



HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

3430 Courthouse Drive

Ellicott City, Maryland 21043

410-313-2350

Voice/Relay

Valdis Lazdins, Director

FAX 410-313-3467

TECHNICAL STAFF REPORT **THE WOODLANDS**

Planning Board Hearing of October 5, 2017

File No./Petitioner:

PB-431, Dosa Clarksville, LLC

Project Name:

The Woodlands, Lots 1-8 and Buildable Preservation Parcel A, and Non-Buildable Preservations B and C (SP-16-008)

DPZ Planner:

Brenda Luber, (410) 313-4343, BLuber@howardcountymd.gov

Request:

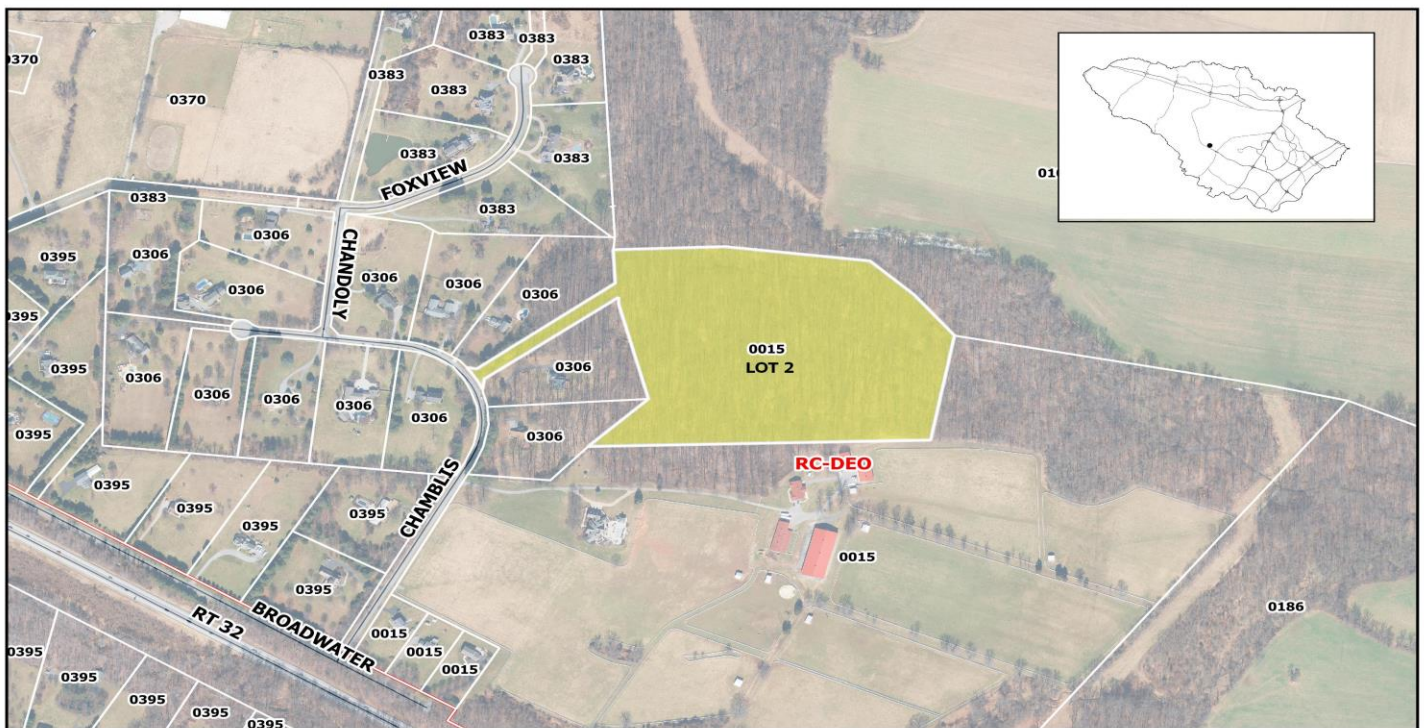
To approve Preliminary Equivalent Sketch Plan (SP-16-008) for a 21.21 acre, eight building lot, one buildable parcel and two non-buildable parcel subdivision, and site improvements. The property is zoned "RC-DEO" (Rural Conservation – Density Exchange Option) and is in the Tier III Growth Area; therefore, it is subject to Maryland Senate Bill 236, "The Sustainable Growth and Agricultural Preservation Act of 2012."

Location:

The property (Tax Map 34, Grid 23, Lot 2, Parcel 15, in the Fifth Election District of Howard County, Maryland) is accessed via Chamblis Drive.

DPZ Recommendation:

Approval, subject to complying with any Planning Board conditions.



Vicinity-Zoning Map:
PB 431



NOT TO SCALE

Vicinal Properties:

Surrounding properties are zoned RC-DEO and designated Tier IV. They include:

North – A 342-acre parcel encumbered with an Agricultural Land Preservation Easement.

East and South – A 99+ acre parcel encumbered with an Agricultural Land Preservation Easement (part of the Glen Mary Estates Subdivision).

West – Residential lots (part of Broadwater Estates).

Legal Notice:

The property was properly posted and verified by DPZ in accordance with the legal requirements.

Regulatory Compliance:

The Amended Fifth Edition of the Subdivision and Land Development Regulations, the Zoning Regulations (effective October 6, 2013) and Zoning Map, the Howard County Design Manual, the Adequate Public Facilities Ordinance, the Forest Conservation Manual, and the Landscape Manual all apply.

History:

- **F-83-114, Final Plan** – Recorded on July 6, 1983, for two residential lots.
- **ECP-15-032, Environmental Concept Plan** - Submitted April 17, 2015, for the eight building lots and one buildable preservation parcel and 2 non-buildable preservation parcels subdivision. The plan was approved on February 26, 2016.
- **WP-16-017, Alternative Compliance Petition** – Approved on December 2, 2015, to allow a forest conservation easement on Buildable Preservation Parcel A, to allow the well on Lot 3 to be located 10 feet from an agricultural preservation easement and to allow removing 18 specimen trees.

Analysis:

Site Improvements – A new public road cul-de-sac Dosa Court will serve eight single family lots, a buildable preservation parcel and two non-buildable preservation parcels. Buildable Preservation Parcel A will contain a forest conservation easement and storm water management facilities. Non-Buildable Preservation Parcel B will contain the environmental features and storm water management devices. Non-Buildable Preservation Parcel C will contain a storm water management device. Lots 1-8 will contain storm water management devices. There are no existing structures.

Setbacks – The proposed development complies with all setback requirements for the “RC” zoning district.

Storm Water Management (SWM) - Storm water management is achieved through a combination of non-rooftop disconnects, sheet flow to grass swales, and micro-bioretenion devices, in accordance with the 2010 Stormwater Management Act and the MDE Stormwater Design Manual.

Environmental Considerations – The property contains a perennial stream, area of wetlands, wetland buffers, stream buffer, and erodible soils. The subdivision layout does not impact the wetlands, stream, wetland buffer or stream buffer. Forest resources are located on the property.

Landscaping - Landscaping complies with the Howard County Landscape Manual and Design Criteria. Perimeter landscaping is being provided through credits for maintaining existing vegetation and providing additional landscaping along the property boundary, where vegetation currently does not exist.

Forest Conservation - The forest conservation obligation will be satisfied by eight

acres of on-site of forest retention and one acre of off-site planting.

Adequate Public Facilities – Allocations in the Rural West Allocation Area are currently available, but will not be finalized until the project has been approved by the Planning Board and the Decision and Order has been executed.

Adequate Road Facilities – This plan complies with acceptable levels of service established by Adequate Road Facilities requirements. The APFO traffic study for this project was approved on April 10, 2017, by the Departments of Public Works and Planning and Zoning.

