45-50

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# THE CITY OF TAKOMA PARK

# PLANS OF PROPOSED BIKEWAY SHA TRACKING NO. 19-AP-MO-034-xx

NEW AVE BIKEWAY, SECTION A MD 650 (NEW HAMPSHIRE AVENUE) AUBURN AVENUE TO HOLTON LANE

## TITLE SHEET ABBREVIATIONS, GENERAL NOTES AND INDEX

TYPICAL SECTION SHEET DT-01 PAVEMENT DETAILS DT-02 TO DT-12 ADA DETAILS GEOMETRY SHEET

INDEX OF SHEETS

GS-02 TO GS-05 INTERSECTION STAKEOUT DETAILS PS-01 TO PS-06 ROADWAY PLAN SHEETS

**DESCRIPTION** 

SW-D1 TO SW-D2 STORMWATER MANAGEMENT DETAILS SW-01 TO SW-03 STORMWATER MANAGEMENT PLANS

STRUCTURAL GENERAL NOTES ST-02 TO ST-04 RETAINING WALL PLAN, ELEVATION & TYPICAL SECTION

MISCELLANEOUS DETAILS

DE-01 TO DE-02 STREAM AND OUTFALL IMPROVEMENT DETAILS STREAM AND OUTFALL IMPROVEMENT PLANS

EN-01 TO EN-05 EROSION AND SEDIMENT CONTROL NOTES & DETAILS ES-01 TO ES-06 EROSION AND SEDIMENT CONTROL PLANS

DRAINAGE PROFILES

MT-01 MAINTENANCE OF TRAFFIC NARRATIVE 53

MT-02 PEDESTRIAN DETOUR SHEET SG-1 TO SG-5 54-58 TRAFFIC SIGNAL PLANS

59 SN-1 SIGNING AND PAVEMENT MARKING GENERAL NOTES AND PROPOSALS

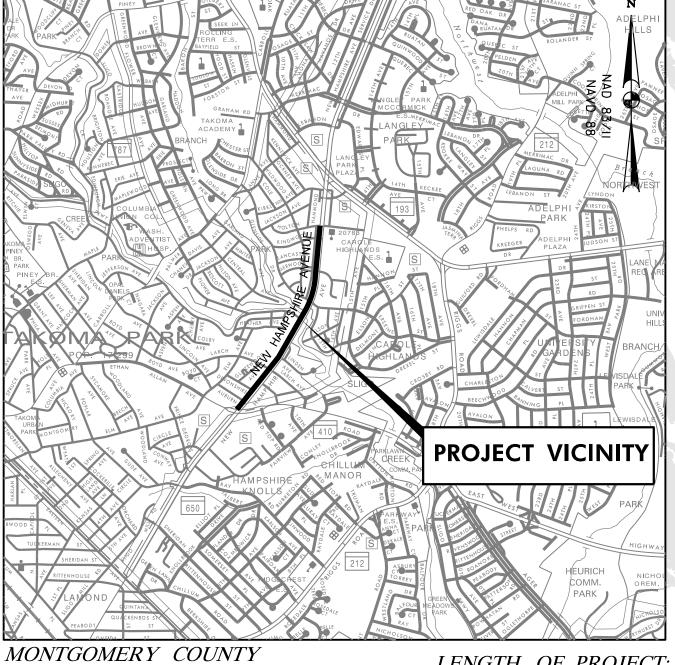
SN-2.01 TO SN-2.04 SIGNING AND PAVEMENT MARKING PLANS 60–63 PRELIMINARY FOREST CONSERVATION KEY

FC-02 TO FC-07 PRELIMINARY FOREST CONSERVATION PLANS

HORIZONTAL DATUM NAD 83 /11 VERTICAL DATUM NAVD 88 FC-08 TO FC-11 PRELIMINARY FOREST CONSERVATION NOTES, PLANTING PLAN

60% SUBMISSION

MAY 2020



LENGTH OF PROJECT: NEW HAMPSHIRE AVENUE (MD 650) = 0.79 miles

SCALE: 1"=2000' *2000* 

#### COMPLETENESS OF DOCUMENTS

FOR THE COMPLETENESS OF DOCUMENTS OBTAINED DIRECTLY FROM THE STATE HIGHWAY ADMINISTRATION'S CASHIER'S OFFICE. FAILURE TO ATTACH ADDENDA MAY CAUSE THE BID TO BE IRREGULAR.

### ADA COMPLIANCE

RIGHT OF WAY

**UTILITIES** 

THE DESIGN OF THIS PROJECT HAS INCORPORATED FACILITIES FOR THE ELDERLY AND HANDICAPPED IN COMPLIANCE WITH THE STATE AND FEDERAL LEGISLATION

#### ENVIRONMENTAL INFORMATION

AASHTO DESIGN CRITERIA

THIS PROJECT WAS DESIGNED IN ACCORDANCE WITH THE 2018 (7TH EDITION) PUBLICATION OF AASHTO'S "A POLICY ON

GEOMETRIC DESIGN OF HIGHWAYS AND STREETS."

STANDARD SPECIFICATIONS BOOK,

INCLUDED IN THE INVITATION FOR BIDS BOOK; THE

RIGHT OF WAY AND EASEMENT LINES SHOWN ON THESE PLANS ARE FOR ASSISTANCE IN INTERPRETING THE PLANS. THEY ARE NOT OFFICIAL. FOR OFFICIAL FEE RIGHT OF WAY

AND EASEMENT INFORMATION, SEE THE APPROPRIATE RIGHT

THE LOCATION OF UTILITIES SHOWN ON THE PLANS ARE FOR INFORMATION AND GUIDANCE ONLY. NO GUARANTEE IS

MADE OF THE ACCURACY OF SAID LOCATIONS.

BOOK OF STANDARDS AND MUTCD

ALL WORK ON THIS PROJECT SHALL CONFORM TO: THE LATEST APPROVED MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION (MDOT SHA) "STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS" REVISIONS THEREOF OR ADDITIONS THERETO, AS INDICATED IN THE PROJECT DESCRIPTION

OF THE INVITATIONS FOR BIDS BOOK; THE SPECIAL PROVISIONS

ADMINISTRATION'S "BOOK OF STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES" AND THE LATEST ADOPTED MUTCD.

ALL STORMWATER MANAGEMENT FACILITIES CONSTRUCTED FOR THIS CONTRACT SHALL BE INSPECTED AND MAINTAINED IN ACCORDANCE WITH THE CITY OF TAKOMA PARK

SEDIMENT AND EROSION CONTROL REGULATIONS WILL BE STRICTLY ENFORCED DURING CONSTRUCTION.

FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN THREE (3) CALENDER DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1), AND SEVEN DAYS (7) AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

#### OWNERS / DEVELOPERS CERTIFICATION

I/WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I HEREBY AUTHORIZE THE RIGHT OF ENTRY FOR PERIODIC ON-SITE EVALUATION BY STATE OF MARYLAND, DEPARTMENT OF THE ENVIRONMENT COMPLIANCE INSPECTORS.

DATE Signature Jamee Ernst Planner

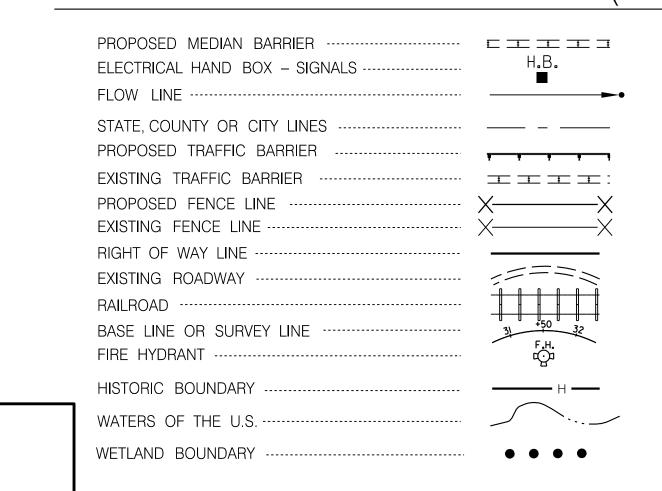
(301) 891–7213 City of Takoma Park Printed Name and Title

RKSK P: 410.728.2900 700 E. Pratt Street, Suite 500 | Baltimore, MD 21202 Engineers | Construction Managers | Planners | Scientists **REVISIONS** 

# ABBREVIATIONS

	1.15).4//		
AASHTO American Association of State Highway		Headwall	RW or R/W Right of Way
Transportation Officials	HERCP	Horizontal Ellipitical Reinforced	RCP Reinforced Concrete Pipe
ADTAverage Daily Traffic		Concrete Pipe	RCPP Reinforced Concrete Pressure Pipe
AHDAhead		High Point	R.Q.DRock Quality Designation
APPROX Approximate	IN		R.MRootmat
B or B∕L Baseline		Inlet Sediment Trap	SSouth
BKBack /Book	INV		SANSanitary Sewer
BIT Bituminous		Junction Box	SB or S/B Southbound
B.C. Bituminous Concrete	K		S.D Storm Drain
B.M. Bench Mark	L	-	S.D.D Surface Drain Ditch
BOTBottom		Linear Feet	S/ESuper Elevation
C.C Center of Curve		Liquid Limit	SFSilt Fence
CAPCorrugated Aluminum Pipe		Low Point	SF Square Feet
CAPA Corrugated Aluminum Pipe Arch	L.P	Light Pole	SHTSheet
CATV Cable Television	LT		SPPStructural Steel Plate Pipe
C.B.RCalifornia Bearing Ratio	MAC	Macadam	SPPAStructural Steel Plate Pipe Arch
	M.C	Moisture Content	S.P.TStandard Penetration Testing
CL Class	MAX	Maximum	SRPSteel Spiral Rib Pipe -
CLF Chainlink Fence	M.D.D	Maximum Dry Content	Aluminized Type 2
CMPCorrugated Metal Pipe	MOD,	Modified	SRPASteel Spiral Rib Pipe Arch -
C.O Cleanout	MIN	Minimum	Aluminized Type 2
COMBCombination	N	North	SSD Stopping Sight Distance
CONC Concrete	NB	Northbound	SSF Super Silt Fence
CONSTR Construction	NE	Northeast	STD Standard
COR Corner	N.P	Non-Plastic	STA Station
CORR Correction	O.C	On Center	SOSingle Opening
CPP-S Corrugated Polyethylene Pipe - Type 'S'	OHE	Overhead Electric	SYSquare Yards
CSP Corrugated Steel Pipe - Aluminized Type 2	O.M	Optimum Moisture	SWM Stormwater Management
CSPACorrugated Steel Pipe Arch -	PAV' T	Pavement	TTangent
Aluminized Type 2	PC	Point of Curvature	T Telephone
DCDegree of Curve	PCC	Point of Compound Curvature	T.CTop of Cover
D.H.V Design Hourly Volume	P/C	Point of Crown	T.GTop of Grate
D.I. Drop Inlet		Profile Grade Elevation	T or TL Traverse Line
DIA Diameter	P.G.E	Profile Ground Elevation	T.MTop of Manhole
D.ODouble Opening	P.G.L	Profile Grade Line	TRAV Traverse
E East		Profile Ground Line	TSTemporary Swale
E Electric		Point of Rotation	T.STop of Slab
E External Distance		Plasticity Index	T.STopsoil
EAEach		Point of Intersection	TYPTypical
EBEastbound		Point On Curve	U.DUnder Drain
ELEVElevation		Point On Tangent	U.G Underground
ES End Section		Polyvinyl Chloride Profile Wall Pipe	U.P Utility Pole
EX or EXIST Existing		Proposed	USDA United States Department
FTFeet		Point of Reverse Curve	of Agriculture
F or FL Flowline	PT		VCLVertical Clearance
F.B.D. Flat Bottom Ditch		Point of Tangency	V.C.L. Vertical Curve Length
F.HFire Hydrant		Point of Vertical Curve	W Water
FWD. Forward		Polyvinyl Chloride	W West
GGas		Point of Vertical Intersection	WB Westbound
G.V Gas Valve		Point of Vertical Intersection Point of Vertical Reverse Curve	WB Westbound WB Westbound
H.B Handbox		Point of Vertical Tangency	W.M Water Meter
HDPEHigh Density Polyetheylene	R	g ,	W.SWrapped Steel
TIDI LTIIGIT DEHSILY FOLYELIEVIETIE			• •
	R.F RT	Rock Fragments	WUSWaters of the United States W.VWater Valve
	111	r ugrit	vv.vvvalci valve

# CONVENTIONAL SIGNS (SAMPLES)



PROPOSED PIPE / CULVERT	
EXISTING PIPE / CULVERT	
EXISTING DROP INLET	===
UTILITY POLE	<del></del>
WETLAND	بادباد
WETLAND BUFFER ·····	—— в —
WATERS OF THE U.S	√ WUS
HEDGE /TREE LINEBUSH /TREE	
	Mz
CONIFEROUS TREE	هٔ  م
GROUND ELEVATION	
GRADE ELEVATION	DATUM LINE

### GENERAL NOTES

- THE EXISTING UTILITIES AND OBSTRUCTIONS SHOWN ON THESE PLANS ARE FROM THE BEST AVAILABLE RECORDS AND SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL NOTIFY ALL UTILITY OWNERS CONCERNED AND MISS UTILITY PRIOR TO CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL CALL "MISS UTILITY" AT LEAST 48 HOURS IN ADVANCE OF ANY EXCAVATION WORK AT 1-800-257-7777.
- THE CONTRACTOR SHALL PROTECT AND NOT INTERRUPT EXISTING UTILITY SERVICES UNLESS OTHERWISE NOTED ON THE PLANS OR AUTHORIZED BY THE ENGINEER. SEE UTILITY
- THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT THE SAFETY OF THE PUBLIC AND ALL WORKERS IS MAINTAINED AT ALL TIMES THROUGHOUT THE TERM OF THE CONTRACT. MOTORISTS SHALL BE GUIDED IN A CLEAR AND POSITIVE MANNER WHILE APPROACHING AND PASSING THROUGH CONSTRUCTION WORK AND EQUIPMENT AREAS.
- 4. HORIZONTAL CONTROL: THE LOCATION AND ELEVATION OF BENCH MARKS ARE SHOWN ON THE PLANS. ALL ELEVATIONS ARE IN FEET AND ARE BASED ON THE NAVD 88.
- 5. WHERE REFERENCE IS MADE TO MDSHA STANDARD PLATES IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE IN HIS POSSESSION THE LATEST UP-TO-DATE STANDARD PLATES AS OF THE DATE OF ADVERTISEMENT OF THESE PLANS. STANDARD PLATES ARE AVAILABLE AT WWW.MARYLANDROADS.COM.
- 6. THE CONTRACTOR SHALL GRADE FOR POSITIVE DRAINAGE AT ALL ROADWAY INTERSECTIONS, ENTRANCES AND YARDS.
- 7. REPAIRS TO UTILITIES OR PROPERTY DAMAGE AS A RESULT OF CONTRACTOR'S NEGLIGENCE OR METHOD OF OPERATION SHALL BE MADE AT NO ADDITIONAL COST TO THE CITY, THE ADMINISTRATION OR THE OWNER.
- 8. PROVIDE 4-INCH FURNISHED TOPSOIL AND TURFGRASS SOD ESTABLISHMENT ON SLOPES UNLESS OTHERWISE NOTED ON THE PLANS.
- MATERIAL REMOVED DURING CONSTRUCTION SHALL BECOME THE CONTRACTOR'S PROPERTY UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIAL PROVISIONS.
- 10. THE CONTRACTOR SHALL RESET ANY SIGN POSTS OR MAIL BOXES TO FACILITATE THE WORK, EXCEPT WHERE SPECIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- FINAL DETERMINATION AS TO THE LOCATION OF EROSION AND SEDIMENT CONTROLS WILL BE AT THE DIRECTION OF THE ENGINEER WHO RESERVES THE RIGHT TO ORDER ADDITIONAL E&S DEVICES.
- 12. CONSTRUCTION EQUIPMENT SHALL HAVE TREADS/TIRES CLEANED PRIOR TO LEAVING THE LOD. ALL MATERIAL REMOVAL/LOAD OUT SHALL BE LIFTED FROM THE LOD. ALL SEDIMENT SPILLED, DROPPED OR TRACKED ONTO THE ROAD MUST BE REMOVED IMMEDIATELY BY VACUUMING, SCRAPING OR SWEEPING.
- 13. SEVERAL PROPOSED DRAINAGE STRUCTURES AND PIPES WILL CONNECT TO EXISTING STORM DRAIN STRUCTURES AND PIPES. THE CONTRACTOR SHALL FIELD VERIFY INVERTS PRIOR TO ORDERING, FABRICATING OR CONSTRUCTING PROPOSED STORM DRAIN STRUCTURES.
- 14. SAW CUTS WILL NOT BE MEASURED BUT WILL BE INCIDENTAL TO OTHER RELATED ITEMS AS SPECIFIED IN THE CONTRACT DOCUMENTS.
- 15. VERTICAL ADJUSTMENT OF EXISTING UTILITIES SHALL BE INCIDENTAL TO THE 5 INCH CONCRETE SIDEWALK, SPECIALTY PAVERS TYPE 2 OR ASPHALT SHARED USE PATH PAY ITEMS. SEE SP 603 - SIDEWALKS.

AB-01

CITY OF TAKOMA PARK NEW AVE BIKEWAY, SECTION A MD 650 (NEW HAMPSHIRE AVENUE) AUBÙRN AVE TO HOLTON LN

ABBREVIATIONS, GENERAL NOTES & INDEX \_ CONTRACT NO. \_\_T.B.D. SCALE N.T.S. DATE MAY 2020 COUNTY MONTGOMERY DESIGNED BY KBJ 60% PLANS LOGMILE <u>MD 650</u> 0.040- 0.830 DRAWN BY\_\_\_\_\_TJS\_\_ CHECKED BY RJG MAY 2020 F.A.P. NO. T.B.D. 1 OF 1 SHEET NO. DRAWING NO. AB01 2 OF 73

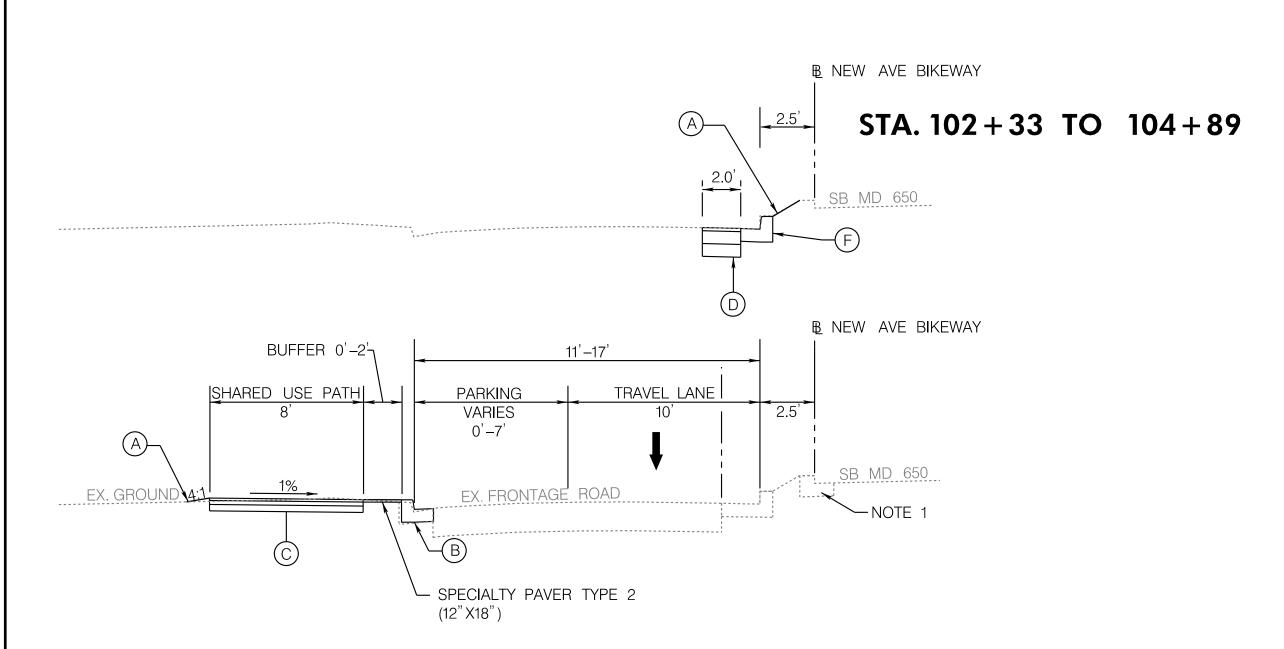
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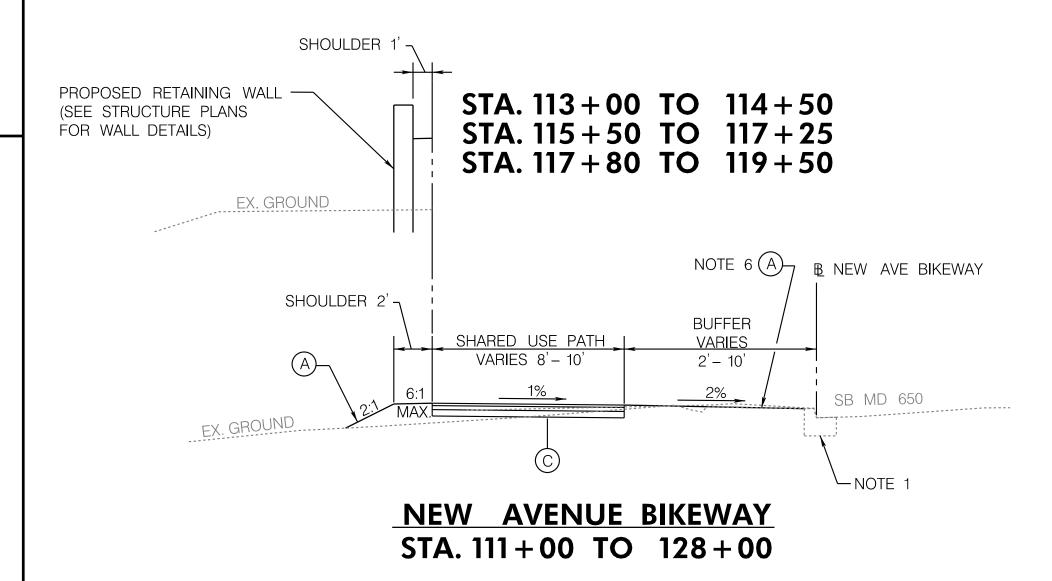
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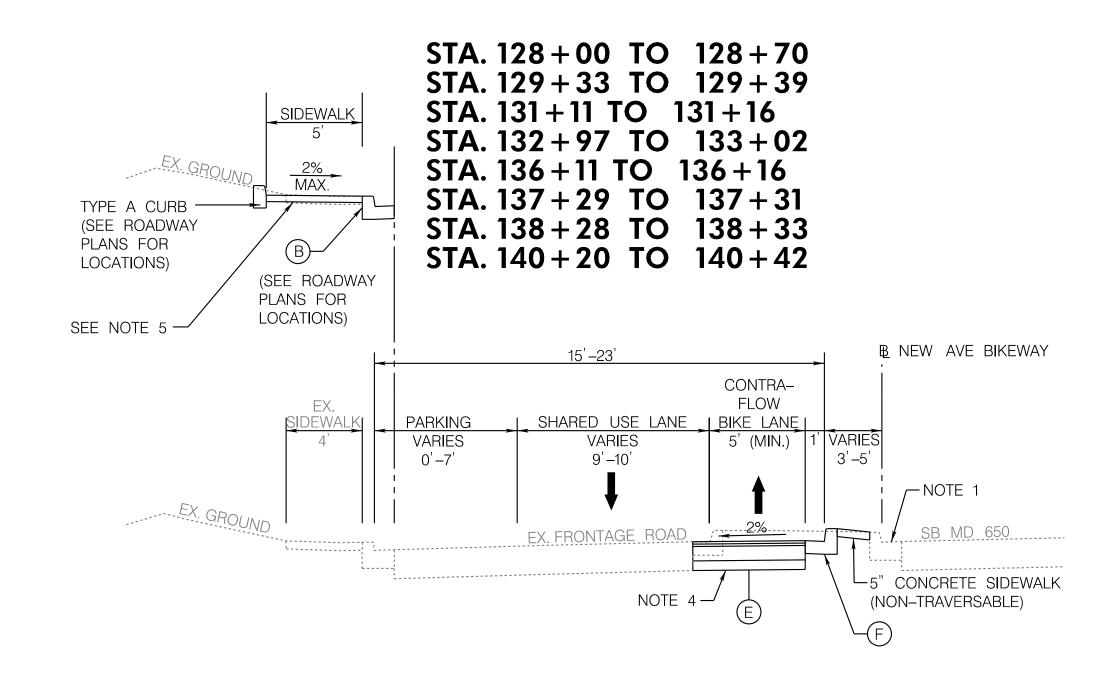


# **NEW AVENUE BIKEWAY** STA. 102 + 33 TO 111 + 00

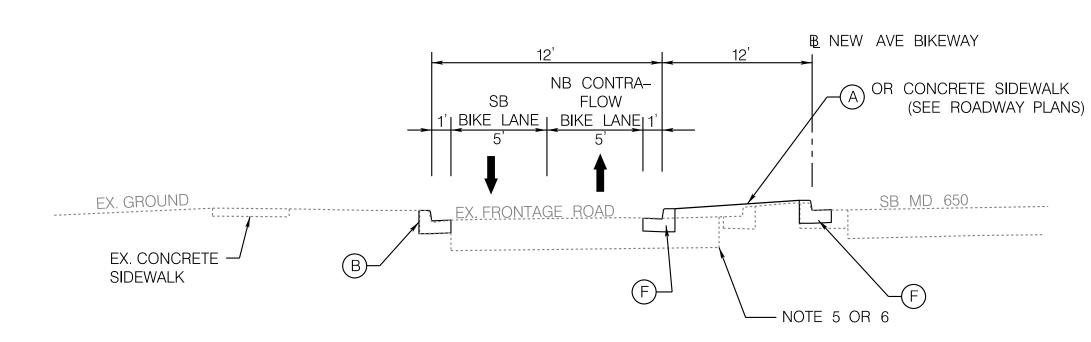


### TYPICAL SECTION LEGEND

- (A) 4" FURNISHED TOPSOIL & TURFGRASS SOD ESTABLISHMENT
- (B) MDOT SHA STANDARD TYPE D COMBINATION CURB AND GUTTER
- (C) MDOT SHA STD. NO. 580.08: BIKE PATHS FLEXIBLE PAVEMENT SECTION
- (D) SEE PAVEMENT DETAIL B, SHEET DT-01
- (E) SEE PAVEMENT DETAIL C, SHEET DT-01
- (F) MDOT SHA TYPE A CURB AND GUTTER



# **NEW AVENUE BIKEWAY** STA. 128 + 00 TO 140 + 75



**NEW AVENUE BIKEWAY** STA. 140 + 75 TO 143 + 00

### NOTES:

- 1. EXISTING CURB AND GUTTER TO REMAIN.
- 2. SAW CUTS ARE INCIDENTAL TO THE EXCAVATION OR PAVING ITEMS.
- 3. ALL ROADWAY EXCAVATION SHALL BE DEFINED AS CLASS 1 REGARDLESS OF THE WIDTH OF THE EXCAVATION.
- 4. LIMIT OF CLASS 1 EXCAVATION AND TOP OF SUBGRADE.
- 5. EXCAVATE TO THE TOP OF EXISTING SUBGRADE. BACKFILL WITH COMMON BORROW TO BOTTOM OF SIDEWALK.
- 6. EXCAVATE TO THE TOP OF EXISTING SUBGRADE. BACKFILL WITH FURNISHED SUBSOIL TO 4" BELOW PROPOSED GRADE. PLACE 4" FURNISHED TOPSOIL TO PROPOSED GRADE. PROVIDE TURFGRASS SOD ESTABLISHMENT.
- 7. SEE SIGNING AND PAVEMENT MARKING PLANS FOR BIKE PAVEMENT STRIPING.
- 8. SEE ROADWAY PLANS AND CURB STAKEOUT DETAILS FOR LIMITS OF MEDIAN RESCONSTRUCTION.

CITY OF TAKOMA PARK NEW AVE BIKEWAY, SECTION A MD 650 (NEW HAMPSHIRE AVENUE) AUBÙRN AVE TO HOLTON LN

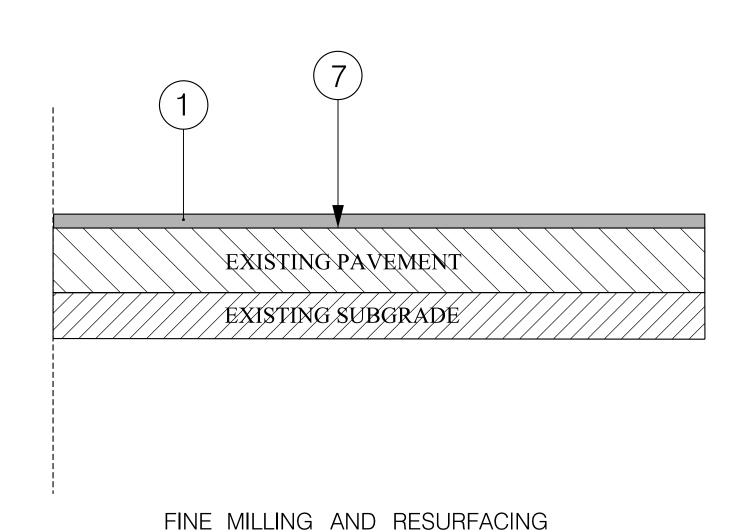
TS-01

**TYPICAL SECTIONS** DATE <u>MAY 2020</u> \_ CONTRACT NO. \_\_T.B.D. SCALE\_1"=5' DESIGNED BY KBJ COUNTY MONTGOMERY 60% PLANS LOGMILE MD 650 0.040- 0.830 DRAWN BY\_ CHECKED BY RJG MAY 2020 F.A.P. NO.\_\_\_\_\_T.B.D. 1 OF 1 SHEET NO. DRAWING NO. TS01 3 OF 73

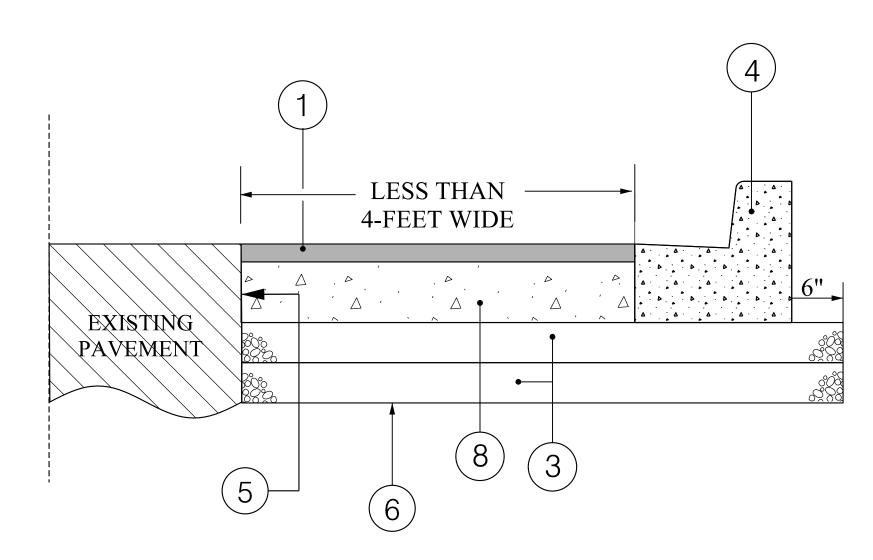
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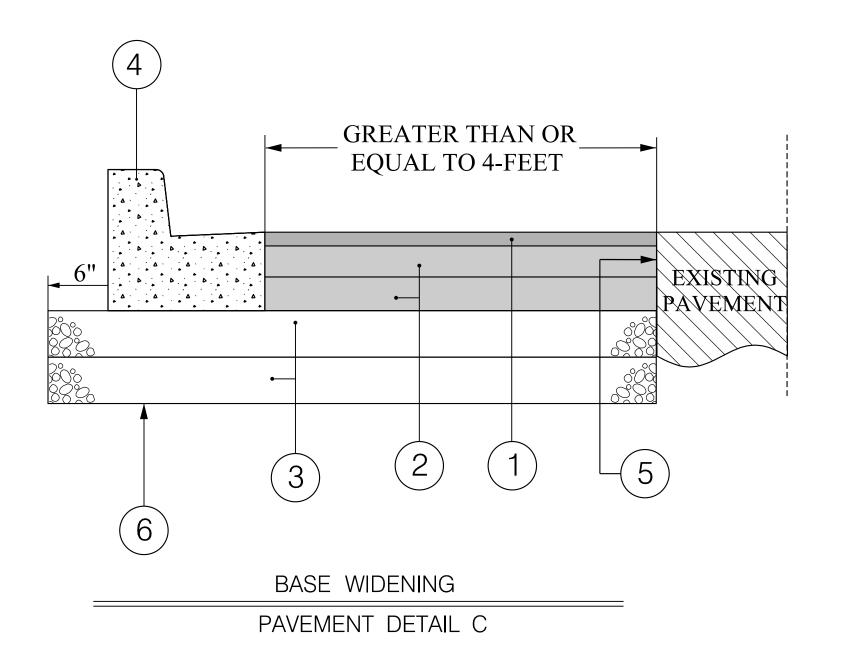
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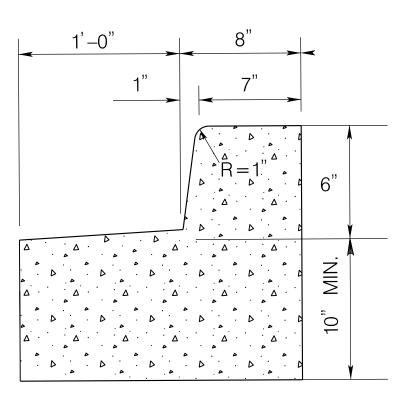


PAVEMENT DETAIL A



NARROW BASE WIDENING
PAVEMENT DETAIL B





# NOTE:

1. GUTTER PAN IS TO SLOPE 1/2" PER FOOT AWAY FROM THE FLOW LINE.

SHA TYPE D COMBINATION CURB AND SPILL GUTTER (MODIFIED)

DETAIL D

### PAVEMENT LEGEND

- (1) 2" SUPERPAVE ASPHALT MIX 9.5 mm FOR SURFACE, HDFV, PG64E-22, LEVEL 2
- (2) 4" SUPERPAVE ASPHALT MIX 19.0 mm FOR BASE, PG 64S-22, LEVEL 2
- (3) 6" GRADED AGGREGATE BASE COURSE
- MDOT SHA STANDARD TYPE A OR D COMBINATION CURB AND GUTTER, OR MONOLITHIC MEDIAN (SEE PLANS)
- 5 FULL-DEPTH SAW CUT INCIDENTAL TO FULL-DEPTH PATCH, CURB AND GUTTER AND EXCAVATION ITEMS
- 6 TOP OF SUBGRADE AND LIMIT OF EXCAVATION
- (7) TOP OF EXISTING PAVEMENT AFTER 2" FINE MILLING
- (8) 8" PLAIN PORTLAND CEMENT CONCRETE MIX NO. 9

### PAVEMENT DETAIL NOTES

- 1. REMOVE AND DISPOSE OF ALL SOFT AND UNSTABLE MATERIAL PER SECTION 208 OF THE MDOT SHA STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, JULY 2019.
- 2. IN AREAS WHERE EXISTING PAVEMENT IS BEING REMOVED, THE LIMIT OF EXCAVATION SHALL BE AT THE BOTTOM OF THE BOUND MATERIALS IN THE EXISTING PAVEMENT OR AT THE TOP OF SUBGRADE, WHICHEVER IS LOWER.
- 3. REFER TO MDOT SHA STD. NO. 580.08 FOR BIKE PATHS FLEXIBLE PAVEMENT SECTION.
- 4. REFER TO MDOT SHA STD. NO. 578.01 FOR REPAIRING PAVEMENT OPENINGS WITHIN UTILITY/STORM DRAIN TRENCHES. PAVEMENT REPAIR FOR PIPE INSTALLATION IS INCIDENTAL TO PIPE INSTALLATION.
- 5. REFER TO MDOT SHA STD. NO. 578.03 FOR PERMANENT PATCHING FOR FLEXIBLE PAVEMENT USING APPROVED ASPHALT MIX.
- 6. REFER TO MDOT SHA STD. NO. 580.03 FOR NEW CURB AND GUTTER PLACEMENT ALONG EXISTING PAVEMENT.

PAVEMENT DETAILS SHALL BE REVIEWED BY MDOT SHA. DETAILS WERE DEVELOPED AS A PLACE HOLDER AND NOT BASED ON PAVEMENT BORINGS OR CORE DATA.

DT-01

# CITY OF TAKOMA PARK NEW AVE BIKEWAY, SECTION A MD 650 (NEW HAMPSHIRE AVENUE) AUBURN AVE TO HOLTON LN

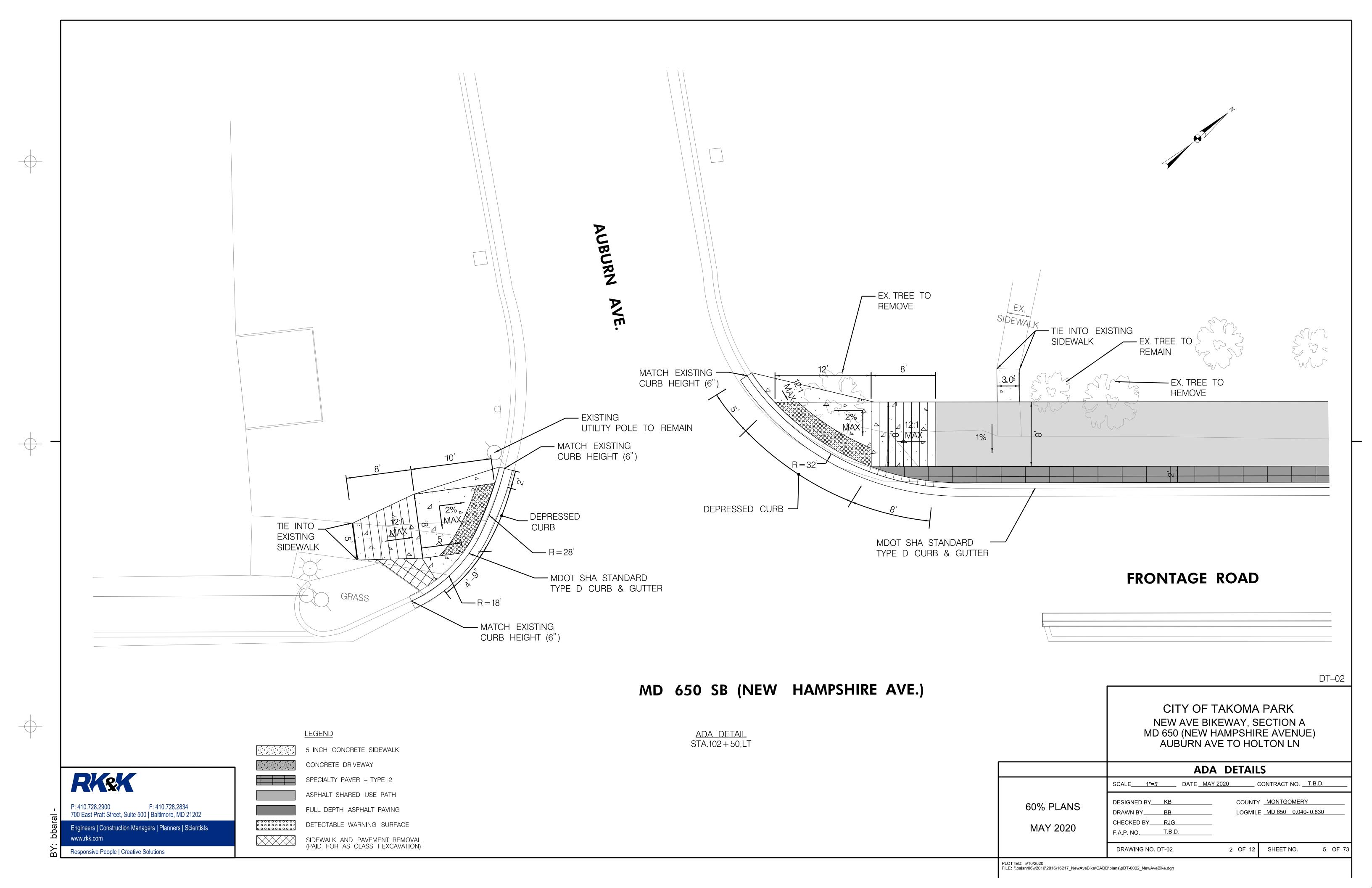
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	SCALE N.T.S	DATE <u>MAY 2020</u>	C(	ONTRACT NOT.B.[	D
60% PLANS MAY 2020	DESIGNED BY KBJ DRAWN BY BB CHECKED BY RJG F.A.P. NO. T.B.D.			MONTGOMERY MD 650 0.040- 0.83	30
	DRAWING NO. DT01	1	OF 12	SHEET NO.	4 OF 73
PLOTTED: 5/14/2020			,		

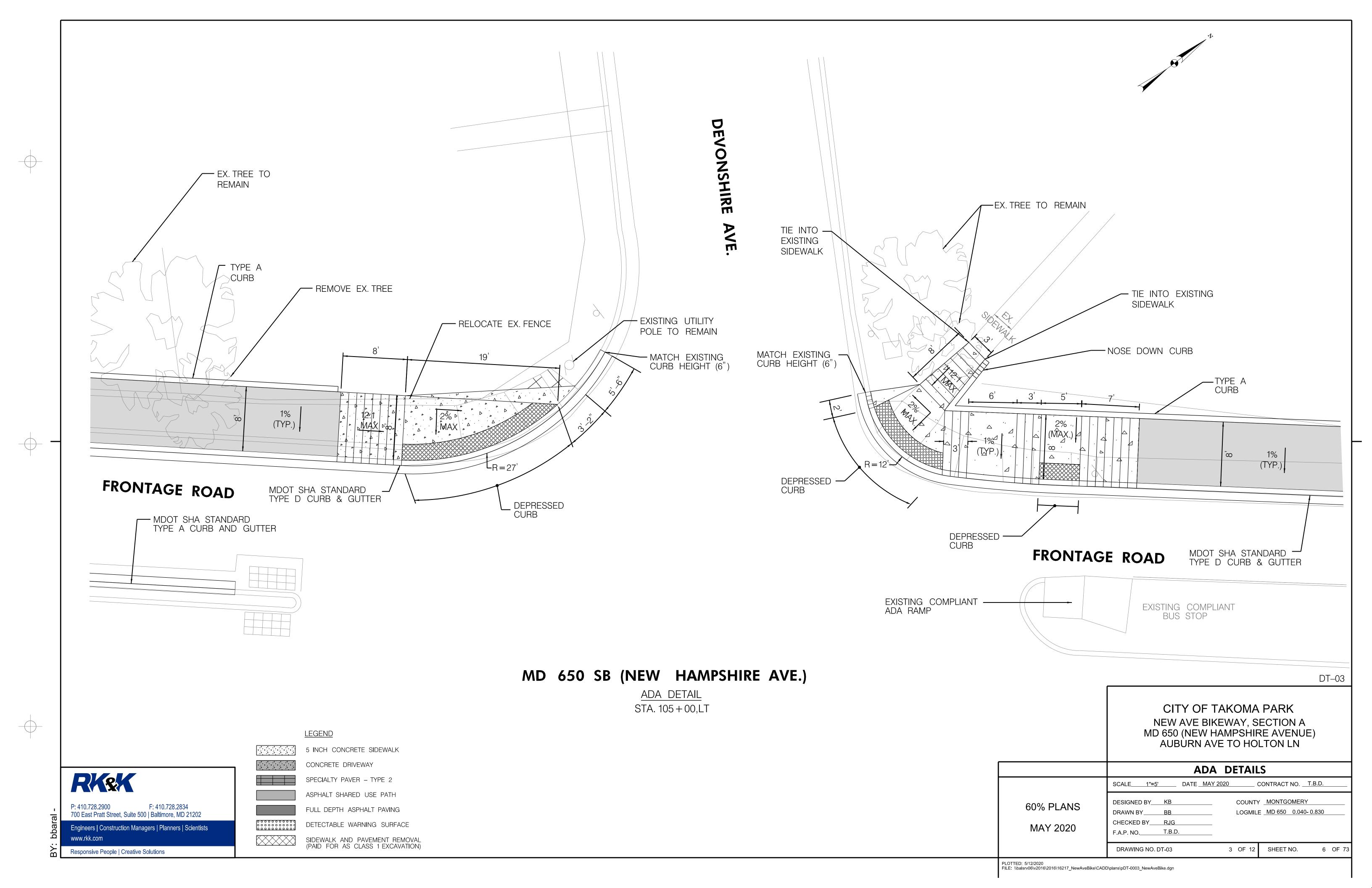
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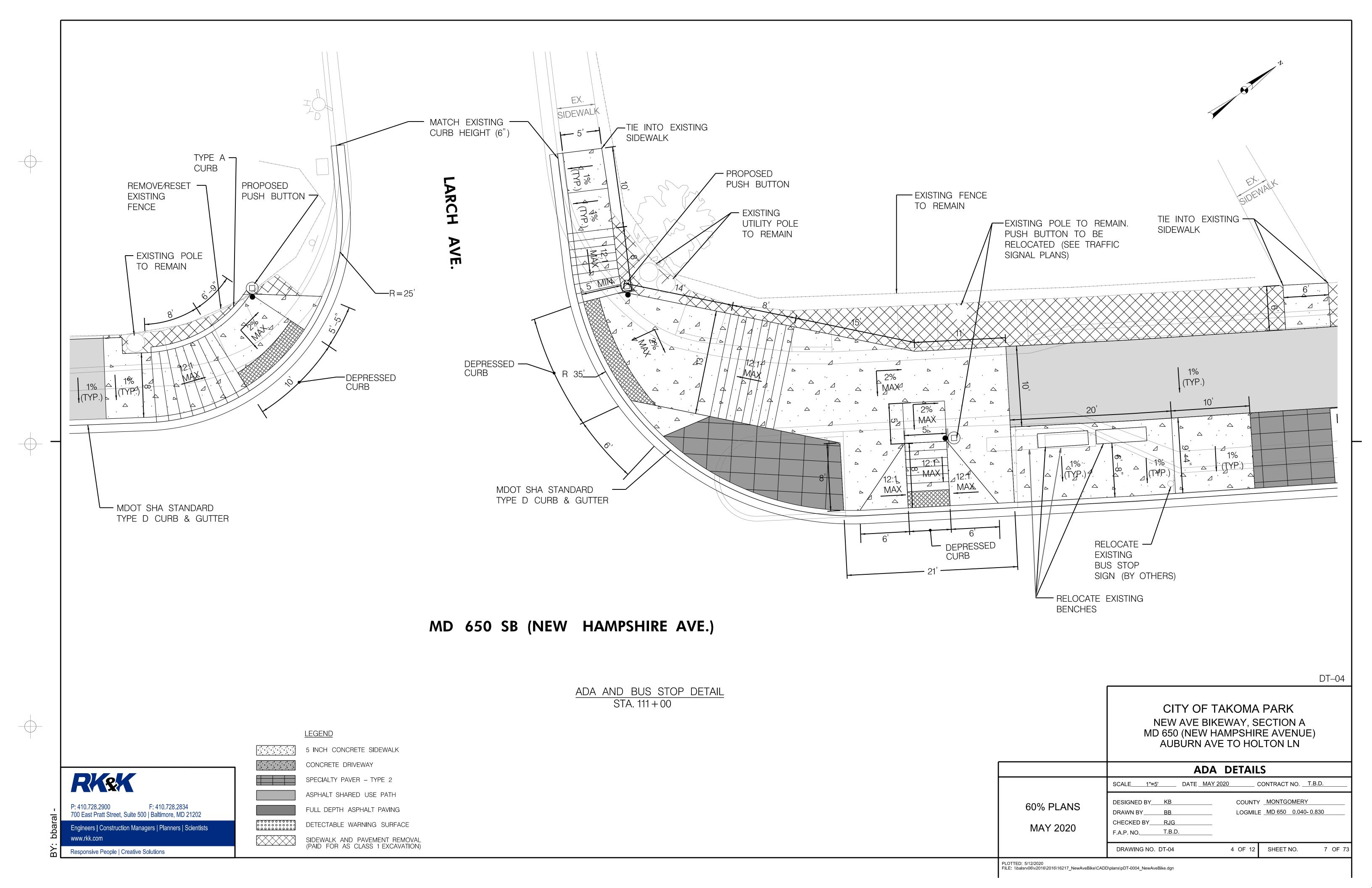
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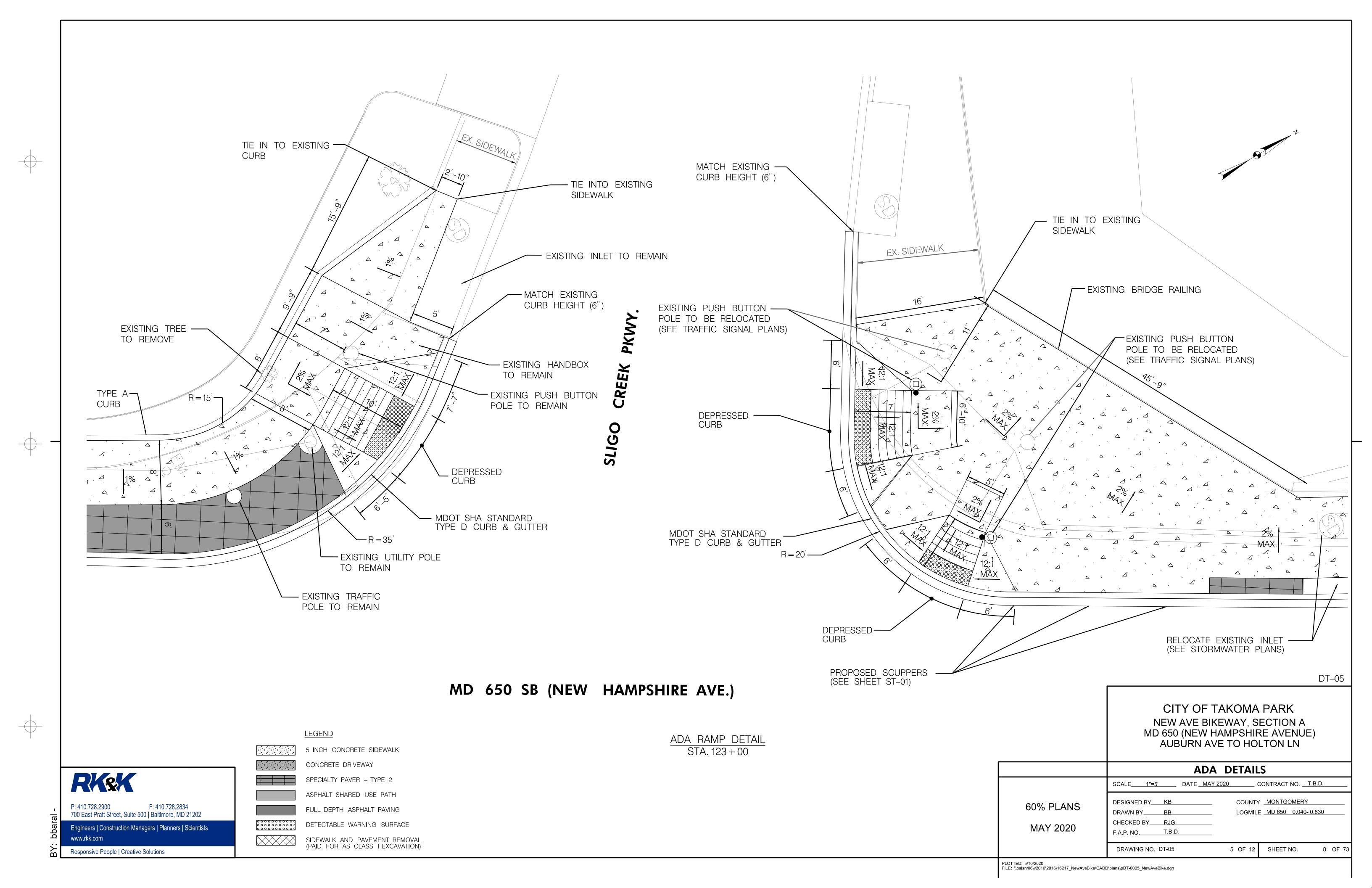
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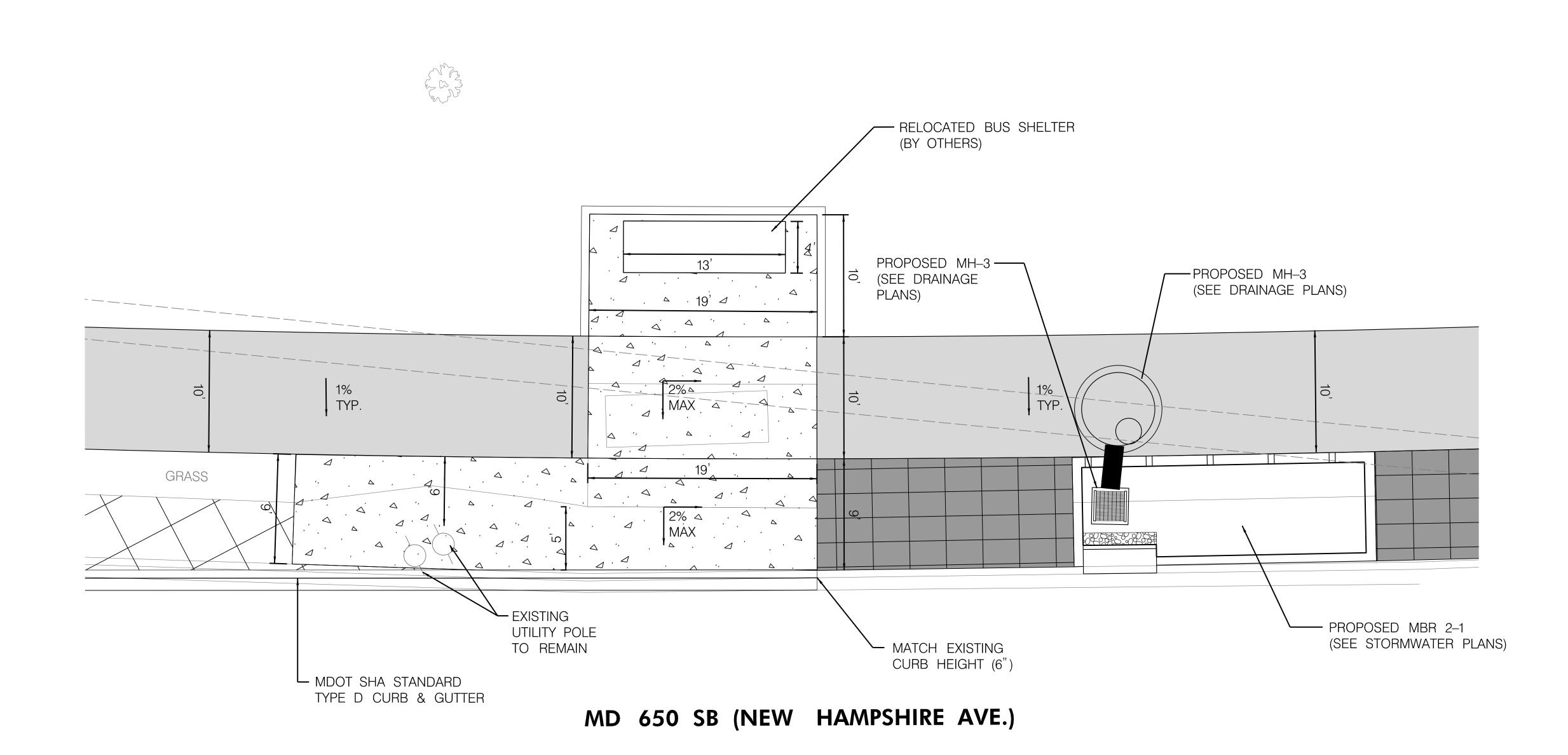












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<u>LEGEND</u>

00000000000

5 INCH CONCRETE SIDEWALK

SPECIALTY PAVER - TYPE 2

ASPHALT SHARED USE PATH

FULL DEPTH ASPHALT PAVING

DETECTABLE WARNING SURFACE

SIDEWALK AND PAVEMENT REMOVAL (PAID FOR AS CLASS 1 EXCAVATION)

