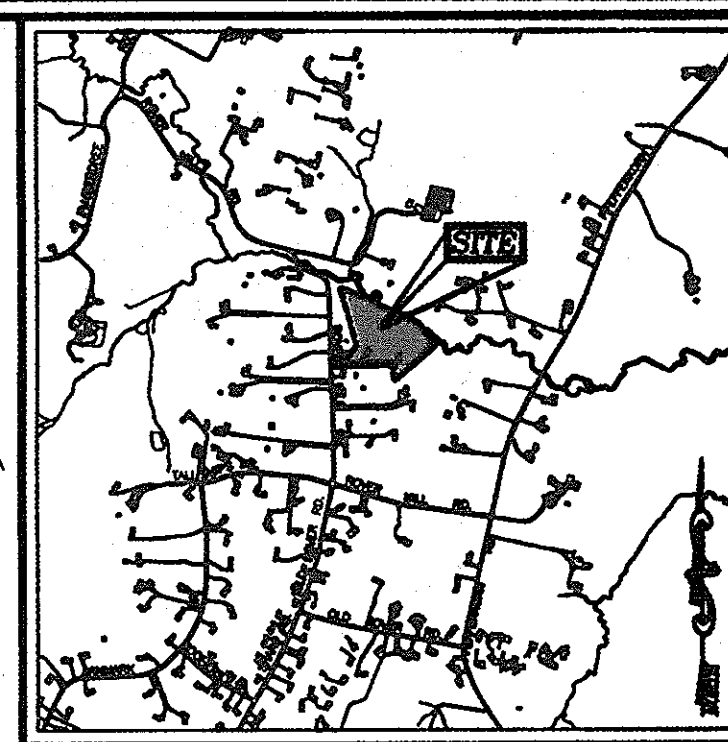


**LEGEND**

RIGHT-OF-WAY LINE	EXISTING FLOODPLAIN EASEMENT
BOUNDARY LINE	PROPOSED PRIVATE WELL AREA
ADJACENT BOUNDARY LINE	EXISTING TREELINE
EXISTING CONTOUR	EXISTING UTILITY POLE
EXISTING SIGN	EXISTING SIGN
SOILS	PROPOSED SEPTIC EASEMENT
LOD	FOREST CONSERVATION AREA
PROPOSED 24' USE-IN-COMMON DRIVEWAY EASEMENT	EXISTING WETLANDS
	FOREST CONSERVATION SIGN



- GENERAL NOTES**
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
  - 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 START OF WORK.
  - ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
  - TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
  - COORDINATE BASED ON NAD 83, MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 2118 AND NO. 211C.
  - THE PROJECT BOUNDARY IS BASED ON THE PLAT AND FIELD VERIFIED BY ROBERT H. VOGEL ENGINEERING, INC.
  - THE TOPOGRAPHY SHOWN ON THIS PLAN IS TAKEN FROM HOWARD COUNTY GIS, AND IS VERIFIED TO ACCURATELY REPRESENT THE SUBJECT PROPERTY.
  - WATER AND SEWER FOR THIS PROJECT WILL BE PROVIDED THROUGH WELL AND SEPTIC. WATER AND SEWER SERVICES TO THESE LOTS WILL BE GRANTED UNDER THE PROVISIONS OF SECTION 18.122.B OF THE HOWARD COUNTY CODE.
  - FLOODPLAIN, AND WETLAND ON THIS SITE PER PLAT#7614.
  - THIS SITE IS NOT LOCATED IN A HISTORIC DISTRICT.
  - SUBJECT PROPERTY ZONED RC-DEO PER 2/02/04 COMPREHENSIVE ZONING ZONING PLAN AND AMENDED BY THE COMPREHENSIVE LITE AMENDMENT DATED 07/28/06.
  - "DRIVEWAY(S) SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
    - WIDTH - 12 FEET (16 FEET SERVING MORE THAN ONE RESIDENCE).
    - SURFACE - 6 INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING.
    - GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% CHANGE AND MINIMUM OF 45-FOOT DEPTH TURNING RADIUS.
    - STRUCTURES (CULVERT/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING).
    - DRAINAGE ELEMENTS-CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE.
    - STRUCTURE CLEARANCES-MINIMUM 12 FEET.
    - MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE.
  - ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
  - THE PROPOSED SUBDIVISION AND RELATED CONSTRUCTION WILL NOT AFFECT ENVIRONMENTAL FEATURES OR BUFFERS.
  - FOREST CONSERVATION OBLIGATIONS FOR THIS SITE IS BY AFForestation OF 1.26 ACRES ONSITE.
  - STORM WATER MANAGEMENT WILL BE ADDRESSED FOR THIS SITE BY ROOFTOP DISCONNECTS, NON-ROOFTOP DISCONNECTS AND SHEETFLOW TO CONSERVATION.
  - THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS (COUNCIL BILL 45-2003).
  - THIS PLAN IS SUBJECT TO WAIVER PETITION WP-11-120, APPROVED FEBRUARY 2, 2011 TO SECTION 16.120(b)(4)(ii)(b) WHICH PROHIBITS FLOODPLAIN, WETLANDS, STREAMS, THEIR BUFFERS AND FOREST CONSERVATION EASEMENT ON LOTS OR PARCELS LESS THAN 10 ACRES IN SIZE. APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:
    - FOREST CONSERVATION SIGNS MUST BE POSTED ALONG THE ENTIRE PERIMETER ON THE FOREST CONSERVATION EASEMENT.
    - THE EXISTING POOL ON PROPOSED LOT 12 MUST BE REMOVED OR A VARIANCE TO THE SETBACKS MUST BE APPROVED.
    - AN ENVIRONMENTAL REPORT (LESS THAN 5 YEARS OLD) MUST BE SUBMITTED WITH THE PLAT OF RESUBDIVISION.
    - THE WAIVER PETITION NUMBER AND ITS CONDITIONS OF APPROVAL MUST BE ADDED TO THE PLAT.
    - NO GRADING, REMOVAL OF VEGETATIVE COVER AND TREES, PAVING AND NEW STRUCTURES ARE PERMITTED WITHIN THE WETLANDS, STREAMS, FLOODPLAIN, FOREST CONSERVATION EASEMENT AND REQUIRED BUFFERS.
  - THE EXISTING HOUSE AND POOL LOCATED ON LOT 12 ARE TO REMAIN. THE POOL MEETS THE ZONING SETBACKS FOR 30' SIDE (OTHER) AND 10' REAR (ACCESSORY).

