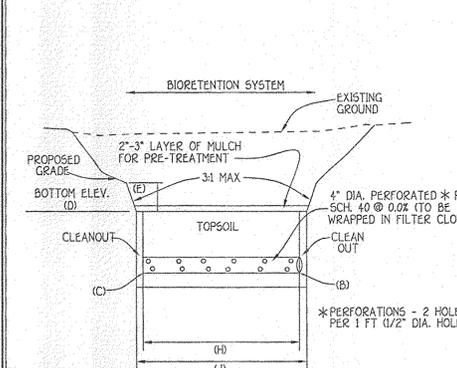
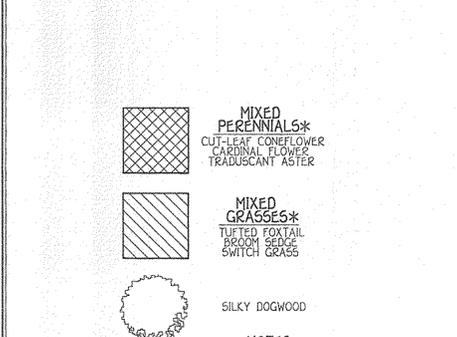


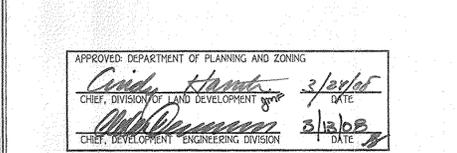
**VICINITY MAP**  
SCALE: 1" = 1000'



**PROFILE ALONG 4" PVC OUTLET**  
NO SCALE



**BIORETENTION FILTER PLANTING DETAIL**  
NOT TO SCALE



**PROFILE ALONG 4" PVC UNDERDRAIN**  
NO SCALE



**TYPICAL PRIVATE DRIVE CROSS SLOPE SECTION**  
NOT TO SCALE

**NOTES:**  
1. ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL VOLUME IV, STANDARD SPECIFICATION AND DETAILS FOR CONSTRUCTION.  
2. \*PERFORATIONS - 2 HOLES PER 1 FT. (1/2" DIA. HOLES)

**NOTES:**  
1. PLANT MATERIAL MUST COVER AT LEAST 50% OF THE SURFACE AREA OF THE RAINGARDEN.  
2. \*SEE PLANT MATERIAL CHARTS FOR QUANTITIES AND SPACING

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
Chief, Division of Land Development  
Chief, Development Engineering Division

FISHER, COLLINS & CARTER, INC.  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTRAL SQUARE OFFICE PARK - 12072 BALTIMORE NATIONAL PIKE  
ELKLOTT CITY, MARYLAND 21042  
(410) 461-2255

1:2025/05/17 (p)0517 Supplemental Plan Revised 105 1 thru 3.dwg, 2/27/2008 1:15:08 PM

**FOREST CONSERVATION WORKSHEET**

NET TRACT AREA

A. TOTAL TRACT AREA	17.6
B. AREA WITHIN 100 YEAR FLOODPLAIN	0.4
C. AREA TO REMAIN IN AGRICULTURAL PRODUCTION	
D. NET TRACT AREA	17.2

LAND USE CATEGORY: (from table 3.2.1, page 40, Manual)  
ARA MDR IDA HDR MPD CIA

INFORMATION FOR CALCULATIONS:

E. AFFORESTATION THRESHOLD	20X x D =	3.4
F. FOREST CONSERVATION THRESHOLD	25X x D =	4.3
G. EXISTING FOREST COVER (EXCLUDING FLOODPLAIN)		15.1
H. AREA OF FOREST ABOVE REFORESTATION THRESHOLD		11.7
I. AREA OF FOREST ABOVE CONSERVATION THRESHOLD		10.8

BREAK-EVEN POINT:

