

SHEET INDEX	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	PLAN VIEW
3	STORMWATER MANAGEMENT DETAILS
4	WETLAND & FOREST STAND DELINEATION

ENVIRONMENTAL CONCEPT PLAN

FULTON MANOR VALLEY

LOTS 1 THRU 9, BUILDABLE PRESERVATION PARCEL 'A' & NON-BUILDABLE PRESERVATION PARCEL 'B'

ZONING: RR-DEO

TAX MAP No. 41 GRID No. 19 PARCEL No. 78

FIFTH ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

LEGEND	
SYMBOL	DESCRIPTION
	EXISTING 2' CONTOURS
	EXISTING 10' CONTOURS
	PROPOSED CONTOUR
	SPOT ELEVATION
	LIMITS OF DISTURBANCE
	EXISTING TREELINE
	PROPOSED TREELINE
	PROPOSED PAVING
	EXISTING PAVING
	SOILS LINES AND TYPE
	GRASS SWALE
	SUPER SILT FENCE
	STABILIZED CONSTRUCTION ENTRANCE
	PROPOSED SWM DRYWELL (M-5)
	PROPOSED MICRO BIORETENTION (M-6)
	GRASS SWALE (M-8)
	NON-ROOFTOP DISCONNECTION (N-2)
	15% TO 24.9% STEEP SLOPES
	25% AND GREATER STEEP SLOPES
	DRAINAGE AREA FOR MICRO BIORETENTION FACILITIES
	TREE PROTECTION

General Notes:

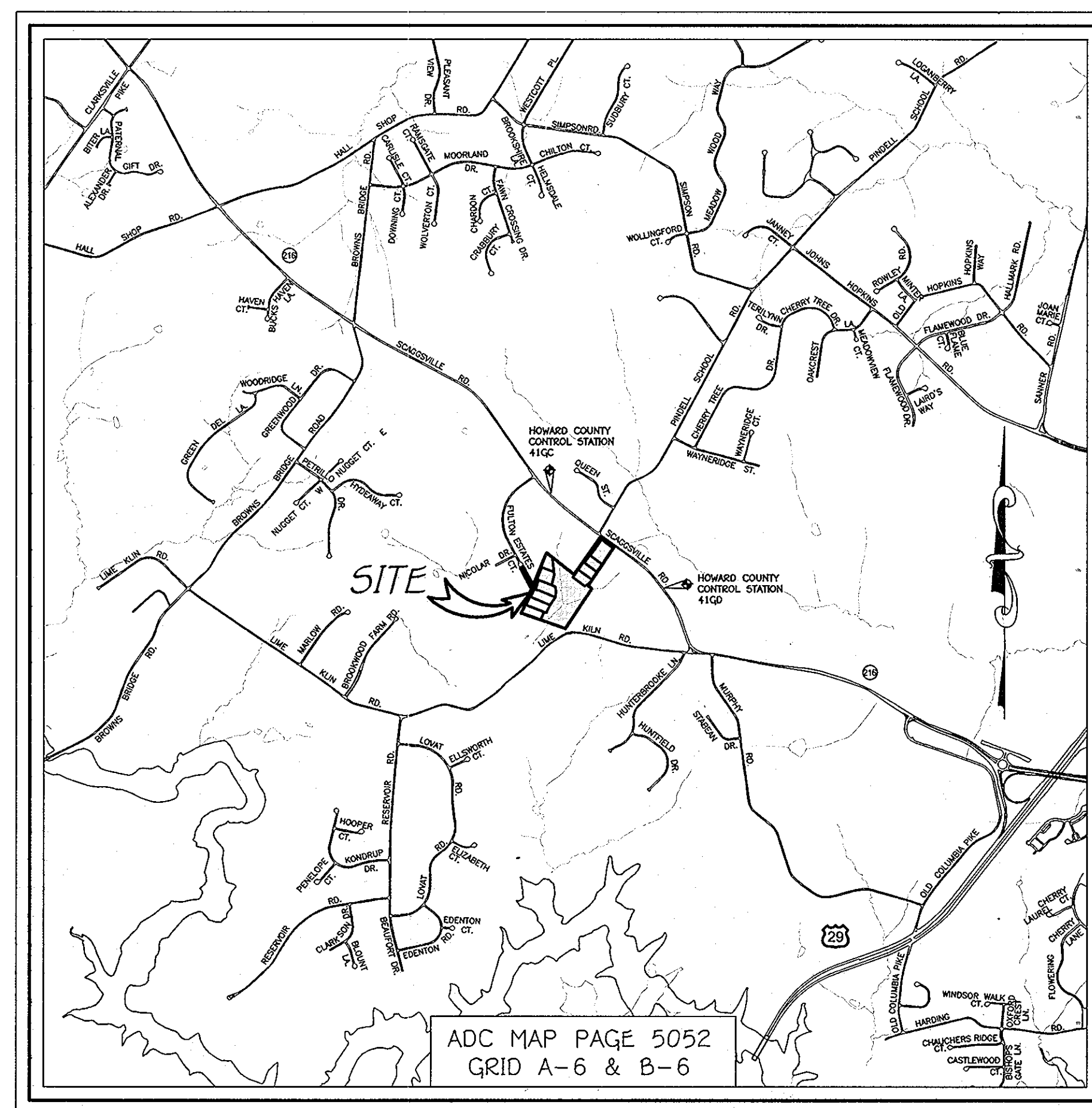
- THE SWM MEASURES ILLUSTRATED ON THIS PLAN ARE CONCEPTUAL AS SPECIFIC HOUSE CONFIGURATIONS HAVE NOT YET BEEN ESTABLISHED. SPECIFIC SWM MEASURES WILL BE PROVIDED WITH THE ASSOCIATED PLOT PLAN WHEN FINAL DESIGN DETAILS CAN BE PROVIDED.
- PRIVATE WATER AND SEWER SHALL BE UTILIZED WITHIN THIS DEVELOPMENT.
- SOILS INFORMATION TAKEN FROM SOIL MAP No. 12, SOIL SURVEY, HOWARD COUNTY, MARYLAND, JULY, 1968 IS USED.
- THIS AREA DESIGNATES A PRIVATE EASEMENT OF 10,000 SQ.FT. AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL. IMPROVEMENT OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THESE EASEMENTS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE AUTHORITY TO GRANT VARIANCES FOR ADJUSTMENTS TO THE PRIVATE SEWERAGE EASEMENT. RECORDATION OF A MODIFIED EASEMENT SHALL NOT BE NECESSARY.
- BOUNDARY OUTLINE BASED ON FIELD RUN SURVEY PERFORMED BY FISHER, COLLINS & CARTER, INC. DATED MAY, 2011.
- TOPOGRAPHY SHOWN IS FROM HOWARD COUNTY AERIAL SUPPLEMENTED WITH FIELD RUN TOPO BY FISHER, COLLINS AND CARTER, INC. DATED AUGUST 19, 2011.
- THE PRIVATELY OWNED BIORETENTION FILTER SYSTEMS SHALL BE MAINTAINED BY EACH INDIVIDUAL PROPERTY OWNER.
- APPROVAL OF THIS ECP DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION PLAN.
- REVIEW OF THIS PROJECT AGAINST THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE HOWARD COUNTY ZONING REGULATIONS SHALL OCCUR AT THE SUBDIVISION PLAN STAGE. THEREFORE, THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED COMMENTS AS THIS PROJECT PROGRESSES.
- A FORMAL REQUEST TO HAVE SECTION 16.1205(A)(7) FOR THE REMOVAL OF THE TREE(S) "STATE CHAMPION TREES, 75% OF THE DIAMETER OF STATE CHAMPION TREES AND TREES 30" IN DIAMETER AND LARGER" IDENTIFIED ON THE P50 PLAN AS "TO BE REMOVED" WILL BE SUBMITTED AT THE TIME OF SUBMISSION OF THE PRELIMINARY EQUIVALENT SKETCH PLAN.