Development Criteria – This plan complies with the Howard County Subdivision and Land Development Regulations and the October 6, 2013, Howard County Zoning Ordinance.

Planning Board Criteria: The Subdivision Plan complies with the below criteria requirements of Maryland Senate Bill 236, “The Sustainable Growth and Agricultural Preservation Act of 2012”:

1. **The cost of providing local governmental services to the residential major subdivision unless a local jurisdiction’s Adequate Public Facilities Ordinance already requires a review of government services.**

Howard County has an Adequate Public Facilities ordinance; therefore, this requirement has been met.

2. **The potential environmental issues or a natural resources inventory related to the proposed residential major subdivision.**

There are no environmental issues or impacts as the environmental features and buffers on the property will not be disturbed.

SRC Action: The SRC determined the Preliminary Equivalent Sketch Plan can be approved.

Recommendation: The Department of Planning and Zoning recommends approval of Preliminary Equivalent Sketch Plan (SP-16-008), and any conditions imposed by the Planning Board.


Valdis Lazdins, Director
Department of Planning and Zoning

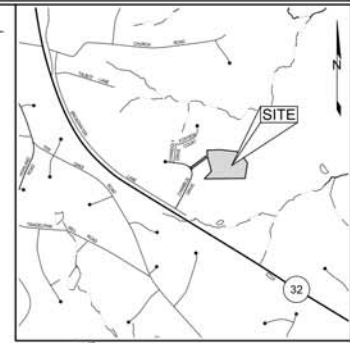
9/18/17
Date

Please note that this file is available for public review by appointment at the Department of Planning and Zoning’s public service counter, Monday through Friday, 8:00 a.m. to 5:00 p.m.



SOILS LEGEND			
SYMBOL	NAME / DESCRIPTION	GROUP	K _f FACTOR
CLC	SALA LOAM, 3 TO 15 PERCENT SLOPES	B	0.24
SLP	DELENG LOAM, 3 TO 6 PERCENT SLOPES	B	0.20
CLC	CLAYEY SUELOE, 3 TO 6 PERCENT SLOPES	C	0.37
CLC	ADAMS LOAM, 1 TO 3 PERCENT SLOPES	B	0.24
MAC	MYRTLE LOAM, 1 TO 3 PERCENT SLOPES	B	0.24
WB	WATER TABLE BELOW 10 PERCENT SLOPES	C	0.24

- LEGEND**
- EXISTING CONTOUR
 - PROPOSED CONTOUR
 - EXISTING SPOT ELEVATION
 - PROPOSED SPOT ELEVATION
 - DIRECTION OF FLOW
 - EXISTING TREELINE
 - SOIL BOUNDARY
 - EXISTING STREAM
 - 10' STREAM BUFFER
 - PERCOLATION TEST HOLE, PASSED
 - PERCOLATION TEST HOLE, FAILED
 - PROPOSED WELL AREA
 - SPECIMEN TREE APPROVED TO BE REMOVED SEE GENERAL NOTE 16
 - PROPOSED PUBLIC TREE MAINTENANCE EASEMENT



WELL BOX AREA	
LOT NUMBER	AREA
1	1,596.0 SF
2	1,563.0 SF
3	1,561.0 SF

GENERAL NOTES

1. ALL PERCOLATION TESTS SHALL BE PERFORMED IN ACCORDANCE WITH THE MARYLAND DEPARTMENT OF THE ENVIRONMENT'S COMPREHENSIVE ZONING PLAN, LOCAL AREA OF PRIORITY 4 ST 21AC4.
2. THIS AREA DESIGNATES A PRIVATE SEWAGE AREA OF AT LEAST 10,000 SF AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL (COMAR 26.04.03). IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THESE AREAS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWAGE AREA. RECORDATION OF A MODIFIED SEWAGE AREA SHALL NOT BE NECESSARY.
3. PRIVATE WATER AND PRIVATE SEWER WILL BE USED WITHIN THIS SITE.
4. THIS PLAN IS BASED ON A FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR ABOUT SEPTEMBER 16, 2014, BY SILL, ADCOCK & ASSOCIATES, LLC.
5. TOPOGRAPHY IS BASED ON A FIELD RUN TOPOGRAPHIC SURVEY PERFORMED BY SILL, ADCOCK & ASSOCIATES, LLC, ON OR ABOUT SEPTEMBER 16, 2014.

GENERAL NOTES CONTINUED

6. PERCOLATION TESTS SHALL BE INSTALLED AT THE PROPOSED PERCOLATION BEDROCK AREAS SHOWN ON THIS PLAN.
7. THE LATER SHOWN HIGHLIGHTED WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT.
8. ANY CHANGES TO A PRIVATE SEWAGE AREA SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
9. ALL EXISTING WELLS, SEPTIC SYSTEMS AND SEWAGE DISPOSAL AREAS WITHIN 100 FEET OF THE PROPERTY BOUNDARIES AND ALL EXISTING AND PROPOSED WELLS THAT ARE LOCATED WITHIN 200 FEET DOWN GRADIENT OF EXISTING OR PROPOSED SEPTIC SYSTEMS AND SEWAGE DISPOSAL AREAS HAVE BEEN FIELD LOCATED.
10. PERCOLATION HOLES THAT ARE ABSENT FROM THE SEQUENTIAL ORDER WERE NOT DUG AND ARE NOT SHOWN ON THIS PLAN.
11. THE MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) HAS APPROVED A VARIANCE TO ALLOW WELLS IN THE WOODLANDS SUBDIVISION TO BE DOWN GRADIENT OF AN OFF SET SDA ON BROADWATER ESTATES LOT 12 AND SDA WITHIN THE PROPOSED SUBDIVISION. THE APPROVAL BY MDE IS GRANTED PURSUANT TO THE FOLLOWING CONDITIONS:
 - ALL WELLS INSTALLED IN THE WOODLANDS SUBDIVISION ARE TO HAVE STEEL CASING, THE WELL CASINGS ARE TO EXTEND TO FIFTY (50) FEET DEPTH, OR TEN (10) FEET INTO COMPLETE BEDROCK, WHICH EVER IS DEEPER.
 - ALL SEPTIC SYSTEMS INSTALLED ON LOTS 2, 3, 4, 5, 7 AND 8 MUST INCLUDE A BEST AVAILABLE TECHNOLOGY (BAT) UNIT.
 - ALL DRAIN FIELDS ON LOTS 2, 3, 4, 5, AND 8 ARE TO BE DESIGNED FOR PRESSURIZED DISTRIBUTION OR EQUIVALENT.
 - BIO-RETENTION FACILITIES 3, 4, 5, 7, 8, 14, AND 17 ARE TO BE WRAPPED IN AN IMPERMEABLE LINER.

