1	inimum i	Lot	Size	e Chi	art	
LOT No.	GROSS AREA		PIPES ARE			MUM SIZE
2	7,504 SQ.FT	,	1,472	5Q.FT.	6,032	SQ.FT.
3	8,198 5Q.FT		1,858	5Q.FT.	6,340	5Q.FT.
4	8,285 SQ.FT	. 7	2,272	5Q.FT.	6,013	SQ.FT.

5	tormwater manageme	ENT PRACTICES
LOT No.	ADDRE55	MICRO-BIORETENTION M-6 (NUMBER)
1	9300 OLD SCAGGSVILLE ROAD	0
2	9298 OLD SCAGGSVILLE ROAD	1
3	9296 OLD SCAGGSVILLE ROAD	1
4	9294 OLD SCAGGSVILLE ROAD	1
Jacobs.	USE-IN-COMMON DRIVEWAY	1

# DESIGN NARRATIVE

This report will demonstrate how the criteria set forth in the Maryland Stormwater Design Manual, Volumes I and II (effective October 2000, revised May 2009) will be satisfied on this project. The goal of creating hydrology similar to that of "Woods in Good Condition" will be accomplished through the use of the practices contained within Chapter 5 of said manual. The achievement of this goal will remove the requirement of providing Channel Protection Volume.

Sabatelli Property is four lot single family lot subdivision including an existing house to remain. Property is zoned R-5C and located on Tax Map 50, Grid 2, Parcel No. 451 of the Howard County, Maryland Tax Map Database System. The property is an existing parcel of ground located at 9300 Old Scaggsville Road. Subdivision will utilize a proposed public water and sewer extension. The property is located in the Laurel area of Howard County in the watershed of an unnamed tributary of the Upper Howard County in the watershed of an unnamed tributary of the Upper Patuxent River (02131104). This property is relatively rectangular in shape and runoff on—site is mainly from northeast to southwest where a stream meanders along the southwestern property line. The existing house sits at the high point / ridge of the property in the upper portion of the property along Old Scaggsville Road. A small amount of forested area exists on—site in the vicinity of the stream buffer with adjacent supplemental planting. Also, according to a field inspection conducted by Eco—Science Professionals (ESP) dated January 9, 2014, no wetlands are present on-site, but a stream and a 75 foot stream buffer exist on-site. The Web Soil Survey shows soils on the site consist of Fallsington loam (Fa), Type "D" Soils in the stream buffer area and Urban Land-Chillum-Beltsville Comples (UcB), Type "D" soils exist for the majority of the property which is located outside of the stream buffer area. The runoff from the roofs of the proposed houses is to be directed overland or through roof leaders to four (4) micro-bioretention facilities to be located on the open space and one on each of Lots 2 driveways will flow overland to the micro-bioretention facility located on

- Natural Resource Protection: Environmentally sensitive areas do exist on-site (stream and stream buffer), therefore development has been proposed outside of the buffer area in an effort to protect this natural resource on-site.
- Maintenance of Natural Flow Patterns: It is the intent of the proposed design to discharge runoff similar to the characteristics and direction of this site prior to any of the proposed
- III. Reduction of impervious areas through better site design, alternative surfaces and Nonstructural Practices The design of this project utilizes a common driveway and individual driveways for the three new lots. Non-Structural practices as permitted in Chapter 5, four (4) Micro-Bioretention Areas (M-6) will be used to address ESD to the MEP requirements.
- V. Integration of Erosion and Sediment Controls into Stormwater Strategy: Since this is a small drainage area (most of site sheet flows from northeast to the southwest toward the existing stream), silt fence, super silt fence, and erosion control matting will be utilized for erosion & sediment control. There is no direct discharge of runoff directly to a stream. All site runoff will discharge to the the existing ground or prior to entering the existing stream channel and eventually to the Upper Patuxent River. No drainage easements will be required. It is anticipated that all cut will be utilized on-site for construction at time of Grading Plan.
- V. Implementation of E5D Planning Techniques and practices to the <u> Maximum Extent Practicable (MEP)</u> The full required ESD volume is being provided
- VI. Request for a Design Manual Waiver: No Waivers related to stormwater management are being requested in

STORMWATER MANAGEMENT SUMMARY					
area id.	E5DV REQUIRED CU.FT.	ESDV PROVIDED CU.FT.	REMARK5		
SITE	526	*1,311	MICRO-BIORETENTION (M-6)		
TOTAL	526	*1,311			

SINCE A SMALL PORTION OF DRIVEWAY PAVING WAS NOT ABLE TO BE CAPTURED BY ONE OF THE FACILITIES, THE MICRO-BIORETENTIONS WERE SIZED TO PROVIDE ADDITIONAL ESDV AND TREATMENT OF EXISTING IMPERVIOUS TO COMPENSATE FOR PROPOSED IMPERVIOUS THAT WAS NOT CAPTURED.

SITE AREA = 1.65 ACRES LOD AREA = 0.71 ACRES RCN = 77TARGET Pe = 1.0"



# APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING 2-11-15 2.9.15 Chief. Development Engineering Division 1.8.

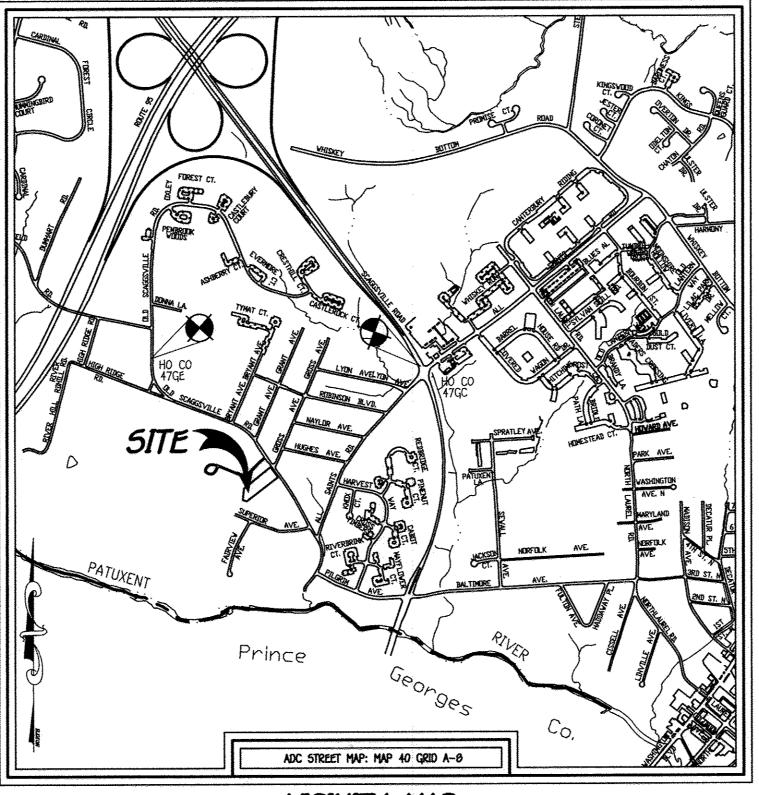
DENSITY TABULATION

1.65 AC\* (AREA OF SITE)

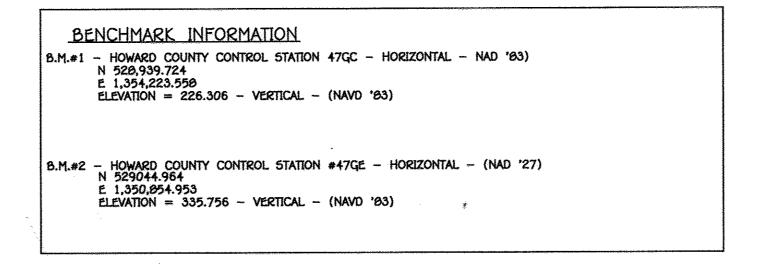
LOTS PROPOSED = 4 LOTS.

# SUPPLEMENTAL, FOREST CONSERVATION, LANDSCAPE, AND SOILS PLAN SABATELLI PROPERTY LOTS 1 THRU 4

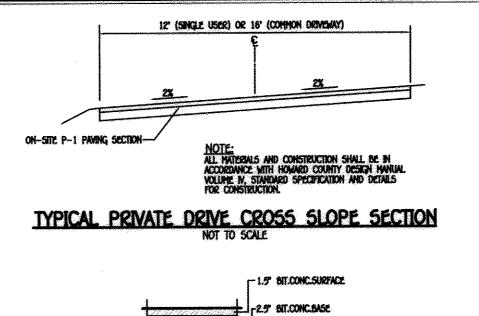
& OPEN SPACE LOT 5 TAX MAP No. 50 GRID No. 2 PARCEL NO. 451 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

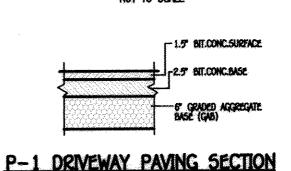


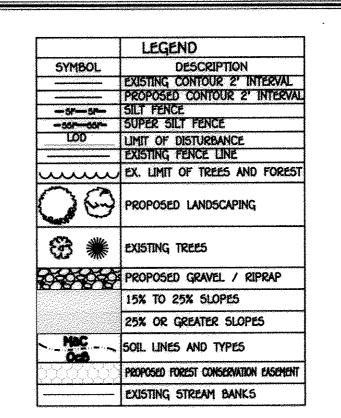
VICINITY MAP



	50ILS LEGEND		
50IL	NAME	CLA55	K FACTOR
Fa	Fällsington sändy loam. 0 to 2 percent slopes	D	0.02
UcB	Urban land-Chillum-Beltsville complex, 0 to 5 percent slopes	D	0.37







### General Notes:

SUBJECT PROPERTY ZONED R-SC PER 10/06/13 COMPREHENSIVE ZONING PLAN. COORDINATES BASED ON NAD '83, MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO.

- 3. THIS PLAN IS BASED ON FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR ABOUT MARCH, 2014 BY FISHER, COLLINS AND CARTER, INC. TOPOGRAPHY SHOWN IS BASED ON A FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR ABOUT MARCH, 2014 AND SUPPLEMENTED WITH HOWARD COUNTY GIS TOPOGRAPHY AT 5' CONTOUR INTERVAL INTERPOLATED FOR 2' CONTOUR INTERVAL. B.R.L. DENOTES BUILDING RESTRICTION LINE.
- DENOTES IRON PIN SET CAPPED "F.C.C. 106".
- O DENOTES ANGULAR CHANGE IN BEARING OF BOUNDARY OR RIGHTS-OF-WAY.

  DENOTES CONCRETE MONUMENT SET WITH ALUMINUM PLATE "F.C.C. 106".

  DENOTES CONCRETE MONUMENT OR STONE FOUND.
- 10. ALL AREAS ARE MORE OR LESS (±).

  11. REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE TO BE PROVIDED AT THE JUNCTION OF PIPE/FLAG STEM AND THE ROAD R/W AND NOT ONTO THE FLAG/PIPE STEM DRIVEWAY.
- USE-IN-COMMON DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A BUILDING PERMIT 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 SIX (6") INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING.
- (1 172 minimory),
  (2) GEOMETRY MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND 45-FOOT TURNING RADIUS;
  (3) STRUCTURES (CULVERTS/BRIDGES) CAPABLE OF SUPPORTING 25 GROSS TONS (H25-LOADING);
  (4) DRAINAGE ELEMENTS CAPABLE OF SAFELY PASSING 100 YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER SURFACE; STRUCTURE CLEARANCES - MINIMUM 12 FEET; ) MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE.
- DISTANCES SHOWN ARE BASED ON SURFACE MEASUREMENT AND NOT REDUCED TO NAD '83 GRID MEASUREMENT PROPERTY SUBJECT TO PRIOR DEPARTMENT OF PLANNING AND ZONING FILE NO'S: ECP-14-061; WP-15-041.
- STREAM AND ITS BUFFERS EXIST ON-SITE. 16. NO WETLANDS OR WETLAND BUFFERS, STEEP SLOPES, 100 YEAR FLOODPLAIN, OR CEMETERIES EXIST ON-SITE
- THIS PROPERTY IS LOCATED INSIDE THE METROPOLITAN DISTRICT. SITE IS NOT ADJACENT TO A SCENIC ROAD. NO CEMETERY OR HISTORIC STRUCTURES EXIST WITHIN THE LIMITS OF THIS PLAT SUBMISSION.
- WATER AND SEWER SERVICE TO THESE LOTS WILL BE GRANTED UNDER THE PROVISIONS OF SECTION 10.1228 OF THE HOWARD COUNTY
- 19. PUBLIC WATER AND SEWAGE ALLOCATIONS WILL BE GRANTED AT TIME OF ISSUANCE OF THE BUILDING PERMIT IF CAPACITY IS AVAILABLE AT
- 21. NO CLEARING, GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE LIMITS OF STREAM BUFFERS AND FOREST CONSERVATION EASEMENT AREAS. 22. NO APPO TRAFFIC REPORT IS REQUIRED FOR THIS SUBDIVISION PLAT.
- 23. NO NOISE STUDY IS REQUIRED FOR THIS PROJECT.
  24. THIS PLAN IS IN COMPLIANCE WITH THE AMENDED FIFTH EDITION OF THE SUBDIMISION AND LAND DEVELOPMENT REGULATIONS.
  25. THE FOREST CONSERVATION EASEMENT AREAS WITHIN THIS SUBDIMISION HAVE BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE AND THE FOREST CONSERVATION ACT. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT; HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION ARE ALLOWED. THE FOREST CONSERVATION REQUIREMENTS PER SECTION 16.1200 OF THE HOWARD COUNTY CODE AND THE FOREST CONSERVATION MANUAL FOR THIS SUBDIMISSION WILL BE FULFILLED BY ON—SITE RETENTION OF 0.24 ACRES OF FOREST. THERE IS NO FOREST SURETY FOR RETENTION OF RESOURCES.
- 26. THE PERIMETER LANDSCAPE OBLIGATION FOR LOTS 2 THRU 4 IS PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY
- CODE AND THE LANDSCAPE MANUAL, A LANDSCAPE SURETY IN THE AMOUNT OF \$3,600.00 BASED ON (9) SHADE TREES @ \$300/SHADE TREE AND (30) SHRUBS @ \$30/SHRUB SHALL BE BONDED AS PART OF THE DPW DEVELOPERS AGREEMENT. 27. A COMMUNITY MEETING WAS CONDUCTED ON FEBRUARY 25, 2014 FOR THE PURPOSE OF THE DEVELOPER TO PROVIDE INFORMATION TO THE COMMUNITY REGARDING THE PROPOSED RESIDENTIAL DEVELOPMENT AND TO ALLOW THE COMMUNITY TO ASK QUESTIONS AND TO MAKE
- COMMENTS, PER SECTION 16.120(D). OF THE SUBDIVISION REGULATIONS. 28. PUBLIC WATER AND SEWER WILL BE UTILIZED FOR THIS DEVELOPMENT.
  29. THERE IS AN EXISTING DWELLING(5)/STRUCTURE(5) ON LOTS 1 TO REMAIN KNOWN AS 9300 OLD SCAGGSVILLE ROAD.
- 30. STORMWATER MANAGEMENT IS IN ACCORDANCE WITH THE M.D.E. STORMWATER DESIGN MANUAL, VOLUMES I & II, REVISED 2009. NON-STRUCTURAL PRACTICES IN ACCORDANCE WITH CHAPTER 5 ARE BEING UTILIZED. FOUR (4) MICRO-BIORETENTION FACILITIES (M-6) ARE 31. ARTICLES OF INCORPORATION FOR THE SABATELLI PROPERTY HOMEOWNERS ASSOCIATION, INC. WILL BE FILED WITH THE MARYLAND STATE
- DEPARTMENT OF ASSESSMENTS AND TAXATION PRIOR TO RECORDATION OF THE FINAL PLAT.

  32. OPEN SPACE LOT 5 IS OWNED AND MAINTAINED BY THE SABATELLI PROPERTY HOMEOWNERS ASSOCIATION, INC. 33. APPROVAL OF A SITE DEVELOPMENT PLAN IS REQUIRED FOR THE DEVELOPMENT OF RESIDENTIAL LOTS 2, 3 AND 4 WITHIN THIS SUBDIMISION PRIOR TO ISSUANCE OF ANY GRADING OR BUILDING PERMITS FOR NEW HOUSE CONSTRUCTION IN ACCORDANCE WITH SECTION 16.155 OF
- 34. A LETTER OF FINDINGS DATED APRIL 23, 2014 FOR THE FOREST STAND DELINEATION AND WETLAND DELINEATION FOR THIS PROJECT WAS 35. THIS PLAT ESTABLISHES A PRIVATE USE-IN-COMMON DRIVEWAY EASEMENT FOR THE USE AND BENEFIT OF LOTS 1 THRU 5. MAINTENANCE
- AGREEMENT HAVE BEEN RECORDED IN THE LAND RECORDS OF HOWARD COUNTY, MARYLAND SIMULTANEOUSLY WITH THE RECORDING OF THE 36. THIS SUBDIVISION IS REQUIRED TO PROVIDE M.L.H.U. (MODERATE INCOME HOUSING UNIT). A FEE-IN-LIEU OF PROVIDING M.L.H.U. IS PROPOSED
- A. M.I.H.U. REQUIRED = 0.3 M.I.H.U. (3 NEW LOT X 10% M.I.H.U./LOT) 27. AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTINGS HEREWITH LISTED AND APPROVED FOR THIS SITE, SHALL BE OF THE
- PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPING MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATION OF REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING, ANY DEVIATION FROM THIS APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATES. 28. THE OWNER, TENANT, AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, INCLUDING BOTH
- PLANT MATERIALS AND BERMS, FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.
- 29. NO GRADING OR REMOVAL OF 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. 30. TRASH AND RECYCLABLES COLLECTION WILL BE AT DAISY ROAD WITHIN 5' OF THE COUNTY ROADWAY. 31. A PRIVATE RANGE OF ADDRESS SIGN ASSEMBLY SHALL BE FABRICATED AND INSTALLED BY HOWARD COUNTY BUREAU OF HIGHWAYS AT THE
- DEVELOPERS/OWNERS EXPENSE. CONTACT HOWARD COUNTY TRAFFIC DIVISION AT 410-313-5752 FOR DETAILS AND COST ESTIMATE. 32. SIGN POSTS: ALL SIGN POST USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED ("QUICK PUNCH" TYPE), SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE) - 3' LONG. THE ANCHOR SHALL NOT EXTEND MORE THAN TWO "QUICK PUNCH" HOLES
- ABOVE GROUND LEVEL. A CALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST. 33. DRIVEWAYS FOR LOTS 2 THRU 4 SHALL BE PROVIDED IN ACCORDANCE WITH HOWARD COUNTY STANDARD DETAIL R-6.06 IN THE VOL. IV
- 34. SOILS INFORMATION BASED ON NRCS WEB SOIL SURVEY FOR HOWARD COUNTY, MARYLAND. 35. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE. 36. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIMISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.

37. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 40 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.

- 38. TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT. 39. THIS PLAN IS SUBJECT TO WP-15-041 WHICH THE PLANNING DIRECTOR APPROVED ON OCTOBER 21, 2014 TO WAIVE SECTION 16.1205(a)(7) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, WHICH STATES THAT ON-SITE RETENTION OF 30" IN DIAMETER OR LARGER SPECIMEN TREES ARE CONSIDERED PRIORITY FOR ON-SITE RETENTION AND PROTECTION. APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:
- (1) PROVIDE AT LEAST FOUR (4) REPLACEMENT TREES OF 3" TO 4" CALIPER ON-SITE AS ADDITIONAL LANDSCAPING TREES OR AS PART OF THE FOREST CONSERVATION EASEMENT AREA AS MITIGATION PLANTINGS FOR THE REMOVAL OF THE TWO (2) SPECIMEN TREES. THE REPLACEMENT TREES SHALL BE BONDED AND SHOWN ON THE SUPPLEMENTAL PLAN AND SOP PLAN. (2) THE REMAINING SPECIMEN TREES THAT ARE LOCATED ON THIS SITE MUST BE PROTECTED WITH TREE PROTECTION DEVICES AND SUCH DEVICES MUST BE DEPICTED ON BOTH THE SUPPLEMENTAL PLAN AND THE SITE DEVELOPMENT PLAN.
- (3) THE SEVEN REMAINING SPECIMEN TREES MUST REMAIN UNDISTURBED, UNLESS A NEW WAIVER PETITION IS FILED WITH ADEQUATE (4) PROVIDE A NOTE ON THE FINAL PLAN AND THE SITE DEVELOPMENT PLAN THAT INCLUDES THIS WAIVER'S FILE NUMBER, THE SECTION TO BE WAIVED. THE WAIVER DECISION, THE DATE OF THE DECISION AND CONDITIONS OF APPROVAL.
- 40. SOILS SHOWN HEREON ARE BASED ON THE NRCS WEBSOIL SURVEY AND HOWARD COUNTY SOILS MAP #28.

# 41. A FEE-IN-LIEU OF SIDEWALK WILL BE PAID AS PART OF THE DPW DEVELOPER'S AGREEMENT.

SUPPLEMENTAL, FOREST CONSERVATION, LANDSCAPE, AND SOILS PLAN

# Sabatelli Property

Lots 1 Thru 4 And Open Space Lot 5

TAX MAP #50 GRID #2 PARCEL #451 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND ZONED: R-5C

SCALE: AS SHOWN DATE: NOVEMBER, 2014 SHEET 1 OF 3

## SITE ANALYSIS DATA CHART

TOTAL AREA OF THIS SUBMISSION = 1.65 AC.+.

1.65 AC+ X 4 LOTS/ACRE = 6 LOTS MAXIMUM.

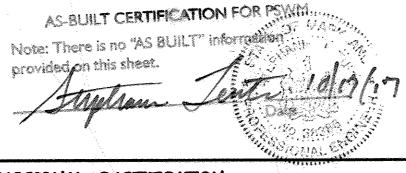
AREA OF PROPOSED BUILDABLE LOTS = 51,027 5Q.FT.+.

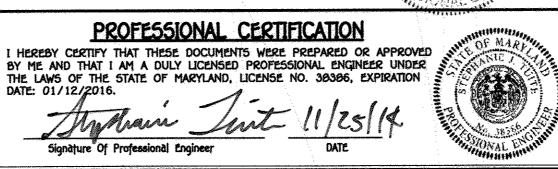
LIMIT OF DISTURBED AREA = 0.71 Ac. \*

PRESENT ZONING DESIGNATION = R-5C (PER 10/06/2013 COMPREHENSIVE ZONING PLAN) PROPOSED USE: RESIDENTIAL BUILDING COVERAGE OF SITE: N/A. PREVIOUS HOWARD COUNTY FILES: N/A. TOTAL AREA OF FLOODPLAIN LOCATED ON SITE 0.00 AC+ TOTAL AREA OF SLOPES IN EXCESS OF 15% = 0.09 AC+ (25% SLOPES OR GREATER = 0.00 AC+) TOTAL AREA OF ERODIBLE SOILS = 1.39 AC+ TOTAL AREA OF STREAMS AND STREAM BUFFERS = 0.31 AC+ (LOCATED WITHIN OPEN SPACE LOT 5) TOTAL AREA OF WETLANDS (INCLUDING BUFFER) = 0.00 AC.= TOTAL AREA OF FOREST = 0.24 AC+, ALL OF WHICH IS TO BE PLACED IN FOREST CONSERVATION EASEMENT. TOTAL GREEN OPEN AREA = 0.97 AC+ TOTAL IMPERVIOUS AREA = 0.44 AC\* (0.28 AC\* PROPOSED) TOTAL AREA OF ROAD DEDICATION = 0.035 AC+

