

**GENERAL NOTES**

- SITE ANALYSIS**  
 AREA OF WETLAND AND BUFFERS: 0 SF (0.00 AC.)  
 AREA OF FLOODPLAIN AND BUFFERS: 0 SF (0.00 AC.)  
 AREA OF FORESTS: 6,524 SF (0.15 AC.)  
 AREA OF STEEP SLOPES (15% OR GREATER): 773 SF (0.02 AC.)  
 AREA OF ERODIBLE SOILS: 0 SF (0.00 AC.)  
 LIMIT OF DISTURBED AREA: 11,010 SF (0.25 AC.)  
 PROPOSED SITE USE: SINGLE FAMILY DETACHED RESIDENTIAL  
 GREEN OPEN AREA: 14,429 SF (0.33 AC.)  
 PROPOSED IMPERVIOUS AREA: 3,578 SF (0.08 AC.)  
 CUT: 300 CY FILL: 300 CY
- PROJECT BACKGROUND:**  
 LOCATION - ELLICOTT CITY, MD; TAX MAP 17, BLOCK 8, PARCEL 21, LOT 3  
 ZONING: R-20  
 SUBDIVISION: SWARTZ SUBDIVISION  
 SECTION/AREA: N/A  
 DPZ REFERENCES: PLAT #9709, F-91-26, CONT. 24-1826-D
- THE EXISTING TOPOGRAPHY SHOWN HEREON IS BASED ON A FIELD TOPOGRAPHICAL SURVEY WITH TWO FOOT CONTOUR INTERVALS PERFORMED BY ROBERT H. VOGEL ENGINEERING, INC.; DATED OCTOBER 10, 2012.
  - THE PROPERTY LINES SHOWN HEREON ARE BASED ON EXISTING DEED INFORMATION AND HOWARD COUNTY GIS.
  - A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.
  - PUBLIC WATER AVAILABLE THROUGH CONTRACT #24-1826-D.
  - PUBLIC SEWER AVAILABLE THROUGH CONTRACT #24-1826-D.
  - TRAFFIC IMPACT STUDY IS NOT REQUIRED FOR THIS PROJECT.
  - BUILDING TO HAVE INSIDE WATER METER SETTING.
  - THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, DEVELOPMENT OR CONSTRUCTION OF THESE LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION, OR BUILDING AND GRADING PERMITS.
  - NO GRADING, REMOVAL OR VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAMS, OR THEIR REQUIRED BUFFERS, FLOODPLAIN AND FOREST CONSERVATION EASEMENT AREAS.
  - THE SUBJECT PROPERTY IS ZONED R-20 PER THE 02/02/04 COMPREHENSIVE ZONING PLAN AND THE COMP LITE ZONING AMENDMENTS DATED 07/29/06.
  - THIS PROJECT IS EXEMPT FROM THE REQUIREMENTS OF SECTION 16.1202(b)(iv) OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION BECAUSE THE TOTAL LOT SIZE IS LESS THAN 40,000 SQUARE FEET.
  - THERE IS NO FLOODPLAIN LOCATED ON LOT 3.
  - THERE ARE NO WETLANDS LOCATED ON LOT 3.
  - THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL, WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENTS 170A AND 170B WERE USED FOR THIS PROJECT.
  - TO THE BEST OF THE OWNERS KNOWLEDGE, THERE ARE NO HISTORIC STRUCTURES, CEMETERIES OR GRAVE SITES LOCATED ON THE SUBJECT PROPERTY.
  - STORM WATER MANAGEMENT TO BE PROVIDED FOR THIS DEVELOPMENT BY ENVIRONMENTAL SITE DESIGN UTILIZING ROOFTOP AND NON-ROOFTOP DISCONNECTION.
  - THIS SITE IS NOT LOCATED IN A HISTORIC DISTRICT.
  - NO RARE, THREATENED, ENDANGERED SPECIES OR CRITICAL HABITAT WERE OBSERVED ON THE PROPERTY.
  - SEDIMENT AND EROSION CONTROL WILL BE PROVIDED FOR THIS SITE.
  - SUNSET FARM ROAD IS NOT A SCENIC ROAD.
  - APPROVAL OF THIS ECP DOES NOT CONSTITUTE APPROVAL OF ANY SUBSEQUENT OR ASSOCIATED SUBDIVISION OR SITE DEVELOPMENT PLAN. REVIEW OF THIS PROJECT FOR COMPLIANCE WITH THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND HOWARD COUNTY ZONING REGULATIONS SHALL OCCUR AT THE SUBDIVISION AND SITE PLAN STAGES. THEREFORE, THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED COMMENTS, INCLUDING THOSE THAT MAY ALTER OVERALL SITE DESIGN AS THE PROJECT PROGRESSES.
  - NO ENVIRONMENTAL FEATURES EXIST WITHIN THE LOD.

