

Forest Conservation Goals and Objectives

Development of the Blough Property under the current Forest Conservation Act (FCA) will entail clearing of 0.17 acres of the 0.387 acres of forest existing outside of the floodplain on-site. The goals and objectives of this Forest Conservation Plan are to provide short and long term protection of the existing forest resources that will remain on-site. The forest clearing proposed under this plan will generate a 0.12 acre reforestation obligation which will be satisfied through a fee-in-lieu payment in the amount of \$3,920.25 due to the absence of on-site reforestation areas.

Forest Conservation Notes:

This project complies with the requirements of Section 16.1200 of the Howard County Code of forest conservation with a total obligation of 0.337 acres provided by 0.217 acres of on-site retention and 0.12 acres of fee-in-lieu payment. The forest conservation easement has 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 easement, however, forest management practices as defined in the Code of Forest Conservation Easement are allowed.

PRECONSTRUCTION MEETING/ CONSTRUCTION PERIOD PRACTICES

Before construction begins, a required preconstruction meeting shall be held. The principle contractors, engineer, Howard County Inspectors and a qualified forest professional familiar with the plan shall be present. All items pertaining to forest retention, tree preservation, and construction period practices shall be discussed. Any changes to the plan due to on-site conditions must be approved by the Howard County Department of Planning and Zoning.

POST CONSTRUCTION MANAGEMENT/ MAINTENANCE BY CONTRACTOR

All dead trees or tree limbs which pose an immediate safety hazard will be felled. Trees dropped within the forest retention area will not be removed. All temporary forest protection structures will be removed after construction and permanent signage will be placed where indicated on the plan. A 2-year Contractor's Maintenance and Monitoring Period shall begin at mobilization. Seventy five percent survival must be guaranteed for this period. The site shall be inspected at the end of the two year period to ascertain survivorship and provide for replacement if necessary. The Contractor's maintenance of new planting shall consist of watering, cultivating, weeding, and mulching as necessary to insure survival. Contractor shall protect planting areas and plants at all times against damage of all kinds for duration of maintenance period. Maintenance includes temporary protection barriers and signs as required for protection. If any plants become damaged or injured, because sufficient protection was not provided, treat or replace as directed by Landscape Architect at no additional cost to Owner.

Forest Conservation Plan Revision Notes: Redline Revision No. 1
This revised Forest Conservation Plan has been prepared to account for and depict the location of abandonment of 0.091 acres (3,921 square feet) of credited Forest Conservation Easement and 0.009 acres (420 square feet) of non-credited Forest Conservation Easement. This easement abandonment is necessary to allow for construction of a sanitary sewer force main that will serve the nearby Whiskey Bottom Booster Station. The Howard County Department of Public Works will address the loss of credited Forest Conservation Easement by making a fee-in-lieu payment in the amount of \$4,901.25. Based on guidance from the Howard County Department of Planning and Zoning, this easement abandonment does not require revisions to the previously approved Forest Conservation Worksheet. Following the easement abandonment, the resulting 0.217 acre Forest Conservation Easement will be comprised of 0.126 acres of credited easement and 0.091 acres of non-credited easement. Labels for forest clearing and easement acreages have been left intact for consistency with the previously approved Forest Conservation Worksheet; however, labels have been added to provide acreages resulting from the easement abandonment for consistency with the Plan of Revision.

NET TRACT AREA:

A. Total tract area.....	1.67
B. Area within 100 year floodplain.....	0.39
C. Area to remain in agricultural production.....	0.00
D. Net tract area.....	1.28

LAND USE CATEGORY: (from table 3.2.1, page 40, Manual)
Input the number "1" under the appropriate land use zoning, and limit to only one entry.

