

TYPE II TREE CONSERVATION NOTES

- i. 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 \$1.50 per square foot mitigation fee.
- 2. The Department of Environmental Resources (DER) Inspection and Code Compliance Section (301-883-6033), must be contacted prior to the start of any work on the site to address implementation of Tree Conservation Measures shown on this plan.
- 3. Property owners shall be notified by the Developer or Contractor, of any Woodland Conservation Areas (Tree Save Areas Reforestation Areas, Afforestation Areas or Selective Clearing Areas) located on their lot or parcel of land and the associated fines for unauthorized disturbances to these areas. Upon the sale of the property the owner/ developer or owners representative shall notify the purchaser of the property of any Woodland Conservation Areas.
- 4. All appropriate bonds shall be posted with the Building Official prior to the issuance of any permits. These bonds will be retained as surety by the Building Official until all required activities have been satisfied. Three copies of the bonds are submitted with the grading permit ap-
- 5. All required off-site mitigation shall be identified on an approved TCPII for the off-site location and shall be recorded as an off-site easement in the land records of Prince George's County prior to issuance of any permits for the subject property.
- 6. The location of all Tree Protection Devices (TPD's) shown on this Plan, shall be flagged or staked in the field prior to the pre-construction meeting with the Sediment and Erosion Control Inspector from DER. Upon approval of the flagged or staked TPD locations by the inspector, installation of the TPD's may begin. TPD installation shall be completed prior to installation of initial sediment controls. No cutting or clearing of trees may begin before final approval of TPD installation.
- 7. Woodland Conservation Tree Save Areas and/or Reforestation Areas shall be posted as shown at the same time as the Tree Protective Device installation and/or start of reforestation activities. These signs shall remain in place.
- 8. All tree planting for woodland replacement, reforestation or afforestation will be completed prior to Use and Occupancy Permit. Failure to establish the woodland replacement, reforestation or afforestation within the prescribed time frame will result in the forfeiture of the Reforestation Bond and/or a violation of this Plan including the associated \$1.50 per square foot penalty unless a written extension is approved by the DER Inspector.
- 9. The DER Inspector shall be notified prior to soil preparation or initiation of any tree planting on this site.
- 10. Results of survival checks for all tree plantings shall be reported to the DER Inspector for the site and M-NCPPC, Environmental Planning
- II. Prior to the issuance on any permits, the contractor responsible for soil preparation, site preparation, tree planting and tree maintenance must be identified.

WOODLAND CONSERVATION AREA MANAGEMENT NOTES

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 parts thereof designated by the Department of Environmental Resources as dead, dying or hazardous may be removed.

- I. A tree is considered hazardous if a condition is present which leads a Licensed Arborist or a 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.
- 2. If a hazardous condition may be alleviated by corrective pruning, the Licensed Arborist or a Licensed Tree Expert may proceed without further authorization. The pruning must be done in accordance with the latest edition of the ANSI A-300 Pruning Standards ("Tree Shrub and Other Woody Plant Maintenance-Standard Practices").
- 3. Corrective measures requiring the removal of the hazardous tree or portions thereof shall require authorization by the building or grading inspector if there is a valid grading or building permit for the subject lots or parcels on which the trees are located. Only after approval of the appropriate inspector, may the tree be cut by chainsaw to near the existing ground level. The stump may not be removed or covered with soil, mulch or other materials that would inhibit sprouting.
- 4. 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 contact with the ground, thus encouraging decomposition. The smaller materials shall be placed into brush piles that will serve as wildlife habitat.

Removal of Hazardous Trees, Limbs, Noxious Plants , Invasive Plants or Non-native Plants In Woodland Conservation Areas Owned BY INDIVIDUAL HOMEOWNERS

- 1. If the developer or builder no longer has an interest in the property, the homeowner shall obtain a written statement from the Licensed Arborist or Licensed Tree Expert identifying the hazardous condition and the proposed corrective measures prior to having the work con-ducted. The tree may then be removed by the arborist or tree expert. The stump shall be cut as close to the ground as possible and left in place. The removal or arinding of the stumps in the woodland conservation area is not permitted.
- 2. The removal of noxious, invasive and non-native plant species from the woodland conservation areas may be done with the use of hand-held equipment only, such as pruners or a chain saw. These plants may be cut near the ground and the 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 the cutting of plant tops. The use of any herbicide shall be done in accordance with the label

Note: 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.

Protection of Reforestation and Afforestation Areas BY DEVELOPERS OR

I. Reforestation and afforestation areas shall be planted prior to occupancy of the nearest building or residence. 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 II Tree Conservation Plan. Planting shall then be accomplished during the next planting season. If planting is delayed beyond the transfer of property title, to the homeowner, the developer 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 environ-mental planning section.

2. Reforestation areas shall not be moved, however the management of competing vegetation around individual trees is acceptable.

Protection of Reforestation and Afforestation Areas BY INDIVIDUAL **HOMEOWNERS**

I. Reforestation fencing and signage shall remain in place in accordance with the approved Type II Tree Conservation Plan or until the trees have grown sufficiently to have crown closure.

2. Reforestation areas shall not be moved, however, the management of competing vegetation around individual trees is acceptable.

PRE-CONSTRUCTION ACTIVITIES

- 1. Prior to any disturbance of the site, the tree save lines shall be field located by surveying techniques and the appropriate tree protective device (see detail) shall be erected along these designated lines. Only after the tree protective devices have been installed shall any tree cutting or other clearing, grubbing or grading operations begin. All protection devices shall remain in place until all construction has ceased in the immediate vicinity. Devices shall be maintained throughout construction. Attachment of signs, or any other objects, to trees is prohibited. No equipment, machinery, vehicles, materials or excessive pedestrian traffic shall be allowed within protected areas.
- 2. After the boundaries of the retention area have been staked and flagged and before any disturbance has taken place on site, a pre-construction meeting at the construction site shall take place. The developer, contractor or project manager, and appropriate local inspectors shall attend.
- 3. Reforestation planting shall be done after the final grading is established, stabilized and approved by SCD. Reforestation techniques and methods must comply with the details and specifications provided hereon.

5 YEAR MANAGEMENT PLAN FOR RE/AFFORESTATION

Field check the re-afforestation area according to the following schedule:

Year I: Site Preparation and Tree Planting Survival check once annually (September-November, see Note 1) <u>Matering if needed</u> (2 x month) Control of undesirable vegetation as needed (1 x in June & 1 x in September min.)

Year 2-3: Reinforcement planting if needed (see Note 2) Survival check once annually (September-November) Control of undesirable vegetation if needed (1 x in May \$ $1 \times \text{in August min}$.

Year 4-5: Reinforcement planting if needed (See Note 2) Survival check once annually (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 alternate plant
- 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. Remove perimeter fencing and signage after year 5 based on the date planted.

MOODLAND AREAS NOT COUNTED AS PART OF THE MOODLAND CONSERVATION REQUIREMENTS

- I. A revised Tree Conservation Plan is required prior to clearing any woodland area which is not specifically identified to be cleared on the most recently approved Type II Tree Conservation Plan (TCP) on file in the office of the M-NCPPC, Environmental Planning Section located on the 4th floor of the County Administration Building at 14741 Governor Oden Bowle Drive, Upper Marlboro, Maryland 20772, phone 301-952-3650. Additional mitigaiton will be required for the clearing of all woodlands beyond that reflected on the approved plans. Although clearing may be allowed, it may be subject to additional replacement requirements, mitigation and fees which must be reflected on TCP revisions approved by the M-NCPPC Environmental Planning Section.
- 2. Homeowners or property owners may remove trees less than two (2) Inches diameter, shrubs, and vines in woodland areas which are saved but not part of the woodland conservation requirements after all permits have been released for the subject property. This area may not be tilled or have other ground disturbances which would result in damage to the tree roots. Raking leaves and overseeding with native grasses, flowers and groundcovers is acceptable. Seeding with invasive grasses, Including any variety of Kentucky 31 fescue is not acceptable.

PLANTING SPECIFICATIONS FOR RE/AFFORESTATION AREAS 1. Quantity: (see Plant Schedule)

- 2. Type: (see Plant Schedule)
- 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) shall show evidence of being cut (pruned) or striped from the plant during the digging process. Substantial auxiliary/fibrous roots shall be present.
- 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 greenhouse, and planted immediately upon receipt by the landscape contractor.
- 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. Plant Handling: The quantity of seedlings taken to the field shall not exceed the quantity that can be planted in a day. Seedlings, once removed from the nursery or temporary storage area shall be planted
- 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. November and early December are also acceptable planting times for this region as cool and cloudy weather is considered ideal. 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 can 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 collars lie just below the 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 contacted and give his approval before planting may begin.
- 7. 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, phosphorous, 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 & Signage: Final protective fencing shall be placed on the visible and/or development side of planting areas. The protective fence shall be installed upon completion of planting operations. Signs shall be posted per the signage detail on this sheet.
- II. Planting Method: Consult the Planting Detail(s) shown on this plan.
- 12. Mulching: Apply 2" 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 sites shall be seeded and stabilized with white clover seed at the rate of 51bs lacre
- 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 two years to assure that no less than 75% of the original planted quantity survives.
- 16. Source of Seedlings:

John S. Auton State Forest Tree Nursery 3424 Gallagher Road Preston, MD 21655 (410) 673-2467

PLANT SCHEDULE FOR RE/AFFORESTATION STOCK SPECIFICATION 1000 SEEDLINGS PER ACRE

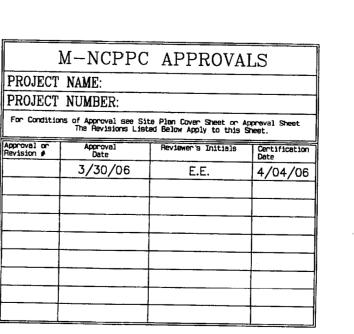
TOTAL RE/AFFORESTATION PROVIDED: 6.30 ACRES

Reforestation Area	Acreage	Seedling Selection					
		River Birch	Black Gum	Red Maple	Red Oak	American Beech	Total No. of Seedlings
	1.83	366	366	366	366	366	1,830
2	0.63	76	76	76	76	76	630
3	0.60	120	120	120	120	120	600
4	1.25	250	250	250	250	250	1,250
5	0.47	94	94	94	94	94	470
6	0.49	98	98	98	98	98	490
7	1.03	206	206	206	206	206	1,030
TOTAL	6.30	1,260	1,260	1,260	1,260	1,260	6,300

I - 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. 2 - In the event of species unavailability, a substitution may be made. Any substitution made requires written notification to MNCPPC, Environmental Planning Section.

3 - Reforestation surrounding stormwater management ponds shall not occur directly on the maintenence road.

PLAN SYMBOL = Forest Conservation Area (PRESERVATION) REFORESTATION PLAN SYMBOL = PROJECT (REFORESTATION) _____ PLACE SEEDLING A CORRECT DEPTH Trees for Your Fiture PLAN SYMBOL = \ (SPECIMEN TREE) I. Retention Area will be set as part of the review process. 2. Boundaries of Retention Area should be staked and Flagge 5. Avoid root damage when placing anchor posts. 4. When should be securely attached to posts. 5. Device should be properly maintained during construction. 6. Use brightly colored surveyor's flagging every 4 feet. 7. Protective signage is also recommended. ----- Min II* -------SPECIMEN FOREST TREE RETENTION AREA EMBED SECTEXTILE CLASS F A MINIMUM OF 8" VERTICALLY INTO THE SECUND DO NOT REMOVE SHOOTER" MACHINERY, DUMPING OR STORAGE OF MACHINERY, DUMPING OR STORAGE OF SECTION B ANY MATERIALS IS ANY MATERIALS IS PROHIBITED PROHIBITED STANDARD SYMBOL 2' STEEL IV' VIOLATORS ARE SUBLECT TO FINES AS IMPOSED BY THE MARYLAND FOREST CONSERVATION ACT OF 1991 JOINING TWO ADJACENT SILT CONSTRUCTION SPECIFICATIONS I. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Mood posts shall be 1 1/2" X 1 1/2" square (min.) cut, or 1 3/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard. T or U section weighting not less than 1.00 pound per linear foot. 4'x4' Pressure Treated Post Geotextile shall be fastened securely to each fence post with rune ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class Fi 2" Steel "U" Channel (min. 6' length) I. Bottom of signs to be no lower than top of tree protection fence but higher than 2. Signs to be placed approximately 50' feet apart. Conditions on site affecting 3. Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent 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 15' Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height. SEEDLING PLANTING DETAIL 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 COMBINATION SILT FENCE & TREE PROTECTION - TYPE II Forest Conservation Manual Chapter 3: Forest Conservation Plan Section 3.6: Reforestation and Afforestation Procedure: Root Pruning Handlina Seedlinas in the Field Flgure 3.6.6 Correct in backet with methicient mother to TREE PROTECTION FENC Aggregate Drift or Sweep. A cluster type grouping which tapers or feathers out along the edges. Figure 3.3.6 notes the correct method for handling seedlings in the planting field. Seedlings dry out very quickly and, once dry, often are not usable even after moistening. PENCE WITHIN I FOOT 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 BACK OF LIMIT OF DISTURBANCE LINE 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 Seedling and Whip Planting Specification tear drop in shape. Conservation Manual (pages 48 thru 101) offers recommendation 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 on-center "grld 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 I. Retention Areas to be established as part of the forest conservation plan review process. aggregate distribution. This does not mean that plants must be in a grid pattern, the drifts of shrubs cannot blend into 2. Boundaries of Retention Areas should be staked, flagged and/or fenced prior to trenching. groupings of trees or that groupings of same species cannot occur together. It simply means that the installer should meet Exact location of trench should be identified 4. Trench should be immediately backfilled with soil removed or other high organic soil. the aforementioned forest conservation act criteria at the Roots should be clearly cut using vibratory initie or other acceptable equipment. 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 Mulching newly planted seedlings is suggested as it helps the soil retain moisture and it protects the seedling from compaction and stem injury. PLANTING LAYOUT Source: Maryland State Forest Conservation Technical Harval, 3rd Folition - 18th NEVER CUT MAIN LEADER ----NEVER CUT MAIN LEADER SELECTIVELY PRUNE TOP 1/4th OF BRANCHES 120 120 THIN 1/3 OF NATURAL BRANCHING REMOVE DAMAGED. BROKEN OR CONFLICTING BRANCHES REMOVE DAMAGED, BROKEN OR CONFLICTING BRANCHES 2-2' X 2' X 6' HARDWOOD POSTS-WRAP TRUNK WITH TREE WRAP. THE WITH TWINE AT THREE PLACES MINIMUM TO SECURE WRAP. (START FROM BOTTOM AND WRAP UP) ROMMETTED NYLON STRAPPING WRAP TRUNK WITH TREE WRAP W/ 10 GUAGE GUY WIRE TWIST UNTIL TAUGHT TO SECOND TIER OF BRANCHES TIE WITH TWINE AT THREE PLACES W/ 10 GUAGE GUY WIRE TWIST UNTIL TAUGHT MINIMUM TO SECURE WRAP SURVEYORS FLAG CTYP. 3 PLACES) CUT AND REMOVE BURLAP FROM TOP 1/3 OF ROOTBALL - 2-3' SAUCER WITH 2-3' SHREDDED FIRST LATERAL ROOT FLUSH WITH FINISHED GRADE CUT AND REMOVE BURLAP FROM TOP 1/3 OF ROOTBALL - 2-3' SAUCER WITH 2-3' SHREDDED STAKES (3 REQUIRED) - POSTS DRIVEN INTO UNDISTURBED GROUND - BACKFILL SOIL MIX (SEE SPECS) B + B TREE PLANTING DETAIL B + B TREE PLANTING DETAIL NO SCALE SECTION FOR TREES LESS THAN 2 1/2" CALIPER NO SCALE SECTION FOR TREES 2 1/2" CALIPER OR GREATER NOTE: STAKES, STRAPPING AND WIRES TO BE REMOVED SIX MONTHS AFTER INSTALLATION DECIDUOUS. B + B TREE PLANTING DETAILS 2" SAUCER WITH SHREDDED WOOD PRIOR TO PLANTING M-NCPPC 'rince George's County Planning Departmen Natural Resources Division TREE CONSERVATION PLAN TCP II / 165 / 04 Approved by J L Stasz ². Vance CONTAINER TREE PLANTING DETAIL MD. NAT'L CAP- PK. & PL. COM PRINCE GEORGE'S COUNTY medell le TREE CONSERVATION PLAN TYPE - II APR 7 2011



3/31/11

DATE

DETAIL SHEET

COUNTYWIDE PLANNING DIVISION ENVIRONMENTAL PLANNING SECTION

(114)

LAKEVIEW AT BRANDYWINE

LOTS 1-96 and PARCELS A-D, BLOCK A; LOTS I-I7 AND PARCEL A, BLOCK B; LOTS I-23, BLOCK C; LOTS 1-25, BLOCK D; PARCEL A, BLOCK E; LOTS 1-35 AND PARCEL A, BLOCK F; LOTS 1-15, BLOCK G; LOTS 1-26, BLOCK H; AND LOTS 1-21, BLOCK I

> BRANDYWINE DISTRICT No. 11 PRINCE GEORGE'S COUNTY, MARYLAND

TCP SHEET 7 OF 7 W55C 200' SHEET SERIES 218 \$ 219 SE 6 \$ 7

45 ADC MAP BK LOCATION 5882 FIO, GIO, HIO, JIO, KIO 5883 A9-10 5998 GI, HI, JI, KI 11721 WOODMORE ROAD, SUITE 200 MITCHELLVILLE, MARYLAND 20721 4-6-11 BEN DYER ASSOCIATES, INC. 3/17/10 Revised for proposed Phase II clearing. ingineers / Surveyors / Planners 11/21/05 Revised for MNCPPC Env. Planning meeting dated 11/2/05 MR COPYRIGHT © 2009 BEN DYER ASSOCIATES, 10/24/05 Revised for MNCPPC Env. Planning comments dated 9/1/05 MR DRAWN BY DESIGNED BY CHECKED BY RECORD NO. Revised to increase project area within Phase !. Mike Petrakis DATE DESCRIPTION AS SHOWN Qualified Professional DESCRIPTION COMAR 08.19.06.01 REVISIONS TE FEBRUARY 2009 54.033-REVISIONS J:\LD7-PROJ\97013-LD7\sheets\TCP2-7-PH2.dwg, 3/31/2011 4:55:19 PM, petmil

APPLICANTS Accokeek Brandywine Investments Two, LLC 2124 Priest Branch Drive, Suite 18 Crofton, MD 21114 C/O Michael Gardiner