CONCRETE DRIVEWAY

BUS STOP DETAIL STA. 126 + 00

NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

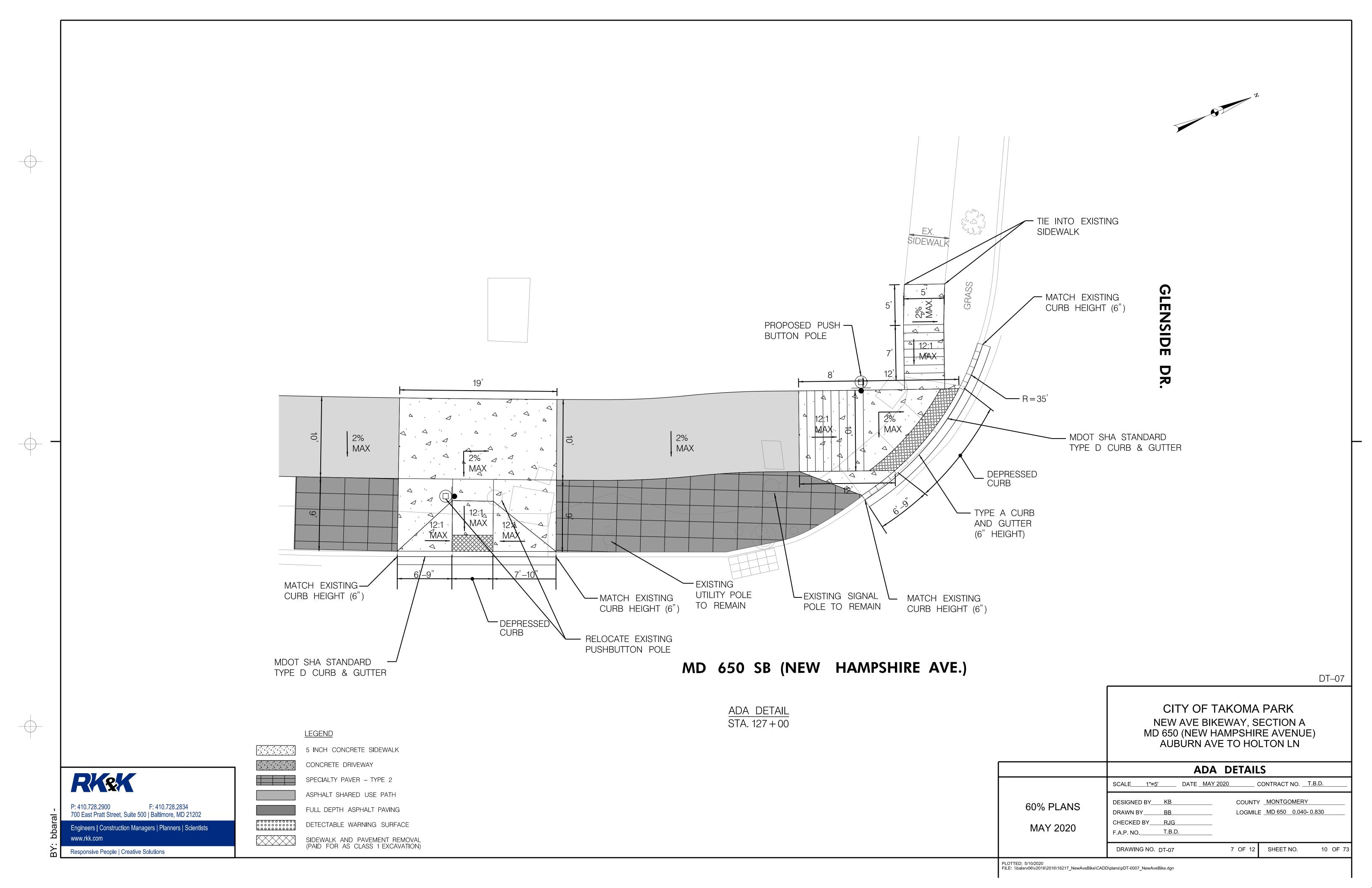
ADA DETAILS

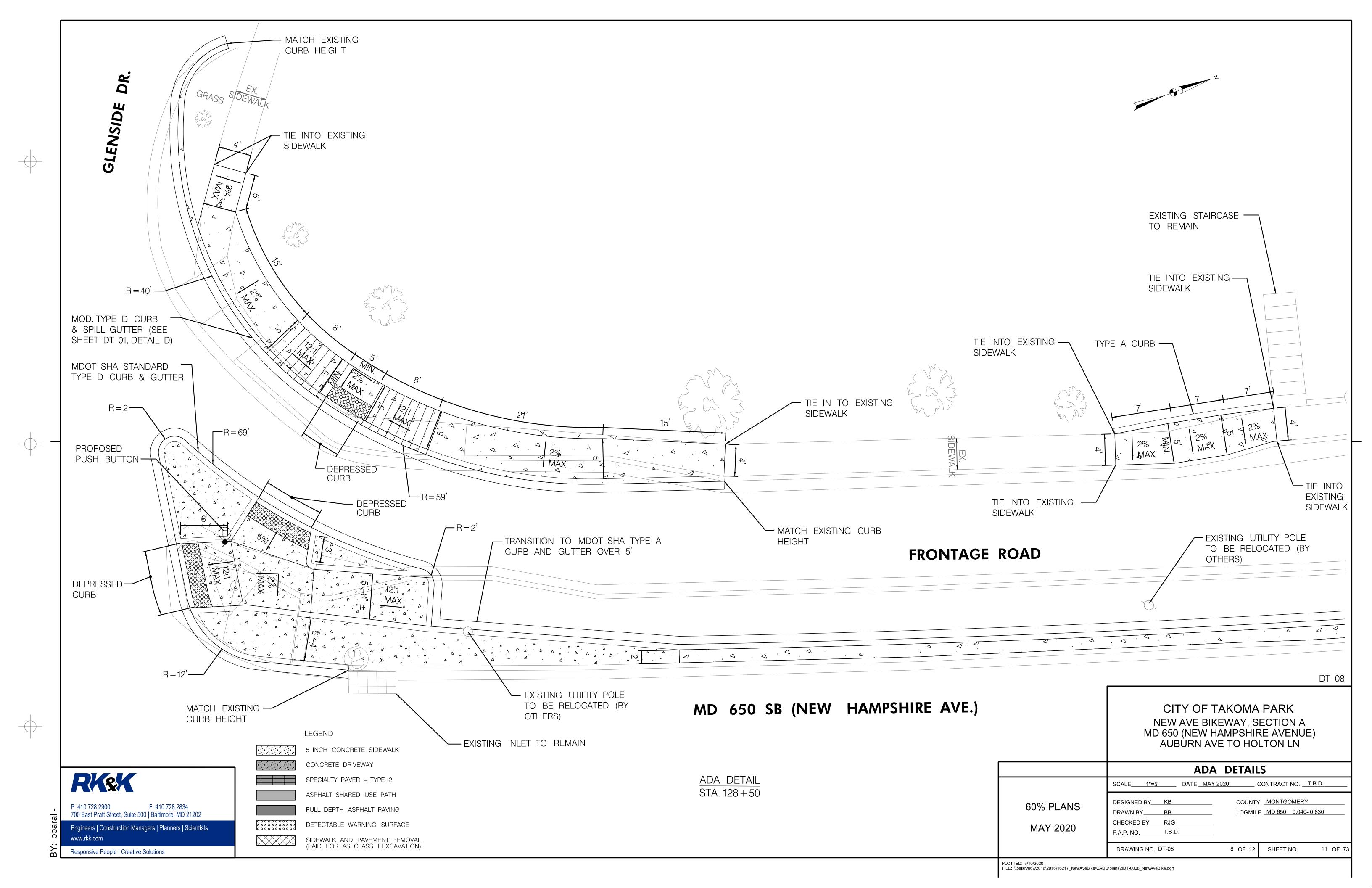
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	SCALE 1"=5' DATE MAY 2	2020 CONTRACT NO		
60% PLANS MAY 2020	DESIGNED BY KB  DRAWN BY BB  CHECKED BY RJG  F.A.P. NO. T.B.D.	COUNTY MONTGOMERY LOGMILE MD 650 0.040- 0.830		
	DRAWING NO. DT-06	6 OF 12 SHEET NO. 9 OF 73		
PLOTTED: 5/10/2020		•		

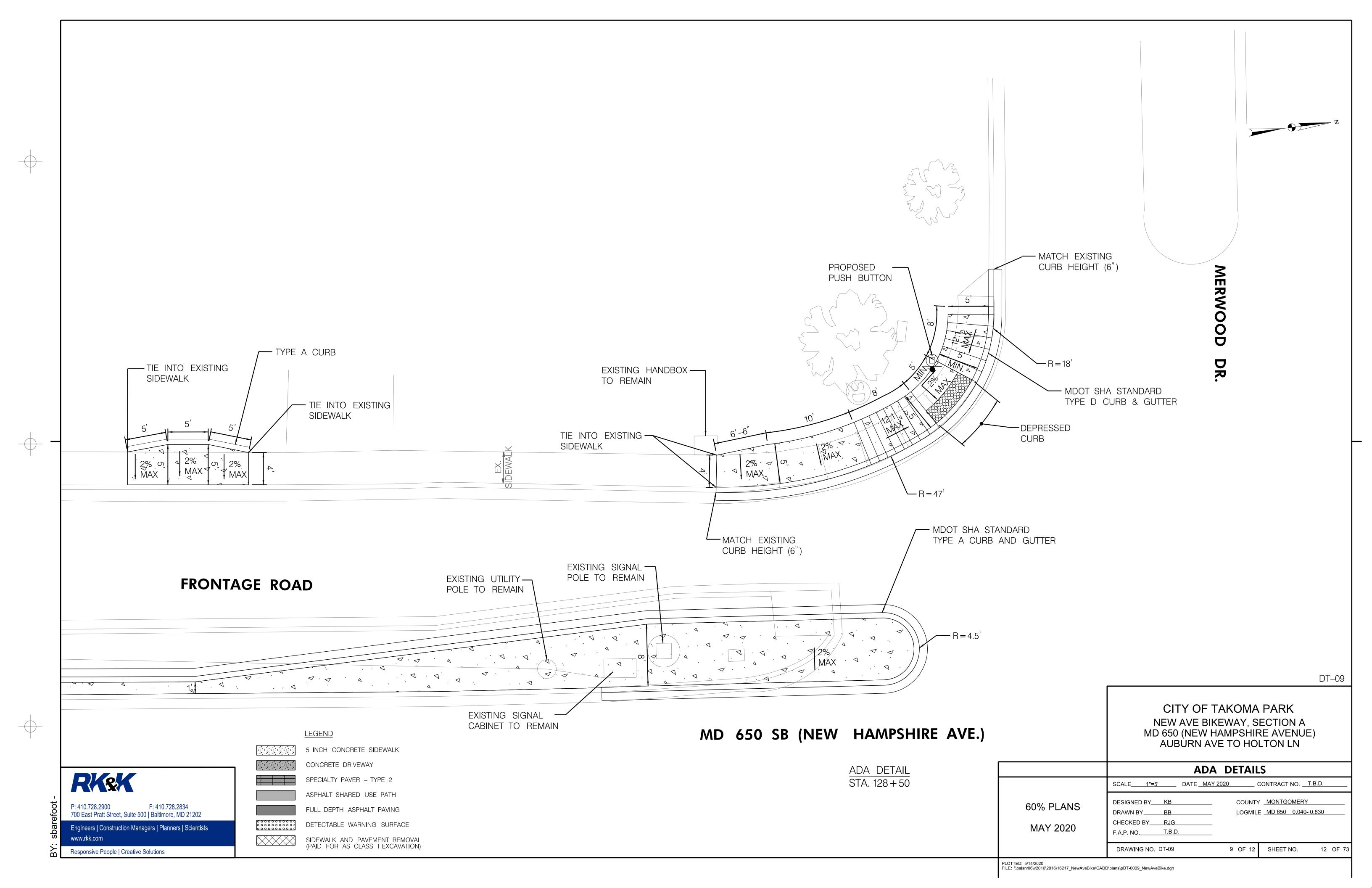
CITY OF TAKOMA PARK

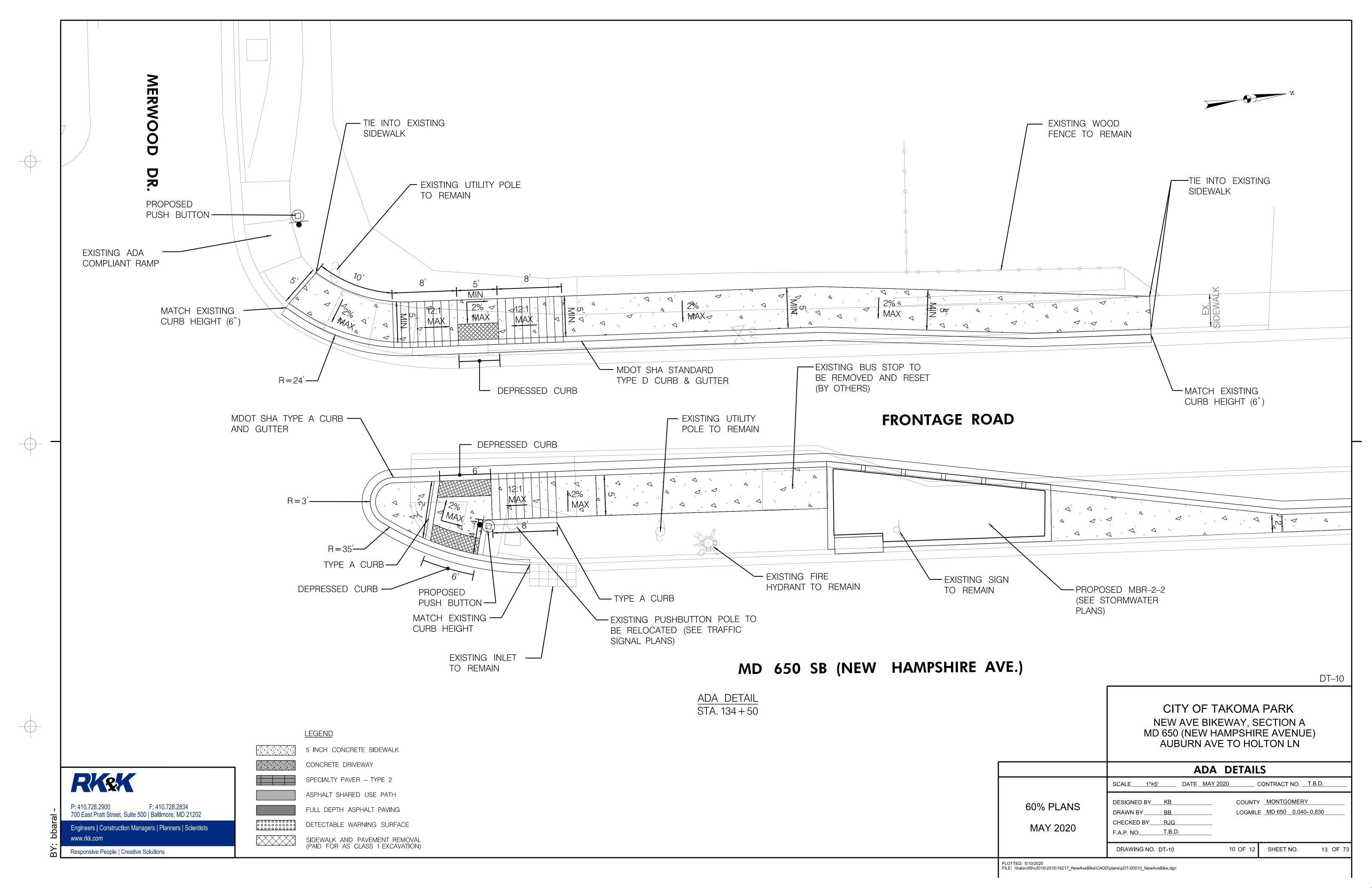
DT-06

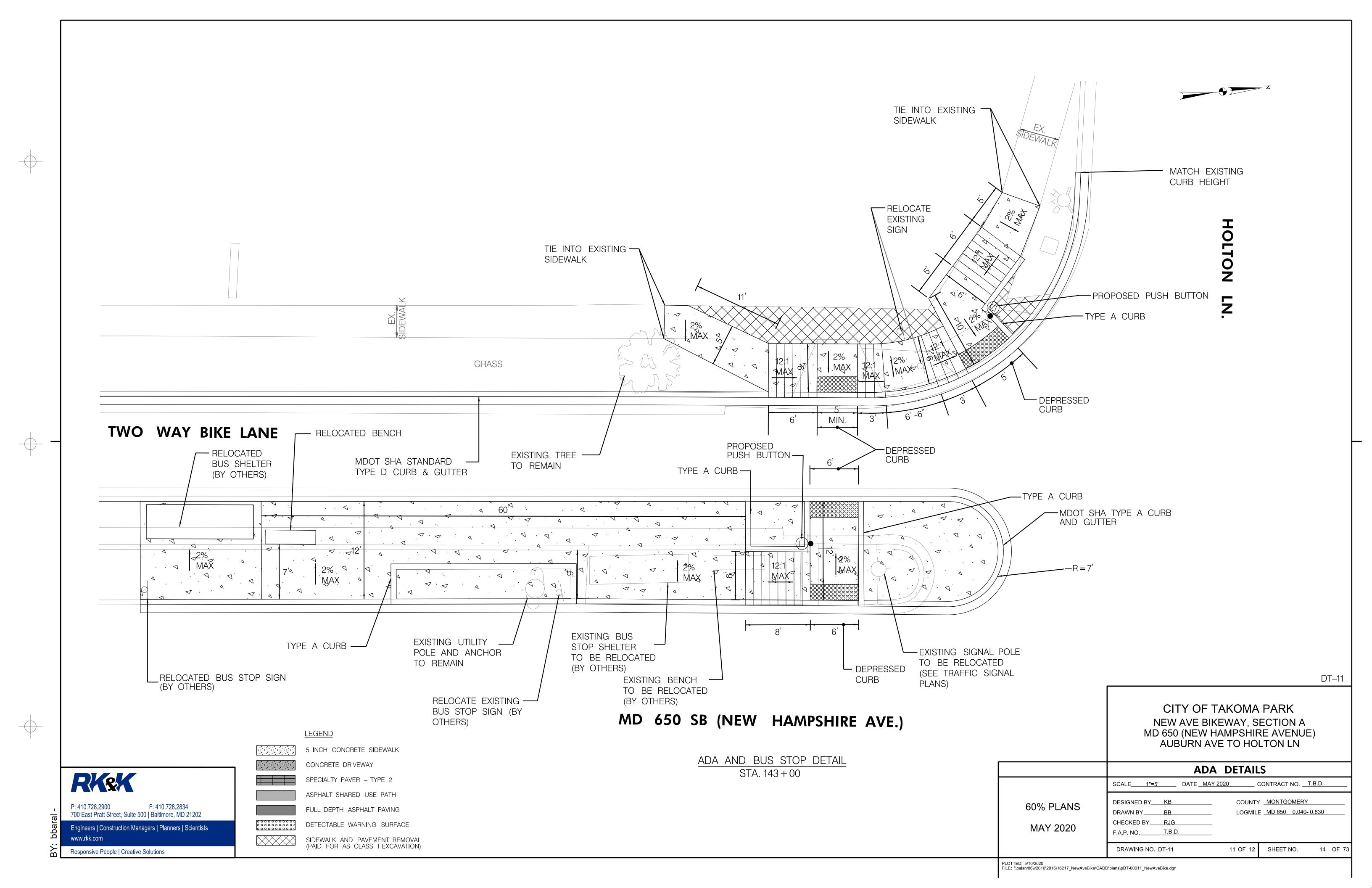
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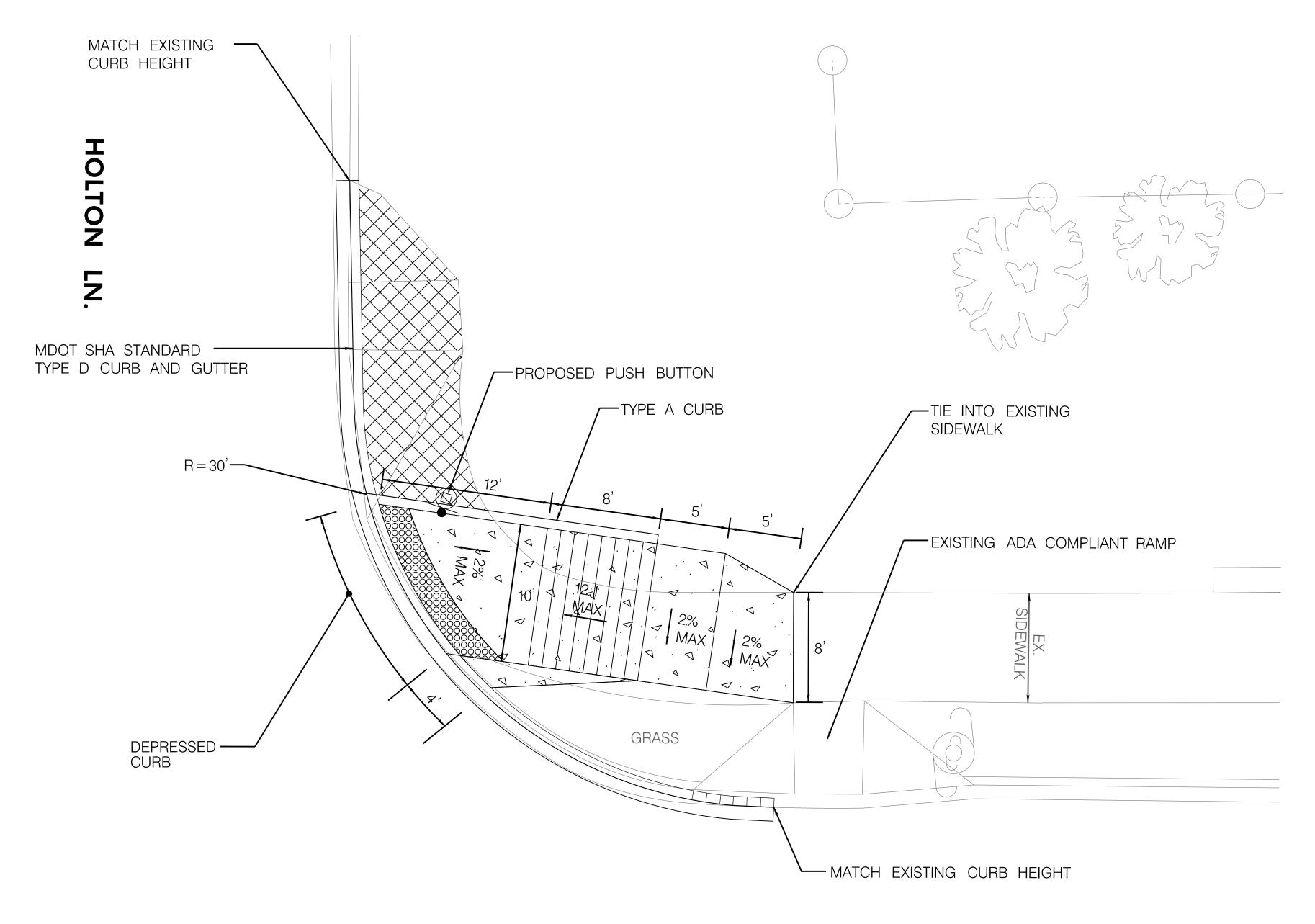












MD 650 SB (NEW HAMPSHIRE AVE.)

ADA DETAIL STA. 143 + 75 CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

DT-12

	ADA DETAILS				
	SCALE1"=5' DATE MAY 2020 CONTRACT NOT.B.D				
60% PLANS MAY 2020	DESIGNED BY         KB         COUNTY         MONTGOMERY           DRAWN BY         BB         LOGMILE         MD 650         0.040- 0.830           CHECKED BY         RJG           F.A.P. NO.         T.B.D.				
	DRAWING NO. DT-12 12 OF 12 SHEET NO. 15 OF 73				

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CONCRETE DRIVEWAY

SPECIALTY PAVER – TYPE 2

ASPHALT SHARED USE PATH

FULL DEPTH ASPHALT PAVING

DETECTABLE WARNING SURFACE

SIDEWALK AND PAVEMENT REMOVAL (PAID FOR AS CLASS 1 EXCAVATION)

5 INCH CONCRETE SIDEWALK

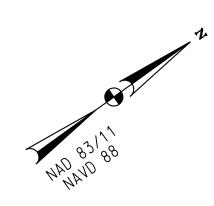
<u>LEGEND</u>

PLOTTED: 5/10/2020
FILE: \\balsrv06\v2016\2016\16217\_NewAveBike\CADD\plans\pDT-00012\_NewAveBike.dgn

CURVE DATA						
CURVE NO.	Δ	Dc	R	Т	L	E
I	9° 22′36 <b>.</b> 43′′	1°00′18 <b>.</b> 68′′	5,700.00′	467.46′	932.84′	19.14′
2	25° 22′55.18′′	2° 48′31 <b>.</b> 02′′	2,040.00′	459.40′	903.72′	51.09′

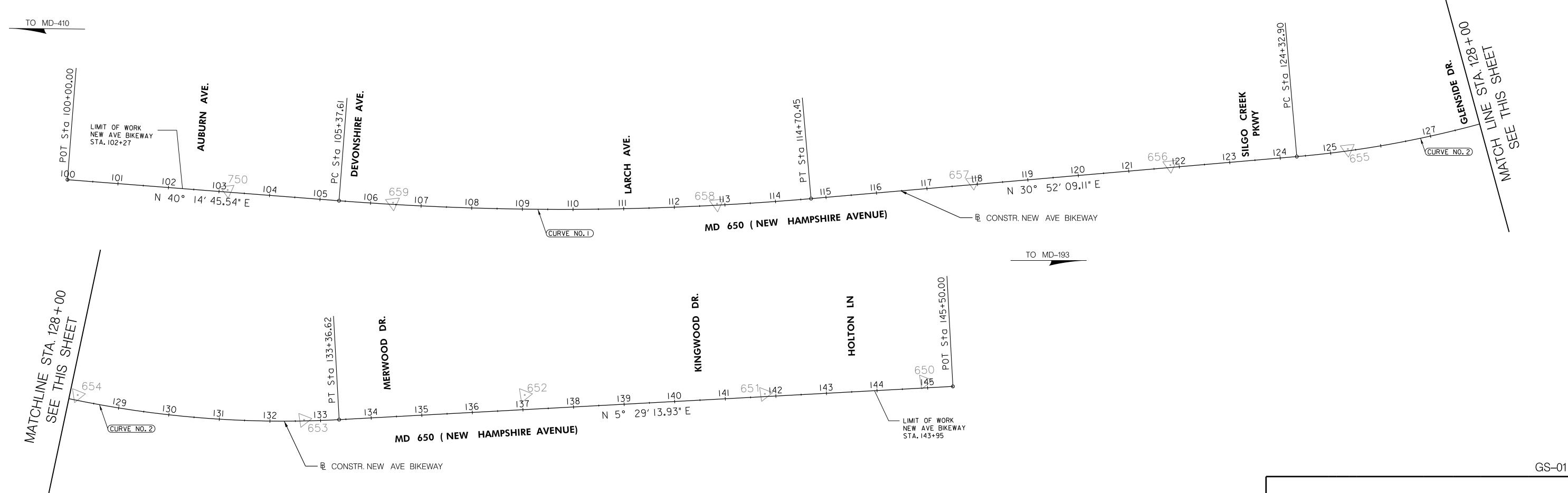
BASELINE CONTROL COORDINATES  & CONSTR. MD 650						
	NORTH	EAST				
POT STA. 100+00.00	476,595.2050	1,313,917.8136				
PC STA. 105+37.61	477,005.5529	1,314,265.1494				
PISTA. 110+05.07	477,362.3568	1,314,567.1633				
PT STA. II4+70.45	477,763.5993	1,314,807.0091				
PC STA. 124+32.90	478,589.7066	1,315,300.8211				
PISTA. 128+92.29	478,984.0258	1,315,536.5285				
PT STA. 133+36.62	479,441.3177	1,315,580.4576				
POT STA.145+50.00	480,649.1413	1,315,696.4855				

TRAVERSE POINTS						
POINT NO.	NORTH	EAST	ELEVATION	PLAN SHEET NO.		
650	480,595.8800	1,315,678.6100	216.12	PS-06		
651	480,279.9300	1,315,655.5800	203.72	PS-05		
652	479,810.8489	1,315,587.0849	170.19	PS-05		
653	479,372.8572	1,315,570.4879	146.13	PS-04		
654	478,938.3286	1,315,455.4728	121.00	PS-04		
655	478,680.1722	1,315,347.7532	106.75	PS-03		
656	478,377.5379	1, 315,168.4333	103.94	PS-03		
657	478,042.5756	1,314,967.8564	110.09	PS-03		
658	477,607.2029	1,314,706.7244	144.10	PS-02		
659	477,089.7324	1,314,330.8027	178.33	PS-0I		
750	476,839.6600	1,314,119.2900	185.45	PS-0I		



NOTES:

I. TOPOGRAPHIC SURVEY AND BOUNDARY LINE ESTABLISHMENT WAS PREPARED BY CAPITOL DEVELOPMENT DESIGN, INC. IN DECEMBER 2016 WITH SUPPLEMENTAL TOPOGRAPHIC SURVEY IN NOVEMEBR 2018.



CITY OF TAKOMA PARK NEW AVE BIKEWAY, SECTION A MD 650 (NEW HAMPSHIRE AVENUE) AUBURN AVE TO HOLTON LN

	BASELINE GEOMETRY & SURVEY CONTROL
	SCALE 1"=100' DATE MAY 2020 CONTRACT NOT.B.D.
60% PLANS MAY 2020	DESIGNED BY KBJ COUNTY MONTGOMERY  DRAWN BY BB LOGMILE MD 650 0.040- 0.830  CHECKED BY RJG  F.A.P. NO. T.B.D.
	DRAWING NO. GS01 1 OF 5 SHEET NO. 16 OF 73

PLOTTED: 5/14/2020 FILE: \\balsrv06\v2016\2016\16217\_NewAveBike\CADD\plans\pGS-0001\_NewAveBike-Plan.dgn

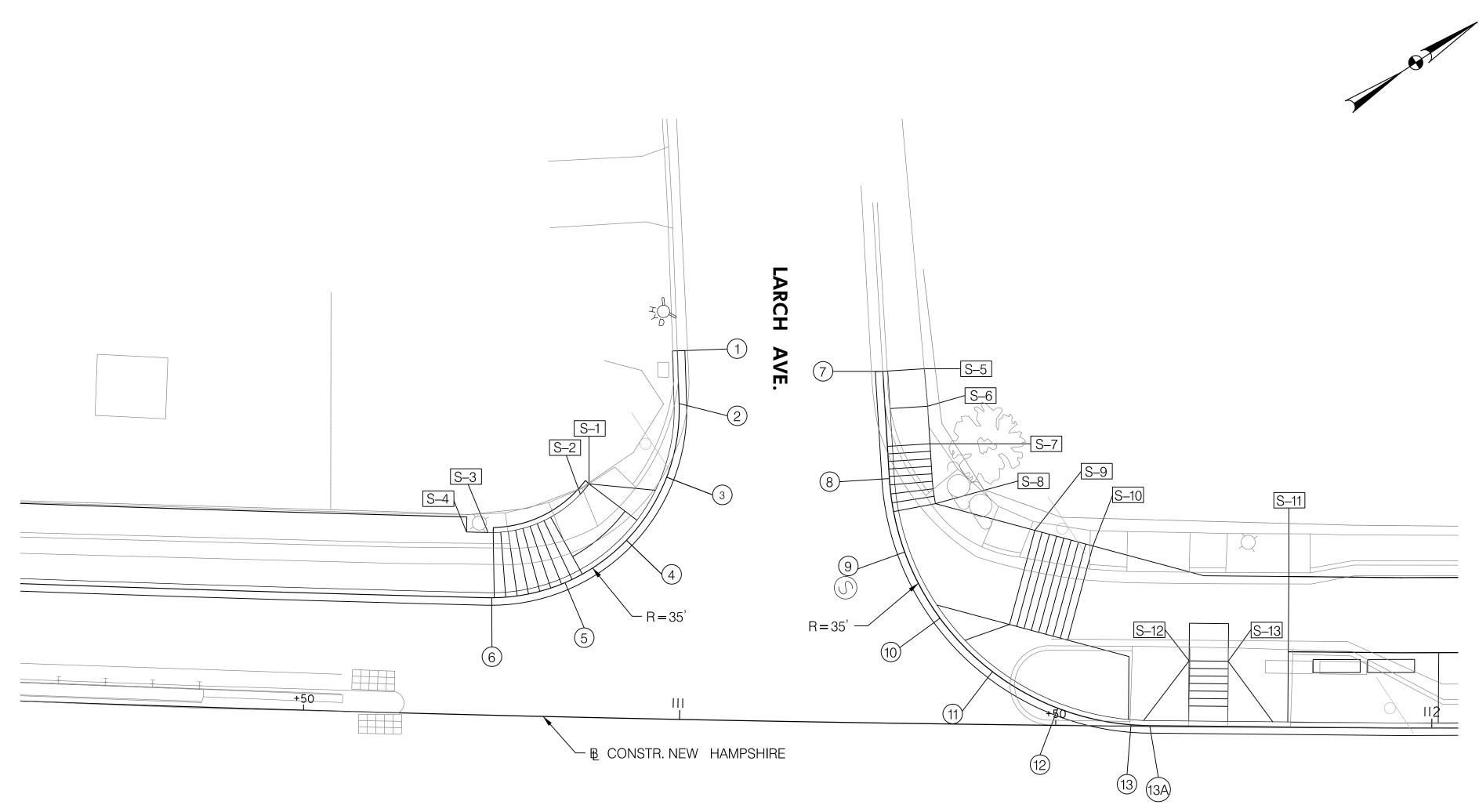
RKSK

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MD	650	NB	(NEW	<b>HAMPSHIRE</b>	AVE.)

	INTERSECTION STAKEOUT CHART							
POINT	STATION AND	EDGE OF	воттом	COORE	DINATES			
NO.	OFFSET	ROAD	OF CURB	NORTHING	EASTING			
Ţ	110+98.71, 48.98′LT			477478.78	1314565.70			
2	110+99.09, 41.98'LT			477475.11	1314571.67			
3	110+97.62, 32.15'LT			477468.33	1314578.93			
4	110+92.44, 23.67'LT			477459.27	1314582.98			
5	110+84.36, 17.85′LT			477449.33	1314583.18			
6	110+74.65, 15.61' LT			477440.11	1314579.50			
7	III+26.30, 46.75′LT			477500.07	1314583.02			
8	III+27.40, 32.50'LT			477492.94	1314595.40			
9	III+29.59, 22.78'LT			477489.26	1314604.66			
10	III+34.42, I4.05′LT			477488.33	1314614.58			
П	III+4I.5I, 7.03'LT			477490.23	1314624.37			
12	III+50.28, 2.28'LT			477494.82	1314633.21			
13	III+60.02, 0.18' LT			477501.71	1314640.41			
13A	III+62.5I, 0.09' LT			477503.72	1314641.87			

SIDEWALK STAKEOUT CHART							
POINT	STATION AND	COORE	INATES				
NO.	OFFSET	NORTHING	EASTING				
S-I	110+87.27, 31.04' LT	477459.23	1314573.99				
S-2	110+86.14, 29.65' LT	477457.52	1314574.49				
S-3	110+73.94, 24.27' LT	477444.48	1314571.99				
S-4	IIO+68.79, 25.57' LT	477442.13	1314570.35				
S-5	III+31.85, 47.17'LT	477504.85	1314585.77				
S-6	III+32.38, 42.19'LT	477502.49	1314590.18				
S-7	III+32.76, 37.21'LT	477499.99	1314594.51				
S-8	III+33.60, 29.26' LT	477496.21	1314601.55				
S-9	III+46.92, 25.89' LT	477505.28	1314611.79				
S-10	III+54.7I, 23.90' LT	477510.59	1314617.78				
S-II	III+80.88, 20.05' LT	477530.08	1314635.52				
S-I2	III+67.67, 8.75' LT	477512.84	1314637.57				
S-13	III+72.88, 8.74' LT	477517.15	1314640.47				

GS-02

# CITY OF TAKOMA PARK NEW AVE BIKEWAY, SECTION A MD 650 (NEW HAMPSHIRE AVENUE) AUBURN AVE TO HOLTON LN

	INTERSECTION STAKEOUT DETAIL
	SCALE 1"=10' DATE MAY 2020 CONTRACT NOT.B.D.
60% PLANS MAY 2020	DESIGNED BY         KB         COUNTY         MONTGOMERY           DRAWN BY         KB         LOGMILE         MD 650         0.040- 0.830           CHECKED BY         RJG           F.A.P. NO.         T.B.D.
	DRAWING NO. GS-02 2 OF 5 SHEET NO. 17 OF 73
DI 07777 - 711010000	

RKSK P: 410.728.2900 F: 410.728.2834 700 East Pratt Street, Suite 500 | Baltimore, MD 21202 Engineers | Construction Managers | Planners | Scientists NOTES:

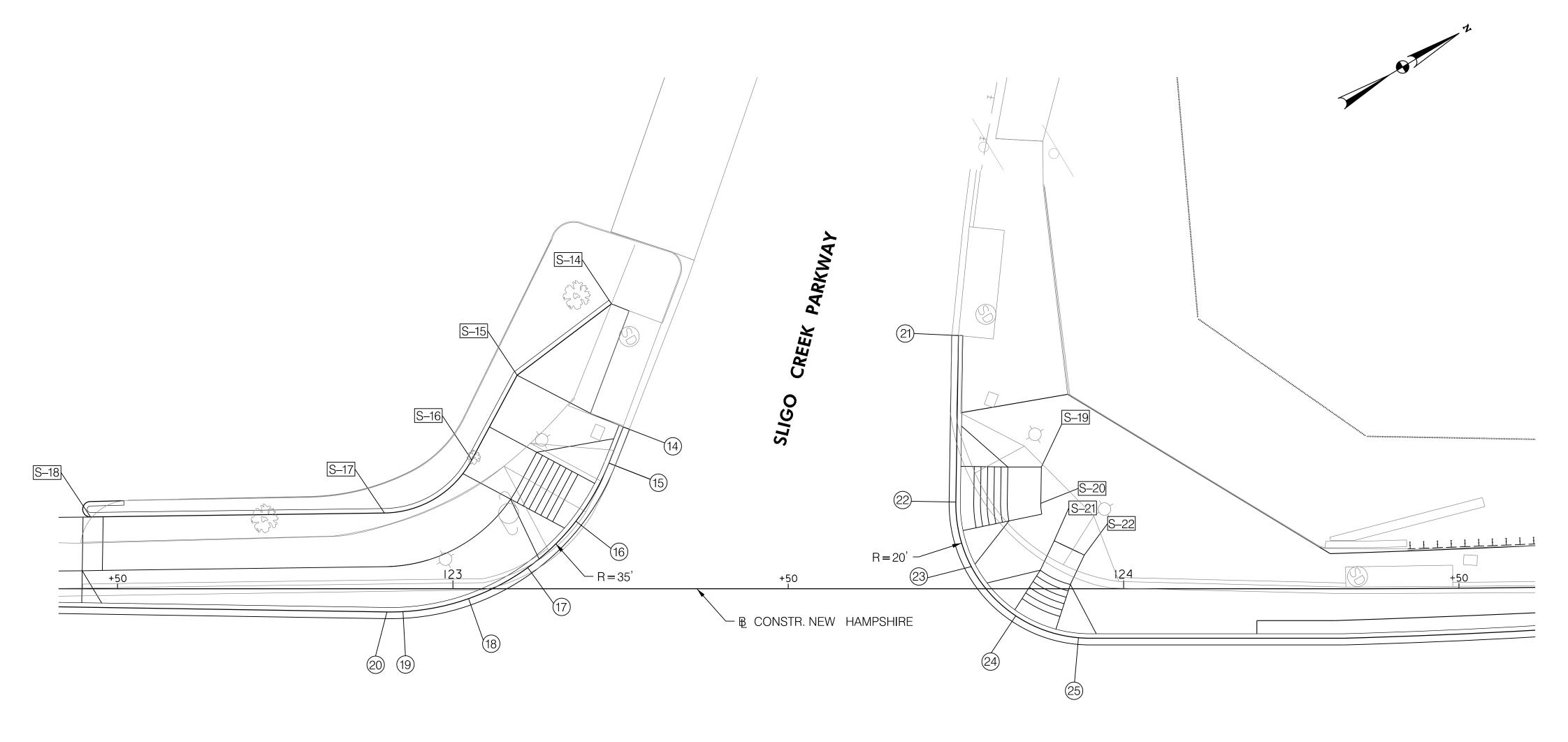
1. STAKEOUT POINT NUMBERS REFERENCE THE FACE OF PROPOSED CURB OR THE BACK OF PROPOSED SIDEWALK.

2. RADII REFERENCE THE FACE OF PROPOSED CURB.

3. SEE ADA DETAILS FOR PEDESTRIAN RAMP DESIGN.

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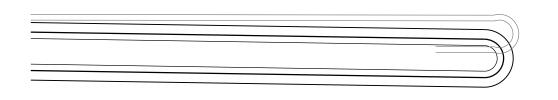
PLOTTED: 5/10/2020 FILE: \\balsrv06\v2016\2016\16217\_NewAveBike\CADD\plans\pGS-0002\_NewAveBike.dgn



	INTERSECT	TION S	TAKEOU	IT CHAR	RT
POINT	STATION AND	EDGE OF	ВОТТОМ	COORD	INATES
NO.	OFFSET	ROAD	OF CURB	NORTHING	EASTING
14	123+23.65, 24.13′ LT			478517.73	1315208.31
15	123+23.26, 18.73′LT			478505.21	1315228.49
16	123+18.33, 10.07′ LT			478496.54	1315233.40
17	123+11 <b>.</b> 16 <b>,</b> 3 <b>.</b> 15′ LT			478486.83	1315235.66
18	123+02.33, 1.47' LT			478476.88	1315235.10
19	123+82.74, 18.15′ LT			478555.96	1315259.51
20	122+90.17, 3.47′LT			478465.42	1315230.57
21	123+75.37, 37.76′ LT			478559.70	1315238.90
22	123+74.99, 12.93' LT			478546.63	1315260.01
23	123+77.29, 3.31' LT			478543.67	1315269.45
24	123+83.92, 4.04′LT			478545.59	1315279.16
25	123+93.26, 7.31'LT			478551.93	1315286.75

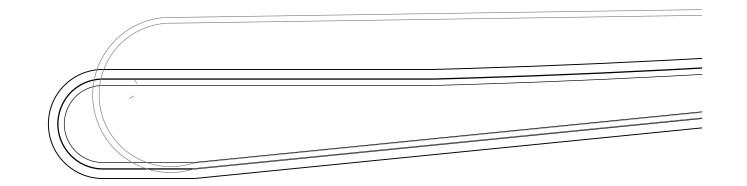
SIDEWALK STAKEOUT CHART						
POINT	STATION AND	1	INATES			
NO.	OFFSET	NORTHING	EASTING			
S-14	123+23.65, 42.48' LT	478517.73	1315208.31			
S-15	123+09.57, 31.83' LT	478500.18	1315210.22			
S-16	123+02.81, 19.20' LT	478487.90	1315217.59			
S-17	122+89.79, II.29' LT	478472.66	1315217.70			
S-18	122+45.96, 10.71' LT	478434.75	1315195.72			
S-19	123+87.74, 18.15′ LT	478560.25	1315262.07			
S-20	123+87.65, 12.73′ LT	478557.40	1315266.68			
S-2I	123+89.65, 7.14' LT	478556.25	1315272.50			
S-22	123+94.14, 5.02′ LT	478559.01	1315276.62			

# MD 650 NB (NEW HAMPSHIRE AVE.)



NOTE:

SUPPLEMENTARY TOPO SURVEY IS REQUIRED ALONG THE NORTHBOUND SIDE OF THE MD 650 MEDIAN TO COMPLETE THE DESIGN /STAKEOUT.



GS-03

# CITY OF TAKOMA PARK NEW AVE BIKEWAY, SECTION A MD 650 (NEW HAMPSHIRE AVENUE) AUBURN AVE TO HOLTON LN

RK&K

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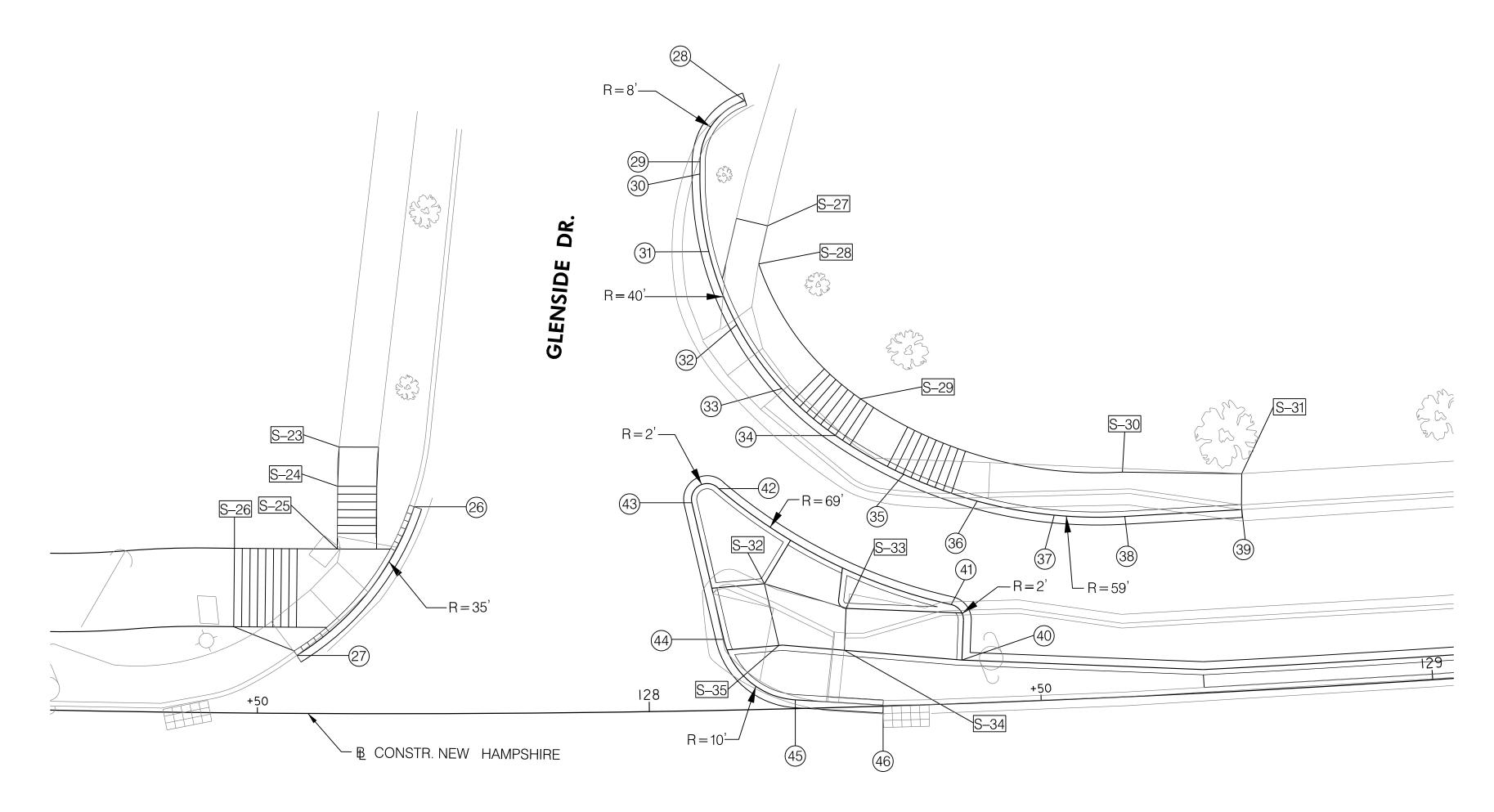
NOTES:

1. STAKEOUT POINT NUMBERS REFERENCE THE FACE OF PROPOSED CURB OR THE BACK OF PROPOSED SIDEWALK.

2. RADII REFERENCE THE FACE OF PROPOSED CURB.

3. SEE ADA DETAILS FOR PEDESTRIAN RAMP DESIGN.

PLOTTED: 5/10/2020
FILE: \\balsrv06\v2016\2016\16217\_NewAveBike\CADD\plans\pGS-0003\_NewAveBike.dgn



MD	650	NB	(NEW	<b>HAMPSHIRE</b>	AVE.)
----	-----	----	------	------------------	-------

	INTERSECT	ION SI	<b>TAKEOU</b>	T CHAR	Т
POINT	STATION AND	EDGE OF	воттом	COORDI	NATES
NO.	OFFSET	ROAD	OF CURB	NORTHING	EASTING
26	127+70.04, 26.39' LT			478901.67	1315424.58
27	127+55.00, 7.40' LT			478880.80	1315436.74
28	128+14.00, 77.68' LT			478959.91	1315391.83
29	128+07.87, 70.00′ LT			478951.71	1315397.00
30	128+07.82, 68.45′LT			478951.12	1315398.43
31	128+24.78, 34.65′LT			478955.03	1315435.86
32	128+61.76, 22.99′ LT			478985.57	1315458.93
33	128+76.85, 23.11' LT			478999.75	1315463.58
34	128+08.78, 58.52′LT			478948.55	1315408.07
35	128+33.40, 29.47'LT			478961.27	1315443.60
36	128+42.79, 25.73′LT			478968.75	1315450.22
37	128+42.79, 25.73′LT			478977.24	1315455.47
38	128+42.79, 25.73′LT			478985.55	1315458.92
39	128+76.85, 23.11' LT			478985.55	1315463.58
40	128+40.08, 5.55′ LT			478959.52	1315468.36
41	128+38.96, 12.66′ LT			478960.84	1315461.28
42	128+09.44, 28.27' LT			478938.66	1315436.66
43	128+05.93, 26.54′ LT			478934.81	1315437.08
44	128+09.68, 9.04' LT			478932.21	1315454.79
45	128+18.65, 1.12′LT			478937.89	1315465.30
46	128+29.82, 0.12' LT			478948.05	1315470.04

SIDEWALK STAKEOUT CHART						
POINT	STATION AND	COORD	INATES			
NO.	OFFSET	NORTHING	EASTING			
S-23	127+60.32, 34.00' LT	478895.55	1315413.99			
S-24	127+60.14, 29.00' LT	478893.54	1315418.57			
S-25	127+60.13, 21.00'LT	478890.57	1315426.00			
S-26	127+46.87, 21.00' LT	478878.40	1315421.12			
S-27	128+16.57, 61.65′ LT	478956.73	1315407.74			
S-28	128+15.29, 56.81' LT	478953.89	1315411.86			
S-29	128+28.12, 39.27' LT	478959.69	1315432.62			
S-30	128+61.69, 28.66' LT	478987.34	1315453.55			
S-3I	128+77.09, 27.69' LT	479001.43	1315459.31			
S-32	128+15.06, 16.02′ LT	478939.64	1315450.08			
S-33	128+25.46, 12.60′ LT	478948.18	1315456.82			
S-34	128+25.09, 7.27' LT	478946.03	1315461.71			
S-35	128+16.72, 8.10'LT	478938.47	1315458.08			

GS-04

CITY OF TAKOMA PARK NEW AVE BIKEWAY, SECTION A MD 650 (NEW HAMPSHIRE AVENUE) AUBURN AVE TO HOLTON LN

	INTERSECTION STAKEOUT DETAIL
	SCALE 1"=10' DATE MAY 2020 CONTRACT NO. T.B.D.
60% PLANS MAY 2020	DESIGNED BY KB COUNTY MONTGOMERY  DRAWN BY KB LOGMILE MD 650 0.040- 0.830  CHECKED BY RJG  F.A.P. NO. T.B.D.
	DRAWING NO. GS-04 4 OF 5 SHEET NO. 19 OF 73
OTTED: 5/8/2020	

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NOTES:

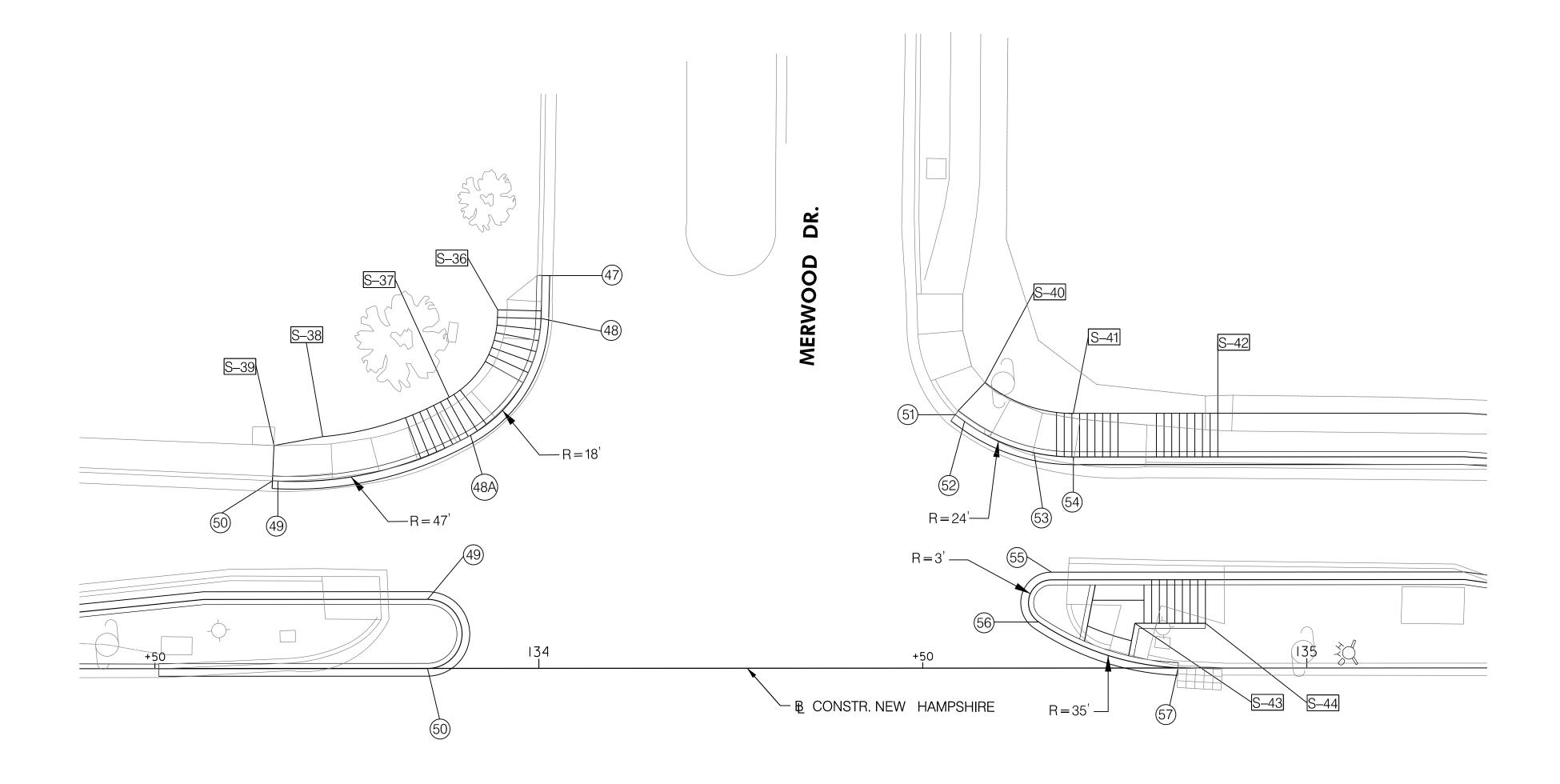
1. STAKEOUT POINT NUMBERS REFERENCE THE FACE OF PROPOSED CURB OR THE BACK OF PROPOSED SIDEWALK.

2. RADII REFERENCE THE FACE OF PROPOSED CURB.

3. SEE ADA DETAILS FOR PEDESTRIAN RAMP DESIGN.

PLOTTED: 5/8/2020 FILE: \\balsrv06\v2016\2016\16217\_NewAveBike\CADD\plans\pGS-0004\_NewAveBike.dgn





	INTERSECTION STAKEOUT CHART						
POINT	STATION AND	EDGE OF	воттом	COORDI	NATES		
NO.	OFFSET	ROAD	OF CURB	NORTHING	EASTING		
47	134+00.45, 51.15′ LT			479509.75	1315535.65		
48	134+00.30, 45.57′LT			479509.07	1315541.18		
48A	133+91.12, 30.37' LT			479498.47	1315555.44		
49	133+66.03, 24.40′ LT			479472.93	1315558.98		
50	133+65.31, 24.44′ LT			479472.22	1315558.88		
51	134+54.25, 33.01' LT			479561.57	1315558.85		
52	134+55.46, 32.13′ LT			479562.68	1315559.84		
53	134+64.51, 28.05′ LT			479571.31	1315564.76		
54	134+69.62, 27.50′ LT			479576.34	1315565.80		
55	134+66.77, 12.5′ LT			479572.07	1315580.46		
56	134+65.09, 6.01′LT			479569.77	1315586.76		
57	134+83.25, 0.04' LT			479587.29	1315594.44		

S	SIDEWALK STAKEOUT CHART					
POINT	STATION AND	COORE	INATES			
NO.	OFFSET	NORTHING	EASTING			
S-36	133+94.66, 46.71' LT	479503.56	1315539.51			
S-37	133+88.34, 35.31'LT	479496.18	1315550.25			
S-38	133+71.86, 30.19' LT	479479.28	1315553.77			
S-39	133+65.52, 29.03' LT	479472.87	1315554.32			
S-40	134+58.13, 37.19' LT	479565.83	1315555.06			
S-4I	134+69.62, 33.17' LT	479576.88	1315560.16			
S-42	134+88.43, 33.17' LT	479595.61	1315561.96			
S-43	134+77 <b>.</b> 63 <b>,</b> 5 <b>.</b> 83′ LT	479582.24	1315588.14			
S-44	134+86.81, 5.83' LT	479591.38	1315589.02			

GS-05

# CITY OF TAKOMA PARK NEW AVE BIKEWAY, SECTION A MD 650 (NEW HAMPSHIRE AVENUE) AUBURN AVE TO HOLTON LN

REVISIONS	INTERSECTION STAKEOUT DETAIL
	SCALE 1"=10' DATE MAY 2020 CONTRACT NO. T.B.D.
60% PLANS MAY 2020	DESIGNED BY KB COUNTY MONTGOMERY  DRAWN BY KB LOGMILE MD 650 0.040- 0.830  CHECKED BY RJG  F.A.P. NO. T.B.D.
	DRAWING NO. GS-05 5 OF 5 SHEET NO. 20 OF 73
PLOTTED: 5/10/2020	

MD 650 NB (NEW HAMPSHIRE AVE.)

RKSK

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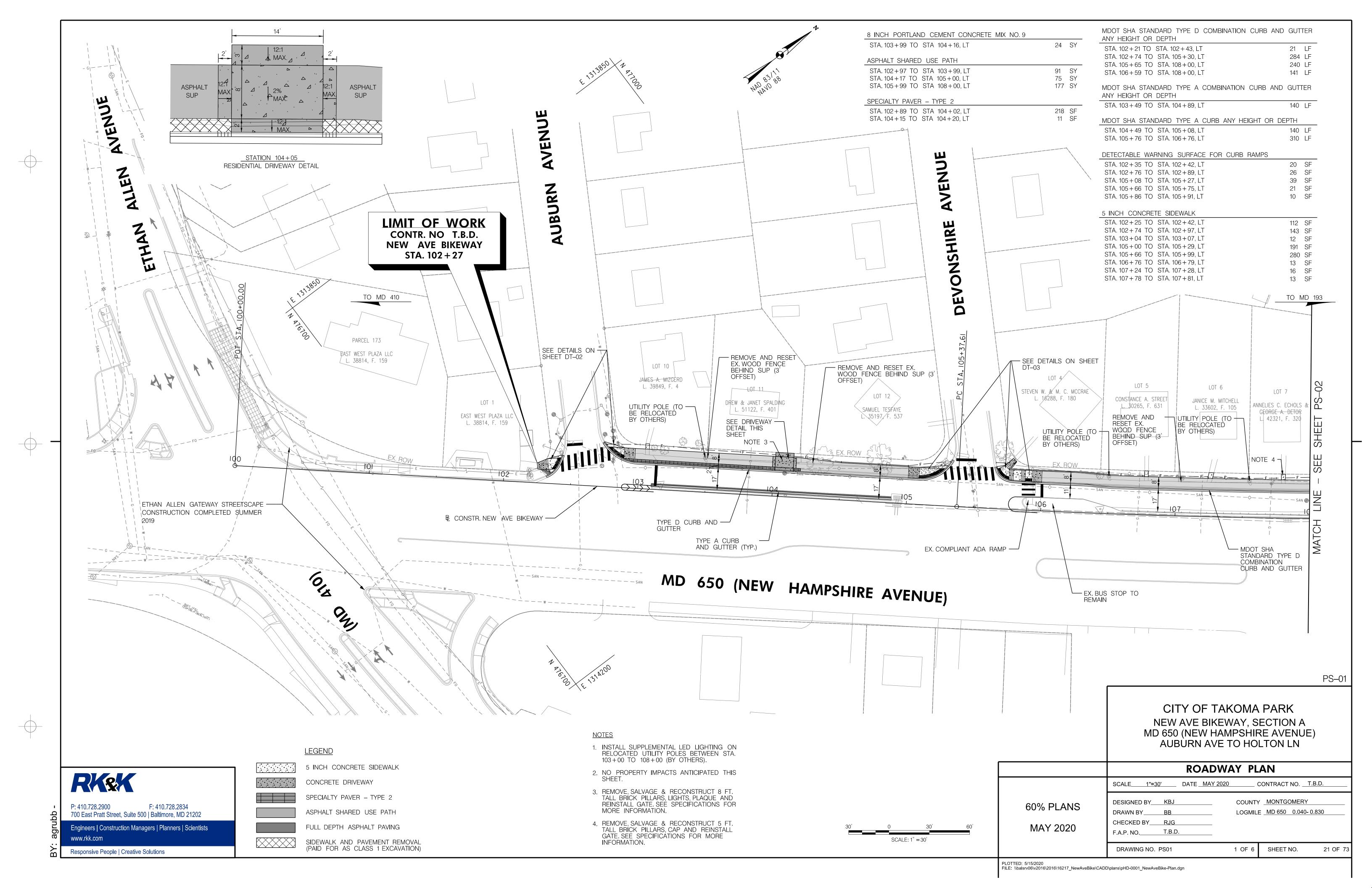
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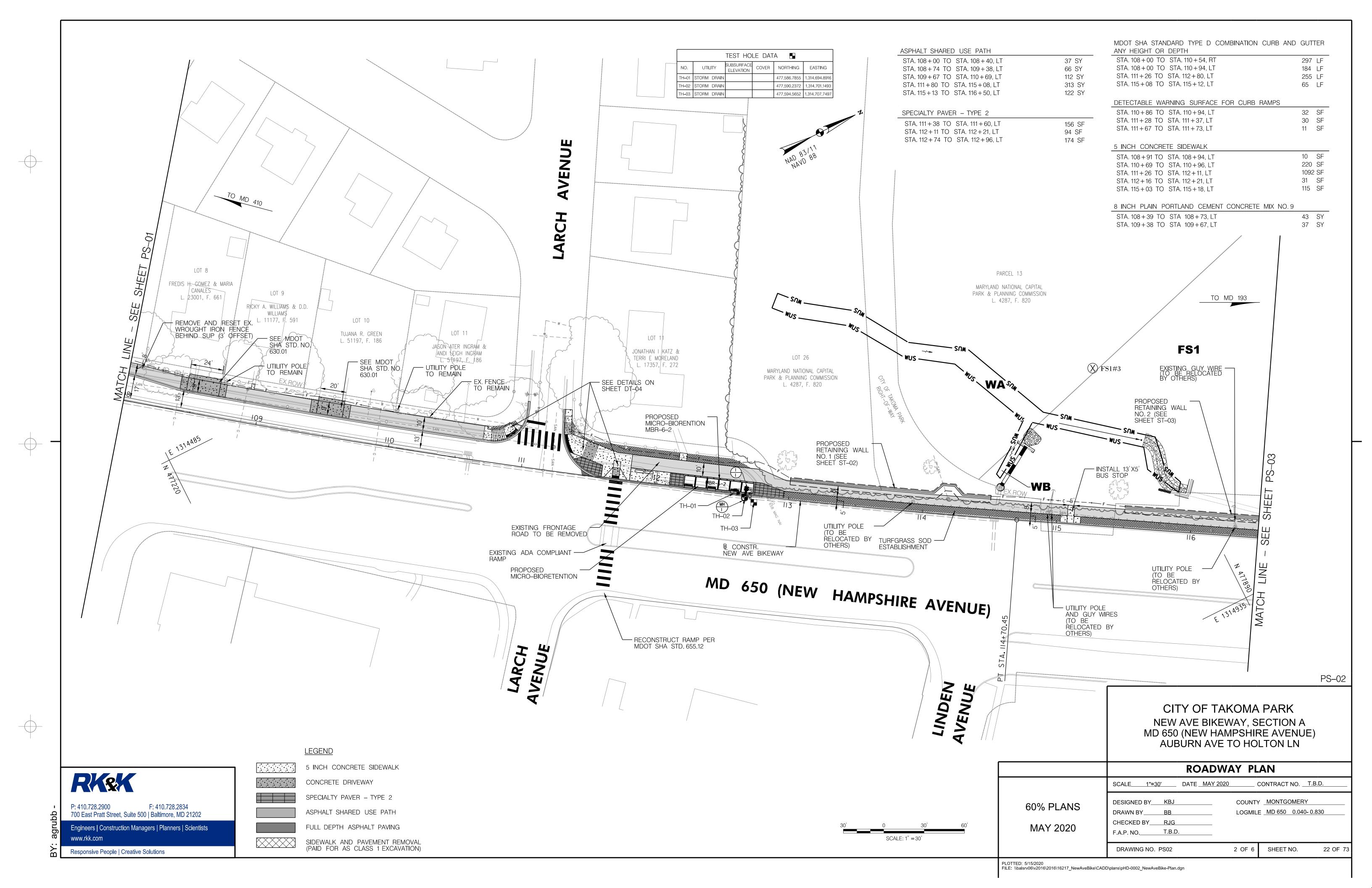
1. STAKEOUT POINT NUMBERS REFERENCE THE FACE OF PROPOSED CURB OR THE BACK OF PROPOSED SIDEWALK.

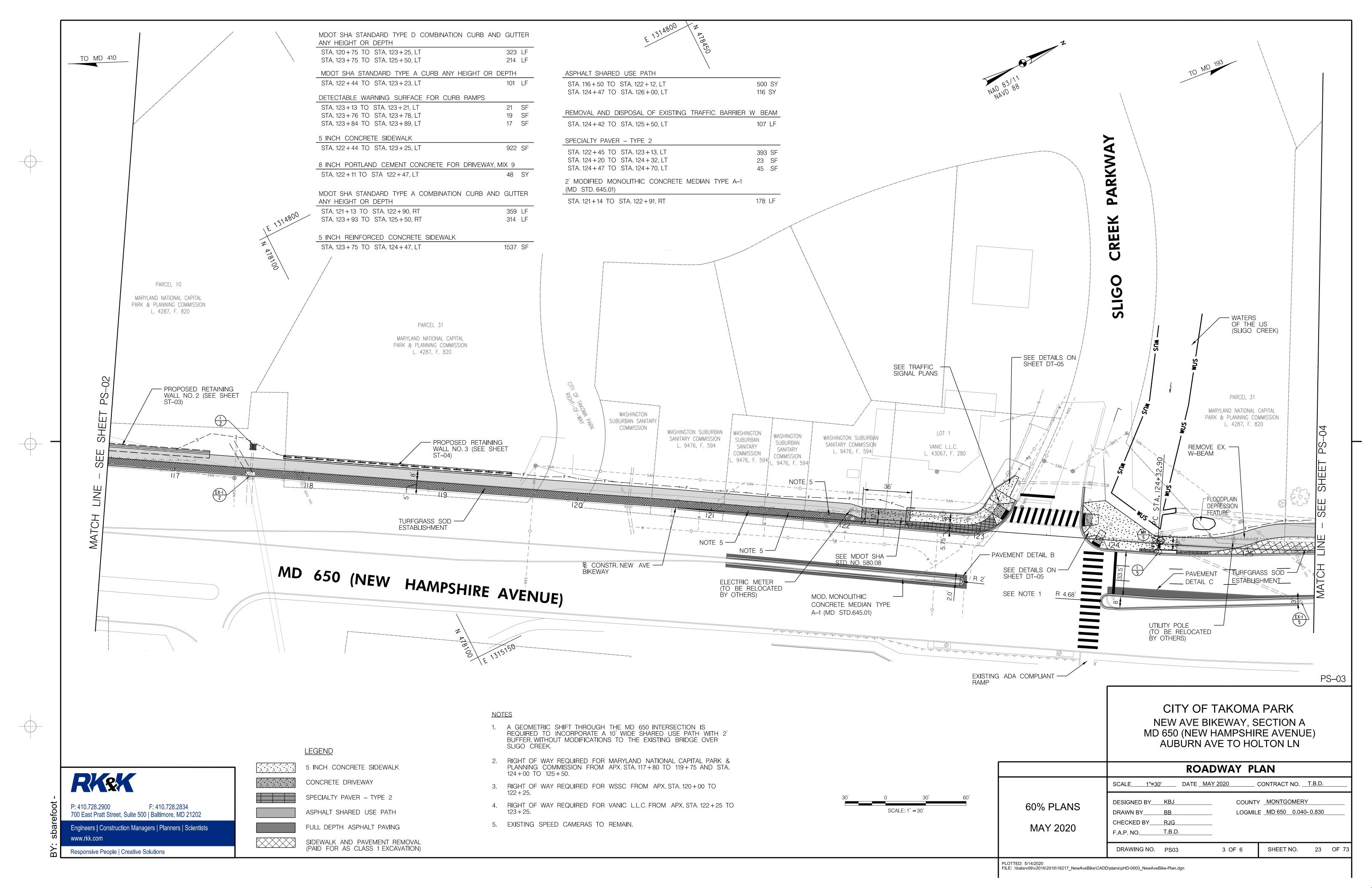
2. RADII REFERENCE THE FACE OF PROPOSED CURB.

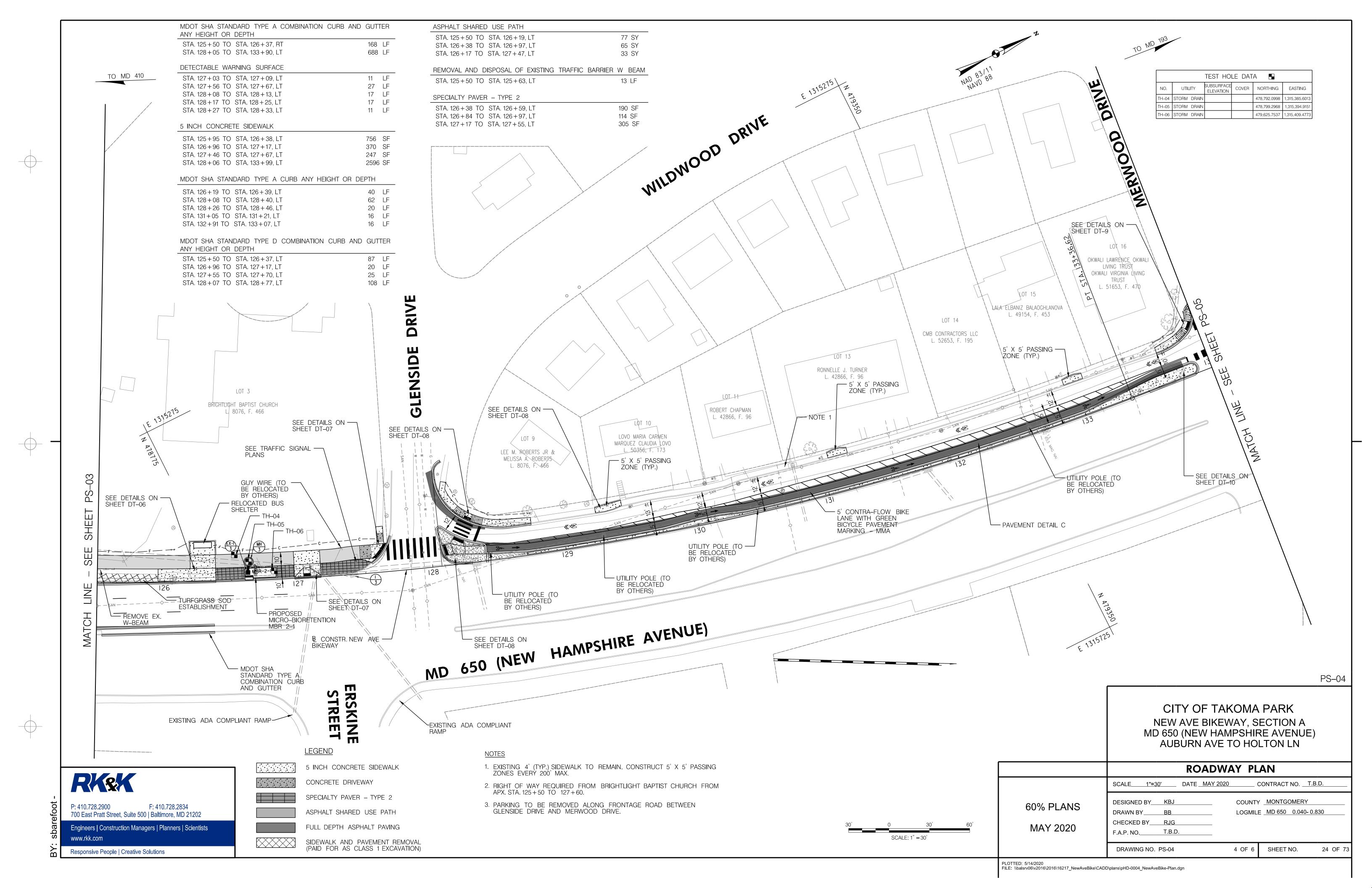
3. SEE ADA DETAILS FOR PEDESTRIAN RAMP DESIGN.

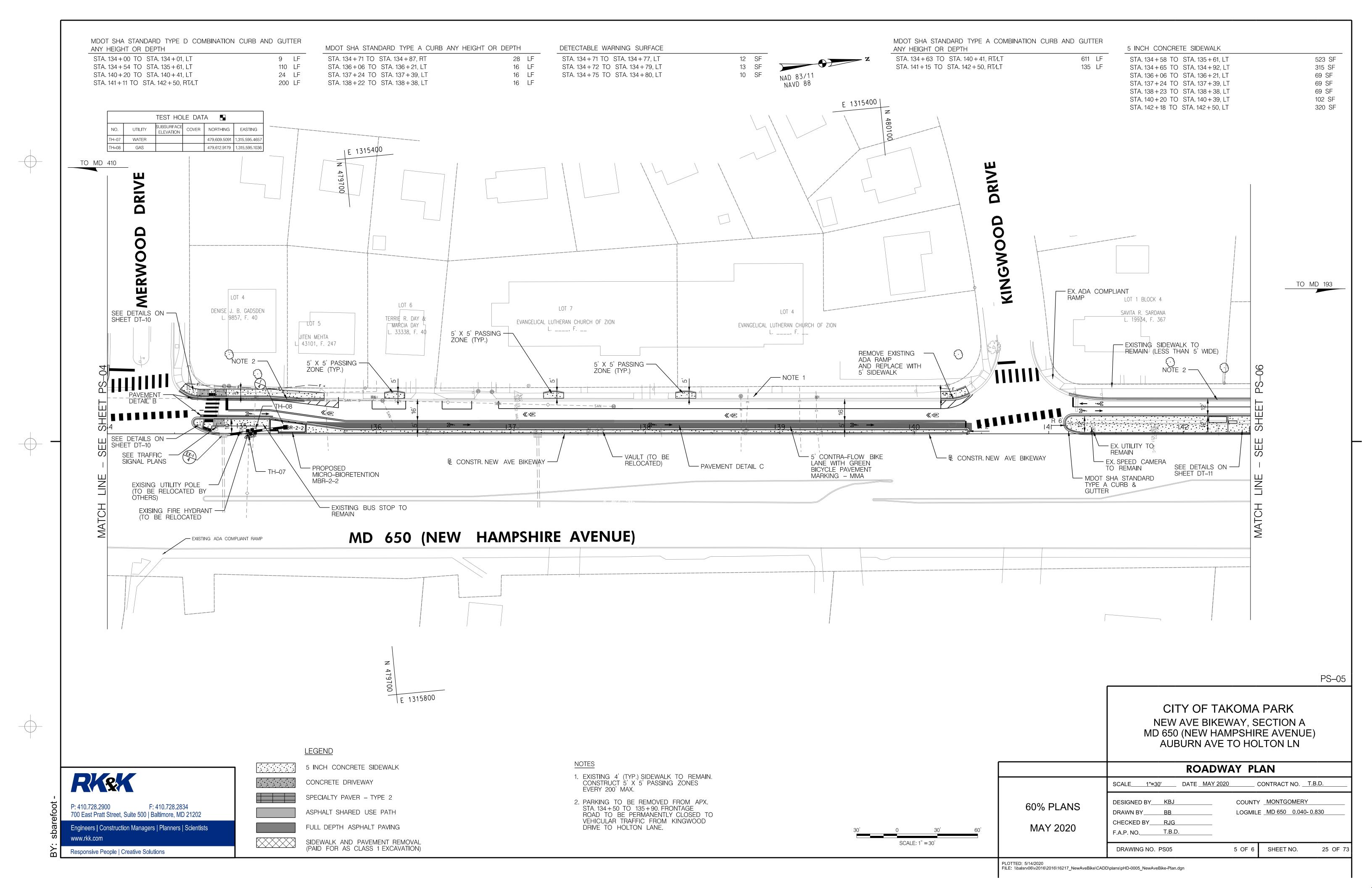
FILE: \\balsrv06\v2016\2016\16217\_NewAveBike\CADD\plans\pGS-0005\_NewAveBike.dgn

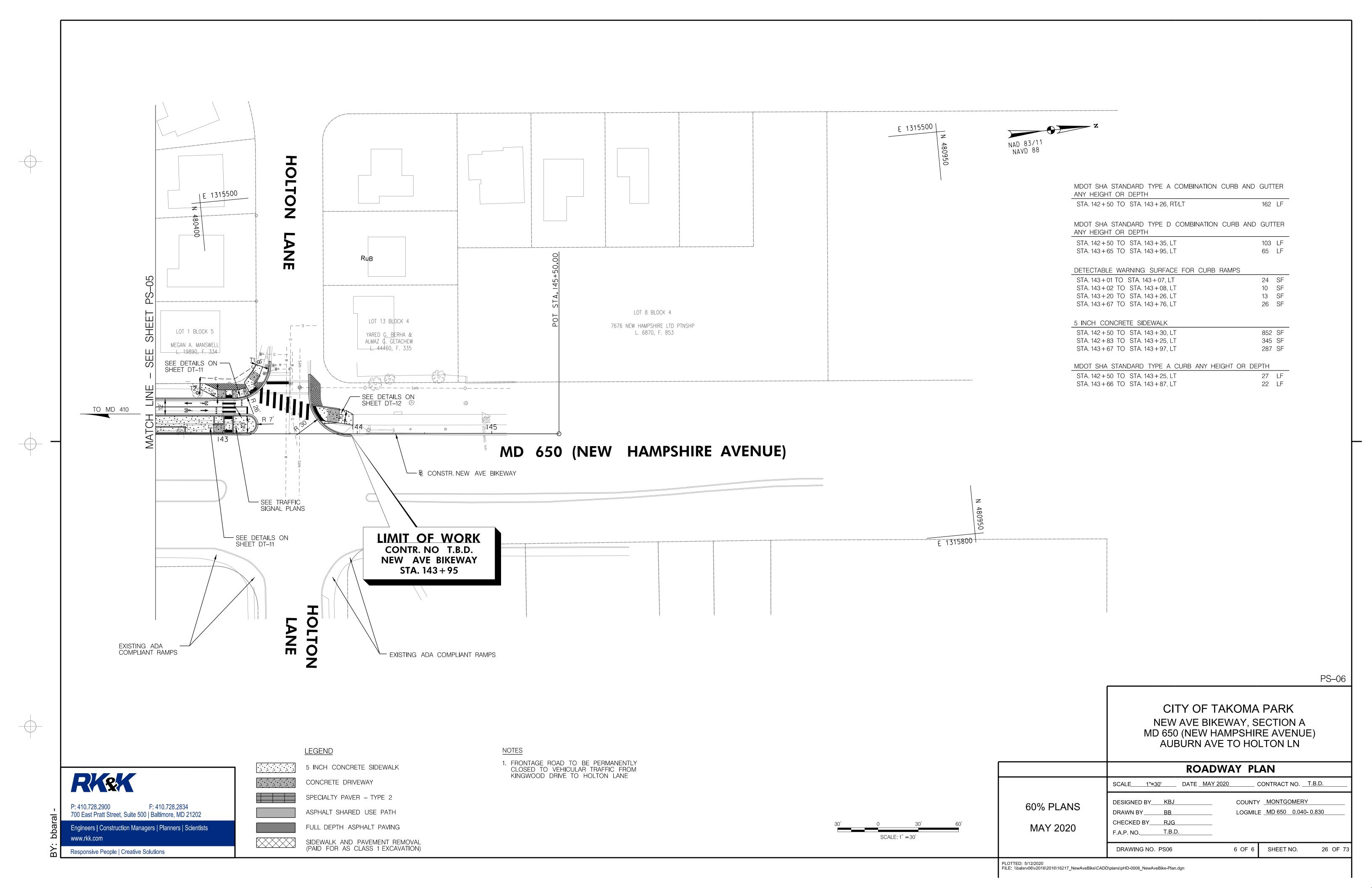


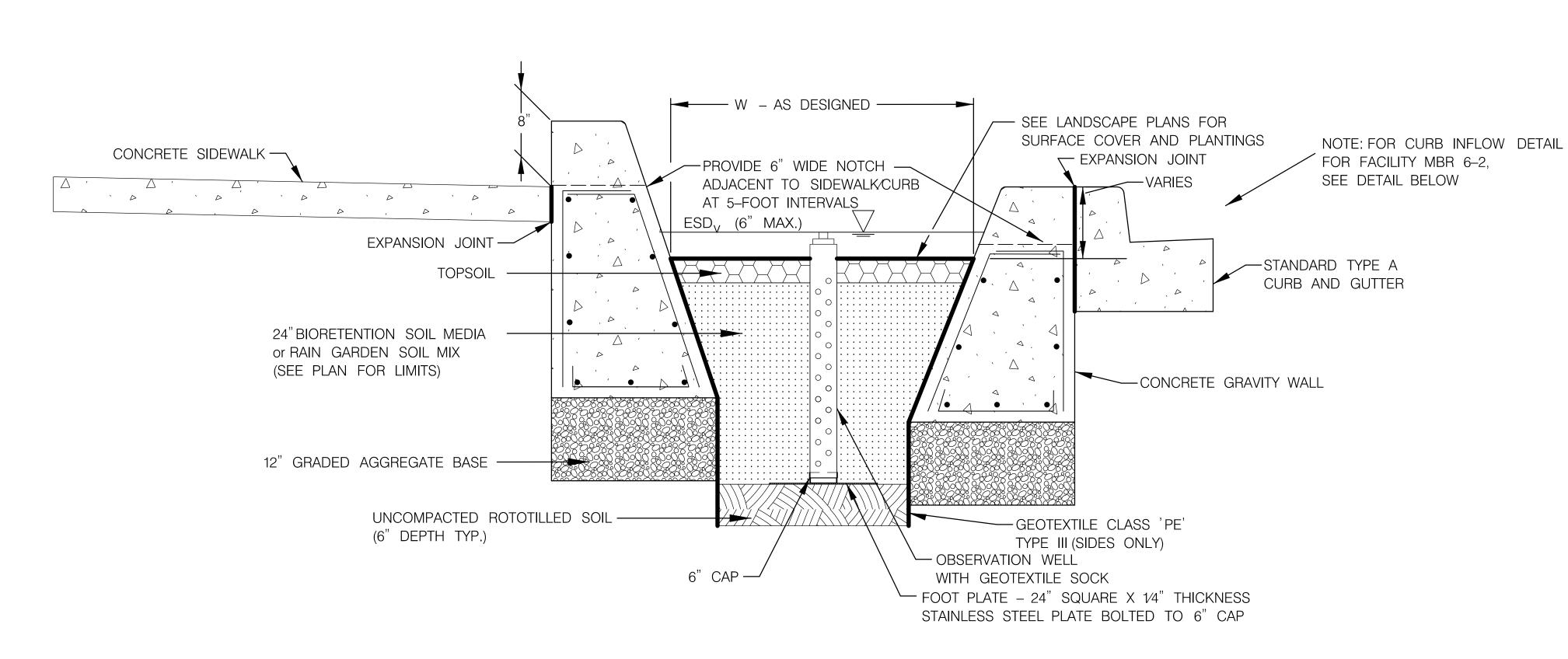












# MICRO-BIORETENTION SECTION

NOT TO SCALE

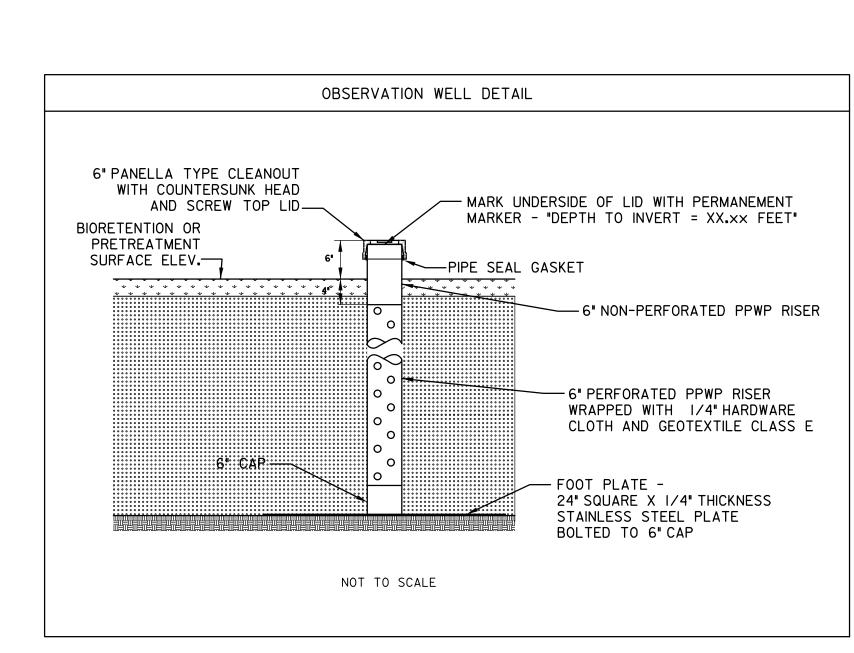
### **GENERAL NOTES:**

1. ALL STRUCTURE CONCRETE SHALL BE fc = 4,000 PSI.

2. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60 (fy = 60.0 KSI). MINIMUM COVER FOR ANY BAR SHALL BE 2 INCHES UNLESS OTHERWISE NOTED, WITH THE EXCEPTION OF BARS AT THE BOTTOM AND SIDE OF ALL FOOTINGS WHICH SHALL HAVE 3 INCHES MINIMUM COVER. ALL BAR LAP SPLICES SHALL BE 9 INCHES UNLESS OTHERWISE NOTED.

3. EXPANSION JOINTS SHALL BE 1/2" PREFORMED NON-EXTRUDING JOINT FILLER AND CONFORM TO AASHTO M 153.

4. ALL FACILITIES ARE LOCATED IN WELL-DRAINING SOILS, PER USDA WEB SOIL SURVEY. NO UNDERDRAINS ARE PROPOSED, PENDING FURTHER TESTING RESULTS.



18" – WEIR WALLS

24" – PERIMETER WALLS

CONCRETE GRAVITY WALL

NOT TO SCALE

#5 @ 12"<del>----</del>

(TYP.)

SW-D1

## CITY OF TAKOMA PARK NEW AVE BIKEWAY, SECTION A MD 650 (NEW HAMPSHIRE AVENUE) AUBÙRN AVE TO HOLTON LN

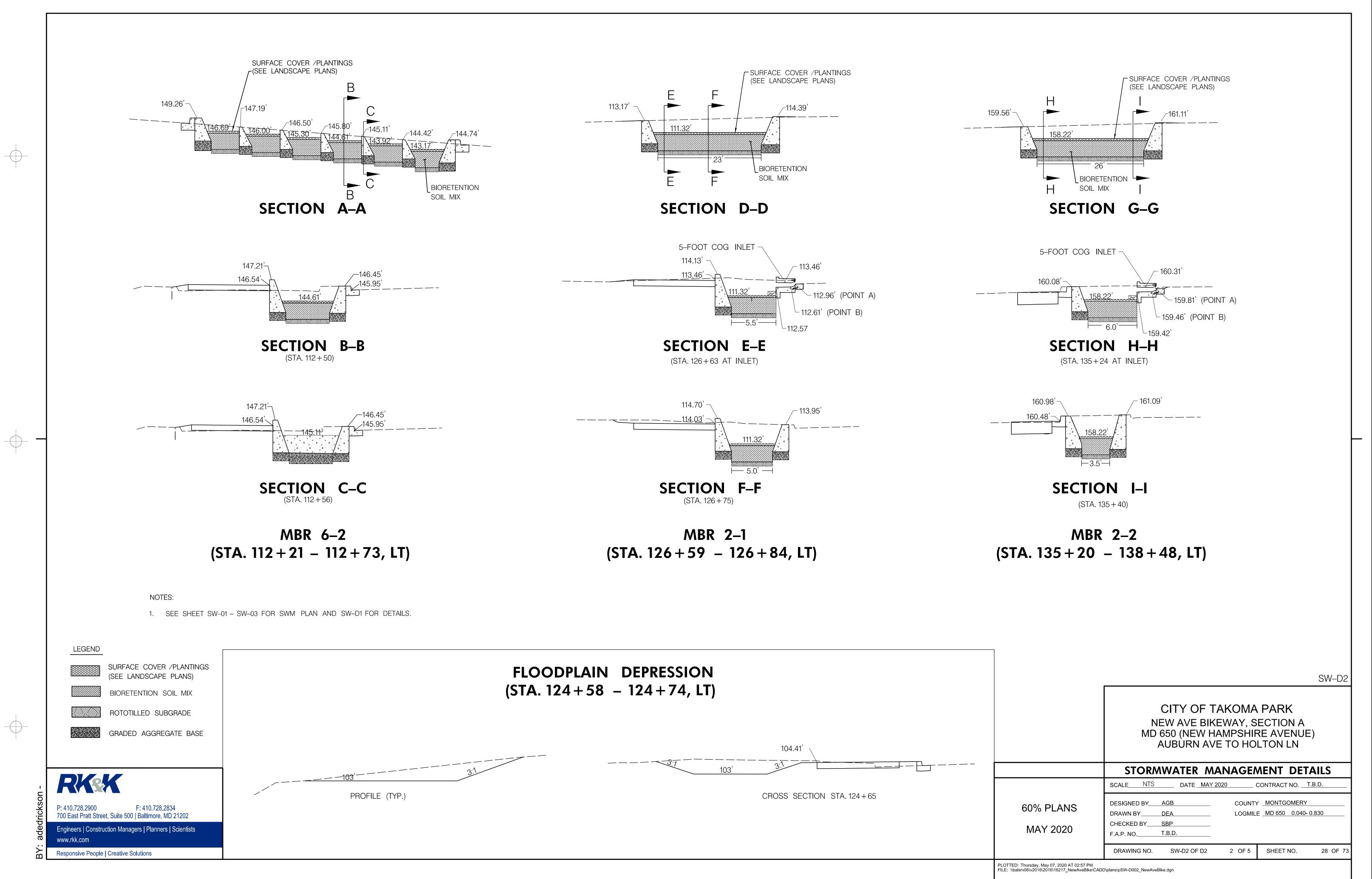
	STORMWATER MANAGEMENT DETAILS				
	scale NTS	DATE_M	1AY 2020 C	CONTRACT NO	Г.В.D.
60% PLANS MAY 2020	DESIGNED BY DRAWN BY CHECKED BY F.A.P. NO	DEA		MONTGOMERY MD 650 0.040-	
	DRAWING NO.	SW-D1 OF D2	2 1 OF 5	SHEET NO.	27 OF 73
OTTED: Thursday, May 07, 2020 AT 02:55 PM					

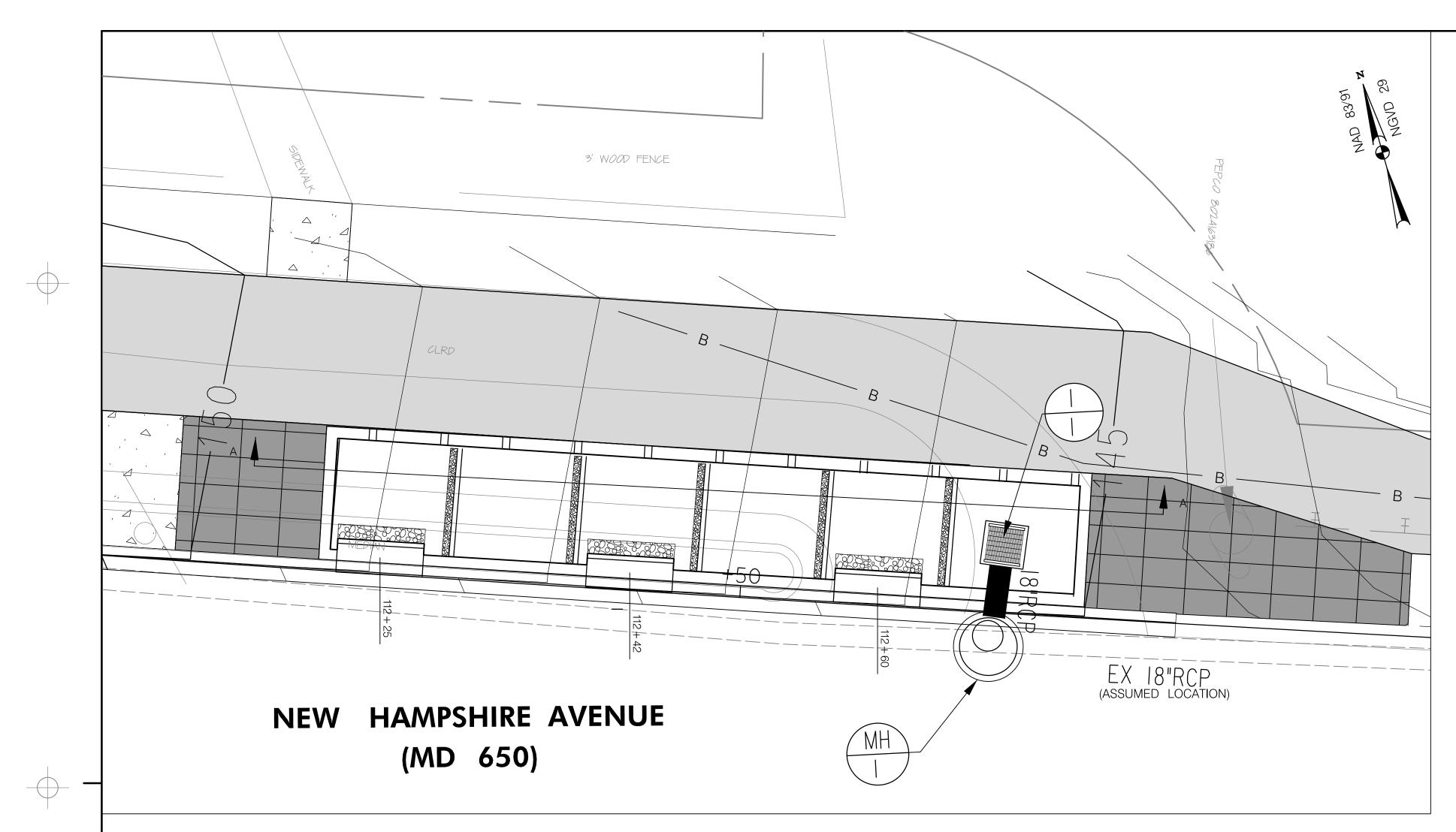
I 4" WEIR WALLS 10" PERIMETER WALLS

34" or 40"

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FILE: \balsrv06\v2016\2016\16217\_NewAveBike\CADD\plans\pSW-D001\_NewAveBike.dgn





# MBR 6-2

# OPEN BACK INLET ELEVATION TABLE

STATION	GUTTER PAN	TOP OF INLET	POINT A (2)	POINT B (2)
112+25	148.43	148.93	148.58	148.54
112+42	147.06	147.56	147.21	147.17
112+60	145.62	146.12	145.77	145.73

<u>LEGEND</u>

FULL DEPTH PAVEMENT

CONCRETE SIDEWALK

CONCRETE ENTRANCE

1. SEE SHEETS SW-D1 AND SW-D2 FOR SECTION DETAILS 2. SEE SHEET SW-D2 FOR LOCATION OF POINTS A AND B

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STORMWATER	MANAGEMENT	AS-BUILT	CERTIFICATION

I hereby certify that the stormwater management facility (facilities) shown on the plans and individually identified below has (have) been constructed in accordance with the plans included under the Maryland Department of the Environment Approval, Number \_\_ - SF -\_\_ except as noted in green on the "AS BUILT" drawings. Furthermore, the green-noted exceptions do not adversely affect the design and/or the intended performance of the facility (facilities).

Facility Identification (Identify Each Facility Individually by BMP Number)

Name (Printed) Signature

Date

"Certify" means to state or declare a professional opinion based on sufficient and appropriate onsite inspections and material tests conducted during construction

Maryland Registration Number

NOTE: AS-BUILT CHECKLISTS CONTAINED IN THE CONTRACT DRAWINGS SHALL BE COMPLETED BY THE AS-BUILT INSPECTOR AND SUBMITTED TO THE SHA ALONG WITH THIS CERTIFICATION.

As-Built Inspection Tabulations/Checklist for BMP Number:

Accepted by City of Takoma Park:

Date

#### **MICROBIORETENTION TABULATIONS**

ACTIVITY	DESIGNED	AS-BUILT	DIFFERENCE	INSPECTOR INITIALS	ACCEPTANCE DATE
As-Built Survey	N/A				
Forebay Area	N/A				
Forebay Volume	N/A				
Filter Bed Area (L x W)	8.25x7.7 (x6)				
Filter Bed Surface Elevation	SEE SHEET SW-D2				
Filter Inlet Pipe Size	3 5' COG OPENINGS				
Filter Inlet Pipe Elevation	SEE TABLE THIS SHEET				
Filter Inlet Pipe Invert	SEE TABLE THIS SHEET				
Outlet Pipe Size	18 INCHES				
Outlet Pipe Elevation	140'				
Observation well installed according to plans	N/A				

As-Built Inspection T	abulations/Checklist for	BMP Number:

Accepted by City of Takoma Park:

### MIRCOBIORETENTION CONSTRUCTION CHECKLIST

ACTIVITY	ON SITE INSPECTION DATE	INSPECTOR INITIALS	ACCEPTANCE DATE
Excavated to proper size and location			
Underdrain system and/ or observation well installed according to plans			
Placement of geotextiles and filter fabric according to plans			
Placement of gravel diaphragm			
Appurtenant conveyance systems (diversion structures, pre-filters, filters, inlet, outlets, orifices and flow distribution structures) installed according to plan			
Composition of Filter Media			

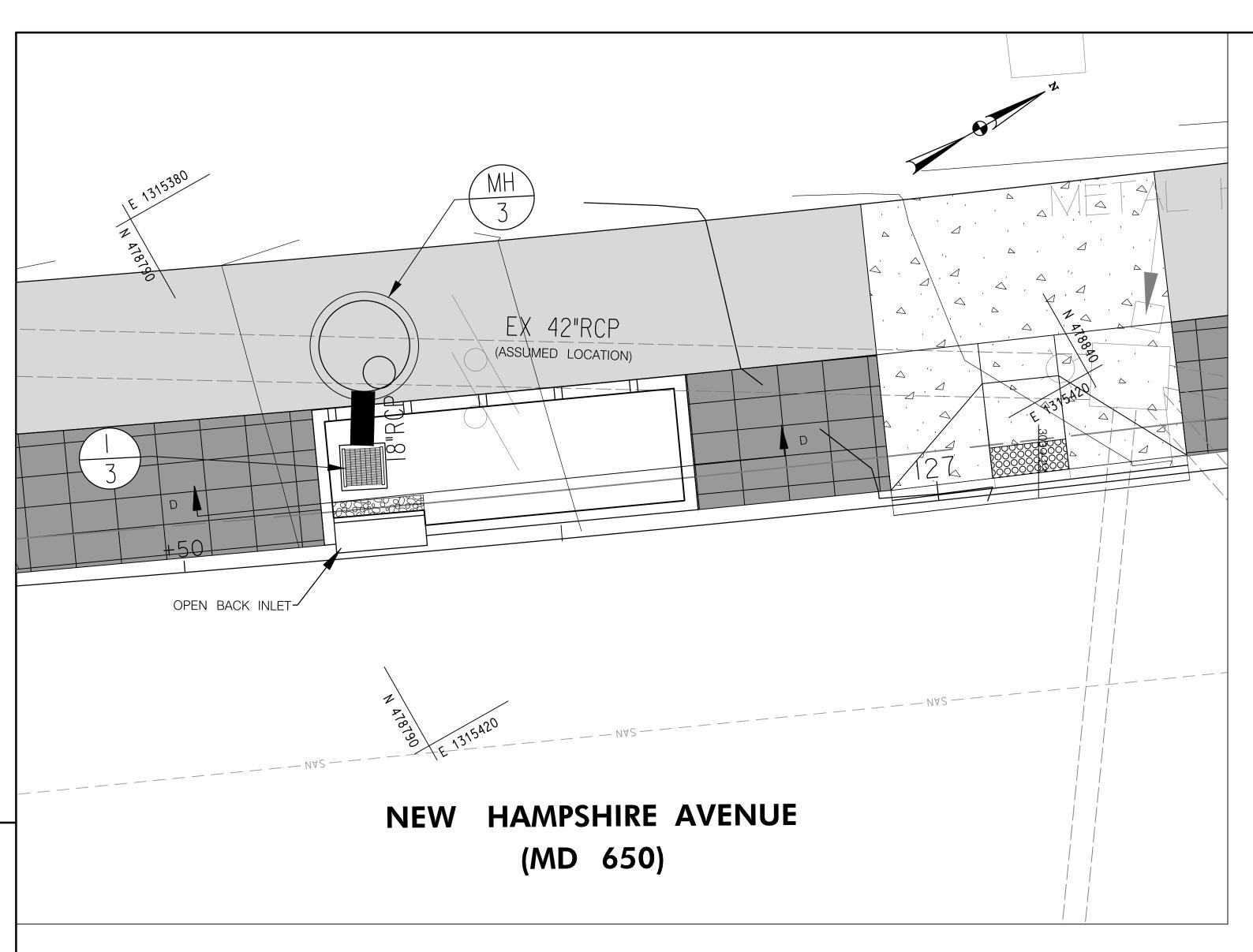
AB Inspector required to perform inspection on site for these steps as required by COMAR 26.17.02.10 The As-Built Inspector is to verify the construction activities while activity is performed as listed above. **Revised February 2011** 

SW-01

CITY OF TAKOMA PARK NEW AVE BIKEWAY, SECTION A MD 650 (NEW HAMPSHIRE AVENUE) AUBURN AVE TO HOLTON LN

STORMWATER MANAGEMENT PLAN SCALE\_\_\_\_\_1" = 5' \_\_\_ DATE MAY 2020 \_ CONTRACT NO. \_\_T.B.D. DESIGNED BY\_\_\_\_AGB COUNTY MONTGOMERY 60% PLANS DRAWN BY\_\_\_\_ LOGMILE <u>MD 650</u> 0.040- 0.830 CHECKED BY SBP MAY 2020 F.A.P. NO.\_\_\_\_\_T.B.D. SHEET NO. DRAWING NO. SW-01 OF 03 3 OF 5 29 OF 73

PLOTTED: Thursday, May 07, 2020 AT 03:50 PM FILE: \balsrv06\v2016\2016\16217\_NewAveBike\CADD\plans\pSW-P001\_NewAveBike.dgn



MBR 2-1

1. SEE SW-D1 AND SW-D2 FOR SECTION DETAILS.

NOTES:

intended performance of the facility (fa-	s do not adversely affect the design and/or the cilities).
Facility Identification (Identify Each Fa	cility Individually by BMD Number)
racinty identification (identify Each Fa	enity individually by Bivir Number)
Name (Printed)	Signature
Name (Printed)  Maryland Registration Number	Signature  Date

	0:			
ccepted by	City of Takoma Pa	rk:		

#### **MICROBIORETENTION TABULATIONS**

ACTIVITY	DESIGNED	AS-BUILT	DIFFERENCE	INSPECTOR INITIALS	ACCEPTANCE DATE
As-Built Survey	N/A				
Forebay Area	N/A				
Forebay Volume	N/A				
Filter Bed Area (L x W)	23x7.5				
Filter Bed Surface Elevation	111.32				
Filter Inlet Pipe Size	5' COG OPENING				
Filter Inlet Pipe Elevation	VARIES				
Filter Inlet Pipe Invert	112.70				
Outlet Pipe Size	18 INCHES				
Outlet Pipe Elevation	108.00				
Observation well installed according to plans	N/A				

As-Built Inspection Tabulations/Checklist fo	or BMP Number:
Accepted by City of Takoma Park:	
Name	 Date

### MIRCOBIORETENTION CONSTRUCTION CHECKLIST

ACTIVITY	ON SITE INSPECTION DATE	INSPECTOR INITIALS	ACCEPTANCE DATE
Excavated to proper size and location			
Underdrain system and/ or observation well installed according to plans			
Placement of geotextiles and filter fabric according to plans			
Placement of gravel diaphragm			
Appurtenant conveyance systems (diversion structures, pre-filters, filters, inlet, outlets, orifices and flow distribution structures) installed according to plan			
Composition of Filter Media			

AB Inspector required to perform inspection on site for these steps as required by COMAR 26.17.02.10 The As-Built Inspector is to verify the construction activities while activity is performed as listed above. Revised February 2011

SW-02

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

	STORM	WATER MANAC	SEMENT PLAN
	SCALE 1" = 5'	DATE MAY 2020	CONTRACT NO
60% PLANS MAY 2020	DESIGNED BY AGB DRAWN BY DEA CHECKED BY SBP F.A.P. NO. T.B.D	LOGMIL	Y MONTGOMERY E MD 650 0.040- 0.830
	DRAWING NO.	SW-02 OF 03 4 OF 5	SHEET NO. 30 OF 73

PLOTTED: Thursday, May 07, 2020 AT 03:47 PM FILE: \\balsrv06\v2016\2016\2016\16217\_NewAveBike\CADD\plans\pSW-P002\_NewAveBike.dgn

<u>LEGEND</u>

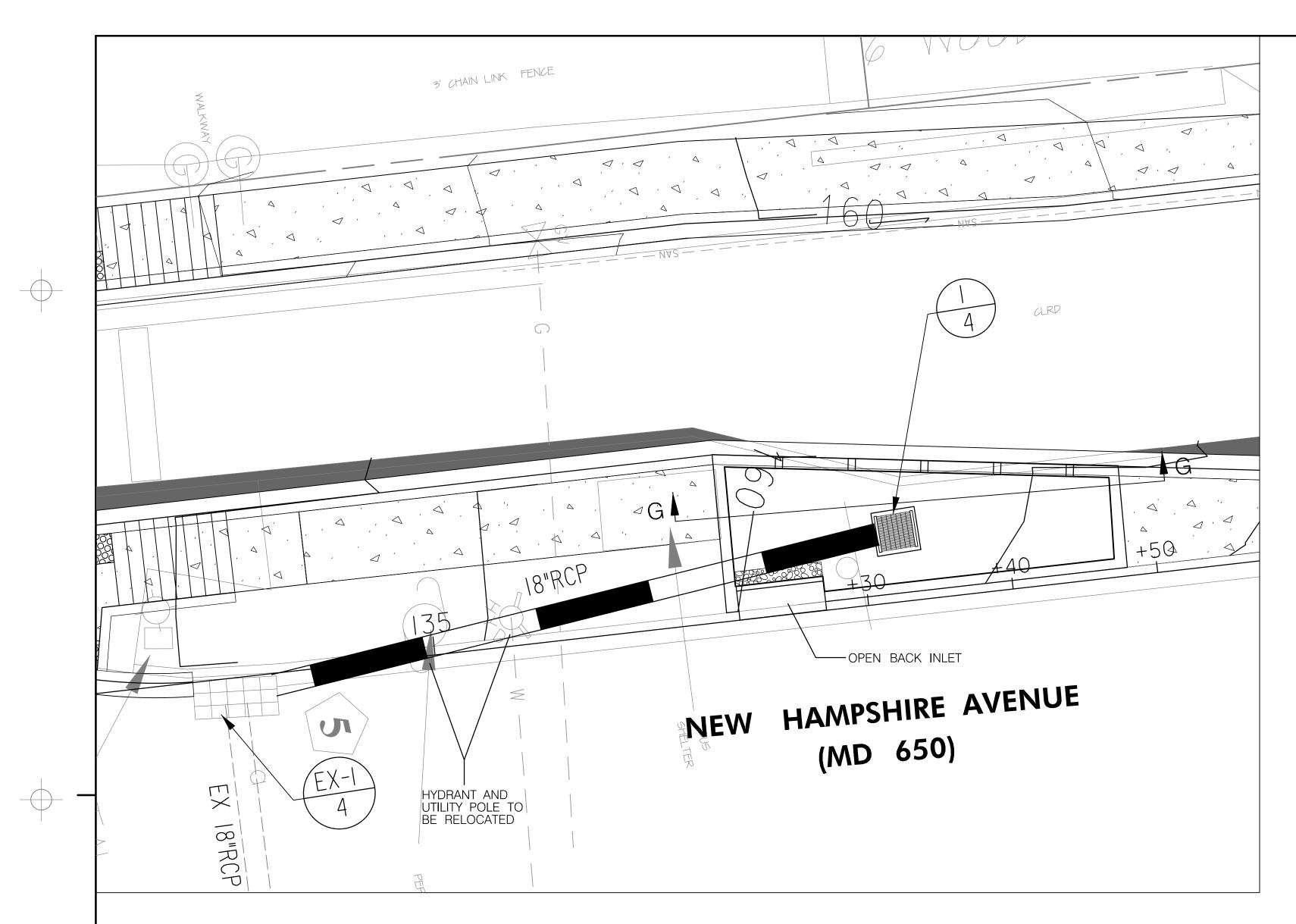
FULL DEPTH PAVEMENT

CONCRETE SIDEWALK

CONCRETE ENTRANCE

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MBR 2-2

<u>LEGEND</u>	
FULL DEPTH PAVEMENT	NOTES:
CONCRETE SIDEWALK	1. SEE SW-D1 AND SW-D2 FOR SECTION DETAILS.
CONCRETE ENTRANCE	
RKSK	

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F: 410.728.2834

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Accepted by City of Tal	koma Park:				
Name		 Date			
	MICROBI	ORETENTION	N TABULATION	s	
ACTIVITY	DESIGNED	AS-BUILT	DIFFERENCE	INSPECTOR INITIALS	ACCEPTANCE DATE

As-Built Inspection Tabulations/Checklist for BMP Number:

ACTIVITY	DESIGNED	AS-BUILT	DIFFERENCE	INSPECTOR INITIALS	ACCEPTANCE DATE
As-Built Survey	N/A				
Forebay Area	N/A				
Forebay Volume	N/A				
Filter Bed Area (L x W)	26x7.25				
Filter Bed Surface Elevation	158.22'				
Filter Inlet Pipe Size	5' COG OPENING				
Filter Inlet Pipe Elevation	VARIES				
Filter Inlet Pipe Invert	159.81				
Outlet Pipe Size	18 INCHES				
Outlet Pipe Elevation	155.20				
Observation well installed according to plans	N/A				

As-Built Inspection Tabulations/Checklist for BMP Number:	
Accepted by City of Takoma Park:	
Name	 Date

### MIRCOBIORETENTION CONSTRUCTION CHECKLIST

ACTIVITY	ON SITE INSPECTION DATE	INSPECTOR INITIALS	ACCEPTANCE DATE
Excavated to proper size and location			
Underdrain system and/ or observation well installed according to plans			
Placement of geotextiles and filter fabric according to plans			
Placement of gravel diaphragm			
Appurtenant conveyance systems (diversion structures, pre-filters, filters, inlet, outlets, orifices and flow distribution structures) installed according to plan			
Composition of Filter Media			

AB Inspector required to perform inspection on site for these steps as required by COMAR 26.17.02.10 The As-Built Inspector is to verify the construction activities while activity is performed as listed above.

Revised February 2011

SW-03

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

	STO	RMWATER N	MANAGE	EMENT PL	.AN
	SCALE1" = 5	5' DATE <u>MAY 202</u>	<u>20</u> CC	ONTRACT NOT	B.D.
60% PLANS MAY 2020	DESIGNED BY DRAWN BY CHECKED BY F.A.P. NO	AGB DEA SBP T.B.D.		MONTGOMERY MD 650 0.040-0	0.830
	DRAWING NO.	SW-03 OF 03	5 OF 5	SHEET NO.	31 OF 73

PLOTTED: Thursday, May 07, 2020 AT 03:55 PM FILE: \\balsrv06\v2016\2016\16217\_NewAveBike\CADD\plans\pSW-P003\_NewAveBike.dgn

STORMWATER MANAGEMENT AS-BUILT CERTIFICATION

I hereby certify that the stormwater management facility (facilities) shown on the plans and individually identified below has (have) been constructed in accordance with the

Furthermore, the green-noted exceptions do not adversely affect the design and/or the

Signature

Date

plans included under the Maryland Department of the Environment Approval, Number \_\_ - SF -\_\_ except as noted in green on the "AS BUILT" drawings.

Facility Identification (Identify Each Facility Individually by BMP Number)

"Certify" means to state or declare a professional opinion based on sufficient and appropriate onsite inspections and material tests conducted during construction

NOTE: AS-BUILT CHECKLISTS CONTAINED IN THE CONTRACT DRAWINGS SHALL BE COMPLETED BY THE AS-BUILT INSPECTOR AND SUBMITTED TO

intended performance of the facility (facilities).

Name (Printed)

Maryland Registration Number

THE SHA ALONG WITH THIS CERTIFICATION.

# STRUCTURAL GENERAL NOTES

SPECIFICATIONS: MDOT SHA STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS

AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 2017.

CONCRETE DESIGN: LRFD, f'c = 3.0 KSIFOR ELEMENTS USING MIX NO. 3 AND f'c = 4.0 KSIFOR

ELEMENTS USING MIX NO.6.

REINFORCING STEEL DESIGN: fy = 60.0 KSI. CONCRETE:

ALL STEM, FOOTING, PILE ENCASEMENT, LEVELING PAD AND COPING CONCRETE SHALL BE MIX.

NO. 3 (3500 PSI)

PRESTRESSED CONCRETE:

FENCING:

ALL PRESTRESSED CONCRETE FOR LAGGING SHALL BE MIX NO.6 (4500 PSI).

JOINCINE I E.

POSTS AND RAILS SHALL CONFORM TO ASTM F-1083, SCHEDULE 80. FABRIC SHALL BE 6

GAUGE, 2" PVC COATED MESH CONFORMING TO 914.01.

ALL POSTS, BRACES, FITTINGS AND HARDWARE SHALL BE PVC COATED. COATED SHALL CONFORM TO 914.03 EXCEPT THAT NUTS, BOLTS AND WASHERS SHALL ALSO BE PVC COATED AND

TOUCHED UP AFTER INSTALLATION.

ALL PLATES SHALL BE STEEL CONFORMING TO ASTM A 709 GRADE 36.

ANCHOR STUDS OR ANCHOR BOLTS SHALL CONFORM TO ASTM A 276, TYPE 430 OR TYPE 304 STAINLESS STEEL ANNEALED, HOT-FINISHED, ULTIMATE STRENGTH 70000 PSI MIN., 20% MIN.

ELONGATION. THREADS MAY BE ROLLED OR CUT.

EPOXY GROUT FOR ANCHOR STUDS IN CORED HOLES SHALL CONFORM TO 902.11(d).

PVC COLOR FOR ALL ELEMENTS OF FENCE SHALL BE BLACK UNLESS OTHERWISE NOTED.

REINFORCING STEEL: REINFORCING STEEL SHALL CONFORM TO A 615, GRADE 60. ALL SPLICES, NOT SHOWN, SHALL BE

LAPPED AS PER BAR LAP CHARTS. MINIMUM COVER FOR ANY BAR SHALL BE 2" UNLESS OTERWISE NOTED, WITH THE EXCEPTION OF BARS AT THE BOTTOM AND SIDES OF ALL

FOOTINGS WHICH SHALL HAVE 3" MINIMUM COVER

ONLY GRADE 60 CAN BE USED.

STRUCTURAL STEEL: NEW STRUCTURAL STEEL SHALL CONFORM TO A 709, GRADE 50. INCLUDING THE ADDITIONAL REQUIREMENTS FOR CHARPY V-NOTCH TESTING OF M 270, FOR PRIMARY LOAD CARRYING

MEMBERS. REFER TO SECTION 909.01.

DESIGN PARAMETERS: EARTH PRESSURE CALCULATED BASED ON COULOMB THEORY.

ANGLE OF INTERNAL FRICTION:

30 DEGREES FOR GOOD AND POOR SOILS (AND ALL WALLS ON PILE FOOTINGS)

FOUNDATION PREPERATION:

IF UNSUITABLE FOUNDATION MATERIAL IS ENCOUNTERED AT THE PROPOSED FOUNDATION BEARING ELEVATION, IT SHALL BE UNDERCUT A MINIMUM OF 2 FEET AND REPLACED WITH GAB.

