

**GENERAL NOTES**

1. THE PROJECT SHALL BE IN CONFORMANCE WITH THE LATEST HOWARD COUNTY REQUIREMENTS UNLESS WAIVERS OR ALTERNATIVE COMPLIANCE PETITIONS HAVE BEEN APPROVED.
2. THE EXISTING TOPOGRAPHY SHOWN HEREON IS BASED ON A HOWARD COUNTY GIS.
3. THE PROJECT BOUNDARY IS BASED ON AN AVAILABLE RECORDED PLATS AND DEED PLOTTING.
4. THE SUBJECT PROPERTY IS ZONED "R-SC" IN ACCORDANCE WITH THE 10/6/2013 COMPREHENSIVE ZONING PLAN.
5. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE WETLANDS, STREAM(S) OR THEIR BUFFERS, FOREST CONSERVATION EASEMENT AREAS AND 100-YEAR FLOODPLAIN.
6. THIS PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT.
7. WATER FOR THIS PROJECT IS TO BE SERVICED CONNECTIONS FROM CONTRACT NO. 1-W.
8. SEWER FOR THIS PROJECT IS TO BE PUBLIC EXTENSIONS OF CONTRACT NO. 20-1018 AND 24-3562-D.
9. EXISTING UTILITIES LOCATED FROM CONTRACT AND AS-BUILT DRAWINGS. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE.
10. THERE ARE NO FLOODPLAIN, AND STEEP SLOPES OVER 20,000 SF CONTIGUOUS.
11. FOREST CONSERVATION OBLIGATIONS FOR THIS PROJECT SHALL BE ADDRESSED BY A FOREST CONSERVATION PLAN SUBMITTED WITH THE SUBDIVISION OR SITE DEVELOPMENT PLAN.
12. IN ACCORDANCE WITH SECTION 16.121(A)(2) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, THE OPEN SPACE REQUIREMENTS FOR THIS R-SC PROJECT IS 25% OF GROSS AREA (1.81 AC. GROSS AREA X 25% = 0.45 AC.).
13. GEOTECHNICAL INVESTIGATIONS SHALL COMPLETED AS PART OF THE SITE DEVELOPMENT PLAN PACKAGE.
14. A NOISE STUDY IS NOT REQUIRED. NOISE WALL MITIGATION CURRENTLY EXISTS ALONG INTERSTATE 95.
15. A WETLAND AND SIMPLIFIED FOREST STAND DELINEATION PLAN WAS PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. C/O MR. JOHN CANOLES, AUGUST 16, 2016, AND APPROVED AS PART OF THIS SKETCH PLAN SUBMISSION.
  - AN INTERMITTENT STREAM IS LOCATED OFFSITE. ITS BUFFER DOES NOT IMPACT THE PROJECT SITE.
  - SEVEN (7) SPECIMEN TREES WERE FOUND ONSITE. THE PROPOSAL INCLUDES THE REMOVAL OF 6 TREES. EFFORTS WILL BE MADE TO SAVE TREE #4.
16. OLD SCAGGSVILLE ROAD IS CLASSIFIED AS A LOCAL ROAD.
  - PROPOSED IS A PRIVATE USE-IN-COMMON DRIVEWAY.
17. TO THE BEST OF THE OWNERS KNOWLEDGE, THERE ARE NO BURIAL GROUNDS, CEMETERIES, OR HISTORIC STRUCTURES LOCATED ON THIS PROPERTY.
18. THERE ARE THREE EXISTING STRUCTURES ON THIS SITE TO BE REMOVED.
19. THE PROPOSED UNITS SHALL HAVE AN AUTOMATIC FIRE PROTECTION SPRINKLER SYSTEM.
20. STORMWATER MANAGEMENT FOR THE PROJECT IS PROVIDED BY THE USE OF MICRO-BIORETENTIONS (M-6) FACILITIES AND DRYWELLS (M-5) IN ACCORDANCE WITH ENVIRONMENTAL SITE DESIGN CRITERIA. THESE FACILITIES WILL BE PRIVATELY OWNED AND MAINTAINED.
21. APPROVAL OF THIS ENVIRONMENTAL CONCEPT PLAN (ECP) DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION PLAN/PLAT AND/OR SITE DEVELOPMENT PLAN AND/OR RED-LINE REVISION PLAN. REVIEW OF THIS PROJECT FOR COMPLIANCE WITH THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE HOWARD COUNTY ZONING REGULATIONS SHALL OCCUR AT THE SUBDIVISION PLAN/PLAT AND/OR SITE DEVELOPMENT PLAN AND/OR RED-LINE REVISION PROCESS. THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED REVIEW COMMENTS (INCLUDING COMMENTS THAT MAY ALTER THE OVERALL SITE DESIGN) AS THIS PROJECT PROGRESSES THROUGH THE PLAN REVIEW PROCESS.
22. APPROVAL OF THIS ENVIRONMENTAL CONCEPT PLAN (ECP) BY THE HOWARD SOIL CONSERVATION DISTRICT DOES NOT GRANT APPROVAL OF THE PROPOSED SEDIMENT CONTROL SCHEME.

