

**GENERAL NOTES**

- PROJECT BACKGROUND: LOCATION: TAX MAP 17, BLOCK 20, PARCELS 0385
- ZONING: R-20
- ADDRESS: 10039 GERMAN ROAD
- APZ REFERENCES: EOP-19-010, WP-19-004
- THIS PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
- THE EXISTING TOPOGRAPHY SHOWN HEREON IS BASED ON A TOPOGRAPHIC SURVEY PREPARED BY ROBERT H. VOGEL ENGINEERING, INC., PERFORMED IN JUNE, 2018. OFFSITE TOPOGRAPHY FROM HOWARD COUNTY GIS.
- THE PROJECT BOUNDARY IS BASED ON A BOUNDARY SURVEY PREPARED BY ROBERT H. VOGEL ENGINEERING, INC., DATED MAY, 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. 17GA AND 17GB WERE USED FOR THIS PROJECT.
- THE SUBJECT PROPERTY IS ZONED R-20 IN ACCORDANCE WITH THE OCTOBER 6, 2013 COMPREHENSIVE ZONING PLAN AND IS SUBJECT TO THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS EFFECTIVE 10/2/03 PER COUNCIL BILL 75-2003.
- THIS PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT.
- PUBLIC WATER IS PROVIDED BY CONTRACT 71-W. PUBLIC SEWER IS PROVIDED BY CONTRACT 20-105.
- EXISTING UTILITIES LOCATED FROM HOWARD COUNTY GIS. 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.
- THERE IS A 100-YEAR FLOODPLAIN WHICH CROSSES THROUGH THE PROPERTY WEST OF THE DEVELOPABLE AREA. THE FLOODPLAIN IS SHOWN ON THESE PLANS PER THE MAY 6, 2013 FEMA DIGITAL FLOOD INSURANCE RATE MAP (DFIRM).
- THERE ARE NO STEEP SLOPES OVER 25% WITH A CONTIGUOUS AREA OF 20,000SF LOCATED ONSITE.
- FOREST CONSERVATION OBLIGATIONS FOR THIS PROJECT SHALL BE ADDRESSED BY A FOREST CONSERVATION PLAN SUBMITTED WITH A FUTURE SUBDIVISION PLAN.
- WETLANDS DELINEATION AND FOREST STAND DELINEATION REPORT PREPARED BY BY LOG-SCIENCE PROFESSIONALS, INC. ON SEPTEMBER 10, 2018 AND APPROVED AS PART OF THIS PROJECT PLAN SUBMISSION.
- TWO PERENNIAL STREAMS ARE LOCATED ONSITE. THEIR BUFFERS DO NOT IMPACT THE DEVELOPABLE AREA.
- SIX (6) SPECIMEN TREES WERE FOUND ONSITE. THE PROPOSAL INCLUDES THE REMOVAL OF 4 TREES.
- THERE ARE NO WETLANDS, STREAMS OR BUFFERS, WITHIN THE LOD. GEOTECHNICAL INVESTIGATIONS SHALL BE COMPLETED AS PART OF THE FUTURE PRELIMINARY PLAN SUBMISSION.
- A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.
- GERMAN ROAD IS CLASSIFIED AS A LOCAL ROAD.
- PROPOSED IS A PUBLIC USE-IN-COMMON DRIVEWAY.
- TO THE BEST OF THE OWNERS KNOWLEDGE, THERE ARE NO BURIAL GROUNDS OR CEMETERIES ON THIS PROPERTY. THERE ARE NO HISTORIC HOUSES LOCATED ON THIS PROPERTY.
- STORMWATER MANAGEMENT FOR THE PROJECT IS PROVIDED BY THE USE OF: MICRO-SCALE PRACTICES: MICRO-BIORETENTION AND DRYWELLS.
- IN ACCORDANCE WITH THE ENVIRONMENTAL SITE DESIGN CRITERIA, THESE FACILITIES WILL BE PRIVATELY OWNED AND MAINTAINED EXCEPT FOR MICRO-BIORETENTION FACILITY #8, WHICH WILL BE PRIVATELY OWNED AND JOINTLY MAINTAINED.
- THE PRE-SUBDIVISION COMMUNITY MEETING WAS HELD FOR THIS PROJECT AT LINDEN HALL IN ELLICOTT CITY, MARYLAND ON SEPTEMBER 10, 2018.
- THE ENVIRONMENTAL CONCEPT PLAN (EOP-19-010) WAS APPROVED ON NOVEMBER 21, 2018.
- MODERATE INCOME HOUSING UNITS (MIHU) ARE REQUIRED FOR THIS PROJECT.
- IN ACCORDANCE WITH SECTION 108.0.E OF THE 10/06/13 COMPREHENSIVE ZONING REGULATIONS, THIS SUBDIVISION IS SUBJECT TO MODERATE INCOME HOUSING UNITS. THE MIHU OBLIGATION FOR THIS DEVELOPMENT WILL BE PROVIDED BY A PAYMENT OF FEE-IN-LIEU TO THE HOWARD COUNTY HOUSING DEPARTMENT FOR EACH UNIT OR PORTION OF THE UNITS REQUIRED BY THE DEVELOPMENT. THE MIHU REQUIREMENTS FOR THIS SUBDIVISION WILL BE 1 UNIT (10% OF 7 UNITS).
- THE MIHU AGREEMENT WILL BE RECORDED IN THE LAND RECORDS OF HOWARD COUNTY WITH THE RECORDING OF THE FINAL PLAN.
- A PRIVATE RANGE OF ADDRESS SIGN ASSEMBLY SHALL BE FABRICATED AND INSTALLED BY HOWARD COUNTY BUREAU OF HIGHWAYS AT THE DEVELOPER'S/OWNERS EXPENSE. CONTACT HOWARD COUNTY TRAFFIC DIVISION AT 410-313-5352 FOR DETAILS AND COST ESTIMATES.
- THE REMOVAL OF FOUR SPECIMEN TREES WAS APPROVED WITH WP-19-004 ON JANUARY 30, 2019. THIS IS AN ALTERNATIVE COMPLIANCE TO SECTION 16.205(O)(7) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:

