

SCHEDULE A PERIMETER LANDSCAPE EDGE (PROVIDED WITH PART ONE (F-14-014))							
PERIMETER	CATEGORY (PROPERTIES/ROADWAYS)	LANDSCAPE TYPE	LINEAR FEET OF ROADWAY FRONTAGE PERMETER	CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	CREDIT FOR WALL, FENCE OR BERTH (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NUMBER OF PLANTS REQUIRED	SHADE TREES EVERGREEN TREES SHRUBS
P-1	ADJACENT TO PERIMETER	A	336.31'	NO	NO	6	-
P-2	ADJACENT TO PERIMETER	A	262.78'	NO	NO	4	-
P-3	ADJACENT TO PERIMETER	A	495.83'	YES - 100%	NO	0	-
P-4	ADJACENT TO PERIMETER	A	258.96'	YES - 45'	NO	4	-
P-5	ADJACENT TO PERIMETER	A	772.83'	NO	NO	13	-
P-6	ADJACENT TO ROADWAY	N/A	40'	NO	NO	-	-
P-7	ADJACENT TO PERIMETER	A	372.63'	YES - (3 EX. TREES)	NO	3	-
P-8	ADJACENT TO PERIMETER	A	615.62'	NO	NO	10	5 (SEE NOTE 1)
P-9	ADJACENT TO PERIMETER	A	130.01'	YES - 100%	NO	0	-
P-10	ADJACENT TO PERIMETER	A	1262.50'	YES - 100% (F.C.E.)	NO	0	-
P-11	ADJACENT TO PERIMETER	A	354.18'	NO	NO	6	-
P-12	ADJACENT TO PERIMETER	A	466.56'	NO	NO	8	5 (SEE NOTE 1)
P-13	ADJACENT TO PERIMETER	A	414.16'	NO	NO	7	-
P-14	ADJACENT TO ROADWAY	N/A	52.35'	NO	NO	-	-

NOTE: A TOTAL OF TEN (10) EVERGREEN TREES ALONG P-8 AND P-12 ARE REPLACEMENT FOR THE REMOVAL OF FIVE (5) SPECIMEN TREES (H, I, J, K, AND L) AS A CONDITION OF APPROVAL OF WP-13-092

Stormwater Management Summary Table

ESDV Summary Table				
AREA ID	ESDV Req. Cu.Ft.	ESDV Pvd. Cu.Ft.	% Impervious	Remarks
Lot 6	305	554	20%	Micro-Bioretenion
Lot 7	295	623	20%	Micro-Bioretenion
Lot 8	195	505	54%	Micro-Bioretenion Non-Rooftop Disconnection
Lot 9	306	619	59%	Micro-Bioretenion Non-Rooftop Disconnection
Portion of UIC Driveway which serves Lots 8 and 9	514	514	100%	Non-Rooftop Disconnection
Totals	1,615	2,815		

