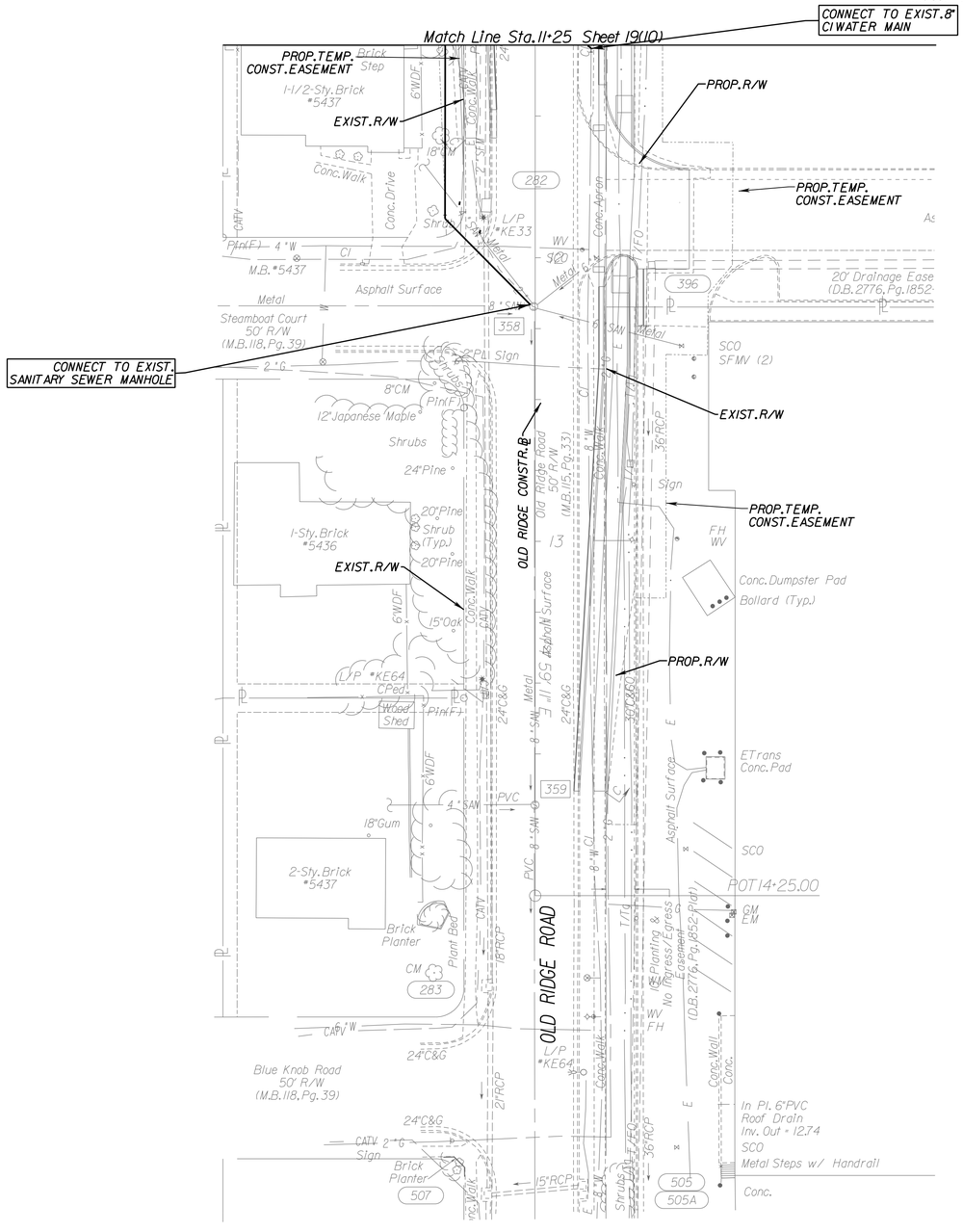
REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)	
Mainline Profile	10A
Entrance Profile	13
Drainage Descriptions	X
Sign & Pave. Mark. Plan	X
Signal Plan	X
Landscaping Plan	X
Utility Plan	X
SWM Plan	X

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	19(10)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

SMH #358
Rim = 14.38
Inv. In = 11.55
Inv. In = 11.66
Inv. In = 12.33
Inv. In = 11.62
Inv. Out = 11.53

SMH #359
Rim = 13.75
Inv. In = 11.07
Inv. In = 11.20
Inv. Out = 11.04



REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C-501	19(10C)

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 Virginia Beach, Virginia HYDRAULIC ENGINEER	Rummel, Klepper & Kahl, LLP Virginia Beach, Virginia ROADWAY ENGINEER

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

Mainline Profile	10B
Entrance Profile	13
Drainage Descriptions	X
Sign & Pave. Mark. Plan	X
Signal Plan	X
Landscaping Plan	X
Utility Plan	X
SWM Plan	

SCALE 0 25' 50'

PROJECT U000-134-842

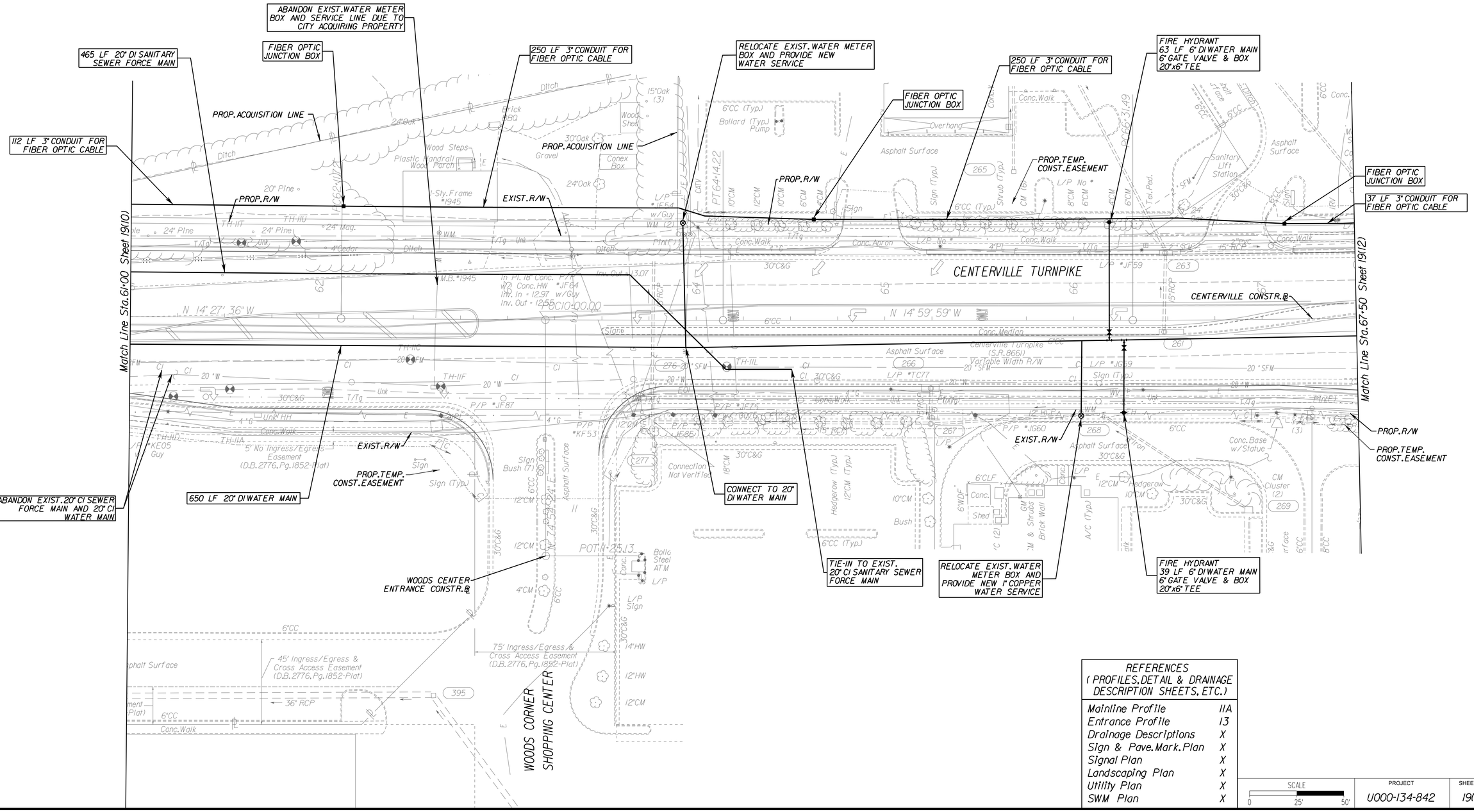
SHEET NO. 19(10C)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C501,	19(11)

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
Virginia Beach, Virginia
UTILITY ENGINEER



REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)	
Mainline Profile	IIA
Entrance Profile	I3
Drainage Descriptions	X
Sign & Pave. Mark. Plan	X
Signal Plan	X
Landscaping Plan	X
Utility Plan	X
SWM Plan	X

SCALE	PROJECT	SHEET NO.
0 25' 50'	U000-134-842	19(11)

PROJECT MANAGER Laurie Murphy, P.E. (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc., (757) 368-0945, 12/08/2017

SMH "355 Rim = 14.71 Inv. In = 5.66(Drop) Inv. In = 3.13 Inv. Out = 2.23

SMH "371 Rim = 15.04 Inv. Out = 2.95

SMH "372 Rim = 14.94 Inv. In = 2.18 Inv. In = 2.16 Inv. In = 2.19 Inv. Out = 2.12

SMH "373 Rim = 15.52 Inv. In = 1.80 Inv. Out = 1.70

SMH "375 Rim = 14.70 Inv. Out = 2.80

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201, C501	19(12)

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
Virginia Beach, Virginia
UTILITY ENGINEER

CONNECT TO 20" DIWATER MAIN

203 LF 3" CONDUIT FOR FIBER OPTIC CABLE

PROP.TEMP. CONST.EASEMENT

FIBER OPTIC JUNCTION BOX

EXIST.R/W

PROP.R/W

Match Line Sta.67+50 Sheet 19(11)

CENTERVILLE CONSTR.

CENTERVILLE TURNPIKE

KEMPSVILLE ROAD

Centerville Turnpike (S.R.8661) Variable Width R/W

15'x15' Public Utility Easement (M.B. 294, Pg.52)

Existing 5' R/W Reservation (M.B. 281, Pg.39)

AREA UNDER CONSTRUCTION

290 LF 20" DI WATER MAIN

RELOCATE EXIST. WATER METER BOX AND PROVIDE NEW WATER SERVICE

ABANDON EXIST. 20" CI WATER MAIN

20" BUTTERFLY VALVE & BOX

TIE-IN TO EXIST. 20" CI WATER MAIN

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)	
Mainline Profile	12A
Entrance Profile	13
Drainage Descriptions	X
Sign & Pave. Mark. Plan	X
Signal Plan	X
Landscaping Plan	X
Utility Plan	X
SWM Plan	X

SCALE 0 25' 50'

PROJECT	SHEET NO.
U000-134-842	19(12)

