

SHEET INDEX	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	ENVIRONMENTAL CONCEPT PLAN
3	ENVIRONMENTAL CONCEPT PLAN
4	PRELIMINARY GRADING AND SEDIMENT CONTROL PLAN
5	PRELIMINARY GRADING AND SEDIMENT CONTROL PLAN

SOILS LEGEND			
SOIL	NAME	CLASS	"K" VALUE
GgB	Glenelig loam, 3 to 8 percent slopes	B	0.20
GgC	Glenelig loam, 8 to 15 percent slopes	B	0.20
GmC	Glenville silt loam, 8 to 15 percent slopes	C	0.37
LAB	Lagore silt loam, 3 to 8 percent slopes	C	0.02
LeB	Lagore silt loam, 3 to 8 percent slopes, stony	C	0.02
Ld	Lagore-Relby gravelly loams, 15 to 25 percent slopes, very stony	B/C	0.02
MaD	Manor loam, 15 to 25 percent slopes	B	0.24
McC	Manor-channery loam, 8 to 15 percent slopes	B	0.24
MkF	Manor-Brinklow complex, 25 to 65 percent slopes, very rocky	B	0.24

**STORMWATER MANAGEMENT DESIGN NARRATIVE**

**INTRODUCTION:**  
This report will demonstrate how the criteria set forth in the Maryland Stormwater Design Manual, Volumes 1 and 2 (effective October 2000, revised May 2009) will be satisfied for this project. The goal of creating hydrology similar to that of "Woods in Good Condition" will be accomplished through the use of dry wells, micro bio-retention, bio-retention, non-roof runoff, submerged gravel wetlands, and grass swales as suggested within Chapter 5 of previously mentioned manual. The achievement of this goal will remove the requirement of providing Channel Protection Volume.

**GENERAL SITE CONDITIONS:**  
The Brickell Property is zoned RR-DEO and located on Tax Maps 9 & 10, Parcel Nos. 254 & 274 respectively of the Howard County, Maryland Tax Map Database System. This property consists of 36.13 acres of which no acres are encumbered with a Preservation Easement dedicated to Howard County Maryland Agricultural Land Preservation Program. The Brickell Property project is bordered by the Patapsco Valley State Park to the north, the Meadowood Community to the east and the newly submitted and approved Walker Meadows (F-17-045) to the west and south. This project proposes to utilize the public road proposed under Walker Meadows for access to the future lots of Brickell Property. The existing home on Parcel 254 is to remain on a future Buildable Preservation Parcel.

**I. NATURAL RESOURCE PROTECTION:**  
This project proposed to place the bulk of the natural resources contained on this property to be protected by encompassing these resources in a non-buildable preservation with containing a forest conservation easement. This future parcel will be located adjacent to the current wooded area of the Patapsco Valley State Park.

**II. MAINTENANCE OF NATURAL FLOW PATTERNS:**  
The design utilizes the natural locations of high and low points to maintain the original drainage patterns of this site. The bulk of the site will be buildable or non-buildable bulk parcels where little or no change will occur.

**III. REDUCTION OF IMPERVIOUS AREAS THROUGH BETTER SITE DESIGN, ALTERNATIVE SURFACES AND NONSTRUCTURAL PRACTICES:**  
Only the minimum impervious areas have been proposed to allow adequate access to the proposed lots. This design provides a central location for the bulk of the lots to reduce driveway length and provide shared driveway access where longer driveways are required.

**IV. INTEGRATION OF EROSION AND SEDIMENT CONTROLS INTO STORMWATER STRATEGY:**  
This project utilizes bio-retention facilities in locations that could work in concert with sediment trapping if required.

**V. IMPLEMENTATION OF ESD PLANNING TECHNIQUES AND PRACTICES TO THE MAXIMUM EXTENT PRACTICABLE (MEP):**  
This submission will propose several chapter 5 devices to meet and exceed Environmental Site Design to the Maximum Extent Practicable (ESD to the MEP). All impervious areas will receive full treatment.

**VI. REQUEST FOR DESIGN MANUAL WAIVER:**  
No waivers are expected to be requested on this project relating to SWM requirements.

