

# PRELIMINARY EQUIVALENT SKETCH PLAN

## OWINGS PROPERTY, LOT 1

5th ELECTION DISTRICT      HOWARD COUNTY, MARYLAND

Engineers  
Planners  
Surveyors  
Landscape Architects

Dewberry & Davis LLC  
A Dewberry Company

804 West Diamond Avenue, Suite 200  
Columbia, MD 21078-1141  
(301) 948-8300 Fax: (301) 258-7607  
www.dewberry.com

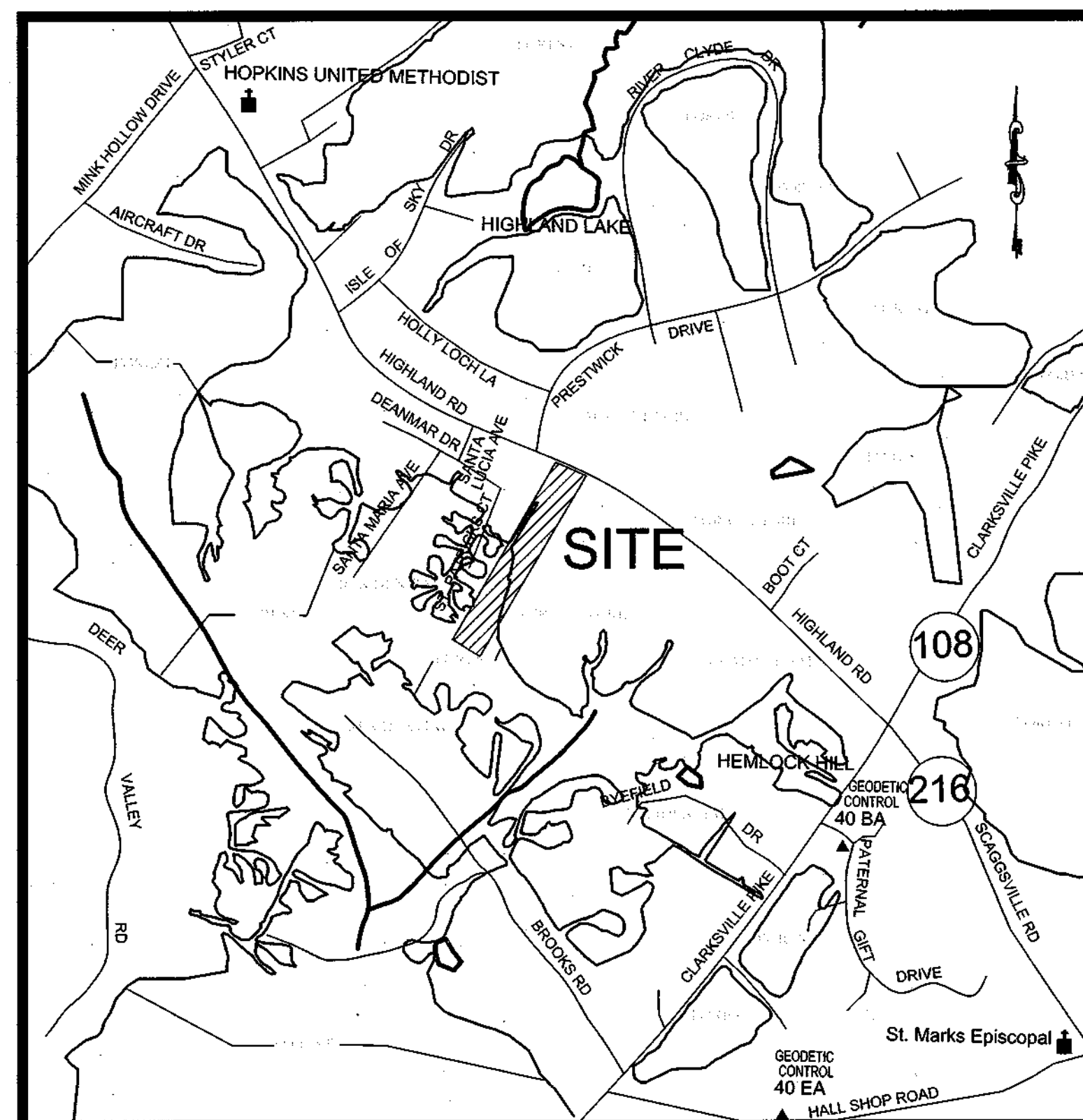


Drawn by: KDM  
Designed by: IEV  
Checked by: IEV  
Zoned: RR-DEO

DEVELOPER:  
DALE THOMPSON BUILDERS  
6500 WOODSIDE COURT  
COLUMBIA, MARYLAND 21046  
PHONE: (410) 995-6736  
FAX: (410) 381-8747

### SHEET INDEX

1. COVERSHEET
2. PRELIMINARY GRADING PLAN
- 3-4. PRELIMINARY FOREST CONSERVATION AND LANDSCAPE PLAN



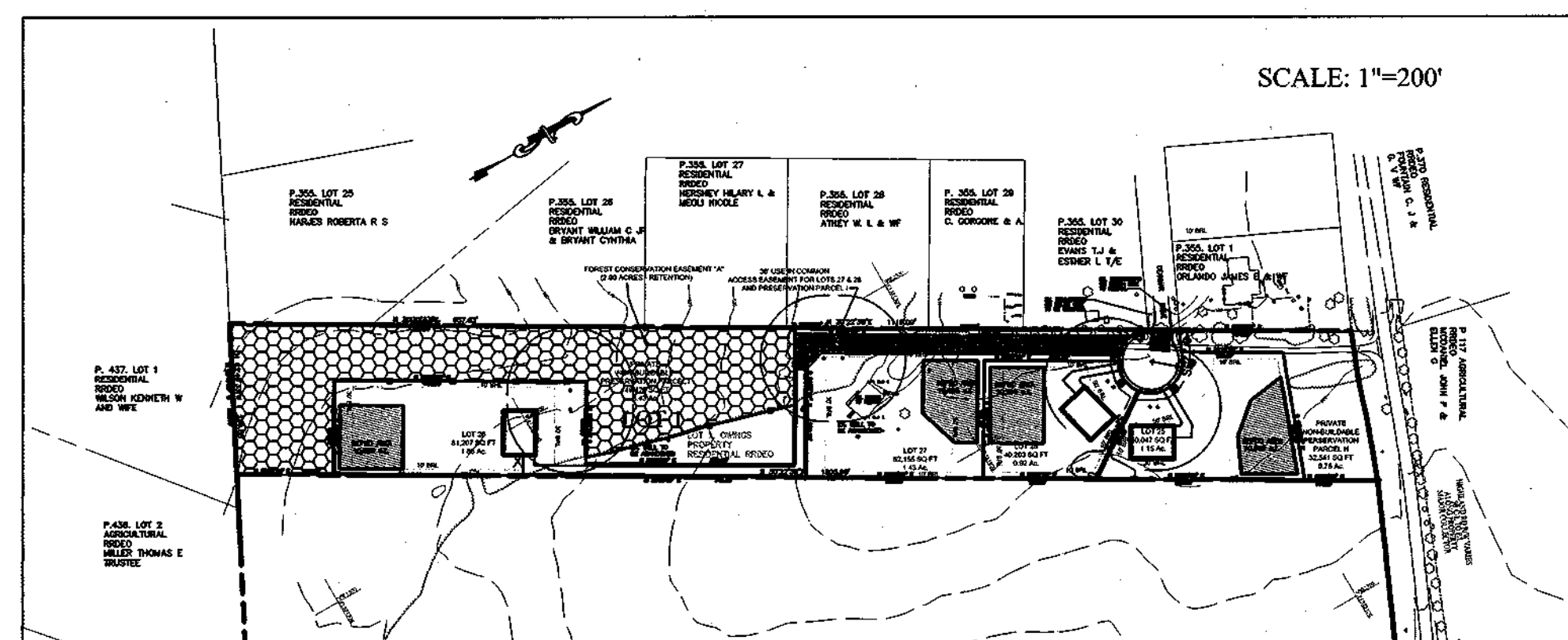
VICINITY MAP  
SCALE: 1"=1000'

#### SITE DATA

1. LOCATION: TAX MAP 40, PARCEL 44
2. 5TH ELECTION DISTRICT
3. ZONING: RR-DEO
4. GROSS AREA OF PROJECT: 9.73 Ac
5. NO. OF DWELLING UNITS PROPOSED (INCLUDING EXISTING RESIDENCE): 4
6. AREA OF PROPOSED RESIDENTIAL LOTS: 5.36 Ac
7. AREA OF PRESERVATION PARCELS: 4.18 Ac
8. OPEN SPACE REQUIRED: NONE
9. NON-BUILDABLE PRESERVATION SPACE TO BE OWNED BY HOA: NONE
10. RECREATION OPEN SPACE REQUIRED: NONE
11. AREA OF PROPOSED ROADS: 0.19 Ac
12. AREA OF 100 YEAR FLOOD PLAIN: NONE
13. NO. OF LOTS/PARCELS:  
4 BUILDABLE LOTS  
2 NON-BUILDABLE PRESERVATION PARCELS

#### GENERAL NOTES

1. THE PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
2. THIS PLAN SHALL BE SUBJECT TO THE FIFTH EDITION OF THE HOWARD COUNTY SUBDIVISION REGULATIONS AND AMENDED ZONING REGULATIONS PER COUNCIL BILL 50-2001.
3. THE EXISTING TOPOGRAPHY IS TAKEN FROM AERIAL SURVEY WITH TWO FOOT CONTOUR INTERVALS PREPARED BY AIR SURVEY PHOTOGRAMMETRIC MAPPING SERVICES DATED MARCH 18, 2001.
4. PROJECT BOUNDARY IS BASED ON BOUNDARY SURVEY BY D&D, FEBRUARY 2002. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 40BA AND 40EA ARE THE CLOSEST TO THIS PROJECT AND WERE USED FOR THIS PROJECT. TRAVERSE RAN BY MARKS AND ASSOCIATES, BOUNDARY SURVEY BY D&D.
5. WATER WILL BE PRIVATE FOR ALL LOTS.
6. SEWER WILL BE PRIVATE FOR ALL LOTS.
7. STORMWATER MANAGEMENT PROVIDED BY ENVIRONMENTALLY SENSITIVE DEVELOPMENT CREDIT & BY SWM POND ON OWINGS LOT 3 (PER APPROVED F-03-133).
8. THERE ARE NO WETLANDS ON SITE BASED FIELD STUDY DONE BY DEWBERRY & DAVIS LLC AND PRESENTED IN CERTIFICATION WITH THIS SUBMITTAL FOR HOWARD SOIL CONSERVATION DISTRICT APPROVAL.
9. THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY LEE CUNNINGHAM & ASSOCIATES, DATED OCTOBER 2002.
10. NO NOISE STUDY IS REQUIRED FOR THIS PROJECT.
11. NO GEOTECHNICAL REPORT IS REQUIRED FOR THIS PROJECT.
12. FOREST STAND DELINEATION BY DEWBERRY & DAVIS LLC, FEB 2002
13. LANDSCAPING WILL BE PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE H.C. SUBDIVISION AND LAND DEVELOPMENT REGULATIONS & THE LANDSCAPE MANUAL.
14. STREET LIGHTING IS NOT REQUIRED FOR THIS SITE.
15. SEDIMENT & EROSION CONTROL PER SEPARATE PLAN.
16. THIS PROPERTY IS NOT WITHIN THE METROPOLITAN DISTRICT.
17. THERE ARE NO BURIAL OR CEMETERY LOCATIONS ON THIS SITE.
18. A FOREST CONSERVATION PLAN IN ACCORDANCE WITH SECTION 16.1200 OF THE HOWARD CO. CODE & THE FOREST CONSERVATION MANUAL, PROVIDED AS PART OF THIS PRELIMINARY EQUIVALENT SKETCH PLAN FOR THIS SITE. D&D LLC, NOVEMBER 2002. FOREST CONSERVATION WILL BE PROVIDED BY ON SITE RETENTION OF 2.11 AC. MIN. UNLESS OTHERWISE DETERMINED AT FINAL PLAN STAGE.
19. THERE ARE NO HISTORIC SITES ON THIS PROPERTY.
20. PROJECT BACKGROUND INFORMATION:  
DEED REFERENCE: LIBER 1100 FOLIO 242  
WATERSHED: PATUXENT, STREAM USE DESIGNATION: NATURAL  
GROSS AREA: 9.73 Ac  
NET AREA: 9.73 Ac  
NET AREA: 9.73 Ac  
ALLOWED DENSITY BASED ON THE DEO/CEO OPTION = (9.73/2) = 4  
NO. OF ENTITIES PERMITTED BY RIGHT (9.73/4.25) = 2  
NO. OF DEO'S REQUIRED = 2  
PROPOSED LOTS 4 (BASED ON 9.73 AC.)  
21. THE EXISTING SINGLE FAMILY RESIDENCE ON LOT 27 IS TO REMAIN.