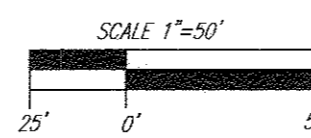
**ENVIRONMENTAL SITE DESIGN NARRATIVE:**

1. THE PROJECT CONTAINS A SMALL AREA OF WETLANDS ALONG THE SOUTHERN PROPERTY LINE. THERE ARE NO STREAMS LOCATED ON THE SITE HOWEVER STREAMS ARE LOCATED WEST AND SOUTH OF THE SITE AND THE ASSOCIATED BUFFERS DO NOT IMPACT THE SITE. THERE ARE NO PROPOSED IMPACTS TO THE WETLAND AND WETLAND BUFFER. THERE ARE SEVEN SPECIMEN TREES LOCATED ON-SITE WHICH WILL BE REQUIRED TO BE REMOVED. AN ALTERNATIVE COMPLIANCE PETITION WILL BE REQUIRED FOR THE REMOVAL OF THESE TREES.
2. THE PROPOSED GRADING DOES NOT ALTER THE EXISTING DRAINAGE PATTERNS.
3. THE CONCEPTUAL REDUCTION IN IMPERVIOUS AREA THROUGH BETTER SITE DESIGN IS ACHIEVED THROUGH THE ENVIRONMENTAL SITE DESIGN (ESD) FOR THE PROJECT. THE ESD CONCEPT UTILIZES MICRO-SCALE PRACTICES INCLUDING MICRO-BIORETENTION FACILITIES (M-6) AND DRYWELLS (M-5). THESE FACILITIES WILL BE PRIVATELY OWNED AND MAINTAINED.
4. SEDIMENT CONTROL FOR THIS SPECIFIC SITE PLAN WILL BE PROVIDED THROUGH THE USE OF SUPER SILT FENCE AND CLEAR WATER EARTHDIKE PERIMETER CONTROLS. SEDIMENT CONTROL SHALL BE IN ACCORDANCE WITH CURRENT REQUIREMENTS AND SHALL BE APPROVED BY THE HOWARD SOIL CONSERVATION DISTRICT.
5. STORMWATER MANAGEMENT FOR THE PROJECT SHALL BE MET THROUGH THE USE OF THE MICRO-SCALE PRACTICES INCLUDING MICRO-BIORETENTION (M-6) FACILITIES AND DRYWELLS (M-5). THE RESULTS OF THE ENVIRONMENTAL SITE DESIGN FOR THIS PROJECT WILL REFLECT "WOODS IN GOOD CONDITION".
 

TARGET PE = 1.77"	PROVIDED PE = 1.77"
TARGET ESDv = 3,561 CF	PROVIDED = 3,561 CF
6. AT THIS CONCEPT STAGE OF DEVELOPMENT, AN ALTERNATIVE COMPLIANCE PETITION WILL BE REQUIRED FOR SPECIMEN TREE REMOVAL. THERE ARE NO OTHER DEVIATIONS ANTICIPATED AT THIS STAGE.



**PLAN VIEW**  
SCALE: 1" = 50'



**SITE ANALYSIS DATA CHART**

A. TOTAL PROJECT AREA:	1.81 AC.±
B. AREA OF PLAN SUBMISSION:	1.81 AC.±
C. AREA OF WETLANDS AND BUFFERS:	0.13 SF
D. AREA OF FLOODPLAIN:	0.0 AC.
E. AREA OF FOREST:	0.20 AC.
F. AREA OF STEEP SLOPES (15% & GREATER):	0.00 AC.
G. AREA OF FRODIBLE SOILS:	0.01 AC.
H. LIMIT OF DISTURBED AREA:	1.68 AC.
I. PROPOSED USES FOR SITE AND STRUCTURES:	RESIDENTIAL SINGLE FAMILY DETACHED (SFD) HOMES
J. GREEN OPEN AREA:	1.28 AC.
K. PROPOSED IMPERVIOUS AREA:	0.53 AC.
L. PRESENT ZONING DESIGNATION:	R-SC
M. OPEN SPACE REQUIRED:	0.45 ACRES (25%)
N. TOTAL NUMBER OF UNITS ALLOWED:	7
O. TOTAL NUMBER OF UNITS PROPOSED:	7
P. DPZ FILE REFERENCES:	-

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*[Signature]* 3/17/17  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*[Signature]* 3/15/17  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

**NOTES:**

1. ALL WATER CONNECTIONS SHALL BE 1-1/2" WITH 1" OUTSIDE METER SETTINGS, UNLESS OTHERWISE NOTED. REFER TO HOWARD COUNTY DETAILS W-3.28 OUTSIDE METER SETTINGS.