SITE ANALYSIS DATA

- TOTAL AREA OF SUBJECT PROPERTY = 26.37 ACRES
- DEVELOPABLE AREA: 12.952 ACRES
- WETLANDS AND BUFFERS: 0.05 ACRES
- FLOODPLAIN AND BUFFERS: 1.23 ACRES
- FOREST: 18.4 ACRES
- STEEP SLOPES 15% TO 24.9%: 2.67 ACRES
- STEEP SLOPES 25% AND GREATER: 0.45 ACRE
- ERODIBLE SOILS: 25.56 ACRES
- LIMIT OF DISTURBANCE: 9.65 ACRES
- PROPOSED SITE USE: RESIDENTIAL - 12.522 ACRES
- GREEN OPEN AREA: 0.354 ACRES
- IMPERVIOUS AREA: 1.87 ACRES

Stormwater Management requirements for this site will be met using Environmental Site Design to the Maximum Extent Possible in accordance with the Maryland Stormwater Design Manual, Volumes I & II, effective in May of 2010. The proposed practices will be located on the various lots, driveways and Use-in-Common (UIC) driveways as follows:

- Lots 1 thru 3 Non-Rooftop Disconnection (N-2) for the proposed individual driveways. Micro-Bioretention (M-6) for the proposed houses.
- Lots 4 thru 6 Non-Rooftop Disconnection (N-2) for the proposed individual driveways. Micro-Bioretention (M-6) and Drywells (M-5) for the proposed houses.
- Lots 7 thru 9 Non-Rooftop Disconnection (N-2) for the proposed individual driveways. Micro-Bioretention (M-6) for the proposed houses.
- UIC-Lots 1-3 Non-Rooftop Disconnection (N-2) & Grass Swale (M-8).
- UIC-Lots 4-9 Non-Rooftop Disconnection (N-2) & Grass Swale (M-8).



VICINITY MAP

SCALE: 1" = 2000'

PHASING TABULATION		
PHASE	ALLOCATION YEAR	NUMBER OF RESIDENTIAL UNITS
I	2011	3
II	2013	3

E50 Narrative:

- There are existing natural resources, i.e., forested areas, non-tidal wetlands and associated buffers, floodplains and steep slopes, as shown in Table 5.1 of the Maryland Stormwater Management Manual (Manual), located on the site. They will be permanently protected under conservation easements or other locally accepted means. There are no critical habitats located on the property; however, the property does contain large forested areas that will be protected by limiting the areas of disturbance as much as possible. It is to be noted that there are 16 specimen trees located on the site, 5 specimen trees have been identified that will have to be removed due to the locations of the proposed houses and driveways. Waiver approval for the removal of these trees is required.
- The existing drainage patterns will be maintained as closely as possible during and after the development of the site.
- Efforts have been made to reduce the impervious areas. After the final house type has been selected, it may be possible to reduce the site imperviousness through better site design.
- The required Sediment and Erosion control measures consisting of super silt fence; a stabilized construction entrance and Erosion Control Matting have been designed in accordance with the latest Howard County Soil Conservation District and Maryland Department of the Environment regulations. Based on the type and location of the ESD practices, there was no need to incorporate these measures into the SWM strategy.
- The proposed Environmental Site Design measures have been implemented to the Maximum Extent Possible and meet the targeted Pe for this site. As such, no major structural practices as described in Chapter 3 of the above cited Manual will be required.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
410 461 - 2999

DATE	DESCRIPTION	REVISION BLOCK

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THE PLANS AND SPECIFICATIONS WERE PREPARED OR APPROVED BY ME AS A PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. EXPIRATION DATE: 2/22/13.

