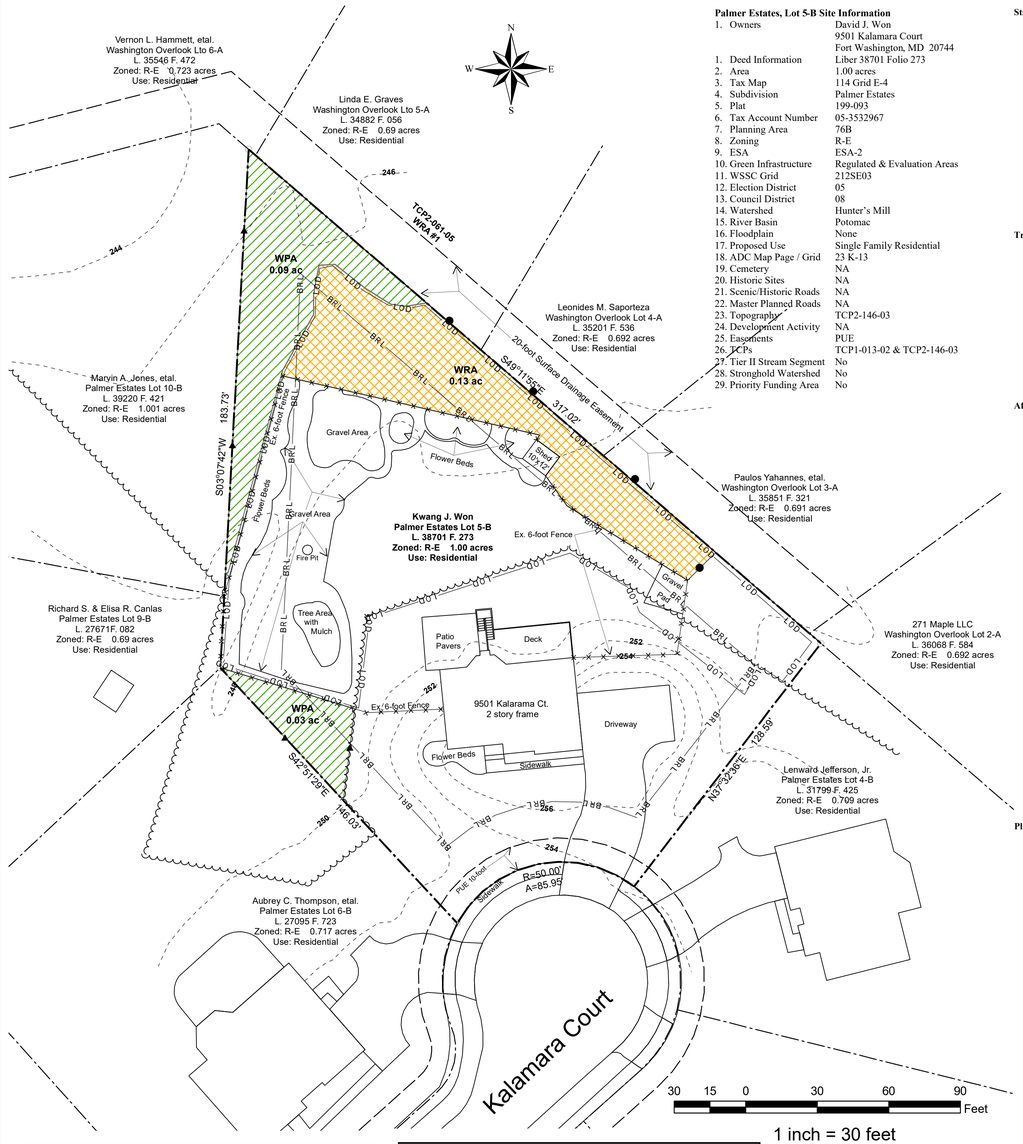


1 inch = 30 feet

Palmer Estates, Lot 5-B Site Information

1.	Owners	David J. Won 9501 Kalamara Court Fort Washington, MD 20744
1.	Deed Information	Liber 38701 Folio 273
2.	Area	1.00 acres
3.	Tax Map	114 Grid E-4
4.	Subdivision	Palmer Estates
5.	Plat	199-093
6.	Tax Account Number	05-3532967
7.	Planning Area	76B
8.	Zoning	R-E
9.	ESA	ESA-2
10.	Green Infrastructure	Regulated & Evaluation Areas
11.	WSSC Grid	212SE03
12.	Election District	05
13.	Council District	08
14.	Watershed	Hunter's Mill
15.	River Basin	Potomac
16.	Floodplain	None
17.	Proposed Use	Single Family Residential
18.	ADC Map Page / Grid	23 K-13
19.	Cemetery	NA
20.	Historic Sites	NA
21.	Scenic/Historic Roads	NA
22.	Master Planned Roads	NA
23.	Topography	TCP2-146-03
24.	Development Activity	NA
25.	Easements	PUE
26.	TCPs	TCP1-013-02 & TCP2-146-03
27.	Tier II Stream Segment	No
28.	Stronghold Watershed	No
29.	Priority Funding Area	No

Standard Type 2 Tree Conservation Plan Notes

1. This plan is submitted to fulfill the woodland conservation requirements for Permit # 14956-2019. If Permit #14956-2019 expires, then this TCP2 also expires and is no longer valid.
2. Cutting or clearing woodlands 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.
3. 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 be discussed in detail.
4. 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.
5. The owners of the property subject to this tree conservation plan are solely responsible for conformance to the requirements contained herein.
6. The property is within the Environmental Strategy Area ESA-2 Tier and is zoned R-E.
7. The is not adjacent to a roadway designated as scenic, historic, a parkway or a scenic byway.
8. The site is not adjacent to a roadway classified as arterial or greater.
9. This plan is grandfathered by CB27-2010, Section 25-119(g).

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 TCF installation. These signs must remain in perpetuity.

Afforestation and Reforestation Notes

15. 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.
16. 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 area.*) Seedling planting is to occur from November through May only. No planting shall be done while the ground is frozen. Planting with larger caliper stock or containerized stock may be done at any time provided a detailed maintenance schedule is provided.
17. 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 county inspector.
18. 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.
19. 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 the clearing and grading of the site. Failure to install and maintain temporary or permanent tree protective fencing is a violation of this TCP2.
20. 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.