1. THE REMOVAL OF THE FOUR SPECIMEN TREES (ST #1-4) IS PERMITTED AS SHOWN ON THE PLAN SHEET. THE REMOVAL OF ANY ADDITIONAL SPECIMEN TREES IS NOT PERMITTED UNDER THIS ALTERNATIVE COMPLIANCE REQUEST UNLESS IT CAN BE SUFFICIENTLY DEMONSTRATED BY THE APPLICANT TO BE JUSTIFIED.
2. THE DEVELOPER SHALL PLANT EIGHT (8) 3" MINIMUM-CALIPER NATIVE SHADE TREES IN ADDITION TO THE REQUIRED PERIMETER LANDSCAPING TO MITIGATE THE REMOVAL OF THE FOUR SPECIMEN TREES. IT IS RECOMMENDED THAT THE EIGHT TREES BE PLANTED WITHIN THE PROPOSED FOREST CONSERVATION EASEMENT ON OPEN SPACE LOT 8 TO ENSURE LONG-TERM PROTECTION. REFERENCE THE ADDITIONAL TREES ON 19-003 AND INCLUDE PLANTING DETAILS ON ALL SUBSEQUENT SUBDIVISION AND DEVELOPMENT PLANS. THESE TREES WILL BE BONDED ALONG WITH THE REQUIRED PERIMETER LANDSCAPING AS PART OF THE FINAL SUBDIVISION PLAN.
- ON SUBSEQUENT SUBDIVISION AND DEVELOPMENT PLANS, ADDITIONAL NATIVE THREE (3) INCH DBH SHADE TREES WILL BE PROVIDED AT A 2:1 RATIO FOR SPECIMEN TREES THAT ARE REMOVED. THIS WILL RESULT IN EIGHT ADDITIONAL SHADE TREES TO THE LANDSCAPING REQUIREMENTS.
- A NECESSARY DISTURBANCE WAS SUBMITTED TO THE HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING ON DECEMBER 31, 2018 AND APPROVED IN A LETTER DATED FEBRUARY 4, 2019. THIS NECESSARY DISTURBANCE ALLOWS MINOR DISTURBANCES TO THE STREAM BUFFER FOR THE CONSTRUCTION OF THE STORM DRAIN OUTFALL AND SEWER CONNECTION FOR THE PROPOSED SUBDIVISION. THE PURPOSE OF THESE DISTURBANCES IS TO ALLOW GRAVITY SEWER SERVICE TO THE PROPOSED DWELLINGS AND TO OUTFALL THE STORM DRAIN ON SLOPES LESS THAN 10%.

