

# MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION DIVISION OF TRANSPORTATION ENGINEERING

## STONEYBROOK DR. @ CAPITOL VIEW AVE. SIDEWALK

### STA. 100+51 TO STA. 109+80 C. I. P. PROJECT NO. 506747

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\* NOT IN THIS SUBMITTAL

**LIMIT OF WORK**  
C.I.P. PR. # 506747  
CAPITOL VIEW AVENUE  
STA. 109+90

**LIMIT OF WORK**  
C.I.P. PR. # 506747  
STONEYBROOK DRIVE  
STA. 100+51



SCALE : 1" = 1000' VICINITY MAP PROJECT LENGTH: 0.18 MILES

DESIGN DESIGNATION		
ROADWAY	MD 192 (CAPITOL VIEW AVENUE)	
CONTROLS / YEARS	2014	20XX
AVERAGE DAILY TRAFFIC (A.D.T.)	X,XXX	
DESIGN HOURLY VOLUME (D.H.V.)	N/A	N/A
DIRECTIONAL DISTRIBUTION	N/A	N/A
% TRUCKS - A.D.T.	N/A	N/A
% TRUCK - D.H.V.	N/A	N/A
DESIGN SPEED M.P.H.	30 M.P.H.	
ROADWAY CLASSIFICATION	MINOR URBAN ARTERIAL	
POSTED SPEED	25 M.P.H.	

THE FOLLOWING STANDARDS ARE REQUIRED FOR THIS PROJECT:

- MD-104.02-01 THRU MD-104.02-10 - TRAFFIC CONTROL
- MD-354.01 - STANDARD TYPE C ENDWALL
- MD-374.61 - STANDARD 10' COS INLET
- MD-374.68 - PRECAST 5' COG OPENING
- MD-605.13 - TYPE L TRAFFIC BARRIER END TREATMENT
- MD-605.25 - TRAFFIC BARRIER W BEAM W/WOOD OFFSET BLOCK (8' POST)
- MD-605.26 - TRAFFIC BARRIER W BEAM POST PLACEMENT FOR SPANNING OPENINGS
- MD-605.31 - TRAFFIC BARRIER W BEAM PLACEMENT DETAILS
- MD-620.02 - COMBINATION CONCRETE CURB & GUTTER
- MD-620.03 - DEPRESSED CURB & GUTTER
- MD-655.12 - SIDEWALK RAMPS PARALLEL
- MD-655.40 - DETECTABLE WARNING SURFACES

FOR ALL STANDARDS REFERRED TO ON THE PLANS THE CONTRACTOR MUST GO TO THE BOOK OF STANDARDS WHICH WILL HAVE THE MOST CURRENT VERSION. THE BOOK OF STANDARDS CAN BE ACCESSED AT:  
[HTTP://APPS.ROADS.MARYLANDGOV/BUSINESSWITHSHALBIZSTDSSPECS/DESMANUALSTD/PUB/PUBLICATIONSONLINE/OHD/BOOKSTD/INDEX.ASP](http://apps.roads.maryland.gov/businesswithshalbizstdsspecs/desmanualstdpub/publicationsonline/ohd/bookstd/index.asp)

ALL ITEMS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT VERSION OF THE REFERENCED STANDARD AT THE TIME OF CONSTRUCTION.

#### 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.

DATE \_\_\_\_\_ BRUCE E. JOHNSTON, P.E.  
CHIEF, DIVISION OF TRANSPORTATION ENGINEERING

#### 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 OF AND TRANSPORTATION "DRAINAGE DESIGN" DATED NOVEMBER, 2013 (REV. JUNE 10,2014) REGULATIONS 5-90., 7-02AM AND 36-90, AND MONTGOMERY COUNTY DEPARTMENT

DATE \_\_\_\_\_ GLENN MARSCHKE, P.E.  
SENIOR ASSOCIATE, WALLACE MONTGOMERY

#### CERTIFICATION OF QUANTITIES

I HEREBY CERTIFY THAT THE ESTIMATED TOTAL AMOUNT OF EXCAVATION AND FILL AS SHOWN ON THESE PLANS HAS BEEN COMPUTED TO BE 200 CUBIC YARDS OF EXCAVATION AND 1,200 CUBIC YARDS OF FILL AND THAT THE TOTAL AREA TO BE DISTURBED AS SHOWN ON THESE PLANS HAS BEEN DETERMINED TO BE 22,450 SQUARE FEET.

DATE \_\_\_\_\_ GLENN MARSCHKE, P.E.  
SENIOR ASSOCIATE, WALLACE MONTGOMERY

#### MONTGOMERY COUNTY DOT MAINTENANCE CERTIFICATION

I HEREBY CERTIFY THAT THE DEPARTMENT OF TRANSPORTATION WILL ASSUME MAINTENANCE RESPONSIBILITIES FOR ALL STORMWATER MANAGEMENT FACILITIES AS LISTED AND SHOWN, HEREON, IN ACCORDANCE WITH THE MEMORANDUM OF UNDERSTANDING BETWEEN THIS DEPARTMENT AND THE DEPARTMENT OF ENVIRONMENTAL PROTECTION DATED SEPTEMBER 1, 1986. IF, FOR ANY REASON, FUTURE IMPROVEMENTS TO THE ROADWAY ARE PLANNED THAT WOULD IMPACT ANY OF THE STORMWATER MANAGEMENT FACILITIES INCLUDED HEREIN, THIS DEPARTMENT WILL NOTIFY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION DURING THE PLANNING OR EARLY DESIGN STAGE OF SUCH IMPROVEMENTS.

DATE \_\_\_\_\_ BRUCE E. JOHNSTON, P.E.  
CHIEF, DIVISION OF TRANSPORTATION ENGINEERING

**WALLACE MONTGOMERY**  
ENGINEERS • PLANNERS • SURVEYORS • CONSTRUCTION MANAGERS  
10150 YORK ROAD - SUITE 200  
HUNT VALLEY, MARYLAND 21030  
(410) 494-9093 / (410) 667-0925 FAX

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 26238, EXPIRATION DATE: 08/17/2015



DATE \_\_\_\_\_ ROBERT J. HUDSON, P.E.

DEPARTMENT OF TRANSPORTATION  
100 EDISON PARK DR., 4TH FLOOR  
GAITHERSBURG, MD 20878  
240-777-7224

RECOMMENDED FOR APPROVAL

\_\_\_\_\_  
CHIEF, DESIGN SECTION DATE \_\_\_\_\_

APPROVED

\_\_\_\_\_  
CHIEF, DIVISION OF TRANSPORTATION ENGINEERING DATE \_\_\_\_\_

MONTGOMERY CO. DEPARTMENT OF PERMITTING SERVICES APPROVED FOR:

Stormwater Management:	Sediment Control Technical Requirements:	Administrative Requirements:
Reviewed _____ Date _____	Reviewed _____ Date _____	Reviewed _____ Date _____
Approved _____ Date _____	Approved _____ Date _____	SEDIMENT CONTROL PERMIT NO. _____

NOTE: MCDPS APPROVAL DOES NOT NEGATE THE NEED OF A MCDPS ACCESS PERMIT

SMF FILE NO. \_\_\_\_\_

TI-01

**GENERAL NOTES**

- THE SPECIFICATIONS FOR THIS CONTRACT WILL BE THOSE OF THE MARYLAND STATE HIGHWAY ADMINISTRATION DATED JULY 2008, ALL ERRATA AND ADDENDA THERETO. THE MARYLAND STATE HIGHWAY ADMINISTRATION BOOK OF STANDARDS FOR HIGHWAY AND INCIDENTAL STRUCTURES, WASHINGTON SUBURBAN SANITARY COMMISSION (W.S.S.C.) STANDARDS, MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION STANDARDS, AND SOIL CONSERVATION SERVICE POND CONSTRUCTION SPECIFICATIONS FOR MARYLAND.
- FOR CONSTRUCTION, ALL HORIZONTAL CONTROL SHALL BE STATE HIGHWAY ADMINISTRATION NAD 83/91 AND VERTICAL CONTROL NAVD 88.
- INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS, BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATIONS OF THE LINES BY DIGGING TEST PITS BY HAND AT ALL UTILITY CROSSINGS WELL IN ADVANCE OF TRENCHING. IF CLEARANCES ARE LESS THAN SHOWN ON THIS PLAN OR SIX (6) INCHES, WHICH-EVER IS LESS, THE CONTRACTOR SHALL CONTACT THE MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION'S PROJECT INSPECTOR AND THE UTILITY OWNER BEFORE PROCEEDING WITH CONSTRUCTION.
- CALL "MISS UTILITY" AT 1-800-257-7777, 48 HOURS PRIOR TO THE START OF WORK. THE EXCAVATOR MUST NOTIFY ALL PUBLIC UTILITY COMPANIES WITH UNDERGROUND FACILITIES IN THE AREA OF PROPOSED EXCAVATION AND HAVE THOSE FACILITIES LOCATED BY THE UTILITY COMPANIES PRIOR TO COMMENCING EXCAVATION. THE EXCAVATOR IS RESPONSIBLE FOR COMPLIANCE WITH THE REQUIREMENTS OF CHAPTER 36A OF THE MONTGOMERY COUNTY CODE. REPAIRS TO UTILITIES OR PROPERTY DAMAGED AS A RESULT OF THE CONTRACTOR'S NEGLIGENCE OR METHOD OF OPERATION, MUST BE MADE AT THE CONTRACTOR'S EXPENSE WITHOUT ADDITIONAL COST TO MONTGOMERY COUNTY BEFORE PROCEEDING WITH CONSTRUCTION.
- GRADING SHALL BE DONE IN SUCH A MANNER AS TO PROVIDE POSITIVE DRAINAGE IN BOTH TEMPORARY AND PERMANENT CONDITIONS.
- DISTURBED AREAS ADJACENT TO ESTABLISHED LAWNS SHALL BE SODDED. OTHER DISTURBED AREAS SHALL BE SEEDED AND MULCHED.
- CLEARING TO BE LIMITED TO THE "LIMIT OF DISTURBANCE" AS SHOWN ON THE PLANS.
- CONTACT THE WASHINGTON SUBURBAN SANITARY COMMISSION SYSTEM MAINTENANCE ENGINEER BEFORE EXCAVATING BENEATH OR IN THE VICINITY OF EXISTING WATER OR SEWER LINES. BACKFILL TO BE DONE UNDER THE SUPERVISION OF W.S.S.C., CALL (301) 699-4420
- ALL STORM DRAINS SHALL BE INSTALLED WITH CLASS "C" BEDDING UNLESS OTHERWISE NOTED.
- ALL UTILITY POLES NOTED FOR RELOCATION SHALL BE PERFORMED BY OTHERS.
- THE CONTRACTOR SHALL OBTAIN A ROADSIDE TREE PERMIT FOR ANY MAINTENANCE, TREATMENT, PLANTING, REMOVAL OR ROOT CUTTING ON TREES WITHIN THE PUBLIC RIGHT-OF-WAY BEFORE STARTING A JOB. PERMIT REQUIREMENTS MAY BE OBTAINED FROM THE DEPARTMENT OF NATURAL RESOURCES - MARYLAND FOREST, PARK AND WILDLIFE SERVICE WHOSE TELEPHONE NUMBER IS (301) 854-6060. THE PERMIT PROCESS TAKES SEVERAL DAYS. TAKE THIS INTO CONSIDERATION BEFORE STARTING A JOB.
- THE LOCATION OF RIGHT-OF-WAY AND EASEMENT LINES SHOWN ON THE PLANS ARE FOR INFORMATION AND GUIDANCE ONLY. NO GUARANTEE IS MADE AS TO THE ACCURACY OF SAID LOCATIONS. PLEASE REFER TO THE APPROPRIATE RIGHT-OF-WAY PLAT FILES NO. 776 TO 781.
- CONCRETE DESIGN: SERVICE LOAD DESIGN METHOD.
- REINFORCING STEEL DESIGN: (f<sub>s</sub>=24,000 PSI)
- ALL CONCRETE SHALL BE MIX NO. 2 f'c=3000 psi UNLESS OTHERWISE NOTED.
- REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60. ALL SPLICES, NOT SHOWN, SHALL BE LAPED AS PER ACI 318 REQUIREMENTS. MINIMUM COVER FOR ANY BAR SHALL BE 2" UNLESS OTHERWISE NOTED.
- WHEN THE DROP OF THE MAIN LINE THROUGH A STRUCTURE IS GREATER THAN THAT WHICH CAN BE ACCOMMODATED BY A SHAPED CHANNEL WITH THE INVERT ON A 1.5 FOOT HORIZONTAL TO 1 FOOT VERTICAL SLOPE, THE BOTTOM OF THE STRUCTURE SHALL BE LINED WITH GRANITE BLOCKS AT LEAST 4 INCHES THICK. NO SHAPED CHANNEL WILL BE REQUIRED FOR THIS TYPE OF CONSTRUCTION, BUT THE BOTTOM OF THE STRUCTURE SHALL SLOPE AT LEAST 1/2 INCH PER FOOT TOWARD THE INVERT OF THE OUTLET PIPE.
- FOR ADDITIONAL NOTES ON DRAINAGE STRUCTURES AND RETAINING WALLS SEE NOTES ELSEWHERE IN PLANS.
- WHERE CURB AND GUTTER ENDS ARE EXPOSED, PROVIDE A NOSE DOWN SECTION AT 3:1 SLOPE.
- DISTURBED AREAS TO BE PERMANENTLY GRASS SHALL RECEIVE 2" OF TOPSOIL.
- STORM DRAIN AND UTILITY INSTALLATION WITHIN SHA RIGHT-OF-WAY AND IN EXISTING PAVEMENT SHALL BE IN ACCORDANCE WITH MD 578.01. ALL COSTS ASSOCIATED WITH MEETING THE REQUIREMENTS OF MD 578.01 SHALL BE INCIDENTAL TO THE APPLICABLE UTILITIES AND STORM DRAIN ITEMS.
- SUBSURFACE INVESTIGATION RESULTS (TEST HOLES, SOIL BORINGS, ETC.) WILL BE MADE AVAILABLE TO THE CONTRACTOR.
- PROPOSED INLETS AND ASSOCIATED PIPE EXTENSIONS SHALL BE CONNECTED TO THE NEAREST SOUND JOINT OF THE EXISTING PIPE AND IN COMPLIANCE WITH THE CONCRETE COLLAR CONNECTION DETAIL SHOWN ON THE STORM DRAIN SCHEDULE SHEET. PIPE CONNECTIONS WHETHER NEW PIPES TO EXISTING PIPES, NEW INLETS TO EXISTING PIPES, OR NEW PIPES TO EXISTING INLETS WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE CONSIDERED INCIDENTAL TO PERTINENT STORM DRAIN ITEMS.
- NOTIFY MR. TONY GOODMAN (703) 750-4708 OF WASHINGTON GAS, FOR STAND BY, 48 HOURS PRIOR TO ANY EXCAVATION IN THE VICINITY OF NATURAL GAS TRANSMISSION LINES.
- ANY RELOCATION OF EXISTING NATURAL GAS TRANSMISSION LINES MAY ONLY BE ABLE TO BE PERFORMED DURING THE NON-HEATING SEASON, MAY THROUGH SEPTEMBER.

**EXPLANATORY NOTES AND REFERENCES**

**SIGHT DISTANCES:** STOPPING SITE DISTANCES FOR VERTICAL CREST CURVES ARE BASED ON A HEIGHT OF EYE OF 3.5' AND A HEIGHT OF OBJECT OF 2'-0".

**PIPE CULVERTS:** ALL PIPE LENGTHS AND LOCATIONS SHALL BE VERIFIED IN THE FIELD AND CHECKED BY THE ENGINEER BEFORE ORDERING.

**INVERT ELEVATIONS:** ALL INVERT ELEVATIONS HAVE BEEN CALCULATED WITH THE MOST RELIABLE DATA AVAILABLE. FIELD CHANGES WILL BE AT THE DIRECTION OF THE ENGINEER.

**CONVENTIONAL SIGNS**

PROPOSED MEDIAN BARRIER .....	
ELECTRICAL HAND BOX - SIGNALS .....	
EXISTING GROUND LINE .....	
PROPOSED TRAFFIC BARRIER .....	
EXISTING TRAFFIC BARRIER .....	
FENCE LINE .....	
EXISTING RIGHT OF WAY LINE .....	
PROPOSED RIGHT OF WAY LINE .....	
EASEMENT .....	
PROPERTY LINE .....	
EXISTING ROADWAY .....	
RAILROAD .....	
BASE OR SURVEY LINE .....	
FIRE HYDRANT .....	
PROPOSED CULVERT .....	
EXISTING CULVERT .....	
EXISTING DROP INLET .....	
UTILITY POLE .....	
EXISTING CURB & GUTTER .....	
WETLAND .....	
HEDGE .....	
WATER LINE .....	
SANITARY SEWER LINE .....	
GAS LINE .....	
SOIL BORING TARGET .....	
TEST PIT LOCATION .....	
EXISTING SANITARY MANHOLE .....	
EXISTING STORM DRAIN MANHOLE .....	
WATERS OF U.S. (AND ID NUMBERS) .....	
STORMDRAIN STRUCTURE IDENTIFICATION .....	
EXISTING STORMDRAIN STRUCTURE IDENTIFICATION .....	

**MAINTENANCE OF TRAFFIC NOTES**

- ALL VEHICULAR AND PEDESTRIAN TEMPORARY TRAFFIC CONTROL ACTIVITIES SHALL ADHERE TO THE MARYLAND STATE HIGHWAY ADMINISTRATION'S (MSHA) BOOK OF STANDARDS FOR HIGHWAY, INCIDENTAL STRUCTURES AND TRAFFIC CONTROL APPLICATIONS.
- CONSTRUCTION ACTIVITIES IMPACTING VEHICULAR TRAVEL ALONG MD 117 (CLOPPER ROAD) SHALL BE PERFORMED USING DAY-TIME STANDARD SHOULDER (AUXILIARY LANE) AND LANE CLOSURE FLAGGING OPERATIONS.
- EXISTING DRIVEWAY ACCESS SHALL BE MAINTAINED AT ALL TIMES. THE CONTRACTOR SHALL COORDINATE WITH PROPERTY OWNERS TO DETERMINE POSSIBLE TEMPORARY PROVISIONS FOR ACCESS DURING CONSTRUCTION.

**ABBREVIATIONS**

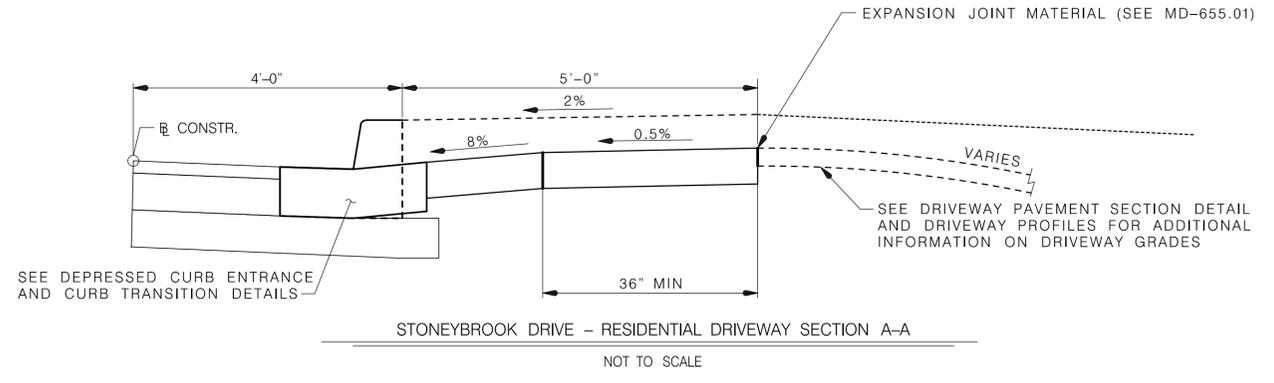
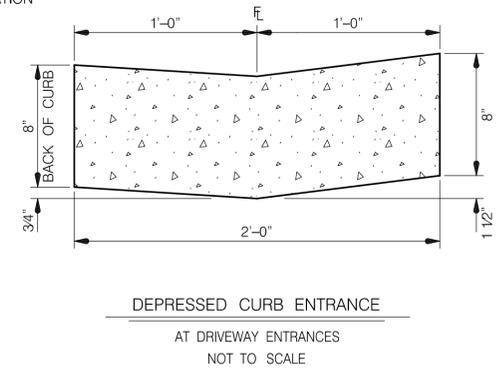
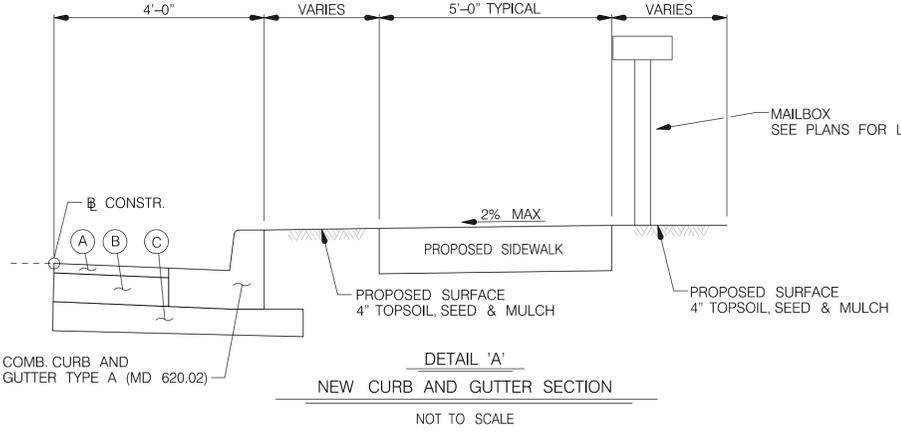
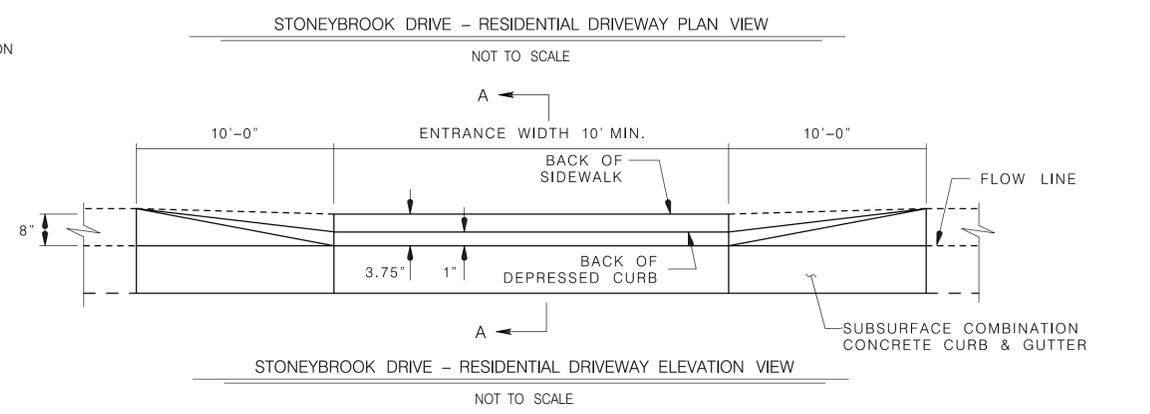
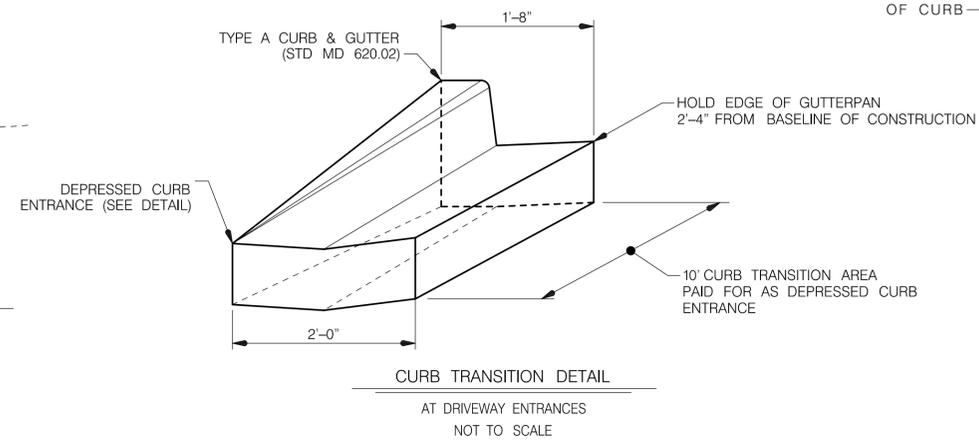
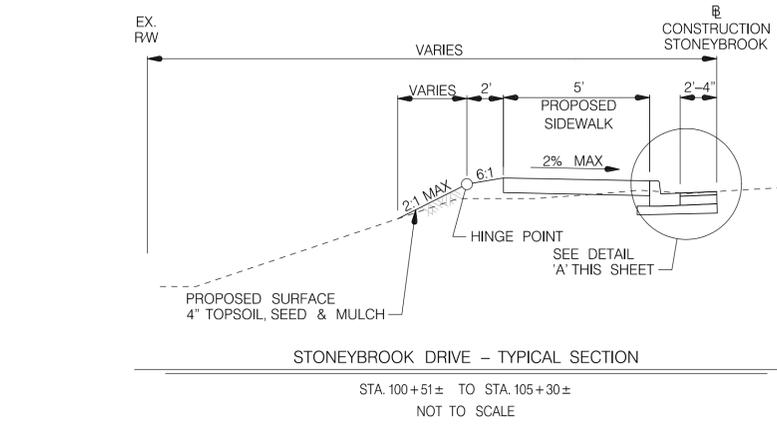
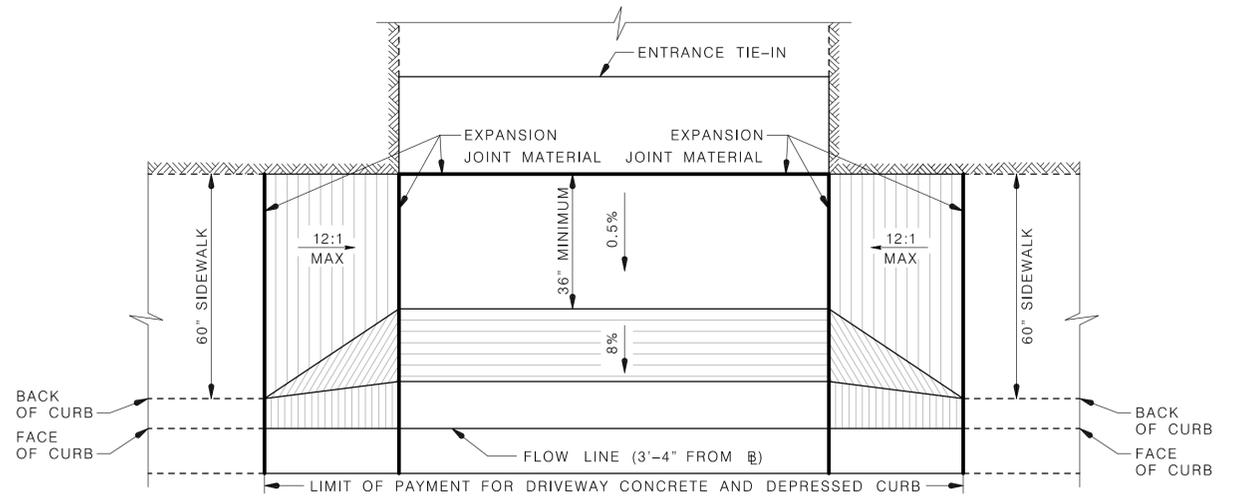
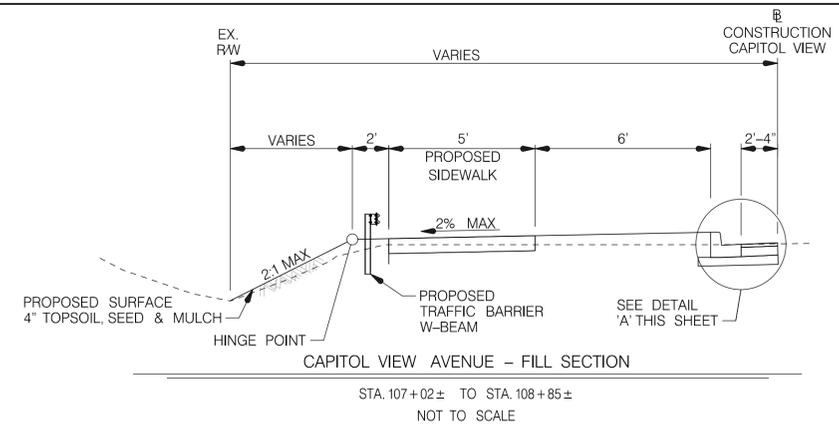
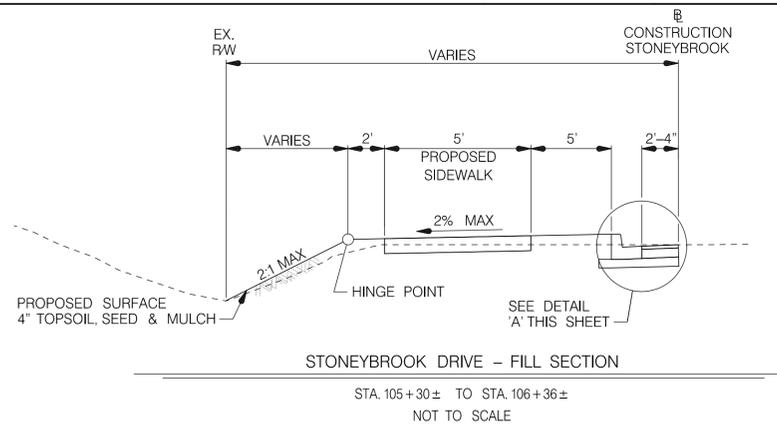
ABUT	-	ABUTMENT	P/C	-	POINT OF CROWN
ACCT. NO.	-	ACCOUNT NUMBER	P.C.	-	POINT OF CURVATURE
APPROX.	-	APPROXIMATE	P.C.C.	-	POINT OF COMPOUND CURVATURE
ASPH	-	ASPHALT SURFACE	P/GE	-	PROFILE GRADE ELEVATION
BK.	-	BACK	P.G.L.	-	PROFILE GRADE LINE
B	-	BASELINE	P/GL	-	PROFILE GROUND LINE
BLVD	-	BOULEVARD	PIE	-	PUBLIC IMPROVEMENT EASEMENT
BRG.	-	BEARING, BORING	P.I.	-	POINT OF INTERSECTION
B.R.L.	-	BUILDING RESTRICTION LINE	PROP.	-	PROPOSED
CATV	-	CABLE TV	P.S.I.	-	POUNDS PER SQUARE INCH
C	-	CENTERLINE	P.S.F.	-	POUNDS PER SQUARE FOOT
CONC.	-	CONCRETE	P.O.B.	-	POINT OF BEGINNING
CMP	-	CORRUGATED METAL PIPE	P.O.E.	-	POINT OF ENDING
CORR.	-	CORRECTION (V.C.)	P/R	-	POINT OF ROTATION
CSW	-	CONCRETE SIDEWALK	P.P.C.C.	-	PLAIN PORTLAND CEMENT CONCRETE
CSXT	-	CSX RAILROAD	P.T.	-	POINT OF TANGENT
C.Y.	-	CUBIC YARDS	PUE	-	PUBLIC UTILITY EASEMENT
Dc	-	DEGREE OF CURVE	P.V.C.	-	POINT OF VERTICAL CURVE
DELTA	-	CENTRAL ANGLE (CURVE DATA)	P.V.I.	-	POINT OF VERTICAL INTERSECTION
DEV	-	DEVELOPMENT	P.V.R.C.	-	POINT OF VERTICAL REVERSE CURVE
DIA.	-	DIAMETER	PVT.	-	PAVEMENT
DI	-	EXISTING DRAIN INLET	P.V.T.	-	POINT OF VERTICAL TANGENCY
E	-	EXTERNAL DISTANCE (CURVE DATA)	R	-	RADIUS (CURVE DATA)
EA.	-	EACH	R.C.P.	-	REINFORCED CONCRETE PIPE
E.B.R.	-	EAST BOUND ROADWAY	RT.	-	RIGHT
ELEV., EL	-	ELEVATION	R/W	-	RIGHT OF WAY
EX., EXIST.	-	EXISTING	S.B.R.	-	SOUTH BOUND ROADWAY
EXP.	-	EXPANSION	SDWK.	-	SIDEWALK
F.S.	-	FAR SIDE	SC	-	STORMCEPTOR
F/O	-	FIBER OPTIC	SD	-	STORM DRAIN
F.215	-	FOLIO	SF	-	SQUARE FEET
HI	-	HIGH POINT	SHA	-	STATE HIGHWAY ADMINISTRATION
INV.	-	INVERT	S.Y.	-	SQUARE YARDS
L	-	LENGTH OF CURVE (CURVE DATA)	SPP	-	STRUCTURAL PLATE PIPE
LBS	-	POUNDS	STA.	-	STATION
L.F.	-	LINEAR FEET	STD.	-	STANDARD
LO	-	LOW POINT	SSD	-	STOPPING SIGHT DISTANCE
LT.	-	LEFT	SMH	-	SANITARY MANHOLE
L.5660	-	LIBER	SWM	-	STORM WATER MANAGEMENT
MAX.	-	MAXIMUM	SW-I	-	STORM WATER MANAGEMENT BORING
MC	-	MONTGOMERY COUNTY	T	-	TANGENT (CURVE DATA)
MD	-	MARYLAND	TBD	-	TO BE DETERMINED
M.H., MH	-	MANHOLE	TC	-	TOP OF CURB
MIN.	-	MINIMUM	TRANS	-	TRANSFORMER
MOD.	-	MODIFIED	TRAV	-	TRAVERSE POINT
MSE	-	MECHANICAL STABILIZED EARTH	TYP.	-	TYPICAL
N.B.R.	-	NORTH BOUND ROADWAY	UG	-	UNDERGROUND
N.D.C.	-	NOSE DOWN CURB	UTIL.	-	UTILITY STRUCTURE
NO.	-	NUMBER	VC	-	VERTICAL CURVE
NORM.	-	NORMAL	W	-	WATER LINE
NRI	-	NATURAL RESOURCE INVENTORY	W.B.R.	-	WEST BOUND ROADWAY
FSD	-	FOREST STAND DELINEATION	W.P.	-	WORKING POINT
N.S.	-	NEAR SIDE			
NTS	-	NOT TO SCALE			