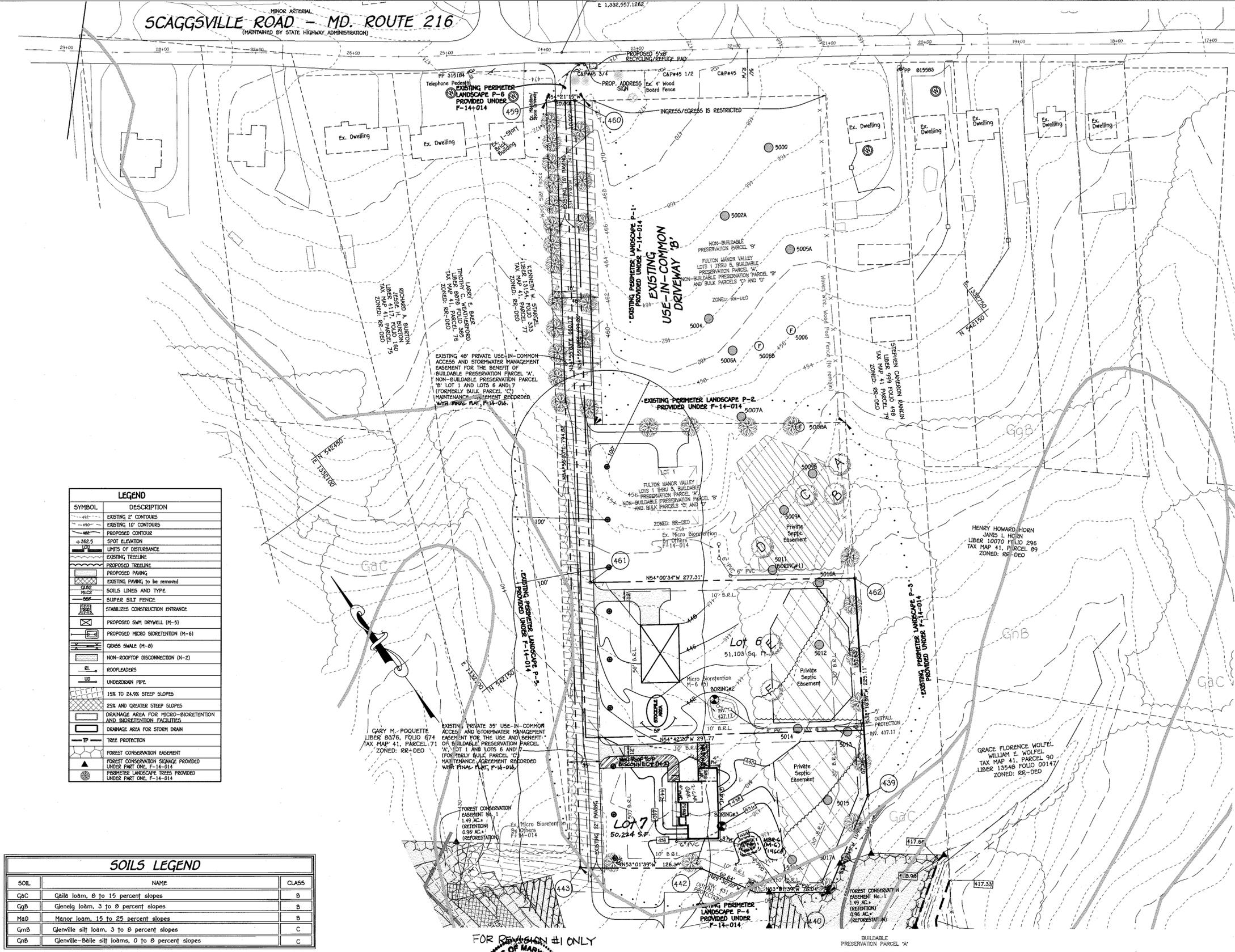
M-6 (5) BORING #2		M-6 (6) BORING #3	
EXISTING ELEV.	444.00	EXISTING ELEV.	438.00
MICRO-BIO. TOP	441.00	MICRO-BIO. TOP	434.50
MICRO-BIO. BOTTOM	437.17	MICRO-BIO. BOTTOM	431.67
BORING BOTTOM	430.00	BORING BOTTOM	424.00

NO.	BY	REVISION	DATE
1	RHV	REVISE THE HOUSE, GRADING AND BIO-RETENTION FACILITY ON LOT 7	6/22/16

Key	Species, Size (dbh)	Comment	Status
A	Quercus rubra, 39"	good condition	to remain
B	Quercus rubra, 33"	good condition	to remain
C	Quercus falcata, 31.5"	good condition	to remain
D	Quercus alba, 33.5"	good condition	to remain
E	Quercus velutina, 33.5"	good condition	to remain
F	Quercus velutina, 31.5"	good condition	to remain

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 18272 BALTIMORE NATIONAL FEE
 ELICOTT CITY, MARYLAND 21042
 (410) 481-2895

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Kate DeLoach 6/16/14
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE
Paul Edmund 5-30-14
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE



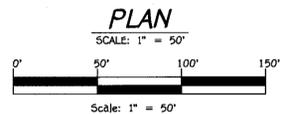
SYMBOL	DESCRIPTION
---452---	EXISTING 2' CONTOURS
---450---	EXISTING 10' CONTOURS
---448---	PROPOSED CONTOUR
SPOT ELEVATION	SPOT ELEVATION
---	UNITS OF DISTURBANCE
---	EXISTING TREELINE
---	PROPOSED TREELINE
---	PROPOSED PAVING
---	EXISTING PAVING TO BE REMOVED
---	SOILS LINES AND TYPE
---	SUPER SILT FENCE
---	STABILIZED CONSTRUCTION ENTRANCE
---	PROPOSED SHM DRYWELL (M-5)
---	PROPOSED MICRO BIORETENTION (M-6)
---	GRASS SWALE (M-8)
---	NON-ROOFTOP DISCONNECTION (M-2)
---	ROOFLEADERS
---	UNDERDRAIN PIPE
---	15% TO 24.9% STEEP SLOPES
---	25% AND GREATER STEEP SLOPES
---	DRAINAGE AREA FOR MICRO-BIORETENTION AND BIORETENTION FACILITIES
---	DRAINAGE AREA FOR STORM DRAIN
---	TREE PROTECTION
---	FOREST CONSERVATION EASEMENT
---	FOREST CONSERVATION SIGNAGE PROVIDED UNDER PART ONE, F-14-014
---	PERIMETER LANDSCAPE TREES PROVIDED UNDER PART ONE, F-14-014

SOIL	NAME	CLASS
GaC	Gailla loam, 0 to 15 percent slopes	B
GgB	Glenelg loam, 3 to 8 percent slopes	B
MdD	Major loam, 15 to 25 percent slopes	B
GmB	Glenville silt loam, 3 to 8 percent slopes	C
GnB	Glenville-Baile silt loams, 0 to 8 percent slopes	C

NOTES:
 * Hydric soils and/or contains hydric inclusions
 ** May contain hydric inclusions
 † Generally only within 100-year floodplain areas



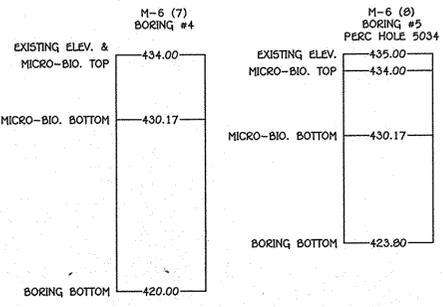
FOR REVISION #1 ONLY
 6/22/16
 ROBERT H. VOGEL PE NO 16193



SUPPLEMENTAL PLAN
 TOPOGRAPHY, GRADING, STORMWATER
 MANAGEMENT AND SOILS
**FULTON MANOR VALLEY
 PART TWO**
 LOTS 6 THRU 9
 ZONED: RR-DEO
 TAX MAP NO. 41 GRID NO. 19 PARCEL NO. 78 AND 456
 FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: MAY 20, 2014
 SHEET 2 OF 7

SOILS LEGEND		
SOIL	NAME	CLASS
GaC	Gaia loam, 0 to 15 percent slopes	B
GgB	Glennelg loam, 3 to 8 percent slopes	B
MaD	Manor loam, 15 to 25 percent slopes	B
GnB	Glennville silt loam, 3 to 8 percent slopes	C
GnB	Glennville-Baile silt loams, 0 to 8 percent slopes	C

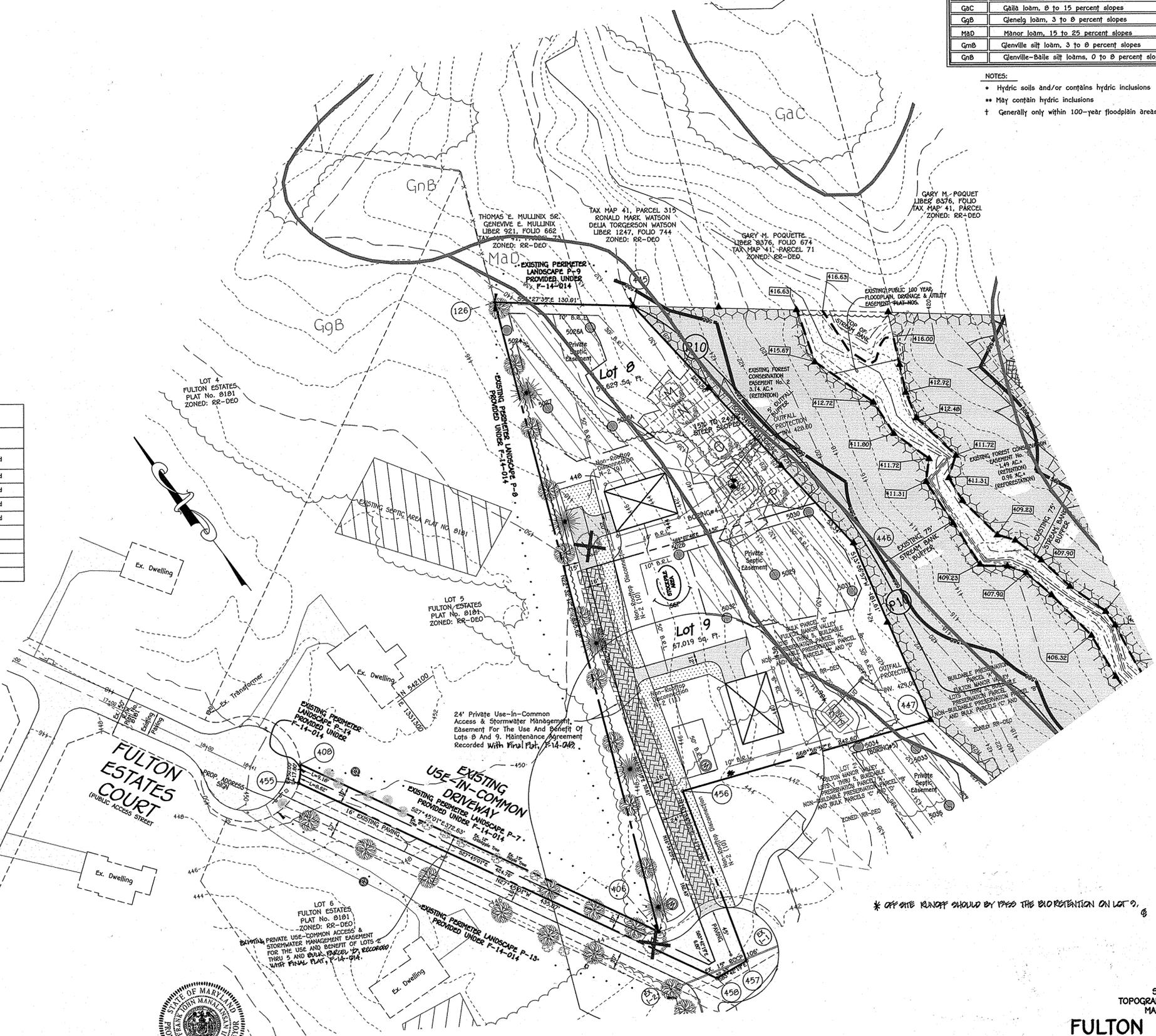
NOTES:
 * Hydric soils and/or contains hydric inclusions
 ** May contain hydric inclusions
 † Generally only within 100-year floodplain areas



