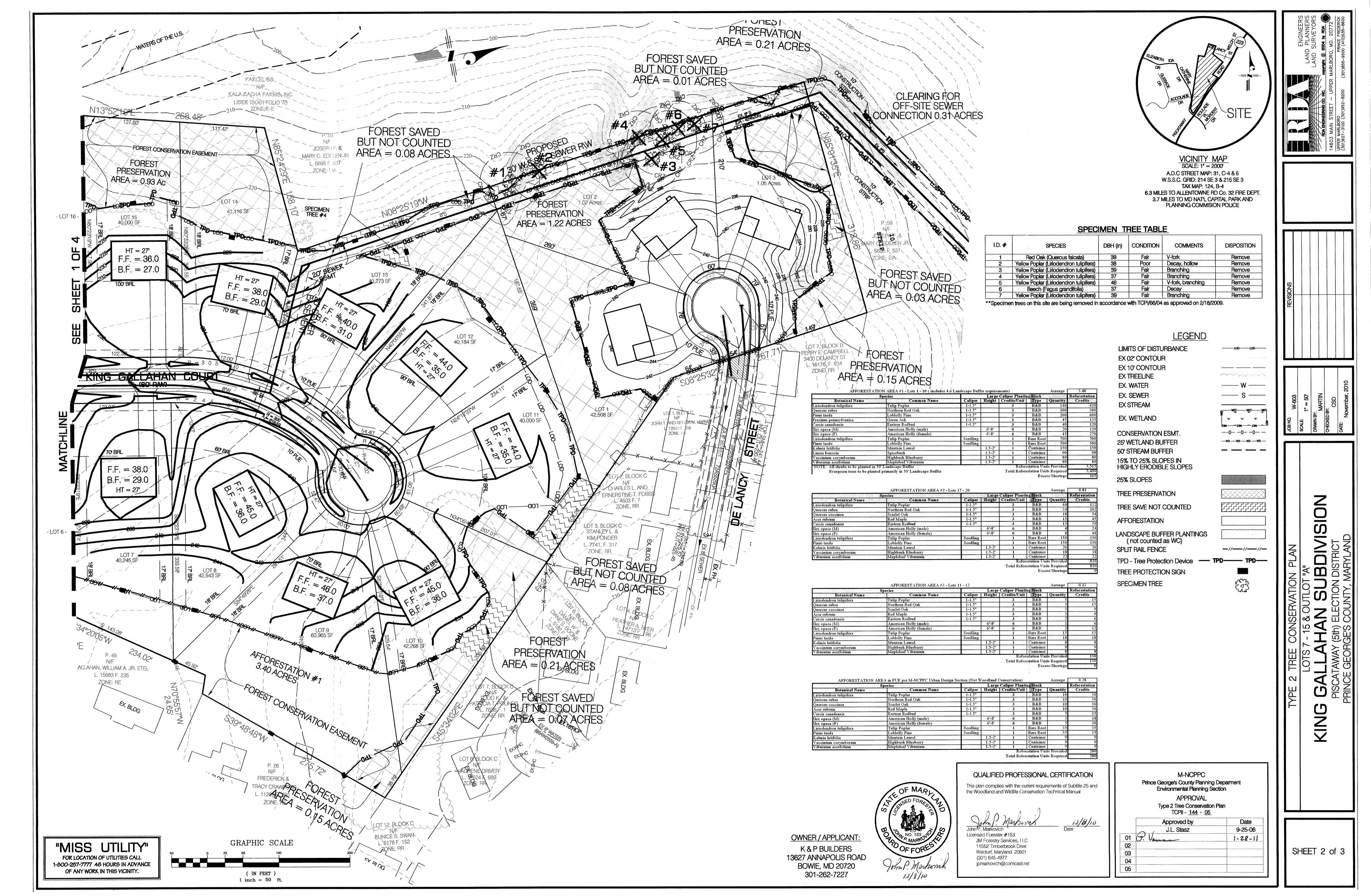


Approved 101 Revision dated 1-28-11



GENERAL NOTES

- This plan is submitted to fulfill the woodland conservation requirements for a grading permit. If this grading permit expires, the this TCP2 also expires and is no longer valid.
- Cutting or clearing of woodland not in conformance with this plan or without the express 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 Public Works and Transportation or the Department of Environmental Resources, as appropriate, shall be contacted 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 will
- 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 the Developing Tier and is Zoned R-E.
- The property is adjacent to Piscataway Road which is a designated historic roadway.
- The property is adjacent to Piscataway Road which is classified as an arterial roadway
- 9. This plan is grandfathered under Prince George's County Code Section 25-119(g), per CB-27-2010.