**OWNER**  
 BRIAN G. ISAAC  
 13940 OLD ROVER MILL ROAD  
 WEST FRIENDSHIP, MD. 21794  
 410-465-2100

**SWM NARRATIVE**

THE STORMWATER MANAGEMENT THIS SITE WAS DESIGNED TO PRESERVE THE NATURAL RESOURCES OF THIS SITE TO THE MAXIMUM EXTENT POSSIBLE. STRUCTURAL PRACTICES HAVE BEEN MINIMIZED WHILE DISCONNECTS AND SHEETFLOW TO CONSERVATION HAVE BEEN UTILIZED THROUGHOUT THE SITE. A 1.26 ACRE FOREST CONSERVATION EASEMENT HAS BEEN ADDED ADJACENT TO THE STREAM BUFFER IN ORDER TO PERPETUALLY PROTECT THE PROPOSED TREE PLANTINGS. IMPERVIOUS AREAS WERE MINIMIZED BY NARROWING DRIVEWAYS AND UTILIZING EXISTING PAVEMENT. SEDIMENT CONTROL FOR THESE LOTS WILL BE ACHIEVED BY USING SUPER SILT FENCE WHICH WILL MINIMIZE DISTURBANCE AND PRESERVE NATURAL SHEETFLOW.

**SITE DATA**

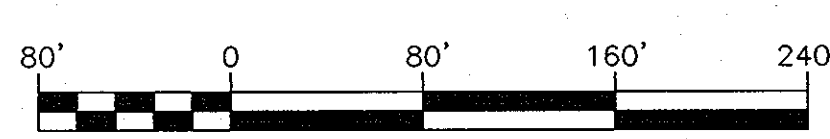
LOCATION: TAX MAP 15, BLOCK 13, PARCEL 116  
 DPZ REFERENCES: L 11857 F.00044  
 3RD ELECTION DISTRICT  
 PRESENT ZONING: RR-DEO  
 GROSS AREA OF PROJECT: 10.48 AC.  
 TOTAL PROJECT AREA: 10.48 AC.  
 LIMIT OF DISTURBANCE: 0.87 AC.  
 PROPOSED IMPERVIOUS AREA: 0.14 AC.  
 PROPOSED USE OF SITE: RESIDENTIAL (SFA)  
 NUMBER OF RESIDENTIAL LOTS PROPOSED: 2 LOTS  
 AREA OF FLOODPLAIN: 4.19 AC.±  
 AREA OF WETLANDS/BUFFER: 3.42 AC.±  
 AREA OF STEEP SLOPES: 0.00 AC.  
 PREVIOUS COUNTY NUMBERS: F-88-86, WP-89-112, F-90-14, WP-11-120

**SOILS LEGEND**

SYMBOL	NAME / DESCRIPTION	GROUP
GcB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	B
GgC	GLENELG LOAM, 8 TO 15 PERCENT SLOPES	B
GgB	GLENVILLE-CODORUS SILT LOAMS, 0 TO 8 PERCENT SLOPES	C
Ho	HATBORO-CODORUS SILT LOAMS, 0 TO 3 PERCENT SLOPES	D

**STREET INDEX**

1	ENVIRONMENTAL CONCEPT PLAN
2	ENVIRONMENTAL CONCEPT PLAN DETAILS



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*[Signature]* 8/21/11  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

*[Signature]* 8/25/11  
 CHIEF, DIVISION OF LAND DEVELOPMENT

NO. \_\_\_\_\_ REVISION \_\_\_\_\_ DATE \_\_\_\_\_

**ENVIRONMENTAL CONCEPT PLAN**  
**ROVER MEADOWS**  
**LOTS 12 AND 13**  
 (L.11857/F.44, PLAT 9607)

TAX MAP 15 GRID 13  
 3RD ELECTION DISTRICT

PARCEL 116, LOT 10  
 HOWARD COUNTY, MARYLAND

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

ZONED: RR-DEO  
 DESIGN BY: JCO  
 DRAWN BY: HS  
 CHECKED BY: RHV  
 DATE: AUGUST 2011  
 SCALE: AS SHOWN  
 W.O. NO.: 09-08

PROFESSIONAL CERTIFICATE  
 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 08-29-2012

1 SHEET OF 2

ROBERT H. VOGEL, PE No.16193

C:\pwworking\robertvogel.com\cadd\p116\116.dwg, 8/25/2011 10:23:41 AM, CADD



FOREST CONSERVATION WORKSHEET  
ROVER MEADOWS

5-Aug-02

NET TRACT AREA:

A. Total tract area ...	10.48
B. Land dedication acres (parks, county facility, etc.) ...	0.00
C. Land dedication for roads or utilities (not being constructed by this plan) ...	0.00
D. Area to remain in commercial agricultural production/use ...	0.00
E. Other deductions (specify) .....	4.19
F. Net Tract Area .....	6.29

LAND USE CATEGORY: (from *Trees Technical Manual*)

Input the number "1" under the appropriate land use, limit to only one entry.

ARA	MDR	IDA	HDR	MPD	CIA
0	1	0	0	0	0

G. Afforestation Threshold ... 20% x F = 1.26  
H. Conservation Threshold ... 25% x F = 1.57

EXISTING FOREST COVER:

I. Existing forest cover .....	0.00
J. Area of forest above afforestation threshold .....	0.00
K. Area of forest above conservation threshold .....	0.00

BREAK EVEN POINT:

L. Forest retention above threshold with no mitigation .....	0.00
M. Clearing permitted without mitigation .....	0.00

PROPOSED FOREST CLEARING:

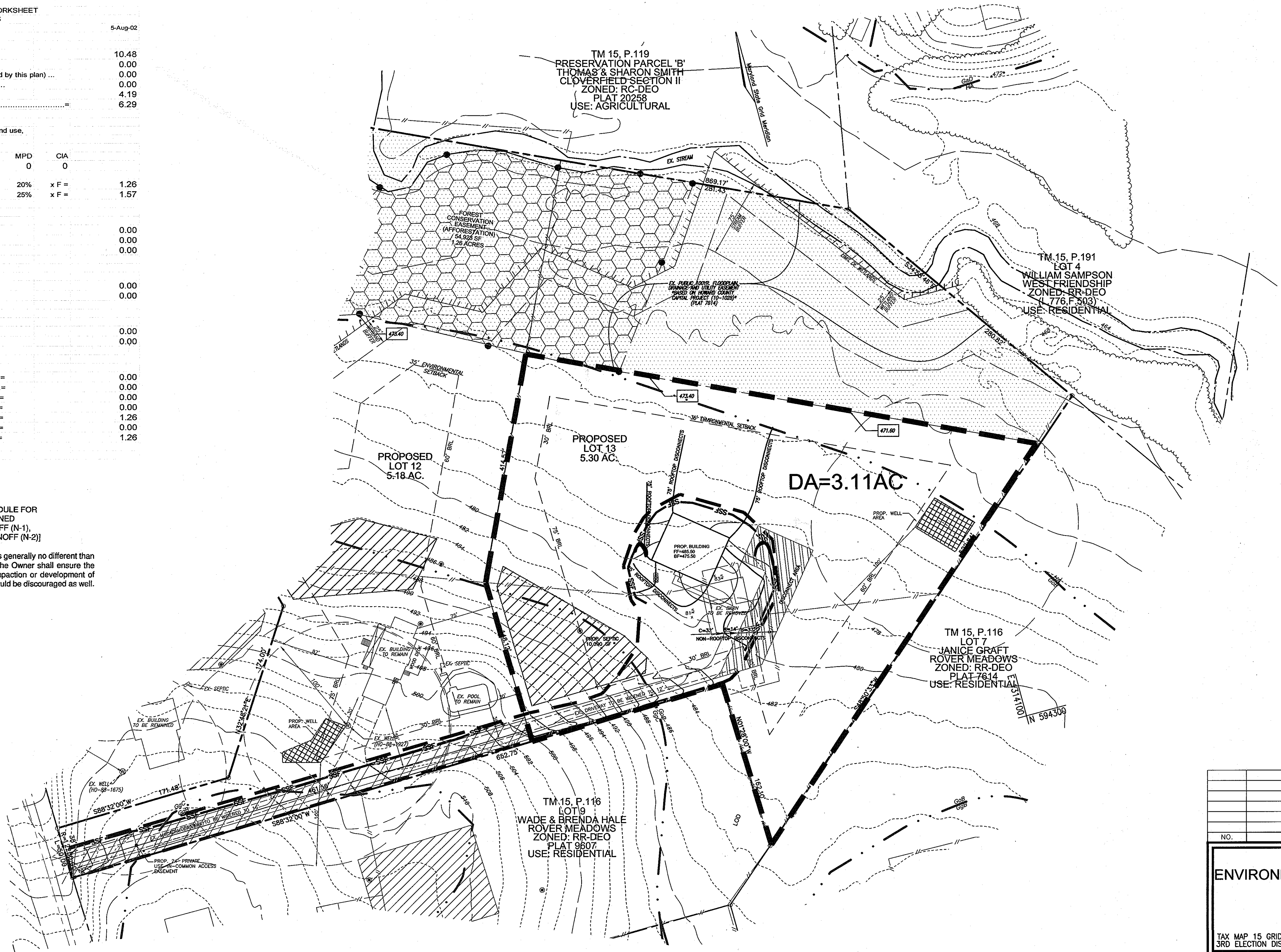
N. Total area of forest to be cleared .....	0.00
O. Total area of forest to be retained .....	0.00

PLANTING REQUIREMENTS:

P. Reforestation for clearing above conservation threshold .....	0.00
Q. Reforestation for clearing below conservation threshold .....	0.00
R. Credit for retention above conservation threshold .....	0.00
S. Total reforestation required .....	0.00
T. Total afforestation required .....	1.26
U. Credit for landscaping (may not exceed 20% of "S") .....	0.00
V. Total reforestation and afforestation required .....	1.26

OPERATION AND MAINTENANCE SCHEDULE FOR  
PRIVATELY OWNED AND MAINTAINED  
DISCONNECTION OF ROOFTOP RUNOFF (N-1),  
DISCONNECTION OF NON-ROOFTOP RUNOFF (N-2)

- a. Maintenance of areas receiving disconnected runoff is generally no different than that required for other lawn or landscaped areas. The Owner shall ensure the areas receiving runoff are protected from future compaction or development of impervious area. In commercial areas, foot traffic should be discouraged as well.



DRAINAGE AREA MAP  
SCALE: 1"=50'

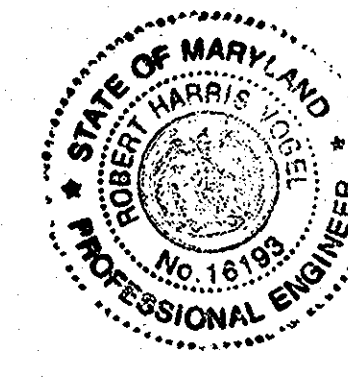
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NO.	REVISION	DATE

ENVIRONMENTAL CONCEPT PLAN DETAILS  
ROVER MEADOWS  
LOTS 12 AND 13  
(L.11857/F.44, PLAT 9607)

TAX MAP 15 GRID 13 PARCEL 116, LOT 10  
3RD ELECTION DISTRICT HOWARD COUNTY, MARYLAND

**ROBERT H. VOGEL ENGINEERING, INC.**  
ENGINEERS • SURVEYORS • PLANNERS  
8407 MAIN STREET ELLICOTT CITY, MD 21043 TEL: 410-461-7666 FAX: 410-461-1861



DESIGN BY: JCO	PROFESSIONAL CERTIFICATE
DRAWN BY: HS	I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A QUALIFIED PROFESSIONAL ENGINEER UNDER THE JURE OF THE STATE OF MARYLAND. EXPIRATION DATE: 08-27-2011
CHECKED BY: RHV	
DATE: AUGUST 2011	
SCALE: AS SHOWN	
W.O. NO.: 09-08	2 SHEET OF 2

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*[Signature]* 8/31/11  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*[Signature]* 8/25/11  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE