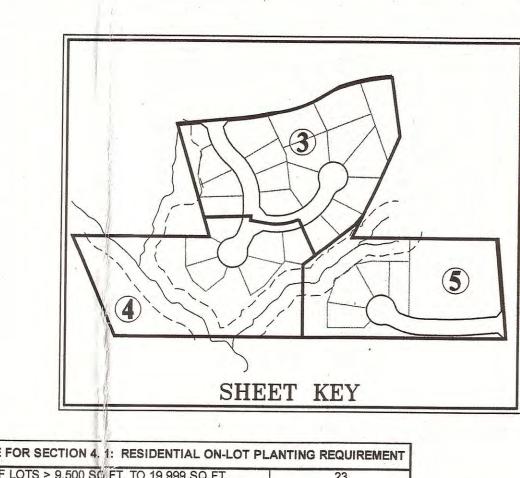
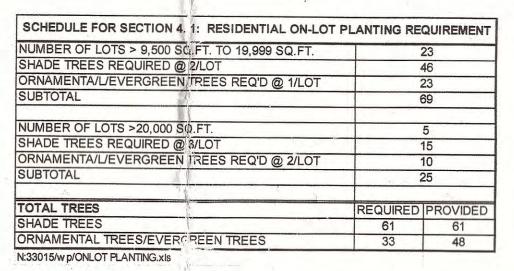


DETAIL - SHRUB PLANTING

Plotted: Nov. 25, 2005

DETAIL - TREE PLANTING

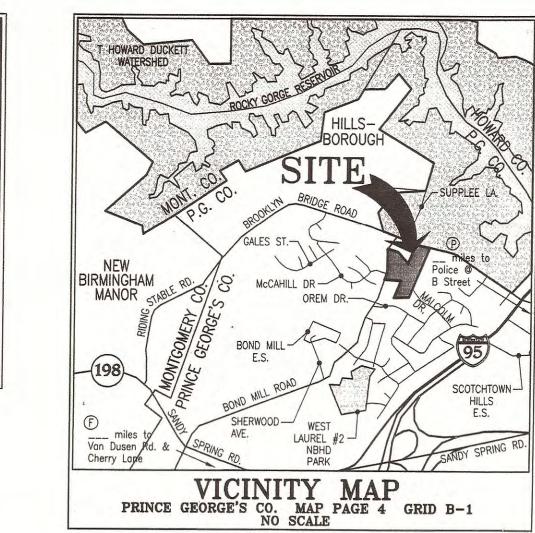




Buffering Residential De	Schedule	and the second of the second o
	nd Mill Road (Collector)	Hall I had a large of the state
1. Linear Feet of Street Frontage Towards Whi		117'
Minimum Width of Required Buffer		35'
3. Number of plants required:	.5	shade trees
	18	evergreen trees
	35	shrubs
4. Number of plants <u>provided:</u>	3	shade trees*
The state of the s	4	ornamental trees
	18	evergreen trees
	35	shrubs
* Ornamental trees used in place of shade tree	s on a two-to-one basis	Control of the state of the sta

		PLANTING SCHEDU	LE	
Quantity	Symbol	Scientific Name	Common Name	Planting Size
Shade T	ree			
29	AR	Acer rubrum 'October Glory'	October Glory Maple	2 1/2" - 3" cal.;B&E
7	BN	Betula Nigra 'Heritage'	Heritage River Birch	8'-10' ht.; B&B
5	LS	Liquidambar Styraciflua 'Rotundiloba'	Fruitless Gum Tree	2 1/2" - 3" cal.;B&B
28	QR	Quercus Rubra	Northern Red Oak	2 1/2" - 3" cal.;B&I
Evergre	en Tree			1
54	10	llex opaca	American Holly	8'-10' ht.; B&B
18	CU	Cupressocyparis Leylandii	Leyland Cypress	8'-10' ht.; B&B
6	CG	Cedrus Atlantica 'Glauca'	Atlas Cedar	8'-10' ht.; B&B
Ornamer	tal Tree			
6	AL	Amalanchier laevis	Serviceberry	7' -9' ht.; B&B
16	CC	Cercis canadensis	Eastern Redbud	7' -9' ht.; B&B
6	PY	Prunus x yeodensis	Yoshino Cherry	7' -9' ht.; B&B
2	JS	Styrax Japonicum	Japanese Snowbell	7' -9' ht.; B&B
Shrub	*			
63	HQ	Hydrangea quercifolia	Oakleaf Hydrangea	30-36"; B&B
26	RY	Rhododendron yakashimanum	Yakushima Rhododendron	2 gal. cont.
9	VT	Vibumum plicatum tomentosum	Doublefile Viburnum	5 gal. cont.
Grasses	& Peren	nials		V
6	CL	Calamagrotis acutiflora 'Karl Foerster'	Feather Reed Grass	3 gal. cont.
28	SS	Salvia x supe : a	Violet Sage	2 gal. plant 2' o.c.
*** Quantit	ies to be	verified by land-pape contractor at time	of installation	
The state of the s		STREET TREE PLANTING	SCHEDULE	
Quantit	Symbo	I Scientific dame	Common Name	Planting Size
40	AR	Acer rubrum 'October Glory'	October Glory Maple	2 1/2" - 3" cal.;B&
17	GT	Gleditsia Tri scanthos Var. Inermis 'Shademaster'	Shademaster Thomless Honeylocust	
21	QW	Quercus Phellos	Willow Oak	2 1/2" - 3" cal.;B&

