

PLANTING SCHEDULE

FCE-3 - Planting Area A - 1.3 Acres

Planting Units Required: 910

Planting Units Provided: 910

Qty	Species	Size	Spacing	Total FCA Units
40	Acer rubrum - Red Maple	2-3' whip	11' O.C.	
45	Cornus florida - Flowering Dogwood	2-3' whip	11' O.C.	
75	Liriodendron tulipifera - Tulip Poplar	2-3' whip	11' O.C.	
75	Prunus serotina - Black Cherry	2-3' whip	11' O.C.	
50	Quercus alba - White Oak	2-3' whip	11' O.C.	
55	Robinia pseudo-acacia - Black Locust	2-3' whip	11' O.C.	
55	Sassafras albidum - Sassafras	2-3' whip	11' O.C.	
60	Viburnum prunifolium - Blackhaw	2-3' whip	11' O.C.	
455	Total whip plantings x 2 units / tree = FCA unit credit			910
				910

FCP NOTES

- ANY FOREST CONSERVATION EASEMENT (FCE) AREA SHOWN HEREON IS SUBJECT TO PROTECTIVE COVENANTS WHICH MAY BE FOUND IN THE LAND RECORDS OF HOWARD COUNTY WHICH RESTRICT THE DISTURBANCE AND USE OF THESE AREAS.
- THE FOREST CONSERVATION EASEMENTS HAVE BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 161200 OF THE HOWARD COUNTY CODE, FOREST CONSERVATION ACT. NO CLEARING, GRADING, OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENTS, HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.
- FORESTED AREAS OCCURRING OUTSIDE OF THE FCE SHALL NOT BE CONSIDERED PART OF THE FCE AND SHALL NOT BE SUBJECT TO PROTECTIVE LAND COVENANTS.
- LIMITS OF DISTURBANCE SHALL BE RESTRICTED TO AREAS OUTSIDE THE LIMIT OF TEMPORARY FENCING OR THE FCE BOUNDARY, WHICHEVER IS GREATER.
- THERE SHALL BE NO CLEARING, GRADING, CONSTRUCTION OR DISTURBANCE OF VEGETATION IN THE FOREST CONSERVATION EASEMENT, EXCEPT AS PERMITTED BY HOWARD COUNTY DPZ.
- NO STOCKPILES, PARKING AREAS, EQUIPMENT CLEANING AREAS, ETC. SHALL OCCUR WITHIN AREAS DESIGNATED AS FOREST CONSERVATION EASEMENTS.
- TEMPORARY FENCING SHALL BE USED TO PROTECT FOREST RESOURCES DURING CONSTRUCTION. THE FENCING SHALL BE PLACED ALONG ALL FCE BOUNDARIES WHICH OCCUR WITHIN 15 FEET OF THE PROPOSED LIMITS OF DISTURBANCE.
- PERMANENT SIGNAGE SHALL BE PLACED 50' - 100' APART ALONG BOUNDARIES OF ALL AREAS INCLUDED IN FOREST CONSERVATION EASEMENTS.
- FOREST CONSERVATION OBLIGATION OF 1.3 ACRES PLANTING TO FULFILL THE REQUIREMENTS OF SECTION 161200 OF THE HOWARD COUNTY CODE FOREST CONSERVATION ACT FOR SHIPLEY'S GRANT, F-06-019 AND F-11-026 IS PROVIDED BY OFF-SITE AFFORESTATION FCE NO. 3 ON PROPERTY OF HOBART MULLINEAUX, TAX MAP 6, GRID 8, TAX PARCEL NO. 15. A FOREST CONSERVATION SURETY IN THE AMOUNT OF \$28,314.00 BASED ON 1.3 ACRES X 43,560 SQ.FT./ACRES X \$0.50/SQ.FT. WILL BE POSTED WITH THE DEVELOPER'S AGREEMENT FOR F-11-026, SHIPLEY'S GRANT, PHASE VI.

MULTIFLORA ROSE CONTROL NOTE:

PRIOR TO PLANTING ALL MULTIFLORA ROSE WITHIN PLANTING AREAS SHALL BE REMOVED. REMOVAL OF THE ROSE MAY BE PERFORMED WITH MOWING AND HERBICIDE TREATMENTS. PHYSICAL REMOVAL OF ALL TOP GROWTH FOLLOWING BY A PERIODIC HERBICIDE TREATMENT OF STUMP SPROUTS IS RECOMMENDED. NATIVE TREE AND SHRUB SPECIES OCCURRING WITHIN THE ROSE THICKETS SHOULD BE RETAINED WHEREVER POSSIBLE. HERBICIDES TREATMENTS SHALL OCCUR ON 2 MONTH INTERVALS DURING THE FIRST GROWING SEASON AND ONCE EACH IN THE SPRING AND FALL FOR SUBSEQUENT YEARS. HERBICIDE USE SHALL BE MADE SPECIFICALLY TO ADDRESS WOODY PLANT MATERIAL AND SHALL BE APPLIED AS PER MANUFACTURER'S SPECIFICATIONS. CARE SHOULD BE TAKEN NOT TO SPRAY PLANTED TREES OR NATURALLY OCCURRING NATIVE TREE/SHRUB SEEDLINGS. IT IS RECOMMENDED THAT INITIATION OF ROSE REMOVAL BEGIN AT LEAST SIX MONTHS PRIOR TO PLANTING.

PLANTING NOTES:

PLANTING DENSITY BASED SPACING REQUIREMENTS: 1" CALIPER TREES @ 15' ON CENTER, WHIPS WITH SHELTER @ 12' ON CENTER. 1" CALIPER TREES SHOULD BE STAGGERED ALONG THE PERIMETER OF THE PLANTING AREA TO SERVE AS DEMARCATION OF THE BOUNDARY AS INDICATED ON THE PLAN. PLANTING MAY BE MADE IN A CURVILINEAR FASHION ALONG CONTOUR. THE PLANTING SHOULD AVOID A GRID APPEARANCE BUT SHOULD BE SPACED TO FACILITATE MAINTENANCE. MULTIFLORA ROSE/HEAVY BRUSH REMOVAL/CONTROL MAY BE REQUIRED PRIOR TO INSTALLATION OF PLANTING. ALL WHIPS ARE REQUIRED TO BE INSTALLED WITH TREE SHELTERS PER HOWARD COUNTY FCA REQUIREMENTS. PLANTING UNITS DEFINED BY THE SPACING REQUIREMENTS ESTABLISHED IN THE FCA MANUAL. ONE PLANT UNIT IS DEFINED AS 1 SEEDLING OR WHIP WITHOUT SHELTER. THE MANUAL STATES THAT 700 SEEDLINGS/WHIPS WITHOUT SHELTERS ARE REQUIRED PER ACRE, OR 350 WHIPS W/SHELTERS, OR 200 1" CALIPER TREES, OR 100 2" CALIPER TREES. BY CONVERSION IT HAS BEEN DETERMINED THAT A SEEDLING OR WHIP WITHOUT SHELTER = 1 UNIT, WHIP WITH SHELTER = 2 UNITS, 1" CALIPER TREE = 3.5 UNITS AND 2" CALIPER TREE = 7 UNITS. THE USE OF PLANT UNITS SIMPLIFIES THE PLANT DENSITY CALCULATIONS WHEN MIXING STOCK SIZE.

PLANTING/SOIL SPECIFICATIONS

- PLANTING OF NURSERY STOCK SHALL TAKE PLACE BETWEEN MARCH 15th AND APRIL 30th OR SEPTEMBER 15th AND NOVEMBER 15th.
- A TWELVE (12) INCH LAYER OF TOPSOIL SHALL BE SPREAD OVER ALL FORESTATION AREAS IMPACTED BY SITE GRADING TO ASSURE A SUITABLE PLANTING AREA. DISTURBED AREAS SHALL BE SEEDED AND STABILIZED AS PER GENERAL CONSTRUCTION PLAN FOR PROJECT. PLANTING AREAS NOT IMPACTED BY SITE GRADING SHALL HAVE NO ADDITIONAL TOPSOIL INSTALLED.
- ALL BAREROOT PLANTING STOCK SHALL HAVE THEIR ROOT SYSTEMS DIPPED INTO AN ANTI-DESICCANT GEL PRIOR TO PLANTING.
- PLANTS SHALL BE INSTALLED SO THAT THE TOP OF ROOT MASS IS LEVEL WITH THE TOP OF EXISTING GRADE. BACKFILL IN THE PLANTING PITS SHALL CONSIST OF 3 PARTS EXISTING SOIL TO 1 PART FINE FINES OR EQUIVALENT.
- FERTILIZER SHALL CONSIST OF AGRIFORM 22-0-2, OR EQUIVALENT, APPLIED AS PER MANUFACTURER'S SPECIFICATIONS.
- A TWO (2) INCH LAYER OF HARDWOOD MULCH SHALL BE PLACED OVER THE ROOT AREA OF ALL PLANTINGS.
- PLANT MATERIAL SHALL BE TRANSPORTED TO THE SITE IN A TARPED OR COVERED TRUCK. PLANTS SHALL BE KEPT MOIST PRIOR TO PLANTING.
- ALL NON-ORGANIC DEBRIS ASSOCIATED WITH THE PLANTING OPERATION SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR.

SEQUENCE OF CONSTRUCTION

- SEDIMENT CONTROL AND TREE PROTECTION DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH GENERAL CONSTRUCTION PLAN FOR SITE. SITE SHALL BE GRADED IN ACCORDANCE WITH GENERAL CONSTRUCTION PLANS.
- PROPOSED FORESTATION AREAS IMPACTED BY SITE GRADING SHALL BE TOPSOILED AND STABILIZED AS PER NOTE NO. 2 OF PLANTING/SOIL SPECIFICATIONS FOR PROJECT.
- PLANTS SHALL BE INSTALLED AS PER PLANT SCHEDULE AND THE PLANTING/SOIL SPECIFICATIONS FOR THE PROJECT.
- UPON COMPLETION OF THE PLANTING, SIGNAGE SHALL BE INSTALLED AS PER THE FOREST PROTECTION DEVICES SHOWN ON THE FOREST CONSERVATION PLAN.
- PLANTINGS SHALL BE MAINTAINED AND GUARANTEED IN ACCORDANCE WITH THE MAINTENANCE AND GUARANTEE REQUIREMENTS FOR PROJECT.

MAINTENANCE OF PLANTINGS

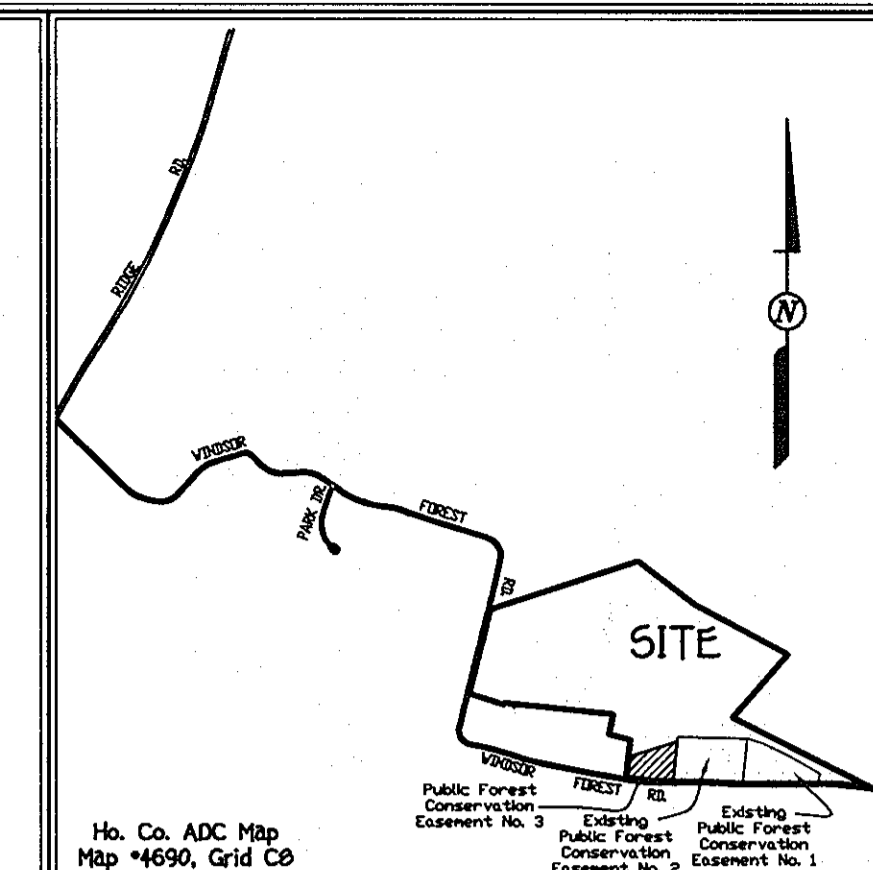
- MAINTENANCE OF PLANTINGS SHALL LAST FOR A PERIOD OF 26 MONTHS.
- ALL PLANT MATERIAL SHALL BE WATERED TWICE A MONTH DURING THE 1st GROWING SEASON. WATERING MAY BE MORE OR LESS FREQUENT DEPENDING ON WEATHER CONDITIONS. DURING 2nd GROWING SEASON, ONCE A MONTH DURING MAY-SEPTEMBER, IF NEEDED.
- INVASIVE EXOTICS AND NOXIOUS WEEDS WILL BE REMOVED FROM FORESTATION AREAS. OLD FIELD SUCCESSIONAL SPECIES WILL BE RETAINED.
- PLANTS WILL BE EXAMINED A MINIMUM TWO TIMES DURING THE GROWING SEASON FOR SERIOUS PLANT PESTS AND DISEASES. SERIOUS PROBLEMS WILL BE TREATED WITH THE APPROPRIATE AGENT.
- DEAD BRANCHES WILL BE PRUNED FROM PLANTINGS.

GUARANTEE REQUIREMENTS

- A 75 PERCENT SURVIVAL RATE OF FORESTATION PLANTINGS WILL BE REQUIRED AT THE END OF THE 24 MONTH MAINTENANCE PERIOD. ALL PLANT MATERIAL BELOW THE 75 PERCENT THRESHOLD WILL BE REPLACED AT THE BEGINNING OF THE NEXT GROWING SEASON.

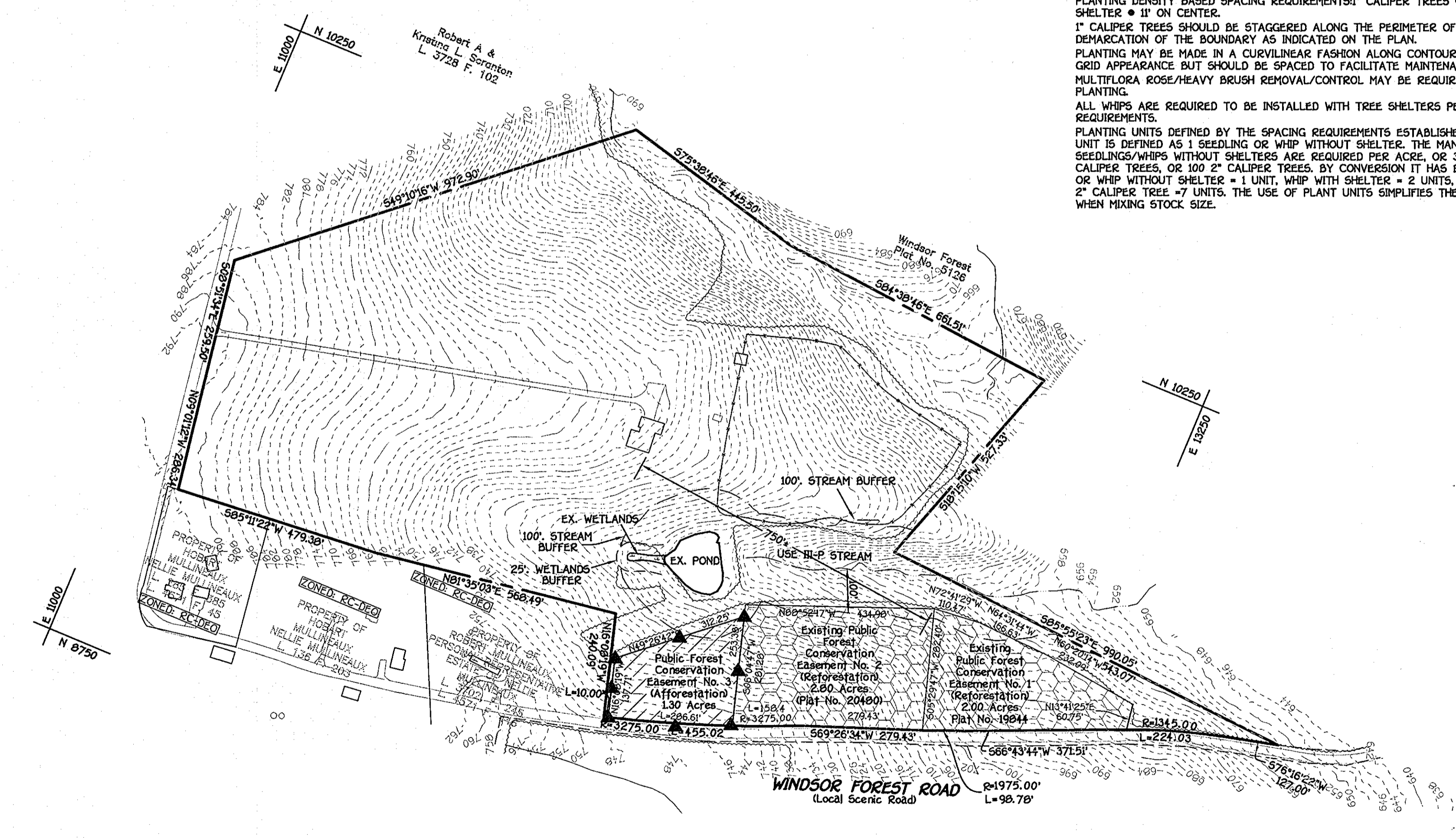
SURETY FOR FORESTATION

- THE DEVELOPER SHALL POST A SURETY (BOND, LETTER OF CREDIT) TO ENSURE THAT REFORESTATION PLANTINGS ARE COMPLETED UPON ACCEPTANCE OF THE PLANTINGS BY THE COUNTY. THE BOND SHALL BE RELEASED.
- SURETY FOR OFF-SITE REFORESTATION (1.3 AC. X 43,560 SQ. FT./AC X 0.50/SQ.FT. = \$28,314.00) IS POSTED WITH THE DEVELOPER'S AGREEMENT ASSOCIATED WITH THE SHIPLEY'S GRANT, NON-BUILDABLE PARCELS 'C' AND 'E', F-06-19.



VICINITY MAP
SCALE: 1" = 1200'

Forest Conservation Easement Tabulation				
INITIAL F.C.E. NO. 1) PLAT NO. 19844	SECOND F.C.E. NO. 2) PLAT NO. 20480	THIRD F.C.E. NO. 3)		
TOTAL AREA OF PROPERTY: 41,547 ACRES	TOTAL AREA OF PROPERTY: 41,547 ACRES	TOTAL AREA OF PROPERTY: 41,547 Acres		
AREA OF FOREST EASEMENT CREATED BY THIS PLAT: 2.00 ACRES	AREA OF FOREST EASEMENT CREATED BY THIS PLAT: 2.80 ACRES	AREA OF FOREST EASEMENT CREATED BY THIS PLAT: 1.30 Acres		
TOTAL AREA OF FOREST EASEMENT CREATED INCLUDING THIS PLAT: 2.00 ACRES	TOTAL AREA OF FOREST EASEMENT CREATED INCLUDING THIS PLAT: 4.80 ACRES	TOTAL AREA OF FOREST EASEMENT CREATED INCLUDING THIS PLAT: 6.10 Acres		
SUBDIVISION REQUIRING OFF-SITE REFORESTATION: F-07-030 PHELPS ESTATES LOTS 1 THRU 4, T.M. 29, GRID 19, PARCEL 300	SUBDIVISION REQUIRING OFF-SITE REFORESTATION: F-09-203 HALL SHOP MANOR BUILDABLE PRESERVATION PARCEL 'A', T.M. 41, GRID 1, PARCEL 138	SUBDIVISION REQUIRING OFF-SITE REFORESTATION: F-06-19 - SHIPLEY'S GRANT NON-BUILDABLE PARCELS 'C' AND 'E', T.M. 37, GRID 1 & 2, P/O PARCEL 4 AND F-11-026, SHIPLEY'S GRANT, PHASE VI		



PLAN
SCALE: 1" = 200'



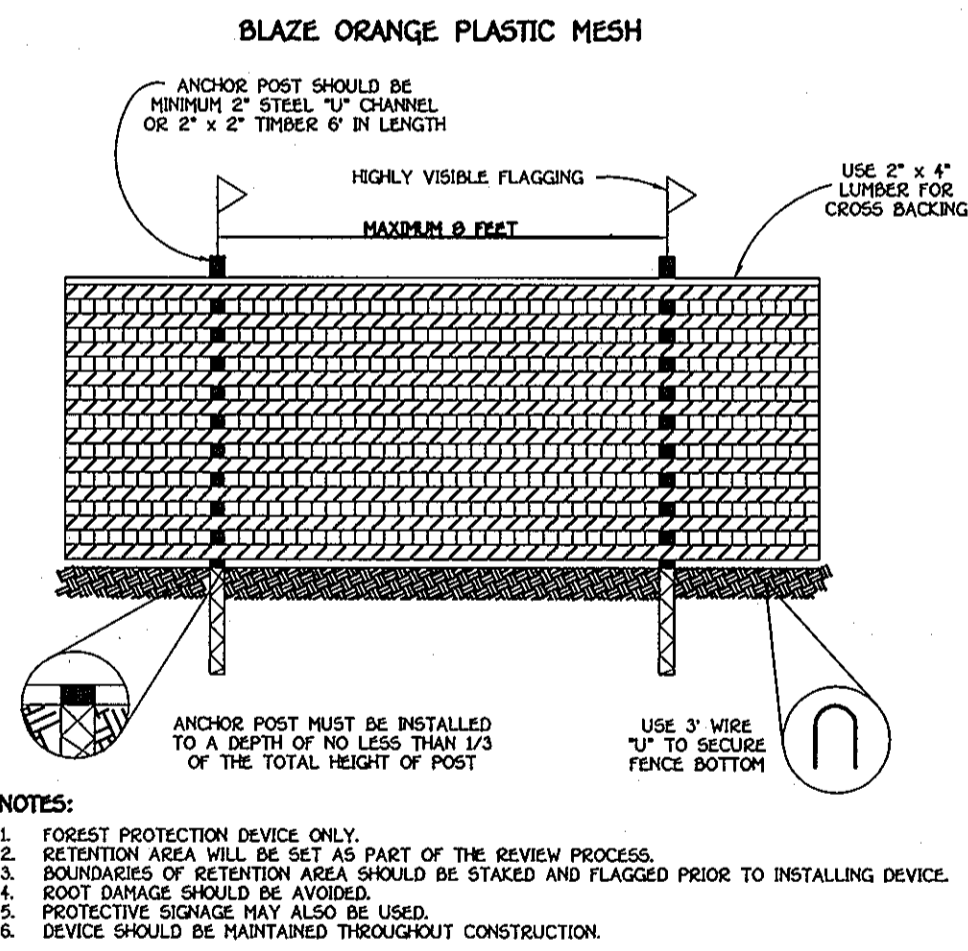
APPROVED: DEPARTMENT OF PLANNING AND ZONING
 [Signature] 5/09/11
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 5/6/11
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

Eco-Science Professionals, Inc.
 CONSULTING ECOLOGISTS

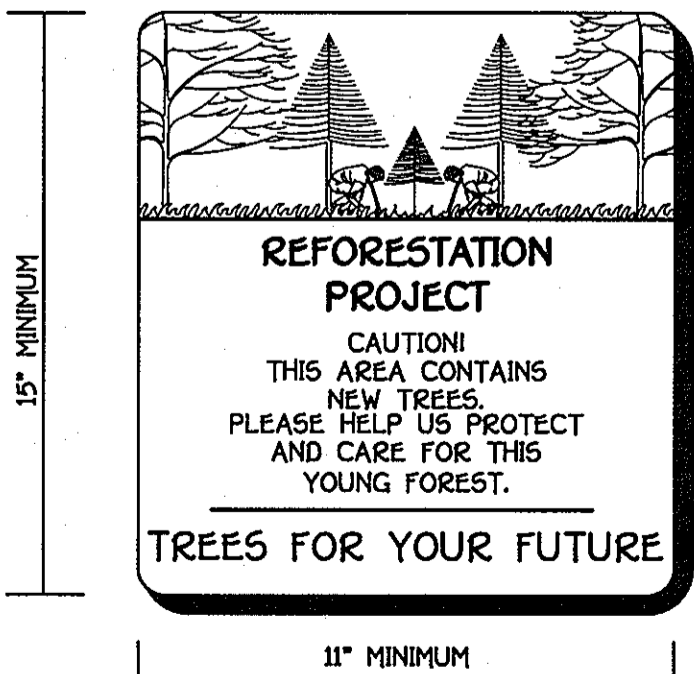
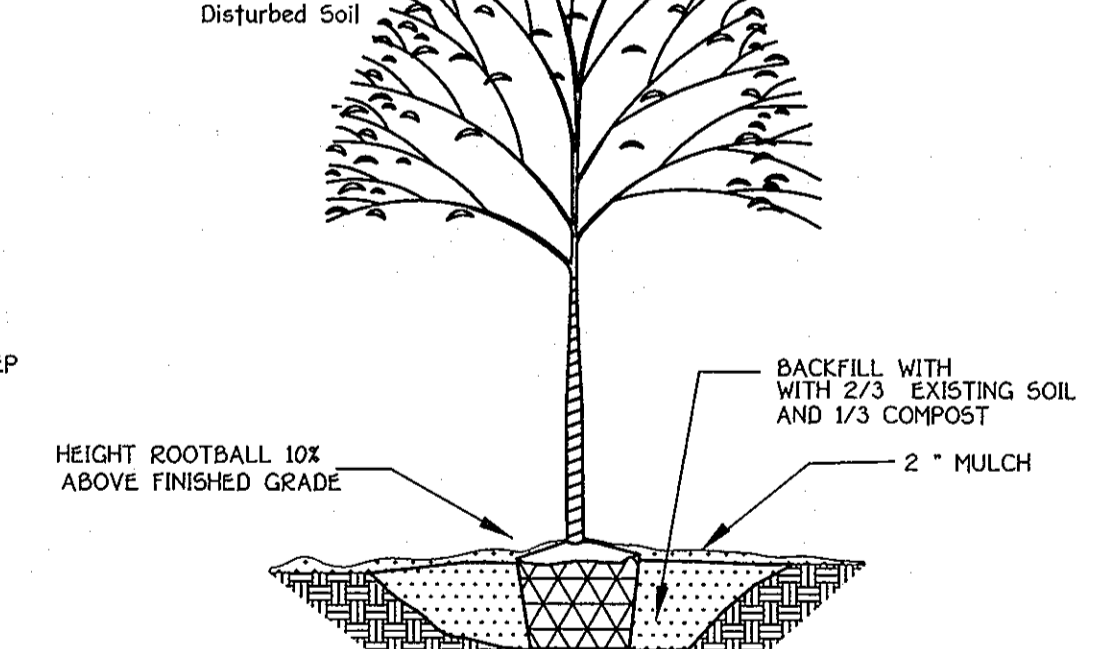
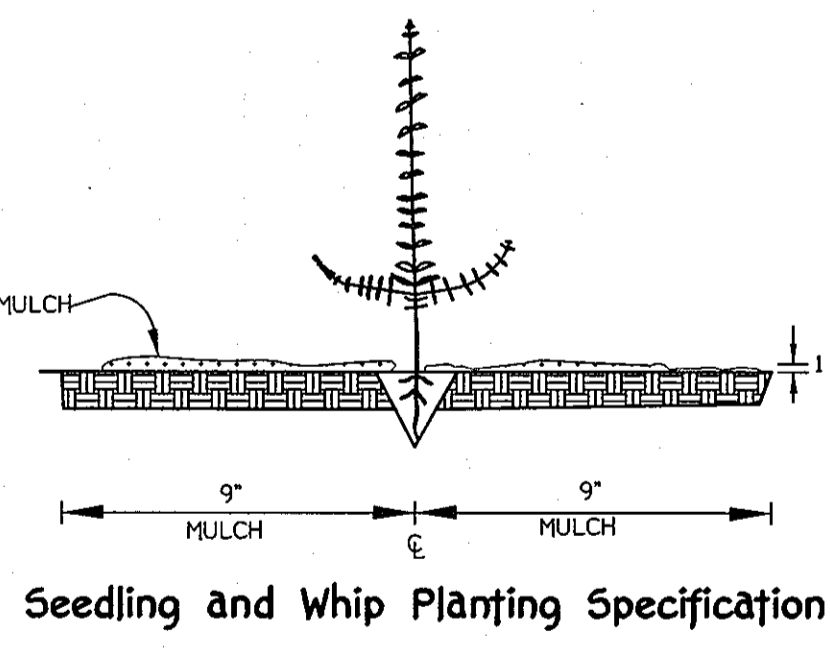
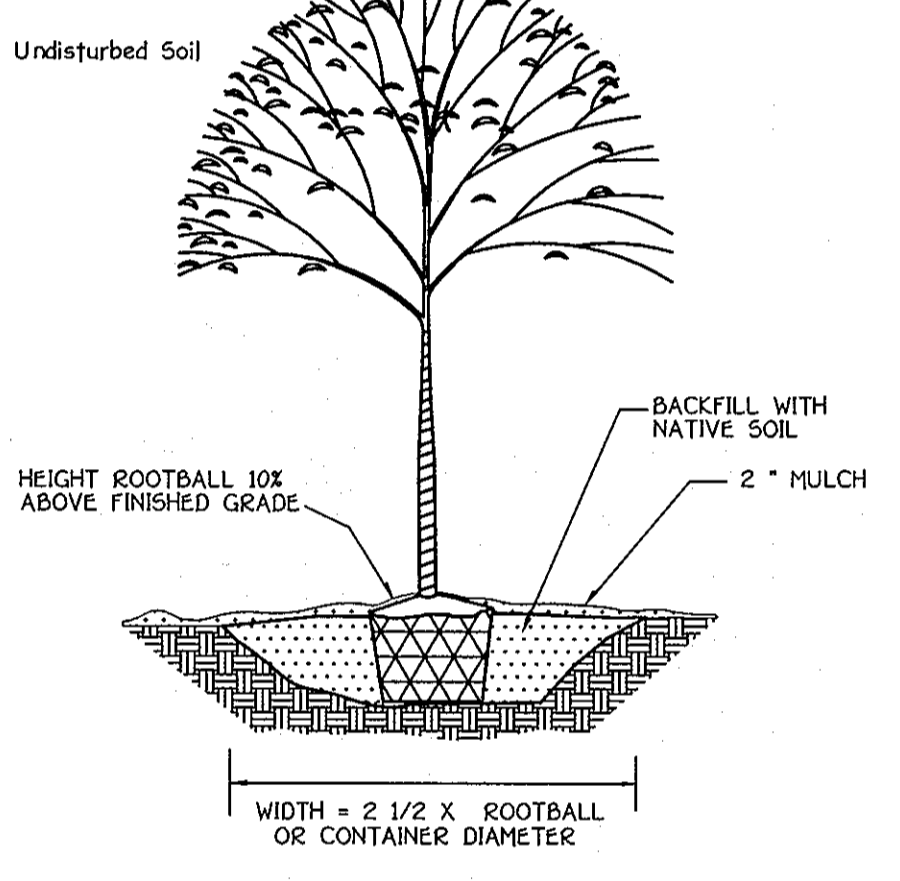
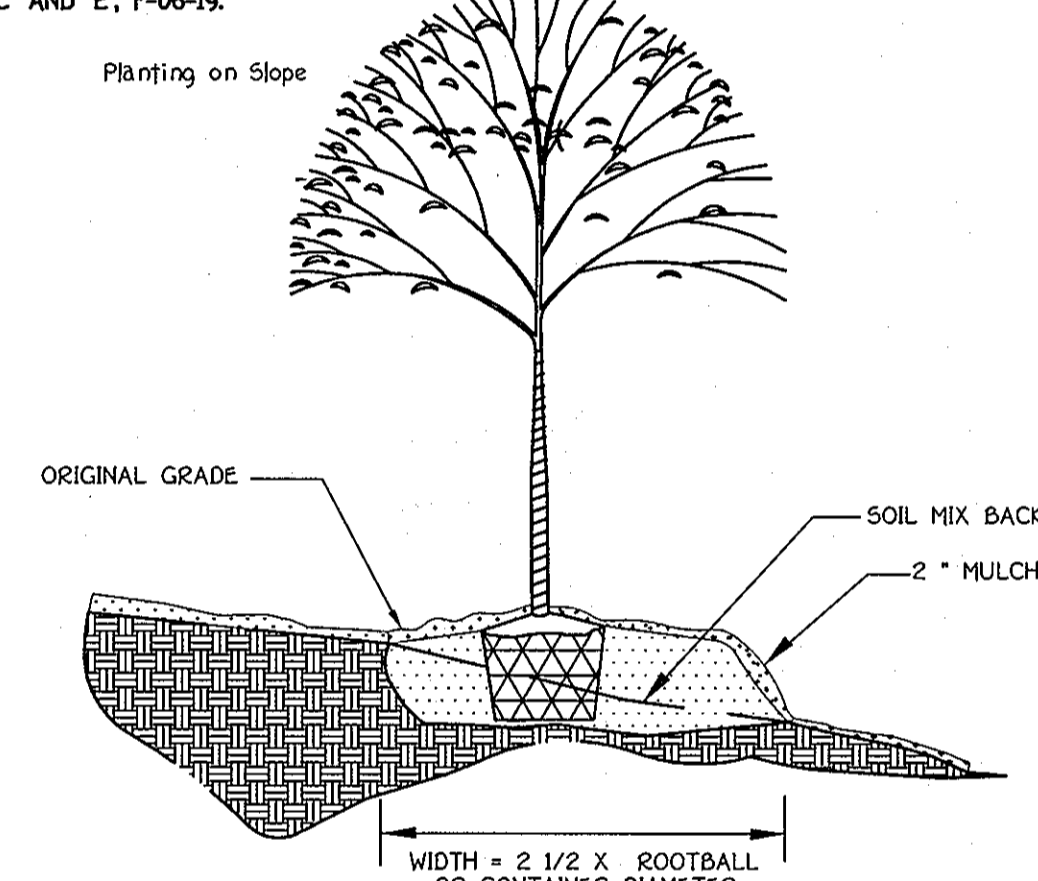
MD DNR Qualified Professional
 USACE Wetland Delimitation Certification: WDCPS00060048
 [Signature]
 JOHN P. CANOLES

SHIPLEY'S GRANT
 DEVELOPER
 BA Waterloo Townhomes, LLC
 7850 Walker Drive - Suite 400
 Greenbelt, Maryland 20770
 301-220-0100

HOBART MULLINEAUX PROPERTY
 OWNER
 Robert Arthur Scramton
 18950 Windsor Forest Road
 Mount Airy Maryland, 21771
 410-549-1669



TREE PROTECTION DETAIL
NOT TO SCALE



OFF-SITE REFORESTATION PLAN
 (FOR FCE NO. 3 FOR SHIPLEY'S GRANT,
 F-06-019 & F-11-026)
 HOBART MULLINEAUX PROPERTY
 TAX MAP 6, GRID 8, PARCEL 15
 FOURTH ELECTION DISTRICT
 ZONED: RC-DEO
 REFORESTATION PLANTING PLAN
 NOTES AND SPECIFICATIONS
 DATE: APRIL 18, 2011
 SHEET 1 OF 1

F-11-026