ST-01

# CITY OF TAKOMA PARK NEW AVE BIKEWAY, SECTION A MD 650 (NEW HAMPSHIRE AVENUE) AUBURN AVE TO HOLTON LN

	GENERAL NOTES			
	SCALE N.T.S. DATE MAY 2020 CONTRACT NO. T.B.D.			
60% PLANS MAY 2020	DESIGNED BY         AR/ TAD         COUNTY         MONTGOMERY           DRAWN BY         TR         LOGMILE         MD 650         0.040- 0.830           CHECKED BY         PCB           F.A.P. NO.         T.B.D.			
	DRAWING NO. ST-01 1 OF 5 SHEET NO. 32 OF 73			

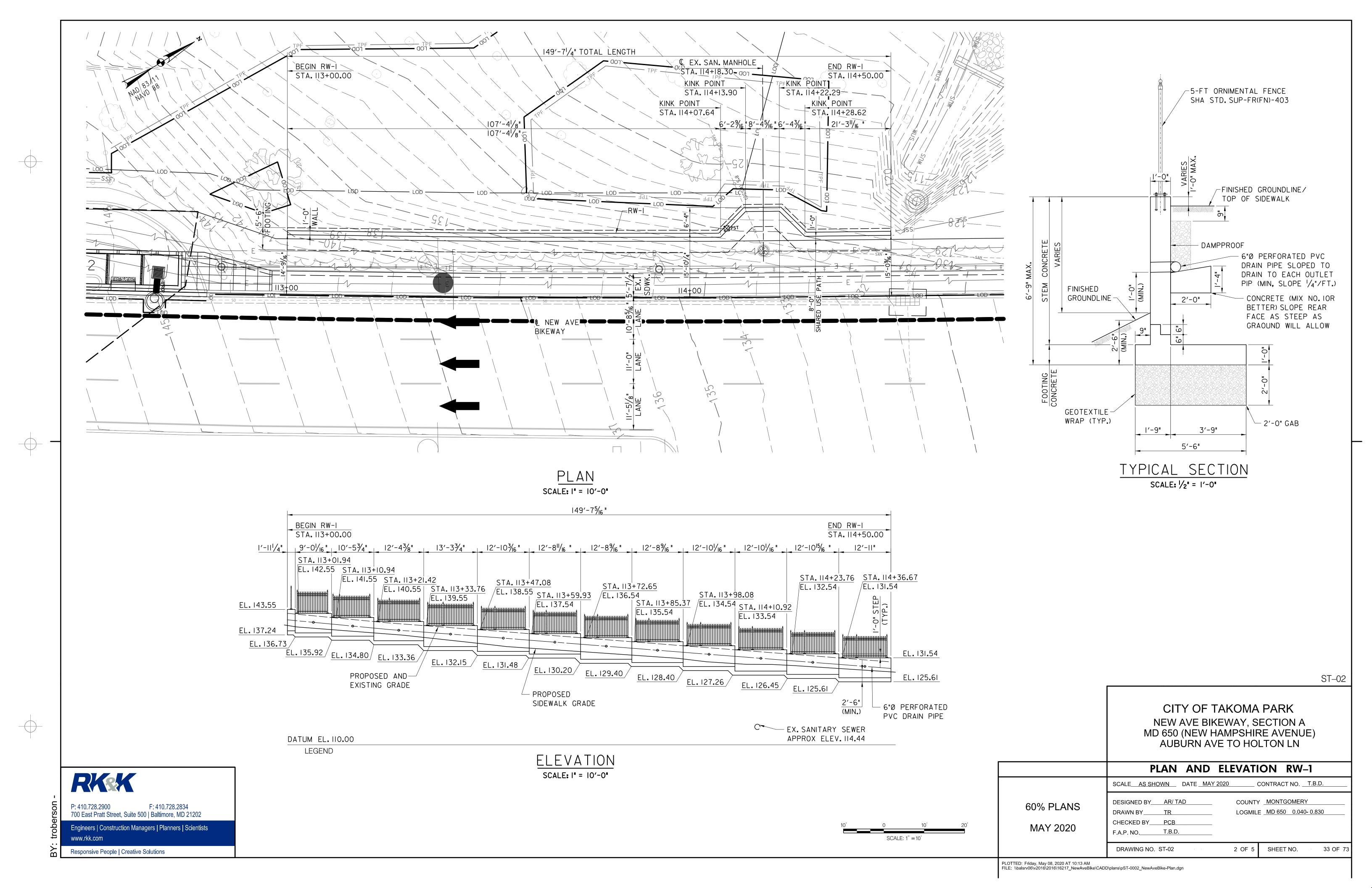
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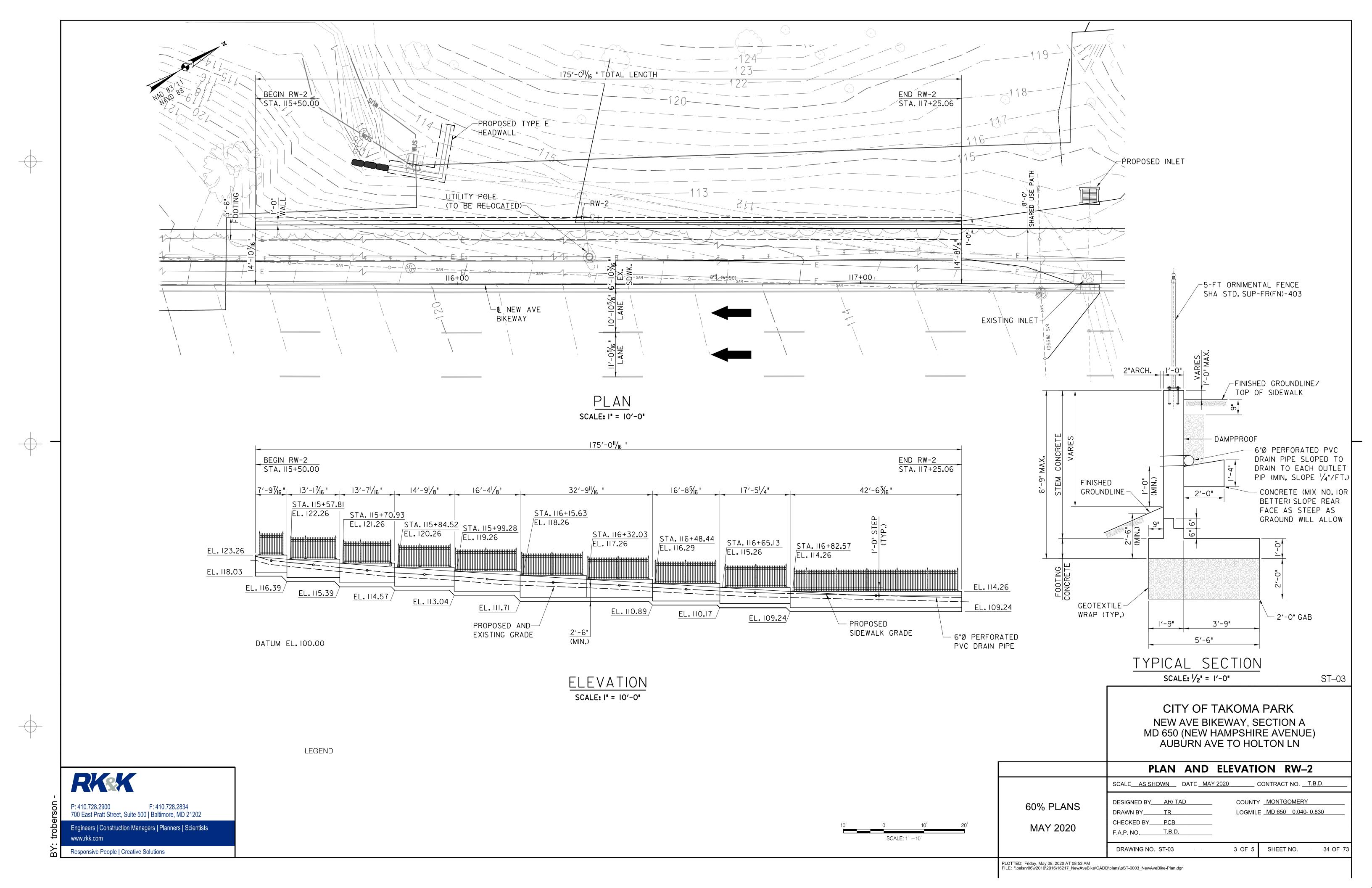
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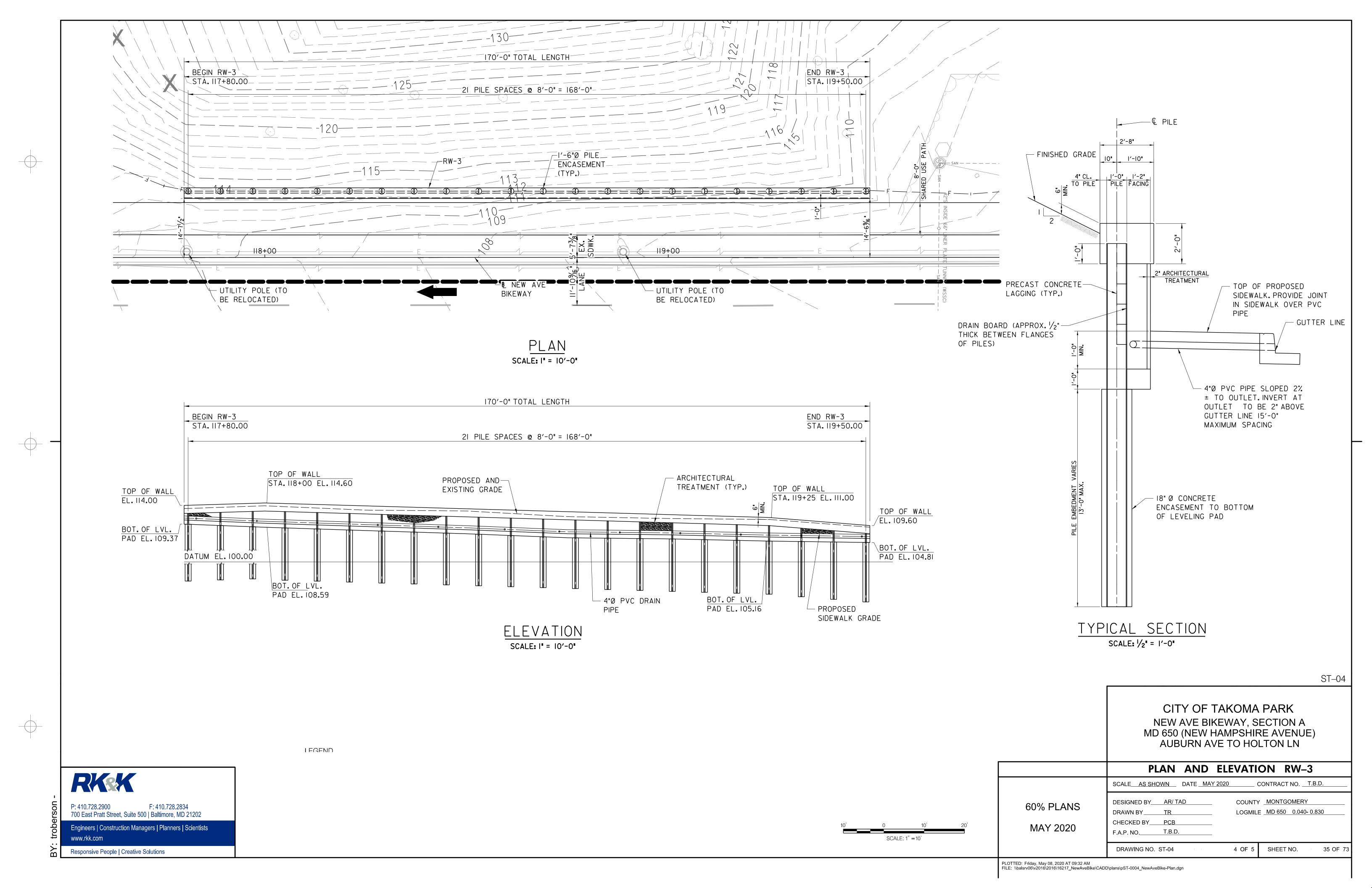
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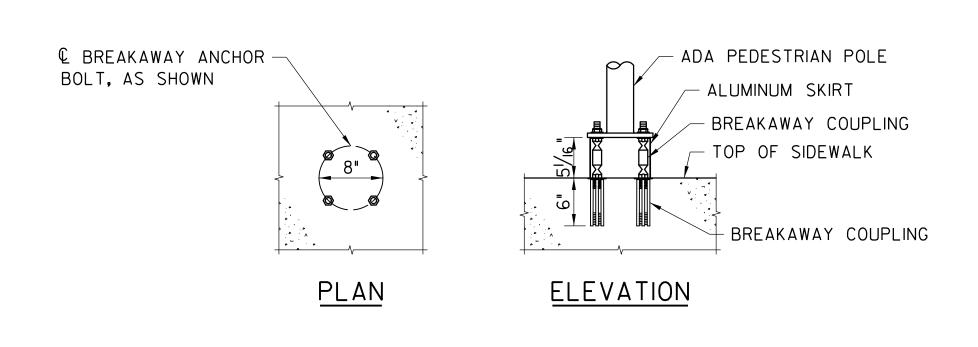
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PLOTTED: Friday, May 01, 2020 AT 10:39 AM FILE: \balsrv06\v2016\2016\16217\_NewAveBike\CADD\plans\pST-0001\_NewAveBike-Plan.dgn

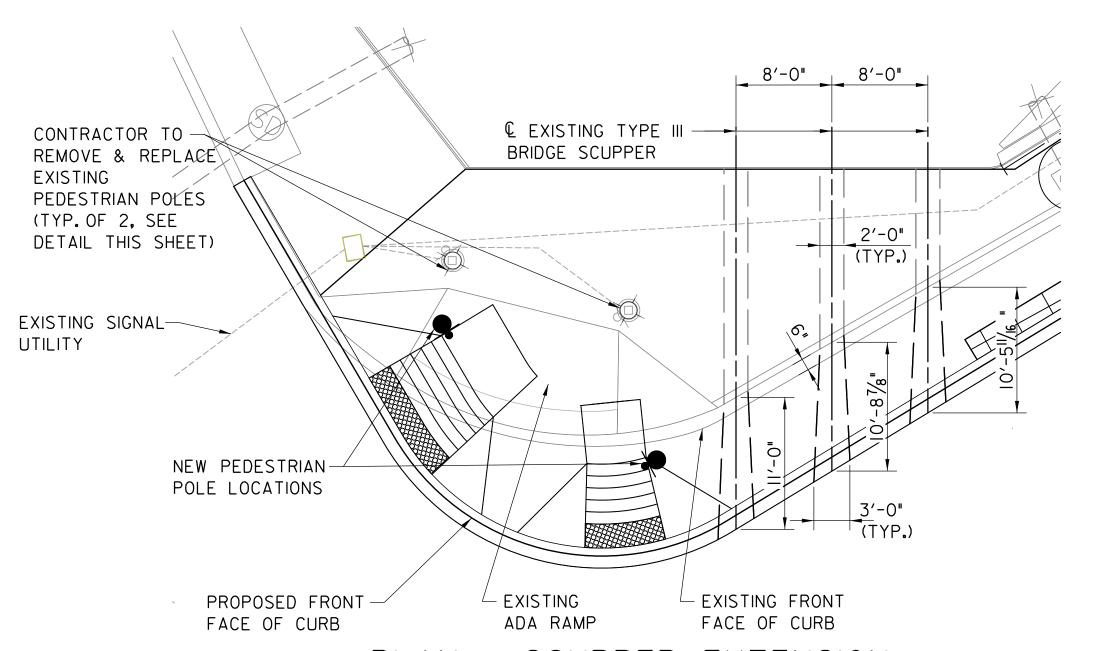






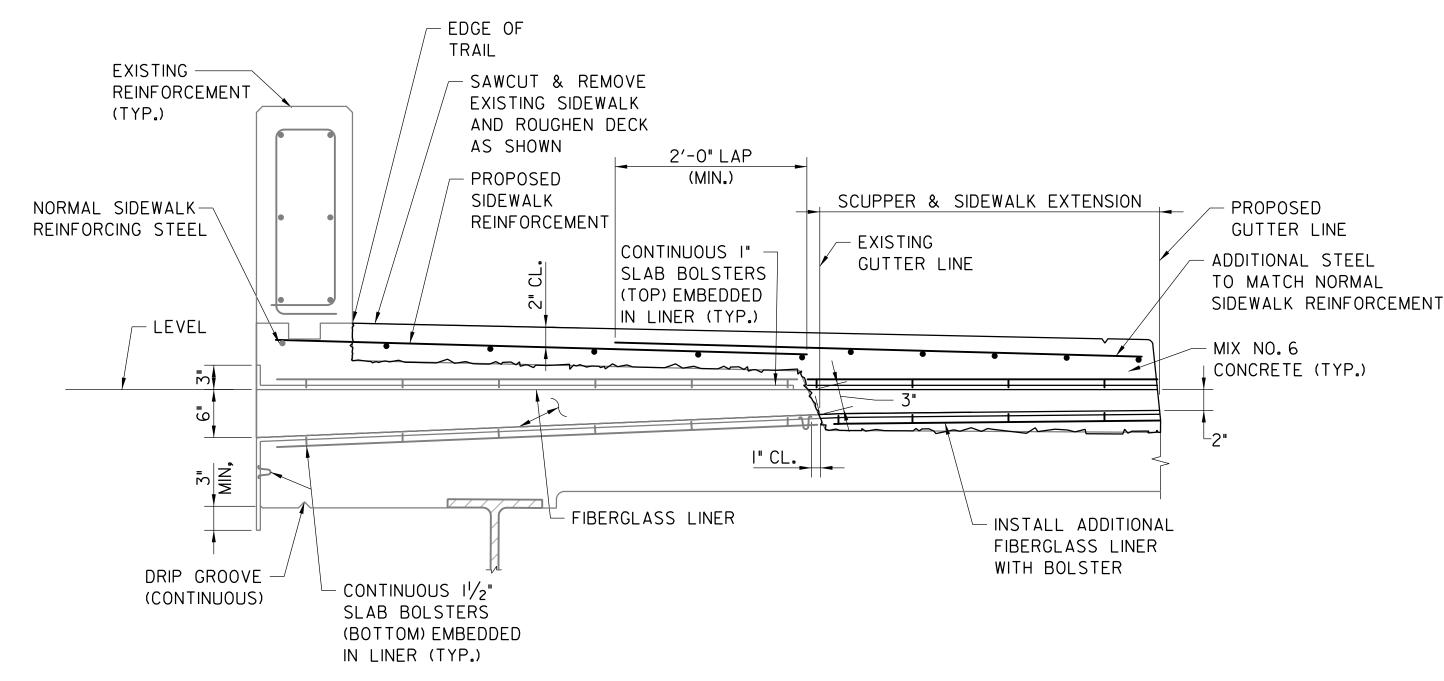


# EXISTING & PROPOSED PEDESTRIAN POLE SCALE: 1" = 1'-0"



PLAN - SCUPPER EXTENSION

SCALE: 1/8" = 1'-0"



SECTION - SCUPPER EXTENSION

SCALE: 1" = 1'-0"

CITY OF TAKOMA PARK

NEW AVE BIKEWAY, SECTION A

MD 650 (NEW HAMPSHIRE AVENUE)

AUBURN AVE TO HOLTON LN

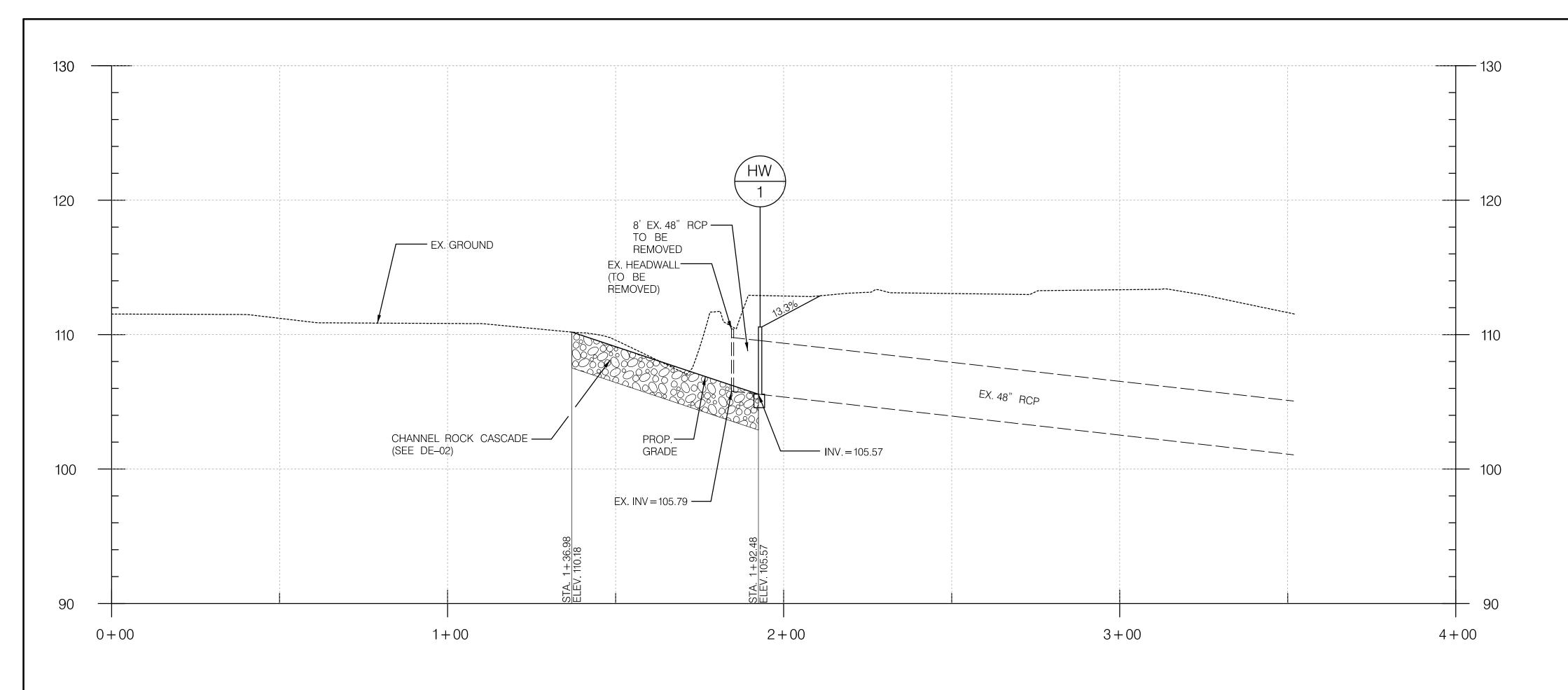
ST-05

	MISCELLANEOUS DETAILS
	SCALE AS SHOWN DATE MAY 2020 CONTRACT NO. T.B.D.
60% PLANS MAY 2020	DESIGNED BY         AR/ TAD         COUNTY         MONTGOMERY           DRAWN BY         TR         LOGMILE         MD 650         0.040- 0.830           CHECKED BY         PCB           F.A.P. NO.         T.B.D.
	DRAWING NO. ST-05 5 OF 5 SHEET NO. 36 OF 73

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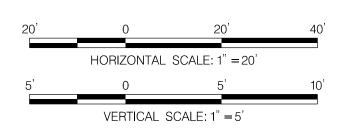


# NEW AVE BIKEWAY CHANNEL PROFILE MD 650 (NEW HAMPSHIRE AVENUE)

SCALE: 1'' = 20' HORZ.1'' = 5' VERT.

# STRUCTURE TABLE

ID	TYPE	SIZE	TOP ELEVATION	INVERT ELEVATION	ADDITIONAL DEPTH	CENTROID LOCATION
MH-2	MDSHA PRECAST MANHOLE - MD 384.03	60"	127.35	110.35	11'	477763.6700 N, 1314779.8152 E
EW-1	MDSHA TYPE C ENDWALL - MD 354.01	30"	114.52	111.02	N/A	477793.8736 N, 1314761.3573 E
HW-1	MDSHA TYPE E ENDWALL - MD 356.01	48"	110.57	105.57	N/A	477884.6783 N, 1314843.7179 E



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<u>LEGEND</u>

PROPOSED GROUND

EXISTING GROUND

140 ---- EX. GROUND — PROP. GRADE 130 — <del>|</del> 130 +INV. = 118.86 120 INV. = -111.36 /- INV. = 111.02 PROP. 30" RCP 110 — OUTFALL PLUNGE POOL— CLASS I (SEE DE-02) — EX. 8" SEWER 100 -100 100 + 00101 + 00

# NEW AVE BIKEWAY OUTFALL PROFILE MD 650 (NEW HAMPSHIRE AVENUE)

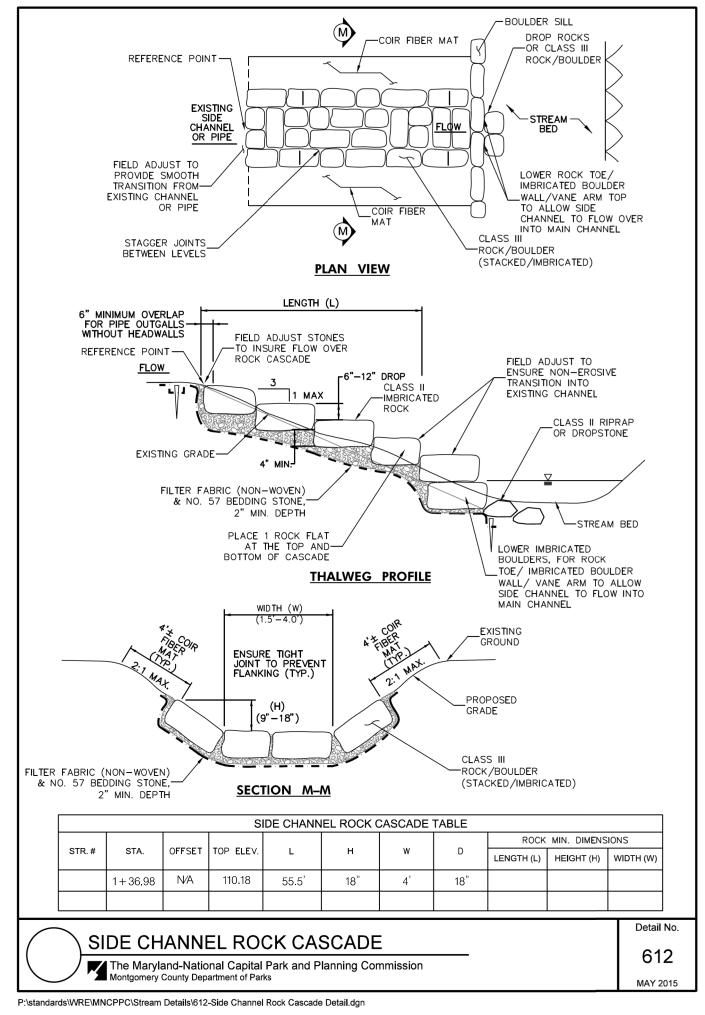
SCALE: 1'' = 20' HORZ.1'' = 5' VERT.

DE-01

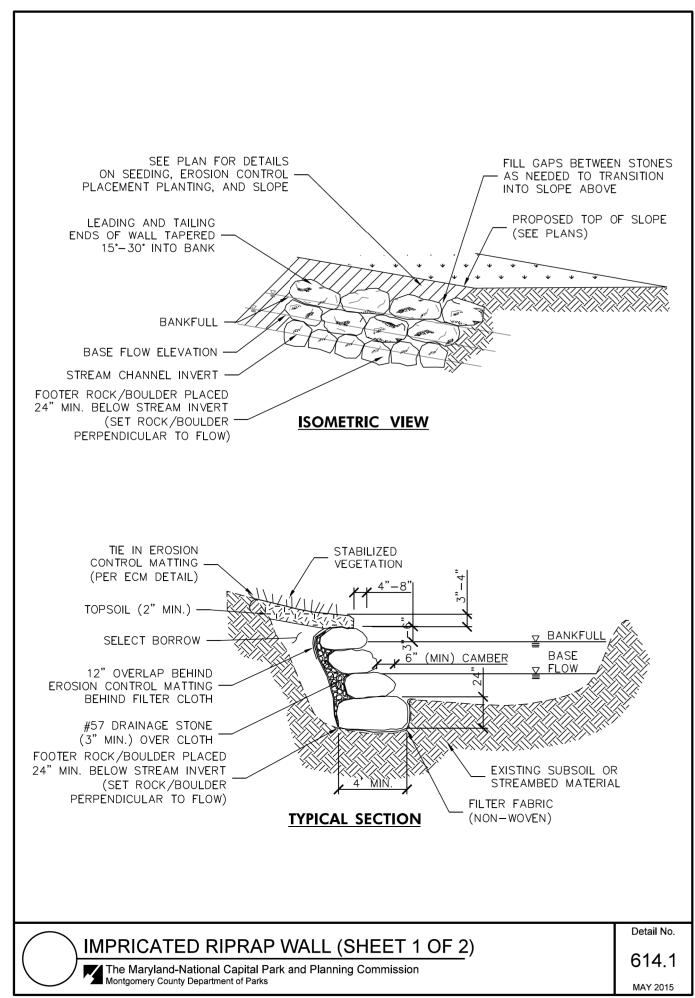
CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

	STREAM & OUTFALL IMPROVEMENT DETAILS				
	SCALE AS SHOWN DATE MAY 2020 CONTRACT NO. T.B.D.				
60% PLANS MAY 2020	DESIGNED BY         JM / ES         COUNTY         MONTGOMERY           DRAWN BY         JB         LOGMILE         MD 650         0.040- 0.830           CHECKED BY         DA / JC           F.A.P. NO.         T.B.D.				
	DRAWING NO. DE-01 1 OF 2 SHEET NO. 37 OF 73				

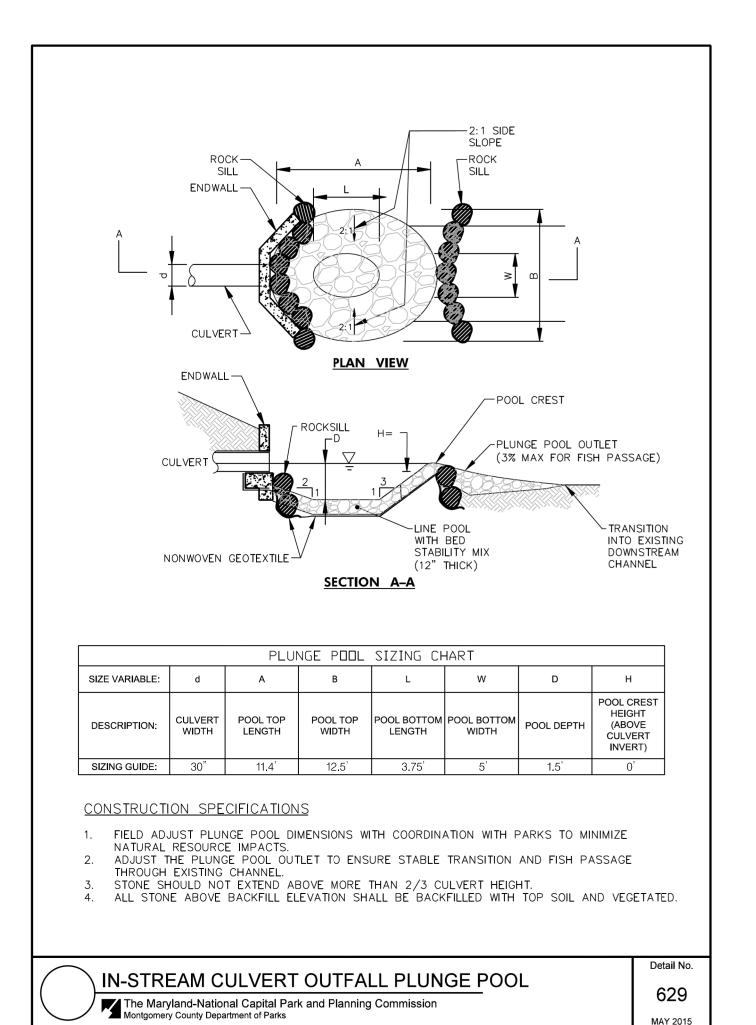
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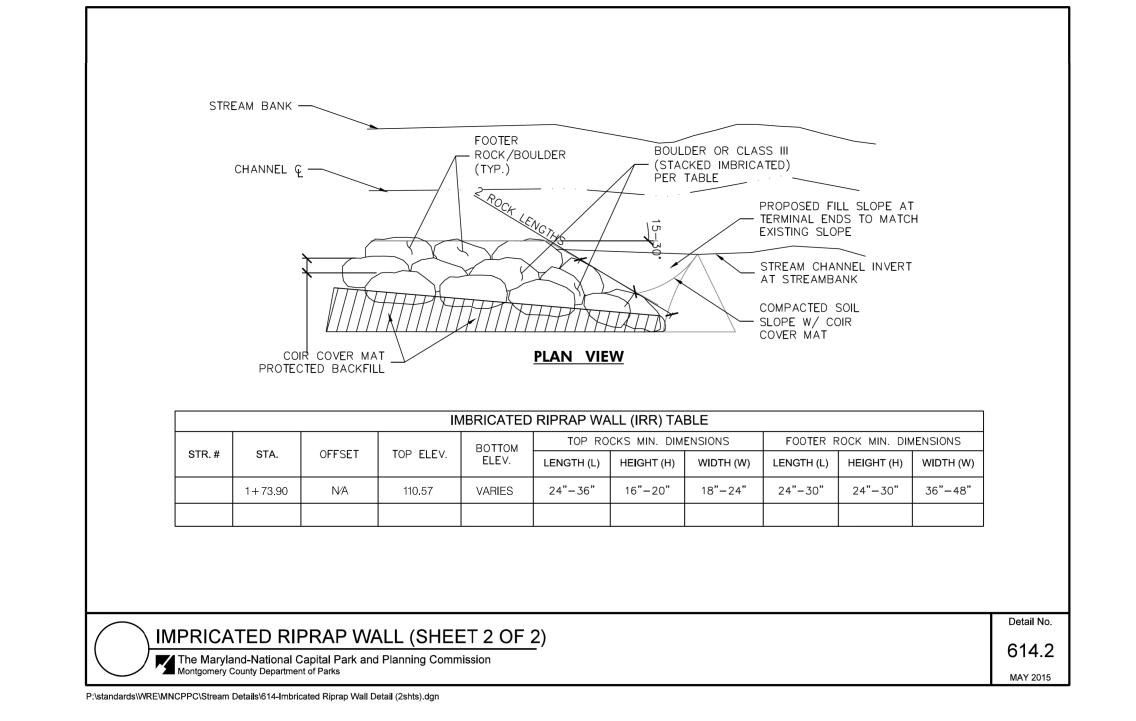












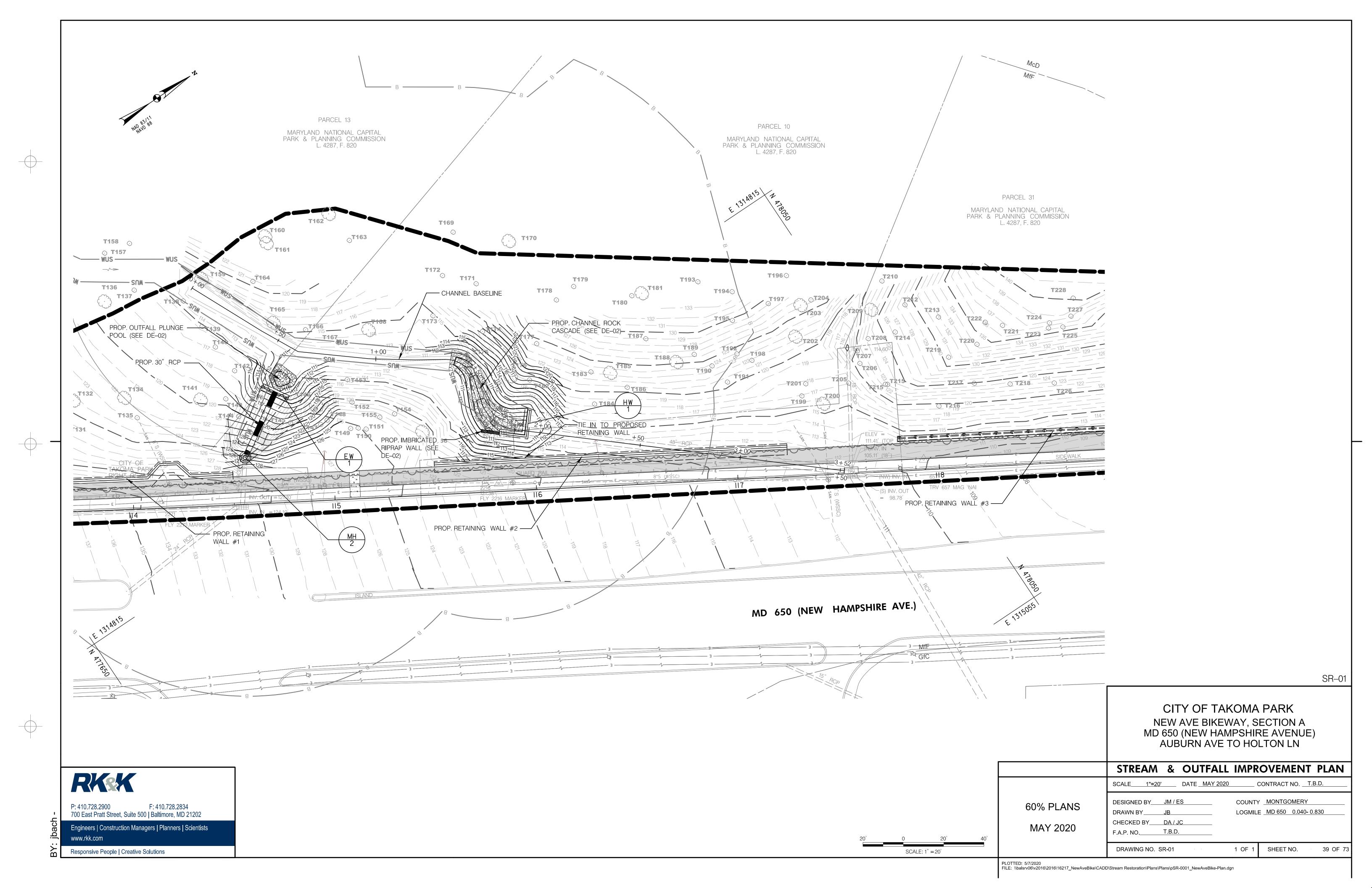
DE-02

CITY OF TAKOMA PARK NEW AVE BIKEWAY, SECTION A MD 650 (NEW HAMPSHIRE AVENUE) AUBURN AVE TO HOLTON LN

	STREAM & OUTFALL	IMPROVEMENT DETAILS
	SCALE <u>NOT TO SCALE</u> DATE <u>MAY 202</u>	20 CONTRACT NO. T.B.D.
60% PLANS MAY 2020	DESIGNED BY JM / ES  DRAWN BY JB  CHECKED BY DA / JC  F.A.P. NO. T.B.D.	COUNTY MONTGOMERY LOGMILE MD 650 0.040- 0.830
	DRAWING NO. DE-02	2 OF 2 SHEET NO. 38 OF 73

FILE: \\balsrv06\v2016\2016\16217\_NewAveBike\CADD\Stream Restoration\Plans\Details\pDT-0002\_NewAveBike.dgn

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#### STANDARD EROSION AND SEDIMENT CONTROL NOTES

1. THE PERMITTEE SHALL NOTIFY THE DEPARTMENT OF PERMITTING SERVICES (DPS) FORTY EIGHT (48) HOURS BEFORE COMMENCING ANY LAND DISTURBING ACTIVITY AND, UNLESS WAIVED BY THE DEPARTMENT, SHALL BE REQUIRED TO HOLD A PRE-CONSTRUCTION MEETING BETWEEN THEM OR THEIR REPRESENTATIVE, THEIR ENGINEER AND AN AUTHORIZED REPRESENTATIVE OF THE DEPARTMENT

2.2. FOLLOWING INSTALLATION OF SEDIMENT CONTROL MEASURES AND PRIOR TO ANY OTHER LAND DISTURBING

- AUTHORIZED REPRESENTATIVE OF THE DEPARTMENT.

  2. THE PERMITTEE MUST OBTAIN INSPECTION AND APPROVAL BY DPS AT THE FOLLOWING POINTS:
  2.1. AT THE REQUIRED PRE-CONSTRUCTION MEETING.
  - ACTIVITY.

    2.3. DURING THE INSTALLATION OF A SEDIMENT BASIN OR STORMWATER MANAGEMENT STRUCTURE AT THE REQUIRED INSPECTION POINTS (SEE INSPECTION CHECKLIST ON PLAN). NOTIFICATION PRIOR TO COMMENCING CONSTRUCTION IS MANDATORY
- 2.4. PRIOR TO REMOVAL OR MODIFICATION OF ANY SEDIMENT CONTROL STRUCTURE(S). 2.5. PRIOR TO FINAL ACCEPTANCE.
- 3. THE PERMITTEE SHALL CONSTRUCT ALL EROSION AND SEDIMENT CONTROL MEASURES PER THE APPROVED PLAN AND CONSTRUCTION SEQUENCE, SHALL HAVE THEM INSPECTED AND APPROVED BY THE DEPARTMENT PRIOR TO BEGINNING ANY OTHER LAND DISTURBANCES, SHALL ENSURE THAT ALL RUNOFF FROM DISTURBED AREAS IS DIRECTED TO THE SEDIMENT CONTROL DEVICES, AND SHALL NOT REMOVE ANY EROSION OR SEDIMENT CONTROL MEASURE WITHOUT PRIOR PERMISSION FROM THE DEPARTMENT.
- 4. THE PERMITTEE SHALL PROTECT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS TO PREVENT THE DEPOSITION OF MATERIALS ONTO TRAVERSED PUBLIC THOROUGHFARE(S). ALL MATERIALS DEPOSITED ONTO PUBLIC THOROUGHFARE(S) SHALL BE REMOVED IMMEDIATELY.
- 5. THE PERMITTEE SHALL INSPECT PERIODICALLY AND MAINTAIN CONTINUOUSLY IN EFFECTIVE OPERATING CONDITION, ALL EROSION AND SEDIMENT CONTROL MEASURES UNTIL SUCH TIME AS THEY ARE REMOVED WITH PRIOR PERMISSION FROM THE DEPARTMENT. THE PERMITTEE IS RESPONSIBLE FOR IMMEDIATELY REPAIRING OR REPLACING ANY SEDIMENT CONTROL MEASURES WHICH HAVE BEEN DAMAGED OR REMOVED BY THE PERMITTEE OR ANY OTHER PERSON.
- 6. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN:
- 6.1. THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND 6.2. SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.

ALL OTHER DISTURBED AREA OUTSIDE OF THE PERIMETER SEDIMENT CONTROL SYSTEM MUST BE MINIMIZED AND STABILIZED IMMEDIATELY. MAINTENANCE MUST BE PERFORMED AS NECESSARY TO ENSURE CONTINUED STABILIZATION.

- 7. THE PERMITTEE SHALL APPLY SOD, SEED, AND ANCHORED STRAW MULCH, OR OTHER APPROVED STABILIZATION MEASURES TO ALL DISTURBED AREAS WITHIN SEVEN (7) CALENDAR DAYS AFTER STRIPPING AND GRADING ACTIVITIES HAVE CEASED ON THAT AREA. MAINTENANCE SHALL BE PERFORMED AS NECESSARY TO ENSURE CONTINUED STABILIZATION. ACTIVE CONSTRUCTION AREAS SUCH AS BORROW OR STOCKPILE AREAS, ROADWAY IMPROVEMENTS, AND AREAS WITHIN FIFTY (50) FEET OF A BUILDING UNDER CONSTRUCTION MAY BE EXEMPT FROM THIS REQUIREMENT, PROVIDED THAT EROSION AND SEDIMENT CONTROL MEASURES ARE INSTALLED AND MAINTAINED TO PROTECT THOSE AREAS.
- 8. PRIOR TO REMOVAL OF SEDIMENT CONTROL MEASURES, THE PERMITEE SHALL STABILIZE ALL CONTRIBUTORY DISTURBED AREAS WITH REQUIRED SOIL AMENDMENTS AND TOPSOIL, USING SOD OR AN APPROVED PERMANENT SEED MIXTURE AND AN APPROVED ANCHORED MULCH. WOOD FIBER MULCH MAY ONLY BE USED IN SEEDING SEASON WHEN THE SLOPE DOES NOT EXCEED 10% AND GRADING HAS BEEN DONE TO PROMOTE SHEET FLOW DRAINAGE. AREAS BROUGHT TO FINISHED GRADE DURING THE SEEDING SEASON SHALL BE PERMANENTLY STABILIZED WITHIN SEVEN (7) CALENDAR DAYS OF ESTABLISHMENT. WHEN PROPERTY IS BROUGHT TO FINISHED GRADE DURING THE MONTHS OF NOVEMBER THROUGH FEBRUARY, AND PERMANENT STABILIZATION IS FOUND TO BE IMPRACTICAL, AN APPROVED TEMPORARY SEED AND STRAW ANCHORED MULCH SHALL BE APPLIED TO DISTURBED AREAS. THE FINAL PERMANENT STABILIZATION OF SUCH PROPERTY SHALL BE COMPLETED PRIOR TO THE FOLLOWING APRIL 15.
- 9. THE SITE PERMIT, WORK, MATERIALS, APPROVED SC/SM PLANS, AND TEST REPORTS SHALL BE AVAILABLE AT THE SITE FOR INSPECTION BY DULY AUTHORIZED OFFICIALS OF MONTGOMERY COUNTY.
- 10. SURFACE DRAINAGE FLOWS OVER UNSTABILIZED CUT AND FILL SLOPES SHALL BE CONTROLLED BY EITHER PREVENTING DRAINAGE FLOWS FROM TRAVERSING THE SLOPES OR BY INSTALLING MECHANICAL DEVICES TO LOWER THE WATER DOWN SLOPE WITHOUT CAUSING EROSION. DIKES SHALL BE INSTALLED AND MAINTAINED AT THE TOP OF CUT OR FILL SLOPES UNTIL THE SLOPE AND DRAINAGE AREA TO IT ARE FULLY STABILIZED, AT WHICH TIME THEY MUST BE REMOVED AND FINAL GRADING DONE TO PROMOTE SHEET FLOW DRAINAGE. MECHANICAL DEVICES MUST BE PROVIDED AT POINTS OF CONCENTRATED FLOW WHERE EROSION IS LIKELY TO OCCUR.
- 11. PERMANENT SWALES OR OTHER POINTS OF CONCENTRATED WATER FLOW SHALL BE STABILIZED WITHIN THREE (3) CALENDAR DAYS OF ESTABLISHMENT WITH SOD OR SEED WITH AN APPROVED EROSION CONTROL MATTING OR BY OTHER APPROVED STABILIZATION MEASURES.
- 12. SEDIMENT CONTROL DEVICES SHALL BE REMOVED, WITH PERMISSION OF THE DEPARTMENT, WITHIN THIRTY (30) CALENDAR DAYS FOLLOWING ESTABLISHMENT OF PERMANENT STABILIZATION IN ALL CONTRIBUTORY DRAINAGE AREAS. STORMWATER MANAGEMENT STRUCTURES USED TEMPORARILY FOR SEDIMENT CONTROL SHALL BE CONVERTED TO THE PERMANENT CONFIGURATION WITHIN THIS TIME PERIOD AS WELL.
- 13. NO PERMANENT CUT OF FILL SLOPE WITH A GRADIENT STEEPER THAN 3:1 WILL BE PERMITTED IN LAWN MAINTENANCE AREAS OR ON RESIDENTIAL LOTS. A SLOPE GRADIENT OF 2:1 WILL BE PERMITTED IN NON-MAINTENANCE AREAS PROVIDED THAT THOSE AREAS ARE INDICATED ON THE EROSION AND SEDIMENT CONTROL PLAN WITH A LOW-MAINTENANCE GROUND COVER SPECIFIED FOR PERMANENT STABILIZATION. SLOPE GRADIENT STEEPER THAN 2:1 WILL NOT BE PERMITTED WITH VEGETATIVE STABILIZATION.
- 14. THE PERMITTEE SHALL INSTALL A SPLASHBLOCK AT THE BOTTOM OF EACH DOWNSPOUT UNLESS THE DOWNSPOUT IS CONNECTED BY A DRAIN LINE TO AN ACCEPTABLE OUTLET.
- 15. FOR FINISHED GRADING, THE PERMITTEE SHALL PROVIDE ADEQUATE GRADIENTS SO AS TO PREVENT WATER FROM STANDING ON THE SURFACE OF LAWNS MORE THAN TWENTY—FOUR (24) HOURS AFTER THEN END OF A RAINFALL, EXCEPT IN DESIGNATED DRAINAGE COURSES AND SWALE FLOW AREAS, WHICH MAY DRAIN AS LONG AS FORTY—EIGHT (48) HOURS AFTER THE END OF A RAINFALL.
- 16. SEDIMENT TRAPS OR BASINS ARE NOT PERMITTED WITHIN 20 FEET OF A BUILDING WHICH IS EXISTING OR UNDER CONSTRUCTION. NO BUILDING MAY BE CONSTRUCTED WITHIN 20 FEET OF A SEDIMENT TRAP OR BASIN.

- 17. ALL INLETS IN NON-SUMP AREAS SHALL HAVE ASPHALT BERMS INSTALLED AT THE TIME OF BASE PAVING ESTABLISHMENT.
- 18. THE SEDIMENT CONTROL INSPECTOR HAS THE OPTION OF REQUIRING ADDITIONAL SEDIMENT CONTROL MEASURES, AS DEEMED NECESSARY.
- 19. ALL TRAP ELEVATIONS ARE RELATIVE TO THE OUTLET ELEVATION, WHICH MUST BE ON EXISTING UNDISTURBED GROUND.
- 20. VEGETATIVE STABILIZATION SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- 21. SEDIMENT TRAP(S)/BASIN(S) SHALL BE CLEANED OUT AND RESTORED TO THE ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO THE POINT OF ONE-HALF (1/2) THE WET STORAGE DEPTH OF THE TRAP/BASIN (1/4 THE WET STORAGE DEPTH FOR ST-III) OR WHEN REQUIRED BY THE SEDIMENT CONTROL INSPECTOR.
- 22. SEDIMENT REMOVED FROM TRAPS/BASINS SHALL BE PLACED AND STABILIZED IN APPROVED AREAS, BUT NOT WITHIN A 100-YEAR FLOODPLAIN.
- 23. ALL SEDIMENT BASINS AND TRAPS MUST BE SURROUNDED WITH A WELDED WIRE SAFETY FENCE. THE FENCE MUST BE AT LEAST 42 INCHES HIGH, HAVE POSTS SPACED NO FARTHER APART THAN 8 FEET, HAVE MESH OPENINGS NO GREATER THAN TWO INCHES IN WIDTH AND FOUR INCHES IN HEIGHT, WITH A MINIMUM OF 14 GAUGE WIRE. SAFETY FENCE MUST BE MAINTAINED IN GOOD CONDITION AT ALL TIMES.
- 24. NO EXCAVATION IN THE AREAS OF EXISTING UTILITIES IS PERMITTED UNLESS THEIR LOCATION HAS BEEN DETERMINED. CALL "MISS UTILITY" AT 1-800-257-7777, 48 HOURS PRIOR TO THE START OF WORK.
- 25. OFF SITE SPOIL OR BORROW AREAS MUST HAVE PRIOR APPROVAL BY DPS.
- 26. SEDIMENT TRAP/BASIN DEWATERING FOR CLEANOUT REPAIR MAY ONLY BE DONE WITH THE DPS INSPECTOR'S PERMISSION. THE INSPECTOR MUST APPROVE THE DEWATERING METHOD FOR EACH APPLICATION. THE FOLLOWING METHODS MAY BE CONSIDERED:
- 26.1. PUMP DISCHARGE MAY BE DIRECTED TO ANOTHER ON—SITE SEDIMENT TRAP OR BASIN, PROVIDED IT IS OF SUFFICIENT VOLUME AND THE PUMP INTAKE IS FLOATED TO PREVENT AGITATION OR SUCTION OF DEPOSITED SEDIMENTS; OR
- 26.2. THE PUMP INTAKE MAY UTILIZE A REMOVABLE PUMPING STATION AND MUST DISCHARGE INTO AN UNDISTURBED AREA THROUGH A NON-EROSIVE OUTLET; OR

  26.3 THE PUMP INTAKE MAY BE FLOATED AND DISCHARGE INTO A DIRT BAG (12 OZ NON-WOVEN FABRIC) OR
- 26.3. THE PUMP INTAKE MAY BE FLOATED AND DISCHARGE INTO A DIRT BAG (12 OZ. NON-WOVEN FABRIC), OR APPROVED EQUIVALENT, LOCATED IN AN UNDISTURBED BUFFER AREA.

REMEMBER: DEWATERING OPERATION AND METHOD MUST HAVE PRIOR APPROVAL BY THE DPS INSPECTOR.

- 27. THE PERMITTEE MUST NOTIFY THE DEPARTMENT OF ALL UTILITY CONSTRUCTION ACTIVITIES WITHIN THE PERMITTED LIMITS OF DISTURBANCE PRIOR TO THE COMMENCEMENT OF THOSE ACTIVITIES.
- 28. TOPSOIL MUST BE APPLIED TO ALL PERVIOUS AREA WITHIN THE LIMITS OF DISTURBANCE PRIOR TO PERMANENT STABILIZATION IN ACCORDANCE WITH MDE "STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS."

# OWNER'S/DEVELOPER'S CERTIFICATION

I/WE HEREBY CERTIFY THAT ALL CLEARING, GRADING, CONSTRUCTION, AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.

SIGNATURE JAMEE ERNST (301) 891-7213	PLANNER CITY OF TAKOMA PARK	DATE

DESIGN CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL," MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES EXECUTIVE REGULATIONS 5-90, 7-02AM AND 36-90, AND MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION "STORM DRAIN DESIGN CRITERIA" DATED AUGUST 1988.

SIGNATURE	DIRECTOR	DATE
SEYED SADAAT, P.E.	WATER RESOURCES	
PRINTED NAME AND TITLE		CERTIFICATION OF THE QUANTITIES

I HEREBY CERTIFY THAT THE ESTIMATED TOTAL AMOUNT OF EXCAVATION AND FILL AS SHOWN ON THESE PLANS HAS BEEN COMPUTED TO 1,800 CUBIC YARDS OF EXCAVATION, 30 CUBIC YARDS OF FILL AND THE TOTAL AREA TO BE DISTURBED AS SHOWN ON THE PLANS HAS BEEN DETERMINED TO BE 64,048 SQUARE FEET.

GNATURE	DIRECTOR	DATE	
EYED SADAAT, P.E.	WATER RESOURCES		

PRINTED NAME AND TITLE

PRINTED NAME AND TITLE

CITY OF TAKOMA PARK

EN-01

NEW AVE BIKEWAY, SECTION A MD 650 (NEW HAMPSHIRE AVENUE) AUBURN AVE TO HOLTON LN

# **|EROSION AND SEDIMENT CONTROL NOTES**

		SCALE	DATE	MAY 2020		CONTRACT NO.	T.B	.D.	
		DESIGNED BYA(	GB		COUNT	Y MONTGOME	RY		
		DRAWN BY DE	EΑ		LOGMIL	E MD 650 0.0	40- 0.8	30	
		CHECKED BY SE	3P		WSSC 208NE01 & 209NE01			01	
		F.A.P. NO. T.B.D. TAX MAPS JN561 & JN562				52			
 	 	DRAWING NO.	EN <b>-</b> 0	1 OF	4	SHEET NO.	40	OF	<b>7</b> 3

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DATE

REVISION

LIST OF PREDOMINANT SOIL TYPES

DESCRIPTION

URBAN LAND

CODORUS-HATSBORO-URBAN LAND COMPLEX, FREQUENTLY FLOODED

MANOR-BRINKLOW COMPLEX, 25 TO 65 PERCENT SLOPES, VERY ROCKY

RUSSETT-CHRISTIANA-URBAN LAND COMPLEX, 0 TO 5 PERCENT SLOPE

GLENELG-WHEATON-URBAN LAND COMPLEX, 0-8% SLOPE

GLENELG-WHEATON-URBAN LAND COMPLEX, 8-15% SLOPE

SYMBOLS

Ch

GfB

GfC

MtF

RuB

BY: bbaral -

#### **SEQUENCE OF CONSTRUCTION:**

- 1. PRIOR TO CLEARING TREES, INSTALLING SEDIMENT CONTROL MEASURES, OR GRADING, A PRECONSTRUCTION MEETING MUST BE CONDUCTED ON-SITE WITH THE MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICE (MCDPS) SEDIMENT CONTOL INSPECTOR (240) 777-0311 (48 HOURS NOTICE), THE MNCPPC (MARYLAND NATIONAL CAPITOL PARK AND PLANNING COMMISSION) PLANNING DEPARTMENT, PLANS ENFORCEMENT INSPECTOR (301) 495-4550 (48 HOURS NOTICE), THE OWNERS REPRESENTATIVE, AND THE SITE ENGINEER. IN ORDER FOR THE MEETING TO OCCUR, THE APPLICANT MUST PROVIDE ONE PAPER SET OF APPROVED SEDIMENT CONTROL PLANS AND APPROVED ROADSIDE TREE PROTECTION PLAN TO THE MCDPS SEDIMENT CONTROL INSPECTOR AT THE PRECONSTRUCTION MEETING. IF NO PLANS ARE PROVIDED, THE MEETING SHALL NOT OCCUR AND WILL NEED TO BE RESCHEDULED PRIOR TO COMMENCING ANY WORK.
- 2. LIMIT OF DISTURBANCE MUST BE FIELD MARKED PRIOR TO CLEARING OF TREES, INSTALLATION OF SEDIMENT CONTROL MEASURES, CONSTRUCTION, OR OTHER LAND DISTURBING ACTIVITIES.
- 3. NO WORK SHALL BE COMPLETED DURING A RAIN EVENT. NO DISTURBED AREA SHALL BE LEFT UNSTABILIZED OVERNIGHT UNLESS THE RUNOFF IS DIRECTED TO AN APPROVED SEDIMENT CONTROL DEVICE. ALL AREAS DESIGNATED AS SAME DAY SHALL BE STABILIZED AT THE END OF EACH WORK DAY.
- 4. ROOT PRUNE ALONG LOD AT DIRECTION OF MD LTE AND INSTALL ALL TREE PROTECTION FENCE PRIOR TO ANY WORK BEING PERFORMED.
- 5. THE PERMITTEE MUST OBTAIN WRITTEN APPROVAL FROM THE MNCPPC INSPECTOR, CERTIFYING THAT THE LIMITS OF DISTURBANCE AND TREE PROTECTION MEASURES ARE CORRECTLY MARKED AND INSTALLED PRIOR TO COMMENCING ANY CLEARING.
- 6. WITH THE APPROVAL OF THE PROJECT ENGINEER AND THE MCDPC SEDIMENT CONTROL INSPECTOR, STEPS IN EACH STAGE MAY BE ADJUSTED AND/OR BE PERFORMED CONCURRENTLY.
- 7. THE NEED FOR AND LOCATION OF STABILIZED CONSTRUCTION ENTRANCES SHALL BE DISCUSSED AT THE PRECONSTRUCTION MEETING FOR ALL STAGES.
- PUMP AROUNDS SHALL BE INSTALLED AND MAINTAINED AS ILLUSTRATED ON THE EROSION AND SEDIMENT CONTROL PLANS.
   AT ALL TIMES DURING CONSTRUCTION ACTIVITIES, A SANDBAG DIVERSION (SBD) AND DEWATERING SYSTEM WITH FILTER BAG MUST BE PLACED AT THE MOST DOWNSTREAM END OF THE UNSTABILIZED WORK ZONE. SBD'S SHALL BE REMOVED, AND ALL DISTURBED AREAS MUST BE STABILIZED OR COVERED IN SSM DAILY PRIOR TO LEAVING THE SITE.
- 10.NO WORK IS TO BE DONE WITHIN THE STREAM CLOSURE PERIOD OF MARCH 1 TO JUNE 15, INCLUSIVE.
- 11.UNLESS NEW, ALL CONSTRUCTION MATS SHALL BE POWER WASHED PRIOR TO BEING BROUGHT ON SITE.
- 12.RELOCATE UTILITIES AS NEEDED PRIOR TO COMMENCING WORK.