# ENVIRONMENTAL CONCEPT PLAN

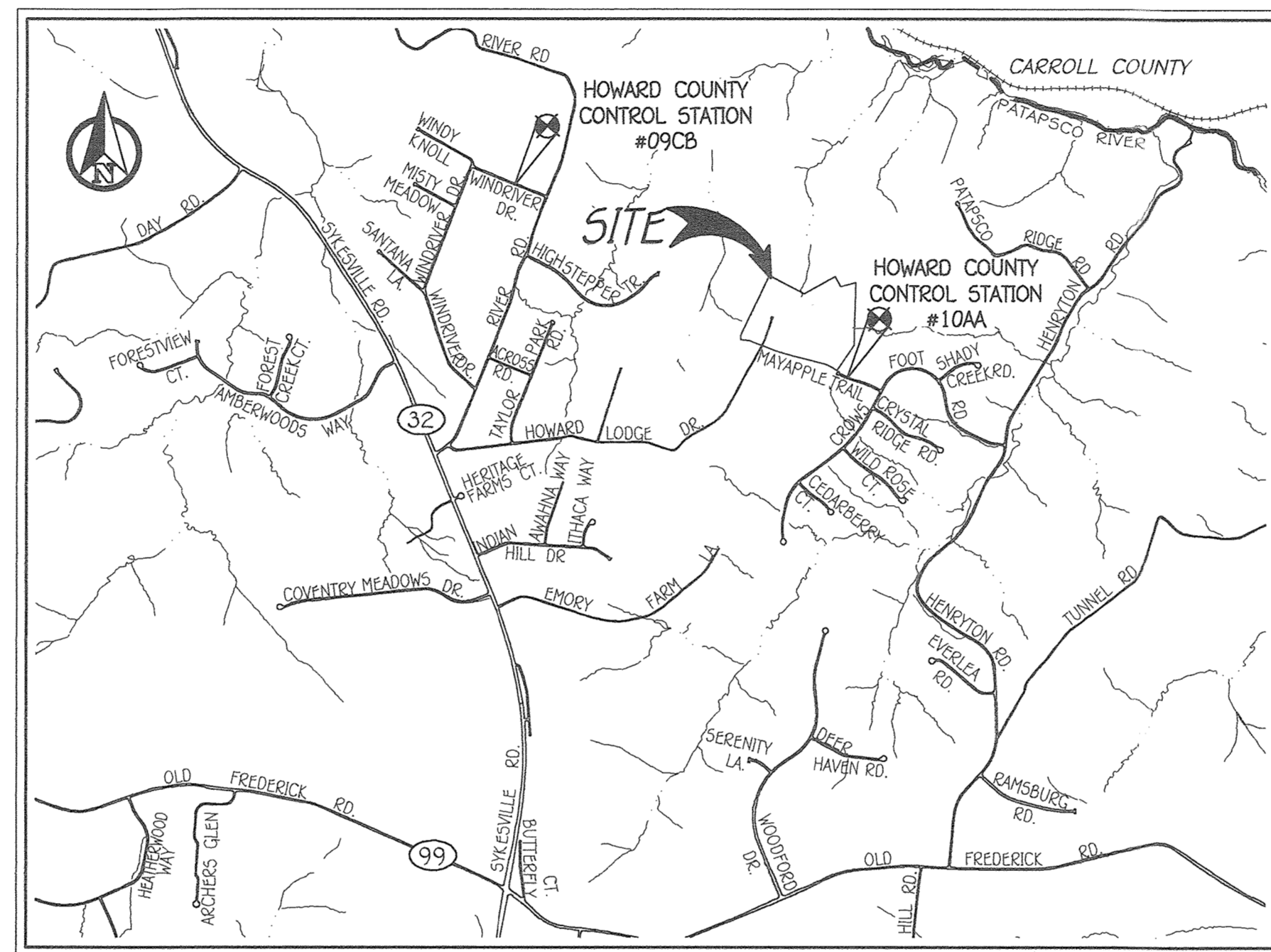
## BRICKELL PROPERTY

### LOTS 1 THRU 10, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' 'C' AND 'D' RR-DEO (RURAL RESIDENTIAL: DENSITY EXCHANGE OPTION)

#### TAX MAP No. 9 GRID No. 6 TAX MAP No. 10 GRID No. 1 PARCEL Nos. 254 & 274

**STORMWATER MANAGEMENT NOTES**

- STORMWATER MANAGEMENT IS PROVIDED IN ACCORDANCE WITH CHAPTER 5, "ENVIRONMENTAL SITE DESIGN" OF THE 2007 MARYLAND STORMWATER MANAGEMENT DESIGN MANUAL, EFFECTIVE MAY 4, 2010.
- MAXIMUM CONTRIBUTING ROOF TOP AREA TO EACH DOWNSPOUT SHALL BE 500 SQ. FT. OR LESS.
- DRYWELLS SHALL BE PROVIDED AT LOCATIONS WHERE THE LENGTH OF DISCONNECTION IS LESS THAN 75' AT 5% SLOPE. THE SIZE AND CONSTRUCTION OF THE DRYWELL SHALL BE IN ACCORDANCE WITH THE DETAIL SHOWN ON THIS SHEET.
- FINAL GRADING WILL BE SHOWN ON THE GRADING PERMIT.



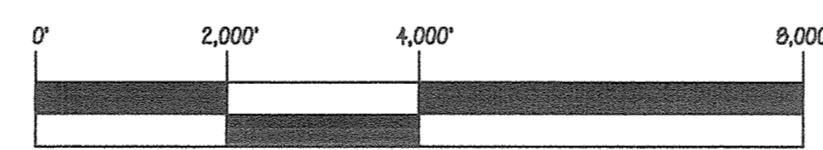
HOWARD COUNTY GEODETIC SURVEY CONTROL NO. 10AA  
N 609,753.356 E 1,331,668.825  
ELEVATION: 563.097'

HOWARD COUNTY GEODETIC SURVEY CONTROL NO. 09CB  
N 612,571.114 E 1,326,795.332  
ELEVATION: 558.923'

REFER TO HOWARD CO. ADC MAP 11-F5

**VICINITY MAP**

SCALE: 1" = 2,000'