DATUM: NAD 83/91 HORIZONTAL NAVD 88 VERTICAL			
NO.	REVISION	DATE	BY

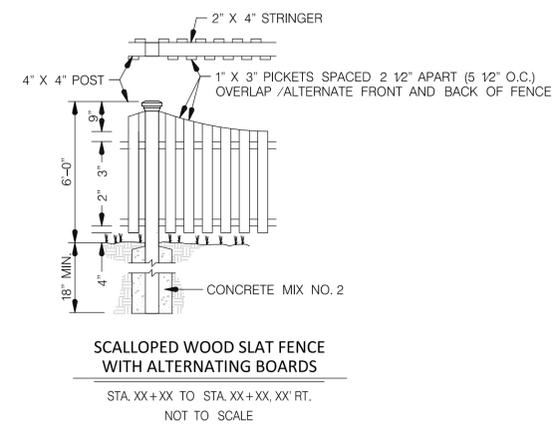
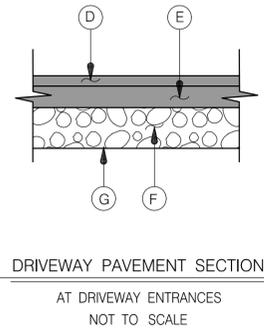
MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION 100 EDISON PARK DRIVE, 4TH FLOOR GAITHERSBURG, MD 20878	
RECOMMENDED FOR APPROVAL	
Chief, Design Section	Date
APPROVED	
Chief, Division of Engineering Services	Date
Designed by : M.J.B.	Drawn by : J.W.L.
Checked by : B.M.D.	

<b>GENERAL NOTES AND DEFINITIONS</b>	
<b>STONEBROOK DRIVE AT CAPITOL VIEW AVE. SIDEWALK</b>	
SCALE 1" = 80'	08/2015
Project No. : C.I.P. PR. # 506747	SHEET 2 of 22



- (A) 2" HMA SUPERPAVE 12.5 mm FOR SURFACE, PG64-22, LEVEL 2
- (B) 6" PLAIN PORTLAND CEMENT CONCRETE MODIFIED MIX #6 (REFER TO STANDARD 577.02 FOR PLACEMENT OF MATERIALS, INCLUDING STEEL REINFORCEMENT)
- (C) 12" BASE COURSE USING GRADED AGGEREGRATE (3-4" LIFTS)

- (D) 1" HMA SURFACE: 9.5 MM, PG 64-22
- (E) 3" HMA BASE: 19.0 MM, PG 64-22
- (F) 4" GRADED AGGREGATE BASE COURSE
- (G) LIMIT OF EXCAVATION /TOP OF SUBGRADE



**WALLACE MONTGOMERY**  
 ENGINEERS-PLANNERS-SURVEYORS-CONSTRUCTION MANAGERS  
 10150 York Road, Suite 200  
 Hunt Valley, Maryland 21030  
 410.494.9093 Tel / 410.667.0925 Fax  
 www.wallacemontgomery.com

DATUM: NAD 83/91 HORIZONTAL  
 NAVD 88 VERTICAL

NO.	REVISION	DATE	BY

RECOMMENDED FOR APPROVAL

Chief, Design Section \_\_\_\_\_ Date \_\_\_\_\_  
 APPROVED

Chief, Division of Engineering Services \_\_\_\_\_ Date \_\_\_\_\_

Designed by : M.J.B. Drawn by : J.W.L. Checked by : B.M.D.

**TYPICAL SECTIONS AND DETAILS**

**STONEBROOK DRIVE AT CAPITOL VIEW AVE. SIDEWALK**

SCALE AS SHOWN 08/2015

Project No. : C.I.P. PR. # 506747 SHEET 03 of 22

PLotted Friday, August 07, 2015 at 02:32 PM  
 FILE: M:\PROJECTS\14113.0001.01\Roadway Design\Cadd\_pHT-001\_STONEY.dgn

CURVE DATA							
CURVE	DELTA	Dc	RADIUS	TANGENT	LENGTH	CHORD	EXTERNAL
C-01	06°09'16.2" LT.	18°53'19.39"	303.33'	16.31'	32.58'	32.57'	0.44'
C-02	02°19'23.1" LT.	01°34'38.05"	3,632.67'	73.65'	147.29'	147.28'	0.75'
C-03	04°59'12.4" RT.	06°14'37.09"	917.67'	39.96'	79.87'	79.84'	0.87'
C-04	04°12'49.4" RT.	04°22'53.50"	1,307.67'	48.11'	96.17'	96.15'	0.88'
C-05	41°05'08.1" RT.	37°31'47.95"	152.67'	57.21'	109.47'	107.14'	10.37'

**STANDARD TYPE A COMBINATION CURB AND GUTTER, 12 INCH GUTTER PAN, 8 INCH DEPTH (MD 620.02)**

49 L.F. STONEYBROOK DR. - STA. 100+51 TO STA. 100+99, LT.  
 30 L.F. STONEYBROOK DR. - STA. 101+35 TO STA. 101+64, LT.  
 71 L.F. STONEYBROOK DR. - STA. 102+24 TO STA. 102+94, LT.  
 23 L.F. STONEYBROOK DR. - STA. 103+23 TO STA. 103+46, LT.  
 30 L.F. STONEYBROOK DR. - STA. 103+83 TO STA. 104+11, LT.  
 57 L.F. STONEYBROOK DR. - STA. 104+45 TO STA. 105+00, LT.

**TYPE L TRAFFIC BARRIER END TREATMENT (MD 605.13)**

1 EA. STONEYBROOK DR. - STA. 100+98, LT.

**BROWN POLYESTER COATED TRAFFIC BARRIER W BEAM USING 8 FOOT POST**

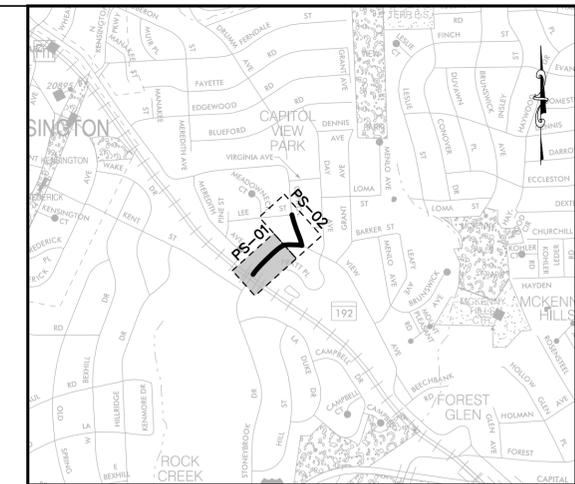
56 L.F. STONEYBROOK DR. - STA. 100+58 TO STA. 101+09, LT.

**PORTLAND CEMENT CONCRETE SIDEWALK, 4" DEPTH**

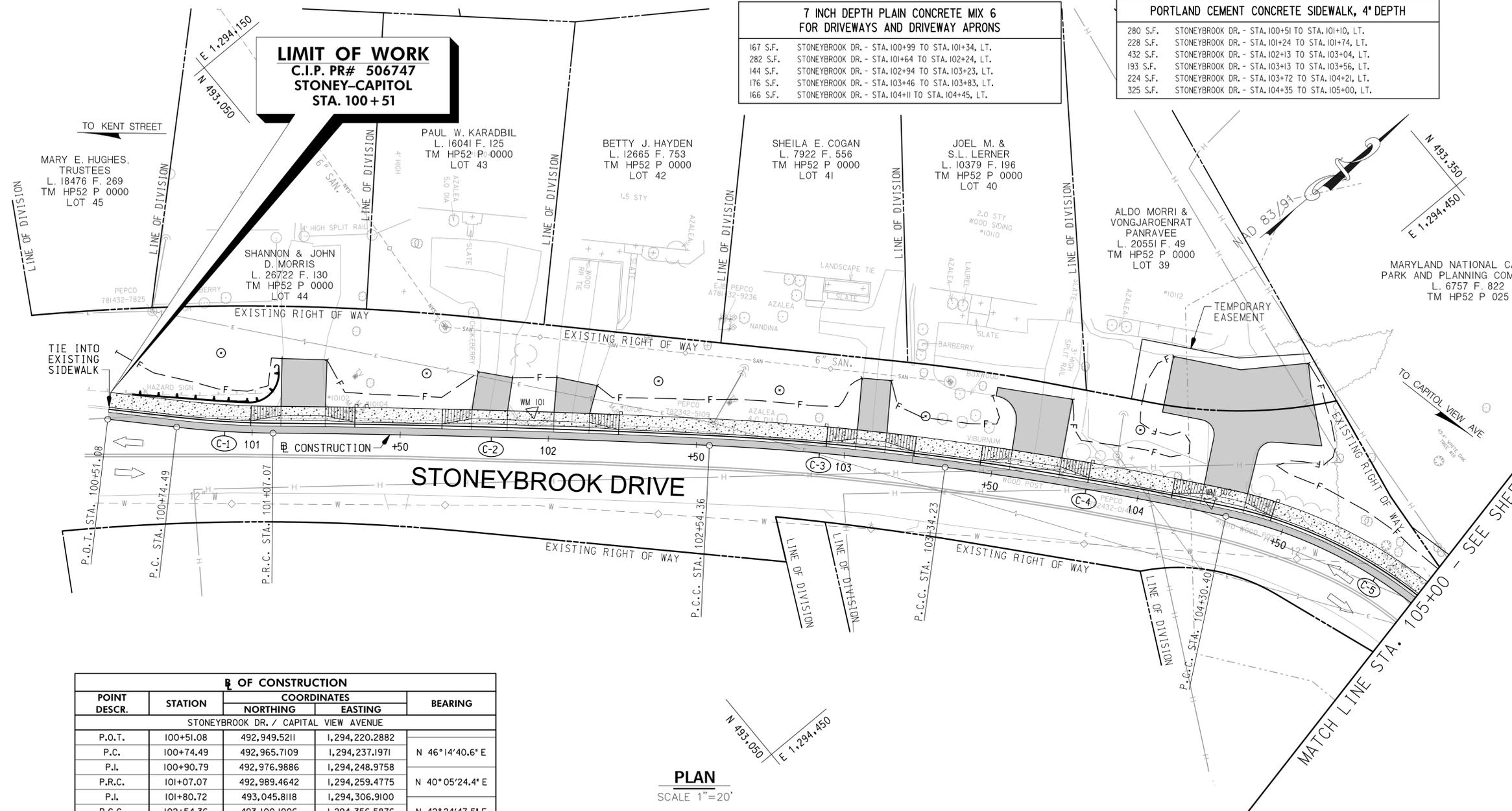
280 S.F. STONEYBROOK DR. - STA. 100+51 TO STA. 101+10, LT.  
 228 S.F. STONEYBROOK DR. - STA. 101+24 TO STA. 101+74, LT.  
 432 S.F. STONEYBROOK DR. - STA. 102+13 TO STA. 103+04, LT.  
 193 S.F. STONEYBROOK DR. - STA. 103+13 TO STA. 103+56, LT.  
 224 S.F. STONEYBROOK DR. - STA. 103+72 TO STA. 104+21, LT.  
 325 S.F. STONEYBROOK DR. - STA. 104+35 TO STA. 105+00, LT.

**7 INCH DEPTH PLAIN CONCRETE MIX 6 FOR DRIVEWAYS AND DRIVEWAY APRONS**

167 S.F. STONEYBROOK DR. - STA. 100+99 TO STA. 101+34, LT.  
 282 S.F. STONEYBROOK DR. - STA. 101+64 TO STA. 102+24, LT.  
 144 S.F. STONEYBROOK DR. - STA. 102+94 TO STA. 103+23, LT.  
 176 S.F. STONEYBROOK DR. - STA. 103+46 TO STA. 103+83, LT.  
 166 S.F. STONEYBROOK DR. - STA. 104+11 TO STA. 104+45, LT.



**LIMIT OF WORK**  
**C.I.P. PR# 506747**  
**STONEY-CAPITOL**  
**STA. 100 + 51**



**DEPRESSED CURB CURB AND GUTTER (MD 620.03)**

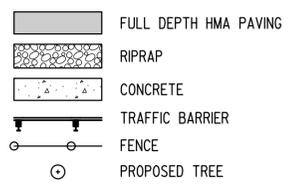
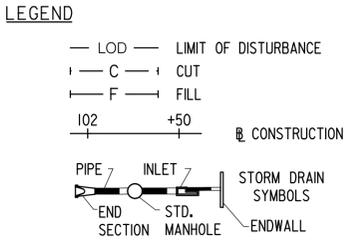
36 L.F. STONEYBROOK DR. - STA. 100+99 TO STA. 101+34, LT.  
 60 L.F. STONEYBROOK DR. - STA. 101+64 TO STA. 102+24, LT.  
 30 L.F. STONEYBROOK DR. - STA. 102+94 TO STA. 103+23, LT.  
 38 L.F. STONEYBROOK DR. - STA. 103+46 TO STA. 103+83, LT.  
 35 L.F. STONEYBROOK DR. - STA. 104+11 TO STA. 104+45, LT.

**REMOVE & RESET/RELOCATE EXISTING MAIL BOX (ANY SIZE, ANY TYPE)**

1 EA. STONEYBROOK DR. - STA. 101+32, LT.  
 1 EA. STONEYBROOK DR. - STA. 101+35, LT.  
 1 EA. STONEYBROOK DR. - STA. 102+20, LT.  
 1 EA. STONEYBROOK DR. - STA. 103+74, LT.  
 1 EA. STONEYBROOK DR. - STA. 104+43, LT.

B OF CONSTRUCTION				
POINT DESCR.	STATION	COORDINATES		BEARING
		NORTHING	EASTING	
STONEYBROOK DR. / CAPITOL VIEW AVENUE				
P.O.T.	100+51.08	492,949.5211	1,294,220.2882	
P.C.	100+74.49	492,965.7109	1,294,237.1971	N 46°14'40.6" E
P.I.	100+90.79	492,976.9886	1,294,248.3758	
P.R.C.	101+07.07	492,989.4642	1,294,259.4775	N 40°05'24.4" E
P.I.	101+80.72	493,045.8118	1,294,306.9100	
P.C.C.	102+54.36	493,100.1906	1,294,356.5876	N 42°24'47.5" E
P.I.	102+94.32	493,129.6932	1,294,383.5396	
P.C.C.	103+34.23	493,156.7413	1,294,412.9542	N 47°23'59.9" E
P.I.	103+82.33	493,189.3036	1,294,448.3653	
P.C.C.	104+30.40	493,219.1759	1,294,486.0733	N 51°36'49.3" E
P.I.	104+87.61	493,254.7009	1,294,530.9167	
P.O.C.	105+00.00	493,248.6918	1,294,548.4429	S 87°18'02.6" E

CONTROL TRAVERSE				
POINT NO.	COORDINATES		ELEVATION	DESCRIPTION
	NORTHING	EASTING		
WM 101	493,061.5592	1,294,309.7454	356.67	MAG NAIL
WM 102	493,218.1954	1,294,479.1095	375.96	MAG NAIL



**NOTES:**

- ALL EXPOSED EARTH & DISTURBED AREAS SHALL BE STABILIZED WITH SEED & MULCH OR SOIL STABILIZATION MATTING AT THE END OF EACH WORK DAY. NO DISTURBED AREA SHALL BE LEFT UNSTABILIZED OVERNIGHT UNLESS RUNOFF CAN BE DIRECTED TO AN APPROVED EROSION & SEDIMENT CONTROL DEVICE.
- DAILY LANE CLOSURES SHALL BE IN ACCORDANCE WITH STD. TCP. 102.02

DATUM: NAD 83/91 HORIZONTAL  
 NAVD 88 VERTICAL

NO.	REVISION	DATE	BY

MONTGOMERY COUNTY  
 DEPARTMENT OF TRANSPORTATION  
 100 EDISON PARK DRIVE, 4TH FLOOR  
 GAITHERSBURG, MD 20878

RECOMMENDED FOR APPROVAL

Chief, Design Section \_\_\_\_\_ Date \_\_\_\_\_  
 APPROVED

Chief, Division of Engineering Services \_\_\_\_\_ Date \_\_\_\_\_

Designed by: M.J.B. Drawn by: J.W.L. Checked by: B.M.D.