#### PHASE 1A: AUBURN AVE TO DEVONSHIRE AVE (MD 650 STA. 102+00 105+50)

- 1. CLEAR AND GRUB FOR INSTALLATION OF SEDIMENT CONTROL DEVICES AND INSTALL THOSE DEVICES SHOWN ON THE EROSION AND SEDIMENT CONTROL PLANS. DURING THIS AND SUBSEQUENT STEPS, SAFE PEDESTRIAN ACCESS MUST BE MAINTAINED AT ALL TIMES.
- 2. ONCE SEDIMENT CONTROL DEVICES ARE INSTALLED, THE PERMITTEE MUST OBTAIN WRITTEN APPROVAL FROM THE MCDPS INSPECTOR BEFORE PROCEEDING WITH ANY ADDITIONAL CLEARING, GRUBBING, OR GRADING.
- 3. CONSTRUCT SHARED USE PATH, ALL WIDENING WORK, CURB RECONSTRUCTION, LIGHTING AND SIGNING WORK. USE SAME DAY STABILIZATION IN ALL AREAS NOT DRAINING TO AN APPROVED SEDIMENT CONTROL DEVICE, AS SHOWN ON THE PLANS.
- 4. ONCE ALL WORK IS COMPLETED AND WITH THE APPROVAL OF THE INSPECTOR, REMOVE EROSION AND SEDIMENT CONTROLS AND PERFORM FINAL STABILIZATION. MOVING ON TO NEXT WORK ZONE.

#### PHASE 1B: DEVONSHIRE AVE TO LARCH AVE (STA. 105+50 111+15)

- 1. CLEAR AND GRUB FOR INSTALLATION OF SEDIMENT CONTROL DEVICES AND INSTALL THOSE DEVICES SHOWN ON THE EROSION AND SEDIMENT CONTROL PLANS. DURING THIS AND SUBSEQUENT STEPS, SAFE PEDESTRIAN ACCESS MUST BE MAINTAINED AT ALL TIMES.
- 2. ONCE SEDIMENT CONTROL DEVICES ARE INSTALLED, THE PERMITTEE MUST OBTAIN WRITTEN APPROVAL FROM THE MCDPS INSPECTOR BEFORE PROCEEDING WITH ANY ADDITIONAL CLEARING, GRUBBING, OR GRADING.
- 3. CONSTRUCT SHARED USE PATH, ALL WIDENING WORK, CURB RECONSTRUCTION, LIGHTING AND SIGNING WORK. USE SAME DAY STABILIZATION IN ALL AREAS NOT DRAINING TO AN APPROVED SEDIMENT CONTROL DEVICE. AS SHOWN ON THE PLANS.
- 4. ONCE ALL WORK IS COMPLETED AND WITH THE APPROVAL OF THE INSPECTOR, REMOVE EROSION AND SEDIMENT CONTROLS AND PERFORM FINAL STABILIZATION, MOVING ON TO NEXT WORK ZONE.

# PHASE 2A STREAM AND OUTFALL WORK

# 2A.1 OUTFALL GRADING AND CONSTRUCTION OF SCOUR HOLE

- 1. THE CONTRACTOR MAY CHOOSE TO COMPLETE PHASE 3A.1 PRIOR TO, AFTER, OR CONCURRENTLY WITH PHASE 2A.2.
- 2. CLEAR AND GRUB FOR INSTALLATION OF SEDIMENT CONTROL DEVICES. INSTALL SEDIMENT CONTROL DEVICES AND TEMPORARY ACCESS ROADS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLANS USING SAME DAY STABILIZATION.
- 3. ONCE SEDIMENT CONTROL DEVICES ARE INSTALLED, THE PERMITTEE MUST OBTAIN WRITTEN APPROVAL FROM THE MCDPS INSPECTOR BEFORE PROCEEDING WITH ANY ADDITIONAL CLEARING, GRUBBING, OR GRADING.
- 4. INSTALL SBD-1, SBD-2, AND PUMP AROUND. INSTALL PIPE SLOPE DRAIN (PSD) AND VELOCITY DISSIPATOR FOR THE STORM DRAIN OUTFALL TO CONVEY BASEFLOW.
- 5. A REMOVABLE PUMP STATION (RPS) SHALL BE PLACED UPSTREAM OF SBD-2. ANY SEDIMENT LADEN WATER THAT DEPOSITS IN THE WORK AREA SHALL BE PUMPED OVER THE DIVERSION, THROUGH AN MDE APPROVED FILTERING DEVICE, AND DISCHARGED AT A DOWNSTREAM STABLE DISCHARGE POINT. THE RPS SHALL BE USED TO DEWATER THE WORK AREA PRIOR TO THE START OF EXCAVATION.
- 6. STARTING AT THE UPSTREAM END OF THE OUTFALL CHANNEL AND WORKING DOWNSTREAM, PERFORM PROPOSED GRADING, INSTALL MH-2 AND EW-1, AND CONSTRUCT THE PREFORMED SCOUR HOLE AS SHOWN ON THE PLANS. TEMPORARILY STABILIZE ALL DISTURBED AREAS AS WORK PROGRESSES.
- 7. AT THE END OF EACH WORK DAY, THE WORK AREA SHALL BE EITHER PERMANENTLY STABILIZED PER THE PLANS OR TEMPORARILY STABILIZED. REMOVE THE SBDs PRIOR TO LEAVING THE SITE OVERNIGHT AND/OR BEFORE RAINFALL EVENTS. UPON ARRIVING ON SITE IN THE MORNING OR AFTER A RAINFALL EVENT, SBDs SHALL BE REPLACED AND PUMP AROUND AND DEWATERING OPERATIONS COMMENCED.
- 8. FOLLOWING CONSTRUCTION, THE PROPOSED OUTFALL CHANNEL SHALL TIE BACK INTO THE EXISTING STREAM CHANNEL, AND THE WORK AREA SHALL BE PERMANENTLY STABILIZED.
- 9. CONTACT THE MCDPS INSPECTOR AND, ONCE PHASE 2A.1 IS APPROVED, REMOVE SBD-1, SBD-2, PUMP AROUND, PSD, RPS AND DEWATERING PUMP WITH FILTER BAG. THE SUPER SILT FENCE ALONG BOTH SCES AND ALONG THE ACCESS ROAD CLOSEST TO SCE-1 SHALL REMAIN IN PLACE DURING THE INSTALLATION OF THE NEARBY RETAINING WALL. PROCEED TO PHASE 2A.2.

#### 2A.2 GRADING AND CONSTRUCTION (CHANNEL BASELINE STA. 1+24.50 TO STA. 2+11.84)

- 1. CLEAR AND GRUB FOR INSTALLATION OF SEDIMENT CONTROL DEVICES. INSTALL SEDIMENT CONTROL DEVICES AND TEMPORARY ACCESS ROADS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLANS USING SAME DAY STABILIZATION.
- 2. ONCE SEDIMENT CONTROL DEVICES ARE INSTALLED, THE PERMITTEE MUST OBTAIN WRITTEN APPROVAL FROM THE MCDPS INSPECTOR BEFORE PROCEEDING WITH ANY ADDITIONAL CLEARING, GRUBBING, OR GRADING.
- 3. INSTALL SBD-3, SBD-4, AND PUMP AROUND.
- 4. A RPS SHALL BE PLACED UPSTREAM OF SBD-4. ANY SEDIMENT LADEN WATER FROM THE ACTIVE WORK AREA SHALL BE PUMPED OVER THE DIVERSION, THROUGH AN MDE APPROVED FILTERING DEVICE, AND DISCHARGED AT A DOWNSTREAM STABLE DISCHARGE POINT. THE RPS SHALL BE USED TO DEWATER THE WORK AREA PRIOR TO THE START OF EXCAVATION.
- 5. STARTING AT SBD-3 AND WORKING DOWNSTREAM TO SBD-4, PERFORM PROPOSED GRADING, CONSTRUCT CHANNEL, AND INSTALL RIP RAP PROTECTION, IMBRICATED ROCK WALL, AND HW-1 AS SHOWN ON THE PLANS. AS WORK IS COMPLETED, INCREMENTALLY REMOVE THE ACCESS ROAD AND ASSOCIATED PERIMETER CONTROLS AT THE DOWNSTREAM END OF THE PHASE 2A WORK AREA WITH APPROVAL OF THE MCDPS INSPECTOR. PERMANENTLY STABILIZE DISTURBED AREA AT FINAL GRADE WITH PERMANENT SEEDING. AS GRADING PROGRESSES, CONTRACTOR SHALL CONTINUOUSLY INSTALL ALL CHANNEL AND FLOODPLAIN TREATMENTS SUCH THAT FINAL STABILIZATION CAN OCCUR.
- AT THE END OF EACH WORK DAY, THE WORK AREA SHALL BE EITHER PERMANENTLY STABILIZED PER THE PLANS OR TEMPORARILY STABILIZED. REMOVE THE SBDs PRIOR TO LEAVING THE SITE OVERNIGHT AND/OR BEFORE RAINFALL EVENTS. UPON ARRIVING ON SITE IN THE MORNING OR AFTER A RAINFALL EVENT, SBDs SHALL BE REPLACED AND PUMP AROUND AND DEWATERING OPERATIONS COMMENCED.
- 7. CONTACT THE MCDPS INSPECTOR AND, ONCE PHASE 2A.2 IS APPROVED, REMOVE SBD-3, SBD-4, PUMP AROUND, DEWATERING PUMP WITH FILTER BAG, AND RPS. PROCEED TO PHASE 2A.3.

#### 2A.3 MISCELLANEOUS CONSTRUCTION AND VEGETATIVE ESTABLISHMENT

- 1. ONCE PHASES 2A.1-2A.2 ARE COMPLETE, FROM DOWNSTREAM TO UPSTREAM INCREMENTALLY REMOVE THE REMAINING ACCESS ROAD AND ASSOCIATED PERIMETER CONTROLS WITH APPROVAL OF THE MCDPS INSPECTOR. ONCE FINISHED GRADE IS ACHIEVED AND STABILIZED, DO NOT DRIVE CONSTRUCTION EQUIPMENT THROUGH COMPLETED WORK.
- 2. PLANT TREES, SHRUBS, AND LIVE STAKES WITHIN SPECIFIED PLANTING WINDOW USING SAME DAY STABILIZATION. NO HEAVY EQUIPMENT SHALL BE USED DURING PLANTING. IF FINAL STABILIZATION OF THE CONSTRUCTED WORK IS DISTURBED, REAPPLY SEED MIX TO ANY DISTURBED AREAS.
- 3. ONCE ALL DISTURBED AREAS ARE 95% STABILIZED AND WITH THE APPROVAL OF THE MCDPS INSPECTOR, REMOVE ALL REMAINING EROSION AND SEDIMENT CONTROLS AND PERFORM FINAL STABILIZATION. MOVING ON TO THE NEXT WORK ZONE.

## PHASE 2B: LARCH AVE TO SLIGO CREEK PARKWAY (111+15 123+50)

- 1. CLEAR AND GRUB FOR INSTALLATION OF SEDIMENT CONTROL DEVICES AND INSTALL THOSE DEVICES SHOWN ON THE EROSION AND SEDIMENT CONTROL PLANS NOT ALREADY IN PLACE FROM THE PREVIOUS STAGE. DURING THIS AND SUBSEQUENT STEPS, SAFE PEDESTRIAN ACCESS MUST BE MAINTAINED AT ALL TIMES.
- 2. WHERE INLET PROTECTION DRAINAGE AREAS EXCEED THE LIMITS REQUIRED, MEASURES ARE TO BE USED IN CONJUNCTION WITH SAME DAY STABILIZATION TO PREVENT THE PROTECTIONS FROM BEING OVERWHELMED WITH SEDIMENT. WHEN INSTALLING DIVERSION FENCE, GRADE AS NECESSARY TO ENSURE POSITIVE FLOW IS MAINTAINED ALONG THE ENTIRE LENGTH. SECURE DOWNSTREAM END OF DIVERSION FENCE WITH SAND BAGS AND OUTLET THROUGH PIPE SLOPE DRAIN INTO EXISTING GRATE INLET.
- 3. ONCE SEDIMENT CONTROL DEVICES ARE INSTALLED, THE PERMITTEE MUST OBTAIN WRITTEN APPROVAL FROM THE MCDPS INSPECTOR BEFORE PROCEEDING WITH ANY ADDITIONAL CLEARING, GRUBBING, OR GRADING.
- DURING A NOAA 3-DAY DRY PERIOD INSTALL INLET 1-2 USING SAME DAY STABILIZATION, CONNECTING TO EXISTING PIPE AND GRADING AS SHOWN ON PLANS TO DIRECT FLOW TO INLET. ONCE INSTALLED, ADD GABION INLET PROTECTION TO INLET.
- 5. CONSTRUCT STORM DRAIN FROM I-1 TO MH-1 DURING A NOAA 3-DAY DRY PERIOD, AND CONSTRUCT STORMWATER MANAGEMENT FACILITY IN AREA. DO NOT INSTALL MEDIA UNTIL FUTURE STEP. WHEN CONSTRUCTING GRAVITY WALLS AROUND PROPOSED SWM FACILITY, TEMPORARILY BLOCK OPENINGS AT BASE OF WALL AND OPEN-BACK INLETS TO PREVENT WATER FROM ENTERING SWM AREA.
- CONSTRUCT SHARED USE PATH, ALL WIDENING WORK, RETAINING WALL NO. 1, NO. 2 AND NO.3, CURB RECONSTRUCTION, LIGHTING AND SIGNING WORK. IN AREAS OF PROPOSED RETAINING WALLS, USE PSTs AS NECESSARY TO DEWATER FOOTING FOUNDATIONS DURING CONSTRUCTION. USE SAME DAY STABILIZATION IN ALL AREAS NOT DRAINING TO AN APPROVED SEDIMENT CONTROL DEVICE. AS SHOWN ON THE PLANS.
- 7. ONCE ENTIRE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, INSTALL MEDIA IN STORMWATER MANAGEMENT FACLITY MBR-6-2 AND COMPLETE CONSTRUCTION AS SHOWN.
  ONCE INSTALLED AND STABILIZED, UNBLOCK OPENINGS IN GRAVITY WALLS.
- ONCE ALL WORK IS COMPLETED AND WITH THE APPROVAL OF THE INSPECTOR, REMOVE EROSION AND SEDIMENT CONTROLS AND PERFORM FINAL STABILIZATION, MOVING ON TO NEXT WORK ZONE.

EN-02

CITY OF TAKOMA PARK

NEW AVE BIKEWAY, SECTION A

MD 650 (NEW HAMPSHIRE AVENUE)

AUBURN AVE TO HOLTON LN

# EROSION AND SEDIMENT CONTROL NOTES

DATE MAY 2020 CONTRACT NO. T.B.D. SCALE DESIGNED BY\_\_\_\_ AGB COUNTY MONTGOMERY LOGMILE MD 650 0.040- 0.830 DRAWN BY\_ DEA CHECKED BY\_\_\_\_ SBP WSSC 208NE01 & 209NE01 TAX MAPS JN561 & JN562 T.B.D. F.A.P. NO. SHEET NO. 41 OF 73 DRAWING NO. EN <del>-</del> 02 OF 4 REVISION DATE

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#### PHASE 3: SLIGO CREEK PARKWAY TO GLENSIDE DRIVE (STA. 123+50 TO STA. 127+75)

- 1. CLEAR AND GRUB FOR INSTALLATION OF SEDIMENT CONTROL DEVICES AND INSTALL THOSE DEVICES SHOWN ON THE EROSION AND SEDIMENT CONTROL PLANS. DURING THIS AND SUBSEQUENT STEPS, SAFE PEDESTRIAN ACCESS MUST BE MAINTAINED AT ALL TIMES.
- 2. ONCE SEDIMENT CONTROL DEVICES ARE INSTALLED, THE PERMITTEE MUST OBTAIN WRITTEN APPROVAL FROM THE MCDPS INSPECTOR BEFORE PROCEEDING WITH ANY ADDITIONAL CLEARING, GRUBBING, OR GRADING.
- 3. CONSTRUCT STORM DRAIN FROM I-3 TO MH-3 AND I-5 TO EXISTING OUTFALL DURING A NOAA 3-DAY DRY PERIOD, AND CONSTRUCT STORMWATER MANAGEMENT FACILITY IN AREA OF I-3. DO NOT INSTALL MEDIA UNTI L FUTURE STEP. WHEN CONSTRUCTING GRAVITY WALLS AROUND PROPOSED SWM FACILITY, TEMPORARILY BLOCK OPENINGS AT BASE OF WALL AND OPEN-BACK INLETS TO PREVENT WATER FROM ENTERING SWM AREA. AFTER CONSTRUCTION, ADD INLET PROTECTION TO NEW INLETS AS SHOWN.
- 4. CONSTRUCT SHARED USE PATH, ALL WIDENING WORK, CURB RECONSTRUCTION, LIGHTING AND SIGNING WORK. USE SAME DAY STABILIZATION IN ALL AREAS NOT DRAINING TO AN APPROVED SEDIMENT CONTROL DEVICE, AS SHOWN ON THE PLANS.
- 5. CONSTRUCT FLOODPLAIN DEPRESSION FOLLOWING DETAIL ON SHEET (SW-D2)
- 6. ONCE ENTIRE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, INSTALL MEDIA IN STORMWATER MANAGEMENT FACLITY MBR-2-1 AND FINALIZE FACILITY AS SHOWN. ONCE INSTALLED AND STABILIZED, UNBLOCK OPENINGS IN GRAVITY WALLS.
- 7. ONCE ALL WORK IS COMPLETED, REMOVE DIVERSION FENCE AND CONSTRUCT BUS STOP SHOWN BEHIND DIVERSION FENCE USING SAME DAY STABILIZATION.
- 8. ONCE ALL WORK IS COMPLETED AND WITH THE APPROVAL OF THE INSPECTOR, REMOVE EROSION AND SEDIMENT CONTROLS AND PERFORM FINAL STABILIZATION, MOVING ON TO NEXT WORK ZONE.

#### PHASE 4A: GLENSIDE DRIVE TO MERWOOD DRIVE (STA. 127+75 TO STA. 134+25)

- 1. ALL WORK IN THIS AREA IS TO BE PERFORMED USING SAME DAY STABILIZATION TECHNIQUES. ONLY THE AREA THAT CAN BE STABILIZED WITHIN THE SAME DAY SHALL BE DISTURBED.
- 2. CONSTRUCT SHARED USE PATH, ALL WIDENING WORK, CURB RECONSTRUCTION, LIGHTING AND SIGNING WORK. USE SAME DAY STABILIZATION IN ALL AREAS NOT DRAINING TO AN APPROVED SEDIMENT CONTROL DEVICE, AS SHOWN ON THE PLANS.
- 3. ONCE ALL WORK IS COMPLETED AND WITH THE APPROVAL OF THE INSPECTOR, PERFORM FINAL STABILIZATION, MOVING ON TO NEXT WORK ZONE.

#### PHASE 4B: MERWOOD DRIVE TO KINGWOOD DRIVE (STA. 134+25 TO STA. 140+75)

- 1. CLEAR AND GRUB FOR INSTALLATION OF SEDIMENT CONTROL DEVICES AND INSTALL THOSE DEVICES SHOWN ON THE EROSION AND SEDIMENT CONTROL PLANS. DURING THIS AND SUBSEQUENT STEPS, SAFE PEDESTRIAN ACCESS MUST BE MAINTAINED AT ALL TIMES.
- 2. ONCE SEDIMENT CONTROL DEVICES ARE INSTALLED, THE PERMITTEE MUST OBTAIN WRITTEN APPROVAL FROM THE MCDPS INSPECTOR BEFORE PROCEEDING WITH ANY ADDITIONAL CLEARING, GRUBBING, OR GRADING.
- 3. CONSTRUCT STORM DRAIN FROM I-4 TO EX-I-4 DURING A NOAA 3-DAY DRY PERIOD, AND CONSTRUCT STORMWATER MANAGEMENT FACILITY IN AREA. DO NOT INSTALL MEDIA UNTIL FUTURE STEP. WHEN CONSTRUCTING GRAVITY WALLS AROUND PROPOSED SWM FACILITY, TEMPORARILY BLOCK OPENINGS AT BASE OF WALL AND OPEN-BACK INLETS TO PREVENT WATER FROM ENTERING SWM AREA. AFTER CONSTRUCTION, ADD INLET PROTECTION TO EXISTING INLET AS SHOWN.
- 4. CONSTRUCT SHARED USE PATH, ALL WIDENING WORK, CURB RECONSTRUCTION, LIGHTING AND SIGNING WORK. USE SAME DAY STABILIZATION IN ALL AREAS NOT DRAINING TO AN APPROVED SEDIMENT CONTROL DEVICE, AS SHOWN ON THE PLANS.
- 5. ONCE ENTIRE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, INSTALL MEDIA IN STORMWATER MANAGEMENT FACLITY MBR-2-2 AND FINALIZE FACILITY AS SHOWN. ONCE INSTALLED AND STABILIZED, UNBLOCK OPENINGS IN GRAVITY WALLS.
- 6. ONCE ALL WORK IS COMPLETED AND WITH THE APPROVAL OF THE INSPECTOR, REMOVE EROSION AND SEDIMENT CONTROLS AND PERFORM FINAL STABILIZATION, MOVING ON TO NEXT WORK ZONE.

## PHASE 5: KINGWOOD DRIVE TO HOLTON LANE (STA. 140+75 TO STA. 143+95)

- 1. ALL WORK IN THIS AREA IS TO BE PERFORMED USING SAME DAY STABILIZATION TECHNIQUES. ONLY THE
- AREA THAT CAN BE STABILIZED WITHIN THE SAME DAY SHALL BE DISTURBED.
- 2. CONSTRUCT SHARED USE PATH, ALL WIDENING WORK, CURB RECONSTRUCTION, LIGHTING AND SIGNING WORK. USE SAME DAY STABILIZATION IN ALL AREAS NOT DRAINING TO AN APPROVED SEDIMENT CONTROL DEVICE, AS SHOWN ON THE PLANS.
- 3. ONCE ALL WORK IS COMPLETED AND WITH THE APPROVAL OF THE INSPECTOR, PERFORM FINAL STABILIZATION, MOVING ON TO NEXT WORK ZONE.

EN-03

CITY OF TAKOMA PARK

NEW AVE BIKEWAY, SECTION A

MD 650 (NEW HAMPSHIRE AVENUE)

AUBURN AVE TO HOLTON LN

# EROSION AND SEDIMENT CONTROL NOTES

				SCALE		DATEM	IAY 2020	(	CONTRACT NO.	T.B.D.	
				DESIGNED BY DRAWN BY	AGB DEA			COUNTY LOGMILI	Y MONTGOMER E MD 650 0.04		
				CHECKED BY F.A.P. NO	SBP T.B.D.				SSC 208NE01 & 2 XX MAPS JN561 8		
NO.	REVISION	DATE	BY	DRAWING NO.		EN <b>–</b> 03	OF	5	SHEET NO.	42 OF	73

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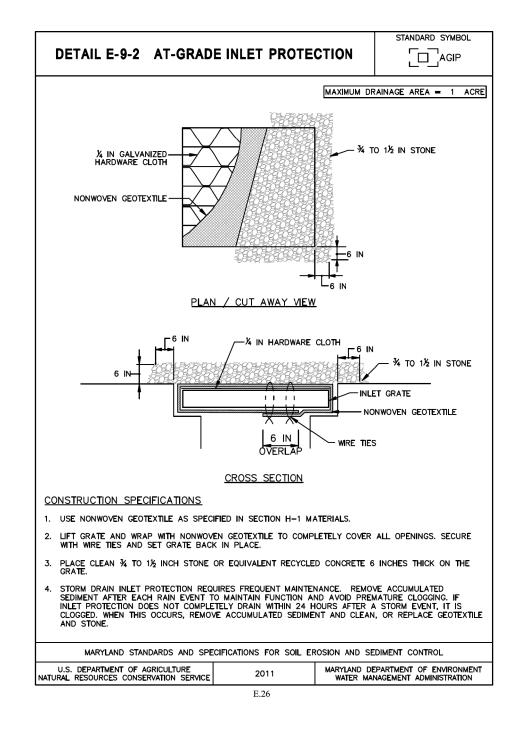
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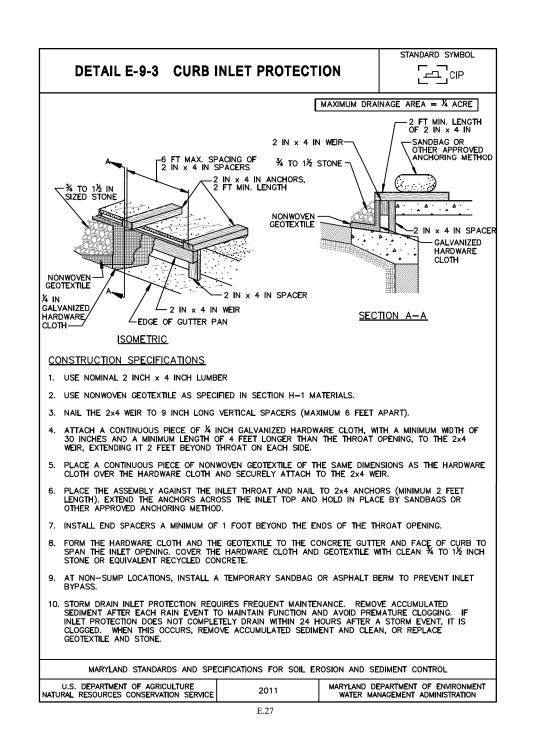
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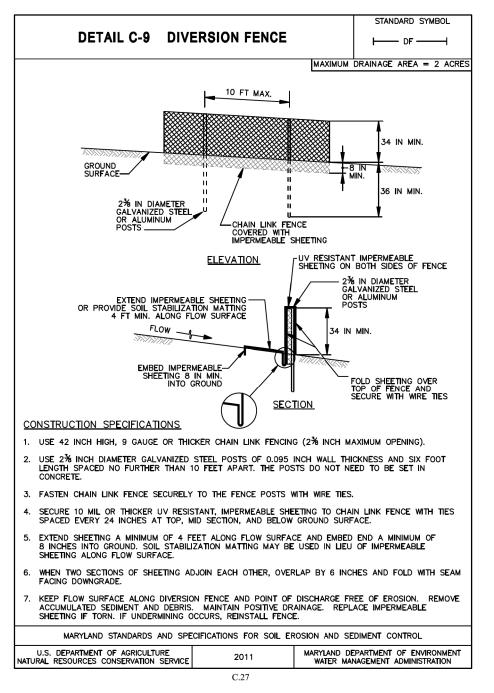
RKSK

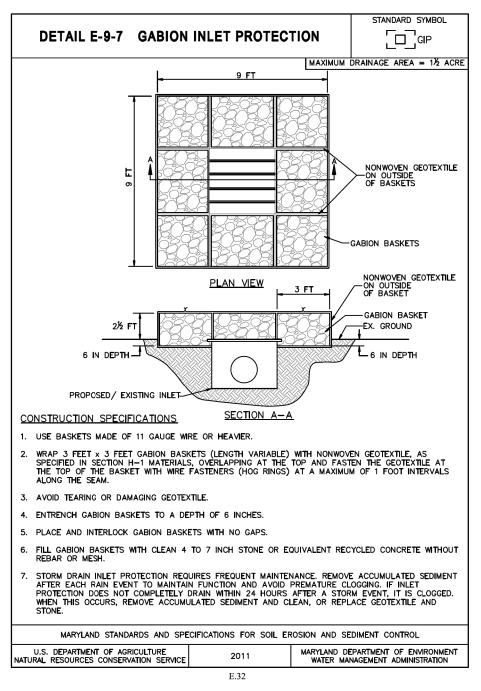
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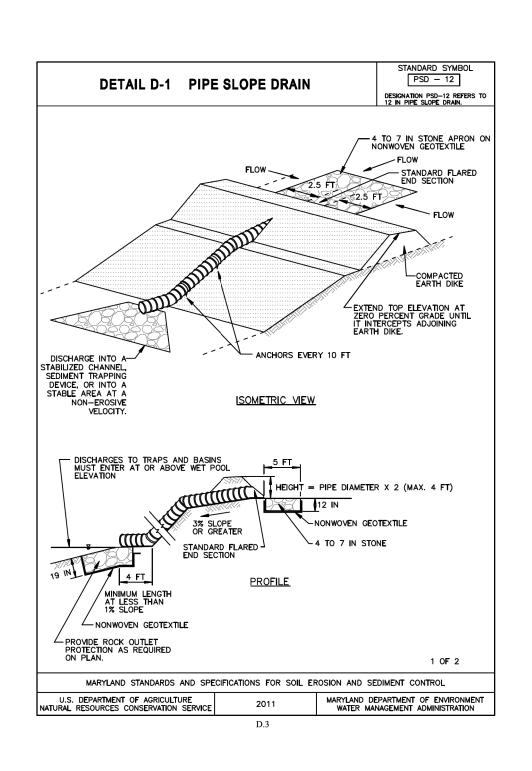
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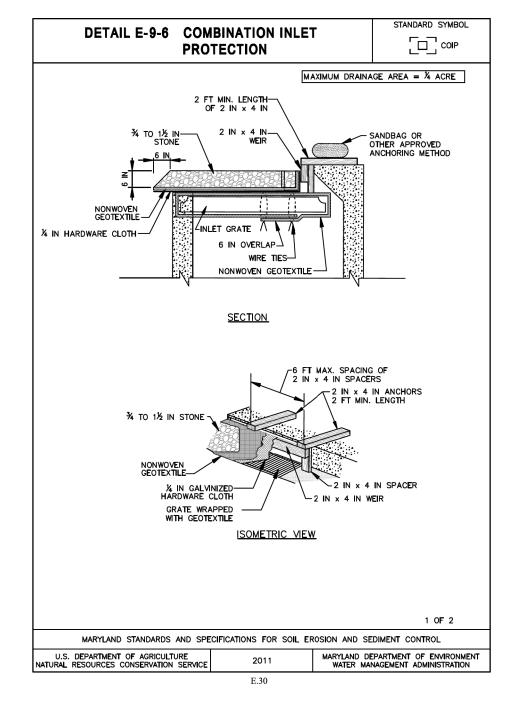


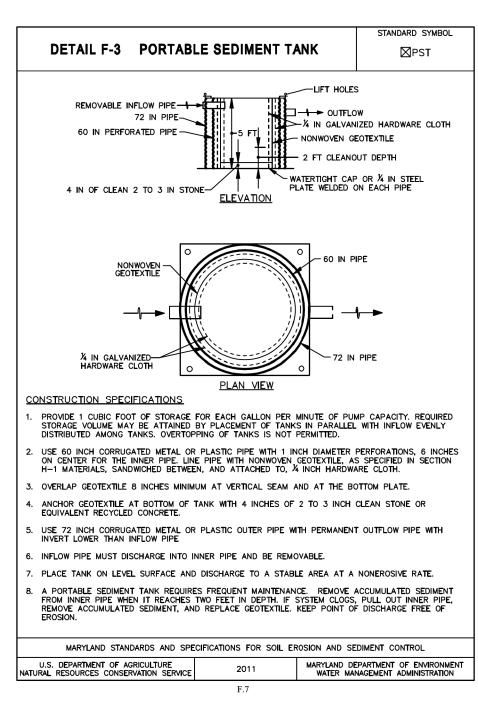


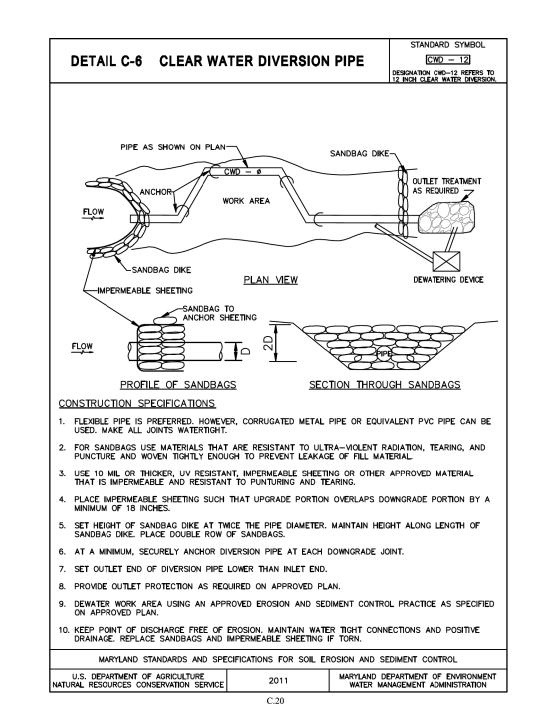


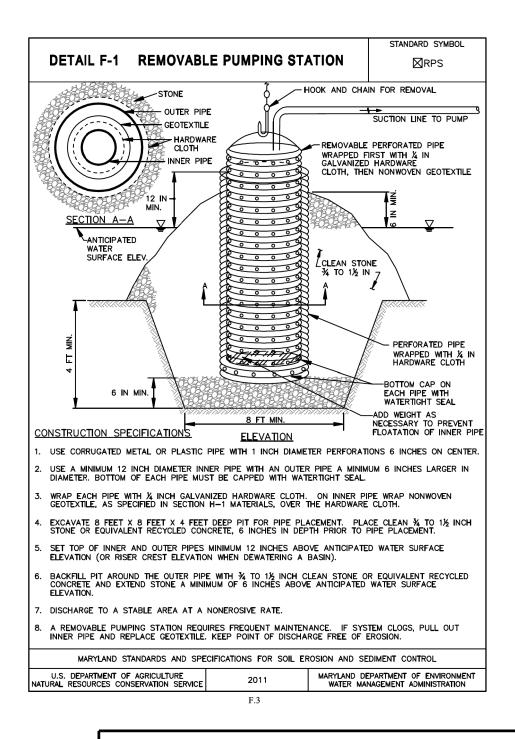












EN-04

# CITY OF TAKOMA PARK NEW AVE BIKEWAY, SECTION A MD 650 (NEW HAMPSHIRE AVENUE) AUBURN AVE TO HOLTON LN

#### **EROSION AND SEDIMENT CONTROL DETAILS** \_ CONTRACT NO. \_ T.B.D. DATE <u>MAY 2020</u> DESIGNED BY\_\_\_ AGB COUNTY MONTGOMERY LOGMILE MD 650 0.040- 0.830 DRAWN BY\_ CHECKED BY\_\_\_\_ WSSC 208NE01 & 209NE01 T.B.D. TAX MAPS JN561 & JN562 F.A.P. NO.\_\_ DRAWING NO. EN <del>-</del> 04 OF SHEET NO. 43 OF 73 DATE

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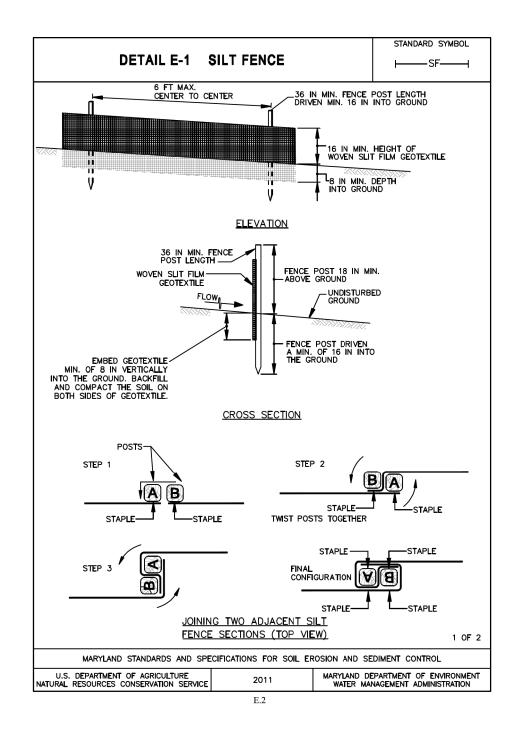
Engineers | Construction Managers | Planners | Scientists

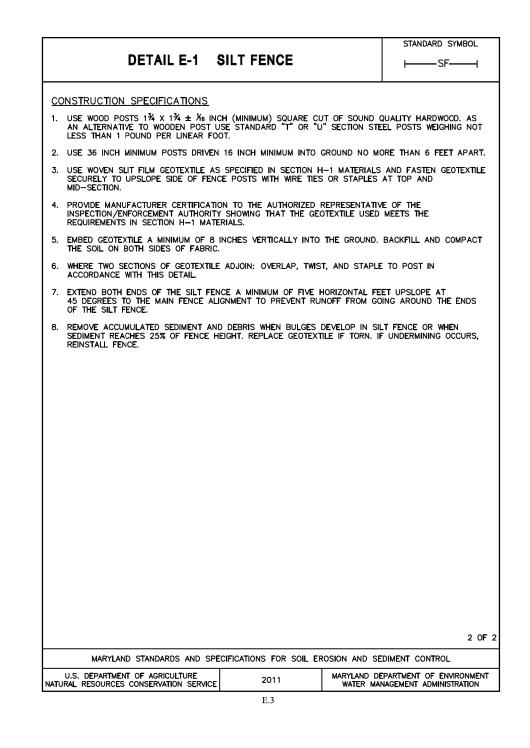
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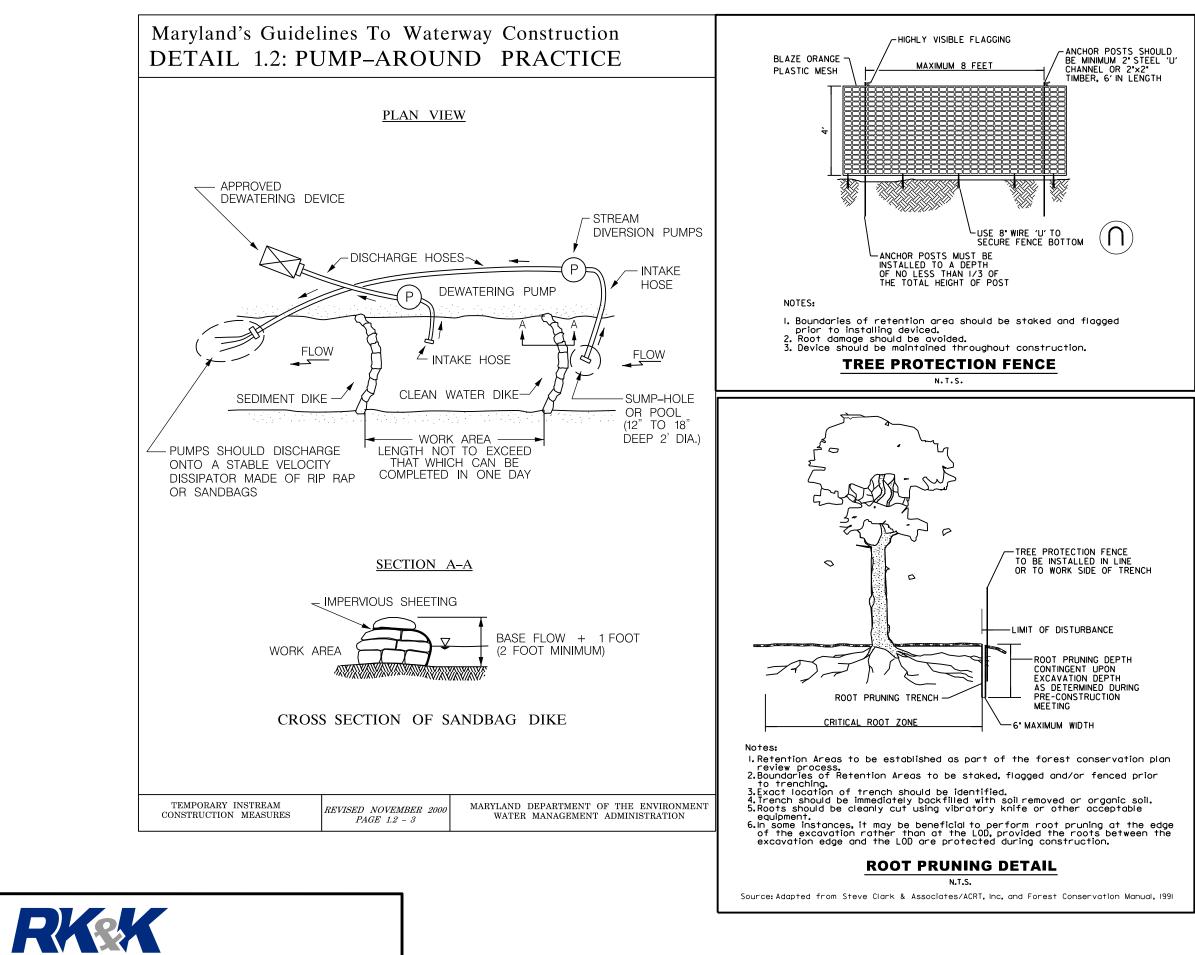
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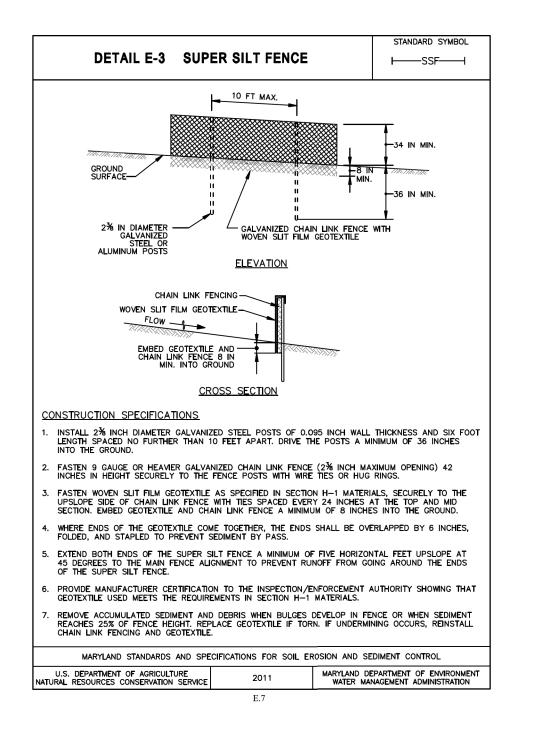
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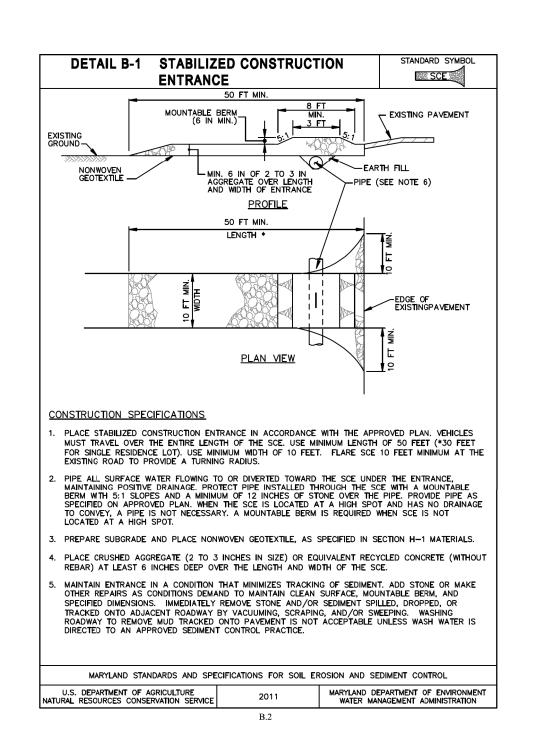
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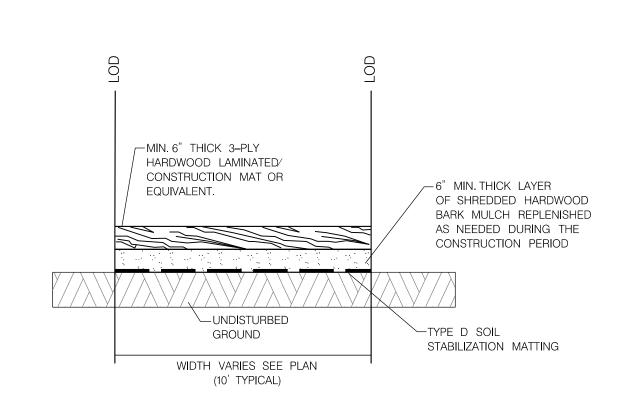




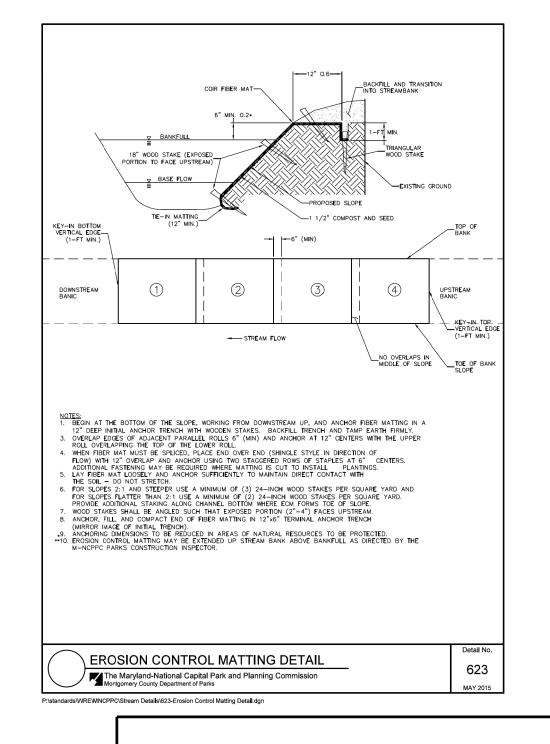








# TIMBER MAT CONSTRUCTION ACCESS ROAD NOT TO SCALE



CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

EN-05

# EROSION AND SEDIMENT CONTROL DETAILS

PLOTTED: 5/10/2020
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BY: bbaral -

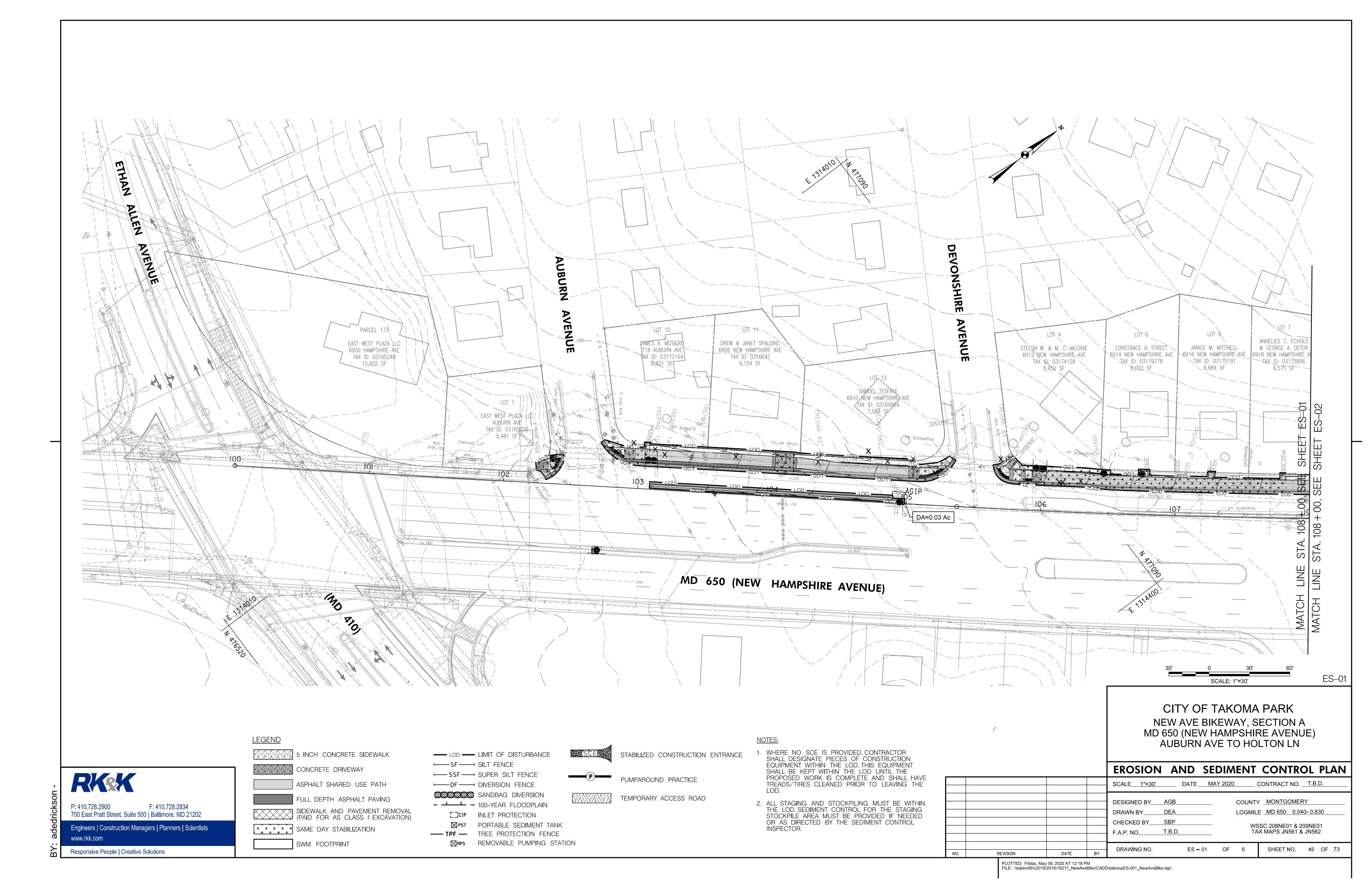
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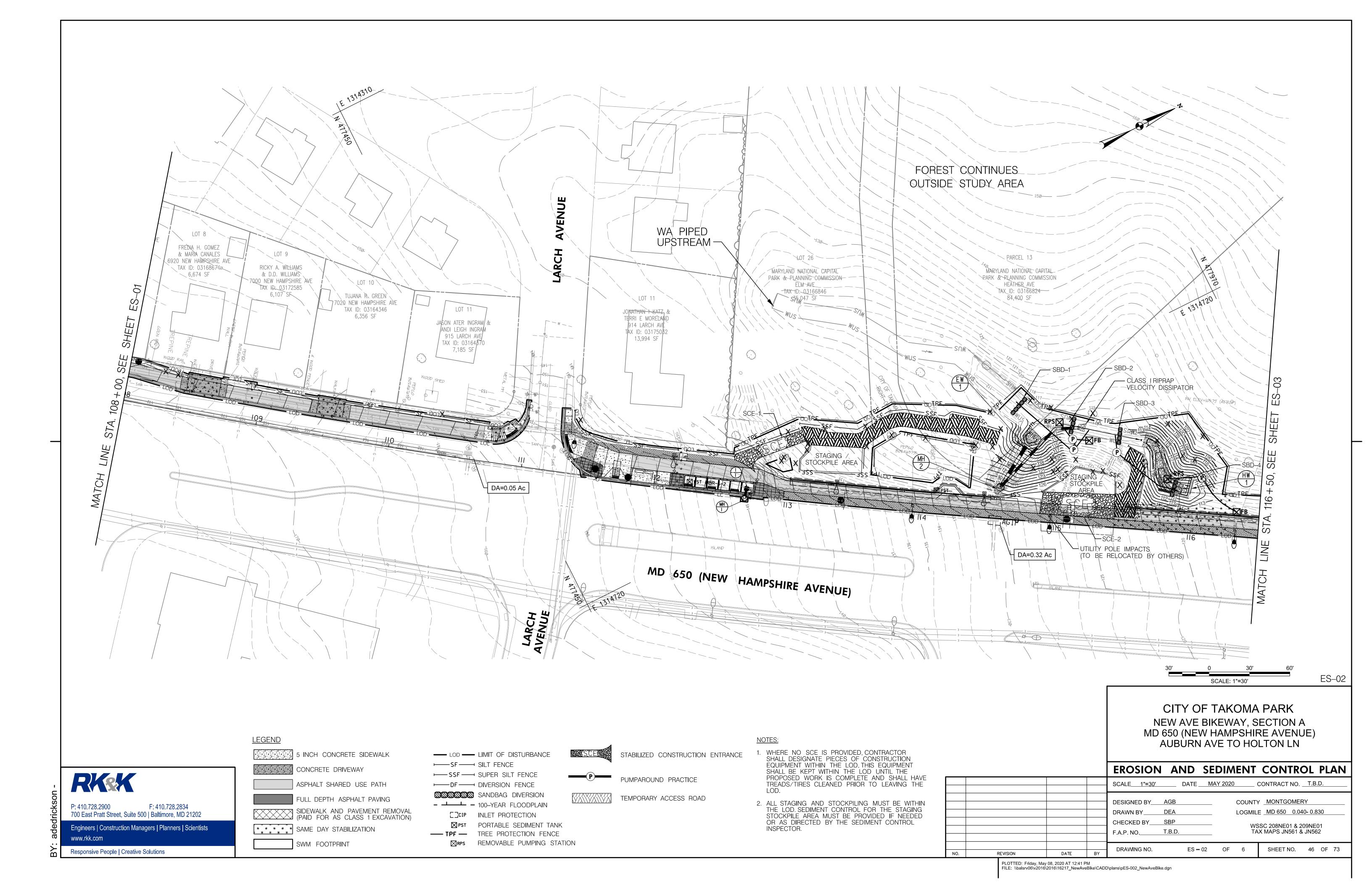
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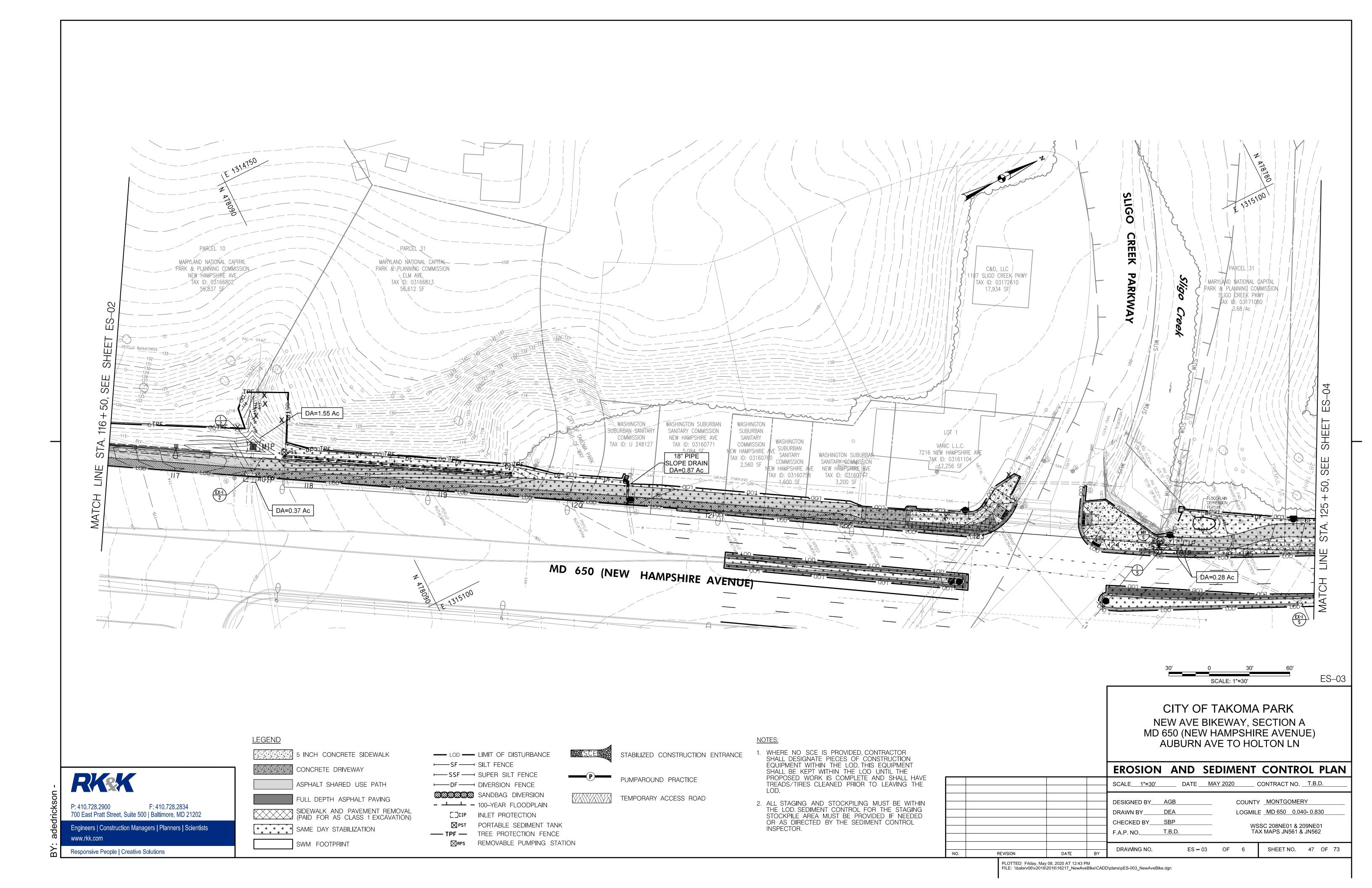
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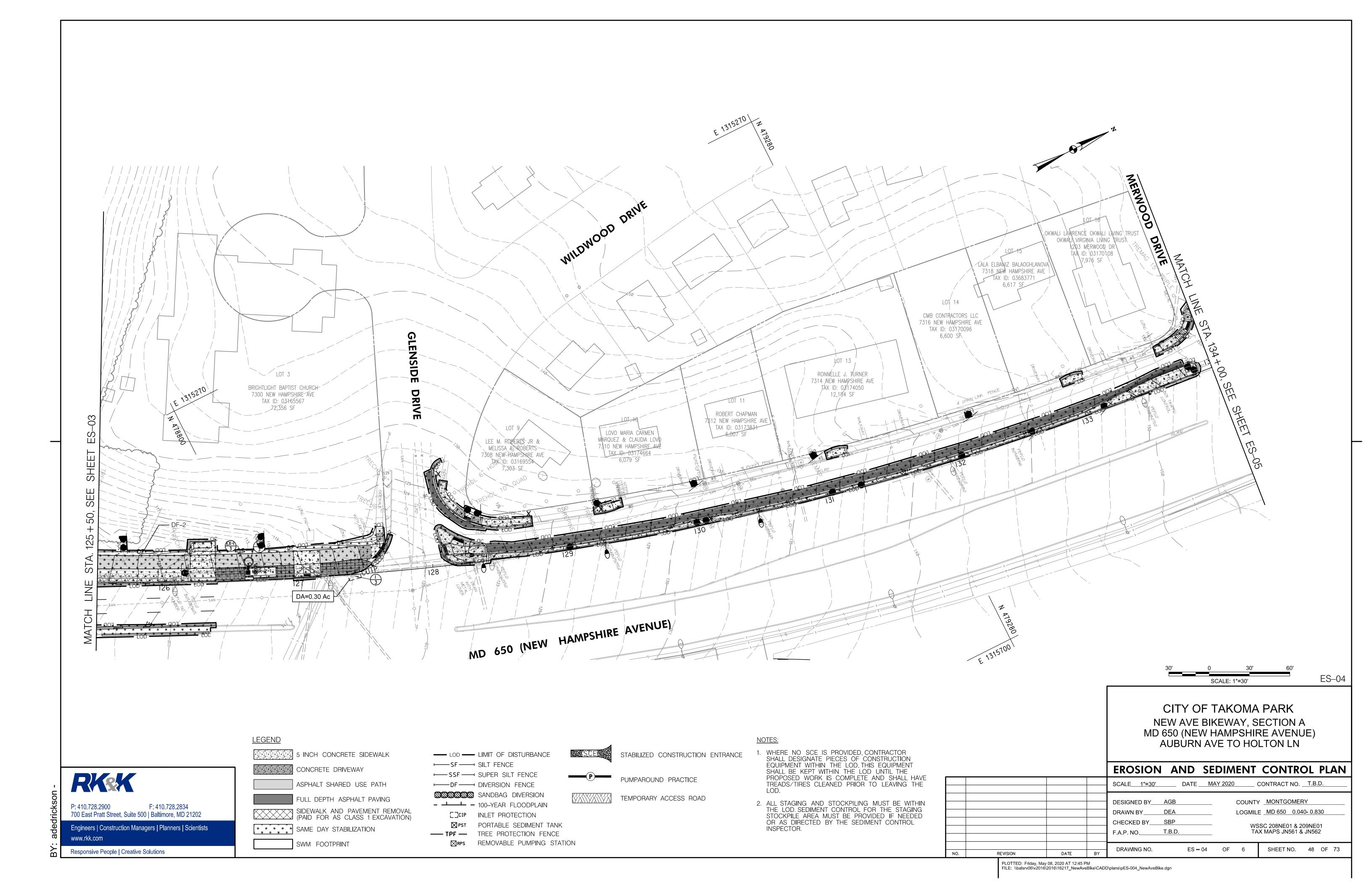
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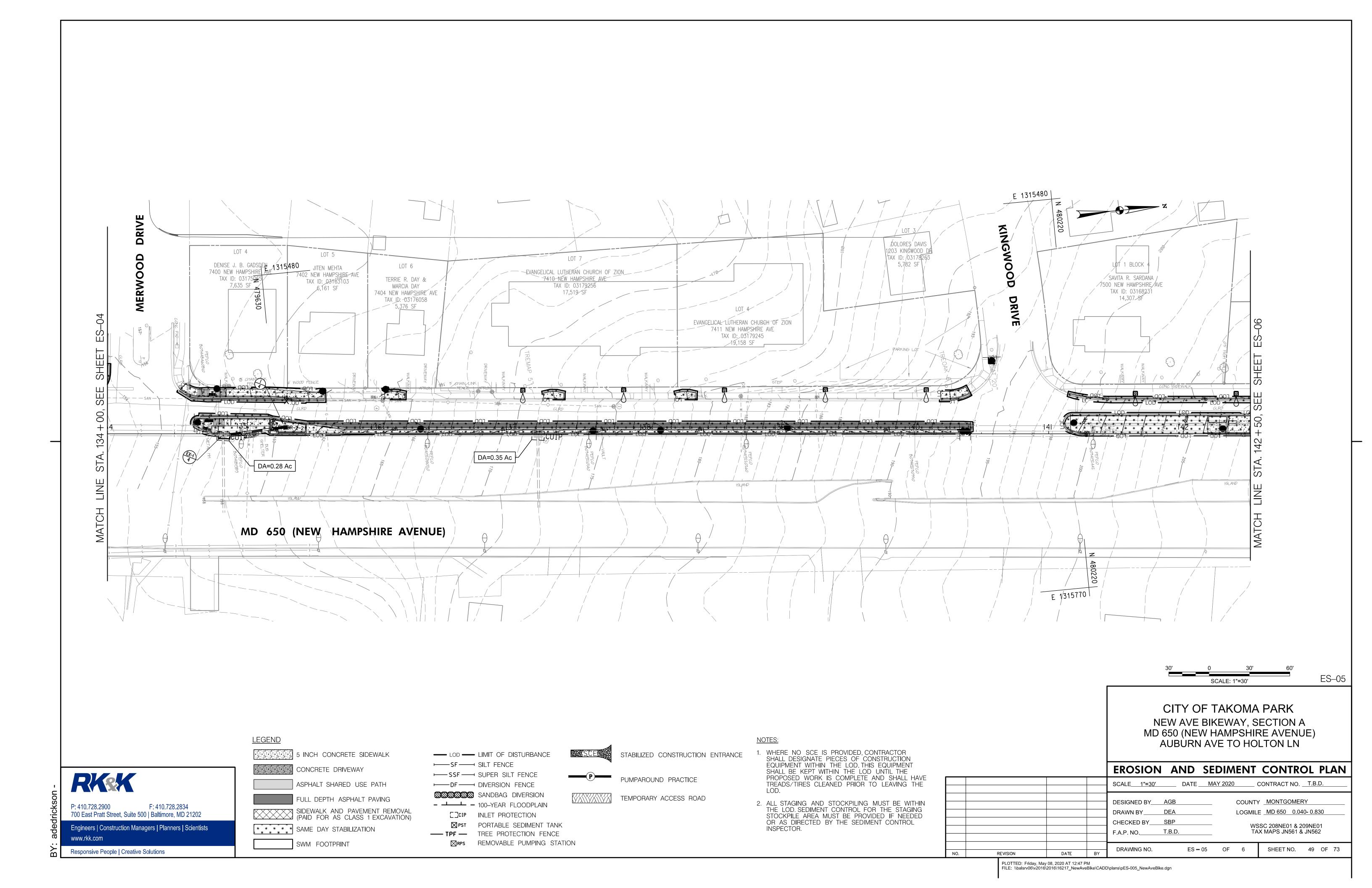
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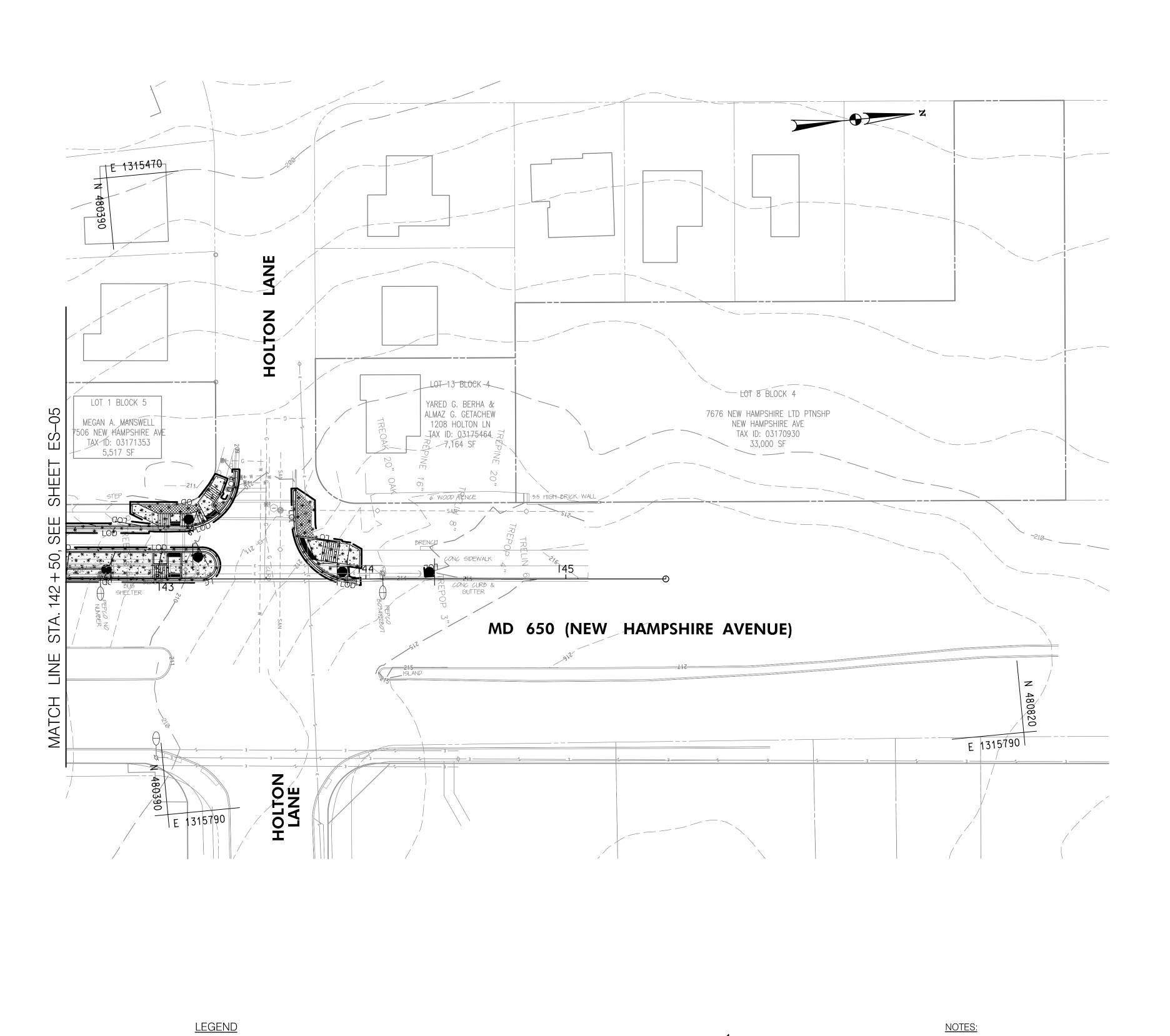