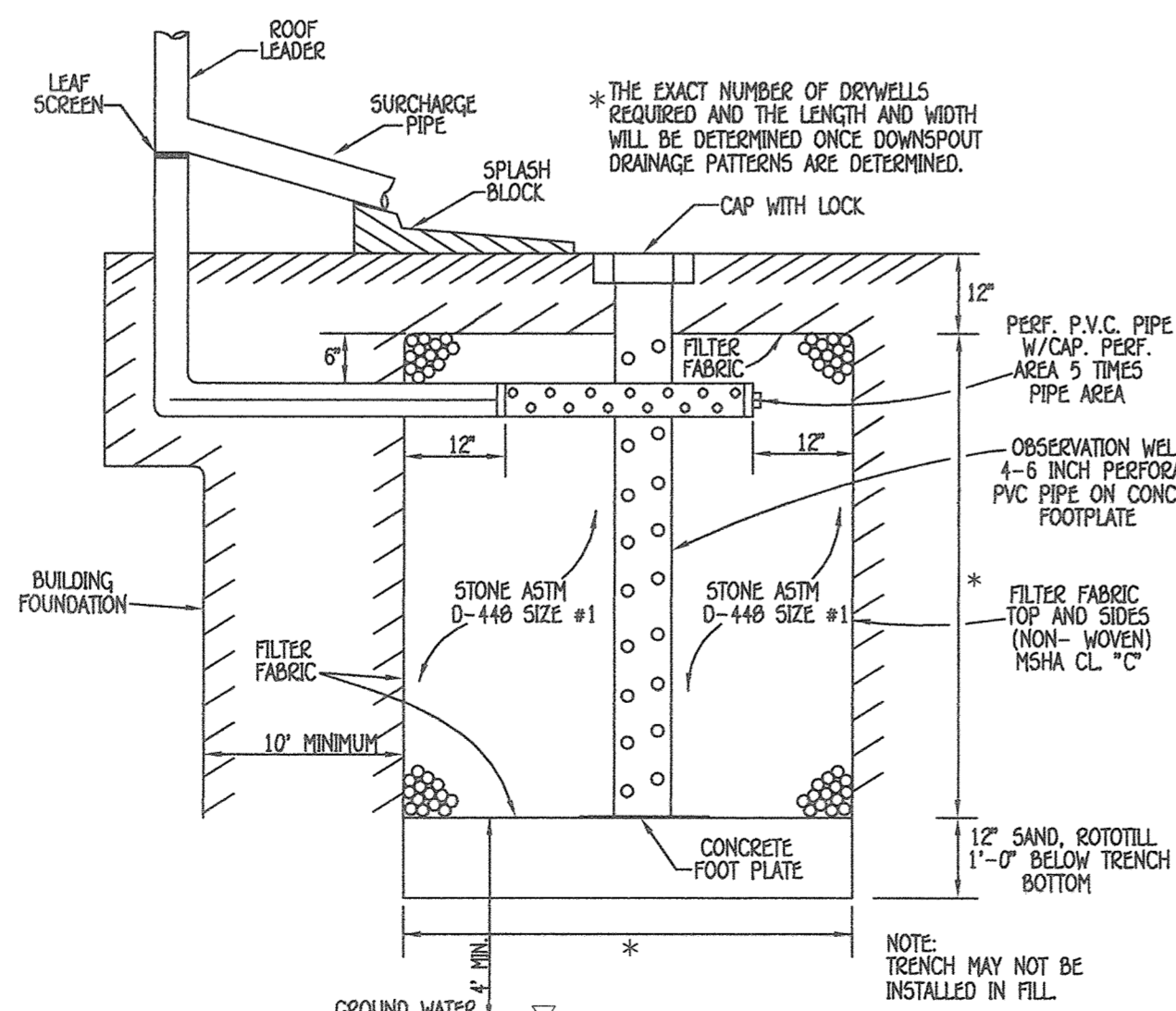


SCALE: 1" = 2,000'

SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
---	EXISTING CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 2' INTERVAL
x362.2	SPOT ELEVATION
(W)	DENOTES PROPOSED WELL
(W)	DENOTES 1500 Sq.Ft. ALTERNATE WELL SITE
(L)	DENOTES EXISTING FOREST TO BE REMOVED
(L)	LIMIT OF DISTURBANCE
---	SUPER SILT FENCE
---	EXISTING TREE LINE
---	DRAINAGE DIVIDE
(D)	DRYWELL (M-5)-TYPICAL
(S)	SOIL LINES AND TYPES
(B)	BIO RETENTION FACILITY (F-6) OR (M-6) AS NOTED
(R)	PROPOSED ROOF LEADER
(T)	DENOTES EXISTING TREES TO BE REMOVED
(T)	DENOTES EXISTING TREES TO REMAIN
(S)	DENOTES 15%-24.9% SLOPES
(S)	DENOTES 25% AND GREATER SLOPE
(P)	DENOTES FAILED PERC
(P)	DENOTES PASSED PERC
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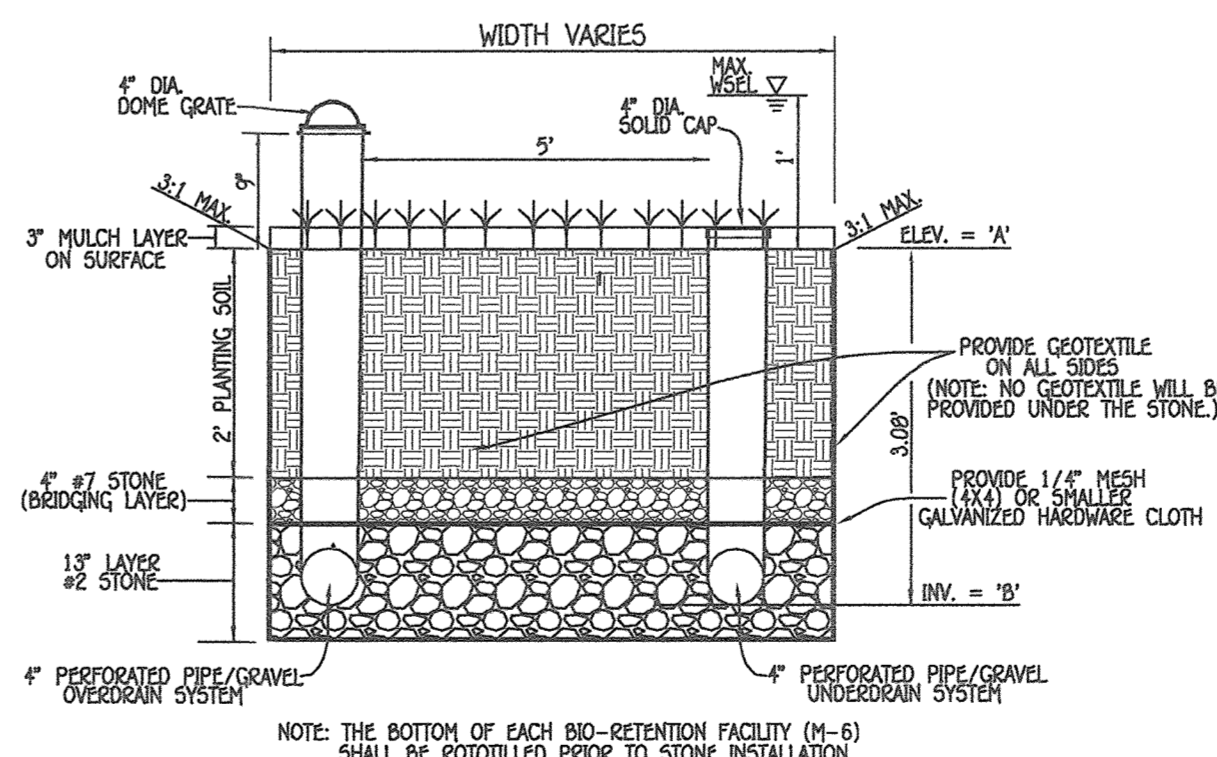
**SITE ANALYSIS DATA CHART**