# ENVIRONMENTAL CONCEPT PLAN

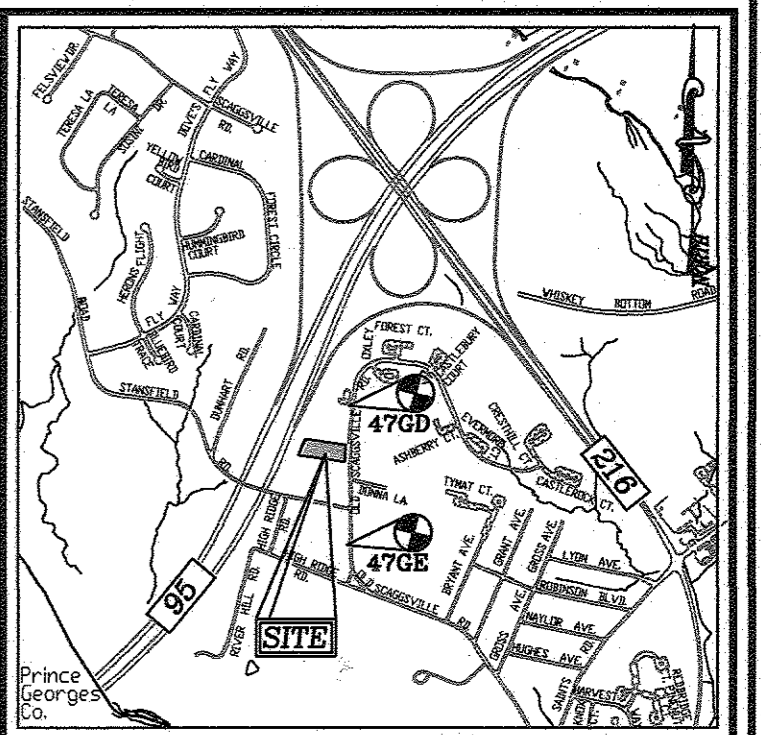
## MAGNOLIA MANOR WEST

### LOTS 1 - 7 AND OPEN SPACE LOT 8

#### OLD SCAGGSVILLE ROAD

#### HOWARD COUNTY, MD

**BENCHMARKS**  
 HOWARD COUNTY BENCHMARK - 47CE  
 N 529044.94 E 1350855.03 ELEV.: 337.61  
 HOWARD COUNTY BENCHMARK - 47GD  
 N 530494.49 E 1350872.35 ELEV.: 312.28



**VICINITY MAP**  
SCALE: 1"=2,000'  
ADC MAP COORDINATE: PAGE: 40 BLOCK: A6 & A7

SHEET INDEX	
DESCRIPTION	SHEET NO.
COVER SHEET AND ESDv CONCEPT PLAN	1 OF 2
STORMWATER MANAGEMENT DRAINAGE AREA MAP & DETAILS	2 OF 2

**LEGEND**

- EXISTING CURB AND GUTTER
- EXISTING UTILITY POLE
- EXISTING MAILBOX
- EXISTING SIGN
- EXISTING SANITARY MANHOLE
- EXISTING SANITARY LINE
- EXISTING CLEANOUT
- EXISTING FIRE HYDRANT
- EXISTING WATER LINE
- EXISTING STORM DRAIN LINE
- EXISTING FENCE
- EXISTING OVER HEAD LINE
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- EXISTING WETLAND
- EXISTING WETLAND BUFFER
- EXISTING FOREST CONSERVATION EASEMENT (RETENTION)
- EXISTING STREAM
- EXISTING STREAM BUFFER
- MICRO-BIORETENTION (M-6)
- EXISTING TREELINE
- PROPOSED TREELINE
- PROPOSED STORM DRAIN
- EX. 15' SEWER AND UTILITY EASEMENT (PLAT # 5708)
- PROP. 15' WATER AND UTILITY EASEMENT

**DEVELOPER**

TRINITY HOMES MARY LAND, LLC  
 3675 PARK AVE., SUITE 301  
 ELLICOTT CITY, MD 21043  
 (410) 480-0023

NO.	REVISION	DATE

**ENVIRONMENTAL CONCEPT PLAN**

## COVER SHEET AND ESDv CONCEPT PLAN

### MAGNOLIA MANOR WEST

LOTS 1 - 7 AND OPEN SPACE LOT 8  
 A SUBDIVISION OF TAX MAP 47 - PARCEL 558  
 AND A RESUBDIVISION OF TAX MAP 47 - PARCEL 157  
 "GIDDINGS PROPERTY - LOTS 1 AND 2" (PLAT 5708)

