

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.
- STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURES AND POLES SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME II (2005) SECTION 5.5.A. A MINIMUM SPACING OF 20' SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE.
- COORDINATE BASED ON NAD 83, MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 17EB AND NO. 17DB.
- THE PROJECT BOUNDARY IS BASED ON A FIELD RUN BOUNDARY SURVEY PREPARED BY ROBERT H. VOGEL ENGINEERING, INC. IN FEBRUARY 2010.
- THE TOPOGRAPHY SHOWN ON THIS PLAN IS BASED ON FIELD RUN TOPO PREPARED BY ROBERT H. VOGEL ENGINEERING, INC. IN FEBRUARY 2010.
- WATER AND SEWER SERVICE WILL BE GRANTED UNDER THE PROVISIONS OF SECTION 18.122B OF THE HOWARD COUNTY CODE. PUBLIC WATER AND PUBLIC SEWER ALLOCATION WILL BE GRANTED AT TIME OF THE ISSUANCE OF THE BUILDING PERMIT IF CAPACITY IS AVAILABLE AT THE TIME.
- THERE IS NO FLOODPLAIN ON THIS SITE.
- THE WETLANDS SHOWN ON SITE WERE DELINEATED BY ECO SCIENCE PROFESSIONALS, INC.
- THIS SITE IS NOT LOCATED IN A HISTORIC DISTRICT.
- SUBJECT PROPERTY ZONED R-20 PER 2/02/04 COMPREHENSIVE 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:
a) WIDTH - 12 FEET (16 FEET SERVING MORE THAN ONE RESIDENCE).
b) SURFACE - 6 INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CLIP COATING.
c) GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% CHANGE AND MINIMUM OF 45-FOOT DEPTH TURNING RADIUS.
d) STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H2S LOADING).
e) DRAINAGE ELEMENTS-CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE.
f) STRUCTURE CLEARANCES-MINIMUM 12 FEET.
g) 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 PROJECT ARE ADDRESS ON THIS PLAN.
A) THERE IS 1.43 AC OF FOREST FOUND ON THIS SITE. 1.15 AC WILL BE RETAINED.
B) THERE ARE NO FOREST CONSERVATION OBLIGATIONS TO BE FULFILLED, NO FEE-IN-LIEU WILL BE REQUIRED FOR THIS PROJECT PER SECTION 16.1200 OF THE HOWARD COUNTY FOREST CONSERVATION MANUAL.
- STORM WATER MANAGEMENT ADDRESSED FOR SITE USING 2007 MARYLAND STORMWATER DESIGN MANUAL (CHAPTER 5).
A. CHANNEL PROTECTION VOLUME (CP-V) IS NOT REQUIRED (P_o FOR ENTIRE SITE IS EQUAL TO OR UNDER 1.0")
B. WATER QUALITY VOLUME (WQV) AND RECHARGE VOLUME (REV) TO BE PROVIDED BY ROOFTOP DISCONNECT, NON ROOFTOP DISCONNECTS AND LEVEL SPREADERS.
- THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS (COUNCIL BILL 45-2003).
- PROPOSED LOTS 1 AND 2 WILL HAVE SEWER SERVICE ONLY TO THE FIRST FLOOR ELEVATIONS. A GRINDER PUMP SYSTEM WILL BE REQUIRED TO SEWER EITHER BASEMENT.
- THE EXISTING DWELLING ON LOT 3 IS SERVED BY A PRIVATE SEPTIC SYSTEM PRESENTLY. THIS SYSTEM WILL BE DISCONNECTED AND ABANDONED PER THE HEALTH DEPARTMENT'S REGULATIONS. A PROPOSED 4" S/C WILL CONNECT THE EXISTING DWELLING TO THE PUBLIC SEWER FOUND IN OLD MILL ROAD.
- PUBLIC SEWER SERVICE WILL BE PROVIDED UNDER CONTRACT 738-S-B AND WATER SERVICE WILL BE PROVIDED UNDER CONTRACT 24-1742-D
- ALL FOREST ON THIS SITE IS WITHIN STAND F-1
- NO RARE, THREATENED OR ENDANGERED SPECIES WERE OBSERVED ON THE PROPERTY
- SURROUNDING LAND USE IS PRIMARILY HIGH DENSITY RESIDENTIAL DEVELOPMENT
- THIS PLAN HAS BEEN PROVIDED TO ADDRESS THE MAPPING REQUIREMENTS OF A SIMPLIFIED FOREST STAND DELINEATION
- NO SPECIMEN TREES OVER 30" DBH WILL BE REMOVED DURING THE DEVELOPMENT OF THESE LOTS.
- THE DESIGN OF THE STORMWATER MANAGEMENT OF THIS SITE IS INTENDED TO PRESERVE THE NATURAL RESOURCES OF THE SITE AND SURROUNDING AREA. THE SITE RUNOFF IS TREATED BY DISCONNECTS AND SHEETPILE INTO BUFFERS THAT WILL BE PROTECTED BY EASEMENT TO INSURE THEY REMAIN INTACT IN THE FUTURE.

DESIGN NARRATIVE

THE STORMWATER MANAGEMENT FOR THIS SITE WAS DESIGNED TO PRESERVE THE NATURAL RESOURCES OF THIS SITE TO THE MAXIMUM EXTENT POSSIBLE. STRUCTURAL PRACTICES HAVE BEEN MINIMIZED WHILE NON-STRUCTURAL DISCONNECTS AND LEVEL SPREADERS HAVE BEEN UTILIZED THROUGHOUT THE SITE. A LARGE FOREST CONSERVATION EASEMENT HAS BEEN ADDED ADJACENT TO THE STREAM UPSTREAM THE SITE. THIS WILL ALLOW THIS NATURAL AREA TO REMAIN IN TRACT FOR YEARS TO COME AND PROVIDE WATER QUALITY MEASURES WELL INTO THE FUTURE. IMPERVIOUS AREAS WERE MINIMIZED BY NARROWING DRIVEWAYS, UTILIZING EXISTING PAVEMENT AND USING PERVIOUS PAVEMENT ON THE PLANTER DRIVEWAY LOCATIONS. SEWERING CONTROL FOR THESE LOTS WILL BE ACHIEVED BY USING SUPER SILT FENCE WHICH WILL MINIMIZE DISTURBANCES AND PRESERVE NATURAL SHEETFLOW. LOT 3 HAS NO STORMWATER MANAGEMENT TREATMENT BECAUSE OF ITS EXISTING DWELLING ON SITE AND NO ADDITIONAL PAVEMENT IS PROPOSED FOR THIS LOT. LOTS 1 & 2 HAVE A COMBINATION OF ROOFTOP DISCONNECTS AND NON-ROOFTOP DISCONNECTS. ALL THESE MEASURES USED ON THESE LOTS ARE INTENDED TO WORK IN CONJUNCTION WITH THE NATURAL FEATURES FOUND ON THE SITE AND MINIMIZE DISTURBANCE OF THE EXISTING PROPERTY.

FOREST CONSERVATION WORKSHEET 2.2

NET TRACT AREA	A = 2.96				
A. TOTAL TRACT AREA	B = 0.00				
B. DEDUCTIONS	C = 2.96				
C. NET TRACT AREA					
LAND USE CATEGORY					
INPUT THE NUMBER "1" UNDER THE APPROPRIATE LAND USE ZONING, AND LIMIT TO ONLY ONE ENTRY					
ARA	MDR	IDA	HDR	MPD	CIA
0	0	0	0	0	0
D. AFFORESTATION THRESHOLD (NET TRACT AREA X 15%)	D = 0.44				
E. CONSERVATION THRESHOLD (NET TRACT AREA X 20%)	E = 0.59				
F. EXISTING FOREST COVER	F = 1.43				
G. AREA OF FOREST ABOVE CONSERVATION THRESHOLD	G = 0.84				
H. BREAK EVEN POINT	H = 0.76				
I. FOREST CLEARING PERMITTED WITHOUT MITIGATION	I = 0.67				
J. TOTAL AREA OF FOREST TO BE CLEARED	J = 0.28				
K. TOTAL AREA OF FOREST TO BE RETAINED	K = 1.15				
L. REFORESTATION FOR CLEARING ABOVE THE CONSERVATION THRESHOLD	L = 0.07				
M. REFORESTATION FOR CLEARING BELOW THE CONSERVATION THRESHOLD	M = 0.00				
N. CREDIT FOR RETENTION ABOVE THE CONSERVATION THRESHOLD	N = 0.56				
O. TOTAL REFORESTATION REQUIRED	O = 0.00				
P. TOTAL AFFORESTATION REQUIRED	P = 0.00				
R. TOTAL PLANTING REQUIREMENT	R = 0.00				

SITE DATA

LOCATION: TAX MAP 17, PARCEL 233
DEED REFERENCE: L 12038/F 228
2ND ELECTION DISTRICT
EXISTING ZONING: R-20
PER THE COMPREHENSIVE ZONING PLAN DATED 2/02/04.
GROSS AREA OF PARCEL: 2,964 AC.
AREA OF LIMIT OF DISTURBANCE: 0.693 AC.
AREA OF RIGHT OF WAY:
AREA OF FLOODPLAIN: N/A
AREA OF STEEP SLOPES: N/A
NET AREA OF PROJECT: 2.96 AC
NUMBER OF RESIDENTIAL LOTS PROPOSED: 3
AREA OF PROPOSED RESIDENTIAL LOTS: 2,964 AC.
AREA OF SMALLEST BUILDABLE LOT PROPOSED: 20,134 SF
NUMBER OF PROPOSED OPEN SPACE LOTS: 0
NUMBER OF NON-BUILDABLE BULK PARCELS: 0

ENVIRONMENTAL CONCEPT PLAN

GILBERT PROPERTY

LOTS 1, 2, AND 3

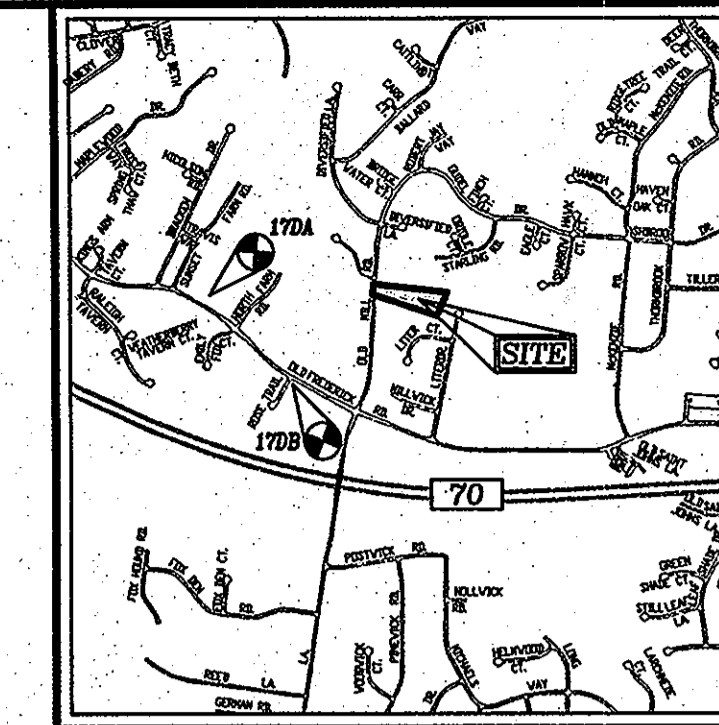
L 12038 / F 228

LEGEND

- RIGHT-OF-WAY LINE
- BOUNDARY LINE
- ADJACENT BOUNDARY LINE
- EXISTING CONTOUR
- EXISTING TREETRINE
- EXISTING UTILITY POLE
- EXISTING SIGN
- SOILS
- EXISTING 20" SEWER EASEMENT
- PROPOSED USE-IN-COMMON ACCESS EASEMENT
- EXISTING WETLAND
- PROPOSED TREES
- LIMIT OF DISTURBANCE
- SPECIMEN TREES
- MODERATE SLOPES (15%-24.99%)
- STEEP SLOPES (25% & OVER)
- RAIN BARREL
- LEVEL SPREADER

BENCHMARKS

HOWARD COUNTY BENCHMARK 17DB (CONC. MON.)
N 594,529.4687 E 1,352,722.6064
HOWARD COUNTY BENCHMARK 17DA (CONC. MON.)
N 595,410.7731 E 1,351,641.1102



VICINITY MAP

SCALE: 1"=2,000'
ADC MAP COORDINATE: 4815 D2

FOREST STAND DATA

KEY	COMMUNITY TYPE	ACREAGE	DOMINANT VEGETATION	GENERAL CONDITION	PRIORITY ACREAGE
F-1	OAK/POPLAR	1.4	QUERCUS ALBA, LIRIODENDRON TULIPIFERA, PRUNUS SEROTINA, ACER RUBRUM, ROSA MULTIFLORA, LINDERA BENZON.	GOOD	1.2 ± BUFFERS

COORDINATE TABLE

NO.	NORTH	EAST
105	595453.7063	1353518.0930
106	595550.5281	1353524.8361
512	595480.8238	1354264.8538
10649	595238.9982	1354160.8332

SOILS LEGEND

SYMBOL	NAME/DESCRIPTION	TYPE
GnB	GLENVILLE-BAILE SILT LOAM, 0 TO 8 PERCENT SLOPES	C
GhB	GLENELG-URBAN LAND COMPLEX, 0 TO 8 PERCENT SLOPES	B
MoD	MANOR LOAM, 15 TO 25 PERCENT SLOPES	B

OWNER

STUART D. GILBERT
9955 OLD MILL RD
ELLCOTT CITY, MD, 21042

NO.	REVISION	DATE

ENVIRONMENTAL CONCEPT PLAN

GILBERT PROPERTY
LOTS 1, 2, AND 3
L 12038 / F 228
R-20 ZONING

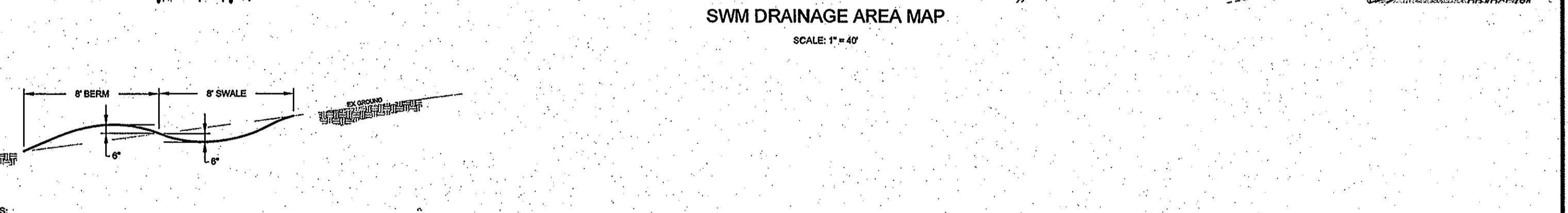
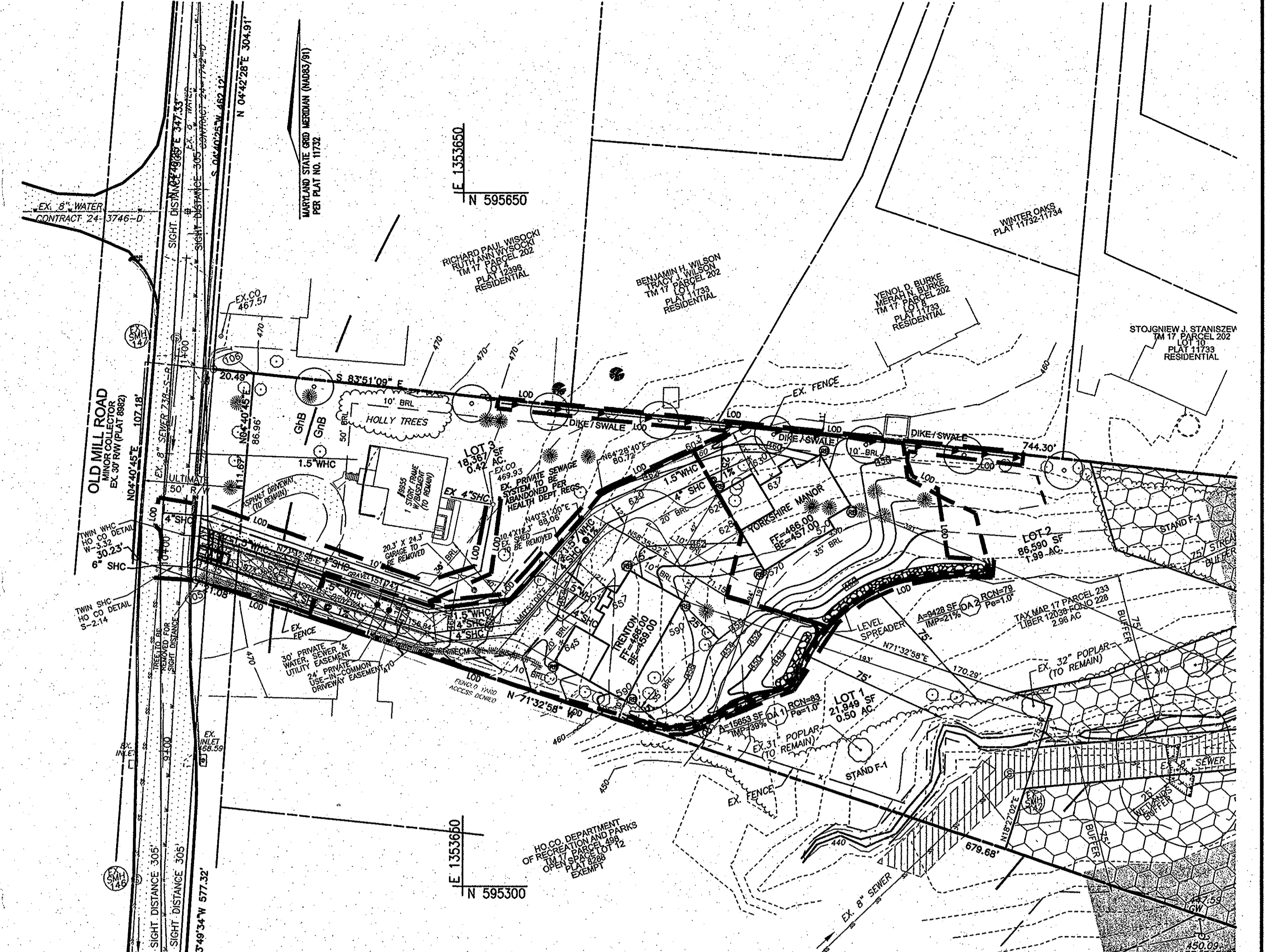
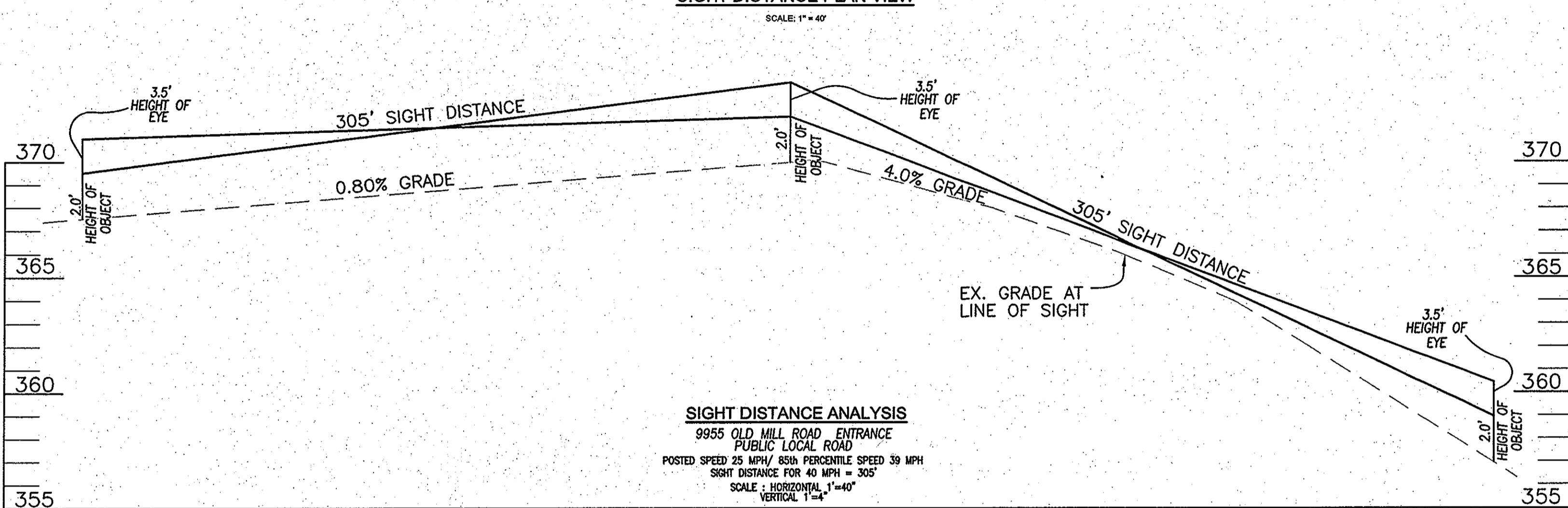
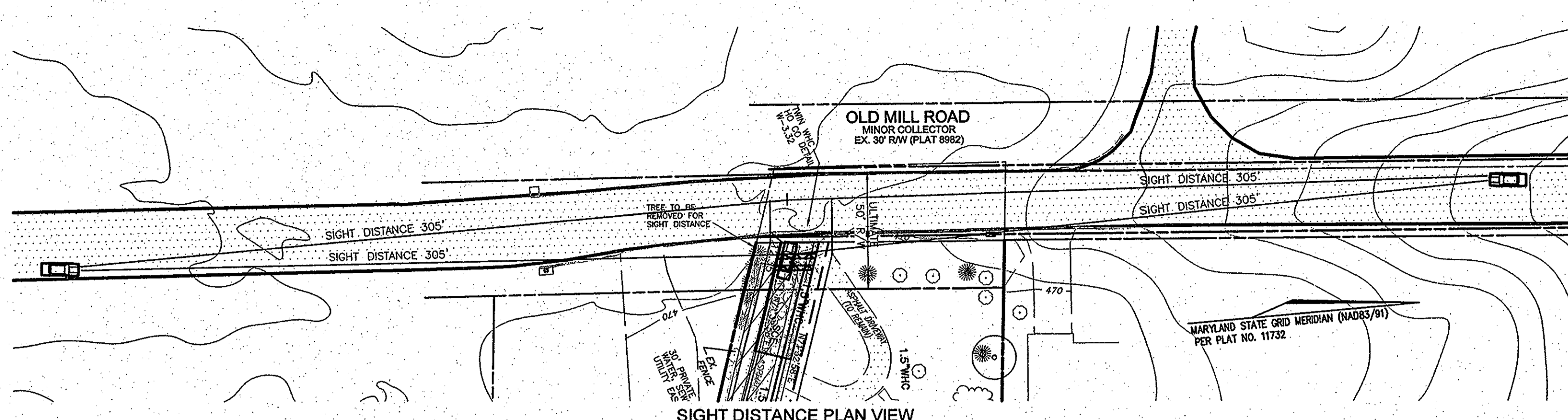
TAX MAP 17 BLOCK 8 PARCEL 233
2 ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
9407 MAIN STREET TEL: 410.461.7666
ELLCOTT CITY, MD 21043 FAX: 410.461.8961



DESIGN BY: RHV
DRAWN BY: KG
CHECKED BY: RHV
DATE: JUNE 2010
SCALE: 1" = 40'
W.O. NO.: 09-44

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: 09-27-2012.



OWNER
 STUART D. GILBERT
 9955 OLD MILL RD
 ELLICOTT CITY MD, 21042

NO.	REVISION	DATE

**ENVIRONMENTAL CONCEPT PLAN
 STORMWATER MANAGEMENT DETAILS**
**GILBERT PROPERTY
 LOTS 1, 2 & 3**
 L 12038 / F 228
 ZONED R-20

TAX MAP 17 BLOCK 8
 2 ND ELECTION DISTRICT

PARCEL 233
 HOWARD COUNTY, MARYLAND

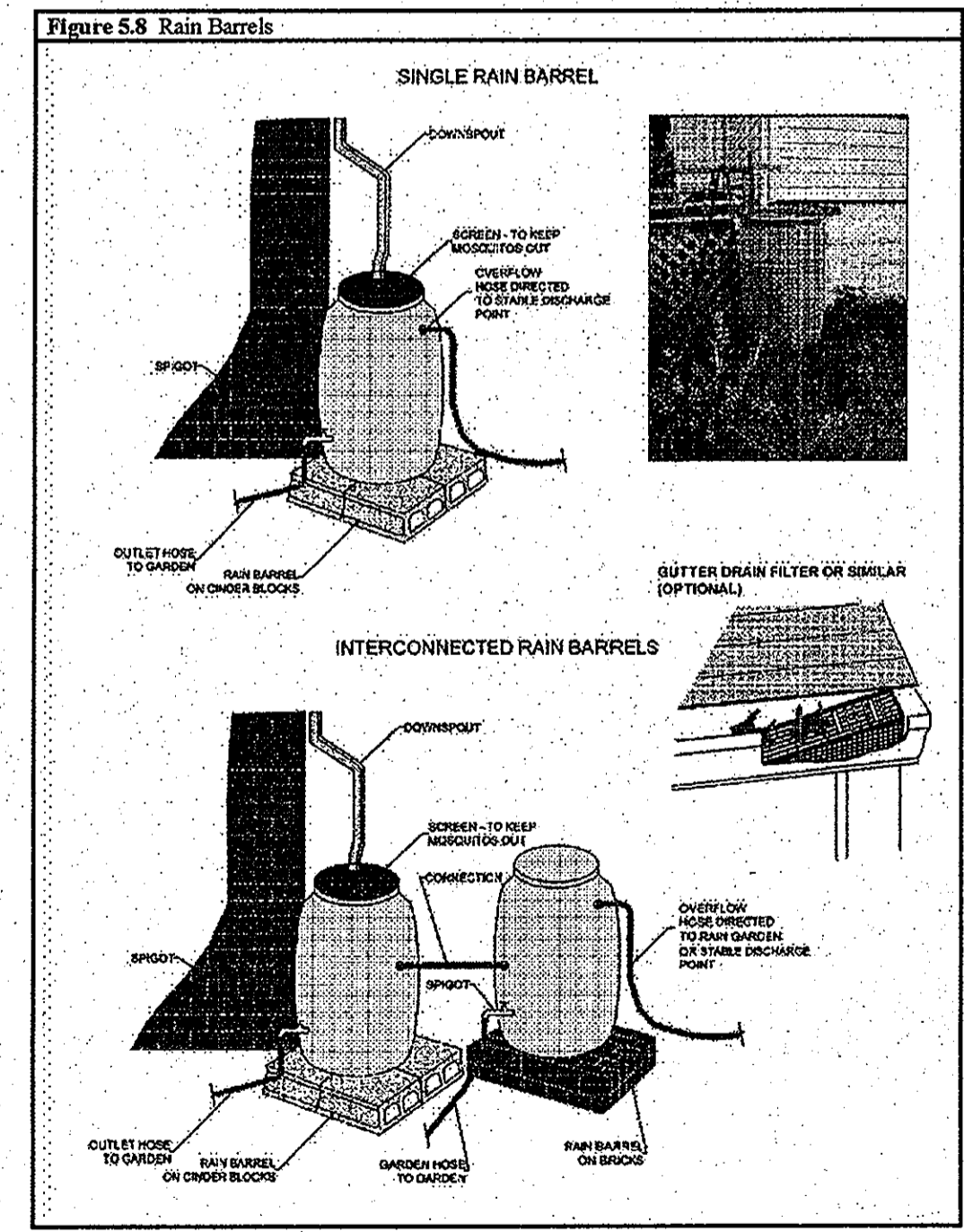
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 FAX: 410.481.8981

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. 16183, EXPIRATION DATE: 09-27-2010.

DESIGN BY: JTD
 DRAWN BY: JTD
 CHECKED BY: RHV
 DATE: JUNE 2010
 SCALE: 1"=50'
 W.O. NO.: 09-44

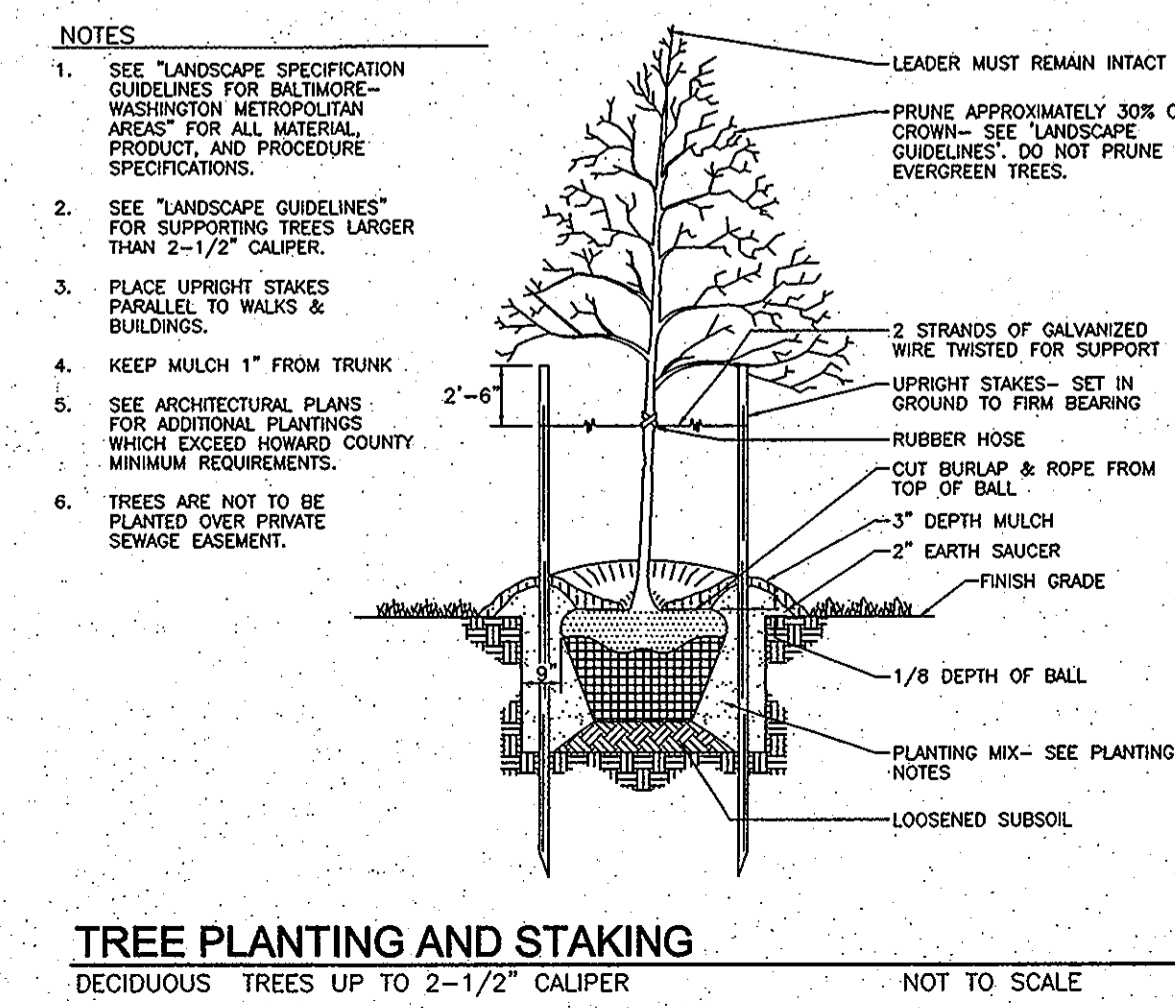
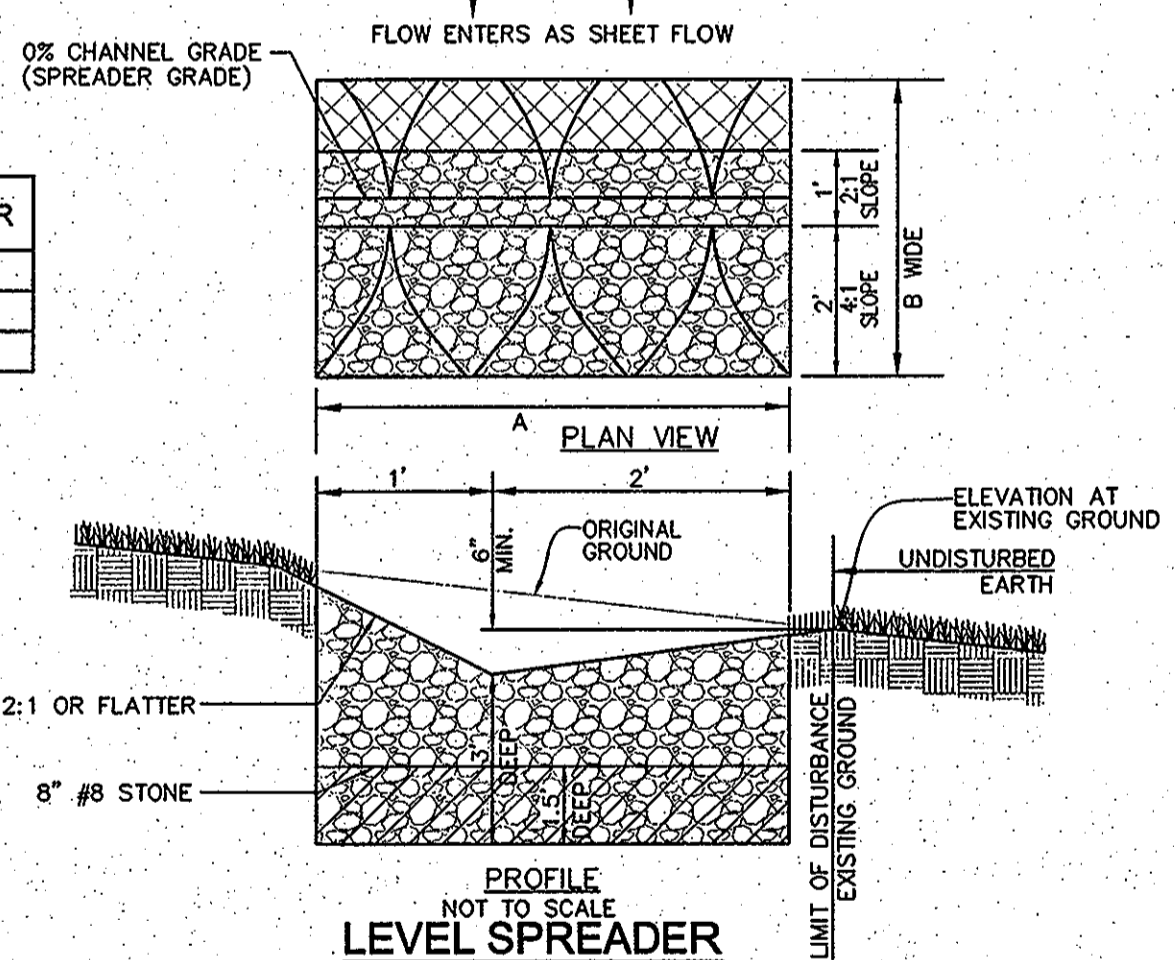
2 SHEET OF 2

Chapter 5. Environmental Site Design.....Nonstructural and Micro-Scale Practices

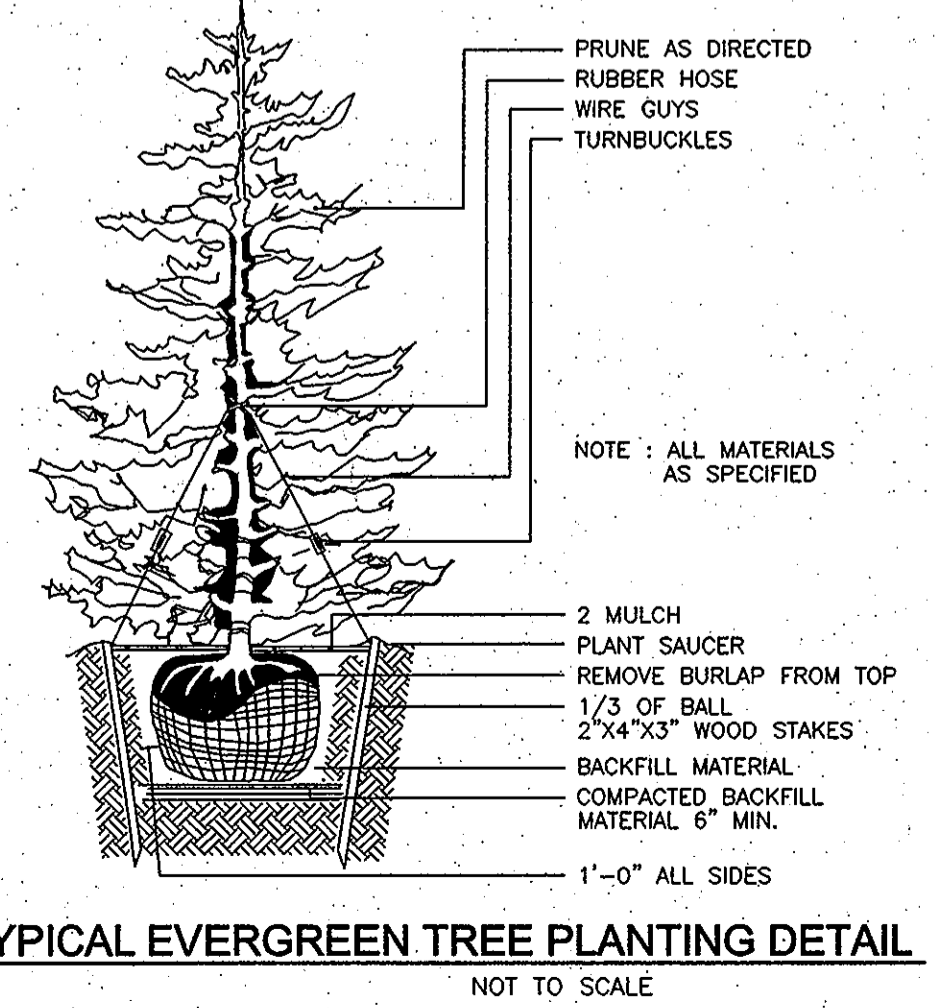


Supp. 1 5.74

LOT	A	B
1	31'	3'
2	87'	3'



TREE PLANTING AND STAKING
 DECIDUOUS TREES UP TO 2-1/2" CALIPER
 NOT TO SCALE



TYPICAL EVERGREEN TREE PLANTING DETAIL
 NOT TO SCALE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 [Signature] 1/20/11
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
 [Signature] 1/14/11
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE