	Minimum Lo	t Size Tabul	ation
Lo† No.			Minimum Lot Size
34	15.361 5q. Ft.±	1,086 5q. Ft. ±	14,275 5q. Ft. ±
35	15,331 5q. Ft.#	997 5q. Ft.#	14.334 5q. Ft.±
36	17,369 5q. Ft. ±	67 2 5q. Ft.±	16,697 5q. Ft.±
39	14,404 5q. Ft.±	151 5q. Ft.±	14,253 5q. Ft. ±
40	14,602 5q. Ft.±	602 5q. Ft.±	14,000 5q. Ft. #
41	14,945 Sq. Ft.±	945 5q. Ft.±	14,000 Sq. Ft. ±

	50IL5 LEGEND		
50IL	NAME	CLA55	K FACTOR
GfB	Gladstone-Urban land complex. 0 to 8 percent slopes	A	0.28
GbB	GbB Gladstone-Urban land complex, 3 to 8 percent slopes		0.28
GbC	Gladstone-Urban land complex, 8 to 15 percent slopes	A	0.28
Soil Map	: 17 (Clarksville, NE)		

	DRY WELL CHART					
LOT NO.	DRYWELL NO.	AREA OF ROOF PER DOWN SPOUT	VOLUME REQUIRED	VOLUME PROVIDED	AREA OF TREATMENT	
	BLD (FR)	900 5Q. FT.	Ø6 C.F.	126 C.F.	100%*	
	BLD (RL)	500 5Q. FT.	40 C.F.	126 C.F.	100%*	
34	BLD (FL)	600 5Q. FT.	57 C.F.	126 C.F.	100%*	
	DRIVEWAY	570 5Q. FT.	55 C.F.	96 C.F.	100%*	
	BLD (FL)	600 SQ. FT.	57 C.F.	126 C.F.	100%*	
35	BLD (RL)	500 5Q. FT.	48 C.F.	126 C.F.	100%*	
	BLD (RR)	900 5Q. FT.	Ø6 C.F.	126 C.F.	100%*	
	BLD (RR)	900 5Q. FT.	Ø6 C.F.	126 C.F.	100%*	
37	BLD (RL)	500 5Q. FT.	48 C.F.	126 C.F.	100%*	
. 37	BLD (FL)	600 5Q. FT.	57 C.F.	126 C.F.	100%*	
	DRIVEWAY	900 5Q. FT.	Ø6 C.F.	96 C.F.	100%*	
	BLD (RR)	900 SQ. FT.	Ø6 C.F.	126 C.F.	100%*	
20	BLD (RL)	500 5Q. FT.	48 C.F.	126 C.F.	100%*	
38	BLD (FL)	600 5Q. FT.	57 C.F.	126 C.F.	100%*	
	DRIVEWAY	900 5Q. FT.	Ø6 C.F.	96 C.F.	100%*	
	BLD (FR)	600 SQ. FT.	57 C.F.	126 C.F.	100%*	
30	BLO (RR)	500 5Q. FT.	40 C.F.	126 C.F.	100%*	
39	BLO (RL)	900 SQ. FT.	86 C.F.	126 C.F.	100%*	
				N/A		
	BLD (RR)	900 5Q. FT.	<i>9</i> 6 C.F.	126 C.F.	100%*	
40	BLD (RL)	500 5Q. FT.	40 C.F.	126 C.F.	100%*	
40	BLD (FL)	600 SQ. FT.	57 C.F.	126 C.F.	100%*	
				N/A		
	BLD (RR)	900 SQ. FT.	96 C.F.	126 C.F.	100%*	
41	BLO (RL)	500 SQ. FT.	48 C.F.	126 C.F.	100%*	
41	BLD (FL)	600 5Q. FT.	57 C.F.	126 C.F.	100%*	
	DRIVEWAY	1000 5Q. FT.	95 C.F.	96 C.F.	100%*	

(F=FRONT, R=REAR / L=LEFT, R=RIGHT)

AREA OF TREATMENT EXCEEDS THAT REQUIRED.

*NOTE: ALL ROOF DRYWELLS = 9'x 7'x 5' (LxWxD) = 126 C.F.

** ALL DRIVEWAY DRYWELLS = 8'x 6'x 5' (LxWxD) = 96 C.F.

STORMWATER MANAGEMENT SUMMARY					
AREA ID.	E50v REQUIRED CU.FT.	E50v PROVIDED CU.FT.	REMARK5		
SITÉ	3,476	3,656	DRY WELLS (M-5), MICRO-BIORETENTION (M-6) & GRASS SWALE (M-0)		
TOTAL	3,476	3,656			

LOD = 3.00 ACRES RCN = 38TARGET Pe = 1.2"

area id.	E5DV REQUIRED CU.FT.	E50v PROVIDED CU.FT.	REMARKS
SITE	3,476	3,656	DRY WELLS (M-5), MICRO-BIORETENTION (M-6) & GRASS SWALE (M-8)
TOTAL	3,476	3,656	
GROSS AR	2EA = 3.93 A	CRE5	-

(Bulk Parcel 'A') Owner/Developer Tyson Tall Timber, Inc. P-1 DRIVEWAY PAVING SECTION 11850 Tall Timber Drive Clarksville, Maryland 21029

Ph# (410) 370-9406 (Lot 24) Owner/Developer Brooke Gingerich-Tyson And Justin Zuber 11832 Tall Timber Drive Clarksville, Maryland 21029

Ph# (410) 370-9406 FISHER, COLLINS & CARTER, INC. VIL ENGINEERING CONSULTANTS & LAND SURVEYORS

FILICOTT CITY, MARYLAND 21042

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING 6-12-17 5.30.17

1.5" BIT.CONC.5URFACE

GRADED AGGREGATE

SUPPLEMENTAL PLAN TROTTER WOODS, SECTION 2

LOTS 33 THRU 41,

OPEN SPACE LOTS 42, 43 AND BULK PARCEL 'B'

VICINITY MAP

5CALE: 1" = 1200'

(LOCATED BEHIND #6523 BARLEY CORN ROAD, EAST OF TROTTER ROAD)

B.M.#2 - HOWARD COUNTY CONTROL STATION #35BB - HORIZONTAL - (NAD '83) (LOCATED AT SOUTH SIDE OF SOUTH WIND CIR. NEAR THE INTERSECTION OF MISTY TOP PATH)

ELEVATION = 430.957 - VERTICAL - (NAVD '86)

ELEVATION = 394.271 - VERTICAL - (NAVD '88)

N 560.767.681

£ 1,335,463.697

£ 1.336.537.287

FIFTH ELECTION DISTRICT

TAX MAP No. 35 GRID No. 8 PARCEL NOS. 21 HOWARD COUNTY, MARYLAND

SITE ANALYSIS DATA CHART

TOTAL AREA OF THIS SUBMISSION = 171,207 SQ.FT. OR 3.93 AC.+. LIMIT OF DISTURBED AREA = 134.646 5Q.FT. OR 3.09 Ac.+ PRESENT ZONING DESIGNATION = R-20 (PER 10/06/2013 COMPREHENSIVE ZONING PLAN)

PROPOSED USE: RESIDENTIAL PREVIOUS HOWARD COUNTY FILES: F-01-119; PLAT 4917, F-03-96; PLAT 5590; 5-97-02; P-90-01; F-90-099; PLAT 13449; 50P-00-032, ECP-15-072, ECP-16-047, 5DP-15-062.

TOTAL AREA OF FLOODPLAIN LOCATED ON-SITE = 0.00 AC TOTAL AREA OF STEEP SLOPES: MODERATE STEEP SLOPES: 15%-24.9% = 0.00 AC+ STEEP SLOPES: 25% OR GREATER = 0.00 AC+

TOTAL AREA OF WETLANDS (INCLUDING BUFFER) = 0.00 AC. TOTAL AREA OF STREAM (INCLUDING BUFFER) = 0.00 AC. TOTAL AREA OF EXISTING FOREST = 1.40 AC+ TOTAL GREEN OPEN AREA = 3.27 AC+ TOTAL IMPERVIOUS AREA = 0.66 AC± TOTAL AREA OF ERODIBLE SOILS = 0.00 AC.

TOTAL AREA OF ROAD DEDICATION = 0.00 AC.

	MICRO-BIORENTION VOLUME CHART						
LOT NO.	MICRO-BIO NO.	TOTAL DRAIN. AREA	VOLUME REQUIRED	VOLUME PROVIDED	AREA OF TREATMENT		
35	'35'	7,010 5Q. FT.	349 C.F.	334 C.F.	96%		
39	'39'	6,850 5Q. FT.	105 C.F.	162 C.F.	100%		
40	'40'	6,850 50. FT.	105 C.F.	162 C.F.	100%		
	GRASS SWALE VOLUME CHART						
SWALE LOCAT	NOF	SWALE WIDTH (BOTTOM)	LENGTH	DEPTH (10 γr.)	VOLUME PROVIDED		
ADJ. TO U.I.	C. DRIVEWAY	2.0' FT.	200.00 FT.	0.21 FT.	62 C.F.		

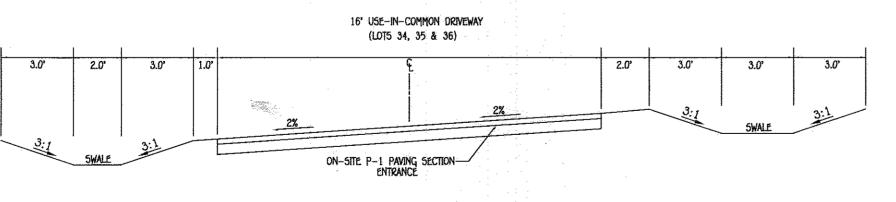
BENCHMARK INFORMATION S.M.#1 - HOWARD COUNTY CONTROL STATION #35AA - HORIZONTAL - NAD '83)

COUNTY DESIGN MANUAL VOLUME IV, STANDARD SPECIFICATION AND DETAILS FOR CONSTRUCTION 2. **2' STONE TRENCH ON LOTS 39, 40 AND 41. DRIVEWAY MUST SLOPE TOWARDS

1. ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH HOWARD

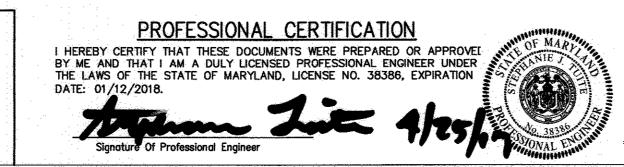
3. 4-6 INCH PERFORATED PVC PIPE PLACED IN STONE TRENCH

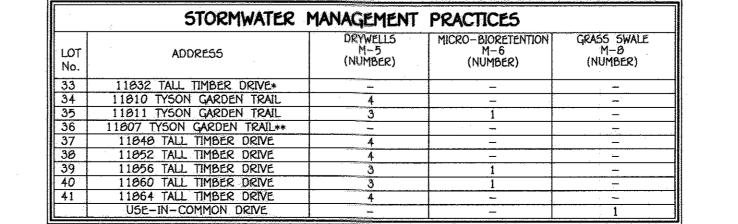
TYPICAL PRIVATE DRIVE CROSS SLOPE SECTION



ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL VOLUME IV, STANDARD SPECIFICATION AND DETAILS FOR 2. SWALES ARE FOR CONVEYANCE OF RUNOFF AND

UTILIZED FOR TREATMENT CREDIT. 16' USE-IN-COMMON DRIVEWAY CROSS SLOPE SECTION





4-6" PVC (Perf. in shows)

* LOT 33 IS A RESUBDIMISION OF LOT 24, TROTTER WOODS, SECTION 1 (5DP-15-062)

12' (SINGLE USER)

ON-SITE P-1 PAVING SECTION

STONE

STONE CHANNEL

PERTAIN TO LOTS

GENERAL NOTES

SUBJECT PROPERTY ZONED R-20 PER 10/06/13 COMPREHENSIVE ZONING PLAN. 2. COORDINATES BASED ON NAD '83. MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 3588 AND NO. 3588.