**NOTES:**

1. ALL WATER CONNECTIONS SHALL BE 1-1/2" WITH 1" OUTSIDE METER SETTINGS, UNLESS OTHERWISE NOTED. REFER TO HOWARD COUNTY DETAILS W-3.28 OUTSIDE METER SETTINGS.
2. LOT SIZE MINIMUM OF 18,000 SQUARE FEET FOR R-20 INFILL APPROVED UNDER HOWARD COUNTY CODE TITLE 16, SUBTITLE 1, ARTICLE 2 WITH 10% MINIMUM OPEN SPACE REQUIREMENT.

**OPEN SPACE TABULATION:**

IN ACCORDANCE WITH SECTION 16.121(A)(2) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS THE OPEN SPACE REQUIREMENTS FOR THIS R-20 PROJECT IS 10% OF GROSS AREA WHEN USING THE OPTIONAL MINIMUM LOT SIZE OF 18,000 SQUARE FEET (7.54 AC. GROSS AREA x 10% = 0.76 AC.).

OPEN SPACE PROVIDED IS 4.50 ACRES±

CREDITED 4.50 ACRES±

NON-CREDITED 0.00 ACRES±

**PARKING TABULATION:**

TOTAL NUMBER OF DWELLING UNITS PROPOSED : 7

SINGLE FAMILY DETACHED (SFD) = 7 LOTS

1. OFF-STREET PARKING SPACES REQUIRED: 2 SPACES PER UNIT
- OFF-STREET PARKING SPACES PROVIDED: 2 SPACES PER UNIT x 2 = 14 SPACES REQUIRED
- PARKING SPACES PROVIDED: SFD 1 GARAGE / 1 DRIVEWAY 2 SPACES IN GARAGE = 14 SPACES (FOR 7 UNITS) 2 SPACES ON DRIVEWAY = 14 SPACES (FOR 7 UNITS) TOTAL PARKING SPACES PROVIDED: = 28 SPACES OFF-STREET
2. VISITOR PARKING REQUIRED: 0.5 SPACES PER SFD UNIT x 7 = 4 SPACES REQUIRED TOTAL OVERFLOW PARKING SPACES PROVIDED: = 7 SPACES (DRIVEWAY) REFER TO OFF-STREET EXCESS.

**SITE DATA**

LOCATION: WEST END OF GERMAN ROAD

EXISTING ZONING: R-20

EXISTING GROSS AREA: 7.54 AC.

AREA OF 100 YEAR FLOODPLAIN: 2.09 AC±/-

AREA OF ON-SITE STEEP SLOPES (25% & GREATER): 0.13 AC.

NET AREA (GROSS-STEEP SLOPES & FLOODPLAIN): 5.32 ACRES±

AREA OF RIGHT OF WAY DEDICATION: 0.27 AC.

TOTAL NUMBER OF UNITS ALLOWED: 7

TOTAL NUMBER OF UNITS PROPOSED: 7

- 7 SINGLE FAMILY DETACHED HOMES

PARKING SPACES: REFER TO PARKING TABULATION

PUBLIC ACCESS ROAD: GERMAN ROAD

INTERIOR ROADS: PUBLIC USE-IN-COMMON DRIVEWAY PUBLIC ACCESS STREET

BUILDING AREA: 0.35 AC. ±

OPEN SPACE REQUIRED: 0.76 ACRES±

OPEN SPACE PROVIDED: 4.50 AC. ± - SEE TABULATION

PROPOSED USE OF SITE: RESIDENTIAL, SINGLE FAMILY DETACHED DWELLING

PROPOSED WATER SYSTEM: PUBLIC

PROPOSED SEWER SYSTEM: PUBLIC

**TENTATIVELY APPROVED**  
DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY

*Valerie J. Allen*  
PLANNING DIRECTOR

3-26-19  
DATE

**MODERATE INCOME HOUSING UNITS (MIHU) ALLOCATION EXEMPTIONS TRACKING**

Total Number of Lots/Units Proposed	7
Number of MIHU Required	10% OR 1 UNIT
Number of MIHU Provided Onsite (exempt from APFO allocations)	0
Number of APFO Allocations Required (remaining lots/units)	6 UNITS *
MIHU Fee-in-Lieu (indicate lot/unit numbers)	LOTS 1-6