TAX MAP: 47 PARCELS: 157 & 558 BLOCK: 19 ZONING: R-SC HOWARD COUNTY, MARYLAND  
 6TH ELECTION DISTRICT

**ROBERT H. VOGEL**  
**ENGINEERING, INC.**  
 ENGINEERS • SURVEYORS • PLANNERS  
 8407 MAIN STREET TEL: 410.461.7666  
 ELLICOTT CITY, MD 21043 FAX: 410.461.8961

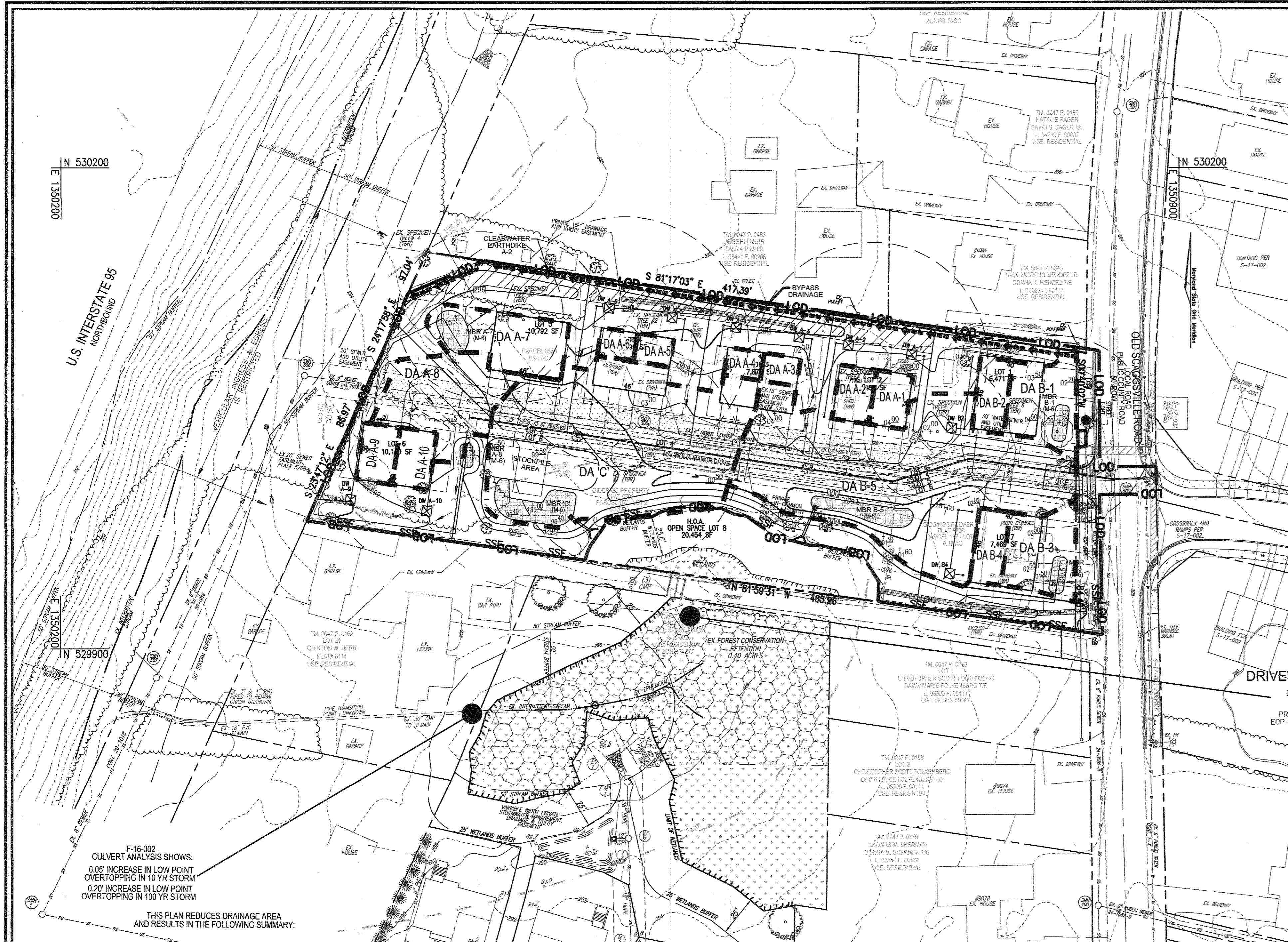


**PROFESSIONAL CERTIFICATE**

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193, EXPIRATION DATE 12-16-2018