TREE PRESERVATION AND RETENTION NOTES

- 10. 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.
- 11. Tree and woodland conservation methods such as root pruning shall be conducted as noted on this plan.
- 12. 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.
- 13. All temporary tree protection fencing required by this plan shall be installed prior to 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.
- 14. 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

- 15. 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 county as dead, dying, or hazardous may be removed.
- 16. 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.
- 17. 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 permittee 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 chainsaw 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.
- 19. 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 A300 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. Debris from the tree removal or pruning that occurs withine action ????g 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.
- 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 TCP2. The work is required to be conducted by a Licensed
- 21. Tree protection fencing (TPFs) is not required for all or portions of this plan because an undisturbed 100-foot buffer of open land /or a 50-foot forested buffer is being maintained between the limit of disturbance (LOD) and the woodland preservation areas. If the _OD changes and the change impacts these buffers, the county inspector shall be contacted to evaluate the change to determine if a revision to the tree conservation plan is necessary or if installation of TPFs will be required.
- 22. 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

AFFORESTATION AND REFORESTATION NOTES

- 23. All afforestation and reforestation bonds, 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.
- 24. For each lot for which afforestation is proposed, the afforestation and associated fencing shall be installed prior to the issuance of the building permit for that lot. A certification prepared by a qualified professional may be used to provide verification that the afforestation has been completed. It must include, at a minimum, photos of the afforestation areas and the associated fencing for each lot with labels on the photos identifying the locations and a plan showing the location where the photos were taken.
- 25. Seedling planting is to occur from November through May only. No planting shall be done while ground is frozen. Planting with larger caliper stock or containerized stock may be done at any time, subject to a detailed maintenance schedule being provided.
- 26. If planting cannot occur due to site or weather 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 county inspector.
- 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.
- 30. 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 afforestation or reforestation within the prescribed time frame will result in 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

NOTES ON PROTECTION OF REFORESTATION AND AFFORESTATION AREAS BY OWNERS

- Reforestation fencing and signage shall remain in place in accordance with the approved Type 2 Tree Conservation Plan.
- Reforestation areas shall not be mowed; however, the management of competing vegetation and removal of noxious, invasive, and non-native vegetation around individual trees is acceptable.

PLANTING SPECIFICATION NOTES

- 36. Type: (See Plant Schedule)

35. Quantity: (See Plant Schedule)

- 37. 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 roots shall be present.
- 38. Plants that do not have an abundance of well developed terminal buds on the leaders and branches shall be rejected.
- 39. 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 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.
- 40. 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 immediately.
- 41. 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.
- 42. 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 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.
- 43. 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.
- 44. 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.
- 45. Soil Improvement Measures: the soil shall then be improved according to the recommendations made by the testing company.
- 46. 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 operations unless it was installed during the initial stages of development. Signs shall be posted per the signage detail on this sheet.v
- 47. Planting method: Consult the Planting Detail(s) shown on this plan.
- 48. Mulching: Apply two-inch thick layer of woodchip or shredded hardwood mulch (as noted) to each planting site (see detail shown on this plan).
- 49. Groundcover Establishment: the remaining disturbed area between seedling planting sites shall be seeded and stabilized with white clover seed at the rate of 5 lbs/acre.
- 50. Mowing: No mowing shall be allowed in any planting area.
- 51. 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.
- 52. | Source of Seedlings: Information concerning source of trees will be provided to M-NCPPC once known

FOUR YEAR MANAGEMENT PLAN FOR REFORESTATION/AFFORESTATION AREAS

- 53. Field-check the Re- or Afforestation area according to the following schedule
- 54. Year 1: Site Preparation and Tree Planting
- Survival check once annually (September-November), see note below
- Control of undesirable vegetation as needed (1x in June and 1x in September, min.)

Year 2-3: Reinforcement Planting as needed (See note below)

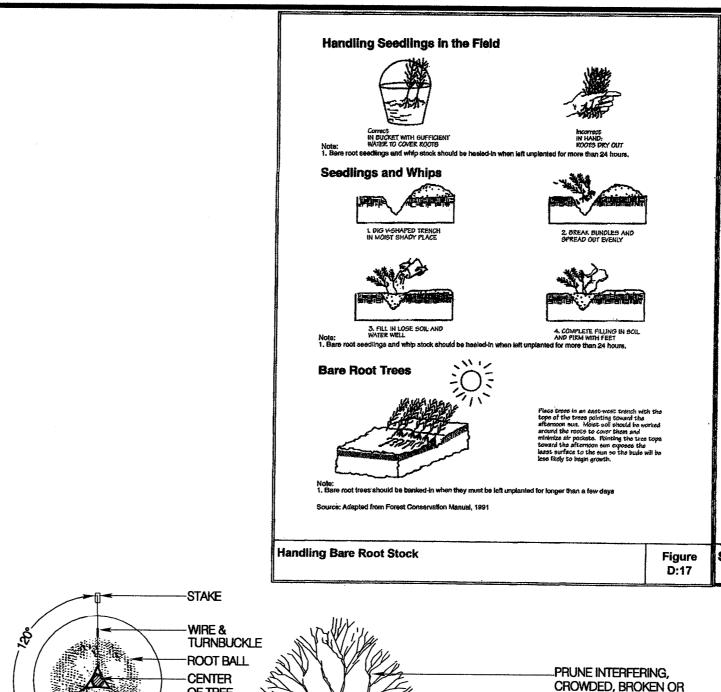
- Survival check once annually (September-November)
- Control of undesirable vegetation if needed (1x in May and 1x in August, min.)
- Year 4: Reinforcement planting as needed. (See note below)
 - Survival check (September-November)
- 55. Survival Check: Check planted stock against plant list (or as-planted list) 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.
- 56. 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.
- 57. 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.

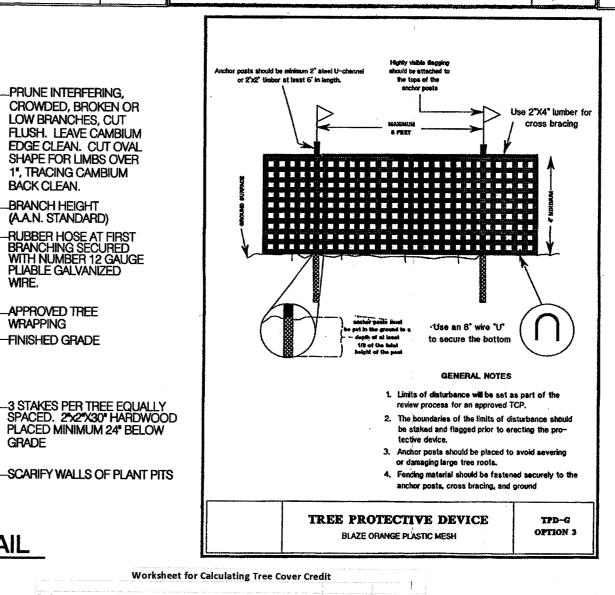
NOTE FOR OFF-SITE WOODLAND CONSERVATION

58. Prior to the issuance of the first permit for the development shown on this TCP2, all off site woodland conservation required by this plan shall be identified on an approved TCP2 plan and recorded as an off-site easement in the land records of Prince George's County. Proof of recordation of the off-site conservation shall be provided to the M-NCPPC, Planning Department prior to issuance of any permit for the associated plan.

NOTES ON RETAINED TREES AND WOODLAND

- If the original developer or builder no longer has an interest in the property and the current owner desires to remove a hazardous tree or portion thereof, the 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 proper 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.
- 60. 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 owner 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.
- 61.1 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 TCP2. The work is required to be conducted by a
- 62. 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.
- 63. 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.
- 64. 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.





Correct and Incorrect Planting Depth

SKEDLDIG WAS GROWN IN HUMBERY

dling and Whip Planting Techniques

LOW BRANCHES, CUT

FLUSH. LEAVE CAMBIUM

EDGE CLEAN. CUT OVA

SHAPE FOR LIMBS OVER

1", TRACING CAMBIUM

BACK CLEAN. BRANCH HEIGHT

(A.A.N. STANDARD)

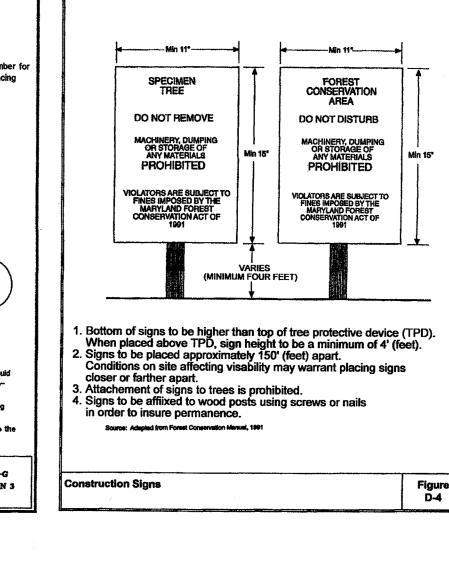
RUBBER HOSE AT FIRS

PLIABLE GALVANIZED

FINISHED GRADE

BRANCHING SECURED WITH NUMBER 12 GAUGE

otal Acres (gross tract acres)



5. PUSH HANDLE OF DIBBLE FORWARD FROM PLANTER FIRMING SOIL AT TOP OF POOTS

Source: Adapted from Duryee & Dougherty, Forest Regeneration Manual, Kluwer Academic Publishers, Boston, 1991 and Forest Conservation Manual, 1991

6. INSERT DIBBLE 2 INCHES FROM SEEDLING

9. FIRM SOIL AROUND SEEDLING WITH FEFT

Figure D:19

1. Insert dibble at angle shown above and push forward to upright position

4. PULL HANDLE OF DIBBLE TOWARD PLANTER FIRMING SOIL AT BOTTOM OF

edling Planting Techniques

D. Fill in and pack soil to bettern of roots.



SURVEYOR'S FLAGGING

2" OF TRUNK.

3" HIGH SAUCER

BARK MULCH, 2" MIN. DEPTH.

PLANTING SOIL-SEE SPECS.

REMOVE ALL WIRE, TWINE,

AND BURLAP FROM UPPER

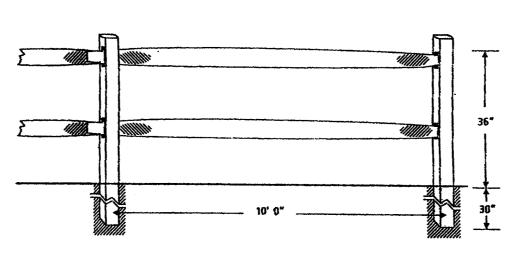
1/3 OF ROOT BALL

UNDISTURBED SUBGRADE

PLACE IN 12" LAYERS, LIGHTLY

TAMP, AND WATER EACH LAYER

DO NOT PLACE MULCH WITHIN



MIN. 3 TIMES DIAMETER OF ROOT BALL

TYPICAL LARGE TREE PLANTING DETAIL

(2-1/2" CALIPER AND LARGER

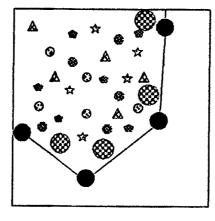
NOT TO SCALE

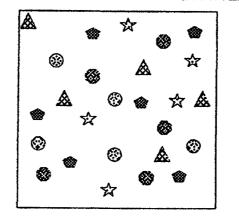
OF TREE

PLANTING

PERMANENT TREE PROTECTION FENCE SPLIT RAIL WOOD FENCE DETAIL

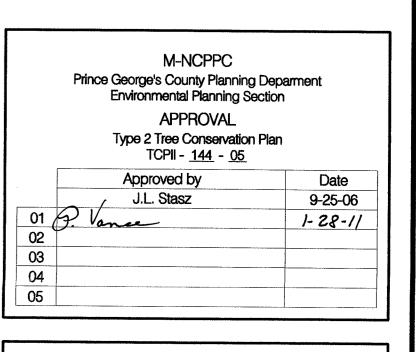
SAMPLE AFFORESTATION / REFORESTATION RANDOM PLANTING PATTERN





A. TOTAL ON-SITE WC PROVIDED (acres) = B. TOTAL AREA EXISTING TREES (non WC acres) = C. TOTAL SQUARE FOOTAGE IN PLANTED TREES = D. TOTAL TREE CANOPY COVERAGE PROVIDED = E. TOTAL SQUARE FOOTAGE REQUIRED = Satisfied Based on Size at Number of ting (in square ciduous - columnar tree (50' or less height Deciduous - small ornamental tree (20' or less heigh with equal spread Deciduous - medium shade tree (25-50' height with equal spread or greater; and over 50' height with less spread eciduous - large shade tree (50' and greater ht. with spread equal to or greater than ht; and trees 75' or greater ht.) Evergreen - columnar tree (less than 30' height with pread less than 15') vergreen - small tree (30-40' height with spread of 15vergreen - large tree (50' height or greater with spread 8 - 10' = 200 TOTAL NUMBER OF TREES Manually enter information/figures into shaded areas

1. Existing Woodlands - 6.35 Ac. Proposed Clearing - 2.69 Ac.
Prop. Afforest/Reforest - 4.32 Ac. 4. Proposed Preservation - 3.18 Ac. 5. Proposed SBNC - 0.76 Ac.



PROPERTY OWNERS AWARENESS CERTIFICATE hereby acknowledge that we are aware of this Type 2 Tree Conservation Plan (TCP2) and that we understand the requirements as set forth in this TCP2 Owner or owners representative

QUALIFIED PROFESSIONAL CERTIFICATION

This plan complies with the current requirements of Subtitle 25 and

(301) 645-4977

Licensed Forester #153 JM Forestry Services, LLC 11552 Timberbrook Drive Waldorf, Maryland 20601 jpmarkovich@comcast.net

the Woodland and Wildlife Conservation Technical Manual

SHEET 3 of 3

<u>SIO</u>

"MISS UTILITY" FOR LOCATION OF UTILITIES CALL 1-800-257-7777 48 HOURS IN ADVANCE OF ANY WORK IN THIS VICINITY.

OWNER / APPLICANT: K & P BUILDERS 13627 ANNAPOLIS ROAD **BOWIE, MD 20720** 301-262-7227

- 12/8/10 Date