GENERAL NOTES CONTINUED

12. PERCOLATION TESTS SHALL BE INSTALLED AT THE PROPOSED PERCOLATION BEDROCK AREAS SHOWN ON THIS PLAN.
13. PERMITS FOR THE REMOVAL OF SPECIMEN TREES SHALL BE OBTAINED FROM THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS TO ALLOW FOR THE REMOVAL OF NINE (9) SPECIMEN TREES. THIS WAS APPROVED BY THE DIRECTOR OF PLANNING AND ZONING SUBJECT TO THE FOLLOWING CONDITIONS: REFER TO WAIVER PERMIT W-16-008.
 - THE WAIVER PETITION NUMBER AND CONDITIONS OF APPROVAL MUST BE ADDED TO ALL SUBDIVISION PLANS AND FINAL PLANS.
 - THE DEVELOPER SHALL PLANT EIGHTEEN (18) 3" MINIMUM CALIPER NATIVE SHADE TREES IN ADDITION TO THE REQUIRED PERIMETER LANDSCAPING TO MITIGATE THE REMOVAL OF SPECIMEN TREES. INCLUDE THE ADDITIONAL TREES ON THE PRELIMINARY EQUIVALENT SKETCH PLAN AND ALL SUBSEQUENT PLANS. THESE TREES WILL BE BONDED WITH THE DEVELOPER'S AGREEMENT UNDER THE FINAL SUBDIVISION PLAN.
 - PROTECTIVE MEASURES SHALL BE UTILIZED DURING CONSTRUCTION TO PROTECT THE SPECIMEN TREES THAT ARE PROPOSED TO REMAIN. INCLUDE DETAILS OF THE PROPOSED TREE PROTECTION MEASURES ON THE PRELIMINARY EQUIVALENT SKETCH PLAN AND ALL SUBSEQUENT PLANS.
 - THE ALTERNATIVE COMPLIANCE APPROVAL APPLIES ONLY TO THE NINE (9) SPECIMEN TREES TO BE REMOVED AS SHOWN ON THE WAIVER PLAN EXHIBIT. THE REMOVAL OF ANY OTHER SPECIMEN TREE ON THE PROPERTY IS NOT PERMITTED UNLESS IT CAN BE SUFFICIENTLY DEMONSTRATED BY THE APPLICANT TO BE JUSTIFIED.
14. A NOTICE OF EXEMPTION MUST BE SUBMITTED TO CURB AND GUTTER AT THE PRELIMINARY EQUIVALENT SKETCH PLAN STAGE FROM ROAD STATION 8 + 96.32 THRU THE CUL-DE-SAC.

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS IN ACCORDANCE WITH THE MASTER PLAN OF HOWARD COUNTY

I CERTIFY THAT THE INFORMATION SHOWN HEREON IS BASED ON FIELD WORK PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, AS IS CORRECT, TO THE BEST OF MY KNOWLEDGE AND BELIEF.

COUNTY HEALTH OFFICER
HOWARD COUNTY HEALTH DEPARTMENT

PAUL M. SILL, PE, LEED AP
LICENSED PROFESSIONAL ENGINEER #30259

DATE

OWNER/DEVELOPER
DOSA INVESTMENTS LLC
DOSA WILEY COURT
LAYTONVILLE MD, 20852
301.370.8868

THE PURPOSE FOR THIS REVISED PERCOLATION CERTIFICATION PLAN IS DUE TO THE RELOCATION OF LOT 3 AND ALL THE ASSOCIATED CHANGES NECESSARY TO COMPLETE THE RELOCATION.

REVISED PERCOLATION CERTIFICATION PLAN
THE WOODLANDS
LOTS 1 THRU 8, BUILDABLE PRESERVATION PARCEL A AND NON-BUILDABLE PRESERVATION PARCELS B AND C (RE-SUBDIVISION OF LOT 2 OF GLEN MARY ESTATES)
TAX MAP 28 GRD 23 PARCEL 15
SND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SILL ENGINEERING GROUP, LLC

11130 Dinklage Court, Suite 200
Manassasville, Maryland 21104
Phone: 410.325.5070
Fax: 410.696.2022
Email: info@sillengineering.com
Civil Engineering & Land Development

DESIGN BY: PS
DRAWN BY: JCV
CHECKED BY: PS
SCALE: AS SHOWN
DATE: APRIL 8, 2017
PROJECT #: 14-029
SHEET # 1 of 1

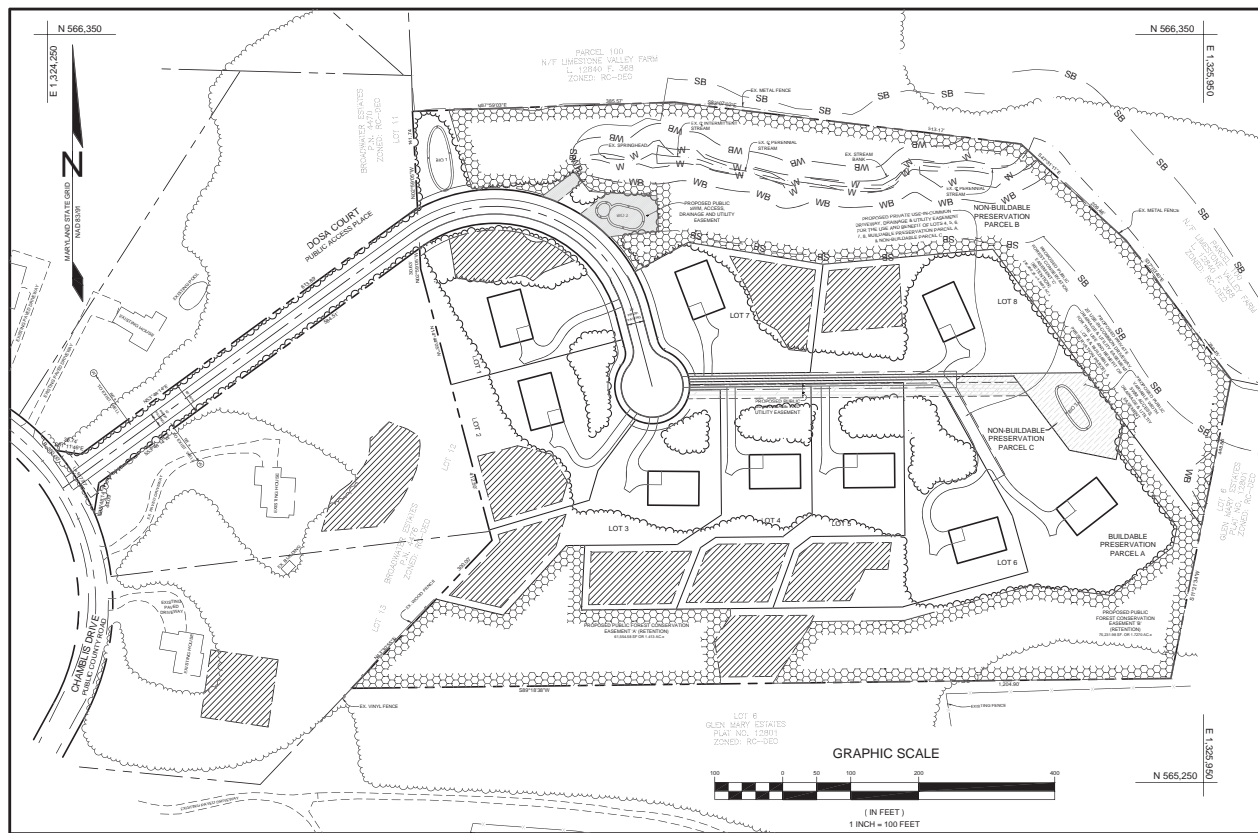
PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 30259, EXPIRATION DATE: JUNE 30, 2017