Specimen Tree Chart

Key	Species, Size (dbh)	Comment	Status
G	Quercus alba, 31"	poor condition, trunk & limb dieback noted	to remain
H	Liriodendron tulipifera, 36.5"	fair condition, some limb dieback noted	to be removed
I	Liriodendron tulipifera, 35"	good condition	to be removed
J	Quercus velutina, 33"	good condition	to be removed
K	Liriodendron tulipifera, 42"	good condition	to be removed
L	Liriodendron tulipifera, 36.5"	good condition	to be removed
M	Liriodendron tulipifera, 37"	good condition	to remain
N	Liriodendron tulipifera, 35"	good condition	to remain
O	Liriodendron tulipifera, 34"	good condition	to remain
P	Liriodendron tulipifera, 31"	good condition	to remain

LEGEND	
SYMBOL	DESCRIPTION
(Symbol)	EXISTING 2' CONTOURS
(Symbol)	EXISTING 10' CONTOURS
(Symbol)	PROPOSED CONTOUR
(Symbol)	SPOT ELEVATION
(Symbol)	LIMITS OF DISTURBANCE
(Symbol)	EXISTING TREELINE
(Symbol)	PROPOSED TREELINE
(Symbol)	EXISTING PAVING TO BE REMOVED
(Symbol)	SOILS LINES AND TYPE
(Symbol)	SUPER SILT FENCE
(Symbol)	STABILIZES CONSTRUCTION ENTRANCE
(Symbol)	PROPOSED SWM DRYWELL (M-5)
(Symbol)	PROPOSED MICRO BIORETENTION (M-6)
(Symbol)	GRASS SWALE (M-8)
(Symbol)	NON-ROOFTOP DISCONNECTION (N-2)
(Symbol)	ROOFLEADERS
(Symbol)	UNDERDRAIN PIPE
(Symbol)	15% TO 24.9% STEEP SLOPES
(Symbol)	25% AND GREATER STEEP SLOPES
(Symbol)	DRAINAGE AREA FOR MICRO-BIORETENTION AND BIORETENTION FACILITIES
(Symbol)	DRAINAGE AREA FOR STORM DRAIN
(Symbol)	TREE PROTECTION
(Symbol)	FOREST CONSERVATION EASEMENT
(Symbol)	FOREST CONSERVATION SIGNAGE PROVIDED UNDER PART ONE, F-14-014
(Symbol)	PERIMETER LANDSCAPE TREES PROVIDED UNDER PART ONE, F-14-014



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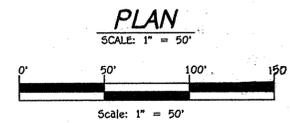
APPROVED: DEPARTMENT OF PLANNING AND ZONING
 [Signature] 6/16/14
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 5-30-14
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

OWNER
 DEBRA E. TAYLOR
 P.O. BOX 535
 FULTON, MARYLAND 21044
 410-977-1327

DEVELOPER
 PLEASANT PROSPECT FARM, INC.
 4401 JENNING'S CHAPEL ROAD
 DAVIS, MD 20833
 ATTN: MR. DONALD R. REINER, JR., PRESIDENT
 443-367-0422



FRANK J. MANALANGAN, II, L.S. 21476
 DATE: 5-20-14
 "Professional certification, I hereby certify that these documents were prepared by me, and that I am a duly Licensed Professional Surveyor under the laws of the State of Maryland, License No. 21476, Expiration Date 7-14-19."