DESIGN BY: RHY  
 DRAWN BY: KG  
 CHECKED BY: RHY  
 DATE: MARCH 2017  
 SCALE: 1"=30'  
 W.O. NO.: 16-15

1 SHEET OF 2



**ECP-17-004 DRIVEWAY CULVERT SUMMARY**

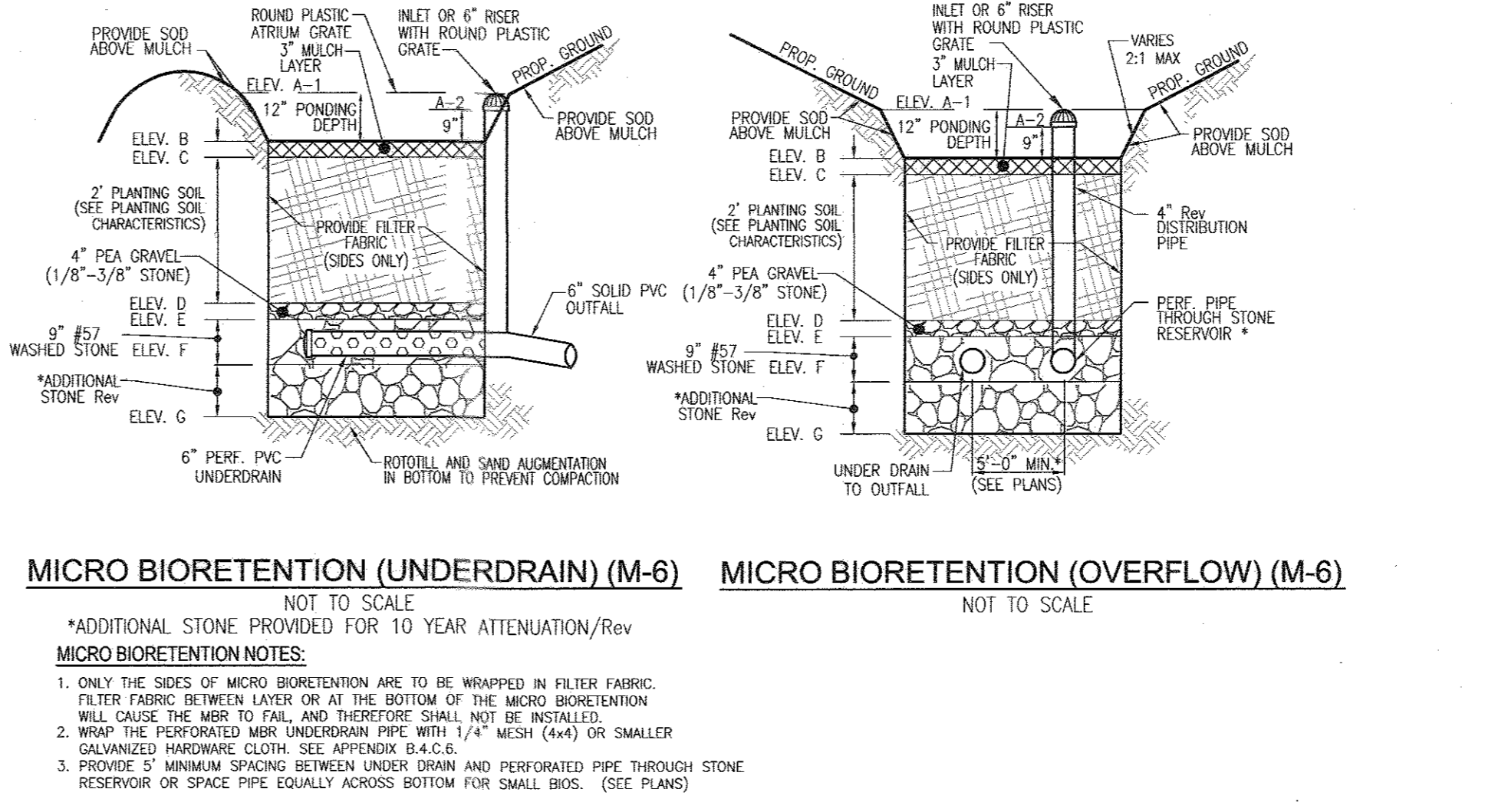