GENERAL NOTES

- SUBJECT PROPERTY ZONED RC-DEO PER 100613 COMPREHENSIVE ZONING PLAN.
- PROPERTY ADDRESS: CHAMBLIS DRIVE, CLARKSVILLE 2029
- TOTAL AREA OF PROPERTY - 21.21 AC.±
- PROPOSED NUMBER OF LOTS = 8
- PROPOSED AREA OF LOTS = 9.15 AC.±
- PROPOSED NUMBER OF BULDBLE PRESERVATION PARCEL = 1
- PROPOSED AREA OF BULDBLE PRESERVATION PARCEL = 4.86 AC.±
- PROPOSED NUMBER OF NON-BULDBLE PRESERVATION PARCELS = 2
- PROPOSED AREA OF NON-BULDBLE PRESERVATION PARCEL = 5 TO 10 AC.±
- PRIVATE WATER AND PRIVATE SEWER WILL BE USED WITHIN THIS SITE.
- ZZZ THIS AREA DESIGNATES A PRIVATE SEWAGE AREA OF AT LEAST 100,000 SF AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THESE AREAS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWAGE AREA. RECONSTRUCTION OF A MODIFIED SEWAGE AREA SHALL NOT BE NECESSARY.
- THE BOUNDARY SHOWN HEREON IS BASED ON A FIELD RUN BOUNDARY SURVEY PREPARED BY ADOCK & ASSOCIATES, LLC ON SEPTEMBER 16, 2014.
- THE TOPOGRAPHY SHOWN HEREON HAS BEEN FIELD RUN BY ADOCK & ASSOCIATES, LLC, ON SEPTEMBER 16, 2014. THE EXISTING TOPOGRAPHY SHOWN OUTSIDE THE SITE IS BASED ON HOWARD COUNTY AERIAL TOPOGRAPHY FLOWN IN 2004.
- REFERENCE: LIBER 07103, JOB# 00688
- PREVIOUS HOWARD COUNTY FILE NUMBERS: RECORD PLAT NO. 5471, F-83-114, ECP-15-032, AND WP-16-017
- THE SOLS SHOWN HAVE BEEN TAKEN FROM THE US DEPARTMENT OF AGRICULTURE, NATURAL RESOURCE CONSERVATION SERVICE, WEB SOIL SURVEY WEBSITE, HOWARD COUNTY WEBSITE, HOWARD COUNTY GRID 20.
- A WETLAND AND STREAM STUDY HAS BEEN PREPARED BY ECO SCIENCE PROFESSIONALS INC. ON NOVEMBER 2014.
- THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP, WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT.
- ALL EXISTING WELLS, SEPTIC SYSTEMS AND SEWAGE DISPOSAL EASEMENTS WITHIN 100 FEET OF THE PROPERTY BOUNDARIES AND ALL EXISTING AND PROPOSED WELLS THAT ARE LOCATED WITHIN 200 FEET DOWNGRADING OF EXISTING OR PROPOSED SEPTIC SYSTEMS AND SEWAGE DISPOSAL EASEMENTS HAVE BEEN FIELD LOCATED.
- EXISTING UTILITIES ARE LOCATED BY THE USE OF ANY OR ALL OF THE FOLLOWING: ROAD CONSTRUCTION PLANS, FIELD SURVEYS, PUBLIC WATER AND SEWER PLANS AND OTHER AVAILABLE RECORD DRAWINGS. APPROXIMATE LOCATION OF THE EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTORS INFORMATION. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO THE CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- GEOTECHNICAL INFORMATION HAS BEEN TAKEN FROM THE US DEPARTMENT OF AGRICULTURE, NATURAL RESOURCE CONSERVATION SERVICE, WEB SOIL SURVEY WEBSITE AND FIELD INVESTIGATIONS. IF FUTURE INVESTIGATIONS SHOW UNSATISFACTORY SOIL CONDITIONS FOR THE STORMWATER MANAGEMENT TREATMENTS SHOWN, EITHER UNDERDRAINS WILL BE PROVIDED OR A DIFFERENT PRACTICE WILL BE SUBSTITUTED.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL, WHICH IS BASED ON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENTS NUMBERS 29HC AND 34BA WERE USED FOR THIS PROJECT.
- NO GRADING OR 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. UNLESS ALTERNATIVE PRACTICE HAS BEEN APPROVED OR ACTIVITIES HAVE BEEN DETERMINED ESSENTIAL BY THE DEPARTMENT OF PLANNING AND ZONING.
- FOREST CONSERVATION OBLIGATIONS WILL BE FULFILLED BY ON-SITE RETENTION AND THE REMAINING OBLIGATION WILL BE FULFILLED BY THE PAYMENT OF A FEE-IN-LIEU, OFF-SITE PLANTING OR TRANSFERRING THE OBLIGATION TO A FOREST MITIGATION BANK.
- ALL SWALES TO HAVE EROSION CONTROL MATTING.
- ANY VEGETATION WITHIN AND NEAR TO WELL ZONES OR SEWAGE DISPOSAL AREAS POTENTIALLY COULD BE DAMAGED OR DESTROYED DURING INSTALLATION OF WELLS OR SEPTIC SYSTEMS. IF ANY SPECIMEN TREES ARE REQUIRED TO BE REMOVED DUE TO INSTALLATION OF WELL OR SEPTIC SYSTEMS, AN ALTERNATIVE COMPLIANCE PETITION APPROVED BY HOWARD COUNTY WILL BE REQUIRED.
- BIORETENTION FACILITIES 3.5, 4, 7, 14 AND 17, RESPECTIVELY, ARE TO BE WRAPPED IN IMPERMEABLE LINERS.
- FOR FLAG OR PIPESTEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPESTEM ROAD RIGHTS-OF-WAY LINE AND NOT ONTO THE PIPESTEM LOT DRIVEWAY.
- AT LEAST 10% OF THE DWELLINGS SHALL BE MODERATE HOME HOUSING UNITS OR A FEE-IN-LIEU PAYMENT OPTION IS REQUIRED.
- THE PRESERVATION PARCELS NO LONGER HAVE SUBDIVISION POTENTIAL.
- THIS MAJOR SUBDIVISION WAS BUT IS NO LONGER GRANDFATHERED TO SB-238, "THE MARYLAND SUSTAINABLE GROWTH AND AGRICULTURAL PRESERVATION ACT OF 2012" AND IS LOCATED IN THE GROWTH TIER AREA III. THEREFORE, THIS PLAN WILL GO BEFORE THE PLANNING BOARD.
- ON DECEMBER 02, 2015, A REQUEST TO WAIVE SECTION 16.120(b)(4)(ii) TO ALLOW A FOREST CONSERVATION EASEMENT ON BUILDABLE PRESERVATION PARCEL 'A', SECTION 16.120(b) TO ALLOW THE WELL ON LOT 3 TO BE LOCATED TEN (10) FEET FROM AN AGRICULTURAL PRESERVATION EASEMENT, SECTION 15.120(a)(7)(1) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, TO ALLOW FOR THE REMOVAL OF EIGHTEEN (18) SPECIMEN TREES, WAS APPROVED BY THE DIRECTOR OF PLANNING AND ZONING SUBJECT TO THE FOLLOWING CONDITIONS, REFER TO WAIVER PERMIT WP-16-009:
 - COMPLIANCE WITH THE SUBDIVISION REVIEW COMMITTEE COMMENTS.
 - THE WAIVER PETITION NUMBER AND CONDITIONS OF APPROVAL MUST BE ADDED TO ALL SUBDIVISION PLANS AND FINAL PLAT.
 - THE DEVELOPER SHALL PLANT EIGHTEEN (18) 3" MINIMUM CALIPER NATIVE SHADE TREES IN ADDITION TO THE REQUIRED PERIMETER LANDSCAPING TO MITIGATE THE REMOVAL OF SPECIMEN TREES. INCLUDE THE ADDITIONAL TREES ON THE PRELIMINARY EQUIVALENT SKETCH PLAN AND ALL SUBSEQUENT PLANS. THESE TREES WILL BE BONDED WITH THE DEVELOPER'S AGREEMENT UNDER THE FINAL SUBDIVISION PLAN.
 - THE HOUSE ON BUILDABLE PRESERVATION PARCEL 'A' MUST BE LOCATED 100 FEET FROM THE EDGE OF FOREST CONSERVATION EASEMENT.
 - PROTECTIVE MEASURES SHALL BE UTILIZED DURING CONSTRUCTION TO PROTECT THE SPECIMEN TREES THAT ARE PROPOSED TO REMAIN. INCLUDE DETAILS OF THE PROPOSED TREE PROTECTION MEASURES ON THE PRELIMINARY EQUIVALENT SKETCH PLAN AND ALL SUBSEQUENT PLANS.
 - THE REQUIRED FOREST CONSERVATION SIGNS MUST BE POSTED ALONG THE EDGE OF THE FOREST CONSERVATION EASEMENT BEFORE THE FIRST USE-IN-OCCUPANCY PERMIT IS ISSUED FOR A LOT OR PARCEL WITHIN THE SUBDIVISION.
 - THE FOREST RETENTION EASEMENT ON BUILDABLE PRESERVATION PARCEL 'A' MUST BE REVISED TO EXCLUDE A PORTION OF PROPOSED FOREST CONSERVATION EASEMENT AREA 'B' TO BE A MINIMUM OF 100 FEET FROM THE SIDE PROPERTY LINE OF LOT 3.
 - THE WAIVER APPROVAL APPLIES ONLY TO THE EIGHTEEN (18) SPECIMEN TREES TO BE REMOVED AS SHOWN ON THE WAIVER PLAN EXHIBIT. THE REMOVAL OF ANY OTHER SPECIMEN TREE ON THE PROPERTY IS NOT PERMITTED UNLESS IT CAN BE SUFFICIENTLY DEMONSTRATED BY THE APPLICANT TO BE JUSTIFIED.
 - A 5' SETBACK SHALL BE PROVIDED AND MAINTAINED FROM THE FOREST CONSERVATION EASEMENT LOCATED ON PRESERVATION PARCEL 'A'.
 - THE DEVELOPER SHALL BE ADVISED THAT FOREST CONSERVATION EASEMENTS THAT ARE EITHER ON OR ADJACENT TO RESIDENTIAL LOTS ARE OFTEN ENCROACHED UPON. THEREFORE, THIS OFFICE ADVISES THE DEVELOPER TO PROVIDE ADDITIONAL EDUCATION AND/OR BARRIERS SUCH AS SPLIT RAIL FENCING OR ADDITIONAL SIGNAGE AROUND THE FOREST CONSERVATION EASEMENT PERMITTER TO WARN FUTURE HOME OWNERS OF THE PROTECTION REQUIREMENT OF FOREST CONSERVATION AREAS.
- THE PLANNING DIRECTOR DENIED YOUR REQUEST TO WAIVE SECTION 16.120(b)(4)(ii) TO ALLOW A FOREST CONSERVATION EASEMENT ON BUILDABLE PRESERVATION PARCEL 'A'.
- GENERAL NOTES CONTINUED THIS SHEET