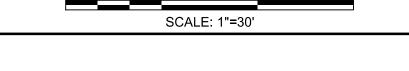












ES-06

# CITY OF TAKOMA PARK NEW AVE BIKEWAY, SECTION A MD 650 (NEW HAMPSHIRE AVENUE) AUBURN AVE TO HOLTON LN

**EROSION AND SEDIMENT CONTROL PLAN** 

DATE MAY 2020 CONTRACT NO. T.B.D. SCALE 1"=30' DESIGNED BY AGB COUNTY MONTGOMERY LOGMILE <u>MD 650</u> 0.040- 0.830 DRAWN BY\_ CHECKED BY SBP WSSC 208NE01 & 209NE01 TAX MAPS JN561 & JN562 F.A.P. NO.\_\_\_ SHEET NO. 50 OF 73 ES **–** 06 OF 6 DRAWING NO. DATE

PLOTTED: Friday, May 08, 2020 AT 12:50 PM FILE: \\balsrv06\v2016\2016\16217\_NewAveBike\CADD\plans\pES-006\_NewAveBike.dgn

RKSK F: 410.728.2834 P: 410.728.2900 700 East Pratt Street, Suite 500 | Baltimore, MD 21202 Engineers | Construction Managers | Planners | Scientists www.rkk.com

5 INCH CONCRETE SIDEWALK CONCRETE DRIVEWAY ASPHALT SHARED USE PATH FULL DEPTH ASPHALT PAVING SIDEWALK AND PAVEMENT REMOVAL (PAID FOR AS CLASS 1 EXCAVATION) \* \* \* \* \* \* \* \* SAME DAY STABILIZATION

→ DF → DIVERSION FENCE SANDBAG DIVERSION - - 100-YEAR FLOODPLAIN []CIP INLET PROTECTION PST PORTABLE SEDIMENT TANK --- TPF -- TREE PROTECTION FENCE RPS REMOVABLE PUMPING STATION

--- LOD --- LIMIT OF DISTURBANCE

──SSF ── SUPER SILT FENCE

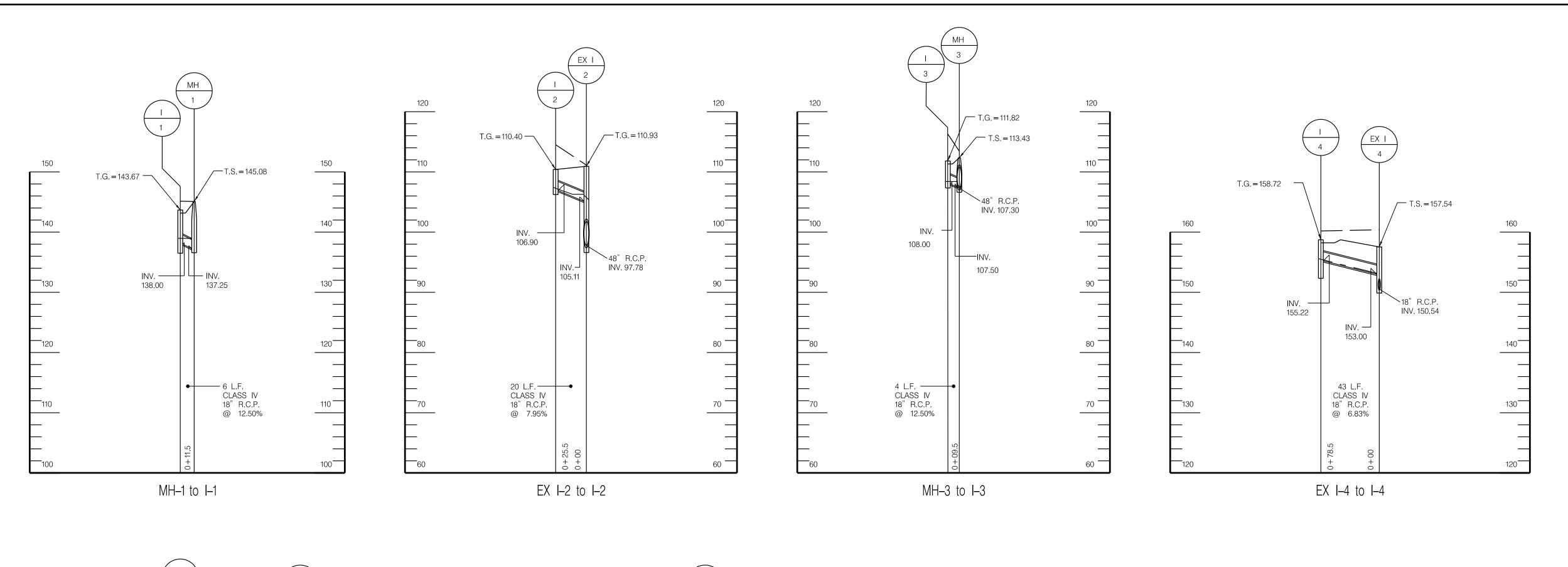
⊢ SF → SILT FENCE

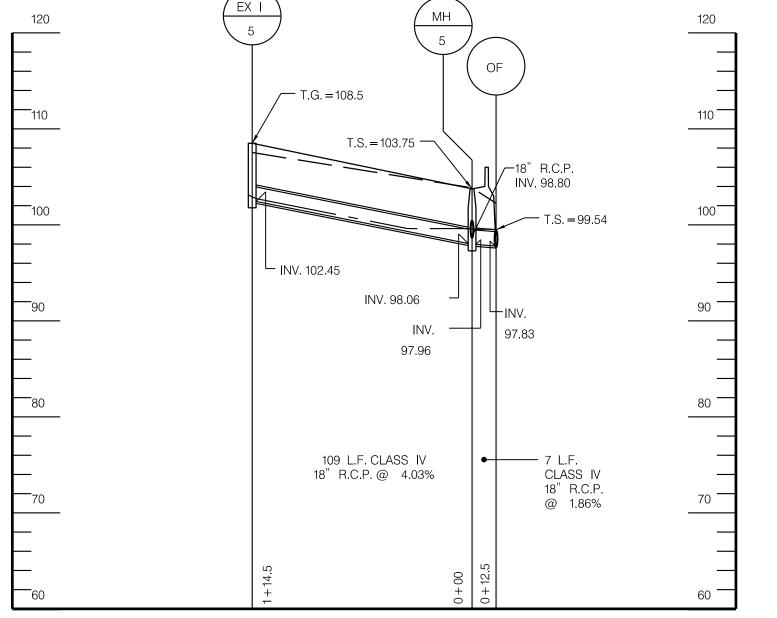
1. WHERE NO SCE IS PROVIDED, CONTRACTOR STABILIZED CONSTRUCTION ENTRANCE SHALL DESIGNATE PIECES OF CONSTRUCTION EQUIPMENT WITHIN THE LOD. THIS EQUIPMENT SHALL BE KEPT WITHIN THE LOD UNTIL THE PROPOSED WORK IS COMPLETE AND SHALL HAVE TREADS/TIRES CLEANED PRIOR TO LEAVING THE LOD. PUMPAROUND PRACTICE

TEMPORARY ACCESS ROAD 2. ALL STAGING AND STOCKPILING MUST BE WITHIN THE LOD. SEDIMENT CONTROL FOR THE STAGING STOCKPILE AREA MUST BE PROVIDED IF NEEDED OR AS DIRECTED BY THE SEDIMENT CONTROL INSPECTOR.

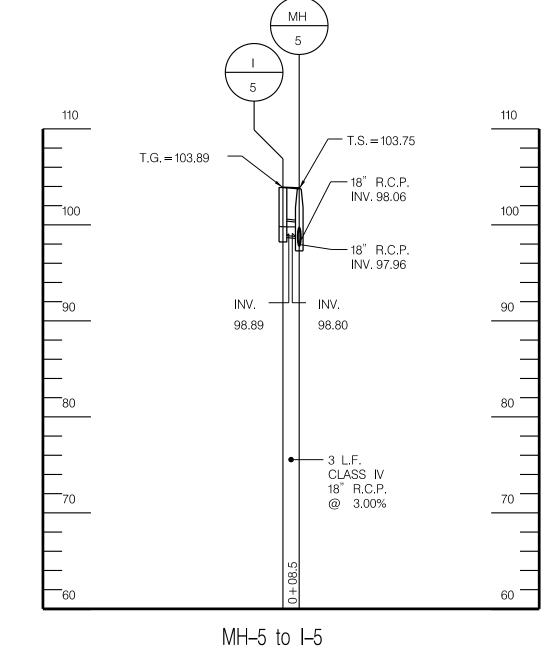
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SWM FOOTPRINT





OF to EX-I-5



STORM DRAIN STRUCTURE SCHEDULE									
STRUCTURE NO.	STATION	OFFSET		BASELINE	TYPE	STD. REF.	T.S. OR T.G. ELEV.	INV. IN	INV. OUT
I-1	112+67.5	4.75	LT	mBL	STD DOUBLE OPENING TYPE K NON-TRAFFIC	MD 378.03	143.67	-	138.00
MH-1	112+67.5	2.36	RT	mBL	48" DIAMETER PRECAST MANHOLE	MD 384.01	145.08	137.25	-
I-2	117+57	24.78	LT	mBL	STD DOUBLE OPENING TYPE K NON-TRAFFIC	MD 378.03	110.40	ı	106.90
I-5	124+33	5.81	RT	mBL	PRECAST CIRCULAR 15' COG INLET	MD 374.62	103.89		98.89
MH-5	124+35	2.23	LT	mBL	60" DIAMETER PRECAST MANHOLE	MD 384.03	103.75	98.80 <i>,</i> 97.96	-
I-3	126+62	5.94	LT	mBL	STD DOUBLE OPENING TYPE K NON-TRAFFIC	MD 378.03	111.82	-	108.00
MH-3	126+62	13.88	LT	mBL	72" DIAMETER PRECAST MANHOLE	MD 384.05	113.43	107.50	-
I-4	135+32	5.98	LT	mBL	STD DOUBLE OPENING TYPE K NON-TRAFFIC	MD 378.03	158.72	-	155.22

STORM DRAIN PIPE SCHEDULE						
FROM	то	SIZE	MATERIAL	LENGTH		
I-1	MH-1	18"	R.C.P. CLASS IV	4 L.F.		
I-5	MH-5	18"	R.C.P. CLASS IV	3 L.F.		
I-3	MH-3	18"	R.C.P. CLASS IV	4 L.F.		
I-4	EX-I-4	18"	R.C.P. CLASS IV	43 L.F.		

VERTICAL SCALE: 1' = 10' HORIZONTAL SCALE: 1" = 50'

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

DP-01

PLOTTED: 5/10/2020
FILE: \balsrv06\v2016\2016\16217\_NewAveBike\CADD\plans\pDP-0000\_NewAveBike.dgn

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#### GENERAL NOTES

- 1. MAINTAIN ACCESS TO ALL ROADWAYS, FRONTAGE ROADS, DRIVEWAY ENTRANCES AND ON-STREET PARKING AT ALL TIMES UNLESS DIRECTED OTHERWISE BY THE ENGINEER. CLOSURE OF DRIVEWAY ENTRANCES, FRONTAGE ROADS AND ON-STREET PARKING MUST BE COORDINATED WITH THE PROPERTY OWNERS THROUGH THE CITY OF TAKOMA PARK AND THE ENGINEER.
- 2. ALL STANDARD REGULATORY AND WARNING SIGNS USED FOR MAINTENANCE OF TRAFFIC SHALL CONFORM TO THE LATEST VERSION OF FHWA'S "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", AS WELL AS MDOT SHA'S "BOOK OF STANDARDS" AND "SUPPLEMENT TO MUTCD".
- 3. CONSTRUCTION EQUIPMENT AND MATERIALS SHALL BE STORED OFF THE TRAVEL LANES AND PEDESTRIAN FACILITIES AT ALL TIMES.
- I. EXISTING REGULATORY SIGNS IN THE WORK ZONE SHALL BE MAINTAINED AT ALL TIMES AS DIRECTED BY THE ENGINEER. SIGNS THAT ARE NOT APPLICABLE SHALL BE REMOVED OR COMPLETELY COVERED WITH NONTRANSPARENT MATERIAL.
- 5. REFER TO SP 104 FOR WORK RESTRICTIONS AND TEMPORARY LANE CLOSURE SCHEDULE. WORK IS NOT PERMITTED ON SATURDAYS OR SUNDAYS, WITHOUT ADVANCE NOTICE AND WRITTEN PERMISSION FROM THE CITY OF TAKOMA PARK.
- 6. WHERE TRAVEL LANES ARE ADJACENT TO THE WORKZONE: MAINTAIN A MINIMUM LANE WIDTH OF 10' ALONG MD 650 (NEW HAMPSHIRE AVE) AND A MINIMUM LANE WIDTH OF 9' ALONG ONE-WAY FRONTAGE ROADS. PARKING LANES SHALL BE MAINTAINED AT A MINIMUM OF 7' WIDE.
- 7. NOTIFY THE WASHINGTON METROPOLITAN TRANSIT AUTHORITY (WMATA) AND THE PASSENGER FACILITIES MANAGER WITH MONTGOMERY COUNTY RIDE-ON, TWO WEEKS IN ADVANCE OF ANY IMPACTS TO EXISTING BUS STOPS WITHIN THE PROJECT LIMITS.
- 3. MAINTAIN POSITIVE DRAINAGE ALONG THE ROADWAY SURFACE THROUGHOUT CONSTRUCTION.
- 9. MISS UTILITY SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION.
- 10. THE SEQUENCE OF CONSTRUCTION IS PROVIDED FOR THE CONTRACTOR'S USE AND CONSIDERATION. THE SEQUENCE OF CONSTRUCTION MAY BE MODIFIED BY THE CONTRACTOR WITH PRIOR APPROVAL BY THE CITY OF TAKOMA PARK.
- 1. COORDINATE CONSTRUCTION ACTIVITIES WITH PEPCO, WHO WILL PERFORM UTILITY POLE RELOCATIONS AND LED LIGHTING MODIFICATIONS TO COBRA HEADS ON EXISTING UTILITY POLES. INSTALLATION OF ORNAMENTAL PATHWAY LIGHTING SHALL BE COMPLETED BY THE CONTRACTOR.

# TEMPORARY TRAFFIC CONTROL TYPICAL APPLICATIONS (TTCTA)

THE FOLLOWING TTCTA FROM THE SHA BOOK OF STANDARDS ARE TO BE FOLLOWED AS APPROPRIATE

MD 104.03-10

MD 104.03-12

MD 104.04-04

MD 104.04-06

MD 104.04-14

MD 104.04-16

MD 104.06-01 TO MD 104.06-04

—INTER. FAR-LEFT LANE CLOSURE /MULTILANE UNDIV. EQL /LESS THAN 40 MPH

—INTER. FAR-RIGHT LANE CLOSURE /DIVIDED UNCON. EQL /LESS THAN 40 MPH

—RIGHT LANE CLOSURE /DIVIDED UNCON. EQL /LESS THAN 40 MPH

—INTER. (LEFT LANE, TURN BAY) CLOSURE /DIVIDED UNCON. EQL /LESS THAN 40 MPH

—INTER. (LEFT LANE, TURN BAY) CLOSURE /DIVIDED UNCON. EQL /LESS THAN 40 MPH

—INSTALLING AND REMOVING CLOSURE SETUPS

-PEDESTRIAN AND CURB LANE CONTROL

#### SEQUENCE OF CONSTRUCTION

#### PHASE 1 – GENERAL:

- 1. PRIOR TO CONSTRUCTION, FIELD MARK THE LIMITS OF DISTURBANCE AND OBTAIN WRITTEN APPROVAL FROM THE CITY OF TAKOMA PARK INSPECTOR.
- 2. SET TEMPORARY TRAFFIC CONTROL DEVICES FOR WORK ALONG FRONTAGE ROAD, INCLUDING IMPLEMENTATION OF PEDESTRIAN DETOURS AS SHOWN ON SHEET MT-02.
- INSTALL EROSION AND SEDIMENT CONTROL DEVICES IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL PLANS.
- . WORK SHALL NOT PROCEED AHEAD UNTIL ALL DISTURBED AREAS ARE STABILIZED. ALL WORK SHALL BE COMPLETED FOR PHASE 1A BEFORE PROCEEDING TO PHASE 1B.

#### PHASE 1A - AUBURN AVE. TO DEVONSHIRE AVE. (MD 650 STA. 102+00 TO 105+50):

- . CLOSE FRONTAGE ROAD.
- CONSTRUCT FRONTAGE ROAD, MEDIAN, CURB & GUTTER AND ASSOCIATED FULL DEPTH PAVEMENT.
- REMOVE AND RESET FENCES, CONSTRUCT CURB & GUTTER, ASPHALT SHARED USE PATH, TYPE 2 PAVERS, CONCRETE PEDESTRIAN RAMPS, CONCRETE DRIVEWAY APRONS AND DETECTABLE WARNING SURFACES. INSTALL PERMANENT SIGNING & PAVEMENT MARKINGS AS SHOWN ON THE PLANS.

#### PHASE 1B - DEVONSHIRE AVE. TO LARCH AVE. (MD 650 STA. 105 + 50 TO 111 + 15):

- 1. CLOSE FRONTAGE ROAD.
- 2. REMOVE AND RESET FENCES, CONSTRUCT CURB & GUTTER, ASPHALT SHARED USE PATH, CONCRETE PEDESTRIAN RAMPS, CONCRETE DRIVEWAY APRONS AND DETECTABLE WARNING SURFACES.
- 3. INSTALL PERMANENT SIGNING & PAVEMENT MARKINGS AS SHOWN ON THE PLANS (AUBURN AVE. TO LARCH AVE).

#### PHASE 2 - GENERAL

- REMOVE PHASE 1B TEMPORARY TRAFFIC CONTROL DEVICES AND SIGNS THAT ARE NO LONGER NEEDED.
- . PRIOR TO CONSTRUCTION, FIELD MARK THE LIMITS OF DISTURBANCE AND OBTAIN WRITTEN APPROVAL FROM THE CITY OF TAKOMA PARK INSPECTOR.
- 3. IMPLEMENT PEDESTRIAN DETOURS AS SHOWN ON SHEET MT-02.
- INSTALL EROSION AND SEDIMENT CONTROL DEVICES IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL PLANS.

#### PHASE 2A - OUTFALL & STREAM WORK (MD 650 APPROX. STA. 114+25 TO STA. 116+25)

- I. CLOSE FRONTAGE ROAD NORTH SIDE OF LARCH AVENUE. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES FOLLOWING MD 104.04–06.
- 2. CONSTRUCT MH–2 AND EW–1, PERFORM STREAM RESTORATION WORK AND CONSTRUCT HW–1 ON M–NCPPC PROPERTY.

## PHASE 2B - LARCH AVE. TO SLIGO CREEK PKWY (MD 650 APPROX. STA. 111+15 TO STA. 123+50):

- 1. SET TEMPORARY TRAFFIC CONTROL DEVICES FOLLOW MD 104.03-10, MD 104.04-06, MD 104.04-04 AND MD 104.04-14. MAINTAIN PEDESTRIAN DETOURS AS SHOWN ON SHEET MT-02.
- 2. CONSTRUCT CURB & GUTTER, ASPHALT SHARED USE PATH, TYPE 2 PAVERS, CONCRETE PEDESTRIAN RAMPS, DETECTABLE WARNING SURFACES, PATHWAY LIGHTING, MBR-6-2, I-1 AND MH-1. RELOCATE BENCHES AT BUS STOP. COORDINATE RELOCATION OF BUS STOP SIGN WITH WMATA AND MONTGOMERY COUNTY RIDE-ON.
- 3. CONSTRUCT RETAINING WALL NO. 1, NO. 2 AND NO. 3, ASPHALT SHARED USE PATH, CONCRETE BUS STOP PAD, PATHWAY LIGHTING, TURFGRASS SOD ESTABLISHMENT AND I-2 CONNECTION TO EXISTING PIPE.
- 4. SOUTH LEG OF MD 650 /SLIGO CREEK PARKWAY INTERSECTION: RELOCATE FENCE ON WSSC PROPERTY, CONSTRUCT CURB & GUTTER, PERFORM SOUTHBOUND MD 650 MONOLITHIC MEDIAN RECONSTRUCTION AND LANE SHIFTS EAST. CONSTRUCT ASPHALT SHARED USE PATH, TYPE 2 PAVERS, CONCRETE PEDESTRIAN RAMPS, CONCRETE DRIVEWAY APRON AND DETECTABLE WARNING SURFACES.

# PHASE 3- SLIGO CREEK PKWY TO GLENSIDE DR. (MD 650 APPROX. STA. 123+50 TO STA. 127+75):

- 1. REMOVE PHASE 2B TEMPORARY TRAFFIC CONTROL DEVICES AND SIGNS THAT ARE NO LONGER NEEDED.
- 2. PRIOR TO CONSTRUCTION, FIELD MARK THE LIMITS OF DISTURBANCE AND OBTAIN WRITTEN APPROVAL FROM THE CITY OF TAKOMA PARK INSPECTOR.
- . INSTALL EROSION AND SEDIMENT CONTROL DEVICES IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL PLANS.
- 4. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES FOLLOWING MD 104.03-10, MD 104.04-06, MD 104.04-04 AND MD 104.04-14.
- 5. NORTH LEG OF MD 650/SLIGO CREEK PARKWAY INTERSECTION: PERFORM SOUTHBOUND MD 650 MEDIAN RECONSTRUCTION, LANE SHIFTS EAST, CURB AND GUTTER CONSTRUCTION, FULL DEPTH PAVING. TRAFFIC SIGNAL MODIFICATIONS (SLIGO CREEK PKWY), BRIDGE SCUPPER WORK, REINFORCED CONCRETE SIDEWALK RECONSTRUCTION ON BRIDGE DECK, CONCRETE PEDESTRIAN RAMPS AND DETECTABLE WARNING SURFACES.
- CONSTRUCT ASPHALT SHARED USE PATH, TYPE 2 PAVERS, FLOODPLAIN DEPRESSION, CONCRETE BUS PAD CONSTRUCTION, MBR-2-1, MH-3, CONCRETE PEDESTRIAN RAMPS AND DETECTABLE WARNING SURFACES. COORDINATE RELOCATION OF BUS STOP SIGN AND BUS SHELTER WITH WMATA, MONTGOMERY COUNTY RIDE-ON AND THE CITY OF TAKOMA PARK, RESPECTIVELY. PERFORM TRAFFIC SIGNAL MODIFICATIONS AT GLENSIDE DR.
- 7. INSTALL PERMANENT SIGNING & PAVEMENT MARKINGS AS SHOWN ON THE PLANS.

#### SEQUENCE OF CONSTRUCTION (CONTINUED)

#### PHASE 4 - GENERAL

- 1. REMOVE PHASE 3 TEMPORARY TRAFFIC CONTROL DEVICES AND SIGNS THAT ARE NO LONGER NEEDED.
- 2. PRIOR TO CONSTRUCTION, FIELD MARK THE LIMITS OF DISTURBANCE AND OBTAIN WRITTEN APPROVAL FROM THE CITY OF TAKOMA PARK INSPECTOR.
- 3. SET TEMPORARY TRAFFIC CONTROL DEVICES FOLLOWING MD 104.04-06. IMPLEMENT PEDESTRIAN DETOURS AS SHOWN ON SHEET MT-2.
- 4. INSTALL EROSION AND SEDIMENT CONTROL DEVICES IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL PLANS.
- 5. WORK SHALL NOT PROCEED AHEAD UNTIL ALL DISTURBED AREAS ARE STABILIZED. ALL WORK SHALL BE COMPLETED FOR PHASE 4A BEFORE PROCEEDING TO PHASE 4B.

#### PHASE 4A - GLENSIDE DR TO MERWOOD DR (MD 650 STA. 127 + 75 TO STA. 134 + 25):

- 1. CLOSE FRONTAGE ROAD.
- 2. CONSTRUCT CURB AND GUTTER, CONCRETE SIDEWALK, CONCRETE PEDESTRIAN RAMPS, DETECTABLE WARNING SURFACES, MEDIAN RECONSTRUCTION AND FULL DEPTH PAVING.
- 3. PERFORM TRAFFIC SIGNAL MODIFICATIONS AT MERWOOD DR.

#### PHASE 4B - MERWOOD DR TO KINGWOOD DR (MD 650 STA. 134 + 25 TO STA. 140 + 75):

- 1. CLOSE FRONTAGE ROAD.
- 2. CONSTRUCT CURB AND GUTTER, CONCRETE SIDEWALK, CONCRETE PEDESTRIAN RAMPS,
  DETECTABLE WARNING SURFACES, MBR-2-2, I-4, PIPE CONNECTIONS, PATHWAY LIGHTING, MEDIAN
  RECONSTRUCTION AND FULL DEPTH PAVING. COORDINATE ANY TEMPORARY CLOSURES OF BUS
  STOP AT STA. 135+10 WITH WMATA AND MONTGOMERY COUNTY RIDE ON.
- INSTALL PERMANENT SIGNING & PAVEMENT MARKINGS AS SHOWN ON THE PLANS (GLENSIDE DR TO KINGWOOD DR)

#### PHASE 5 - KINGWOOD DR TO HOLTON LN (MD 650 STA. 140 + 75 TO STA. 143 + 95):

- 1. REMOVE PHASE 4 TEMPORARY TRAFFIC CONTROL DEVICES AND SIGNS THAT ARE NO LONGER NEEDED.
- PRIOR TO CONSTRUCTION, FIELD MARK THE LIMITS OF DISTURBANCE AND OBTAIN WRITTEN APPROVAL FROM THE CITY OF TAKOMA PARK INSPECTOR.
- 3. SET TEMPORARY TRAFFIC CONTROL DEVICES FOLLOWING MD 104.04-06. IMPLEMENT PEDESTRIAN DETOURS AS SHOWN ON SHEET MT-2. CLOSE FRONTAGE ROAD.
- 4. INSTALL EROSION AND SEDIMENT CONTROL DEVICES IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL PLANS.
- 5. CONSTRUCT CURB AND GUTTER, CONCRETE SIDEWALK, CONCRETE PEDESTRIAN RAMPS, DETECTABLE WARNING SURFACES, MEDIAN RECONSTRUCTION, CONCRETE BUS PAD AND PATHWAY LIGHTING. COORDINATE BUS STOP RELOCATION (SIGN & SHELTER) WITH WMATA, MONTGOMERY COUNTY RIDE ON AND CITY OF TAKOMA PARK.
- 6. PERFORM TRAFFIC SIGNAL MODIFICATIONS AT HOLTON LN.
- 7. INSTALL PERMANENT SIGNING & PAVEMENT MARKINGS AS SHOWN ON THE PLANS.

MT-01

# CITY OF TAKOMA PARK NEW AVE BIKEWAY, SECTION A MD 650 (NEW HAMPSHIRE AVENUE) AUBURN AVE TO HOLTON LN

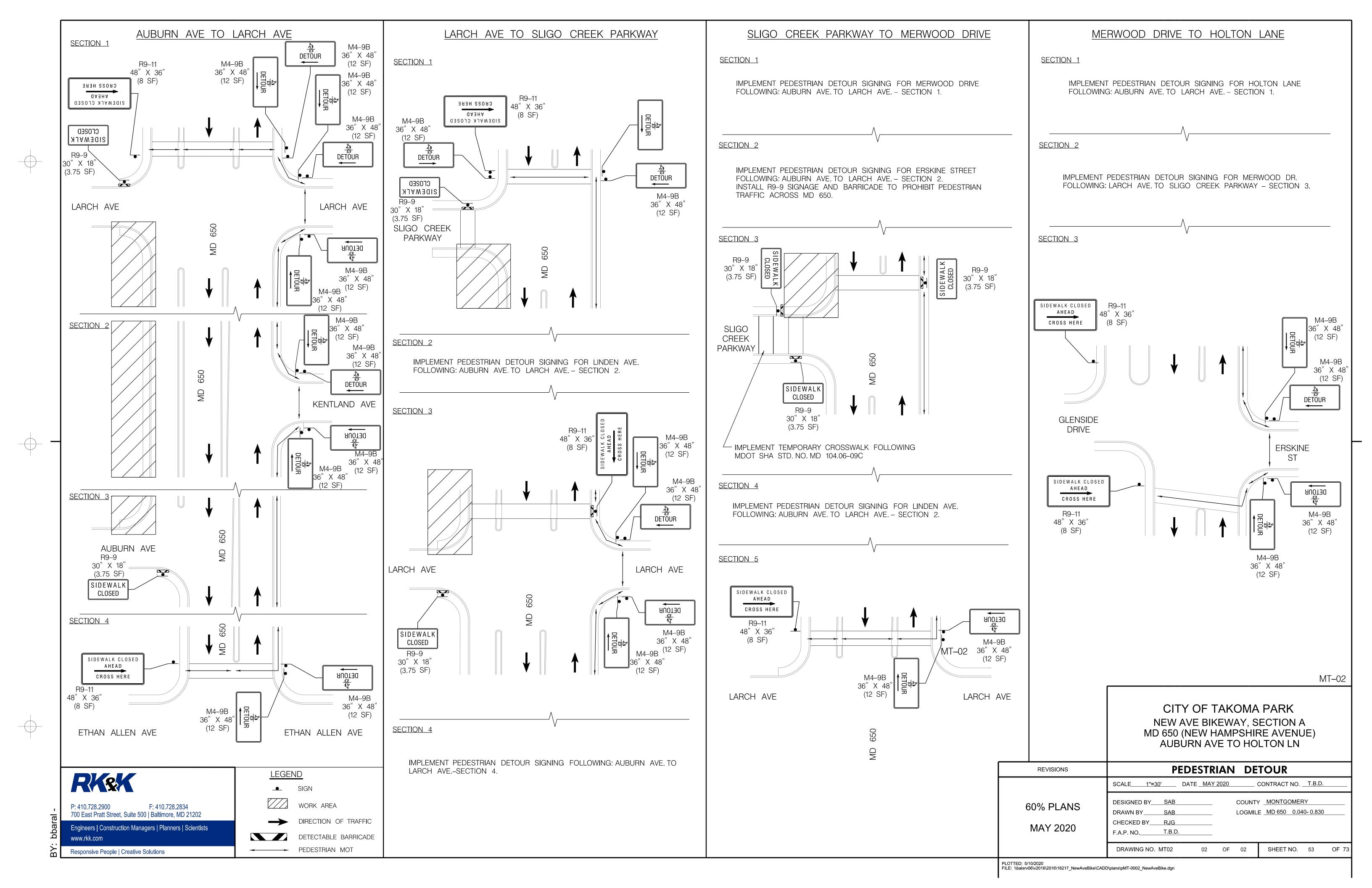
REVISIONS	MAINTENANCE OF TRAFFIC NARRATIVE
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60% PLANS MAY 2020	DESIGNED BY         SAB         COUNTY         MONTGOMERY           DRAWN BY         SAB         LOGMILE         MD 650         0.040- 0.830           CHECKED BY         RJG           F.A.P. NO.         T.B.D.
	DRAWING NO. MT01 01 OF 02 SHEET NO. 52 OF 73

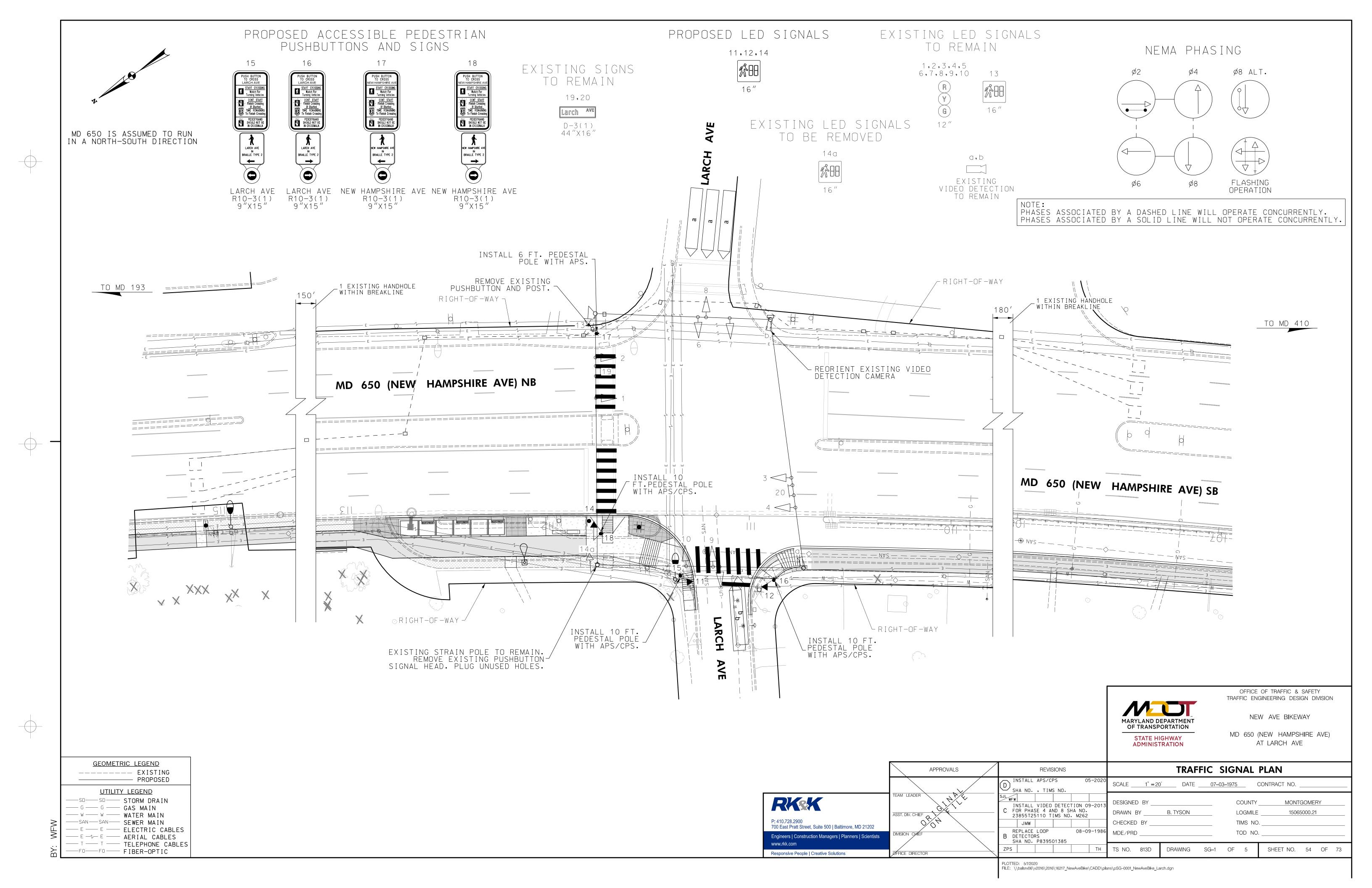
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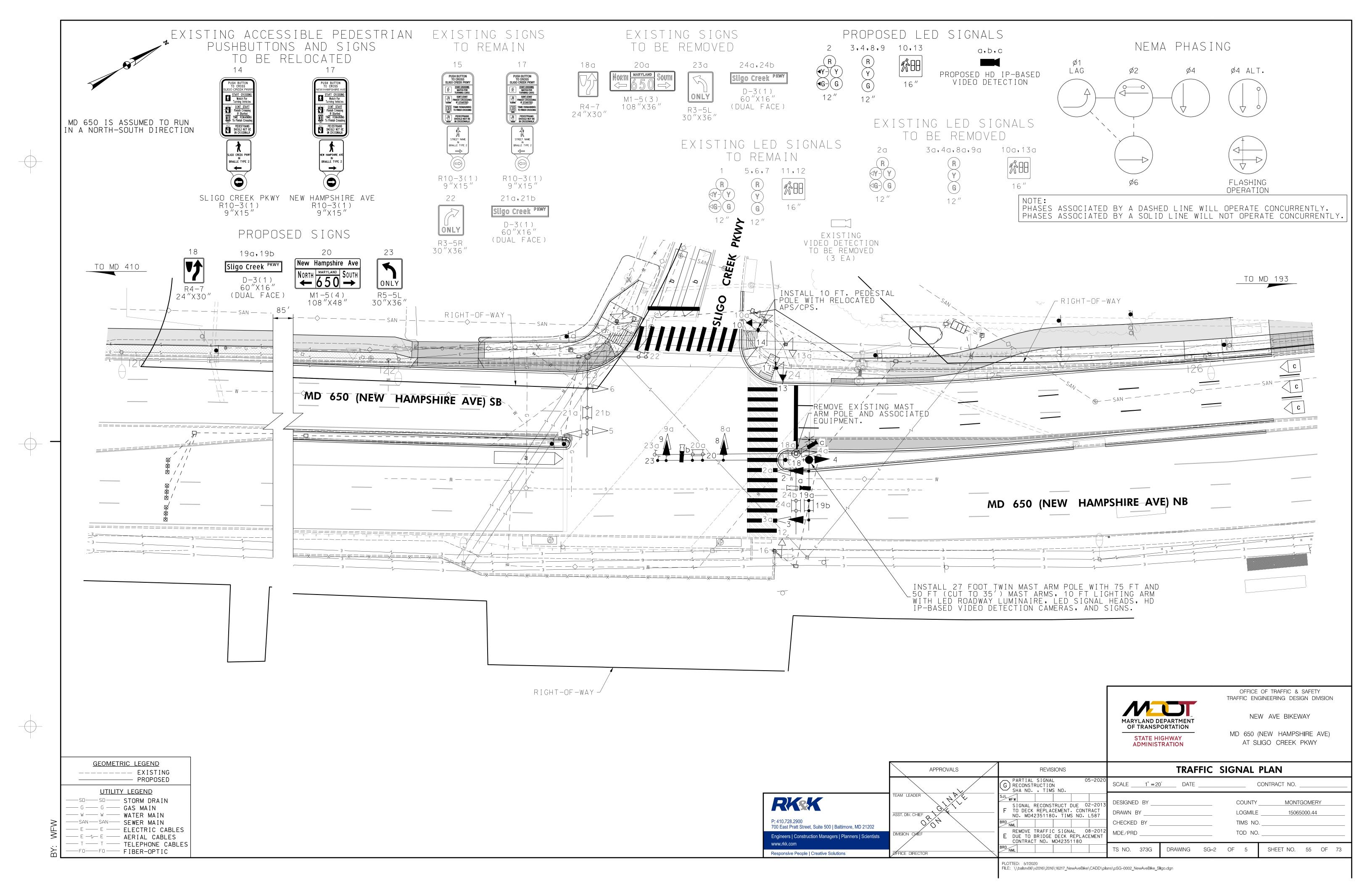


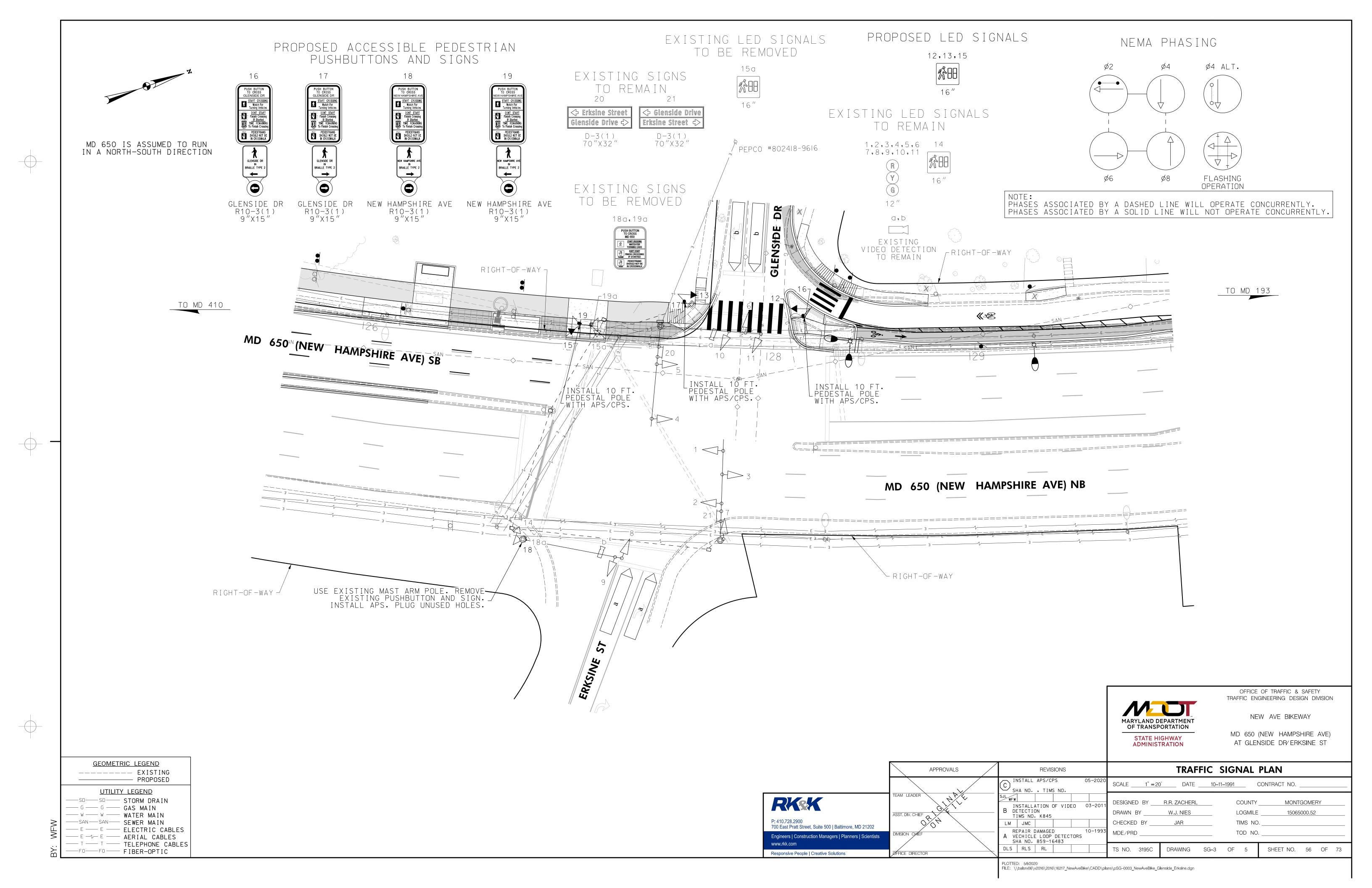
MD 104.06-09A AND MD 104.06-09C

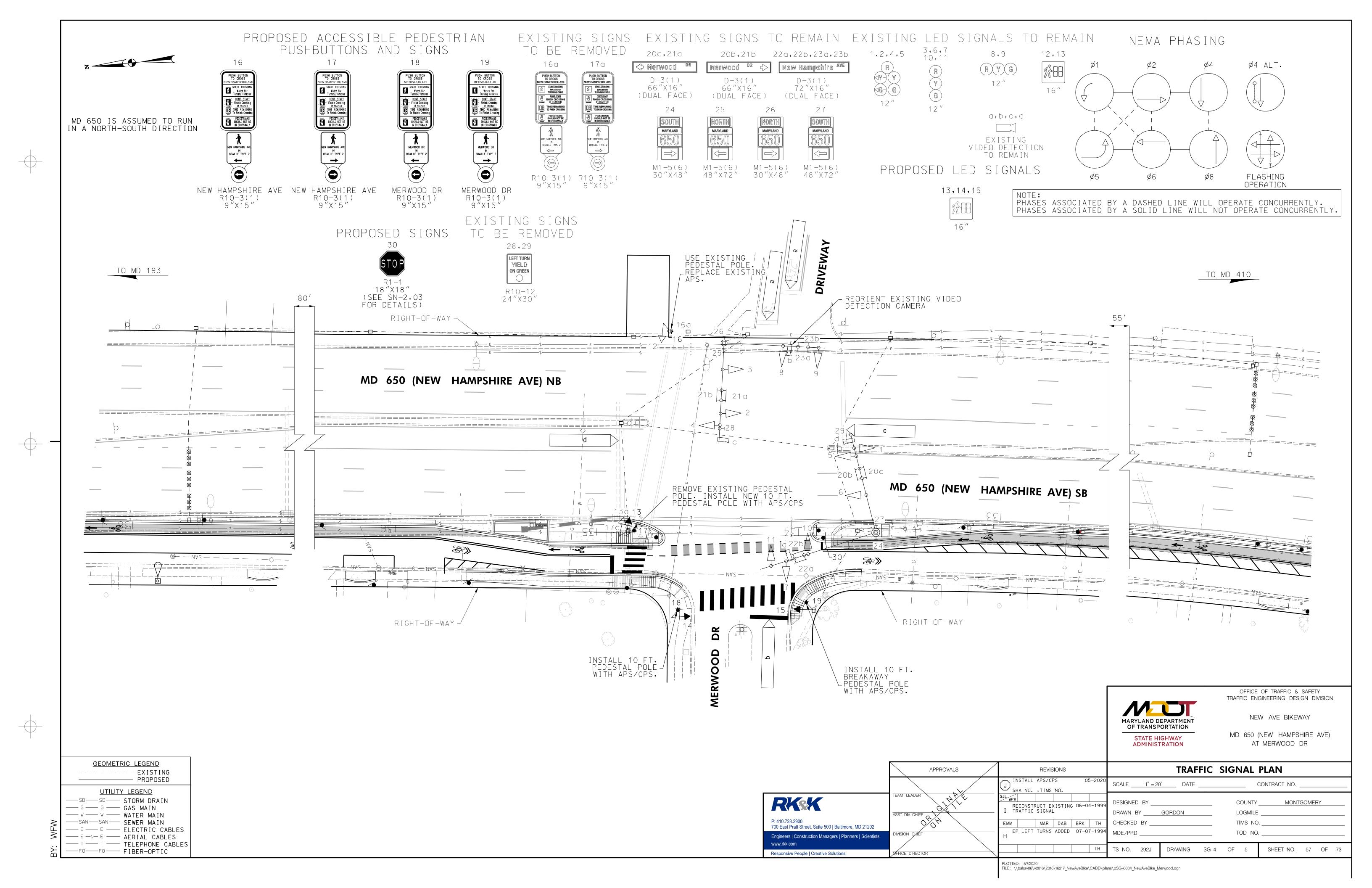


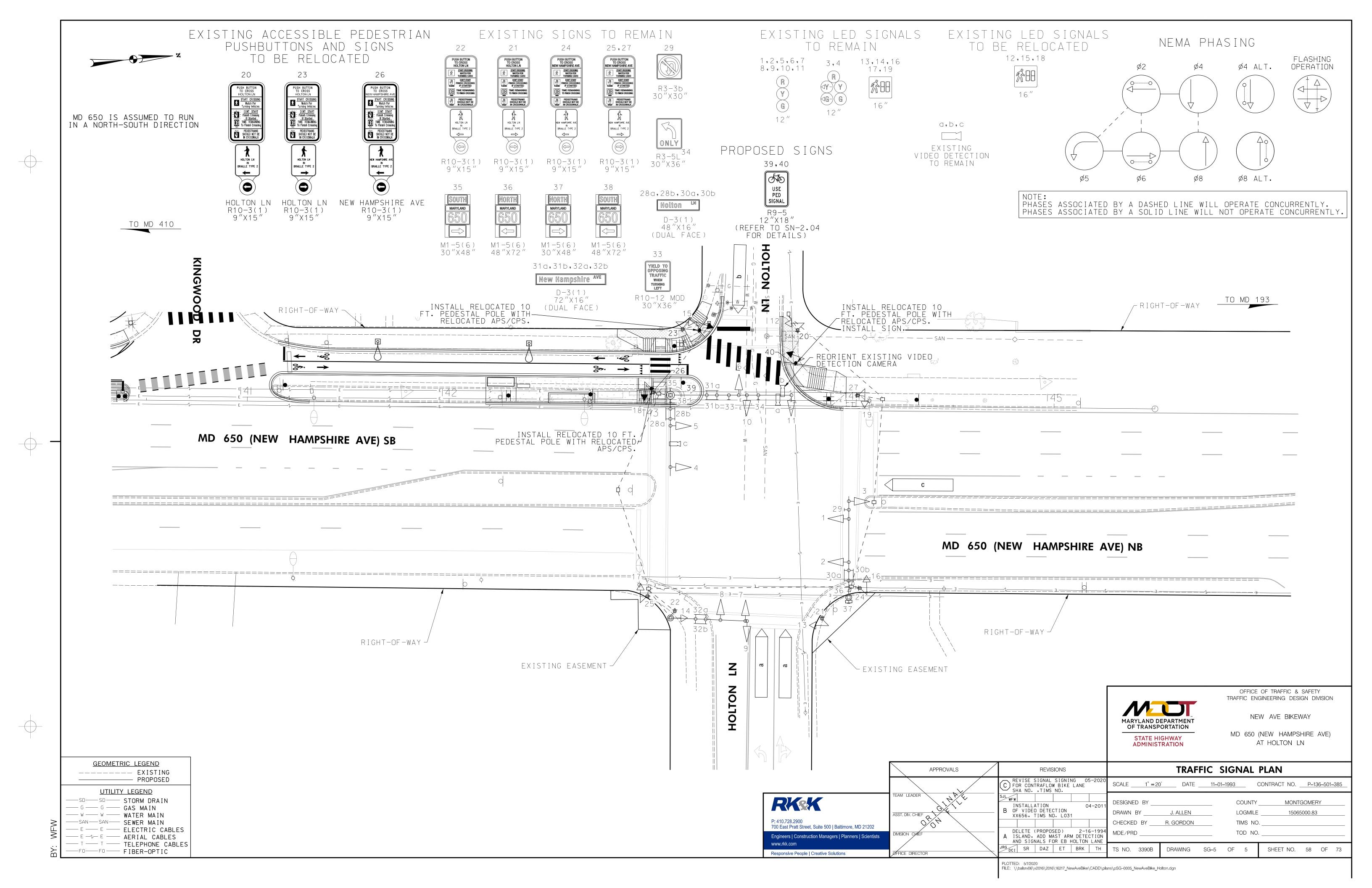












#### <u>DESIGN</u>

MDOT SHA - "MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", 2011 EDITION AND SUBSEQUENT REVISIONS.(MDMUTCD)

A A S H T O - "HIGHWAY SAFETY DESIGN AND OPERATIONS GUIDE" -1997

A A S H T O - "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS LUMINAIRES AND TRAFFIC SIGNALS", 2001 EDITION (CATEGORY II FOR ALL OVERHEAD AND CANTILEVER SIGN STRUCTURES).

#### MATERIALS AND CONSTRUCTION

MDOT SHA - "STANDARD SPECIFICATIONS FOR CONSTRUCTION & MATERIALS",
MOST CURRENT EDITION AND SUBSEQUENT REVISIONS AND SUPPLEMENTS.

MDOT SHA - "BOOK OF STANDARDS FOR HIGHWAY AND INCIDENTAL STRUCTURES",

MOST CURRENT EDITION AND SUBSEQUENT REVISIONS AND SUPPLEMENTS.

ALL DISTRICTS

MATERIAL - EXTRUDED ALUMINUM

I) HIGH INTENSITY (NEW SIGNS AND

REVISIONS TO EXISTING SIGNS)

COPY - DIRECT APPLIED

#### DESIGN WIND

100 MPH - WOOD SUPPORTS

IO YEAR RECURRENCE INTERVAL

100 MPH - GROUND MOUNT SIGN STEEL SUPPORTS

IO YEAR RECURRENCE INTERVAL

100 MPH - OVERHEAD AND CANTILEVER STRUCTURES 50 YEAR RECURRENCE INTERVAL

# DESIGN STRESS

SOIL BEARING PRESSURE - S = 3,000 P.S.F. (ASSUMED)

SEE MATERIAL & CONSTRUCTION ABOVE AND SPECIAL PROVISIONS FOR DESIGN

STRESSES FOR STRUCTURAL STEEL, ALUMINUM, REINFORCING STEEL AND CONCRETE.

#### CHAMFER

ALL EXPOSED EDGES OF CONCRETE SHALL HAVE A 3/4" X 3/4" CHAMFER.

#### CLASSIFICATION OF SIGNS

SIGNS ARE DIVIDED INTO TWO (2) GENERAL CATEGORIES. B) PANELS

I. GUIDE SIGNS

A) STRUCTURAL TYPES

OH - OVERHEAD

C - CANTILEVER

GM - GROUND MOUNT, BREAKAWAY

OR NON-BREAKWAY
BM - BRIDGE MOUNTED

B) PANELS

2. STANDARD SIGNS (REGULATORY, WARNING, ETC.)
A) STRUCTURAL TYPES
WOOD SUPPORTS

TC.) MATERIAL - SHEET ALUMINUM COPY - DIRECT APPLIED

# IDENTIFICATION OF SIGNS AND PANELS

SQUARE TUBE

## GUIDE SIGNS

EACH GUIDE SIGN IS IDENTIFIED BY A SIGN NUMBER ON THE PLANS AND IN THE TABULATIONS. (GM-I, GM-2, GM-3, e+c)

SIGNS ON STRUCTURES ARE IDENTIFIED WITH A NUMBER AND WHERE VARIATIONS OCCUR,
A LOWER CASE LETTER. (OH-Id. OH-Id.)

# STANDARD SIGNS

STANDARD SIGNS ARE IDENTIFIED BY PANEL NUMBERS AND ARE CLASSIFIED AS FOLLOWS

- R REGULATORY W - WARNING
- M ROUTE MARKERS AND ACCESSORIES
- D DESTINATION AND MILEAGE PANELS
- S SCHOOL

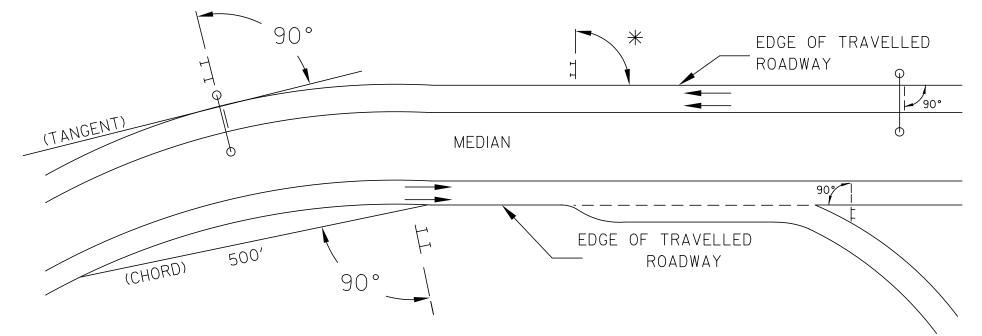
PANELS SHALL BE DESIGNATED TO AGREE WITH MARYLAND STANDARD SIGN BOOK. EACH STANDARD SIGN IS IDENTIFIED FIRST BY THE SHEET NUMBER, THEN BY THE NUMERICAL ORDER OF THE SIGN AS IT APPEARS ON THE PLAN. FOR EXAMPLE SHEET SN 2.1-101,102,103, ETC. SHEET SN 2.2-201,202,203,ETC.

# PANEL LAYOUT AND ALPHABETS

I. GUIDE SIGN PANEL LAYOUTS ARE BASED ON THE A.A.S.H.T.O. MANUALS NOTED ABOVE.

2. STANDARD SIGN PANEL LAYOUTS ARE BASED ON THE MDMUTCD WITH SPECIFICATIONS
DETAILED IN THE MARYLAND STATE HIGHWAY ADMINISTRATION PUBLICATION, "STANDARD SIGN BOOK", AVAILABLE ONLINE AT http://apps.roads.maryland.gov/businesswithsha/bizstdsspecs/desmanualstdpub/publicationsonline/oots/internet\_signbook.asp

#### ORIENTATION OF SIGN FACES



\* UNDER 30 FEET FROM TRAVELLED ROADWAY TO NEAR EDGE OF SIGN - 93° AWAY FROM THE ROAD TO AVOID SPECULAR REFLECTION AS INDICATED IN 813.03 OF THE MARYLAND STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS.

OVER 30 FEET FROM TRAVELLED ROADWAY TO NEAR EDGE OF SIGN - 90°

#### REFLECTORIZATION

BACKGROUNDS, BORDERS, TEXTS AND ALL OTHER ELEMENTS OF SIGN PANELS SHALL BE REFLECTORIZED EXCEPT WHERE NOTED. REFER TO PROJECT REQUIREMENTS FOR MORE DETAIL.

### SIGN LOCATIONS

I. GUIDE SIGNS ARE LOCATED ON THE PLANS BY DIMENSION TO SURVEY STATIONS, OR WHEN NECESSARY, TO IDENTIFIABLE PHYSICAL FEATURES.

2. ALL CHANGES IN THE LOCATIONS OF SIGNS AS SHOWN ON THE PLAN SHALL HAVE THE PRIOR APPROVAL OF THE ENGINEER.

#### EXISTING UTILITIES

THE ENGINEER DOES NOT WARRANT OR GUARANTEE THE ACCURACY OR COMPLETENESS OF UTILITY INFORMATION SHOWN ON THE PLAN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND PROTECT ALL EXISTING FACILITIES WHICH MIGHT BE AFFECTED BY THIS WORK OR HIS OPERATION.

# ROADSIDE SIGNS

I. VERTICAL ALIGNMENT

POSITION PANEL SO FACE IS PLUMB.

2. HORIZONTAL ALIGNMENT (SEE DIAGRAM ABOVE)

A) ON STRAIGHT ROADWAY SECTIONS, ANGLE OF SIGN FACE TO ROADWAY VARIES WITH DISTANCE FROM TRAVELLED ROADWAY TO NEAR EDGE OF SIGN - SEE DIAGRAM.

B) ON THE INSIDE OF HORIZONTAL CURVES, POSITION SIGN SO FACE OF PANEL MAKES

AN ANGLE OF 90° WITH A CHORD BETWEEN A POINT ON NEAR EDGE OF PAVEMENT AT SIGN LOCATION AND A POINT ON EDGE OF PAVEMENT 500' IN ADVANCE OF SIGN.

C) ON THE OUTSIDE OF HORIZONTAL CURVES, POSITION SIGN SO FACE OF PANEL IS

AT RIGHT ANGLES TO THE TANGENT OF THE CURVE AT THE SIGN LOCATION.

D) POSITIONING OF SIGNS AT GORES AND RAMP SEPARATIONS IS REFERRED TO THE NORMAL EDGE OF THE MAINLINE ROADWAY.

# OVERHEAD SIGNS

# I. VERTICAL ALIGNMENT

POSITION PANELS FOR ALL OVERHEAD STRUCTURES SO THAT PANEL FACE IS PLUMB. 2. OVERHEAD SIGN STRUCTURES SHALL NOT BE ERECTED WITHOUT ATTACHING LUMINAIRES, SUPPORTS, AND/OR SIGNS.

3. HORIZONTAL ALIGNMENT

A) POSITION ALL OVERHEAD SIGNS SO THAT THE FACE OF THE PANEL IS AT RIGHT ANGLES TO THE NORMAL EDGE OF ROADWAY, IF ON A STRAIGHT ROADWAY SECTION.

B) POSITION ALL OVERHEAD SIGNS SO THAT THE FACE OF THE PANEL IS AT RIGHT ANGLES TO THE TANGENT OF THE CURVE AT SIGN LOCATION, IF ON A HORIZONTAL CURVE.

C) POSITIONING OF SIGNS AT GORES AND RAMP SEPARATIONS IS REFERRED TO THE NORMAL EDGE OF THE MAINLINE ROADWAY.

4. VERTICAL CLEARANCE

A) OVERHEAD SIGNS SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 17'-9" FROM ROADWAY TO THE BOTTOM OF LIGHT FIXTURES. ALL LIGHT FIXTURES ARE TO BE AT THE SAME ELEVATION.

B) IF THE CONTRACTOR CANNOT OBTAIN 17'-9" (SEE 3A) CLEARANCE, HE IS TO CEASE WORK

AND CONTACT THE PROJECT ENGINEER FOR FURTHER INSTRUCTIONS. THE PROJECT ENGINEER MAY CONTACT THE TRAFFIC ENGINEERING DESIGN DIVISION FOR ASSISTANCE.

C) ON ALL OVERHEAD SIGNS. THE MINIMUM CLEARANCE TO BOTTOM OF DESIGN SIGN: 20'-9".

## PROJECT REQUIREMENTS

ALL NEW SIGNS ON THIS PROJECT SHALL BE FABRICATED FROM SHEETING WHICH MEETS ALL OF THE FOLLOWING REQUIREMENTS, UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS, OR AS DIRECTED BY THE ENGINEER:

I. SHEETING SHALL MEET THE REQUIREMENTS OF SECTIONS 813 AND 950.03 OF MDOT SHA'S STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS 2017 EDITION AND SUBSEQUENT REVISIONS AND SUPPLEMENTS.

2. LISTED ON MDOT SHA OFFICE OF TRAFFIC AND SAFETY'S QUALIFIED PRODUCTS LIST (QPL).

#### PROJECT REQUIREMENTS CONT'D

3. THE FOLLOWING TYPES OF SHEETING SHALL BE USED FOR THE SPECIFIED SIGN CLASSIFICATIONS:

GENERAL NOTE: ALL COLORS SHALL BE RETROREFLECTIVE EXCEPT BLACK. BLACK TEXT, BORDERS, SYMBOLS OR ANY BLACK ELEMENTS OF ANY SIGN SHALL BE NON-REFLECTIVE. THIS APPLIES TO ALL MDOT SHA SIGNS AS SHOWN BELOW.

A) GUIDE, EXIT GORE, GENERAL INFORMATION, AND SERVICE SIGNS - FALL INTO TWO SUB CATEGORIES:

(I). GROUND MOUNTED:

ALL RETROREFLECTIVE SHEETING ELEMENTS OF THESE SIGNS SHALL MEET OR EXCEED THE REQUIREMENTS FOR ASTM TYPE IX (9).

(II). OVERHEAD STRUCTURE SIGNS AND OVERHEAD CANTILEVER SIGNS:

ALL RETROREFLECTIVE SHEETING ELEMENTS OF ALL OVERHEAD SIGNS SHALL MEET OR EXCEED THE REQUIREMENTS FOR ASTM TYPE XI(II). (THIS SECTION DOES NOT APPLY TO OVERHEAD SIGNALIZED INTERSECTION SIGNING; MAST ARM OR SPAN WIRE. FOLLOW THE REQUIREMENTS FOR THE RESPECTIVE SIGN CLASSIFICATION FOR SIGNAL SIGNING.)

B) WARNING SIGNS - RETROREFLECTIVE SHEETING FOR WARNING SIGNS (FLUORESCENT YELLOW AND FLUORESCENT ORANGE) SHALL MEET OR EXCEED THE REQUIREMENTS FOR ASTM TYPE IX (9). REGULATORY MESSAGES WITHIN WARNING SIGNS SHALL FOLLOW THE REQUIREMENTS FOR REGULATORY SIGNS.

C) SCHOOL SIGNS - RETROREFLECTIVE SHEETING FOR SCHOOL SIGNS (FLUORESCENT YELLOW AND FLUORESCENT YELLOW-GREEN) SHALL MEET OR EXCEED THE REQUIREMENTS FOR ASTM TYPE IX (9). REGULATORY MESSAGES WITHIN SCHOOL SIGNS SHALL FOLLOW THE REQUIREMENTS FOR REGULATORY SIGNS.

D) REGULATORY SIGNS - FALL INTO THREE SUBCATEGORIES:

(I). "RED" REGULATORY SIGNS; (SPECIFICALLY - STOP, YIELD, DO NOT ENTER AND WRONG WAY). ALL RETROREFLECTIVE SHEETING ELEMENTS OF THESE SIGNS SHALL MEET OR EXCEED THE REQUIREMENTS FOR ASTM TYPE IX (9).

(II). ALL R7 AND R8 SERIES PARKING RELATED SIGNS AND THEIR SUPPLEMENTAL PANELS, NO TRESPASSING SIGNS, AND SIGNS DIRECTED AT PEDESTRIANS AND BICYCLISTS ONLY. ALL RETROREFLECTIVE SHEETING ELEMENTS OF THESE SIGNS SHALL MEET THE REQUIREMENTS FOR ASTM TYPE IV (4).

(III). ALL OTHER REGULATORY SIGNS - ALL RETROREFLECTIVE SHEETING ELEMENTS OF THESE SIGNS SHALL MEET ASTM TYPE IV (4) INCLUDING RED ELEMENTS. WARNING MESSAGES WITHIN REGULATORY SIGNS SHALL FOLLOW THE REQUIREMENTS FOR WARNING SIGNS.

E) ROUTE MARKERS (INDEPENDENT USE AND GUIDE SIGN USE)

INDEPENDENT USE: ALL RETROREFLECTIVE SHEETING ELEMENTS OF THESE SIGNS SHALL MEET BUT NOT TO EXCEED THE REQUIREMENTS FOR ASTM TYPE IV (4).

GUIDE SIGN USE: WHEN INCORPORATED IN THE BODY OF A GUIDE SIGN, ALL RETROREFLECTIVE SHEETING ELEMENTS OF THESE SIGNS SHALL MEET THE SHEETING REQUIREMENTS OF THE GUIDE SIGNS FOR WHICH THEY ARE TO BE APPLIED; GROUND MOUNT ASTM TYPE IX (9) OR OVERHEAD ASTM TYPE XI(II).

F)LOGOS AND / OR GRAPHICS - WITHIN SIGNS SHALL FOLLOW THE REQUIREMENTS FOR THE RESPECTIVE SIGN CLASSIFICATION UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS, OR AS DIRECTED BY THE ENGINEER.

G) SPECIFIC SERVICE (LOGO) SIGNING - ALL COPY, DIVIDER BORDERS, LOGOS AND ARROWS SHALL BE DEMOUNTABLE ALUMINUM OVERLAYS, .032 MINIMUM TO .063 MAXIMUM. ALL RETROREFLECTIVE SHEETING ELEMENTS OF THESE SIGNS SHALL MEET OR EXCEED THE REQUIREMENTS FOR ASTM TYPE IX (9). DISTANCES ON DIRECTIONAL ARROWS WHEN SPECIFIED SHALL BE BLACK. THE OVERLAYS ARE TO BE APPLIED WITH .125 ALUMINUM POP RIVETS TO THE BODY OF THE MAIN SIGN.

H) CIVIL DEFENSE SIGNS AND OTHER SIGNS - NOT SPECIFICALLY FALLING INTO ONE OF THE CATEGORIES ABOVE, SHALL FOLLOW THE GUIDELINES FOR THE SIGN CLASSIFICATION THAT MOST CLOSELY MATCHES THE COLOR(S) OF THE PROPOSED SIGN.

4. THE FOLLOWING MINIMUM THICKNESS SHALL BE USED FOR THE APPROPRIATE WIDTH OF SHEET ALUMINUM BLANKS:

LONGEST DIMENSION	MINIMUM THICKNESS
UP TO 12"	0.040"
GREATER THAN 12" TO 24"	0.063"
GREATER THAN 24" TO 36"	0.080"
GREATER THAN 36" TO 48"	O.IOO"
OVER 48"	0.125"

CITY OF TAKOMA PARK

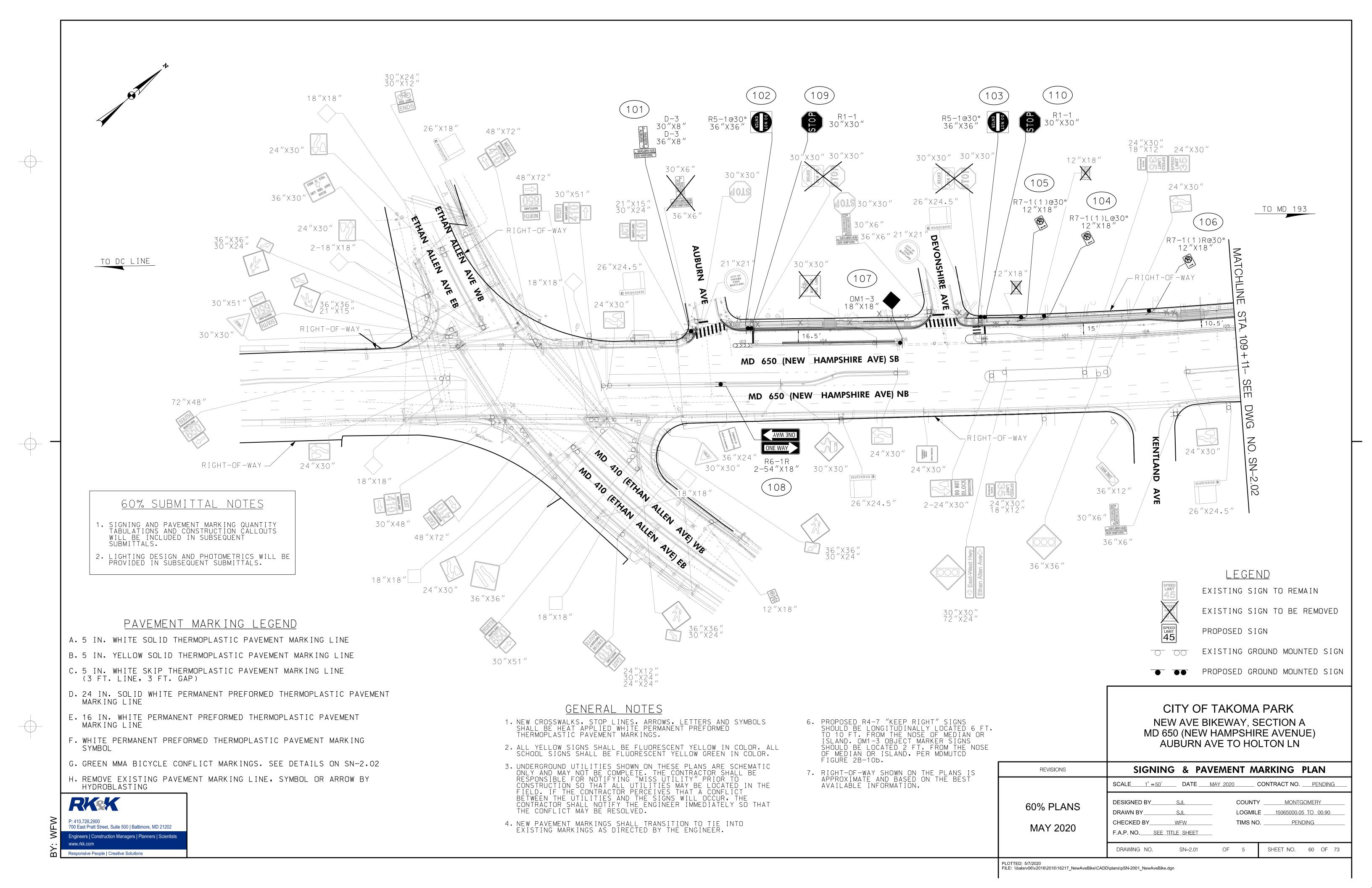
NEW AVE BIKEWAY, SECTION A

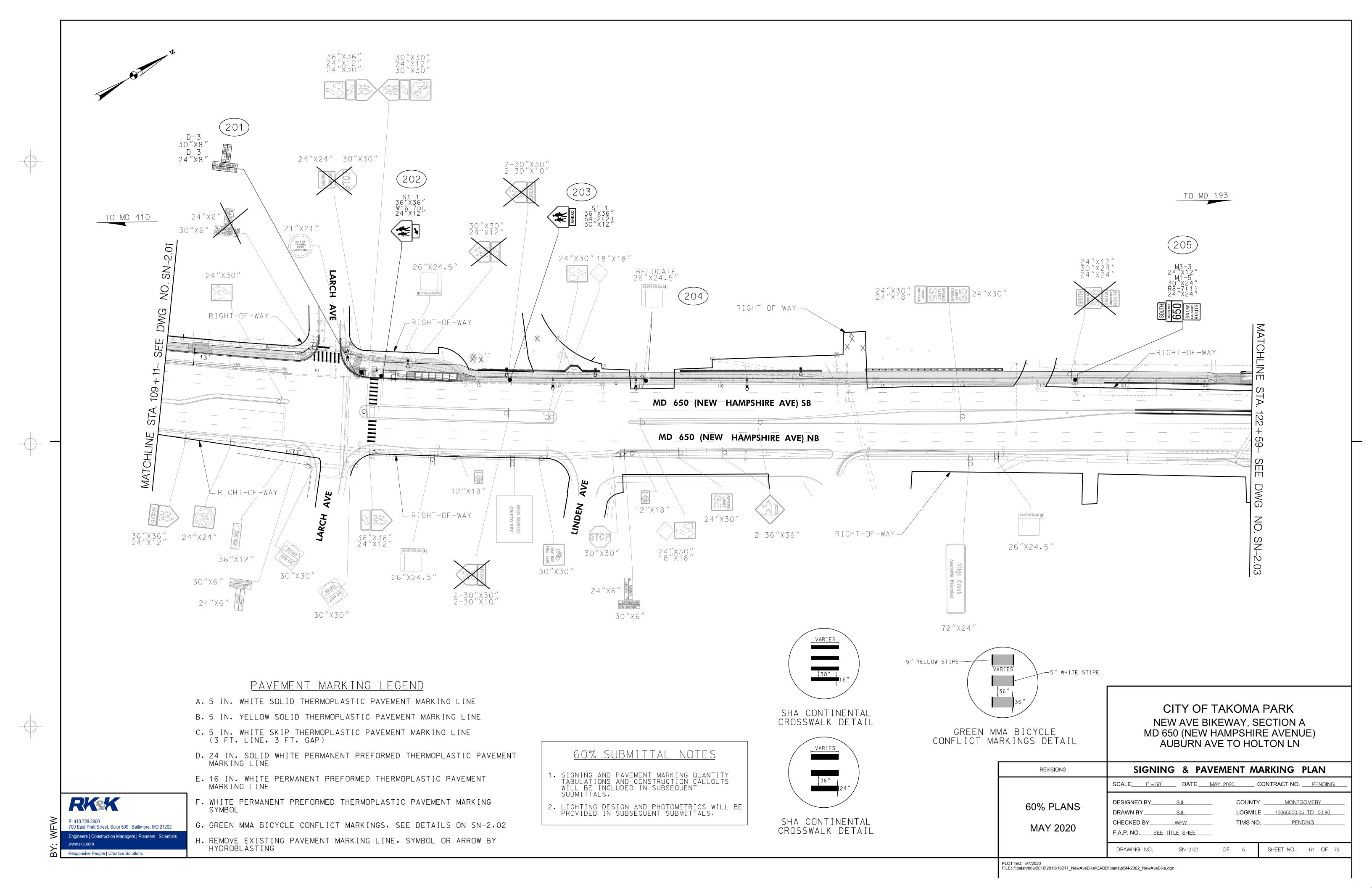
MD 650 (NEW HAMPSHIRE AVENUE)

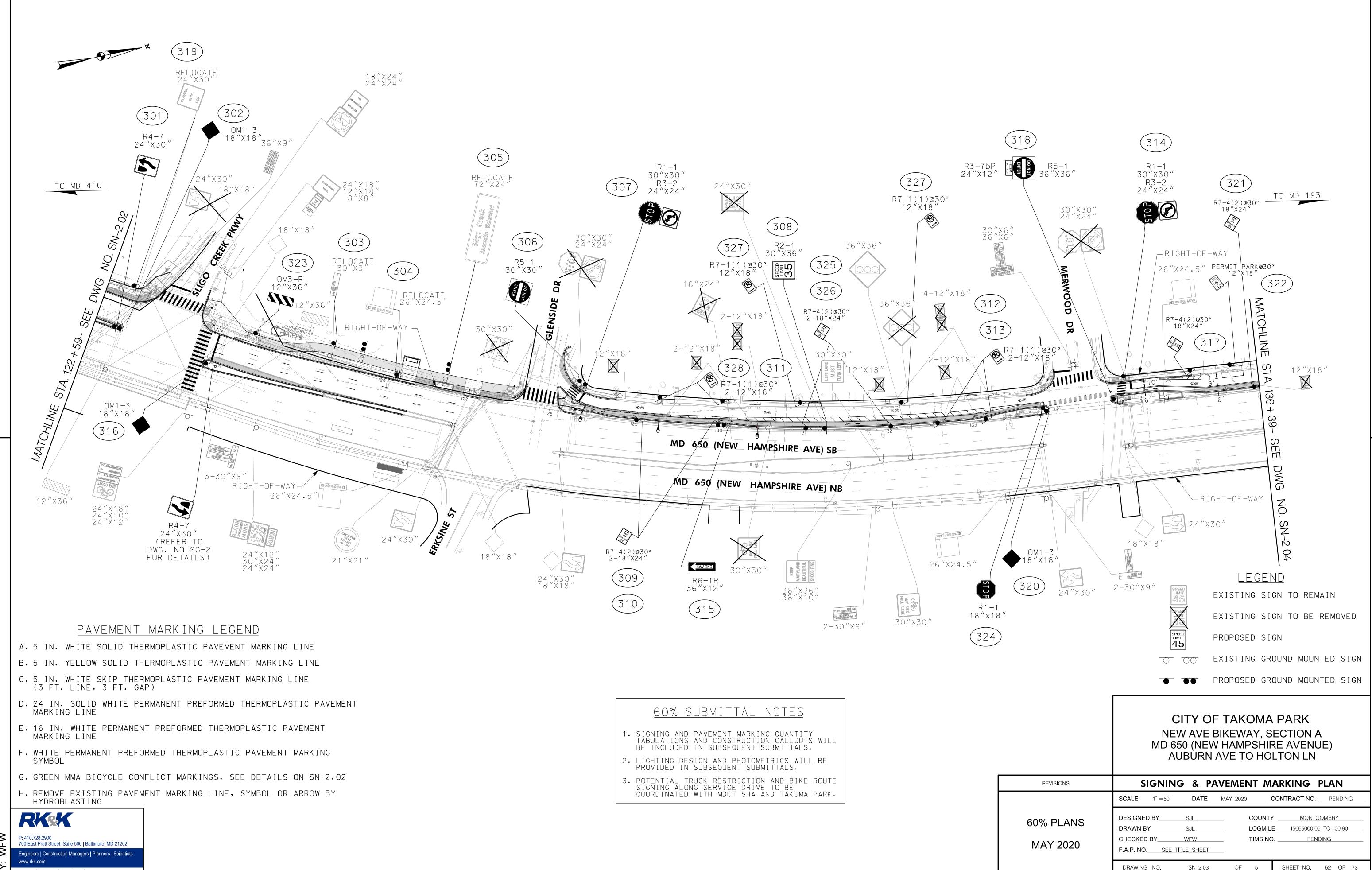
AUBURN AVE TO HOLTON LN

APPROVALS	REVISIONS	GENERAL NOTES AND PROPOSALS
		SCALE NONE DATE MAY 2020 CONTRACT NO. PENDING
ASST. DIV. CHIEF  DIVISION CHIEF	60% PLANS MAY 2020	DESIGNED BY SJL COUNTY MONTGOMERY  DRAWN BY SJL LOGMILE 15065000.05 TO 00.90  CHECKED BY WFW TIMS NO. PENDING  F.A.P. NO. SEE TITLE SHEET
OFFICE DIRECTOR		DRAWING NO. SN-1 OF 5 SHEET NO. 59 OF 73
	DLOTTED: 5/7/2020	

PLOTTED: 5/7/2020 FILE: \\balsrv06\v2016\2016\16217\_NewAveBike\CADD\plans\pSN-1001\_NewAveBike.dgn



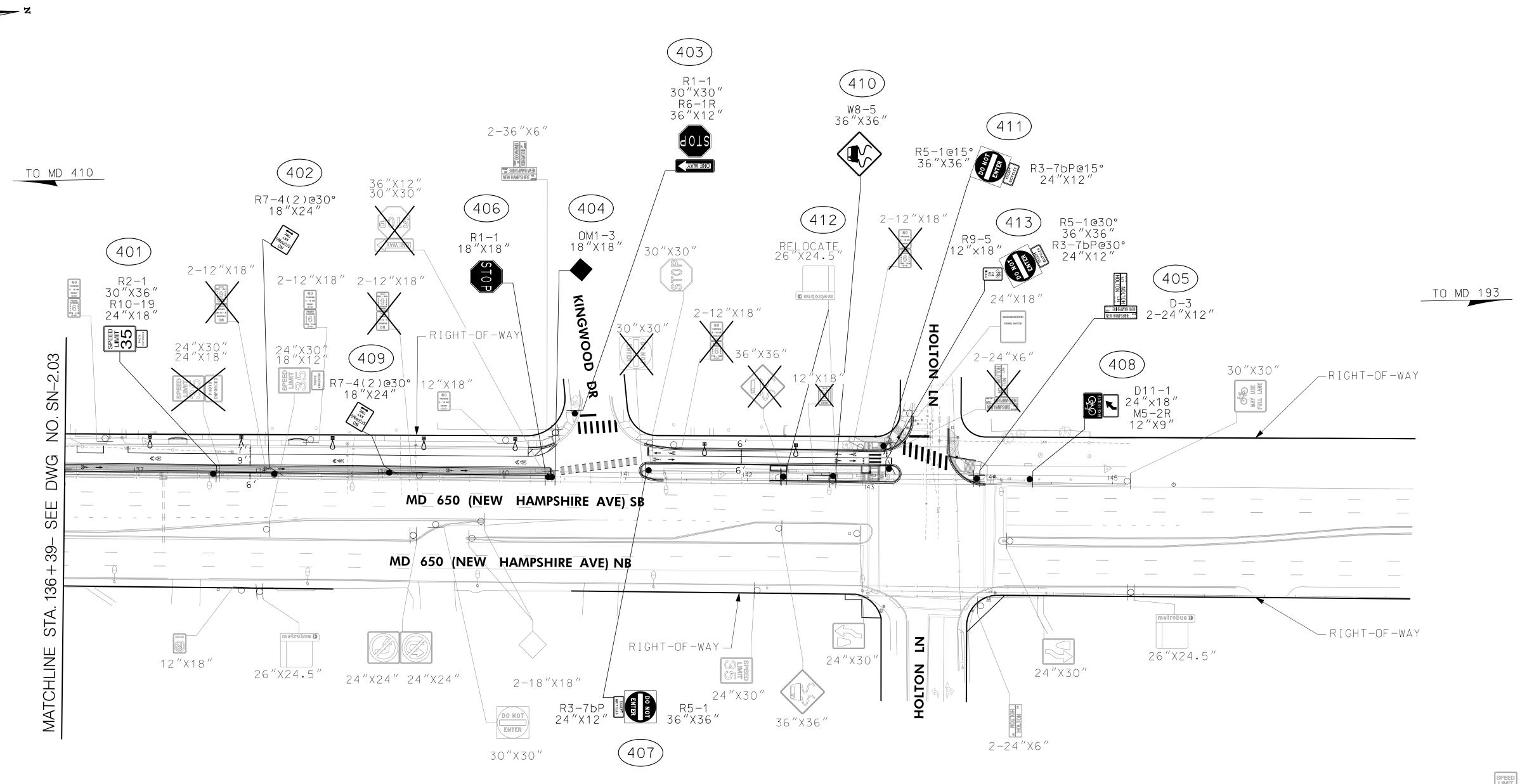




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AV: WEW

Responsive People | Creative Solutions



# PAVEMENT MARKING LEGEND

- A. 5 IN. WHITE SOLID THERMOPLASTIC PAVEMENT MARKING LINE
- B. 5 IN. YELLOW SOLID THERMOPLASTIC PAVEMENT MARKING LINE
- C. 5 IN. WHITE SKIP THERMOPLASTIC PAVEMENT MARKING LINE (3 FT. LINE, 3 FT. GAP)
- D. 24 IN. SOLID WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING LINE
- E. 16 IN. WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING LINE
- F. WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING SYMBOL
- G. GREEN MMA BICYCLE CONFLICT MARKINGS. SEE DETAILS ON SN-2.02
- H. REMOVE EXISTING PAVEMENT MARKING LINE, SYMBOL OR ARROW BY HYDROBLASTING

# 60% SUBMITTAL NOTES

- 1. SIGNING AND PAVEMENT MARKING QUANTITY TABULATIONS AND CONSTRUCTION CALLOUTS WILL BE INCLUDED IN SUBSEQUENT SUBMITTALS.
- 2. LIGHTING DESIGN AND PHOTOMETRICS WILL BE PROVIDED IN SUBSEQUENT SUBMITTALS.
- 3. POTENTIAL TRUCK RESTRICTION AND BIKE ROUTE SIGNING ALONG SERVICE DRIVE TO BE COORDINATED WITH MDOT SHA AND TAKOMA PARK.

# LEGEND

EXISTING SIGN TO REMAIN EXISTING SIGN TO BE REMOVED

PROPOSED SIGN

EXISTING GROUND MOUNTED SIGN

PROPOSED GROUND MOUNTED SIGN

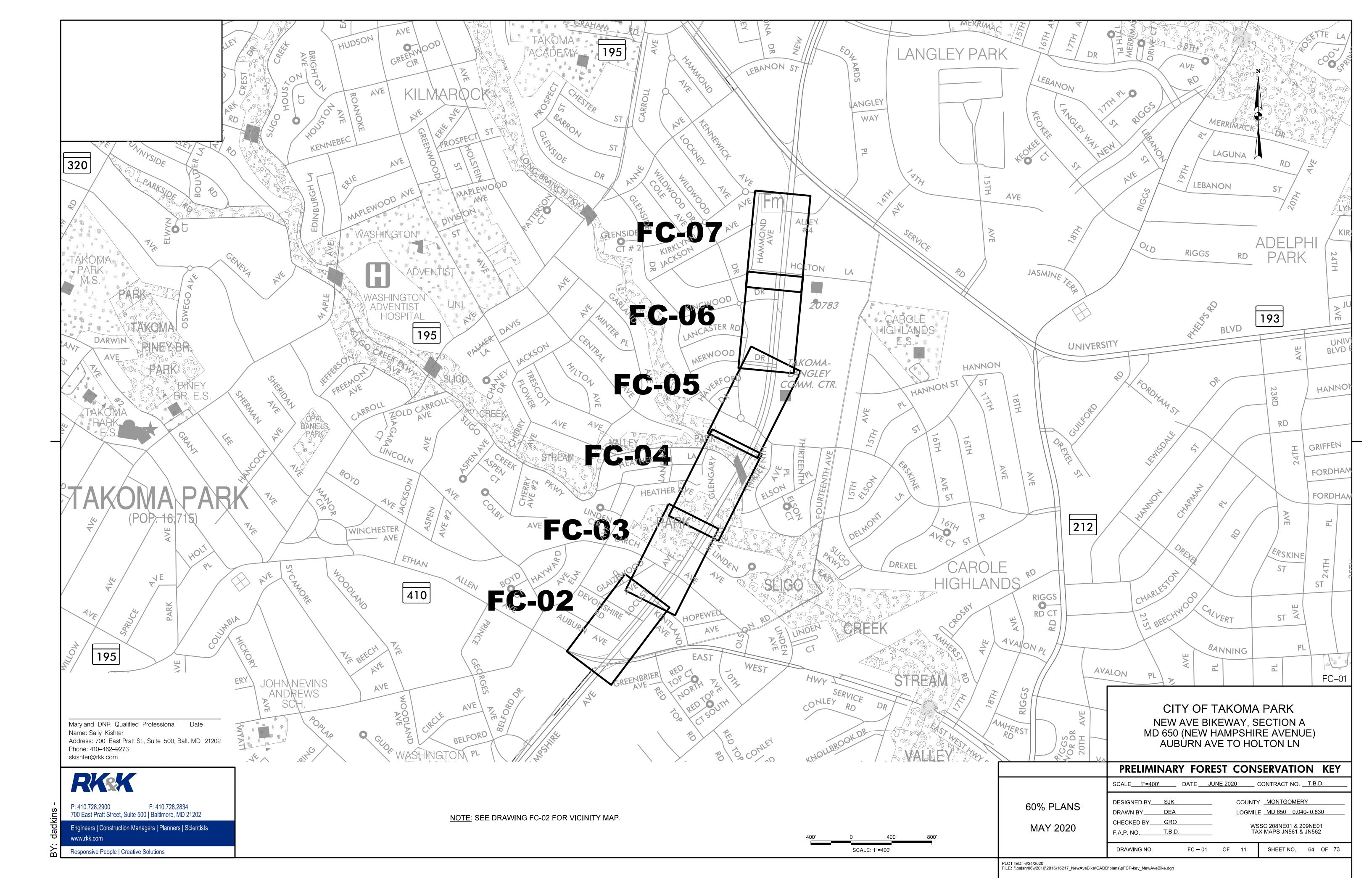
CITY OF TAKOMA PARK NEW AVE BIKEWAY, SECTION A MD 650 (NEW HAMPSHIRE AVENUE)

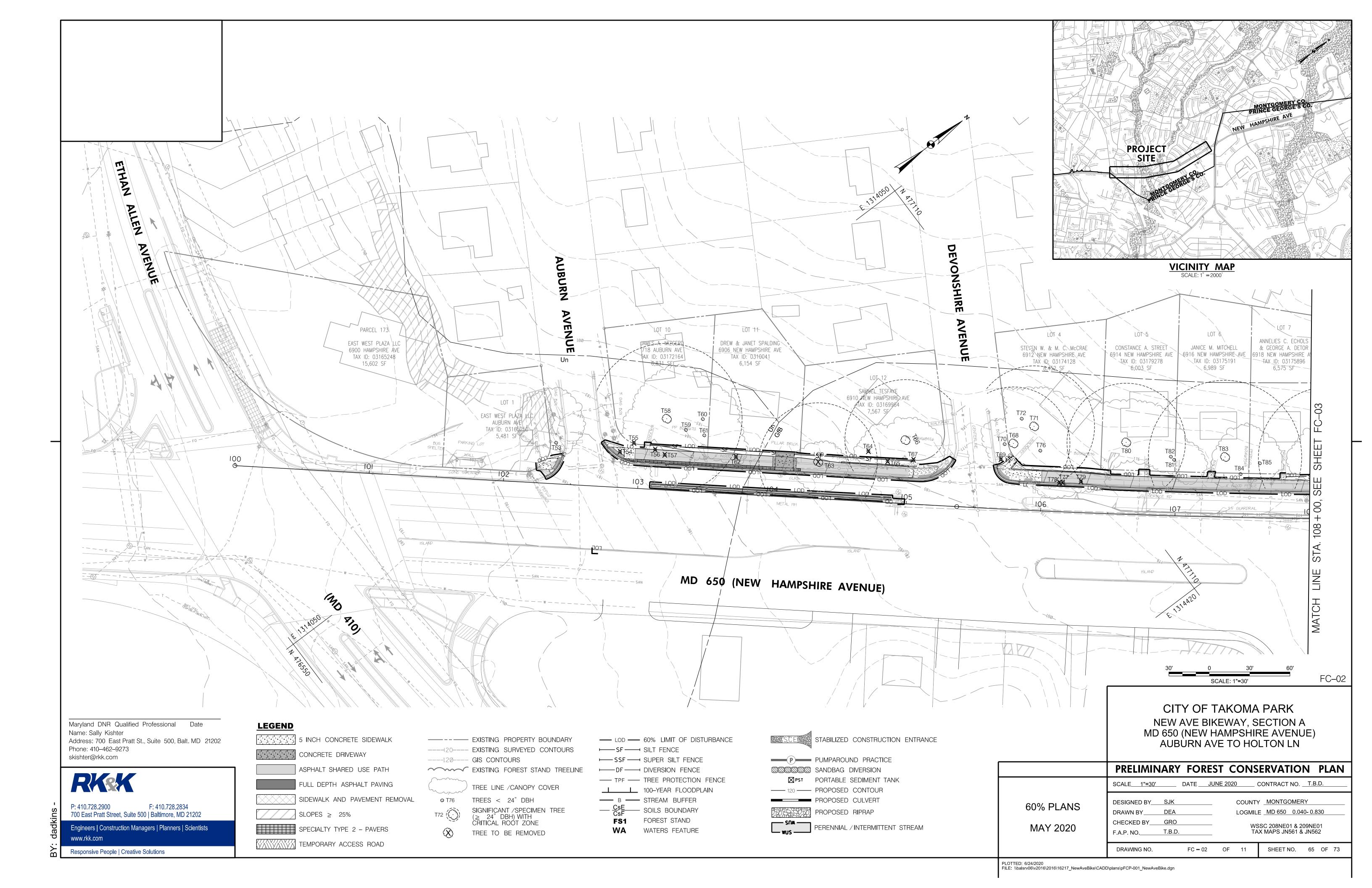
AUBÙRN AVE TO HOLTON LN

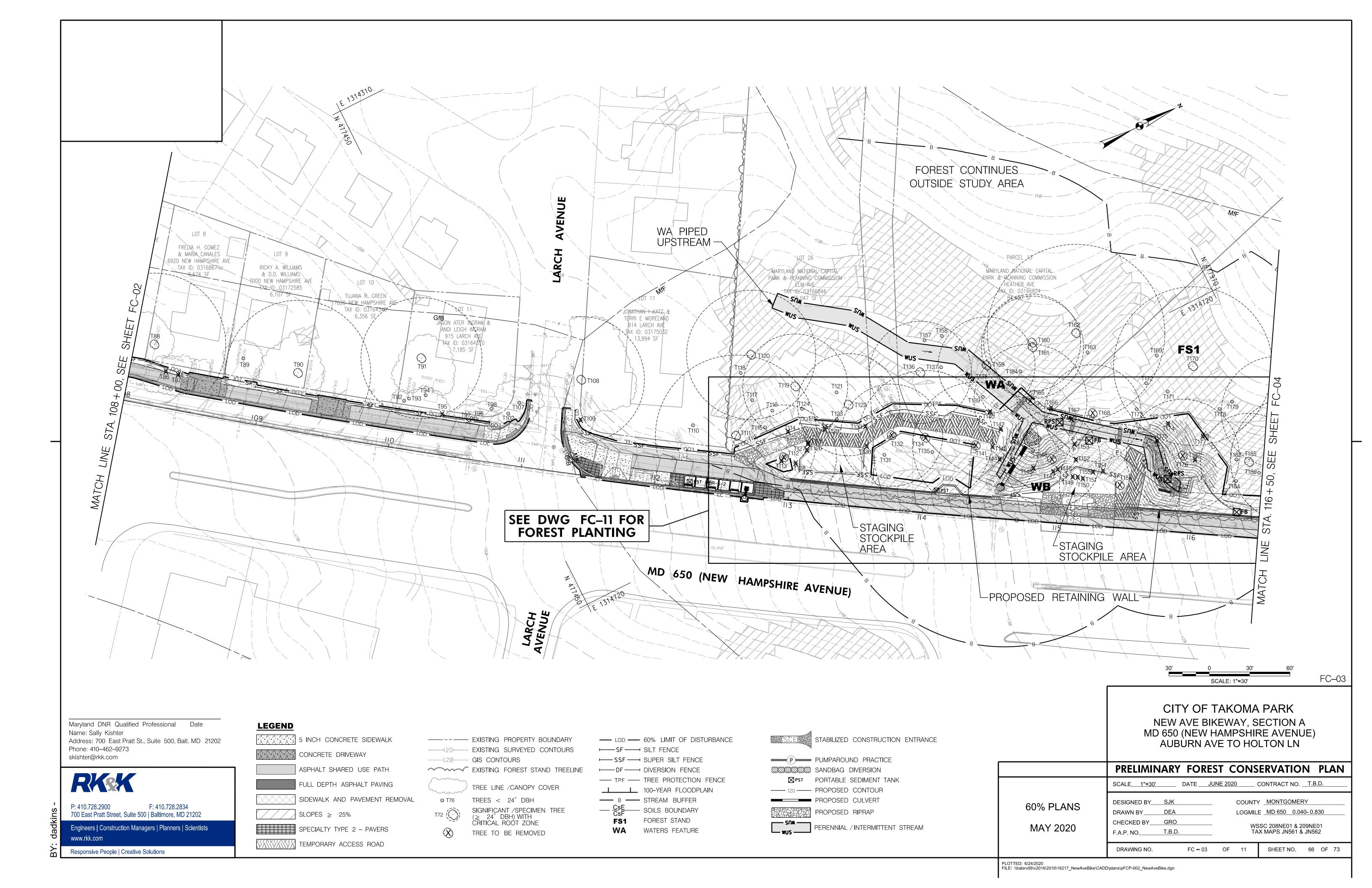
REVISIONS	SIGNING & PAVEMENT MARKING PLAN
	SCALE 1" = 50' DATE MAY 2020 CONTRACT NO. PENDING
60% PLANS MAY 2020	DESIGNED BY SJL COUNTY MONTGOMERY  DRAWN BY SJL LOGMILE 15065000.05 TO 00.90  CHECKED BY WFW TIMS NO. PENDING  F.A.P. NO. SEE TITLE SHEET
	DRAWING NO. SN-2.04 OF 5 SHEET NO. 63 OF 73
PLOTTED: 5/7/2020	

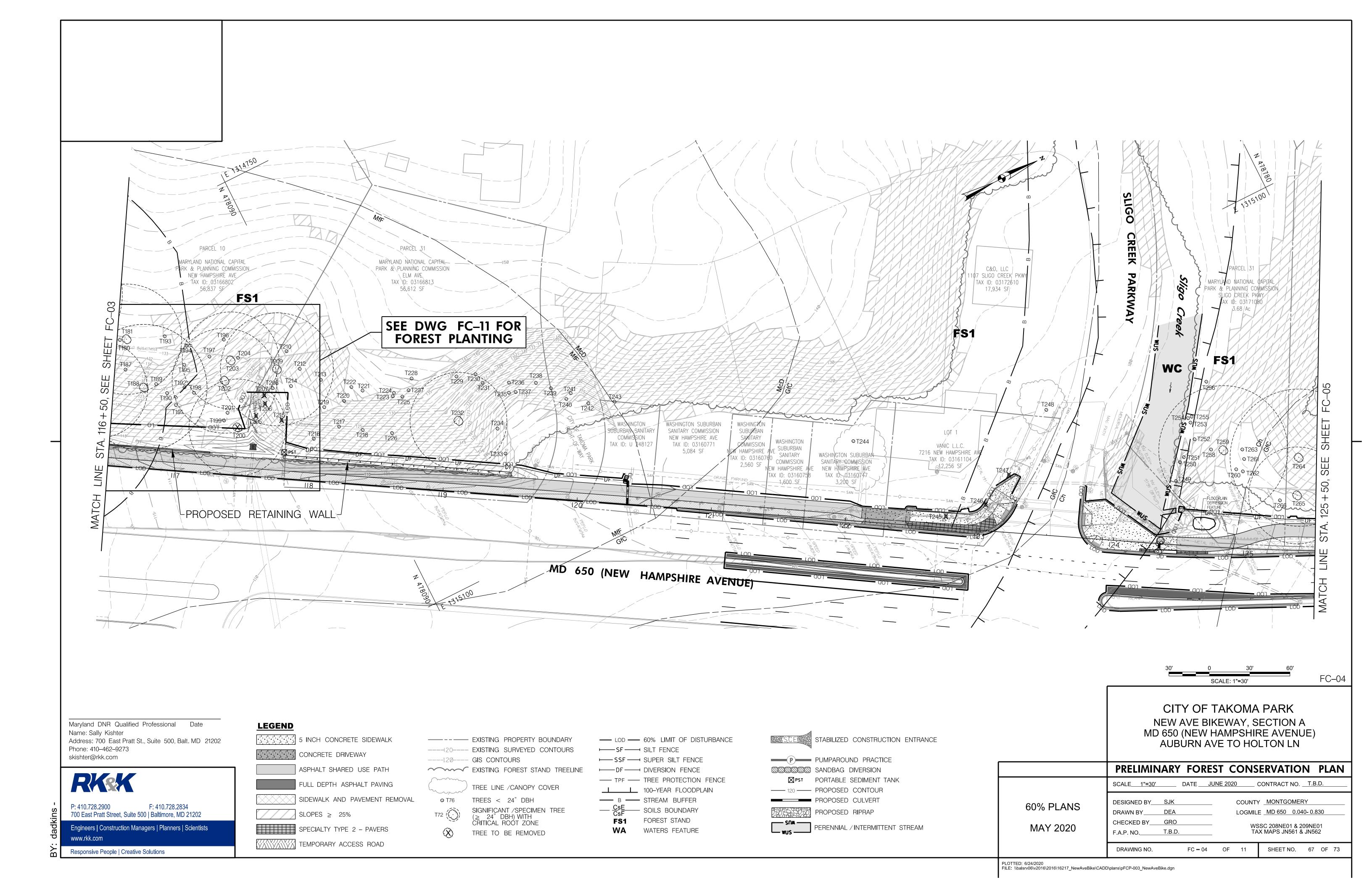
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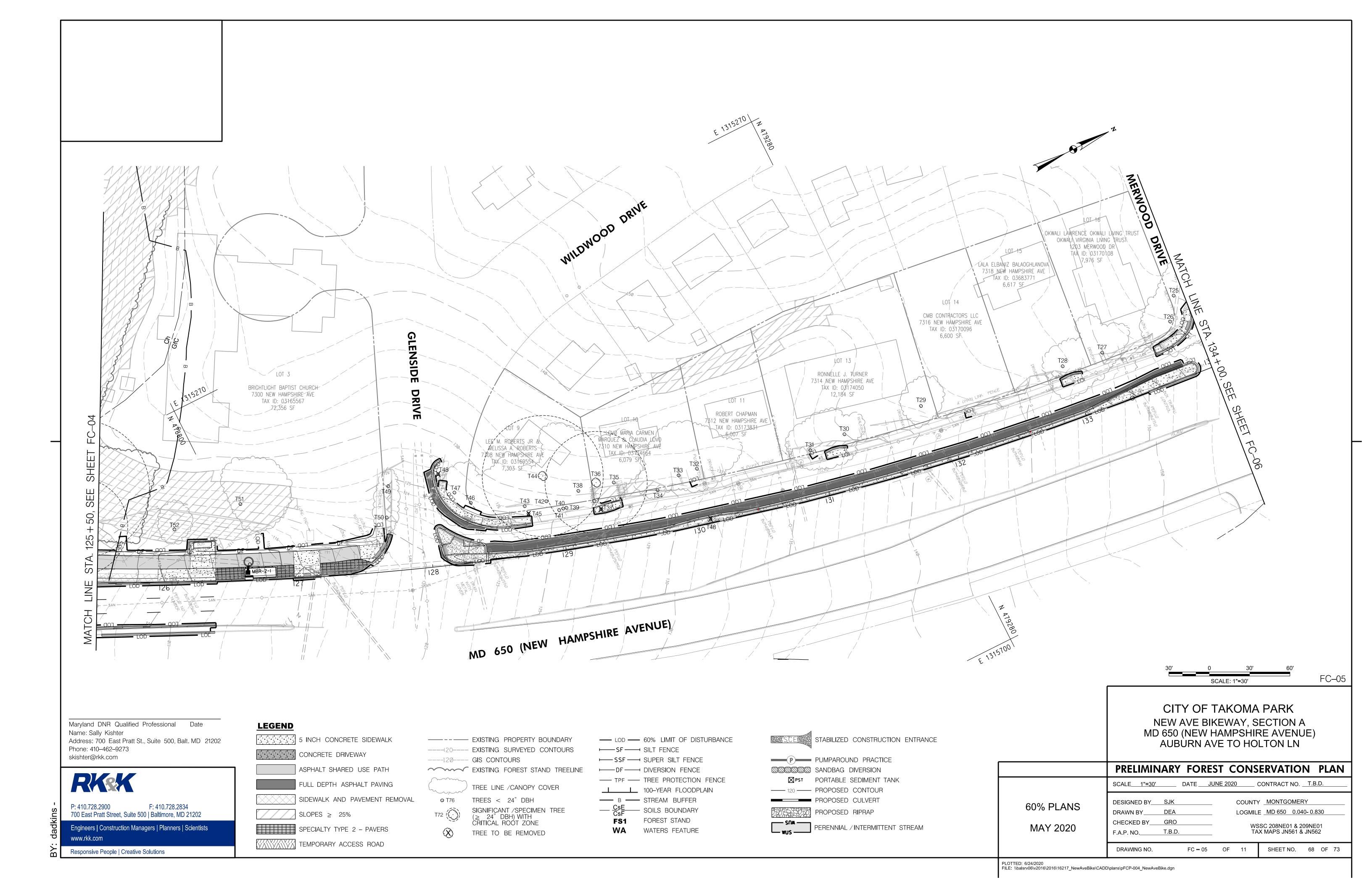
RKSK P: 410.728.2900 700 East Pratt Street, Suite 500 | Baltimore, MD 21202 Engineers | Construction Managers | Planners | Scientists Responsive People | Creative Solutions

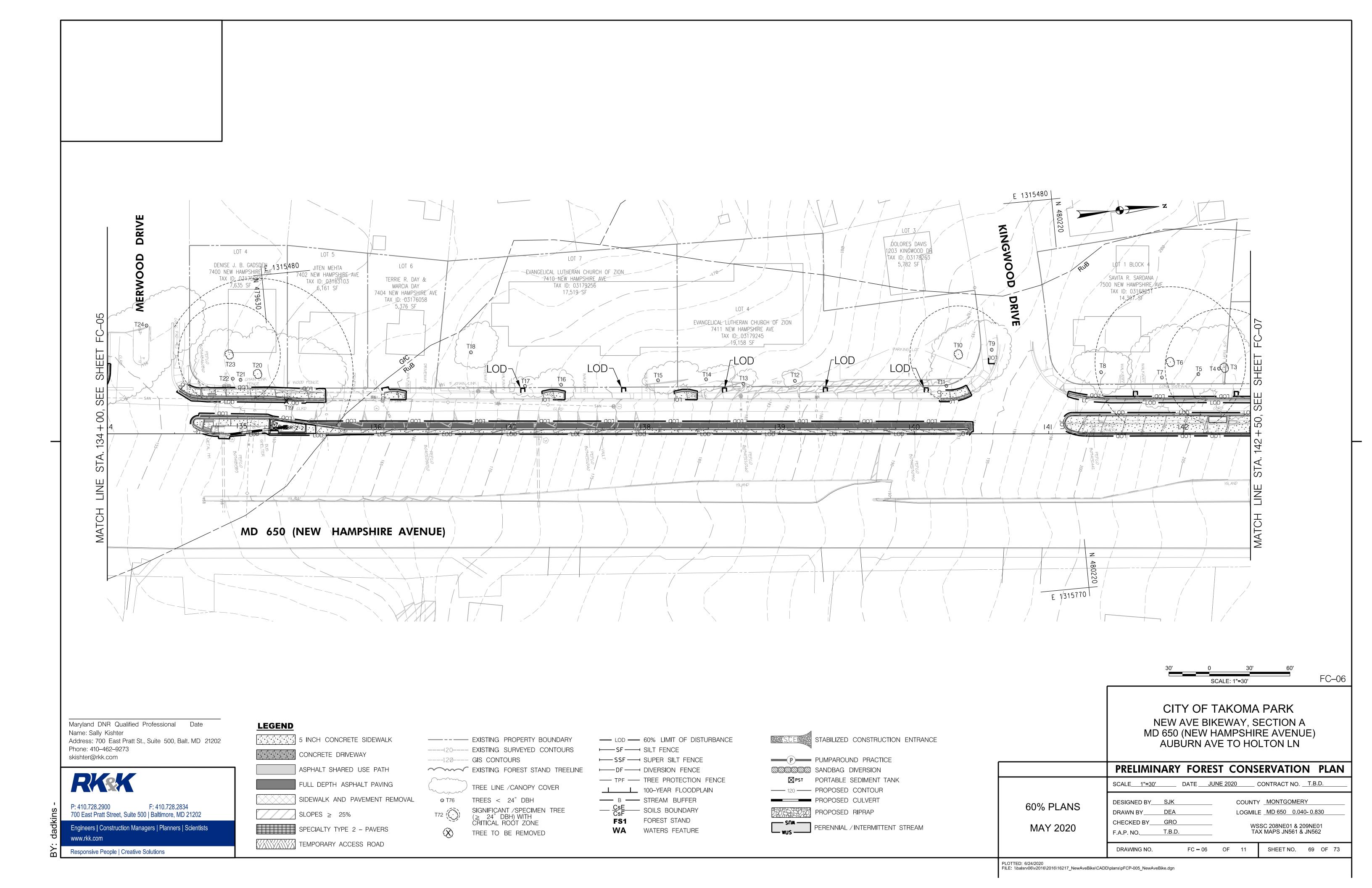


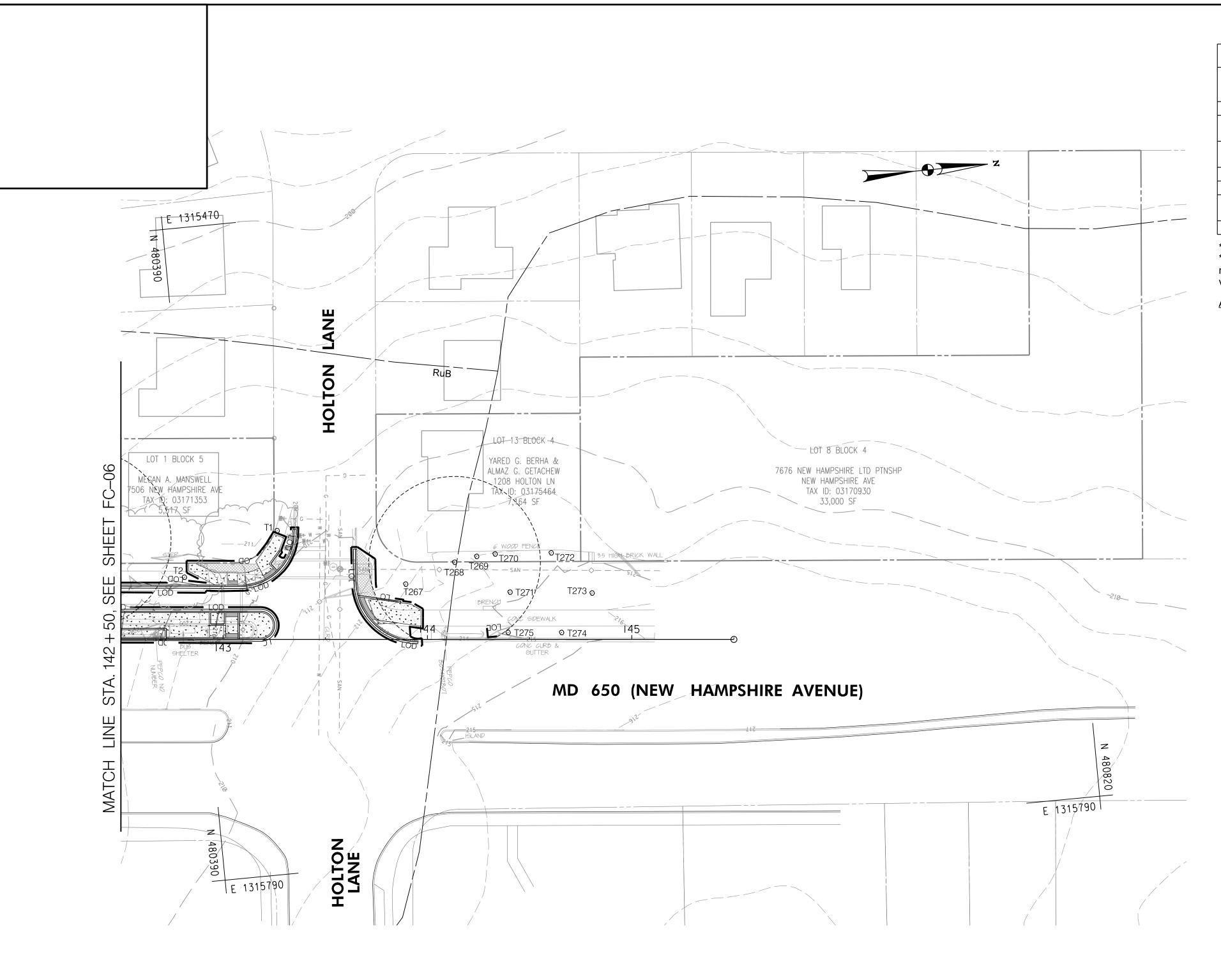












	SOIL SURVEY							
Map Unit Symbol	Map Unit Name	*K-Factor	**Hydric Rating	Hydrologic Soil Group	Drainage Class			
Ch	Codorus-Harboro-Urban land complex	-	30	D	Poorly drained			
Gfb	Glenelg-Wheaton-Urban land complex, 0 to 8 percent slopes	0.28	0	В	Well drained			
GfC	Glenelg-Wheaton-Urban land complex, 8 to 15 percent slopes	0.28	0	В	Well drained			
McD	Manor loam, 15 to 25 slopes	0.28	0	В	Well drained			
MfF	Manor-Brinklow complex, 25 to 65 percent	0.32	0	В	Well drained			
RuB	Russett-Christiana-Urban land complex, 0 to 5 percent slopes	-	0	D	Moderately well drained			
Un	Urban land	-	0	D	=			

\* Erodibility Coefficient - Value assigned to soil types by NRCS. K > 0.35 are considered to be highly erodible.

\*\* Hydric Rating - Value is based on the percentage of hydric soils within the soil type. Non-hydric soils have a value of 0, predominantly non-hydric soils have a value between 0 and 33, partially hydric soils have a value between 33 and 66, predominantly hydric soils have a value between 66 and 99, and hydric soils have a value of 100.

Agricultural Note: None of the soils are listed as Prime Farmland within the study area.

#### **Forest Conservation Data Table**

	Number of Acres	
Tract	2.3	LOD of Linear Project
Remaining in Agricultural Use	-	
Road & Utility ROWs <sup>1</sup>	-	
Total Existing Forest	0.6	
Forest Retention	-	
Forest Cleared	0.6	
Land Use & Thresholds <sup>2</sup>		
Land Use Category	IDA	ARA, MDR, IDA, HDR, MDP, or CIA.
Conservation Threshold	20%	percent
Afforestation Threshold	15%	percent
	Total Channel	Average Buffer

Acres of Forest in	Retained	Cleared	Planted
Wetlands		-	
100-Year Floodplain		-	
Stream Buffers		0.5	0.3
Priority Areas		-	-

Only Road or Utility ROWs not to be improved as part of development application.

<sup>2</sup> Information from FC Land Use Categories & Thresholds document.

<sup>3</sup> Measured from stream edge to buffer edge.

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**LEGEND** 

5 INCH CONCRETE SIDEWALK CONCRETE DRIVEWAY ASPHALT SHARED USE PATH FULL DEPTH ASPHALT PAVING SIDEWALK AND PAVEMENT REMOVAL SLOPES ≥ 25%

TEMPORARY ACCESS ROAD

SPECIALTY TYPE 2 – PAVERS

**⊙** T76

---- EXISTING PROPERTY BOUNDARY ----120---- EXISTING SURVEYED CONTOURS ----120---- GIS CONTOURS EXISTING FOREST STAND TREELINE

TREE LINE /CANOPY COVER TREES < 24" DBH SIGNIFICANT /SPECIMEN TREE (≥ 24" DBH) WITH CRITICAL ROÓT ZONE TREE TO BE REMOVED

--- LOD --- 60% LIMIT OF DISTURBANCE → SF → SILT FENCE → SSF → SUPER SILT FENCE ⊢ DF → DIVERSION FENCE --- TPF --- TREE PROTECTION FENCE \_\_\_\_\_\_ 100-YEAR FLOODPLAIN --- B --- STREAM BUFFER — <u>CsE</u> Soils boundary

FOREST STAND

WATERS FEATURE

FS1

STABILIZED CONSTRUCTION ENTRANCE P PUMPAROUND PRACTICE SANDBAG DIVERSION PST PORTABLE SEDIMENT TANK PROPOSED CULVERT PROPOSED RIPRAP

PERENNIAL / INTERMITTENT STREAM

CITY OF TAKOMA PARK NEW AVE BIKEWAY, SECTION A MD 650 (NEW HAMPSHIRE AVENUE) AUBÙRN AVE TO HOLTON LN

SCALE: 1"=30'

FC-07

PRELIMINARY FOREST CONSERVATION PLAN SCALE 1"=30' DATE JUNE 2020 CONTRACT NO. T.B.D. DESIGNED BY SJK COUNTY MONTGOMERY 60% PLANS LOGMILE MD 650 0.040- 0.830 DRAWN BY\_ CHECKED BY GRO WSSC 208NE01 & 209NE01 TAX MAPS JN561 & JN562 MAY 2020 T.B.D. F.A.P. NO.\_\_ DRAWING NO. FC **–** 07 OF 11 SHEET NO. 70 OF 73

PLOTTED: 6/24/2020 FILE: \balsrv06\v2016\2016\16217\_NewAveBike\CADD\plans\pFCP-006\_NewAveBike.dgn

Tree	Removal	Common Name	Scientific Name	DBH (In.)	Condition	Comments
<b>No.</b>		Japanese zelkova	Zelkova serrata	6	Good	Yard tree
T2		Japanese zelkova	Zelkova serrata	13	Good	Girdling roots and included bark (IB)
T3		White oak	Quercus alba	29	Good/Fair	Moderate dead branches
T4		Black gum	Nyssa sylvatica	12	Fair	Joins T3 at base, lean, minor dead branche Splits below BH (4.5'), minor dead branches
T5		Southern magnolia	Magnolia grandiflora	9	Good/Fair	IB
T6		White oak	Quercus alba	37	Good/Fair	Minor to moderate dead branches
T7		Flowering dogwood	Cornus florida	10	Poor	Dead leader, decaying trunk, more than 50 <sup>o</sup> dead
T8		American holly	llex opaca	15	Good	
T9		Northern catalpa	Catalpa speciosa	17	Poor	Dead leader, lots of dead branches
T10		Post oak	Quercus stellata	24	Fair/Poor	In parking lot, one sided, moderate to large dead branches
T11		Willow oak	Quercus phellos	9	Good	
T12		White mulberry	Morus alba	3	Fair/Poor	Leaf spot, sparse foliage
T13		Roundleaf sweetgum	Liquidambar styraciflua 'Rotundiloba'	5	Good	
T14		Roundleaf sweetgum	Liquidambar styraciflua 'Rotundiloba'	6	Good	
T15		Crepe-myrtle	Lagerstroemia	3	Good	Multistem
T16		Crepe-myrtle	Lagerstroemia	3	Good/Fair	Multistem, ~15 feet, split stem
T17		Roundleaf sweetgum	Liquidambar styraciflua 'Rotundiloba'	7	Good	Included Bark
T18		Norway spruce	Picea abies	17	Good	
T19		Eastern red cedar	Juniperus virginiana	4	Fair	One sided, compressed by fence
T20		Red maple	Acer rubrum	47	Good/Fair	Girdling roots, another 22" (splits below 4.5' (BH)), minor English ivy vines,
T21		Eastern red cedar	Juniperus virginiana	3	Fair	Under maple
T22		Southern red oak	Quercus falcata	10	Good	S <b>l</b> ight lean
T23		Eastern white pine	Pinus strobus	25	Good	
T24		Bradford pear	Pyrus calleryana	23	Good/Fair	Girdling roots, IB, little decay
T25		Southern magnolia	Magnolia grandiflora	18	Good	13, 12" multistem, girdling roots
T26		Southern magnolia	Magnolia grandiflora	18	Good/Fair	15, 12" multistem, minor girdling roots, bark damage, a little decay
T27		Willow oak	Quercus phellos	4	Good	Splits at ground 4" and 2", 3" Pin oak 2' south by wall
T28		Southern magnolia	Magnolia grandiflora	19	Fair	And 18" splits below BH, IB, moderate to dead branches, trunk damage
T29		Chinese magnolia	Magnolia × soulangeana	8	Fair	7, 5, 4" multistem below BH, IB, decay,
T30		Flowering dogwood	Cornus florida	4	Good	pruned And 3" split below BH, some dead branche
T31		Norway maple	Acer platanoides	22	Fair	Girdling roots, IB, minor decay in pruned
T32		White mulberry	Morus alba	6	Fair	branch  Minor vines going up trunk, splits a feet off
T33		White mulberry	Morus alba	7	Fair/Poor	ground, IB, leaf spot  4" splits below BH, bark damage, patches
T34		Crepe-myrtle	Lagerstroemia	2	Good	of decay, lean  Multistem, ~12" high
T35		Winter creeper	Euonymus kiautschovicus	4	Good	And 3" splits below BH, twisted trunk, ~10'
T36		River birch	Betula nigra	25	Fair	tall  English ivy in lower canopy, minor dead
						branches  Minor trunk damage, some dead branches
T37	X	American holly	llex opaca	11	Fair	lean
T38		American holly	llex opaca	7	Fair 	Minor vines  Vines going up trunk, moderate dead
T39		Loblolly pine	Pinus taeda	14	Fair	branches, slight lean
T40		White mulberry	Morus alba	7	Fair	Discolored bark, lean
T41		American holly	llex opaca	10	Fair	Poison ivy (PI), lean, branches coming out
T42		Loblolly pine	Pinus taeda	11	Fair	40 degrees
T43		Loblolly pine	Pinus taeda	10	Fair/Poor	Poison ivy, lean, very small crown  Inside wood fence, moderate dead
T44		Red oak	Quercus rubra	30	Good/Fair	branches
T45	X	Loblolly pine	Pinus taeda	17	Fair	One sided
T46		American holly	llex opaca	12	Good	
T47		Ornamental holly	llex sp.	10	Good	Multistem splits below BH, vines into lower canopy
T48	Х	Ornamental cherry	Prunus sp.	7	Fair	Pruning, leaf spotting
T49		Ornamental cherry	Prunus sp.	8	Fair	Trunk damage, early leaf drop
T50		Ornamental cherry	Prunus sp.	8	Fair	Early leaf drop, fungal slime
T51		White mulberry	Morus alba	14	Fair	vines in lower canopy, dead branches; mostly dead Ornamental cherry next to T5
T52		Ornamental cherry	Prunus sp.	7	Fair	5 and 4" multistem, IB, conks, vines in canopy, minor dead branches
T53		Privet	Ligustrum sp.	5	Good	Multistem, ~15' tall
T54	х	Virginia pine	Pinus virginiana	13	Fair	Lean, growing into power line
T55		Southern red oak	Quercus falcata	5	Good	
T56	Х	Loblolly pine	Pinus taeda	13	Fair	Bark damage, one sided, in power lines
T57	Х	Red oak	Quercus rubra	14	Fair	Slight lean, one sided
T58		Red oak	Quercus rubra	37	Fair	Minor vines, slight lean, moderate dead
T59		American holly	llex opaca	14	Fair	Tip of leader is dead
T60		American holly	llex opaca	13	Fair	Lean, dead branches
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Tree No.	Removal	Common Name	Scientific Name	DBH (In.)	Condition	Comments	
T61		American holly	llex opaca	10	Good		
T62	Х	Common hibiscus	Hibiscus syriacus	< 1	Good/Fair	10' shrub, 2-3' inside fence	
T63	х	Red oak	Quercus rubra	29	Fair	Vines going up trunk, growing into pow lines, lean, power line pruned, dead branches	
T64	х	Chestnut oak	Quercus montana	23	Fair	In power lines,	
T65	х	American beech	Fagus grandifolia	15	Fair/Poor	20" mostly dead split below BH, lean, pow lined pruned, fungal growth on dead tree	
T66		Chestnut oak	Quercus montana	30	Fair	Slight lean, in power lines, one sided moderate to large dead branches	
T67	х	Slippery elm	Ulmus rubra	2	Good		
T68		Chestnut oak	Quercus montana	28	Fair	Power line pruned, minor dead branch	
T69	х	Chestnut oak	Quercus montana	19	Fair/Poor	IP, large dead branches, lean, power lin pruned	
T70		American holly	llex opaca	8	Good	Start of row of hollies	
T71		White oak	Quercus alba	30	Good		
T72		White oak	Quercus alba	20	Fair	One sided	
T73		American holly	llex opaca	3	Good		
T74		American holly	llex opaca	7	Good	3-Multistem: 7, 5 & 4"	
T75		American holly	llex opaca	5	Good	2-Multistem: 5 & 4"	
T76		American holly	llex opaca	7	Good	Straight line from T70, row of hollies includes 70 & 73-76	
T77	х	American holly	llex opaca	8	Good	Start of another hedge, multistem 6" and	
T78	×	American holly	llex opaca	7	Good	2-multistem 7 & 5"	
T79	×	American holly	llex opaca	8	Good	7", 6", 5" multistem	
T80		White oak	Quercus alba	29	Fair	One sided, by house, minor dead branches	
T81		Blue spruce	Picea pungens	9	Good/Fair		
T82		Ornamental holly	llex sp.	9	Fair	Vines on lower canopy, power line prune	
T83		Silver maple	Acer saccharinum	38	Fair/Poor	Girdling roots, several large dead branches	
T84		Ornamental holly	llex sp.	5	Fair/Poor	4" multistem, half dead other leader	
T85		American holly	llex opaca	12	Good		
T86	х	Eastern white pine	Pinus strobus	11	Fair	Slight lean, power line pruning, leader eith died or pruned	
T87	×	Eastern white pine	Pinus strobus	11	Good/Fair	Slight lean, power line pruned	
T88		Post oak	Quercus stellata	35	Fair	Dead large branches, one sided, growing around fence post	
T89		Blue spruce	Picea pungens	13	Good/Fair	Vines growing up trunk, minor lean	
T90		Red maple	Acer rubrum	36	Fair/Poor	A lot of English ivy, vines up mid cano dead branches	
T91		White oak	Quercus alba	30	Good	Vines up trunk	
T92		Ornamental cherry	Prunus sp.	2	Good		
T93		Ornamental cherry	Prunus sp.	5	Good/Fair	Leaf spot	
T94		Arborvitae	Thuja occidentalis	2	Good	~10 feet tall	
T95	х	Eastern redbud	Cercis canadensis	8	Good		
T96		Red oak	Quercus rubra	2	Good		
T97		Eastern redbud	Cercis canadensis	3	Good		
T98		Ornamental holly	llex sp.	5	Good	Start of row of hollies, ~20' high	
T99		Ornamental holly	llex sp.	3-5	Good		
T100		Ornamental holly	llex sp.	3-5	Good		
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Tree No.	Removal	Common Name	Scientific Name	DBH (In.)	Condition	Comments
T102		Ornamental holly	llex sp.	4	Good	Middle of holly row, ~15' high
T103		Ornamental holly	llex sp.	3-5	Good	
T104		Ornamental holly	llex sp.	3-5	Good	
T105		Ornamental holly	llex sp.	3-5	Good	
T106		Ornamental holly	llex sp.	3-5	Good	
T107		Ornamental holly	llex sp.	4	Good	End of holly row, whole row 3-5" DBH
T108		White oak	Quercus alba	31	Good	Power line going through it
T109	×	White oak	Quercus alba	21	Fair	Moderate dead branches
T110		Flowering dogwood	Cornus florida	7	Fair	Lean, minor dead branches
T111		White oak	Quercus alba	40	Good	A lot of dead vines, some vines left over healthy canopy
T112	х	Red oak	Quercus rubra	26	Fair	~9" split at base mostly dead, vines to lower canopy, minor lean
T113	Х	Green ash	Fraxinus pennsylvanica	7	Fair	Vines in canopy, dead branches
T114	Х	Slippery elm	Ulmus rubra	6	Fair/Poor	Dead branches, moderate lean
T115		Norway maple	Acer platanoides	7	Fair	One sided, minor dead branches
T116		Red maple	Acer rubrum	9	Fair	Minor dead branches
T117		Pignut hickory	Carya glabra	10	Good/Fair	Lean
T118		White mulberry	Morus alba	8	Fair	Lean, moderate dead branches
T119	х	White oak	Quercus alba	26	Good/Fair	Moderate dead branches, flag vines
T120		White oak	Quercus alba	32	Good/Fair	Minor vines
T121		American beech	Fagus grandifolia	9	Good/Fair	6" split below BH, lean
T122		White oak	Quercus alba	25	Good	Twin 24"
T123		Red maple	Acer rubrum	6	Good/Fair	Minor dead branches
T124		American beech	Fagus grandifolia	14	Good/Fair	Old lightning damage, trunk/hollow decay
T125	х	Shagbark hickory	Carya ovata	8	Fair	Minor dead branches, slight lean
T126	Х	Green ash	Fraxinus pennsylvanica	7	Fair	Minor dead branches
T127	Х	Green ash	Fraxinus pennsylvanica	6	Poor	Mostly dead
T128	х	Green ash	Fraxinus pennsylvanica	7	Fair/Poor	Vines in canopy, IB
T129	×	White oak	Quercus alba	22	Good/Fair	Vines but controlled
T130	×	Red maple	Acer rubrum	7	Fair	Lean, some vines in canopy
T131		American beech	Fagus grandifolia	6	Fair	Some vines in canopy
T132	х	Pignut hickory	Carya glabra	25	Fair	Vines going up trunk, some dead branches
T133	Х	American beech	Fagus grandifolia	8	Good	
T134	х	American beech	Fagus grandifolia	33	Good	Minor dead branches, some vines
T135		American beech	Fagus grandifolia	7	Good/Fair	Minor vines, slightly one sided
T136		White oak	Quercus alba	25	Fair	Moderate dead branches, skinny crown
T137		American beech	Fagus grandifolia	7	Good	On edge of stream
T138		American beech	Fagus grandifolia	6	Good	
T139		Tulip poplar	Liriodendron tulipifera	20	Fair	Scant canopy
T140	Х	American beech	Fagus grandifolia	8	Good	
T141	х	Tulip poplar	Liriodendron tulipifera	31	Fair	Moderate dead branches, sparse canop
T142	Х	Slippery elm	Ulmus rubra	7	Fair	Lean, vines
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FOR CONTINUATION OF TREE LIST, SEE FC-09

FOREST STAND TABLE								
ID	Dominant Species & DBH Size Class	Condition	Retention Value	Description	Acres in LOD			
FS1	Mixed Oaks: mostly N. Red & White, 10-18", mid-successional	Good to Fair-Poor along edges	moderate to high (non-edge forest by	~65-90% canopy closure; understory (hickory & beech) & sparse shrub layers; Cover: ~10-35% herb, ~15% downed woody, ~2-20% invasive, low interior vine cover; good forest	0.58			

NOTES: 1. There are high levels of invasive vines along FS1 edges, including porcelain berry (roads and clearing by Glenside Dr.) 2. The highest canopy closure and lowest herb & invasive covers listed above are consistent with interior forest plots.

3. FS1 includes stream buffer for Sligo Creek (WC) and unnamed tributaries (WA & WB).

CITY OF TAKOMA PARK NEW AVE BIKEWAY, SECTION A MD 650 (NEW HAMPSHIRE AVENUE) AUBURN AVE TO HOLTON LN

FC-08

	PRELIMINARY	<b>FOREST</b>	CONSE	RVATION	NOTES
	SCALE	DATE JUNE	E 2020 (	CONTRACT NOT	.B.D.
60% PLANS MAY 2020	DESIGNED BY SJK  DRAWN BY DEA  CHECKED BY GRO  F.A.P. NO. T.B.D.		LOGMILI	MONTGOMERY E MD 650 0.040- SSC 208NE01 & 209N X MAPS JN561 & JN	NE01
	DRAWING NO.	FC <b>–</b> 08	OF 11	SHEET NO. 7	'1 OF 73

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Maryland DNR Qualified Professional Date

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PLOTTED: 6/24/2020 FILE: \\balsrv06\v2016\2016\16217\_NewAveBike\CADD\plans\pFCP-007\_NewAveBike.dgn

Tree No.	Removal	Common Name	Scientific Name	DBH (In.) Condition		Comments
T143	Х	Red maple	Acer rubrum	9	Fa <b>i</b> r/Poor	Small hollow on trunk, dead leader
T144	Х	White mulberry	Morus alba	6	Fair	Serious lean, dead branches
T145	Х	American beech	Fagus grandifolia	7	Good	
T146	х	Tulip poplar	Liriodendron tulipifera	24	Fair	Poison ivy vines into lower canopy, multileader above BH
T147	Х	American beech	Fagus grandifolia	6	Good/Fair	Minor vines
T148	Х	Tulip poplar	Liriodendron tulipifera	13	Fair	Scant canopy
T149	Х	American beech	Fagus grandifolia	7	Good/Fair	Little one sided
T150	Х	Tulip poplar	Liriodendron tulipifera	11	Fair	Skinny
T151	Х	Tulip poplar	Liriodendron tulipifera	19	Fair	Very scant crown
T152	Х	American beech	Fagus grandifolia	8	Good	
T153	Х	Tulip poplar	Liriodendron tulipifera	21	Fair	Very scant crown
T154		American beech	Fagus grandifolia	6	Good	
T155	Х	Tulip poplar	Liriodendron tulipifera	15	Fair	Vines into canopy, lean
T156	х	Tulip poplar	Liriodendron tulipifera	30	Fair	Slight lean, multileader above BH, vines, moderate dead branches, scant canopy
T157	Х	Tulip poplar	Liriodendron tulipifera	18	Good/Fair	
T158		Sycamore	Plantanus occidentalis	22	Good/Fair	Vines going up but controlled
T159		American beech	Fagus grandifolia	24	Good	By stream, leaning, on edge of undercut stream bank
T160		American beech	Fagus grandifolia	24	Good/Fair	Cavity in base of trunk, but still looks stable
T161		American beech	Fagus grandifolia	25	Good	Cavity in base of trunk, but still looks stable
T162		White oak	Quercus alba	44	Good/Fair	Treated vines, moderate dead branches
T163		American beech	Fagus grandifolia	6	Good	
T164		American beech	Fagus grandifolia	21	Good	Small cavity but stable
T165	х	American beech	Fagus grandifolia	28	Good/Fair	Slight lean, edge of eroding stream
T166	Х	American beech	Fagus grandifolia	21	Good/Fair	Growing/ fruiting fungus and insects
T167	Х	American beech	Fagus grandifolia	9	Good	On edge of stream
T168	х	American beech	Fagus grandifolia	24	Good	
T169		White oak	Quercus alba	19	Fair	Vine going up trunk, little one sided
T170		Tulip poplar	Liriodendron tulipifera	39	Good	
T171		American beech	Fagus grandifolia	7	Good	
T172		White oak	Quercus alba	19	Fair	Poison ivy going up trunk
T173		American beech	Fagus grandifolia	20	Good	Splits below BH ~5"
T174	Х	American beech	Fagus grandifolia	7	Good	
T175	Х	American beech	Fagus grandifolia	8	Good	
T176	х	White oak	Quercus alba	28	Fair	Heavy poison ivy vines to lower canopy
T177	Х	Red maple	Acer rubrum	6	Fair	Vines in canopy, moderate dead branches
T178		Tu <b>li</b> p poplar	Liriodendron tulipifera	11	Good	
T179		Green ash	Fraxinus pennsylvanica	8	Good/Fair	Minor dead branches
T180		Green ash	Fraxinus pennsylvanica	10	Good/Fair	Minor dead branches, little one sided
T181		Black oak	Quercus velutina	27	Fair	Split leader, IB
T182	Х	Loblolly pine	Pinus taeda	14	Fair/Poor	Heavy poison ivy vine going up into lower crown, very scant canopy
T183		Green ash	Fraxinus pennsylvanica	7	Fair/Poor	Heavy poison ivy vines into lower canopy, scant crown
T184		Pignut hickory	Carya glabra	6	Fair	Poison ivy vines in canopy
T185		White oak	Quercus alba	24	Fair	Vines treated, minor to moderate dead branches

Tree No.	Removal	Common Name	Scientific Name	DBH (In.)	Condition	Comments
T186		American beech	Fagus grandifolia	17	Good/Fair	
T187		Tulip poplar	Liriodendron tulipifera	17	Good/Fair	Minor dead branches
T188		White oak	Quercus alba	31	Fair	Poison ivy vines up to lower canopy slight lean
T189		Pignut hickory	Carya glabra	6	Fair/Poor	Dead leader, lean, vines
T190		Tulip poplar	Liriodendron tulipifera	20	Fair	Scant canopy, minor dead branches
T191		American beech	Fagus grandifolia	6	Good	
T192		Tulip poplar	Liriodendron tulipifera	22	Fair	Vines but treated, slight lean
T193		American beech	Fagus grandifolia	6	Good	Minor vines
T194		Tu <b>li</b> p poplar	Liriodendron tulipifera	19	Fair	PI to lower canopy
T195		Pignut hickory	Carya glabra	6	Good/Fair	PI vines
T196		Tu <b>li</b> p poplar	Liriodendron tulipifera	22	Good/Fair	Minor dead branches
T197		American beech	Fagus grandifolia	6	Good	
T198		Green ash	Fraxinus pennsylvanica	6	Fair	Minor dead branches, one sided
T199		Tulip poplar	Liriodendron tulipifera	18	Fair	One sided
T200	x	Tulip poplar	Liriodendron tulipifera	24	Fair	Vines
T201		Tulip poplar	Liriodendron tulipifera	16	Fair	Minor dead branches, skinny canopy
T202		American beech	Fagus grandifolia	26	Good	
T203		Tulip poplar	Liriodendron tulipifera	24	Fair	PI vines
T204		Tulip poplar	Liriodendron tulipifera	9	Fair	PI vines, sparse canopy
T205	Х	Pignut hickory	Carya glabra	8	Fair	Vines going up lower canopy
T206	х	American beech	Fagus grandifolia	6	Good	
T207	×	Sassafras	Sassafras albidum	12	Fair	Slight lean, lots of competition
T208		Pignut hickory	Carya glabra	6	Good/Fair	Minor dead branches
T209		White oak	Quercus alba	28	Fair	Minor dead branches, one sided
T210		White oak	Quercus alba	17	Fair	Skinny canopy
T211		American beech	Fagus grandifolia	7	Good/Fair	Minor dead branches
T212		Pignut hickory	Carya glabra	6	Good	
T213		Pignut hickory	Carya glabra	11	Fair	Moderate dead branches, one sided
T214		Pignut hickory	Carya glabra	10	Fair	Moderate dead branches
T215		Pignut hickory	Carya glabra	12	Good	
T216		Green ash	Fraxinus pennsylvanica	12	Fair	Vines into canopy
T217		Red maple	Acer rubrum	6	Fair	Moderate dead branches
T218		Red maple	Acer rubrum	13	Good	Some vines
T219		Green ash	Fraxinus pennsylvanica	9	Fair/Poor	Included bark, lots of PI, 7" split below E
T220		Red oak	Quercus rubra	12	Fair	Vines treated, moderate to dead branch
T221		Black oak	Quercus velutina	10	Fair	Sparse canopy, one sided
T222		Pignut hickory	Carya glabra	9	Fair	Moderate dead branches
		Chestnut oak	Quercus montana	9	Fair	PI vines going up into lower canopy, spa canopy, flag near branch
T223	1	Black gum	Nyssa sylvatica	7	Fair	PI vines going up into lower canopy
T223 T224		Diaok gain				1
		Pignut hickory	Carya glabra	8	Fair	Treated vines, slightly one sided
T224			Carya glabra Ulmus rubra	8 7	Fair Fair	Treated vines, slightly one sided  Minor vines
T224 T225		Pignut hickory				

Tree No.	Removal	Common Name	Scientific Name	DBH (In.)	Condition	Comments
T229		Black gum	Nyssa sylvatica	11	Good/Fair	Sparse canopy, vines treated
T230		Black cherry	Prunus serotina	17	Fair/Poor	Very sparse canopy, very small crown
T231		Japanese princess tree	Paulownia tomentosa	14	Fair	PI vines, lean, split damage with branch
T232		Tulip poplar	Liriodendron tulipifera	24	Good	
T233		Black locust	Robinia pseudoacacia	17	Fair	On edge of forest by road, vines
T234		Tulip poplar	Liriodendron tulipifera	9	Good	
T235		Sycamore	Plantanus occidentalis	13	Fair	Slight lean, vines
T236		Black cherry	Prunus serotina	15	Poor	Major lean, dead leader, moderate dead branches
T237		Red oak	Quercus rubra	6	Fair	Moderate dead branches
T238		Japanese princess tree	Paulownia tomentosa	8	Fair/Poor	Sparse canopy, moderate dead branches, small hollow wound in trunk
T239		Black cherry	Prunus serotina	7	Fair	Minor dead branches, one sided, slight lean
T240		White mulberry	Morus alba	13	Poor	Fungal growth up trunk, lean
T241		Japanese princess tree	Paulownia tomentosa	12	Fair	Lean, vines
T242		White mulberry	Morus alba	7	Poor	Serious lean, major vines into canopy, moderate dead branches
T243		Green ash	Fraxinus pennsylvanica	18	Poor	Split above BH, moderate dead branches, major vines
T244		Eastern white pine	Pinus strobus	18	Fair	Heavy vines, minor dead branches, by food truck and patty wholesale
T245	Х	Red maple	Acer rubrum	10	Fair/Poor	Dead leader, one third dead
T246	Х	Red maple	Acer rubrum	4	Good	
T247	Х	Red maple	Acer rubrum	10	Good	
T248		Red maple	Acer rubrum	13	Good	IB, minor bark damage
T249		Sycamore	Plantanus occidentalis	6	Good/Fair	Leaf spot, flood debris around base
T250		Green ash	Fraxinus pennsylvanica	10	Poor	PI vines up to canopy, major dead branches
T251		Tulip poplar	Liriodendron tulipifera	22	Fair	Vines growing up into lower canopy
T252		Tu <b>l</b> ip poplar	Liriodendron tulipifera	6	Fair	One sided
T253		Green ash	Fraxinus pennsylvanica	6	Fair/Poor	Lean, moderate dead branches, sparse
T254		White mulberry	Morus alba	13	Poor	Large dead branches, vines
T255		White mulberry	Morus alba	7	Poor	Mostly dead, vines, lean
T256		Red maple	Acer rubrum	13	Fair/Poor	Dead leader, fruiting bodies up trunk, vines
T258		Pignut hickory	Carya glabra	12	Good	PI vines into lower canopy
T259		Red oak	Quercus rubra	32	Good/Fair	PI vines, slightly one sided
T260		Red oak	Quercus rubra	18	Fair	Vines treated
T261		White oak	Quercus alba	23	Fair	Vines mostly treated, skinny canopy
T262		American holly	llex opaca	6	Good/Fair	
T263		Pignut hickory	Carya glabra	12	Fair	Vines going up into lower canopy
T264		White oak	Quercus alba	34	Poor	Dead leader and shelf fungus, vines into canopy, one third alive
T265		Red oak	Quercus rubra	24	Fair	Moderate dead branches, lean, vines,
T266		White mulberry	Morus alba	14	Fair/Poor	Lean, a lot of vines, decay in old branch
T267		Chinese elm	Ulmus parvifolia	10	Good	behind sidewalk
T268		Willow oak	Quercus phellos	28	Good	minor dead branches
T269		White pine	Pinus strobus	19	Fair	almost 45 degree lean on oak, minor dead branches, just outside fence
T270		American holly	llex opaca	5	Good	Multistem below BH, 2-4" & 3",
T271		Chinese elm	Ulmus parvifolia	9	Good	
T272		White pine	Pinus strobus	23	Fair	Modhigh dead branches
T273		Chinese elm	Ulmus parvifolia	9	Good	
T274		Redbud	Cercis canadensis	5	Fair	dead branches, ~3' narrow mostly healed
T275		Redbud	Cercis canadensis	5	Good/Fair	split in lower trunk minor dead branches
T272 T273 T274		White pine Chinese elm Redbud	Pinus strobus  Ulmus parvifolia  Cercis canadensis	23 9 5	Fair Good Fair	dead branches, ~3' narrow mostly hea

Significant & Specimen Trees (≥ 24" DBH)

FC-09

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

	PRELIMINA	ARY	FORI	EST CO	NSE	RVATION	I NOTES
	SCALE		DATE	JUNE 2020	C	ONTRACT NO	T.B.D.
60% PLANS MAY 2020	DESIGNED BY DRAWN BY CHECKED BY F.A.P. NO	DEA GRO			OGMILE WS\$	MONTGOMER  MD 650 0.04  SC 208NE01 & 20  ( MAPS JN561 &	0- 0.830 09NE01
	DRAWING NO.		FC - 0	9 OF	11	SHEET NO.	72 OF 73

Maryland DNR Qualified Professional Date Name: Sally Kishter Address: 700 East Pratt St., Suite 500, Balt. MD 21202 Phone: 410–462–9273 skishter@rkk.com

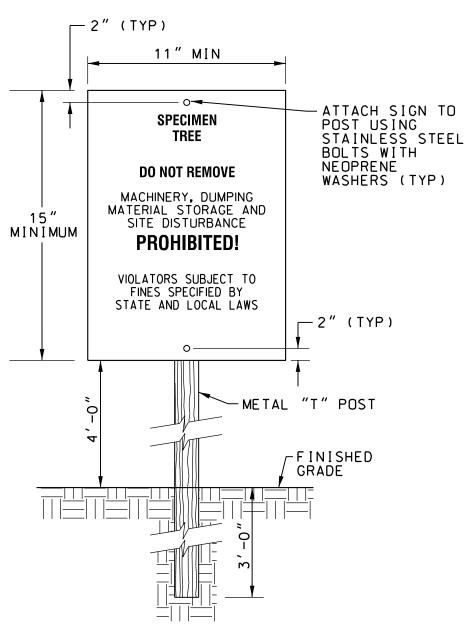


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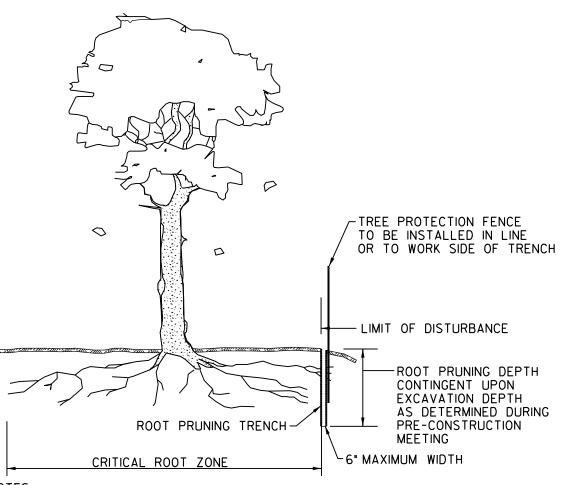
BY: dadkins -



# TREE PROTECTION SIGN DETAIL

1. Bottom of signs to be higher than top of tree protection fence.
2. Attachment of signs to tree is prohibited. 3. Attach signs to metal "T" posts or directly to tree protection fence.

Source: Adapted from Forest Conservation Manual, 1991



I. RETENTION AREAS TO BE ESTABLISHED AS PART OF THE FOREST CONSERVATION PLAN REVIEW PROCESS.

2. BOUNDARIES OF RETENTION AREAS TO BE STAKED, FLAGGED AND/OR FENCED PRIOR TO TRENCHING.

3. EXACT LOCATION OF TRENCH SHOULD BE IDENTIFIED.

4. TRENCH SHOULD BE IMMEDIATELY BACKFILLED WITH SOIL REMOVED OR ORGANIC SOIL.

5. ROOTS SHOULD BE CLEANLY CUT USING VIBRATORY KNIFE OR OTHER ACCEPTABLE EQUIPMENT.

6. IN SOME INSTANCES, IT MAY BE BENEFICIAL TO PERFORM ROOT PRUNING AT THE EDGE OF EXCAVATION RATHER THAN AT THE LOD, PROVIDED THE ROOTS BETWEEN THE EXCAVATON AND THE LOD ARE PROTECTED DURING CONSTRUCTION.

NOT TO SCALE

Source: Adapted from Steve Clark & Associates/ACRT, Inc., and Forest Conservation Manual, 1991

# ROOT PRUNING DETAIL

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Sequence of Events for Properties Required to Comply With Forest Conservation Plans, Exemptions from Submitting Forest Conservation Plans, and Tree Save Plans

The property owner is responsible for ensuring all tree protection measures are performed in accordance with the approved final forest conservation plan or tree save plan, and as modified in the field by a Planning Department Forest Conservation Inspector. The measures must meet or exceed the most recent standards published by the American National Standards Institute (ANSI A300).

Pre-Construction

1.An on-site pre-construction meeting is required after the limits of disturbance have been staked and flagged and before any land disturbance.

2.The property owner must arrange for the meeting and following people must participate at the pre-construction meeting: the property owner or their representative, construction superintendent, International Society of Arboriculture (ISA) certified arborist/Maryland Licensed Tree Expert (representing owner) that will implement the tree protection measures, The Planning Department Forest Conservation Inspector, and Montgomery County Department of Permitting Services (DPS) Sediment Control Inspector. The purpose of this meeting is to verify the limits of disturbance and discuss specific tree protection and tree care measures shown on the approved plan. No land disturbance shall begin before tree protection and stress-reduction measures have been implemented and approved by the Planning Department's Forest Conservation Inspector.

a. Typical tree protection devices include:

i. Chain link fence (four feet high)

ii. Super silt fence with wire strung between the support poles (minimum 4 feet high) with

iii. 14 gauge, 2 inch x 4 inch welded wire fencing supported by steel T-bar posts (minimum 4 feet high) with high visibility flagging.

b. Typical stress reduction measures may include, but are not limited to:

i. Root pruning with a root cutter or vibratory plow designed for that purpose. Trenchers are

not allowed, unless approved by the Forest Conservation Inspector ii. Crown Reduction or pruning

iii. Watering

iv. Fertilizing

**PROTECTION** 

AREA

NO DISTURBANCE PERMITTED

AREA DE

PROTECCION

DE ARBOLES

NO SE PERMITE TRABAJAR N

DEJAR MATERIALES EN EL AREA ATRAS DE ESTE ROTULO

BETWEEN POSTS

NOTES:

v. Vertical mulching vi. Root aeration systems

STANDARD SYMBOL

FLAGGING

TREE PROTECTION FENCE

2. LOCATION AND LIMITS OF FENCING SHALL BE COORDINATED IN FIELD WITH MARYLAND LTE.

I. PRACTICE MAY BE COMBINED WITH SEDIMENT CONTROL FENCING.

3. BOUNDARIES OF PROTECTION AREA SHOULD BE STAKED PRIOR TO

6. FENCING SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.

INSTALLING PROTECTIVE DEVICE.

4. ROOT DAMAGE SHOULD BE AVOIDED. 5. PROTECTIVE SIGNAGE IS REQUIRED.

-10"×12" WEATHERPROOF SIGNS SECURED TO FENCE @30'0.C.(MAX)

— WELDED WIRE FENCE 14/14 GA.GALVANIZED WIRE 2"×4" OPENING

SECURE FENCING TO METAL

-6' MIN. METAL 'T' FENCE POSTS DRIVEN 2' INTO THE GROUND

Measures not specified on the Tree Save Plan may be required as determined by the Forest Conservation Inspector in coordination with the property owner's arborist.

3.A Maryland Licensed Tree expert must perform, or directly supervise, the implementation of all stress reduction measures. Documentation of the process (including photographs) may be required by the Forest Conservation Inspector, and will be determined at the pre-construction meeting.

4. Temporary tree protection devices must be installed per the approved Forest Conservation Plan, Exemption Plan, or Tree Save Plan and prior to any land disturbance. The Forest Conservation Inspector, in coordination with the DPS Sediment Control Inspector, may make field adjustments to increase the survivability of trees and forest shown as saved on the approved plan.

5.Tree protection fencing must be installed and maintained by the property owner for the duration of construction project and must not be altered without prior approval from the Forest Conservation Inspector. All construction activity within protected tree and forest areas is prohibited. This includes the following activities:

a. Parking or driving of equipment, machinery or vehicles of any type.

b. Storage of any construction materials, equipment, stockpiling, fill, debris, etc. c. Dumping of any chemicals (i.e., paint thinner), mortar or concrete remainder, trash,

garbage, or debris of any kind. d. Felling of trees into a protected area.

e. Trenching or grading for utilities, irrigation, drainage, etc.

6. Forest and tree protection signs must be installed as required by the Forest Conservation Inspector. The signs must be waterproof and wording provided in both English and Spanish. During Construction

7.Periodic inspections will be made by the Forest Conservation Inspector. Corrections and repairs to tree protection devices must be completed within the timeframe given by the Inspector.

8. The property owner must immediately notify the Forest Conservation Inspector of any damage to trees, forests, understory, ground cover, and any other undisturbed areas shown on the approved plan. Remedial actions, and the relative timeframes to restore these areas, will be determined by the Forest Conservation Inspector.

Post-Construction

9. After construction is completed, but before tree protection devices have been removed, the property owner must request a final inspection with the Forest Conservation Inspector. At the final inspection, the Forest Conservation Inspector may require additional corrective measures, which may include:

a. Removal, and possible replacement, of dead, dying, or hazardous trees

b. Pruning of dead or declining limbs

 c. Soil aeration d. Fertilization

e Watering

f. Wound repair

g. Clean up of retention areas, including trash removal

10.After the final inspection and completion of all corrective measures the Forest Conservation Inspector will request all temporary tree and forest protection devices be removed from the site. Removal of tree protection devices that also operate for erosion and sediment control must be coordinated with both DPS and the Forest Conservation Inspector and cannot be removed without permission of the Forest Conservation Inspector. No additional grading, sodding, or burial may take place after the tree protection fencing is removed.

11.Long-term protection measures, including permanent signage, must be installed per the approved plan. Installation will occur at the appropriate time during the construction project. Refer to the approved plan drawing for the long-term protection measures to be installed.

#### **FCP NOTES:**

- 1. ALL AREAS OUTSIDE OF THE LOD SHALL BE CONSIDERED FOREST/TREE PRESERVATION AREAS TO BE LEFT
- 2. NINE SIGNIFICANT (≥ 24" DBH) TREES AND THREE SPECIMEN TREE (≥30" DBH OR 75% OF STATE CHAMPIONS) WILL BE REMOVED. OTHER SIGNIFICANT AND SPECIMEN TREES HAVE SOME CRITICAL ROOT ZONE WITHIN THE LOD AND MAY REQUIRE SUPPLEMENTAL TREE PROTECTION MEASURES. ALL WORK ACTIVITIES NEAR THESE TREES SHALL BE SUPERVISED AND DIRECTED BY A MD LICENSED TREE EXPERT (LTE).
- 3. THE PROJECT AREA IS LOCATED WITHIN THE SLIGO CREEK WATERSHED WITH A WATERSHED USE CLASS OF I (DNR
- 4. THE PROJECT IS LOCATED OUTSIDE OF SPECIAL PROTECTION AND PRIMARY MANAGEMENT AREAS.
- 5. THERE IS NO CURRENT MAPPED FEMA 100-YEAR FLOODPLAIN WITHIN THE STUDY AREA (MONTGOMERY COUNTY FEMA GIS DATA, MAP NO. 24031C0480D, EFFECTIVE DATE 9/29/06) NOR M-NCPPC MAPPED FLOODPLAIN ON MC ATLAS. FEMA 1996 FLOODPLAIN IS SHOWN FOR SLIGO CREEK, SINCE THE LACK OF CURRENT FLOODPLAIN APPEARS TO BE A GAP IN THE LATEST FLOODPLAIN STUDY (CURRENT STUDIES SHOW SLIGO FLOODPLAIN FURTHER UP AND DOWNSTREAM OF THE PROJECT AREA).
- 6. TWO PERENNIAL AND ONE INTERMITTENT WATERWAYS AND NO WETLANDS WERE FIELD DELINEATED OCTOBER 2018 WITHIN THE STUDY AREA. NWI AND DNR WETLAND INVENTORY MAPPING IDENTIFIED SLIGO CREEK AND NO WETLANDS
- 7. THE MARYLAND DEPARTMENT OF NATURAL RESOURCES WILDLIFE AND HERITAGE SERVICE (MDNR-WH) DETERMINED THAT THERE ARE NO OFFICIAL STATE OR FEDERAL RECORDS FOR LISTED PLANT OR ANIMAL SPECIES WITHIN THE PROJECT AREA IN THEIR OCTOBER 17, 2019 RESPONSE LETTER. MDNR ENVIRONMENTAL REVIEW PROGRAM (ERP) STATED THAT NO INSTREAM WORK IS PERMITTED FROM MARCH 1ST THROUGH JUNE 15TH OF ANY GIVEN YEAR IN THEIR OCTOBER 21, 2019 RESPONSE. NO RTE SPECIES WERE OBSERVED ON SITE
- 8. MHT DETERMINED THAT THE PROJECT WOULD HAVE NO ADVERSE EFFECT ON HISTORIC PROPERTIES (OCTOBER 23. 2019 RESPONSE), AND THERE ARE NO HISTORIC RESOURCES OR DISTRICTS WITHIN THE STUDY AREA ON MC ATLAS.
- 9. FCP PREPARED BY SALLY KISHTER, QUALIFIED PROFESSIONAL. FIELD DATA WAS COLLECTED ON OCTOBER 1, 2018 AND OCTOBER 2, 2018.
- 10. THERE ARE NO HIGHLY ERODIBLE SOILS IN THE STUDY AREA, AND THEREFORE NO > 15% SLOPES ON ERODIBLE SOILS
- 11. THE TOTAL LIMITS OF DISTURBANCE (60% LOD, LINEAR PROJECT NET TRACT AREA) IS 2.26 ACRES. THE LOD IS PRIMARILY WITHIN THE EXISTING ROAD RIGHT-OF WAYS (ROW), WITH SOME M-NCPPC PARK AND WSSC PROPERTY.
- 12. FIELD SURVEY WAS CONDUCTED FOR THE STUDY AREA, AND GIS CONTOURS ARE SHOWN OUTSIDE THE SURVEY.
- 13. PROPERTY TAX INFORMATION IS SHOWN WITHIN INDIVIDUAL PROPERTY BOUNDARIES ON EACH FCP PLAN SHEET, INCLUDING LOT IF APPLICABLE, OWNER NAME, ADDRESS, TAX ID, AND TRACT SIZE.
- 14. ON THE FINAL PLANS TPF WILL BE ADDED ALONG THE LOD NEXT TO TREE PRESERVATION AREAS AND PLANTING WILL

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CITY OF TAKOMA PARK NEW AVE BIKEWAY, SECTION A MD 650 (NEW HAMPSHIRE AVENUE)

FC-10

	<b>PRELIMINARY</b>	FOREST CONSERVATION NOTES
	SCALE	DATE JUNE 2020 CONTRACT NO. T.B.D.
60% PLANS MAY 2020	DESIGNED BY SJK  DRAWN BY DEA  CHECKED BY GRO  F.A.P. NO. T.B.D.	WSSC 208NE01 & 209NE01
	DRAWING NO.	FC - 10 OF 11 SHEET NO. 73 OF 73

AUBÙRN AVE TO HOLTON LN

F: 410.728.2834 700 East Pratt Street, Suite 500 | Baltimore, MD 21202 Engineers | Construction Managers | Planners | Scientists www.rkk.com

Maryland DNR Qualified Professional Date

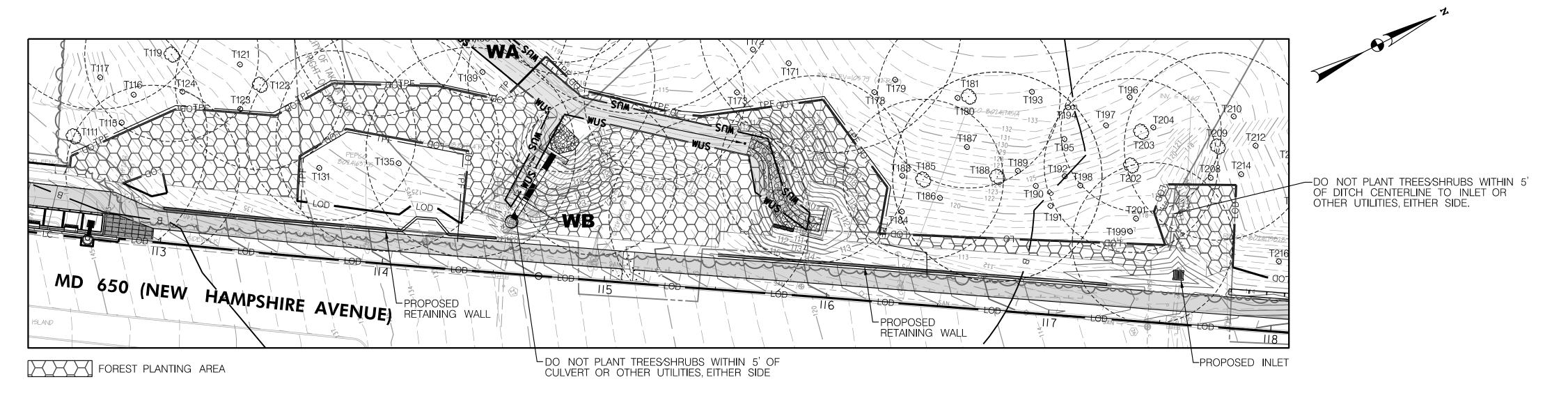
Address: 700 East Pratt St., Suite 500, Balt. MD 21202

Name: Sally Kishter

Phone: 410-462-9273

skishter@rkk.com

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FOREST F	PLANTING S	<b>0.33</b> acres						
Quantity per acre	Frequency (%)	Species Quantity	Vegetation Strata/ Species Name	Common Name	Wetland Indicator Status	Size	Туре	Placement
200			TREES					
trees	25	17	Quercus rubra	Northern red oak	FACU	1" Cal.	7 Gal. Cont.	Naturalized @ 15' OC
	25	17	Quercus alba	White oak	FACU	1" Cal.	7 Gal. Cont.	Naturalized @ 15' OC
	20	13	Liriodendron tulipifera	Tulip poplar	FACU	1" Cal.	7 Gal. Cont.	Naturalized @ 15' OC
	15	10	Acer rubrum	Red maple	FAC	1" Cal.	7 Gal. Cont.	Naturalized @ 15' OC
	15	10	Nyssa sylvatica	Black gum	FAC	1" Cal.	7 Gal. Cont.	Naturalized @ 15' OC
	100	67	=total					
33			SHRUBS					
shrubs	60	7	Virburnum dentatum	Southern arrowwood	FACU	2' ht.	3 Gal. Cont.	Groups of 3 to 5 @ 6' OC
	40	4	Amelanchier arborea	Serviceberry	FAC	2' ht.	3 Gal. Cont.	Groups of 3 to 5 @ 6' OC
	100	11	=total					

MC PARKS REFORESTATION CALCULATION								
SF ACRES								
FC-03 REFORESTATION AREA:	12,672	0.29						
FC-04 REFORESTATION AREA:	1,879	0.04						
TOTAL	14,551	0.33						
# 1" CAL. TREES PER ACRE	TOTAL TREES PLANTED	TOTAL INCHES PLANTED						
200	67	67						

TOTAL SI	0.334 acres						
Seeding Rate	eding Frequency Species		Common Name	Scientific Name	1616.8 SY		
30	35	3.51	Little Bluestem	Schizachyrium scopariu	um, PA Ecotype		
lbs/ac.	30	3.01	3.01 Redtop Panic Grass Panicum i		n rigidulum		
	15	1.50	Indiangrass	Sorghastrum nutans, PA Ecotype			
	5	0.50	Big Bluestem	Andropogon gerardii 'Niagara'			
	5	0.50	Switchgrass	Panicum virgatum 'Shelter'			
	10	1.00	Virginia Wild Rye	Elymus virginicus			
	100	10.02	Total lbs Tree/Shrub Are	ea Seed			

NOTE: TEMPORARY ITEMS SUCH AS PAVEMENT REMOVAL, ACCESS ROAD, FENCES, SCE, PUMPAROUND, SANDBAGS, PST, STEEP SLOPES AND TREES TO BE REMOVED ARE NOT SHOWN ON THE PLANTING PLANS.

Maryland DNR Qualified Professional Date
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LEGEND

5 INCH CONCRETE SIDEWALK

CONCRETE DRIVEWAY

ASPHALT SHARED USE PATH

FULL DEPTH ASPHALT PAVING

SIDEWALK AND PAVEMENT REMOVAL

SLOPES ≥ 25%

SPECIALTY TYPE 2 – PAVERS

TEMPORARY ACCESS ROAD

TREE LINE /CANOPY COVER

TREES < 24" DBH

SIGNIFICANT /SPECIMEN TREE

(≥ 24" DBH) WITH

CRITICAL ROOT ZONE

TREE TO BE REMOVED

SF SILT FENCE
SSF SUPER SILT FENCE
DF DIVERSION FENCE
TPF TREE PROTECTION FENCE
100-YEAR FLOODPLAIN
B STREAM BUFFER
CSE SOILS BOUNDARY
FS1 FOREST STAND
WA WATERS FEATURE

— LOD — 60% LIMIT OF DISTURBANCE

P PUMPAROUND PRACTICE

SANDBAG DIVERSION

PORTABLE SEDIMENT TANK

PROPOSED CONTOUR

PROPOSED CONTOUR
PROPOSED CULVERT
PROPOSED RIPRAP
PERENNIAL / INTERMITTENT STREAM

30' 0 30' 60' SCALE: 1"=30'

FC-11

# CITY OF TAKOMA PARK NEW AVE BIKEWAY, SECTION A MD 650 (NEW HAMPSHIRE AVENUE) AUBURN AVE TO HOLTON LN

SCALE 1"=30'   DATE   JUNE 2020   CONTRACT NO. T.B.D.	PRELIMINARY	<b>FOREST</b>	CONSER	VATION	PLANTING
60% PLANS       DEA       LOGMILE       MD 650 0.040- 0.830         MAY 2020       CHECKED BY GRO       WSSC 208NE01 & 209NE01	SCALE 1"=30'	_ DATEJL	JNE 2020 (	CONTRACT NO.	
	DRAWN BY DEA	A O	LOGMILI	MD 650 0.0	040- 0.830 209NE01
DRAWING NO. FC - 11 OF 11 SHEET NO. 73A OF 73	DRAWING NO.	FC <b>–</b> 11	OF 11	SHEET NO.	73A OF 73

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