MINIMUM OPEN SPACE REQUIRED = 71,937 5Q.FT.\* X 0.25 = 17,984 5Q.FT.\*

OPEN SPACE PROVIDED = 19,393 5Q.FT. + (17,984 5Q.FT. + CREDITED)





Owner Richard Scott Sabatelli 9300 Old Scaggsville Road Laurel, Maryland 20723 Ph# 301-864-4043

WHITE OAK 30.5" 45.75

4 | SOUTHERN RED OAK | 47.5" | 71.25

**SPECIES** 

RED OAK

RED OAK

SPECIMEN TREE TABLE

44.5" 66.75 POOR, HEAVILY TRIMMED, LIMB DIEBACK

STATUS

TO REMAIN

TO BE REMOVED

TO REMAIN

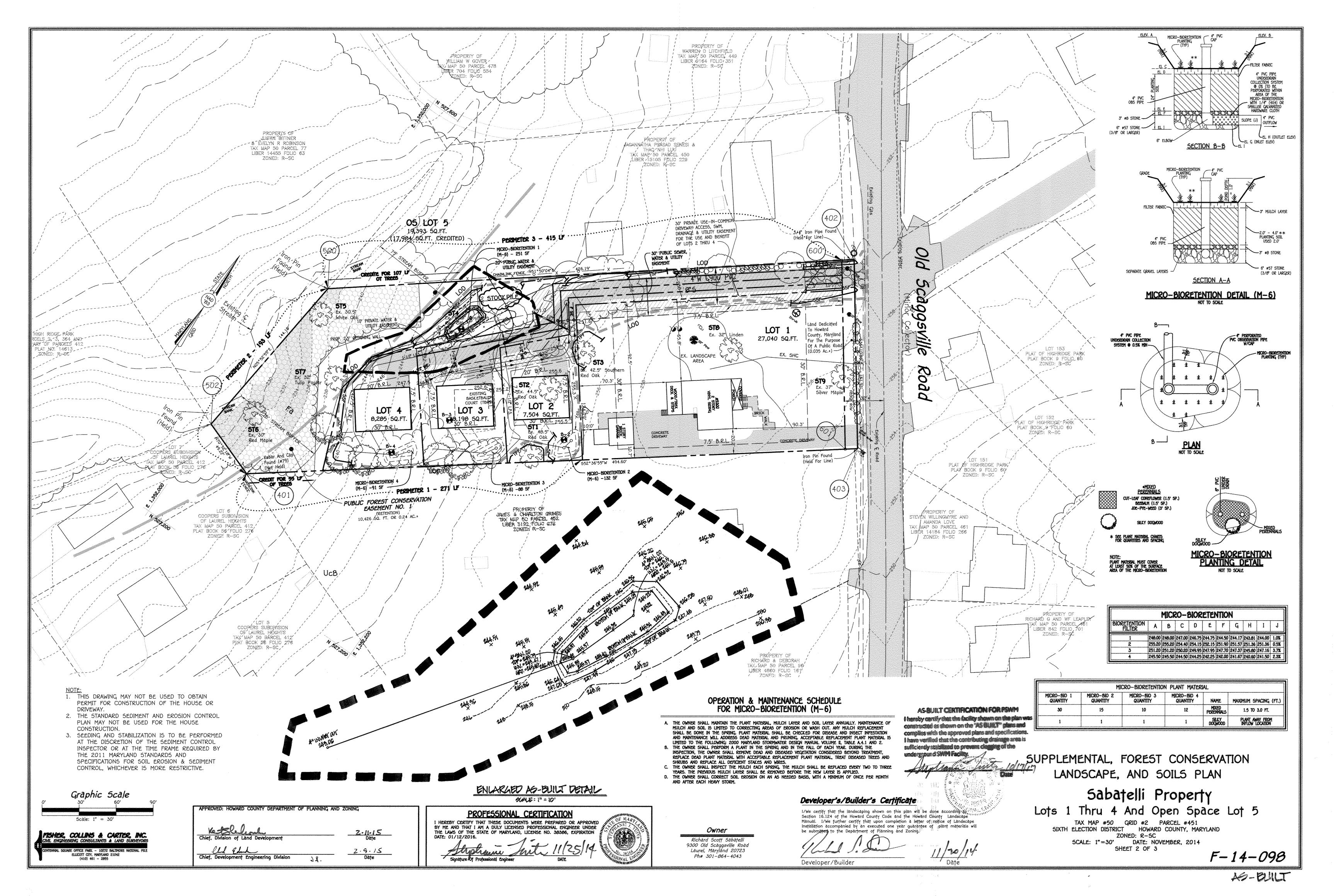
TO BE REMOVED

to remain

SIZE | CRZ

(DBH) (FT RADIUS)

3 SOUTHERN RED OAK 42.5" | 63.75 | POOR, MAJOR TRUNK ROT



#### PLANTING / SOIL SPECIFICATIONS

- 1. Planting Of Nursery Stock Shall Take Place Between March 15th And April 30th Or September 15th And November 15th.
- 2. A Twelve (12) Inch Layer Of Topsoil Shall Be Spread Over All Reforestation Areas Impacted By Site Grading To Assure A Suitable Planting Area, If Applicable. Disturbed Areas Shall Be Seeded And Stabilized In Accordance With The Sediment & Erosion Control Plan For This Project. Planting Areas Not Impacted By Site Grading Shall Have No
- 3. All Bare Rood Planting Stock Shall Have Their Root System Dipped Into An Anti-Desiccant Gel Prior To Planting.
- 4. Plants Shall Be Installed So That The Top Of The Root Mass Is Level With The Top Of Existing Grade. BackFill In The Planting Pits Shall Consist of 3 Parts Existing Soil to 1 Part Pine Fines Or Equivalent
- 5. Fertilizer Shall Consist Of Agriform 22-8-2, Or Equivalent, Applied As Per
- 6. A Two (2) Inch Layer Of Hardwood Mulch Shall Be Placed Over The Root Area Of All Plantings. See Planting Detail.
- 7. Plant Material Shall be Transported To The Site In A Tarped Or Covered Truck. Plants Shall Be Kept Moist Prior To Planting.
- 8. All Non-Organic Debris Associated With The Planting Operation Shall Be Removed From The Site By The Contractor.

