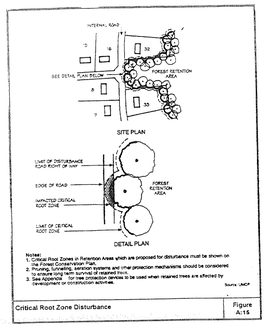
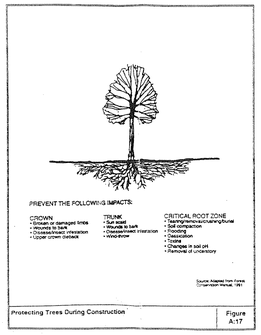
GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

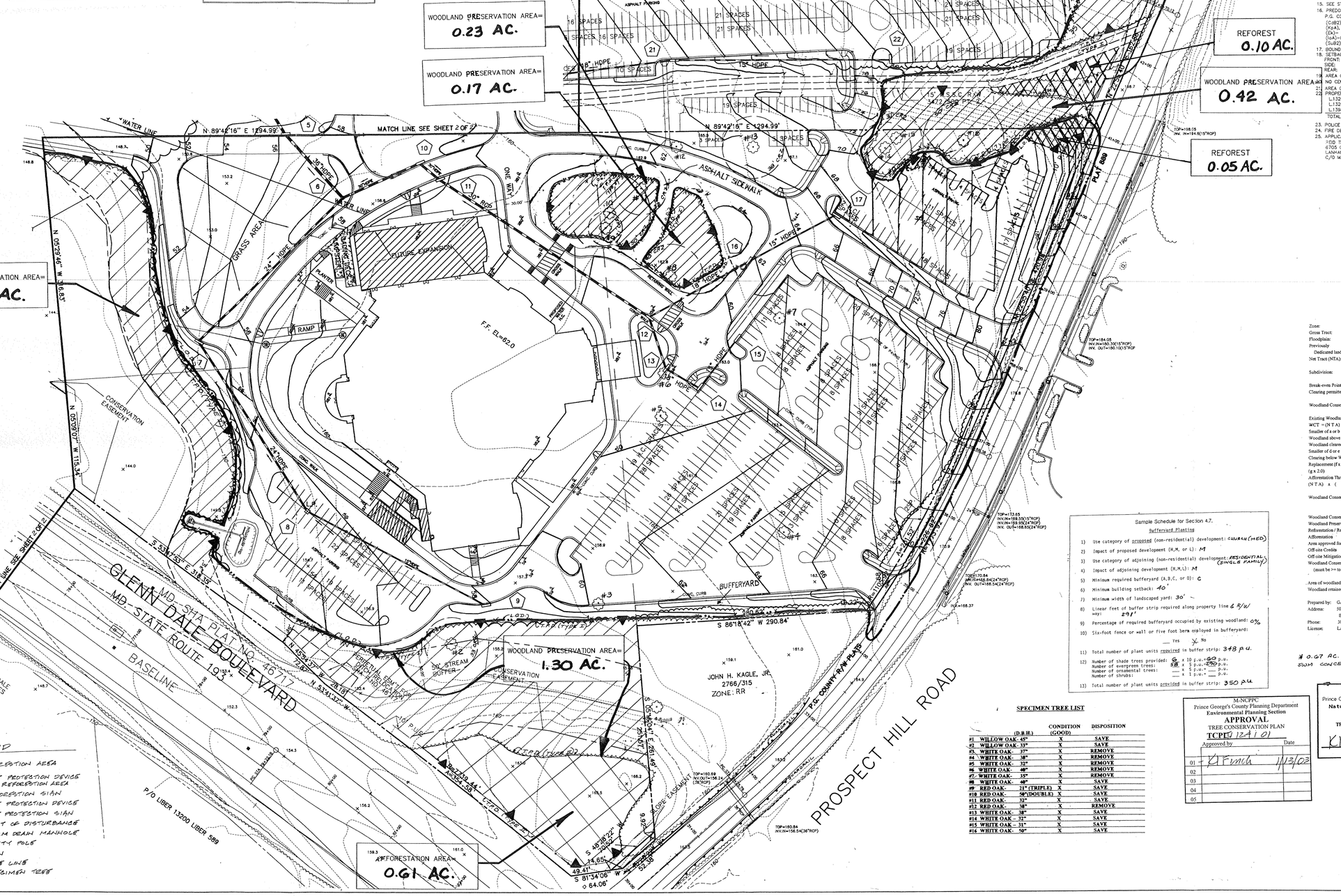
MARYLAND STATE PLANE DATUM





PARCEL "D" Schedule for Section 4.7
Bufferyard Planting

1. Use category of proposed (non-residential) development CHURCH(HEC)
2. Impact of proposed development (H,M, or L): M
3. Use category of adjoining (non-residential) development RESIDENTIAL (SINGLE FAMILY)
4. Impact of adjoining development (H,M or L): M
5. Minimum required bufferyard (A,B,C, or D): C
6. Minimum building setback: 40'
7. Minimum width of landscaped yard: 30' REQUIRED
8. Linear feet of buffer strip required along property line and R/W: 1142
9. Percentage of required bufferyard occupied by existing woodland: 66 %
10. Six foot fence or wall or five foot berm employed in bufferyard
___ Yes X No
11. Total number of plant units required in buffer strip: 1370
12. Number of shade trees provided 25 x 10 p.u.= 250 p.u.
Number of evergreen trees 22 x 5 p.u.= 110 p.u.
Number of ornamental trees 23 x 10 p.u.= 115 p.u.
Number of shrubs ___ x 10 p.u.= ___ p.u.
13. Total number of plant units provided in buffer strip: 475 PLANTS + 1379 PROVIDED
66% BY EXISTING WOODLAND OR 304 PLANTS



LEGEND

- REFORESTATION AREA
- TPD2 — TREE PROTECTION DEVICE FOR REFORESTATION AREA
- REFORESTATION SIGN
- TPD2 — TREE PROTECTION DEVICE
- TREE PROTECTION SIGN
- LOD2 — LIMIT OF DISTURBANCE
- STORM DRAIN MANHOLE
- UTILITY POLE
- SIGN
- TREE LINE
- #2 SPECIMEN TREE

SPECIMEN TREE LIST

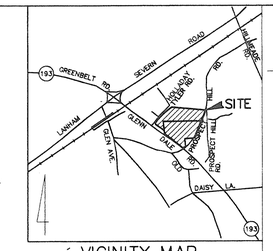
	(D.B.H.)	CONDITION (GOOD)	DISPOSITION
#1 WILLOW OAK-	45"	X	SAVE
#2 WILLOW OAK-	33"	X	SAVE
#3. WHITE OAK-	37"	X	REMOVE
#4 WHITE OAK-	38"	X	REMOVE
#5 WHITE OAK-	32"	X	REMOVE
#6 WHITE OAK-	40"	X	REMOVE
#7. WHITE OAK-	35"	X	REMOVE
#8 WHITE OAK-	40"	X	SAVE
#9 RED OAK-	21" (TRIPLE)	X	SAVE
#10 RED OAK-	50"(DOUBLE)	X	SAVE
#11 RED OAK-	32"	X	SAVE
#12 RED OAK-	38"	X	REMOVE
#13 WHITE OAK-	38"	X	SAVE
#14 WHITE OAK-	32"	X	SAVE
#15 WHITE OAK-	31"	X	SAVE
#16 WHITE OAK-	50"	X	SAVE

Sample Schedule for Section 4.7.
Bufferyard Planting

1) Use category of proposed (non-residential) development: CHURCH (HEC)
2) Impact of proposed development (H,M, or L): M
3) Use category of adjoining (non-residential) development: RESIDENTIAL (SINGLE FAMILY)
4) Impact of adjoining development (H,M,L): M
5) Minimum required bufferyard (A,B,C, or D): C
6) Minimum building setback: 40'
7) Minimum width of landscaped yard: 30'
8) Linear feet of buffer strip required along property line & R/W way: 291'
9) Percentage of required bufferyard occupied by existing woodland: 0%
10) Six-foot fence or wall or five foot berm employed in bufferyard:
___ Yes X No
11) Total number of plant units required in buffer strip: 348 p.u.
12) Number of shade trees provided: 6 x 10 p.u.= 60 p.u.
Number of evergreen trees: 58 x 5 p.u.= 290 p.u.
Number of ornamental trees: ___ x 5 p.u.= ___ p.u.
Number of shrubs: ___ x 1 p.u.= ___ p.u.
13) Total number of plant units provided in buffer strip: 350 p.u.

M-NCPPC
Prince George's County Planning Department
Environmental Planning Section
APPROVAL
TREE CONSERVATION PLAN
TCPII 124/01

Approved by	Date
01 K Finch	1/13/02
02	
03	
04	
05	



VICINITY MAP
SCALE: 1"=2000'

SITE NOTES

1. EXISTING ZONING OF PROPERTY: R-R.
2. TOTAL AREA OF PROPERTY: 32.16 AC.
3. M-NCP&PC PREL. PLAT # 4-00071
4. PROPOSED USE OF PROPERTY: CHURCH TOTAL SEATS: 1,000
5. TOTAL PARKING REQUIRED: 1 PER 4 SEATS= 250 TOTAL PROVIDED: 1022
6. WATER CATEGORY: 3
7. SEWER CATEGORY: 3
8. FOR PUBLIC WATER AND SEWER SYSTEMS ONLY.
9. TAX MAP # 36, GRID C-3
10. ADC MAP # 5, GRID D.2-10,11.
11. 200' MAP REFERENCE: 209 NE 10 & 210 NE 10
12. NO KNOWN HISTORICAL SITE AFFECTED BY THIS PLAN.
13. FLOODPLAIN= 2.32 AC.
14. EXISTING "WATERS OF THE U.S." AS SHOWN (W.U.S.)
15. SEE STORMWATER CONCEPT CSD# #91916/2-2000-00
16. PREDOMINANT SOIL TYPES FOUND ON SITE PER P.G. COUNTY SOILS MAP BOOK PAGE #14:
(CuB2), (CuC2), (CeB2),(CeC2),(CaA)=Christiana
(KpA), (KpC2)= Keyport
(EA)= Elkton
(LnA)= Luka
(SuB2),(SyC2)= Sunnyside
17. BOUNDARY BY C.O.D.I.
18. SETBACKS:
FRONT: 29'
SIDE: 8' MIN/ 17 TOTAL
REAR: 20'
19. AREA OF ROAD DEDICATION: NONE
20. NO CEMETARIES ON SITE.
21. AREA OF 25% SLOPES: 0.52 AC.
22. PROPERTY INCLUDED:

L.13200 F.589	10.84 AC.
L.13200 F.600	6.32 AC.
L.13986 F.646	15.00 AC.
TOTAL THIS PLAN=	32.16 AC.

23. POLICE DEPARTMENT: GLENN DALE- 1/2 MI.
24. FIRE DEPARTMENT: GLENN DALE CO. 18-1/2 MI.
25. APPLICANT:
REID TEMPLE A.M.E. CHURCH
6705 GOOD LUCK ROAD
LANHAM, MD 20706
C/O MR. JIM SIMPSON

Woodland Conservation Worksheet
for
Non-Governmental Projects

Zone:	R-R	Owner:	
Gross Tract:	32.16	Address:	
Floodplain:	2.32		
Previously Dedicated land:	0.00	Phone:	
Net Tract (NTA):	29.84	Tax Map:	
		Permit#:	

Subdivision: Reid Temple A.M.E. Property

Break-even Point (preservation) =	10.52 acres
Clearing permitted w/o reforestation=	18.20 acres

Woodland Conservation Calculations:		Net Tract (acres)	Floodplain (acres)
Existing Woodland	a.	28.72	k. 2.32
WCT =(N T A) x (20.00 %)	b.	5.97	
Smaller of a or b	c.	5.97	
Woodland above WCT	d.	22.75	
Woodland cleared	e.	22.71	l. 0.13
Smaller of d or e	f.	22.75	
Clearing below WCT	g.	0.04	
Replacement (f x 0.25) (g x 2.0)	h.	1.00	
	i.	1.28	
Afforestation Threshold (N T A) x (15.00 %)	j.	0.00	
Woodland Conservation Required	m.	12.42	

Woodland Conservation Provided:	(acres)	
Woodland Preservation	5.29	
Reforestation/Replacement	2.14	
Afforestation	0.00	
Area approved for fee-in-lieu	0.00 =	50.00
Off-site Credits	0.00	
Off-site Mitigation Provided	4.99	
Woodland Conservation Provided (must be >= to "m" above)	12.42	

Area of woodland not cleared	5.33	acres
Woodland retained not part of requirements:	0.00	acres

Prepared by: GARY R. BUTSON
Address: 5010 SUNNYSIDE AVE.
BELTSVILLE, MD
Phone: 301-982-1781
License: LANDSCAPE ARCHITECT

gv REV. 8-10-02

0.67 AC. REFORESTATION APPROVED ON SWM CONCEPT, APPROVAL #8316/02-2000-00

M-NCPPC
Prince George's County Planning Department
Natural Resources Division
APPROVAL
TREE CONSERVATION PLAN
TCP- II 124/01
K Finch 9/04/2002
BY DATE

5-28-02

CAPITOL DEVELOPMENT DESIGN, INC.
ENGINEERS – PLANNERS – SURVEYOR'S
5010 SUNNYSIDE AVENUE – SUITE 200 – BELTSVILLE, MD 20705
OFFICE (301) 982-1781 FAX (301) 982-1994

CDDI

REID TEMPLE A.M.E. PROPERTY
P/O L. 13200 F. 589 AND L. 13200 F. 600
BOWIE (14th) ELECTION DISTRICT
PRINCE GEORGE'S COUNTY, MARYLAND

TCP II

RECEIVED
JAN 21 2003

REVISIONS

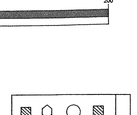
5-29-02 ADD OLD WKSP
8-10-02 SP-REV REVISED
10-03 BUFFERYARD SCH. & PARK SIGN RESITE ADD NOTES FOR SEED TREE MANAGMENT PLAN & MULCH ONLY AREA ADDED SPEC TREE DETAILS
1-10-03 BUFFERYARD SCHEDULE 4.7 ADD PARCEL "D" ADDED-REFINISH PLANTING CHANGES TO USE RED LARGER CALIPER TREES NOTES ADDED, P.A.C.

DATE: MAY, 2002
DWN. SFP
CHECKED VC
SCALE: 1"=50'
PROJECT/FILE NO. 99004
SHEET NO. 1 OF 2

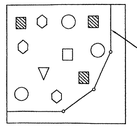
GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.



REFORESTATION AREA



POST & SMOOTH WIRE (TPD TYPE II) FENCING

RED MAPLE	200/AC(20%)= 390
RED OAK	200/AC(20%)= 390
WHITE ASH	200/AC(20%)= 390
WHITE PINE	200/AC(20%)= 390
EASTERN REDBUD	200/AC(20%)= 390

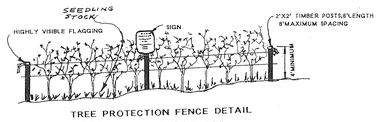
TO BE PLANTED IN RANDOM DISTRIBUTION PATTERN

NUMBER OF TREES PER ACRE= 1,000 SEEDLINGS PER ACRE
AREA TO BE REFORESTED ON THESE PLANS= 2.14 AC. OR 1,950 SEEDLINGS (1.95 AC)
45 1" CAL (0.09 AC) *
25 2½"CAL (0.10 AC) *
*USED TO FULFILL BUFFERYARD REQ. SCHEDULE 4.7 FOR PARCEL "D"

*0.10 AC. PLANTED AS 2½ CAL
0.10 x 250 PER ACRE = 25 TREES
13 RED MAPLE
12 PIN OAK
*0.09 AC. PLANTED AS 1" CAL
0.09 x 500 PER ACRE= 45 TREES
23 REDBUD
22 NYSSA
*(PLACEMENT SHOWN ON LANDSCAPE PLAN, SHOWN HERE AS PART OF REFORESTATION AREA)

Plant Management Plan

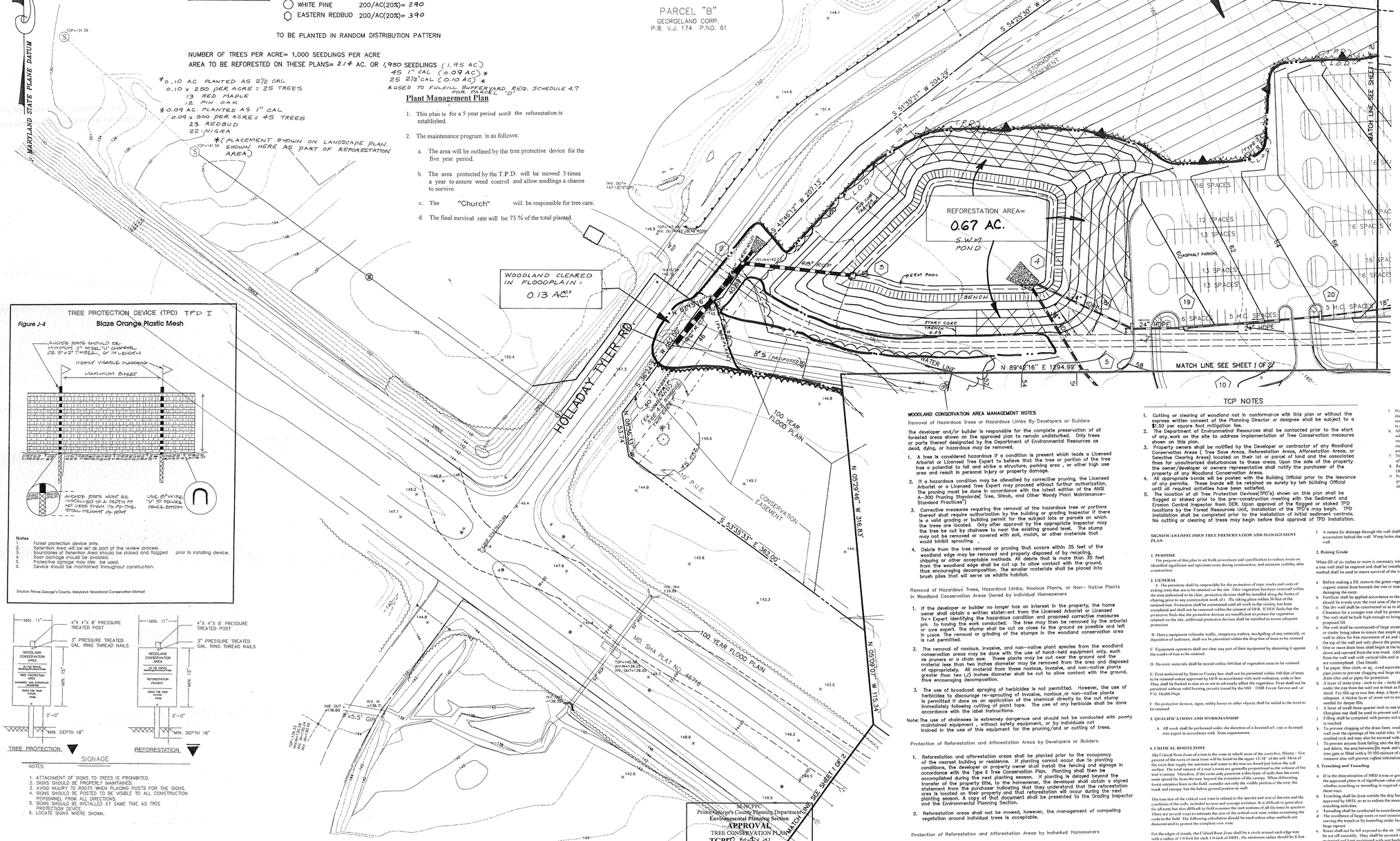
1. This plan is for a 5 year period until the reforestation is established.
2. The maintenance program is as follows:
   a. The area will be outlined by the tree protective device for the five year period.
   b. The area protected by the T.P.D. will be mowed 3 times a year to assure weed control and allow seedlings a chance to survive.
   c. The "Church" will be responsible for tree care.
   d. The final survival rate will be 75 % of the total planted.

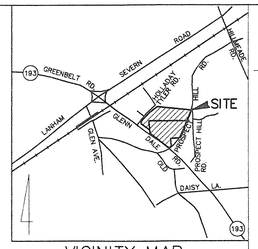


TREE PROTECTION FENCE DETAIL
FOR REFORESTATION AREA
TPD II

"HOLLADAY-TYLER RD" Sample Schedule for Section 4.2. Commercial and Industrial Landscaped Strip

1) Linear feet of street frontage, not including parking lots and driveway entrances (see Figure 4-2): 162'
2) Option selected (1,2, or 3): 3
3) Number of plants required: 25' WIDE STRIP — ___ shade trees (or equivalent ornamental or evergreen trees) ___ shrubs
4) Number of plants provided: 50' WIDE STRIP (EX. WOODLAND) — ___ shade trees ___ ornamental trees ___ evergreen trees ___ shrubs





VICINITY MAP
SCALE: 1"=2000'

NOTES:
1. EXISTING ZONING OF THE PROPERTY: R-R
2. TOTAL AREA OF PROPERTY:
3. PROPOSED NUMBER OF LOTS/PARCELS:
4. PROPOSED USE OF PROPERTY: CHURCH (TOTAL SEATS PHASE-I = 2000
5. TOTAL PARKING REQUIRED: 1 PER 4 SEATS=500 TOTAL PROVIDED= 841
6. WATER CATEGORY: 3
7. SEWER CATEGORY: 3
8. PUBLIC WATER AND SEWER SYSTEMS ONLY.
9. TAX MAP #36, GRID C-3
10. ADC MAP #9, GRID D-11,12
11. 200' MAP REFERENCE: 209NE10
12. NO KNOWN HISTORICAL SITE AFFECTED BY THIS PLAN.
13. FLOODPLAIN:
14. EXISTING WATERS OF THE US AS SHOWN
15. SEE STORMWATER CONCEPT CSD#
16. BOUNDARY BY C.D.D.I.
17. SETBACKS:
    FRONT: 25'
    SIDE: 8'/17'
    REAR: 20'
18. AREA OF ROAD DEDICATION:
19. NO CEMETARIES ON SITE
20. AREA OF 25% SLOPES:
21. POLICE DEPARTMENT: GLENN DALE-1/2 MILE
22. FIRE DEPARTMENT: GLENN DALE CO.18 1/2 MILE
23. PROPERTY INCLUDED:
    L. 13200 F. 589
    L. 13200 F. 600 — TOTAL PARCEL "C"
    L. 13986 F. 046
    TOTAL THIS PLAN: 32.16 ACRES

CAPITOL DEVELOPMENT DESIGN, INC.
ENGINEERS – PLANNERS – SURVEYOR'S
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REID TEMPLE A.M.E. PROPERTY

P/O L. 13200 F. 589 AND L. 13200 F. 600
BOWIE (14th) ELECTION DISTRICT
PRINCE GEORGE'S COUNTY, MARYLAND

TCP II

TREE PROTECTION DEVICE (TPD) TPD I
Figure J-4 Blaze Orange Plastic Mesh

Notes
1. Forest protection device only.
2. Retention Area will be set as part of the review process.
3. Boundaries of Retention Area should be staked and flagged prior to installing device.
4. Root damage should be avoided.
5. Protective signage may also be used.
6. Device should be maintained throughout construction.

Source: Prince George's County, Maryland: Woodland Conservation Manual

TREE PROTECTION

REFORESTATION

NOTES:
1. ATTACHMENT OF SIGNS TO TREES IS PROHIBITED.
2. SIGNS SHOULD BE PROPERLY MAINTAINED.
3. AVOID INJURY TO TREES 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 WHERE SHOWN.

SIGNAGE

LEGEND

	REFORESTATION AREA
TPD I	TREE PROTECTION DEVICE FOR REFORESTATION AREA
	REFORESTATION SIGN
TPD II	TREE PROTECTION DEVICE
	TREE PROTECTION SIGN
LOD	LIMIT OF DISTURBANCE
	STORM DRAIN MANHOLE
	UTILITY POLE
	SIGN
	TREE LINE
	SPECIMEN TREE

* SIGNIFICANT/SPECIMEN TREE MANAGEMENT NOTES (CONT.)

5. Pruning
   a. All pruning of branches shall be done to shows on the Pruning Diagram (Figure D-21). Cuts must properly to prevent additional bark from being torn from the tree. Flush cuts are unacceptable. All final cuts shall be made sufficiently close to the trunk or parent limb without cutting into the branch collar or leaving a protruding stub, so that wound closure can readily start under normal conditions.
   b. If a large amount of the root system has been impacted through compaction, damaged or killed, the crown leaf surface shall be proportionately reduced to balance the reduced root system. This may be accomplished by pruning 20 to 30 percent of the crown foliage as shown in the Crown Reduction Diagram in. If roots are cut during the winter, pruning shall be accomplished before the next growing season. If roots are cut during the growing season, pruning shall be done immediately.
6. Repair of Damage
   a. Any damage to the crown, trunk or root system of trees retained on the site shall be repaired immediately.
   b. Branches – All damaged branches shall be cut off cleanly as specified.
   c. Bark – All jagged bark wound (Figure A) shall be cut clean immediately by making all edges smooth and rounding the wounds at the top and the bottom (Figure B). In the case that callous growth has already started to grow it shall not be removed when trimming the wound.
   d. Roots – Damaged roots shall be cut off cleanly behind the damage and covered with topsoil

7. End of Construction

a. Inspection
Inspection shall be requested at the completion of construction to ensure that the work accomplished agrees with the approved Tree Preservation and Management Plan.

b. Repair
All trees that have been damaged as a result of construction activity shall be repaired as previously specified.

c. Dead or Dying Trees

1. Work shall have been accomplished as specified

2. If any trees shown on the approved plan to be saved are dead or dying due to acts of negligence by persons, they shall be removed and replaced by the permittee. The size, species, and quantity of replacement trees shall be specified by the Director based on the value of the trees that were to have been saved as determined by the formula in the latest revision of Guide for Establishing Values of Trees and Other Plants" prepared by the Council of tree and landscape Appraisers. The quantity shall be dictated by the constraints of the site.

d. Soil Aeration
Soil shall be aerated compacted over the root zone of any tree, the ground shall be aerated by punching holes with a iron bar. The bar shall be driven one foot deep and then moved back and forth until the soil is loosened. This procedure shall be repeated every 18 inches until all of the compacted soil beneath the crown of the tree has been loosened.

e. Fertilization
The permittee shall fertilize trees that in the opinion of NRD have been stressed or a damaged during construction.

1. Trees shall be fertilized in accordance with Figure A.20 Tree Planting and Maintenance Calendar
2. Fertilizer shall be applied to the soil over the feeder roots. (See Fertilization Table). In no case shall fertilizer be applied closer than three feet to the trunk.
3. Fertilizer shall be applied using approved fertilization methods and equipment.
4. Formulations and application rates shall conform to the guidelines given in the Fertilization Table.

M-NCPPC
Prince George's County Planning Department
Environmental Planning Section
APPROVAL
TREE CONSERVATION PLAN
TCPII 121-01

Approved by	Date
01	1/13/03
02	
03	
04	
05	

M-NCPPC
Prince George's County Planning Department
Natural Resources Division
APPROVAL
TREE CONSERVATION PLAN
TCP- II/121/01
BY 9/04/2002 DATE

WOODLAND CONSERVATION AREA MANAGEMENT NOTES

Removal of Hazardous Trees or Hazardous 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.

1. A tree is considered hazardous if a condition is present which leads a Licensed Arborist or Licensed Tree Expert to believe that the tree or 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(Trees, 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 by 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, Hazardous Limbs, Noxious 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 home owner shall obtain a written statement from the Licensed Arborist or Licensed Tre~ Expert identifying the hazardous condition and proposed corrective measures pri 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 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 site and disposed of appropriately. All material from these noxious, invasive, and non–native plants greater than two (2) inches diameter shall be cut to allow contact with the ground, thus encouraging decomposition.
3. The use of broadcast spraying of herbicides is not permitted. However, the use of herbicides to discourage re–sprouting of invasive, noxious or non–native plants is permitted if done as an application of the chemical directly to the cut stump immediately following cutting of plant tops. The use of any herbicide shall be done accordance with the label instructions.

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 Builders

1. Reforestation and afforestation areas shall be planted prior to the 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 Type II 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 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 Environmental Planning Section.
2. Reforestation areas shall not be mowed, however, the management of competing vegetation around individual trees is acceptable.

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 to have grown closure.
2. Reforestation areas shall not be mowed, 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 located at 14741 Governor Oden Bowie Drive, Upper Marlboro, Maryland 20772, phone 301–952–3650. Additional mitigation 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. Mowing is permitted with native grasses. Mowing of native ground covers is acceptable. Seeding with invasive grasses including any variety of Kentucky 31 fescue is not acceptable.

TCP NOTES

1. 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 $1,50 per square foot mitigation fee.
2. The Department of Environmental Resources shall 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 will be posted with the Building Official prior to the issuance of any permits. These bonds will be retained as surety by teh building Official until all required activities have been satisfied.
5. The location of all Tree Protection Devices(TPD's) shown on this plan shall be flagged or staked 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 Forest Resources Unit, installation of the TPD's may begin. TPD installation shall be completed prior to the installation of initial sediment controls. No cutting or clearing of trees may begin before final approval of TPD installation.
5. Woodland Conservation – Tree Save Areas and or Reforestation Areas shall be posted as shown at the same time as Tree Protective Device installation and or start of reforestation activities. These signs shall remain in place until *[illegible]*
6. All tree planting for woodland/replacement, reforestation or afforestation will be completed prior to *[illegible]*. Failure to establish the woodland replacement, 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 DER Inspector.
7. The DER Inspector shall be notified prior to soil preparation or initiation of any tree planting on the site.
8. Results of survival checks for all tree plantings shall be reported to the DER Inspector for that site
9. Prior to the issuance on any permits the contractor responsible for soil preparation, site preparation, and tree planting tree maintenance must be identified

SIGNIFICANT/SPECIMEN TREE PRESERVATION AND MANAGEMENT PLAN

1. PURPOSE
The purpose of this plan is set forth procedures and specification to reduce stress on identified significant and specimen trees during construction, and maintain viability after construction

2. GENERAL
A. The permittee shall be responsible for the protection of tops, trucks and roots of existing trees that are to be retained on the site After vegetation has been removed within the area authorized to be clear, protective devices shall be installed along the limits of clearing prior to any construction work of t ffic taking place within 50 feet of the retained tree. Protection shall be maintained until all work in the vicinity has been completed and shall not be removed within the consent of DER. If DER finds that the protective finds that the protective devices are insufficient to protect the vegetation retained on the site, additional protective devices shall be installed to insure adequate protection

B. Heavy equipment vehicular traffic, temporary trailers, stockpiling of any materials, or deposition of sediment, shall not be permitted within the drop line of trees to be retained

C. Equipment operators shall not clear away part of their equipment by slamming it against the trunks of trees to be retained.

D. No toxic materials shall be stored within 100 feet of vegetation areas to be retained

E. Fires authorized by State or County law shall not be permitted within 100 feet of trees to be retained unless approved by DER in accordance with such ordinance, code or law They shall be limited in size so as not to adversely affect the vegetation. Fires shall not be permitted without valid burning permit issued by the MD– DNR Forest Service and or P.G. Health Dept

F. No protective devices, signs, utility boxes or other objects shall be nailed to the trees to be retained

3. QUALIFICATIONS AND WORKMANSHIP

A. All work shall be performed under the direction of a licensed arb ;ist or licensed tree expert in accordance with State requirements

4. CRITICAL ROOTS ZONE
The Critical Root Zone of a tree is the zone in which most of the roots live, Ninety – five percent of the roots of most trees will be found in the upper 12–18" of the soil Most of the roots that supply the nutrients and water to the tree are found just below the soil surface The total amount of a tree's roots are generally proportional to the volume of the tree's canopy Therefore, if the roots early penetrate a thin layer of soils then the roots need spread far from the tree, beyond the extension of the canopy When delineating forest retention lines in the field, consider not only the visible portion of the tree, the trunk and canopy, but the below ground portion as well

The true size of the critical root zone is related to the species and size of the tree and the conditions of the soils, included texture and average moisture. It is difficult to generalize for all trees but also difficult to field examine the root systems of all the trees in question There are several ways to estimate the size of the critical root zone within examining the roots in the field The following calculation should be used unless other methods are demonstrated to protect the complete root zone

For the edges of stands, the Critical Root Zone shall be a circle around each edge tree with a radius of 1 0 foot for each 1 0 inch of DBH (the minimum radius should be 8 feet

For Retention Areas less than 100,000 square feet and isolated specimen trees, the Critical Root Zone should be a circle around each edge tree with a radius 1 5 feet for each 1 0 inch of DBH

Inclusion of a tree inside the retention area will require an evaluation of its resistance to disturbance This will require an examination of pest or disease infestation, tree decay, susceptibility to windthrow, and soil compaction

5. PROTECTION DEVICES

A. Grade Change

1. Lowering Grades
Grade cuts of 12 inches or more which, in the determination of NRD, are harmful to trees, shall be reduced or eliminated within the drip line of trees to retained by the construction of a tree well Once grade has been lowered, the wall shall be constructed within two weeks

a When excavating, all tree roots that are exposed and or damaged shall be trimmed cleanly, and covered temporarily with moist peat moss, burlap or other suitable material to keep them from drying out
b Tree walls shall be constructed in accordance with the Tree Wall detail
c The back fill shall consist of top soil to retain moisture and aid ccrv development
d Fertilizer shall be applied according to the Fertilization Table Fertilizer should be evenly over root area of the tree affected (see Figure D-3)
e The tree crown shall be pruned in accordance with specifications, reducing the leaf surface to compensate for root loss
f A means for drainage through the wall shall be provided so water will not accumulate behind the wall. Weep holes shall be required with a solid masonry wall

2. Raising Grade

When fill of six inches or more is necessary within the drip line of a tree to be trained, a tree wall shall be required and shall be installed prior to any filling The following method shall be used to insure survival of the tree

a Before making a fill, remove the green vegetation, sod, leaf litter and other organic matter from beneath the tree or trees and loosen the surface soil without damaging the roots
b Fertilizer shall be applied accordance to the Fertilization Table (Detail). Fertilizer should be evenly over the root area of the trees affected
c The dry well shall be constructed so as to allow for tree trunk diameter growth Clearance for a younger tree shall be greater than that for an older tree
d The well shall be built high enough to bring the top just above the level of the proposed fill.
e The well shall be constructed of large stones, brick, building tile, concrete blocks, or cinder beag taken to insure that ample openings will be left through the wall of the well to allow for free movement of air and water Mortar shall be used only near the top of the well and only above the potton fill
f One or more drain lines shall begin at the lowest point inside the well and extend down and outward from the tree trunk Additional drain lines shall also radiate out from the well wall with vertical tiles and or pipes being used if fills over two feet are contemplated (See Detail)
g Tar paper, filter cloth, or aq ,ovel equivalents shall be placed over the tile and or pipe joints to prevent clogging and large stone shall be placed around and over the drain tiles and or pipes for protection.
h A layer of stone (two –inch to six – inch) shall be placed over the entire area under the tree from the well out at least as far as the drip line as shown on the detail. For fills up to two feet deep, a layer of stone 8 to 12 inches thick is usually adequate. A thicker layer of stone not to exceed a maximum of 30 inches will be needed for deeper fills.
i A layer of small three–quarter inch to one inch stone covering by straw or a fiberglass mat shall be used to prevent soil sifting through the stone
j Filling shall be competed with porous soil such as top soil until the desired grade is reached
k To prevent clogging of the drain lines, crushed stone shall be placed inside the dry well over the openings of the radial tiles. Vertical tiles shall also be filled with crushed rock and may also be covered with a screen
l To prevent anyone from falling into the dry well and the accumulation of leaves and debris, the area between the trunk and the well may either be covered by an iron gate or filled with a 50 /50 mixture of crushed charcoal and sand (The latter measure also will prevent rodent infestation and mosquito breeding)

3. Trenching and Tunneling

a If in the determination of NRD a tree or group of trees shown to be preserved on the approved plans is of significant value or importance, NRD shall determine whether trenching or tunneling is required when working within the trip line of these trees
b Trenching shall be done outside the drip line of the tree unless otherwise approved by NRD, so as to reduce the amount of root area damaged or killed by trenching activities
c Tunneling shall be conducted in accordance with the specifications in Detail
d The avoidance of large roots or root concentrations shall be accomplished by coving the trench or by tunneling under large roots and zones that do not have a large taproot.
e Roots shall not be left exposed to the air The ends of damaged and cut roots must be cut off smoothly. They shall be covered with soil as soon as possible or protected and kept moistened with wet burlap or peat moss until the trench can be filled
f Trenches and tunnels shall be filled as soon as possible Air spaces in the soil shall be avoided by careful filling.
g The tree shall be mulched and fertilized to conserve moisture and stimulate new root growth and enhance general tree vigor. Fertilize according to the Fertilization Table (Detail). Broadcast fertilizer evenly over the root area of the tree affected
h If a significant amount of root system has been damaged or killed, the tree shall be pruned in accordance with Detail

4. Dead or Dying Trees

a In the event may tree or portion thereof is dead or dying due to environmental changes brought about by required to take such action as required to take such action as requested by NRD or DER to eliminate the hazard carefully
b Trees that required to be removed by the permittee shall be cut down flush with ground (within 2 inches of the soil) to prevent the creation of a new hazard. If site conditions interfere with the permittee's ability to do this, then an improved stump shall be removed with the permittee's ability to do this, then an improved stump can be left or must be removed with the removal of a tree
c If a stump created by the removal of a hazardous tree is determined by NRD to pose a hazard in itself, i.e. jagged stumps, stumps of hollow trees, then the stump shall be removed by acceptable means in conjunction with the removal of the tree
d It shall be the responsibility of the permittee to obtain written permission from the property owner or high point to enter upon such property for the purpose of complying with the paragraphs above, prior to commencing remedial action. In the event such permission is denied and such denial is demonstrated to the satisfaction of the paragraphs above
When trees must be felled, removed, or pruned as a result of the paragraphs above, the wood from these operations shall remain the property of the property owner

SEE *

REVISIONS
5-29-02 REV. LIMITS & AREAS
8-10-02 REF. PROPERTY LINES REVISED. REV. FOR CHURCH COMMENTS REF. METES AND BOUNDS. REF. TREE SURVEY. REF. PRESERVATION AREA. WOODLAND CONSERVATION NOTES ADDED & REVISED. REF. SIGNAGE. REVISED & ADDED. REF. PARCEL "D" ADDED. REFORESTATION ADDED & REVISED. REF. LARGER CAL. TREES WHERE NEEDED. SEE *

DATE:	MAY,2002
DWN. SFP	CHECKED VC
SCALE:	1"=50'
PROJECT/FILE NO.	99004
SHEET NO.	2 OF 2

5-29-02