5TA. 3588 N 560,790.404, E 1,336,537.207, STA. 3508 N 557,696.148, E 1,333,974.615.

3. THIS PLAN IS BASED ON A BOUNDARY SURVEY PERFORMED ON OR ABOUT JULY 23, 2015 BY FISHER, COLLINS & CARTER, INC. AND ALSO BASED ON PLATS ENTITLED "TROTTER WOODS, SECTION 1, LOTS 1 THRU 32 AND BULK PARCEL "A" RECORDED AMONG THE LAND RECORDS OF HOWARD COUNTY, MARYLAND AS PLAT NOS. 13449 THRU 13452. 4. B.R.L. DENOTES BUILDING RESTRICTION LINE

5. • DENOTES IRON PIN SET CAPPED "F.C.C. 106".

■ DENOTES IRON PIPE OR IRON BAR FOUND.

O DENOTES ANGULAR CHANGE IN BEARING OF BOUNDARY OR RIGHTS-OF-WAY. 8. DENOTES CONCRETE MONUMENT SET WITH ALUMINUM PLATE "F.C.C. 106".

DENOTES CONCRETE MONUMENT OR STONE FOUND.

10. ALL AREAS ARE MORE OR LESS (+). 11. DISTANCES SHOWN ARE BASED ON SURFACE MEASUREMENT AND NOT REDUCED TO NAD '83 GRID MEASUREMENT. 12. FOR FLAG OR PIPE STEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF FLAG OR PIPE STEM AND ROAD RIGHT-OF-WAY LINE ONLY AND NOT ONTO THE FLAG OR PIPE STEM LOT

13. DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING (MINIMUM) REQUIREMENTS: A). WIDTH - 12 FEET (16 FEET SERVING MORE THAN ONE RESIDENCE):

B). SURFACE - SIX (6") INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING.

C). GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND 45-FOOT TURNING RADIUS;)). STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25-LOADING); E). DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOOD WITH NO MORE THAN 1 FOOT

DEPTH OVER SURFACE; F). STRUCTURE CLEARANCE - MINIMUM 12 FEET;

G). MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE. 14. PROPERTY SUBJECT TO PRIOR DEPARTMENT OF PLANNING AND ZONING FILE NO'5: 5-97-02, F-01-119, F-03-96, F-98-99, P-98-01, ECP-15-072 AND ECP-16-047, 50P-15-062. 15. NO CEMETERIES EXIST ON THIS SITE BASED ON A VISUAL SITE VISIT AND BASED ON AN EXAMINATION OF THE

HOWARD COUNTY CEMETERY INVENTORY MAP. 16. SITE IS NOT ADJACENT TO A SCENIC ROAD.

17. A PRE-SUBMISSION COMMUNITY MEETING WAS HELD FOR THIS PROJECT ON OCTOBER 14, 2015. .18. NO NOISE STUDY IS REQUIRED BECAUSE THE PROJECT DOES NOT FALL WITHIN THE GUIDELINES OF DESIGN MANUAL, VOLUME III, ROADS, BRIDGES SECTION 5.2.F.2.

19. THE WETLAND AND FOREST STAND DELINEATION LETTER OF FINDINGS DATED MARCH 11, 2016 PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. DETERMINED THAT THERE ARE NO WETLANDS AND STREAM AND THEIR RESPECTIVE BUFFERS LOCATED WITHIN THE LIMITS OF THIS PLAT.

20. APPROVAL OF A SITE DEVELOPMENT PLAN IS REQUIRED FOR THE DEVELOPMENT OF ALL RESIDENTIAL LOTS WITHIN THIS SUBDIVISION PRIOR TO ISSUANCE OF ANY GRADING OR BUILDING PERMITS FOR NEW HOUSE CONSTRUCTION IN ACCORDANCE WITH SECTION 16.155 OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.

21. THE LOTS CREATED BY THIS SUBDIVISION PLAN ARE SUBJECT TO A FEE OR A ASSESSMENT TO COVER OR DEFRAY ALL OR PART OF THE DEVELOPERS COST OF THE INSTALLATION OF THE WATER AND SEWER FACILITIES, PURSUANT TO THE HOWARD COUNTY CODE SECTION 18.112. THIS FEE OR ASSESSMENT, WHICH RUNS WITH THE LAND, IS A CONTRACTUAL OBLIGATION BETWEEN THE DEVELOPER AND EACH OWNER OF THIS PROPERTY AND IS NOT IN ANY WAY A FEE

OR ASSESSMENT OF HOWARD COUNTY. , 22. THIS PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT. PUBLIC WATER AND PUBLIC SEWER WILL BE UTILIZED FOR THIS PROJECT, CONT.# 24-3643-D.

23. THIS PLAN IS IN COMPLIANCE WITH THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS PER COUNCIL BILL 45-2003 AND THE 10/06/13 COMPREHENSIVE ZONING PLAN. DEVELOPMENT OR CONSTRUCTION ON THESE LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION APPLICATION, OR BUILDING/GRADING PERMIT. 24. THIS PROJECT IS IN COMPLIANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS ALTERNATIVE COMPLIANCE HAS

, 25. THE TRAFFIC STUDY DATED OCTOBER 5, 2016 FOR THIS PROJECT WAS PREPARED BY THE TRAFFIC GROUP AND APPROVED

ON OCTOBER 24, 2016. 26. ARTICLES OF INCORPORATION FOR TROTTER WOODS HOMEOWNERS ASSOCIATION, INC. ARE RECORDED AT LIBER 4532, FOLIO 168 OF THE HOWARD COUNTY LAND RECORDS.

27. DECLARATION OF COVENANTS AND RESTRICTIONS FOR THE HOMEOWNERS ASSOCIATION ARE RECORDED SIMULTANEOUSLY WITH

28. WATER AND SEWER SERVICE TO THESE LOTS WILL BE GRANTED UNDER THE PROVISIONS OF SECTION 18.1228 OF THE HOWARD COUNTY CODE. 29. PUBLIC WATER AND SEWER ALLOCATIONS WILL BE GRANTED AT TIME OF ISSUANCE OF THE BUILDING PERMIT IF CAPACITY IS

/ 30. THE PRIVATE USE-IN-COMMON DRIVEWAY ACCESS EASEMENT AND MAINTENANCE AGREEMENT FOR SHARED DRIVEWAY ON LOTS 34. 35 AND 36 AND LOT 27. FOREST HILLS SUBDIVISION, PLAT NO. 4250 WILL BE RECORDED SIMULTANEOUSLY WITH THE

31. THIS SUBDIVISION IS SUBJECT TO SECTION 104.0 F. OF THE ZONING REGULATIONS. AT LEAST 10% OF THE DWELLING UNITS SHALL BE MODERATE INCOME HOUSING UNITS (M.I.H.U.) OR AN ALTERNATIVE COMPLIANCE WILL BE PROVIDED. THE DEVELOPER SHALL EXECUTE A M.I.H.U. AGREEMENT WITH THE DEPARTMENT OF HOUSING TO INDICATE HOW THE M.I.H.U. REQUIREMENT WILL BE MET. THE M.I.H.U. AGREEMENT AND COVENANTS WILL BE RECORDED SIMULTANEOUSLY WITH THIS PLAT IN THE LAND RECORDS OFFICE OF HOWARD COUNTY, MARYLAND. THIS DEVELOPMENT WILL MEET M.I.H.U. ALTERNATIVE COMPLIANCE BY A PAYMENT OF A FEE-IN-LIEU TO THE DEPARTMENT OF HOUSING FOR EACH REQUIRED UNIT. MODERATE INCOME HOUSING UNIT (M.I.H.U.) TABULATION: a. M.I.H.U. REQUIRED (LOTS 34, 35, 37 THRU 41) = (7 LOTS X 10%) = 0.7 M.I.H.U.

b. M.I.H.U. PROPOSED = DEVELOPER WILL PURSUE ALTERNATIVE COMPLIANCE BY PAYING A FEE-IN-LIEU TO THE HOWARD COUNTY HOUSING DEPARTMENT FOR THE UNITS REQUIRED BY THE DEVELOPMENT. c. AN EXECUTED M.I.H.U. AGREEMENT WITH THE HOWARD COUNTY HOUSING DEPARTMENT HAS BEEN COMPLETED.

32. AN M.I.H.U. AGREEMENT AND COVENANTS ARE RECORDED SIMULTANEOUSLY WITH THE PLAT. 33. THE FOREST CONSERVATION OBLIGATION FOR THIS FINAL PLAT FOR TROTTERS WOODS, SECTION 2 WAS INCLUDED WITH THE DEVELOPERS AGREEMENT FOR TROTTER WOODS, SECTION 1, F-98-99.

34. THERE ARE EXISTING DWELLINGS LOCATED ON LOT 33 AND 36 WHICH ARE TO REMAIN. NO NEW BUILDINGS, EXTENSIONS OR ADDITIONS TO THE EXISTING DWELLING ARE TO BE CONSTRUCTED AT A DISTANCE LESS THAN THE ZONING REGULATION

35. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE. 36. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION

DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK. 37. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION

38. THE EXISTING TOPOGRAPHY SHOWN HEREON IS BASED ON A FIELD RUN TOPOGRAPHIC SURVEY PERFORMED BY FISHER, COLLINS & CARTER INC. ON OR ABOUT JULY 23, 2015 AND SUPPLEMENTED WITH HOWARD COUNTY GIS DATA. 39. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION

DIVISION AT 410-313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK. 40. THE CONTRACTOR SHALL NOTIFY (MISS UTILITY) AT 1-800-257-7777 AT LEAST 40 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE. 41. SOIL BORINGS WERE EXCAVATED WITHIN 50 FEET OF THE PROPOSED STORMWATER MANAGEMENT DEVICES.

42. STORMWATER MANAGEMENT IS IN ACCORDANCE WITH THE M.D.E. STORM WATER DESIGN MANUAL, VOLUMES I & II, REVISED 2009. NON-STRUCTURAL PRACTICES IN ACCORDANCE WITH CHAPTER 5 ARE BEING UTILIZED. ALL DRYWELLS (M-5), MICRO-BIORETENTION FACILITIES (M-6) AND GRASS SWALES (M-8) ARE PRIVATELY OWNED AND MAINTAINED.

43. TRAFFIC CONTROL DEVICES, MARKING AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF AND ASPHALT. 44. STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURE AND POLE SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY

DESIGN MANUAL, VOLUME III (1993) AND AS MODIFIED BY "GUIDELINE FOR STREET LIGHT IN RESIDENTIAL DEVELOPMENT (JUNE 1193)." A MINIMUM SPACING OF 20' SHALL BE MAINTAINED BETWEEN AND STREETLIGHT AND ANY TREE. 45. ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE POST (12 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL,

PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE) - 3' LONG. A GALVINIZED STEEL POST CAP SHALL BE MOUNTED ON TOP 46. PRIVATE RANGE OF ADDRESS SIGN ASSEMBLIES - FOR THE TWO USE-IN-COMMON DRIVEWAYS - SHALL BE FABRICATED

AND INSTALLED BY HOWARD COUNTY BUREAU OF HIGHWAYS, AT THE DEVELOPERS / OWNERS EXPENSE. CONTACT HOWARD COUNTY TRAFFIC DIVISION AT 410-313-5752 FOR DETAILS AND COST ESTIMATES.