7/6/12
DATE

OWNER
DEBRA E. TAYLOR
P.O. BOX 5335
FULTON, MARYLAND 21044

DEVELOPER
FAL DEVELOPMENT, LLC
5300 DOORSEY HALL DRIVE, SUITE 102
ELLICOTT CITY, MARYLAND 21042
443-367-0422

APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature]
Chief, Division of Land Development
7/16/12
DATE

[Signature]
Chief, Development Engineering Division
7/17/12
DATE

SUBDIVISION: FULTON MANOR VALLEY
SECTION/AREA: N/A
LOT NO.:

PLAT NUMBER	PARCEL NO.	ZONE	TAX MAP	ELEC. DIST.	CENSUS TR.
N/A	78	RR-DEO	41	5jh	

TITLE SHEET

FULTON MANOR VALLEY

**LOTS 1 THRU 9 AND
BUILDABLE PRESERVATION PARCEL 'A'
& NON-BUILDABLE PRESERVATION PARCEL 'B'**

11987 ROUTE 216
HIGHLAND, MARYLAND 20777
ZONED: RR-DEO
TAX MAP No. 41 GRID No. 19 PARCEL No. 78
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: JULY 6, 2012

SHEET 1 OF 4

ECP-12-040

SOIL	NAME	CLASS
ChB2	Chester silt loam, 3 to 8 percent slopes, moderately eroded	B
ChC2	Chester silt loam, 8 to 15 percent slopes, moderately eroded	B
CuB	Comus silt loam, local alluvium, 3 to 8 percent slopes	B
EKA	Elioak silt loam, 0 to 3 percent slopes	C
EkB2	Elioak silt loam, 3 to 8 percent slopes, moderately eroded	C
EkC3	Elioak silty clay loam, 8 to 15 percent slopes, moderately eroded	C
GIC3	Glenels loam, 8 to 15 percent slopes, severely eroded	B
GnB2	Glenville silt loam, 3 to 8 percent slopes, moderately eroded	C
GnC2	Glenville silt loam, 8 to 15 percent slopes, moderately eroded	C
MIB2	Manor loam, 3 to 8 percent slopes, moderately eroded	B
MIC2	Manor loam, 8 to 15 percent slopes, moderately eroded	B
MIC3	Manor loam, 8 to 15 percent slopes, severely eroded	B
MID3	Manor loam, 15 to 25 percent slopes, severely eroded	B

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

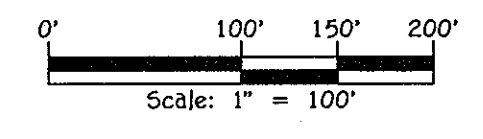
SYMBOL	DESCRIPTION
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	EXISTING 10' CONTOURS
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	SPOT ELEVATION
	LIMITS OF DISTURBANCE
	EXISTING TREELINE
	PROPOSED TREELINE
	EXISTING PAVING
	SOILS LINES AND TYPE
	SUPER SILT FENCE
	STABILIZED CONSTRUCTION ENTRANCE
	PROPOSED 5MH DRYWELL (M-5)
	PROPOSED MICRO BIORETENTION (M-6)
	GRASS SWALE (M-8)
	NON-ROOFTOP DISCONNECTION (N-2)
	15% TO 24.9% STEEP SLOPES
	25% AND GREATER STEEP SLOPES
	DRAINAGE AREA FOR MICRO BIORETENTION FACILITIES
	TREE PROTECTION

Stormwater Management Summary Table

Total Site Area=Developable Area=12.552 acre/Impervious Area=1.87 acre
 Target RCo=95%
 Target Pe=1.00 inches

AREA ID	ESDv Req. Cu.Ft.	ESDv Pvd. Cu.Ft.	% Impervious	Remarks
Lot 1	303.47	310	67%	Micro-Bioretenion & Non-Rooftop Disconnection
Lot 2	303.47	310	38%	Micro-Bioretenion & Non-Rooftop Disconnection
Lot 3	303.47	310	32%	Micro-Bioretenion & Non-Rooftop Disconnection
Lot 4	303.47	310	57%	Micro-Bioretenion, 3 Drywells & Non-Rooftop Disconnection
Lot 5	303.47	310	20%	Micro-Bioretenion, 2 Drywells & Non-Rooftop Disconnection
Lot 6	303.47	310	61%	Micro-Bioretenion, 2 Drywells & Non-Rooftop Disconnection
Lot 7	303.47	310	57%	Micro-Bioretenion & Non-Rooftop Disconnection
Lot 8	303.47	310	66%	Micro-Bioretenion & Non-Rooftop Disconnection
Lot 9	303.47	310	29%	Micro-Bioretenion & Non-Rooftop Disconnection
UIC Driveway to serve Lots 1 thru 3	2143	2252	72%	Grass Swale & Non-Rooftop Disconnection
UIC Driveway to serve Lots 1 thru 9	1893	1950	50%	Grass Swale & Non-Rooftop Disconnection
Individual Driveways to serve Lots 1 thru 9	1425	1425	53.7% Avg.	Non-Rooftop Disconnection
Totals	8192.23	8417		

Calculate the Pe provided as follows:
 $Pe = \frac{ESDv \times 12}{Rv \times A} = \frac{8417 \times 12}{0.18 \times (12.552 \text{ ac.} \times 43560)} = 1.01024 = 1.00'$
 As such, the required ESD volume has been provided.