- TOTAL AREA OF THIS SUBMISSION = 36.13 AC.±
- LIMIT OF DISTURBED AREA = 10.53 AC.± (SWM BASED ON LOD)
- PRESENT ZONING DESIGNATION = RR-DEO (PER 10/06/2013 COMPREHENSIVE ZONING PLAN)
- PROPOSED USE: RESIDENTIAL SINGLE FAMILY DETACHED
- PREVIOUS HOWARD COUNTY FILES: N/A
- TOTAL AREA OF FLOODPLAIN LOCATED ON-SITE = 0 AC
- TOTAL AREA OF SLOPES IN EXCESS OF 25% = 0.99 AC.±
- TOTAL AREA OF WETLANDS (INCLUDING BUFFER) = 0.70 AC.±
- TOTAL AREA OF STREAM (INCLUDING BUFFER) = 0.0 AC.±
- TOTAL AREA OF EXISTING FOREST = 6.89 AC.±
- TOTAL AREA OF FOREST TO BE RETAINED = 8.02 AC.±
- TOTAL AREA OF LOTS / BUILDABLE PARCELS = 19.672 AC.±
- TOTAL IMPERVIOUS AREA = 2.15 AC.± (WITHIN LOD, EXCLUDES EXISTING IMPERVIOUS)
- TOTAL AREA OF ERODIBLE SOILS = 4.25 AC.±



**DRY WELL DETAIL (M-5)**

NOT TO SCALE



**TYPICAL SECTION BIO-RETENTION FACILITY (F-6)**

NO NOT SCALE

STORMWATER MANAGEMENT PRACTICES						
AREA ID	GRASS SWALE M-8(Y/N)	DRYWELLS M-5 (Y/N)	MICRO BIO-RETENTION F-6 (Y/N)	BIO-RETENTION F-6 (Y/N)	NON-ROOFTOP DISCONNECTION M-2 (Y/N)	SUBMERGED GRAVEL WETLAND M-2 (Y/N)
LOT 1						
LOT 2	Y	Y	Y			
LOT 3			Y		Y	
LOT 4						Y
LOT 5						Y
LOT 6			Y			
LOT 7				Y		
LOT 8			Y			
LOT 9			Y			
LOT 10	Y					
PUBLIC ROAD	Y					Y
USE-IN-COMMON DRIVE FOR LOTS 2-3					Y	
USE-IN-COMMON DRIVE FOR LOTS 9-10				Y		Y

TITLE SHEET  
**BRICKELL PROPERTY**  
LOTS 1 THRU 10, BUILDABLE PRESERVATION  
PARCEL 'A' AND NON-BUILDABLE PRESERVATION  
PARCEL 'B' 'C' AND 'D'  
TAX MAP NO.: 9 GRID NO.: 6 PARCEL NO.: 254  
TAX MAP NO.: 10 GRID NO.: 1 PARCEL NO.: 274  
ZONED RR-DEO  
THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
SCALE: AS SHOWN DATE: MARCH, 2019  
SHEET 1 OF 5 **ECP-19-021**

**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
ELIJAH CITY, MARYLAND 21042  
(410) 461-2895



**PROFESSIONAL CERTIFICATION**  
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/19.  
*Frank Mahalanan II*  
FRANK MAHALANAN, II  
5/28/19  
Date

**OWNER/DEVELOPER**  
JAMES AND SUSAN BRICKELL  
12201 HOWARD LODGE DRIVE  
SYKESVILLE, MD 21784-5404

Approved: Department Of Planning And Zoning

*[Signature]*  
Chief, Development Engineering Division M/Y  
*[Signature]*  
Chief, Division Of Land Development

5-28-19  
Date  
5-22-19  
Date

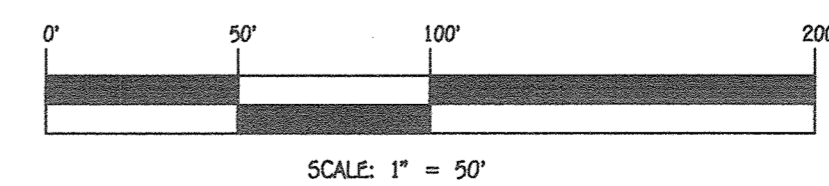
**GENERAL NOTES**

- 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 THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY (DESS UTILITY) AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- BOUNDARY SHOWN HEREON IS BASED ON FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED BY FISHER, COLLINS & CARTER, INC. DATED JANUARY, 2018. TOPOGRAPHY SHOWN HEREON IS BASED ON AERIAL TOPOGRAPHY PROVIDED BY MAPPING RESOURCES GROUP, INC. RECEIVED APRIL, 2018 AND SUPPLEMENTED BY A FIELD RUN TOPOGRAPHIC SURVEY IN JANUARY, 2018.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 10AA AND 09CB WERE USED FOR THIS PROJECT.
- PREVIOUS DTZ FILE NUMBERS: SP-19-003.
- STORM WATER MANAGEMENT IS IN ACCORDANCE WITH THE M.D.E. STORM WATER DESIGN MANUAL VOLUMES 1 & 2, REVISED 2009, NON-STRUCTURAL PRACTICES IN ACCORDANCE WITH CHAPTER 5 ARE BEING UTILIZED ALONG WITH BIORETENTION UNDER CHAPTER 3.
- THIS PROPERTY IS LOCATED OUTSIDE THE METROPOLITAN DISTRICT. LOTS TO BE SERVED BY PRIVATE WELL & SEPTIC SYSTEMS.
- ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- THE SUBJECT PROPERTY IS ZONED RR-DEO (PER DATE 10/06/2013) COMPREHENSIVE ZONING PLAN.
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE REQUIRED WETLANDS, STREAMS(S) OR THEIR BUFFERS, FOREST CONSERVATION EASEMENT AREAS AND 100 YEAR FLOODPLAIN.
- THIS PROJECT IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBMISION AND LAND DEVELOPMENT REGULATIONS.
- THE SITE IS NOT LOCATED WITHIN A HISTORIC DISTRICT. THERE IS NO 100-YEAR FLOODPLAIN LOCATED ON THIS PROPERTY.
- WETLAND AND FOREST STAND DELINEATION PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. IN NOVEMBER, 2018.
- THE FURTHER CONSERVATION REQUIREMENTS PER SECTION 16.1200 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION MANUAL FOR THIS SUBMISION WILL BE FULFILLED BY ON-SITE CREDITED RETENTION AND REFORESTATION.
- SOILS SHOWN HEREON ARE BASED ON THE NRCS WEBSOIL SURVEY AND HOWARD COUNTY MAP #2.
- LANDSCAPING WILL BE PROVIDED AT THE FINAL PLAN STAGE OF THIS PROJECT.
- SOIL BORINGS WILL BE PROVIDED WITH THE PRELIMINARY EQUIVALENT SKETCH PLAN FOR THIS PROJECT.
- APPROVAL OF THIS ECP DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBMISION PLAN/PLAN AND/OR RED-LINE REVISION PLAN. REVIEW OF THIS PROJECT FOR COMPLIANCE WITH THE HOWARD COUNTY SUBMISION AND LAND DEVELOPMENT REGULATIONS AND THE HOWARD COUNTY ZONING REGULATIONS SHALL OCCUR AT THE SUBMISION PLAN/PLAN AND/OR SITE DEVELOPMENT PLAN STAGES AND/OR RED-LINE REVISION PROCESS. THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED REVIEW COMMENTS (INCLUDING COMMENTS THAT MAY ALTER THE OVERALL SITE DESIGN) AS THIS PROJECT PROGRESSES THROUGH THE PLAN REVIEW PROCESS.
- STRUCTURES EXIST ON THE PROPERTY, KNOWN AS 18201 HOWARD LODGE ROAD, WHICH ARE TO REMAIN.
- APPROVAL OF THIS ECP BY THE HOWARD SCD DOES NOT PROVIDE APPROVAL OF THE SHOWN SEDIMENT CONTROLS.
- HOWARD SCD STANDARD SEDIMENT CONTROL PLAN CANNOT BE USED TO OBTAIN PERMITS FOR THIS PROJECT.

1/20/21/17/10/20/Engineering/Design/ECP Folder/ECP Plan set/17040/ECP 01 Title Sheet.dwg, Layout 1, 11



LEGEND					
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL	□	DRYWELL (M-5)-TYPICAL	▨	DENOTES 15%-24.9% SLOPES
---	EXISTING CONTOUR 10' INTERVAL	▨	SOIL LINES AND TYPES	▨	DENOTES 25% AND GREATER SLOPE
---	PROPOSED CONTOUR 10' INTERVAL	○	BIO RETENTION FACILITY (F-6) OR (M-6) AS NOTED	○	DENOTES FAILED PERC
---	PROPOSED CONTOUR 2' INTERVAL	○	PROPOSED ROOF LEADER	○	DENOTES PASSED PERC
X362.2	SPOT ELEVATION	○	PROPOSED SEPTIC FIELD	▨	EXISTING SEPTIC FIELD
○	DENOTES PROPOSED WELL	▨	DENOTES EXISTING TREES TO BE REMOVED	▨	FOREST CONSERVATION EASEMENT
○	DENOTES 1500 Sq.Ft. ALTERNATE WELL SITE	▨	DENOTES EXISTING TREES TO REMAIN	▨	ERODIBLE SOILS
▨	DENOTES EXISTING FOREST TO BE REMOVED				
▨	LIMIT OF DISTURBANCE				
▨	SSF SUPER SILT FENCE				
▨	SF SILT FENCE				
---	EXISTING TREE LINE				
---	DRAINAGE DIVIDE				



**ENVIRONMENTAL CONCEPT PLAN  
BRICKELL PROPERTY**  
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 PARCEL 'B' 'C' AND 'D'  
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 ZONED: RR-DEO  
 THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 SCALE: AS SHOWN DATE: MARCH, 2019  
 SHEET 2 OF 5 ECP-19-021

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 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL FRIE  
 ELLICOTT CITY, MARYLAND 21042  
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 Frank Manalansan, II  
 DATE: 5/20/19

**OWNER/DEVELOPER**  
 JAMES AND SUSAN BRICKELL  
 12201 HOWARD LODGE DRIVE  
 SYKESVILLE, MD 21784-5404

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LEGEND	
SYMBOL	DESCRIPTION
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---	PROPOSED SEPTIC FIELD
---	EXISTING SEPTIC FIELD
---	FOREST CONSERVATION EASEMENT
---	ERODIBLE SOILS
---	REFORESTATION PLANTING

Specimen Tree Chart				
Key (X#)	Species	Size (in dbh)	CRZ (feet radius)	Comments/Condition
1	Silver maple	31.5	47.25	
2	Norway spruce	39.5	59.25	poor, top removed
3	Pin oak	39.5	59.25	
4	Norway maple	35	52.5	poor, dieback
5	Black walnut	35.5	53.25	
6	Black cherry	36	54	
7	White ash	43	64.5	dead, ash borer infested
8	Tulip poplar	33	49.5	
9	Tulip poplar	35	52.5	
10	Tulip poplar	37.5	56.25	
11	Tulip poplar	38	57	
12	Tulip poplar	42	63	
13	Tulip poplar	34	51	
14	Red oak	38	57	
15	Silver maple	51	76.5	poor, sever dieback
16	Tulip poplar	32	48	poor
17	Tulip poplar	34.5	51.75	fair
18	White ash	32	48	dead, ash borer infested
19	White pine	46	69	
20	Red oak	37.5	56.25	
21	Red oak	34	51	
22	Chestnut oak	30	45	poor, storm damage
23	White oak	33.5	50.25	
24	White oak	32.5	48.75	
25	Black oak	35	52.5	
26	Tulip poplar	38	57	
27	Sycamore	44	66	
28	White ash	34	51	dead, ash borer infested
29	Black oak	31	46.5	

**FOREST CONSERVATION WORKSHEET  
VERSION 1.0**

BASIC SITE DATA:  
 A. TOTAL TRACT AREA ..... 56.10ac  
 B. AREA WITHIN 100 YEAR FLOODPLAIN ..... 0.00  
 C. AREA TO REMAIN IN AGRICULTURAL PRODUCTION ..... 0.00  
 D. NET TRACT AREA ..... 56.10ac