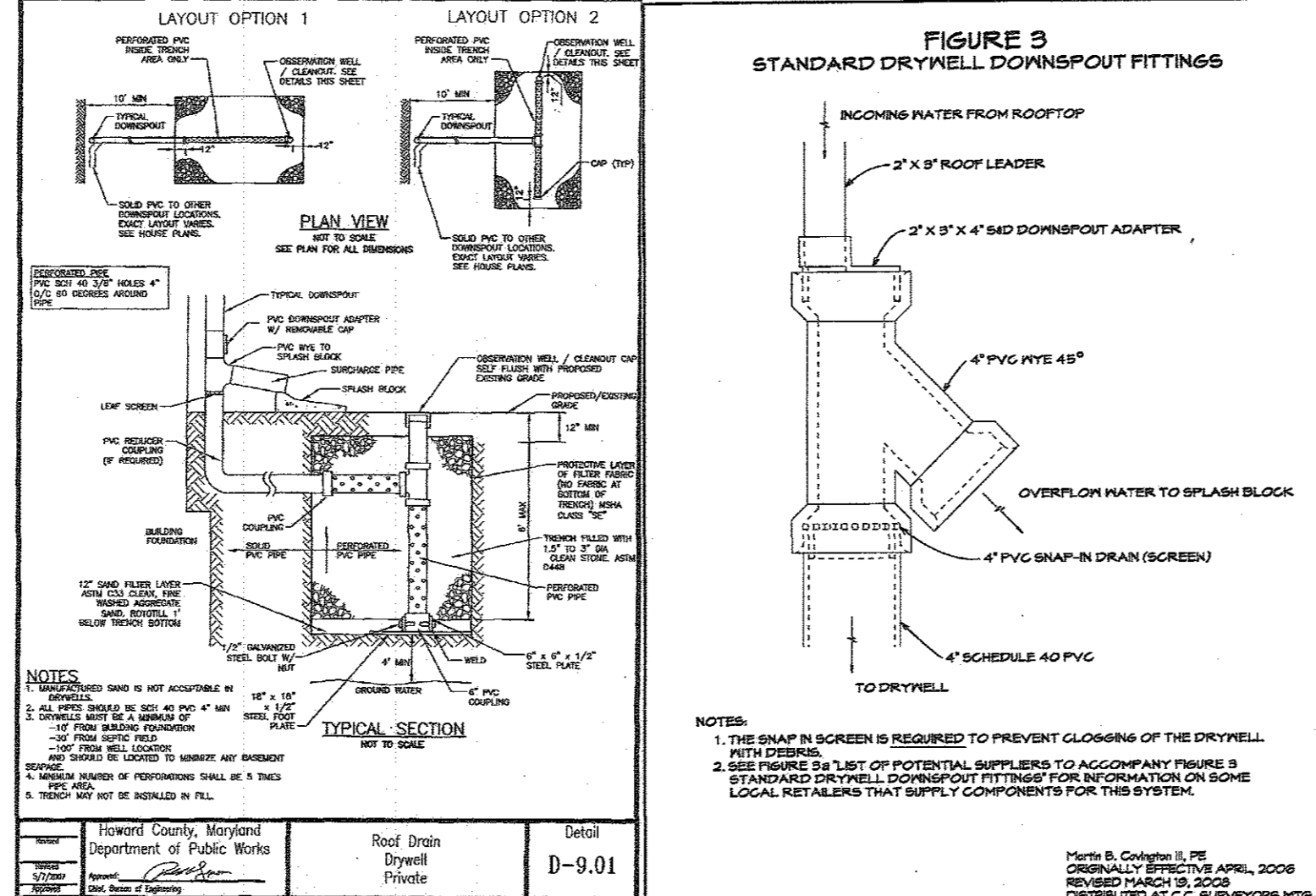
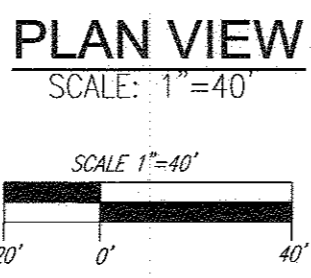
EXISTING CONDITIONS	10 YEAR	9.44 CFS
PROPOSED CONDITIONS	10 YEAR	4.52 CFS

