Moodland Conservation Worksheet for Prince George's County Zone: <u>R-80</u> Owner: Marrick Properties Gross Tract: 25.07 Acres Address: 3150 West Ward Road, Suite 401 Dunkirk, Maryland 20754 Floodplain: 1.29 Acres Prev.Dedicated Land: O.OO Acres Phone: 301-855-3828 Net Tract (NTA): 23.78 Acres Tax Map: <u>116</u> Subdivision/Block/Lot: Surrats Crossing Is this site subject to the 1989 Ordinance? Reforestation Requirement Reduction Questions Is this one (1) single family lot? N Are there prior TCP approvals which includes a combo of these lots and/or other lots? <u>Y</u> Is this a mitigation bank? <u>N</u> Break-even Point (preservation) = 4.97 Acres Clearing permitted w/o reforestation = 0.84 Acres Moodland Conservation Calculations:

Net Tract Floodplain Impacts (acres) (acres) (acres) a. 5.81 k. 1.29 Existing Woodland Woodland Conservation Threshold (NTA) 1 = 20.00% b. 4.76 c. 4.76 Smaller of a or b d. 1.05 Woodland above WCT e. 3.54 l. 0.04 0.00 Woodland cleared f. 1.05 Smaller of d or e Clearing above WCT (0.25:1) replacement requirement g. 0.26 Clearing below WCT (2:1 replacement requirement) Afforestation Threshold (AFT) = 15.00% 1. 0.00 Off-site Mitigation being provided on this property j. 0.00 Moodland Conservation Required Moodland Conservation Provided: Moodland Preservation Afforestation / Reforestation \$2,874.96 Area approved for fee-in-lieu Credits for Off-site Mitigation on another property

Name: Mike Petrakis Address: <u>11721 Woodmore Road, Suite 200</u> Mitchellville, MD 20721 License: <u>Qvalifled Professional</u>

0.00

2.27 acres

0.34 acres

Off-site Mitigation being provided on this property

Woodland retained but not part of requirements:

Moodland Conservation Provided

Area of woodland not cleared

Plan Certified by:

I WCT is the Woodland Conservation Threshold as shown in Part 5 of the Prince George's County Woodland Conservation and Tree Preservation Policy Document. ² All entries in parentheses are mathematical formulas. NOTE: Off-Site Tree Requirement to be provided at a County Approved Tree Bank.

FLOODPLAIN CLEARING AREAS (CA-FP)					
No.	AREA (AC)				
ı	0.04				
TOTAL	AL 0.04				
REFORESTATION AREA (RA)					

AREA (AC)

0.61

0.61

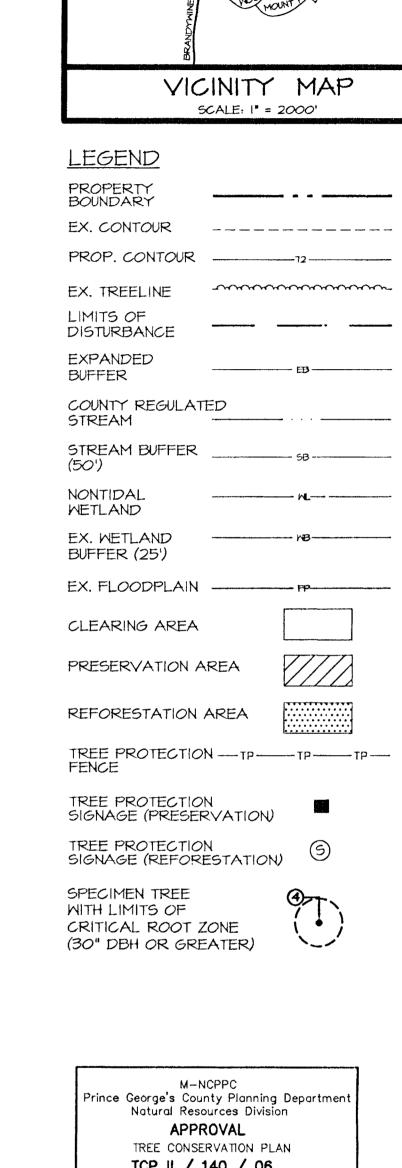
TOTAL

No.	AREA (AC)			
1	0.24			
2	0.64			
3	0.32			
4	0.13			
5	0.02			
6	0.14			
7	0.05			
8	0.39			
TOTAL	1.93			

PRESERVATION AREAS (PA)