ARA	MDR	IDA	HDR	MPD	CIA
			1		

E. Afforestation Threshold..... 15% x D = 0.19
F. Conservation Threshold..... 20% x D = 0.26

EXISTING FOREST COVER:

G. Existing forest cover (excluding floodplain).....	0.39
H. Area of forest above afforestation threshold.....	0.20
I. Area of forest above conservation threshold.....	0.13

BREAK EVEN POINT:

J. Forest retention above threshold with no mitigation.....	0.28
K. Clearing permitted without mitigation.....	0.11

PROPOSED FOREST CLEARING:

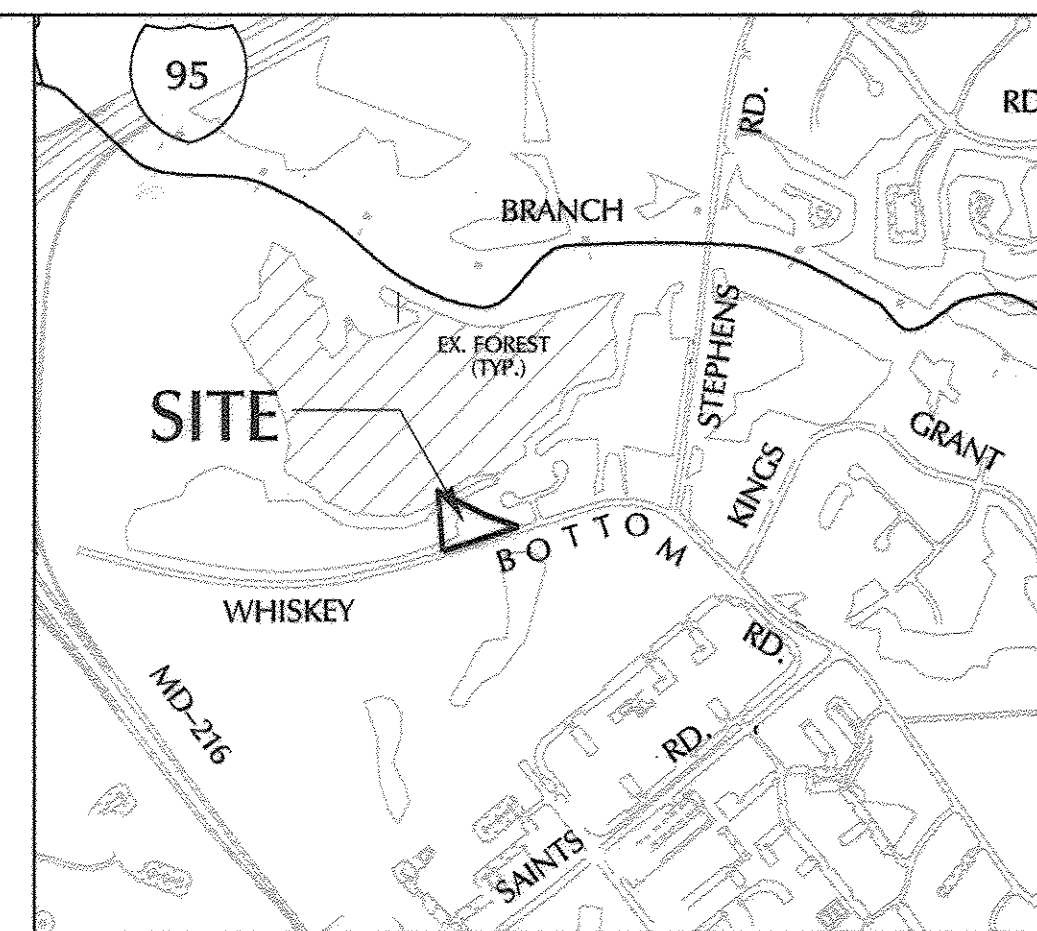
L. Total area of forest to be cleared.....	0.17
M. Total area of forest to be retained.....	0.22

PLANTING REQUIREMENTS:

N. Reforestation for clearing above conservation threshold.....	0.03
P. Reforestation for clearing below conservation threshold.....	0.07
Q. Credit for retention above conservation threshold.....	0.00
R. Total reforestation required.....	0.11
S. Total afforestation required.....	0.11

Legend

- EX CURB & GUTTER
- EX MAJOR CONTOURS
- EX MINOR CONTOURS
- EX STORM DRAIN
- EX SEWER
- EX WATER
- EXISTING TREE LINE
- EXISTING WETLAND LIMIT
- 25' WETLAND BUFFER
- STREAM BUFFER
- 100 YR FLOODPLAIN
- PROPERTY LINE
- ADJACENT PROPERTY LINE
- ROADWAY RIGHT-OF-WAY
- PROPOSED LOT LINE
- PROPOSED EASEMENT
- LIMIT OF DISTURBANCE
- PROPOSED CURB & GUTTER
- TREE PROTECTION FENCE OFFSET 5 FT FOR CLARITY
- PERMANENT TREE PROTECTION SIGNS (S)
- FOREST CONSERVATION EASEMENT
- FOREST TO BE CLEARED
- FOREST TO BE RETAINED
- PROPOSED WOODS EDGE
- LARGE SHADE TREE
- SMALL TREE
- EVERGREEN TREE
- SPECIMEN TREE TO BE REMOVED



Vicinity Map
1" = 1000'

DEVELOPER'S/ BUILDER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL.
I/WE FURTHER CERTIFY THAT UPON COMPLETION A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.
Name: *Paul G. Carran* Date: *7/29/08*
"THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL."

THE OWNER, TENANT, AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, INCLUDING BOTH PLANT MATERIALS AND BERMS, FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.

LANDSCAPING NOTES:

At the time of plant installation, all shrubs and trees listed and approved on the Landscape Plan, shall comply with the proper height requirement in accordance with the Howard County Landscape Manual. In addition, no substitutions or relocations of the required plantings may be made without prior review and approval from the Department of Planning and Zoning. Any deviation from the Approved Landscape Plan may result in denial or delay in the release of landscape surety until such time as all required materials are planted and/or revisions are made to the applicable plans.

This plan has been prepared in accordance with Section 16.124 of the Howard County Code and the Landscape Manual with 6 large shade trees, provided with landscape surety in the amount of \$18,000.00 with the DPW, Developers Agreement. Bond is only for perimeter landscaping and not the street tree landscaping.

PLANT LIST

QTY	SYM.	BOTANICAL NAME/COMMON NAME	SIZE	REMARKS
3	QP	QUERCUS PHellos WILLOW OAK	2 1/2" - 3" CAL. 12-14' HT.	B & B FULL HEAD
6	AM	ACER GINNALA AMUR MAPLE	2 1/2" CAL. 8-10' HT.	B & B FULL HEAD
5	PC	PRUNUS CEPHAIFERA ATROPURPUREA THUNDERCLOUD	2 1/2" CAL. 8-10' HT.	B & B FULL HEAD
5	PS	PRUNUS SERRULATA 'AMANOGAWA' ORIENTAL CHERRY	2 1/2" CAL. 8-10' HT.	B & B FULL HEAD
4	FA	PICEA ABIES NORWAY SPRUCE	8-10' HT.	B & B