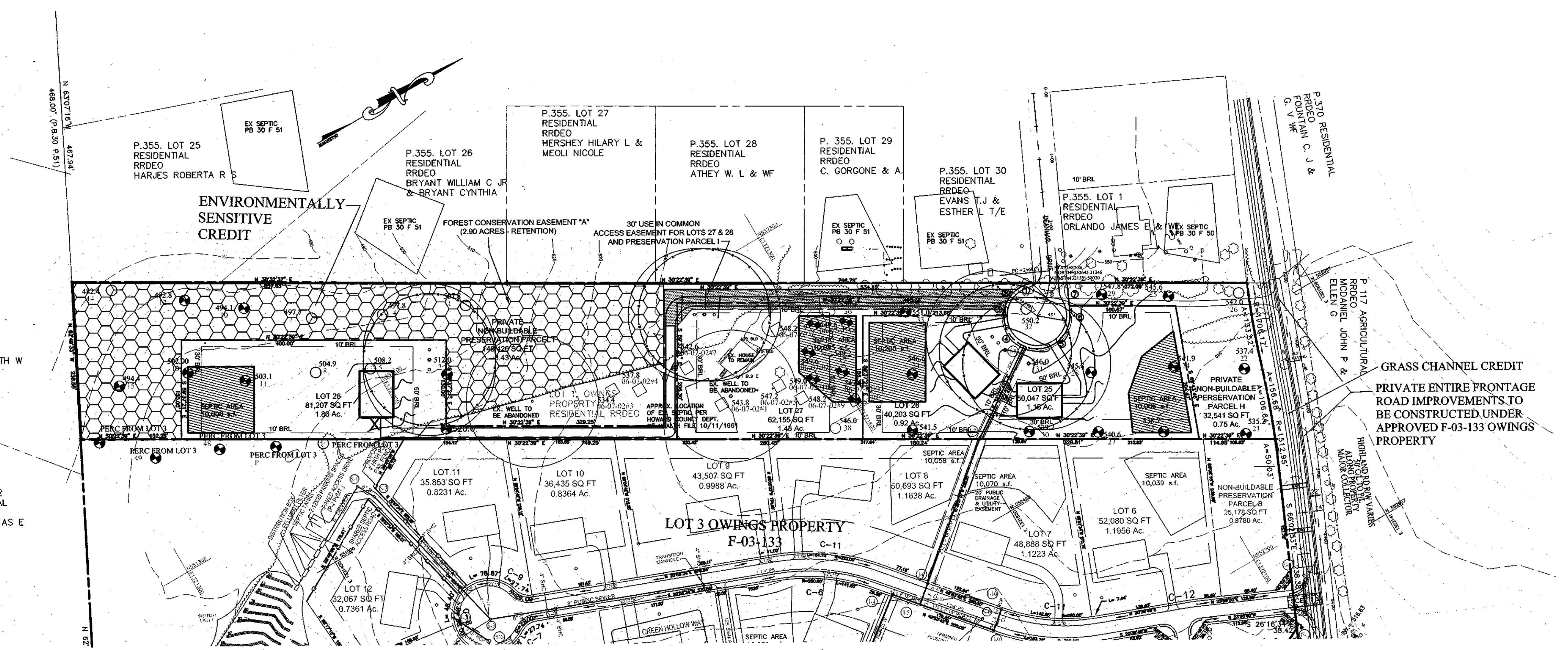
OWNER:  
OUR SHEPHERD LUTHERAN CHURCH  
8775 CLOUDLEAP COURT, STE. 210  
COLUMBIA, MARYLAND 21045

NOTE  
INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATION OF THE MAINS BY DIGGING TEST PITS BY HAND AT ALL UTILITY CROSSINGS WELL IN ADVANCE OF THE START OF EXCAVATION. CONTACT "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO THE START OF EXCAVATION. IF CLEARANCES ARE LESS THAN SHOWN ON THIS PLAN OR TWELVE (12) INCHES, WHICHEVER IS LESS, CONTACT THE ENGINEER AND THE UTILITY BEFORE PROCEEDING WITH CONSTRUCTION.

PRELIMINARY EQUIVALENT SKETCH PLAN  
OWINGS PROPERTY  
RESUBDIVISION OF LOT 1  
CONSISTING OF LOTS 25-28, PARCELS H & I  
5TH ELECTION DISTRICT      HOWARD COUNTY, MARYLAND

Section: NA	Area: NA	Phase: AS SHOWN	Sheet: 1 of 4
Tax Map Grid & Parcel: MAP 40, PARCEL 44	Date: JUNE 2003	Prior Submittals: PRELIMINARY/SKETCH PLAN SUBMITTED FEB. 14, 2003 SUBMITTED MAY 7, 2003	File number:

MINIMUM LOT SIZE CHART (AREAS IN S.F.)			
LOT NO	GROSS AREA	PIPESTEM AREA	MINIMUM LOT SIZE
27	62,155	4,299	57,856
28	81,207	21,344	59,863



PROP. PROPERTY BEARINGS & DISTANCES AROUND DENMAR DRIVE CUL-DE-SAC			
PRESERVATION PARCEL I	①	L = 27.65' R = 50.00'	
LOT 28	②	L = 25.79' R = 50.00'	
LOT 27	③	L = 20.58' R = 50.00'	
LOT 25	④	L = 61.19' R = 50.00'	
	⑤	L = 100.40' R = 50.00'	
LOT 25	⑥	N 64° 48' 44" W 10.52'	
	⑦	N 64° 48' 44" W 35.14'	

DEVELOPER:  
DALE THOMPSON BUILDERS  
6300 WOODSIDE COURT  
COLUMBIA, MARYLAND 21046  
PHONE: (410) 995-6736  
FAX: (410) 381-8747

6/16/03

RR-DEO

**LEGEND**

- EXISTING 2 FOOT CONTOURS
- EXISTING 10 FOOT CONTOURS
- PERC TEST HOLE: PASSED
- PERC TEST HOLE: FAILED
- PROPOSED WELL LOCATION
- ▨ FOREST CONSERVATION EASEMENT
- ▨ PROPOSED SHARED SEPTIC AREA
- ▨ EXISTING 15-24.9% SLOPES
- ▨ EXISTING 25% AND GREATER SLOPES
- ▨ SOILS LINE

**BMP SELECTION AND LOCATION OF FACILITIES**

**Drainage Area "A"**  
 Rev Requirement met by site design.  
 WQv Requirement met by site design  
 Cpv Requirement met due to the One-year peak discharge being < 2.0 cfs.

**Drainage Area "B"** (requirements being met in Owings-Lot 3)  
 Rev Requirement met site wide in open section grass channels of Area "B".  
 WQv and Cpv are required and a BMP must be selected. There are no known Watershed or Terrain factors which prohibit any BMP's at this site. Since Rev is being handled in the grass channels, we can select from Table 4.3 eight possible BMP facilities. Since the total drainage area is only 17.1 acres only one of the BMP's qualify under Table 4.4. The P-1 Micro-Pool Extended Detention Pond was selected and appears to satisfy all the community and environmental factors in Table 4.5.

**Drainage Area "C"**  
 Rev Requirement met by site design.  
 WQv Requirement met by site design  
 Cpv Requirement met due to the One-year peak discharge being < 2.0 cfs.

**Drainage Area "D"** (requirements being met in Owings-Lot 3)  
 Rev Requirement met site wide in grass channels of Area "B".  
 WQv Requirement met designed grass channel along the road.  
 Cpv Requirement met due to the One-year peak discharge being < 2.0 cfs.

**Summary Tables**

Category	Volume Required		Comments
	Drainage Area "A"	Drainage Area "C"	
Water Quality Volume (WQv)	0.0945 Ac-Ft	0.024 Ac-Ft	Met by site design Utilizing the Environmentally Sensitive & Natural Area Credits
Recharge Volume (Rev)	0.023 Ac-Ft (vol) 0.221 Ac-Ft (area)	0.002 Ac-Ft (vol) 0 Ac-Ft (area)	Met by site design Utilizing the Environmentally Sensitive & Natural Area Credits
Channel Protection Volume (Cpv)	N/A	N/A	requirement of less than 2 cfs
Overbank Flood Protection Storage Volume (Qp)	N/A	N/A	
Extreme Flood Volume (Q)	N/A	N/A	

Runoff	Acres		1-year storm		10-year storm		100-year storm	
	Existing	Proposed	Q Pre	Q Dev	Q Pre	Q Dev	Q Pre	Q Dev
Drainage Area "A"	5.67	5.67	0.13	1.46	6.0	10.6	14.2	20.5
Drainage Area "C"	1.44	1.44	0.03	0.14	1.6	2.4	3.9	5.2

TENTATIVELY APPROVED  
 DEPT. OF PLANNING AND ZONING OF  
 HOWARD COUNTY  
*Paul A. Gaylor* 6/16/03  
 PLANNING DIRECTOR DATE

THIS AREA DESIGNATES A MINIMUM 10,000 SQ. FT. PRIVATE SEWAGE EASEMENT REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWAGE IS AVAILABLE. THESE EASEMENTS SHALL BE NULL AND VOID UPON CONNECTION TO A PUBLIC SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT VARIANCES FOR ENCROACHMENT INTO THE PRIVATE SEWAGE EASEMENT. RECORDATION OF A MODIFIED SEWAGE EASEMENT SHALL NOT BE NECESSARY.

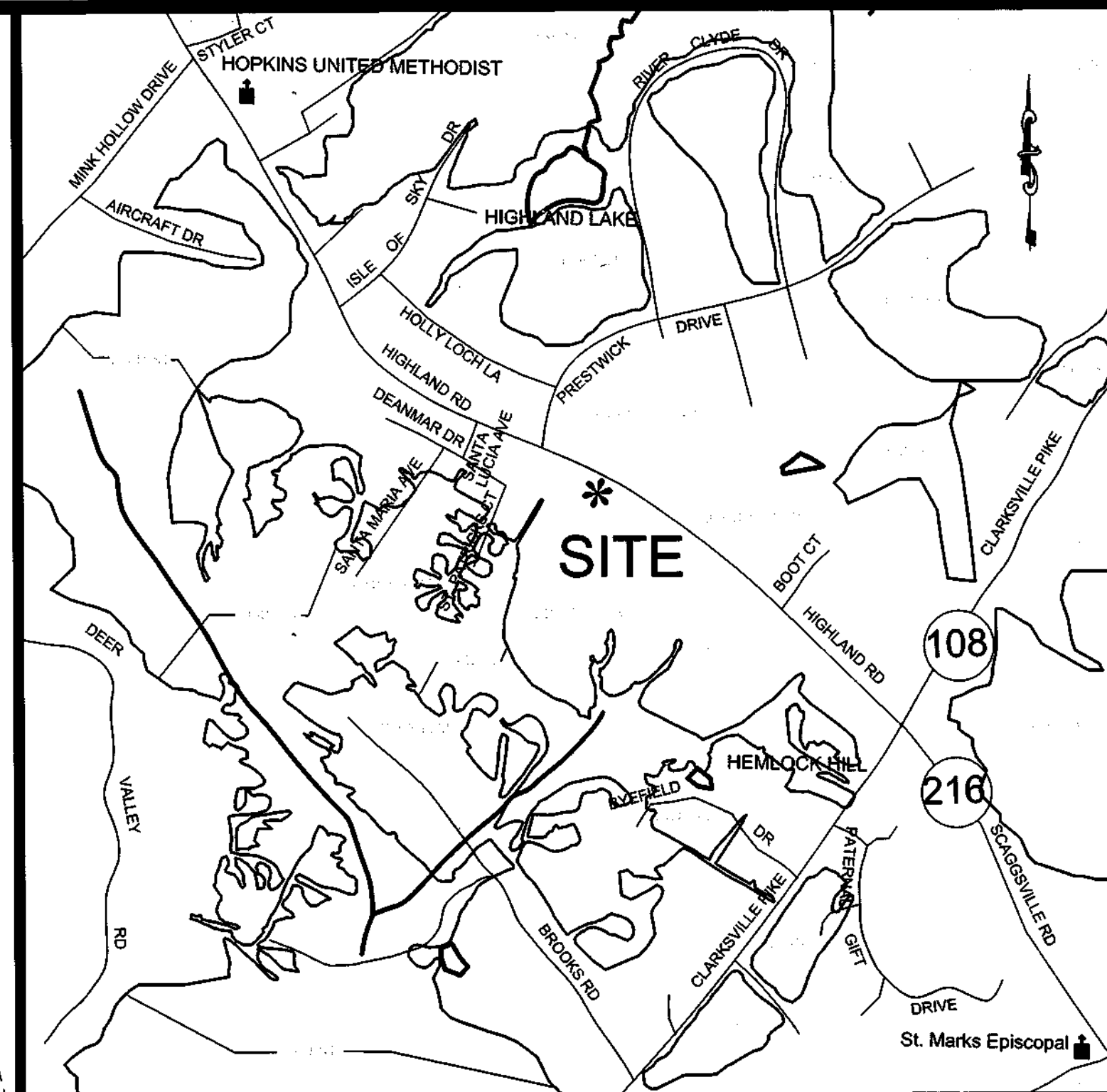
- NOTES**
- TOPOGRAPHY FEATURES, CONTOURS AND ELEVATIONS SHOWN HEREON ARE BASED ON AERIAL PHOTOGRAPHY BY AIR SURVEY PHOTOGRAMMETRIC MAPPING SERVICES.
  - THE BOUNDARY LINES SHOWN HEREON ARE BASED ON A BOUNDARY SURVEY BY DEWBERRY & DAVIS LLC, JANUARY 2002.
  - ALL EXISTING WELLS AND SEPTIC AREAS WITHIN 100' OF THE SITE HAVE BEEN SHOWN TO THE BEST OF OUR KNOWLEDGE.
  - ALL WELLS TO BE DRILLED PRIOR TO SUBMITTAL OF RECORD PLAT FOR SIGNATURE.
  - EXISTING WELLS ON PRESERVATION PARCELS 1 AND 27 TO BE ABANDONED BY A LICENSED WELL DRILLER.
  - APPLICATION NO. 513229 PERC. LOCATIONS ARE BASED ON PERC TESTING DATED JANUARY 13, 2003. ADDITIONAL TESTS PERFORMED ON JUNE 7, 2003.
  - A GROUND WATER APPROPRIATION PERMIT NUMBER MUST BE ISSUED PRIOR TO SUBMITTAL OF RECORD PLAT FOR SIGNATURE.
  - THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
  - LOT 3 SHOWN FOR REFERENCE ONLY.