CLEARING AREAS (CA)				
No.	AREA (AC)			
1	0.09			
2	0.05			
3	0.03			
4	0.29			
5	2.70			
6	0.38			
TOTAL	3.54			

		PLOCK A AND B OAK ORCHAPO MEST OAK ORCHAPO PLANES PLY BOX MATS PLAY DELANED LEE SHOLE FAMILY DELANED LEE SHOLE FAMILY DELANED		
<i>CONS</i> 2.1	PN OA		DE STORM HAIT	WI RIGHT OF WAY
		OAK word to the state of the st		
AND THE STATE OF T		CA-3		
WIDTH RIGHT OF	FP-I	CA-2		
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M-NCPPC Prince George's County Planning Department Natural Resources Division TREE CONSERVATION PLAN TCP II / 140 / 06

TREE CONSERVATION PLAN - TYPE II

APPROVED PLANS TCP2

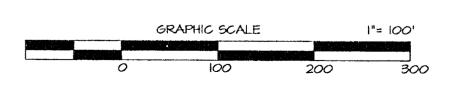
MD. NAT'L, CAP. PK. & PL. COMM
PRINCE GEORGE'S COUNTY

JUL 1 6 2015

COUNTYWIDE PLANNING DIVISION ENVIRONMENTAL PLANNING BECTION

SURRATTS CROSSING

SURRATTS DISTRICT No. 9 PRINCE GEORGE'S COUNTY, MARYLAND

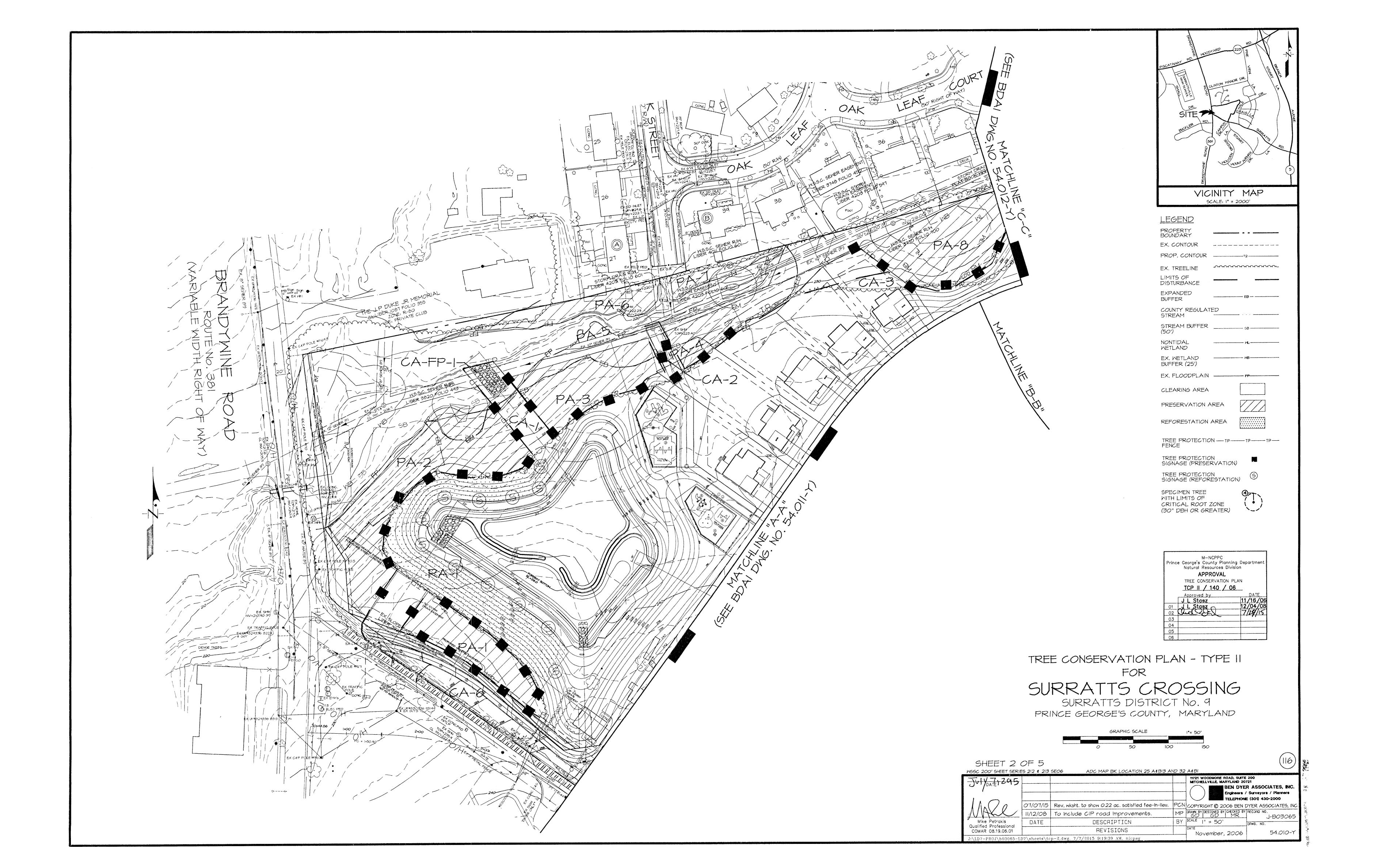


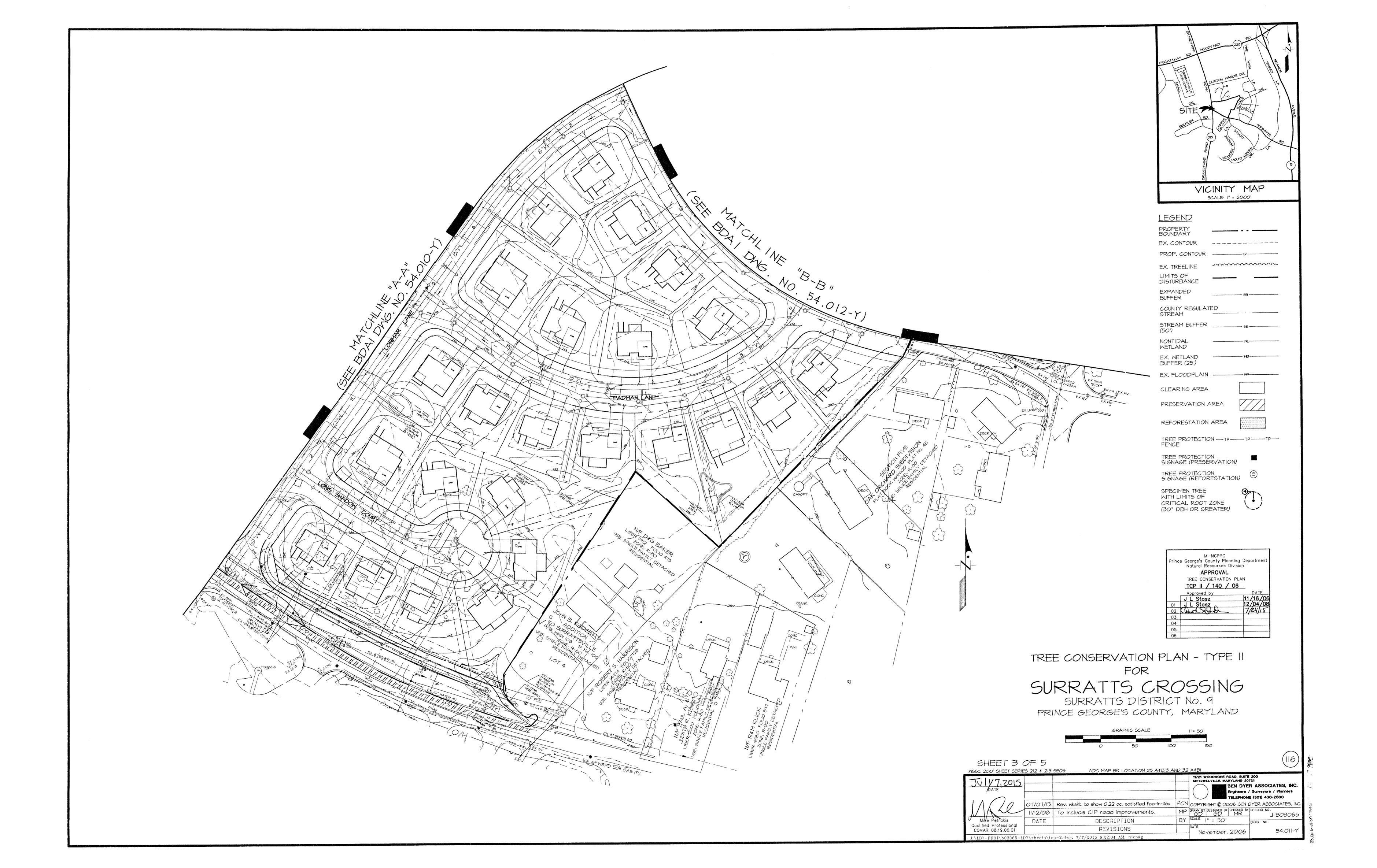
SHEET I OF 5 WSSC 200' SHEET SERIES 212 \$ 213 SE06 HI721 WOODMORE ROAD, SUITE 200
MITCHELLVELE, MARYLAND 20721
BEN DYER ASSOCIATES, INC. 7/07/15 Rev. wksht. to show 0.22 ac. satisfied fee-in-lieu. MP DRAWN BY DESIGNED BY CHECKED BY RECORD NO.