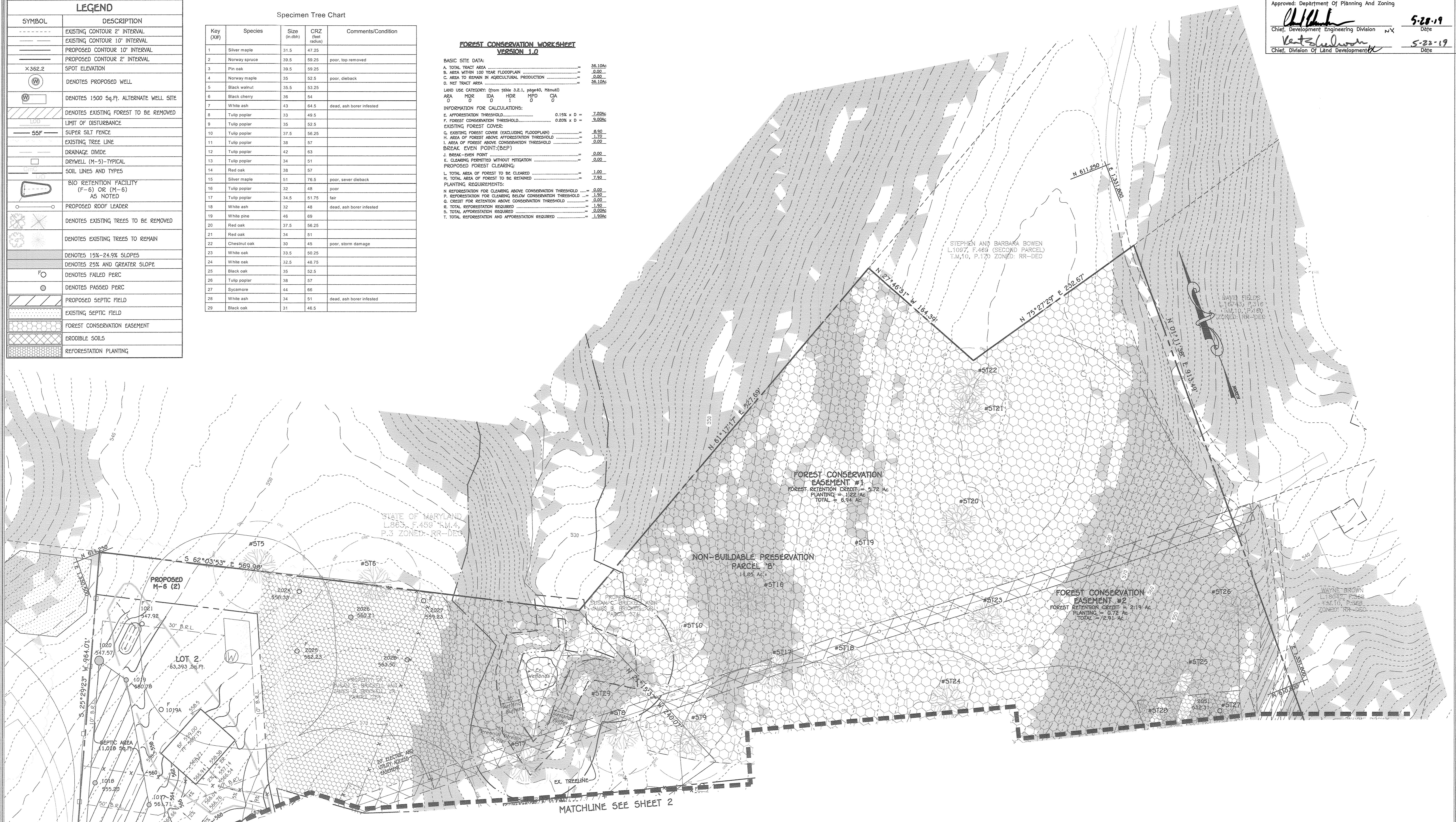
LAND USE CATEGORY: (from table 3.2.1, page 40, Manual)  
 ABA MDR IDA HDR MPD CIA  
 0 0 1 0 0

INFORMATION FOR CALCULATIONS:  
 E. AFFORESTATION THRESHOLD ..... 0.15% x D = 7.20ac  
 F. FOREST CONSERVATION THRESHOLD ..... 0.20% x D = 9.00ac

EXISTING FOREST COVER:  
 G. EXISTING FOREST COVER (EXCLUDING FLOODPLAIN) ..... 8.90  
 H. AREA OF FOREST ABOVE AFFORESTATION THRESHOLD ..... 1.70  
 I. AREA OF FOREST ABOVE CONSERVATION THRESHOLD ..... 0.00  
 BREAK-EVEN POINT (BEP) ..... 0.00  
 J. BREAK-EVEN POINT ..... 0.00  
 K. CLEARING PERMITTED WITHOUT MITIGATION ..... 0.00

PROPOSED FOREST CLEARING:  
 L. TOTAL AREA OF FOREST TO BE CLEARED ..... 1.00  
 H. TOTAL AREA OF FOREST TO BE RETAINED ..... 7.90

PLANTING REQUIREMENTS:  
 N. REFORESTATION FOR CLEARING ABOVE CONSERVATION THRESHOLD ..... 0.00  
 P. REFORESTATION FOR CLEARING BELOW CONSERVATION THRESHOLD ..... 1.90  
 Q. CREDIT FOR RETENTION ABOVE CONSERVATION THRESHOLD ..... 0.00  
 R. TOTAL REFORESTATION REQUIRED ..... 1.90  
 S. TOTAL AFFORESTATION REQUIRED ..... 0.00ac  
 T. TOTAL REFORESTATION AND AFFORESTATION REQUIRED ..... 1.90ac



ENVIRONMENTAL CONCEPT PLAN  
**BRICKELL PROPERTY**  
 LOTS 1 THRU 10, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCEL 'B' 'C' AND 'D'

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 THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
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 SHEET 3 OF 5 ECP-19-021

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 1100 NATIONAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PARK  
 ELICOTT CITY, MARYLAND 21042  
 (410) 461-2855