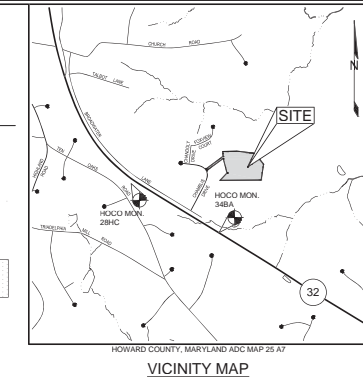
PRELIMINARY EQUIVALENT SKETCH PLAN THE WOODLANDS

LOTS 1 THRU 8, BUILDABLE PRESERVATION PARCEL A AND NON-BUILDABLE PRESERVATION PARCELS B & C (RE-SUBDIVISION OF LOT 2 OF GLEN MARY ESTATES) HOWARD COUNTY, MARYLAND



LEGEND

- EXISTING CONTOUR
- PROPOSED CONTOUR
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- DIRECTION OF FLOW
- EXISTING TREELINE
- SOIL BOUNDARY
- EXISTING STREAM
- 100' STREAM BUFFER
- PROPOSED WELL AREA



BENCHMARKS

NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
29HC	565,351.762	1,332,102.463	552.207	'S SIDE OF ROUTE 32, 0.2 MILES W OF EXIT 20 SIGN, W. 130' E OF GUARDRAIL
34BA	563,852.491	1,324,672.167	450.048	2.5' N OF EDGE OF PAVEMENT OF ROUTE 32, 13.3' SE OF EXIT 20 SIGN

STORMWATER MANAGEMENT DESIGN DATA

DA #	DESCRIPTION	REQUIRED	PROPOSED	CODE	BMP TREATMENT TYPE
A	POD OF PUBLIC ROAD	2,414 CF	2,446 CF	F-6	BIORETENTION FACILITY 1
B	POD OF PUBLIC ROAD	857 CF	865 CF	M-6	MICRO-BIORETENTION FACILITY 2
C	USE-IN-COMMON DRIVEWAY	1,448 CF	1,543 CF	M-6	MICRO-BIORETENTION FACILITY 3
D	HOUSE LOT 1	167 CF	191 CF	M-6	MICRO-BIORETENTION FACILITY 4
E	HOUSE LOT 1	167 CF	191 CF	M-6	MICRO-BIORETENTION FACILITY 5
F	HOUSE LOT 2	167 CF	191 CF	M-6	MICRO-BIORETENTION FACILITY 6
G	HOUSE LOT 2	293 CF	279 CF	M-6	MICRO-BIORETENTION FACILITY 7
H	HOUSE LOT 3	293 CF	293 CF	M-6	MICRO-BIORETENTION FACILITY 8
I	HOUSE LOT 3	167 CF	192 CF	M-6	MICRO-BIORETENTION FACILITY 9
J	HOUSE LOT 4	373 CF	387 CF	M-6	MICRO-BIORETENTION FACILITY 10
K	HOUSE LOT 5	373 CF	387 CF	M-6	MICRO-BIORETENTION FACILITY 11
L	HOUSE LOT 6	373 CF	387 CF	M-6	MICRO-BIORETENTION FACILITY 12
M	YARD LOT 7	209 CF	220 CF	M-6	MICRO-BIORETENTION FACILITY 13
N	HOUSE LOT 7	373 CF	387 CF	M-6	MICRO-BIORETENTION FACILITY 14
O	HOUSE LOT 8	373 CF	387 CF	M-6	MICRO-BIORETENTION FACILITY 15
P	HOUSE - PARCEL A	373 CF	387 CF	M-6	MICRO-BIORETENTION FACILITY 16

- NOTES:
- HOUSE SIZE IS BASED ON A 3,750 SF FOOTPRINT.
 - DRIVEWAYS WILL BE TREATED BY NON-ROOFTOP DISCONNECTS WHERE POSSIBLE.

DENSITY TABULATION CHART

TOTAL PARCEL COMPUTED ACREAGE	21.21 AC.
MAXIMUM DENSITY	21.21 AC./2 = 10 UNITS
TOTAL BASE DENSITY UNITS ALLOWED	21.21 AC./25 = 4 UNITS
TOTAL BUILDABLE LOTS/PARCELS	9
TOTAL CED SENDING UNITS REQUIRED	5 UNITS
SENDING PARCEL INFORMATION	TO BE DETERMINED AT A LATER PLAN STAGE

SHEET INDEX

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	PRELIMINARY ROAD PLAN AND PROFILE
3	PRELIMINARY GRADING, SEDIMENT AND EROSION CONTROL PLAN
4	PRELIMINARY GRADING, SEDIMENT AND EROSION CONTROL PLAN
5	PRELIMINARY STORMWATER MANAGEMENT DRAINAGE AREA MAP
6	PRELIMINARY STORMWATER MANAGEMENT DRAINAGE AREA MAP
7	PRELIMINARY STORM DRAIN DRAINAGE AREA MAP
8	PRELIMINARY STORM DRAIN DRAINAGE AREA MAP
9	PRELIMINARY LANDSCAPE AND FOREST CONSERVATION PLAN
10	PRELIMINARY LANDSCAPE AND FOREST CONSERVATION PLAN