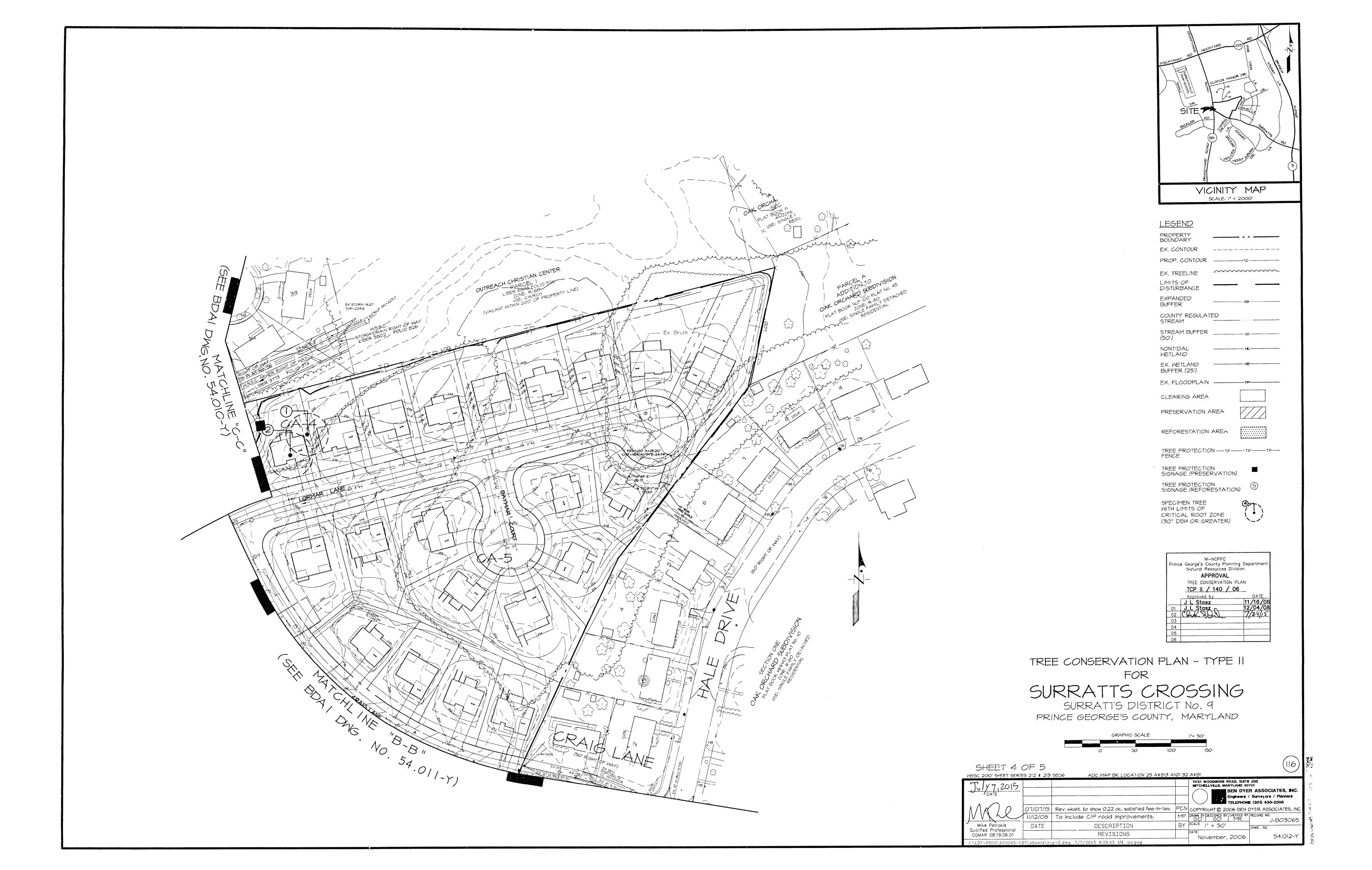
BY SCALE | = 100' DRWG. NO. 11/12/08 To include CIP road improvements. J-B03065 DESCRIPTION Qualified Professional COMAR 08.19.06.01 August, 2006 54.009-Y :\LD7-PROJ\b03065-LD7\sheets\tcp-2.dwg, 7/7/2015 9:17:20 AM, nicpag

		SPECIM	EN TABLE		
No.	Size	Species	Condition	Disposition	
l	30"	yellow poplar	Poor	To Be Remove	
2	32"	yellow poplar	Fair	To Be Remove	

NOTE: Specimen trees were field located.







TYPE II TREE CONSERVATION NOTES

- 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 initigation fee.
- 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 Moodland 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.
- The location of all Tree Protection Devices (TPD's) shown on this Plan, shall be flagged or staked in the fleid 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.
- Moodland 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
- 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 Section.. 1. Prior to the Issuance on any permits, the contractor responsible for soil preparation, site preparation, tree planting and tree maintenance must be

Business Name Phone Number

- 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.
- After the boundaries of the retention area have been staked and flagged and before any disturbance has taken place on site, a pre-construction eeting at the construction site shall take place. The developer, contractor or project manager, and appropriate local inspectors shall attend.
- 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.

WOODLAND CONSERVATION AREA MANAGEMENT NOTES

Removal of Hazardovs 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 házardous 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 with out 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 chains an to near the existing ground level. The stump may not be removed or covered with soil, mulch or other materials that would
- 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 plies that will serve as wildlife habitat.

<u>Removal of Hazardous Trees, Limbs, Noxious Plants , invasive Plants or Non-native Plants in Moodland Conservation Areas Owned by Individual</u>

- 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 conducted. 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 grinding of the stumps in the woodland conservation
- 2. The removal of noxlous, 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
- 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 instr-
- Note: The use of chainsans is extremely dangerous and should not be cond-ucted with poorly maintained equipment, without safety equipment, or by
- individuals not trained in the use of this equipment for the pruning and/or Protection of Reforestation and Afforestation Areas by Developers or Builders
- 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 our chaser 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-
- 2. Reforestation areas shall not be moved, however the management of competing vegeta-
- Protection of Reforestation and Afforestation Areas by Individual Homeowners 1. 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
- 2. Reforestation areas shall not be moved, however, the management of competing vegetation around individual trees is acceptable.

Woodland Areas NOT Counted as Part of the Woodland Conservation Requirements

- 1. 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 Mariboro, Maryland 20772, phone 301-952-3650. Additional mitigalton 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 grosses, including any variety of Kentucky 31 fescue is not acceptable.

PLANTING SPECIFICATIONS FOR RE/AFFORESTATION AREAS

- 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
- of being cut (pruned) or striped from the plant during the digging process. Substantial auxillary/fibrous roots shall be present. Plants that do not have an abundance of well developed terminal buds on

developed and at least 8° long. No more than twenty-five percent (25%)

of the root system (both primary and auxillary/fibrous) shall show evidence

- Plants shall be shipped by the nursery immediately after lifting from the field or removal from the greenhouse, and planted immediately upon receipt bu the landscape contractor.
- If the plants cannot be planted immediately after delivery to the reforest-ation 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 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. 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
- 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 alve his approval before planting may begin,
- 7. Spacina: See Plant Schedule and/or Plantina Plan for spacing requirements. Also refer to the Planting Layout detail for a description of the general planting
- 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 according conditions. Soil samples shall be taken at a rate that provides one soil sample for each area that appears to have a different soil tupe (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 soll will be tested and recommended for corrections of soll 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
- 11. 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 5lbs/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 two years to assure that no less than 75% of the original planted avantity survives.
- 16. Source of Seedlings: Md. Forest, Park and Wildlife Service in Bowle, Md.; Phone (301) 464-3065. Ruppert Environmental, Ashton, Maryland; Phone: (301)774-0400.

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

- Year I: Site Preparation and Tree Planting <u>Survival check</u> once annually (September-November, see Note 1) Watering if needed (2 x month) Control of undesirable vegetation as needed (1 x in June \$
- Year 2-3: Reinforcement planting if needed (see Note 2) <u>Survival check</u> once annually (September-November) Control of undesirable vegetation if needed (1 x in May & I x in August min).

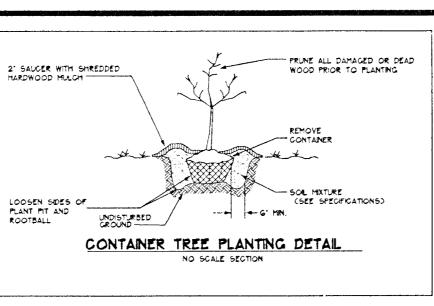
I x in September min.)

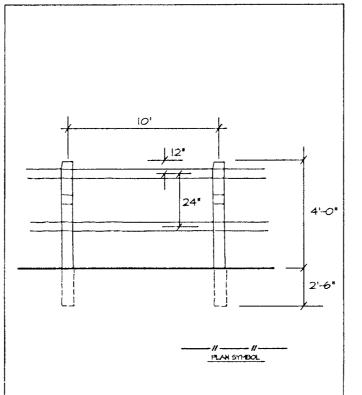
- Year 4-5: Reinforcement planting if needed (See Note 2) <u>Survival check</u> once annually (September-November)
- 1) Survival Check: Check planted stock against plant list (or as-built) by walking the site and taking inventory. Plants must show vitality. Submit field data forms (Condition Check Sheets) 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 I 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.

STOCK SPECIFICATION: 1000 SEEDLINGS PER ACRE TOTAL RE/AFFORESTATION REQUIRED: 0.61 ACRES VAFFORESTATION PROVIDED, O.61 ACRE

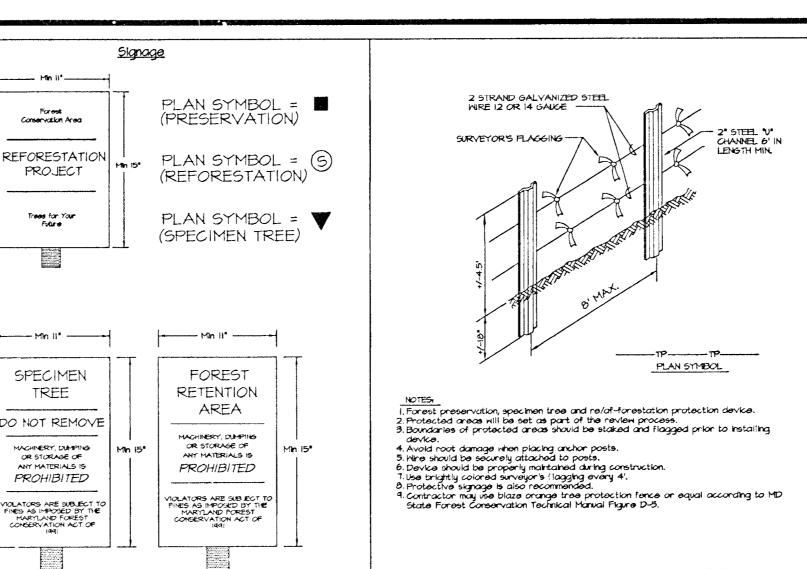
TOTAL REPARTORESTATION PROVIDED: U.O. ACRES							
Reforestation Area	Acreage	Seedling Selection					
		Tulip Poplar	Sweet Gum	Red Maple	Red Oak	American Beech	Total No. of Seedlings
1	0.61	122	122	122	122	122	610
TOTAL	0.61	122	122	122	122	122	610

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.

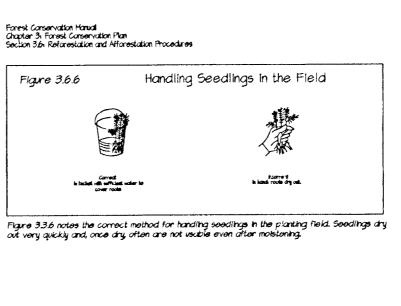


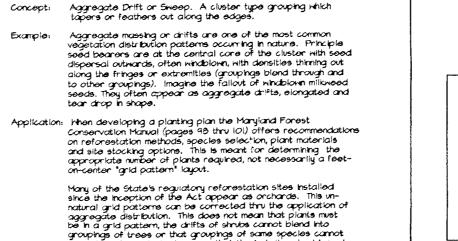


SPLIT RAIL FENCE DETAIL



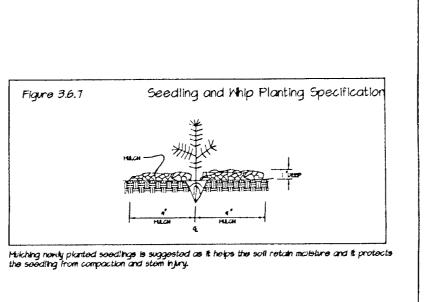
TREE PROTECTION FENCING - TYPE ! . Bottom of skins to be higher than top of tree protection fence. 2. Stars to be placed approximately 50' feet apart. Conditions on site affecting visibility may warrant placing signs closer or farther apart. 3. Attachment of signs to trees is prohibited. PLANTING LAYOUT (AGGREGATE DISTRIBUTION DRIFT THEORY)

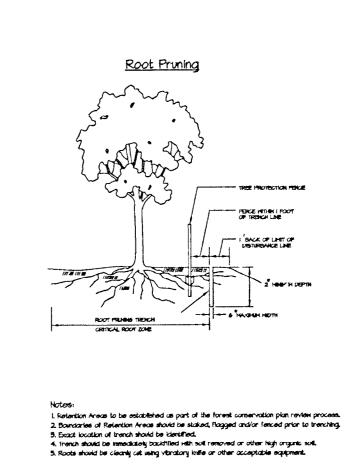




the aforementioned forest conservation act criteria at the

same time replicating natures aggregate drift patterns (see





Sources 7 Implant State Forest Conservation Technical Honoric Strd Edition - 199

I. Retention Area Hill be set as part of the neview process.

2. Boundaries of Retention Area should be staked and Ragged prior to installing device.

3. Avoid root damage rheen placing anothor posts.

4. Hirls should be securely attached to posts.

35° Hilliand FENCE.

70° Device should be properly maintained during construction.

6. Use brightly colored surveyor's flagging every 4 feet.

1. Protective signage is also recommended.

STAPLE 2' STEEL POSTS

CONSTRUCTION SPECIFICATIONS

2. Geotextile shall be fastened securs ly to each fence post with wine ties on stoples at top and mid-section and shall meet the following requirements for Geotextile Class Fi

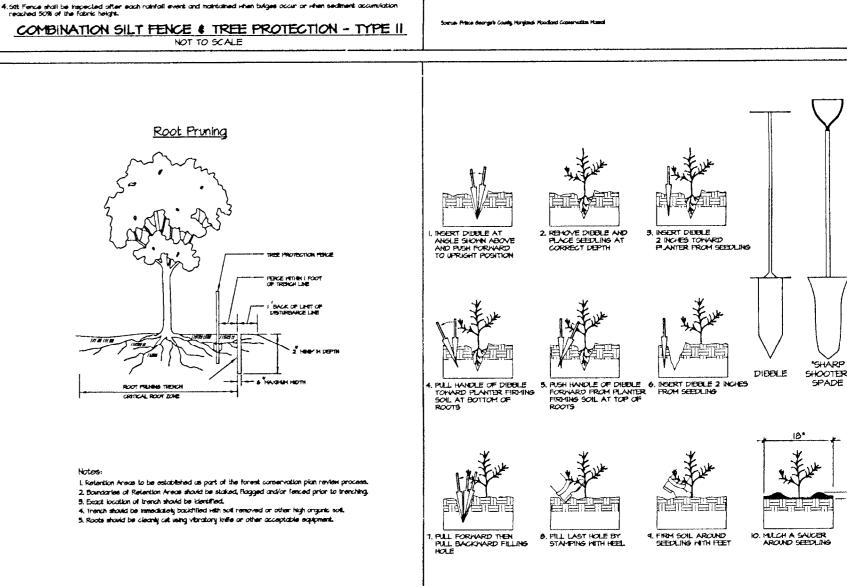
3. Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sertiment

I. Fence posts shall be a minimum of 36" long driven lib" minimum into the ground. Mood posts shall be 1 V2" x 1 V2 square (min) out, or 1 5/4" dometer (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section resigning not less than 1,00 pound per linear foot.

Tensile Strength 50 Be/hr/(min) Test: MSHT 504
Tensile Modulue 20 Be/hr/(min) Test: MSHT 504
Tensile Modulue 20 Be/hr/(min) Test: MSHT 505
Fittering Efficiency 258 (min) Test: MSHT 52

JOHNING TWO ADJACENT SILT

STANDARD SYMBOL



L Combination sediment control and forest protection device.

i. The toe of slope should be outside the critical root zone

4. Root damage should be avoided.

Boundaries of the Retention Area will be set as part of the forest conservation plan review process.
 Boundaries of Retention Area should be staked prior to installing protective device.

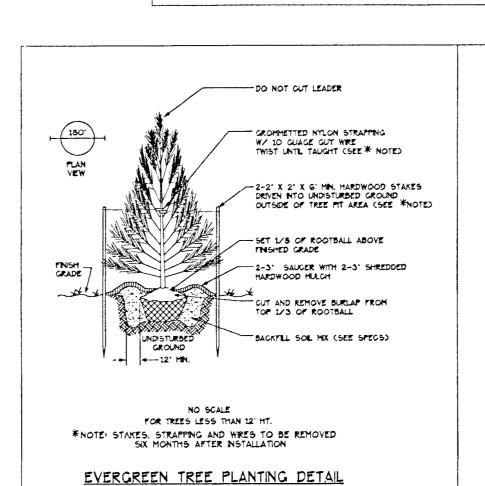
Equipment is prohibited within critical root zone of retention area; place dike accordingly.

