

AFFORESTATION PLANT LIST						
QTY.	SPECIES	SHADE TOL.	MOIST. REGIME	WET. STATUS	MIN. O.C. SPACING	SIZE & REMARKS
12	Prunus serotina Wild Black Cherry	I	M	FACU	11'	SEEDLING/WHIP W/TREE SHELTER
12	Rubus pseudoacacia Black Locust	VI	D-M	FACU	11'	SEEDLING/WHIP W/TREE SHELTER
12	Liriodendron tulipifera Tulip Poplar	I	D-M	FACU	11'	SEEDLING/WHIP W/TREE SHELTER
12	Quercus rubra Red Oak	MT	D-M	UPL	11'	SEEDLING/WHIP W/TREE SHELTER
12	Fraxinus americana White Ash	MT	D-M	FACU	11'	SEEDLING/WHIP W/TREE SHELTER
12	Nyssa sylvatica Black Gum	T	M-W	FAC	11'	SEEDLING/WHIP W/TREE SHELTER
12	Juglans nigra Black Walnut	VI	M	FACU	11'	SEEDLING/WHIP W/TREE SHELTER
12	Acer rubrum Red Maple	VI	D-W	FAC	11'	SEEDLING/WHIP W/TREE SHELTER
12	Cercis canadensis Eastern Redbud	T	M	UPL	11'	SEEDLING/WHIP W/TREE SHELTER
12	Diospyros virginiana Persimmon	I	D-M	UPL	11'	SEEDLING/WHIP W/TREE SHELTER

Quantities of Individual Species And Species Composition May Change Depending On Availability At Time of Planting. Total Quantity Of Trees For Entire Easement Area Will Not Change. Any Species Substitution Must Be Listed On The Howard County Forest Association List. If Quantities Are Changed, A Minimum Of Five (5) Species Must Be Planted.

FOREST CONSERVATION WORKSHEET:

NET TRACT AREA:	AREA
A. Total tract area	2.22 Ac.±
B. Area within 100 year floodplain	0.00 Ac.±
C. Area to remain in agricultural production	0.00 Ac.±
D. Net tract area	2.22 Ac.±

LAND USE CATEGORY: (From Table 3.2.1., Page 40, Manual)
Input the number "1" under the appropriate land use zoning, and limit to only one entry.

ARA	MDR	IDA	HDR	MPD	CIA
0	0	0	0	0	0

E. Afforestation Threshold 0.33 Ac.±
F. Conservation Threshold 0.44 Ac.±

EXISTING FOREST COVER:

C. Existing forest cover (excluding floodplain)	0.00 Ac.±
H. Area of forest above afforestation threshold	0.00 Ac.±
I. Area of forest above conservation threshold	0.00 Ac.±

BREAK EVEN POINT:

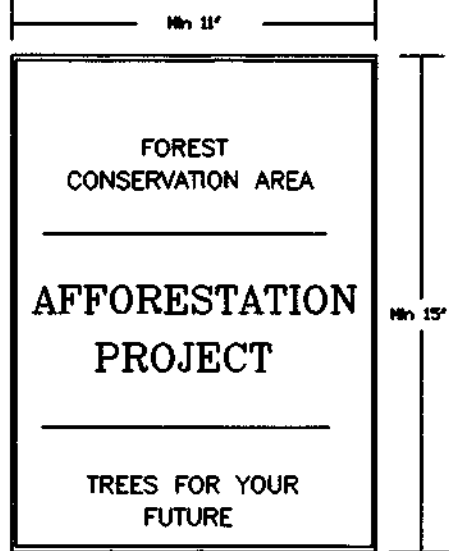
J. Forest retention above threshold with no mitigation	0.00 Ac.±
K. Clearing permitted without mitigation	0.00 Ac.±

PROPOSED FOREST CLEARING:

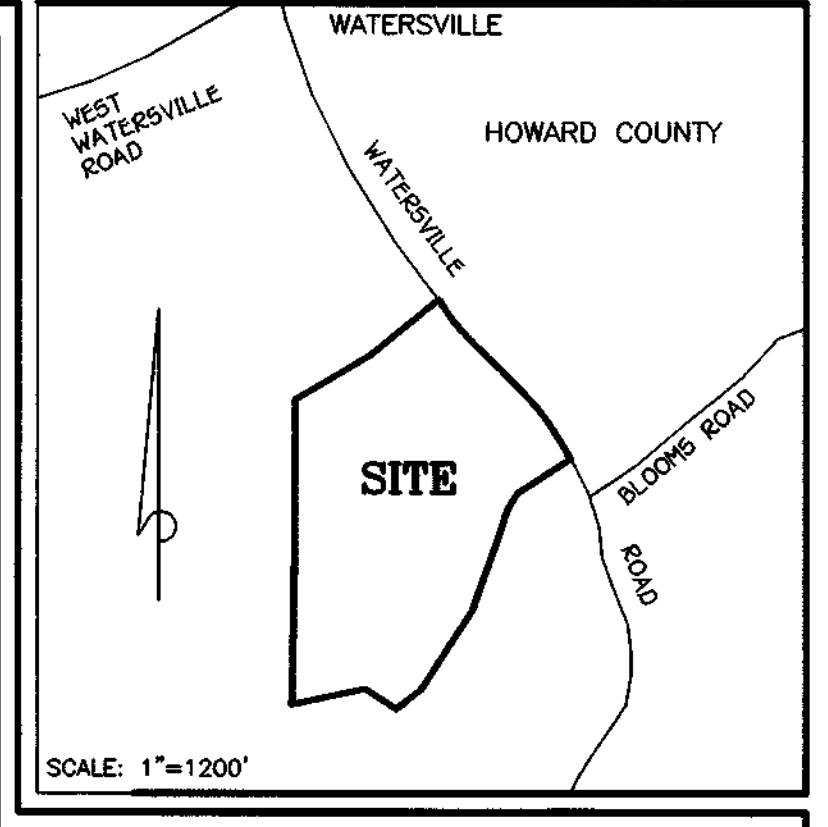
L. Total area of forest to be cleared	0.00 Ac.±
M. Total area of forest to be retained	0.00 Ac.±

PLANTING REQUIREMENTS

N. Reforestation for clearing above conservation threshold	0.00 Ac.±
O. Reforestation for clearing below conservation threshold	0.00 Ac.±
P. Credit for retention above conservation threshold	0.00 Ac.±
Q. Total reforestation required	0.00 Ac.±
R. Total afforestation required	0.33 Ac.±
S. Total reforestation and afforestation required	0.33 Ac.±



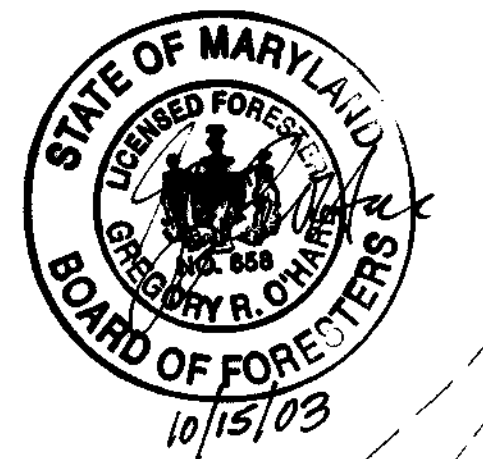
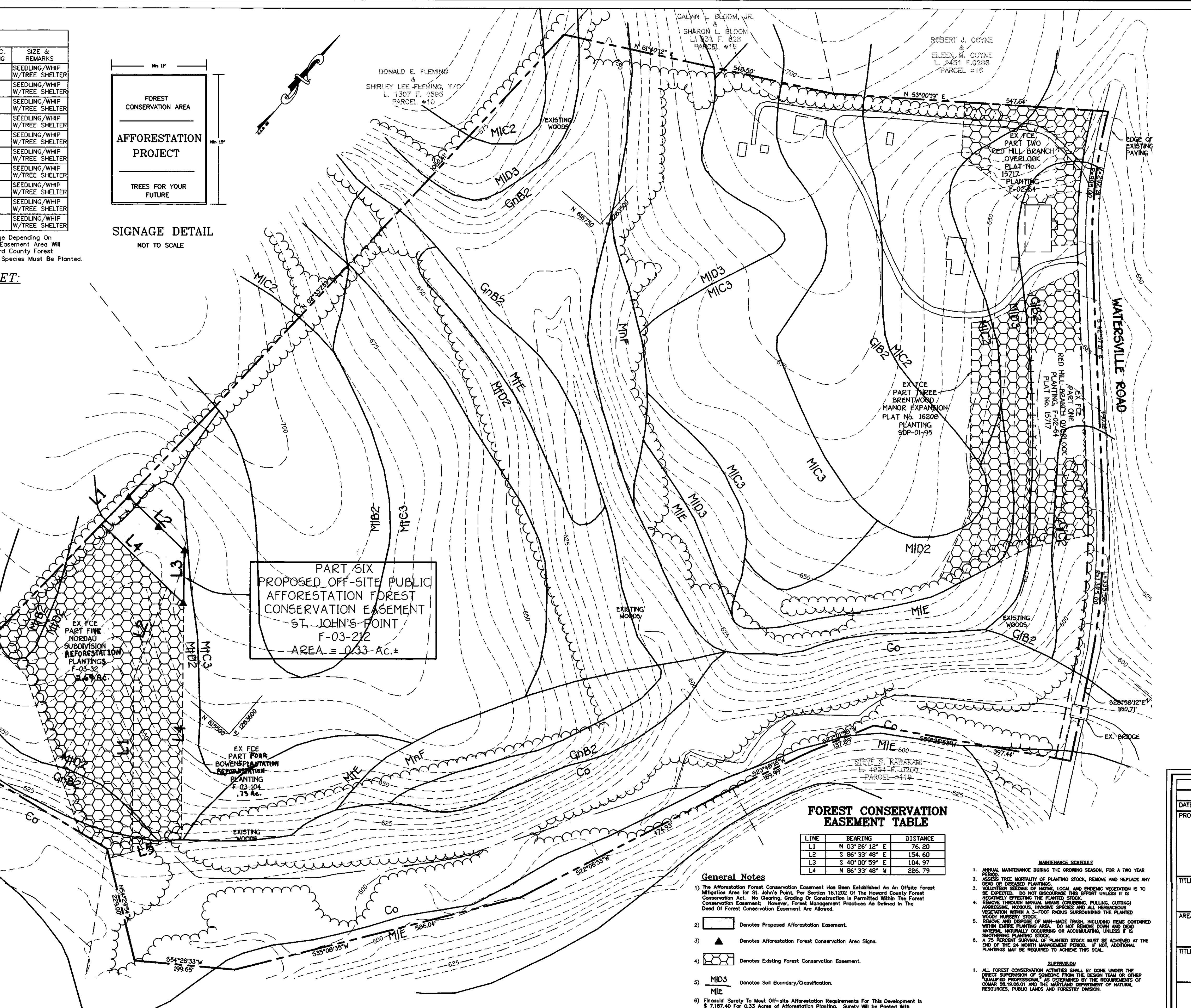
SIGNAGE DETAIL NOT TO SCALE



VICINITY MAP

PLANTING SPECIFICATIONS AND NOTES

- SITE PREPARATION AND SOILS**
- PROTECTION FENCING AND SILT FENCES FOR SEDIMENT AND EROSION CONTROL ARE TO BE INSTALLED AS A FIRST ORDER OF BUSINESS. SEE PLAN FOR LOCATIONS.
 - DISTURBANCE OF SOILS SHOULD BE LIMITED TO THE PLANTING FIELD FOR EACH PLANT. AS SHOWN ON THE DETAIL VIEW, A PLANTING FIELD OF RADIUS = 5 X DIAMETER OF THE ROOT BALL OR CONTAINER IS RECOMMENDED.
 - SOIL MIX FOR ALL PLANTS EXCEPT ERICACEOUS MATERIAL: SOIL MIX SHALL CONSIST OF EXISTING NATIVE TOPSOIL MIXTURE AT EACH PLANTING FIELD LOCATION INTO WHICH THE CONTRACTOR SHALL THOROUGHLY INCORPORATE 25% BY VOLUME OF COMPOSTED SLODGE. SOIL MIX FOR ERICACEOUS MATERIAL: SOIL MIX SHALL CONSIST OF EXISTING NATIVE TOPSOIL MIXTURE AT EACH PLANTING FIELD LOCATION INTO WHICH THE CONTRACTOR SHALL THOROUGHLY INCORPORATE 25% BY VOLUME PEAT MOSS.
 - ALL MIXING IN 3" AND 4" SHALL BE LIMITED TO CONTAINER GROWN OR BALL AND BURLAP STOCK ONLY AND COMPINED TO THE PLANTING FIELD AND IMMEDIATE ADJACENT SOIL SURFACE AREA AND SHALL BE DONE TO THE SATISFACTION OF THE DESIGN TEAM ENGINEER.
- PLANT STORAGE AND INSPECTION**
- FOR CONTAINER GROWN NURSERY STOCK, PLANTING SHOULD OCCUR WITHIN 2 WEEKS AFTER DELIVERY TO THE SITE.
 - FOR BALL AND BURLAP NURSERY STOCK, PLANTING SHOULD OCCUR WITHIN THREE DAYS AFTER DELIVERY TO THE SITE.
 - PLANTING STOCK SHOULD BE INSPECTED PRIOR TO PLANTING. PLANTS NOT CONFORMING TO STANDARD NURSERYMAN SPECIFICATIONS FOR SIZE, FORM, VIGOR, ROOTS, TRUNK WOUNDS, INSECTS AND DISEASE SHOULD BE REPLACED.
 - UNTIL PLANTED, ALL PLANT STOCK SHALL BE KEPT IN A SHADED, COOL AND MOISTENED ENVIRONMENT.
- PLANT INSTALLATION**
- THE PLANTING FIELD SHOULD BE PREPARED AS SPECIFIED (SEE DETAIL). NATIVE STOCKPILED SOILS SHOULD BE USED FOR SOIL MIX AND BACKFILL FOR PLANTING FIELD. AFTER PLANT INSTALLATION, BACKFILL SHOULD COVER THE PLANTING FIELD AND COVER WITH AT LEAST 4 INCHES OF MULCH. WATER, GENEROUSLY, TO SETTLE SOIL BACKFILL AROUND TREES.
 - PLANTING FIELD DIAMETERS SHOULD BE REDUCED OR PLANTING FIELD MOVED IF IT APPEARS THAT EXCESSIVE EXISTING ROOT DAMAGE MAY OCCUR DURING DIGGING OPERATION NEAR EXISTING FOREST. CARE SHALL BE TAKEN WHEN DIGGING PLANTING FIELDS NOT TO CHOP THRU LARGER EXISTING ROOTS FROM EXISTING MATURE TREES. IF ROOTS GREATER THAN 1/2" DIAMETER EXISTING PLANTS TRY TO DIG AROUND THEM AS MUCH AS POSSIBLE TO MINIMIZE IMPACT TO EXISTING TREES. THEY WERE HERE FIRST.
 - CONTAINER GROWN STOCK SHOULD BE REMOVED FROM THE CONTAINER AND ROOTS GENTLY LOOSESED FROM THE SOIL. IF THE ROOTS ENIRCLE THE ROOT BALL, SUBSTITUTION IS STRONGLY RECOMMENDED. U-SHAPED OR KINKED ROOT SYSTEMS SHOULD ALSO BE NOTED. ROOTS MAY NOT BE TRIMMED ON SITE DUE TO THE INCREASED CHANCES OF SOIL BORNE DISEASES.
 - FOR BALL AND BURLAP STOCK, PLACE TREES IN PREPARED PLANTING FIELD AND REMOVE WIRE AND/OR STRING FROM ROOT BALL. THEN PEEL BACK BURLAP TO BASE OF ROOT BALL AND COVER ENTIRE ROOT BALL WITH MULCH. WATER, GENEROUSLY, TO SETTLE SOIL BACKFILL AROUND TREES.
 - FOR TREES PLANTED IN THE AFFORESTATION AREA, CONTRACTOR SHALL EVENLY DISPERSE SPECIES IN GROUPS OF TWO TO FOUR (2-4) PER SPECIES, OVER THE ENTIRE DESIGNATED AREA TO BE PLANTED WHILE MAINTAINING AN AVERAGE RANDOM SPACING OF INDIVIDUAL TREES AT PROPER SPACING INDICATED ON PLANT LIST.
 - AVOID PLANTING IN A STRAIGHT ROW PATTERN. TREES SHALL BE PLANTED ON AN AVERAGE SPACING AS INDICATED ON PLANT LISTS TO OBTAIN A MORE NATURAL APPEARANCE.
 - NEWLY PLANTED TREES MAY NEED WATERING AS MUCH AS ONCE A WEEK FOR THE ENTIRE GROWING SEASON, DUE TO THE WELL DRAINED NATIVE SOILS FOUND ON THIS SITE COMBINED WITH THE LOSS OF THE BACKFILLED AREA WITHIN THE PLANTING FIELD. THE NEXT TWO YEARS MAY REQUIRE WATERING ONLY A FEW TIMES A YEAR DURING SUMMER AND DRY MONTHS. AFTER THAT PERIOD, TREES SHOULD ONLY NEED WATER IN SEVERE DROUGHTS. ANY WATERING PLAN SHOULD COMPENSATE FOR RECENT RAINFALL PATTERNS.
- FERTILIZING**
- DO NOT FERTILIZE NEWLY PLANTED TREES WITHIN THE FIRST GROWING SEASON AFTER PLANTING. DOING SO MAY CAUSE A SPURT OF CANOPY GROWTH WHICH THE ROOTS CANNOT SUPPORT AND ADDITIONAL SHOCK TO THE ALREADY DISTURBED PLANT.
 - NOTHING SHOULD BE ADDED TO THE SOIL WITHOUT TESTING IT FIRST TO DETERMINE ITS NEEDS.
 - IF AND WHEN IT IS TIME TO FERTILIZE, ORGANIC FERTILIZERS ARE PREFERRED TO SYNTHETIC FERTILIZERS. BOW MAN OR SEAWED BASED PRODUCTS ARE AVAILABLE COMMERCIALY AND ARE RECOMMENDED. THEY HAVE THE ABILITY TO SUPPLY NUTRIENTS TO THE PLANT AS NEEDED WHILE MINIMIZING THE RISK OF EXCESS NUTRIENTS ENTERING THE FOREST SYSTEM AND WATER SUPPLY.



CHARLES ALAN SHARP
DENISE ROEMER SHARP
L 4667 F 0485
PARCEL #048

PART SIX
PROPOSED OFF-SITE PUBLIC
AFFORESTATION FOREST
CONSERVATION EASEMENT
ST. JOHN'S POINT
F-03-212
AREA = 0.33 AC.±

FOREST CONSERVATION EASEMENT TABLE

LINE	BEARING	DISTANCE
L1	N 03° 26' 12" E	76.20
L2	S 86° 33' 48" E	154.60
L3	S 40° 00' 59" E	104.97
L4	N 86° 33' 48" W	226.79

General Notes

- The Afforestation Forest Conservation Easement Has Been Established As An Offsite Forest Mitigation Area for St. John's Point, Per Section 16.1202 Of The Howard County 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 Easement Are Allowed.
- Denotes Proposed Afforestation Easement.
- Denotes Afforestation Forest Conservation Area Signs.
- Denotes Existing Forest Conservation Easement.
- MIB3 Denotes Soil Boundary/Classification.
- MIE Denotes Soil Boundary/Classification.
- Financial Surety To Meet Off-site Afforestation Requirements For This Development Is \$ 7,187.40 For 0.33 Acres of Afforestation Planting. Surety Will Be Posted With Developer's Agreement. See F-03-212.

- MAINTENANCE SCHEDULE**
- ANNUAL MAINTENANCE DURING THE GROWING SEASON, FOR A TWO YEAR PERIOD.
 - REMOVE TREE MORTALITY OF PLANTING STOCK, REMOVE AND REPLACE ANY DEAD OR DISEASED PLANTINGS.
 - REMOVE EXCESSIVE BRANCHES, LOCAL AND ENDEMIC VEGETATION IS TO BE EXPECTED. DO NOT DISCOURAGE THIS EFFORT UNLESS IT IS NEARBY EXISTING PLANTINGS.
 - REMOVE THROUGH MANUAL MEANS (GRUBBING, PULLING, CUTTING) ANY EXCESSIVE BRANCHES, LOCAL AND ENDEMIC VEGETATION WITHIN A 3-FOOT RADIUS SURROUNDING THE PLANTED NURSERY STOCK.
 - REMOVE AND DISPOSE OF MAN-MADE TRASH, INCLUDING ITEMS CONTAINED WITHIN ENTIRE PLANTING FIELD. DO NOT BURN DOWN AND BURN MATERIAL, NATURALLY OCCURRING OR ACCUMULATING, UNLESS IT IS NEARBY EXISTING PLANTINGS.
 - A 75 PERCENT SURVIVAL OF PLANTED STOCK MUST BE ACHIEVED AT THE END OF THE 24 MONTH MANAGEMENT PERIOD. IF NOT, ADDITIONAL PLANTINGS MAY BE REQUIRED TO ACHIEVE THIS GOAL.
- SUPERVISION**
- ALL FOREST CONSERVATION ACTIVITIES SHALL BE DONE UNDER THE DIRECT SUPERVISION OF SOMEONE FROM THE DESIGN TEAM OR OTHER QUALIFIED PROFESSIONAL AS DETERMINED BY THE REQUIREMENTS OF COMAR 08.16.06.01 AND THE MARYLAND DEPARTMENT OF NATURAL RESOURCES, PUBLIC LANDS AND FORESTRY DIVISION.

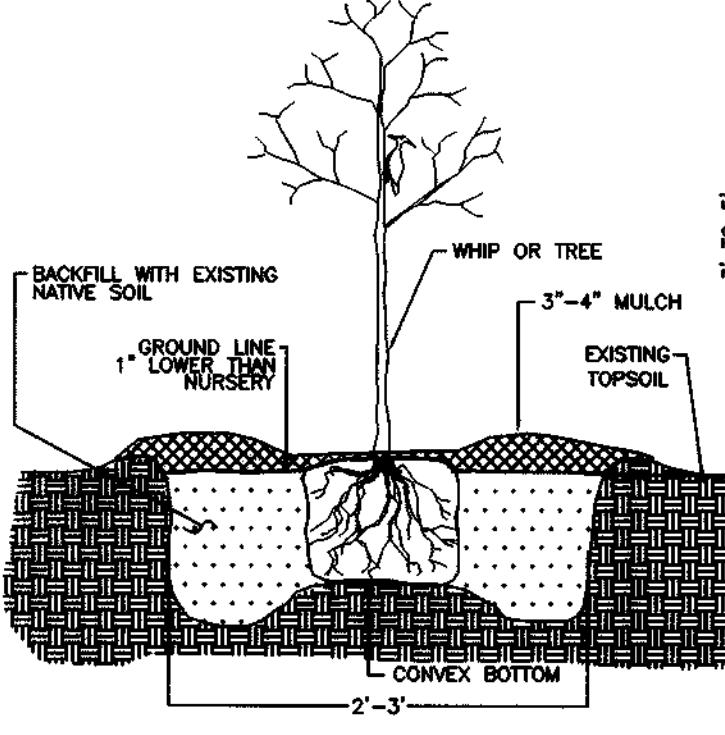
EXISTING AND FUTURE PUBLIC AFFORESTATION/REFORESTATION FOREST CONSERVATION EASEMENT TABULATION

EASEMENT NUMBER	SUBDIVISION NAME	FILE NUMBER(S)	ACREAGE	PLAT NUMBER	RETENTION	PLANTING
ONE	RED HILL BRANCH OVERLOOK	F-02-64	1.26 Ac.±	15717	NO	YES
TWO	RED HILL BRANCH OVERLOOK	F-02-64	1.04 Ac.±	15717	NO	YES
THREE	BRENTWOOD MANOR EXPANSION	SDP-01-95	1.45 Ac.±	16208	NO	YES
FIVE	NORDAU SUBDIVISION	F-03-32	2.69 Ac.±	---	NO	YES
FOUR	BOWEN'S PLANTATION	F-03-104	0.73 Ac.±	---	NO	YES
SIX	ST. JOHN'S POINT	F-03-212	0.33 Ac.±	---	NO	YES

DEVELOPER
RONALD B. WILDMAN
4747 BONNIE BRANCH ROAD
ELLICOTT CITY, MARYLAND 21043

OWNER/GRANTOR
WILLIAM & BARBARA LISTON
P.O. BOX 228
342 WATERSVILLE ROAD
MT. AIRY, MARYLAND 21771

THIS PLAN IS FOR
FOREST CONSERVATION EASEMENT
PLANTING PURPOSES ONLY



TREE PLANTING DETAIL

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chantrelle
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE: 10/27/13

Alan Dawson
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 10/21/13

DATE NO.	REVISION
PROJECT: Saint John's Point TAX MAP 24 PARCEL 458 4TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND F-03-212	
TITLE: OFF-SITE FOREST MITIGATION PLAN	
AREA: LISTON FARM PRESERVATION PARCEL TAX MAP 24 - PARCEL 17 SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
TITLE: OFFSITE AFFORESTATION PLANTING PLAN	
<p>WILDMAN ENVIRONMENTAL SERVICES 4747 BONNIE BRANCH RD. ELLICOTT CITY, MD. 21043 PHONE: (410) 869-9999 FAX: (410) 869-9901</p>	
DESIGNED BY: R.B.W. DRAWN BY: J.E.P. PROJECT NO. DATE: 6/9/03 SCALE: 1"=100' SHEET NO. 1 OF 1	