12/1/2020

12/1/2020
4:22:09 PM

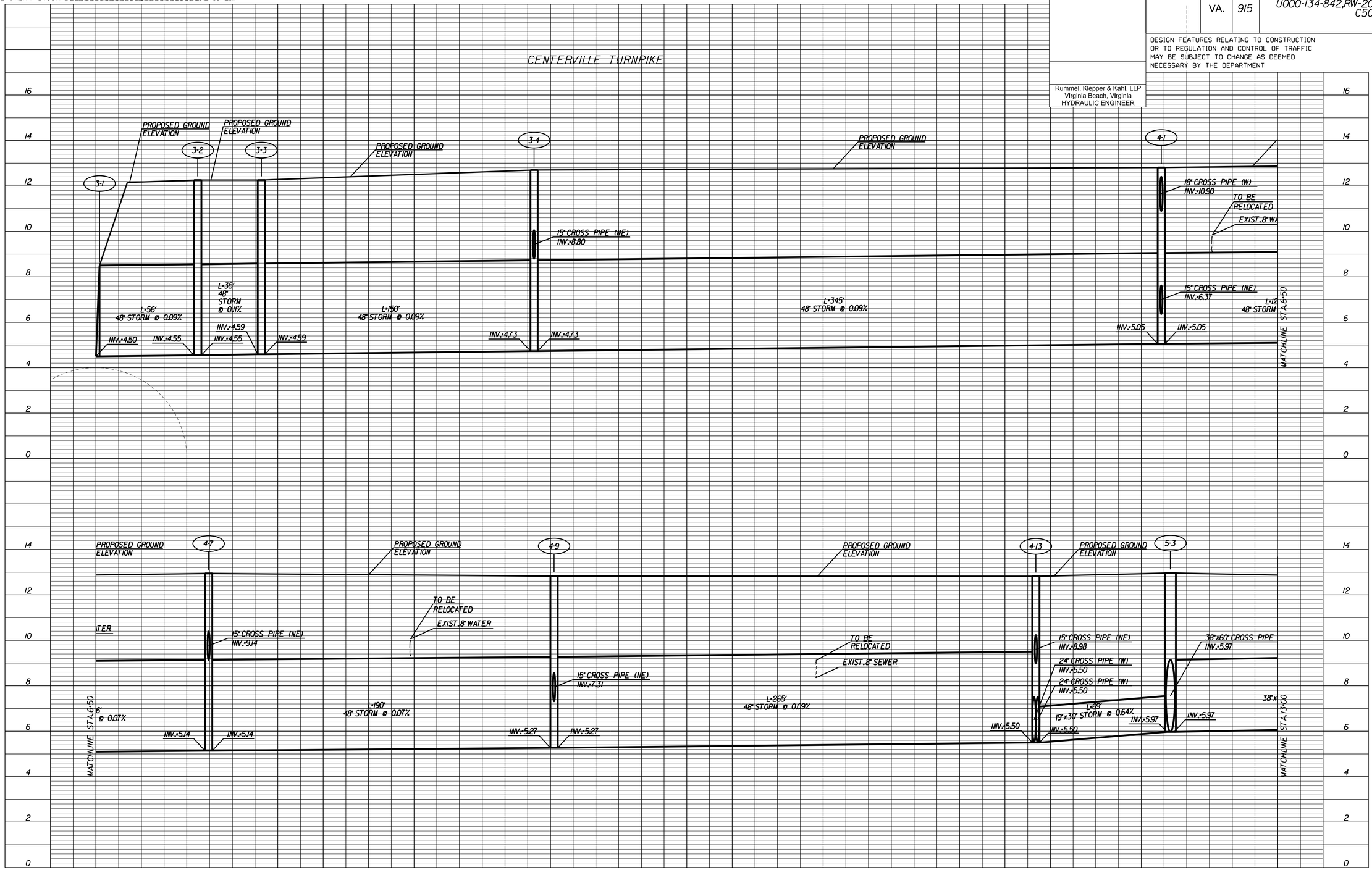
hl093812001l.dgn
Plotted By: RK&K - JMK

PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C501	20(1)

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
Virginia Beach, Virginia
HYDRAULIC ENGINEER



NOTE:
CREST VERTICAL CURVE DESIGN SPEED BASED ON STOPPING SIGHT DISTANCE (SSD)
SAG VERTICAL CURVES DESIGN SPEED BASED ON "K" VALUE

HORIZ. 1" = 25' VERT. 1" = 2'	PROJECT U000-134-842	SHEET NO. 20(1)

12/1/2020

12/1/2020
4:22:11 PM

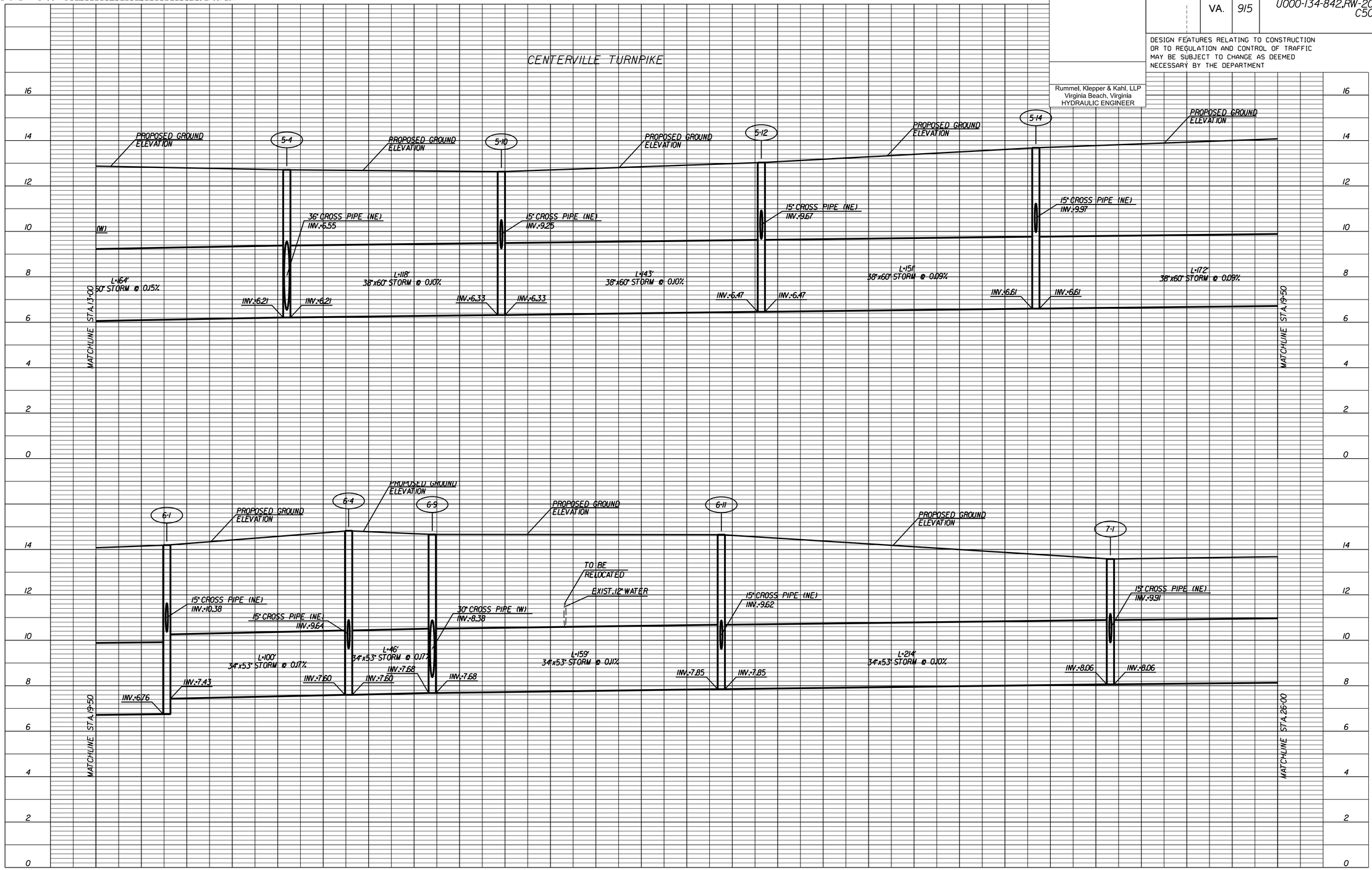
hl093812002l.dgn
Plotted By: RK&K - JMK

PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C501	20(2)

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

Rummel, Klepper & Kahl, LLP
Virginia Beach, Virginia
HYDRAULIC ENGINEER



NOTE:
CREST VERTICAL CURVE DESIGN SPEED BASED ON STOPPING SIGHT DISTANCE (SSD)
SAG VERTICAL CURVES DESIGN SPEED BASED ON "K" VALUE

HORIZ. 1" = 25' VERT. 1" = 2'	PROJECT U000-134-842	SHEET NO. 20(2)

