

**FOREST CONSERVATION WORKSHEET FOR**

**Net Tract Area**

A = Total (Gross) Tract Area	A = 3.13
B = Area within 100-year Floodplain	B = 0.00
C = Other Deductions (Identify)	C = 0.00
D = Net Tract Area	D = 3.13

**Land Use Category**

Resid.	Resid.	Resid.	Inst/	Retail/Off	Mixed Use/
Rural LD	Rural MD	Suburban	Linear	Office	PUD
0	0	0	0	0	0

**Existing Forest Cover**

E. Afforestation Threshold (Net Tract Area x 15%)	E = 0.50
F. Reforestation Threshold (Net Tract Area x 20%)	F = 0.60
G. Existing Forest Cover within the Net Tract Area	G = 0.00
H. Area of Forest above Afforestation Threshold	H = 0.00
I. Area of Forest above Reforestation Threshold	I = 0.00

**Break Even Point**

J. Break Even Point	J = 0.00
K. Forest Clearing Permitted without Mitigation	K = 0.00

**Proposed Forest Clearing**

L. Total Area of Forest to be Cleared	L = 0.00
M. Total Area of Forest to be Retained	M = 0.00

**Planting Requirements Inside Watershed**

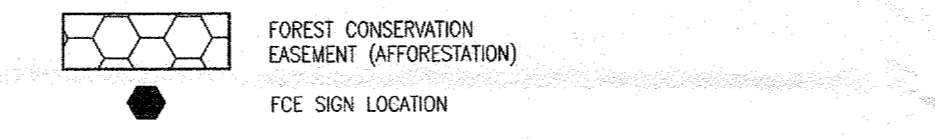
N. Reforestation for Clearing above the Reforestation Threshold	N = 0.00
P. Reforestation for Clearing above the Reforestation Threshold	P = 0.00
Q. Credit for Retention above the Reforestation Threshold	Q = 0.00
R. Total Reforestation Required	R = 0.00
S. Total Afforestation Required	S = 0.50
T. Total Reforestation and Afforestation Requirement	T = 0.50
U. 75% of Total Obligation (Retention + Planting)	U = 0.40
V. Planting Required Onsite to meet 75% Obligation	V = 0.40

**Planting Requirements Outside Watershed**

W. Total Planting within Development Site Watershed	W = 0.00
X. Total Afforestation Required	X = 0.50
Y. Remaining Planting within Watershed for Reforestation Credit	Y = 0.00
Z. Reforestation for Clearing above the Reforestation Threshold	Z = 0.00
AA. Reforestation for Clearing below the Reforestation Threshold	AA = 0.00
BB. Credit for Retention above the Reforestation Threshold	BB = 0.00
CC. Total Reforestation Required	CC = 0.00
DD. Total Afforestation and Reforestation Requirement	DD = 0.50

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

**FOREST CONSERVATION LEGEND:**

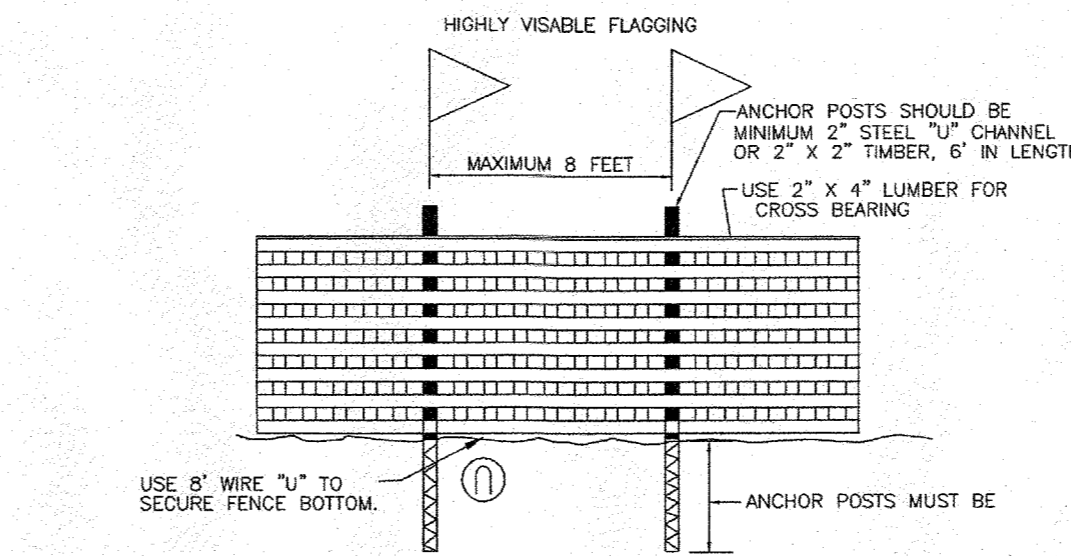


**CONSTRUCTION PERIOD PROTECTION AND MANAGEMENT NOTES FOR FOREST CONSERVATION**

- PRE-CONSTRUCTION PHASE**
- FOR RETENTION AREAS, INSTALL BLAZE ORANGE FENCE AND RETENTION SIGNS BEFORE CONSTRUCTION BEGINS.
  - FENCING SHALL BE MAINTAINED IN GOOD CONDITION AND PROMPTLY REPAIRED OR RESTORED AS THE SITUATION WARRANTS.
  - A QUALIFIED TREE CARE EXPERT SHALL DETERMINE IF ROOT PRUNING IS REQUIRED ALONG THE LIMIT OF DISTURBANCE. ROOT PRUNE TREES AS REQUIRED. WATER ANY ROOT-PRUNED TREES IMMEDIATELY AFTER ROOT-PRUNING AND MONITOR FOR SIGNS OF STRESS DURING CONSTRUCTION.
- CONSTRUCTION PHASE**
- NO DISTURBANCE OR DUMPING IS ALLOWED INSIDE THE TREE RETENTION AREA.
  - NO EQUIPMENT SHALL BE OPERATED INSIDE THE TREE RETENTION AREA INCLUDING TREE CANNOPES.
  - IN THE EVENT OF DROUGHT, THE PROTECTED TREES SHALL BE MONITORED FOR SIGNS OF STRESS AND WATERED AS NEEDED.
- POST-CONSTRUCTION PHASE**
- AT THE DISCRETION OF A QUALIFIED TREE CARE EXPERT, DAMAGES TO RETAINED TREES SHALL BE REPAIRED BY THE CONTRACTOR.
  - FENCE REMOVAL AND STABILIZATION SHALL BE AS PER THE SEDIMENT AND EROSION CONTROL PLAN.
  - DO NOT REMOVE SIGNS.

**SEQUENCE OF CONSTRUCTION-FOREST CONSERVATION**

- PRE-CONSTRUCTION MEETING / SITE WALK WITH CONTRACTORS AND OTHER RESPONSIBLE PARTIES TO DEFINE PROTECTION MEASURES TO BE UTILIZED AND TO POINT OUT PARTICULAR TREES TO BE SAVED.
- STAKE OUT LIMITS OF DISTURBANCE AND TREE PROTECTION FENCING LOCATIONS.
- INSTALL TREE PROTECTION FENCING; FENCING TO BE INSPECTED BY THE PROJECT ENGINEER OR THE PROJECT ECOLOGIST AND HOWARD COUNTY PLANNING AND ZONING.
- PROCEED WITH TREE REMOVAL AND SITE IMPROVEMENTS AS PER APPROVED SEDIMENT CONTROL PLAN TO BE INSPECTED BY HOWARD COUNTY PLANNING AND ZONING.
- TEMPORARY TREE PROTECTION DEVICES SHALL BE REMOVED AFTER ALL FINISHED GRADING AND UTILITY CONSTRUCTION HAS OCCURRED AND WITH APPROVAL FROM THE HOWARD COUNTY OFFICE OF PLANNING AND ZONING.



**Specimen Tree Chart**

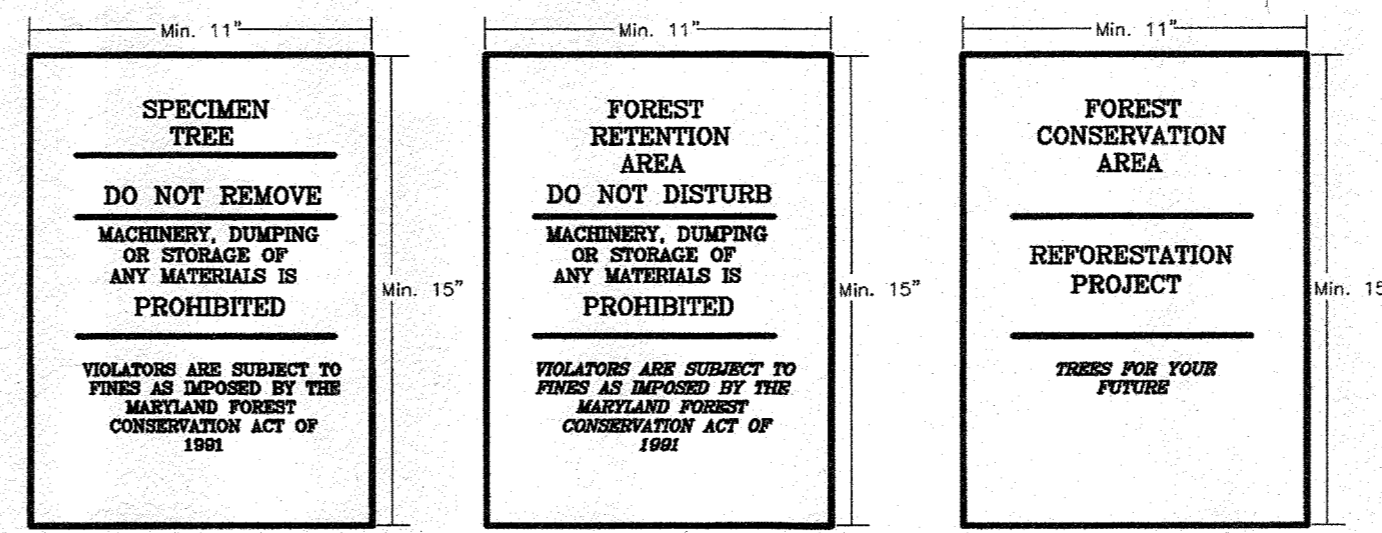
Key	Species	Size (in.d.b.h)	CRZ (feet radius)	Comments	MD State Champion
1	Red oak	44.25	66	TO BE REMOVED GOOD CONDITION	92.04
2	Black walnut	39	59	fair, SOUTH SHAGGAGE, diaback	74.52
3	Black walnut	32.5	49	TO BE REMOVED fair, SOUTH SHAGGAGE, diaback	74.52
4	Black walnut	30.5	46	fair, SOUTH SHAGGAGE, diaback	74.52
5	Black walnut	30	45	fair, SOUTH SHAGGAGE, diaback	74.52

-S1-1 TO BE REMOVED AND MITIGATED WITH 2 SHADE TREES MEETING 3\"/>

**SPECIMEN TREE REPLACEMENT CALCULATIONS**

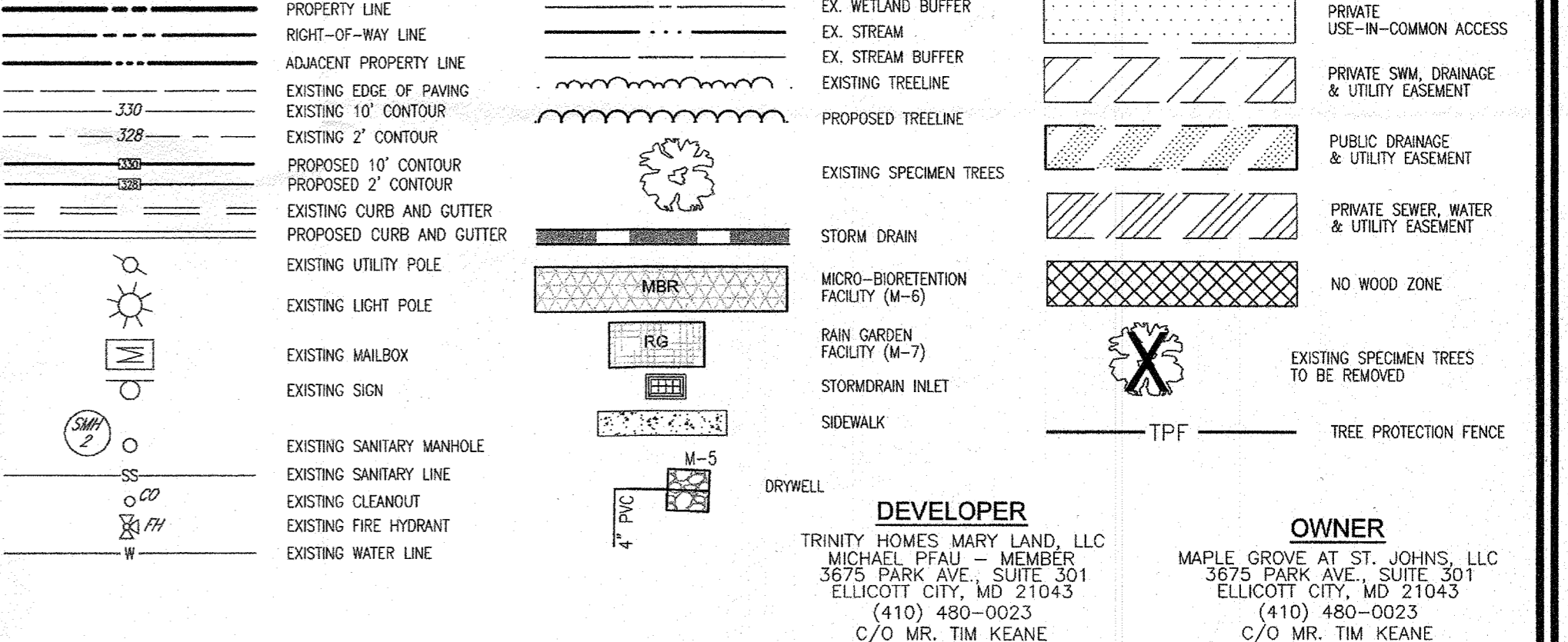
NUMBER TO BE REMOVED	NUMBER REPLACEMENT TREES REQUIRED	NO. PROVIDED
2	4	3*

REFER TO WP 22-129  
3\"/>



- 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 FEET.
  - ATTACHMENT OF SIGNS TO TREES IS PROHIBITED.
  - ALL FOREST CONSERVATION SIGNAGE SHALL BE IN PLACE FOR PERPETUITY.
  - SIGN LOCATION SYMBOL = ●

**LEGEND:**



**VICINITY MAP**  
SCALE: 1"=1,000'  
ADC MAP 20 GRID B/5

**DEVELOPER**  
TRINITY HOMES MARY LAND, LLC  
MICHAEL PFALZ - MEMBER  
3675 PARK AVE., SUITE 301  
ELICOTT CITY, MD 21043  
(410) 480-0023  
C/O MR. TIM KEANE

**OWNER**  
MAPLE GROVE AT ST. JOHNS, LLC  
3675 PARK AVE., SUITE 301  
ELICOTT CITY, MD 21043  
(410) 480-0023  
C/O MR. TIM KEANE

IN ACCORDANCE WITH THE HOWARD COUNTY - FOREST CONSERVATION MANUAL, CHAPTER 3, SECTION 3.7.4, AS THE PROJECTS OBLIGATION IS LESS THAN 1 ACRE, THE PLANTING OBLIGATION CAN BE MET OFFSITE.

THE MAPLE GROVE PROJECT IS LOCATED WITHIN THE PATAPSCO RIVER L. N. BR. 02130906 WATERSHED, MDE 12-DIGIT WATERSHED #021309061017 AND THE LITTLE PATUXENT RIVER 02131105 WATERSHED, MDE 12-DIGIT WATERSHED #021311050956.

THE FOREST CONSERVATION OBLIGATION FOR THIS PROJECT IS 0.50 ACRES OF AFFORESTATION, WHICH SHALL BE SATISFIED BY THE PURCHASE OF FOREST PLANTING IN AN OFF-SITE MITIGATION BANK.

THE FOREST CONSERVATION OBLIGATION OF THIS PROJECT TO BE FULFILLED BY:

- THE PURCHASE OF 0.5 ACRES OF AFFORESTATION CREDIT IN THE ESTATES AT RIVER HILL FOREST BANK, F-18-064 LOCATED WITHIN THE MIDDLE PATUXENT RIVER 02131105 WATERSHED, MDE 12-DIGIT WATERSHED #021311050956.
- NON-CREDIT AFFORESTATION OF 0.16 ACRES FOR ON-SITE SENSITIVE AREAS.

TENTATIVELY APPROVED  
DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY

PLANNING DIRECTOR \_\_\_\_\_ DATE \_\_\_\_\_

**MAPPED SOILS TYPES - CLARKSVILLE SE MAP #23**

SYMBOL	NAME / DESCRIPTION	GROUP	HYDRC	HYDRC	K FACTOR	PERCENT PERMEABLE	PERCENT ERODIBLE
GnB	GLENNVILLE-URBAN LAND COMPLEX, 0 TO 8 PERCENT SLOPES	B	NO	NO	0.43	NO	NO
GnB	GLENNVILLE-SHALE Silt LOAM, 0 TO 8 PERCENT SLOPES	C	PARTIALLY	PARTIALLY	0.49	NO	YES
MdC	MANNING LOAM, 8 TO 15 PERCENT SLOPES	B	NO	NO	0.32	YES	NO
UdC	URBAN LANDS - LOOSELY COMPLEX, 0 TO 8 PERCENT SLOPES	D	NO	NO	N/A	NO	NO

TAKEN FROM: USDA, SCS-WEB SOIL SURVEY, HOWARD COUNTY  
\*GLENNVILLE SOILS ARE CONSIDERED HIGHLY ERODIBLE  
MORE STRINGENT SEEDING & STABILIZATION MAY BE REQUIRED.

**NOTE:**  
HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR H GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT

FSD PLAN  
PREPARED BY

MYRA BROSIUS  
CERTIFIED ARBORIST

Eco-Science Professionals, Inc.  
CONSULTING PROFESSIONALS  
10000 WOODBURN ROAD, SUITE 200  
ELICOTT CITY, MD 21043  
(410) 480-0023  
www.eco-science.com

PRELIMINARY PLAN

**FOREST CONSERVATION PLAN,  
NOTES & DETAILS**

**MAPLE GROVE**  
LOTS 1-9 AND OPEN SPACE LOT 10  
A SUBDIVISION OF TAX MAP 24 - PARCEL 41  
PROPERTY ADDRESS: 9060 UPTON ROAD  
ELICOTT CITY, MD - 21042

TAX MAP 24, BLOCK 5, 2ND ELECTION DISTRICT

PARCEL 41  
HOWARD COUNTY, MARYLAND  
ZONED: R-12

**VOGEL ENGINEERING**

**TIMMONS GROUP**  
3300 NORTH RIDGE ROAD, SUITE 110, ELICOTT CITY, MD 21043  
P: 410.461.7666 F: 410.461.8961 www.timmons.com

PROFESSIONAL CERTIFICATE

DESIGN BY: \_\_\_\_\_ RHV  
DRAWN BY: \_\_\_\_\_ MMH  
CHECKED BY: \_\_\_\_\_ RHV  
DATE: \_\_\_\_\_ JANUARY 2024  
SCALE: \_\_\_\_\_ AS SHOWN  
W.O. NO.: \_\_\_\_\_ 14-25

10 SHEET OF 12

ROBERT H. VOGEL, PE, NO. 16193