FISHER, COLLINS & CARTER, INC.
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 CENTRAL SQUARE OFFICE PARK - 10272 BALDORNE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21042
 (410) 461-2000

DATE	DESCRIPTION

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 [Signature] 7/6/12
 DATE

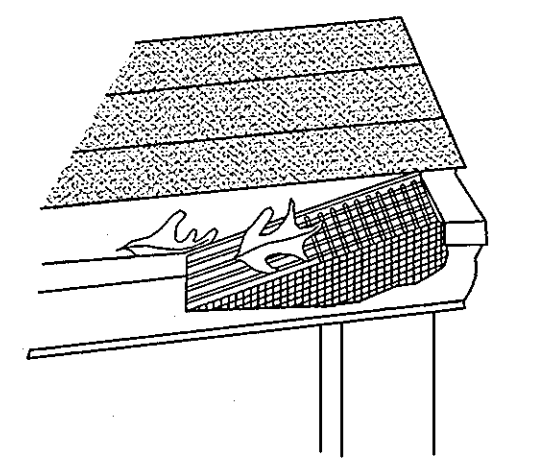
OWNER
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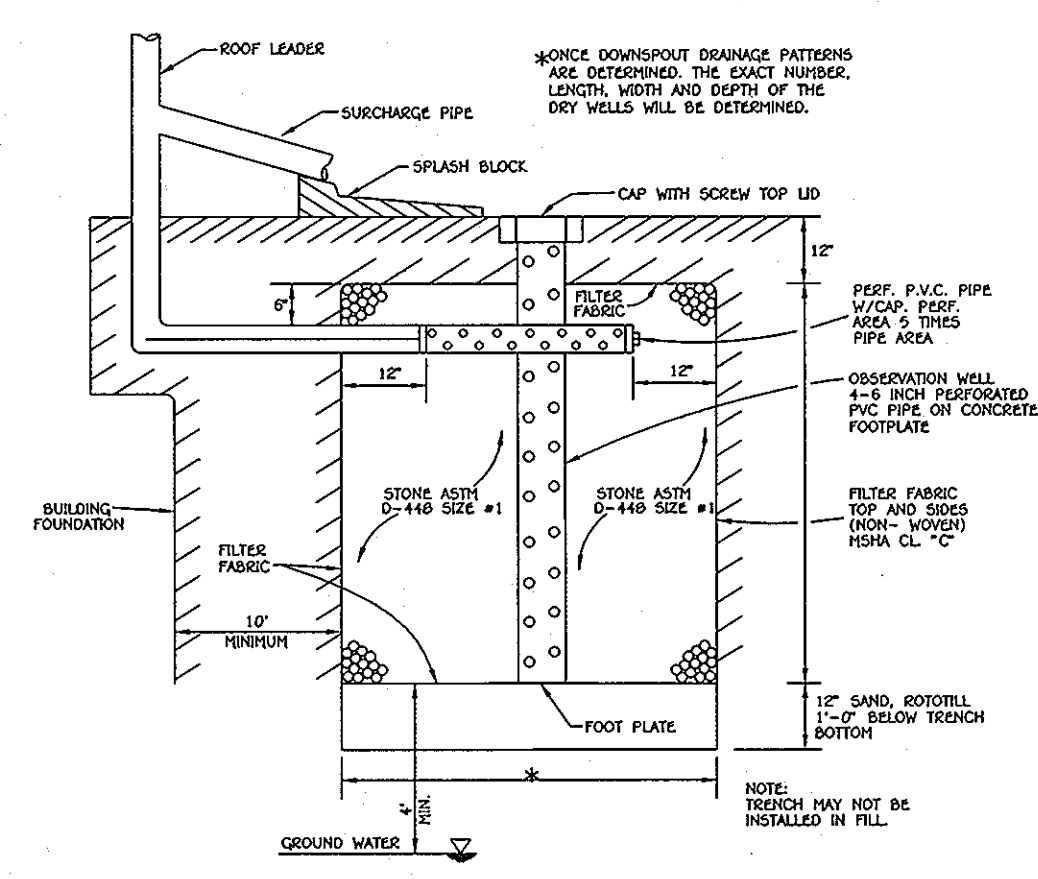
APPROVED: DEPARTMENT OF PLANNING AND ZONING			
[Signature] 7/16/12 Chief, Division of Land Development		[Signature] 7/17/12 Chief, Development Engineering Division	
SUBDIVISION	SECTION/AREA	LOT NO.	
FULTON MANOR VALLEY	N/A		
PLAY NUMBER	PARCEL NO.	ZONE	TAX MAP
N/A	7B	RR-DEO	41
		ELEC. DIST.	CENSUS TR.
		5th	

ENVIRONMENTAL CONCEPT PLAN
FULTON MANOR VALLEY
 LOTS 1 THRU 9 AND
 BUILDABLE PRESERVATION PARCEL 'A'
 & NON-BUILDABLE PRESERVATION PARCEL 'B'
 11987 ROUTE 216
 HIGHLAND, MARYLAND 20777
 ZONED: RR-DEO
 TAX MAP No. 41 GRID No. 19 PARCEL No. 7B
 FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: 1" = 100' DATE: JULY 6, 2012
 SHEET 2 OF 4 **ECP-12-040**

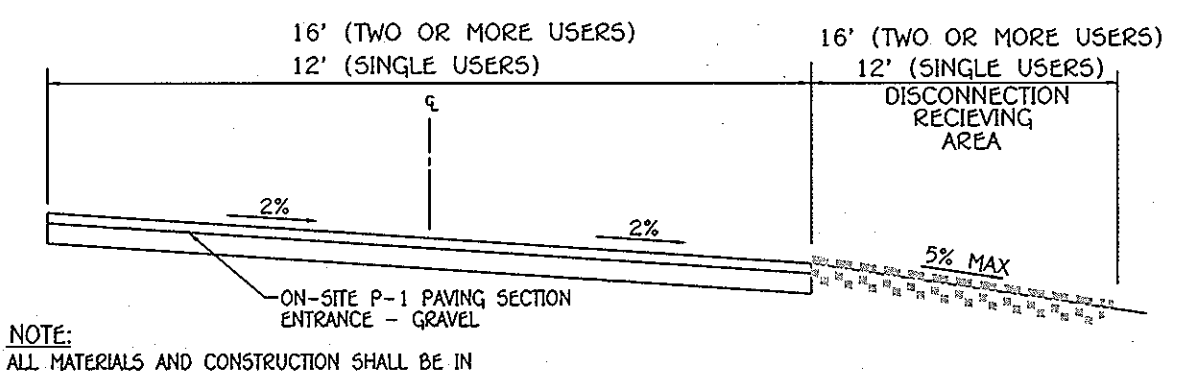
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	SPOT ELEVATION LOD
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	EXISTING TREELINE
	PROPOSED TREELINE
	EXISTING PAVING
	SOILS LINES AND TYPE
	SUPER SILT FENCE
	STABILIZES CONSTRUCTION ENTRANCE
	PROPOSED SWM DRYWELL (M-5)
	PROPOSED MICRO BIORETENTION (M-6)
	GRASS SWALE (M-8)
	NON-ROOFTOP DISCONNECTION (N-2)
	15% TO 24.9% STEEP SLOPES
	25% AND GREATER STEEP SLOPES
	DRAINAGE AREA FOR MICRO BIORETENTION FACILITIES
	TREE PROTECTION



GUTTER DRAIN FILTER DETAIL
NOT TO SCALE



DRY WELL DETAIL
NOT TO SCALE



TYPICAL PRIVATE DRIVE CROSS SLOPE SECTION
NOT TO SCALE

STORMWATER MANAGEMENT NOTES

1. STORMWATER MANAGEMENT IS PROVIDED IN ACCORDANCE WITH CHAPTER 5, "ENVIRONMENTAL SITE DESIGN" OF THE 2007 MARYLAND STORMWATER MANAGEMENT DESIGN MANUAL, EFFECTIVE MAY 4, 2010.
2. MAXIMUM CONTRIBUTING ROOF TOP AREA TO EACH DOWNSPOUT SHALL BE 500 SQ. FT. OR LESS.
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 THE DETAIL SHOWN ON THIS SHEET.
4. FINAL GRADING WILL BE SHOWN AT THE SITE DEVELOPMENT PLAN STAGE.

OPERATION & MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED DISCONNECTION OF NONROOFTOP RUNOFF (N-2)

1. 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 CONSTRUCTION OR DEVELOPMENT OF IMPERVIOUS AREA IN COMMERCIAL AREAS, FOOT TRAFFIC SHOULD BE DISCOURAGED AS WELL.

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

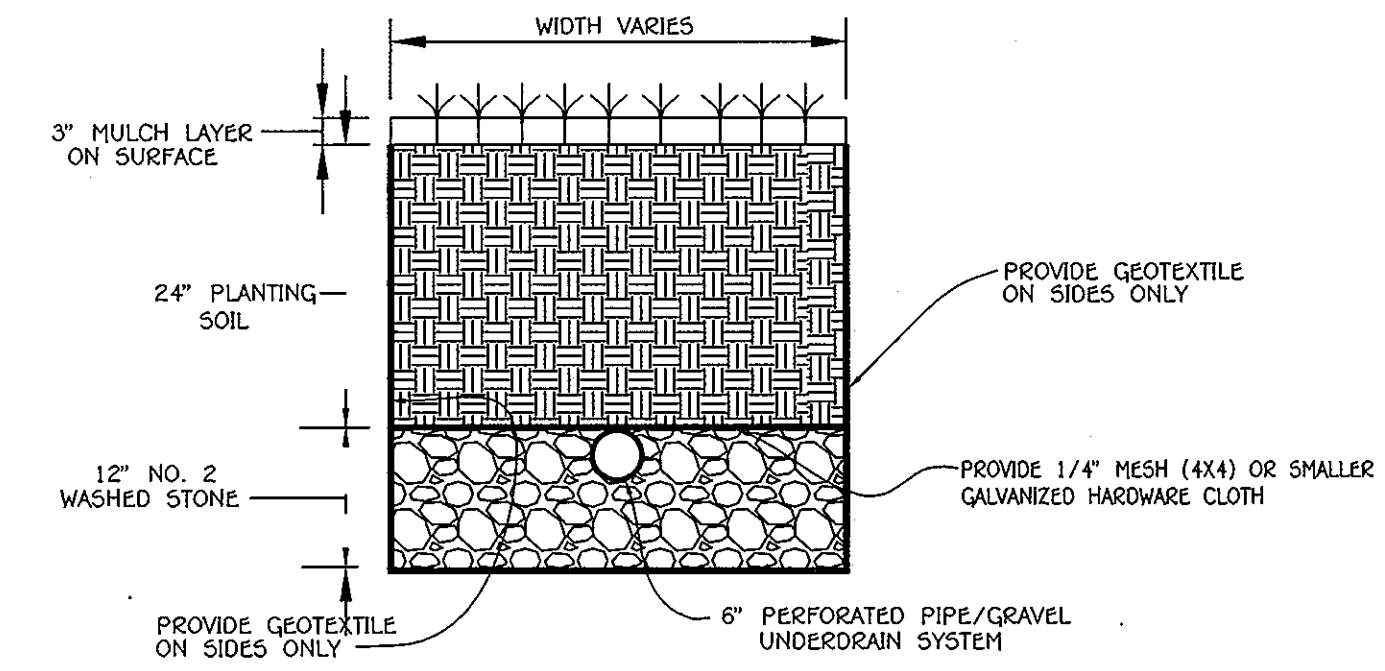
- a. THE OWNER SHALL INSPECT THE MONITORING WELLS AND STRUCTURES ON A QUARTERLY BASIS AND AFTER EVERY HEAVY STORM EVENT.
- b. THE OWNER SHALL RECORD THE WATER LEVELS AND SEDIMENT BUILD UP IN THE MONITORING WELLS OVER A PERIOD OF SEVERAL DAYS TO INSURE TRENCH DRAINAGE.
- c. THE OWNER SHALL MAINTAIN A 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.