1	STO	RMWATER	MANAGEMENT PL	ANTING SCHEDULE	
Quantity	Symbol	Scientific N	ame	Common Name	Planting Size
Ornamen	tal Tree		K	Fire a second	
10	AL	Amalanchier	aevis	Serviceberry	7' -9' ht. ; B&B
Shrub	1				9
25	HQ	Hydrangea qu	iercifolia	Oakleaf Hydrangea	30-36"; B&B
19	VO	Viburnum op	ulus	European Cranberrybush	24-30"; B&B
19	VT	Viburnum plic	atum tomentosum	Doublefile Viburnum	30-36"; B&B



L	110 DOMINE	
GENERAL NOTES		
Zoning		RR - Cluster
No. Of Lots Proposed	**.	28
Max. Allowed		40
Areas:		
Gross Tract Area For Total	Site	20.91 Ac.
Required Street Dedication	1	0.18 Ac.
Bond Mill Road: O		
Brooklyn Bridge R	load: 0.07 Ac.	
100 Year Flood Plain		1.92 Ac.
Net Tract Area		18.81 Ac.
Wetlands		0.40 Ac.
Proposed open area		7.27 Ac.
Parcel A = 0.33 A		
Parcel B = 6.94 A	Ac.	
Vater/Sewer Categories		W-3/S-3
Method Of Stormwater Manage		Low Impact Development
SWM Concept A	Approval #33343-2003-0	O, Approved Oct. 13, 2003
opographical Information From	Prince George's County Ac	enal
Boundary Information From Char	les P. Johnson & Associate	s, Inc.
Contour Interval		2'
V.S.S.C. Datum Used		
ax Map Reference		O2/E3
Minimum Development Standards	5	
R-Cluster		
and the latest and th	Cluster Dev.	
ot Area:	10,000 sq. ft.	
ot Coverage:	30%	
ot Width, at bldg. Line	75 ft.	
at street line	50 ft.	
ard Setbacks: Front:	25 ft.	
Side:	8/17 ft.	
Rear:	20 ft.	
Mandatory dedication of parkland	d (24-134 (1))	
5% of 20.75 ac. or 1.1 ac.		
. Existing home on P. 58 (Pro		
2. All Sitings are conceptual ur		
3. There are no cemeteries with	thin this site.	
. There are no known cultural	features or historic sites w	othin or adjacent to this site.
. This plan should not be used		
		ecorded information, please see
record plats or applicable re		
5. Stormwater Management Co		2003-00, dated October 13.
2003	Charles of the control of State (1975)	
'. All units sited must have a mi	nimum finished living area o	of 2,600 square feet.
. A minimum of 60% of all units		
	I will be a light it willed!	

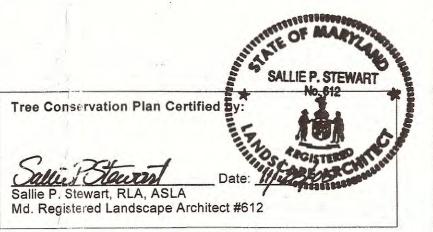
Type II - TREE CONSERVATION PLAN Cover, Landscape Schedules Sheet 2 TCP II Details

Preliminary Plan #4-03013, Approved February 3, 2004

N:|3 | 100|wp|SITE PLAN|Phase 3-Landbay K & L|Sheet Index-TCP|| .doc

Sheets 3-5 30-Scale Landscape \$ TCP | Plans

DSP-04008



12/1/05

Sallie P. Stewart, RLA, ASLA Md. Registered Landscape Architect #612	LANDSCAPE & TYPE II TREE CONSERVATION PLAN  BOND MILL STATION APPROVI  PLAN  LAUREL (10th) ELECTION DISTRICT
M.N.C.P.P.C. Prince George's County Planning Department	PRINCE GEORGE'S COUNTY, MARYLAND
APPROVAL TREE CONSERVATION PLAN  CCP II/ 62 / 05  Approved by	Charles P. Johnson & Associates, Inc. PLANNERS • ENGINEERS • LANDSCAPE ARCHITECTS • SURVEYORS 1751 ELTON ROAD SUITE 300 SILVER SPRING, MARYLAND 20903 Phone: (301)434-7000 E-mail:ss@cpja.com Fax: (301)434-9394 FREDERICK, MD FAIRFAX, VA

RELIMINARY PLAN NO: SITE PLAN NO:

MLB

DSP-04008

BOND MILL STATION APPROVED PLAN
LAUREL (10th) ELECTION DISTRICT

BOND MILL, L.L.C. 2900 LINDEN LANE, SUITE 200 SILVER SPRING, MD 20910 COPYRIGHT © LATEST DATE HEREON CHARLES P. JOHNSON & ASSOCIATES, INC. ALL RIGHTS RESERVED, UNAUTHORIZED USE OR REPRODUCTION IS PROHIBITED.

NOV. 2004 SCALE 1"/100' 33-015-22 D

Dwg: N:\33015\dwg\22-00S1 Xrefs: TOPO/22-00/21-00/44-099/46-099/53-00

# PLANTING PROCEDURES FOR REFORESTATION AREAS (LANDSCAPE AND SEEDLING STOCK)

Results of survival checks for all tree planting shall be reported to DER.

\* Planting window for bare root seedings - December 1st - April 30th . Planting window for landscape stock - March 1st - December 30th. No planting will occur while the ground is frozen. \* Species List - Based on the native forest association of the area in which Bond Mill Station

Community is located (see "Reforestation Plant Lists"). \* Seeding size to be 1/4" to 1/2" caliper with roots not less than 8' long. Landscape stock to range

\* Spacing and Quantity - See "Reforestation Plant Lists".

\* Layout - For seedlings see "Planting Layout" detail. For landscape stock - see TCP-II planting plan. \* The designated regulatory agency shall inspect site.

\* No tree shelters are to be used for seedlings unless excessive deer browse is evident or adjacent infestations of invasive species are present. Tree shelters increase native cavity nesting bird mortality and inhibit plants' ability to establish root systems.

\* Each individual seedling is to be flagged with florescent flagging tape and mulched with 2" of composted wood chips or shredded hardwood mulch for maintenance and monitoring purposes. \* Each landscape tree should be mulched with 2-3" of composted shredded hardwood mulch unless they are in a planting bed where mulch will be spread throughout.

## SITE PREPARATION (EXPOSED AND NEWLY GRADED SOILS)

aluminum and soluble manganese).

1) Contractor is to perform soil tests in proposed planting areas prior to site preparation, to identify potential nutrient and pH deficiencies. 2) Soils shall be free of contaminants (oil products, concentrated soluble salts, ferrous iron, soluble

3) Apply soil amendments, if specified, prior to tilling, discing, raking, final grading, etc. Soil amendments are to be determined by the University of Maryland Cooperative Extension Service or a qualified Ecologist based on soil test results.

4) Flat areas and slopes up to 3:1 shall be loose and friable to a depth of at least 6 inches. The top layer of soil shall be loosened by raking, discing or other acceptable means before seeding. 5) Slopes steeper than 3:1 grade shall have the top 1-3 inches of soil loose and friable before

6) Seed and fertilizer. Seed with a hydroseeder for sites larger than one half acre. Dry seed with a manual centrifugal spreader for sites less than one half acre or that are inaccessible to hydroseeding equipment (see seeding specifications to follow for either method used). Fertilizer is to be incorporated into the hydroseed mix if hydroseeding is performed, or it is to be applied with a manual centrifugal spreader if dry seeding is the method used. Fertilizer type, analysis, and application rate to be determined by University of Maryland Cooperative Extension Service or a qualified Ecologist based

7) Herbicide applications for the control of invasive species after planting will be done as part of the maintenance agreement, only with written permission from Environmental Planning. There will be no use of herbicides within the PMA.

## PLANT INSTALLATION METHODS

\* Auger planting method is preferred for level areas, as it creates better soil porosity by drilling a hole much larger than the root system and producing tilled backfill, see "Method for Auger Tree

\* Hand digging is acceptable in situations where the auger cannot be applied (slopes, wet areas, confined spaces, etc.) See "Planting Methods" detail.

PLANT CRITERIA FOR REFORESTATION AREAS (LANDSCAPE AND SEEDLING STOCK) \* Plants supplied shall conform in all respects to the current edition of the American Standard for Nursery stock (ANSI Z60.1). They shall be nursery grown in accordance with good horticultural practice and grown under climatic conditions similar to those in the locality of the project. Plant names

\* Prior to planting, protect plants at all times from sun and drying winds. Plants that cannot be planted immediately shall be kept in the the shade, and kept well watered. Plants shall not remain unplanted for more than three (3) calendar days unless adequate irrigation and protection from the elements is provided

shall be those given in the edition of Standard Plant Names, American Joint committee on Horticultural

\* Plants shall not be bound with wire or rope at any time so as to damage the bark or break branches or

\* Plants shall be sound, vigorous and healthy. They shall be free of disease and insect pests and shall have healthy, well developed root systems. Trunks and branches shall be free of cuts and abrasions over

\* Container-grown plants shall not have roots that encircle the rootball. \* All plants shall be certified pest-free by the Department of Agriculture of the state of origin.

#### SPECIFICATIONS FOR HYDROSEEDING ALL REFORESTATION AREAS WITH A STABILIZATION SEED MIX (SWM POND AREA EXCLUDED)

Apply seed upon the completion of site preparation (herbicide application, topical or incorporated soil amendment applications grading, etc.)

\* Stabilization seed mix to consist of a non-turf building ground cover. I. State certified weed free seed (labeled) graded. II. Rate - 50 lbs/acre (for disturbed, exposed or newly graded soils and overseeding existing

the seeding shall be immediate without interruption.

vegetation with less than 60% cover). Note: For best success rates under drought conditions ie; unusually dry seasons, S/W facing slopes, sandy soils etc., the application rate should be reduced to 25-30 lbs/acre III. Apply seed uniformly with a hydroseeder. The slurry includes seed, fertilizer, mulch binder (where applicable) on a firm, moist seedbed. Note: The seed and fertilizer will be mixed on site and

\* Mulch Binder (for 20% or greater exposed soils only). Utilize only wood cellulose fiber mulch as manufactured by Conwed, or an approved equal. Mulch at the rate of 35 pounds per 1000 square feet. Do not use on sites which have more than 80% existing ground cover as seed will adhere to the vegetation causing it to dry out. On sites where exposed soils and existing ground cover exists, apply mulch binder to exposed soils only after seed has been applied to the entire site.

Type, analysis and application rates previously listed as specified by University of Maryland Cooperative Extension Service and/or a qualified ecologist based on the soil test results.

As necessary provide a water absorbing co-polymer which can absorb up to 400 times its own weight to aid in fluffing the surface soil during application and to provide a lubricant coating to protect the plant when passing through the hydroseeder nozzle.

If soil moisture is deficient, supply new seeding with adequate water for plant growth until they are firmly established. This is especially true when seeding is made in abnormally dry or hot seasons, or on adverse sites.

REFORESTATION MANAGEMENT PLAN

\* REFORESTATION SHOULD BE COMPLETED WITHIN ONE (1) YEAR OF FINAL GRADING.