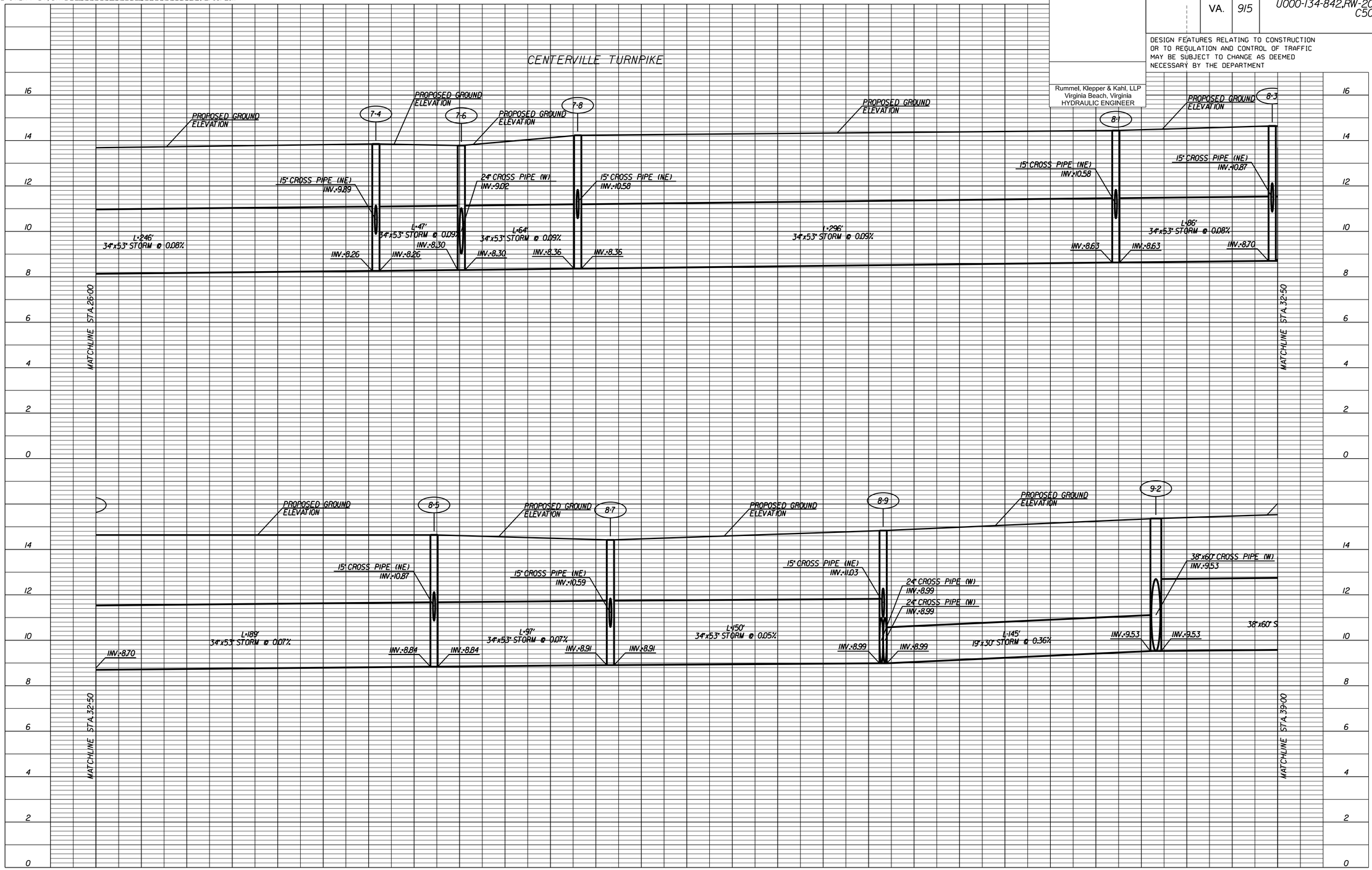
12/1/2020

PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C501	20(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
Virginia Beach, Virginia
HYDRAULIC ENGINEER



NOTE:
CREST VERTICAL CURVE DESIGN SPEED BASED ON STOPPING SIGHT DISTANCE (SSD)
SAG VERTICAL CURVES DESIGN SPEED BASED ON "K" VALUE

HORIZ. 1" = 25' VERT. 1" = 2'	PROJECT U000-134-842	SHEET NO. 20(3)

12/1/2020
4:22:14 PM

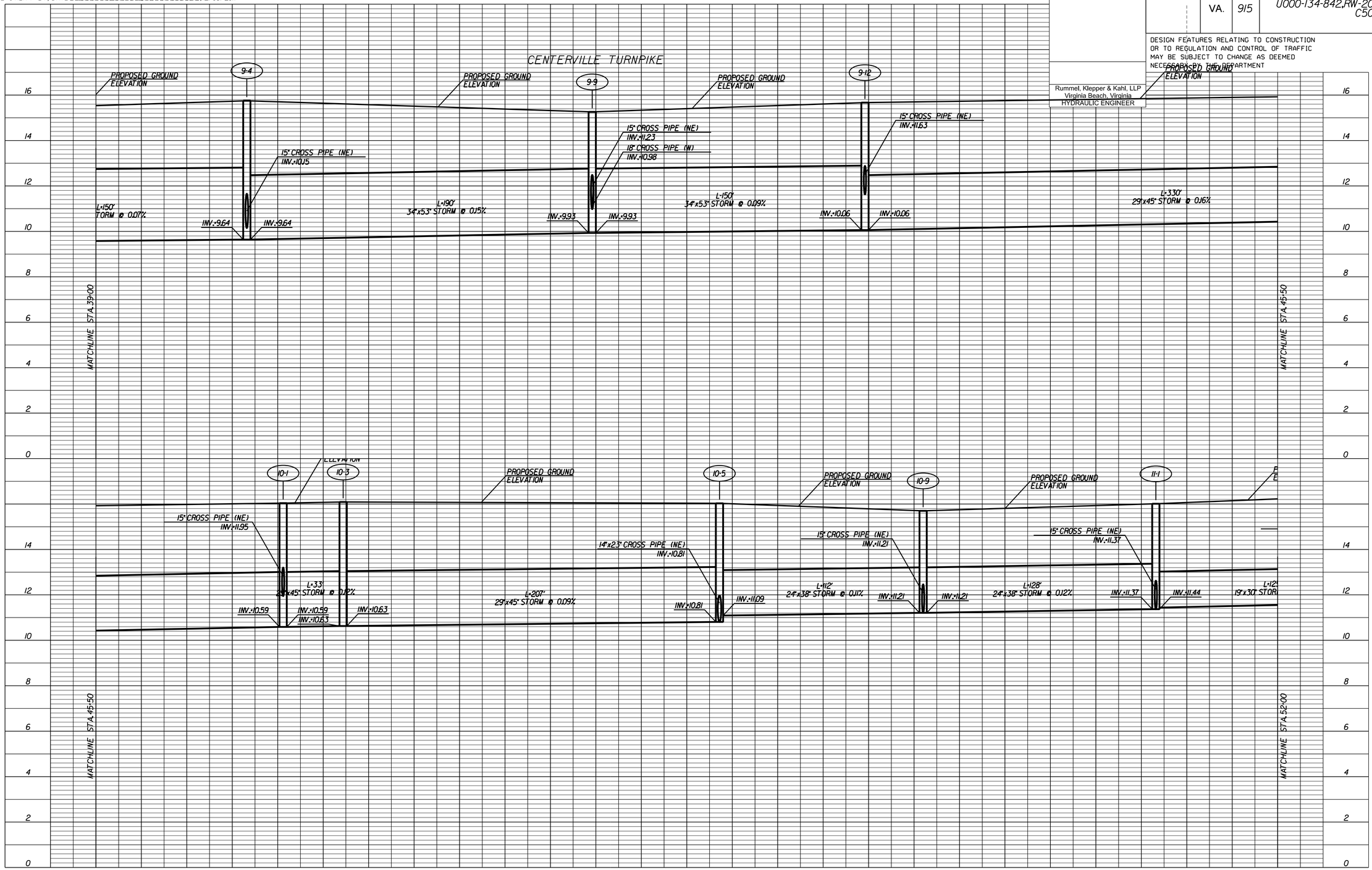
hl093812001d1.dgn
Plotted By: RK&K - JMK

PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C501	20(4)

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

Rummel, Klepper & Kahl, LLP
Virginia Beach, Virginia
HYDRAULIC ENGINEER



NOTE:
CREST VERTICAL CURVE DESIGN SPEED BASED ON STOPPING SIGHT DISTANCE (SSD)
SAG VERTICAL CURVES DESIGN SPEED BASED ON "K" VALUE

HORIZ. 1" = 25' VERT. 1" = 2'	PROJECT U000-134-842	SHEET NO. 20(4)

12/1/2020

12/1/2020
4:22:16 PM

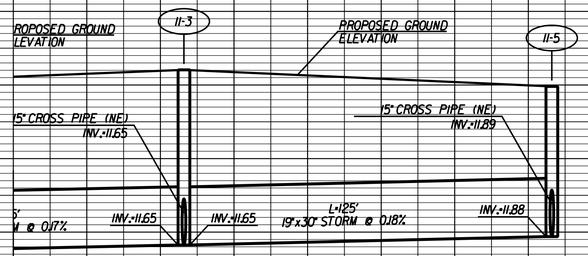
hl093812005.dgn
Plotted By: RK&K - JMK

PROJECT MANAGER Laurie Murphy, PE (757) 385-8465 (City of Virginia Beach)
SURVEYED BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017
DESIGN BY Rummel, Klepper & Kahl, LLP (757) 498-4123
SUBSURFACE UTILITY BY, DATE Precision Measurements, Inc. (757) 368-0945, 12/08/2017

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	915	U000-134-842, RW-201 C501	20(5)

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
Virginia Beach, Virginia
HYDRAULIC ENGINEER



CENTERVILLE TURNPIKE

MATCHLINE STA.52+00

MATCHLINE STA.45+50

MATCHLINE STA.45+50

MATCHLINE STA.52+00

NOTE:
CREST VERTICAL CURVE DESIGN SPEED BASED ON STOPPING SIGHT DISTANCE (SSD)
SAG VERTICAL CURVES DESIGN SPEED BASED ON "K" VALUE

HORIZ. 1" = 25' VERT. 1" = 2'	PROJECT U000-134-842	SHEET NO. 20(5)

12/1/2020

12/1/2020
4:22:18 PM

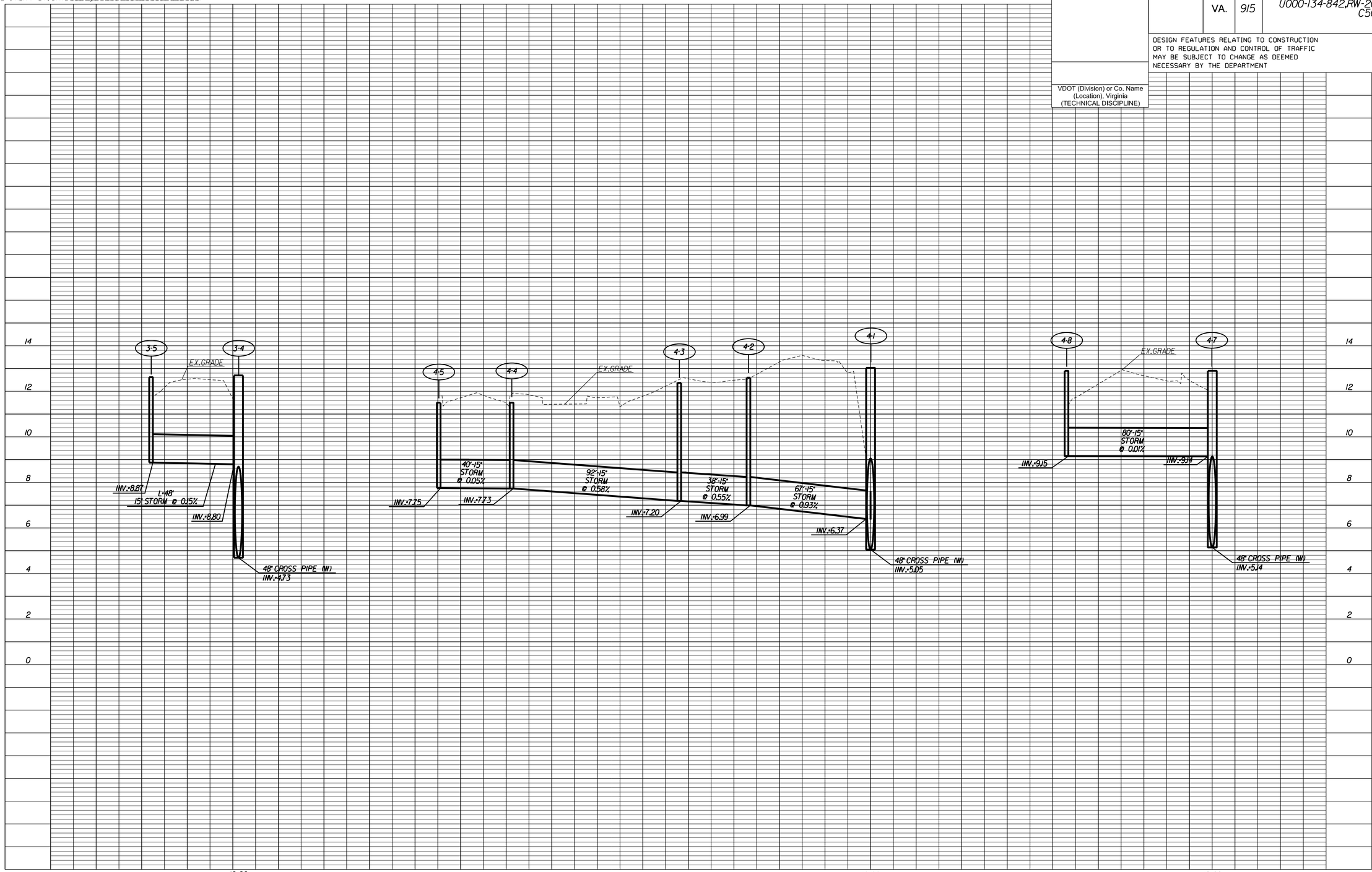
hl093812006d.dgn
Plotted By: RK&K - JMK

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.	915	U000-134-842,RW-201 C501	20(6)

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

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



12/1/2020

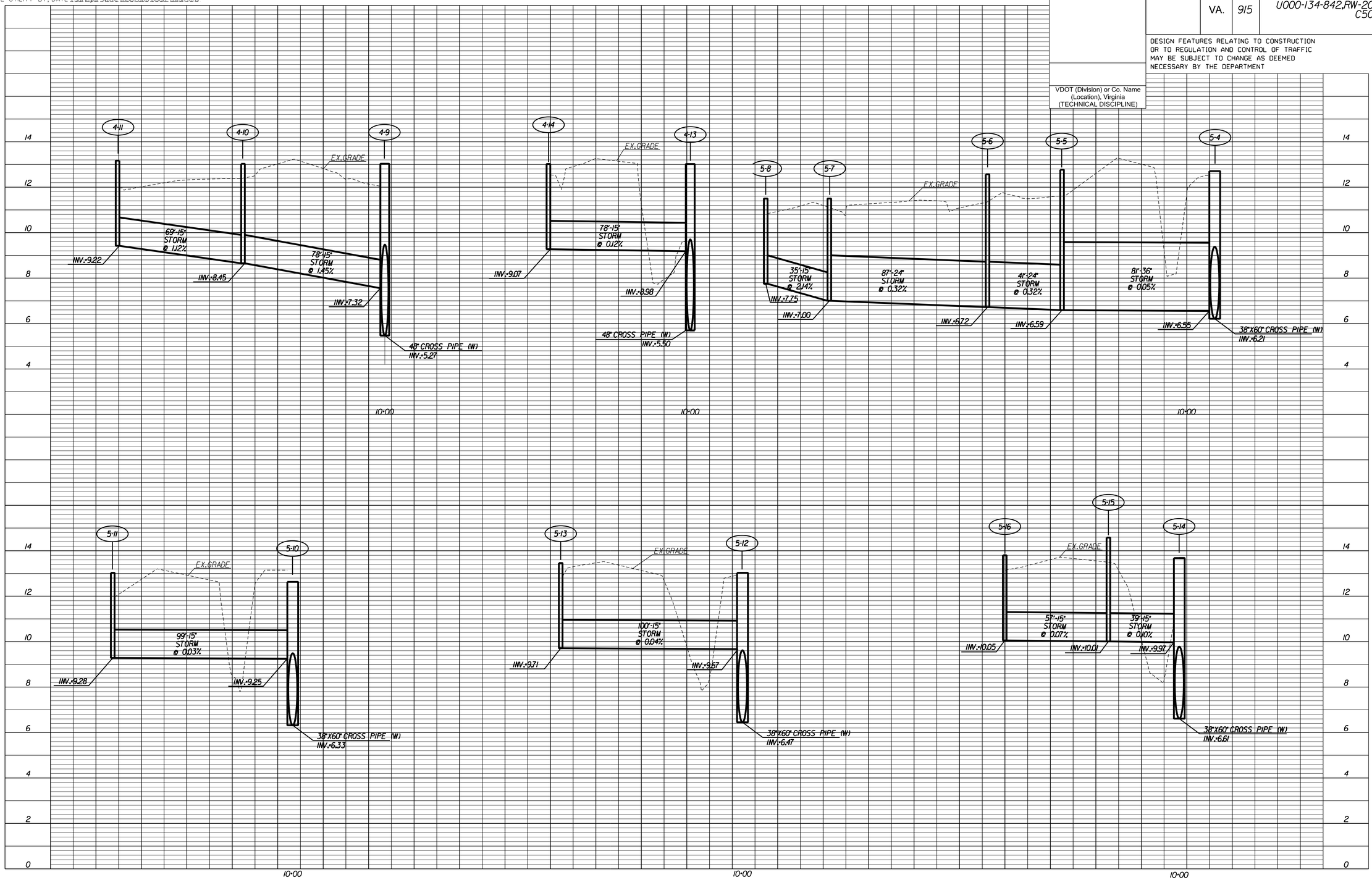
HORIZ. 1" = 25' VERT. 1" = 5'	PROJECT U000-134-842	SHEET NO. 20(6)

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.	915	U000-134-842,RW-201 C501	20(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 (Division) or Co. Name
(Location), Virginia
(TECHNICAL DISCIPLINE)



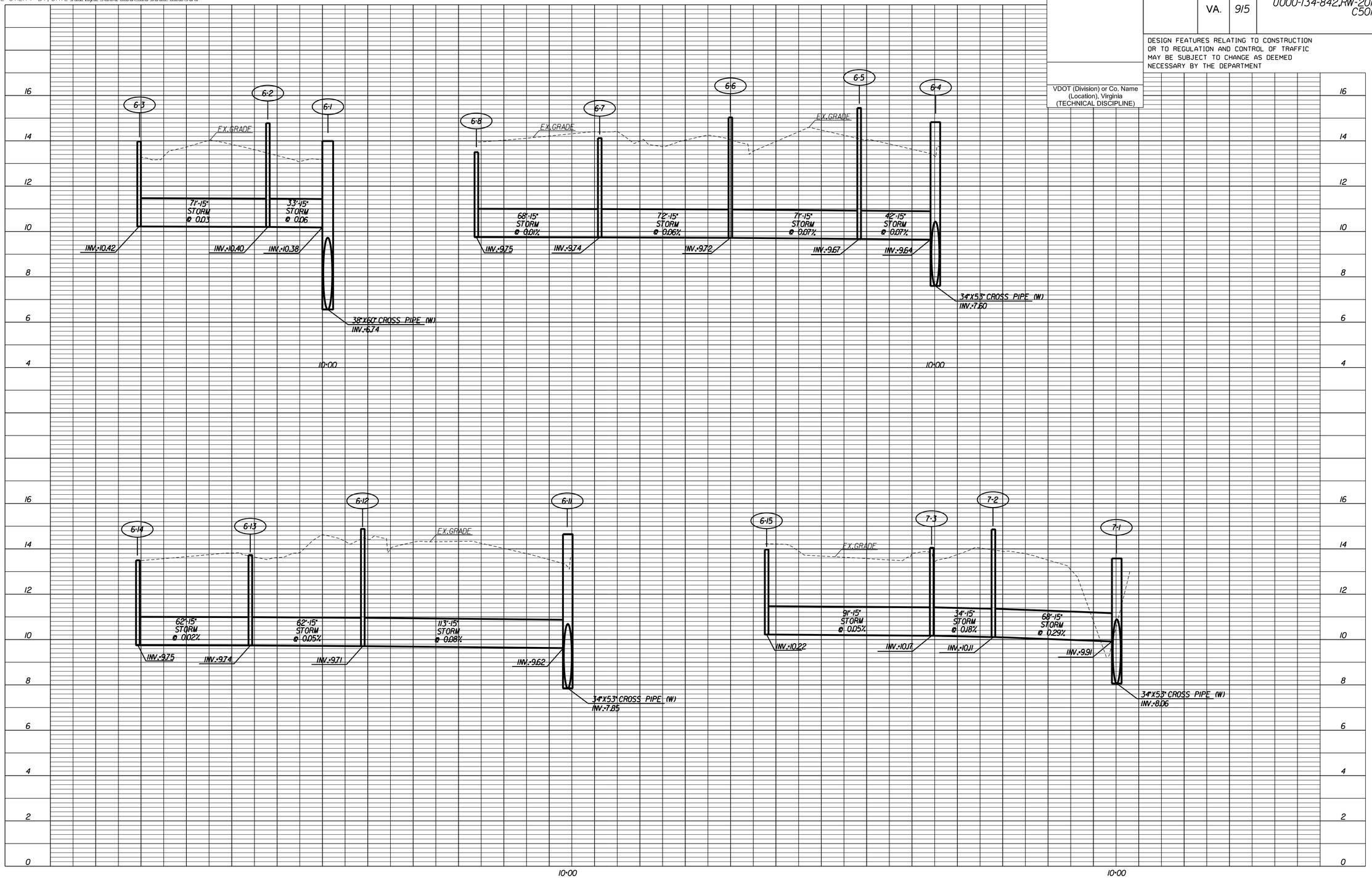
HORIZ. 1" = 25' VERT. 1" = 5'	PROJECT U000-134-842	SHEET NO. 20(7)