**Table B.4.1 Materials Specifications for Micro-Bioretention, Rain Gardens & Landscape Infiltration**

Material	Specification	Rate	Notes
Planting soil	loamy sand (60-65%) & compost (35-40%) or sandy loam (30%), coarse sand (30%) & compost (40%)	n/a	Planting soil shall be free of herbicide, pesticides, fertilizers, or other toxic substances. The planting soil shall be tested and shall meet the following criteria: • SOIL COMPONENT - LOAMY SAND OR SANDY LOAM (USDA SOIL TEXTURAL CLASSIFICATION) • ORGANIC CONTENT - MINIMUM 10% BY DRY WEIGHT (ASTM D 2974). IN GENERAL, THIS CAN BE MET WITH A MIXTURE OF LOAMY SAND (60%-65%) AND COMPOST (35% TO 40%) OR SANDY LOAM (30%), COARSE SAND (30%), AND COMPOST (40%). • CLAY CONTENT - MEDIA SHALL HAVE A CLAY CONTENT OF LESS THAN 5%. • PH RANGE - SHOULD BE BETWEEN 5.5 - 7.0. AMENDMENTS (E.G., LIME, IRON SULFATE PLUS SULFUR) MAY BE MIXED IN TO THE SOIL TO INCREASE OR DECREASE PH. THERE SHALL BE AT LEAST ONE SOIL TEST PER PROJECT. EACH TEST SHALL CONSIST OF BOTH THE STANDARD SOIL TEST FOR PH, AND ADDITIONAL TESTS OF ORGANIC MATTER, AND SOLUBLE SALTS. A TEXTURAL ANALYSIS IS REQUIRED FROM THE SITE STOCKPILED TOPSOIL, IF TOPSOIL IS IMPORTED. THEN A TEXTURE ANALYSIS SHALL BE PERFORMED FOR EACH LOCATION WHERE THE TOPSOIL WAS EXCAVATED.
Organic content	Min. 10% by dry weight (ASTM D 2974)	n/a	Planting soil shall be free of herbicide, pesticides, fertilizers, or other toxic substances.
Mulch	shredded hardwood	n/a	aged 6 months, minimum; no pine or wood chips
Pea gravel diaphragm	pea gravel: ASTM-D-448	NO. 8 OR NO. 9 (1/8" TO 3/8")	n/a
Curtain drain	commercial stone: washed cobbles	stone: 2" to 5"	n/a
Geotextile	n/a	n/a	PE Type 1 nonwoven
Gravel (underdrains and infiltration berms)	AASHTO M-43	NO. 57 OR NO. 6 AGGREGATE (3/8" TO 3/4")	n/a
Underdrain piping	F 758, Type PS 28 or AASHTO M-278	4" to 6" rigid schedule 40 PVC or SDR35	Slotted or perforated pipe; 3/8" perf. @ 6" on center, 4 holes per row, minimum of 3" of gravel over pipe, not necessary underdrain pipes. Perforated pipe shall be wrapped with 1/2 inch galvanized hardware cloth
Placed in place concrete (if required)	MSEA Mix No. 3, $f_c = 3500$ psi @ 28 days, normal weight, air-entrained; reinforcing to meet ASTM-615-60	n/a	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 State or local standard design drawings sealed and approved by a professional structural engineer licensed in the State of Maryland - design to include meeting ACI Code 309.1R-99; vertical loading (W 10 or 14-30); 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 carbonate or dolomitic sand substitutions are acceptable. No "rock dust" can be used for sand.

**NOTES:**

- APPROVAL OF THIS SIMPLIFIED ECP DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED BUILDING AND/OR GRADING PERMIT.
- REVIEW OF THIS PLAN FOR COMPLIANCE WITH ZONING AND SUBDIVISION AND LAND DEVELOPMENT REGULATIONS SHALL OCCUR AT THE PERMIT STAGES, AND THEREFORE, THIS PLAN IS SUBJECT TO ADDITIONAL AND MORE DETAILED COMMENTS AS THE PLAN PROGRESSES THROUGH THE PERMIT PROCESS.
- THERE ARE NO STREAMS LOCATED ON THE SITE HOWEVER STREAMS ARE LOCATED WEST AND SOUTH OF THE SITE AND THE ASSOCIATED BUFFERS DO NOT IMPACT THE SITE. THE PROJECT CONTAINS A SMALL AREA OF WETLANDS ALONG THE SOUTHERN PROPERTY LINE. THERE IS NO 100YR FLOODPLAIN LOCATED ON THIS PROPERTY.



**LEGEND:**

---	EXISTING CONTOUR
---	PROPOSED CONTOUR
+	PROPOSED SPOT ELEVATION
+	EXISTING SPOT ELEVATION
---	EXISTING CURB AND GUTTER
---	EXISTING UTILITY POLE
---	EXISTING MAJOR
---	EXISTING SIGN
---	EXISTING SANITARY MANHOLE
---	EXISTING SANITARY LINE
---	EXISTING FIRE HYDRANT
---	EXISTING WATER LINE
---	EXISTING OVER HEAD LINE
---	PROPOSED STORM DRAIN
---	EXISTING TREES (FIELD LOCATED)
---	EXISTING SPECIMEN TREES
---	EXISTING FENCE
---	PROPERTY LINE
---	RIGHT-OF-WAY LINE
---	SOILS BOUNDARY
---	MICRO-BIORETENTION (M-6)
---	EX. 15" SOWER AND UTILITY EASEMENT PLATE 5/08
---	PROP. 15" WATER AND UTILITY EASEMENT
---	LIMIT OF DISTURBANCE
---	DRAINAGE DYKE
---	STABILIZED CONSTRUCTION ENTRANCE
---	SUPER SILT FENCE
---	CLEAR WATER EARTHWORK
---	EXISTING WETLAND
---	EXISTING WETLAND BUFFER
---	EXISTING WETLAND PRESERVATION (WETLAND PROTECTION)
---	EXISTING STREAM
---	EXISTING STREAM BUFFER