\* ONE CREDIT FOR THE EXISTING HOUSE TO BE REMOVED

**COVER SHEET AND LAYOUT PLAN**  
SCALE: 1"=50'

STREET LIGHT LOCATION			
ROAD NAME	STATION	OFFSET	FIXTURE/POLE TYPE
GERMAN ROAD CUL-DE-SAC	0+83.35	47.12'	L LED-150 WATT COLONIAL POST TOP FIXTURE MOUNTED ON A 14" BLACK FIBERGLASS POLE
GERMAN ROAD CUL-DE-SAC	0+77.54	45.62'	R LED-150 WATT COLONIAL POST TOP FIXTURE MOUNTED ON A 14" BLACK FIBERGLASS POLE

**SHEET INDEX**

DESCRIPTION	SHEET NO.
COVER SHEET AND LAYOUT PLAN	1 OF 2
GRADING PLAN	2 OF 3
FOREST CONSERVATION PLAN	3 OF 3

# SKETCH PLAN

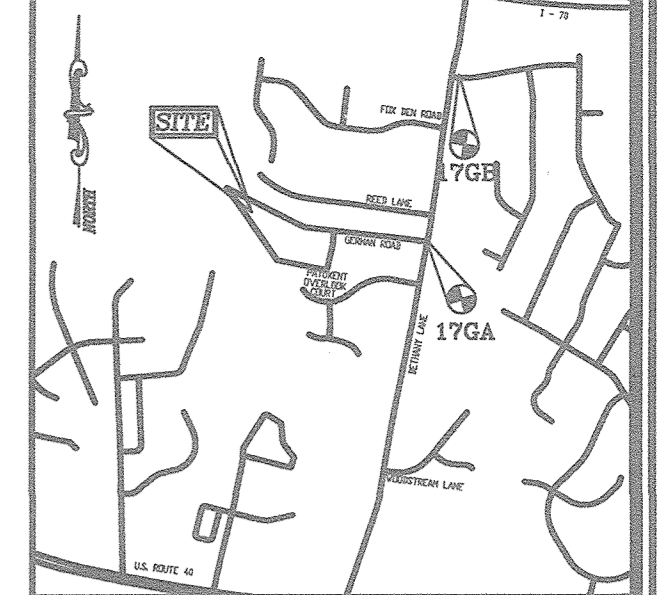
## RIVER BIRCH MANOR

LOTS 1-7 AND OPEN SPACE LOT 8  
10039 GERMAN ROAD  
HOWARD COUNTY, MD

**BENCHMARKS**

HOWARD COUNTY BENCHMARK - 17GA (CONC. MONUMENT)  
N 591048.52 E 1352732.11 ELEV. 432.03  
LOCATION: NORTHWEST CORNER OF BETHANY LANE AND GERMAN ROAD

HOWARD COUNTY BENCHMARK - 17GB (CONC. MONUMENT)  
N 592856.77 E 1353019.98 ELEV. 441.52  
LOCATION: NORTHEAST CORNER OF BETHANY LANE AND POSTWICK DRIVE



**VICINITY MAP**  
SCALE: 1"=2000'  
ADC MAP 11 GRID G/5

**LEGEND:**

- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPERTY LINE
- PROPERTY LINE TO BE ABANDONED
- TOP OF STREAM BANK
- BOTTOM OF STREAM BANK
- STREAM CENTERLINE
- EXISTING TREELINE
- PROPOSED TREELINE
- EXISTING EDGE OF PAVING
- EXISTING SPECIMEN TREE
- EXISTING TREE
- EXISTING UTILITY
- EXISTING FENCE
- PROPERTY LINE TO BE ABANDONED
- ADJACENT PROPERTY LINE
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- 100 YEAR FLOODPLAIN
- EX. WETLANDS
- EX. 25' WETLAND BUFFER
- EX. 100' STREAM BUFFER
- PROPOSED LIGHT
- PROPOSED SIGN
- MICRO-BIORETENTION
- DRY WELL
- PROPOSED SIDEWALK
- PROPOSED STORM DRAIN
- PROPOSED STORM DRAIN PASS THRU
- 24" PUBLIC USE-IN-COMMON ACCESS EASEMENT
- STEEP SLOPES (1:38-24.99%)
- STEEP SLOPES (>25%)
- EXISTING OVERHEAD ELECTRIC LINES
- CRITICAL ROOT ZONE

