

GENERAL NOTES

- Subject property zoned RC-DEO per 02/02/04 Comprehensive Zoning Plan.
- Total area of property = 6.08 ac.±
- Existing 2 foot topography on site based on field run topographic survey provided by Eyett, Inc. in March 2011.
- There are no State Champion Trees on the project site.
- Per a MERLIN search on March 31, 2011, there are no critical habitats of rare, threatened or endangered species, or historic structures on the project site.
- Exploration Research, Inc. (ERI) performed a field visit on January 11, 2011 and found no wetlands on site (wetlands shown on plan are from plat #4324) and noted one stream channel present on the southern portion of the property as delineated in the wetland report dated Jan 24, 2011.

SPECIMEN TREES

NO.	DBH	COMMON NAME	SCIENTIFIC NAME	CONDITION	STATUS
ST-1	31.3"	American Beech	Fagus grandifolia	Good	Remove
ST-2	34"	Tulip Poplar	Liriodendron tulipifera	Good	Retain
ST-3	32.7"	Tulip Poplar	Liriodendron tulipifera	Fair	Retain
ST-4	32"	Tulip Poplar	Liriodendron tulipifera	Good	Retain
ST-5	30.2"	Tulip Poplar	Liriodendron tulipifera	Good	Retain
ST-6	31"	Green Ash	Fraxinus pennsylvanica	Poor	Retain
ST-7	30"	Tulip Poplar	Liriodendron tulipifera	Good	Retain
ST-8	31"	Tulip Poplar	Liriodendron tulipifera	Good	Retain

Forest Stand Delineation Narrative

This Forest Stand Delineation was prepared in accordance with the Howard County Forest Conservation Manual.

The entire site is forested. The forest is approximately 99% tulip poplar in the canopy layer. Understory includes primarily red maple, american beech and american holly. The forest contains 8 specimen trees as delineated on the plan and in the specimen tree chart. Due to the sensitive environments found within, as well as the specimen trees, this stand would be considered a high priority for retention.

FOREST STAND ANALYSIS TABLE

KEY	TYPE OF COMMUNITY	AREA Acres	SOIL INFORMATION			EXISTING VEGETATION (Type and approx. %)	STAND CHARACTERISTICS			FOREST AREA IN SENSITIVE ENVIRONMENTS	
			SOIL TYPE	TYPICAL FOREST COVER	WOODLAND SUITABILITY INDEX		HABITAT VALUE	SIZE AVG. DIAM.	AGE		GENERAL CONDITIONS
F-1	Tulip Poplar	6.08	Co	Mixed Hardwoods	75-84 oaks 65-74 pines	Good	tulip poplar 99% (canopy) red maple 25% american beech 25% american holly 10%	18-30+ 10-18 5-10 7-12	54-90 45-61 30-60	Good	1.7 ac steep slopes 15-25%; 0.5 ac steep slopes 25%+
			Ha	Water Tolerant Hardwoods	65-74 oaks 65-74 oaks	Good	N/A				
			GgC		N/A	N/A					
			MaB		N/A	N/A					
			MaD		N/A	N/A					
			MCD		N/A	N/A					

FOREST CONSERVATION WORKSHEET

Item	Description	Acres
A.	Total Tract Area	6.54*
B.	Area Within 100 Year Floodplain	2.38
C.	Other deductions	0
D.	Net Tract Area	4.16
Zoning Use Category: RESIDENTIAL-LOW DENSITY		
E.	Afforestation Minimum (20% x D)	0.83
F.	Conservation Threshold (50% x D)	2.08
Existing Forest Cover		
G.	Existing Forest on Net Tract Area	4.16
H.	Forest Area Above Conservation Threshold	2.08
I.	Forest Retention Above Threshold with no Mitigation	2.50
J.	Clearing Permitted without Mitigation	1.66
Proposed Forest Clearing		
K.	Forest Areas to be Cleared	2.32
L.	Forest Areas to be Retained	1.84
Planting Requirements		
M.	Reforestation for Clearing Above Threshold	0.52
N.	Reforestation for Clearing Below the Threshold	0.48
P.	Credit for Retention Above Conservation Threshold	0
Q.	Total Reforestation Required	1.00
R.	Total Afforestation Required	0
S.	Total Reforestation and Afforestation Requirement	1.00
* 6.08 Ac on-site + 0.46 Ac. adjacent property		

Forest Conservation Narrative

This forest conservation plan has been developed in accordance with the Howard County Forest Conservation Manual and the Forest Conservation Act of 1991.