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.	915	U000-134-842,RW-201 C501.	20(8)

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

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



HORIZ. 1" = 25' VERT. 1" = 5'	PROJECT U000-134-842	SHEET NO. 20(8)

12/1/2020
4:22:24 PM

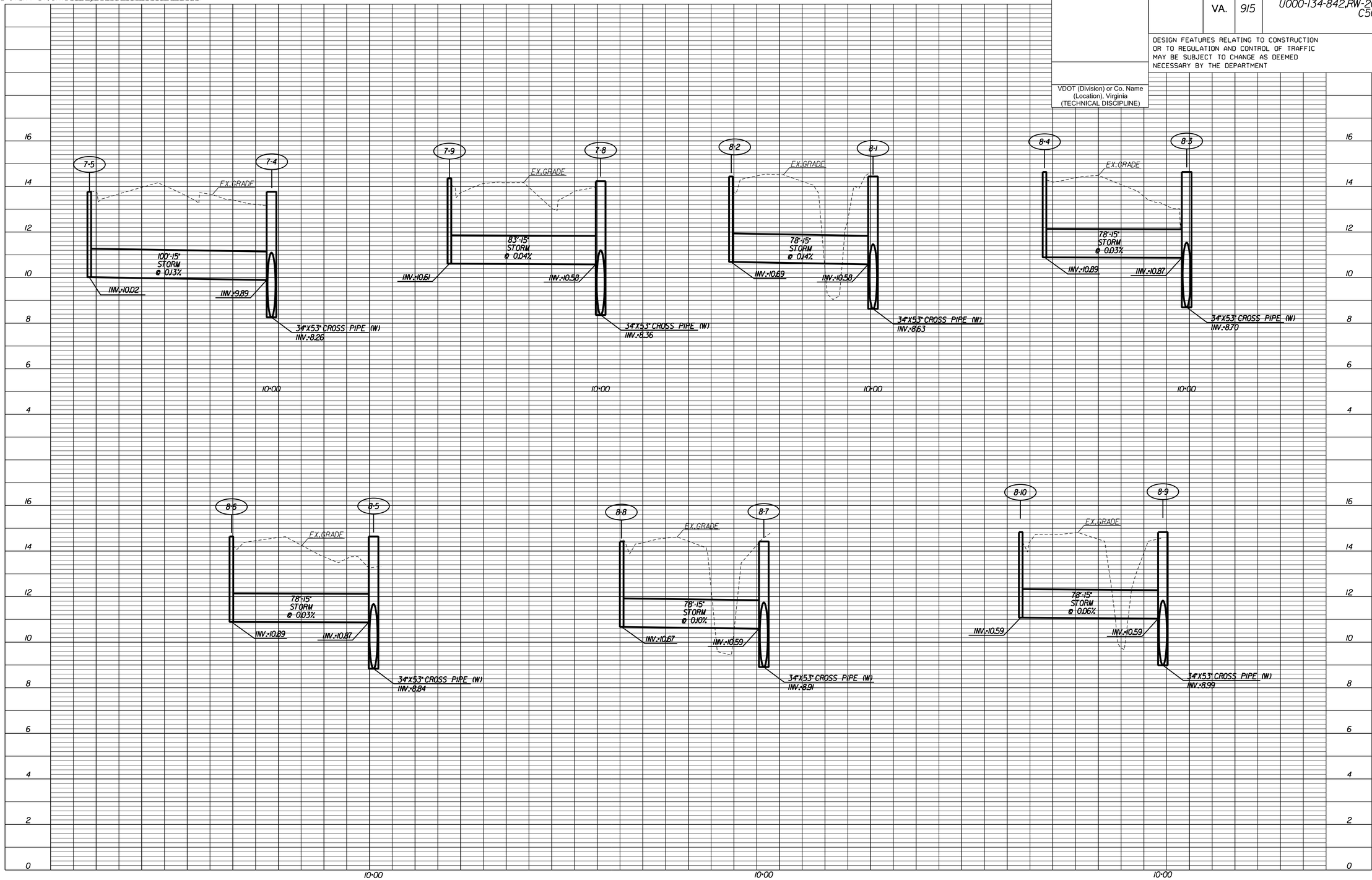
hl093812009l.dgn
Plotted By: RK&K - JMK

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.	915	U000-134-842,RW-201 C501	20(9)

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

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



HORIZ. 1" = 25' VERT. 1" = 5'	PROJECT U000-134-842	SHEET NO. 20(9)