**DEVELOPER**  
TRINITY HOMES MARYLAND, LLC  
3675 PARK AVE., SUITE 301  
ELLICOTT CITY, MD 21043  
(410) 480-0023

NO.	REVISION	DATE

**SKETCH PLAN**  
**COVER SHEET AND LAYOUT PLAN**  
**RIVER BIRCH MANOR**  
LOTS 1-7 AND OPEN SPACE LOT 8

L 314 / F. 315  
L 343 / F. 316  
TAX MAP 17 GRID 20  
2ND ELECTION DISTRICT

10039 GERMAN ROAD  
ELLICOTT CITY, MD 21042

ZONED: R-20  
PARCELS: 0385  
HOWARD COUNTY, MARYLAND

**ROBERT H. VOGEL ENGINEERING, INC.**  
ENGINEERS • SURVEYORS • PLANNERS  
3300 N. RIDGE ROAD, SUITE 110  
ELLICOTT CITY, MD 21043  
TEL: 410.461.7666  
FAX: 410.461.1896

**PROFESSIONAL CERTIFICATE**

DESIGN BY: RHV  
DRAWN BY: LAG  
CHECKED BY: RHV  
DATE: MARCH 2018  
SCALE: AS SHOWN  
W.O. NO.: 41656

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 16183 EXPIRATION DATE: 07-07-2020

1 SHEET OF 3



**LEGEND:**

- - - - - EXISTING CONTOUR
- — — — PROPOSED CONTOUR
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- — — — EXISTING PAVING
- — — — EXISTING UTILITY
- — — — EXISTING SANITARY MANHOLE
- — — — EXISTING SANITARY LINE
- — — — EXISTING WATER LINE
- — — — PROPOSED STORM DRAIN
- ○ ○ ○ EXISTING TREE
- ○ ○ ○ EXISTING SPECIMEN TREES
- — — — EXISTING TRELLENE
- — — — EXISTING FENCE
- — — — PROPERTY LINE TO BE ABANDONED
- — — — ADJACENT PROPERTY LINE
- — — — PROPERTY LINE
- — — — RIGHT-OF-WAY LINE
- — — — SOILS BOUNDARY
- — — — MICRO-BORRENTION (M-B)
- — — — EX. 15' SEWER AND UTILITY EASEMENT PLANT STRIP
- — — — PROP. 30' PUBLIC WATER AND UTILITY EASEMENT
- — — — LIMIT OF DISTURBANCE
- — — — STABILIZED CONSTRUCTION ENTRANCE
- — — — SUPER SILT FENCE
- — — — CLEAR WATER DIVERSION / EARTHROCK
- — — — TREE PROTECTION FENCE
- — — — EXISTING WETLAND
- — — — EXISTING WETLAND BUFFER
- — — — EXISTING STREAM
- — — — EXISTING STREAM BUFFER

AT PRELIMINARY PLAN THE CURVE INTO DEVELOPER

**DEVELOPER**  
 TRINITY HOMES MARYLAND, LLC  
 3675 PARK AVE., SUITE 301  
 ELLICOTT CITY, MD 21043  
 (410) 480-0023

NO.	REVISION	DATE

**GRADING PLAN**  
 SCALE: 1"=40'

**SOILS LEGEND**  
 HOWARD COUNTY SOILS MAP #13

SYMBOL	NAME / DESCRIPTION	GROUP	K FACTOR	ERODIBLE	ACREAGE
GhB	GLENNVILLE-BAILE SILT LOAMS, 0 TO 8 PERCENT SLOPES	C	0.49	YES	0.88
MoD	MANOR LOAM, 15 TO 25 PERCENT SLOPES	B	0.32	YES	0.02
Ho	HATBORO-CODORUS SILT LOAMS, 0 TO 3 PERCENT SLOPES	D	0.43	NO	2.48
GhC	GLENEIG LOAM, 8 TO 15 PERCENT SLOPES	B	0.43	NO	3.71
GhB	GLENEIG LOAM, 3 TO 8 PERCENT SLOPES	B	0.37	NO	0.46

**SOILS NOTES:**  
 1. TAKEN FROM USDA, SCS-WEB SOIL SURVEY, HOWARD COUNTY  
 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.  
 3. GhB AND Ho SOILS MAY CONTAIN HYDRIC COMPONENTS.

TENTATIVELY APPROVED  
 DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY

*Valerie Gillin*  
 PLANNING DIRECTOR

3-26-19  
 DATE

**SKETCH PLAN**  
**GRADING PLAN**  
**RIVER BIRCH MANOR**  
 LOTS 1-7 AND OPEN SPACE LOT 8

L 314 / F 315  
 L 343 / F 316  
 TAX MAP 17 GRID 20  
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DESIGN BY: RHV  
 DRAWN BY: LAG  
 CHECKED BY: RHV  
 DATE: MARCH 2018  
 SCALE: AS SHOWN  
 W.O. NO.: 41656

PROFESSIONAL CERTIFICATE  
 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. 16183, EXPIRATION DATE: 08-27-2020.

2 SHEET OF 3



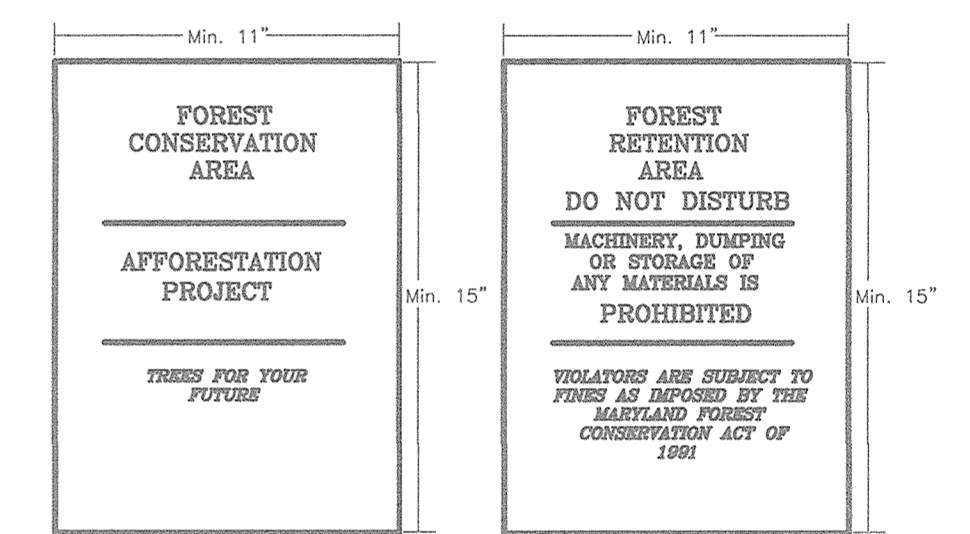
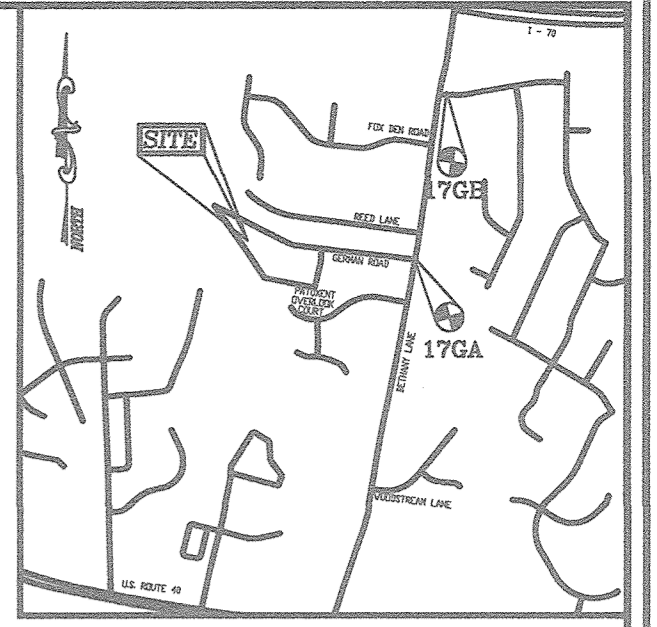
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- EXISTING TREELINE
- EXISTING FENCE
- PROPERTY LINE TO BE ABANDONED
- ADJACENT PROPERTY LINE
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- SOILS BOUNDARY
- MICRO-SETBACK (M-6)
- PROP. EASEMENT
- EXISTING WETLAND
- EXISTING WETLAND BUFFER
- EXISTING STREAM
- EXISTING STREAM BUFFER
- FOREST CONSERVATION SIGN
- FOREST CONSERVATION AFFORESTATION EASEMENT
- FOREST CONSERVATION CREDITED RETENTION EASEMENT
- FOREST CONSERVATION NON-CREDITED RETENTION EASEMENT

**BENCHMARKS**

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- NOTE:**
- BOTTOM OF SIGNS TO BE HIGHER THAN TOP OF TREE PROTECTION FENCE.
  - SIGNS TO BE PLACED APPROXIMATELY 50'-100' FEET APART. CONDITIONS ON SITE AFFECTING VISIBILITY MAY WARRANT PLACING SIGNS CLOSER OR FARTHER APART. WHERE SIGNS ARE TO BE PLACED AT THE REAR OF PROPOSED LOTS, SPACING SHALL BE APPROX. 25'-30'/.
  - ATTACHMENT OF SIGNS TO TREES IS PROHIBITED.
  - ALL FOREST CONSERVATION SIGNAGE SHALL BE IN PLACE FOR PERPETUITY.
  - SIGN LOCATION SYMBOL = ●

**Forest Stand Data**

Key	Community Type	Acroage (nts)	Dominant Vegetation	General Condition	Priority Acroage
F1	Oak-Poplar	0.8	Liriodendron tulipifera, Quercus velutina, Quercus rubra, Fraxinus pennsylvanica, Prunus serotina	Good	0.8 acres +/- buffer slopes

See accompanying report for complete stand description.

**DEVELOPER**  
 TRINITY HOMES MARY LAND, LLC  
 3675 PARK AVE., SUITE 301  
 ELLICOTT CITY, MD 21043  
 (410) 480-0023

**PRELIMINARY HOWARD COUNTY FOREST CONSERVATION WORKSHEET**

ZONED R-20

NET TRACT AREA:  
 A. TOTAL TRACT AREA (PROJECT TOTAL) 7.5 AC.  
 B. AREA WITHIN 100 YEAR FLOODPLAIN 2.1 AC.  
 C. AREA TO REMAIN IN AG. PRODUCTION 0.0 AC.  
 D. NET TRACT AREA 5.4 AC.

LAND USE CATEGORY  
 INPUT THE NUMBER "1" UNDER THE APPROPRIATE LAND USE ZONING, AND LIMIT TO ONLY ONE ENTRY. ZONED R-20

ARA	MDR	IDA	HDR	MPD	CJA
0	0	0	1	0	0

E. AFFORESTATION THRESHOLD 15% X 5.4 = 0.8 AC  
 F. CONSERVATION THRESHOLD 20% X 5.4 = 1.1 AC

G. EXISTING FOREST COVER (EXCLUDING FLOODPLAIN) = 0.8 AC (FSD REPORT)  
 H. AREA OF FOREST ABOVE AFFORESTATION THRESHOLD = 0.0 AC  
 I. AREA OF FOREST ABOVE CONSERVATION THRESHOLD = 0.0 AC

BREAK EVEN POINT:  
 (2 X I) + F = BREAK EVEN POINT (0 AC)

J. FOREST RETENTION WITH NO MITIGATION = 0.0 AC  
 K. CLEARING PERMITTED WITHOUT MITIGATION = 0.0 AC

PROPOSED FOREST CLEARING:  
 L. TOTAL AREA OF FOREST TO BE CLEARED = 0.0 AC  
 M. TOTAL AREA OF FOREST TO BE RETAINED = 0.8 AC

PLANTING REQUIREMENTS:  
 N. REFORESTATION FOR CLEARING ABOVE CONSERVATION THRESHOLD (L X 25) = 0.0 AC  
 O. REFORESTATION FOR CLEARING BELOW CONSERVATION THRESHOLD = 0.0 AC  
 P. CREDIT FOR RETENTION ABOVE CONSERVATION THRESHOLD (M-F) = 0.0 AC  
 R. TOTAL REFORESTATION REQUIRED (N+P-O) = 0.0 AC  
 S. TOTAL AFFORESTATION REQUIRED = 0.0 AC  
 T. TOTAL REFORESTATION AND AFFORESTATION REQUIRED = 0.0 AC

**FOREST CONSERVATION PLAN**  
 SCALE: 1"=50'

**SPECIMEN TREE CHART**

KEY (X#)	SPECIES	SIZE (IN DBH)	CRZ (FEET RADIUS)	COMMENTS	TO BE REMOVED
1	SILVER MAPLE	35.5	53.25		TO BE REMOVED
2	SOUR CHERRY	30.5	45.75		TO BE REMOVED
3	PIN OAK	31	46.5		TO BE REMOVED
4	TULIP POPLAR	31	46.5		TO BE REMOVED
5	SILVER MAPLE	46	69	FAIR CONDITION, SOME DIEBACK NOTED	TO REMAIN
6	BLACK OAK	33	49.5	GOOD CONDITION	TO REMAIN

**SOILS LEGEND**  
 HOWARD COUNTY SOILS MAP #13

SYMBOL	NAME / DESCRIPTION	GROUP	K FACTOR	ERODIBLE	ACREAGE
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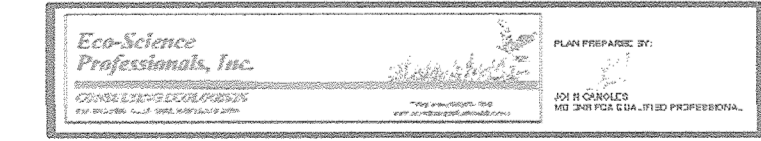
**SOILS NOTES:**

- TAKEN FROM USDA, SCS-WEB SOIL SURVEY, HOWARD COUNTY
- 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.

**GENERAL NOTES**

WATERSHED NAME: LITTLE PATUXENT RIVER  
 WATERSHED NUMBER: 2131105

A. GROSS SITE AREA: 7.54 AC.  
 NET SITE AREA: 5.45 AC.  
 B. AREA OF 100-YEAR FLOODPLAIN: 2.09 AC.  
 C. AREA OF WETLANDS AND BUFFERS(ONSITE): 1.99 AC.  
 AREA OF STREAM AND BUFFERS(ONSITE): 3.15 AC.  
 D. AREA OF > 25% STEEP SLOPES: 0.13 AC.  
 E. EXISTING FOREST (FSD): 0.80 AC.  
 F. ZONED: R-20  
 G. EXISTING USE: RESIDENTIAL  
 H. PROPOSED USE: RESIDENTIAL



**FSD NOTES:**

- NO RARE, THREATENED OR ENDANGERED SPECIES OR THEIR HABITATS WERE OBSERVED ON THE PROPERTY.
- NO CEMETARIES OR HISTORIC PROPERTIES ARE KNOWN TO OCCUR ON THE PROPERTY.
- SURROUNDING LAND USE IS PRIMARILY HIGH DENSITY RESIDENTIAL DEVELOPMENT.
- APPROXIMATELY 3.7 ACRES OF FOREST IS PRESENT WITHIN 100 FEET OF THE SUBJECT PROPERTY. MOST OF THIS FOREST IS WITHIN THE 100 YEAR FLOODPLAIN.
- ALL OF THE WETLANDS AND STREAMS ARE PART OF THE LITTLE PATUXENT RIVER WATERSHED (02-13-11). THESE STREAMS ARE CLASSIFIED AS USE IV-P WATERS.
- APPROXIMATELY 2.1 ACRES OF 100 YEAR FLOODPLAIN IS PRESENT ON THE PROPERTY.
- STEEP SLOPES ARE PRESENT ON THE PROPERTY.
- SPECIMEN TREES ARE PRESENT ON THE PROPERTY.

TENTATIVELY APPROVED  
 DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY

*William J. Glick*  
 PLANNING DIRECTOR

3-26-19  
 DATE

NO. REVISION DATE

**SKETCH PLAN FOREST CONSERVATION PLAN**

**RIVER BIRCH MANOR**  
 LOTS 1-7 AND OPEN SPACE LOT 8

L 314 / F. 315  
 L 343 / F. 316  
 TAX MAP 17 GRID: 20  
 2ND ELECTION DISTRICT

10039 GERMAN ROAD  
 ELLICOTT CITY, MD 21042

ZONED: R-20  
 PARCEL: 0368  
 HOWARD COUNTY, MARYLAND

**ROBERT H. VOGEL ENGINEERING, INC.**  
 ENGINEERS • SURVEYORS • PLANNERS  
 3300 N. RIDGE ROAD, SUITE 310  
 ELLICOTT CITY, MD 21043  
 TEL: 410.461.7666  
 FAX: 410.461.8961

DESIGN BY: RHV  
 DRAWN BY: LAG  
 CHECKED BY: RHV  
 DATE: MARCH 2018  
 SCALE: AS SHOWN  
 W.O. NO.: 41656

PROFESSIONAL CERTIFICATE  
 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. DATE OF EXPIRATION: 08-27-2020

3 SHEET OF 3