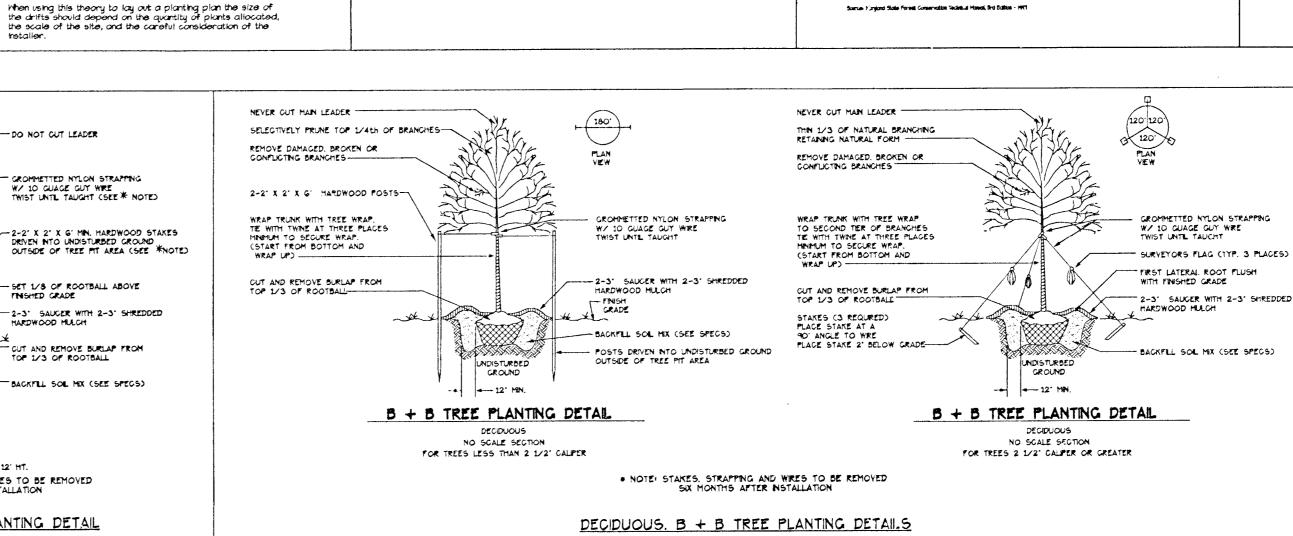
All standard recionation practices for earthen allies and snales shall apply to these details.

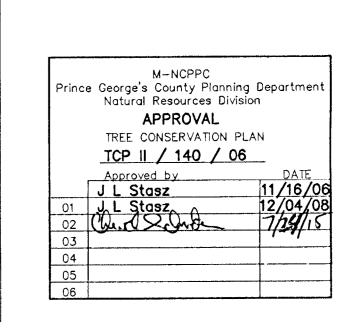
. All standard maintenance for earther alkes and swales apply to these distalls.

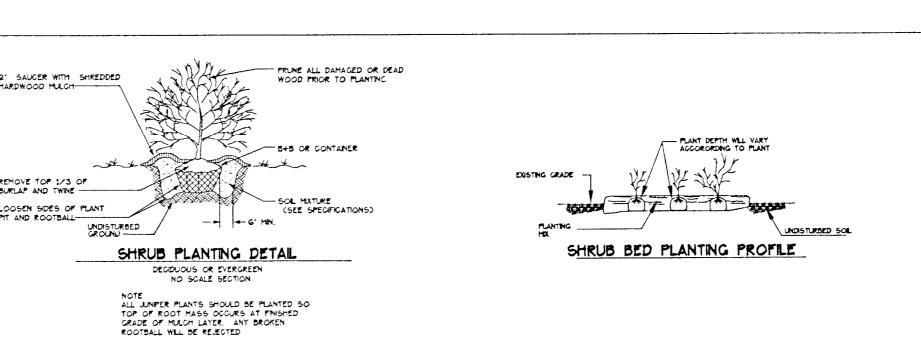
COMBINATION EARTH DIKE & TREE PROTECTION - TYPE III

THE PROTECTION PENCE HITH









TREE CONSERVATION PLAN - TYPE II DETAILS AND SPECIFICATIONS

SURRATTS CROSSING SURRATTS DISTRICT No. 9

PRINCE GEORGE'S COUNTY, MARYLAND

SHEET 5 OF 5 WSSC 200' SHEET SERIES 212 \$ 213 SE06 ADC MAP BK LOCATION 25 A&BI3 AND 32 A&BI 11721 WOODMORE ROAD, SUITE 200 MITCHELLVILLE, MARYLAND 2072 BEN DYER ASSOCIATES, INC ingineers / Surveyors / Planner 07/07/15 | Rev. wksht. to show 0.22 ac. satisfied fee-in-lieu. |PCN| COPYRIGHT @ 2006 BEN DYER ASSOCIATES, MP DRAWN BY DESIGNED BY CHECKED BY RECORD NO. /12/08 | To include CIP road improvements J-B03065 BY |SCALE |" = 100" Mike Petrakis DATE DESCRIPTION Qualified Professional REVISIONS COMAR 08.19.06.01 54.013-Y August, 2006 D7-PROJ\b03065-LD7\sheets\tcp-2.dwg, 7/7/2015 9:32:06 AM, nicp