**PLAN SHEET PS-01**  
**STA. 100+51 TO STA. 105+00**  
**STONEYBROOK DRIVE AT**  
**CAPITOL VIEW AVE. SIDEWALK**

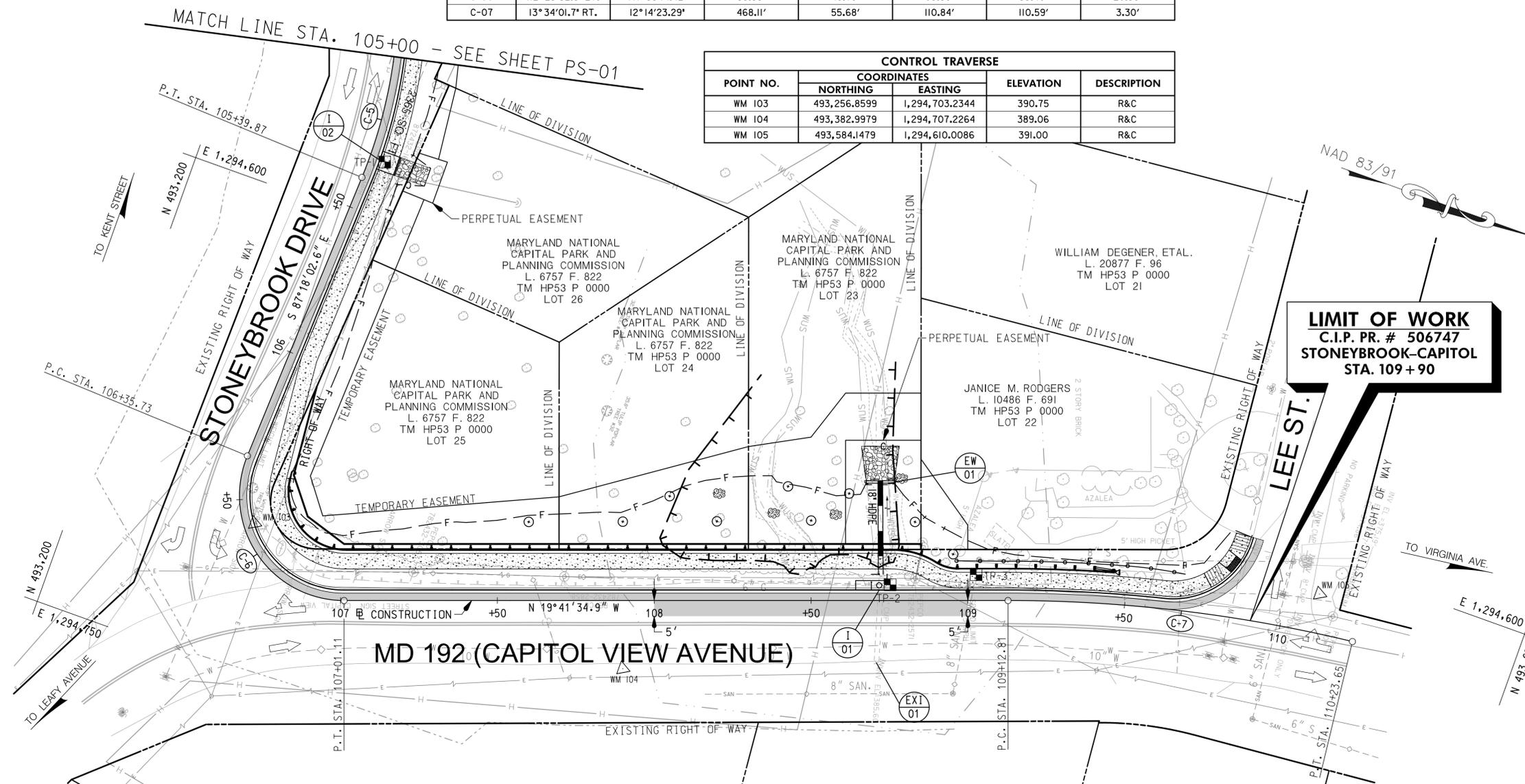
SCALE 1" = 20' 08/2015

Project No.: C.I.P. PR. # 506747 SHEET 04 of 22

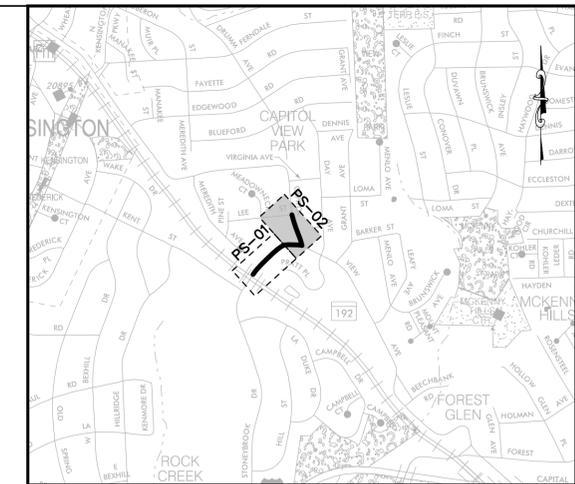
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CURVE DATA							
CURVE	DELTA	Dc	RADIUS	TANGENT	LENGTH	CHORD	EXTERNAL
C-05	41°05'08.1" RT.	37°31'47.95"	152.67'	57.21'	109.47'	107.14'	10.37'
C-06	112°23'32.3" LT.	171°53'14.42"	33.33'	49.79'	65.39'	55.40'	26.58'
C-07	13°34'01.7" RT.	12°14'23.29"	468.11'	55.68'	110.84'	110.59'	3.30'

CONTROL TRAVERSE				
POINT NO.	COORDINATES		ELEVATION	DESCRIPTION
	NORTHING	EASTING		
WM 103	493,256.8599	1,294,703.2344	390.75	R&C
WM 104	493,382.9979	1,294,707.2264	389.06	R&C
WM 105	493,584.1479	1,294,610.0086	391.00	R&C



**PLAN**  
SCALE 1"=20'

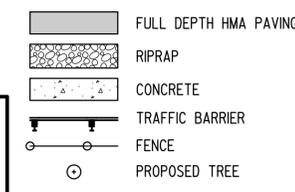
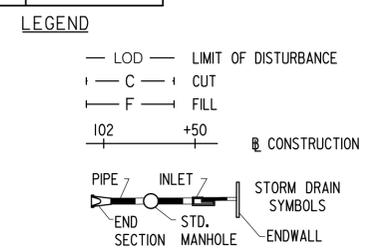


**LOCATION MAP**  
SCALE 1"=1000'

**LIMIT OF WORK**  
C.I.P. PR. # 506747  
STONEBROOK-CAPITOL  
STA. 109+90

- PORTLAND CEMENT CONCRETE SIDEWALK, 4' DEPTH**  
2,365 S.F. STONEYBROOK DR. / CAPITOL VIEW - STA. 105+00 TO STA. 109+77, LT.
- STANDARD TYPE A COMBINATION CURB AND GUTTER, 12 INCH GUTTER PAN, 8 INCH DEPTH (MD 620.02)**  
495 L.F. STONEYBROOK DR. / CAPITOL VIEW - STA. 105+00 TO STA. 109+87, LT.
- TYPE C TRAFFIC BARRIER END TREATMENT (MD 605.03)**  
1 EA. CAPITOL VIEW - STA. 109+48, LT.
- BROWN POLYESTER COATED TRAFFIC BARRIER W BEAM USING 8 FOOT POST**  
230 L.F. STONEYBROOK DR. / CAPITOL VIEW - STA. 106+78 TO STA. 108+97, LT.
- CLASS I RIPRAP FOR CHANNEL PROTECTION (SEE DD-01)**  
8 TONS STONEYBROOK DR. - STA. 105+33, LT. (L=10')  
27 TONS CAPITOL VIEW - STA. 108+72, LT. (L=15')
- DETECTABLE WARNING SURFACE (MD 655.40)**  
10 S.F. CAPITOL VIEW - STA. 109+83, LT.
- SIDEWALK RAMPS PARALLEL**  
1 EA. CAPITOL VIEW - STA. 109+83, LT.
- BOARD ON BOARD FENCE**  
74 L.F. CAPITOL VIEW - STA. 108+96 TO STA. 109+68, LT.

R OF CONSTRUCTION				
POINT DESCR.	STATION	COORDINATES		BEARING
		NORTHING	EASTING	
STONEBROOK DR. / CAPITOL AVENUE				
P.O.C.	105+00.00	493,248.6918	1,294,548.4429	
P.T.	105+39.87	493,252.0067	1,294,588.0629	S 87°18'02.6" E
P.C.	106+35.73	493,247.4926	1,294,683.8100	
P.L.	106+85.51	493,245.1480	1,294,733.5402	N 19°41'34.9" W
P.T.	107+01.11	493,292.0216	1,294,716.7635	
P.C.	109+12.81	493,491.3381	1,294,645.4252	N 06°07'33.3" W
P.L.	109+68.49	493,543.7639	1,294,626.6612	
P.T.	110+23.65	493,599.1285	1,294,620.7191	



**WALLACE MONTGOMERY**  
ENGINEERS-PLANNERS-SURVEYORS-CONSTRUCTION MANAGERS  
10150 York Road, Suite 200  
Hunt Valley, Maryland 21030  
410.494.9093 Tel / 410.667.0925 Fax  
www.wallacemontgomery.com



**NOTES:**

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- DAILY LANE CLOSURES SHALL BE IN ACCORDANCE WITH STD. TCP. 102.02
- FOR BARRIER DETAILS, SEE US DOT STD 617-60, 617-61, AND 617-63.

DATUM: NAD 83/91 HORIZONTAL  
NAVD 88 VERTICAL

NO.	REVISION	DATE	BY

MONTGOMERY COUNTY  
DEPARTMENT OF TRANSPORTATION  
100 EDISON PARK DRIVE, 4TH FLOOR  
GAITHERSBURG, MD 20878

RECOMMENDED FOR APPROVAL

Chief, Design Section \_\_\_\_\_ Date \_\_\_\_\_  
APPROVED

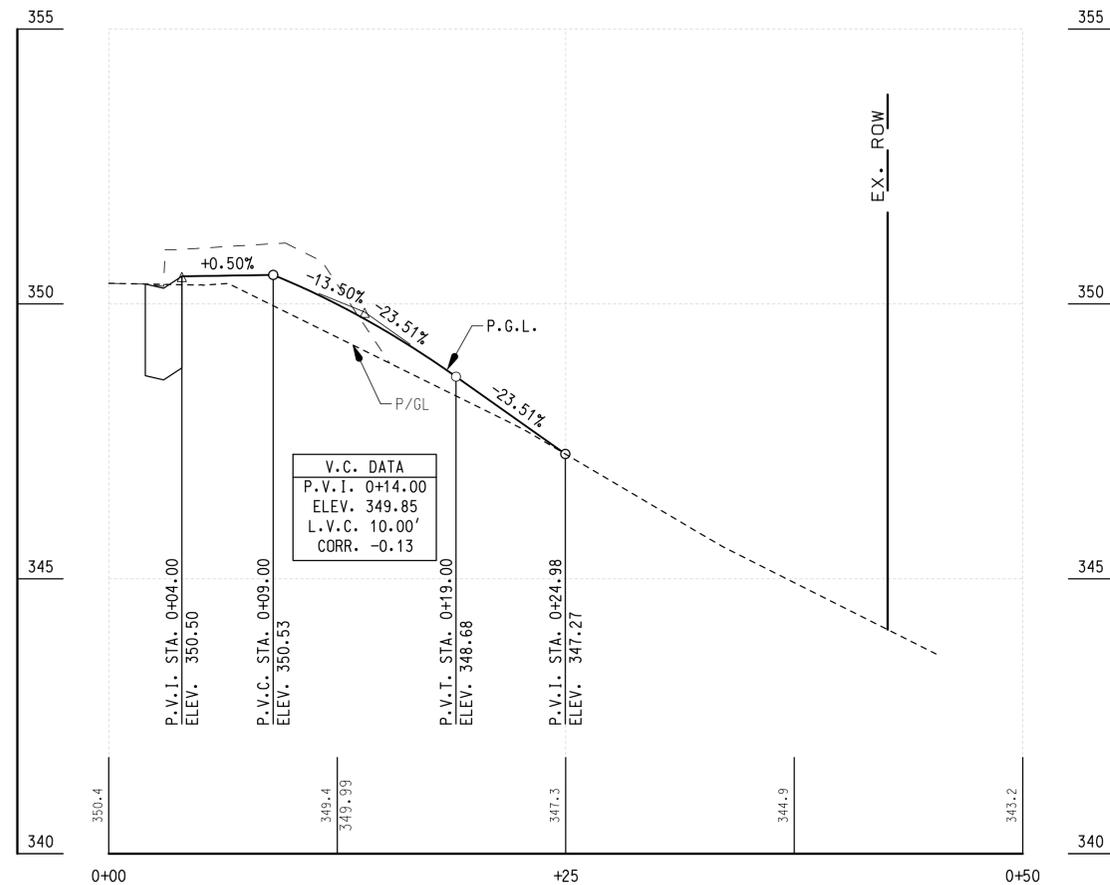
Chief, Division of Engineering Services \_\_\_\_\_ Date \_\_\_\_\_

Designed by: M.J.B. Drawn by: J.W.L. Checked by: B.M.D.

**PLAN SHEET PS-02**  
**STA. 105+00 TO STA. 109+90**  
**STONEBROOK DRIVE AT**  
**CAPITOL VIEW AVE. SIDEWALK**  
SCALE 1"=20' 08/2015

Project No.: C.I.P. PR. # 506747 SHEET 05 of 22

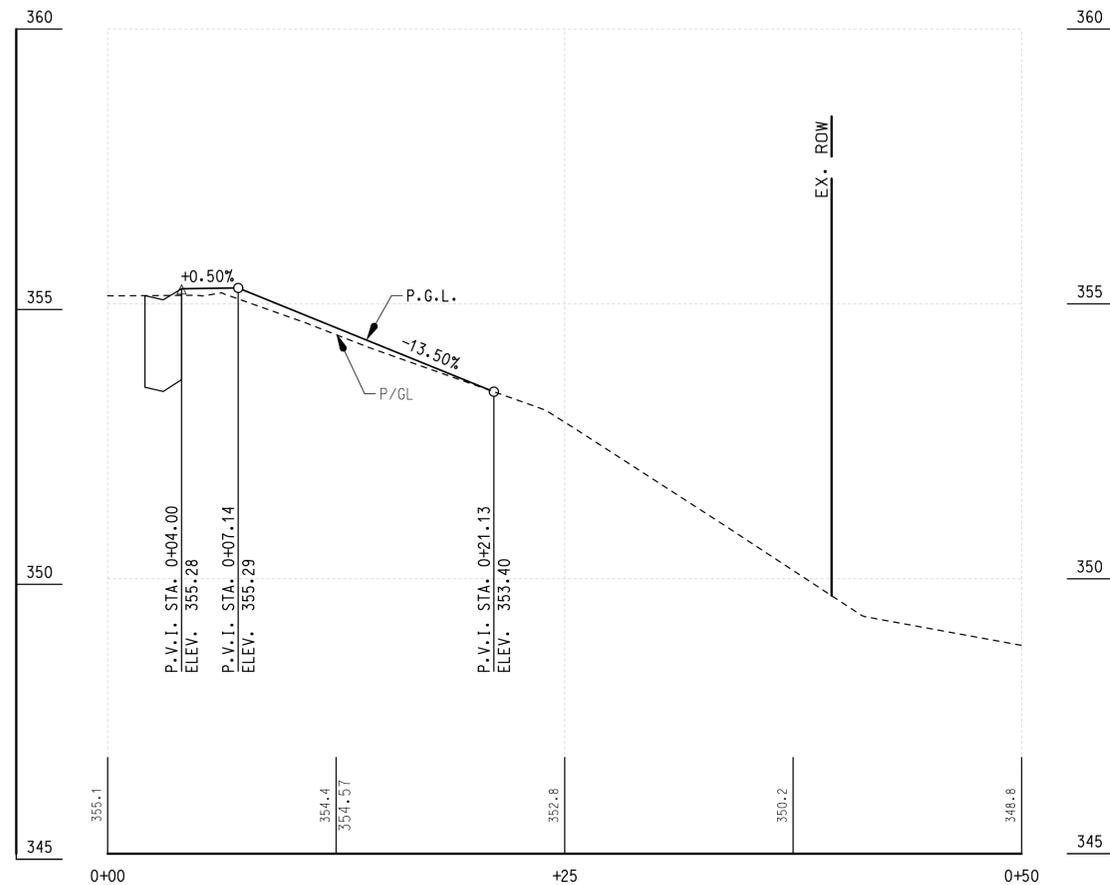
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DRIVEWAY 1 PROFILE

SCALE: HOR. 1" = 5'  
VERT. 1" = 3'

POINT DESCR.	STATION	COORDINATES		BEARING
		NORTHING	EASTING	
DRIVEWAY 1				
P.O.T.	0+00.00	492,997.1828	1,294,265.9933	N 49° 45' 02.1" W
P.I.	0+10.50	493,003.9670	1,294,257.9792	N 48° 45' 57.6" W
P.L.	0+32.11	493,018.2100	1,294,241.7291	N 45° 27' 24.9" W
P.O.E.	0+63.01	493,039.8888	1,294,219.7018	



DRIVEWAY 2 PROFILE

SCALE: HOR. 1" = 5'  
VERT. 1" = 3'

POINT DESCR.	STATION	COORDINATES		BEARING
		NORTHING	EASTING	
DRIVEWAY 2				
P.O.T.	0+00.00	493,044.7574	1,294,306.9784	N 48° 45' 36.5" W
P.I.	0+10.50	493,051.6791	1,294,299.0829	N 40° 28' 37.6" W
P.L.	0+25.49	493,063.0820	1,294,289.3518	N 45° 08' 13.4" W
P.O.E.	0+65.23	493,091.1152	1,294,261.1842	



DATUM: NAD 83/91 HORIZONTAL NAVD 88 VERTICAL			
NO.	REVISION	DATE	BY

MONTGOMERY COUNTY  
DEPARTMENT OF TRANSPORTATION  
100 EDISON PARK DRIVE, 4TH FLOOR  
GAITHERSBURG, MD 20878

RECOMMENDED FOR APPROVAL

Chief, Design Section \_\_\_\_\_ Date \_\_\_\_\_  
APPROVED

Chief, Division of Engineering Services \_\_\_\_\_ Date \_\_\_\_\_

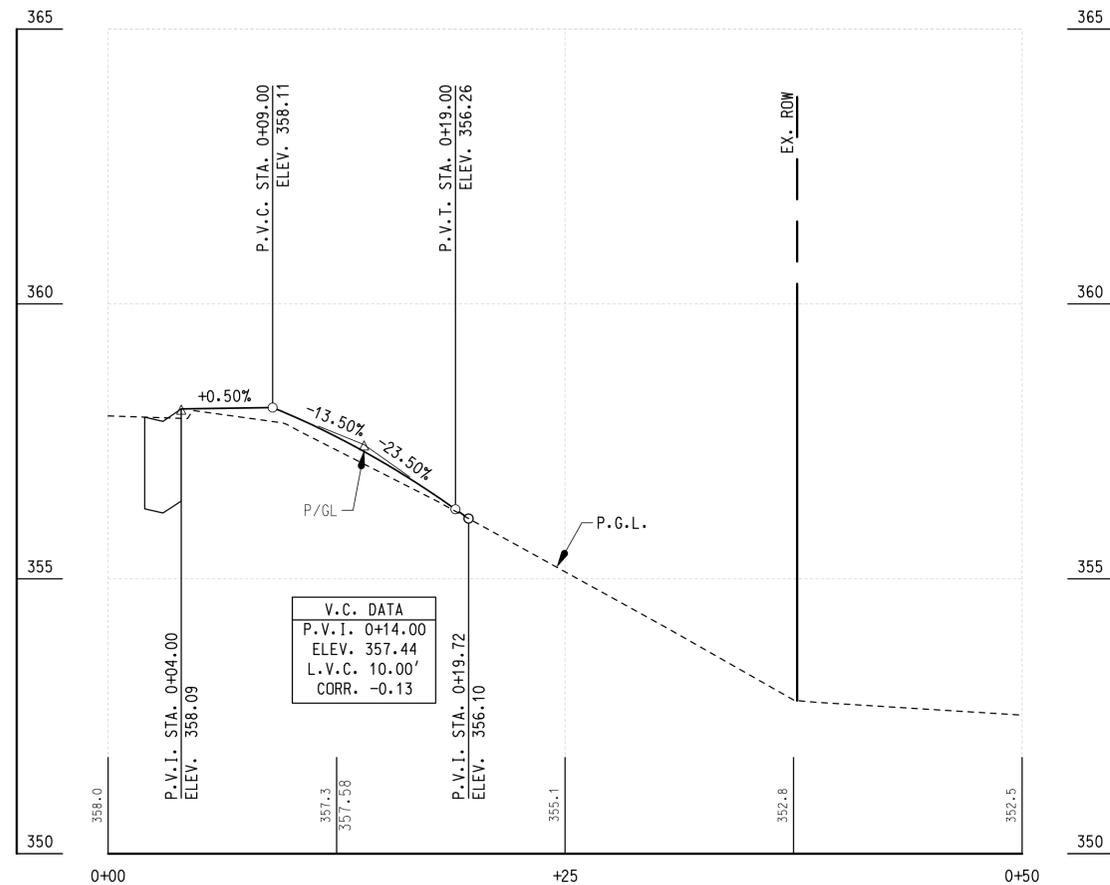
Designed by : M.J.B. Drawn by : J.W.L. Checked by : B.M.D.

**DRIVEWAY PROFILES PR-01  
DRIVEWAYS 1 & 2**

**STONEBROOK DRIVE AT  
CAPITOL VIEW AVE. SIDEWALK**

SCALE AS SHOWN 08/2015

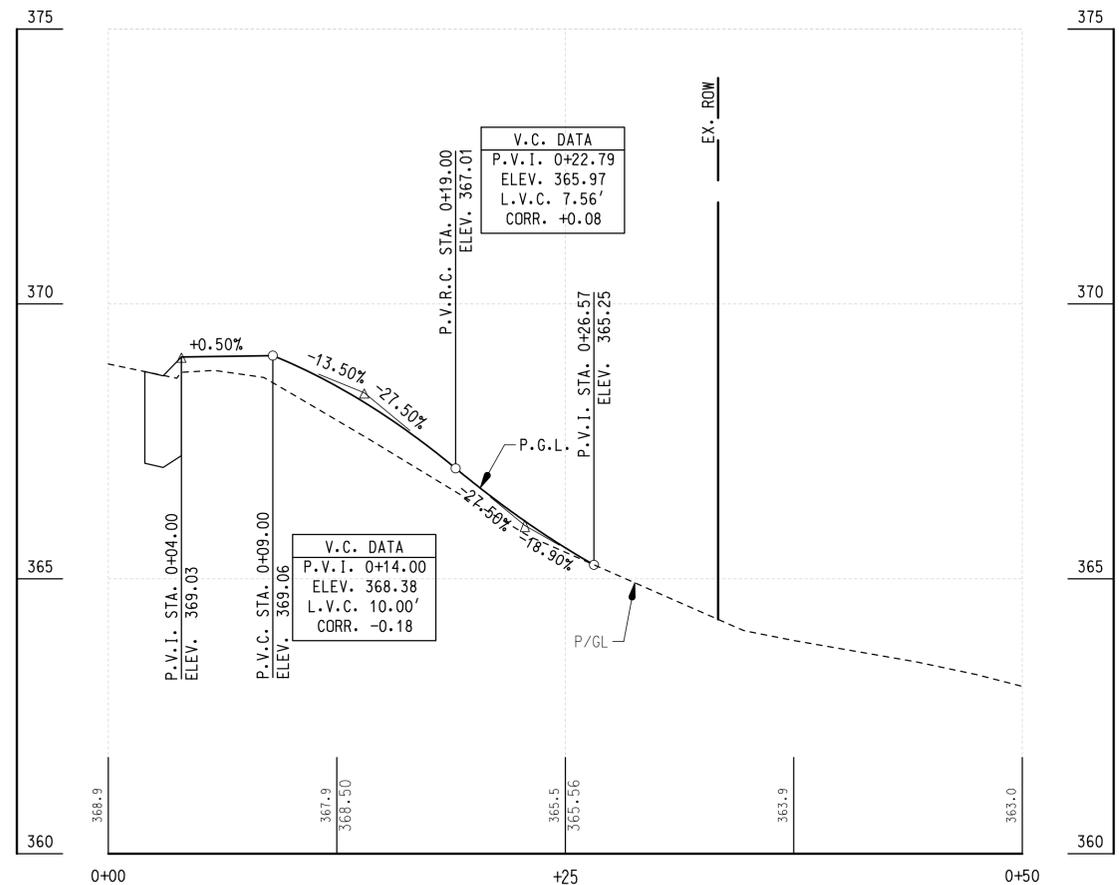
Project No. : C.I.P. PR. # 506747 SHEET 06 of 22



DRIVEWAY 3 PROFILE

SCALE: HOR. 1" = 5'  
VERT. 1" = 3'

☐ OF CONSTRUCTION DRIVEWAY 3				
POINT DESC.	STATION	COORDINATES		BEARING
		NORTHING	EASTING	
DRIVEWAY 3				
P.O.T	0+00.00	493,065.4791	1,294,325.2843	
P.I.	0+10.50	493,072.4607	1,294,317.4417	N 48°19'26.6" W
P.I.	0+30.62	493,088.1629	1,294,304.8685	N 38°41'06.9" W
P.O.E.	0+60.71	493,110.4416	1,294,284.6312	N 42°15'03.9" W



DRIVEWAY 4 PROFILE

SCALE: HOR. 1" = 5'  
VERT. 1" = 3'

☐ OF CONSTRUCTION DRIVEWAY 4				
POINT DESC.	STATION	COORDINATES		BEARING
		NORTHING	EASTING	
DRIVEWAY 4				
P.O.T	0+00.00	493,139.0586	1,294,394.2575	
P.I.	0+10.50	493,146.5853	1,294,386.9363	N 44°12'24.6" W
P.I.	0+37.47	493,165.4506	1,294,367.6677	N 45°36'21.2" W
P.I.	0+44.21	493,170.8882	1,294,363.6777	N 36°16'14.2" W
P.O.E.	0+63.80	493,186.0515	1,294,351.2704	N 39°17'30.0" W



MONTGOMERY COUNTY  
DEPARTMENT OF TRANSPORTATION  
100 EDISON PARK DRIVE, 4TH FLOOR  
GAITHERSBURG, MD 20878

**DRIVEWAY PROFILES PR-02  
DRIVEWAYS 3 & 4**  
**STONEBROOK DRIVE AT  
CAPITOL VIEW AVE. SIDEWALK**  
SCALE AS SHOWN 08/2015

DATUM: NAD 83/91 HORIZONTAL  
NAVD 88 VERTICAL

RECOMMENDED FOR APPROVAL

Chief, Design Section \_\_\_\_\_ Date \_\_\_\_\_

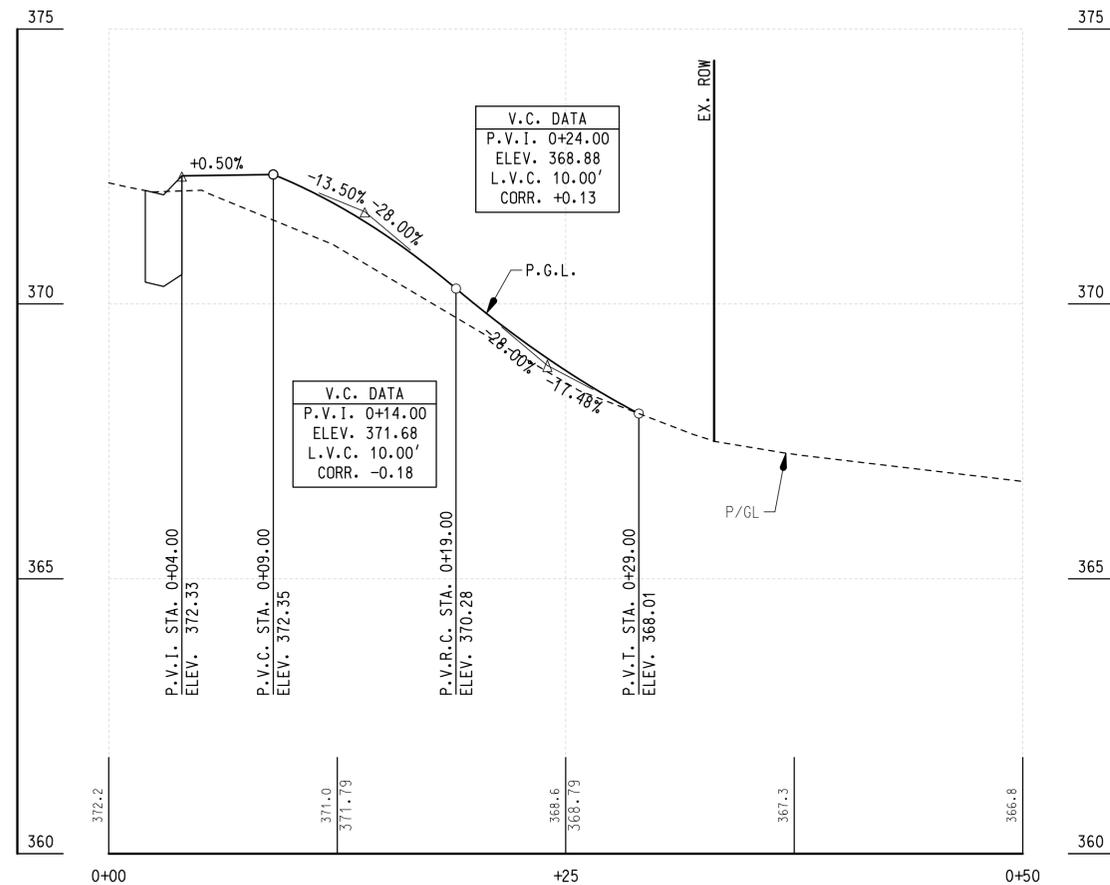
APPROVED

Chief, Division of Engineering Services \_\_\_\_\_ Date \_\_\_\_\_

Designed by : M.J.B. Drawn by : J.W.L. Checked by : B.M.D.