47. ALL FUTURE RESIDENTIAL DRIVEWAYS ENTRANCES ADJACENT TO TALL TIMBER DRIVE SHALL BE CONSTRUCTED WITH A HOWARD COUNTY APRON (DETAIL R-6.05)

TITLE SHEET

TROTTER WOODS, SECTION 2

LOTS 33 THRU 41,

OPEN SPACE LOTS 42, 43 AND BULK PARCEL B A RESUBDIVISION OF BULK PARCEL A AND LOT 24

OF TROTTER WOODS, SECTION 1

TAX MAP #35 GRID #8 PARCEL #21 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND ZONED: R-20 SCALE: AS SHOWN DATE: APRIL 13, 2017

SHEET 1 OF 6

F-17-031



Property Line Line Table Chart BEARING PL1 N 21°27'59" W 21.04'

PL2 N 01°11'58" W 214.41'

PL3 N 21°27'59" W 20.49'

PL4 N 01°11'58" W 129.33'

PL5 N 21°27'59" W 20.26'

PL6 N 01°11'58" W 16.92' PL7 N 03°34'21" W 134.02' PL0 N 03°34'21" W 236.16' PL9 N 03°34'21" W 199.27' PL10 N 03°34'21" W 194.76' PL11 N 03°34'21" W 192.83' PL12 N 17°46'03" E 22.93'

	LEGEND						
5YMBOL	DESCRIPTION	5YMBOL	DESCRIPTION				
~~492	EXISTING 2' CONTOURS	402	PROPOSED CONTOUR				
490	EXISTING 10' CONTOURS	+362.5	SPOT ELEVATION				
Gf8 GfC	SOILS LINES AND TYPE	LOD	LIMITS OF DISTURBANCE				
	existing treeline	· · · · · · · · · · · · · · · · · · ·	PROPOSED TREELINE				
— x — x —	EXISTING FENCE LINE	——5F——	SILT FENCE				
	EXISTING PAVING	• • • • •	PERMANENT SOIL STAB. MATTING CHANNEL				
nertain takeen kreater mentalis	DRAINAGE AREA DIVIDE	55F	SUPER SILT FENCE				
	AREA OF RUNOFF TO DRYWELL		STABILIZES CONSTRUCTION ENTRANCE				
	PROPOSED EARTH DIKE		USE-IN-COMMON ACCESS EASEMENT				
~~~	EXISTING TREELINE		PROPOSED TREELINE				

STORMWATER MANAGEMENT PRACTICES						
LOT NO.	DISCONNECTION OF ROOFTOP RUNOFF (N-1) Y/N, NUMBER	DISCONNECTION OF NON-ROOFTOP RUNOFF (N-2) Y/N	DRY WELLS (M-5) Y/N, NUMBER	MICRO-BIORETENTION (M-6) Y/N, NUMBER		
33	33 ** STORMWATER MANAGEMENT PROVIDED UNDER 50P-15-062					
34 -	NO	NO	YES, FOUR(4)	NO		
35	NO	NO	YES, THREE(3)	YES, ONE(1)		
36	EXISTING HOUSE (TO REMAIN)	NO	NO	NO		
37	NO	NO	YES, FOUR(4)	NO		
38	NO	NO	YES, FOUR(4)	NO		
39	NO	NO	YES, THREE(3)	YES, ONE(1)		
40	NO	NO	YES, TREE(3)	YES. ONE(1)		
41	NO	NO	YES, FOUR(4)	NO		
42	NZA	N/A	N/A	N/A		
43	N/A	N/A	N/A	N/A		

	SCHEDUL	E A - PERIM	IETER LANDSC	APE EDGE	
PERIMETER	P-1	P-2	P-3	P-4	TOTAL
CATEGORY	ADJACENT TO PERIMETER PROPERTIES	INTERIOR LOT LINES	ADJACENT TO ROADWAY	INTERIOR LOT LINES	
LANDSCAPE TYPE	A	A*	N/A	A*	e e
LINEAR FEET OF PERIMETER	478 L.F.	203 L.F.	563 L.F.	289 L.F.	
CREDIT FOR EXISTING TREES TO REMAIN	N/A	N/A	N/A	N/A	
number of plants required Shade trees Evergreen trees	8	N/A	N/A	N/A	<b>છ</b> 0
CREDIT FOR EXISTING VEGETATION SHADE TREES	0	0	o	0	o
SMALL/MEDIUM DECIDUOUS TREES (2:1 SUBSTITUTION)	0	<b>o</b> :	o	О .	0
NUMBER OF PLANTS PROVIDED SHADE TREES EVERGREEN TREES	6	0 0	0	0	6 4

* NOTE: PERIMETERS P-2 AND P-4 ARE ADJACENT TO SECTION 1 LOTS WHICH DO NOT REQUIRE LANDSCAF

	LANDSCAPING PLANT LIST					
QTY.	KEY	NAME	SIZE			
3		ACER RUBRUM 'OCTOBER GLORY' (OCTOBER RED MAPLE)	2 1/2 - 3" CALIPER FULL CROWN, B&B			
3	0	PRUNUS SARGENTII (SARGENT CHERRY)	2 1/2" - 3" CALIPER FULL CROWN, B&B			
2	ANA CA	ilex 'nellie R. Stevens' (Nellie R. Stevens Holly)	5'-6' HT. 5&6			
2	N. B. V.	THUJA STANDISHII X PLICATA (GREEN GIANT ARBORVITAE)	5'-6' HT. B&B			

TOTAL: 6 SHADE TREES, 4 EVERGREEN TREES

M	MICRO-BIORETENTION PLANT LIST					
LOT	QUANTITY	NAME	5PACING			
35	24	MIXED PERENNIALS	1.5 TO 3.0 FT.			
39	10	MIXED PERENNIALS	1.5 TO 3.0 FT.			
40	10	MIXED PERENNIALS	1.5 TO 3.0 FT.			

SEE PAGE 5 FOR MORE DETAILS

SUPPLEMENTAL PLAN TOPOGRAPHY, LANDSCAPING & SOILS

## TROTTER WOODS, SECTION 2

LOTS 33 THRU 41,

OPEN SPACE LOTS 42, 43 AND BULK PARCEL B A RESUBDIVISION OF BULK PARCEL A AND LOT 24

OF TROTTER WOODS, SECTION 1

TAX MAP #35 GRID #0 PARCEL #21
SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND ZONED: R-20 SCALE: AS SHOWN DATE: APRIL 13, 2017 SHEET 2 OF 6

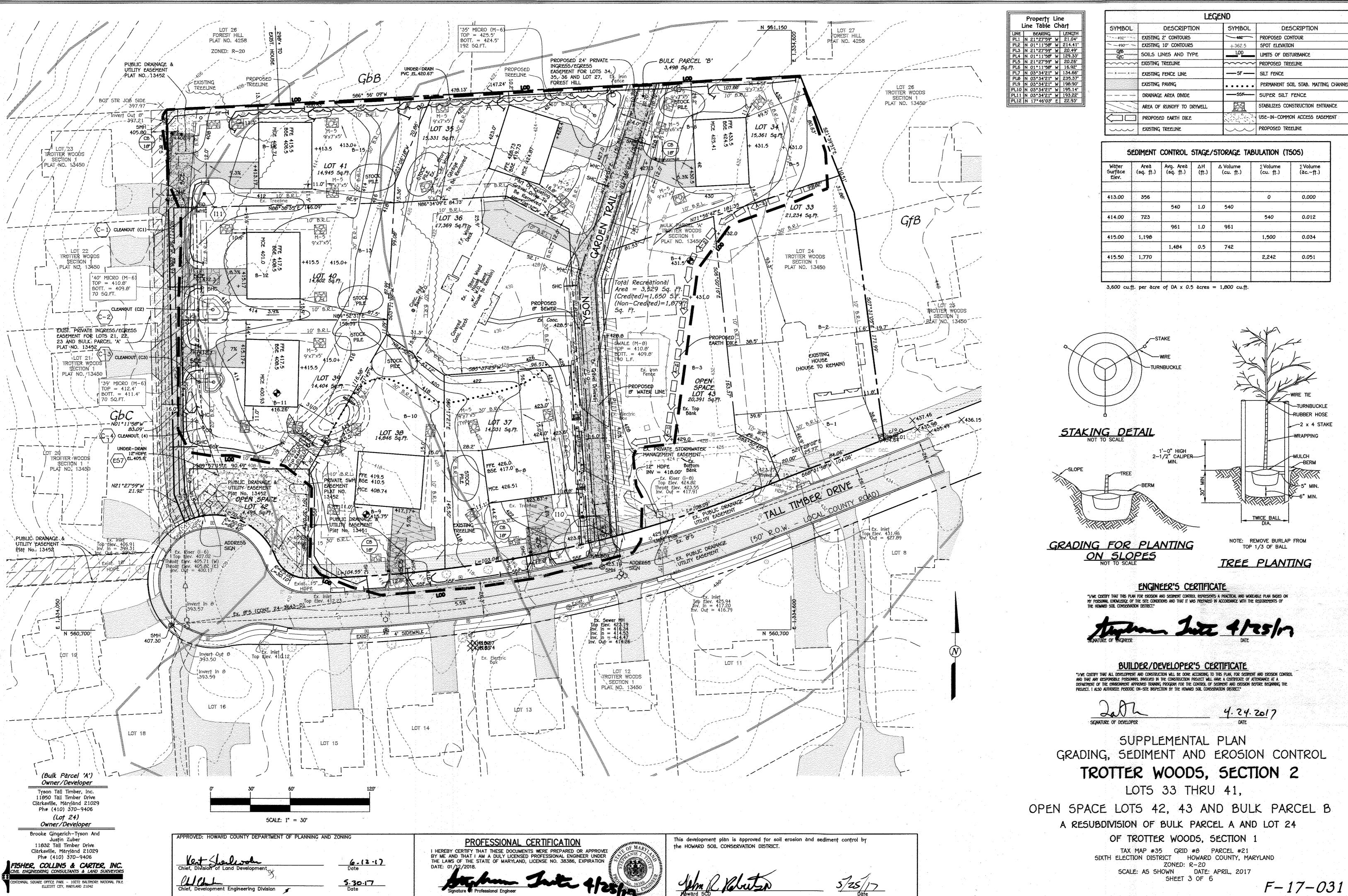
F-17-031

FISHER, COLLINS & CARTER, INC.

INGINEERING CONSULTANTS & LAND SURVEYO

Chief, Development Engineering Division

5 · 30 · 17 Date



F-17-031

(ac.-ff.)

0.000

0.012

0.034

0.051

-RUBBER HOSE ___2 x 4 STAKE

MULCH

### A. Soil Preparation

1. Temporary Stabilization a 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.

#### b. Apply fertilizer and lime as prescribed on the plans.

concorporate lime and fertilizer into the top 3 to 5 inches of soil by disking or other suitable means.

a. A soil test is required for any earth disturbance of 5 acres or more. The minimum soil conditions required for permanent vegetative establishment are:

i. Soil pH between 6.0 and 7.0.

iii. 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.

iv. Soil contains 1.5 percent minimum organic matter by weight v. Soil contains sufficient pore space to permit adequate root penetration.

b. Application of amendments or topsoil is required if on-site soils do not meet the above conditions c. 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.

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.

1. 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.

2. 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.

3. Topsoiling is limited to areas having 2:1 or flatter slopes where:

a. The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.

b. 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.

c. The original soil to be vegetated contains material toxic to plant growth d. The soil is so acidic that treatment with limestone is not feasible

Areas having slopes steeper than 2:1 require special consideration and design.

5. Topsoil Specifications: Soil to be used as topsoil must meet the following criteria:

used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Topsoil must not be a mixture of confrasting 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 1 1/2 inches in diameter b. Topsoil must be free of noxious plants or plant parts such as Bermuda grass, duack grass, Johnson grass, nut sedge, poison ivy, thistle, or others as specified.

c. 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.

a. Erosion and sediment control practices must be maintained when applying topsoil

b. 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.

c. 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 and seedbed preparation.

1. Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on

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

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.

2. 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 laws and must bear the name, trade name or trademark and warranty of the producer. 3. Lime materials must be ground limestone (hydrated or burnt lime may be substituted except when hydroseeding) 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

4. Lime and fertilizer are to be evenly distributed and incorporated into the top 3 to 5 inches of soil by disking or

5. 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-4-3 STANDARDS AND SPECIFICATIONS FOR SEEDING AND MULCHING

### The application of seed and mulch to establish vegetative cover

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.

a. All seed must meet the requirement 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 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 cook as possible until used. Temperatures above 75 to 80 degrees Fahrenheit can weaken bacteria and make the inoculant less

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.

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

weighted roller to provide good seed to soil contact.

b. Drill or Cultipacker Seeding: Mechanized seeders that apply and cover seed with soil.

i. Cultipacking seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil coverina. Seedbed must

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 O (phosphorus), 200 pounds per acre; K 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.

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 uniform fibrous physical

(Bulk Parcel 'A') Owner/Developer Tyson Tall Timber, Inc. 11850 Tall Timber Drive

Clarksville, Maryland 21029 Ph# (410) 370-9406 (Lot 24) Owner/Developer Brooke Gingerich-Tyson And

Justin Zuber 11832 Tall Timber Drive Clarksville, Maryland 21029 Ph# (410) 370-9406

FISHER, COLLINS & CARTER. INC. VIL ENGINEERING CONSULTANTS & LAND SURVEYORS

ELLICOTT CITY, MARYLAND 21042

BUILDER/DEVELOPER'S CERTIFICATE "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, FOR SEDIMENT AND EROSION CONTROL and that any responsible personnel involved in the construction project will have a certificate of attendance at a DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE Project. I also authorize periodic on—site inspection by the howard soil conservation district."

SIGNATURE OF DEVELOPER APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

6.1247

5.30.17

ENGINEER'S CERTIFICATE TAWE CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON

P205

Mar. 1-May 15 1/4-1/2 45 lbs. 90 lb/ac 90 lb/ac 2 tons/ac Aug. 15-Oct. 15 in. per acre (2 lb/ (2 lb/ (90 lb/

Fertilizer Rate (10-20-20) Lime Rate

(1.0 lb/ 1000 sf) 1000 sf) 1000 sf)

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.

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

growth of the grass seedlings.

iv. WCFM material must not contain elements or compounds at concentration levels that will by 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. 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 to 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

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:

acre. Mix the wood cellulose fiber with water at a maximum of 50 pounds of wood cellulose fiber per 100 gallons of

heavier at the edges where wind catches mulch, such as in valleys and on crests of banks. Use of asphalt binders is

Exposed soils where ground cover is needed for a period of 6 months or less. For longer

Plant Hardiness Zone (from Figure 8.3), 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

mulch alone as prescribed in Section 8-4-3.4.1.6 and maintain until the next seeding season.

rates, and seeding dates in the Permanent Seeding Summary. The Summary is to be placed on the plan. b. Additional planting specifications for exceptional sites such as shorelines, stream banks, or dunes or for

special purposes such as wildlife or aesthetic treatment may be found in USDA-NRCS Technical Field Office

c. For sites having disturbed area over 5 acres, use and show the rates recommended by the soil testing agency. d. For areas receiving low maintenance, apply urea form fertilizer (46-0-0) at 3 1/2 pounds per

b. Select one or more of the species or mixtures listed below based on the site conditions or purpose.

i. Kentucky Bluegrass: Full Sun Mixture: For use in areas that receive intensive management, Irrigation

bluegrass cultivars with each ranging from 10 to 35 percent of the total mixture by weight.

Rate: 5 to 8 pounds per 1000 square feet. One or more cultivars may be blended.

ii. Kentucky Bluegrass/Perennial Rye: Full Sun Mixture: For use in full sun areas where rapid

required in the areas of central Maryland and Eastern Shore. Recommended Certified Kentucky Bluegrass

Cultivars Seeding Rate: 1.5 to 2.0 pounds per 1000 square feet. Choose a minimum of three Kentucky

establishment is necessary and when turf will receive medium to intensive management. Certified Perennial

Choose a minimum of three Kentucky bluegrass cultivars with each ranging from 10 to 35 percent of the

iii. Tall Fescue/Kentucky Bluegrass: Full Sun Mixture: For use in drought prone areas and/or for areas

Tall Fescue Cultivars 95 to 100 percent, Certified Kentucky Bluegrass Cultivars 0 to 5 percent. Seeding

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: 1 1/2 to 3

Select turfarass varieties from those listed in the most current University of 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

Publication, Agronomy Memo #77, "Turfgrass Cultivar Recommendations for Maryland"

Ideal Times of Seeding for Turf Grass Mixtures Western MD: March 15 to June 1, August 1 to

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 1 1/2 inches in diameter

e. If soil moisture is deficient, supply new seedings with adequate water for plant growth ( 1/2 to 1 inch

seedings are made late in the planting season, in abnormally dry or hot seasons, or on adverse sites.

every 3 to 4 days depending on soil texture) until they are firmly established. This is especially true when

Depths

The resulting seedbed must be in such condition that future moving of grasses will pose no difficulty.

a reliable means of consumer protection and assures a pure genetic line

October 1 (Hardiness Zones: 5b. 6a) Central MD: March 1 to May 15, August 15 to October 15 (Hardiness Zone: 6b) Southern MD, Eastern Shore: March 1 to May 15, August 15 to October 15

receiving low to medium management in full sun to medium shade. Recommended mixture includes; Certified

Ryegrass Cultivars/Certified Kentucky Bluegrass Seeding Rate: 2 pounds mixture per 1000 square feet.

Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary. The

1000 square feet (150 pounds per acre) at the time of seeding in addition to the soil amendments shown

Depths

Fertilizer Rate

(10-20-20)

1000 sf)

Lime Rate

1000 sf)

2. For sites having soil tests performed, use and show the recommended rates by the

Seeding

Dates

3/1 - 5/15

8/15 - 10/15

iii. Synthetic binders such as Acrylic DLR (Agro-Tack), DCA-70, Petroset, 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

iv. Lightweight plastic netting may be stapled over the mulch according to manufacturer recommendations. Netting is

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

an operate safely. If used on sloping land, this practice should follow the contour.

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

duration of time, permanent stabilization practices are required.

testing agency. Soil tests are not required for Temporary Seeding.

Hardiness Zone (from Figure B.3): ____6b

Application Rate

(lb/ac)

72

PERMANENT SEEDING NOTES (8-4-5)

Seed Mixture (from Table B.1):

A. Seed Mixtures

2. Turfgrass Mixtures

in the Permanent Seeding Summary .

summary is to be placed on the plan.

Hardiness Zone (from Figure B.3): 6b

(lb/ac)

100

Dates

Seed Mixture (from Table B.3):

No. Species Application Rate

1. General Use

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

usually available in rolls 4-15 feet wide and 300 to 3,000 feet long.

TEMPORARY SEEDING NOTES (8-4-4)

nomogeneous slurry. The mulch material must form a blotter-like ground cover, on application, having moisture

ii. WCFM, including dye, must contain no germination or growth inhibiting factors

MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF

PROFESSIONAL CERTIFICATION the HOWARD SOIL CONSERVATION DISTRICT. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVEL BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 38386. EXPIRATION

B. Sod: To provide quick cover on disturbed areas (2:1 grade or flatter)

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 to % inch, plus or minus % 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.

5od must not be harvested or transplanted when moisture content (excessively dry of wet) may adversely affect its survival e, 5od 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

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

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. 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.

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 1/3 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.

#### B-4-8 STANDARDS AND SPECIFICATIONS FOR STOCKPILE AREAS

A mound or pile of soil protected by appropriately designed erosion and sediment control measures.

To provide a designated location for the temporary storage of soil that controls the potential for erosion, sedimentation, and

Conditions Where Practice Applie Stockpile areas are utilized when it is necessary to salvage and store soil for later use

. The stockpile location and all related sediment control practices must be clearly indicated on the grosion and sediment control plan 2. The footprint of the stockpile must be sized to accommodate the anticipated volume of material and based on a side slope ratio no steeper than 2:1. Benching

6. Where runoff concentrates along the toe of the stockpile fill, an appropriate erosion/sediment control practice must be used to intercept the discharge.

7. Stockpiles must be stabilized in accordance with the 3/7 day stabilization requirement as well as Standard 8-4-1 Incremental Stabilization and Standard 8-4-4

The stockpile area must continuously meet the requirements for Adequate Vegetative Establishment in accordance with Section 8-4 Vegetative Stabilization. Side slopes must be maintained at no steeper than a 2:1 ratio. The stockpile area must be kept free of erosion. If the vertical height of a stockpile exceeds 20 feet for 2:1 slopes, 30 feet for 3:1 slopes, or 40 feet for 4:1 slopes, benching must be provided in accordance with Section B-3 Land Grading.

8. If the stockpile is located on an impervious surface, a liner should be provided below the stockpile to facilitate cleanup. Stockpiles containing contaminated

#### HOWARD SOIL CONSERVATION DISTRICT (HSCD)

STANDARD SEDIMENT CONTROL NOTES LOD and protected areas are marked clearly in the field. A minimum of 40 hour notice to CID must be given at the following stages:

b. Upon completion of the installation of perimeter erosion and sediment controls, but before

proceeding with any other earth disturbance or grading,
c. Prior to the start of another phase of construction or opening of another grading unit,
d. Prior to the removal or modification of sediment control practices.

Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made. Other related state and federal permits shall be referenced, to ensure coordination and to avoid conflicts with this plan. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 2011 MARYLAND STANDARDS controls, 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

All disturbed dreas must be stabilized within the time period specified above in accordance with the 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for topsoil (Sec. B-4-2), permanent seeding (Sec. B-4-5), temporary seeding (Sec. B-4-4) and mulching (Sec. B-4-3). remporary stabilization with mulch alone can only be applied between the fall and spring seeding dates if the ground is frozen. Incremental stabilization (Sec. B-4-1) specifications shall be enforced in areas with >15 of cut and/or fill. Stockpiles (Sec. B-4-8) in excess of 20 ft. must be benched with stable outlet. All concentrated flow, steep slope, and highly erodible areas shall receive soil stabilization matting (Sec. B-4-5). All sediment control structures are to remain in place, and are to be maintained in operative condition until permission for their removal has been obtained from

Site Analysis: Total Area of Site: Area to be vegetatively stabilized: ___

Offsite waste/borrow area location: N/A.

Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.

Additional sediment control must be provided, if deemed necessary by the CID. The site and all controls shall be inspected by the contractor weekly; and the next day after each rain event. A written report by the contractor, made available upon request, is part of every inspection and should include:

Inspection type (routine, pre-storm event, during rain event)

Weather information (current conditions as well as time and amount of last recorded precipitation

Brief description of project's status (e.g., percent complete) and/or current activities Evidence of sediment discharges Identification of plan deficiencies

Identification of sediment controls that require maintenance Identification of missing or improperly installed sediment controls Compliance status regarding the sequence of construction and stabilization requirements

Maintenance and/or corrective action performed
 Other inspection items as required by the General Permit for Stormwater Associated with Construction Activities (NPDES, MDE).
 Trenches for the construction of utilities is limited to three pipe lengths or that which can and shall be back-filled and stabilized by the end of each workday.

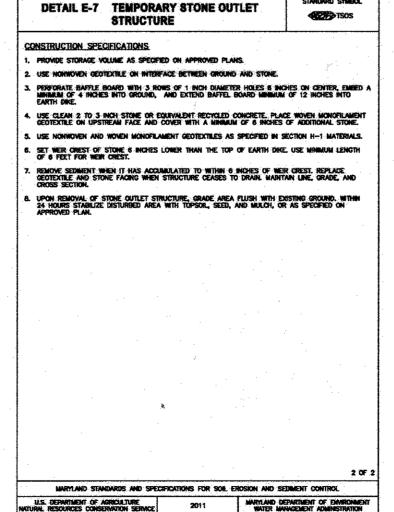
Any major changes or revisions to the plan or sequence of construction must be reviewed and approved by the HSCD prior to proceeding with construction. Minor revisions may allowed by the CID per the list of HSCD-approved field changes.

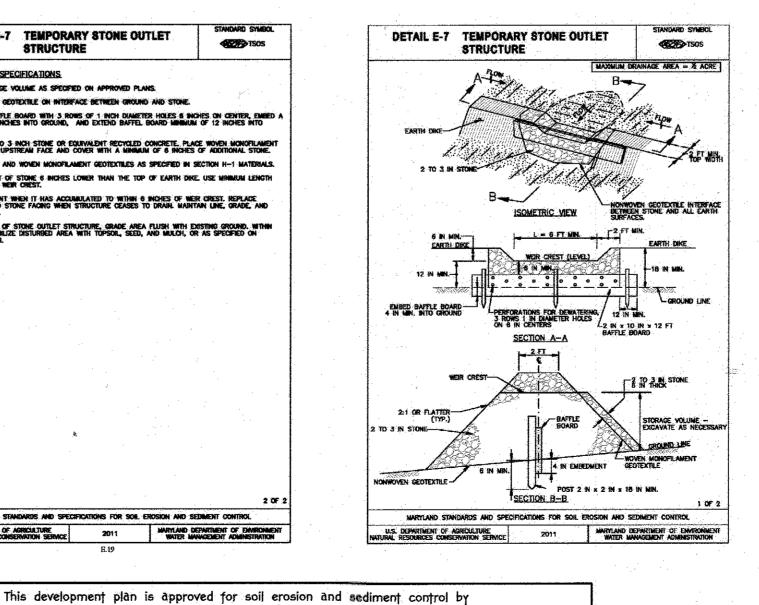
Disturbance shall not occur outside the L.O.D. A project is to be sequenced so that grading activities begin on one grading unit (maximum acreage of 20 ac. per grading unit) at a time. Work may proceed to a subsequent grading unit when at least 50 percent of the disturbed area in the preceding grading unit has been stabilized and approved by the HSCD. Unless otherwise specified and approved by the HSCD, no more than 30 acres cumulatively may be disturbed at a given time. Wash water from any equipment, vehicles, wheels, pavement, and other sources must be treated in a sediment basin or other approved washout structure.

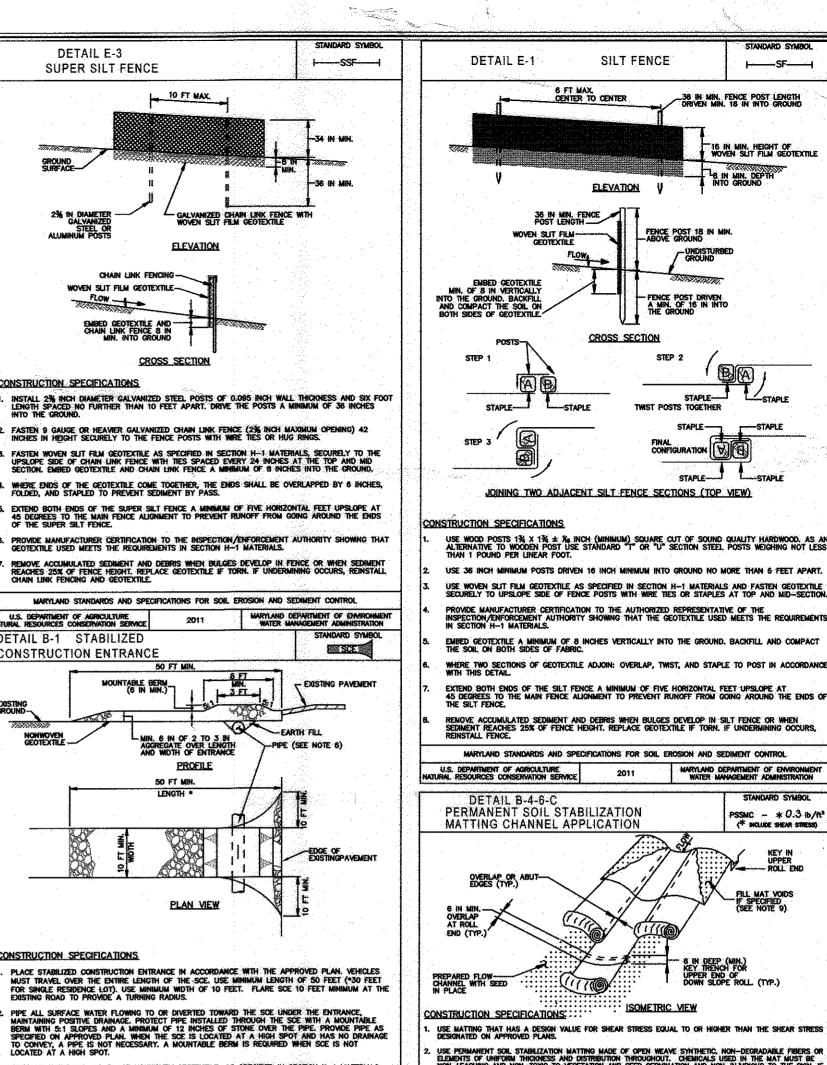
Topsoil shall be stockpiled and preserved on-site for redistribution onto final grade.

All Silf Fence and Super Silf Fence shall be placed on-the-contour, and be imbricated at 25 minimum intervals, with lower ends curied uphill by 2 in elevation. Stream channels must not be disturbed during the following restricted time periods (inclusive): Use I and IP March 1 - June 15 Use III and IIIP October 1 - April 30

Use IV March 1 - May 31 16. A copy of this plan, the 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and associated permits shall be on-site and







PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS. MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE 2011 OVERLAP OR ABUT EDGES OF MATTING ROLLS PER MANUFACTURER RECOMMENDATIONS, OVERLAP ROLL ENDS BY 6 INCHES (MINIMUM), WITH THE UPSTREAM MAT OVERLAPPING ON TOP OF THE NEXT DOWNSTREAM MAT. KEY IN THE TOP OF SLOPE END OF MAT & INCHES (MINIMUM) BY DIGGING A TRENCH, PLACING THE MATTING ROLL END IN THE IRENCH, STAPLING THE MAT IN PLACE, REPLACING THE EXCAVATED MATERIAL, AND TAMPING TO SECURE THE MAT END IN THE KEY. STAPLE/STAKE MAT IN A STAGGERED PATTERN ON 4 FOOT (MAXIMUM) CENTERS THROUGHOUT AND 2 FOOT (MAXIMUM) CENTERS ALONG SEAMS, JOINTS, AND ROLL FINDS. -4 TO 7 IN STONE (TYP.) IF SPECIFIED BY THE DESIGNER OR MANUFACTURER AND DEPENDING ON THE TYPE OF MAT BEING INSTALLED, ONCE THE MATTING IS KEYED AND STAFLED IN PLACE FILL THE MAT VOIDS WITH TOP SOE OR GRANULAR MATERIAL AND LIGHTLY COMPACT OR ROLL TO MANIFIES SOL/MAT CONTACT WITHOUT CRUSHING MAT.

DETAIL D-2 STONE CHECK DAM 10. ESTABLISH AND MAINTAIN VEGETATION SO THAT REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT ARE CONTINUOUSLY MET IN ACCORDANCE WITH SECTION 9-4 VEGETATIVE STABILIZATION. U.S. DEPARTMENT OF AGRICULTURE 2011 MARYLAND DEPARTMENT OF ENVIRONMENT NATURAL RESOURCES CONSERVATION SERVICE 2011 WATER MANAGEMENT ADMINISTRATION -- NONWOVEN 4 TO 7 IN STONE

CONSTRUCTION SPECIFICATIONS PREPARE SWALES IN ACCORDANCE WITH THE CONSTRUCTION SPECIFICATIONS DESCRIBED IN SECTION C-2. STANDARDS AND SPECIFICATIONS FOR TEMPORARY SWALE, OR AS SPECIFIED ON PLAN. PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, UNDER THE BOTTOM AND SIDES OF THE DAM PRIOR TO PLACEMENT OF STONE, CONSTRUCT THE CHECK DAM WITH WASHED 4 TO 7 INCH STONE OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) WITH SIDE SLOPES OF 2:1 OR FLATTER AND A MINIMUM TOP WIDTH OF 12 INCHES, PLACE THE STONE SO THAT TO OMPLETELY COVERS THE WIDTH OF THE CHANNEL AND CHANNEL BANKS, FORM THE WEIR SO THAT TOP OF THE OUTLET CREST IS APPROXIMATELY 6 INCHES LOWER THAN THE OUTER EDGES. LINE THE UPSTREAM FACE OF THE DAM WITH A 1 FOOT THICK LAYER OF WASHED AGGREGATE (% TO 1% INCH).

REMOVE ACCUMULATED SEDIMENT WHEN IT REACHES ONE-HALF OF THE HEIGHT OF THE WEIR CREST. MAINTAIN LINE, GRADE, AND CROSS SECTION.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