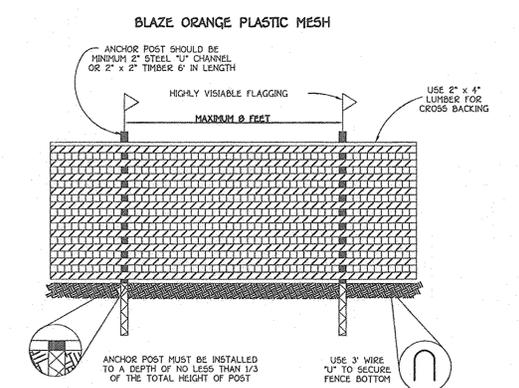
J. FOREST RETENTION ABOVE THRESHOLD WITH NO MITIGATION	2.2
K. CLEARING PERMITTED WITHOUT MITIGATION	0.6

PROPOSED FOREST CLEARING:

L. TOTAL AREA OF FOREST TO BE CLEARED OR RETAINED OUTSIDE FCE	0.6
M. TOTAL AREA OF FOREST TO BE RETAINED IN FCE	6.5

PLANTING REQUIREMENTS:

N. REFORESTATION FOR CLEARING ABOVE CONSERVATION THRESHOLD	2.2
P. REFORESTATION FOR CLEARING BELOW CONSERVATION THRESHOLD	0
Q. CREDIT FOR RETENTION ABOVE CONSERVATION THRESHOLD	0
R. TOTAL REFORESTATION REQUIRED	0
S. TOTAL AFFORESTATION REQUIRED	0
T. TOTAL REFORESTATION AND AFFORESTATION REQUIRED	0



**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.

**TREE PROTECTION DETAIL**  
NOT TO SCALE

**SEQUENCE OF CONSTRUCTION**

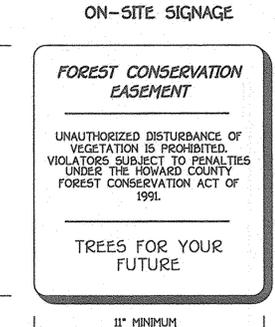
THE FOLLOWING TIMETABLE REPRESENTS THE PROPOSED TIMETABLE FOR DEVELOPMENT OF THE SUBJECT PROPERTY. THE ITEMS OUTLINED IN THE FOREST CONSERVATION PLAN WILL BE ENACTED WITHIN TWO (2) YEARS OF SUBDIVISION APPROVAL.

BELOW FIND A PROPOSED SEQUENCE OF CONSTRUCTION.

- INSTALL ALL PROTECTIVE SIGNAGE, FENCING AND SEDIMENT CONTROL DEVICES.
- HOLD PRE-CONSTRUCTION MEETING BETWEEN DEVELOPER, CONTRACTOR AND COUNTY INSPECTOR.
- BUILD ACCESS ROADS, INSTALL WATER AND SEWER, AND CONSTRUCT HOUSES, STABILIZE ALL DISTURBED AREA ACCORDINGLY.
- REMOVE SEDIMENT CONTROL.
- HOLD POST-CONSTRUCTION MEETING WITH COUNTY INSPECTORS TO ASSURE COMPLIANCE WITH FCP. SUBMIT CERTIFICATION OF RETENTION.

**GENERAL NOTES:**

- Subject Property Zoned RR-DEO Per 02/02/04 Comprehensive Zoning Plan And The "Comp Lite" Zoning Amendments Effective 07/28/06.
- Coordinates Based On NAD 83, Maryland Coordinate System As Projected By Howard County Geodetic Control Stations No. 465D And No. 465C.  
Sta. 465D N 54196.6336 (meters), E 1333747.2310 (meters)  
Sta. 465C N 543290.6326 (meters), E 1331697.8579 (meters)
- This Plat Is Based On Field Run Monumented Boundary Survey Performed On Or About December, 2005, By Fisher, Collins & Carter, Inc.
- B.L. Denotes Building Restriction Line.
- Denotes Iron Pin Set Capped T.C.C. 106".
- ⊙ Denotes Iron Pipe Or Iron Bar Found.
- Denotes Angular Change In Bearing Or Boundary Or Right-Of-Way.
- Denotes Concrete Monument Set With Aluminum Plate T.C.C. 106".
- Denotes Concrete Monument Or Stone Found.
- For Flag Or Pipestem Lots, Refuse Collection, Snow Removal And Road Maintenance Are Provided To The Junction Of The Flag Or Pipestem And Road Right-Of-Way Line And Not To The Pipestem Lot Driveway.
- Driveway(s) Shall Be Provided Prior To Issuance Of A Residential Occupancy Permit For Any New Dwelling To Ensure Safe Access For Fire And Emergency Vehicles Per The Following Minimum Requirements:  
a) Width - 12 Feet (6 Feet Serving More Than One Residence).  
b) Surface - Six (6) Inches Of Compacted Crusher Run Base With Tar And Chip Coating. (1-1/2" Minimum).  
c) Geometry - Maximum 15% Grade, Maximum 10% Grade Change And 45-Foot Turning Radius.
- Structures (Gables/Bridges) - Capable Of Supporting 25 Goss Tons (1-125-Loading).
- Drainage Elements - Capable Of Surface Passing 100 Year Flood With No More Than 1 Foot Depth Over Surface.
- Structure Clearances - Minimum 12 Feet.
- Maintenance - Sufficient To Ensure All Weather Use.  
d) All Lot Areas Are More Or Less (+ or -).  
e) Distances Shown Are Based On Surface Measurement And Not Reduced To NAD 83 Grid Measurement.
- No Grading Removal Of Vegetative Cover Or Trees, Or Placement Of New Structures Is Permitted Within The Limits Of Wetlands, Streams, Or Their Buffers And Forest Conservation Easement Areas.
- No Previous Department Of Planning And Zoning File Number Exist For This Property.
- There Is An Existing Dwelling/Structure Located Lot 3 To Remain. No New Buildings, Extensions Or Additions To The Existing Dwellings Are To Be Constructed At A Distance Less Than The Zoning Regulations Require.
- Landscaping For Lots 1 And 2 On File With This Plat And Is Provided In Accordance With A Certified Landscape Plan. The Landscape Obligation For Lots 1 And 2 Is Fulfilled Entirely Through Retention Of Existing Forest. In Accordance With Section 16124 Of The Howard County Code And The Landscape Manual Lot 3 Is Exempt From The Farmer Landscaping Requirements Of Section 16124 Of The Howard County Code And The Landscape Manual Because Lot 3 Contains An Existing Dwelling To Remain.
- This Plat Is In Compliance With The Amended Fifth Edition Of The Subdivision And Land Development Regulations Per Council Bill 45-2003 And The Zoning Regulations As Amended By Council Bill 75-2003 And The July 28, 2006 Update Of The Howard County Zoning Regulations. Development Or Construction On These Lots Must Comply With Setback And Buffer Regulations In Effect At The Time Of Submission Of The Site Development Plan, Waiver Petition Application, Or Building/Grading Permit.
- Fee In Lieu Of Providing Open Space Has Been Paid In The Amount Of \$3,000.00 For The Creation Of Two New Lots (Lots 1 And 2).
- No Cemeteries Exist On This Site Based On A Visual Site Visit And Based On An Examination Of The Howard County Cemetery Inventory Map.
- Forest Stand Delineation And Wetland Delineation Was Prepared By Eco-Science Professionals, Inc. Dated September, 2006.
- The Forest Conservation Easement Has Been Established To Fulfill The Requirements Of Section 161200 Of The Howard County Code And Forest Conservation Act. No Clearing, Grading Or Construction Is Permitted Within The Forest Conservation Easement; However, Forest Management Practices As Defined In The Deed Of Forest Conservation Easement Are Allowed. The Plat Complies With The Requirements Of Section 161200 Of The Howard County Code For Forest Conservation By Providing 6.5 Acres On-Site Forest Retention Within Lot 3.
- This Area Designates A Private Sewerage Easement Of At Least 10,000 Square Feet As Required By The Maryland State Department Of The Environment For Individual Sewerage Disposal. Improvements Of Any Nature In This Area Are Restricted Until Public Sewerage Is Available. These Easements Shall Become Null And Void Upon Connection To A Public Sewerage System. The County Health Officer Shall Have The Authority To Grant Adjustments To The Private Sewerage Easement. Recordation Of A Modified Easement Shall Not Be Necessary.
- The Lots Shown Hereon Comply With The Minimum Ownership Width And Lot Area As Required By The Maryland State Department Of The Environment.
- The Property Is Located Outside Of The Metropolitan District.
- A Maintenance Agreement For The Private Use-In-Common Driveway For Lots 1 Thru 3 And Tax Parcel 237 Has Been Recorded Among The Land Records Of Howard County, Maryland Simultaneously With The Recording Of This Plat.
- All Wells Shall Be Drilled Prior To Final Plat Recordation. It Is The Developers Responsibility To Schedule The Well Drilling Prior To Final Plat Submission. It Will Not Be Considered "Government Delay" If The Well Drilling Holds-up The Health Department Signature Of The Record Plat.
- Stream Buffers Are Measured From The Top Of Bank Of The Stream.
- This Property Is Located Within 2500 Feet Of The Rocky Gorge Reservoir, Comar 26.04.02.04K States: "A Lot Located Within 2500 Feet Of The Normal Water Level Of Existing Or Proposed Water Supply Reservoirs, Measured Horizontally Or Within A 5000-Foot Radius Upstream From The Water Intake On Streams Used As Potable Water Supply Sources And A 5000-Foot Radius Of Water Intake Located Within A Reservoir Shall Have An Area Of Not Less Than 2 Acres With A Minimum Width Of 175 Feet.
- Water Quality Volume (WQV) And Groundwater Recharge Volume (GRV) Stormwater Management Requirements Are Proposed To Be Met In Accordance With The 2000 Stormwater Management Design Manual By Applying The Criteria Found In Chapter 3, Section 34 "Stormwater Filtering Systems" And Chapter 5, Section 5.3 "Disconnection Of Non-Rooftop Runoff Credit". The Site Is Exempt From Providing Channel Protection Volume (CPV) Requirements Because The CPV Discharge Rate From The Various Study Points Does Not Exceed 2.0 Cfs.
- Wetlands Located On This Site Are Confined In The Stream And Stream Bank Area.
- The Conveyance Of Non-Buildable Bulk Parcel 'A' Will Be Done Without Any Monetary Compensation From The Owner Of Parcel 237 And There Is A Possibility The 50' Conveyance Could Become A Public Road In The Future If Parcel 237 Is Subdivided.
- The Developer Will Be Responsible For Constructing The Use-In-Common Driveway Across And Thru Parcel 89 And Connecting into the Existing Driveway On Parcel 237.
- Plat Subject To WP-08-052 Which The Planning Director Approved A Waiver To Section 16191A(B) Which Requires That Public Streets Shall Extend To The Boundary Lines Of The Proposed Subdivision So That Connection Can Be Made To Adjacent Properties Subject To:  
A. Immediately Following Plat Recordation Of Pending F-08-001, Non-Buildable Bulk Parcel 'A' Is To Be Conveyed To The Adjoining Property Owner Of Parcel 237.  
B. The Existing 30' Private Right-of-Way Serving Parcel 237 Is To Be Abandoned And The Associated Driveway Demolished. The Developer Of The Bruns Property Shall Be Responsible For The Costs Of Installing This Driveway Connection To Parcel 237.  
C. The Developer Shall Furnish A Letter Of Acknowledgement From The Adjoining Property Owner Stating That The 50' Conveyance Of Land Will Be Accepted And That In Case Tax Map 48, Parcel 237 Is Developed, The Responsibility And Cost Related Construction And Extension Of Hunterbrook Lane Shall Be Borne By The Owner Of Parcel 237.  
D. A Note Shall Be Included On The F-08-001 Plat Clearly Stating That The 50' Conveyance Has The Potential To Become A Public Road In The Future.  
E. A Revised Percolation Certification Plan Shall Be Submitted To The Health Department.  
F. On The Pending Plat, F-08-001, A Use-In-Common Access Easement Serving All Three Of The Bruns Lots And Parcel 237 Shall Be Created Within Non-Buildable Bulk Parcel A Driveway Maintenance Agreement Shall Be Recorded With The Plat.



**FOREST CONSERVATION EASEMENT**

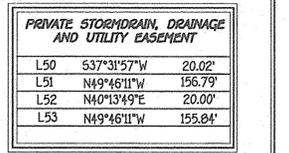
LINE	BEARING & DISTANCE
FCE-1	S07°24'30"E 610.09'
FCE-2	S76°35'09"W 559.37'
FCE-3	N15°04'50"W 594.85'
FCE-4	N67°56'34"E 135.69'
FCE-5	S01°12'27"E 172.33'
FCE-6	S01°01'41"W 46.34'
FCE-7	S14°10'18"E 53.78'
FCE-8	S46°50'37"W 51.21'
FCE-9	S15°27'25"E 80.63'
FCE-10	S24°17'50"E 110.17'
FCE-11	S44°07'18"E 105.70'
FCE-12	N69°30'07"E 221.08'
FCE-13	N08°49'36"E 304.89'
FCE-14	N51°36'24"W 97.79'
FCE-15	S77°56'10"W 92.99'
FCE-16	S55°22'28"W 132.78'
FCE-17	N25°52'49"W 52.71'
FCE-18	N03°05'55"W 208.31'
FCE-19	N63°46'44"E 150.14'
FCE-20	N37°31'57"E 53.10'
FCE-21	N04°59'50"E 134.83'
FCE-22	N38°21'47"E 119.92'
FCE-23	N68°51'03"E 70.31'
FCE-24	S21°24'56"E 312.14'

**PRIVATE USE-IN-COMMON ACCESS EASEMENT**

LINE	BEARING & DISTANCE
E-1	S21°24'56"E 54.87'
E-2	S44°19'49"W 97.74'
E-3	S34°58'40"W 153.29'
E-4	S42°30'33"W 303.78'
E-5	S27°30'27"E 7.80'
E-6	S62°29'33"W 34.00'
E-7	N27°30'27"W 7.02'
E-8	S68°50'44"W 108.67'
E-9	N15°04'50"W 50.00'
E-10	N69°00'27"E 97.85'
E-11	N27°30'27"W 12.97'
E-12	N62°29'33"E 33.99'
E-13	S27°38'17"E 12.11'
E-14	N42°20'29"E 272.16'
E-15	N34°58'40"E 169.42'
E-16	N44°15'49"E 120.34'

**100 YEAR FLOODPLAIN, DRAINAGE AND UTILITY EASEMENT**

FP-1	N21°55'39"W	81.45'
FP-2	N10°59'38"E	60.63'
FP-3	N63°11'34"W	39.55'
FP-4	N27°48'01"W	44.02'
FP-5	N04°03'13"W	75.75'
FP-6	N19°45'26"W	32.92'
FP-7	N00°51'08"W	65.92'
FP-8	N43°32'35"W	34.82'
FP-9	N54°56'38"W	45.57'
FP-10	N07°19'26"E	85.43'
FP-11	N55°58'54"E	23.14'
FP-12	N35°03'15"E	33.70'
FP-13	N05°06'32"E	24.54'
FP-14	S82°15'38"E	6.76'
FP-15	S19°10'24"E	14.01'
FP-16	S02°07'03"W	125.30'
FP-17	S31°54'42"E	58.61'
FP-18	S10°39'22"E	30.23'
FP-19	S13°28'45"W	34.20'
FP-20	S10°35'02"E	43.86'
FP-21	S00°44'37"W	34.27'
FP-22	S35°48'10"E	47.60'
FP-23	S45°57'13"E	18.59'
FP-24	S07°24'30"E	190.44'
FP-25	N58°23'27"W	8.52'



LANDSCAPE, FOREST CONSERVATION, STORMWATER MANAGEMENT, TOPOGRAPHIC AND SOILS  
**BRUNS PROPERTY**  
LOTS 1 THRU 3 & NON-BUILDABLE BULK PARCEL "A"  
ZONED: RR-DEO

TAX MAP NO.: 46 PARCEL NO.: 89 GRID NO.: 7  
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
SCALE: 1" = 50' DATE: FEBRUARY 22, 2008  
SHEET 1 OF 2

**OWNER/DEVELOPER**  
Mr. & Mrs. Douglas P. Bruns  
8100 Hunterbrook Lane  
Fulton, Maryland 20759-2105  
301-931-3600



F-08-01

**SCHEDULE A - PERIMETER LANDSCAPE EDGE**

PERIMETER	P-1	P-2	TOTALS
CATEGORY	ADJACENT TO PERIMETER PROPERTIES	ADJACENT TO PERIMETER PROPERTIES	
LANDSCAPE TYPE	A	A	
LINEAR FEET OF PERIMETER	16543'179.57' + 422.20' = 767.20 L.F.	614.48' L.F.	
NUMBER OF PLANTS REQUIRED	767.20/60' = 13	614.48/60' = 10	23
NUMBER OF PLANTS PROVIDED	0	0	0
CREDIT FOR EXISTING VEGETATION	13	10	23
SHADE TREES	0	0	0
SMALL/MEDIUM DECIDUOUS TREES	0	0	0
C21 SUBSTITUTION	0	0	0
NUMBER OF PLANTS PROVIDED	0	0	0
SHADE TREES	0	0	0

**LEGEND**

- EXISTING E CONTOURS
- EXISTING V CONTOURS
- PROPOSED CONTOUR
- DISCONNECTION RECEIVING AREA
- SLOPES 1:1 TO 2:1
- SLOPES 2:1 OR GREATER
- LIST OF DISTURBANCE
- SOILS LINES AND TYPE
- PRIVATE USE-IN-COMMON EASEMENT
- SEWER ACCESS EASEMENT



**Developer/Builder's Certificate**  
 I/we certify that the landscaping shown on this plan will be done according to Section 16.124 of the Howard County Code and the Howard County Landscape Manual. I/we further certify that upon completion of Certification of Landscape Installation accompanied by an executed one year guarantee of plant materials will be submitted to the Department of Planning and Zoning.

Name: \_\_\_\_\_ Date: Feb 27 2008

**OWNER/DEVELOPER**  
 Mr. & Mrs. Douglas P. Bruns  
 8100 Hunterbrooke Lane  
 Fulton, Maryland, 20759-2105  
 301-931-3600

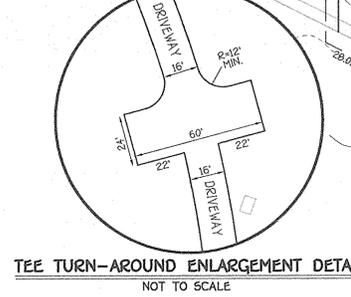
**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTENAL SQUARE OFFICE PARK, SUITE 2072, BALTIMORE, NATIONAL FIRE  
 BUILDING CITY, MARYLAND 21284  
 (410) 461-2955

**APPROVED: DEPARTMENT OF PLANNING AND ZONING**  
 Chief, Division of Land Development: [Signature] 2/21/08  
 Chief, Development Engineering Division: [Signature] 2/12/08

**SOILS LEGEND**

SOIL	NAME	CLASS
GgA	Glenns loam, 0 to 3 percent slopes	B
GgB	Glenns loam, 3 to 8 percent slopes	B
MaB	Manor loam, 3 to 8 percent slopes	B
MaC	Manor loam, 8 to 15 percent slopes	B
MaD	Manor loam, 15 to 25 percent slopes	B
GmC	Glennville silt loam, 8 to 15 percent slopes	C
MkF	Manor-Brinklow complex, 25 to 65 percent slopes, very rocky	B

**NOTES:**  
 \* Hydric soils and/or contains hydric inclusions  
 \*\* May contain hydric inclusions  
 † Generally only within 100-year floodplain areas



**PLAN**  
 SCALE: 1" = 50'

**STATE OF MARYLAND**  
 PROFESSIONAL ENGINEER  
 No. 0000000000  
 [Signature]

**LANDSCAPE, FOREST CONSERVATION, STORMWATER MANAGEMENT, TOPOGRAPHIC AND SOILS**  
**BRUNS PROPERTY**  
 LOTS 1 THRU 3 &  
 NON-BUILDABLE BULK PARCEL "A"  
 ZONED: RR-DEO

TAX MAP NO: 46 PARCEL NO: 89 GRID NO: 7  
 FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 SCALE: 1" = 50' DATE: FEBRUARY 22, 2008  
 SHEET 2 OF 2

F-08-01