#### SEQUENCE OF CONSTRUCTION

- 1. Sediment Controls And Tree Protective Devices Shall Be Installed In Accordance With Sediment & Erosian Control Plans For This Site, If Applicable. Site Shall Be Graded in Accordance With The Plans.
- 2. Proposed Reforestation Areas Impacted by The Site Grading Shall Be Topsoiled And Stabilized As Per Note 2 Of The "Planting / Soil
- 3. Plants Shall Be Installed And Maintained As Per Notes And Specifications For This Project.
- 4. Upon Completion Of The Plantings, Signage Shall Be Installed As Per
- 5. Plantings Shall Be Guaranteed and Maintained In Accordance With The "Guarantee Requirements" And "Maintenance Of Plantings" Associated With This Project.

#### MULTIFLORA ROSE CONTROL NOTE:

PRIOR TO PLANTING ALL MULTIFLORA ROSE WITHIN PLANTING AREAS SHALL BE REMOVED. Removal Of The Multiflora Rose May Be Performed With Mowing And Herbicide Treatments. Physical Removal Of All Top Growth Followed By A Periodic Herbicide Treatment Of Stump Sprouts is Recommended. Native Tree And Shrub Species Occurring Within The Rose Thickets Should Be Retained Wherever Possible. Herbicide Treatments Shall Occur On Two (2) Month Intervals During The First Growing Seaseon And Once in The Spring And Once in the Fall For Subsequent Years. Herbicide Used Shall Be Made Specifications. Care Should Be Taken Not To Spray Planted Trees Or Naturally Occurring Native Tree And Shrub Seedlings. It is Recommended That Initiation Of Rose Removal Begin At Least Six Months Prior To Planting So That New Growth OF Roses is Able To Be More Successfully Managed.

#### FOREST PROTECTION GENERAL NOTES

ALL FOREST RETENTION AREAS SHALL BE TEMPORARILY PROTECTED BY WELL ANCHORED BLAZE ORANGE PLASTIC MESH FENCING, AS NECESSARY, AND SIGNAGE AS INDICATED ON THE PLANS THE DEVICES SHALL BE INSTALLED ALONG THE FOREST RETENTION BOUNDARY PRIOR TO ANY LAND CLEARING, GRUBBING, OR GRADING ACTIVITIES

THE FOREST PROTECTION DEVICES SHALL BE INSTALLED SUCH THAT THE CRITICAL ROOT

- ZONES OF ALL TREES WITHIN THE RETENTION AREA NOT OTHERWISE PROTECTED WILL BE WITHIN FOREST PROTECTION DEVICES, UNLESS ROOT PRUNING IS PROPOSED.
- ALL PROTECTION DEVICES SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION, INCLUDING SILT FENCE BEING USED AS PROTECTIVE FENCING. ALL DEVICES SHALL REMAIN IN PLACE UNTIL ALL CONSTRUCTION HAS CEASED IN THE IMMEDIATE VICINITY.
- ATTACHMENT OF SIGNS, OR ANY OTHER OBJECTS TO TREES IS PROHIBITED. NO EQUIPMENT, MACHINERY, VEHICLES, MATERIALS OR EXCESSIVE PEDESTRIAN TRAFFIC SHALL BE ALLOWED WITHIN THESE PROTECTED AREAS.
- INSTALLATION AND MAINTENANCE OF PROTECTIVE FENCING AND SIGNAGE SHALL BE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR SHALL TAKE HE UTMOST CARE TO PROTECT TREE ROOT SYSTEMS DURING ALL CONSTRUCTION activities. Tree root systems shall be protected from smothering, flooding EXCESSIVE WETTING FROM DE-WATERING OPERATIONS, OFF-SITE RUN OFF, SPILLAGE
- AND DRAINING OF MATERIALS THAT MAY BE HARMFUL TO TREES. THE GENERAL CONTRACTOR SHALL PREVENT PARKING OF CONSTRUCTION VEHICLES AND EQUIPMENT, AND THE STORING OF BUILDING SUPPLIES OR STOCKPILING OF EARTH
- 7. REMOVAL OF TOPSOIL OR ROOT MAT WITHIN THE TREE PRESERVATION AREA SHALL BE
- 8. THE GENERAL CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY TREES DAMAGED OR
- 9. ROOT PRUNING SHALL BE USED AT THE LIMIT OF DISTURBANCE OR LIMIT OF GRADING WITHIN AND ADJACENT TO ALL PRESERVATION AREAS, AS NECESSARY.

## PRE-CONSTRUCTION MEETING

- AFTER THE BOUNDARIES OF THE FOREST RETENTION AREAS HAVE BEEN FIELD LOCATED AND MARKED, AND AFTER THE FOREST PROTECTION DEVICES HAVE BEEN INSTALLED, BUT BEFORE ANY OTHER DISTURBANCE HAS TAKEN PLACE ON SITE, A PRE-CONSTRUCTION MEETING SHALL TAKE PLACE ON SITE. THE DEVELOPER, CONTRACTOR OR PROJECT MANAGER, AND HOWARD COUNTY INSPECTORS SHALL ATTEND. THE PURPOSE OF THIS MEETING WILL BE:
- A TO IDENTIFY THE LOCATIONS OF THE FOREST RETENTION AREAS, SPECIMEN TREES WITHIN 50 FEET OF THE LIMIT OF DISTURBANCE, LIMITS OF CONSTRUCTION, EMPLOYEE PARKING AREAS AND EQUIPMENT STAGING AREAS; B. INSPECT ALL FLAGGED BOUNDARIES AND PROTECTION DEVICES;
- . MAKE ALL NECESSARY ADJUSTMENTS; D. ASSIGN RESPONSIBILITIES AS APPROPRIATE AND DISCUSS PENALTIES.