OWNER/DEVELOPER
 DOSA CLARKSVILLE, LLC
 5900 WHALE BOAT DRIVE UNIT #206
 CLARKSVILLE MD 21029
 301.370.8969

**COVER SHEET
THE WOODLANDS**
 LOTS 1 THRU 8, BUILDABLE PRESERVATION PARCEL A
 AND NON-BUILDABLE PRESERVATION PARCELS B AND C
 (RE-SUBDIVISION OF LOT 2 OF GLEN MARY ESTATES)

**TAX MAP 34 GRID 23
8TH ELECTION DISTRICT** **PARCEL 15
HOWARD COUNTY, MARYLAND**

SILL ENGINEERING GROUP, LLC
 11130 Drexelville Court, Suite 2100
 Manassas, VA 20108
 Phone: 443.325.5076
 Fax: 410.696.2022
 Email: info@sillengineering.com
 Civil Engineering for Land Development

DESIGN BY: PS
 DRAWN BY: JCV
 CHECKED BY: PS
 SCALE: AS SHOWN
 DATE: APRIL 13, 2017
 PROJECT #: 14-029
 SHEET #: 1 of 10

PROFESSIONAL CERTIFICATION: 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. 34025, EXPIRATION DATE: JUNE 20, 2018

- GENERAL NOTES CONTINUED:**
- ON FEBRUARY 1, 2017 A REQUEST TO WAIVE SECTION 16.120(a)(7) & (10) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, TO ALLOW FOR THE REMOVAL OF NINE (9) SPECIMEN TREES, WAS APPROVED BY THE DIRECTOR OF PLANNING AND ZONING SUBJECT TO THE FOLLOWING CONDITIONS, REFER TO WAIVER PERMIT WP-16-009:
 - THE WAIVER PETITION NUMBER AND CONDITIONS OF APPROVAL MUST BE ADDED TO ALL SUBDIVISION PLANS AND FINAL PLAT.
 - THE DEVELOPER SHALL PLANT EIGHTEEN (18) 3" MINIMUM CALIPER NATIVE SHADE TREES IN ADDITION TO THE REQUIRED PERIMETER LANDSCAPING TO MITIGATE THE REMOVAL OF SPECIMEN TREES. INCLUDE THE ADDITIONAL TREES ON THE PRELIMINARY EQUIVALENT SKETCH PLAN AND ALL SUBSEQUENT PLANS. THESE TREES WILL BE BONDED WITH THE DEVELOPER'S AGREEMENT UNDER THE FINAL SUBDIVISION PLAN.
 - PROTECTIVE MEASURES SHALL BE UTILIZED DURING CONSTRUCTION TO PROTECT THE SPECIMEN TREES THAT ARE PROPOSED TO REMAIN. INCLUDE DETAILS OF THE PROPOSED TREE PROTECTION MEASURES ON THE PRELIMINARY EQUIVALENT SKETCH PLAN AND ALL SUBSEQUENT PLANS.
 - THE REQUIRED FOREST CONSERVATION SIGNS MUST BE POSTED ALONG THE EDGE OF THE FOREST CONSERVATION EASEMENT BEFORE THE FIRST USE-IN-OCCUPANCY PERMIT IS ISSUED FOR A LOT OR PARCEL WITHIN THE SUBDIVISION.
 - THE FOREST RETENTION EASEMENT ON BUILDABLE PRESERVATION PARCEL 'A' MUST BE REVISED TO EXCLUDE A PORTION OF PROPOSED FOREST CONSERVATION EASEMENT AREA 'B' TO BE A MINIMUM OF 100 FEET FROM THE SIDE PROPERTY LINE OF LOT 3.
 - THE WAIVER APPROVAL APPLIES ONLY TO THE EIGHTEEN (18) SPECIMEN TREES TO BE REMOVED AS SHOWN ON THE WAIVER PLAN EXHIBIT. THE REMOVAL OF ANY OTHER SPECIMEN TREE ON THE PROPERTY IS NOT PERMITTED UNLESS IT CAN BE SUFFICIENTLY DEMONSTRATED BY THE APPLICANT TO BE JUSTIFIED.
 - A 5' SETBACK SHALL BE PROVIDED AND MAINTAINED FROM THE FOREST CONSERVATION EASEMENT LOCATED ON PRESERVATION PARCEL 'A'.
 - THE DEVELOPER SHALL BE ADVISED THAT FOREST CONSERVATION EASEMENTS THAT ARE EITHER ON OR ADJACENT TO RESIDENTIAL LOTS ARE OFTEN ENCROACHED UPON. THEREFORE, THIS OFFICE ADVISES THE DEVELOPER TO PROVIDE ADDITIONAL EDUCATION AND/OR BARRIERS SUCH AS SPLIT RAIL FENCING OR ADDITIONAL SIGNAGE AROUND THE FOREST CONSERVATION EASEMENT PERMITTER TO WARN FUTURE HOME OWNERS OF THE PROTECTION REQUIREMENT OF FOREST CONSERVATION AREAS.
 - THE PLANNING DIRECTOR DENIED YOUR REQUEST TO WAIVE SECTION 16.120(a)(7) & (10) TO ALLOW A FOREST CONSERVATION EASEMENT ON BUILDABLE PRESERVATION PARCEL 'A'.
 - GENERAL NOTES CONTINUED THIS SHEET

STORMWATER MANAGEMENT NOTES & DESIGN NARRATIVE

- ENVIRONMENTALLY SENSITIVE AREAS (STREAMS AND STEEP SLOPES) EXIST ON SITE IN THE AREA OF DEVELOPMENT. IF NECESSARY, A WAIVER WILL BE SUBMITTED FOR THESE FEATURES TO REMAIN ON THE PROPOSED LOTS AND/OR BE DISTURBED.
- STORMWATER MANAGEMENT OBLIGATIONS WILL BE TREATED BY UTILIZING TWO MICRO-BIORETENTION FACILITIES AND A BIORETENTION FACILITY FOR THE PROPOSED ROAD AND NON-ROOFTOP DISCONNECTS FOR THE USE-IN-COMMON DRIVEWAYS WHERE FEASIBLE. THE PROPOSED HOUSES WILL BE TREATED USING MICRO-BIORETENTION FACILITIES. PROPOSED PRIVATE DRIVEWAYS WILL BE TREATED BY NON-ROOFTOP DISCONNECTS.
- THE SITES NATURAL RESOURCES ARE PROTECTED AND ENHANCED BY FOREST CONSERVATION EASEMENTS BEING PLACED OVER THEM WHERE FEASIBLE AND STREAM BUFFERS BEING ADDED WHERE APPROPRIATE.
- TO THE GREATEST EXTENT PRACTICABLE THE NATURAL FLOW PATTERNS OF THE SITE HAVE BEEN MAINTAINED BY DIRECTING STORM DRAIN, BIORETENTION AND SHEET FLOW RUNOFF TO LOCATIONS WITHIN THE NATURAL DRAINAGE DIVIDES.
- IMPROVED AREAS HAVE BEEN REDUCED BY THE USE OF THE SMALLEST ROAD SECTION ALLOWABLE AND BY UTILIZING PERVIOUS AREAS FOR TREATMENT.
- THERE ARE MULTIPLE PROPOSED "ON-SITE" FOREST CONSERVATION AFForestation AREAS CREATED TO SATISFY THE FOREST CONSERVATION REQUIREMENTS FOR THIS DEVELOPMENT.
- THE REQUIRED P6 FOR THE SITE (L6) HAS BEEN TREATED THROUGH THE USE OF BIORETENTION, MICRO-BIORETENTION AND NON-ROOFTOP DISCONNECTS. SEDIMENT CONTROL WILL BE PROVIDED BY SILT FENCE, SUPER SILT FENCE, INLET PROTECTION AND CLEAN WATER EARTH-DIKE #1. NO STRUCTURAL BMPs OR SEDIMENT BASINS ARE REQUIRED.