# ENVIRONMENTAL CONCEPT PLAN

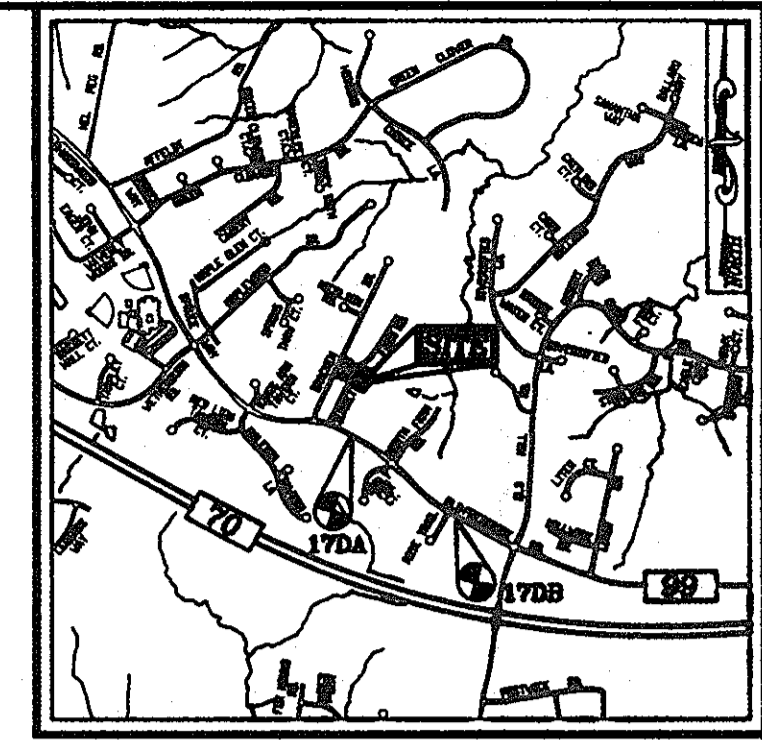
## SWARTZ SUBDIVISION

### LOT 3

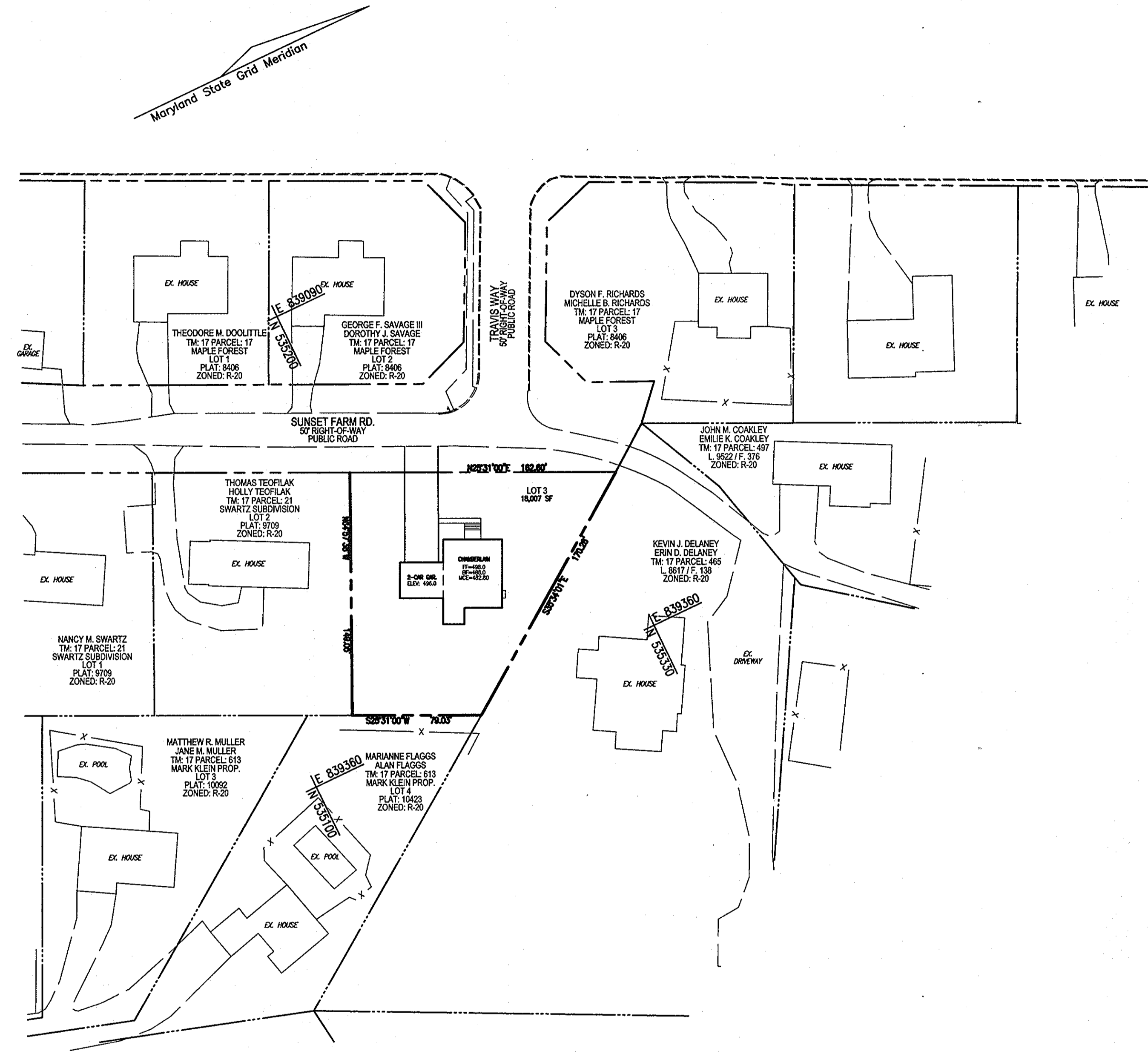
#### DEED REF. L. 13408 / F. 00002

**LEGEND**

- PROPERTY LINE
- RIGHT-OF-WAY LINE
- ADJACENT PROPERTY LINE
- EXISTING PAVEMENT
- X --- EXISTING FENCE
- EXISTING CURB



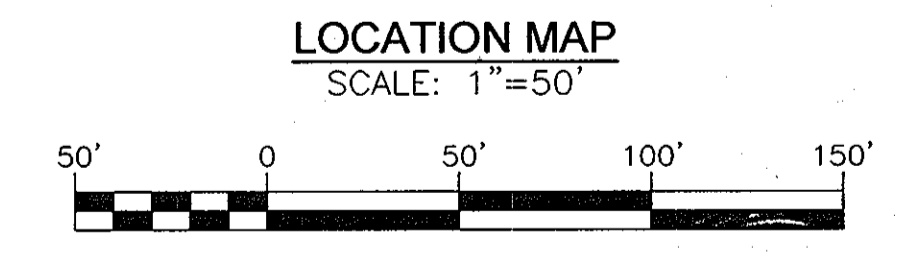
**BENCHMARKS**  
 HOWARD COUNTY BENCHMARK 170A  
 N 595410.83 E 1351641.11 ELEV.: 481.24  
 HOWARD COUNTY BENCHMARK 170B  
 N 594529.53 E 1352722.59 ELEV.: 475.22



**ENVIRONMENTAL SITE DESIGN NARRATIVE:**

- IN ACCORDANCE WITH CHECKLIST ITEM III.K.
- THERE ARE NO NATURAL AREAS ON THE PROJECT SITE. NO DISTURBANCE TO A STREAM OR WETLAND OR THEIR WOODED RESOURCES IS PROPOSED.
  - NO DRAMATIC DISTURBANCE TO THE NATURAL DRAINAGE PATTERNS ARE PROPOSED, PLEASE REFER TO THE PROPOSED GRADING, SHEET 2.
  - THE CONCEPTUAL DESIGN SHOWN HEREON PROVIDES THE "REDUCTION IN IMPERVIOUS AREA THROUGH BETTER SITE DESIGN, ALTERNATIVE SURFACES AND NON STRUCTURAL PRACTICES" TO THE EXTENT PRACTICAL. THE SITE DESIGN INCORPORATES THE USE OF NON ROOFTOP DISCONNECTION (N-2), OTHER PRACTICES, THOUGH NOT NON-STRUCTURAL INCLUDE THE USE OF DRY WELLS (M-5) TO ACHIEVE THE REQUIRED ESDV.
  - SEDIMENT CONTROL FOR THIS SPECIFIC SITE PLAN WILL BE PROVIDED THROUGH THE USE A PROPOSED SILT FENCE PERIMETER CONTROLS AROUND THE PROPOSED DISTURBED AREAS. SEDIMENT CONTROL SHALL BE IN ACCORDANCE WITH CURRENT REQUIREMENTS AND SHALL BE APPROVED BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
  - STORMWATER MANAGEMENT FOR THE PROJECT SHALL BE MET FOR THE REQUIRED P = 1.8" THROUGH THE USE OF DRY WELLS (M-5) FACILITIES AND NON ROOFTOP DISCONNECTION (N-2). THE RESULTS OF THE ENVIRONMENTAL SITE DESIGN FOR THIS PROJECT WILL REFLECT "WOODS IN GOOD CONDITION" TO THE MAXIMUM EXTENT PRACTICABLE.

- AT THIS CONCEPT STAGE OF DEVELOPMENT:
- ALL ITEMS LISTED IN SECTION II.C.1.A HAVE BEEN INCLUDED IN THE GENERAL NOTES
  - IMPLEMENTATION OF THE ESD PLANNING TECHNIQUES AND PRACTICES TO THE MAXIMUM EXTENT PRACTICABLE HAVE BEEN ACHIEVED BY MEETING THE REQUIRED ESDV.
  - ANY DESIGN MANUAL AND WAIVER PETITIONS FOR ENVIRONMENTAL AND STORMWATER DESIGN SHALL BE SUBMITTED UNDER THE SITE DEVELOPMENT PLAN STAGE. HOWEVER IT SHOULD BE NOTED WE DO NOT ANTICIPATE THE NEED FOR ANY WAIVERS TO SWM.
  - NO WAIVER PETITIONS FOR ENVIRONMENTAL DISTURBANCE OR ENCROACHMENTS ARE REQUIRED.



**OWNER/DEVELOPER**  
 SD PROPERTIES  
 3138 ROGERS AVENUE  
 ELLICOTT CITY, MD 21043  
 410-203-2460  
 ATTN: MR. DOUG CHAMBERLAIN

NO.	REVISION	DATE

**ENVIRONMENTAL CONCEPT PLAN**  
**COVER SHEET**  
**SWARTZ SUBDIVISION**  
**LOT 3**  
 TAX MAP: 17 GRID: 8 DEED REF. L. 13408/F.00002 PARCEL: 21  
 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 DPZ REF'S: PLAT #9709, F-91-26, CONT. 24-1826-D

**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**  
 DESIGN BY: JBS/EDS  
 DRAWN BY: JMR  
 CHECKED BY: RHV/EDS  
 DATE: FEBRUARY 2013  
 SCALE: AS SHOWN  
 W.O. NO.: 12-54

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. 16193, EXPIRATION DATE: 09-27-2014.

1 SHEET OF 2

ADDRESS CHART	
LOT/PARCEL#	STREET ADDRESS
LOT 3/PARCEL 21	SUNSET FARM ROAD

PERMIT INFORMATION CHART				
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NUMBER	GRID NO.	ZONING
SWARTZ SUBDIVISION	N/A	LOT 3/PARCEL 21	8	R-20

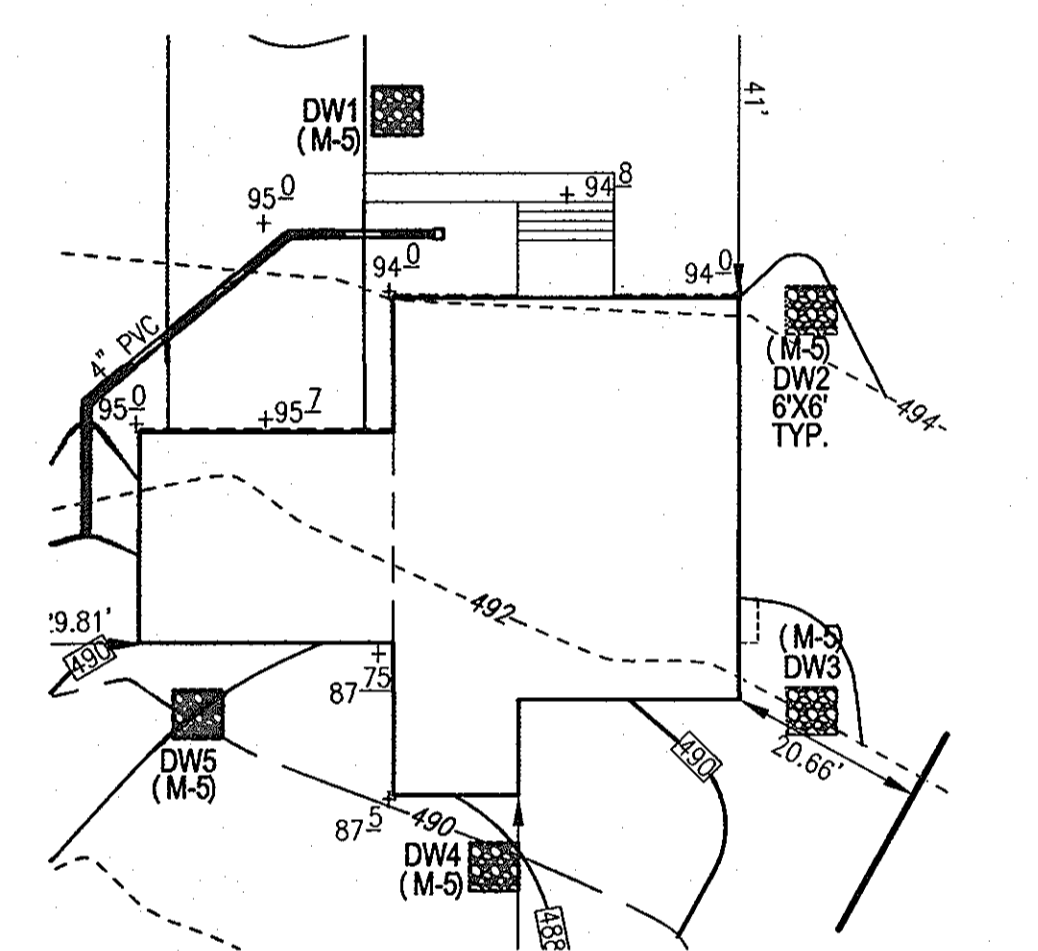
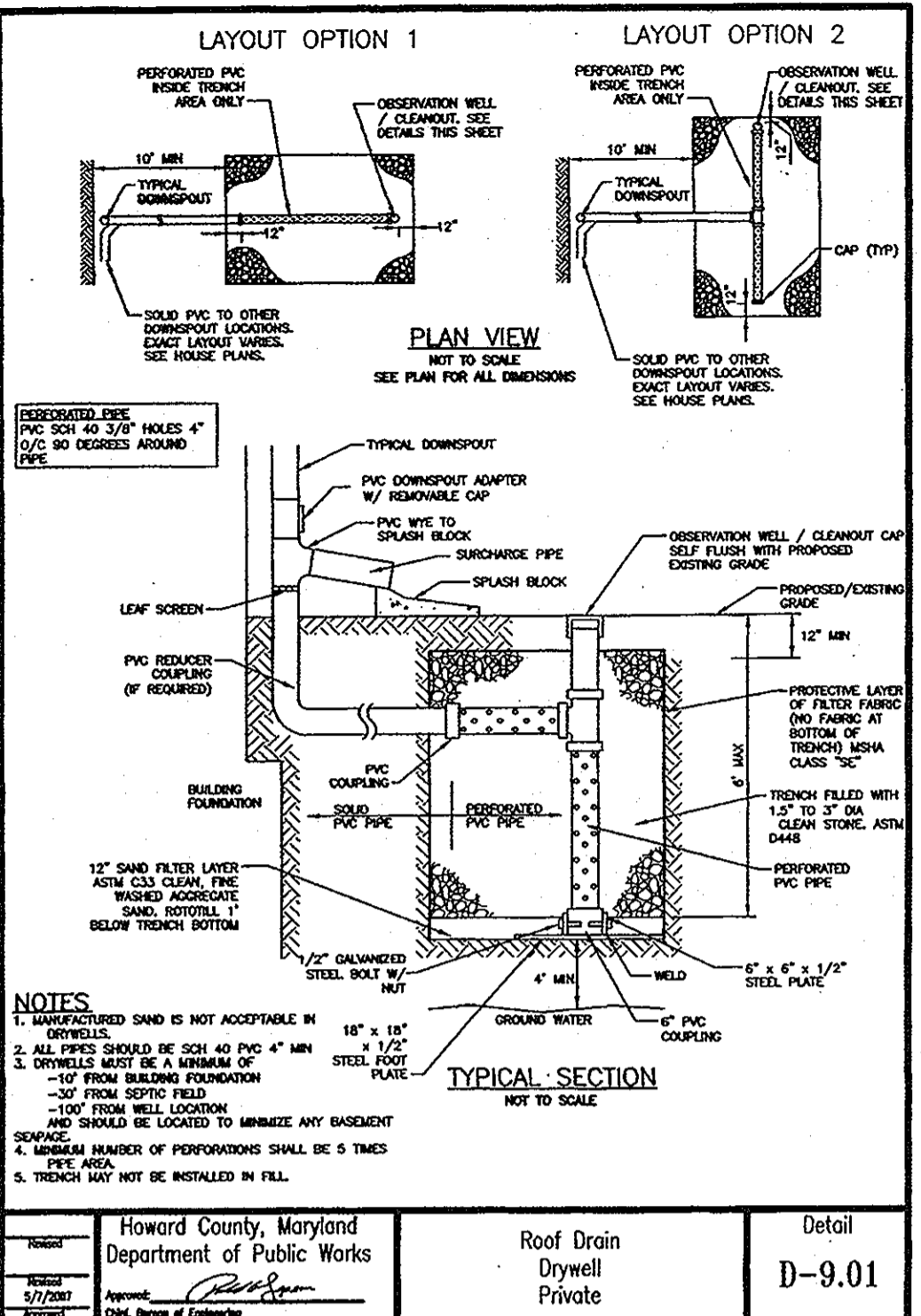
PLAT OR L/F	GRID NO.	ZONING	TAX MAP NO.	ELECT. DIST.	CENSUS TR.
PLAT #9709	8	R-20	17	2ND	6021.00

SHEET INDEX	
DESCRIPTION	SHEET NO.
COVER SHEET	1 OF 2
SITE LAYOUT, GRADING & SOIL EROSION AND SEDIMENT CONTROL PLAN	2 OF 2

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*[Signature]* 2/12/13  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*[Signature]* 3/12/13  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

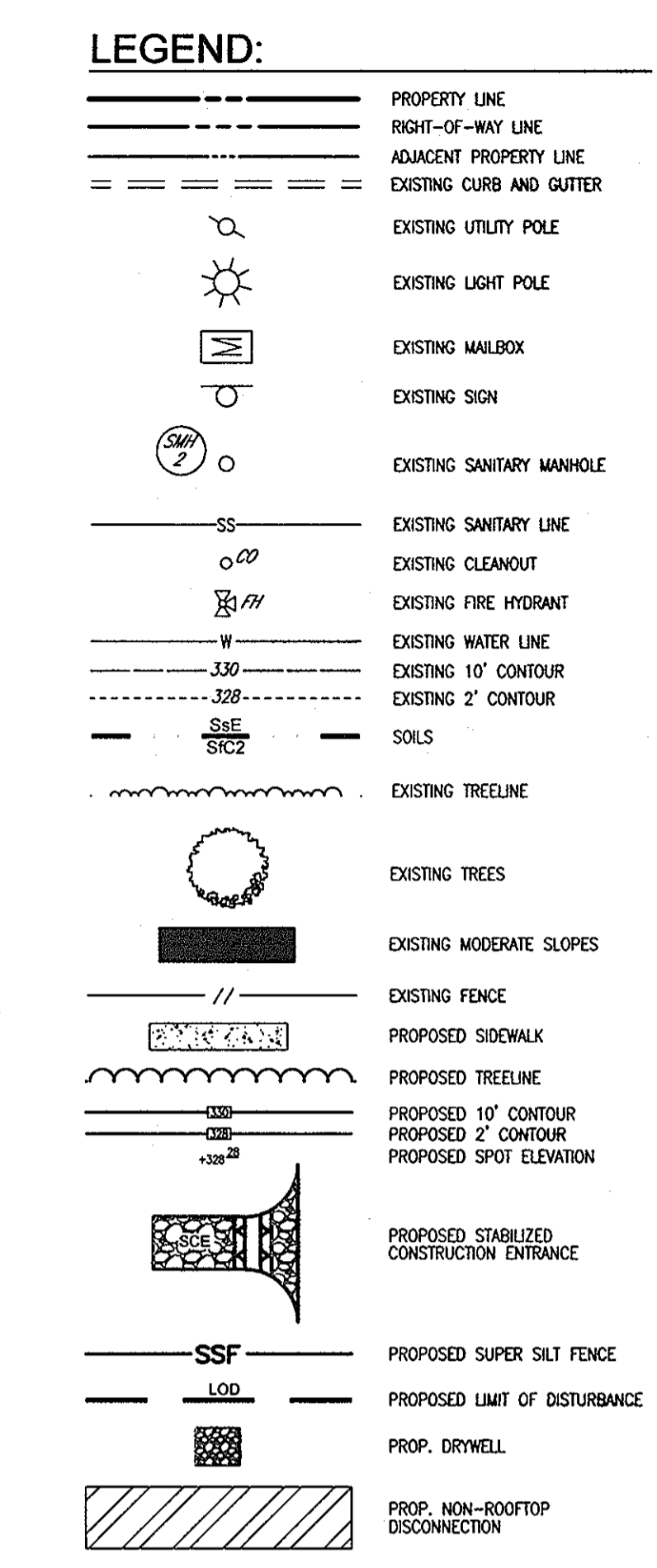
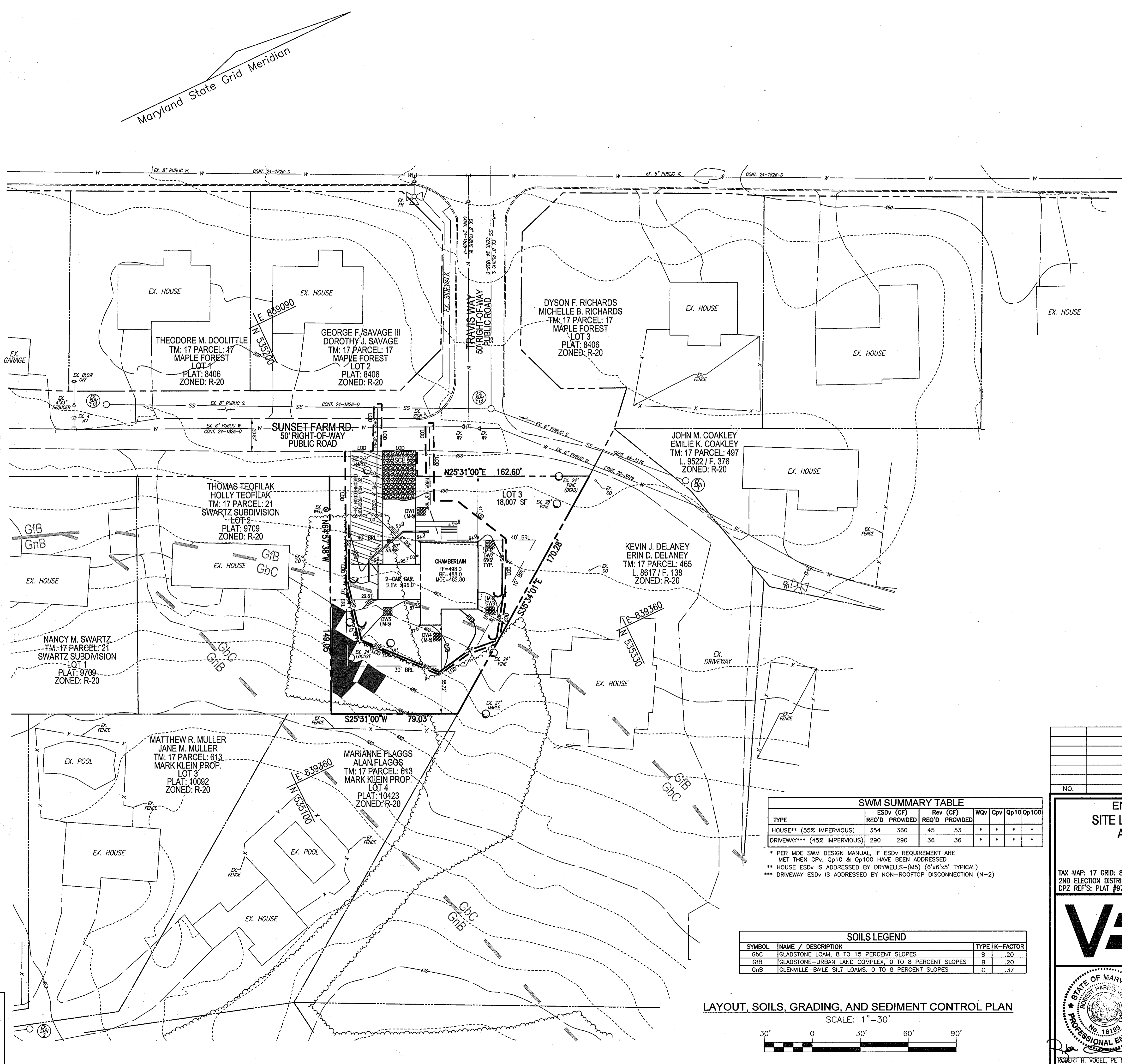


**ROOFTOP DISCONNECTION DRAINAGE AREAS**  
SCALE: 1"=20'

**MAINTENANCE CRITERIA FOR DISCONNECTION OF ROOFTOP RUNOFF**  
MAINTENANCE OF AREAS RECEIVING DISCONNECTED RUNOFF IS GENERALLY NO DIFFERENT THAN THAT REQUIRED FOR OTHER LAWN OF LANDSCAPED AREAS. THE AREAS RECEIVING RUNOFF SHOULD BE PROTECTED FROM FUTURE COMPACTION.  
LOT 3 DISCONNECTED FLOWPATHS ARE SHOWN ON SHEET 2.

**FOREST CONSERVATION NOTES:**  
THIS LOT (LOT 3) IS EXEMPT FROM THE REQUIREMENTS OF SECTION 16.12000 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION WITH THE FILING OF A DECLARATION OF INTENT FOR A "SINGLE RESIDENTIAL LOT EXEMPTION" CLEAR LESS THAN 20,000 SQUARE FEET OF FOREST FILLING OF THE FOREST CONSERVATION-DECLARATION OF INTENT (DOI) SHALL BE COMPLETED WITH THE SUBMISSION OF THE GRADING AND/OR BUILDING PERMIT APPLICATION.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 [Signature] 3/13/13  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 [Signature] 3/13/13  
 CHIEF, DIVISION OF LAND DEVELOPMENT



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**SWM SUMMARY TABLE**

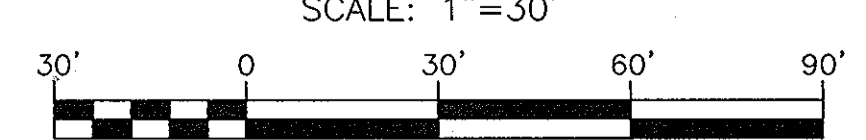
TYPE	ESDv (CF) REQ'D	ESDv (CF) PROVIDED	Rev (CF) REQ'D	Rev (CF) PROVIDED	WQv	Cpv	Qp10	Op100
HOUSE** (55% IMPERVIOUS)	354	360	45	53	*	*	*	*
DRIVEWAY*** (45% IMPERVIOUS)	290	290	36	36	*	*	*	*

\* PER MDE SWM DESIGN MANUAL, IF ESDv REQUIREMENT ARE MET THEN Cpv, Qp10 & Op100 HAVE BEEN ADDRESSED  
 \*\* HOUSE ESDv IS ADDRESSED BY DRYWELLS-(M5) (6"x6"x5" TYPICAL)  
 \*\*\* DRIVEWAY ESDv IS ADDRESSED BY NON-ROOFTOP DISCONNECTION (N-2)

**SOILS LEGEND**

SYMBOL	NAME / DESCRIPTION	TYPE	K-FACTOR
GnC	GLADSTONE LOAM, 8 TO 15 PERCENT SLOPES	B	.20
GfB	GLADSTONE-URBAN LAND COMPLEX, 0 TO 8 PERCENT SLOPES	B	.20
GnB	GLENVILLE-BAILE SILT LOAMS, 0 TO 8 PERCENT SLOPES	C	.37

LAYOUT, SOILS, GRADING, AND SEDIMENT CONTROL PLAN  
SCALE: 1"=30'



**ENVIRONMENTAL CONCEPT PLAN  
 SITE LAYOUT, SOILS, GRADING, EROSION  
 AND SEDIMENT CONTROL PLAN  
 SWARTZ SUBDIVISION  
 LOT 3**

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