The total tract area consists of 6.08 Ac. on-site plus 0.46 Ac. off-site disturbance for driveway access. The entire lot is currently forested, and 8 specimen trees are on the property. 1 of the specimen trees shall be removed for site grading; the others will remain. 2.38 Ac of floodplain has been netted out, leaving a net tract of 4.16 Ac.

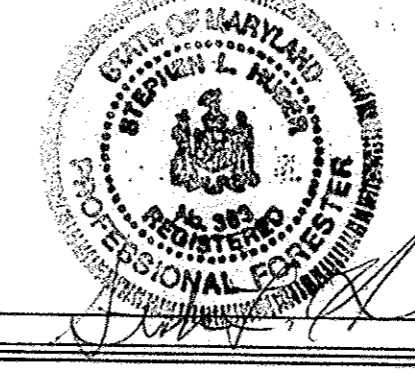
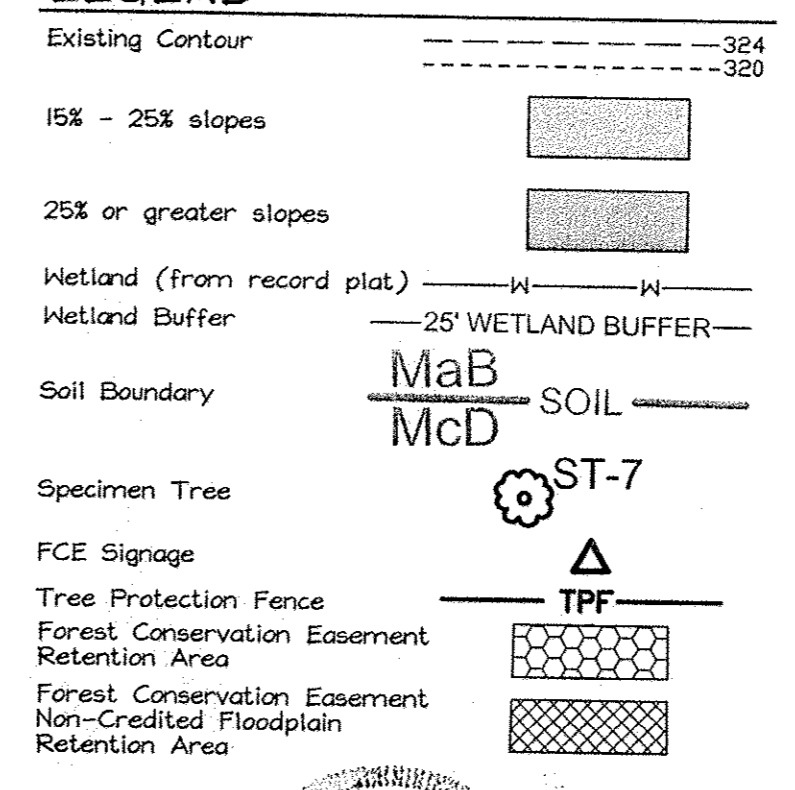
The total forest conservation obligation for the site is 2.84 acres. There shall be two easements, the first containing 0.35 acres of retained forest and the second containing 1.49 acres of retained forest. Due to space limitations on site, the client is looking into forest bank options for off-site fulfillment of the remainder of the obligation (1.00 acres, or 43,560 SF). In the case that an off-site bank cannot be found, the obligation shall be fulfilled with a fee-in-lieu payment of \$32,670.00 (\$0.75/sf for 43,560 sf).

FOREST CONSERVATION EASEMENT TABLE

EASEMENT	TYPE	AREA (ACRES)
1	RETENTION	0.35
2	RETENTION NON-CREDITED FP	1.49
TOTAL		1.87

The forest conservation easements have been established to fulfill the requirements of Section 16-1200 of the Howard County Code and the Forest Conservation Manual. No clearing, grading or construction is permitted within the forest conservation easements, however, forest management practices as defined in the Deed of Forest Conservation Easement are allowed.

LEGEND



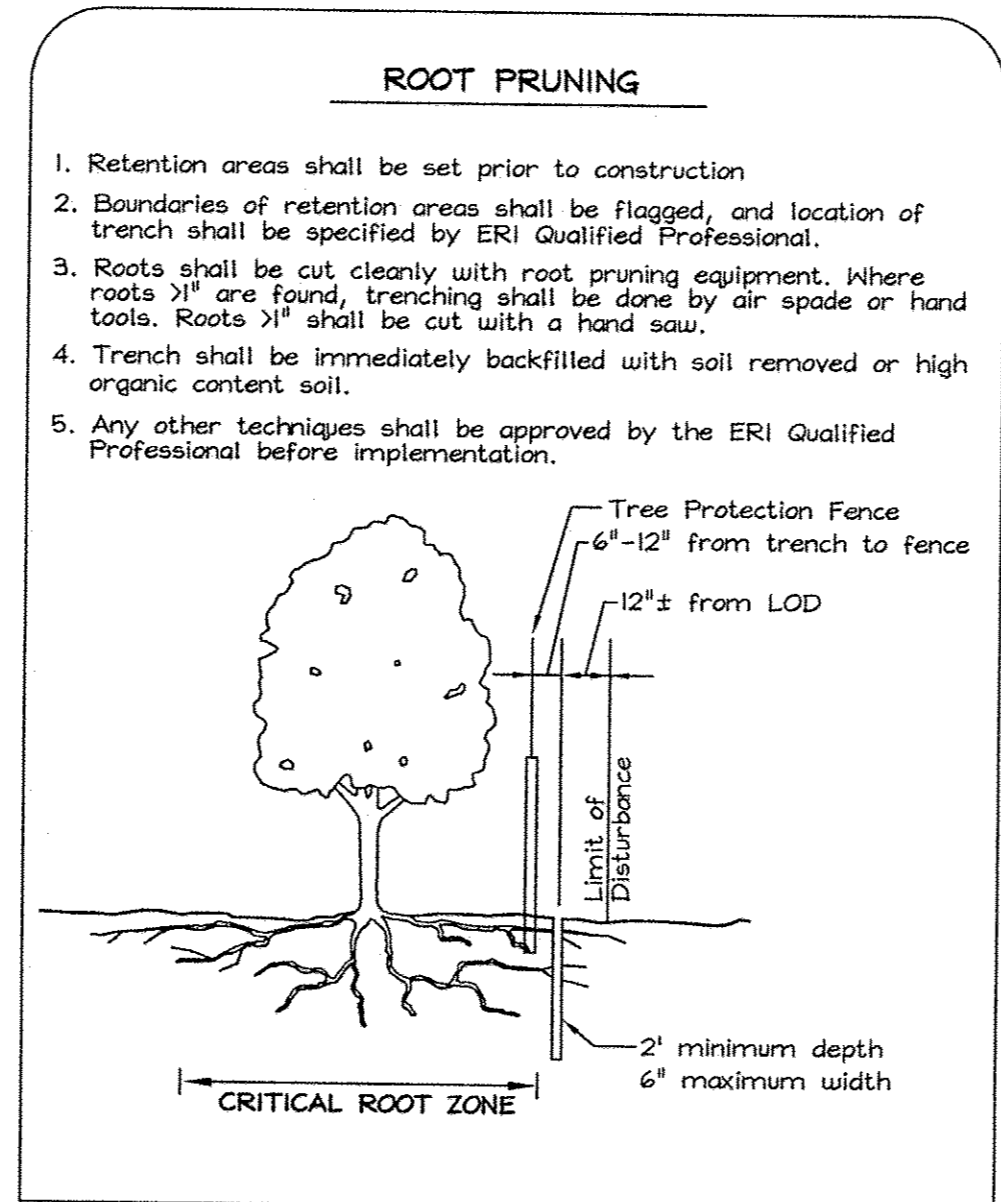
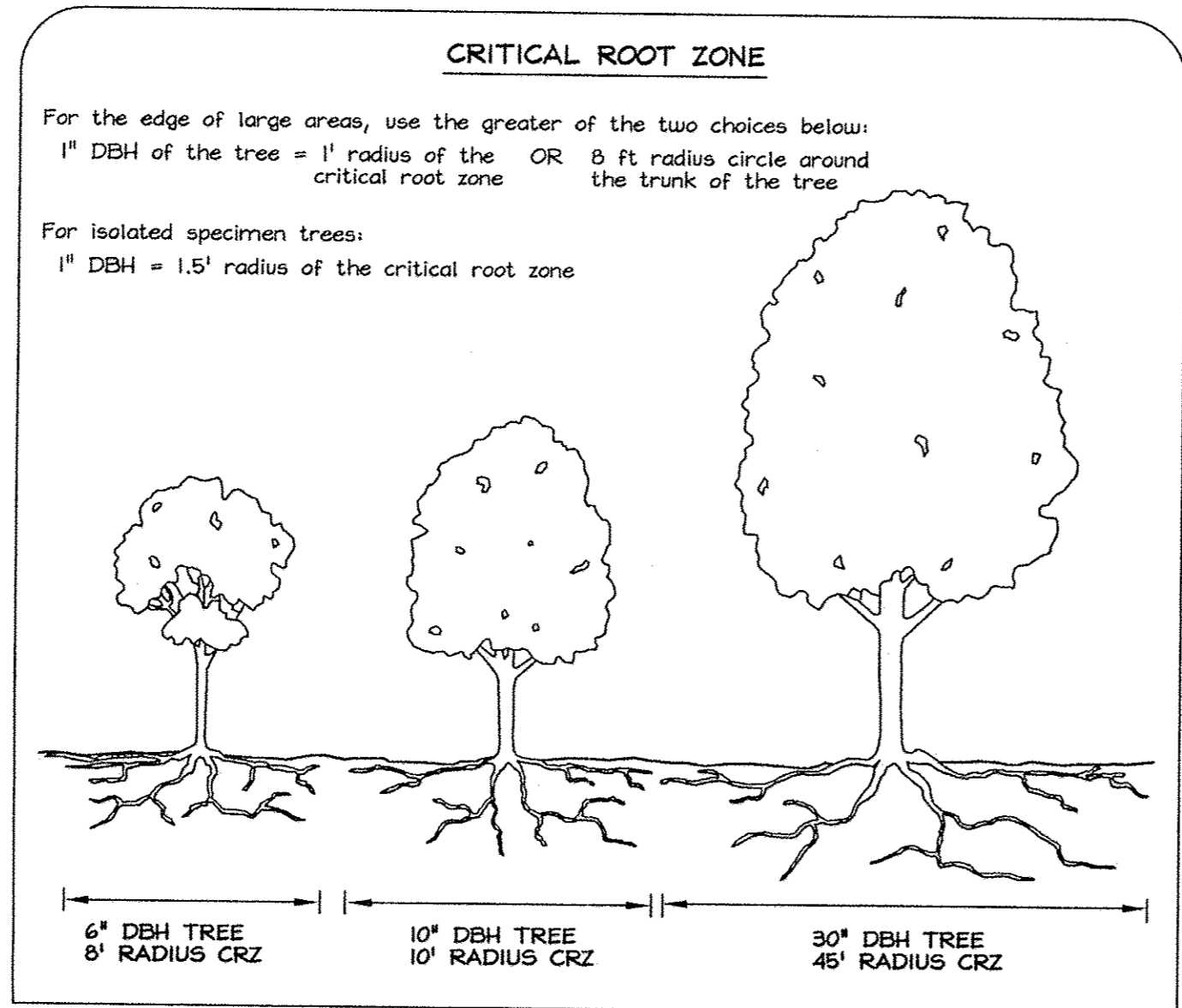
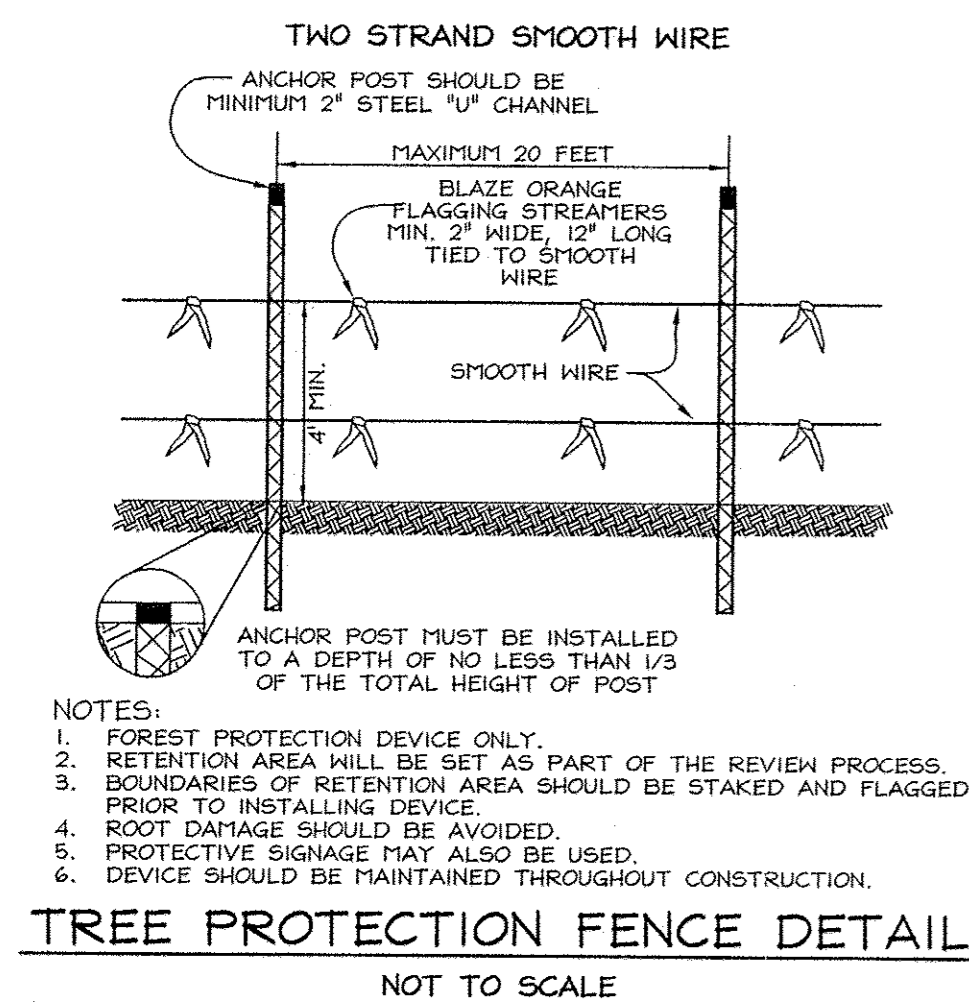
FOREST STAND DELINEATION / FOREST CONSERVATION PLAN CHAPEL WOODS II, LOT 17