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

- THE MONITORING WELLS AND STRUCTURES SHALL BE INSPECTED ON A QUARTERLY BASIS AND AFTER EVERY LARGE STORM EVENT.
- WATER LEVELS AND SEDIMENT BUILD UP IN THE MONITORING WELLS SHALL BE RECORDED OVER A PERIOD OF SEVERAL DAYS TO INSURE TRENCH DRAINAGE.
- A LOG BOOK SHALL BE MAINTAINED TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS.
- WHEN THE FACILITY BECOMES CLOGGED SO THAT IT DOES NOT DRAIN DOWN WITHIN THE 72 HOUR TIME PERIOD, CORRECTIVE ACTION SHALL BE TAKEN.
- THE MAINTENANCE LOG BOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO INSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.
- 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 AND MAINTENANCE SCHEDULE FOR LANDSCAPE INFILTRATION (M-3), MICRO-BIORETENTION (M-6), RAIN GARDENS (M-7), BIORETENTION SWALE (M-8), AND ENHANCED FILTERS (M-9)**

- THE OWNER SHALL MAINTAIN THE PLANT MATERIAL, MULCH LAYER AND SOIL LAYER ANNUALLY. 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 PRUNING. ACCEPTABLE REPLACEMENT PLANT MATERIAL IS LIMITED TO THE FOLLOWING: 2000 MARLAND STORMWATER DESIGN MANUAL, VOLUME II, TABLE A.4.1 AND 2.
- 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 DISEASED TREES AND SHRUBS, AND REPLACE ALL DEFICIENT STAKES AND WIRES.
- 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.
- THE OWNER SHALL CORRECT SOIL EROSION ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER EACH HEAVY STORM.

**DEVELOPER**  
TRINITY HOMES MARY LAND, LLC  
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(410) 480-0023

**ENVIRONMENTAL CONCEPT PLAN**  
**STORMWATER MANAGEMENT**  
**DRAINAGE AREA MAP: SWM DETAILS**  
**MAGNOLIA MANOR WEST**  
LOTS 1 - 7 AND OPEN SPACE LOT 8  
A SUBDIVISION OF TAX MAP 47 - PARCEL 558  
AND A REVISION OF TAX MAP 47 - PARCEL 157  
"GIDDINGS PROPERTY - LOTS 1 AND 2" (PLAT 5708)  
TAX MAP: 47 PARCELS: 157 & 558  
BLOCK: 19 ZONING: R-SC  
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

**ROBERT H. VOGEL ENGINEERING, INC.**  
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8407 MAIN STREET  
ELLCOTT CITY, MD 21043  
TEL: 410.461.7666  
FAX: 410.461.8961

**PROFESSIONAL CERTIFICATE**

DESIGN BY: RHV  
DRAWN BY: KG  
CHECKED BY: RHV  
DATE: MARCH 2017  
SCALE: 1"=30'  
W.O. NO.: 16-15.

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21439 EXPIRATION DATE: 12-16-2018

2 SHEET OF 2

**SOILS LEGEND**  
HOWARD COUNTY SOILS MAP #24

SYMBOL	NAME / DESCRIPTION	GROUP	K FACTOR	ERODIBLE	FAMLAND	HYDRIC
Fa	Fallsington sandy loams, 0 to 2 percent slopes, Northern Coastal Plain	D	0.02	NO	YES	YES
SfB	Sassafras gravelly sandy loam, 2 to 5 percent slopes	B	0.24	NO	YES	NO
Uzd	Urban loam-Cullum-Bettsville complex, 5 to 15 percent slopes	C	0.37	YES	NO	NO

NOTE:  
TAKEN FROM: USDA, SCS-WEB SOIL SURVEY, HOWARD COUNTY  
HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR K GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT

NOTE:  
- SILT FENCE IS TO BE REPLACED WITH SUPER SILT FENCE IN THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.  
- SUPER SILT FENCE SHALL BE CURLED UPHILL NO MORE THAN 35 FEET APART.  
- DOUBLE ROWS OF SUPER SILT FENCE SHALL BE INSTALLED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*Chad Edwards* 3-17-17  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*Karl Edwards* 3-15-17  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE