

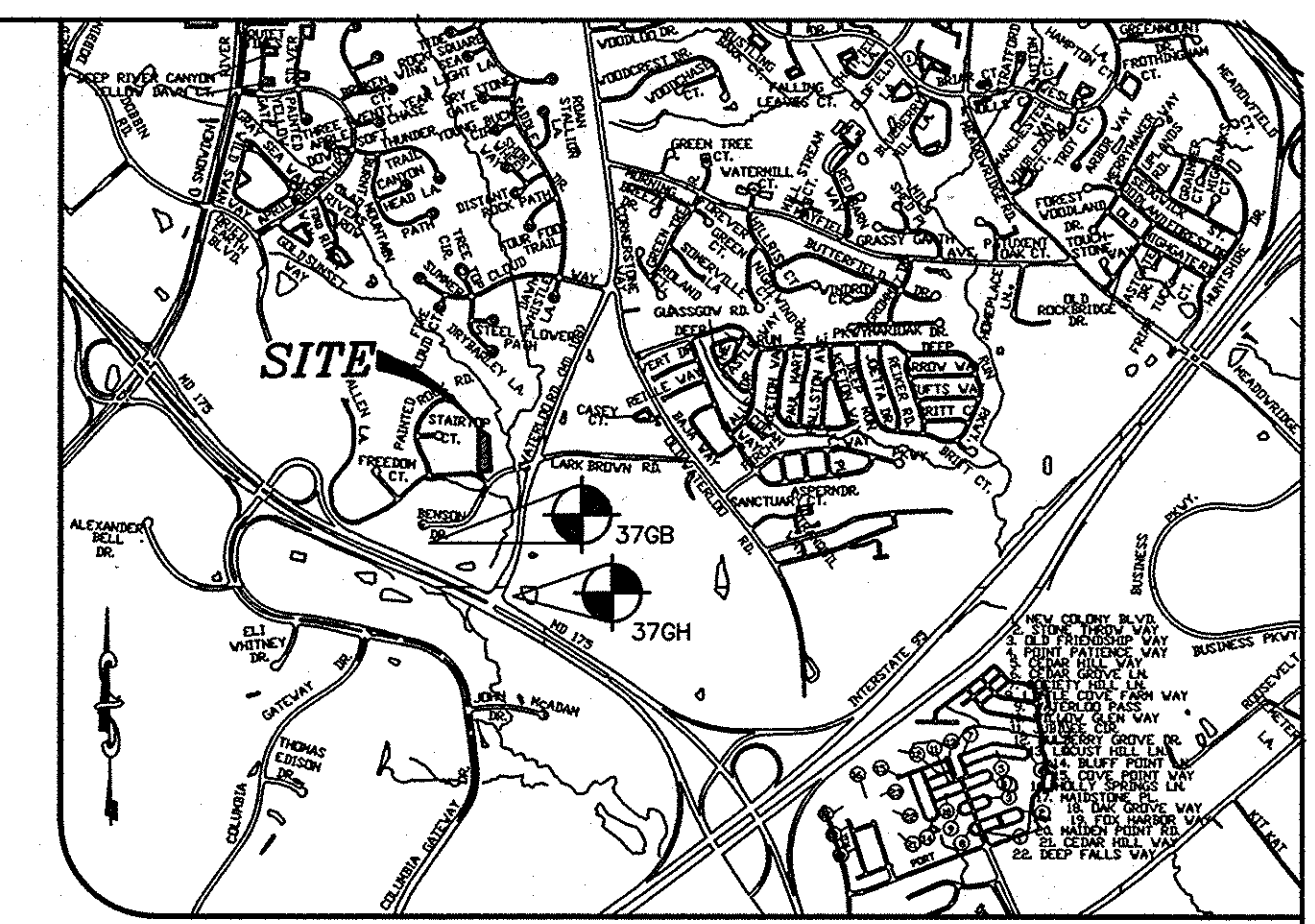
**SITE ANALYSIS DATA:**

- AREA OF THE SITE = 1.03 AC ±  
LIMIT OF DISTURBANCE (LOD) = 1.00 AC ± (INCLUDING OFFSITE)
- AREA OF ROAD DEDICATION = 0 AC
- AREA OF WETLANDS AND ITS BUFFERS (WITHIN LOD) = 0 AC
- AREA OF FLOODPLAIN (WITHIN LOD) = 0  
AREA OF 35' ENVIRONMENTAL SETBACK (FLOODPLAIN, WITHIN LOD) = 0
- AREA OF STREAM BUFFER (WITHIN LOD) = 0 AC
- AREA OF STEEP SLOPES (15% OR GREATER WITHIN LOD FOR A VERTICAL DISTANCE OF 10 FEET OR MORE) = 0 AC  
NO STEEP SLOPES WITH A CONTIGUOUS AREA OF 20,000 SF OR GREATER WILL BE DISTURBED.
- AREA OF FOREST (WITHIN LOD) = 0 AC
- TOTAL ENVIRONMENTAL SENSITIVE AREA\* (WITHIN LOD) = 0 AC
- THIS SITE CONTAINS URBAN LAND-SASSAFRAS-BELTSVILLE SOILS WHICH ARE HIGHLY ERODIBLE WHERE THE SLOPE EXCEEDS 5% AND EXCAVATED TO A DEPTH OF TWO FEET OR LESS OR WHERE THE SLOPE EXCEEDS 15 PERCENT.  
AREA OF HIGHLY ERODIBLE SOILS = 1.03 AC ±
- THREE (3) DETACHED SINGLE-FAMILY RESIDENTIAL UNITS ARE PROPOSED.
- TOTAL IMPERVIOUS AREA: 0.35 AC / 15,225 SF  
BUILDINGS AND DECKS: 0.15 AC / 6,750 SF  
DRIVEWAYS (UC): 0.12 AC / 5,253 SF  
DRIVEWAYS (LOT): 0.06 AC / 2,496 SF  
DRIVEWAY (PARCEL 470): 0.02 AC / 726 SF
- GREEN OPEN AREA = 0.68 AC ±

**ESD NARRATIVE**

- NO NATURAL RESOURCES SUCH AS STEEP SLOPES, WETLANDS, STREAMS, OR VALUABLE FOREST LAND EXIST ON-SITE. THE PROPOSED NON-ROOFTOP DISCONNECTION AND MICRO-BIORETENTION FACILITIES WILL PROVIDE STORMWATER QUALITY TREATMENT FOR THE NEW DEVELOPMENT, WHICH WILL BE AN IMPROVEMENT OVER EXISTING CONDITIONS. NO TREATMENT EXISTS FOR THE EXISTING FRAME GARAGE, WHICH WILL BE REMOVED AS PART OF THIS PROJECT.
- THE IMPROVEMENTS AND DEVELOPED AREA WILL MAINTAIN THE EXISTING DRAINAGE PATTERNS AS CLOSELY AS POSSIBLE. NO IMPACT IS PROPOSED THAT WOULD SIGNIFICANTLY ALTER ANY NATURAL FLOW PATTERNS.
- THE USE OF NON-STRUCTURAL PRACTICES (N-1, N-2) WAS INVESTIGATED AND REJECTED DUE TO THE STEEPNESS OF THE EXISTING TOPOGRAPHY AND THE SMALL SIZE OF THE LOTS, WITH THE EXCEPTION OF ONE AREA OF LOT 3'S DRIVEWAY THAT WILL UTILIZE NON-ROOFTOP DISCONNECTION. ALTERNATIVE SURFACES SUCH AS PERVIOUS CONCRETE (A-2) AND STRUCTURES SUCH AS DRY WELLS (M-5) ARE NOT FEASIBLE FOR THIS PROJECT DUE TO THE EXTENT OF TYPE 'D' SOILS ON THE SITE.
- THE REQUIRED EROSION AND SEDIMENT CONTROL MEASURES WILL BE IN ACCORDANCE WITH THE LATEST MDE STANDARDS AND SPECIFICATIONS UTILIZING SILT FENCES AND SUPER SILT FENCES. NO CONCENTRATION FLOW IS PROPOSED. NO SEDIMENT TRAPS OR BASINS ARE REQUIRED.
- TABLE 5.2, SUMMARY OF SITE DEVELOPMENT STRATEGIES WAS UTILIZED TO THE EXTENT ALLOWABLE BY THE CURRENT HOWARD COUNTY ZONING AND LAND DEVELOPMENT REGULATIONS BY UTILIZING SHARED DRIVEWAY AND MINIMIZING EARTH DISTURBANCE.
- IN DESIGNING THIS PROJECT, AND AFTER WE PLAN THE PROJECT TO MINIMIZE IMPERVIOUS AREAS, WE UTILIZED ESD MEASURES IN THE FOLLOWING ORDER OF PREFERENCE:  
A. NON-ROOFTOP DISCONNECTION (N-2)  
B. MICRO-SCALE PRACTICES (M-6)

EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THIS PLAN ARE CONCEPTUAL. ADDITIONAL MEASURES WILL BE SHOWN ON BOTH THE FINAL PLANS AND SITE DEVELOPMENT PLANS.



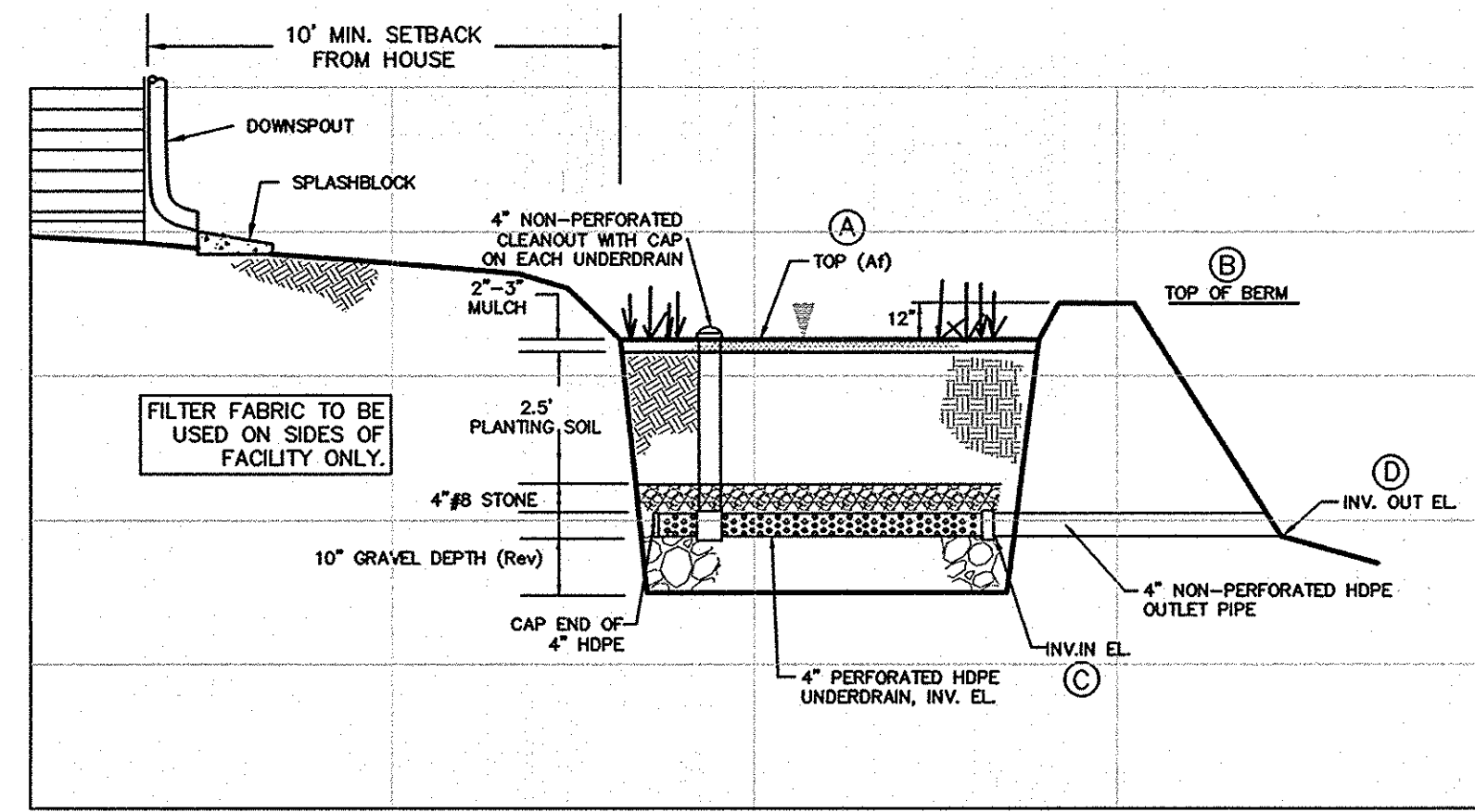
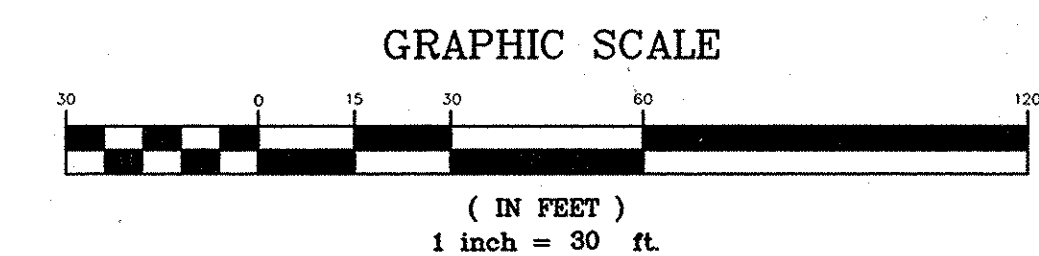
**VICINITY MAP**  
SCALE: 1"=200'  
ADC MAP: 34 GRID: B4, B5

**NOTES:**

- SITE ANALYSIS DATA:  
LOCATION: TAX MAP: 37 GRID: 20 PARCEL: 508  
ELECTION DISTRICT: SIXTH  
ZONING: R-12  
TOTAL AREA: 1.03 AC ±  
LIMIT OF DISTURBED AREA: 1.00 AC ± (INCLUDING OFFSITE)  
PROPOSED USE FOR SITE: RESIDENTIAL  
TOTAL NUMBER OF UNITS: 3  
TYPE OF PROPOSED UNIT: SFD  
DEED REFERENCE: L 15408, F 409  
PREVIOUS DPZ NUMBERS: NONE
- HORIZONTAL AND VERTICAL DATUMS ARE RELATED TO THE MARYLAND STATE PLANE COORDINATE SYSTEM AS PROJECTED FROM HOWARD COUNTY CONTROL STATIONS NO. 376B & 376H  
STA. No. 376B N 553,452.821 E 1,368,503.169 EL. 325.209  
STA. No. 376H N 552,861.799 E 1,369,532.680 EL. 283.769
- THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS (COUNCIL BILL 45-2003). 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/GRADING PERMIT.
- SITE DEVELOPMENT PLAN APPROVAL BY THE DEPARTMENT OF PLANNING AND ZONING IS REQUIRED PRIOR TO BUILDING PERMITS BEING ISSUED FOR THE CONSTRUCTION OF RESIDENTIAL DWELLINGS ON THESE LOTS.
- THIS DEVELOPMENT IS DESIGNED TO BE IN ACCORDANCE WITH SECTION 16.127 RESIDENTIAL INFILL DEVELOPMENT OF SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. THE DEVELOPERS OF THIS PROJECT SHALL CREATE COMPATIBILITY WITH THE EXISTING NEIGHBORHOOD THROUGH THE USE OF ENHANCED PERIMETER LANDSCAPING, BERMS, FENCES, SIMILAR HOUSING UNIT TYPES AND THE DIRECTIONAL ORIENTATION OF THE PROPOSED HOUSES.
- BOUNDARY SHOWN HEREON IS BASED ON FIELD RUN SURVEY BY MILDENBERG, BOENDER AND ASSOC. IN MARCH, 2014.
- ONSITE TOPOGRAPHY SHOWN HEREON IS BASED ON FIELD RUN SURVEY BY MILDENBERG, BOENDER AND ASSOCIATES INC. IN MARCH, 2014. OFFSITE TOPOGRAPHY BASED ON HOWARD COUNTY GIS.
- FOREST CONSERVATION OBLIGATIONS IN ACCORDANCE WITH SECTION 16.120 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION ACT FOR THIS SUBDIVISION WILL BE FULFILLED BY PAYMENT OF FEE-IN-LIEU.
- THIS SITE IS NOT LOCATED IN A HISTORIC DISTRICT.
- BASED ON A FIELD VISIT PERFORMED ON APRIL 2, 2014, IT WAS DETERMINED THAT NO FOREST STANDS OF 10,000 SQUARE FEET OR LARGER EXIST ONSITE.
- BASED ON A FIELD VISIT PERFORMED ON APRIL 2, 2014, IT WAS DETERMINED THAT NO WETLANDS EXIST ONSITE.
- NO AREAS OF 100-YEAR FLOODPLAIN EXIST ONSITE.
- APPROVAL OF THIS ECP DOES NOT CONSTITUTE AN APPROVAL OF SUBSEQUENT SUBDIVISION OR SITE DEVELOPMENT PLANS. FURTHER COMMENTS WILL BE GENERATED UPON REVIEW OF THE APPLICABLE DEVELOPMENT PLANS IN ACCORDANCE WITH THE SUBDIVISION AND ZONING REGULATIONS.

**LEGEND**

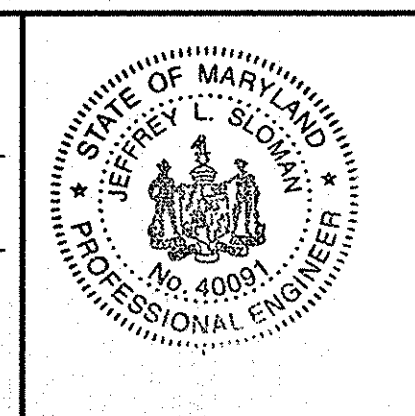
- IMPERVIOUS AREA TREATED BY M-6, MICRO-BIORETENTION
- IMPERVIOUS AREA TREATED BY N-2, NON-ROOFTOP DISCONNECTION
- AREA OF N-2, NON-ROOFTOP DISCONNECTION
- ROOF DRAIN LEADER
- PRIVATE 28' USE-IN-COMMON ACCESS, DRAINAGE & UTILITY EASEMENT FOR THE USE AND BENEFIT OF LOTS 1, 2, AND 3.
- 5.2'± WIDE EASEMENT AREA TO BE OBTAINED FOR USE AS A PRIVATE USE-IN-COMMON ACCESS & UTILITY EASEMENT FOR THE USE AND BENEFIT OF LOTS 1-3.
- EXISTING TREELINE
- PROPOSED TREELINE
- 4" SHC SEWER HOUSE CONNECTION
- 4" WMC WATER HOUSE CONNECTION
- STABILIZED CONSTRUCTION ENTRANCE
- SUPER SILT FENCE
- CHECK DAM (FOR EROSION CONTROL ONLY - CHECK DAMS WILL NOT BE USED FOR STORMWATER MANAGEMENT)
- EARTH DIKE



**MICRO-BIORETENTION (M-6) DETAIL**  
NOT TO SCALE

**OWNER / DEVELOPER**  
FARAMARZ SADEGHI-BAJIRAN  
6043 MAJORS LANE, APT 5  
COLUMBIA, MARYLAND 21045  
(443)825-8507

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
DATE: 5/21/14  
DATE: 5/20/14



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. 40091, EXP DATE 2/13/15.  
DATE: 5/14/14  
JEFFREY SLOVAN, P.E.

**SWM PRACTICES SCHEDULE**

AREA	ESD METHOD	TREATED AREA TYPE	ESDv (REQ)	(PROVIDED)
LOT 1	MICRO-BIORETENTION (M-6) FACILITIES MB-A1, MB-A2	HOUSE, DRIVEWAY, UIC DRIVEWAY		854 CF
LOT 2	MICRO-BIORETENTION (M-6) FACILITY MB-B	HOUSE, DRIVEWAY, UIC DRIVEWAY		632 CF
LOT 3	MICRO-BIORETENTION (M-6) FACILITIES MB-C1, MB-C2	HOUSE, DRIVEWAY, UIC DRIVEWAY		644 CF
USE-IN-COMMON DW	MICRO-BIORETENTION (M-6) FACILITIES MB-A2, MB-B, MB-C1	NON-ROOFTOP DISCONNECTION (N-2)	2,130 CF	2,130 CF
TOTAL				

**SOILS DESCRIPTION**

SYMBOL	HYDROLOGICAL DESCRIPTION GROUP	Kw	Kf	MAP
U8B	URBAN LAND-SASSAFRAS-BELTSVILLE COMPLEX U-8B	0.37	0.37	19
U8D	URBAN LAND-SASSAFRAS-BELTSVILLE COMPLEX U-8D	0.37	0.37	19

**MILDENBERG, BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors  
6800 Deerpath Road, Suite 150, Ellicottville, Maryland 21075  
(410) 997-0286 Fax: (410) 997-0288 Fax.

**FAZ PROPERTY**  
LOTS 1 THRU 3, SINGLE FAMILY DETACHED  
TAX MAP 37, PARCEL 508, GRID 20  
SIXTH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
ENVIRONMENTAL CONCEPT PLAN

date: APR 2014  
project: 14-005  
illustration: engineering  
scale: JLS  
approval: JLS  
revision: MMB  
date: 1"=30'

1 OF 1  
ECP-14-075