2011

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION SEDIMENT CONTROL NOTES & DETAILS

TROTTER WOODS, SECTION 2

LOTS 33 THRU 41.

OPEN SPACE LOTS 42, 43 AND BULK PARCEL B A RESUBDIVISION OF BULK PARCEL A AND LOT 24

OF TROTTER WOODS, SECTION 1

TAX MAP #35 GRID #8 PARCEL #21 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND ZONED: R-20 SCALE: AS SHOWN DATE: APRIL, 2017 SHEET 4 OF 6

F-17-031

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

62.4 LB5/FT° × 0.12 FT × 0.04 = 0.3 LB5/FT° (2 62.4 LB5/FT° × 0.22 FT × 0.02 = 0.3 LB5/FT° (3)

NECESSARY. (1 DAY PER LOT)

Q(1) = (0.26)(6.6)(0.12) = 0.2 CF5; Q(2) = (0.26)(6.6)(0.11) = 0.2 CF5;

2. VELOCITY (10 YR STORM) = 0.5 FP5 (1) & 0.5 FP5 (2) & 0.5 FP5 (3) 3. SHEER STRESS = 62.4 LB5/FT × 0.13 FT × 0.04 = 0.3 LB5/FT² (1);

SEQUENCE OF CONSTRUCTION

NOTIFY "MISS UTILITY" AT LEAST 48 HOURS BEFORE BEGINNING ANY WORK AT

1-800-257-7777. NOTIFY THE HOWARD COUNTY OFFICE OF CONSTRUCTION/INSPECTION AT 410-313-1330 AT LEAST 24 HOURS BEFORE STARTING WORK.

INSTALL STABILIZED CONSTRUCTION ENTRANCE, SILT FENCE, SUPER SILT FENCE

EARTH DIKE, AND TSOS. (3 DAYS)
REMOVE NECESSARY TREES. ROUGH GRADE LOTS AND COMMON DRIVEWAY AND INSTALL INLETS AND DRAINAGE PIPES AS SHOWN ON PLANS. UPON COMPLETION OF GRADING FOR SWALE ON EAST SIDE OF COMMON DRIVEWAY, INSTALL SOD.

CONSTRUCT HOUSES AND DRIVEWAYS AND INSTALL WHC. AND SHC. (6 MONTHS

INSTALL TEMPORARY SEEDING AND PERMANENT SOIL STABILIZATION MATTING WHERE

INSTALL ROOF LEADERS & DRYWELLS UPON CONSTRUCTION OF INDIVIDUAL HOUSES. FINE GRADE EACH INDIVIDUAL LOT. (1 WEEK PER LOT)
INSTALL PERMANENT SEEDING WITH CONSTRUCTION ON EACH LOT. (1 DAY PER LOT)

UPON COMPLETION OF GRADING WITHIN DRAINAGE AREA TO 1505, REMOVE 1505

ALL FINAL GRADES AND STABILIZATION SHOULD BE COMPLETED BEFORE ANY REMOVAL OF CONTROLS. WHEN ALL CONTRIBUTING AREAS TO THE SEDIMENT

SEDIMENT CONTROL INSPECTOR, THE SEDIMENT CONTROL DEVICES MAY BE

NOTE: THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE EACH

CONTROL DEVICES HAVE BEEN STABILIZED AND WITH THE PERMISSION OF THE

AND FINE GRADE. (1 WEEK)
UPON COMPLETION OF STABILIZATION ON INDIVIDUAL LOTS AND WITH APPROVAL OF

E SEDIMENT CONTROL INSPECTOR, INSTALL MICRO-BIORETENTION FACILITIES ON

OBTAIN A GRADING PERMIT AND HOLD PRE-CONSTRUCTION MEETING WITH COUNTY

_36 IN MIN. FENCE POST LENGTH DRIVEN MIN. 18 IN INTO GROUND

FENCE POST 18 IN MIN.
-- ABOVE GROUND

STAPLE -

T16 IN MIN. HEIGHT OF WOVEN SLIT FILM GEOTEXTILI

PSSMC - *0.3 lb/ft (* INCLUDE SHEAR STRESS)

2. AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTINGS HEREWITH LISTED AND APPROVED FOR THIS SITE, SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPING MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATION OF REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THIS APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATES.

3. THE OWNER, TENANT, AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, INCLUDING BOTH PLANT MATERIALS AND BERMS, FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REQULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.

#### PLANTING / SOIL SPECIFICATIONS

1. Planting Of Nursery Stock Shall Take Place Between March 15th And April 30th Or September 15th And November 15th.

2. A Twelve (12) Inch Layer Of Topsoil Shall Be Spread Over All Reforestation Areas Impacted By Site Grading To Assure A Suitable Planting Area, If Applicable. Disturbed Areas Shall Be Seeded And Stabilized In Accordance With The Sediment & Erosion Control Plan For This Project. Planting Areas Not Impacted By Site Grading Shall Have No Additional Topsoil Installed.

3. All Bare Rood Planting Stock Shall Have Their Root System Dipped Into An Anti-Desiccant Gel Prior To Planting.

4. Plants Shall Be Installed So That The Top Of The Root Mass Is Level With The Top Of Existing Grade. Backfill In The Planting Pits Shall Consist of 3 Parts Existing Soil to 1 Part Pine Fines Or Equivalent.

 Fertilizer Shall Consist Of Agriform 22-8-2, Or Equivalent, Applied As Per Manufacturer's Specifications.

 A Two (2) Inch Layer Of Hardwood Mulch Shall Be Placed Over The Root Area Of All Plantings. See Planting Detail.

7. Plant Material Shall Be Transported To The Site In A Tarped Or Covered Truck. Plants Shall Be Kept Moist Prior To Planting.

8. All Non-Organic Debris Associated With The Planting Operation Shall Be Removed From The Site By The Contractor.

#### MAINTENANCE OF PLANTINGS

1. Maintenance Of Plantings Shall Last For A Period Of 26 Months.

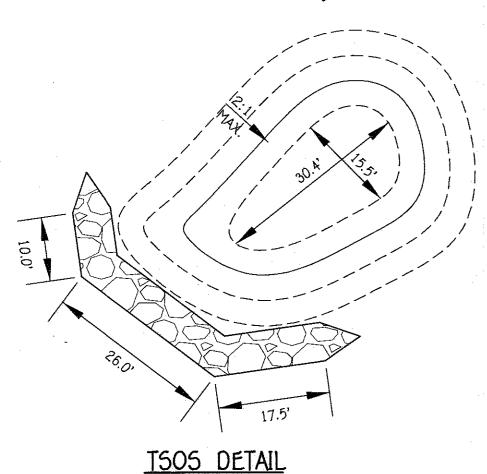
2. All Plant Material Shall Be Generally Watered Twice A Month During The 1st Growing Season. Watering May Be More Or Less Frequent Depending On Weather Conditions.

3. During The 2nd Growing Season, Plant Material Shall Be Watered Once A Month From May To September, As Needed.

 Invasive Exotics And Noxious Weeds Shall Be Removed From The Reforestation Area(s). Old Field Successional Species Shall Be Retained.

 Plants Shall Be Examined A Minimum Of Two (2) Times During The Growing Season For Serious Plant Pests And Diseases With The Appropriate Agent.

6. Dead Branched Shall Be Pruned From The Plantings.



### STORMWATER MANAGEMENT NOTES

1. STORMWATER MANAGEMENT IS PROVIDED IN ACCORDANCE WITH CHAPTER 5, "ENVIRONMENTAL SITE DESIGN" OF THE 2007 MARYLAND STORMWATER MANAGEMENT DESIGN MANUAL,

2. MAXIMUM CONTRIBUTING ROOF TOP AREA TO EACH DOWNSPOUT

3. DRYWELLS SHALL BE PROVIDED AT LOCATIONS WHERE THE LENGTH OF DISCONNECTION IS LESS THAN 75' AT 5%. THE SIZE AND CONSTRUCTION OF THE DRYWELL SHALL BE IN ACCORDANCE WITH

4. FINAL GRADING WILL BE SHOWN ON A SITE DEVELOPMENT PLAN.

(Bulk Parcel 'A')
Owner/Developer

Tyson Tall Timber, Inc.
11850 Tall Timber Drive
Clarksville, Maryland 21029
Ph# (410) 370-9406
(Lot 24)

(Lot 24)
Owner/Developer

Brooke Gingerich-Tyson And
Justin Zuber
11832 Tall Timber Drive

Clarksville, Maryland 21029
Ph# (410) 370-9406
FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS

ELLICOTT CITY, MARYLAND 21042

Chief, Division of Land Development

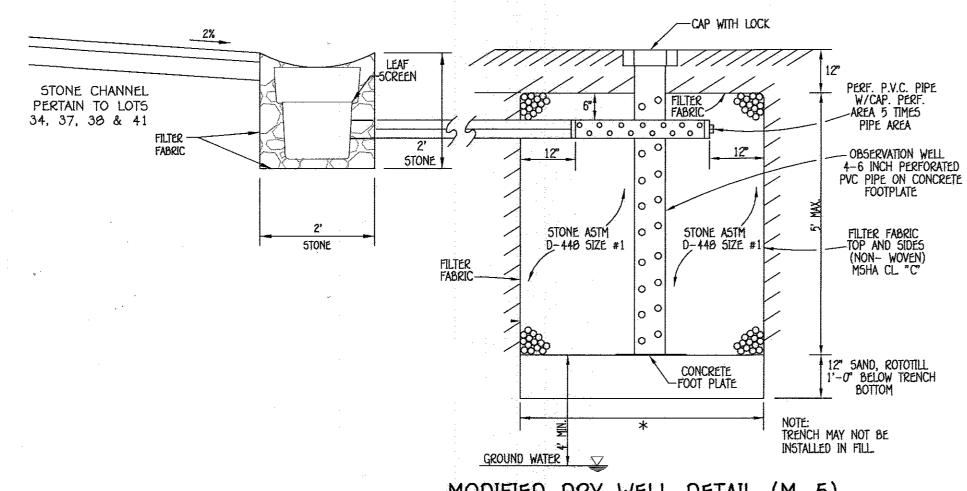
Chief, Development Engineering Division

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

6-12-17 Date 5-30-17 Date

Table B.4. Materials Specifications for Micro-Bioretention, Rain Gardens & Landscape Infiltration

lable b.4. Materials	Specifications for M	icro-bioretention, 1	Rain Gardens & Landscape Infiltration
Material	Specification	Size	Notes
Plantings	see Appendix A: Table A.4	n/ā	plantings are site-specific
Planting soil [2' to 4' deep]	loamy sand 60-65% compost 35-40% or sandy loam 30% coarse sand 30% compost 40%		USDA soil types loamy sand or sandy loam; clay content <5%
Organic Content	Min. 10% by dry weight (ASTM D 2974)		
Mulch	shredded hardwood		aged 6 months, minimum
Pea gravet diaphragm	pea gravel: ASTM-D-440	No. 0 or No. 9 (1/8" to 3/8")	
Curțăin drăin	ornamental stone: washed cobbles	stone: 2" to 5"	
Geotextile		n/a	PE Type 1 nonwoven
Gravel (underdrains and infiltration berms)	AASHTO M-43	No. 57 or No. Aggregate (3/8" to 3/4")	
Underdrain piping	F 750, Type P5 20 or AASHTO M-270	4" to 6" rigid schedule 40 PVC or 5DR35	Slotted or perforated pipe; 3/8" pert. © 6" on center, 4 holes per row; minimum of 3" of gravel over pipes; not necessary underneath pipes. Perforated pipe shall be wrapped with 1/4 inch galvanized hardware cloth
Poured in place concrete (if required)	MSHA Mix No. 3; f = 3500 psi at 20 days, normal weight, air-entrained; reinforcing to meet ASTM-615-60	n.ā	on-site testing of poured-in-place concrete required:  28 day strength and slump test; all concrete design (cast-in-place or pre-cast) not using previously approved 5tate or local standards requires design drawings sealed and approved by a professional structural engineer licensed in the State of Maryland — design to include meeting ACI Code 350.R/89; vertical loading EH-10 or H-201; allowable horizontal loading (based on soil pressures); and analysis of potential cracking