OPERATION & MAINTENANCE SCHEDULE PRIVATE BIORETENTION (M-7)

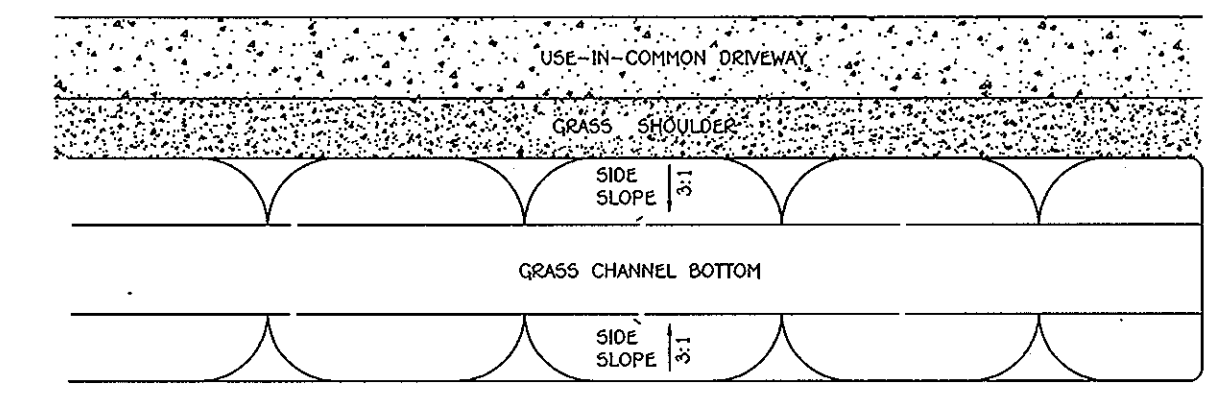
1. ANNUAL MAINTENANCE OF PLANT MATERIAL, MULCH LAYER AND SOIL LAYER IS REQUIRED. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING.
2. 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.
3. MULCH SHALL BE INSPECTED EACH SPRING. REMOVE PREVIOUS MULCH LAYER BEFORE APPLYING NEW LAYER ONCE EVERY 2 TO 3 YEARS.
4. SOIL EROSION TO BE ADDRESSED ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER HEAVY STORM EVENTS.

OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED OPEN CHANNEL SYSTEMS GRASS SWALES AND WET SWALES (M-8)

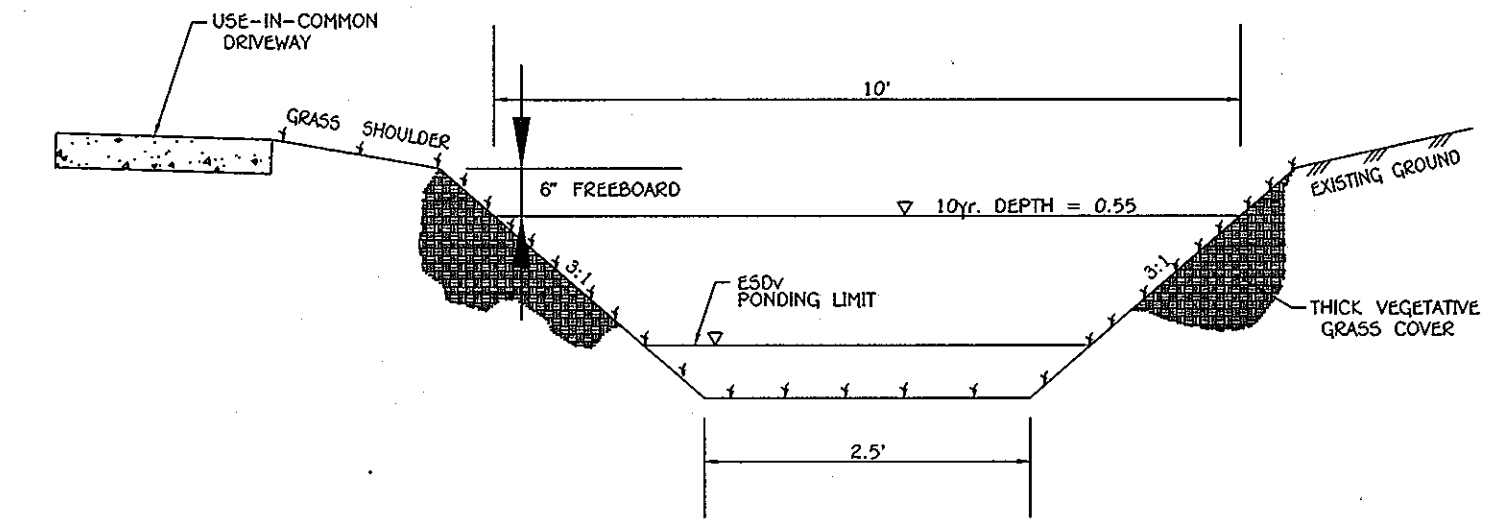
1. THE OPEN CHANNEL SYSTEM SHALL BE INSPECTED ANNUALLY AND AFTER MAJOR STORMS. INSPECTIONS SHALL BE PERFORMED DURING WET WEATHER TO DETERMINE IF THE FACILITY IS FUNCTIONING PROPERLY.
2. THE OPEN CHANNEL SHALL BE MOWED A MINIMUM OF AS NEEDED DURING THE GROWING SEASON TO MAINTAIN A MAXIMUM GRASS HEIGHT OF LESS THAN 6 INCHES.
3. DEBRIS AND LITTER SHALL BE REMOVED DURING REGULAR MOWING OPERATIONS AND AS NEEDED.
4. VISIBLE SIGNS OF EROSION IN THE OPEN CHANNEL SYSTEM SHALL BE REPAIRED AS SOON AS IT IS NOTICED.
5. REMOVE SILT IN THE OPEN CHANNEL SYSTEM WHEN IT EXCEEDS 25% OF THE ORIGINAL MOV.
6. INSPECT DAMS TWICE A YEAR FOR STRUCTURAL INTEGRITY. RESTORE CHECK DAMS TO ORIGINAL CONDITION AS APPLICABLE.