\* The Contractor implementing the reforestation plan is subject to a binding maintenance agreement for the length of 5 years. IPM practices will be employed as needed to control diseased, insects and weeds. The contractor is responsible for the following:

1. Field check the planting area according to the following schedule: Year 1: 3 times (March-April), (July-August), (October-November)

Year 2-3: Twice annually (April-May), (September-October). Years 4-5: Once annually (May-September). If appropriate, remove temporary tree

protection fencing at this time. Field Data Forms (Condition check sheets) will be sent to the client after each visit. II. Watering is dependent on rainfall and the mount and frequency will vary. Plants will be

watered as needed, during years 1-3, depending on rainfall, time of season, and installation timing. III. Control of invasive species will be achieved by annually mulching individual trees with composted woodchips or shredded hardwood mulch, re-flagging them as needed and spot applications of herbicide applied directly to target species competing with reforestation plants. Be careful not to spray herbicide onto or inside the critical root zone of desirable plants.

IV. Fertilizing within the first 3 years of the maintenance period may not be necessary and will be based on the soil test results and the UMCP Ext. Service Recommendations. V. Pest control is to be accomplished by identifying insect and disease, problems and applying

appropriate integrated pest management practices as needed. VI. Perimeter fencing and signage will be removed after five years based on the planting date.

VII. The Warranty service obligations are such that at the end of the 5-year period, at (1,000) seedlings per acre or (500) 1" caliper trees per acre plant survivability must be above 75% and at (200) 2 1/2" caliper trees per acre, survivability must be 10%. The applicant will be charged with a mitigation fee to restock the area and it will be levied based on the square footage of the affected area.

Protection of forest areas, as established through the forest conservation process, relies upon adherence to protection and maintenance standards during construction and preservation of these areas as undisturbed open space after construction to ensure their long-term survival. In order to provide for identification of these measures and ensure that they are carried out, refer to this Type Il Tree Conservation Plan.

#### TREE PROTECTION MEASURES

Tree protection fence and signs are to be installed along the perimeter of existing forest and individual trees to remain. It is to be installed outside of the critical root zone of the trees and the rootpruning line (if present) and will be smooth wire fencing. It is to be installed before any grading. If possible, install before sediment control measures. Necessary signage may be determined during the pre-construction meeting. Grounds maintenance staff shall be instructed to avoid disturbance within designated Conservation areas. Root Pruning is to be performed as per TCP-II, typically outside the critical root zone of specified forest edges and specified individual trees to remain. It is to be accomplished by a vibratory plow with a serrated cutting edge or a root cutter with a 36" wheel to a depth of 8". Other stress reduction/tree protection measures for individual trees should be implemented at this time.

#### TREE PROTECTION SEQUENCE

1. Pre-construction meeting: After the boundaries of the limits of disturbance have been staked and flagged, but before any disturbance has taken place on-site; a pre-construction meeting at the construction site shall be held. The developer, contractor, or project manage, all construction personnel, contracted tree professional and appropriate local inspectors shall attend. The purpose of the meeting will be to field verify the limits of clearing as specified on the plan and make any necessary adjustments. They will authorize installation of protection devices and determine location and quantity of

of the protection devices before construction is authorized to begin. 2. Tree protection measures and devices shall be implemented after the pre-construcion meeting and prior

responsibilities and discuss violation penalties. An additional inspection may be required after installation

to any disturbance or clearing activity including erosion control devices.

Root prune all designated areas.

5. Install tree protection fence and signs (see detail on sheet 1). To be maintained at least through the construction period for retention greas, and through the 2-year maintenance period for reforestation areas unless waived by county inspector.

6. When silt fence is specified, it should be positioned outside of the tree protection fence. In areas where silt fence and tree protection fence are to be used a "combination tree protection silt fence" can be used instead. This determination can be made at the pre-construction meeting (see alternative fence detail on sheet 1).

7. Approved clearing will take place after all tree protection measures are completed and will occur outside the tree protection fence

8. Upon completion of construction, corrective measures may include: Removal of dead or dying trees, pruning of dead or declining limbs, soil aeration, fertilization, watering of specimen tress when specified, and clean-up of retention areas.

9. Inspection and approval by regulatory agency for Prince George's County.

3. If pruning is specified, do so before installing fence to avoid damage to fencing.

10. Removal of temporary protective measures, such as tree protection fence and signs.

# 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, or hazardous may be removed.

A tree is considered hazardous if a condition is present which leads a Licensed Arborist or a Licensed Tree Expert may proceed without further authorization. The pruning must be done in accordance with the latest edition of the ANSI A-300 Pruning Standards ("Tree, Shrub, and Other Woody Plant Maintenance - Standard Practices").

If a hazardous condition may be alleviated by corrective pruning, the Licensed Arborist or a Licensed Tree Expert may proceed without further authorization. The pruning must be done in accordance with the latest edition of the ANSI A-300 Pruning Standards ("Tree, Shrub, and Other Woody Plant Maintenance - Standard Practices")

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 lost or parcels which the trees are located. Only after approval of the appropriate inspector may the tree be cut by chainsaw to near the existing ground level. The stump may not be removed or covered with soil, mulch or other materials that would inhibit sprouting.

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, Invasive Plants or Non-Native

Plants in Woodland Conservation Areas Owned by Individual Homeowners.

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 areas is not permitted.

The removal of noxious, invasive, and non-natives plant species from the woodland conservation areas may be done with the use of hand-held equipment only such as pruners or a chain saw. These plants may be cut near the ground and the material less than two inches diameter may be removed from the area and disposed of appropriately. All material from these noxious, invasive, and non-native plants greater than two (2) inches diameter shall be cut to allow contact with the ground, thus encouraging decomposition.

The 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.

te: 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

# rotection of Reforestation and Afforestation Areas by Developers or Builders

the pruning and/or cutting of trees.

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 approved 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.

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

Protection of Reforestation and Afforestation Areas by Individual Homeowners

Reforestation fencing and signage shall remain in place in accordance with the approved Type Tree II Tree Conservation Plan or until the trees have grown sufficiently to have crown closure. Reforestation areas shall not to be mowed, however, the management of competing vegetation around individual trees is acceptable.

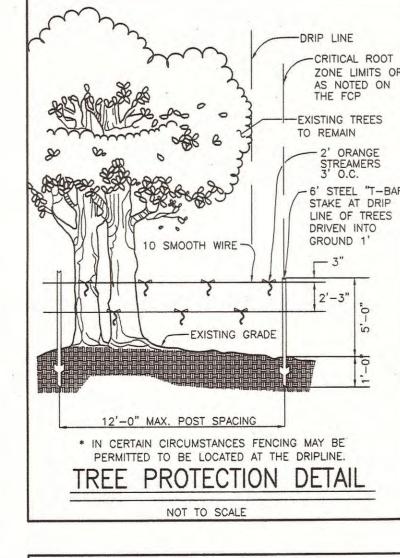
# Voodland Areas NOT Counted as Part of the Woodland Conservation Requirements

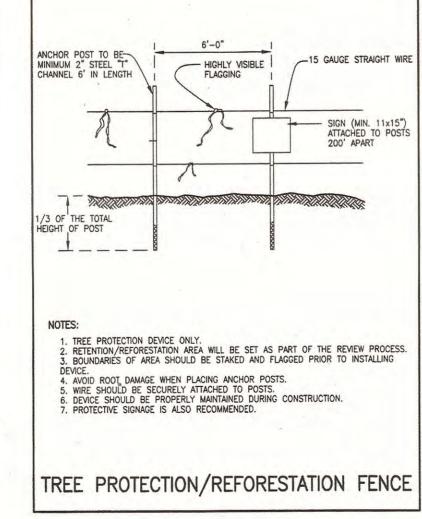
A revised Tree Conservation Plan is required prior to clearing any woodland area which is not specifically identified to be cleared on the most recently approved Type II Tree Conservation (TCP) on file in the office of the M-NCPPC, Environmental Planning Section located on the 4th flood of the County Administration Building 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.

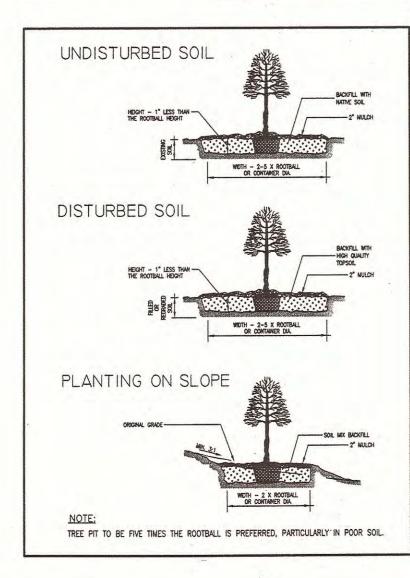
Homeowners or property owners may remove trees less than two (2) inches diameter, shrubs, and vines in woodland areas which are saved but not part of the Woodland Conservation requirements after all permits have been released for the subject property. This area may not be tilled or have other ground disturbances which would result in damage to the tree roots. Raking the leaves and overseeding with native grasses, native flowers or native groundcover is acceptable. Seeding with invasive grasses including any variety of Kentucky 31 fescue is not acceptable.

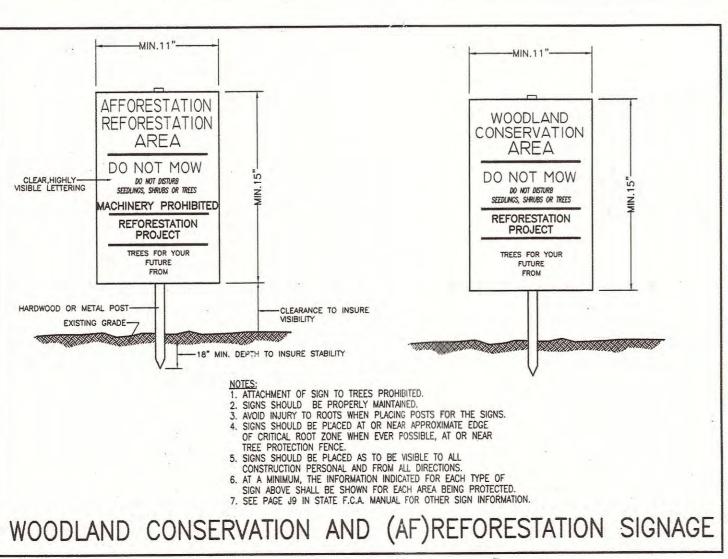
R:\BLOCKS\SI\FCP\Hazardous trees.doc

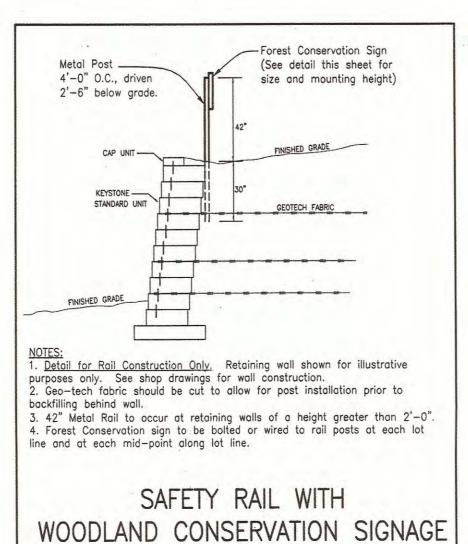
# FILTER CLOTH ON WIRE MESH 10' MAX. BETWEEN POSTS 6"MAX. MESH OPENING 2. RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS. 3. BOUNDARIES OF RETENTION AREA SHOULD BE STAKED PRIOR TO INSTALLING DEVICES. 4. AVOID ROOT DAMAGE. 5. MOUND SOIL ONLY WITHIN THE LIMITS OF DISTURBANCE. 6. PROTECTIVE SIGNAGE IS REQUIRED. 7. ALL STANDARD MAINTENANCE FOR SEDIMENT CONTROL DEVICES APPLY TO THESE DETAILS. SOURCE: PRINCE GEORGES COUNTY, MARYLAND WOODLAND CONSERVATION MANUAL ADAPTED FROM MARYLAND STATE FOREST CONSERVATION MANUAL TREE PROTECTION AND SEDIMENT CONTROL











Standard Type II Tree Conservation Plan 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 / square foot The Department of Environmental Resources, (DER) must be contacted prior to the start of any work on the site to address implementation of Tree Conservation measures shown on this Plan.

Property owners shall be notified by the Developer or Contractor of any Woodland Conservation

Areas, (Tree Save Areas, Reforestation Areas, Aforestation 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 Owner Representative shall notify

All appropriate bonds will be posted with the Building Official prior to the issuance of any

permits. These bonds will be posted with the Building Official until all required activities have

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

The location of all Tree Protective Devices, (TPDs,) shown on this Plan shall be flagged or staked

in the field prior to the pre-construction meeting with the Sediment and Erosion Control Inspector

from DER. Upon approval of the flagged or staked TPD locations by the Inspector, installation of

the TPDs may begin. TPD installation shall be completed prior to installation of initial sediment

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

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

The DER Inspector shall be notified prior to soil preparation or initiation of any tree planting on

Results of survival checks for all tree plantings shall be reported to the DER Inspector for that site

Prior to issuance of any permits, the Contractor responsible for soil preparation, site preparation,

PLANTING LAYOUT

SAMPLE PLOT = .44 ACRES, ALL 154 PLANTS PLANTS ARE NOT SHOWN ON SKETCH (TO AVOID, CONFUSION

feathers out along the edges.

elongated and lear drop in shape

O "SHRUB O TREE A.B.C. "DIFFERENT SPECIES - ORIFT PATTERNS

Application: This does not mean that plants must be in a grid pattern, that drifts of

and the careful consideration of the installer.

PLANTING METHOD

(1-3 gallon container grown stock)

Begin planting upon the completion of site preparation

2. Dig hole twice the width and no deeper than the actual

size of the root ball. Scarify the sides of the hole to

3. Silce sides of the root ball if pot bound, and place onto the bottom of the hole. Hele should be the same depth

as the root ball. Do not butterfly root ball, as this method

causes air pockets. Backfill with the existing native soil.

A polymer gel soil moisture enhancer mixed into backfill

soil is optional depending on site conditions.

4. Tamp existing back fill soil around root ball. Avoid

applied during site preparation.

TASKS

PLANTING SEEDINGS. UAIPS

PERTILIZER

GREATLY RECOMMENDED

- RECOMMENDED

RECOMMENDED WITH ADDITIONAL CARE

DEPENDANT UPON SITE CONDITIONS

WATER .

excessive tamping and other soil compacting activities

5. No fertilizer is necessary at the time of planting because site specific fertilizer determined by soil test results was

6. Mulch with 3" of shredded hardwood mulch, shredded

MONTHS

FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV I

pinebark mulch or composted woodchips.

Water all plants at the time of initial planting

\_\_\_\_\_

\* ACTIVITIES DURING THESE MONTHS ARE DEPENDENT UPON GROUND CONDITIONS

The planting and care of trees is most successful when coordinated with the local climatic conditions. This calendar summarizes some of the recommended time frames for basic reforestation and stress reduction activities.

DEPENDANT UPON SITE CONDITIONS: WEEKLY WATERING IS GREATLY RECONTENDED PROMI MAY THROUGH OCTOBER UNLESS WEEKLY RANFALL EQUALS I

prevent glazing and to encourage root penetration.

(see planting specifications for site specific preparation

Aggregate Drift or Sweep. A cluster type grouping which tapers or

Aggregate massing or drifts are one of the most common vegetation

distribution patterns occurring in nature. Principle seed bearers are at

the central core of the cluster with seed dispersal outwards, often

windblown with densities thinning out along the fringes or extremities.

Groupings blend through and into other groupings. Imagine the fallout of windblown milkweed seeds. They often appear as aggregate drifts,

shrubs cannot blend into groupings of trees or that groupings of same

species cannot occur together. It simply means that the installe

should meet the aforementioned forest conservation act criteria at the

When using this theory to lay out a planting plan the size of the drifts will depend on the quantity of plants allocated, the scale of the site,

same time replicating natures aggregate drift patterns (see detail).

(AGGREGATE DISTRIBUTION DRIFT THEORY)

Controls. No cutting or clearing of trees may begin before final approval of TPD installation.

the Purchaser of the property of any Woodland Conservation Areas.

to issuance of any permits for the subject property.

written extension is approved by the DER Inspector.

and M-NCPPC, Environmental Planning Section.

ree planting and tree maintenance must be identified.

signs shall remain in place.

4:\33015\wp\TCP II Notes.doc

1. REFORESTATION INSPECTION SCHEDULE: There shall be five inspections for forest conservation. A. The first inspection shall occur after flagging/staking of the L.O.D. and/or stream buffers and prior to any clearing, grading, or sediment control measures. This inspection is to address the issues of tree protection and sediment control. The developer and representatives from M-NCPPC and MCDEP will meet to walk the proposed limits of disturbance and determine the final locations of sediment control devices and tree

B. The second inspection shall occur after placement of sediment control devices and tree protection decives and prior to clearing and grading. This inspection is to determine the completion and adequacy of protective measures.

C. The third inspection shall occur prior to planting in reforestation areas. The pre-planting inspection is to make final decisions regarding the best implementation of the Planting Plan, including, but not limited to the final placement and selection of plant species, determination of the regeneration potential of existing plants to remain, and a determination of the best edge planting treatment. The purchase and delivery of plant materials should not be made unit after this inspection, since a determination may be made in the field to alter the choice of plant material.

D. The fourth inspection shall occur immediately following the completion of the reforestation planting. This inspection is to deetermine the completion and adequacy of the planting.

E. The fifth and final inspection shall occur at the completion of the two-year maintenance program. The purpose of this inspection is to determine the success and adequacy of the mainenance program (and deer management program). Final determination will be made at this time as to whether additional plantings and a further maintenance program are necessary.

2. PRE-PLANTING CONSIDERATIONS

REFORESTATION INSPECTION AND PLANTING NARRATIVE

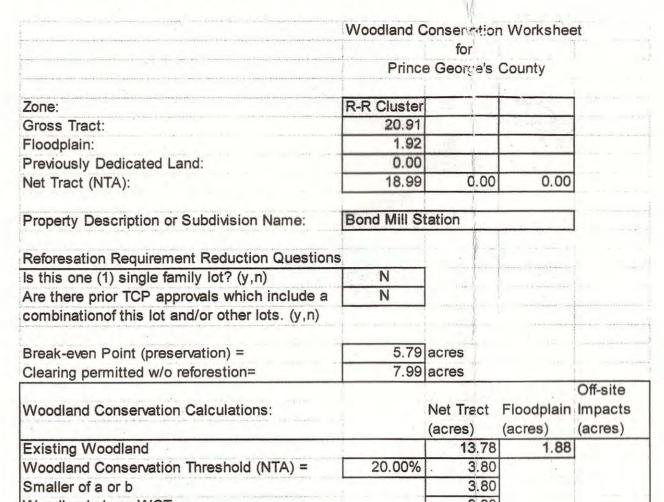
A. In areas with substantial growth of invasive groundcover species, measures shall be taken to remove and control invasives. The infested area should be mown prior to commencement of planting. Necessary weed control measure should be determined during the pre-planting inspection, including, but not limited to mulching, periodic mowing around the reforestation plantings, and fabric coverings. The use of chemical weed controls will be limited to extreme cases, and only with prior written approval by MNCPPC staff. Where periodic mowing will occur as a weed control measure, the typical tree planting distribution pattern should be modified so as to allow access by mowing equipment without damage to

B. A soils analysis will be conducted prior to commencement of reforestation on land where extensive agricultural use has occured in the past. Test pits will be dug in areas of undisturbed soil to determine if a gragipan layer is present. If fragipan is present, it should be pierced by

C. Soils should be treated by incorporating natural mulch within the top 12 inches or mulch or leaf mold compost are preferred.

auguring and planting. Holes should be dug to twice the normal diameter for the material planted.

D. If fill material is used at the planting site, it should be clean fill with 12 inches of native soil. Stockpiling of native top soils must be done in such a way that the height of the pile does not damage the seed bank.



	4	(acres)	(acres)	(acres)
Existing Woodland	7	13.78	1.88	
Woodland Conservation Threshold (NTA) =	20.00%	3.80		
Smaller of a or b		3.80		
Woodland above WCT		9.98		
Woodland cleared		8.92	0.04	0.00
Smaller of d or e		8.92		
Clearing above WCT (0.25 : 1) replacement requirement		2.23		
Clearing below WCT (2:1 replacement requirem	ent)	0.00		
Afforestation Threshold (AFT) =	0.00%	0.00		
Woodland Conservation Required		6.07		
Woodland Conservation Provided:	1	(acres)		
Woodland Preservation		3 89		:
Reforestation / Replacement		0.21		
and the second s	2.11	The second secon	and the same of th	

vvoodland Conservation Provided.	(acres)	
Woodland Preservation	3 89	
Reforestation / Replacement	0.21	
Afforestation	0/00	
Area approved for fee-in-lieu	0,00	\$0.00
Requirement for Off-site Mitigation on another property	1.97	
Off-site Mitigation provided on this property	0,00	
Total Woodland Conservation Provided	6.07	
	100	
Area of woodland not cleared 4.	.87 acres	

0.98 acres

# **BOND MILL STATION TCP II INFORMATION**

Woodland retained not part of requirements:

PROJECT NAME: BOND MILL STATION

PROJECT NUMBER: DSP-04008

M.N.C.P.P.C. APPROVALS

For Conditions of Approval see Site Plan Cover Sheet or Approval Sheet

The Revision Listed Below Apply to this Sheet

1. FLOODPLAIN STUDY BY CHARLES P. JOHNSON & ASSOCIATES - APPROVAL

2. JURISDICTIONAL DELINEATION OF WATERS OF THE US, INCLUDING WETLANDS, WAS FIELD LOCATED BY McCARTHY & ASSOCIATES AND HAS BEEN SUBMITTED TO US ARMY CORPS OF ENGINEERS FOR APPROVAL.

3. SPECIMEN TREES SHOWN ON THIS PLAN WERE FIELD LOCATED BY CHARLES P. JOHNSON & ASSOCIATES. 4. AREAS LABELED AS "WOODLAND NOT COUNTED TOWARD REQUIREMENTS" ARE AREAS OF EXISTING FOREST THAT WILL NOT BE CLEARED BUT IS NOT

COUNTED AS WCA. 5. AREAS LABELED AS "WOODLAND COUNTED AS CLEARED" ARE AREAS OF EXISTING FOREST THAT WILL BE SAVED: HOWEVER, OWNER HAS RIGHT TO CLEAR THESE TREES IN THE FUTURE. AREA COUNTED AS CLEARED EVEN THOUGH THE TREES WILL REMAIN AT THIS TIME.

SYM.	AREA (S.F.)	AREA (Ac.)	SHEET#
S-1	26122	0.60	4
S-2	838	0.02	4
S-3	34801	0.80	4
S-4	2279	0.05	4
S-5	12352	0.28	4
S-6	87093	2.00	4,5
S-7	5855	0.13	3
TOTAL	169340.46	3.89	

FOREST SAVE CALCULATIONS

REQUIREMENTS				
SYM.	AREA (S.F.)	AREA (Ac.)	SHEET#	
W-1	28035	0.64	4	
W-2	6364	0.15	4	
W-3	7153	0.16	3	
W-4	927	0.02	3	

42478.46

RE	FORESTATION	CALCULATIO	NS
M.	AREA (S.F.)	AREA (Ac.)	SHEET#
	6827	0.16	3
2	981	0.02	4
3	1341	0.03	4
TAL	9148	0.21	

(	0.21	acres at 200 3/4-1" ca	al. cont. trees/acre	42	trees
Υ		SCIENTIFIC NAME	COMMON NAME	SIZE	SPACING
	6	Acer rubrum	Red Maple	3/4' - 1" cal. Cont.	20' o.c.
	6	Carya tomentosa	Mockernut Hickory	3/4' - 1" cal. Cont.	20' o.c.
	6	Liquidambar styraciflua	Sweet Gum	3/4' - 1" cal. Cont.	20' o.c.
	6	Quercus rubra	Red Oak	3/4' - 1" cal. Cont.	20' o.c.
	9	llex opac	American Holly	6-8' in height	8' o.c.
	9	Pinus taeda	Loblolly Pine	6-8' in height	8' o.c.

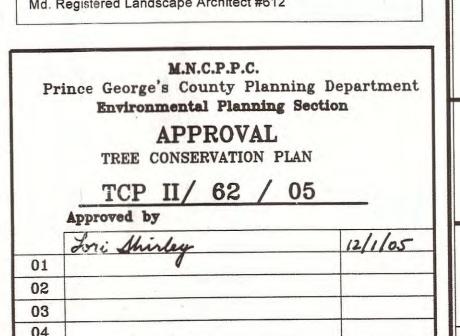
#### SPECIMEN TREE TABLE TREE ID# SPECIES & SIZE (DBH) RP TP CA SP CONDITION Adjacent to existing house-not to be disturbed Adjacent to existing house-not to be disturbed 2 36" MAPLE 3 25" WHITE PINE To Be Removed 4 30" RED OAK

(RP) - ROOT PRUNING IS TO BE PERFORMED OUTSIDE THE TREE PROTECTION FENCE AND THE CRITICAL ROOT ZONE. IT IS TO BE ACCOMPLISHED BY A VIBRATORY PLOW WITH A SERRATED CUTTING EDGE OR A ROOT CUTTER WITH A 36" WHEEL TO A DEPTH OF A 8". CHAIN DRIVEN TRENCHERS ARE NOT ACCEPTABLE.

(TP)- TOPICAL FERTILIZER IS TO BE A DRY FORMULATION FIBROUS ROOT STIMULATOR SUCH AS ROOTS 2-4-2. APPLICATION RATE: 1 LB. OF FERT / 1" - TRUNK DIAMETER THROUGHOUT ROOT ZONE. (CA)- CORE AERATION IS TO BE DONE WITH A HAND HELD MANUAL PUNCH, CORE AERATOR AT 2 HOLES PER SQ. FT.

THROUGHOUT THE ROOT ZONE. (SP)- SANITARY PRUNING IS THE REMOVAL OF DEAD DYING LIMBS ON A TREE TO IMPROVE ITS HEALTH AND APPEARANCE.





DSP-04008 5 REVISED TOTAL FLOODPLAIN AREA ON WOODLAND CONSERVATION CHART AND ADDED GUARDRAIL WITH WOODLAND CONSERVATION SIGNAGE DETAIL. MLB

TYPE II TREE CONSERVATION DETAIL SHEET

BOND MILL STATION PPROVED LAUREL (10th) ELECTION DISTRICT PLAN PRINCE GEORGE'S COUNTY, MARYLAND



BOND MILL, L.L.C.

Charles P. Johnson & Associates, Inc. PLANNERS • ENGINEERS • LANDSCAPE ARCHITECTS • SURVEYORS 1751 ELTON ROAD SUITE 300 SILVER SPRING, MARYLAND 20903 Phone:(301)434-7000 E-mail:ss@cpja.com Fax:(301)434-9394 FAIRFAX, VA

4-03103

MLB

ELIMINARY PLAN NO: SITE PLAN NO:

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NOV. 2004 FILE NO: SCALE N.T.S. 33-015-22 D

Dwg: N:\33015\dwg\22-00S2 Xref:

DSP-04008

Plotted: Nov. 25, 2005