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS ON LOTS 24, 25, 26, AND 27.  
 HOWARD COUNTY HEALTH DEPARTMENT  
*Henry Brantley* 6-25-03  
 HOWARD COUNTY HEALTH OFFICER DATE  
*JAB*

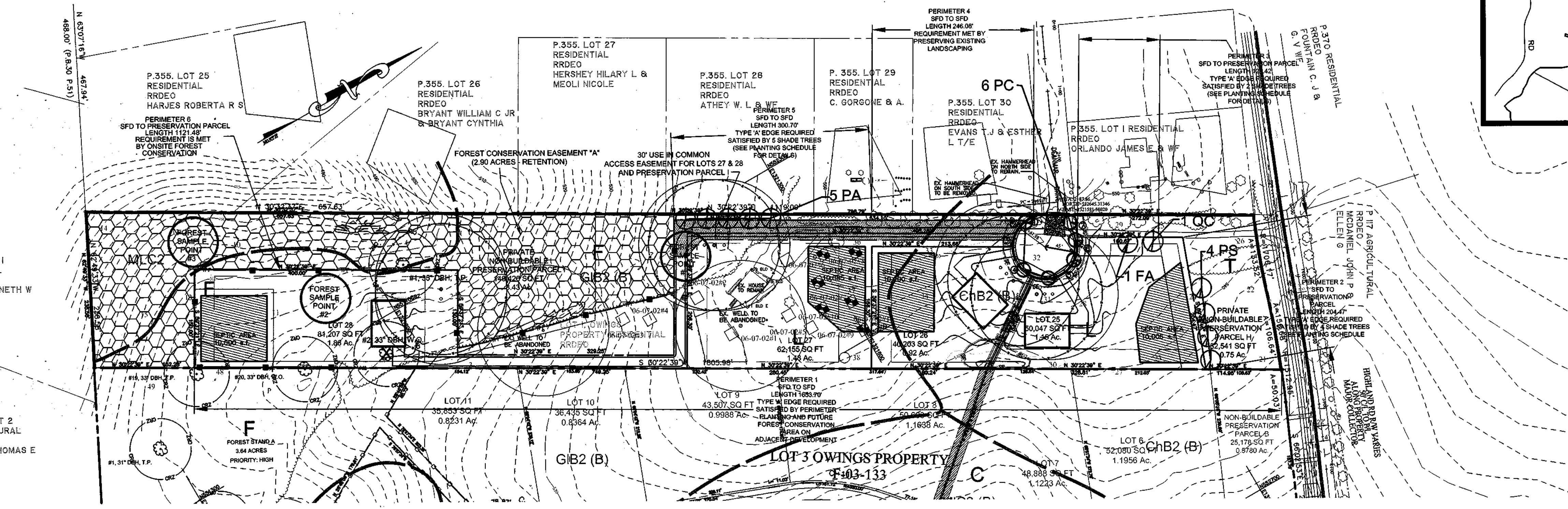
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**PRELIMINARY EQUIVALENT SKETCH PLAN**  
**OWINGS PROPERTY**  
 RESUBDIVISION OF LOT 1  
 CONSISTING OF LOTS 25-28, PARCELS H & I  
 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

Section: NA	Area:	Phase: NA	Scale: 1" = 100'	Sheet: 2 of 4
Map Grid & Parcel: MAP 40, PARCEL 44	Date: JUNE 2003	Prior Submittals: PRELIMINARY SKETCH PLAN SUBMITTED FEB. 14, 2003 SUBMITTED MAY 7, 2003	File number:	



VICINITY MAP  
 SCALE: 1"=1000'



**SPECIMEN TREE IDENTIFICATION LIST**

BOTANICAL NAME/ COMMON NAME	TRUNK Ø (d.b.h.)	TREE HEIGHT	TREE CANOPY	TREE CONDITION	TREE PROTECTION MEASURES
1. <i>Liriodendron tulipifera</i> TULIP POPLAR	35"	70'	45'	GOOD	SAVE, ROOT PRUNE
2. <i>Quercus alba</i> WHITE OAK	33"	65'	40'	GOOD	REMOVE

NOTE: \* - CANDIDATE SPECIMEN TREE WITH A 30" OR GREATER DBH

- GENERAL NOTES**
- TOTAL AREA OF TRACT: 9.73 AC; 423,773± SQ.FT.
  - EXISTING ZONING: RRDEO
  - BOUNDARY FROM TAX MAP (40), AND FROM SURVEY
  - TOPOGRAPHY FROM SURVEY CONTOUR INTERVAL 2 FEET.
  - THERE ARE NO 100-YEAR FLOODPLAINS KNOWN TO EXIST ON THIS SITE ACCORDING TO AVAILABLE INFORMATION (MDMRLIN.NET).
  - THERE ARE NO WETLANDS, WETLAND BUFFERS, STREAMS, AND STREAM BUFFERS ON THE SUBJECT PROPERTY.
  - THE WILDLIFE AND HERITAGE SERVICE HAS NO RECORDS FOR FEDERAL OR STATE RARE, THREATENED OR ENDANGERED PLANTS OR ANIMALS WITHIN THIS PROJECT SITE. HOWEVER, THE FORESTED AREA ON THE SUBJECT PROPERTY CONTAINS FOREST INTERIOR DWELLING BIRD HABITAT. THIS INFORMATION COMES FROM DNR.
  - THE SUBJECT PROPERTY FALLS WITHIN THE ROCKY GORGE DAM SUB-WATERSHED (USE CLASS 1), OF THE PATUXENT WATERSHED.
  - THERE IS ONE FOREST STAND ON THIS SITE TOTALING 4.54 ACRES. SITE INVESTIGATIONS PERFORMED ON 2/10/02, BY DEWBERRY & DAVIS LLC.
  - TWO SPECIMEN CANDIDATE TREES WITH 30" ± DBH MEASUREMENTS EXIST ON THE SUBJECT PROPERTY; ONE OF WHICH (TREE #2) WILL BE REMOVED.
  - NO HYDRIC SOILS EXISTS WITHIN THE SUBJECT PROPERTY ACCORDING TO THE HOWARD COUNTY SOIL SURVEY OF MARYLAND.
  - THERE ARE NO HISTORICAL SITES KNOWN TO EXIST ON THE SUBJECT PROPERTY ACCORDING TO AVAILABLE INFORMATION (MDMRLIN.NET).

**LEGEND**

- LIMIT OF DISTURBANCE
- TREE PROTECTION FENCE (TO BE INSTALLED PRIOR TO CONSTRUCTION)
- PROPOSED ROOT PRUNE AREA (TO BE INSTALLED PRIOR TO CONSTRUCTION)
- PROPOSED FOREST RETENTION AREA SIGN (TO BE INSTALLED PRIOR TO CONSTRUCTION)
- EXIST. TREE >24" D.B.H. TO BE SAVED
- ⊗ TREE >24" D.B.H. TO BE REMOVED
- ▨ FOREST CONSERVATION EASEMENTS (RETENTION AND REFORESTATION)

**SOILS LEGEND  
 HOWARD COUNTY**

NON-HYDRIC SOILS LIST

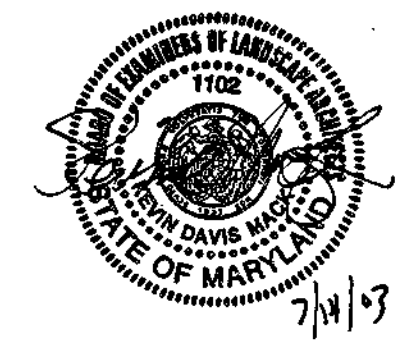
- ChB2 CHESTER SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED
- GLB2 GLENELG LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED
- MLC2 MANOR LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED

DESCRIPTION PER HOWARD COUNTY SOIL SURVEY (1988)

**LEGEND**

- CRITICAL ROOT ZONE (CRZ) (ESTIMATED RADIUS = 1.5' X DBH)
- ▨ AREAS WITH 15-25% SLOPES
- ▨ AREAS WITH 25% & GREATER SLOPES
- TREE LINE
- FOREST SAMPLE POINT #1
- GIB2 (B) SOILS SYMBOL
- C CROPS
- L LAWN
- F FOREST
- T GROUP OF TREES

TENTATIVELY APPROVED  
 DEPT. OF PLANNING AND ZONING  
 HOWARD COUNTY  
*James S. Leggett*  
 PLANNING DIRECTOR  
 DATE



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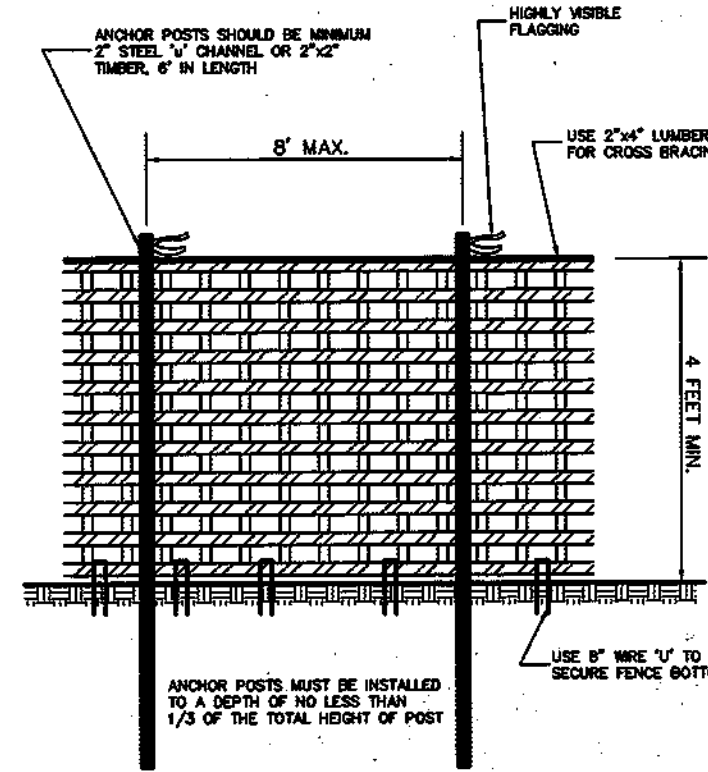
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Drawn by: MNJ  
 Designed by: MNJ  
 Checked by: GW  
 Zoned: RR-DEO

DEVELOPER:  
 DALE THOMPSON BUILDERS  
 680 WOODSIDE COURT  
 COLUMBIA, MARYLAND 21046  
 PHONE: (410) 995-6756  
 FAX: (410) 381-8747

LANDSCAPE PLAN / FOREST CONSERVATION PLAN

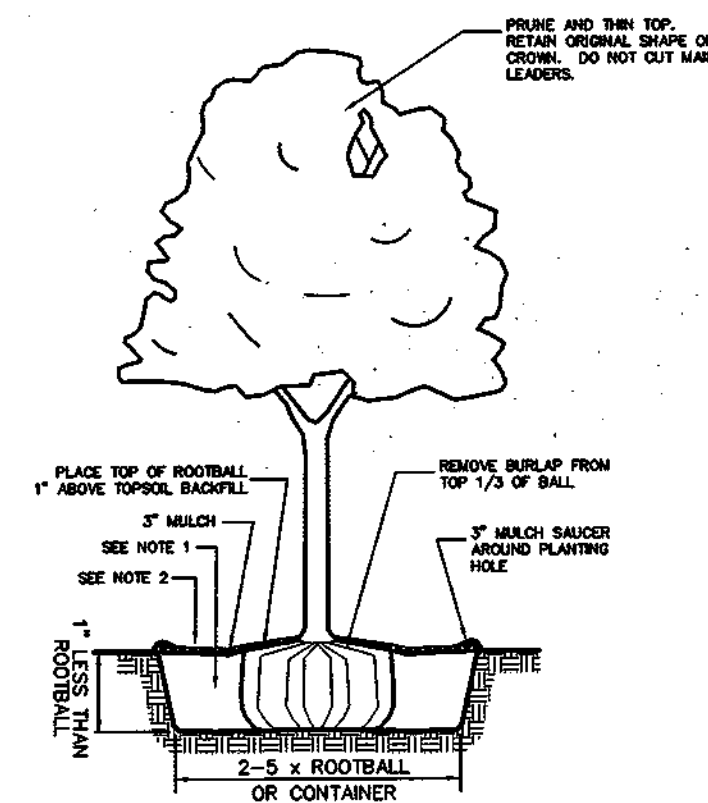
**TREE PROTECTION FENCING**  
BLAZE ORANGE PLASTIC MESH



- NOTE:
1. FOREST PROTECTION DEVICE ONLY.
  2. RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.
  3. BOUNDARIES OF RETENTION AREAS SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICE.
  4. ROOT DAMAGE SHOULD BE AVOIDED.
  5. PROTECTIVE SIGNAGE IS REQUIRED.
  6. DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION.