# CONSTRUCTION MONITORING

- THE SITE SHALL BE INSPECTED PERIODICALLY DURING THE CONSTRUCTION PHASE OF THE PROJECT. A QUALIFIED PROFESSIONAL SHALL BE RESPONSIBLE FOR IDENTIFYING DAMAGE TO PROTECTED FOREST AREAS OR INDIVIDUAL TREES WHICH MAY HAVE BEEN CAUSED BY CONSTRUCTION ACTIVITIES, SUCH AS SOIL COMPACTION, ROOT INJURY, TRUNK WOUNDS.
- LIMB INJURY, OR STRESS CAUSED BY FLOODING OR DROUGHT CONDITIONS. ANY SUCH DAMAGE THAT MAY OCCUR SHALL BE REMEDIED IMMEDIATELY USING APPROPRIATE MEASURES. SEVERE PROBLEMS MAY REQUIRE CONSULTATION WITH A PROFESSIONAL
- 3. THE CONSTRUCTION PROCEDURE SHALL NOT DAMAGE AREAS OUTSIDE OF THE LIMITS OF DISTURBANCE AS DESIGNATED ON THE PLANS. ANY DAMAGE. SHALL BE RESTORED BY THE CONTRACTOR AT HIS EXPENSE AND TO THE SATISFACTION OF THE DESIGN TEAM OR



#### FOREST CONSERVATION WORKSHEET VERSION 1.0

V E. (C. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	
BASIC SITE DATA:	1.65 Ac
A. TOTAL TRACT AREA=  B. AREA OF LOT 1 CONTAINING THE EXISTING STRUCTURE=  C. NET TRACT AREA=	0.62 1.03 Ac
LAND USE CATEGORY: (from table 3.2.1, page40, Manual)  ARA MDR IDA HDR MPD CIA  X	
INFORMATION FOR CALCULATIONS:	0.15
D. AFFORESTATION THRESHOLD	0.15
F. EXISTING FOREST COVER WITHIN NET TRACT AREA	0.24
	0.03
BREAK EVEN POINT: H. FOREST RETENTION ABOVE THRESHOLD WITH NO MITIGATION=  I. CLEARING PERMITTED WITHOUT MITIGATION=	0.21
PROPOSED FOREST CLEARING:	
J. TOTAL AREA OF FOREST TO BE CLEARED=	0.00
K. TOTAL AREA OF FOREST TO BE RETAINED	0.24
PLANTING REQUIREMENTS:	
L. REFORESTATION FOR CLEARING ABOVE CONSERVATION THRESHOLD	0.00
M. REFORESTATION FOR CLEARING BELOW CONSERVATION THRESHOLD	0.03
P. TOTAL REFORESTATION REQUIRED	0.00
Q. TOTAL AFORESTION REQUIRED	0.00
R. TOTAL REFORESTATION AND AFFORESTATION REQUIRED=  5. EXCESS FOREST CREDIT=	0.03

SCHEDULE A - PERIMETER LANDSCAPE EDGE						
PERIMETER	P-1	P-2	P-3		TOTAL	
CATEGORY	ADJACENT TO PERIMETER PROPERTIES	ADJACENT TO PERIMETER PROPERTIES	ADJACENT TO PERIMETER PROPERTIES	SPECIMEN TREE REPLACEMENT		
LANDSCAPE TYPE	Α	A	Α			
LINEAR FEET OF PERIMETER	271 LF	193 LF	415 LF			
CREDIT FOR EXISTING VEGETATION LINEAR FEET (LF) OF CREDIT REMAINING PERIMETER (LF)	55 LF OF EX. TREES 216 LF REMAINING	193 LF OF EX. TRE55 0 LF REMAINING	107 LF OF EX. TREES 300 LF REMAINING		0	
NUMBER OF PLANTS REQUIRED SHADE TREES EVERGREENS/SUBSTITUTION TREES(2:1) SHRUBS	(216'/60' = 3.6 OR 4)	О	(300°/60° = 5.1 OR 5)		0	
CREDIT FOR EXISTING VEGETATION SHADE TREES EVERGREENS/SUBSTITUTION TREES(2:1) SHRUB5	1 0 0	0 0 0	0 0 0		0 0 0	
NUMBER OF PLANTS PROVIDED SHADE TREES EVERGREENS/SUBSTITUTION TREES(2:1) SHRUBS	3 0 0	0 0	2 0 30	4 0 0	9 0 30	

*	CREDIT FOR EXISTING TREES:	PERIMETER 1 -	CREDIT IS TAKEN	FOR AN	EXISTING 48.5	' RED OA
	owners in a manistral services	1 Things for 1 Think T	CICEDII IO MERII	I OIC FUI	F1017114 1017	14EB 0/1

LANDSCAPING PLANT LIST						
QTY.	KEY	NAME	SIZE			
4	$\odot$	ACER RUBRUM 'RED SUNSET' (RED SUNSET RED MAPLE)	2.5"-3" CAL FULL CROWN B&B			
5		TILIA CODATA 'GREENSPIRE' (GREENSPIRE LITTLELEAF LINDEN)	2.5"-3" CAL FULL CROWN 8&8			
18	9	ABELIA × GRANDIFLORA (GLOSSY ABELIA)	2.5"-3" HT. CONT.			
12	0	ILEX x CRENATA ' COMPACTA' (COMPACT JAPANESE HOLLY)	2.5" – 3" HT. CONT.			

(INCLUDES 4 SHADE TREES THAT ARE REPLACING TWO SPECIMEN TREES PER WP-15-041)

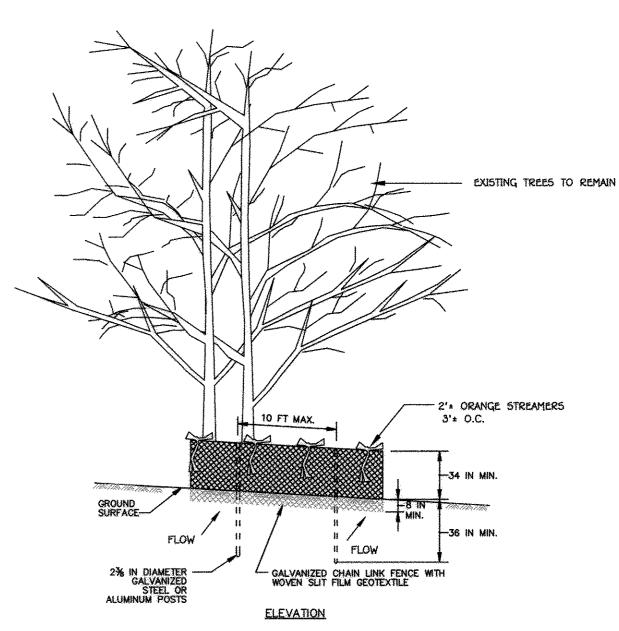
### FOREST RETENTION AREA MACHINERY, DUMPING OR STORAGE OF ANY MATERIALS IS PROHIBITED VIOLATORS SUBJECT TO THE FINES AS IMPOSED BY THE MARYLAND FOREST CONSERVATION ACT OF 11" MINIMUM

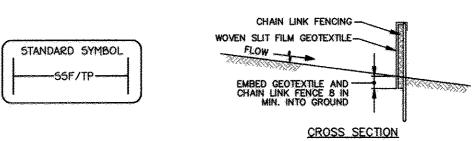
NOTE: THE PROTECTIVE SIGNAGE SHALL BE IN PLACE FOR PERPETUTY.

#### FOREST CONSERVATION SIGN DETAIL NOT TO SCALE

#### BLAZE ORANGE PLASTIC MESH - ANCHOR POST SHOULD BE OR 2" x 2" TIMBER 6' IN LENGTH USE 2" x 4" HIGHLY VISIABLE FLAGGING LUMBER FOR CROSS BACKING -TURNBUCKLE -TURNBUCKLE -RUBBER HOSE 2 x 4 STAKE -WRAPPING STAKING DETAIL 1'-0" HIGH 2-1/2" CALIPER-1777777 -MULCH ANCHOR POST MUST BE INSTALLED USE 3' WIRE TO A DEPTH OF NO LESS THAN 1/3 "U" TO SECURE OF THE TOTAL HEIGHT OF POST FENCE BOTTOM RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS. BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICE. NOTE: REMOVE BURLAP FROM ROOT DAMAGE SHOULD BE AVOIDED. PROTECTIVE SIGNAGE MAY ALSO BE USED. TOP 1/3 OF BALL DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION. GRADING FOR PLANTING TREE PLANTING TREE PROTECTION DETAIL ON SLOPES

- 1. THE FOREST CONSERVATION EASEMENT AREAS WITHIN THIS SUBDIVISION HAVE BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE AND THE FOREST CONSERVATION ACT. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT; HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION ARE ALLOWED. THE FOREST CONSERVATION REQUIREMENTS PER SECTION 16.1200 OF THE HOWARD COUNTY CODE AND THE FOREST CONSERVATION MANUAL FOR THIS SUBDIVISION WILL BE FULFILLED BY ON—SITE RETENTION OF 0.24 ACRES OF FOREST. THERE IS NO FOREST SURETY FOR
- 2. THE PERIMETER LANDSCAPE OBLIGATION FOR LOTS 2 THRU 4 IS PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL, A LANDSCAPE SURETY IN THE AMOUNT OF \$3,600.00 BASED ON (9) SHADE TREES @ \$300/SHADE TREE AND (30) SHRUBS @ \$30/SHRUB SHALL BE BONDED AS PART OF THE DPW
- 3. AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTINGS HEREWITH LISTED AND APPROVED FOR THIS SITE, SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPING MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATION OF REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING, ANY DEVIATION FROM THIS APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATES.
- 4. THE OWNER, TENANT, AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING. INCLUDING BOTH PLANT MATERIALS AND BERMS, FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.
- 5. SHOULD DISTURBANCE OCCUR IN THE FOREST CONSERVATION EASEMENT AREAS DURING OR AFTER CONSTRUCTION, CIVIL
- 6. SEE THE RECORD PLAT FOR THE BEARING AND DISTANCE DESCRIPTIONS OF THE FOREST CONSERVATION EASEMENTS.
- 7. TWO SPECIMEN TREES SHALL BE REMOVED FROM THIS SUBDIVISION: A TOTAL OF 4 TREES HAVE BEEN SHOWN ON LOT 3, 4, AND OPEN SPACE LOT 5 TO REPLACE THESE TWO SPECIMEN TREES, PER WP-15-041.





CONSTRUCTION SPECIFICATIONS

- INSTALL 2% INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND.
- FASTEN 9 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2% INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HUG RINGS.
- 3. FASTEN WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THE UPSLOPE SIDE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8 INCHES INTO THE GROUND.
- WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BY PASS.
- EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE.
- REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.

SUPER SILT FENCE, TREE PROTECTION FENCE

SUPPLEMENTAL, FOREST CONSERVATION LANDSCAPE, AND SOILS PLAN NOTES & DETAILS

# Sabatelli Property

Lots 1 Thru 4 And Open Space Lot 5

TAX MAP #50 GRID #2 PARCEL #451 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND ZONED: R-5C SCALE: AS SHOWN DATE: NOVEMBER, 2014

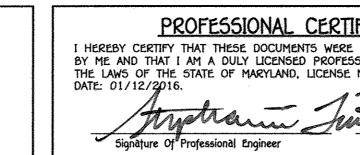
SHEET 3 OF 3

F-14-098

ELLICOTT CITY, MARYLAND 21042

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

NOTES:



PROFESSIONAL CERTIFICATION I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER

Owner Richard Scott Sabatelli 9300 Old Scaggsville Road Laurel, Maryland 20723 Ph# 301-864-4043

## Developer's/Builder's Certificate

I/We certify that the landscaping shown on this plan will be done according to Section 16.124 of the Howard County Code and the Howard County Landscape Manual. I/We further certify that upon completion a letter of notice of Landscape installation accompanied by an executed one year guarantee of plant materials will be submitted to the Department of Planning and Zoning.