Project No. : C.I.P. PR. # 506747 SHEET 07 of 22

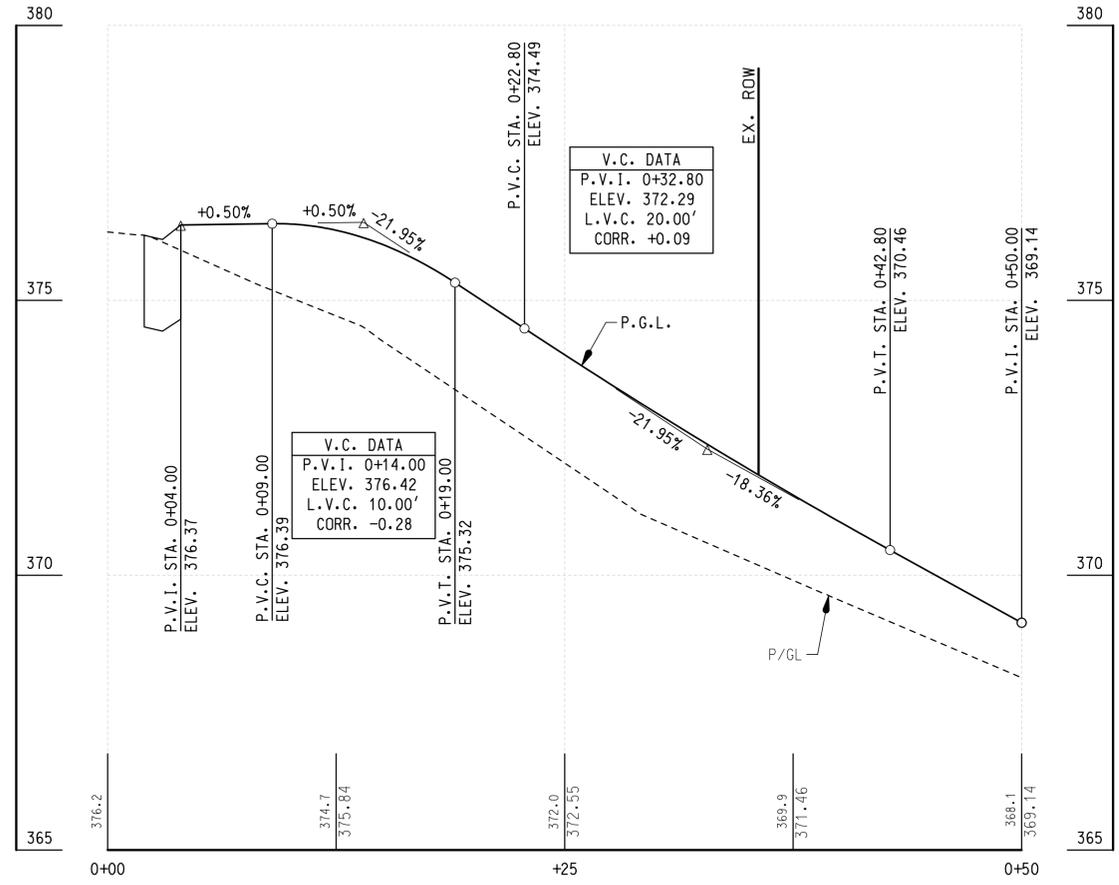




DRIVEWAY 5 PROFILE

SCALE: HOR. 1" = 5'  
VERT. 1" = 3'

POINT DESCR.	STATION	COORDINATES		BEARING
		NORTHING	EASTING	
DRIVEWAY 5				
P.O.T.	0+00.00	493,176.7570	1,294,435.2277	N 41°17'16.5" W
P.I.	0+10.50	493,184.6468	1,294,428.2993	N 40°48'07.3" W
P.I.	0+17.86	493,190.2205	1,294,423.4878	N 41°28'13.2" W
P.I.	0+37.48	493,204.9159	1,294,410.5000	N 40°44'34.8" W
P.O.E.	0+54.22	493,217.6022	1,294,399.5715	



DRIVEWAY 6 PROFILE

SCALE: HOR. 1" = 5'  
VERT. 1" = 3'

POINT DESCR.	STATION	COORDINATES		BEARING
		NORTHING	EASTING	
DRIVEWAY 6				
P.O.T.	0+00.00	493,218.0327	1,294,484.6323	N 38°28'00.9" W
P.I.	0+10.44	493,226.2036	1,294,478.1406	N 37°35'21.9" W
P.I.	0+22.87	493,236.0585	1,294,470.5541	N 45°41'00.5" W
P.I.	0+40.39	493,248.2936	1,294,458.0237	N 42°06'18.1" W
P.O.E.	0+54.32	493,258.6293	1,294,448.6830	



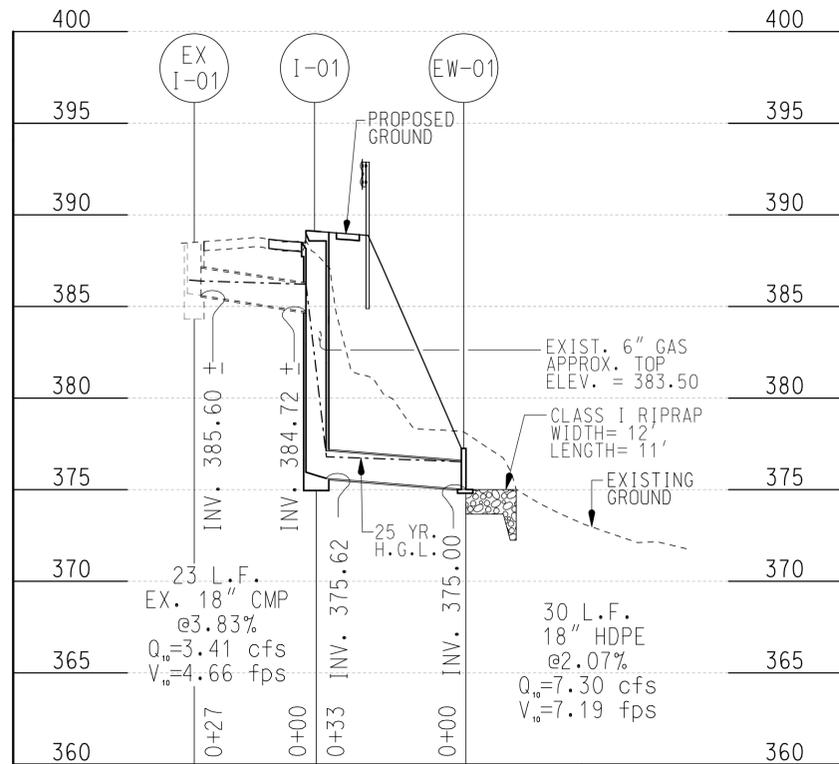
MONTGOMERY COUNTY  
DEPARTMENT OF TRANSPORTATION  
100 EDISON PARK DRIVE, 4TH FLOOR  
GAITHERSBURG, MD 20878

**DRIVEWAY PROFILES PR-03  
DRIVEWAYS 5 - 6**  
**STONEBROOK DRIVE AT  
CAPITOL VIEW AVE. SIDEWALK**

DATUM: NAD 83/91 HORIZONTAL NAVD 88 VERTICAL			
NO.	REVISION	DATE	BY

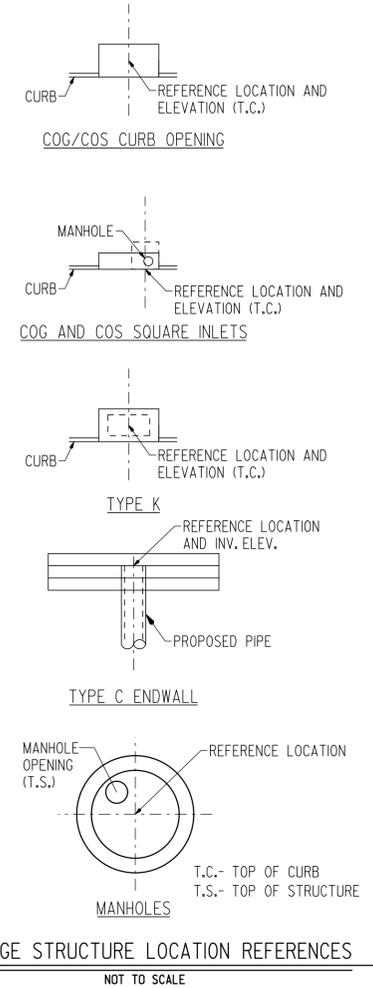
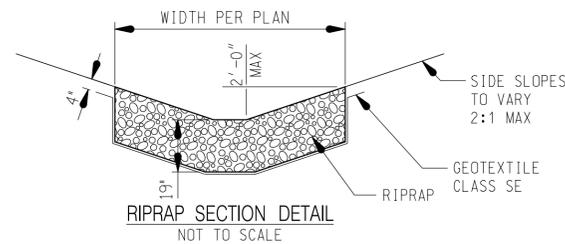
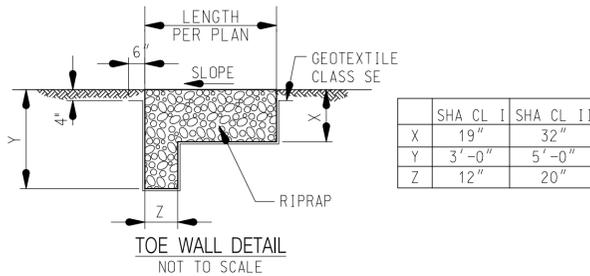
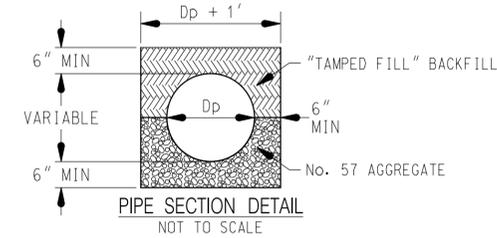
RECOMMENDED FOR APPROVAL	
Chief, Design Section	Date
APPROVED	
Chief, Division of Engineering Services	Date
Designed by : M.J.B.	Drawn by : J.W.L.
Checked by : B.M.D.	

SCALE AS SHOWN 08/2015  
Project No. : C.I.P. PR. # 506747 SHEET 08 of 22



EX. I-01 TO EW-01

SCALE: HOR. 1"=20'  
VERT. 1"=5'



STRUCTURE SCHEDULE

PLAN SHEET	NUMBER	STATION	OFFSET	TYPE	ELEVATION		STANDARD	VERTICAL DEPTH	COMMENTS
					TOP	INV.			
PS-02	I-01	108+72.23	3.33' LT.	PRECAST 10' COG INLET	389.13	375.62	MD 374.61	7.34'	N/A
PS-02	I-02	105+32.77	3.33' LT.	PRECAST 5' COG OPENING	381.55	N/A	MD 374.68	N/A	CURB OPENING 7' WIDTH
PS-02	EW-01	108+72.03	45.59' LT.	SHA TYPE C END WALL	N/A	375.00	MD 354.01	N/A	

PIPE SCHEDULE

FROM	TO	SIZE	TYPE	LENGTH
I-01	EW-01	18"	DUAL WALL HDPE	30'



DATUM: NAD 83/91 HORIZONTAL  
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MONTGOMERY COUNTY  
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100 EDISON PARK DRIVE, 4TH FLOOR  
GAITHERSBURG, MD 20878

RECOMMENDED FOR APPROVAL

Chief, Design Section \_\_\_\_\_ Date \_\_\_\_\_  
APPROVED

Chief, Division of Engineering Services \_\_\_\_\_ Date \_\_\_\_\_

Designed by : M.J.B. Drawn by : J.W.L. Checked by : B.M.D.

**DRAINAGE SCHEDULE & PROFILES**

**STONEBROOK DRIVE AT  
CAPITOL VIEW AVE. SIDEWALK**

SCALE AS SHOWN 08/2015

Project No. : C.I.P. PR. # 506747 SHEET 09 of 22

STANDARD EROSION AND SEDIMENT CONTROL NOTES

- 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.
- THE PERMITTEE MUST OBTAIN INSPECTION AND APPROVAL BY DPS AT THE FOLLOWING POINTS:
  - AT THE REQUIRED PRE-CONSTRUCTION MEETING.
  - FOLLOWING INSTALLATION OF SEDIMENT CONTROL MEASURES.
  - 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.
  - PRIOR TO REMOVAL OR MODIFICATION OF ANY SEDIMENT CONTROL STRUCTURE(S).
  - PRIOR TO FINAL ACCEPTANCE.
- 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.
- THE PERMITTEE SHALL PROTECT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS TO PREVENT THE DEPOSITION OF MATERIALS ONTO TRAVERSED PUBLIC ROADS. ALL MATERIALS DEPOSITED ONTO PUBLIC THOROUGHFARE(S) SHALL BE REMOVED IMMEDIATELY.
- 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.
- FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN:
  - 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
  - SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.

ALL AREAS DISTURBED OUTSIDE OF THE PERIMETER SEDIMENT CONTROL SYSTEM MUST BE MINIMIZED AND STABILIZED IMMEDIATELY. MAINTENANCE MUST BE PERFORMED AS NECESSARY TO ENSURE CONTINUED STABILIZATION.
- 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.
- PRIOR TO REMOVAL OF SEDIMENT CONTROL MEASURES, THE PERMITTEE 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.
- 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.
- 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.
- PERMANENT SWALES OR OTHER POINTS OF CONCENTRATED WATER FLOW SHALL BE STABILIZED WITHIN 3 CALENDAR DAYS OF ESTABLISHMENT WITH SOD OR SEED WITH AN APPROVED EROSION CONTROL MATTING OR BY OTHER APPROVED STABILIZATION MEASURES.
- 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.
- NO PERMANENT CUT OR FILL SLOPE WITH A GRADIENT STEEPER THAN 3:1 WILL BE PERMITTED IN LAWN MAINTENANCE AREAS OR ON RESIDENTIAL LOTS. A SLOPE GRADIENT OF UP TO 2:1 WILL BE PERMITTED IN NONMAINTENANCE 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.
- 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.

- 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 THE 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.
- 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.
- ALL INLETS IN NON-SLUMP AREAS SHALL HAVE ASPHALT BERMS INSTALLED AT THE TIME OF BASE PAVING ESTABLISHMENT.
- THE SEDIMENT CONTROL INSPECTOR HAS THE OPTION OF REQUIRING ADDITIONAL SEDIMENT CONTROL MEASURES, AS DEEMED NECESSARY.
- ALL TRAP ELEVATIONS ARE RELATIVE TO THE OUTLET ELEVATION, WHICH MUST BE ON EXISTING UNDISTURBED GROUND.
- VEGETATIVE STABILIZATION SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- 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-111) OR WHEN REQUIRED BY THE SEDIMENT CONTROL INSPECTOR.
- SEDIMENT REMOVED FROM TRAPS/BASINS SHALL BE PLACED AND STABILIZED IN APPROVED AREAS, BUT NOT WITHIN A FLOODPLAIN.
- 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.
- 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.
- OFF-SITE SPOIL OR BORROW AREAS MUST HAVE PRIOR APPROVAL BY DPS.
- SEDIMENT TRAP/BASIN DEWATERING FOR CLEANOUT OR 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:
  - 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
  - THE PUMP INTAKE MAY UTILIZE A REMOVABLE PUMPING STATION AND MUST DISCHARGE INTO AN UNDISTURBED AREA THROUGH A NON-EROSIVE OUTLET; OR
  - 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.
- THE PERMITTEE MUST NOTIFY THE DEPARTMENT OF ALL UTILITY CONSTRUCTION ACTIVITIES WITHIN THE PERMITTED LIMITS OF DISTURBANCE PRIOR TO THE COMMENCEMENT OF THOSE ACTIVITIES.
- TOPSOIL MUST BE APPLIED TO ALL PVIOUS AREAS WITHIN THE LIMITS OF DISTURBANCE PRIOR TO PERMANENT STABILIZATION IN ACCORDANCE WITH MDE.

SITE INFORMATION:

A. TOTAL AREA OF FACILITY (BASE, CAMPUS, PARK, ETC.)	N/A	ACRES
B. TOTAL AREA OF PROJECT SITE	0.52	ACRES
C. AREA DISTURBED	0.52	ACRES
D. AREA TO BE ROOFED OR PAVED	0.26	ACRES
E. TOTAL CUT	370	CUBIC YARDS
F. TOTAL FILL	1,910	CUBIC YARDS
G. OFF-SITE WASTE / BORROW AREA LOCATION	N/A	

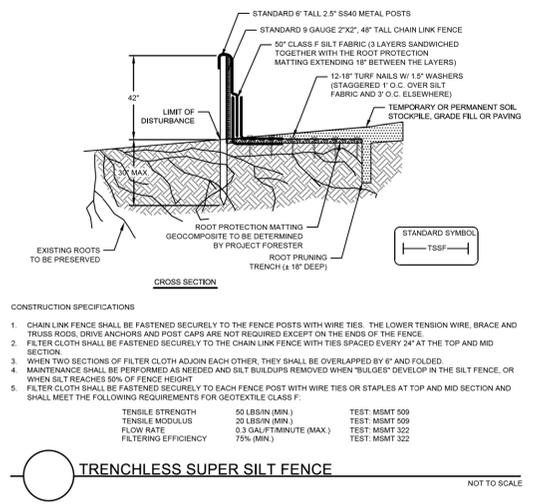
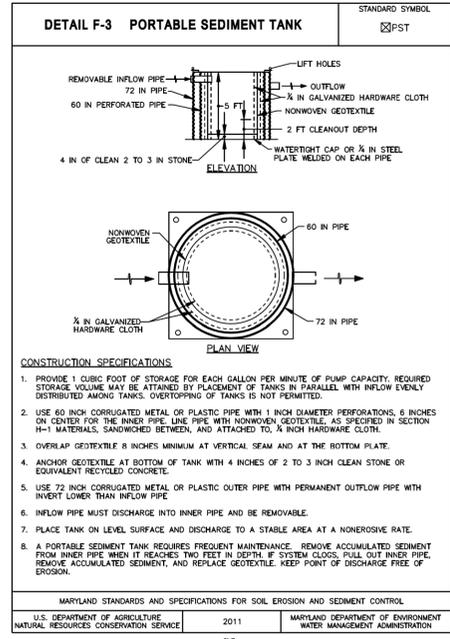
**DESIGN CERTIFICATION**

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH THE MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, THE 2000 MARYLAND STORMWATER DESIGN MANUAL, VOLUMES 1 & II INCLUDING SUPPLEMENTS, THE ENVIRONMENT ARTICLE SECTIONS 4-101 THROUGH 116 AND SECTIONS 4-201 AND 215, AND THE CODE OF MARYLAND REGULATIONS (COMAR) 26-17.01 AND COMAR 26-17.02 FOR EROSION AND SEDIMENT CONTROL AND STORMWATER MANAGEMENT, RESPECTIVELY.

\_\_\_\_\_  
 GLENN W. MARSCHKE  
 NAME  
 16142  
 MARYLAND, REGISTRATION NUMBER.  
 (P.E.), R.L.S. OR R.L.A. (CIRCLE)  
 \_\_\_\_\_  
 SIGNATURE  
 \_\_\_\_\_  
 DATE

**PROFESSIONAL CERTIFICATION**

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16142, EXPIRATION DATE: 8/17/2016.



**WORK IN PROGRESS  
NOT FOR CONSTRUCTION**

**WALLACE MONTGOMERY**  
 ENGINEERS-PLANNERS-SURVEYORS-CONSTRUCTION MANAGERS  
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 Hunt Valley, Maryland 21030  
 410.494.9093 Tel / 410.667.0925 Fax  
 www.wallacemontgomery.com A Limited Liability Partnership

SC/SWM-01 OF 05

MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES APPROVED FOR:		NOTE: MCDPS APPROVAL DOES NOT NEGATE THE NEED FOR A MCDPS ACCESS PERMIT.
Stormwater Management:	Sediment Control Technical Requirements:	Administrative Requirements:
Reviewed	Date	Reviewed
Approved	Date	Date
SM FILE #		SEDIMENT CONTROL PERMIT NO.
		MCDPS APPROVAL OF THIS PLAN WILL EXPIRE TWO YEARS FROM THE DATE OF APPROVAL IF THE PROJECT HAS NOT STARTED.

DPS approval of a sediment control or stormwater management plan is for demonstrated compliance with minimum environmental runoff treatment standards and does not create or imply any right to divert or concentrate runoff onto any adjacent property without that property owner's permission. It does not relieve the design engineer or other responsible person of professional liability or ethical responsibility for the adequacy of the drainage design as it affects uphill or downhill properties.

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION  
 100 EDISON PARK DRIVE, 4TH FLOOR  
 GAITHERSBURG, MD 20878

RECOMMENDED FOR APPROVAL

Chief, Design Section \_\_\_\_\_ Date \_\_\_\_\_  
 APPROVED

Chief, Division of Engineering Services \_\_\_\_\_ Date \_\_\_\_\_

Designed by : BJA Drawn by : BJA Checked by : GRL

**EROSION AND SEDIMENT CONTROL NOTES**

**STONEBROOK DRIVE AT CAPITOL VIEW AVE. SIDEWALK**

SCALE N.T.S. 08/2015

Project No. : C.I.P. PR. # 506747 SHEET 10 of 22

DATUM: NAD 83/91 HORIZONTAL NAVD 88 VERTICAL			
NO.	REVISION	DATE	BY

**B-3 STANDARDS AND SPECIFICATIONS**

**FOR**

**LAND GRADING**

**Definition**

Reshaping the existing land surface to provide suitable topography for building facilities and other site improvements.

**Purpose**

To provide erosion control and vegetative establishment for extreme changes in grade.

**Conditions Where Practice Applies**

Earth disturbances or extreme grade modifications on steep or long slopes.

**Design Criteria**

The grading plan should be based on the incorporation of building designs and street layouts that fit and utilize existing topography and desirable natural surroundings to avoid extreme grade modifications. Information submitted must provide sufficient topographic surveys and soil investigations to determine limitations that must be imposed on the grading operation related to slope stability, adjacent properties, drainage patterns, measures for water removal, and vegetative treatment, etc.

Many jurisdictions have regulations and design procedures already established for land grading that must be followed. The plan must show existing and proposed contours for the area(s) to be graded including practices for erosion control, slope stabilization, and safe conveyance of runoff (e.g., waterways, lined channels, reverse benches, grade stabilization structures). The grading/construction plans are to include the phasing of these practices and consideration of the following:

- Provisions to safely convey surface runoff to storm drains, protected outlets or stable water courses to ensure that surface runoff will not damage slopes or other graded areas.
- Cut and fill slopes, stabilized with grasses, no steeper than 2:1. (Where the slope is to be mowed, the slope should be no steeper than 3:1, but 4:1 is preferred because of safety factors related to mowing steep slopes). Slopes steeper than 2:1 require special design and stabilization considerations to be shown on the plans.
- Benching per Detail B-3-1 whenever the vertical interval (height) of any 2:1 slope exceeds 20 feet; for 3:1 slopes, when it exceeds 30 feet; and for 4:1 slopes, when it exceeds 40 feet. Locate benches to divide the slope face as equally as possible and to convey the water to a stable outlet. Soils, seeps, rock outcrops, etc. are to be taken into consideration when designing benches.
  - Provide benches with a minimum width of six feet for ease of maintenance.
  - Design benches with a reverse slope of 6:1 or flatter to the toe of the upper slope and with a minimum of one foot in depth. Grade the longitudinal slope of the bench between 2 percent and 3 percent, unless accompanied by appropriate design and computations.

B.5

c. The maximum allowable flow length within a bench is 800 feet unless accompanied by appropriate design and computations.

4. Diversion of surface water from the face of all cut and fill slopes using earth dikes or swales. Convey surface water down slope using a designed structure, and:

- Protect the face of all graded slopes from surface runoff until they are stabilized.
- Do not subject the slope's face to any concentrated flow of surface water such as from natural drainage ways, graded swales, downspouts, etc.
- Protect the face of the slope by special erosion control materials to include, but not be limited to, approved vegetative stabilization practices, riprap or other approved stabilization methods.

5. Serrated slope m shown in Detail B-3-2. The steepest allowable slope for ripable rock is 1.5:1. For non rock surfaces, the slopes are to be 2:1 or flatter. These steps will weather and act to hold moisture, lime, fertilizer and seed thus producing a much quicker and longer lived vegetative cover and better slope stabilization.

6. Subsurface drainage provisions. Provide subsurface drainage where necessary to intercept seepage that would otherwise adversely affect slope stability or create excessively wet site conditions.

7. Proximity to adjacent property. Slopes must not be created close to property lines without adequate protection against sedimentation, erosion, slippage, settlement, subsidence, or other related damages.

8. Quality of fill material. Fill material must be free of brush, rubbish, logs, stumps, building debris, and other objectionable material. Do not place frozen materials in the fill nor place the fill material on a frozen foundation.

9. Stabilization. Stabilize all disturbed areas structurally or vegetatively in compliance with Section B-4 Standards and Specifications for Stabilization Practices.

**Maintenance**

The line, grade, and cross section of benching and serrated slopes must be maintained. Benches and serrated slopes must continuously meet the requirements for Adequate Vegetative Establishment in accordance with Section B-4 Vegetative Stabilization.

B.6

**B-4 STANDARDS AND SPECIFICATIONS**

**FOR**

**VEGETATIVE STABILIZATION**

**Definition**

Using vegetation as cover to protect exposed soil from erosion.

**Purpose**

To promote the establishment of vegetation on exposed soil.

**Conditions Where Practice Applies**

On all disturbed areas not stabilized by other methods. This specification is divided into sections on incremental stabilization; soil preparation, soil amendments and topsoiling; seeding and mulching; temporary stabilization; and permanent stabilization.

**Effects on Water Quality and Quantity**

Stabilization practices are used to promote the establishment of vegetation on exposed soil. When soil is stabilized with vegetation, the soil is less likely to erode and more likely to allow infiltration of rainfall, thereby reducing sediment loads and runoff to downstream areas.

Planting vegetation in disturbed areas will have an effect on the water budget, especially on volumes and rates of runoff, infiltration, evaporation, transpiration, percolation, and groundwater recharge. Over time, vegetation will increase organic matter content and improve the water holding capacity of the soil and subsequent plant growth.

Vegetation will help reduce the movement of sediment, nutrients, and other chemicals carried by runoff to receiving waters. Plants will also help protect groundwater supplies by assimilating those substances present within the root zone.

**Sediment control practices must remain in place during grading, seedbed preparation, seeding, mulching, and vegetative establishment.**

**Adequate Vegetative Establishment**

Inspect seeded areas for vegetative establishment and make necessary repairs, replacements, and reseedings within the planting season.

- Adequate vegetative stabilization requires 95 percent groundcover.
- If an area has less than 40 percent groundcover, following the original recommendations for lime, fertilizer, seedbed preparation, and seeding.
- If an area has between 40 and 94 percent groundcover, over-seed and fertilize using half of the rates originally specified.
- Maintenance fertilizer rates for permanent seeding are shown in Table B.6.

B.9

**B-4.2 STANDARDS AND SPECIFICATIONS**

**FOR**

**SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS**

**Definition**

The process of preparing the soils to sustain adequate vegetative stabilization.

**Purpose**

To provide a suitable soil medium for vegetative growth.

**Conditions Where Practice Applies**

Where vegetative stabilization is to be established.

**Criteria**

- Soil Preparation
  - Temporary Stabilization
    - Seedbed preparation consists of loosening soil to a depth of 3 to 5 inches by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows or rippers mounted on construction equipment. After the soil is loosened, it must not be rolled or dragged smooth but left in the roughened condition. Slopes 3:1 or flatter are to be tracked with ridges running parallel to the contour of the slope.
    - Apply fertilizer and lime as prescribed on the plans.
    - Incorporate lime and fertilizer into the top 3 to 5 inches of soil by disking or other suitable means.
  - Permanent Stabilization
    - A soil test is required for any earth disturbance of 5 acres or more. The minimum soil conditions required for permanent vegetative establishment are:
      - Soil pH between 6.0 and 7.0.
      - Soluble salts less than 500 parts per million (ppm).
      - Soil contains less than 40 percent clay but enough fine grained material (greater than 30 percent silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception: if lovegrass will be planted, then a sandy soil (less than 30 percent silt plus clay) would be acceptable.
      - Soil contains 1.5 percent minimum organic matter by weight.
      - Soil contains sufficient pore space to permit adequate root penetration.
    - Application of amendments or topsoil is required if on-site soils do not meet the above conditions.
    - Graded areas must be maintained in a true and even grade as specified on the approved plan, then scarified or otherwise loosened to a depth of 3 to 5 inches.

B.12

d. Apply soil amendments as specified on the approved plan or as indicated by the results of a soil test.

e. Mix soil amendments into the top 3 to 5 inches of soil by disking or other suitable means. Rake lawn areas to smooth the surface, remove large objects like stones and branches, and ready the area for seed application. Loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface where site conditions will not permit normal seedbed preparation. Track slopes 3:1 or flatter with tracked equipment leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. Leave the top 1 to 3 inches of soil loose and friable. Seedbed loosening may be unnecessary on newly disturbed areas.

**B. Topsoiling**

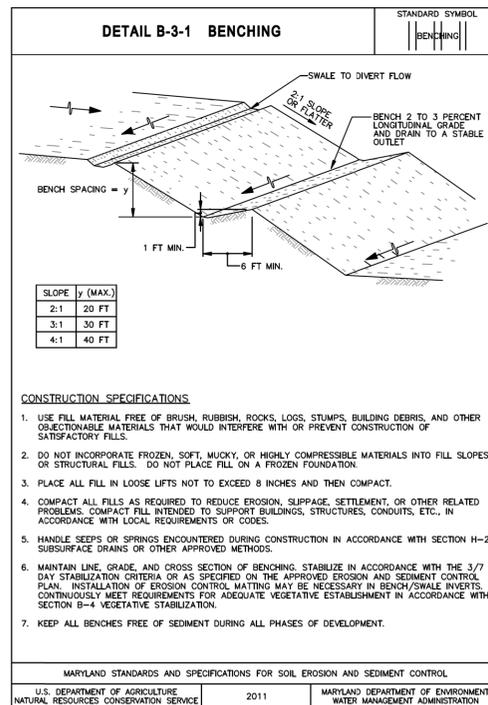
- Topsoil is placed over prepared subsoil prior to establishment of permanent vegetation. The purpose is to provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.
- Topsoil salvaged from an existing site may be used provided it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-NRCS.
- Topsoiling is limited to areas having 2:1 or flatter slopes where:
  - The texture of the exposed subsoil parent material is not adequate to produce vegetative growth.
  - The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
  - The original soil to be vegetated contains material toxic to plant growth.
  - The soil is so acidic that treatment with limestone is not feasible.
- Areas having slopes steeper than 2:1 require special consideration and design.
- Topsoil Specifications: Soil to be used as topsoil must meet the following criteria:
  - Topsoil must be a loam, sandy loam, clay loam, silt loam, sandy clay loam, or loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Topsoil must not be a mixture of contrasting textured subsoils and must contain less than 5 percent by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1½ inches in diameter.
  - Topsoil must be free of noxious plants or plant parts such as Bermuda grass, quack grass, Johnson grass, nut sedge, poison ivy, thistle, or others as specified.
  - Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.
- Topsoil Application
  - Erosion and sediment control practices must be maintained when applying topsoil.
  - Uniformly distribute topsoil in a 5 to 8 inch layer and lightly compact to a minimum thickness of 4 inches. Spreading is to be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations must be corrected in order to prevent the formation of depressions or water pockets.
  - Topsoil must not be placed if the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading.

B.13

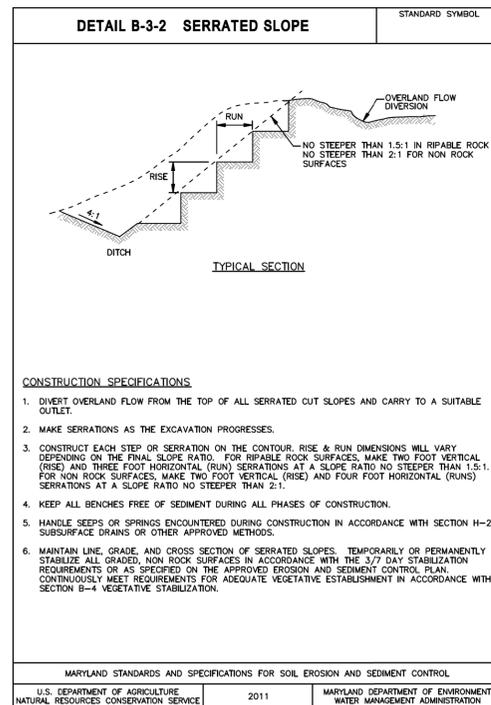
**C. Soil Amendments (Fertilizer and Lime Specifications)**

- Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas of 5 acres or more. Soil analysis may be performed by a recognized private or commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses.
- Fertilizers must be uniform in composition, free flowing and suitable for accurate application by appropriate equipment. Manure may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers must all be delivered to the site fully labeled according to the applicable laws and must bear the name, trade name or trademark and warranty of the producer.
- Lime materials must be ground limestone (hydrated or burnt lime may be substituted except when hydrosedding) which contains at least 50 percent total oxides (calcium oxide plus magnesium oxide). Limestone must be ground to such fineness that at least 50 percent will pass through a #100 mesh sieve and 90 to 100 percent will pass through a #20 mesh sieve.
- Lime and fertilizer are to be evenly distributed and incorporated into the top 3 to 5 inches of soil by disking or other suitable means.
- Where the subsoil is either highly acidic or composed of heavy clays, spread ground limestone at the rate of 4 to 8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil.

B.14



B.7



B.8

SC/SWM-02 OF 05

MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES APPROVED FOR:		NOTE: MCDPS APPROVAL DOES NOT NEGATE THE NEED FOR A MCDPS ACCESS PERMIT.
Stormwater Management:	Sediment Control Technical Requirements:	Administrative Requirements:
Reviewed	Reviewed	Reviewed
Date	Date	Date
Approved	Approved	SEDIMENT CONTROL PERMIT NO.
Date	Date	
SM FILE #		MCDPS APPROVAL OF THIS PLAN WILL EXPIRE TWO YEARS FROM THE DATE OF APPROVAL IF THE PROJECT HAS NOT STARTED.

DPS approval of a sediment control or stormwater management plan is for demonstrated compliance with minimum environmental runoff treatment standards and does not create or imply any right to divert or concentrate runoff onto any adjacent property without that property owner's permission. It does not relieve the design engineer or other responsible person of professional liability or ethical responsibility for the adequacy of the drainage design as it affects uphill or downhill properties.



**WORK IN PROGRESS  
NOT FOR CONSTRUCTION**

**WALLACE MONTGOMERY**  
ENGINEERS-PLANNERS-SURVEYORS-CONSTRUCTION MANAGERS  
10150 York Road, Suite 200  
Hunt Valley, Maryland 21030  
410.494.9093 Tel / 410.667.0925 Fax  
www.wallacemontgomery.com A Limited Liability Partnership

**MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION**  
100 EDISON PARK DRIVE, 4TH FLOOR  
GAITHERSBURG, MD 20878

**EROSION AND SEDIMENT CONTROL DETAILS**

**STONEYBROOK DRIVE AT CAPITOL VIEW AVE. SIDEWALK**

SCALE N.T.S. 08/2015

Project No. : C.I.P. PR. # 506747 SHEET 11 of 22

DATUM: NAD 83/91 HORIZONTAL  
NAVD 88 VERTICAL

RECOMMENDED FOR APPROVAL

Chief, Design Section \_\_\_\_\_ Date \_\_\_\_\_  
APPROVED

Chief, Division of Engineering Services \_\_\_\_\_ Date \_\_\_\_\_

Designed by : BJA Drawn by : BJA Checked by : GRL

NO. REVISION DATE BY

**B-4.3 STANDARDS AND SPECIFICATIONS**

**FOR SEEDING AND MULCHING**

**Definition**

The application of seed and mulch to establish vegetative cover.

**Purpose**

To protect disturbed soils from erosion during and at the end of construction.

**Conditions Where Practice Applies**

To the surface of all perimeter controls, slopes, and any disturbed area not under active grading.

**Criteria**

- A. Seeding
  - 1. Specifications
    - a. All seed must meet the requirements of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory. All seed used must have been tested within the 6 months immediately preceding the date of sowing such material on any project. Refer to Table B.4 regarding the quality of seed. Seed tags must be available upon request to the inspector to verify type of seed and seeding rate.
    - b. Mulch alone may be applied between the fall and spring seeding dates only if the ground is frozen. The appropriate seeding mixture must be applied when the ground thaws.
    - c. Inoculants: The inoculant for treating legume seed in the seed mixtures must be a pure culture of nitrogen fixing bacteria prepared specifically for the species. Inoculants must not be used later than the date indicated on the container. Add fresh inoculants as directed on the package. Use four times the recommended rate when hydroseeding. Note: It is very important to keep inoculant as cool as possible until used. Temperatures above 75 to 80 degrees Fahrenheit can weaken bacteria and make the inoculant less effective.
    - d. Sod or seed must not be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phyto-toxic materials.
  - 2. Application
    - a. Dry Seeding: This includes use of conventional drop or broadcast spreaders.
      - i. Incorporate seed into the subsoil at the rates prescribed on Temporary Seeding Table B.1, Permanent Seeding Table B.3, or site-specific seeding summaries.
      - ii. Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction. Roll the seeded area with a weighted roller to provide good seed to soil contact.

B.15

- b. Drill or Cultipacker Seeding: Mechanized seeders that apply and cover seed with soil.
  - i. Cultipacker seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil covering. Seedbed must be firm after planting.
  - ii. Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction.
- c. Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer).
  - i. If fertilizer is being applied at the time of seeding, the application rates should not exceed the following: nitrogen, 100 pounds per acre total of soluble nitrogen; P<sub>2</sub>O<sub>5</sub> (phosphorous), 200 pounds per acre; K<sub>2</sub>O (potassium), 200 pounds per acre.
  - ii. Lime: Use only ground agricultural limestone (up to 3 tons per acre may be applied by hydroseeding). Normally, not more than 2 tons are applied by hydroseeding at any one time. Do not use burnt or hydrated lime when hydroseeding.
  - iii. Mix seed and fertilizer on site and seed immediately and without interruption.
  - iv. When hydroseeding do not incorporate seed into the soil.

**B. Mulching**

- 1. Mulch Materials (in order of preference)
  - a. Straw consisting of thoroughly threshed wheat, rye, oat, or barley and reasonably bright in color. Straw is to be free of noxious weed seeds as specified in the Maryland Seed Law and not musty, moldy, caked, decayed, or excessively dusty. **Note: Use only sterile straw mulch in areas where one species of grass is desired.**
  - b. Wood Cellulose Fiber Mulch (WCFM) consisting of specially prepared wood cellulose processed into a uniform fibrous physical state.
    - i. WCFM is to be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniformly spread slurry.
    - ii. WCFM, including dye, must contain no germination or growth inhibiting factors.
    - iii. WCFM materials are to be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer and other additives to form a homogeneous slurry. The mulch material must form a blotter-like ground cover, on application, having moisture absorption and percolation properties and must cover and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings.
    - iv. WCFM material must not contain elements or compounds at concentration levels that will be phyto-toxic.
    - v. WCFM must conform to the following physical requirements: fiber length of approximately 10 millimeters, diameter approximately 1 millimeter, pH range of 4.0 to 8.5, ash content of 1.6 percent maximum and water holding capacity of 90 percent minimum.

B.16

**2. Application**

- a. Apply mulch to all seeded areas immediately after seeding.
  - b. When straw mulch is used, spread it over all seeded areas at the rate of 2 tons per acre to a uniform loose depth of 1 to 2 inches. Apply mulch to achieve a uniform distribution and depth so that the soil surface is not exposed. When using a mulch anchoring tool, increase the application rate to 2.5 tons per acre.
  - c. Wood cellulose fiber used as mulch must be applied at a net dry weight of 1500 pounds per acre. Mix the wood cellulose fiber with water to attain a mixture with a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.
3. Anchoring
- a. Perform mulch anchoring immediately following application of mulch to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending upon the size of the area and erosion hazard:
    - i. A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface a minimum of 2 inches. This practice is most effective on large areas, but is limited to flatter slopes where equipment can operate safely. If used on sloping land, this practice should follow the contour.
    - ii. Wood cellulose fiber may be used for anchoring straw. Apply the fiber binder at a net dry weight of 750 pounds per acre. Mix the wood cellulose fiber with water at a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.
    - iii. Synthetic binders such as Acrylic DLR (Agro-Tack), DCA-70, Petrosol, Terra Tax II, Terra Tack AR or other approved equal may be used. Follow application rates as specified by the manufacturer. Application of liquid binders needs to be heavier at the edges where wind catches mulch, such as in valleys and on crests of banks. **Use of asphalt binders is strictly prohibited.**
    - iv. Lightweight plastic netting may be stapled over the mulch according to manufacturer recommendations. Netting is usually available in rolls 4 to 15 feet wide and 300 to 3,000 feet long.

B.17

**B-4.4 STANDARDS AND SPECIFICATIONS**

**FOR TEMPORARY STABILIZATION**

**Definition**

To stabilize disturbed soils with vegetation for up to 6 months.

**Purpose**

To use fast growing vegetation that provides cover on disturbed soils.

**Conditions Where Practice Applies**

Exposed soils where ground cover is needed for a period of 6 months or less. For longer duration of time, permanent stabilization practices are required.

**Criteria**

- 1. Select one or more of the species or seed mixtures listed in Table B.1 for the appropriate Plant Hardness Zone (from Figure B.3), and enter them in the Temporary Seeding Summary below along with application rates, seeding dates and seeding depths. If this Summary is not put on the plan and completed, then Table B.1 plus fertilizer and lime rates must be put on the plan.
- 2. For sites having soil tests performed, use and show the recommended rates by the testing agency. Soil tests are not required for Temporary Seeding.
- 3. When stabilization is required outside of a seeding season, apply seed and mulch or straw mulch alone as prescribed in Section B-4-3.A.1.b and maintain until the next seeding season.

**Temporary Seeding Summary**

Hardness Zone (from Figure B.3): ZONE 6B				Fertilizer Rate (10-20-20)	Lime Rate
Seed Mixture (from Table B.1):					
No.	Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths	
	BARLEY PLUS FOXTAIL MILLET	96 & 30	3/15-5/31 & 8/1-9/30	1" & 0.5"	
	CEREAL RYE PLUS FOXTAIL MILLET	112 & 30	3/15-5/31 & 8/1-9/30	1" & 0.5"	436 lb/ac (10 lb/1000 sf) 2 tons/ac (90 lb/1000 sf)

B.18

rapid establishment is necessary and when turf will receive medium to intensive management. Certified Perennial Ryegrass Cultivars/Certified Kentucky Bluegrass Seeding Rate: 2 pounds mixture per 1000 square feet. Choose a minimum of three Kentucky bluegrass cultivars with each ranging from 10 to 35 percent of the total mixture by weight.

- iii. Tall Fescue/Kentucky Bluegrass: Full Sun Mixture: For use in drought prone areas and/or for areas receiving low to medium management in full sun to medium shade. Recommended mixture includes: Certified Tall Fescue Cultivars 95 to 100 percent, Certified Kentucky Bluegrass Cultivars 0 to 5 percent. Seeding Rate: 5 to 8 pounds per 1000 square feet. One or more cultivars may be blended.
- iv. Kentucky Bluegrass/Fine Fescue: Shade Mixture: For use in areas with shade in Bluegrass lawns. For establishment in high quality, intensively managed turf area. Mixture includes: Certified Kentucky Bluegrass Cultivars 30 to 40 percent and Certified Fine Fescue and 60 to 70 percent. Seeding Rate: 1½ to 3 pounds per 1000 square feet.

**Notes:**  
Select turfgrass varieties from those listed in the most current University of Maryland Publication, Agronomy Memo #77, "Turfgrass Cultivar Recommendations for Maryland"

Choose certified material. Certified material is the best guarantee of cultivar purity. The certification program of the Maryland Department of Agriculture, Turf and Seed Section, provides a reliable means of consumer protection and assures a pure genetic line

- c. Ideal Times of Seeding for Turf Grass Mixtures
  - Western MD: March 15 to June 1, August 1 to October 1 (Hardness Zones: 5b, 6a)
  - Central MD: March 1 to May 15, August 15 to October 15 (Hardness Zone: 6b)
  - Southern MD, Eastern Shore: March 1 to May 15, August 15 to October 15 (Hardness Zones: 7a, 7b)

- d. Till areas to receive seed by disking or other approved methods to a depth of 2 to 4 inches, level and rake the areas to prepare a proper seedbed. Remove stones and debris over 1½ inches in diameter. The resulting seedbed must be in such condition that future mowing of grasses will pose no difficulty.
- e. If soil moisture is deficient, supply new seedlings with adequate water for plant growth (½ to 1 inch every 3 to 4 days depending on soil texture) until they are firmly established. This is especially true when seedlings are made late in the planting season, in abnormally dry or hot seasons, or on adverse sites.

B.22

**Permanent Seeding Summary**

Hardness Zone (from Figure B.3): ZONE 6B				Fertilizer Rate (10-20-20)			Lime Rate
Seed Mixture (from Table B.3):				N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	
No.	Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths			
9	TALL FESCUE	60	3/15-5/31 & 8/1-9/30	½- ½ in	45 pounds per acre (1.0 lb/ 1000 sf)	90 lb/ac (2 lb/ 1000 sf)	2 tons/ac (90 lb/ 1000 sf)
	KENTUCKY BLUEGRASS	40	3/15-5/31 & 8/1-9/30	½- ½ in			
	PERENNIAL RYEGRASS	20	3/15-5/31 & 8/1-9/30	½- ½ in			

B.23

- B. Sod: To provide quick cover on disturbed areas (2:1 grade or flatter).
  - 1. General Specifications
    - a. Class of turfgrass sod must be Maryland State Certified. Sod labels must be made available to the job foreman and inspector.
    - b. Sod must be machine cut at a uniform soil thickness of ¾ inch, plus or minus ¼ inch, at the time of cutting. Measurement for thickness must exclude top growth and thatch. Broken pads and torn or uneven ends will not be acceptable.
    - c. Standard size sections of sod must be strong enough to support their own weight and retain their size and shape when suspended vertically with a firm grasp on the upper 10 percent of the section.
    - d. Sod must not be harvested or transplanted when moisture content (excessively dry or wet) may adversely affect its survival.
    - e. Sod must be harvested, delivered, and installed within a period of 36 hours. Sod not transplanted within this period must be approved by an agronomist or soil scientist prior to its installation.
  - 2. Sod Installation
    - a. During periods of excessively high temperature or in areas having dry subsoil, lightly irrigate the subsoil immediately prior to laying the sod.
    - b. Lay the first row of sod in a straight line with subsequent rows placed parallel to it and tightly wedged against each other. Stagger lateral joints to promote more uniform growth and strength. Ensure that sod is not stretched or overlapped and that all joints are butted tight in order to prevent voids which would cause air drying of the roots.
    - c. Wherever possible, lay sod with the long edges parallel to the contour and with staggering joints. Roll and tamp, peg or otherwise secure the sod to prevent slippage on slopes. Ensure solid contact exists between sod roots and the underlying soil surface.
    - d. Water the sod immediately following rolling and tamping until the underside of the new sod pad and soil surface below the sod are thoroughly wet. Complete the operations of laying, tamping and irrigating for any piece of sod within eight hours.

B.24

**3. Sod Maintenance**

- a. In the absence of adequate rainfall, water daily during the first week or as often and sufficiently as necessary to maintain moist soil to a depth of 4 inches. Water sod during the heat of the day to prevent wilting.
- b. After the first week, sod watering is required as necessary to maintain adequate moisture content.
- c. Do not mow until the sod is firmly rooted. No more than ½ of the grass leaf must be removed by the initial cutting or subsequent cuttings. Maintain a grass height of at least 3 inches unless otherwise specified.

SC/SWM-03 OF 05

<b>MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES APPROVED FOR:</b>		<b>NOTE: MCDPS APPROVAL DOES NOT NEGATE THE NEED FOR A MCDPS ACCESS PERMIT.</b>
Stormwater Management:	Sediment Control Technical Requirements:	Administrative Requirements:
_____	_____	Reviewed _____ Date _____
Reviewed _____ Date _____	Reviewed _____ Date _____	SEDIMENT CONTROL PERMIT NO. _____
Approved _____ Date _____	Approved _____ Date _____	_____
SM FILE # _____		MCDPS APPROVAL OF THIS PLAN WILL EXPIRE TWO YEARS FROM THE DATE OF APPROVAL IF THE PROJECT HAS NOT STARTED.

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**WORK IN PROGRESS NOT FOR CONSTRUCTION**

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410.494.9093 Tel / 410.667.0925 Fax  
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DATUM: NAD 83/91 HORIZONTAL NAVD 88 VERTICAL			
NO.	REVISION	DATE	BY

**MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION**  
100 EDISON PARK DRIVE, 4TH FLOOR  
GAITHERSBURG, MD 20878

RECOMMENDED FOR APPROVAL

Chief, Design Section \_\_\_\_\_ Date \_\_\_\_\_  
APPROVED

Chief, Division of Engineering Services \_\_\_\_\_ Date \_\_\_\_\_

Designed by : BJA Drawn by : BJA Checked by : GRL

**EROSION AND SEDIMENT CONTROL DETAILS**

**STONEYBROOK DRIVE AT CAPITOL VIEW AVE. SIDEWALK**

SCALE N.T.S. 08/2015

Project No. : C.I.P. PR. # 506747 SHEET 12 of 22



**LIMIT OF WORK**  
**C.I.P. PR # 506747**  
**STONEBROOK-CAPITAL**  
**STA. 100+51**

MARY E. HUGHES, TRUSTEES  
 L. 18476 F. 269  
 TM HP52 P 0000  
 LOT 45

SHANNON & JOHN D. MORRIS  
 L. 26722 F. 130  
 TM HP52 P 0000  
 LOT 44

PAUL W. KARADBIL  
 L. 16041 F. 125  
 TM HP52 P 0000  
 LOT 43

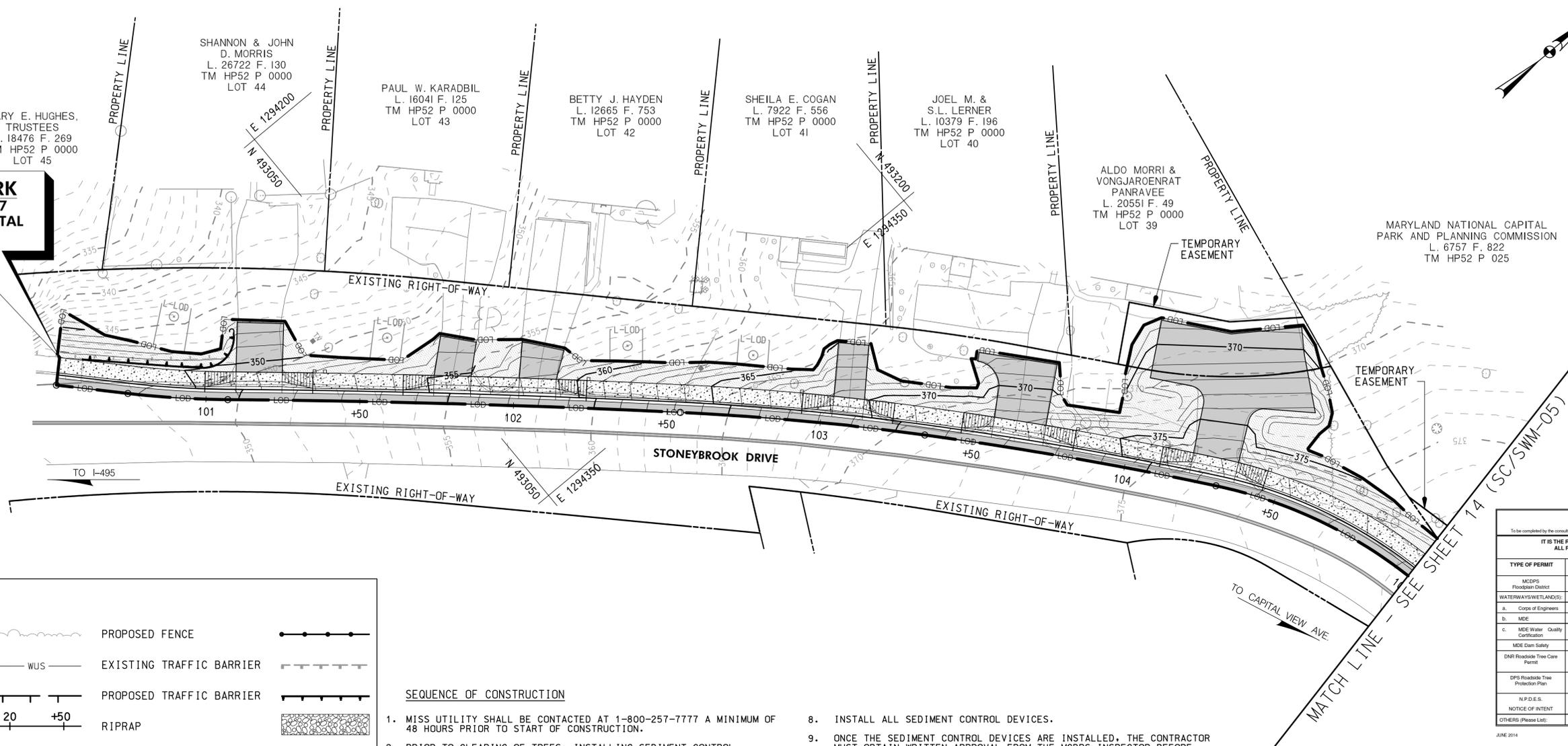
BETTY J. HAYDEN  
 L. 12665 F. 753  
 TM HP52 P 0000  
 LOT 42

SHEILA E. COGAN  
 L. 7922 F. 556  
 TM HP52 P 0000  
 LOT 41

JOEL M. & S.L. LERNER  
 L. 10379 F. 196  
 TM HP52 P 0000  
 LOT 40

ALDO MORRI & VONGJARENAT PANRAVEE  
 L. 20551 F. 49  
 TM HP52 P 0000  
 LOT 39

MARYLAND NATIONAL CAPITAL PARK AND PLANNING COMMISSION  
 L. 6757 F. 822  
 TM HP52 P 025



LEGEND			
TREE LINE		PROPOSED FENCE	
WATERS OF THE US		EXISTING TRAFFIC BARRIER	
100-YR WATER SURFACE ELEVATION		PROPOSED TRAFFIC BARRIER	
CONSTRUCTION BASELINE		RIPRAP	
EXISTING CONTOUR		SAME DAY STABILIZATION	
PROPOSED CONTOUR		FULL DEPTH PAVING	
EXISTING RIGHT-OF-WAY		PROPOSED SIDEWALK	
PROPOSED RIGHT-OF-WAY		SAND BAGS	
LIMIT OF DISTURBANCE		PORTABLE SEDIMENT TANK	
LANDSCAPING LIMIT OF DISTURBANCE		PROPOSED TREE PLANTING FENCE	

**SEQUENCE OF CONSTRUCTION**

- MISS UTILITY SHALL BE CONTACTED AT 1-800-257-7777 A MINIMUM OF 48 HOURS PRIOR TO START OF CONSTRUCTION.
- PRIOR TO CLEARING OF TREES, INSTALLING SEDIMENT CONTROL MEASURES, OR GRADING, A PRECONSTRUCTION MEETING MUST BE CONDUCTED ON-SITE WITH THE MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES (MCDPS) SEDIMENT CONTROL INSPECTOR (240) 777-6210 (48 HOURS NOTICE), THE OWNERS REPRESENTATIVE, AND THE SITE ENGINEER.
- THE LIMITS OF DISTURBANCE MUST BE FIELD MARKED PRIOR TO CLEARING OF TREES, INSTALLATION OF SEDIMENT CONTROL MEASURES, CONSTRUCTION, OR OTHER LAND DISTURBING ACTIVITIES.
- WHERE NO STABILIZED CONSTRUCTION ENTRANCE IS PROVIDED, THE CONTRACTOR SHALL DESIGNATE PIECES OF CONSTRUCTION EQUIPMENT THAT SHALL BE ALLOWED 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. HAULING AND DELIVERY OF THE MATERIAL SHALL BE PERFORMED FROM THE ROADWAY. ROADWAY SHALL BE SWEEPED CLEAN AS NEEDED.
- IMPLEMENT MAINTENANCE OF TRAFFIC AS DIRECTED BY THE MAINTENANCE OF TRAFFIC NOTES ON SHEET 02.
- CLEAR AND GRADE FOR INSTALLATION OF SEDIMENT CONTROL DEVICES.
- INSTALL ALL TREE PROTECTION FENCE AND PERFORM ALL ROOT PRUNING PRIOR TO INSTALLATION OF PERIMETER SEDIMENT CONTROLS. SEE SHEETS TP-01, TP-02, AND TP-03 FOR ADDITIONAL ROOT PRUNING INFORMATION.
- INSTALL ALL SEDIMENT CONTROL DEVICES.
- ONCE THE SEDIMENT CONTROL DEVICES ARE INSTALLED, THE CONTRACTOR MUST OBTAIN WRITTEN APPROVAL FROM THE MCDPS INSPECTOR BEFORE PROCEEDING WITH ANY ADDITIONAL CLEARING, GRUBBING, OR GRADING.
- BEGIN CONSTRUCTION OF PROPOSED STORM DRAIN SYSTEMS INCLUDING I-01, I-02, AND EW-01. STORM DRAIN CONSTRUCTION SHALL TAKE PLACE DURING A FIVE (5) DAY DRY WEATHER FORECAST. STORM DRAIN CONSTRUCTION SHALL TAKE PLACE FROM DOWNSTREAM TO UPSTREAM.
- FINALIZE GRADING, STORM DRAIN CONSTRUCTION, AND STABILIZE OUTFALL. REMOVE SANDBAGS AND PORTABLE SEDIMENT TANK WITH WRITTEN APPROVAL FROM MCDPS INSPECTOR.
- BEGIN CONSTRUCTION OF SIDEWALK/BIKE PATH AND CURB AND GUTTER.
- FINALIZE ROADWAY CONSTRUCTION AND STABILIZE ALL AREAS WITHIN THE LOD.
- OBTAIN WRITTEN APPROVAL FROM MCDPS INSPECTOR AND REMOVE ALL SEDIMENT CONTROL DEVICES. STABILIZE ANY AREA DISTURBED BY REMOVAL OF SEDIMENT CONTROL DEVICES.

RELATED REQUIRED PERMITS					
IT IS THE RESPONSIBILITY OF PERMITTEE/OWNER OF THIS SITE TO OBTAIN ALL REQUIRED PERMITS PRIOR TO ISSUANCE OF THE APPROVED SEDIMENT CONTROL PERMIT					
TYPE OF PERMIT	REQD	NOT REQD	PERMIT #	EXPIRATION DATE	WORK RESTRICTION DATES
MCDPS (Proprietary District)	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
WATERWAYS/WETLANDS (a. Corps of Engineers)	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
b. MDE	<input checked="" type="checkbox"/>	<input type="checkbox"/>			3/1-2/15 (INCLUSIVE, DURING ANY YEAR)
c. MDE Water Quality Certification	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
MDE Dam Safety	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
DNR Roadside Tree Care Permit	<input checked="" type="checkbox"/>	<input type="checkbox"/>		Approval Date	
DPS Roadside Tree Protection Plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>		Approval Date	
N.P.D.E.S.	<input checked="" type="checkbox"/>	<input type="checkbox"/>			DATE FILED
NOTICE OF INTENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
OTHERS (Please List):	<input checked="" type="checkbox"/>	<input type="checkbox"/>			

SC/SWM-04 OF 05

MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES APPROVED FOR:		NOTE: MCDPS APPROVAL DOES NOT NEGATE THE NEED FOR A MCDPS ACCESS PERMIT.
Stormwater Management:	Sediment Control Technical Requirements:	Administrative Requirements:
Reviewed _____ Date _____	Reviewed _____ Date _____	Reviewed _____ Date _____
Approved _____ Date _____	Approved _____ Date _____	SEDIMENT CONTROL PERMIT NO. _____
SM FILE # _____		MCDPS APPROVAL OF THIS PLAN WILL EXPIRE TWO YEARS FROM THE DATE OF APPROVAL IF THE PROJECT HAS NOT STARTED.

- NOTES:
- L-LOD ONLY USED FOR PLANTING OF TREES
  - ROCK CREEK IS CLASSIFIED AS A USE III WATERS



**WORK IN PROGRESS**  
**NOT FOR CONSTRUCTION**

**WALLACE MONTGOMERY**  
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 10150 York Road, Suite 200  
 Hunt Valley, Maryland 21030  
 410.494.9093 Tel / 410.667.0925 Fax  
 www.wallacemontgomery.com

**DAILY STABILIZATION NOTE**  
 ALL DISTURBED AREAS NOT DIRECTED TO AN MDE APPROVED SEDIMENT CONTROL DEVICE SHALL BE STABILIZED AT THE END OF EACH WORK DAY. THE CONTRACTOR SHALL NOT DISTURB AN AREA GREATER THAN THAT WHICH CAN BE STABILIZED AT THE END OF EACH DAY.



NO.	REVISION	DATE	BY

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION  
 100 EDISON PARK DRIVE, 4TH FLOOR  
 GAITHERSBURG, MD 20878

RECOMMENDED FOR APPROVAL

Chief, Design Section \_\_\_\_\_ Date \_\_\_\_\_  
 APPROVED

Chief, Division of Engineering Services \_\_\_\_\_ Date \_\_\_\_\_

Designed by : BJA Drawn by : BJA Checked by : GRL

**EROSION AND SEDIMENT CONTROL PLANS**

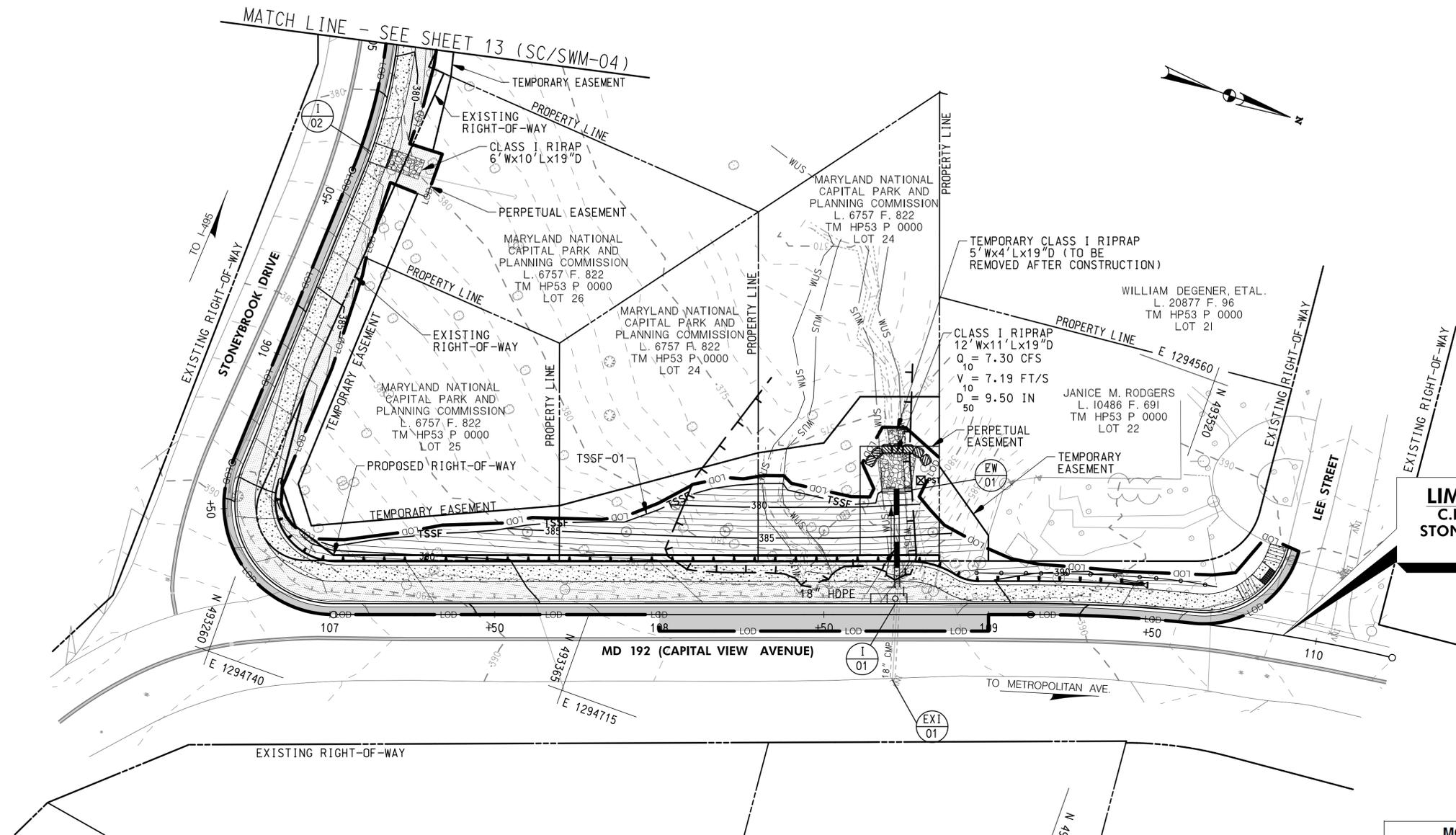
**STONEBROOK DRIVE AT CAPITOL VIEW AVE. SIDEWALK**

SCALE 1" = 20' 08/2015

Project No. : C.I.P. PR. # 506747 SHEET 13 of 22

LEGEND	
TREE LINE	
WATERS OF THE US	
100-YR WATER SURFACE ELEVATION	
CONSTRUCTION BASELINE	
EXISTING CONTOUR	
PROPOSED CONTOUR	
EXISTING RIGHT-OF-WAY	
PROPOSED RIGHT-OF-WAY	
LIMIT OF DISTURBANCE	
LANDSCAPING LIMIT OF DISTURBANCE	
TRENCHLESS SUPER SILT FENCE	
PROPOSED FENCE	
EXISTING TRAFFIC BARRIER	
PROPOSED TRAFFIC BARRIER	
RIPRAP	
SAME DAY STABILIZATION	
FULL DEPTH PAVING	
PROPOSED SIDEWALK	
SAND BAGS	
PORTABLE SEDIMENT TANK	
PROPOSED TREE PLANTING	

NOTE: L-L0D ONLY USED FOR PLANTING OF TREES



**LIMIT OF WORK**  
**C.I.P. PR. # 506747**  
**STONEBROOK-CAPITAL**  
**STA. 109+90**

SC/SWM-05 OF 05

**BEST MANAGEMENT PRACTICES FOR WORKING IN NONTIDAL WETLANDS, WETLAND BUFFERS, WATERWAYS AND 100-YEAR FLOODPLAINS**

- NO EXCESS FILL, CONSTRUCTION MATERIAL, OR DEBRIS SHALL BE STOCKPILED OR STORED IN NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS, OR THE 100-YEAR FLOODPLAIN.
- PLACE MATERIALS IN A LOCATION AND MANNER WHICH DOES NOT ADVERSELY IMPACT SURFACE OR SUBSURFACE WATER FLOW INTO OR OUT OF NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS, OR THE 100-YEAR FLOODPLAIN.
- DO NOT USE THE EXCAVATED MATERIAL AS BACKFILL IF IT CONTAINS WASTE METAL PRODUCTS, UNSIGHTLY DEBRIS, TOXIC MATERIAL, OR ANY OTHER DELETERIOUS SUBSTANCE. IF ADDITIONAL BACKFILL IS REQUIRED, USE CLEAN MATERIAL FREE OF WASTE METAL PRODUCTS, UNSIGHTLY DEBRIS, TOXIC MATERIAL, OR ANY OTHER DELETERIOUS SUBSTANCE.
- PLACE HEAVY EQUIPMENT ON MATS OR SUITABLY OPERATE THE EQUIPMENT TO PREVENT DAMAGE TO NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS, OR THE 100-YEAR FLOODPLAIN.
- REPAIR AND MAINTAIN ANY SERVICEABLE STRUCTURE OR FILL SO THERE IS NO PERMANENT LOSS OF NON-TIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, OR WATERWAYS, OR PERMANENT MODIFICATION OF THE 100-YEAR FLOODPLAIN IN EXCESS OF THAT LOST UNDER THE ORIGINALLY AUTHORIZED STRUCTURE OR FILL.
- RECTIFY ANY NONTIDAL WETLANDS, WETLAND BUFFERS, WATERWAYS, OR 100-YEAR FLOODPLAIN TEMPORARILY IMPACTED BY ANY CONSTRUCTION.
- ALL STABILIZATION IN THE NONTIDAL WETLAND AND NONTIDAL WETLAND BUFFER SHALL CONSIST OF THE FOLLOWING SPECIES: ANNUAL RYE GRASS (LOLIUM MULTIFLORUM), MILLET (SETARIA ITALICA), BARLEY (HORDEUM SP.), OATS (UNIOILA SP.), AND/OR RYE (SECALE CEREALE). THESE SPECIES WILL ALLOW FOR THE STABILIZATION OF THE SITE WHILE ALSO ALLOWING FOR THE VOLUNTARY REVEGETATION OF NATURAL WETLAND SPECIES. OTHER NONPERSISTENT VEGETATION MAY BE ACCEPTABLE, BUT MUST BE APPROVED BY THE NONTIDAL WETLANDS AND WATERWAYS DIVISION. KENTUCKY 31 FESCUE SHALL NOT BE UTILIZED IN WETLAND OR BUFFER AREAS. THE AREA SHOULD BE SEEDED AND MULCHED TO REDUCE EROSION AFTER CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED.
- AFTER INSTALLATION HAS BEEN COMPLETED, MAKE POST-CONSTRUCTION GRADES AND ELEVATIONS THE SAME AS THE ORIGINAL GRADES AND ELEVATIONS IN TEMPORARILY IMPACTED AREAS.
- TO PROTECT AQUATIC SPECIES, IN-STREAM WORK IS PROHIBITED AS DETERMINED BY THE CLASSIFICATION OF THE STREAM:  
 USE I WATERS: IN-STREAM WORK SHALL NOT BE CONDUCTED DURING THE PERIOD MARCH 1 THROUGH JUNE 15, INCLUSIVE, DURING ANY YEAR.  
 USE III WATERS: IN-STREAM WORK SHALL NOT BE CONDUCTED DURING THE PERIOD OCTOBER 1 THROUGH APRIL 30, INCLUSIVE, DURING ANY YEAR.  
 USE IV WATERS: IN-STREAM WORK SHALL NOT BE CONDUCTED DURING THE PERIOD MARCH 1 THROUGH MAY 31, INCLUSIVE, DURING ANY YEAR.
- STORMWATER RUNOFF FROM IMPERVIOUS SURFACES SHALL BE CONTROLLED TO PREVENT THE WASHING OF DEBRIS INTO THE WATERWAY.
- CULVERTS SHALL BE CONSTRUCTED AND ANY RIPRAP PLACED SO AS NOT TO OBSTRUCT THE MOVEMENT OF AQUATIC SPECIES, UNLESS THE PURPOSE OF THE ACTIVITY IS TO IMPOUND WATER.

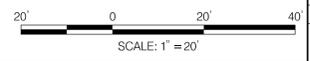
MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES APPROVED FOR:			NOTE: MCDPS APPROVAL DOES NOT NEGATE THE NEED FOR A MCDPS ACCESS PERMIT.
Stormwater Management:	Sediment Control Technical Requirements:	Administrative Requirements:	
Reviewed	Date	Reviewed	Date
Approved	Date	Approved	Date
SM FILE #		SEDIMENT CONTROL PERMIT NO.	
MCDPS APPROVAL OF THIS PLAN WILL EXPIRE TWO YEARS FROM THE DATE OF APPROVAL IF THE PROJECT HAS NOT STARTED.			

DPS approval of a sediment control or stormwater management plan is for demonstrated compliance with minimum environmental runoff treatment standards and does not create or imply any right to divert or concentrate runoff onto any adjacent property without that property owner's permission. It does not relieve the design engineer or other responsible person of professional liability or ethical responsibility for the adequacy of the drainage design as it affects uphill or downhill properties.



**WORK IN PROGRESS**  
**NOT FOR CONSTRUCTION**

**WALLACE MONTGOMERY**  
 ENGINEERS-PLANNERS-SURVEYORS-CONSTRUCTION MANAGERS  
 10150 York Road, Suite 200  
 Hunt Valley, Maryland 21030  
 410.494.9093 Tel / 410.667.0925 Fax  
 www.wallacemontgomery.com A Limited Liability Partnership



DATUM: NAD 83/91 HORIZONTAL  
 NAVD 88 VERTICAL

NO.	REVISION	DATE	BY

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION  
 100 EDISON PARK DRIVE, 4TH FLOOR  
 GAITHERSBURG, MD 20878

RECOMMENDED FOR APPROVAL

Chief, Design Section \_\_\_\_\_ Date \_\_\_\_\_  
 APPROVED

Chief, Division of Engineering Services \_\_\_\_\_ Date \_\_\_\_\_

Designed by : BJA Drawn by : BJA Checked by : GRL

**EROSION AND SEDIMENT CONTROL PLANS**

**STONEBROOK DRIVE AT CAPITOL VIEW AVE. SIDEWALK**

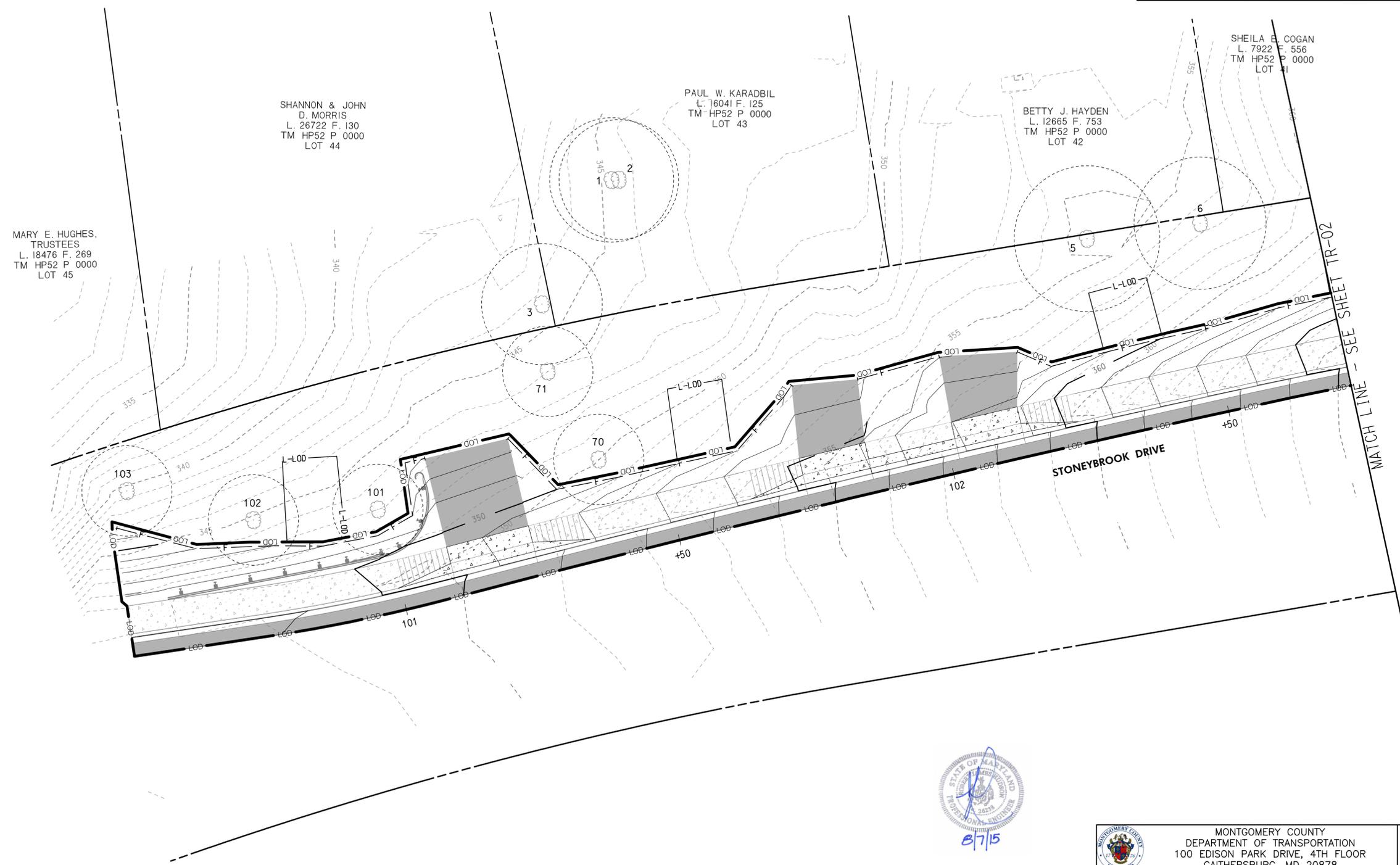
SCALE 1" = 20' 08/2015

Project No. : C.I.P. PR. # 506747 SHEET 14 of 22

Plotter: Burrows August 06, 2015 At 02:57 PM  
 FILE: M:\PROJECTS\140110001\01\Water Resources\_Cadd\_L\PE5-P002\_STONEYBROOK.dgn



LEGEND			
	BASELINE OF CONSTRUCTION		TRAFFIC BARRIER W BEAM
	EXISTING RIGHT-OF-WAY LINE		LANDSCAPING LIMIT OF DISTURBANCE
	PROPOSED RIGHT-OF-WAY LINE		LIMITS OF DISTURBANCE
	PROPERTY LINE		FOREST BOUNDARY
	TOE OF FILL		INDIVIDUAL TREE
	EXISTING CONTOURS		SIGNIFICANT TREE
	PROPOSED CONTOURS		CRITICAL ROOT ZONE
	EDGE OF ROADWAY		TREE TO BE REMOVED



MARY E. HUGHES,  
TRUSTEES  
L. 18476 F. 269  
TM HP52 P. 0000  
LOT 45

SHANNON & JOHN  
D. MORRIS  
L. 26722 F. 130  
TM HP52 P. 0000  
LOT 44

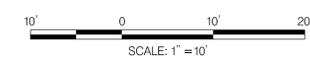
PAUL W. KARADBIL  
L. 16041 F. 125  
TM HP52 P. 0000  
LOT 43

BETTY J. HAYDEN  
L. 12665 F. 753  
TM HP52 P. 0000  
LOT 42

SHEILA E. COGAN  
L. 7922 F. 556  
TM HP52 P. 0000  
LOT 41



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DATUM: NAD 83/91 HORIZONTAL  
NAVD 88 VERTICAL

NO.	REVISION	DATE	BY

MONTGOMERY COUNTY  
DEPARTMENT OF TRANSPORTATION  
100 EDISON PARK DRIVE, 4TH FLOOR  
GAITHERSBURG, MD 20878

RECOMMENDED FOR APPROVAL	
Chief, Design Section	Date
APPROVED	
Chief, Division of Engineering Services	Date
Designed by : AEM	Drawn by : CBG
Checked by : AEM	

**PLAN SHEET TR-01  
TREE REMOVAL PLAN**

**STONEBROOK DRIVE AT  
CAPITOL VIEW AVE. SIDEWALK**

SCALE 1" = 10' 08/2015  
Project No. : C.I.P. PR. # 507596 SHEET 15 of 22

PLotted Thursday, August 06, 2015 At 02:20 PM  
FILE: M:\PROJ\14011001\01\Water Resources\_Cadd\_L\pFO-P001\_STONEYBROOK.dgn

SHEILA E. COGAN  
L. 7922 F. 556  
TM HP52 P 0000  
LOT 41

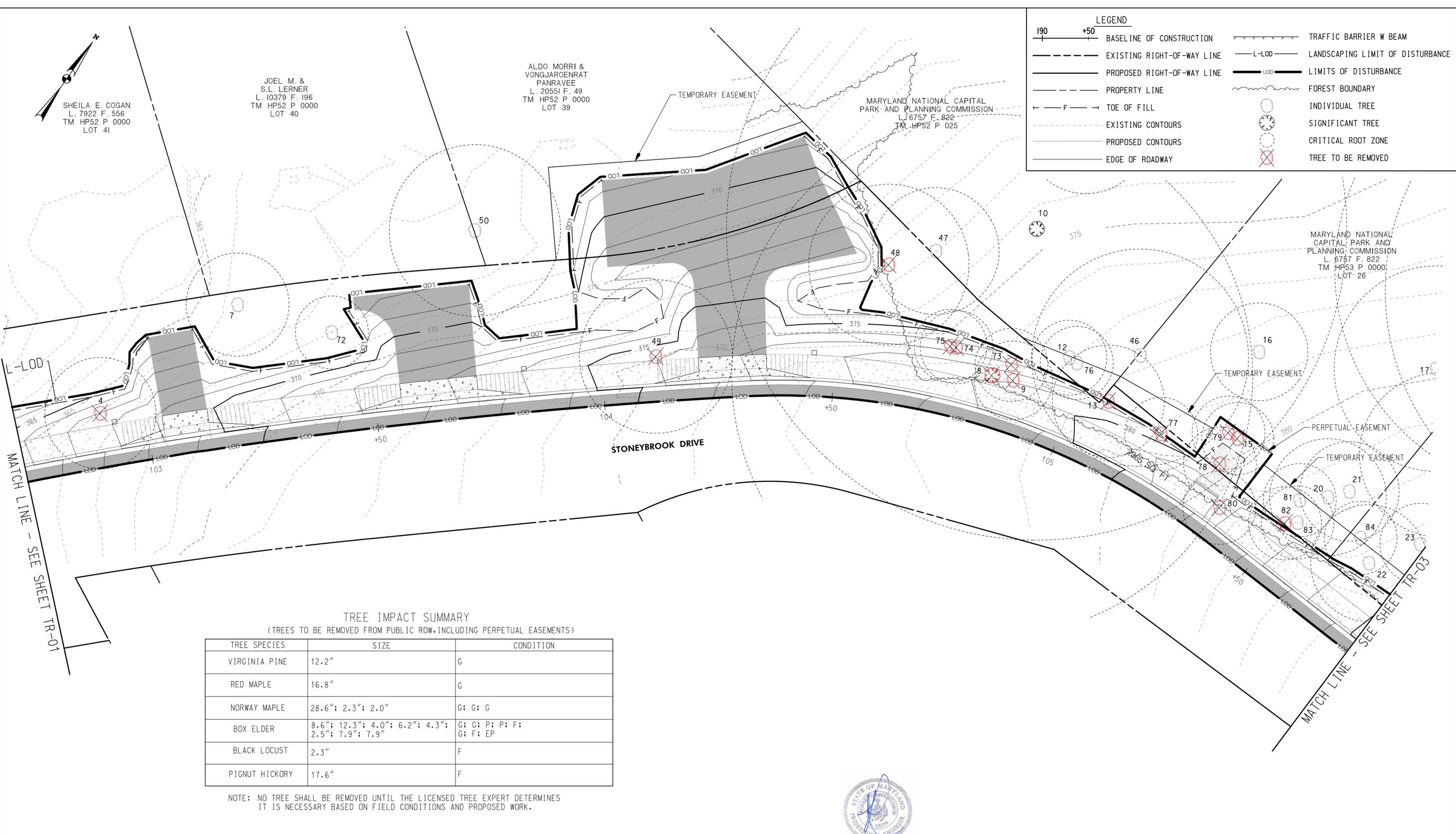
JOEL M. &  
S.L. LERNER  
L. 10379 F. 196  
TM HP52 P 0000  
LOT 40

ALDO MORRI &  
VONGJAROENRAT  
PANRAVEE  
L. 20551 F. 49  
TM HP52 P 0000  
LOT 39

MARYLAND NATIONAL CAPITAL  
PARK AND PLANNING COMMISSION  
L. 6757 F. 822  
TM HP52 P 025

MARYLAND NATIONAL CAPITAL  
PARK AND PLANNING COMMISSION  
L. 6757 F. 822  
TM HP53 P 0000  
LOT 26

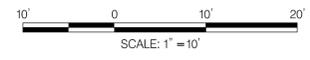
LEGEND			
—+50—	BASELINE OF CONSTRUCTION	—L-LOD—	TRAFFIC BARRIER W BEAM
- - -	EXISTING RIGHT-OF-WAY LINE	—LOD—	LANDSCAPING LIMIT OF DISTURBANCE
—	PROPOSED RIGHT-OF-WAY LINE	—	LIMITS OF DISTURBANCE
- - -	PROPERTY LINE	~ ~ ~	FOREST BOUNDARY
- F -	TOE OF FILL	○	INDIVIDUAL TREE
- - -	EXISTING CONTOURS	⊗	SIGNIFICANT TREE
—	PROPOSED CONTOURS	⊗	CRITICAL ROOT ZONE
—	EDGE OF ROADWAY	⊗	TREE TO BE REMOVED



TREE IMPACT SUMMARY  
(TREES TO BE REMOVED FROM PUBLIC ROW, INCLUDING PERPETUAL EASEMENTS)

TREE SPECIES	SIZE	CONDITION
VIRGINIA PINE	12.2"	G
RED MAPLE	16.8"	G
NORWAY MAPLE	28.6"; 2.3"; 2.0"	G; G; G
BOX ELDER	8.6"; 12.3"; 4.0"; 6.2"; 4.3"; 2.5"; 7.9"; 7.9"	G; G; P; P; F; G; F; EP
BLACK LOCUST	2.3"	F
PIGNOT HICKORY	17.6"	F

NOTE: NO TREE SHALL BE REMOVED UNTIL THE LICENSED TREE EXPERT DETERMINES IT IS NECESSARY BASED ON FIELD CONDITIONS AND PROPOSED WORK.



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DATUM: NAD 83/91 HORIZONTAL  
NAVD 88 VERTICAL

NO.	REVISION	DATE	BY

MONTGOMERY COUNTY  
DEPARTMENT OF TRANSPORTATION  
100 EDISON PARK DRIVE, 4TH FLOOR  
GAITHERSBURG, MD 20878

RECOMMENDED FOR APPROVAL

Chief, Design Section \_\_\_\_\_ Date \_\_\_\_\_  
APPROVED

Chief, Division of Engineering Services \_\_\_\_\_ Date \_\_\_\_\_

Designed by : AEM Drawn by : CBG Checked by : AEM

**PLAN SHEET TR-02  
TREE REMOVAL PLAN**

**STONEYBROOK DRIVE AT  
CAPITOL VIEW AVE. SIDEWALK**

SCALE 1" = 10' 08/2015

Project No. : C.I.P. PR. # 507596 SHEET 16 of 22

Plotter Thursday, August 06, 2015 At 02:51 PM  
FILE: \\C:\PROJ\410150001\01\Water Resources\_Cadd\_L\PO-P002\_STONEYBROOK.dgn

JANICE M. RODGERS  
 L. 10486 F. 691  
 TM HP53 P 0000  
 LOT 22

MARYLAND NATIONAL  
 CAPITAL PARK AND  
 PLANNING COMMISSION  
 L. 6757 F. 822  
 TM HP53 P 0000  
 LOT 24

MARYLAND NATIONAL  
 CAPITAL PARK AND  
 PLANNING COMMISSION  
 L. 6757 F. 822  
 TM HP53 P 0000  
 LOT 25

TREE REMOVALS NOT SUBJECT  
 TO DNR ROADSIDE TREE PERMIT

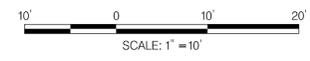
CAPITOL VIEW AVENUE (MD 192)  
 POSTED SPEED: 25 MPH

- LEGEND
- 190 +50 BASELINE OF CONSTRUCTION
  - EXISTING RIGHT-OF-WAY LINE
  - PROPOSED RIGHT-OF-WAY LINE
  - PROPERTY LINE
  - TOE OF FILL
  - EXISTING CONTOURS
  - PROPOSED CONTOURS
  - TRAFFIC BARRIER W BEAM
  - EDGE OF ROADWAY
  - LOD LIMITS OF DISTURBANCE
  - L-LOD LANDSCAPING LIMIT OF DISTURBANCE
  - WUS WATERS OF THE U.S.
  - FOREST BOUNDARY
  - INDIVIDUAL TREE
  - SIGNIFICANT TREE
  - CRITICAL ROOT ZONE
  - TREE TO BE REMOVED

TREE IMPACT SUMMARY  
 (TREES TO BE REMOVED FROM PUBLIC ROW, INCLUDING PERPETUAL EASEMENTS)

TREE SPECIES	SIZE	CONDITION
WHITE OAK	31.9"	P
BOX ELDER	2.8"; 7.9"; 18.5"; 9.8"; 10.4"; 15.6"; 9.1"; 6.8"; 7.2"	F; P; P; P; F; F; F; F; F
MULBERRY	5.9"	P
BLACK WALNUT	18.2"	P
AMERICAN ELM	5.0"	P
NORWAY MAPLE	2.5"	F
BLACK CHERRY	6.5"	F
MORROW'S HONEYSUCKLE	5.5"	G

NOTE: NO TREE SHALL BE REMOVED UNTIL THE LICENSED TREE EXPERT DETERMINES IT IS NECESSARY BASED ON FIELD CONDITIONS AND PROPOSED WORK.



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DATUM: NAD 83/91 HORIZONTAL  
 NAVD 88 VERTICAL

NO.	REVISION	DATE	BY

MONTGOMERY COUNTY  
 DEPARTMENT OF TRANSPORTATION  
 100 EDISON PARK DRIVE, 4TH FLOOR  
 GAITHERSBURG, MD 20878

RECOMMENDED FOR APPROVAL

Chief, Design Section \_\_\_\_\_ Date \_\_\_\_\_  
 APPROVED

Chief, Division of Engineering Services \_\_\_\_\_ Date \_\_\_\_\_

Designed by : AEM Drawn by : CBG Checked by : AEM

8/7/15

**PLAN SHEET TR-03  
 TREE REMOVAL PLAN**

**STONEBROOK DRIVE AT  
 CAPITOL VIEW AVE. SIDEWALK**

SCALE 1" = 10' 08/2015

Project No. : C.I.P. PR. # 507596 SHEET 17 of 22

Plotter Thursday, August 06, 2015 At 02:58 PM  
 FILE: M:\PROJ\14015\001\01\Water Resources\_Cadd\_L\p0-P003\_STONEYBROOK.dgn

TREE NO.	COMMON NAME	SCIENTIFIC NAME	DBH (INCHES)	CONDITION	TO BE REMOVED	TREE NO.	COMMON NAME	SCIENTIFIC NAME	DBH (INCHES)	CONDITION	TO BE REMOVED
1	AMERICAN BEECH	FAGUS GRADNIFOLIA	11	GOOD	NO	81	BLACK LOCUST	ROBINA PSEUDOACACIA	6.1	FAIR	NO
2	AMERICAN BEECH	FAGUS GRADNIFOLIA	10.6	GOOD	NO	82	BOX ELDER	ACER NEGUNDO	7.9	EX. POOR	YES
3	WHITE MULBERRY	MORUS ALBA	10.7	FAIR	NO	83	BLACK LOCUST	ROBINA PSEUDOACACIA	5.4	FAIR	NO
4	VIRGINIA PINE	PINUS VIRGINIANA	12.2	GOOD	YES	84	BOX ELDER	ACER NEGUNDO	3	FAIR	NO
5	AMERICAN HOLLY	ILEX OPACA	12.9	GOOD	NO	85	MULBERRY	MORUS SP.	6.1	GOOD	NO
6	AMERICAN HOLLY	ILEX OPACA	11.7	GOOD	NO	86	MORROW'S HONEYSUCKLE	LONICERA MORROWII	2	GOOD	NO
7	AMERICAN HOLLY	ILEX OPACA	11.3	GOOD	NO	87	MORROW'S HONEYSUCKLE	LONICERA MORROWII	2	GOOD	NO
8	NORWAY MAPLE	ACER PLATANOIDES	28.6	GOOD	YES	88	BOX ELDER	ACER NEGUNDO	2.8	FAIR	YES
9	BOX ELDER	ACER NEGUNDO	8.6	GOOD	YES	89	MULBERRY	MORUS SP.	5.9	POOR	YES
10	WHITE OAK	QUERCUS ALBA	45.4	FAIR	NO	90	BOX ELDER	ACER NEGUNDO	7.9	POOR	YES
11	BOX ELDER	ACER NEGUNDO	13.7	POOR	NO	91	MORROW'S HONEYSUCKLE	LONICERA MORROWII	2.2	GOOD	NO
12	WHITE MULBERRY	MORUS ALBA	8.2	GOOD	NO	92	BOX ELDER	ACER NEGUNDO	8.8	GOOD	NO
13	BOX ELDER	ACER NEGUNDO	12.3	GOOD	YES	93	MORROW'S HONEYSUCKLE	LONICERA MORROWII	5.5	GOOD	YES
14	TULIP TREE	LIRIODENDRON TULIPIFERA	23.8	FAIR	NO	94	BOX ELDER	ACER NEGUNDO	3	POOR	NO
15	BOX ELDER	ACER NEGUNDO	7.9	FAIR	YES	95	BOX ELDER	ACER NEGUNDO	4.8	FAIR	YES
16	BOX ELDER	ACER NEGUNDO	10.7	FAIR	NO	96	AMERICAN ELM	ULMUS AMERICANA	5	POOR	YES
17	BLACK WALNUT	JUGLANS NIGRA	22.5	GOOD	NO	97	NORWAY MAPLE	ACER PLATANOIDES	2.5	FAIR	YES
18	WHITE OAK	QUERCUS ALBA	18	GOOD	NO	98	BOX ELDER	ACER NEGUNDO	6.8	FAIR	YES
19	WHITE OAK	QUERCUS ALBA	18	FAIR	NO	99	BLACK CHERRY	PRUNUS SEROTINA	6.5	FAIR	YES
20	BOX ELDER	ACER NEGUNDO	10.8	POOR	NO	100	BOX ELDER	ACER NEGUNDO	7.2	FAIR	YES
21	BOX ELDER	ACER NEGUNDO	10.9	POOR	NO	101	RED MAPLE	ACER RUBRUM	6.4	GOOD	NO
22	BOX ELDER	ACER NEGUNDO	12.8	FAIR	NO	102	RED MAPLE	ACER RUBRUM	6.8	GOOD	NO
23	BOX ELDER	ACER NEGUNDO	8.9	POOR	NO	103	RED MAPLE	ACER RUBRUM	5.2	GOOD	NO
24	BOX ELDER	ACER NEGUNDO	8	POOR	NO						
25	NORWAY MAPLE	ACER PLATANOIDES	8.5	GOOD	NO						
26	NORWAY MAPLE	ACER PLATANOIDES	28	FAIR	NO						
27	WHITE OAK	QUERCUS ALBA	9.7	FAIR	NO						
28	NORWAY MAPLE	ACER PLATANOIDES	10.8	FAIR	NO						
29	WHITE OAK	QUERCUS ALBA	31.9	POOR	YES						
30	WHITE OAK	QUERCUS ALBA	12	FAIR	NO						
31	PIGNOT HICKORY	CARYA GLABRA	13	FAIR	NO						
32	TULIP TREE	LIRIODENDRON TULIPIFERA	35.8	POOR	NO						
33	BOX ELDER	ACER NEGUNDO	9.1	FAIR	NO						
34	BOX ELDER	ACER NEGUNDO	18.5	POOR	YES						
35	BOX ELDER	ACER NEGUNDO	9.1	POOR	YES						
36	BOX ELDER	ACER NEGUNDO	9.8	POOR	YES						
37	BOX ELDER	ACER NEGUNDO	10.4	FAIR	YES						
38	BOX ELDER	ACER NEGUNDO	15.7	POOR	YES						
39	BOX ELDER	ACER NEGUNDO	9.7	FAIR	NO						
40	TULIP TREE	LIRIODENDRON TULIPIFERA	32.7	FAIR	NO						
41	BOX ELDER	ACER NEGUNDO	9.1	GOOD	NO						
42	BLACK WALNUT	JUGLANS NIGRA	18.2	POOR	YES						
43	BOX ELDER	ACER NEGUNDO	10	FAIR	YES						
44	BOX ELDER	ACER NEGUNDO	15.6	FAIR	YES						
45	BOX ELDER	ACER NEGUNDO	9.1	FAIR	YES						
46	TULIP TREE	LIRIODENDRON TULIPIFERA	23.8	FAIR	NO						
47	NORWAY MAPLE	ACER PLATANOIDES	13.9	GOOD	NO						
48	PIGNOT HICKORY	CARYA GLABRA	17.6	FAIR	YES						
49	RED MAPLE	ACER RUBRUM	16.8	GOOD	YES						
50	RED MAPLE	ACER RUBRUM	18.8	GOOD	NO						
70	PRINCESS TREE	PAULOWNIA TOMENTOSA	7	POOR	NO						
71	AMERICAN ELM	ULMUS AMERICANA	7	FAIR	NO						
72	CREPE MYRTLE	LAGERSTROEMIA SP.	5	GOOD	NO						
73	BOX ELDER	ACER NEGUNDO	2.5	GOOD	YES						
74	NORWAY MAPLE	ACER PLATANOIDES	2.3	GOOD	YES						
75	NORWAY MAPLE	ACER PLATANOIDES	2	GOOD	YES						
76	BOX ELDER	ACER NEGUNDO	3	GOOD	NO						
77	BLACK LOCUST	ROBINA PSEUDOACACIA	2.3	FAIR	YES						
78	BOX ELDER	ACER NEGUNDO	4	POOR	YES						
79	BOX ELDER	ACER NEGUNDO	6.2	POOR	YES						
80	BOX ELDER	ACER NEGUNDO	4.3	FAIR	YES						

NOTE: FOR AREAS NOT SUBJECT TO THE ROADSIDE TREE PERMIT, ONLY TREES 8" DBH AND GREATER ARE INCLUDED.



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NO.	REVISION	DATE	BY

MONTGOMERY COUNTY  
 DEPARTMENT OF TRANSPORTATION  
 100 EDISON PARK DRIVE, 4TH FLOOR  
 GAITHERSBURG, MD 20878

RECOMMENDED FOR APPROVAL

Chief, Design Section \_\_\_\_\_ Date \_\_\_\_\_  
 APPROVED

Chief, Division of Engineering Services \_\_\_\_\_ Date \_\_\_\_\_

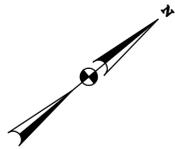
Designed by : AEM Drawn by : CBG Checked by : AEM

**PLAN SHEET TR-04  
 TREE REMOVAL PLAN**

**STONEBROOK DRIVE AT  
 CAPITOL VIEW AVE. SIDEWALK**

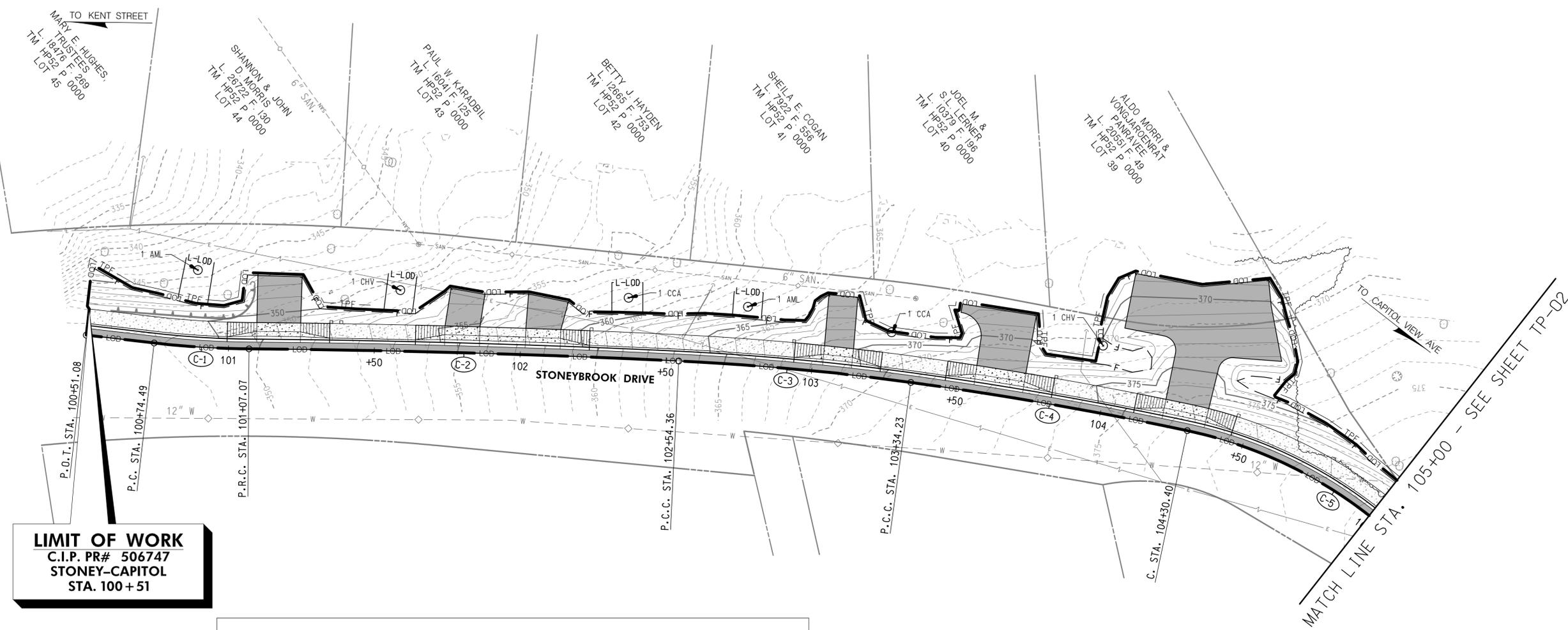
08/2015

Project No. : C.I.P. PR. # 507596 SHEET 18 of 22



**LEGEND**

- |     |     |  |  |                                   |
|-----|-----|--|--|-----------------------------------|
| 190 | +50 | BASELINE OF CONSTRUCTION   |  | TRAFFIC BARRIER W BEAM            |
|     |     | EXISTING RIGHT-OF-WAY LINE                                       |  | LIMITS OF DISTURBANCE             |
|     |     | PROPERTY LINE  |  | LANDSCAPING LIMITS OF DISTURBANCE |
|     |     | EXISTING CONTOURS  |  | FILL LINE                         |
|     |     | PROPOSED CONTOURS  |  | FOREST BOUNDARY                   |
|     |     | TREE PROTECTION FENCE/TEMPORARY ORANGE CONSTRUCTION FENCE (TOCF) |  | SHRUB PLANTING                    |
|     |     |  |  | TREE PLANTING                     |



**LIMIT OF WORK**  
C.I.P. PR# 506747  
STONEY-CAPITOL  
STA. 100 + 51

**PLANT LIST**

QTY	CODE	BOTANICAL NAME/COMMON NAME	SIZE	CONDITION	SPACING	REMARKS
2	AML	AMELANCHIER LAEVIS / ALLEGHENY SERVICEBERRY	8 FT HEIGHT	CONT. / B&B	AS SHOWN	3-5 STEM
2	CHV	CHIONANTHUS VIRGINICUS / FRINGETREE	1.5 IN. CAL.	CONT. / B&B	AS SHOWN	CENTRAL LEADER
2	CCA	CERCIS CANADENSIS / EASTERN REDBUD	1.5 IN. CAL.	CONT. / B&B	AS SHOWN	CENTRAL LEADER

- NOTES:**
1. ROOT PRUNE, BRANCH PRUNE, AND SUPPLEMENTAL WATER WITHIN AND ALONG EDGE OF LOD AS DIRECTED BY MD LICENSED TREE EXPERT (LTE) DURING CONSTRUCTION.
  2. TREE PROTECTION FENCE IS SHOWN OUTSIDE THE LOD FOR DISPLAY PURPOSES ONLY. IT SHOULD BE INSTALLED ALONG THE LOD OR SILT FENCE.
  3. TREE PROTECTION FENCE/TEMPORARY ORANGE CONSTRUCTION FENCE (TOCF) = 286 L.F.
  4. ROOT PRUNING = 286 L.F.



**NOTES:**

1. ALL EXPOSED EARTH & DISTURBED AREAS SHALL BE STABILIZED WITH SEED & MULCH OR SOIL STABILIZATION MATTING AT THE END OF EACH WORK DAY. NO DISTURBED AREA SHALL BE LEFT UNSTABILIZED OVERNIGHT UNLESS RUNOFF CAN BE DIRECTED TO AN APPROVED EROSION & SEDIMENT CONTROL DEVICE.
2. DAILY LANE CLOSURES SHALL BE IN ACCORDANCE WITH STD. TCP. 102.02



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DATUM: NAD 83/91 HORIZONTAL  
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NO.	REVISION	DATE	BY

MONTGOMERY COUNTY  
DEPARTMENT OF TRANSPORTATION  
100 EDISON PARK DRIVE, 4TH FLOOR  
GAITHERSBURG, MD 20878

RECOMMENDED FOR APPROVAL

Chief, Design Section \_\_\_\_\_ Date \_\_\_\_\_  
APPROVED

Chief, Division of Engineering Services \_\_\_\_\_ Date \_\_\_\_\_

Designed by : AEM Drawn by : CBG Checked by : AEM

**PLAN SHEET TP-01**  
**PLANTING PLAN**

**STONEYBROOK DRIVE AT**  
**CAPITOL VIEW AVE. SIDEWALK**

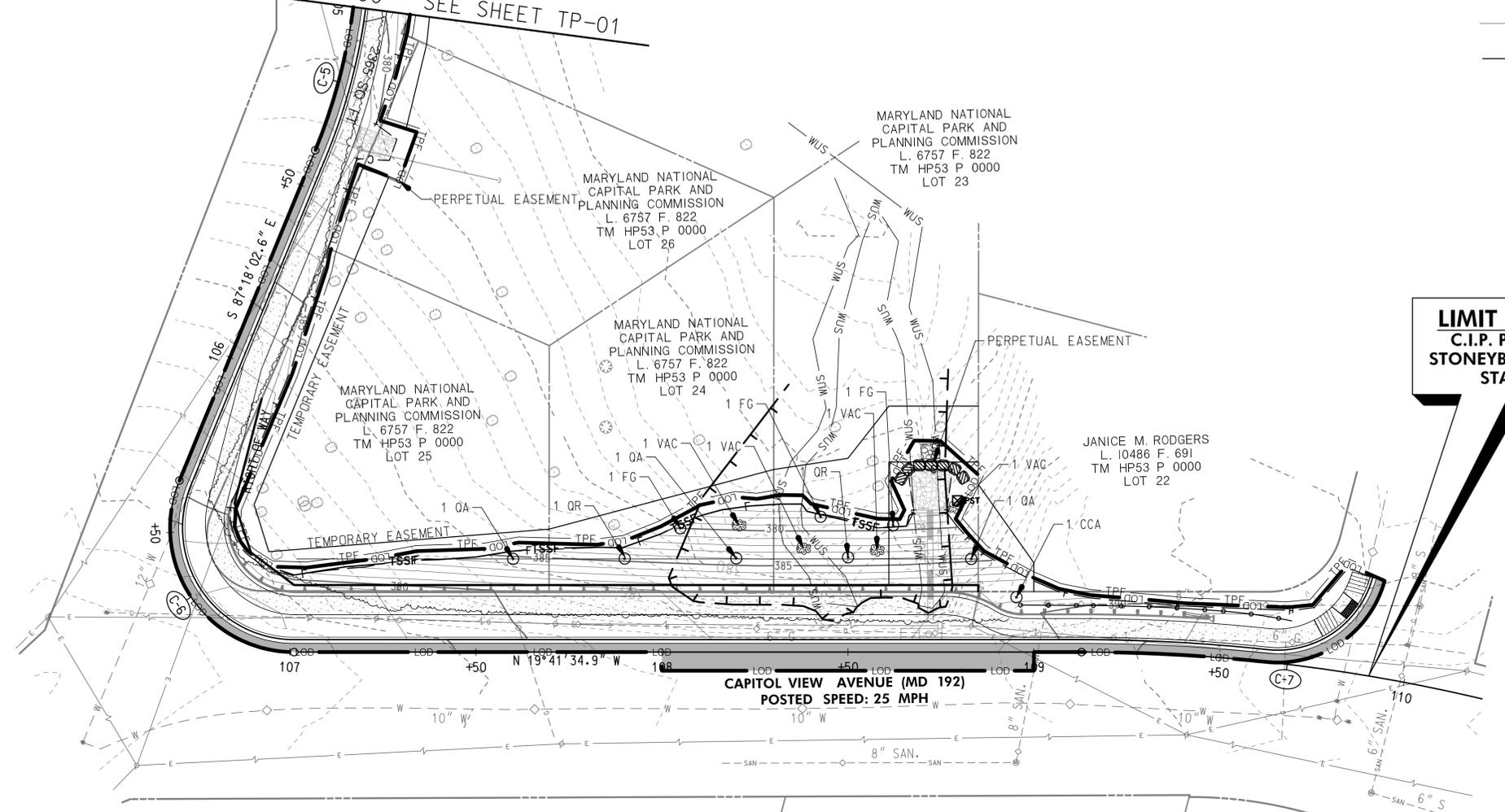
SCALE 1" = 20' 08/2015

Project No. : C.I.P. PR. # 507596 SHEET 19 of 22

LEGEND

190	+50	BASELINE OF CONSTRUCTION		TRAFFIC BARRIER W BEAM
		EXISTING RIGHT-OF-WAY LINE		LIMITS OF DISTURBANCE
		PROPERTY LINE		LANDSCAPING LIMITS OF DISTURBANCE
		EXISTING CONTOURS		FILL LINE
		PROPOSED CONTOURS		WATERS OF THE US
		TREE PROTECTION FENCE/TEMPORARY ORANGE CONSTRUCTION FENCE (TOCF)		FOREST BOUNDARY
				SHRUB PLANTING
				TREE PLANTING

MATCH LINE STA. 105+00 - SEE SHEET TP-01



**LIMIT OF WORK**  
**C.I.P. PR. # 506747**  
**STONEBROOK-CAPITOL**  
**STA. 109+90**

PLANT LIST						
QTY	CODE	BOTANICAL NAME/COMMON NAME	SIZE	CONDITION	SPACING	REMARKS
1	CCA	CERCIS CANADENSIS / EASTERN REDBUD	1.5 IN. CAL.	CONT./ B&B	10'	CENTRAL LEADER
3	QA	QUERCUS ALBA / WHITE OAK	2 IN. CAL.	B&B	15'	CENTRAL LEADER
2	QR	QUERCUS RUBRA / NORTHERN RED OAK	2 IN. CAL.	B&B	15'	CENTRAL LEADER
3	FG	FAGUS GRANDIFOLIA/ AMERICAN BEECH	2 IN. CAL.	B&B	15'	CENTRAL LEADER
4	VAC	VIBURNUM ACERIFOLIUM / MAPLELEAF VIBURNUM	2 FT HEIGHT	CONT.	15'	

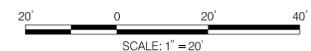
- NOTES:
1. ROOT PRUNE, BRANCH PRUNE, AND SUPPLEMENTAL WATER WITHIN AND ALONG EDGE OF LOD AS DIRECTED BY MD LICENSED TREE EXPERT (LTE) DURING CONSTRUCTION.
  2. TREE PROTECTION FENCE IS SHOWN OUTSIDE THE LOD FOR DISPLAY PURPOSES ONLY. IT SHOULD BE INSTALLED ALONG THE LOD OR SILT FENCE
  3. TREE PROTECTION FENCE/TEMPORARY ORANGE CONSTRUCTION FENCE (TOCF) = 512 L.F.
  4. ROOT PRUNING = 512 L.F.
  5. ROW ALONG CAPITOL VIEW AVE IS SHA'S.



NOTES:

1. ALL EXPOSED EARTH & DISTURBED AREAS SHALL BE STABILIZED WITH SEED & MULCH OR SOIL STABILIZATION MATTING AT THE END OF EACH WORK DAY. NO DISTURBED AREA SHALL BE LEFT UNSTABILIZED OVERNIGHT UNLESS RUNOFF CAN BE DIRECTED TO AN APPROVED EROSION & SEDIMENT CONTROL DEVICE.
2. DAILY LANE CLOSURES SHALL BE IN ACCORDANCE WITH STD. TCP. 102.02

**WALLACE MONTGOMERY**  
 ENGINEERS-PLANNERS-SURVEYORS-CONSTRUCTION MANAGERS  
 10150 York Road, Suite 200  
 Hunt Valley, Maryland 21030  
 410.494.9093 Tel / 410.667.0925 Fax  
 www.wallacemontgomery.com A Limited Liability Partnership



DATUM: NAD 83/91 HORIZONTAL  
 NAVD 88 VERTICAL

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 APPROVED

Chief, Division of Engineering Services \_\_\_\_\_ Date \_\_\_\_\_

Designed by : AEM Drawn by : CBG Checked by : AEM

**PLAN SHEET TP-02**  
**PLANTING PLAN**

**STONEBROOK DRIVE AT**  
**CAPITOL VIEW AVE. SIDEWALK**

SCALE 1" = 20' 08/2015

Project No. : C.I.P. PR. # 507596 SHEET 20 of 22

SHA LANDSCAPE NOTES

LANDSCAPE CONSTRUCTION WITHIN THE RIGHT OF WAY OF THE MARYLAND STATE HIGHWAY ADMINISTRATION (SHA) SHALL CONFORM TO THESE NOTES.

SHA STANDARD SPECIFICATIONS. LANDSCAPE CONSTRUCTION SHALL CONFORM TO SECTIONS 701 THROUGH 716 AND LANDSCAPE MATERIALS SHALL CONFORM TO SECTION 920 OF THE SHA 2008 STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, INCLUDING ALL REVISIONS AND SUPPLEMENTS, AND AS SPECIFIED IN THESE NOTES. THESE REQUIREMENTS SHALL SUPERSEDE ALL OTHER SPECIFICATIONS FOR WORK WITHIN THE SHA RIGHT OF WAY.

EROSION AND SEDIMENT CONTROL MANAGER (ESCM). SOIL DISTURBANCE SUCH AS GRADING, EXCAVATION, SOIL PLACEMENT OR OTHER ACTIVITIES THAT INVOLVE SOIL DISTURBANCE WITHIN THE SHA RIGHT OF WAY SHALL BE SUPERVISED BY AN ESCM MANAGER WITH A VALID SHA "YELLOW CARD" IN CONFORMANCE WITH SHA 2008 SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS AND ANY APPLICABLE EROSION AND SEDIMENT CONTROL PERMIT.

SHA STANDARD DETAILS FOR TREES, SHRUBS AND PLANTING BEDS. THE INSTALLATION OF TREES, SHRUBS, PLANTING BEDS AND OTHER LANDSCAPE CONSTRUCTION IN THE SHA RIGHT OF WAY RELATED TO SECTION 710 OF THE SHA STANDARD SPECIFICATIONS SHALL CONFORM TO THE "SHA BOOK OF STANDARDS FOR HIGHWAY & INCIDENTAL STRUCTURES - CATEGORY 7."

TEMPORARY STABILIZATION SHALL BE INSTALLED IN CONFORMANCE WITH SECTION 704 TO ENSURE THAT AREAS OF SOIL DISTURBANCE ARE PROTECTED FROM WIND, RAINFALL AND FLOWING WATER UNTIL PERMANENT STABILIZATION IS INSTALLED.

1. TEMPORARY MULCH, EITHER AS TEMPORARY STRAW MULCH OR TEMPORARY MATTING MULCH, SHALL BE INSTALLED AT THE END OF EACH WORKING DAY TO PROVIDE "SAME DAY STABILIZATION" UNLESS OTHER APPROVED STABILIZATION IS INSTALLED.
2. TEMPORARY STRAW MULCH SHALL BE INSTALLED ON AREAS AND SLOPES FLATTER THAN 4:1; TEMPORARY MATTING MULCH SHALL BE APPLIED ON SLOPES 4:1 AND STEEPER, AND TO AREAS WITHIN CHANNELS.
3. TEMPORARY SEED SHALL BE INSTALLED IN LIEU OF TEMPORARY MULCH WHEN SOIL REDISTURBANCE IS EXPECTED MORE THAN 30 DAYS AFTER SOIL DISTURBANCE. THE REQUIRED APPLICATION RATE OF 15-30-15 FERTILIZER SHALL BE REDUCED TO 150 LBS PER ACRE.

EXCAVATION AND DEBRIS REMOVAL. DEBRIS RELATED TO THE DEMOLITION OF SIDEWALKS, DRIVEWAYS, CURBS, TREES, STUMPS, ROOTS, FENCING, PIPES, AND OTHER MATERIALS THAT MAY INTERFERE WITH LANDSCAPE INSTALLATION OR FUTURE MAINTENANCE WITHIN THE SHA RIGHT OF WAY SHALL BE EXCAVATED AS NECESSARY FOR THEIR COMPLETE REMOVAL AND DISPOSAL.

SOIL RESTORATION. AREAS OF PAVEMENT REMOVAL, EXCAVATION OR DRILLING IN LANDSCAPED AREAS SHALL REMOVE EXCAVATED DEBRIS AND RESTORE THE SUBGRADE WITH APPROVED SUBSOIL AND TOPSOIL PLACED IN CONFORMANCE WITH SECTION 701 OF THE SHA STANDARD SPECIFICATIONS.

1. A LAYER OF APPROVED TOPSOIL OF AT LEAST A 4 INCH DEPTH SHALL BE PLACED ON ALL DISTURBED AREAS FLATTER THAN 2:1 AND IN ALL CHANNELS PRIOR TO SEEDING, SODDING OR OTHER LANDSCAPING, UNLESS OTHERWISE SPECIFIED.
2. A LAYER OF APPROVED TOPSOIL OF AT LEAST A 2 INCH DEPTH SHALL BE PLACED ON ALL DISTURBED AREAS 2:1 AND STEEPER PRIOR TO SEEDING, SODDING OR OTHER LANDSCAPING, UNLESS OTHERWISE SPECIFIED.

TURFGRASS ESTABLISHMENT SHALL BE PERFORMED IN ALL DISTURBED AREAS OF THE SHA RIGHT OF WAY, OR WITHIN THE AREAS INDICATED IN THE PLANS, IN CONFORMANCE WITH SECTION 705 OF THE SHA STANDARD SPECIFICATIONS. THE REQUIRED APPLICATION RATE OF 20-16-12 FERTILIZER SHALL BE REDUCED TO 200 LBS PER ACRE, AND NO FERTILIZER SHALL BE APPLIED FROM NOV. 15 TO MAR. 1.

SOIL STABILIZATION MATTING SHALL BE INSTALLED IN CONFORMANCE WITH SECTION 709 OF THE SHA STANDARD SPECIFICATIONS, IN CONJUNCTION WITH TURFGRASS ESTABLISHMENT PER SECTION 705 OR MEADOW ESTABLISHMENT PER SECTION 707 AS FOLLOWS:

1. AREAS FLATTER THAN 6:1. TYPE A OR TYPE E MATTING MAY BE INSTALLED IN LIEU OF STRAW MULCH AND HYDROMULCH BINDER IN CONJUNCTION WITH TURFGRASS ESTABLISHMENT.
2. AREAS STEEPER THAN 6:1 AND FLATTER THAN 4:1. TYPE A OR TYPE E MATTING SHALL BE INSTALLED IN LIEU OF STRAW MULCH AND HYDROMULCH BINDER IN CONJUNCTION WITH TURFGRASS ESTABLISHMENT, UNLESS DELINEATED AND NOTED OTHERWISE ON THE PLANS.

3. CHANNELS, STORMWATER MANAGEMENT FACILITIES, AND SLOPES 4:1 AND STEEPER TYPE A SOIL STABILIZATION MATTING SHALL BE INSTALLED IN LIEU OF STRAW MULCH AND HYDROMULCH BINDER IN CONJUNCTION WITH TURFGRASS ESTABLISHMENT, UNLESS DELINEATED AND NOTED OTHERWISE ON THE PLANS.

4. IN HIGH VELOCITY CHANNELS WITH TURFGRASS ESTABLISHMENT, TYPE B SOIL STABILIZATION MATTING SHALL BE INSTALLED IN LIEU OF STRAW MULCH AND HYDROMULCH BINDER WITHIN THE DELINEATED AREAS.

TREE PRESERVATION AREAS. TEMPORARY ORANGE CONSTRUCTION FENCE (TOCF) SHALL BE INSTALLED IN LOCATIONS DELINEATED ON THE PLANS AS TREE PRESERVATION AREAS (TPA) IN CONFORMANCE WITH SECTION 120 OF THE SHA STANDARD SPECIFICATION TO PROTECT EXISTING TREES AND OTHER VEGETATION DURING CONSTRUCTION. AREAS OF SHA RIGHT OF WAY WITHIN TOCF SHALL BE PROTECTED FROM ALL PROHIBITED AND RESTRICTED ACTIVITIES, PER SECTION 120.

ROADSIDE TREE PERMIT. TREE REMOVAL, TREE INSTALLATION, TREE ROOT AND BRANCH PRUNING, AND OTHER REGULATED IMPACTS TO TREES IN THE SHA RIGHT OF WAY SHALL CONFORM TO THE REQUIREMENTS OF THE ROADSIDE TREE PERMIT (RTP) OF THE MARYLAND DEPARTMENT OF NATURAL RESOURCES, OR THE FOREST CONSERVATION ACT (FCA) APPROVAL OF THE LOCAL AUTHORITY.

1. A COPY OF THE RTP OR FCA APPROVAL SHALL BE SUBMITTED TO THE SHA OFFICE OF ENVIRONMENTAL DESIGN BEFORE WORK IS PERFORMED, AND A COPY OF THE RTP OR FCA APPROVAL SHALL BE REPRODUCED IN THE PLANS OR BE IN POSSESSION OF THE APPLICANT AT THE PROJECT SITE WHEN THE PERMITTED WORK IS PERFORMED.
2. A MARYLAND LICENSED TREE EXPERT SHALL PERFORM THE SPECIFIED TREE OPERATIONS IN CONFORMANCE WITH THE SHA STANDARD SPECIFICATIONS AND ANSI A300 STANDARDS FOR TREE CARE OPERATIONS.

TREES, SHRUBS, PERENNIALS, ANNUALS, BULBS, LANDSCAPE BEDS AND SIMILAR MATERIALS INSTALLED IN THE SHA RIGHT OF WAY SHALL BE INSTALLED IN CONFORMANCE WITH SECTION 710 AND 711 OF THE SHA STANDARD SPECIFICATIONS. TREES AND SHRUBS SHALL BE PRUNED AT THE TIME OF INSTALLATIONS TO ENSURE SIDEWALK CLEARANCE FOR PEDESTRIANS IS MAINTAINED TO A HEIGHT OF 8 FEET.

TREE BRANCH PRUNING WITHIN THE SHA RIGHT OF WAY SHALL BE PERFORMED IN CONFORMANCE WITH SECTION 712. PERFORM CLEANING PER 712.03.08 AS DIRECTED BY THE LICENSED TREE EXPERT; PERFORM RAISING AS DIRECTED AND NECESSARY TO INSTALL TOCF IN LOCATIONS DELINEATED TPF ON THE PLANS; AND PERFORM RAISING AS NECESSARY TO PROVIDE 8 FT SIDEWALK CLEARANCE. REMOVE ALL PRUNING DEBRIS FROM SHA RIGHT OF WAY.

TREE ROOT PRUNING IN THE SHA RIGHT OF WAY SHALL BE IN CONFORMANCE WITH SECTION 715. PERFORM ROOT PRUNING AS DIRECTED BY THE LICENSED TREE EXPERT AT LOCATIONS NOTED ON PLANS. TREE ROOT PRUNING SHALL BE COMPLETED BEFORE BEGINNING EXCAVATION OR CONSTRUCTION ADJACENT TO TREES TO BE PRESERVED.

TREE FERTILIZING IN THE SHA RIGHT OF WAY SHALL BE PERFORMED IN CONFORMANCE WITH OPERATION 1 - BROADCAST FERTILIZING PER SECTION 716. 20-16-12 FERTILIZER AT THE RATE OF 200 LBS. PER ACRE SHALL BE APPLIED TO THE SOIL SURFACE UNDER THE DRIPLINE OF TREES IMPACTED BY TREE ROOT PRUNING OR TREE BRANCH PRUNING.

FINISHED MATERIALS. THE SUITABILITY, COLOR AND TEXTURE OF THE RETAINING WALL TO BE INSTALLED IN THE SHA RIGHT OF WAY SHALL BE APPROVED BEFORE INSTALLATION. THE CONTRACTOR SHALL FURNISH SAMPLES OR MAKE ARRANGEMENTS FOR INSPECTION AND APPROVAL AT THE PROJECT SITE.

FUTURE MAINTENANCE. ADDITIONAL MAINTENANCE THAT MAY BE REQUIRED AFTER HARDSCAPE, STREET FURNITURE, OR PLANT MATERIALS ARE INSTALLED AND ACCEPTED BY SHA SUCH AS REPLACEMENT, WATERING, WEEDING, MULCHING OR PEST CONTROL MAY BE PROVIDED BY THE APPLICANT WHEN A PERMIT FOR THE PROPOSED WORK IS ISSUED BY THE SHA DISTRICT OFFICE.

GENERAL NOTES

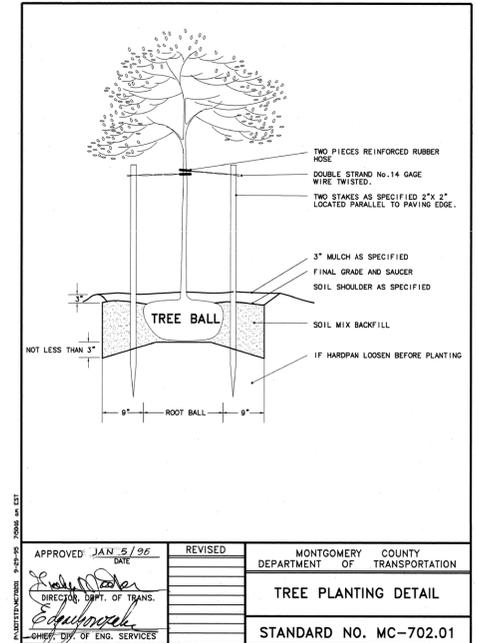
TREE REMOVAL, TREE INSTALLATION, TREE ROOT AND BRANCH PRUNING, AND OTHER REGULATED IMPACTS TO TREES IN THE RIGHT OF WAY SHALL CONFORM TO THE REQUIREMENTS OF THE ROADSIDE TREE PERMIT (RTP) OF THE MARYLAND DEPARTMENT OF NATURAL RESOURCES.

A MARYLAND LICENSED TREE EXPERT SHALL PERFORM THE SPECIFIED TREE OPERATIONS IN CONFORMANCE WITH ANSI A300 STANDARDS FOR TREE CARE OPERATIONS.

THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES PRIOR TO ANY PLANT INSTALLATION. THE CONTRACTOR SHALL CONTACT MISS UTILITY (1-800-257-7777) A MINIMUM OF 48 HOURS PRIOR TO ANY PLANT INSTALLATION.

TREE INSTALLATION OUTSIDE SHA ROW SHALL BE IN CONFORMANCE WITH MONTGOMERY STANDARD NO. MC-702.01. ANY REQUEST TO SUBSTITUTE PLANTS DIFFERENT TO SPECIES, CULTIVARS, SIZE, GROWTH HABIT, OR PLANTING STOCK TYPE SHALL BE SUBMITTED IN WRITING TO THE PROJECT ENGINEER AS A SUBSTITUTION REQUEST. SUBSTITUTION WILL NOT BE PERMITTED WITHOUT WRITTEN APPROVAL FROM THE LANDSCAPE ARCHITECT.

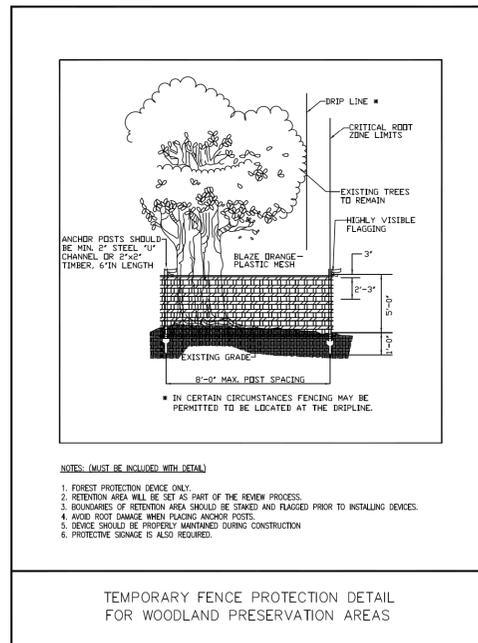
TOTAL AMOUNT OF TREE PROTECTION FENCE/TEMPORARY ORANGE CONSTRUCTION FENCE AND ROOT PRUNING = 798 L.F.



APPROVED JAN 5 / 98	REVISION	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION
DIRECTOR, DEPT. OF TRANS.		TREE PLANTING DETAIL
ENGINEER, DEPT. OF ENG. SERVICES		STANDARD NO. MC-702.01

MASTER PLANT LIST  
(APPLIES TO ALL LANDSCAPE SHEETS)

QTY	CODE	BOTANICAL NAME/Common Name	SIZE	CONDITION	SPACING	REMARKS
2	AML	AMELANCHIER LAEVIS / ALLEGHENY SERVICEBERRY	8 FT HEIGHT	CONT. / B&B	AS SHOWN	3-5 STEM
2	CHV	CHIONANTHUS VIRGINICUS / FRINGETREE	1.5 IN. CAL.	CONT. / B&B	AS SHOWN	CENTRAL LEADER
3	CCA	CERCIS CANADENSIS / EASTERN REDBUD	1.5 IN. CAL.	CONT. / B&B	AS SHOWN	CENTRAL LEADER
3	QA	QUERCUS ALBA / WHITE OAK	2 IN. CAL.	B&B	15'	CENTRAL LEADER
2	QR	QUERCUS RUBRA / NORTHERN RED OAK	2 IN. CAL.	B&B	15'	CENTRAL LEADER
3	FG	FAGUS GRANDIFOLIA / AMERICAN BEECH	2 IN. CAL.	B&B	15'	CENTRAL LEADER
4	VAC	VIBURNUM ACERIFOLIUM / MAPLELEAF VIBURNUM	2 FT HEIGHT	CONT.	15'	



TEMPORARY FENCE PROTECTION DETAIL FOR WOODLAND PRESERVATION AREAS

NOTES:

1. ALL EXPOSED EARTH & DISTURBED AREAS SHALL BE STABILIZED WITH SEED & MULCH OR SOIL STABILIZATION MATTING AT THE END OF EACH WORK DAY. NO DISTURBED AREA SHALL BE LEFT UNSTABILIZED OVERNIGHT UNLESS RUNOFF CAN BE DIRECTED TO AN APPROVED EROSION & SEDIMENT CONTROL DEVICE.
2. DAILY LANE CLOSURES SHALL BE IN ACCORDANCE WITH STD. TCP. 102.02



MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION  
100 EDISON PARK DRIVE, 4TH FLOOR  
GAITHERSBURG, MD 20878

PLAN SHEET TP-03  
PLANTING PLAN

STONEBROOK DRIVE AT  
CAPITOL VIEW AVE. SIDEWALK

SCALE 1" = 20' 08/2015

DATUM: NAD 83/91 HORIZONTAL  
NAVD 88 VERTICAL

RECOMMENDED FOR APPROVAL

Chief, Design Section Date

Chief, Division of Engineering Services Date

Designed by: AEM Drawn by: CBG Checked by: AEM

Project No.: C.I.P. PR. # 507596 SHEET 21 of 22



# GRADING TABLE

ROADWAY	EXCAVATION																				EMBANKMENT					
	STATIONS		CUT FROM XSECTS	TOPSOIL		ROOTMAT		TOTAL	SUITABLE FOR EMBANK.	SHRINK/SWELL FACTOR (%)	AVAIL. FOR EMBANK.	CLASS 2			EROSION & SEDIMENT		FILL		CAPPING	BORROW	SELECT BORROW					
	FROM	TO		CUT	FILL	CUT	FILL					LOSS DUE TO HANDLING	AVAIL. FOR EMBANK.	ORIGINAL EXCAVATION	CLEAN-OUT EXCAVATION	FROM XSECT	TOT. REQ. BEFORE DENSIFICATION	CAPPING	TOT. REQ. AFTER DENSIFICATION	FROM XSECT	TOT. REQ. AFTER DENSIFICATION					
STONEBROOK DRIVE / CAPITOL VIEW AVENUE	PS-01																									
	100+51	105+00	0	9	13	27	35	143	59	0.85	50	94	19	76	0	0	113	193	0	0	0	0	0			
	PS-02																									
	105+00	110+24	0	0	0	38	142	233	54	0.85	45	91	18	73	0	0	691	1,000	0	0	0	0	0			
	TOTAL		0	9	13	65	177	176	113	0.85	95	185	37	149	0	0	804	1,193	0	0	0	0	0			

## SUMMARY OF EARTHWORK

### EXCAVATION

(A) TOTAL CLASS 1 EXCAVATION	0	C.Y.
(B) TOTAL CLASS 2 EXCAVATION	185	C.Y.
(C) TOTAL EXCAVATION AVAILABLE FOR EMBANKMENT	244	C.Y.
(D) TOTAL EROSION & SEDIMENT CONTROL EXCAVATION	0	C.Y.

### EMBANKMENT

(E) TOTAL COMMON BORROW REQUIRED	1,193	C.Y.
(F) TOTAL CAPPING BORROW REQUIRED	0	C.Y.
(G) TOTAL SELECT BORROW REQUIRED	0	C.Y.
(H) WASTE	0	C.Y.
(I) COMMON BORROW REQUIRED	949	C.Y.
(J) BORROW DENSIFIED (20%)	190	C.Y.
(K) TOTAL COMMON BORROW REQUIRED	1,139	C.Y.

### PROPOSAL QUANTITIES

CLASS 1 EXCAVATION	0	C.Y.
CLASS 1-A EXCAVATION	0	C.Y.
CLASS 2 EXCAVATION	200	C.Y.
COMMON BORROW	1,200	C.Y.
CAPPING BORROW	0	C.Y.
SELECT BORROW	0	C.Y.



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RECOMMENDED FOR APPROVAL

Chief, Design Section \_\_\_\_\_ Date \_\_\_\_\_  
 APPROVED

Chief, Division of Engineering Services \_\_\_\_\_ Date \_\_\_\_\_

Designed by : M.J.B. Drawn by : J.W.L. Checked by : B.M.D.

**GRADING TABLE  
 AND SUMMARY OF EARTHWORK**

**STONEBROOK DRIVE AT  
 CAPITOL VIEW AVE. SIDEWALK**

SCALE N.T.S. 08/2015

Project No. : C.I.P. PR. # 506747 SHEET 22 of 22