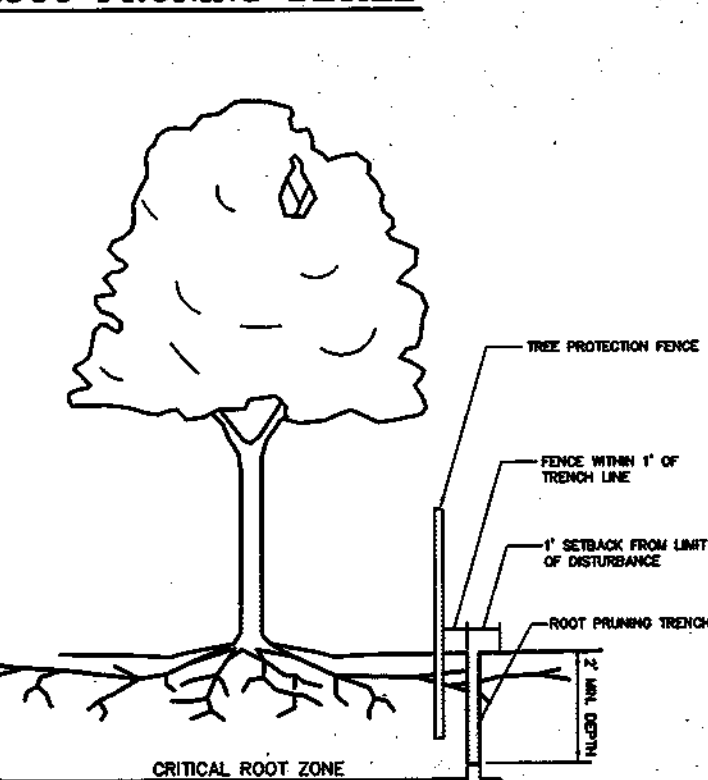
**PLANTING DETAIL**

FOR PROTECTIVE & PRESERVATION TREES & SHRUBS  
CONTAINER GROWN AND BALLED & BURLAPPED STOCK



- NOTE:
1. BACKFILL PLANTING HOLE WITH NATIVE TOP SOIL IN AREAS OF UNDISTURBED SOIL. USE HIGH QUALITY TOPSOIL BACKFILL IN AREAS OF DISTURBED SOIL.
  2. MAKE TOP OF PLANTING HOLE LEVEL. SET CENTER OF TOP OF ROOTBALL EVEN WITH ORIGINAL GRADE ON SLOPING AREAS.
  3. USE STAKING FOR TREES UP TO 3" CALIPER ONLY IN AREAS OF HIGH WIND. REMOVE AFTER 1ST GROWING SEASON.

**ROOT PRUNING DETAIL**

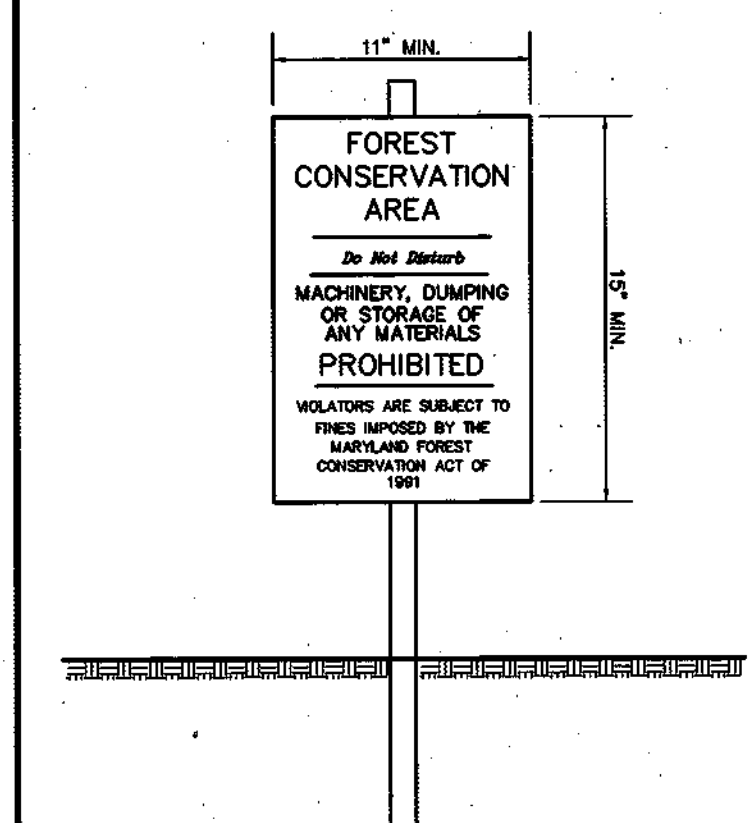


- NOTE:
1. RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.
  2. BOUNDARIES OF RETENTION AREAS SHOULD BE STAKED AND FLAGGED PRIOR TO TRENCHING.
  3. EXACT LOCATION OF TRENCH SHOULD BE IDENTIFIED.
  4. TRENCH SHOULD BE IMMEDIATELY BACKFILLED WITH SOIL REMOVED OR OTHER HIGH ORGANIC SOIL.
  5. ROOTS SHOULD BE CLEANLY CUT USING VIBRATORY KNIFE OR OTHER ACCEPTABLE EQUIPMENT.

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**SIGNAGE**  
FOREST RETENTION AREAS



- NOTE:
1. ATTACHMENT OF SIGNS TO TREES IS PROHIBITED.
  2. SIGNS SHOULD BE PROPERLY MAINTAINED.
  3. AVOID INJURY TO ROOTS WHEN PLACING POSTS FOR SIGNS.
  4. SIGNS SHOULD BE PLACED AT A MAX. INTERVAL OF 100' ALONG ALL L.O.D.'S AND/OR STREAM BUFFERS IN AREAS OF FOREST RETENTION.

**FOREST PROTECTION PROCEDURES-CONSTRUCTION PHASE**  
FOREST AND TREE CONDITIONS SHOULD BE MONITORED DURING CONSTRUCTION AND CORRECTIVE MEASURES TAKEN WHEN APPROPRIATE.

THE FOLLOWING SHALL BE MONITORED:

- A) SOIL COMPACTION
- B) ROOT INJURY-PRUNE AND MONITOR; CONSIDER CROWN REDUCTION
- C) LIMB INJURY-PRUNE AND MONITOR
- D) FLOODED CONDITION-DRAIN AND MONITOR; CORRECT PROBLEM
- E) DROUGHT CONDITIONS-WATER AND MONITOR; CORRECT PROBLEM
- F) OTHER STRESS SIGNS-DETERMINE REASON, CORRECT, AND MONITOR

**FOREST PROTECTION PROCEDURES-POST-CONSTRUCTION PHASE**

THE FOLLOWING MEASURES SHALL BE TAKEN:

- 1) CORRECTIVE MEASURES IF DAMAGES WERE INCURRED DUE TO NEGLIGENCE
  - a. STRESS REDUCTION
  - b. REMOVAL OF DEAD OR DYING TREES. THIS MAY BE DONE ONLY IF TREES POSE AN IMMEDIATE SAFETY HAZARD.
- 2) REMOVAL OF TEMPORARY STRUCTURES:
  - a. NO BURIAL OF DISCARDED MATERIALS WILL OCCUR ON-SITE WITHIN THE CONSERVATION AREA.
  - b. NO OPEN BURNING WITHIN 100 FEET OF A WOODED AREA.
  - c. ALL TEMPORARY FOREST PROTECTION STRUCTURES WILL BE REMOVED AFTER CONSTRUCTION.
  - d. REMOVE TEMPORARY ROADS BY REMOVING STONE OR BROADCASTING MULCH; PRE-CONSTRUCTION ELEVATION SHOULD BE MAINTAINED.
  - e. AERATE COMPACTED SOIL.
  - f. REPLANT DISTURBED SITES WITH TREES, SHRUBS AND/OR HERBACEOUS PLANTS.
  - g. RETAIN SIGNS FOR RETENTION AREAS OR SPECIMEN TREES.
  - h. A COUNTY OFFICIAL SHALL INSPECT THE ENTIRE SITE.

TENTATIVELY APPROVED  
DEPT. OF PLANNING AND ZONING OF  
HOWARD COUNTY

*James J. Grogan*  
PLANNING DIRECTOR  
7/14/03 DATE

**SCHEDULE "A" PERIMETER LANDSCAPE EDGE (FOR EACH PERIMETER)**

PERIMETER	CATEGORY (PROPERTIES/ROADWAYS)	LANDSCAPE TYPE	LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NUMBER OF PLANTS REQUIRED			NUMBER OF PLANTS PROVIDED			
						SHADE TREES	EVERGREEN TREES	SHRUBS	SHADE TREES	EVERGREEN TREES	SHRUBS	
1	SFD TO SFD	A	1653.7'	YES, PROPOSED PERIMETER PLANTING ON ADJACENT PROPERTY (SEE F-03-133).	NO	--	--	--	--	--	--	--
2	SFD TO PRESERVATION PARCEL	A	204.47'	NO	NO	4	--	--	4	--	--	--
3	SFD TO PRESERVATION PARCEL	A	123.42'	NO	NO	2	--	--	2	--	--	--
4	SFD TO SFD	A	246.68'	YES, 246.68' OF EXISTING TREES AND SHRUBS; 6" -18", GOOD CONDITION.	NO	--	--	--	--	--	--	--
5	SFD TO SFD	A	300.70'	NO	NO	5	--	--	5	--	--	--
6	SFD TO PRESERVATION PARCEL	A	1,121.48'	YES, 1121.48' OF FOREST TO BE RETAINED IN EASEMENT	NO	--	--	--	--	--	--	--
<b>TOTAL TABULATION:</b>						<b>17</b>	<b>--</b>	<b>--</b>	<b>17</b>	<b>--</b>	<b>--</b>	<b>--</b>

**FOREST CONSERVATION EASEMENT STANDARD NOTES:**

THE FOREST CONSERVATION EASEMENT HAS BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.12000 OF THE HOWARD COUNTY CODE, FOREST CONSERVATION ACT. NO CLEARING, GRADING, OR CONSTRUCTION PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT; HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.

**PLANTING SCHEDULE "A" FOR PERIMETERS 2,3, & 5--**  
SFD TO SFD (TYPE A BUFFER) TYPE A BUFFER  
(TOTAL PERIMETER LENGTH= 628.59')

QTY	KEY	BOTANICAL NAME	COMMON NAME	SIZE/TYPE	ROOT CONDITION	REMARKS
<b>SHADE TREES</b>						
1	QC	QUERCUS COCCINEA	SCARLET OAK	2 1/2"-3" CAL	B & B	
1	FA	FRAXINUS AMERICANA 'AUTUMN PURPLE'	'AUTUMN PURPLE' WHITE ASH	2 1/2"-3" CAL	B & B	
5	PA	PLATANUS ACERIFOLIA 'BLOODGOOD'	'BLOODGOOD' LONDON PLANE	2 1/2"-3" CAL	B & B	
4	PS	PRUNUS SARGENTII	SARGENT CHERRY	2 1/2"-3" CAL	B & B	

**PLANTING SCHEDULE FOR STREET TREE PLANTING**

QTY	KEY	BOTANICAL NAME	COMMON NAME	SIZE/TYPE	ROOT CONDITION	REMARKS
<b>MEDIUM SIZE TREES</b>						
6	PC	PYRUS CALLERYANA 'CHANTICLEER'	'CHANTICLEER' PEAR	2" - 2 1/2" CAL	B & B	40' O.C. EXCEPT WHERE NOTED ON PLAN

**SUMMARY PLANTING SCHEDULE FOR OWINGS LOT 1**

QTY	KEY	BOTANICAL NAME	COMMON NAME	SIZE/TYPE	ROOT CONDITION	REMARKS
<b>SHADE TREES</b>						
1	QC	QUERCUS COCCINEA	SCARLET OAK	2 1/2"-3" CAL	B & B	
1	FA	FRAXINUS AMERICANA 'AUTUMN PURPLE'	'AUTUMN PURPLE' WHITE ASH	2 1/2"-3" CAL	B & B	
5	PA	PLATANUS ACERIFOLIA 'BLOODGOOD'	'BLOODGOOD' LONDON PLANE	2 1/2"-3" CAL	B & B	
4	PS	PRUNUS SARGENTII	SARGENT CHERRY	2 1/2"-3" CAL	B & B	
<b>MEDIUM SIZE TREES</b>						
6	PC	PYRUS CALLERYANA 'CHANTICLEER'	'CHANTICLEER' PEAR	2" - 2 1/2" CAL	B & B	40' O.C. EXCEPT WHERE NOTED ON PLAN

**GRAND TOTAL OF ONSITE LANDSCAPING REQUIREMENTS (PERIMETER LANDSCAPING AND STREE TREES)**

**GRAND TOTAL OF PLANTINGS REQUIRED: 17 SHADE TREES**

**GRAND TOTAL OF PLANTINGS PROVIDED: 17 SHADE TREES**

**APPENDIX E**  
**FOREST CONSERVATION WORKSHEET**

I. BASIC SITE DATA	
GROSS SITE AREA	9.73 ACRES
AREA WITHIN 100 YEAR FLOOD PLAIN	0.00 ACRES (B)
AREA WITHIN PRESERVATION PARCEL (IF APPLICABLE)	0.00 ACRES (C)
NET TRACT AREA	9.73 ACRES
LAND USE CATEGORY (R-RLD, R-RMD, R-S, C10, I)	R-RMD

II. INFORMATION FOR CALCULATIONS	
A. NET TRACT AREA	9.73 ACRES (A)
B. REFORESTATION THRESHOLD (25% X A)	2.43 ACRES (B)
C. AFFORESTATION MINIMUM (20% X A)	1.95 ACRES (C)
D. EXISTING FOREST ON NET TRACT AREA	4.54 ACRES (D)
E. FOREST AREAS TO BE CLEARED	1.84 ACRES (E)
F. FOREST AREAS TO BE RETAINED	2.90 ACRES (F)

III. DETERMINING REQUIREMENTS: AFFORESTATION OR REFORESTATION	
1. REFORESTATION:	IF EXISTING FOREST AREAS EQUAL OR EXCEED THE AFFORESTATION MINIMUM (IF D EQUALS OR IS MORE THAN C), AND CLEARING OF FOREST AREAS IS PROPOSED, REFORESTATION REQUIREMENTS APPLY.
GO TO SECTION IV	
IF EXISTING FOREST AREAS EXCEED THE AFFORESTATION MINIMUM (IF D EQUALS OR IS MORE THAN C) AND NO CLEARING OF FOREST AREAS IS PROPOSED, NO REFORESTATION IS REQUIRED. NO FURTHER CALCULATIONS ARE NEEDED.	
2. AFFORESTATION:	IF EXISTING FOREST AREAS ARE LESS THAN THE AFFORESTATION MINIMUM (IF D IS LESS THAN C), AFFORESTATION REQUIREMENTS APPLY.
GO TO SECTION V	

IV. REFORESTATION CALCULATIONS	
A. NET TRACT AREA	9.73 ACRES (A)
B. REFORESTATION THRESHOLD (25% X A)	2.43 ACRES (B)
C. EXISTING FOREST ON NET TRACT AREA	4.54 ACRES (C)
D. FOREST AREAS TO BE CLEARED	1.84 ACRES (D)
E. FOREST AREAS TO BE RETAINED	2.90 ACRES (E)
F. FOREST AREAS CLEARED ABOVE THRESHOLD (C-E, IF E EQUALS OR IS GREATER THAN B, ALTERNATE 1)	1.64 ACRES (F)
G. FOREST AREAS CLEARED BELOW REFORESTATION THRESHOLD (D-F, IF APPLICABLE)	0.00 ACRES (G)
H. FOREST AREAS RETAINED ABOVE REFORESTATION THRESHOLD (F-B, RETENTION CREDIT, IF APPLICABLE)	0.79 ACRES (H)

SELECT THE ALTERNATIVE THAT APPLIES:

1. CLEARING ABOVE THE THRESHOLD ONLY

IF FOREST AREAS TO BE RETAINED EQUAL OR ARE GREATER THAN THE REFORESTATION THRESHOLD (IF F EQUALS OR IS GREATER THAN B), THE FOLLOWING CALCULATIONS APPLY:

REFORESTATION FOR CLEARING ABOVE THRESHOLD	0.41 ACRES
F X 1/4	
CREDIT FOR FOREST AREAS RETAINED ABOVE THRESHOLD	0.79 ACRES
H = RETENTION CREDIT	
TOTAL REFORESTATION REQUIRED (F X 1/4) - H	0 ACRES

2. CLEARING BELOW THE THRESHOLD

IF FOREST AREAS TO BE RETAINED ARE LESS THAN THE REFORESTATION THRESHOLD (IF F IS LESS THAN B), THE FOLLOWING CALCULATIONS APPLY:

REFORESTATION FOR CLEARING ABOVE THRESHOLD	NA
F X 1/4	
REFORESTATION FOR CLEARING BELOW THRESHOLD	NA
G X 2	
TOTAL REFORESTATION REQUIRED (F X 1/4) + (G X 2)	NA

SINCE CLEARING OCCURS BELOW THE THRESHOLD, NO FOREST RETENTION CREDIT IS POSSIBLE

V. AFFORESTATION CALCULATIONS

VI. TOTAL AFFORESTATION AND REFORESTATION REQUIREMENT:	0.00 ACRES
VII. PROPOSED QUANTITY OF AFFORESTATION AND REFORESTATION ONSITE:	0.00 ACRES

NOTE TO REVIEWER:

1. NO AFFORESTATION OR REFORESTATION IS REQUIRED ONSITE. DEVELOPER HAS 0.79 ACRES OF TRANSFERABLE RETENTION CREDIT.

**NOTE TO REVIEWER**

1. OWNER REQUESTS TO RECEIVE CREDIT FOR THE LANDSCAPING REQUIREMENT FOR PERIMETER 1 ON THIS PROPERTY FOR THAT WHICH WILL BE PLANTED ON SAME PERIMETER ALONG THE ADJACENT PROPERTY, ON LOT3.

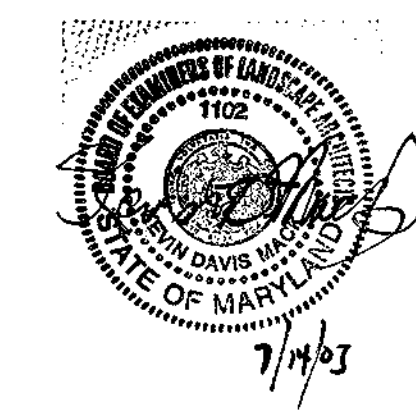
**NOTE TO CONTRACTOR:**

1. THE CONTRACTOR SHOULD REMOVE ANY DEAD OR DISEASED TREES THAT ARE ON THE SUBJECT PROPERTY.

**PRELIMINARY EQUIVALENT SKETCH PLAN**  
**OWINGS PROPERTY**

RESUBDIVISION OF LOT 1  
CONSISTING OF LOTS 25-28, PARCELS H & I  
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

Section:	Area:	Phase:	Scale:	Sheet:
NA		NA	1" = 100'	4 of 4
Tax Map Ord & Parcel:	Date:	Prior Submittal:	File number:	
MAP 40, PARCEL 44	JUNE 2003	PRELIMINARY/SKETCH PLAN SUBMITTED FEB. 14, 2003 SUBMITTED MAY 7, 2003		

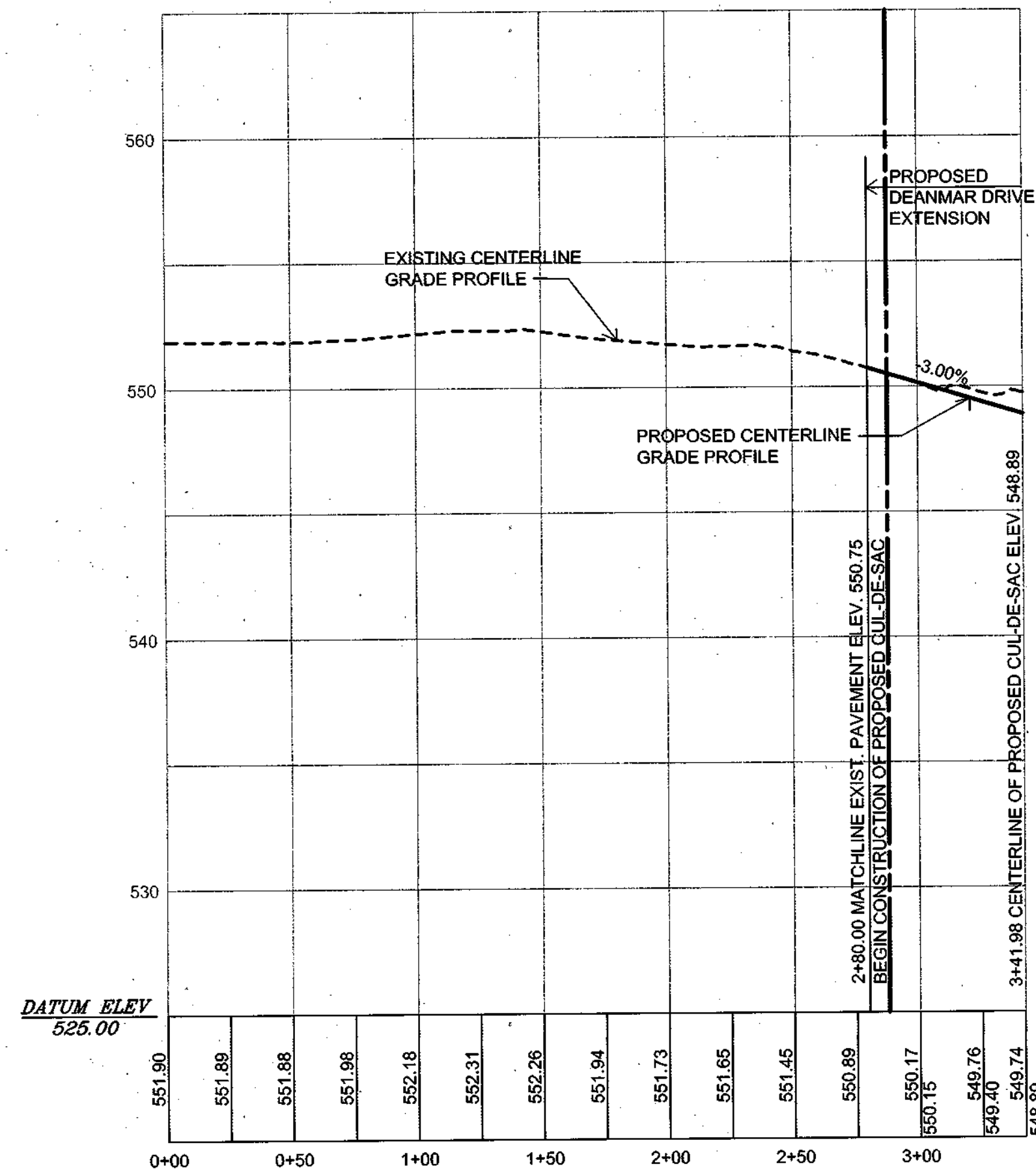


**Dewberry & Davis LLC**  
A Dewberry Company  
804 West Diamond Avenue, Suite 200  
Gaithersburg, MD 20878-1414  
(301) 948-8300 Fax: (301) 258-7607  
www.dewberry.com

*James J. Grogan*  
7/14/03  
PREPARED BY  
QUALIFIED PROFESSIONAL  
PLANNING DIRECTOR  
STATE OF MARYLAND

Drawn by: MNJ  
Designed by: MNJ  
Checked by: GW  
Zone: RR-DEO  
DEVELOPER: DALE THOMPSON BUILDERS  
6500 WOODSIDE COURT  
COLUMBIA, MARYLAND 21046  
PHONE: (410) 995-0756  
FAX: (410) 981-5874

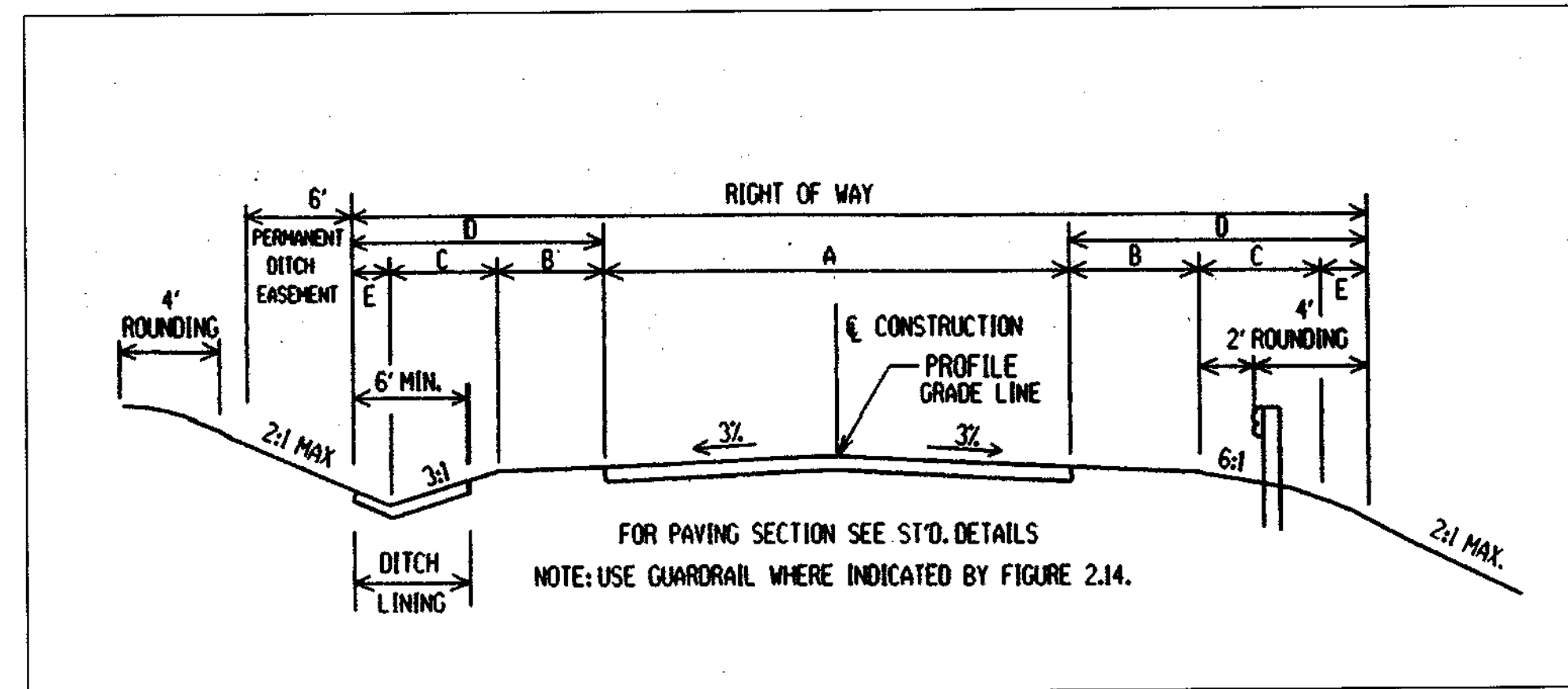
LANDSCAPE PLAN / FOREST CONSERVATION PLAN



# DEANMAR DRIVE

SCALE  
V: 1"=5'  
H: 1"=50'

## TYPICAL PAVEMENT SECTION DEANMAR DRIVE\*



CLASSIFICATION	A	B	C	D	E	RW
RESIDENTIAL ACCESS STREET / MINOR COLLECTOR*	24'	4'	4'	13'	5'	50'

TENTATIVELY APPROVED  
DEPT. OF PLANNING AND  
ZONING OF  
HOWARD COUNTY

*Handwritten signature*  
PLANNING DIRECTOR

*Handwritten date*  
DATE

**NOTE**  
INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS; BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATION OF THE MAINS BY DIGGING TEST PITS BY HAND AT ALL UTILITY CROSSINGS WELL IN ADVANCE OF THE START OF EXCAVATION. CONTACT "MISS UTILITY" AT 1-800-257-7377 AT LEAST 48 HOURS PRIOR TO THE START OF EXCAVATION. IF CLEARANCES ARE LESS THAN SHOWN ON THE PLAN OR TWELVE (12) INCHES, WHICHEVER IS LESS, CONTACT THE ENGINEER AND THE UTILITY BEFORE PROCEEDING WITH CONSTRUCTION.

**PRELIMINARY EQUIVALENT SKETCH PLAN  
OWINGS PROPERTY**  
RESUBDIVISION OF LOT 1  
CONSISTING OF LOTS 25-28, PARCELS H & I  
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

Section: NA	Area:	Phase: NA	Scale: 1" = 100'	Sheet: 1 of 1
Tax Map Grid & Parcel: MAP 40, PARCEL 44	Date: JUNE 2003	Prior Submittal: PRELIMINARY/SKETCH PLAN SUBMITTED FEB. 14, 2003 ; SUBMITTED MAY 7, 2003 ;	File number:	

Engineers  
Planners  
Surveyors  
Landscape Architects  
www.dewberry.com

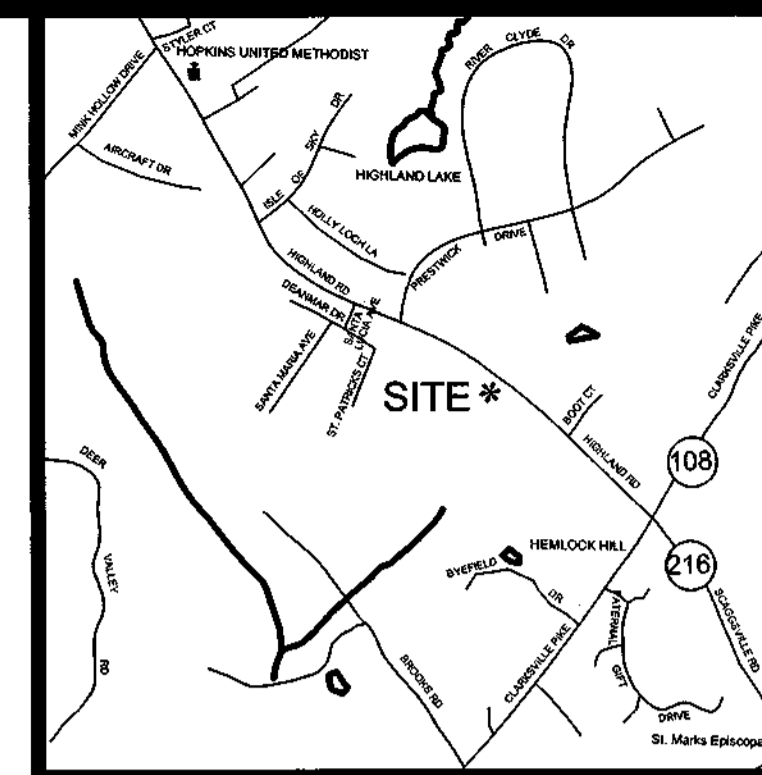
**Dewberry & Davis LLC**  
A Dewberry Company  
804 West Diamond Avenue, Suite 200  
Gaithersburg, MD 20878-1414  
(301) 948-5300 Fax: (301) 258-7607



Drawn by: KDM  
Designed by: KDM  
Checked by: IEV  
Zone: RR-DEO

DEVELOPER:  
DALE THOMPSON BUILDERS  
6300 WOODSIDE COURT  
COLUMBIA, MARYLAND 21046  
PHONE: (410) 995-0736  
FAX: (410) 381-8747

PRELIMINARY STREET PROFILES



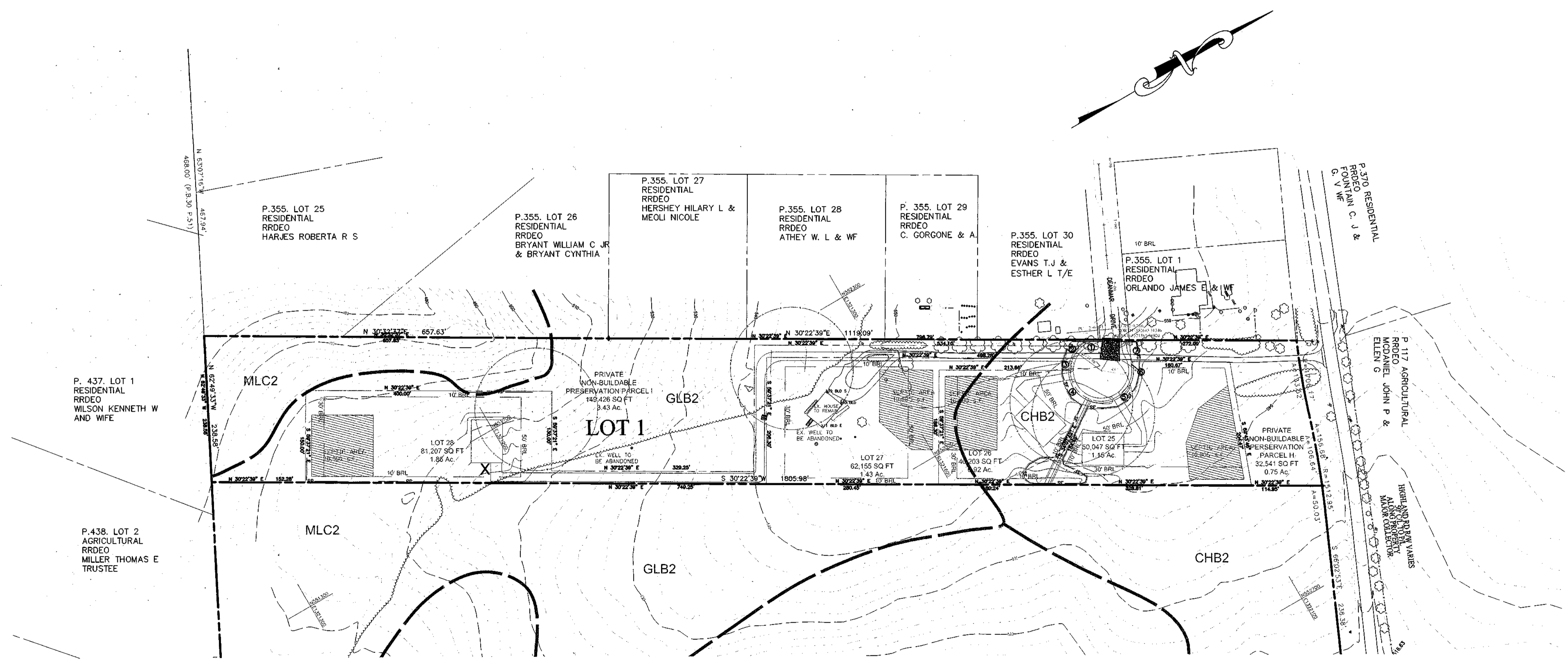
VICINITY MAP  
SCALE: 1"=2000'

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COLUMBIA, MARYLAND 21046  
PHONE: (410) 995-6736  
FAX: (410) 381-8747

PRELIMINARY SEDIMENT CONTROL PLAN



TENTATIVELY APPROVED  
DEPT. OF PLANNING AND  
GENERAL SERVICES  
HOWARD COUNTY  
*Paul A. Long* 8/12/03  
PLANNING DIRECTOR DATE

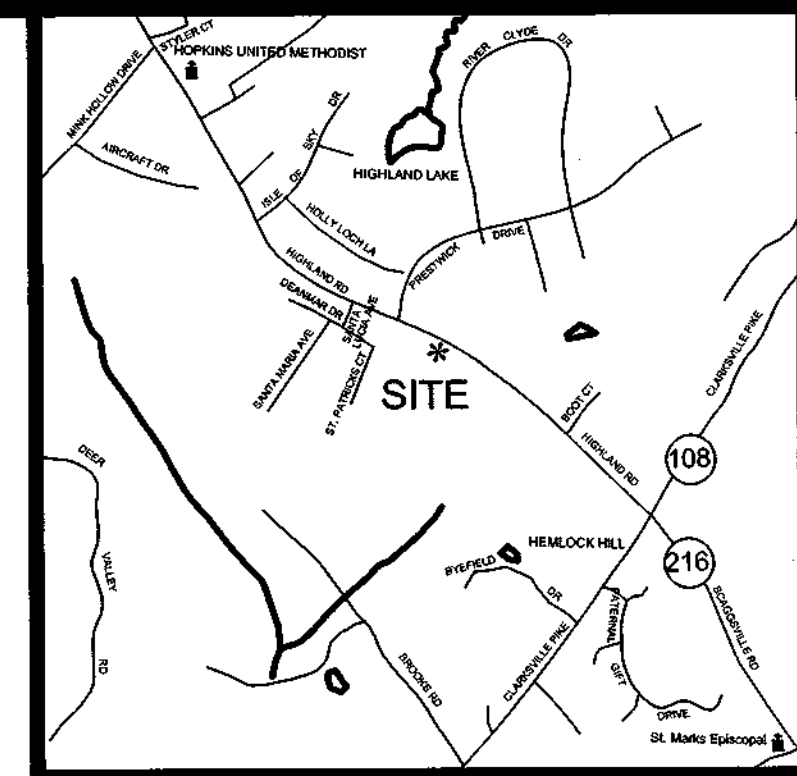
- LEGEND**
- EXISTING 2 FOOT CONTOURS
  - EXISTING 10 FOOT CONTOURS
  - PROPOSED LOD
  - PROPOSED SILT FENCE
  - PROPOSED SILT & TREE PROTECTION FENCE

**NOTE**  
INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATION OF THE MAINS BY DIGGING TEST PITS BY HAND AT ALL UTILITY CROSSINGS WELL IN ADVANCE OF THE START OF EXCAVATION. CONTACT "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO THE START OF EXCAVATION. IF CLEARANCES ARE LESS THAN SHOWN ON THIS PLAN OR TWELVE (12) INCHES, WHICHEVER IS LESS, CONTACT THE ENGINEER AND THE UTILITY BEFORE PROCEEDING WITH CONSTRUCTION.

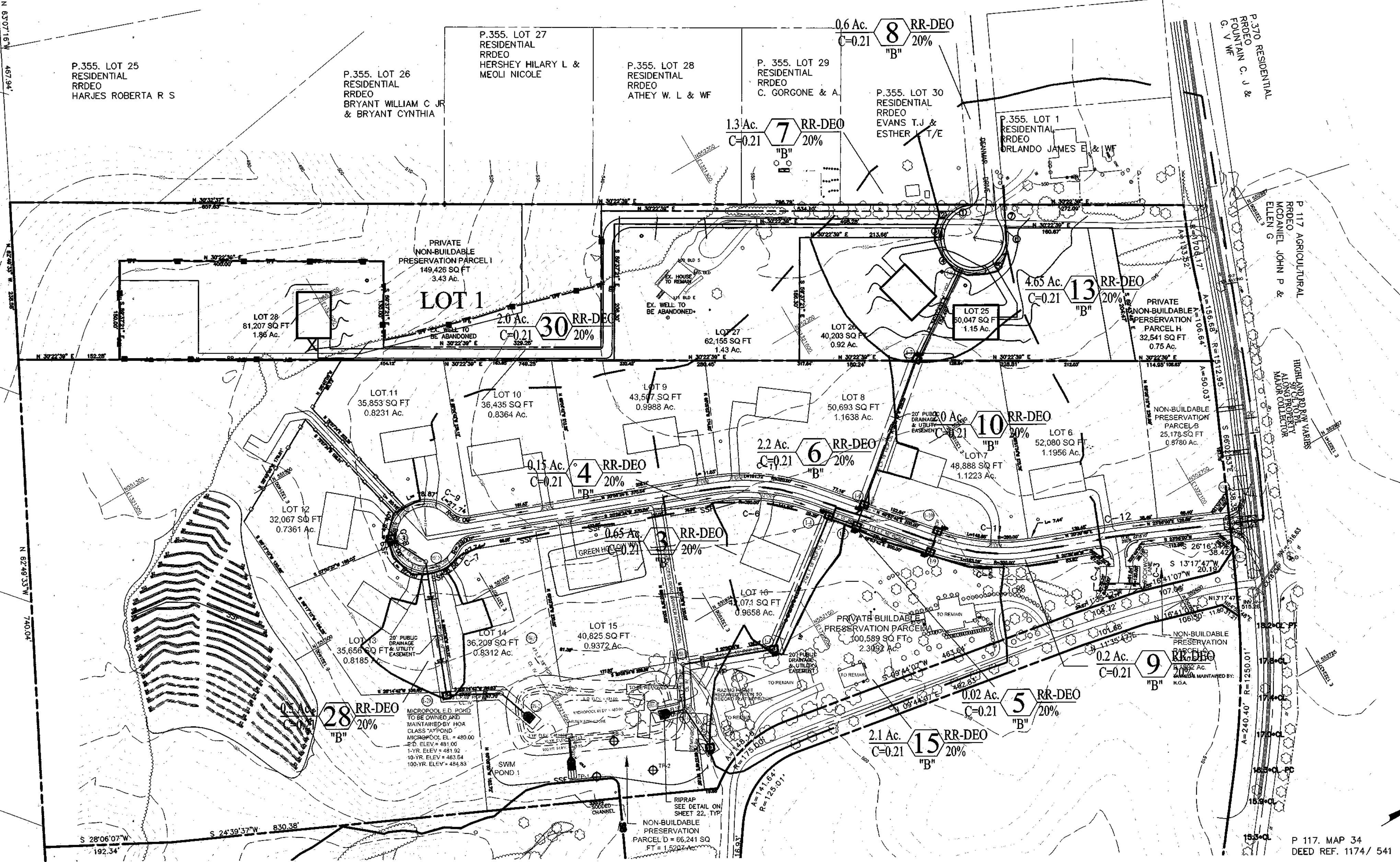
**PRELIMINARY EQUIVALENT SKETCH PLAN  
OWINGS PROPERTY  
RESUBDIVISION OF LOT 1  
CONSISTING OF LOTS 25-28, PARCELS H & I  
5TH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND**

Section: NA	Area:	Phase: NA	Scale: 1" = 100'	Sheet: 1 of 1
Tax Map Grid & Parcel: MAP 40, PARCEL 44	Date: JUNE 2003	Prior Submittals: PRELIMINARY/SKETCH PLAN SUBMITTED FEB. 14, 2003 SUBMITTED MAY 7, 2003	File number:	

C-9	29.00'	27.74'	54'47"50"	26.69'	N 48°20'20" E
C-10	320.00'	161.72'	28°57'18"	160.00'	N 35°25'03" E
C-11	280.00'	142.85'	29°13'53"	141.31'	N 35°16'46" E
C-12	220.00'	12.55'	3°16'10"	12.55'	S 22°17'55" W



VICINITY MAP  
SCALE: 1"=2000'



**LEGEND**  
 --- EXISTING 2 FOOT CONTOURS  
 --- EXISTING 10 FOOT CONTOURS  
 --- DRAINAGE DIVIDE

TENTATIVELY APPROVED  
 DEPT. OF PLANNING AND ZONING OF  
 HOWARD COUNTY  
*Mark Hager* PLANNING DIRECTOR  
 DATE

**NOTE**  
 INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATION OF THE MAINS BY LOGGING TEST PITS BY HAND AT ALL UTILITY CROSSINGS WELL IN ADVANCE OF THE START OF EXCAVATION CONTRACT "PASS UTILITY" AT 1:00-2:00 PM AT LEAST 48 HOURS PRIOR TO THE START OF EXCAVATION. IF CLEARANCES ARE LESS THAN SHOWN ON THIS PLAN OR TWELVE (12) INCHES, WHICHEVER IS LESS CONTACT THE ENGINEER AND THE UTILITY BEFORE PROCEEDING WITH CONSTRUCTION.

**OWINGS PROPERTY - LOT 1 & 3**

STORM DRAIN COMPUTATIONS  
 SHEET 1 of 1  
 DATE: May 14, 2003  
 10 YR STORM

FROM	TO	AREA INCREM.	AREA TOTAL	RcC	RR	EAR	Tc	I	Q	SLOPE MIN %	SLOPE ACT %	PIPE SIZE INCHES	Q/A	LENGTH	TIME IN PIPE MIN
8	7	0.60	0.60	0.21	0.13	0.13	10.00	6.80	0.63	0.03	0.02%	4.00"	15	0.68	2.30
7	6	1.30	1.30	0.21	0.27	0.27	10.00	16.38	1.43	0.09	0.10%	4.00"	15	1.70	3.82
6	5	2.20	4.10	0.21	0.46	0.66	20.21	4.68	2.16	4.03	0.39%	2.00"	15	3.28	1.51
10	9	2.00	2.00	0.21	0.42	0.42	10.00	6.80	2.77	2.77	0.18%	2.00"	15	2.26	4.6
9	5	0.20	2.20	0.21	0.94	0.46	10.34	6.50	0.27	3.09	0.22%	2.00"	15	2.45	2.00
5	4	0.02	6.32	0.21	0.00	1.33	20.87	4.60	0.02	6.11	0.89%	2.00"	15	4.97	7.0
4	3	0.15	6.47	0.21	0.03	1.36	21.11	4.58	0.14	6.22	0.35%	3.00"	18	3.92	1.70
3	2	0.08	7.12	0.21	0.14	1.50	22.61	4.38	0.00	6.55	0.30%	2.00"	18	3.71	3.4
2	14	0.00	7.12	0.21	0.00	1.50	22.97	4.38	0.00	6.55	0.30%	2.00"	18	3.71	45
15	14	2.10	2.10	0.21	0.44	0.44	10.00	6.80	2.91	2.91	0.20%	3.00"	15	2.37	7.0
14	1	0.00	9.22	0.21	0.00	1.94	23.29	4.40	0.00	6.52	0.66%	1.00"	18	4.82	7.0
30	28	2.00	2.00	0.21	0.42	0.42	10.00	6.80	2.77	2.77	0.18%	2.00"	15	2.26	1.38
28	26	0.90	2.90	0.21	0.00	0.42	11.38	6.60	0.00	2.77	0.18%	2.00"	15	2.26	97
28	27	0.50	2.50	0.21	0.11	0.53	12.10	6.03	0.63	3.17	0.24%	3.00"	15	2.58	1.15
27	26	0.00	2.50	0.21	0.00	0.53	13.25	6.03	0.00	3.17	0.24%	4.00"	15	2.58	149
13	12	4.65	17.57	0.21	0.98	0.98	18.00	6.60	6.44	6.44	1.00%	1.00"	15	5.25	46

**PRELIMINARY EQUIVALENT SKETCH PLAN**  
**OWINGS PROPERTY**  
 RESUBDIVISION OF LOT 1  
 CONSISTING OF LOTS 25-28, PARCELS H & I  
 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

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Drawn by: IEV  
 Designed by: IEV  
 Checked by: MAM  
 Zoned: RR-DEO

DEVELOPER:  
 DALE THOMPSON BUILDERS  
 6800 WOODSIDE COURT  
 COLUMBIA, MARYLAND 21046  
 PHONE: (410) 995-6756  
 FAX: (410) 381-8747

PRELIMINARY STORM DRAIN STUDY





**SOILS LEGEND  
HOWARD COUNTY**

**NON-HYDRIC SOILS LIST**

CHB2 CHESTER SILT LOAM,  
3 TO 8 PERCENT SLOPES,  
MODERATELY ERODED

GLB2 GLENELG LOAM,  
3 TO 8 PERCENT SLOPES,  
MODERATELY ERODED

MLB2 MANOR LOAM,  
3 TO 8 PERCENT SLOPES,  
MODERATELY ERODED

MLC2 MANOR LOAM,  
8 TO 15 PERCENT SLOPES,  
MODERATELY ERODED

MLD2 MANOR LOAM,  
15 TO 25 PERCENT SLOPES,  
MODERATELY ERODED

**HYDRIC SOILS LIST**

NO HYDRIC SOILS ON SITE

DESCRIPTION PER HOWARD COUNTY SOIL SURVEY

**LEGEND**

- EXISTING 2 FOOT CONTOURS
- EXISTING 10 FOOT CONTOURS
- SOILS LINE
- MIC2 SOIL TYPE (SEE SOIL LEGEND)
- DRAINAGE DIVIDE
- Tc FLOWPATH
- SWM FOR THIS AREA PROVIDED FOR UNDER OWINGS LOT 3 (P-02-18)
- ENVIRONMENTALLY SENSITIVE DEVELOPMENT CREDIT

**BMP SELECTION AND LOCATION OF FACILITIES**

**Drainage Area "A"**  
 Rev Requirement met by site design.  
 WQv Requirement met by site design  
 Cpv Requirement met due to the One-year peak discharge being < 2.0 cfs.

**Drainage Area "B"** (requirements being met in Owings-Lot 3)  
 Rev Requirement met site wide in open section grass channels of Area "B".  
 WQv and Cpv are required and a BMP must be selected. There are no known Watershed or Terrain factors which prohibit any BMP's at this site. Since Rev is being handled in the grass channels, we can select from Table 4.3 eight possible BMP facilities. Since the total drainage area is only 17.1 acres only one of the BMP's qualify under Table 4.4. The P-1 Micro-Pool Extended Detention Pond was selected and appears to satisfy all the community and environmental factors in Table 4.5.

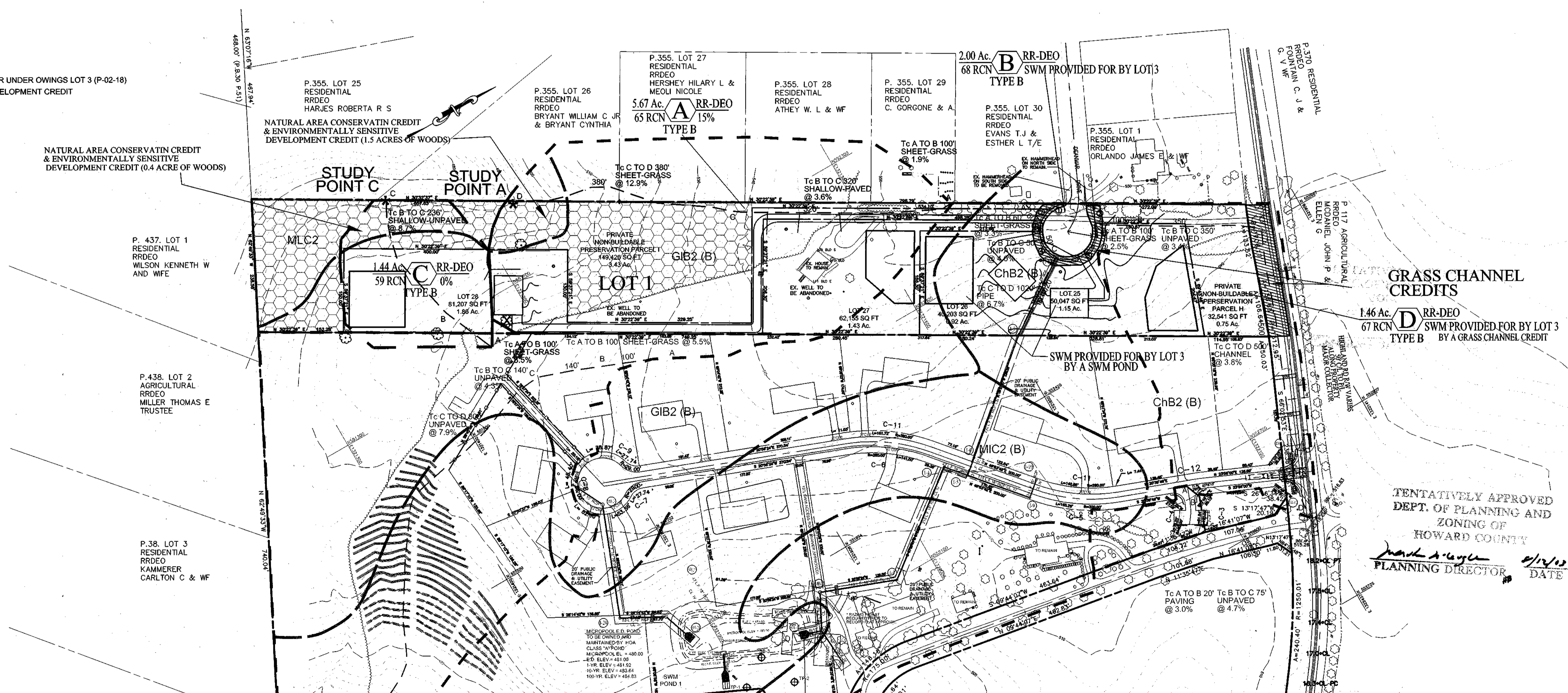
**Drainage Area "C"**  
 Rev Requirement met by site design.  
 WQv Requirement met by site design  
 Cpv Requirement met due to the One-year peak discharge being < 2.0 cfs.

**Drainage Area "D"** (requirements being met in Owings-Lot 3)  
 Rev Requirement met site wide in grass channels of Area "B".  
 WQv Requirement met designed grass channel along the road.  
 Cpv Requirement met due to the One-year peak discharge being < 2.0 cfs.

**Summary Tables**

Category	Volume Required		Comments
	Drainage Area "A"	Drainage Area "C"	
Water Quality Volume (WQv)	0.0945 Ac-Ft	0.024 Ac-Ft	Met by site design Utilizing the Environmentally Sensitive & Natural Area Credits
Recharge Volume (Rev)	0.023 Ac-Ft (60) 0.221 Ac-Ft(areas)	0.002 Ac-Ft (60) 0 Ac-Ft(areas)	Met by site design Utilizing the Environmentally Sensitive & Natural Area Credits
Channel Protection Volume (Cpv)	N/A	N/A	requirement of less than 2 cfs
Owbank Flood Protection Storage Volume (Ov)	N/A	N/A	
Extreme Flood Volume (Ov)	N/A	N/A	

Runoff	Acres		1-year storm		10-year storm		100-year storm	
	Existing	Proposed	Q Pre	Q Dev	Q Pre	Q Dev	Q Pre	Q Dev
Drainage Area "A"	5.67	5.67	0.13	1.46	6.0	10.6	14.2	20.5
Drainage Area "C"	1.44	1.44	0.03	0.14	1.6	2.4	3.9	5.2



TENTATIVELY APPROVED  
 DEPT. OF PLANNING AND ZONING OF  
 HOWARD COUNTY  
 Mark A. Cooper  
 PLANNING DIRECTOR 2/14/03  
 DATE

**PRELIMINARY EQUIVALENT SKETCH PLAN  
OWINGS PROPERTY  
RESUBDIVISION OF LOT 1  
CONSISTING OF LOTS 25-28, PARCELS H & I  
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND**

Section: NA	Area: NA	Phase: NA	Scale: 1" = 100'	Sheet: 1 of 1
Tax Map Grid & Parcel: MAP 40, PARCEL 44	Date: JUNE 2003	Prior Submittal: PRELIMINARY/SKETCH PLAN SUBMITTED FEB. 14, 2003	Submitted: SUBMITTED MAY 7, 2003	File Number:

**NOTE**  
 INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATION OF THE MAINS BY DIGGING TEST PITS BY HAND AT ALL UTILITY CROSSINGS WELL IN ADVANCE OF THE START OF EXCAVATION. CONTACT "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO THE START OF EXCAVATION. IF CLEARANCES ARE LESS THAN SHOWN ON THIS PLAN OR TWELVE (12) INCHES, WHICHEVER IS LESS, CONTACT THE ENGINEER AND THE UTILITY BEFORE PROCEEDING WITH CONSTRUCTION.