21. The county inspector shall be notified prior to soil preparation or initiation of any tree planting on this site.
22. 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.
23. Result of annual survival check for each of the required four years after tree planting shall be reported to the M-NCPPC, Planning Department.
24. 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 written extension.

Planting Specification Notes

25. Quantity: (See Plant Schedule)
26. Type: (See Plant Schedule)
27. Plant Quality Standards: The plants selected shall be healthy and sturdy representative 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.
    a. Plants that do not have an abundance of well developed terminal buds on the leaders and branches shall be rejected.
    b. 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.
    c. 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 ans shall be maintained through periodic watering, until the time of planting.
28. 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.
29. 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 soils is moist, but may be planted from March through November. No planting shall be done while the 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.
30. 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 shall 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 hold 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.
31. 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.
32. 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 on soil sample for each area that appears to have a different soil type (if the entire area appears uniform, then only on 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.
33. Soil Improvement Measures: the soil shall then be improved according to the recommendations made by the testing company.
34. 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.
35. Planting method: Consult the Planting Detail(s) shown on this plan.
36. Mulching: Apply two-inch thick layer of woodchip or shredded hardwood mulch (as noted) to each planting site (see detail shown on this plan).
37. 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.
38. Mowing: No mowing shall be allowed in any planting area.
39. 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.
40. Source of Seedlings: state name, address, and phone number of nursery or supplier.

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
	Watering is needed (2 x month)
	Control of undesirable vegetation as needed (1 x in June and 1 x in September minimum)
Year 2-3:	Reinforcement planting is needed (See Note 2)

This site was issued a Violation on February 12, 2019 to address Sec. 25-120(c) of the Woodland and Wildlife Habitat Conservation Ordinance. This plan addresses those requirements by a combination of on-site reforestation, on-site preservation and payment of a fee-in-lieu.

Individual TCP2 with Previously Approved TCP1 or TCP2
Woodland Conservation Worksheet for Prince George's County

SECTION I -- Establishing Site Information (Enter acres for each zone)

1	Zone:	R-E		
2	Gross Tract:	1.00		
3	Floodplain:	0.00		
4	Previously Dedicated Land:	0.00		
5	Net Tract (NTA):	1.00	0.00	0.00
6	Property Description or Subdivision Name:	Palmer Estates, Lot 5-B		
7	Current TCP Number:	TCP2-146-03	Rev #	3
8	Previous TCP Number:	TCP2-146-03	Rev #	

SECTION II - Determining Woodland Conservation Requirements (Enter acres in corresponding column)

			Net tract		Floodplain
9	Woodland Conservation Calculations:				
11	Acreage of Existing Woodland		1.00		0.00
12	Woodland Conservation Required for per TCPI or TCP2	58.62%	0.59		
13	Area of Woodland Cleared per previous TCP1 or TCP2		0.41		0.00
14	Area of Woodland Cleared per current TCP2		0.88		0.00
15	Area of Woodland above WCT not cleared by TCP1 or TCP2		0.00		
16	Additional Woodland Cleared by current TCP2	0.47			0.00
17	Does the TCPI show 2:1 replacement?	y			
18	Clearing above WCT (1/4:1 Replacement)	0.00	Additional Replacement required =		0.00
19	Clearing below WCT (2:1 Replacement)	0.47	Additional Replacement required =		0.94
20	Total Woodland Conservation Required :		1.06		

SECTION III-Meeting the Requirement (Enter acres in corresponding column)

21	Woodland Conservation Provided:	(acres)		
22	Woodland Preservation	0.12		
23	Reforestation / Afforestation	0.12	Bond amount:	$ 1,568.16
24	Natural Regeneration	0.00		
25	Landscape Credits	0.00		
26	Area approved for fee-in-lieu	0.82	Fee amount:	$10,715.76
27	Credits Received for Off-site Mitigation on another property	0.00		
28	Off-site Mitigation provided on this property	0.00		
29	Total Woodland Conservation Provided	1.06		

29	Area of net tract woodland not cleared	0.12 acres
30	Woodland retained not part of requirements:	0.00 acres

31 Prepared by: Date:

32 Qualifications:

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.

When the use of fee-in-lieu is proposed:

41. All required fee-in-lieu payments shall be made to the Woodland Conservation Fund. Proof of deposit shall be provided prior to issuance of any permits related to this TCP2 unless the project is phased. Phased projects shall pay the fee-in-lieu amount for each phase prior to the issuance of any permit for that phase and shown in the fee-in-lieu breakdown on this TCP2.

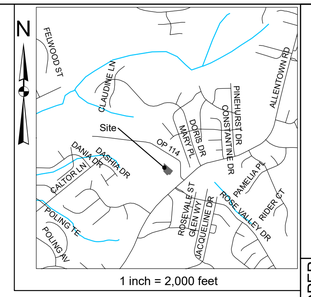
POST DEVELOPMENT NOTES

When woodlands and/or specimen, historic or champion trees are to remain:

42. 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 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.
43. If a tree or portion thereof are in imminent danger of striking a structure, parking area, or other high use areas 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.
44. 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 Tree Expert.
45. 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 plant 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.
46. 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.
47. 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 Individual Homeowners

48. Reforestation fencing and signage shall remain in place in accordance with the approved Type 2 Tree Conservation Plan.
49. 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.



1 inch = 2,000 feet

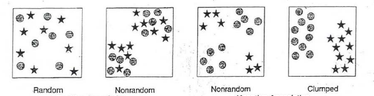
General Information Table

Layer Category	Layer Name	Value
Zone	Zoning (Zone)	R-E
Zone	Aviation Policy Area (APA)	6
Administrative	Tax Grid (TMG)	114 E-4
Administrative	WSSC Grid (Sheet 20)	212SE03
Administrative	Planning Area (Plan Area)	76B
Administrative	Election District (ED)	05
Administrative	Councilmanic District (CD)	08
Administrative	General Plan 2035 ESA	ESA-2
Administrative	Traffic Analysis Zone (COG) (TAZ-COG)	773
Administrative	PG Traffic Analysis Zone (TAZ-PG)	2585

Legend

- WRA Signs (Reforestation Area Signs)
- WPA Signs (Woodland Preservation Area Signs)
- LOD (Limit of Disturbance - Current)
- Treeline per TCP2-146-03-02
- BRL (Building Restriction Line)
- Property Boundary
- Fence (existing 6-foot high fence)
- Easements
- Topographic Contours - 2 foot
- WRA (Reforestation Area)
- WPA (Woodland Preservation Area)

Typical Forest Tree Distribution Patterns



Note:
Naturally occurring populations of trees tend to be found in informal groupings. A cluster of trees is really a mosaic of different species groups. The objective of an afforestation/reforestation plan is to select the appropriate species and distribution pattern for a chose site that mimic natural patterns.
Source: Prince Georges County Woodland Conservation Manual.

AFFORESTATION AREA #1 Acreage 0.13 Mixed Plantings

Species			Large Caliper Planting Stock			Reforestation	Percent of
Botanical Name	Common Name	Caliper	Height	Credits/Unit	Type	Quantity	Credits	Stocking
Juniperus sp.	Juniper	1-1.5"		2.33	B&B	7	16	17.2%
Quercus palustris	Pin Oak	1-1.5"		2.33	B&B	8	19	19.6%
Acer rubrum	Red Maple	1-1.5"		2.33	B&B	8	19	19.6%
Plantanus occidentalis	American Sycamore	1-1.5"		2.33	B&B	8	25	26.3%
Betula nigra	River Birch	1-1.5"		2.33	B&B	7	16	17.2% 100.0%
Substitution Species:	Willow Oak (Quercus phellos)			Reforestation Units Provided			95	
	River Birch (Betula nigra)			Total Reforestation Units Required			91	
	Basswood (Tilia sp.)			Excess			4	
	Blackgum (Nyssa sylvatia)							
	Beech (Fagus grandifolia)							
	Serviceberry (Amelanchier canadensis)							
	Yellow Poplar (Liriodendron tulipifera)							
	Holly (Ilex opaca)							
	Eastern Red Cedar (Juniperus virginiana)							
	Loblolly Pine (Pinus taeda)							

QUALIFIED PROFESSIONAL CERTIFICATION

This complies with the current requirements of Subtitle 25 and the Environmental Technical Manual.

Signed: John P Markovich Date: 6/19/2019

John P. Markovich
JM Forestry Services, LLC
11552 Timberbrook Drive
Waldorf, MD 20601
Phone: 301-645-4977
E-mail: jpmarkovich@comcast.net

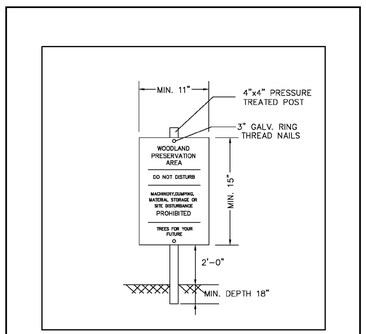
I Kwang J. Won hereby acknowledge that we are aware of this Type 2 Tree Conservation Plan (TCP2) and that we understand the requirements as set forth in this TCP2.

Kwang J. Won 3/18/19
Kwang J. Won Date

Prince George's County Planning Department, M-NCPPC
Environmental Planning Section
TREE CONSERVATION PLAN APPROVAL

TCP2-146-2003

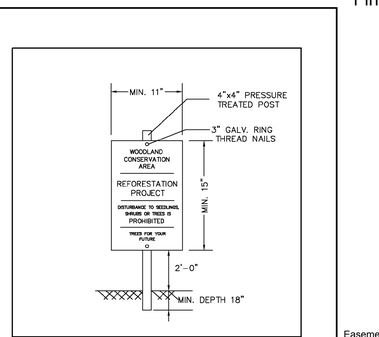
	Approved by	Date	DRD #	Reason for Revision
00 Revision	J. L. Stasz	1/12/2004	NA	Unknown
01 Revision	J. L. Stasz	8/19/2004	NA	Unknown
02 Revision	J. L. Stasz	12/17/2004	NA	Site layout change & new Engineer
03 Revision		11/20/2019	NA	SL revision for Lot 5-B
04 Revision				
05 Revision				



NOTES:
1. ATTACHMENT OF SIGNS TO TREES IS PROHIBITED.
2. SIGNS SHOULD BE PROPERLY MAINTAINED.
3. AVOID INJURY TO ROOTS WHEN PLACING POSTS FOR THE SIGNS.
4. SIGNS SHOULD BE POSTED TO BE VISIBLE TO ALL CONSTRUCTION PERSONNEL FROM ALL DIRECTIONS.
5. SIGNS SHOULD BE INSTALLED AT SAME TIME AS TREE PROTECTION DEVICE.
6. LOCATE SIGNS AT 100-FOOT INTERVALS OR AS SHOWN ON PLAN
7. SIGNS SHOULD BE IN PLACE IMMEDIATELY FOLLOWING STAKE OUT OF L.O.D., AND REMAIN IN PLACE IN PERPETUITY.

WOODLAND PRESERVATION AREA SIGN

August 2010 A-4, DET-1



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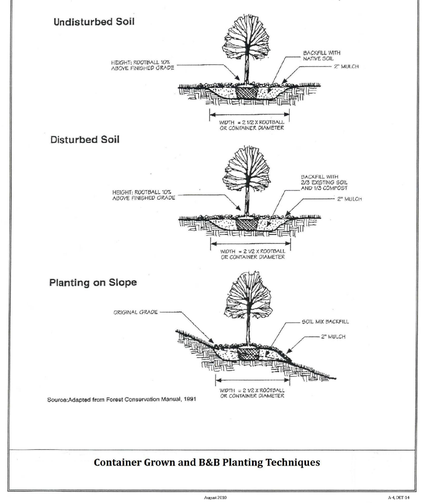
4. SIGNS SHOULD BE POSTED TO BE VISIBLE TO ALL CONSTRUCTION PERSONNEL FROM ALL DIRECTIONS.
5. SIGNS SHOULD BE INSTALLED AT SAME TIME AS TREE PROTECTION DEVICE.
6. LOCATE SIGNS APPROXIMATELY EVERY 50 FEET ALONG FENCING.
7. SIGNS SHOULD BE IN PLACE IMMEDIATELY FOLLOWING STAKE OUT OF L.O.D., AND REMAIN IN PLACE IN PERPETUITY.

REFORESTATION AREA SIGN

August 2010 A-4, DET-2

Easement Note:
The on-site woodland conservation easement is located in Easement Book 42668 Page 533



Source:Adapted from Forest Conservation Manual, 1991

Container Grown and B&B Planting Techniques

August 2010 A-4, DET-3

JM Forestry Services, LLC
11552 Timberbrook Drive
Waldorf, MD 20601
Phone/FAX: (301) 645-4977

APPLICANT / DEVELOPER

Kwang J. Won
9501 Kalamara Court
Fort Washington, MD 20744
Phone: 703-850-8965

Type 2 Tree Conservation Plan
Single Lot Revision
TCP2-146-03

Palmer Estates, Lot 5, Block "B"
9501 Kalamara Ct.
Fort Washington, MD 20744
5th ELECTION DISTRICT
PRINCE GEORGE'S COUNTY, MARYLAND

REVISIONS

3/20/2019 JPM - SL revision, Lot 5-B

DWN JPM	Checked JPM
Scale	1" = 30'
Project No.	19-012
Sheet No.	1 of 1