

### LEGEND

- Existing Contour: ---362---
- Proposed Contour: ---362---
- Spot Elevation: +82.53
- Direction of Flow: --->---
- Existing Trees to Remain: [Symbol]
- Silt Fence: ---SF---SF---
- Limit of Disturbance: [Symbol]
- Prop. Shade Tree: [Symbol]
- Prop. Dwelling: [Symbol]
- 15% to 24.9% slopes: [Symbol]
- slopes of 25% or greater: [Symbol]
- Forest Type Boundary: [Symbol]
- Soil Type Boundary: [Symbol]
- Tree Protection Fence: ---TPF---
- Forest Conservation Easement Sign: [Symbol]
- Forest Conservation Easement: [Symbol]

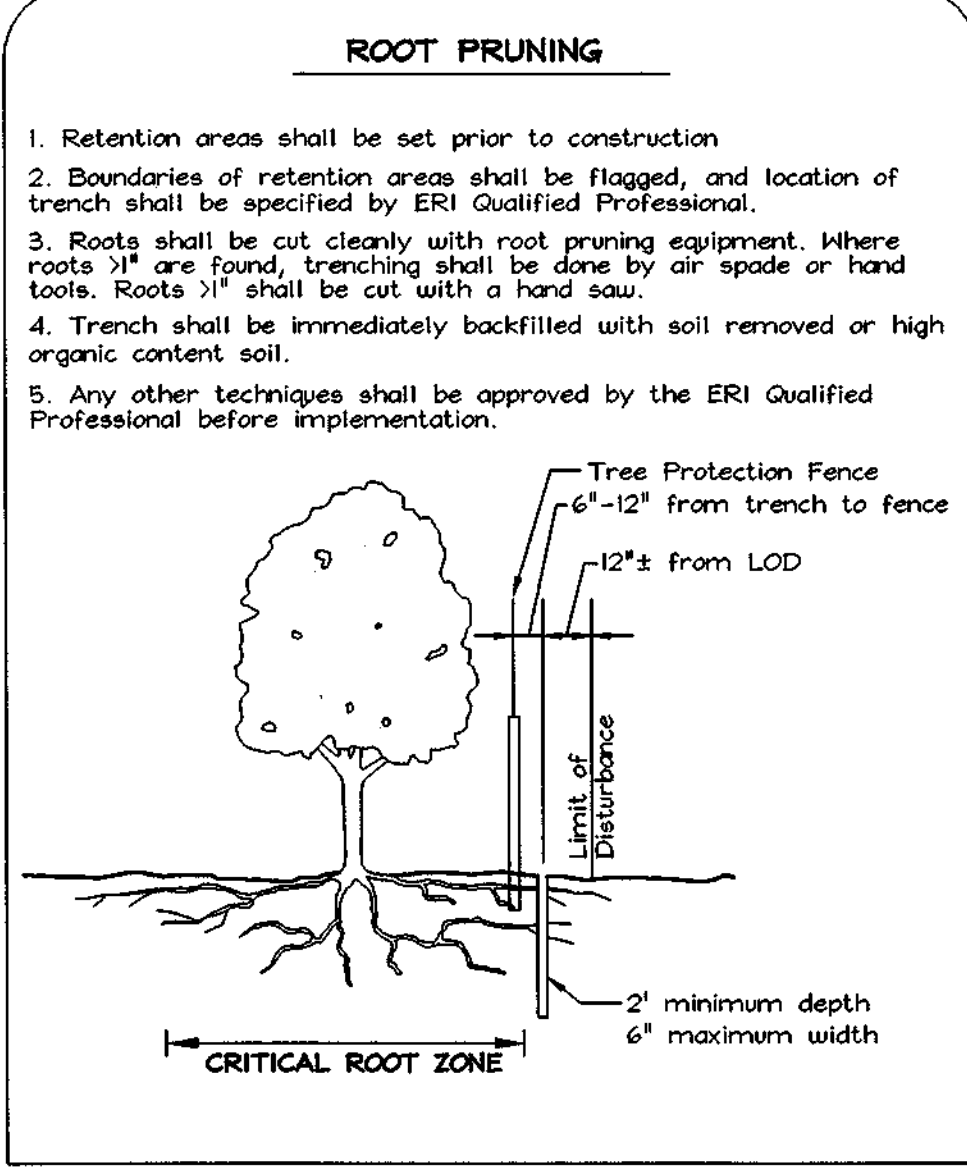
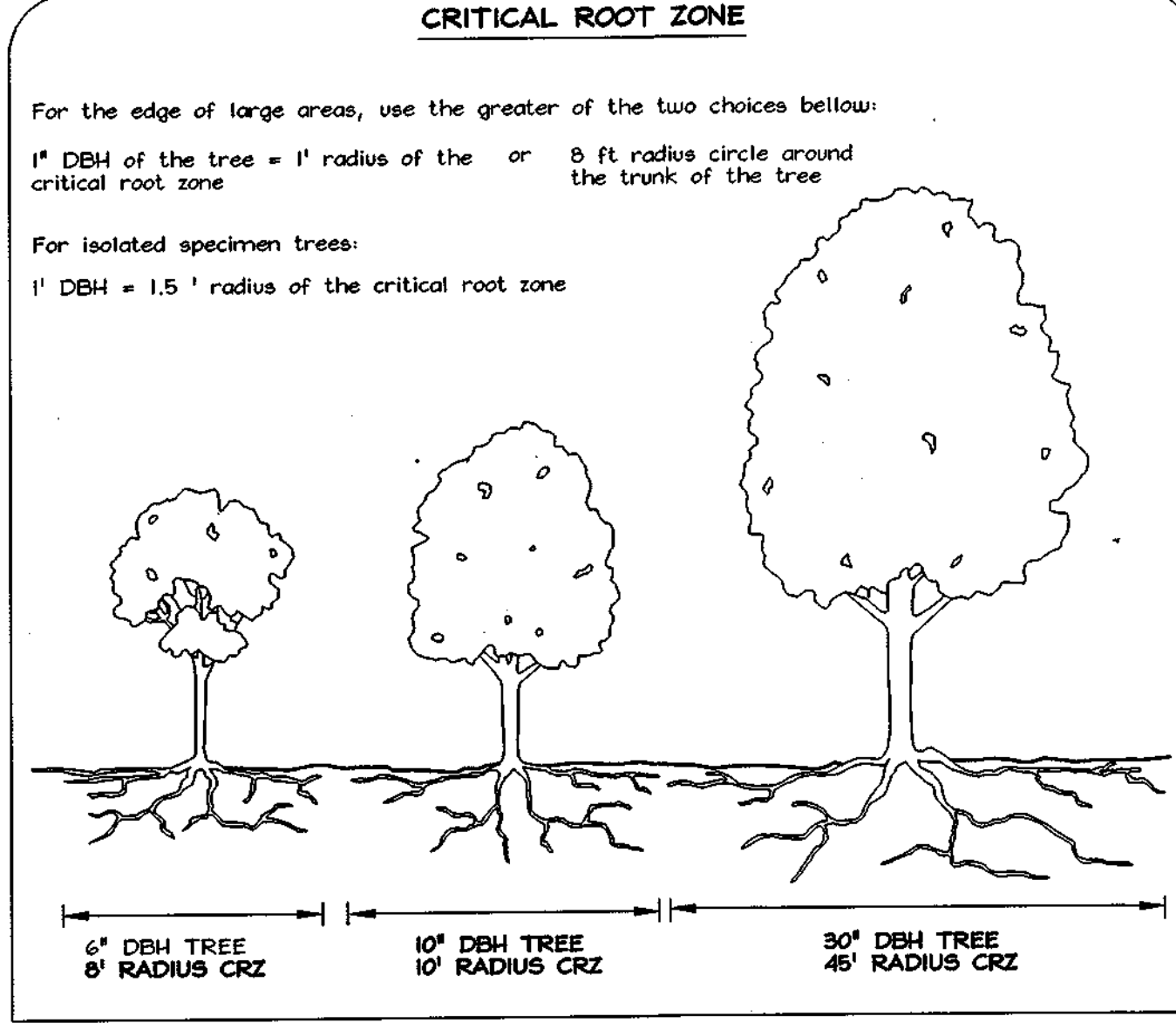
### MANAGEMENT NOTES FOR FOREST RETENTION AREAS

- 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.
  - 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. Temporary signage shall be replaced with permanent signage on posts in locations shown.
  - Following completion of construction, prior to use, the County Inspector shall inspect the entire area.