SUPPLEMENTAL PLAN
 TOPOGRAPHY, GRADING, STORMWATER
 MANAGEMENT AND SOILS
**FULTON MANOR VALLEY
 PART TWO**
 LOTS 6 THRU 9
 ZONED: RR-DEO
 TAX MAP No. 41 GRID No. 19 PARCEL No. 78 AND 456
 FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: MAY 20, 2014
 SHEET 3 OF 7

SCAGGSVILLE ROAD - MD. ROUTE 216
(MAINTAINED BY STATE HIGHWAY ADMINISTRATION)

LEGEND	
SYMBOL	DESCRIPTION
---	EXISTING 2' CONTOURS
---	EXISTING 10' CONTOURS
---	PROPOSED CONTOUR
+	SPOT ELEVATION
---	LIMITS OF DISTURBANCE
---	EXISTING TREELINE
---	PROPOSED TREELINE
---	PROPOSED PAVING
---	EXISTING PAVING TO BE REMOVED
---	SOILS LINES AND TYPE
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---	PROPOSED SWM DRYWELL (M-5)
---	PROPOSED MICRO BIORETENTION (M-6)
---	GRASS SWALE (M-6)
---	NON-ROOFTOP DISCONNECTION (N-2)
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---	PERIMETER LANDSCAPE TREES PROVIDED UNDER PART ONE, F-14-014

NO.	BY	REVISION	DATE
1	RHV	REVISE THE HOUSE, GRADING AND BIO RETENTION FACILITY ON LOT 7	6/22/16

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10275 BALTIMORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21042
(410) 461-5895

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Debra E. Taylor 6/22/14
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Paul E. Carter 5-30-14
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

FOR REVISION #1 ONLY

STATE OF MARYLAND
PROFESSIONAL ENGINEER
ROBERT H. VOGEL, PE NO 16193

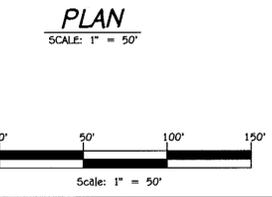
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DEVELOPER
PLEASANT PROSPECT FARM, INC.
4401 JENNINGS CHAPEL ROAD
DANBY, MD 20633
ATTN: MR. DONALD R. SEUWIC, JR., PRESIDENT
443-367-0422

STATE OF MARYLAND
PROFESSIONAL LAND SURVEYOR
FRANK J. MANALANSAN, II, L.S. 21476
DATE 5-20-14

Professional certification. I hereby certify that these documents were prepared by me, and that I am a duly Licensed Professional Surveyor under the laws of the State of Maryland, License No. 21476, Expiration Date 7-14-15.

NOTE: THE LOCATION FOR THE PROPOSED DWELLING ON LOT 7 WITH RESPECT TO THE BRLLS AND LOT LINES WILL BE REVIEWED AND APPROVED AT THE TIME OF THE BUILDING PERMIT.



THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT

Approved: *John C. Robertson*
6/3/14

SEDIMENT CONTROL PLAN
FULTON MANOR VALLEY PART TWO
LOTS 6 THRU 9
ZONED: RR-DEO
TAX MAP No. 41 GRID No. 19 PARCEL No. 78 AND 456
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: MAY 20, 2014
SHEET 4 OF 7



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Infiltration and Filter System Construction Specifications

Infiltration and filter systems either take advantage of existing permeable soils or create a permeable medium such as sand for WC, and Re v. In some instances where permeability is great, these facilities may be used for up as well. The most common systems include infiltration trenches, infiltration basins, sand filters, and organic filters.

When properly planted, vegetation will thrive and enhance the functioning of these systems. For example, pre-treatment buffers will trap sediments that often are bound with phosphorus and metals. Vegetation planted in the facility will aid in nutrient uptake and water storage. Additionally, plant roots will provide aeration for stormwater to permeate soil for groundwater recharge. Finally, successful plantings provide aesthetic value and wildlife habitat making these facilities more desirable to the public.

Design Constraints:

- > Planting buffer strips of at least 20 feet will cause sediments to settle out before reaching the facility, thereby reducing the possibility of clogging.
- > Determine areas that will be saturated with water and water table depth so that appropriate plants may be selected (hydrology will be similar to bioretention facilities, see figure A.5 and Table A.4 for planting material guidance).
- > Plants known to send down deep taproots should be avoided in systems where filter fabric is used as part of facility design.
- > Test soil conditions to determine if soil amendments are necessary.
- > Plants shall be located so that access is possible for structure maintenance.
- > Stabilize heavy flow areas with erosion control mats or sod.
- > Temporarily divert flows from seeded areas until vegetation is established.
- > See Table A.5 for additional design considerations.

Bio-retention

The characteristics of the soil for the bioretention facility are perhaps as important as the facility location, size, and treatment volume. The soil must be permeable enough to allow runoff to filter through the media, while having characteristics suitable to promote and sustain a robust vegetative cover crop. In addition, much of the nutrient pollutant uptake (nitrogen and phosphorus) is accomplished through absorption and microbial activity within the soil profile. Therefore, soils must balance their chemical and physical properties to support biotic communities above and below ground.