TAX MAP 29 GRID 7
5TH ELECTION DISTRICT

PARCEL 68
HOWARD COUNTY, MARYLAND

DESIGN BY: —
DRAWN BY: SMH
CHECKED BY: SLH
SCALE: 1"=50'
DATE: Apr. 18, 2011
P.O. No.: 2559
SHEET No. 1 OF 2

EXPLORATION RESEARCH, INC.
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LANDSCAPE ARCHITECTS
6310 HOWARD LANE
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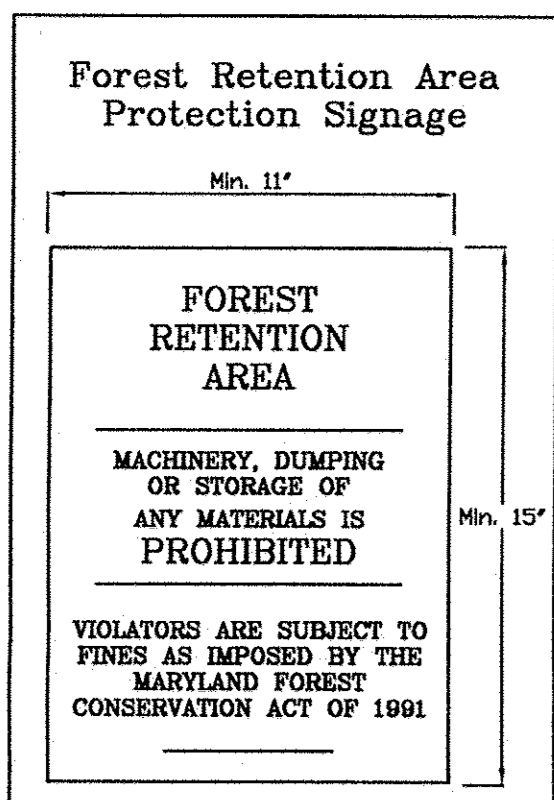


Forest Retention Management Notes

- All proposed activities shall adhere to the conditions, schedules and terms of an approved sediment control and erosion plan.
- After the boundaries of the retention area have been staked and flagged and before any disturbance has taken place on-site, a preconstruction meeting at the construction site shall take place. The developer, contractor or project manager, and appropriate County Inspectors shall attend.
- Tree protection for all retained areas:
 - All retention areas within 50 feet of proposed construction activities shall be protected by highly visible, well anchored temporary protection devices (silt fence or blaze orange plastic mesh).
 - All protection devices shall be in place prior to any grading or land clearing.
 - All protection devices shall be properly maintained and shall remain in place until construction has ceased.
 - Attachment of signs, fencing or other objects to trees is prohibited.
 - No equipment, machinery, vehicles, materials or excessive pedestrian traffic shall be allowed within protected areas.
- If the critical root zone (see detail) is affected by construction activities such as grade change, digging for foundations and roads or utility installation:
 - Prune roots with a clean cut using proper pruning equipment (see root pruning detail).
 - Water and fertilize as needed.
- During construction phase, monitor and correct condition of retained trees for: soil compaction, root injury, flood conditions, drought conditions and other stress signs.
- Post-Construction Phase
 - Inspect existing trees around the perimeter of disturbed limits for evidence of soil compaction, root injury, limb injury, or other stress signs and correct with proper management techniques such as root or limb pruning, soil aeration, fertilization, crown reduction or watering. Inspection and evaluation shall be performed by a licensed arborist.
 - Inspect for dead or dying trees or limbs which may pose safety hazard and remove.
 - No burial of discarded materials will occur onsite within the conservation areas.
 - No burning within 100 feet of wooded area.
 - All temporary forest protection structures will be removed after construction.
 - Following completion of construction, prior to use, the County Inspector shall inspect the entire area.

Soil Protection Zone Notes

- The Soil Protection Zone shall include all areas contained outside the Limit of Disturbance.
- Where possible, the Soil Protection Zone shall extend to the drip line of specimen trees. For other groups of trees, the zone shall be the drip line or 40% of the height of the tree, whichever is greater.
- No construction activity is permitted within the Soil Protection Zone.
- If soil has been compacted or grading has taken place in the vicinity of the Soil Protection Zone, root pruning shall be implemented per Root Pruning detail, shown on this plan.
- Root pruning shall occur prior to the beginning of construction.
- Where the Limit of Disturbance must encroach inside the Critical Root Zone of a tree, soil disturbance shall be mitigated with vertical mulching, radial trenching, or another method approved by the ERI Forest Conservation Professional.
- Prior to construction, the Limits of Disturbance shall be marked and the ERI Professional shall determine which trees will need preventative treatment or removal.
- Tree maintenance and removal shall be undertaken by a qualified Maryland Tree Expert to ensure damage to surrounding trees is minimized.
- Brush and limbs removed for construction shall be chipped and spread at the edge of the Soil Protection Zone to a depth of 6 inches. This shall occur outside the Soil Protection Zone where compaction could impact otherwise unprotected Critical Root Zone.



SIGN DETAIL: PERMANENT SIGN
 SIGNAGE NOTE: ALL TREE PROTECTION SIGNS SHALL BE PLACED ON METAL 1\"/>

**FOREST STAND DELINEATION /
 FOREST CONSERVATION PLAN DETAILS
 CHAPEL WOODS II, LOT 17**

TAX MAP 29 GRID 7 PARCEL 68
 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

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DESIGN BY: -
 DRAWN BY: SHM
 CHECKED BY: SLH
 SCALE: not to scale
 DATE: Apr 18, 2011
 P.O. No.: 2559
 SHEET No.: 2 OF 2