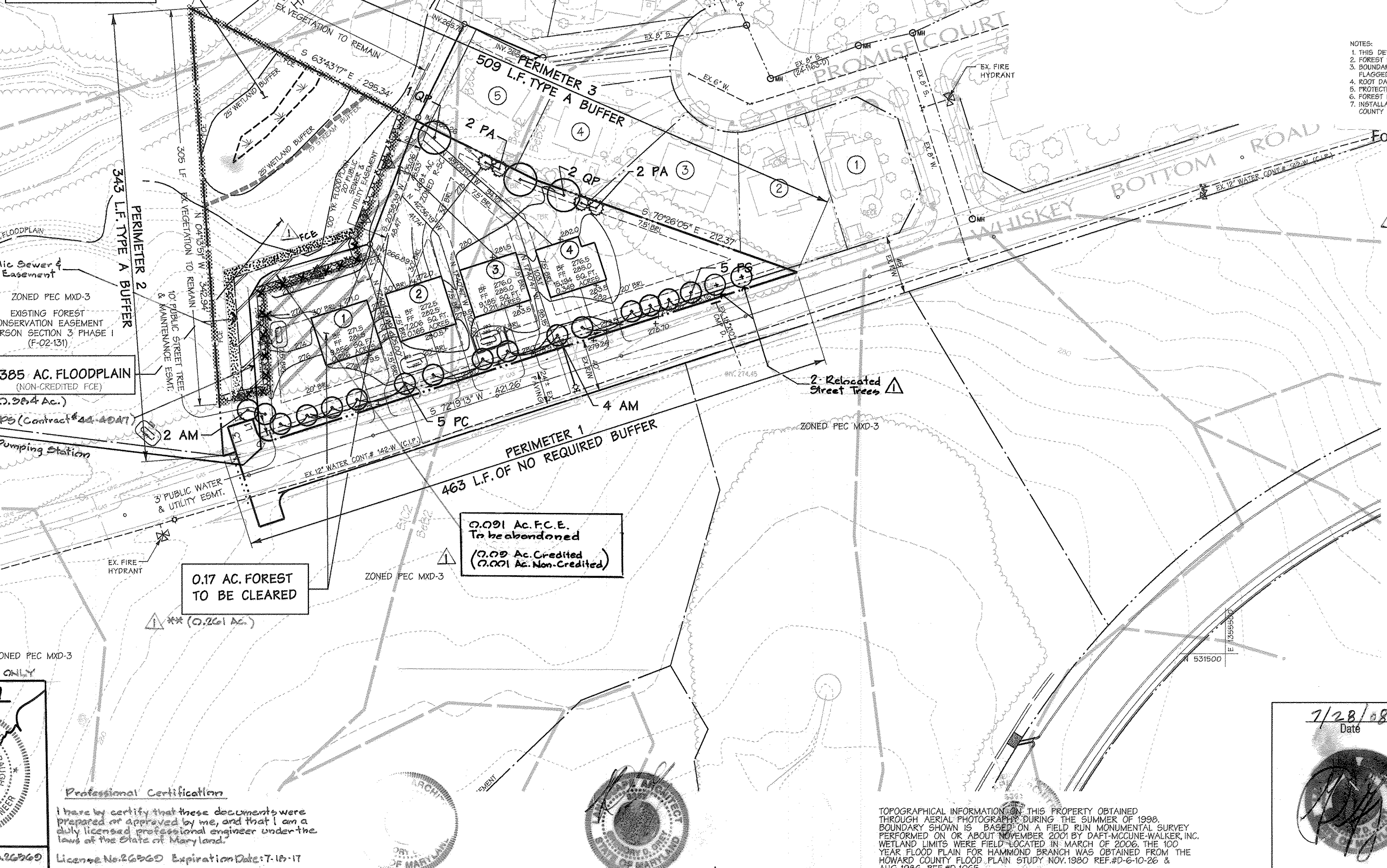
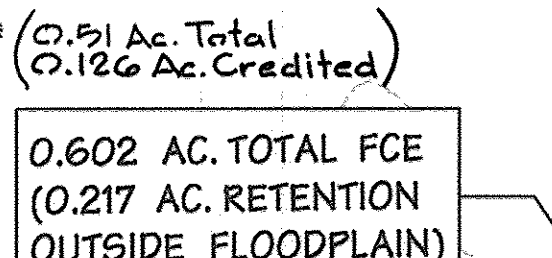
SCHEDULE A PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO RIGHT OF WAY	ADJACENT TO PERIMETER PROP.
LANDSCAPE EDGE NOT REQUIRED	1	
LINEAR FEET OF PERIMETER	463	
LANDSCAPE TYPE 'A'	2	3
LINEAR FEET OF PERIMETER	343	509
CREDIT FOR EXISTING VEGETATION (DESCRIBE BELOW IF NEEDED)	65	305 185
CREDIT FOR FENCE (DESCRIBE BELOW IF NEEDED)		
NUMBER OF PLANTS REQUIRED		
SHADE TREES		1 5
EVERGREEN TREES	N/A	
SHRUBS		
NUMBER OF PLANTS PROVIDED		
SHADE TREES	14	3
SMALL TREES		2
EVERGREEN TREES		4
SHRUBS		

NOTE:
*STREET TREES AS REQUIRED IN HOWARD COUNTY LANDSCAPE MANUAL
SMALL TREES ARE UTILIZED IN STREET TREE PLANTING DUE TO OVERHEAD WIRES

Forest Retention Signage

Not To Scale
ZONED PEC MXD-3
HOWARD RESEARCH & DEVELOPMENT CORPORATION
5289/330



Forest Protection Fence

NOTE:
There are no cemeteries, historic sites/features and/or critical habitats of rare, threatened or endangered species on this site.

Purpose Statement for Redline Revision No. 1
The purpose of this Redline Revision is to show new offset of the 12\"/>

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION	<i>[Signature]</i>	DATE	7/29/08
CHIEF, DIVISION OF LAND DEVELOPMENT	<i>[Signature]</i>	DATE	8/11/08
DIRECTOR	<i>[Signature]</i>	DATE	

Date	No.	Revision Description
11-30-16	1	REDLINE REVISION No. 1
7/05/07	1	Howard County Review Revisions

BLOUGH PROPERTY
LOTS 1 THRU 4 AND
OPEN SPACE LOT 5

OWNER / DEVELOPER:
Howard Research and Development Corporation
10275 Little Patuxent Parkway
Columbia, MD 21044
410-392-6284

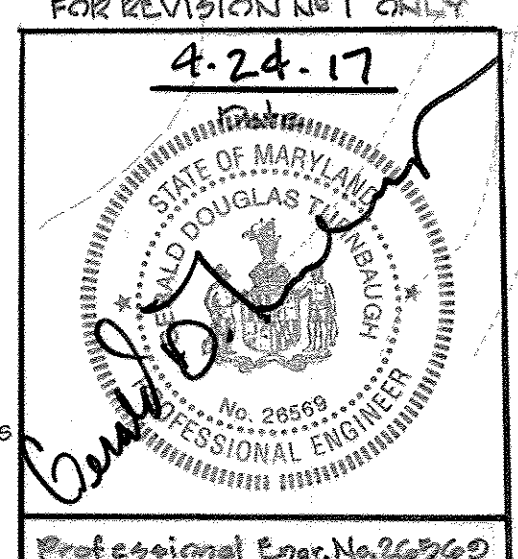
DMW
Duff MacCanna-Walton, Inc.
300 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3858
Fax 296-4705

A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

PROJECT NAME	BLOUGH PROPERTY	SECTION/AREA	N/A	DATE	7/29/08
PLAN # OR REF.	87284/MSO	DATE	7/29/08	DATE	7/29/08
DATE	7/29/08	DATE	7/29/08	DATE	7/29/08

LANDSCAPE PLAN / FOREST CONSERVATION PLAN

Des. By	SHH/SFM	Scale	1"=50'	Proj. No.	95054.D6
Drn. By	SHH/SFM	Date	8/11/08		
Chk. By		Approved			1 of 1



Professional Certifications
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 26599 Expiration Date: 7-16-17

TOPOGRAPHICAL INFORMATION ON THIS PROPERTY OBTAINED THROUGH AERIAL PHOTOGRAPHY DURING THE SUMMER OF 1998. BOUNDARY SHOWN IS BASED ON A FIELD RUN MONUMENTAL SURVEY PERFORMED ON OR ABOUT NOVEMBER 2001 BY DAFT-MCCOINE-WALKER, INC. WETLAND LIMITS WERE FIELD LOCATED IN MARCH OF 2006. THE 100 YEAR FLOOD PLAN FOR HAMMOND BRANCH WAS OBTAINED FROM THE HOWARD COUNTY FLOOD PLAN STUDY NOV. 1980 REF. #D-6-10-26 & AUG. 1986 REF. #D-1065.

8/3/08