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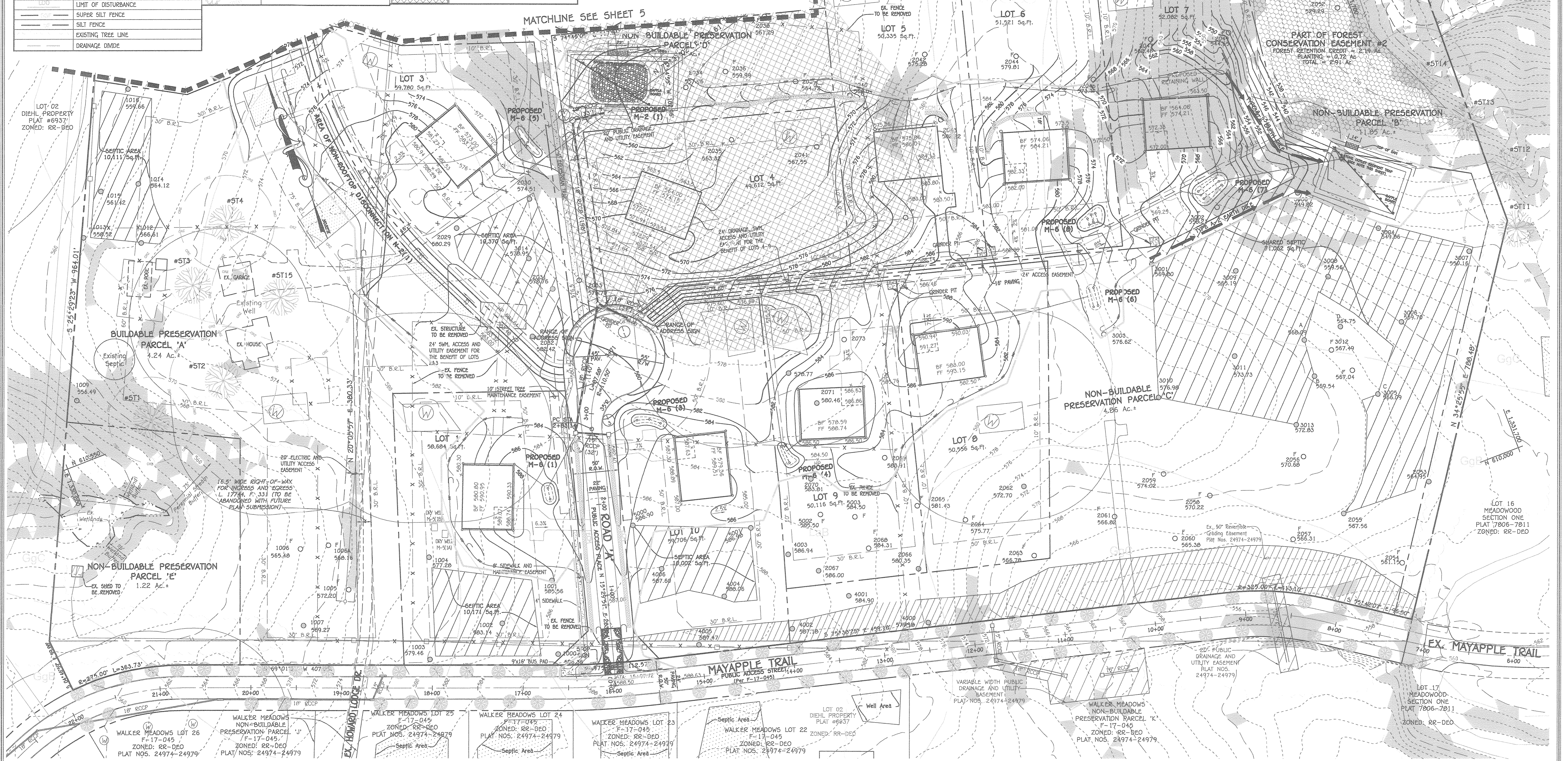
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LEGEND					
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
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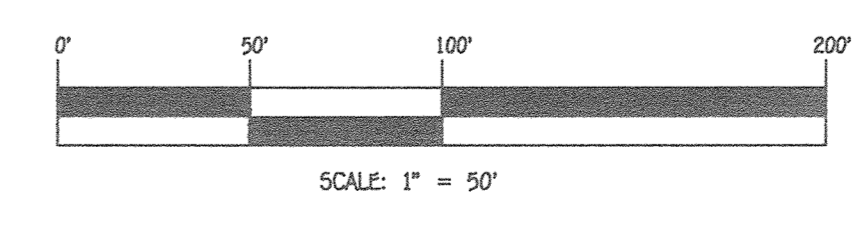
NOTE:  
FINAL DESIGN OF STONE OUTLET SEDIMENT TRAP AND ASSOCIATED EARTH DIKES WILL BE PROVIDED AT THE FINAL PLAN STAGE OF THIS PROJECT

Approved: Department of Planning And Zoning  
 Chief, Development Engineering Division *[Signature]* 5-28-19 Date  
 Chief, Division of Land Development *[Signature]* 5-22-19 Date



SOILS LEGEND							
SOIL	NAME	CLASS	K'VALUE	SOIL	NAME	CLASS	K'VALUE
GgB	Glenelg loam, 3 to 8 percent slopes	B	0.20	LdD	Lagore-Relay gravelly loams, 15 to 25 percent slopes, very stony	B/C	0.28
GgC	Glenelg loam, 8 to 15 percent slopes	B	0.20	MdD	Manor loam, 15 to 25 percent slopes	B	0.24
GmC	Glenville silt loam, 8 to 15 percent slopes	C	0.37	McC	Manor-channery loam, 8 to 15 percent slopes	B	
LaB	Lagore silt loam, 3 to 8 percent slopes	C	0.28	MkF	Manor-Drinklow complex, 25 to 65 percent slopes, very rocky	B	0.24
LaB	Lagore silt loam, 3 to 8 percent slopes, stony	C	0.28				

SOILS TAKEN FROM WEB SOILS SURVEY



PRELIMINARY GRADING & SEDIMENT CONTROL PLAN  
**BRICKELL PROPERTY**  
 LOTS 1 THRU 10, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCEL 'B' 'C' AND 'D'  
 TAX MAP NO.: 9 GRID NO.: 6 PARCEL NO.: 254  
 TAX MAP NO.: 10 GRID NO.: 1 PARCEL NO.: 274  
 ZONED RR-DEO  
 THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 SCALE: AS SHOWN DATE: MARCH, 2019  
 SHEET 4 OF 5 ECP-19-021

PROFESSIONAL CERTIFICATION  
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/19.  
*[Signature]*  
 FRANK MALANASIAN, II  
 Date: 5/22/19

OWNER/DEVELOPER  
 JAMES AND SUSAN BRICKELL  
 12201 HOWARD LODGE DRIVE  
 SYKESVILLE, MD 21784-5404



FISHER, COLLINS & CARTER, INC.  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
 ELICOTT CITY, MARYLAND 21042  
 (410) 461-2899