TYPICAL SECTION - BIO-RETENTION FACILITY (M-6)
NO SCALE

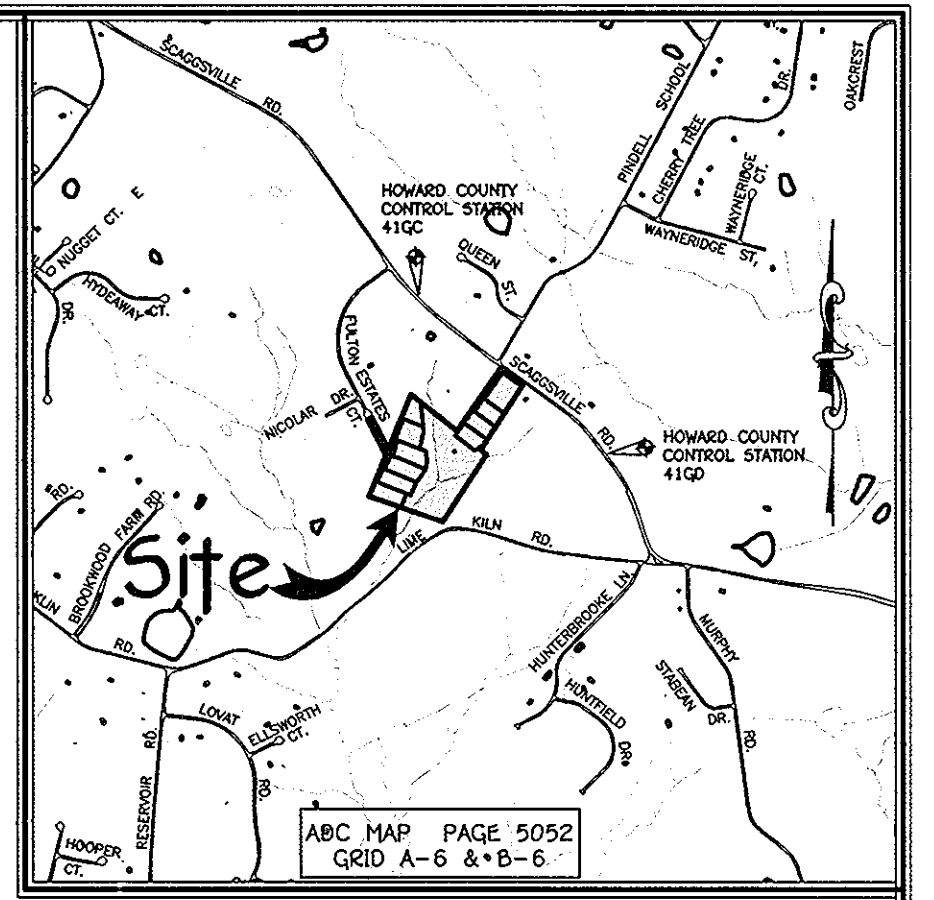


PLAN - GRASS CHANNEL
NO SCALE



SECTION - GRASS CHANNEL
NO SCALE

STORMWATER MANAGEMENT PRACTICES				
LOT No.	ADDRESS	DISCONNECTION OF NON-ROOFTOP RUNOFF (N-2) (Y/N)	DRY WELLS (M-5) (NUMBER)	MICRO BIO-RETENTION (M-6) (NUMBER)
1	ROUTE 216	Y	-	1
2	ROUTE 216	Y	-	1
3	ROUTE 216	Y	-	1
4	FULTON ESTATES COURT	Y	3	1
5	FULTON ESTATES COURT	Y	2	1
6	FULTON ESTATES COURT	Y	4	1
7	FULTON ESTATES COURT	Y	-	1
8	FULTON ESTATES COURT	Y	-	1
9	FULTON ESTATES COURT	Y	-	1
P.P. 'A'	11987 ROUTE 216	Y	-	-



VICINITY MAP
SCALE: 1" = 2000'

DATE	DESCRIPTION	REVISION BLOCK

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE PRACTICES WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 1070794, EXPIRATION DATE: 2/22/13.

[Signature] 7/6/12
DATE

OWNER
DEBRA E. TAYLOR
P.O. BOX 535
FULTON, MARYLAND 21044

DEVELOPER
FAL DEVELOPMENT, LLC
5300 DORSEY HALL DRIVE, SUITE 102
ELLICOTT CITY, MARYLAND 21042
443-367-0422

APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature] 7/16/12
Chief, Division of Land Development Date

[Signature] 7/17/12
Chief, Development Engineering Division Date

SUBDIVISION	SECTION/AREA	LOT NO.
FULTON MANOR VALLEY	N/A	

PLAT NUMBER	PARCEL NO.	ZONE	TAX MAP	ELEC. DIST.	CENSUS TR.
N/A	7B	RR-DEO	41	5th	

STORMWATER MANAGEMENT DETAILS

FULTON MANOR VALLEY

LOTS 1 THRU 9 AND BUILDABLE PRESERVATION PARCEL 'A' & NON-BUILDABLE PRESERVATION PARCEL 'B'

11987 ROUTE 216
HIGHLAND, MARYLAND 20777
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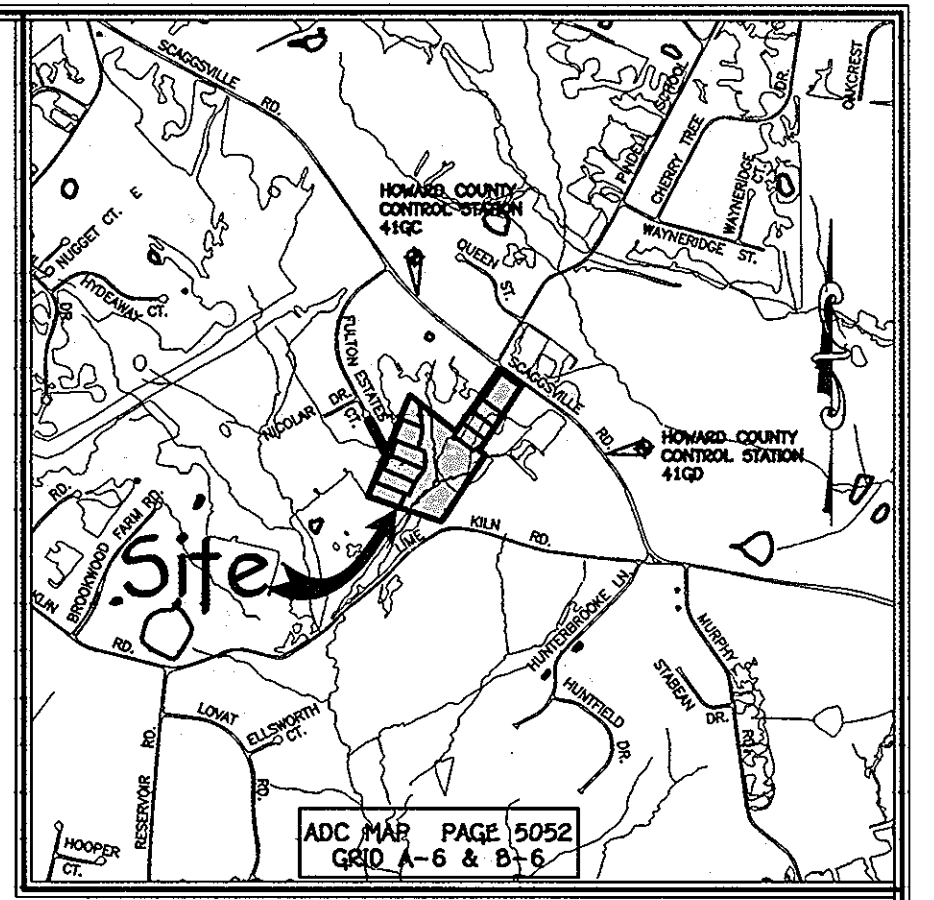
SHEET 3 OF 4

SOIL	NAME	CLASS
ChB2	Chester silt loam, 3 to 8 percent slopes, moderately eroded	B
ChC2	Chester silt loam, 8 to 15 percent slopes, moderately eroded	B
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E8A	E8oak silt loam, 0 to 3 percent slopes	C
E8B2	E8oak silt loam, 3 to 8 percent slopes, moderately eroded	C
E8C3	E8oak silty clay loam, 8 to 15 percent slopes, moderately eroded	C
G3C3	Glenels loam, 8 to 15 percent slopes, severely eroded	B
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M8B2	Manor loam, 3 to 8 percent slopes, moderately eroded	B
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MIC3	Manor loam, 8 to 15 percent slopes, severely eroded	B
MID3	Manor loam, 15 to 25 percent slopes, severely eroded	B

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
A	Quercus rubra, 35"	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
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



VICINITY MAP
 SCALE: 1" = 2000'

Wetland Data

WETLAND SYSTEM	COWARDIN CLASSIFICATION	DOMINANT VEGETATION	ACREAGE
A	PFO1A	Acer rubrum, Liriodendron benzoin, Cinna arundinacea	200 sq.ft.

5. Elevations Are Based On Field Run Topographic Survey Performed April, 2011 By Fisher, Collins & Carter, Inc.
 6. No Wetlands Exist On Site As Certified By Eco-Science Professionals, Inc. On March 23, 2011.

FSD NOTES:

- No rare, threatened or endangered species or their appropriate habitat were observed on the property.
- Surrounding land use is primarily residential.
- Approximately 4.0 acres of forest extends onto adjacent offsite property within 100 feet of the subject property.

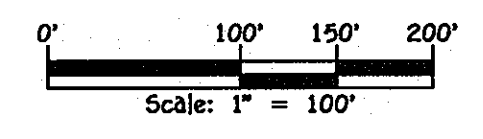
Forest Stand Data

Key	Community Type	Acreage (NTA)	Dominant Vegetation	General Condition	Priority Acreage
F1	Mixed Oak-Poplar	16.9	Liriodendron tulipifera, Quercus alba, Quercus rubra, Quercus velutina, Fagus grandiflora	Good	5.0 buffers/slope

See accompanying report for complete stand descriptions

SYMBOL	DESCRIPTION
492	EXISTING CONTOUR 2' INTERVAL
490	EXISTING CONTOUR 10' INTERVAL
---	EXISTING FOREST LIMITS
---	EXISTING WETLANDS
---	SOIL TYPES

H SPECIMEN TREES



DATE	DESCRIPTION

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21042
 (410) 461-2000

Eco-Science Professionals, Inc.
 Consulting Ecologist
 P.O. Box 5006 Glen Arm, Maryland 21057 Telephone (410) 832-2480 Fax (410) 832-2488 John P. Canoles

MD DNR Qualified Professional
 USFWS Wetland Delineator
 Certification # WD0930061004-02
 John P. Canoles

OWNER
 DEBRA E. TAYLOR
 P.O. BOX 535
 FULTON, MARYLAND 21044

DEVELOPER
 FAL DEVELOPMENT, LLC
 5300 DORSEY HALL DRIVE, SUITE 102
 ELLICOTT CITY, MARYLAND 21042
 443-367-0422

APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature] 7/16/12
 Chief, Division of Land Development Date

[Signature] 7/17/12
 Chief, Development Engineering Division Date

SUBDIVISION	SECTION/AREA	LOT NO.
FULTON MANOR VALLEY	N/A	
PLAT NUMBER	PARCEL NO.	ZONE
N/A	7B	RR-DEO
TAX MAP	ELEC. DIST.	CENSUS TR.
41	5th	

WETLAND AND FOREST STAND DELINEATION PLAN
FULTON MANOR VALLEY
 LOTS 1 THRU 9 AND BUILDABLE PRESERVATION PARCEL 'A' & NON-BUILDABLE PRESERVATION PARCEL 'B'

11987 ROUTE 216
 HIGHLAND, MARYLAND 20777
 ZONED: RR-DEO
 TAX MAP No. 41 GRID No. 19 PARCEL No. 7B
 FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: 1" = 100' DATE: JULY 6, 2012
 SHEET 4 OF 4