SITE ANALYSIS DATA SHEET

ENVIRONMENTAL AREA	SIZE OR USE
TOTAL PROJECT AREA	21.21 ACRES±
LIMIT OF DISTURBANCE	10.76 ACRES±
GREEN OPEN AREA (LAWN)	9.25 ACRES±
IMPROVED AREA	2.45 ACRES±
PROPOSED SITE USES	1.06 ACRES±
WETLANDS	0.29 ACRES±
WETLAND BUFFERS	1.16 ACRES±
FLOODPLAIN	0.00 ACRES±
EXISTING FOREST	17.90 ACRES±
SLOPES GREATER THAN 15% 1	4.76 ACRES±
HIGHLY ERODIBLE SOILS	5.70 ACRES±(1)

- NOTES:
- SOIL INFORMATION HAS BEEN TAKEN FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCE CONSERVATION SERVICE, WEB SOIL SURVEY.
 - HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR 'K' GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT.

SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	GROUP	'K' FACTOR
Gsc	GALIA LOAM, 8 TO 15 PERCENT SLOPES	B	0.24
Gsb	GLENNELG LOAM, 3 TO 8 PERCENT SLOPES	B	0.20
Gmb	GLENNVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES	C	0.37
Msc	MANOR LOAM, 8 TO 15 PERCENT SLOPES	B	0.24
Msb	MANOR LOAM, 15 TO 25 PERCENT SLOPES	B	0.24
Wmb	WILTSHIRE SILT LOAM, 3 TO 8 PERCENT SLOPES	C	0.24

- NOTES:
- SOIL INFORMATION HAS BEEN TAKEN FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCE CONSERVATION SERVICE, WEB SOIL SURVEY, SOILS GRID 12, SUB-GRID 206.
 - HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR 'K' GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT.

MINIMUM LOT SIZE CHART

LOT NUMBER	GROSS AREA (AC)	PIEDESTEM AREA (AC)	MINIMUM LOT SIZE
4	1.07±	0.0032±	1,074 AC / 46,609.2 SF
5	1.05±	0.0193±	1,054 AC / 45,738 SF
6	1.29±	0.0289±	1,324 AC / 57,499.2 SF
8	1.31±	0.0166±	1,314 AC / 57,063.6 SF
	4.86±	0.0335±	4,866 AC / 211,701.6 SF

BUILD PRES. PARCEL A

COUNTY HEALTH OFFICER: _____ DATE: _____

HOWARD COUNTY HEALTH DEPARTMENT

TEMPORARILY APPROVED: _____ DATE: _____

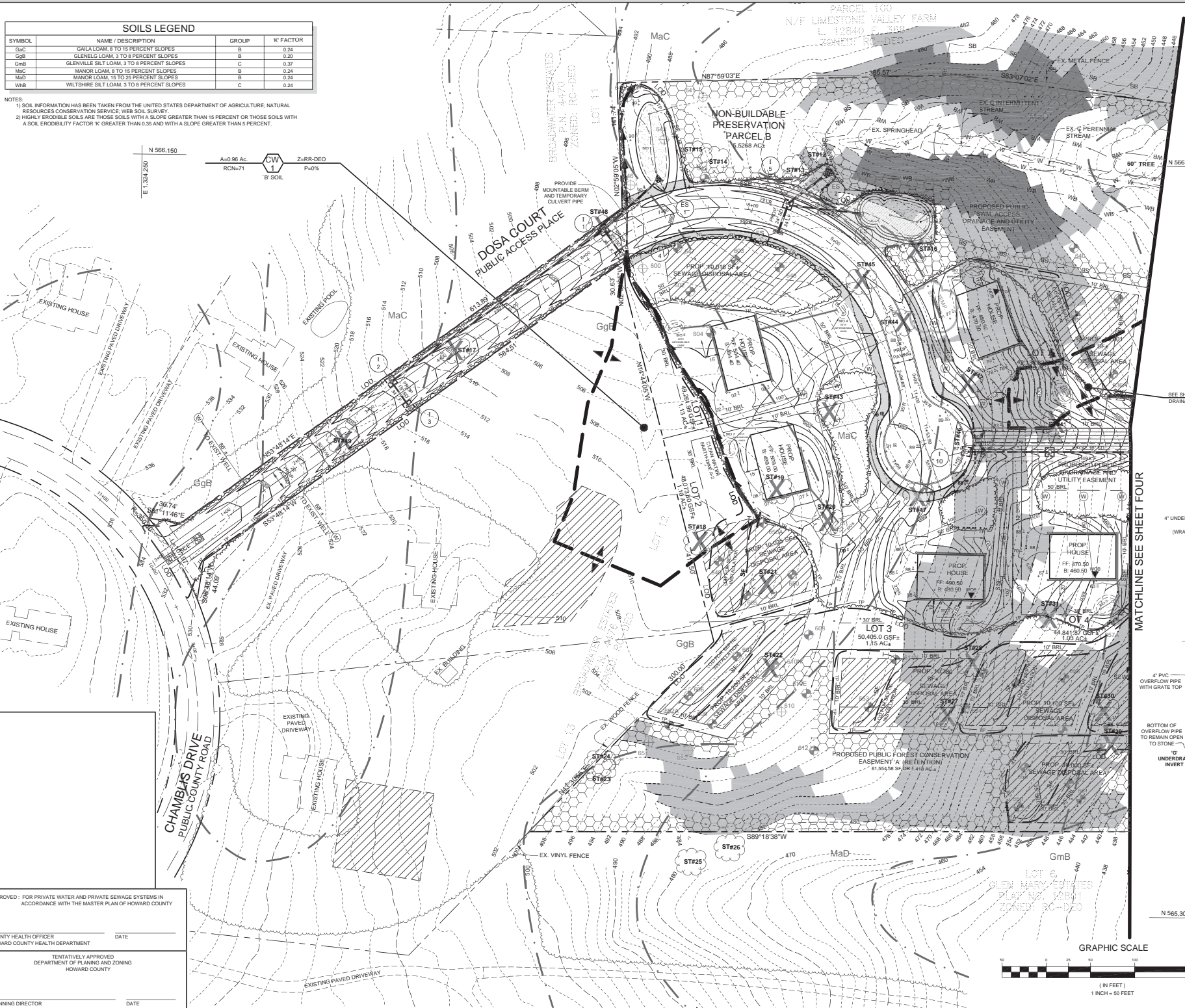
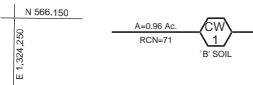
DEPARTMENT OF PLANNING AND ZONING

HOWARD COUNTY

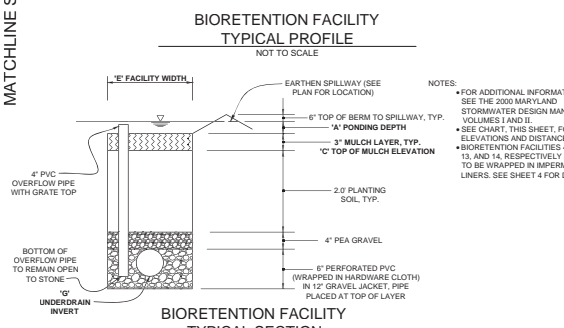
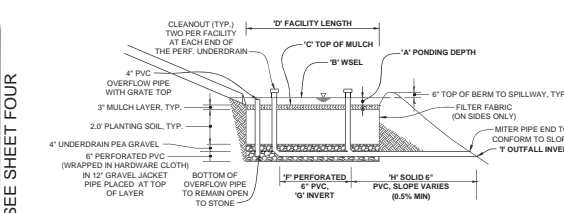
PLANNING DIRECTOR: _____ DATE: _____

SOILS LEGEND			
SYMBOL	NAME / DESCRIPTION	GROUP	K' FACTOR
GaC	GAILA LOAM, 8 TO 15 PERCENT SLOPES	B	0.24
GgB	GLENGLE LOAM, 3 TO 8 PERCENT SLOPES	B	0.20
GmB	GLENNVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES	C	0.37
MaC	MANOR LOAM, 8 TO 15 PERCENT SLOPES	B	0.24
MaD	MANOR LOAM, 15 TO 25 PERCENT SLOPES	B	0.24
WbB	WILTSHIRE SILT LOAM, 3 TO 8 PERCENT SLOPES	C	0.24

- NOTES:
 1) SOIL INFORMATION HAS BEEN TAKEN FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, WEB SOIL SURVEY.
 2) HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR 'K' GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT.