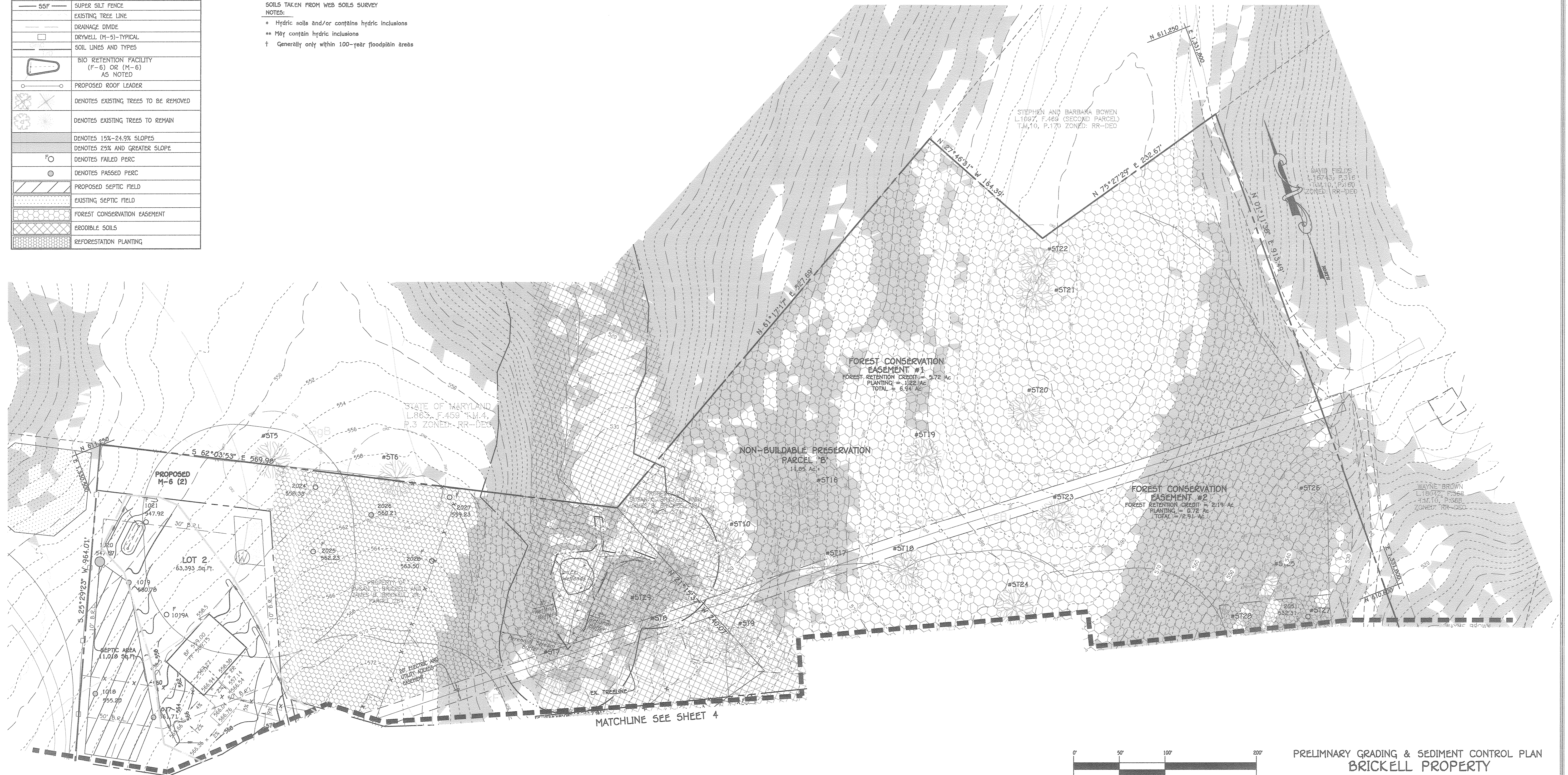
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LEGEND	
SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
---	EXISTING CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 2' INTERVAL
X362.2	SPOT ELEVATION
⊙	DENOTES PROPOSED WELL
⊙	DENOTES 1500 Sq.Ft. ALTERNATE WELL SITE
---	DENOTES EXISTING FOREST TO BE REMOVED
---	LIMIT OF DISTURBANCE
---	SUPER SILT FENCE
---	EXISTING TREE LINE
---	DRAINAGE DIVIDE
---	DEYWELL (M-5)-TYPICAL
---	SOIL LINES AND TYPES
---	BIO RETENTION FACILITY (F-6) OR (M-6) AS NOTED
---	PROPOSED ROOF LEADER
---	DENOTES EXISTING TREES TO BE REMOVED
---	DENOTES EXISTING TREES TO REMAIN
---	DENOTES 15%-24.9% SLOPES
---	DENOTES 25% AND GREATER SLOPE
⊙	DENOTES FAILED PERC
⊙	DENOTES PASSED PERC
---	PROPOSED SEPTIC FIELD
---	EXISTING SEPTIC FIELD
---	FOREST CONSERVATION EASEMENT
---	ERODIBLE SOILS
---	REFORESTATION PLANTING

SOILS LEGEND			
SOIL	NAME	CLASS	'K' VALUE
GgB	Glenelg loam, 3 to 8 percent slopes	B	0.20
GgC	Glenelg loam, 8 to 15 percent slopes	B	0.20
GmC	Glenville silt loam, 8 to 15 percent slopes	C	0.37
LaB	Legore silt loam, 3 to 8 percent slopes	C	0.02
LaB	Legore silt loam, 3 to 8 percent slopes, stony	C	0.02
LrD	Legore-Relley gravelly loams, 15 to 25 percent slopes, very stony	B/C	0.02
MaD	Manor loam, 15 to 25 percent slopes	B	0.24
McC	Manor-channery loam, 8 to 15 percent slopes	B	0.24
Mlf	Manor-Brinklow complex, 25 to 65 percent slopes, very rocky	B	0.24

SOILS TAKEN FROM WEB SOILS SURVEY  
NOTES:  
\* Hydric soils and/or contains hydric inclusions  
\*\* May contain hydric inclusions  
† Generally only within 100-year floodplain areas

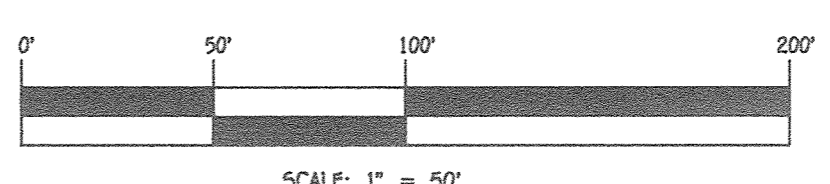


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SHEET 5 OF 5 **ECP-19-021**

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