The planting soil should be a sandy loam, loamy sand, loam (USDA), or a loam/sand mix (should contain a minimum 35 to 60% sand, by volume). The clay content for these soils should be less than 25% by volume (Environmental Quality Resources (EQR), 1996; Engineering Technology Inc. and Biohabitats, Inc. (ET&B), 1993). Soils should fall within the SM, ML, SC classifications or the Unified Soil Classification System (USCS). A permeability of at least 1.0 feet per day (0.5"/hr) is required (a conservative value of 0.5 feet per day is used for design). The soil should be free of stones, stumps, roots, or other woody material over 1" in diameter. Brush or seeds from noxious weeds (e.g. Johnson Grass, Mugwort, Nuttall's, and Canada Thistle or other noxious weeds as specified under COMAR 15.08.01.05) should not be present in the soils. Placement of the planting soil should be in 12 to 18 lifts that are loosely compacted (tamped lightly with a backhoe bucket or traversed by dozer tracks). The specific characteristics are presented in Table A.3.

Table A.3 Planting Soil Characteristics

Parameter	Value
pH range	5.2 to 7.00
Organic matter	1.5 to 4.0% (by weight)
Magnesium	35 lbs. per acre, minimum
Phosphorus (phosphate - P2O5)	75 lbs. per acre, minimum
Potassium (potash - K2O)	85 lbs. per acre, minimum
Soluble salts	500 ppm
Clay	10 to 25 %
Silt	30 to 55 %
Sand	35 to 60%

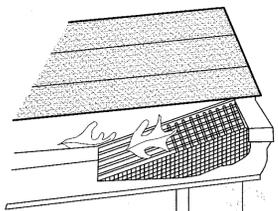
Mulch Layer

The mulch layer plays an important role in the performance of the bioretention system. The mulch layer helps maintain soil moisture and avoids surface sealing, which reduces permeability. Mulch helps prevent erosion, and provides a microenvironment suitable for soil biota at the mulch/soil interface. It also serves as a pretreatment layer, trapping the finer sediments, which remain suspended after the primary pretreatment.

The mulch layer should be standard landscape style, single or double shredded hardwood mulch or chips. The mulch layer should be well aged (stockpiled or stored for at least 12 months), uniform in color, and free of other materials, such as weed seeds, soil, roots, etc. The mulch should be applied to a maximum depth of three inches. Grass clippings should not be used as a mulch material.

Planting Guidance

Plant material selection should be based on the goal of simulating a terrestrial forested community of native species. Bioretention simulates an upland-species ecosystem. The community should be dominated by trees, but have a distinct community of understory trees, shrubs and herbaceous materials. By creating a diverse, dense plant cover, a bioretention facility will be able to treat stormwater runoff and withstand urban stresses from insects, disease, drought, temperature, wind, and exposure. The proper selection and installation of plant materials is key to a successful system. There are essentially three zones within a bioretention facility (Figure A.5). The lowest elevation supports plant species adapted to standing and fluctuating water levels. The middle elevation supports plants that like drier soil conditions, but can still tolerate occasional inundation by water. The outer edge is the highest elevation and generally supports plants adapted to dryer conditions. A sample of appropriate plant materials for bioretention facilities are included in Table A.4. The layout of plant material should be flexible, but should follow the general principals described in Table A.5. The objective is to have a system, which resembles a random, and natural plant layout, while maintaining optimal conditions for plant establishment and growth. For a more extensive bioretention plan, consult ET&B, 1993 or Clayton and Schueler, 1997.



GUTTER DRAIN FILTER DETAIL
NOT TO SCALE

OPERATION AND MAINTENANCE SCHEDULE FOR BIO-RETENTION AREAS (M-6)

- ANNUAL MAINTENANCE OF PLANT MATERIAL, MULCH LAYER AND SOIL LAYER IS REQUIRED. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY 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.
- SCHEDULE OF PLANT INSPECTION WILL BE TWICE A YEAR IN SPRING AND FALL. THIS INSPECTION WILL INCLUDE REMOVAL OF DEAD AND DISEASED VEGETATION CONSIDER BEYOND TREATMENT. TREATMENT OF ALL DISEASED TREES AND SHRUBS AND REPLACEMENT OF ALL DEFICIENT STAKES AND WIRES.
- MULCH SHALL BE INSPECTED EACH SPRING. REMOVE PREVIOUS MULCH LAYER BEFORE APPLYING NEW LAYER ONCE EVERY 2 TO 3 YEARS.
- SOIL EROSION TO BE ADDRESSED ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER HEAVY STORM EVENTS.

STORMWATER MANAGEMENT PRACTICES				
LOT NO.	ADDRESS	DISCONNECTION OF NON-ROOFTOP RUNOFF N-2 Y/N	MICRO-BIO-RETENTION M-6 Y/N	BIO-RETENTION F-6 Y/N
1	11805 TEDDYS WAY	N	Y	N
2	12163 FULTON ESTATES COURT	Y	N	Y
3	12167 FULTON ESTATES COURT	Y	N	Y
4	12171 FULTON ESTATES COURT	Y	Y	N
5	12175 FULTON ESTATES COURT	Y	Y	N
6	11809 TEDDYS WAY	N	Y	N
7	11813 TEDDYS WAY	N	Y	N
8	12155 FULTON ESTATES COURT	Y	Y	N
9	12159 FULTON ESTATES COURT	Y	Y	N
Area A	12821 TEDDYS WAY	N	N	N
Par. B	11813 SCAGGSVILLE ROAD	Y	N	N

DRAINAGE AREA M-6 (5) MICRO-BIORETENTION PLANT MATERIAL		
QUANTITY	NAME	MAXIMUM SPACING (FT.)
110	MIXED PERENNIALS	1 FT.
95	SHRUBS	2 FT.

DRAINAGE AREA M-6 (6) MICRO-BIORETENTION PLANT MATERIAL		
QUANTITY	NAME	MAXIMUM SPACING (FT.)
109	MIXED PERENNIALS	1 FT.
54	SHRUBS	2 FT.

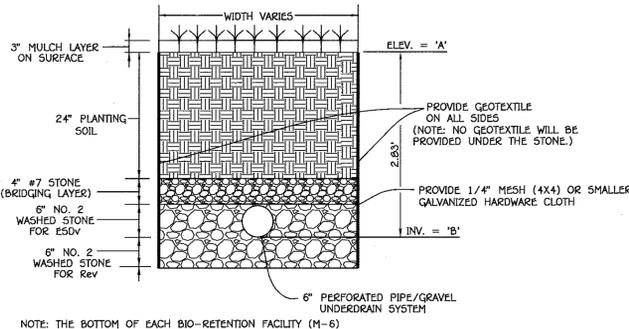
DRAINAGE AREA M-6 (7) MICRO-BIORETENTION PLANT MATERIAL		
QUANTITY	NAME	MAXIMUM SPACING (FT.)
33	MIXED PERENNIALS	1 FT.
16	SHRUBS	2 FT.

DRAINAGE AREA M-6 (8) MICRO-BIORETENTION PLANT MATERIAL		
QUANTITY	NAME	MAXIMUM SPACING (FT.)
108	MIXED PERENNIALS	1 FT.
54	SHRUBS	2 FT.

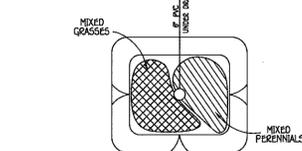
FACILITY NO.	A	B
M-6 (5)	440.00	437.17
M-6 (6)	442.05	429.22
M-6 (7)	433.00	430.17
M-6 (8)	433.00	430.17

M-6 (6)
(MICRO BIO-RETENTION FACILITY)
SCALE: 1" = 30'
DRAINAGE AREA: 2,449 SF (IMPERVIOUS AREA)
FILTER AREA: 146 SF (AREA OF MULCH)
ELEVATION: 432.00 (TOP OF MULCH)
PERIMETER: 45
WEIR ELEVATION: 439.30

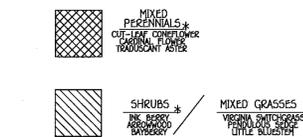
M-6 (5)
(MICRO BIO-RETENTION FACILITY)
SCALE: 1" = 30'
DRAINAGE AREA: 21201 SF
FILTER AREA: 437 SF
ELEVATION: 440.00
PERIMETER: 78
WEIR ELEVATION: 441.00



TYPICAL SECTION - BIO-RETENTION FACILITY (M-6)

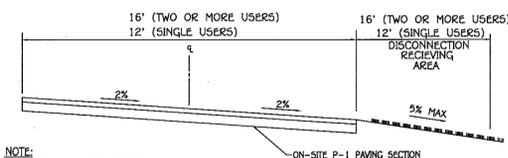


MICRO-BIORETENTION PLANTING DETAIL
NOT TO SCALE



* SEE PLANT MATERIAL CHART FOR QUANTITIES AND SPACING
NOTE: PLANT MATERIAL MUST COVER THE ENTIRE SURFACE AREA OF THE MICRO-BIORETENTION

(MICRO - BIORETENTION FACILITIES)



Typical Private Drive Cross Slope Section
NOT TO SCALE

Operation & Maintenance Schedule For Privately Owned And Maintained Disconnection Of Rooftop Runoff (N-1) And Nonrooftop Runoff (N-2)

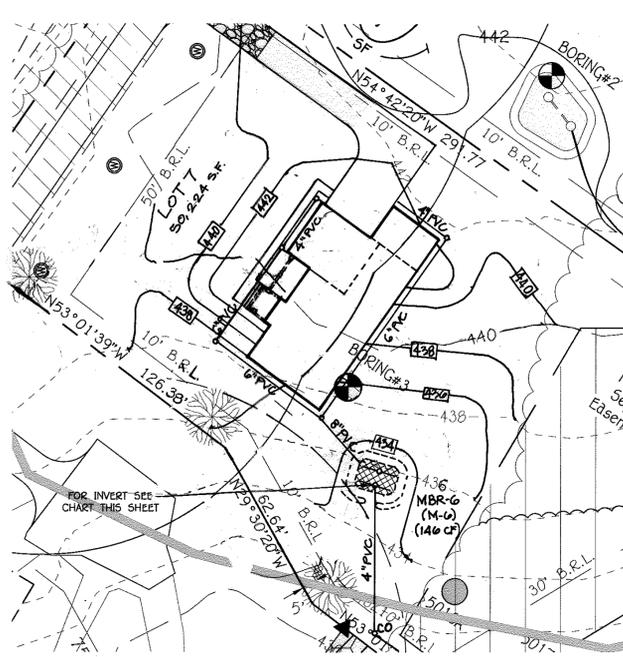
- MAINTENANCE OF AREAS RECEIVING DISCONNECTION RUNOFF IS GENERALLY NO DIFFERENT THAN THAT REQUIRED FOR OTHER LAWN OR LANDSCAPED AREAS. THE AREAS RECEIVING RUNOFF SHOULD BE PROTECTED FROM FUTURE COMPACTION OR DEVELOPMENT OF IMPERVIOUS AREA. IN COMMERCIAL AREAS, FOOT TRAFFIC SHOULD BE DISCOURAGED AS WELL.
- OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED DISCONNECTION OR ROOFTOP RUNOFF (N-1), DISCONNECTION OF NON-ROOFTOP RUNOFF (N-2)
- MAINTENANCE OF AREAS RECEIVING DISCONNECTION RUNOFF IS GENERAL, NO DIFFERENT THAN THAT REQUIRED FOR LAWN OR LANDSCAPED AREAS. THE AREAS RECEIVING RUNOFF SHOULD BE PROTECTED FROM FUTURE COMPACTION OR DEVELOPMENT OF IMPERVIOUS AREA. IN COMMERCIAL AREAS FOOT TRAFFIC SHOULD BE DISCOURAGED AS WELL.



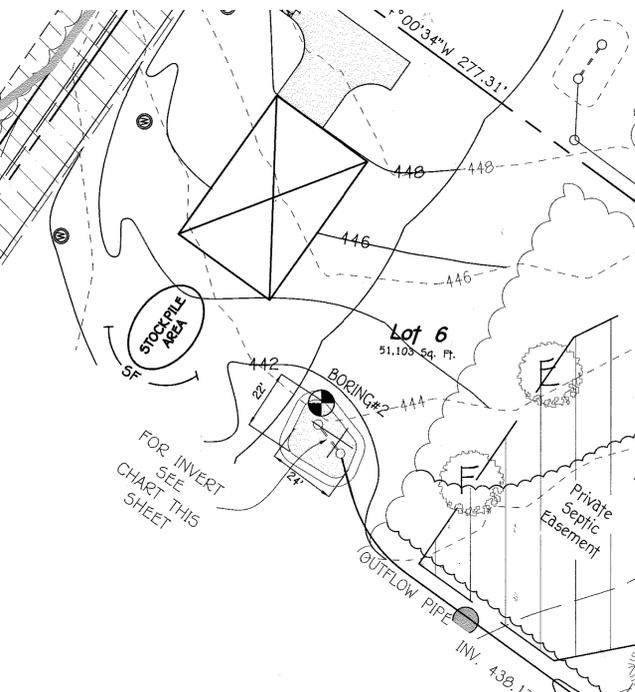
ROBERT VOGEL PEN016193
DEVELOPER



FRANK J. MANALANSAN, II, L.S. 21476
DATE: 5/20/14
Professional certification, I hereby certify that these documents were prepared by me and that I am a duly Licensed Professional Surveyor under the laws of the State of Maryland, License No. 21476, Expiration Date 7-14-15"

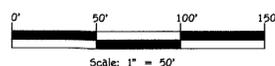


M-6 (7)
(MICRO BIO-RETENTION FACILITY)
SCALE: 1" = 30'
DRAINAGE AREA: 4,429 SF
FILTER AREA: 344 SF
ELEVATION: 433.00
PERIMETER: 77
WEIR ELEVATION: 434.00



M-6 (8)
(MICRO BIO-RETENTION FACILITY)
SCALE: 1" = 30'
DRAINAGE AREA: 4,055 SF
FILTER AREA: 344 SF
ELEVATION: 433.00
PERIMETER: 77
WEIR ELEVATION: 434.00

NOTE: THE LOCATION FOR THE PROPOSED DWELLING ON LOT 7 WITH RESPECT TO THE B.R.'S AND LOT LINES WILL BE REVIEWED AND APPROVED AT THE TIME OF THE BUILDING PERMIT.



NO.	BY	REVISION	DATE
1	RHV	REVISE THE HOUSE, GRADING AND BIO-RETENTION FACILITY LOT 7	6/14/14

**STORMWATER MANAGEMENT NOTES & DETAILS
FULTON MANOR VALLEY
PART TWO**

LOTS 6 THRU 9
ZONED: RR-DEO
TAX MAP NO. 41 GRID NO. 19 PARCEL NO. 78 AND 156
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: MAY 20, 2014