LEGEND	
EXISTING CONTOUR	---
PROPOSED CONTOUR	---
EXISTING SPOT ELEVATION	125.2
PROPOSED SPOT ELEVATION	125.2
DIRECTION OF FLOW	→
EXISTING SPECIMEN TREE	ST#10
EXISTING TREELINE	---
PROPOSED TREELINE	---
STABILIZED CONSTRUCTION ENTRANCE	---
SILT FENCE	--- SF --- SF ---
SUPER SILT FENCE	--- SSF --- SSF ---
LIMIT OF DISTURBANCE	---
WETLAND BUFFER	--- WB --- WB ---
STREAM BUFFER	--- SB --- SB ---
TREE PROTECTION FENCE	---
SOIL BOUNDARY	---
STANDARD INLET PROTECTION	---
PROPOSED MICRO-BIORETENTION FACILITY (M-6)	BIO 2
ROOF LEADERS	---
CLEAN WATER EARTH DIKE A-1	---
PERCOLATION TEST HOLE, PASSED	602
PERCOLATION TEST HOLE, FAILED	600
HYDROLOGIC SOIL GROUP 'C'	--- (hatched) ---
STEEP SLOPES 15% TO 25%	--- (diagonal lines) ---
STEEP SLOPES >25%	--- (stippled) ---
FOREST CONSERVATION AREA	--- (hatched) ---
PROPOSED PUBLIC TREE MAINTENANCE EASEMENT	---



OWNER/DEVELOPER
 DOSA CLARKSVILLE, LLC
 9900 WYALLS BOAT DRIVE UNIT 2008
 CLARKSVILLE MD, 21029
 301.370.6896

PRELIMINARY GRADING, SEDIMENT AND EROSION CONTROL PLAN THE WOODLANDS
 LOTS 1 THRU 8, BUILDABLE PRESERVATION PARCEL A AND NON-BUILDABLE PRESERVATION PARCELS B AND C (RE-SUBDIVISION OF LOT 2 OF GLEN MARY ESTATES)

TAX MAP 34 GRID 23 PARCEL 15
 8TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SILL ENGINEERING GROUP, LLC
 11130 Drexelale Court, Suite 200
 Manassas, Maryland 21104
 Phone: 413.335.5076
 Fax: 413.696.3022
 Email: info@sillengineering.com
 Civil Engineering for Land Development

DESIGN BY: PS
 DRAWN BY: JCV
 CHECKED BY: PS
 SCALE: 1" = 50'
 DATE: APRIL 13, 2017
 PROJECT #: 14-029
 SHEET #: 3 of 10

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS IN ACCORDANCE WITH THE MASTER PLAN OF HOWARD COUNTY

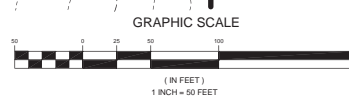
COUNTY HEALTH OFFICER
 HOWARD COUNTY HEALTH DEPARTMENT

PLANNING DIRECTOR

DATE

TENTATIVELY APPROVED
 DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY

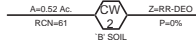
DATE



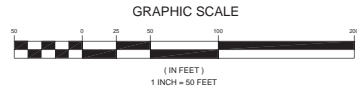
PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 30205, EXPIRATION DATE: JUNE 20, 2019

SOILS LEGEND			
SYMBOL	NAME / DESCRIPTION	GROUP	K' FACTOR
GaC	GAILA LOAM, 8 TO 15 PERCENT SLOPES	B	0.24
GgB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	B	0.20
GmB	GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES	C	0.37
MaC	MANOR LOAM, 8 TO 15 PERCENT SLOPES	B	0.24
MaD	MANOR LOAM, 15 TO 25 PERCENT SLOPES	B	0.24
WmB	WILTSHIRE SILT LOAM, 3 TO 8 PERCENT SLOPES	C	0.24

NOTES:
 1) SOIL INFORMATION HAS BEEN TAKEN FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, WEB SOIL SURVEY.
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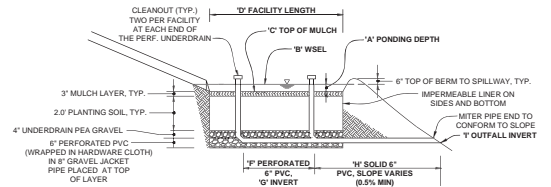


MATCHLINE SEE SHEET THREE



WELL BOX AREA	
LOT NUMBER	AREA
1	-
2	1,566.0 SF.
3	1,501.0 SF.
4	1,500.0 SF.
5	1,500.0 SF.
6	1,503.0 SF.
PRESERVATION PARCEL A	1,501.0 SF.
8	-

* LOT HAS THREE DISCRETE WELL LOCATIONS



BIORETENTION FACILITY WITH IMPERMEABLE LINER PROFILE
 NOT TO SCALE

NOTES:
 • FOR ADDITIONAL INFORMATION, SEE THE 2000 MARYLAND STORMWATER DESIGN MANUAL, VOLUMES I AND II.
 • SEE CHART ON SHEET 3, FOR ELEVATIONS AND DISTANCES.
 • BIORETENTION FACILITIES 3, 4, 5, 7, 8, 14, AND 17 ARE TO BE WRAPPED IN IMPERMEABLE LINERS.

OWNER/DEVELOPER

DOSA CLARKSVILLE LLC
 5900 WHALE BOAT DRIVE UNIT #206
 CLARKSVILLE, MD, 21029
 301.370.6866

PRELIMINARY GRADING, SEDIMENT AND EROSION CONTROL PLAN THE WOODLANDS

LOTS 1 THRU 8, BUILDABLE PRESERVATION PARCEL A AND NON-BUILDABLE PRESERVATION PARCELS B AND C (RE-SUBDIVISION OF LOT 2 OF GLEN MARY ESTATES)

TAX MAP 34 GRID 23 5TH ELECTION DISTRICT PARCEL 15 HOWARD COUNTY, MARYLAND



11130 Dovetail Court, Suite 300
 Marriottsville, Maryland 21104
 Phone: 410.325.5076
 Fax: 410.696.3022
 Email: info@sillengineering.com
 Civil Engineering for Land Development

DESIGN BY: PS
 DRAWN BY: JCV
 CHECKED BY: PS
 SCALE: AS SHOWN
 DATE: APRIL 13, 2017
 PROJECT #: 14-029
 SHEET #: 4 of 10

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS IN ACCORDANCE WITH THE MASTER PLAN OF HOWARD COUNTY

COUNTY HEALTH OFFICER _____ DATE _____
 HOWARD COUNTY HEALTH DEPARTMENT

TENTATIVELY APPROVED DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY

PLANNING DIRECTOR _____ DATE _____

PLAN

SCALE: 1"=50'

PROFESSIONAL CERTIFICATION: 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. 20263, EXPIRATION DATE: JUNE 29, 2019.