12/1/2020

12/1/2020
4:22:25 PM

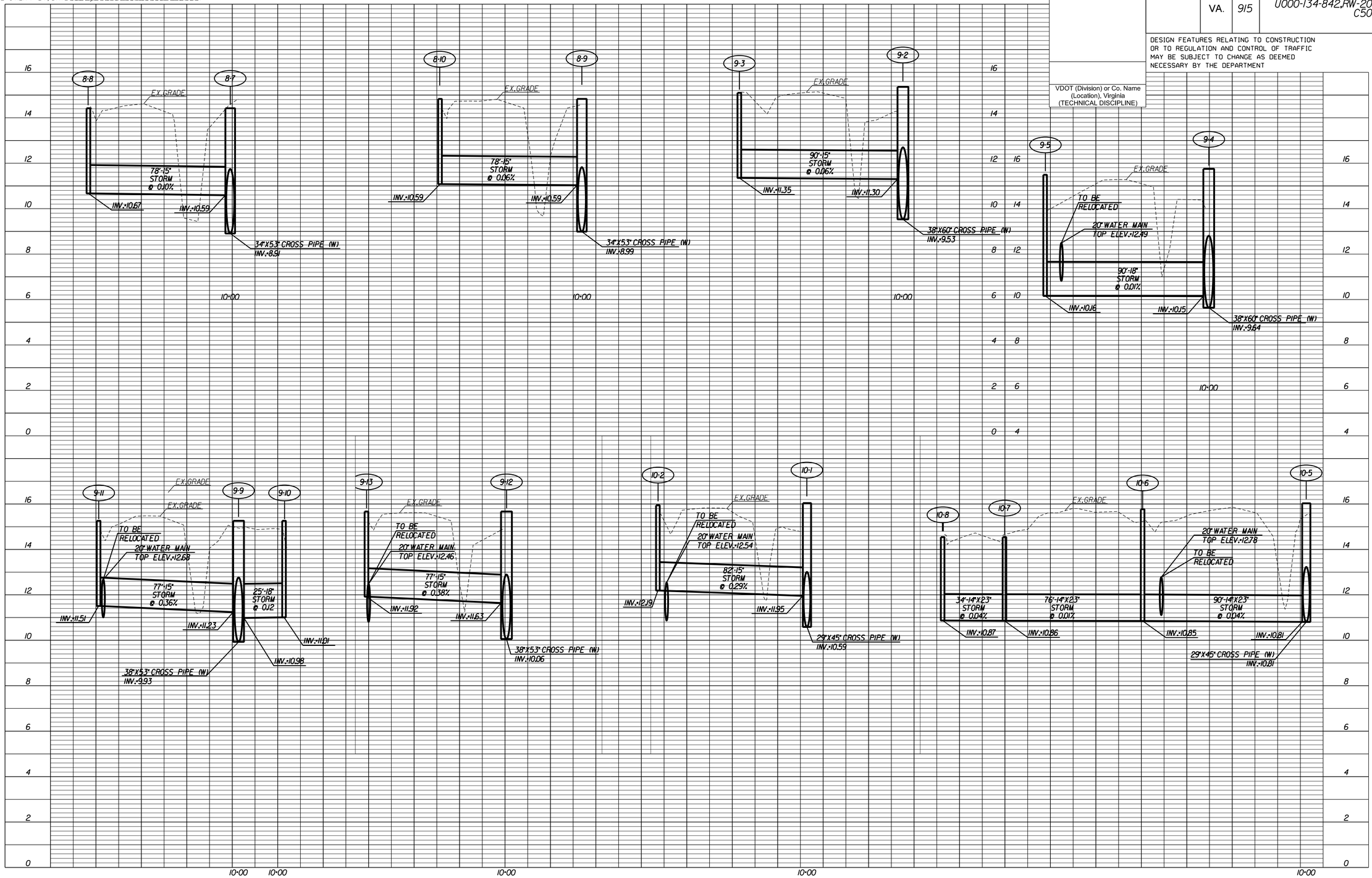
hl0938120(10).dgn
Plotted By: RK&K - JMK

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.	915	U000-134-842,RW-201, C501,	20(10)

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

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



12/1/2020

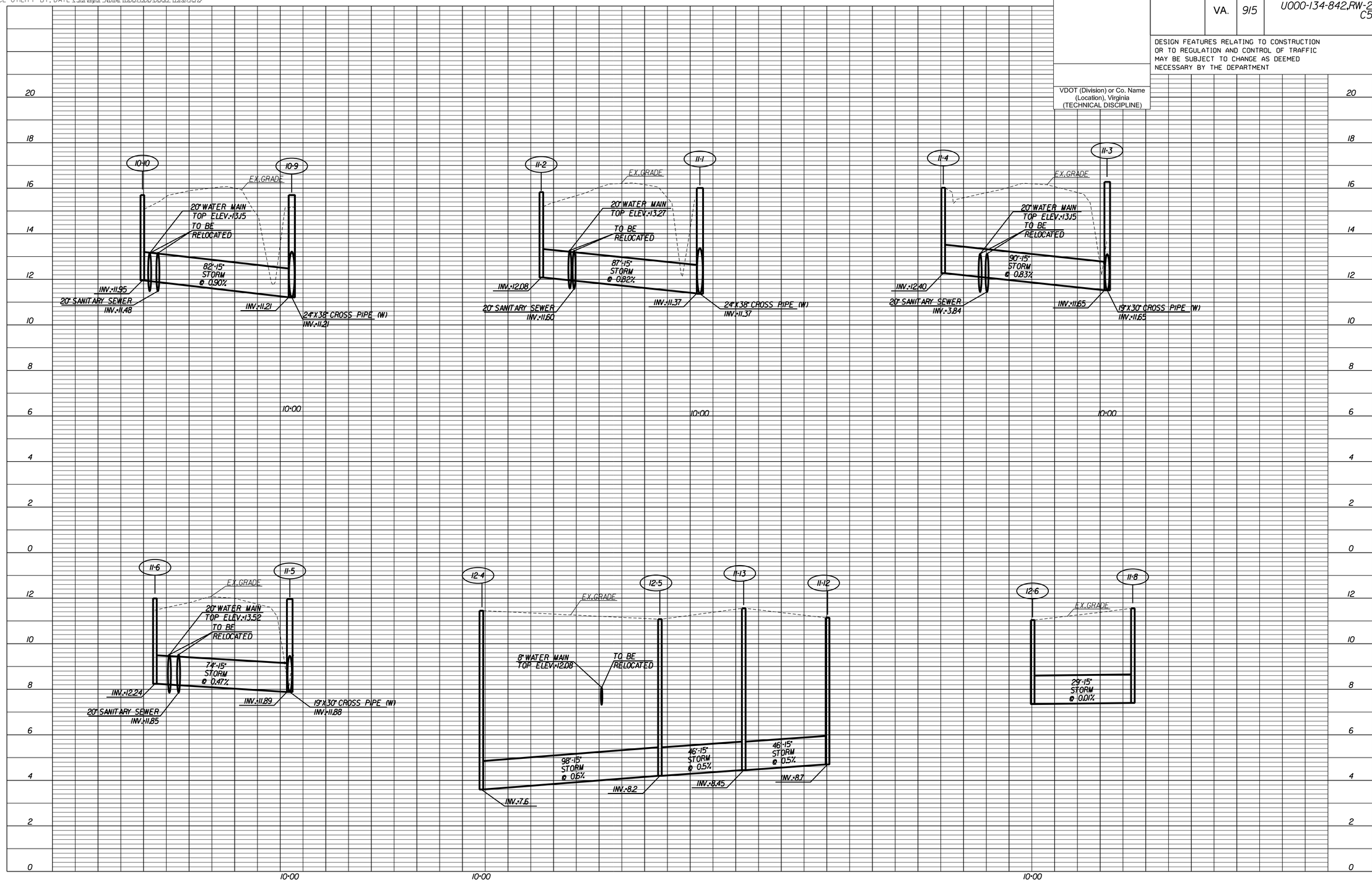
HORIZ. 1" = 25' VERT. 1" = 5'	PROJECT U000-134-842	SHEET NO. 20(10)

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.	915	U000-134-842,RW-201 C501	20(11)

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

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



HORIZ. 1" = 25' VERT. 1" = 5'	PROJECT U000-134-842	SHEET NO. 20(11)

12/1/2020