

GENERAL NOTES

- This plan is submitted to fulfill the woodland conservation requirements for a grading permit. Cutting or clearing of woodland not in conformance with this plan or without the expressed written
- consent of the Planning Director or designee shall be subject to a \$9.00 per square foot mitigation fee. A pre-construction meeting is required prior to the issuance of grading permits. The Department of Permits, Inspection and Enforcement, shall be contracted prior to the start of any work on the site to conduct a pre-construction meeting where implementation of woodland conservation measures shown on this plan
- The developer or builder of the lots or parcels shown on this plan shall notify future buyers of any woodland conservation areas through the provision of a copy of this plan at time of contract signing. Future property owners are also subject to this requirement.
- The owners of the property subject to this tree conservation plan are solely responsible for conformance to the requirements contained herein.
- . The property is within Environmental Strategy Area, ESA-2 and is zoned R-E & R-R.
- The site is not adjacent to a roadway designated as scenic, historic, a parkway or a scenic byway.
- The site is not adjacent to a roadway classified as arterial or greater.
- 9. This plan is not grandfathered under CB-27-2010, Section 25-177(g)

WOODLAND PRESERVATION AND RETENTION NOTES

will be discussed in detail.

- All woodlands designated on this plan for preservation are the responsibility of the property owner. The woodland areas shall remain in a natural state. This includes the canopy trees and understory vegetation. A revised tree conservation plan is required prior to clearing woodland areas that are not specifically identified to be cleared on the approved TCP2.
- Tree and woodland conservation methods such as root pruning shall be conducted as noted on this plan.
- The location of all temporary tree protection fencing (TPFs) shown on this plan shall be flagged or staked in the field prior to the pre-construction meeting. Upon approval of the locations by the county inspector, installation of the TPFs may begin.
- All temporary tree protection fencing required by this plan shall be installed prior to the commencement of clearing and grading of the site and shall remain in place until the bond is released for the project. Failure to install and maintain temporary or permanent tree protective devices is a violation of this TCP2.
- Woodland preservation areas shall be posted with signage as shown on the plans at the same time as the temporary TPF installation. These signs must remain in perpetuity. Removal of Hazardous Trees or Limbs by Developers or Builders
- The developer and/or builder is responsible for the complete preservation of all forested areas shown on the approved plan to remain undisturbed. Only trees or part thereof designated by the county as dead, dying, or hazardous may be removed.
- A tree is considered hazardous if a condition is present which leads a Certified Arborist or Licensed Tree Expert to believe that the tree or a portion of the tree has a potential to fall and strike a structure, parking area, or other high use area and result in personal injury or property damage.
- During the initial stages of clearing and grading, if hazardous trees are present, or trees are present that are not hazardous but are leaning into the disturbed area, the permitee shall remove said trees using a chain saw. Corrective measures requiring the removal of the hazardous tree or portions thereof shall require authorization by the county inspector. Only after approval by the inspector may the tree be cut by chain saw to near the existing ground level. The stump shall not be removed or covered with soil, mulch or other materials that would inhibit sprouting.
- 18. If a tree or trees become hazardous prior to bond release for the project, due to storm events or other situations not resulting from an action by the permitee, prior to removal, a Certified Arborist or a Licensed Tree Expert must certify that the tree or the portion of the tree in question has a potential to fall and strike a structure, parking area, or other high use area and may result in personal injury or property damage. If a tree or portions thereof are in imminent danger of striking a structure, parking area, or other high use area and may result in personal injury or property damage then the certification is not required and the permitee shall take corrective action immediately. The condition of the area shall be fully documented through photographs prior to corrective action being taken. The photos shall be submitted to the inspector for documentation of the damage.

If corrective pruning may alleviate a hazardous condition, the Certified Arborist or a Licensed Tree Expert may proceed without further authorization. The pruning must be done in accordance with the latest edition of the appropriate ANSI A-300 Pruning Standards. The condition of the area shall be fully documented through photographs prior to corrective action being taken. The photos shall be submitted to the inspector for documentation of the damage.

encouraging decomposition. The smaller materials shall be placed into brush piles that will serve as wildlife habitat. Tree work to be completed within a road right-of-way requires a permit from the Maryland Department of Natural Resources unless the tree removal is shown within the approved limits of disturbance on a

Debris from the tree removal or pruning that occurs within 35 feet of the woodland edge may be

removed and properly disposed of by recycling, chipping or other acceptable methods. All debris that

is more than 35 feet from the woodland edge shall be cut up to allow contract with the ground, thus

Debris piles shown in woodland preservation areas shall be removed by hand without the use of mechanical equipment within the preservation area. Chains may be used to pull debris out of the preservation areas. Caution must be used not to damage remaining vegetation.

AFFORESTATIOIN AND REFORESTATION NOTES

All afforestation/reforestation bonding, based on square footage, shall be posted with the county prior to the issuance of any permits. These bonds will be retained as surety until all required activities have been satisfied or the required timeframe for maintenance has passed, whichever is longer.

TCP2. The work is required to be conducted by a Licensed Tree Expert.

- The planting of afforestation or reforestation areas shall be completed prior to the issuance of the first building permit. (This standard note may be modified as necessary to address which building permits are adjacent to the proposed planting areas.) Seedling planting is to occur from November through May only. No planting shall be done while ground is frozen. Planting with large caliper stock or containerized stock may be done at any time provided a detailed maintenance schedule is provided.
- If planting cannot occur due to planting conditions, the developer or property owner shall install the fencing and signage in accordance with the approved Type 2 Tree Conservation Plan. Planting shall then be accomplished during the next planting season. If planting is delayed beyond the transfer of the property title to the homeowner, the developer or builder shall obtain a signed statement from the purchaser indicating that they understand that the reforestation area is located on their property and that reforestation will occur during the next planting season. A copy of that document shall be presented to the Grading Inspector and the county.
- Reforestation areas shall not be mowed. The management of competing vegetation around individual trees and the removal of noxious, invasive, and non-native vegetation within the reforestation areas is acceptable.
- All required temporary tree protection fencing shall be installed prior to the clearing and grading of the site and shall remain in place until the permanent tree protection fencing is installed with the required planting. The temporary fencing is not required to be installed if the permanent fencing is installed prior to clearing and grading of the site. Failure to install and maintain temporary or permanent tree protective fencing is a violation of this TCP2.
- Afforestation/reforestation areas shall be posted with notification signage, as shown on the plans, at the same time as the permanent protection fencing installation. These signs shall remain in perpetuity.
- The county inspector shall be notified prior to soil preparation or initiation of any tree planting on this site.
- At time of issuance of the first permit, the following information shall be submitted to the M-NCPPC Planning Department regarding the contractor responsible for implementation of this plan; contractor name; business name (if different); address; and phone number. Results of annual survival checks for each of the required four years after tree planting shall be reported to the M-NCPPC, Planning Department.
- Failure to establish the afforesation or reforestation within the prescribed time frame will resulting the forfeiture of the reforestation bond and/or a violation of this plan including the associated \$9.00 per square foot penalty unless the county inspector approves a written extension.

PLANTING SPECIFICATION NOTES

- Quantity: (See Plant Schedule)
- Type: (See Plant Schedule)

landscape contractor.

- 3. Plant Quality Standards: The plants selected shall be healthy and sturdy representatives of their species. Seedlings shall have a minimum top growth of 18". The diameter of the root collar (the part of the root just below ground level) shall be at least 3/8". The roots shall be well developed and at least 8" long, no more than twenty-five percent (25%) of the root system (both primary and auxiliary/fibrous
- Plants that do not have an abundance of well developed terminal buds on the leaders and branches shall be rejected.
- Plants shall be shipped by the nursery immediately after lifting from the field or removal from the green house, and planted immediately upon receipt by the
- If the plants cannot be planted immediately after delivery to the reforestation site, they shall be stored in the shade with their root masses protected from direct exposure to sun and wind by the use of straw, peat moss, compost, or other suitable material and shall be maintained through periodic watering, until the time of planting.
- 4. Planting Handling: The quantity of seedlings taken to the field shall not exceed the quantity that can be plated in a day. Seedlings, once removed from the nursery or temporary storage area shall be planted immediately.
- 5. Timing of Planting: The best time to plant seedlings is while they are dormant, prior to spring budding. The most suitable months for planting are March and April, when the soil is moist, but may be planted from March through November. No planting shall be done while ground is frozen. Planting shall occur within one growing season of the issuance of grading/building permits and/or reaching the final grades and stabilization of planting areas.
- 6. Seedling Planting: Tree seedlings shall be hand planted using a dibble bar or sharp-shooter shovel. It is important that the seedling be placed in the hole so that the roots can spread out naturally; they should not be twisted, balled up or bent. Moist soil should then be packed firmly around the roots. Seedlings should be planted at a depth where their roots lie just below ground surface. Air pockets should not be left after closing the hole which would allow the roots to dry out. See planting details for further explanation. If the contractor wishes to plant by another method, the preparer of this tree conservation plan must be contracted and give his approval before planting may begin.
- Spacing: See Plant Schedule and/or Planting Plan for spacing requirements. Also refer to the Planting Layout detail for a description of the general planting theory.
- 8. Soil: Upon the completion of all grading operations, a soil test shall be conducted to determine what soil preparation and soil amendments, if any, are necessary to create good tree growing conditions. Soil samples shall be taken at a rate that provides one soil sample for each area that appears to have a different soil type (if the entire area appears uniform, then only one sample is necessary), and submitted for testing to a private company. The company of choice shall make recommendations for improving the existing soil. The soil will be tested and recommended for corrections of soil texture, pH, magnesium, phosphorus, potassium, calcium and organic matter.
- 9. Soil Improvement Measures: The soil shall then be improved according to the recommendations made by the testing company.
- 10. Fencing and Signage: Final protective fencing shall be placed on the visible and/or development side of planting areas. The final protective fence shall be installed upon completion of planting operation unless it was installed during the initial stages of development. Signs shall be posted per the signage detail on this sheet.
- 11. Planting method: Consult the Planting Detail(s) shown on this plan.
- 2. Mulching: Apply two-inch thick layer of woodchip or shredded hardwood mulch (as noted) to each planting site (see detail shown on this plan).
- 13. Groundcover Establishment: The remaining disturbed area between seedling planting site shall be seeded and stabilized with white clover seed at the rate of 5 lbs/acre.
- 14. Mowing: No mowing shall be allowed in any planting area.
- 15. Survival Check for Bond Release: The seedling planting is to be checked at the end of each year for four years to assure that no less than 75% of the original planted quantity survives. If the minimum number has not been provided the area must be supplemented with additional seedlings to reach the required number at time of planting.
- 16. Source of Seedlings: State name, address, and phone number of nursery or supplier. When areas designated for reforestation will be reforested by natural regeneration the following notes shall be added to the plan:
- FOUR-YEAR MANAGEMENT PLAN FOR RE/AFFORESTATION AREAS
- Field check the re-afforestation area according to the following schedule:
- Year 1: Site Preparation and Tree Planting Survival check once annually (September-November) see Note 1) Natering is needed (2 x month) Control of undesirable vegetation as needed (1 x in June and 1 x in
- Year 2-3: Reinforcement planting is needed (See Note 2) Survival check once annually (September-November) Control of undesirable vegetation if needed (1 x in May and 1 x in August min.)
- Year 4: Reinforcement planting if needed. (See Note 2) Survival Check (September-November)
 - 1. Survival Check: Check planted stock against plant list (or as-built) by walking the site and taking inventory. Plants must show vitality. Submit field data forms (Condition Check Sheets) to owner after each inspection. Remove all dead plants. 2. Reinforcement Planting: Replace dead or missing plants in sufficient
 - quantity to bring the total number of live plants to at least 75% of the number originally planted. If a particular species suffers unusually high mortality, replace with an alternative plant type.
 - 3. Miscellaneous: Fertilization or watering during years 1 through 3 will be done on an as needed basis. Special return operations or recommendations will be conducted on an as needed basis.

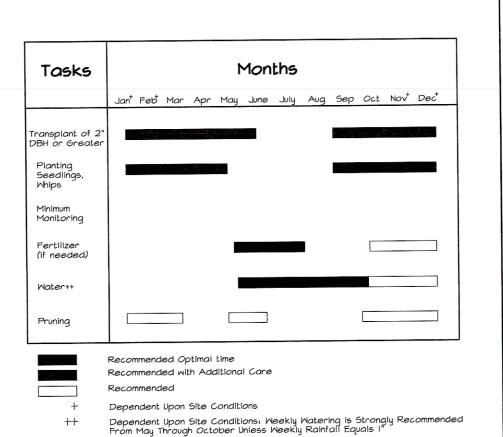
POST DEVELOPMENT NOTES

1. If the developer or builder no longer has an interest in the property and the new owner desires to remove a hazardous tree or portion thereof, the new owner shall obtain a written statement from a Certified Arborist or Licensed Tree Expert identifying the hazardous condition and the proposed corrective measures prior to having the work conducted. After property documentation has been completed per the handout "Guidance for Prince George's County Property Owners, Preservation of Woodland Conservation Areas", the arborist or tree expert may then remove the tree. The stump shall be cut as close to the ground as possible and left in place. The removal or grinding of the stumps in the woodland conservation area is not permitted.

If a tree or portions thereof are in imminent danger of striking a structure, parking area, or other high use area and may result in personal injury or property damage then the certification is not required and the permittee shall take corrective action immediately. The condition of the area shall be fully documented through photographs prior to corrective action being taken. The photos shall be submitted to the inspector for documentation of the damage.

Tree work to be completed within a road right-of-way requires a permit from the Maryland Department of Natural Resources unless the tree removal is shown within the approve limits of disturbance on a TCP2. The work is required to be conducted by a Licensed Tree Expert.

- The removal of noxious, invasive, and non-native plant species from any woodland preservation area shall be done with the use of hand-held equipment only (pruners or a chain saw). These plants may be cut near the ground and material less than two inches diameter may be removed from the area and disposed of appropriately. All material from these noxious, invasive, and non-native plants greater than two (2) inches diameter shall be cut to allow contact with the ground, thus encouraging decomposition.
- 3. The use of broadcast spraying of herbicides is not permitted. However, the use of herbicides to discourage re-sprouting of invasive, noxious, or non-native plants is permitted if done as an application of the chemical directly to the cut stump immediately following cutting of plant tops. The use of any herbicide shall be done in accordance with the label instructions.
- 4. The use of chainsaws is extremely dangerous and should not be conducted with poorly maintained equipment, without safety equipment, or by individuals not trained in the use of this equipment for the pruning and/or cutting of trees.



. Activities during November through February depend on ground conditions. No fall planting of oaks and pines.
 The planting and care of trees most successful when coordinated with the local conditions.
 This calendar summarizes some of the recommended time frames for basic reforestation

TREE PLANTING and MAINTENANCE CALENDAR

DIBBLE

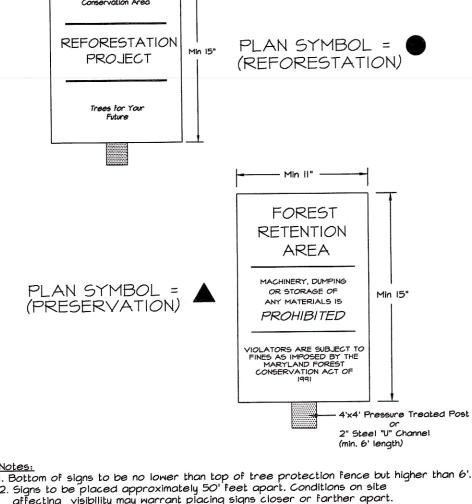
5. INSERT DIBBLE 2 INCHES

SEEDLING PLANTING DETAIL

- PRUNE ALL DAMAGED OR DEAD

WOOD PRIOR TO PLANTING

(SEE SPECIFICATIONS)



2. Signs to be placed approximately 50' feet apart. Conditions on site affecting visibility may warrant placing signs closer or farther apart. 3. Attachment of signs to trees is prohibited 4. Signs to be posted on 4'x4' pressure treated wood posts driven a minimum of 1.5' into ground or 2" steel "U" channel (minimum 6' length) driven into ground. 5. Signs to be attached to posts with 2 galvanized bolts, each with 2 washers and a galvanized nut.

Handling Seedlings in the Field

N BUCKET WITH SUFFICIENT WATER

Seedling and Whips

I. DIG V-SHAPED TRENCH IN MOIST SHADY PLACE

3. FILL IN LOSE SOIL AND WATER WELL

Bare Root Trees

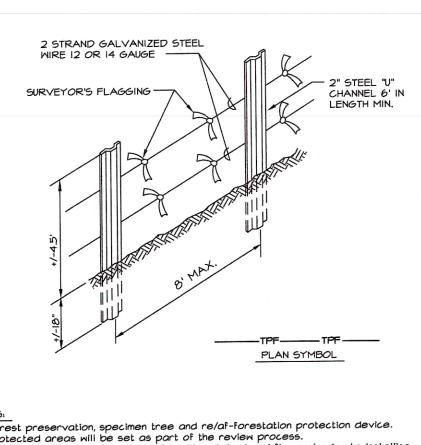
SIGNAGE NOT TO SCALE

Note: I. Bare root seedlings and whip stock should be heeled-in when left unplanted for

1. Bare root seedlings and whip stock should be heeled-in when left unplanted for

1. Bare root trees should be banked-in when they must be left unplanted for

HANDLING BARE ROOT STOCK



Forest preservation, specimen tree and re/af-forestation protection device. Protected areas will be set as part of the review process. 3. Boundaries of protected areas should be staked and flagged prior to installing 4. Avoid root damage when placing anchor posts. 5. Wire should be securely attached to posts. 6. Device should be properly maintained during construction. 1. Use brightly colored surveyor's flagging every 4'. b. Protective signage is also recommended

9. Contractor may use blaze orange tree protection fence or equal according to

MD State Forest Conservation Technical Manual Figure D-5.

TREE PROTECTION FENCING - TYPE I

Retention Areas to be established as part of the forest conservation

2. Boundaries of Retention Areas should be staked, flagged and/or fenced

4. Trench should be immediately backfilled with soil removed or other high

5. Roots should be cleanly cut using vibratory knife or other acceptable

ROOT PRUNING

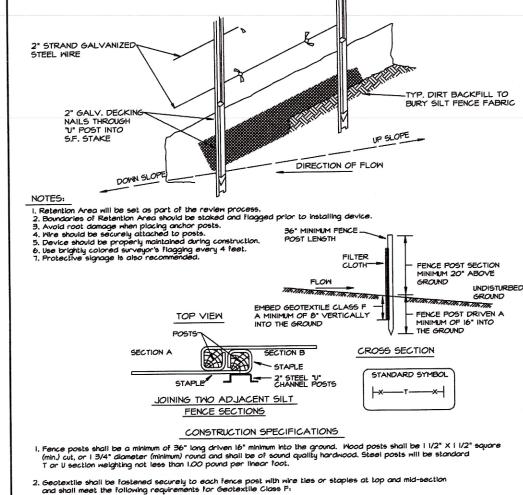
plan review process

3. Exact location of trench should be identified.

prior to trenchin

TREE PROTECTION PENCE

- PENCE WITHIN I FOOT OF TRENCH LINE



 Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F: Tensile Strength 50 libs/in² (min.)
Tensile Modulus 20 libs/in² (min.)
Flow Rate 0.3 gal ft / minute (mo

Flow Rate 0.3 gal ft / minute (max.) Test: MSMT 322
Filtering Efficiency 75% (min.) Test: MSMT 322 Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass. Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

Pruning a Branch

COMBINATION SILT FENCE & TREE PROTECTION - TYPE I

LIVING BRANCH

Pruning a Leader to Reduce Size

Remove stub at EF parallel to the bark branch ridge.

Source: Feirlax County, Virginia: Vegetation Preservation & Planting, January 1986

Notes:

1. Remove branch weight by undercutting at A and remove limb by cutting through at AB.

2. Remove stub at CD (line between branch bark ridge and outer edge of branch collar).

3. If D is difficult to find on hardwoods, angle of CD to trunk should be the reflective angle of the bark branch ridge to the trunk.

4. Only prune at specified times.

5. Remove no more than 30% of crown at one time.

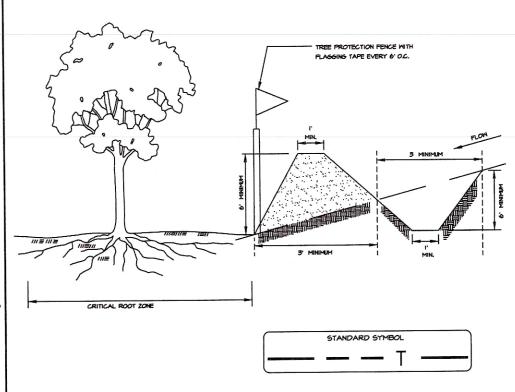
move top weight by undercutting at A and remove limb by cutting through AB

Only prune at specified times.
 No more than 30% of crown to be removed at one time.
 Diameter of lateral branch should be no less than 30% of the diameter of the leader.

BARK BRANCH RIDGE

CONIFERS -FOR LIVING OR DEAD BRANCH

PLANT DEPTH WILL VARY ACCORORDING TO PLANT



Combination sediment control and forest protection device. 2. Boundaries of the Retention Area will be set as part of the forest conservation plan review process. 3. Boundaries of Retention Area should be staked prior to

installing protective device. 4. Root damage should be avoided 5. The toe of slope should be outside the critical root zone

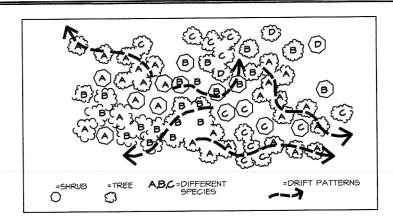
6. Equipment is prohibited within critical root zone of retention

area place dike accordinaly. 7. All standard maintenance for earthen dikes and swales apply to these details.

8. All standard reclamation practices for earthen dikes and swales shall apply to these details.

COMBINATION EARTH DIKE & TREE PROTECTION - TYPE III

Source: Prince George's County, Manyland: Moodland Conservation Manual



Aggregate Drift or Sweep. A cluster type grouping which tapers or feathers out along the edges. Aggregate massing or drifts are one of the most common vegetation distribution patterns occurring in nature. Principle seed bearers are at the central core of the cluster with seed dispersal outwards, often windblown, with densities thinning out along the fringes or extremities (groupings blend through and to other groupings). Imagine the fallout of windblown milkweed seeds. They often appear as aggregate drifts, elongated and tear drop in shape.

Application: When developing a planting plan the Maryland Forest Conservation Manual (pages 98 thru 101) offers recommendations on reforestation methods, species selection, plant materials and site stocking options. This is meant for determining the appropriate number of plants required, not necessarily a feeton-center "grid pattern" layout. Many of the State's regulatory reforestation sites installed

since the inception of the Act appear as orchards. This unnatural grid patterns can be corrected thru the application of aggregate distribution. This does not mean that plants must be in a grid pattern, the drifts of shrubs cannot blend into groupings of trees or that groupings of same species cannot ccur together. It simply méans that the installer should meet the aforémentioned forést conservation act criteria at the same time replicating natures aggregate drift patterns (see

When using this theory to lay out a planting plan the size of the drifts should depend on the quantity of plants allocated, the scale of the site, and the careful consideration of the <u>PLANTING LAYOUT</u>

(AGGREGATE DISTRIBUTION DRIFT THEORY)

PLANT SCHEDULE FOR RE/AFFORESTATION STOCK SPECIFICATION:

700 SEEDLINGS PER ACRE

TOTAL RE/AFFORESTATION PROVIDED: 0.98 ACRES

Incorrect IN HAND: ROOTS DRY OUT.

2. BREAK BUNDLES AND SPREAD OUT EVENLY

Place trees in an east-west trench

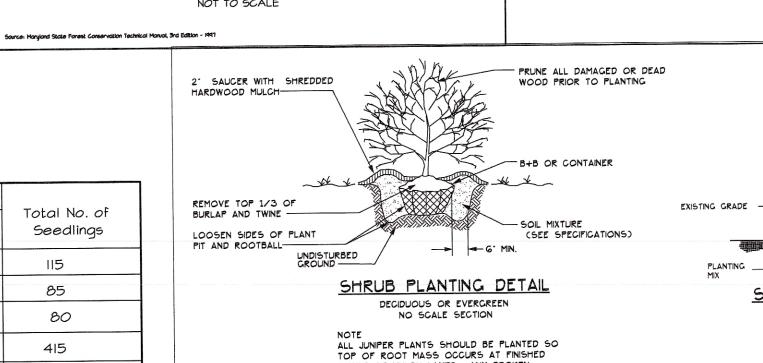
with the tops of the trees pointing toward the afternoon sun. Moist soil

ointing the tree tops towards the

surface to the sun so the buds will be

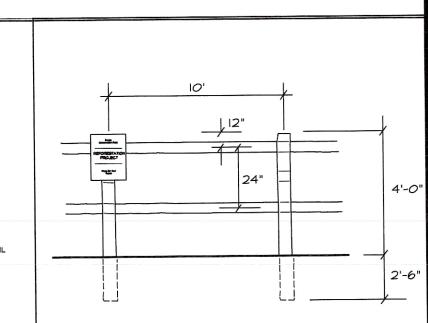
	, ,) / L (L/)					
Reforestation Area	Acreage	Seedling Selection					T = 1 = 1 N = = F
		Tulip Poplar	Sycamore	Red Maple	Red Oak	White Oak	Total No. of Seedlings
ı	0.16	23	23	23	23	23	115
2	0.12	17	17	17	17	17	<i>8</i> 5
3	0.11	16	16	16	16	16	80
4	0.59	83	83	83	83	83	415
TOTAL	0.98	139	139	139	139	139	695

1. All tree/shrub species planted within the re/afforestation areas, should be randomly distributed throughout the proposed relafforestation area, so as to promote a natural woodland structure. (See Planting Layout detail) 2. In the event of species unavailability, a substitution may be made. Any substitution made requires written notification to MNCPPC, Environmental



GRADE OF MULCH LAYER. ANY BROKEN DECIDUOUS OR EVERGREEN, B + B OR CONTAINER SHRUB PLANTING DETAIL AND PROFILE

NOT TO SCALE



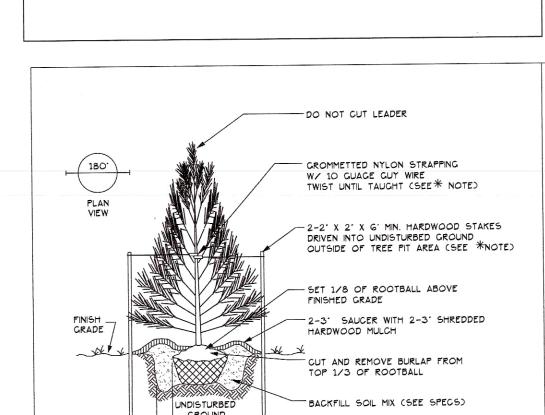
 Reforestation signs to be attached to wood posts Top of sign to be flush with top of wood post. 3. Signs to be attached using 2 galvanized wood screws each with a galvanized washer.

SPLIT RAIL FENCE DETAIL

JBSURFACE CEMETERY INVESTIGATION

LIMITED DETAIL SITE PLAN

ITE PLAN FOR CHURCH



CONTAINER TREE PLANTING DETAIL

SAUCER WITH SHREDDED

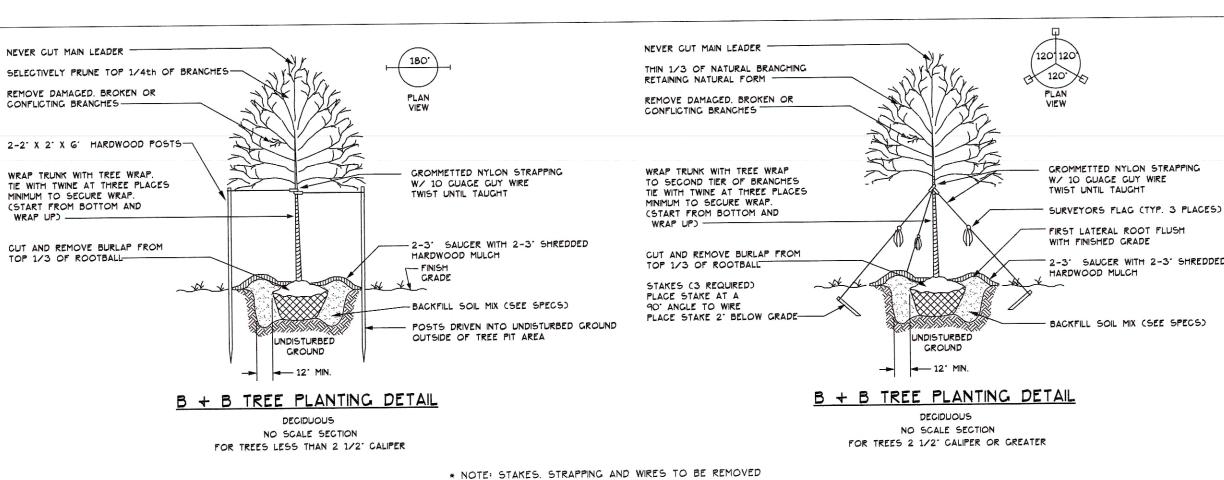
HARDWOOD MULCH -

LOOSEN SIDES OF PLANT PIT AND ROOTBALL

NO SCALE SECTION FOR TREES LESS THAN 12' HT. * NOTE: STAKES, STRAPPING AND WIRES TO BE REMOVED SIX MONTHS AFTER INSTALLATION

EVERGREEN TREE PLANTING DETAIL

→ 12° MIN.



* NOTE: STAKES, STRAPPING AND WIRES TO BE REMOVED SIX MONTHS AFTER INSTALLATION DECIDUOUS, B + B TREE PLANTING DETAILS

01 CHUCK SCHNEIDER 5-09-2019 02 Duc 2 12/12/2019

TREE CONSERVATION PLAN TYPE 2 GRACE UNITED METHODIST CHURCH PISCATAWAY DISTRICT No. 5 PRINCE GEORGE'S COUNTY, MARYLAND

Prince George's County Planning Department, M-NCPPC

Environmental Planning Section

TCP 2 - 012 - 2018-02

DSP-18033

TREE CONSERVATION PLAN APPROVAL

DATE Mike Petrakis DESCRIPTION DATE Qualified Professional COMAR 08.19.06.01 REVISIONS .C3D-PROJ\B12044-C3D\DWG\TCP2.dwg, 11/29/2019 1:04:25 PM, asgani

C-4.2SHEET 2 OF 2

RUSTEES OF GRACE UNITED METHODIST CHURCH AT FORT WASHINGTON, INC. 11700 OLD FORT ROAD FORT WASHINGTON, MD 20744 ATTN.: BROTHER PURCELL CONWAY PHONE: 202-329-6147

5-09-2019

NOVEMBER 2018

BEN DYER ASSOCIATES, INC. TELEPHONE (301) 430-2000 J-B12044

COPYRIGHT © 2018 BEN DYER ASSOCIATES, INC. 54.008-2