Sand	AASHTO-M-6 or ASTM-C-33	0.02" to 0.04"	Sand substitutions such as Diabase and Graystone (AASHTO) #10 are not acceptable. No calcium carbonated or dolomitic sand substitutions are acceptable. No "rock dust" can be used for sand.



PVI ELEV = 429.39  $LENGTH = 100.00^{\circ}$ H50 = ???|550| = 160.76HIGH PT 5TA 1+48.23 HIGH PT ELEV 428 98 EXISTING GRADE EXISTING GRADE — PROPOSED GRADE 415 415 -0+500+00 0+50 1+00 1+50 2+50 3+00 3+50 4+00 2+00 PROFILE CL UIC_1 SCALE HORZ. 1" = 30"

VERT. 1" = 3"

LEAF
SCREEN

SURCHARGE
PIPE

* THE EXACT NUMBER OF DRYWELLS
REQUIRED AND THE LENGTH AND WIDTH
WILL BE DETERMINED ONCE DOWNSPOUT
DRAINAGE PATTERNS ARE DETERMINED.

**THE EXACT NUMBER OF DRYWELLS
REQUIRED AND THE LENGTH AND WIDTH
WILL BE DETERMINED.

DRAINAGE PATTERNS ARE DETERMINED.

**THE EXACT NUMBER OF DRYWELLS
REQUIRED AND THE LENGTH AND WIDTH
WICKLE BY CAP. PERF.

AREA 5 TIMES
PIPE AREA

**THE EXACT NUMBER OF DRYWELLS
REQUIRED AND THE LENGTH AND WIDTH
WICKLE BY CAP. PERF.

AREA 5 TIMES
PIPE AREA

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REQUIRED AND THE LENGTH AND WIDTH
WICKLE BY CAP.

**THE EXACT NUMBER OF DRYWELLS
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ARE DRYWELLS
ARE DRY

# OPERATION & MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED DRY WELLS (M-5)

INSTALLED IN FILL.

A. THE OWNER SHALL INSPECT THE MONITORING WELLS AND STRUCTURES ON A QUARTERLY BASIS AND AFTER EVERY HEAVY STORM EVENT.

DRY WELL DETAIL (M-5)

B. THE OWNER SHALL RECORD THE WATER LEVELS AND SEDIMENT BUILD UP IN THE MONITORING WELLS OVER A PERIOD OF SEVERAL DAYS TO ENSURE TRENCH DRAINAGE.

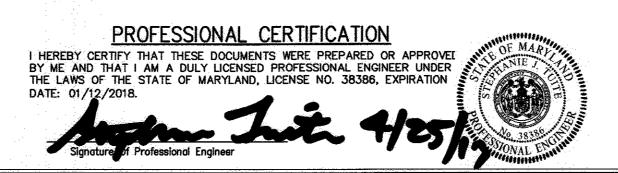
C. THE OWNER SHALL MAINTAIN A LOG BOOK TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS.

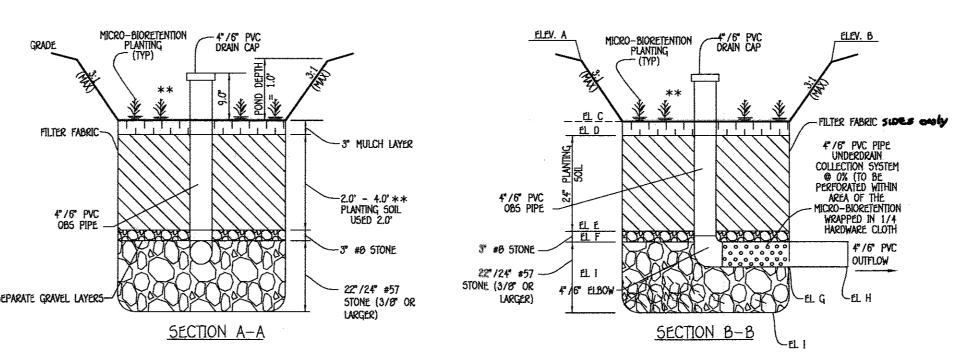
D. WHEN THE FACILITY BECOMES CLOGGED SO THAT IT DOES NOT DRAIN DOWN WITHIN A SEVENTY-TWO

(72) HOUR TIME PERIOD, CORRECTIVE ACTION SHALL BE TAKEN.

E. THE MAINTENANCE LOG BOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO INSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.

F. ONCE THE PERFORMANCE CHARACTERISTICS OF THE INFILTRATION FACILITY HAVE BEEN VERIFIED. THE MONITORING SCHEDULE CAN BE REDUCED TO AN ANNUAL BASIS UNLESS THE PERFORMANCE DATA INDICATES THAT A MORE FREQUENT SCHEDULE IS REQUIRED.





MICRO—BIORETENTION DETAIL (M—6)

NOT TO SCALE

*MIXED PERENNIALS

MICRO—BIORETENTION PLANTING DETAIL

NOT TO SCALE

*MIXED PERENNIALS

CUT-LEAF CONFETIONER: (1.5' SP.)

DEEBALM (1.5' SP.)

DEEBALM (1.5' SP.)

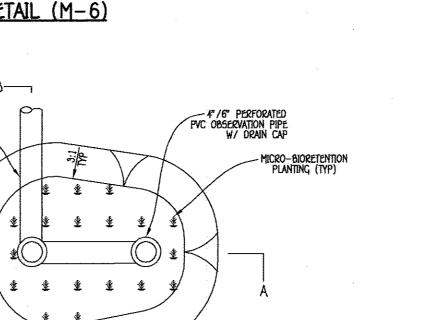
DEEPYE-WEED (3' SP.)

*MIXED
PERENNIALS

CUT-LEAF CONEFLOWER (1.5' SP.)
BEEBALM (1.5' SP.)
JOE-PYE-WEED (3' SP.)

SILKY DOGWOOD

* SEE PLANT MATERIAL CHARTS
FOR QUANTITIES AND SPACING,
AREA OF THE MICRO-BIORETENTION



NOT TO SCALE

A. THE OPEN CHANNEL SYSTEM SHALL BE INSPECTED ANNUALLY AND AFTER MAJOR STORM.

B. THE OPEN CHANNEL SHALL BE MOWED A MINIUM OF AS NEEDED DURING THE GROWING

C. DEBRIS AND LITTER SHALL BE REMOVED DURING REGULAR MOWING OPERATIONS AND AS

D. VISIBLE SIGNS OF EROSION IN THE OPEN CHANNEL SYSTEM SHALL BE REPAIRED AS SOON AS

E. REMOVE SILT IN THE OPEN CHANNEL SYSTEM WHEN IT EXCEEDS 25% OF THE ORIGINAL WQV.

F. INSPECT CHECK DAMS TWICE A YEAR FOR STRUCTURAL INTEGRITY. RESTORE CHECK DAMS TO

SEASON TO MAINTAIN A MAXIMUM GRASS HEIGHT OF LESS THAN 6 INCHES.

IT IS NOTICED.

ORIGINAL CONDITION AS APPLICABLE.

INSPECTIONS SHALL BE PERFORMED DURING WET WEATHER TO DETERMINE IF THE FACILITY IS

SUPPLEMENTAL NOTES AND DETAILS
TROTTER WOODS, SECTION 2

MICRO-BIORETENTION / BIORETENTION

LOT 35 20' x 14' 192 5Q.FT. 425.5 425.5 424.5 424.25 422.25 422.0 421.67 420.67 420.0 LOT 39 8' x 8.6' 70 5Q.FT. 412.4 411.4 411.4 411.15 409.15 408.90 408.57 408.24 406.90 LOT 40 8' x 8.6' 70 5Q.FT. 410.8 410.8 409.8 409.55 407.55 407.30 406.97 406.91 405.30

DIMENSIONS MULCH AREA A B C D (APPROX.) SQ.FT.

OPERATION & MAINTENANCE SCHEDULE

FOR MICRO-BIORETENTION (M-6)

MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY

THE OWNER SHALL INSPECT THE MULCH EACH SPRING. THE MULCH SHALL BE REPLACED EVERY TWO TO

THREE YEARS. THE PREVIOUS MULCH LAYER SHALL BE REMOVED BEFORE THE NEW LAYER IS APPLIED.

D. THE OWNER SHALL CORRECT SOIL EROSION ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER

MULCH REPLACEMENT SHALL BE DONE IN THE SPRING, PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING. ACCEPTABLE REPLACEMENT PLANT MATERIAL IS LIMITED TO THE FOLLOWING: 2000 MARYLAND

B. THE OWNER SHALL PERFORM A PLANT IN THE SPRING AND IN THE FALL OF EACH YEAR. DURING THE INSPECTION, THE OWNER SHALL REMOVE DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT, REPLACE DEAD PLANT MATERIAL WITH ACCEPTABLE REPLACEMENT PLANT MATERIAL, TREAT

A. THE OWNER SHALL MAINTAIN THE PLANT MATERIAL, MULCH LAYER AND SOIL LAYER ANNUALLY.

DISEASED TREES AND SHRUBS AND REPLACE ALL DEFICIENT STAKES AND WIRES.

STORMWATER DESIGN MANUAL VOLUME II, TABLE A.4.1 AND 2.

MONTH AND AFTER EACH HEAVY STORM.

LOTS 33 THRU 41,

OPERATION & MAINTENANCE SCHEDULE FOR PRIVATELY OWNED OPEN SPACE LOTS 42, 43 AND BULK PARCEL B AND MAINTAINED GRASS SWALE (M-8)

A RESUBDIVISION OF BULK PARCEL A AND LOT 24

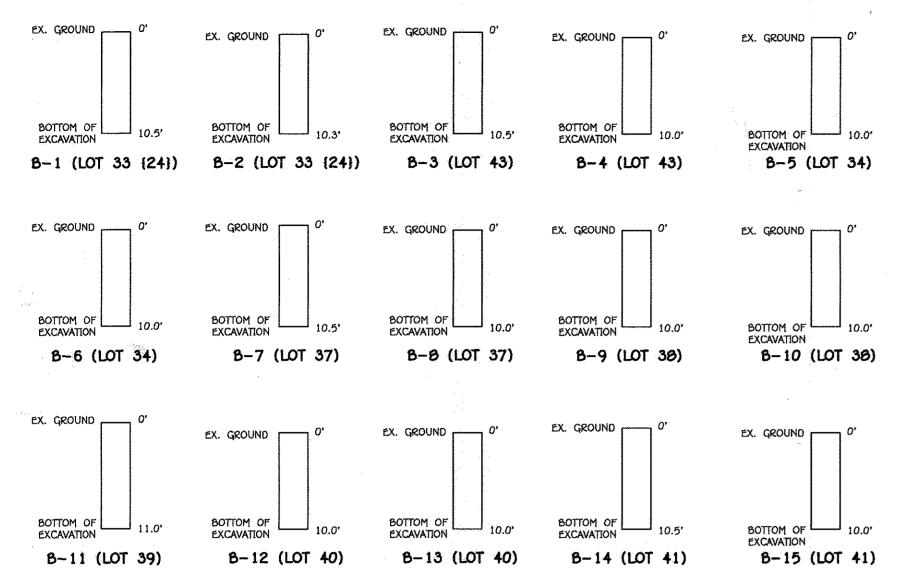
OF TROTTER WOODS, SECTION 1

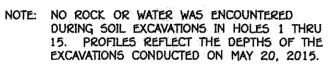
TAX MAP #35 GRID #8 PARCEL #21
SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
ZONED: R-20

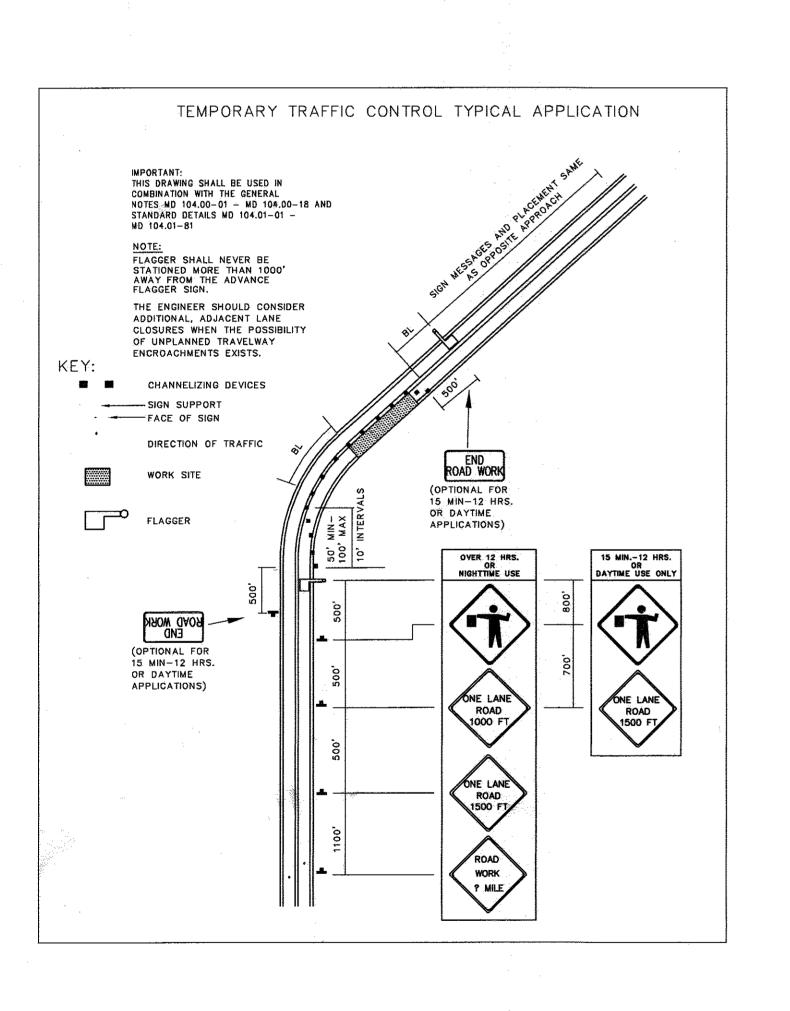
SCALE: AS SHOWN DATE: APRIL 13, 2017
SHEET 5 OF 6

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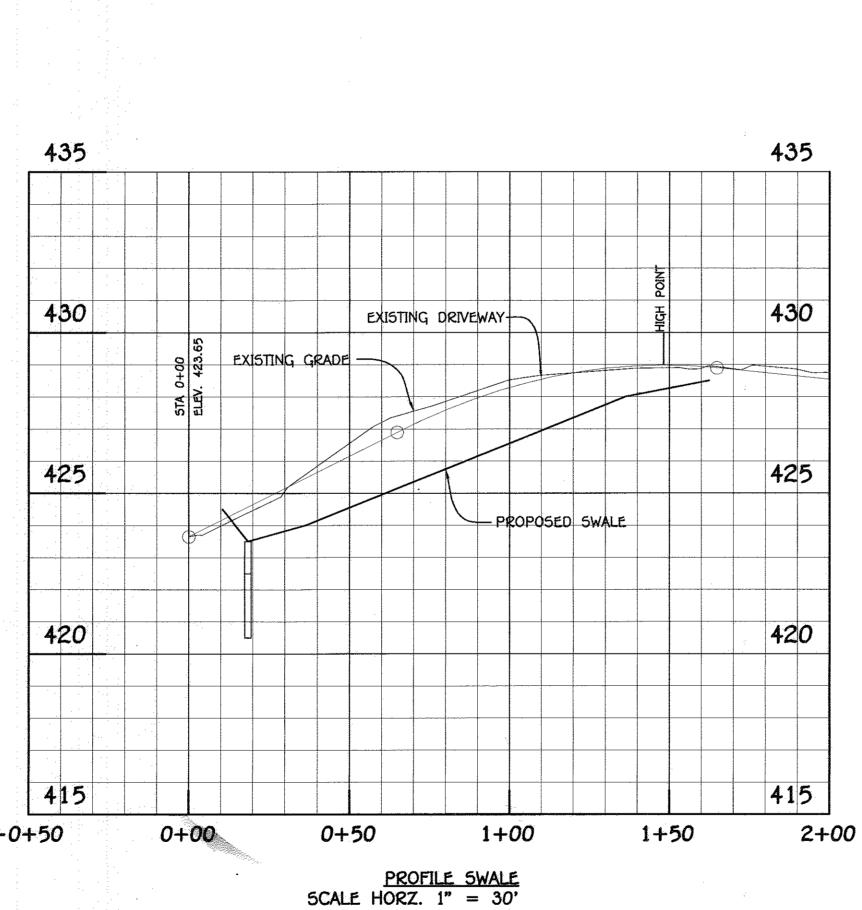
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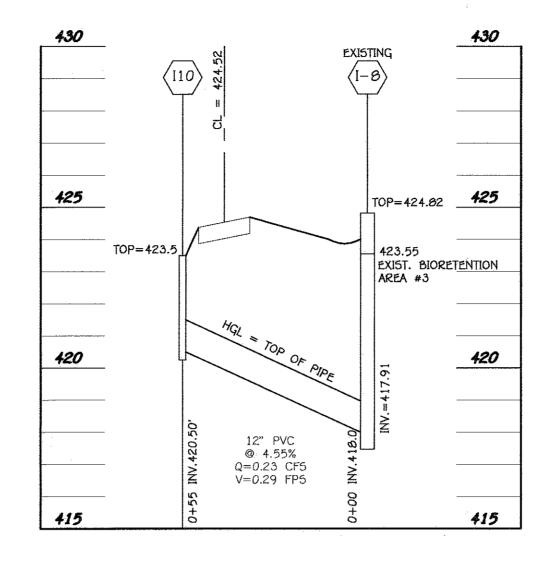




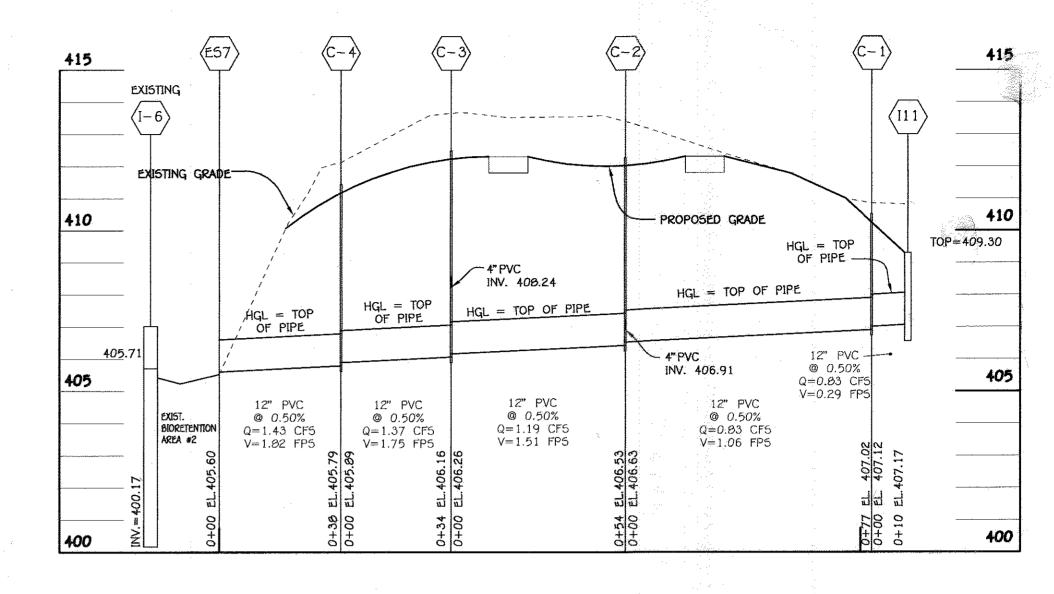
(Bulk Parcel 'A')



VERT. 1" = 3"



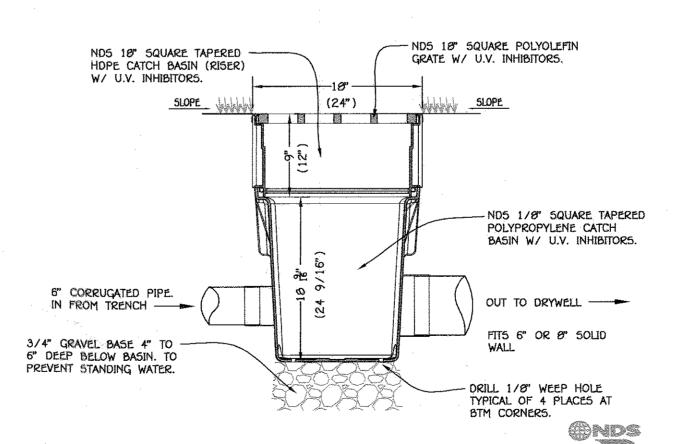
PROFILE STORM DRAIN SCALE HORZ. 1" = 30"VERT. 1" = 3"

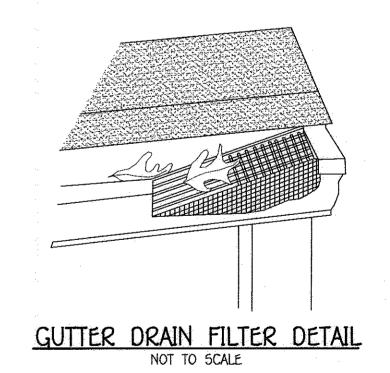


PROFILE STORM DRAIN SCALE HORZ. 1" = 30' VERT. 1" = 3"

STRUCTURE SCHEDULE						
STRUCTURE NO.	TOP ELEVATION	INV,IN	INV.OUT	LOCATION	TYPE	REMARKS
I-10	423.50		420.50	TALL TIMBER DR. 5TA 8+38.33, 45' RT	24" ND5 CATCH BASIN+	MODEL 240
I-11	409.30		407.17	N. 561,027.5, E. 1,334,157.5	24" ND5 CATCH BASIN*	MODEL 240
C-1	410.52	407.12	407.02	N. 561,017.4, E. 1,334,151.6	PVC CLEANOUT	6" PVC
C-2	412.25	406.91 406.63	406.53	N. 560,940.5, E. 1,334,152.9	PVC CLEANOUT	MICROBIO. 4
C-3	412.25	408.24 406.26	406.16	N. 560,006.2, E. 1,334,153.0	PVC CLEANOUT	місковіо. з
C-4	411.40	405.89	405.79	N. 560,851.9, E. 1,334,156.9	PVC CLEANOUT	6" PVC
£5-7			405.60	N. 560,815.8, E. 1,334,168.9	END SECTION	G-5.12
exist. I-0	424.82	THROAT 423.55 41 <i>0.00</i>	417.19	TALL TIMBER DR 5TA 7+79.4, 31.6' RT	inlet type 'k'	D-4.13

NOTE: LOCATION OF YARD INLETS AND MANHOLES IS TO CENTER OF STRUCTURE. LOCATION OF END SECTION IS TO JUNCTION WITH PIPE. *MAY SUBSTITUTE EQUIVALENT TYPE STRUCTURE





CB SQUARE CATCH BASIN 18" ) 18" SQUARE CATCH BASIN WITH RISER INSTALLATION FOR LANDSCAPE APPLICATIONS 1

SUPPLEMENTAL PROFILE AND DETAILS

## TROTTER WOODS, SECTION 2

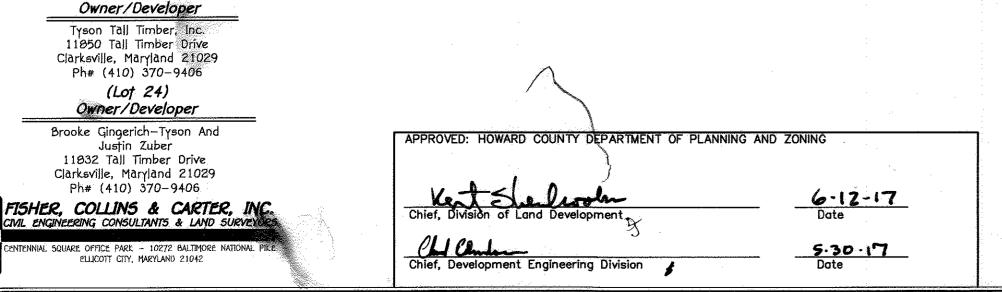
LOTS 33 THRU 41,

OPEN SPACE LOTS 42, 43 AND BULK PARCEL B A RESUBDIVISION OF BULK PARCEL A AND LOT 24

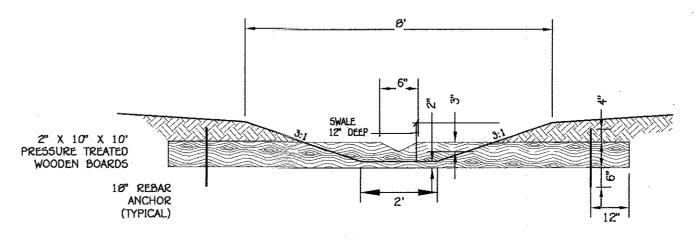
OF TROTTER WOODS, SECTION 1

TAX MAP #35 GRID #8 PARCEL #21 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND ZONED: R-20 SCALE: AS SHOWN DATE: APRIL 13, 2017

SHEET 6 OF 6 F-17-031







GRASS SWALE & TIMBER CHECK DAM DETAIL SECTION "A-A" NOT TO SCALE