EXPLORATION RESEARCH INC.  
ENVIRONMENTAL CONSULTANTS  
LANDSCAPE ARCHITECTS  
6818 FOREST STREET  
ELLSWORTH CITY, MARYLAND 21043  
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### FOREST STAND ANALYSIS TABLE

KEY	TYPE OF COMMUNITY	AREA	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
F1	Mixed Hardwood	0.30 AC	C1C3 CmB2	OAKS & OTHER UPLAND HARDWOODS	55-64	FAIR	Tulip Poplar 50% Austrian Spruce 5% Pine 10% Black Gum 15% Cherry 20% Maple 10%	4-24 in. 8-14 in. 4-6 in. 4-8 in. 18-24 in.	100±	Good	0.11 Ac. in slopes 25% + 1.07 Ac. in stream buffers
F-2	UPLAND HARDWOOD	1.63 ac.	C1C3 Ba	OAKS & OTHER UPLAND HARDWOODS Midland Hardwood	55-64	FAIR	YELLOW POPLAR 80% RED MAPLE 15% VIRGINIA PINE 5%	18-22 8-14 8-12	54-66 36-63 32-48	GOOD, FEW INVASIVES	0.11 Ac. in slopes 25% + 1.07 Ac. in stream buffers
L-1	LAWN	1.34 ac.	BeB2 CmB2 C1C3	N/A	N/A	N/A	GRASS	N/A	N/A	N/A	N/A



### SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	SOIL GROUP
Ba	Baile silt loam	D
BeB2	Beltville silt loam, 1 to 5 percent slopes, moderately eroded	C
C1C3	Chillum gravelly loam, 5 to 10 percent slopes, severely eroded	C
CmB2	Chillum silt loam, 1 to 5 percent slopes, moderately eroded	C

### FOREST CONSERVATION WORKSHEET

Item	Acres
Net Tract Area	3.27
A. Total Tract Area	3.27
B. Area Within 100 Year Floodplain	0
C. Other deductions	0
D. Net Tract Area	3.27
Land Use Category Residential-Suburban	
E. Afforestation Minimum (15% x D)	0.49
F. Conservation Threshold (20% x D)	0.65
Existing Forest Cover	
G. Existing Forest on Net Tract Area	1.93
H. Forest Area Above Conservation Threshold	1.28
Breakeven Point	
I. Forest Retention for no Mitigation	0.91
J. Clearing Permitted without Mitigation	1.02
Proposed Forest Clearing	
K. Forest Areas to be Cleared	0.57
L. Forest Areas to be Retained	1.36*
Planting Requirements	
M. Reforestation for Clearing Above Threshold	0.14
N. Reforestation for Clearing Below the Threshold	0
P. Credit for Retention Above Conservation Threshold	0.26**
Q. Total Reforestation Required	0
R. Total Afforestation Required	0
S. Total Reforestation and Afforestation Requirement	0

\* Includes 0.44 acre of off-site retention easement for F-03-89.  
\*\* Excludes 0.44 acres of off-site retention easement for F-03-89.

No forest conservation survey is required for this project because it is a minor subdivision that fulfills its obligation entirely by on-site retention.

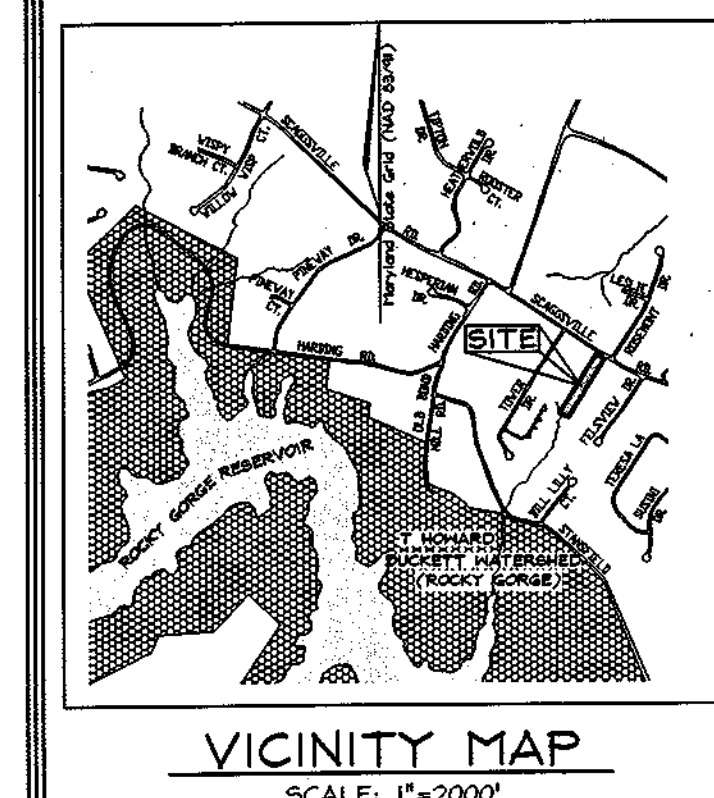
Forest Conservation Easement Table
Easement 1 Retention 0.91 Ac.
Total 0.91 Ac.

### Forest Stand Narrative

F1 This 0.30 Acre forest is well developed on the interior and young near the edge. The overstory contains tulip poplar, red maple, black cherry as well as small quantities of Austrian Pine, Black Gum and red and white oak. The middle-story contains tulip poplar, American holly, black gum, black cherry, and sassafras. In the understorey, raspberry, pokeweed, yucca, Virginia creeper, multiflora rose, Japanese honeysuckle, black cherry, and tulip poplar are found. The stand is in good health without significant invasive infestation.

F2 This mature 1.63 Acre forest is a mix of yellow poplar, red maple and Virginia pine. The understorey is composed of green briar, multiflora rose, honeysuckle and black cherry. This area contains 1.07 Ac. of stream and stream buffers and 0.11 Ac. of steep slopes. This area would be considered a high priority for retention. This includes the FCE area for F-03-89.

L1 The remainder of the site, 1.34 Ac., is lawn with scattered individual trees.



### Specimen Tree Protection Signage

Min. 11"

**SPECIMEN TREE**

DO NOT REMOVE

MACHINERY, DUMPING OR STORAGE OF ANY MATERIALS IS PROHIBITED

VIOLATORS ARE SUBJECT TO FINES AS IMPOSED BY THE MARYLAND FOREST CONSERVATION ACT OF 1991

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### Forest Retention Area Protection Signage

Min. 11"

**FOREST RETENTION AREA**

MACHINERY, DUMPING OR STORAGE OF ANY MATERIALS IS PROHIBITED

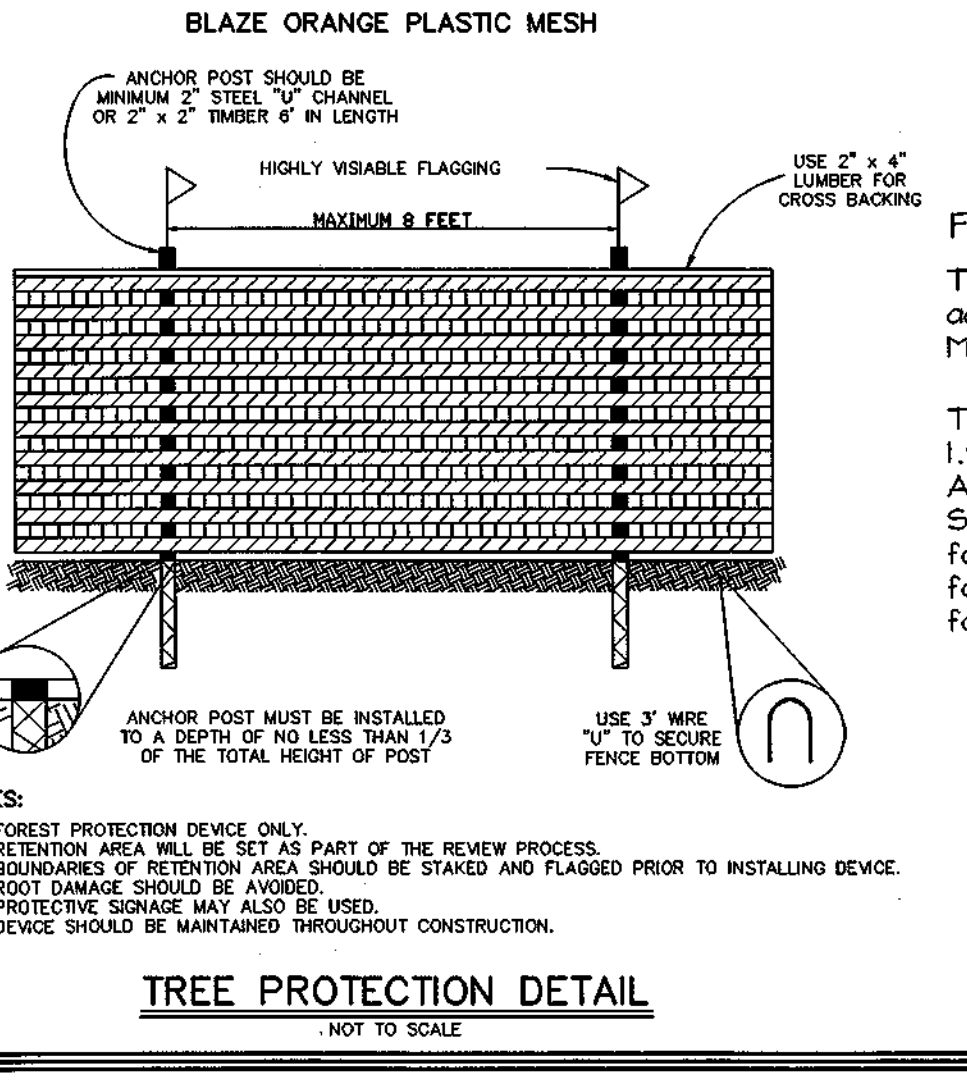
VIOLATORS ARE SUBJECT TO FINES AS IMPOSED BY THE MARYLAND FOREST CONSERVATION ACT OF 1991

### SPECIMEN TREES

Key	Name	Scientific Name	Size	Condition
ST-1	Tulip Poplar	Liriodendron tulipifera	30"	Good
ST-2	Tulip Poplar	Liriodendron tulipifera	38"	Good
ST-3	Tulip Poplar	Liriodendron tulipifera	31"	Fair
ST-4	Tulip Poplar	Liriodendron tulipifera	42"	Good
ST-5	Tulip Poplar	Liriodendron tulipifera	34"	Good

### Soil Protection Zone Notes

- The Soil Protection Zone shall include all areas contained inside 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 Soil Protection Zone 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 MID 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.



### Forest Conservation Narrative

This Forest Conservation Plan has been developed in accordance with the Howard County Forest Conservation Manual and the 1991 Forest Conservation Act.

The existing site consists of 3.27 acres. The site has 1.93 acres of existing forest within the net tract area. An easement will be established to retain 0.91 ac. Specimen trees will be protected where possible. No forest mitigation is needed. An easement of 0.44 Ac for off-site forest conservation is to be established for the adjacent F-03-89.

DEVELOPER'S/BUILDER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.12A OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE(1) YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

Signature: [Signature]  
DATE: 6/19/03

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division: [Signature]  
DATE: 6/20/03

Chief, Division of Land Development: [Signature]  
DATE: 6/20/03

OWNER  
Christine N. Harris and Daniel S. Kessler  
10475 Scaggville Road  
Laurel, Maryland 20723

DEVELOPER  
Scaggville Road Investment, LLP c/o Brian D. Boy  
9691 Norfolk Avenue  
Laurel, Maryland 20723  
Tel.: (410)792-2665 Fax: (410)792-2667

### COMBINED FOREST STAND DELINEATION AND FOREST CONSERVATION PLAN

## THE HILLSIDE AT ROCKY GORGE V

### Lot 1 and Open Space Lot 3

TAX MAP 46, GRID 18  
6TH ELECTION DISTRICT

PARCEL 92  
HOWARD COUNTY, MARYLAND

DESIGN BY: PS/KO  
DRAWN BY: DW/AB  
CHECKED BY: SLH  
SCALE: 1"=50'  
DATE: June 12, 2003  
W.O. No.: 3050  
SHEET No. 1 OF 1

FSH Associates  
Engineers Planners Surveyors  
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E-mail: FSHAssociates@cs.com