**Dewberry & Davis LLC**  
 A Dewberry Company  
 Engineers  
 Planners  
 Surveyors  
 Landscape Architects  
 www.dewberry.com  
 804 West Diamond Avenue, Suite 200  
 Gaithersburg, MD 20878-1414  
 (301) 948-8300 Fax: (301) 258-7607

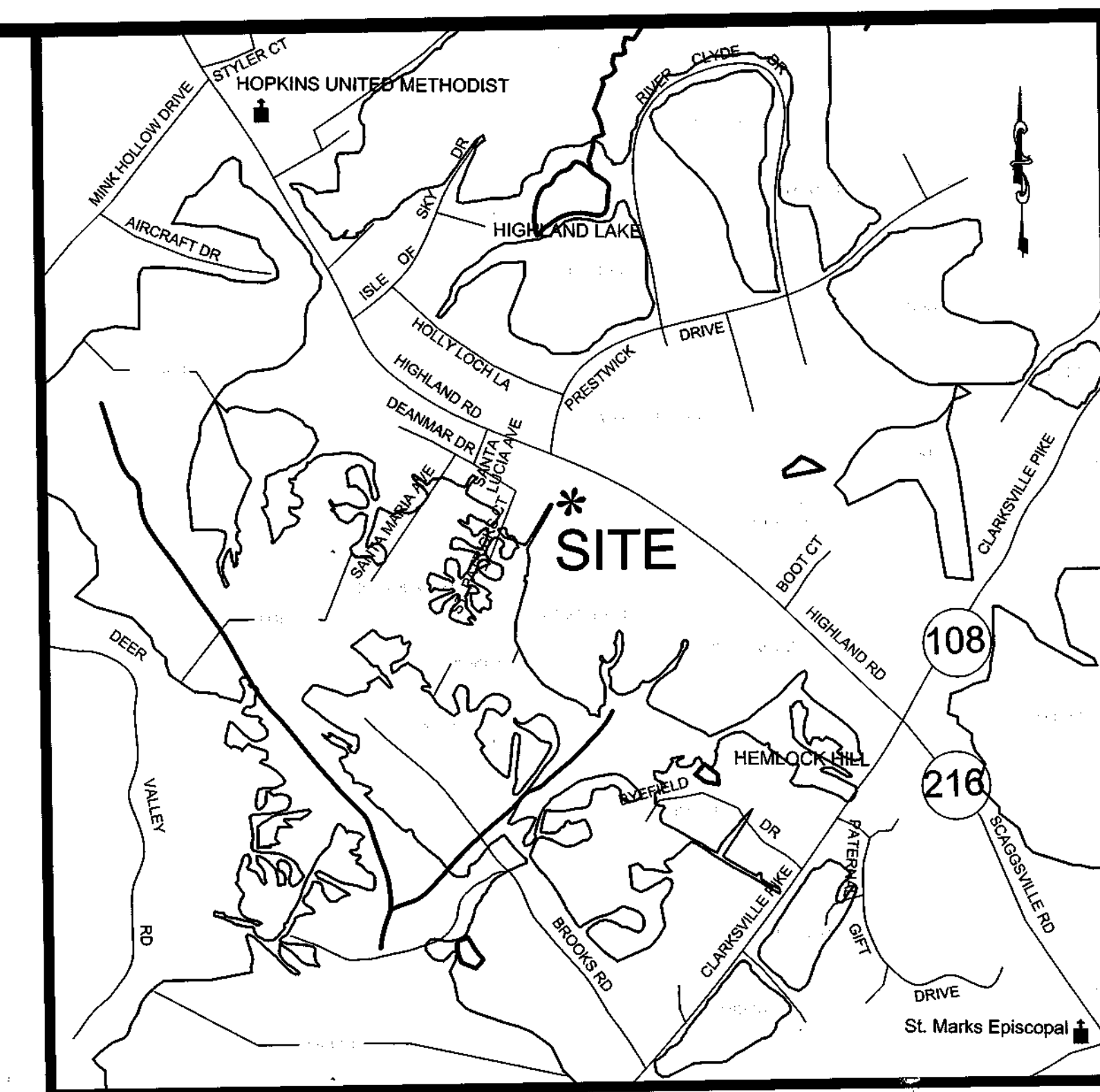
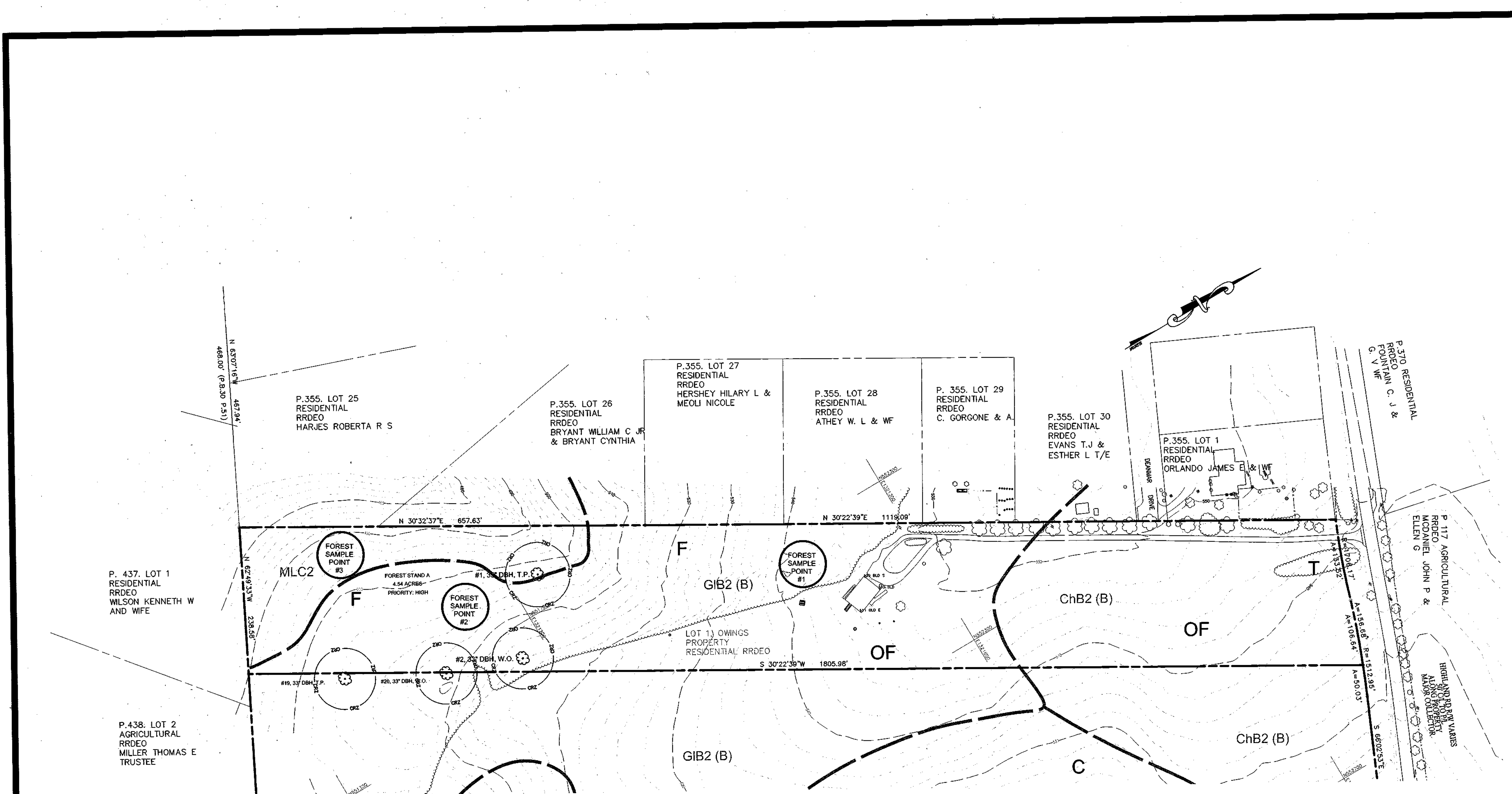
DEVELOPER:  
 DALE THOMPSON BUILDERS  
 6800 WOODSIDE COURT  
 COLUMBIA, MARYLAND 21046  
 PHONE: (410) 995-6736  
 FAX: (410) 381-9747

**PROPOSED SWM DRAINAGE AREA MAP**

Drawn by: IEV  
 Designed by: MAM  
 Checked by: MAM  
 Title: RR-DEO

1/14/03

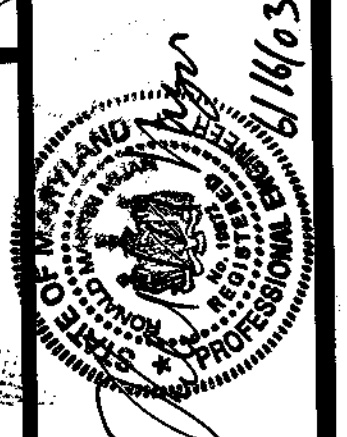
SHEET 1



VICINITY MAP  
SCALE: 1"=1000'

TENTATIVELY APPROVED  
DEPT. OF PLANNING AND ZONING OF  
HOWARD COUNTY  
*Dale Thompson*  
PLANNING DIRECTOR DATE *6/16/03*

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Planners  
Surveyors  
Landscape Architects  
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Drawn by: IEV  
Designed by: MNJ  
Checked by: GW  
Zoned: RR-DEO  
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DALE THOMPSON BUILDERS  
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COLUMBIA, MARYLAND 21046  
PHONE: (410) 995-6736  
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NATURAL RESOURCE INVENTORY  
FOREST STAND DELINEATION

**SOILS LEGEND  
HOWARD COUNTY**

NON-HYDRIC SOILS LIST

ChB2	CHESTER SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED
GLB2	GLENELG LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED
MLC2	MANOR LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED

DESCRIPTION PER HOWARD COUNTY SOIL SURVEY (1968)

- GENERAL NOTES**
- TOTAL AREA OF TRACT: 9.73 AC; 423,772± SQ.FT.
  - EXISTING ZONING: RRDEO
  - BOUNDARY FROM TAX MAP (40), AND FROM SURVEY
  - TOPOGRAPHY FROM SURVEY  
CONTOUR INTERVAL 2 FEET.
  - THERE ARE NO 100-YEAR FLOODPLAINS KNOWN TO EXIST ON THIS SITE ACCORDING TO AVAILABLE INFORMATION (MDMERLIN.NET).
  - THERE ARE NO WETLANDS, WETLAND BUFFERS, STREAMS, AND STREAM BUFFERS ON THE SUBJECT PROPERTY.
  - THE WILDLIFE AND HERITAGE SERVICE HAS NO RECORDS FOR FEDERAL OR STATE RARE, THREATENED OR ENDANGERED PLANTS OR ANIMALS WITHIN THIS PROJECT SITE. HOWEVER, THE FORESTED AREA ON THE SUBJECT PROPERTY CONTAINS FOREST INTERIOR/WELLING BIRD HABITAT. THIS INFORMATION COMES FROM DNR.
  - THE SUBJECT PROPERTY FALLS WITHIN THE ROCKY GORGE DAM SUB-WATERSHED (USE CLASS 1), OF THE PATUXENT WATERSHED.
  - THERE IS ONE FOREST STAND ON THIS SITE TOTALING 4.54 ACRES. SITE INVESTIGATIONS PERFORMED ON 2/1/02, BY DEWBERRY & DAVIS LLC.
  - TWO SPECIMEN CANDIDATE TREES WITH 30" + DBH MEASUREMENTS EXIST ON THE SUBJECT PROPERTY.
  - NO HYDRIC SOILS EXISTS WITHIN THE SUBJECT PROPERTY ACCORDING TO THE HOWARD COUNTY SOIL SURVEY OF MARYLAND.
  - THERE ARE NO HISTORICAL SITES KNOWN TO EXIST ON THE SUBJECT PROPERTY ACCORDING TO AVAILABLE INFORMATION (MDMERLIN.NET)

**LEGEND**

	CRITICAL ROOT ZONE (CRZ) (ESTIMATED RADIUS = 1.5 X DBH)		FSD SAMPLE POINT		L OPEN FIELD
	AREAS WITH 15-25% SLOPES		GIB2 (B) SOILS SYMBOL		F FOREST
	AREAS WITH 25% & GREATER SLOPES		C CROPS		T GROUP OF TREES
	TREE LINE				

**SPECIMEN TREE IDENTIFICATION LIST**

BOTANICAL NAME/ COMMON NAME	TRUNK Ø (6.5 ft.)	TREE HEIGHT	TREE CANOPY	TREE CONDITION
* 1. <i>Liriodendron tulipifera</i> TULIP POPLAR	35"	70'	45'	GOOD
* 2. <i>Quercus alba</i> WHITE OAK	35"	65'	40'	GOOD

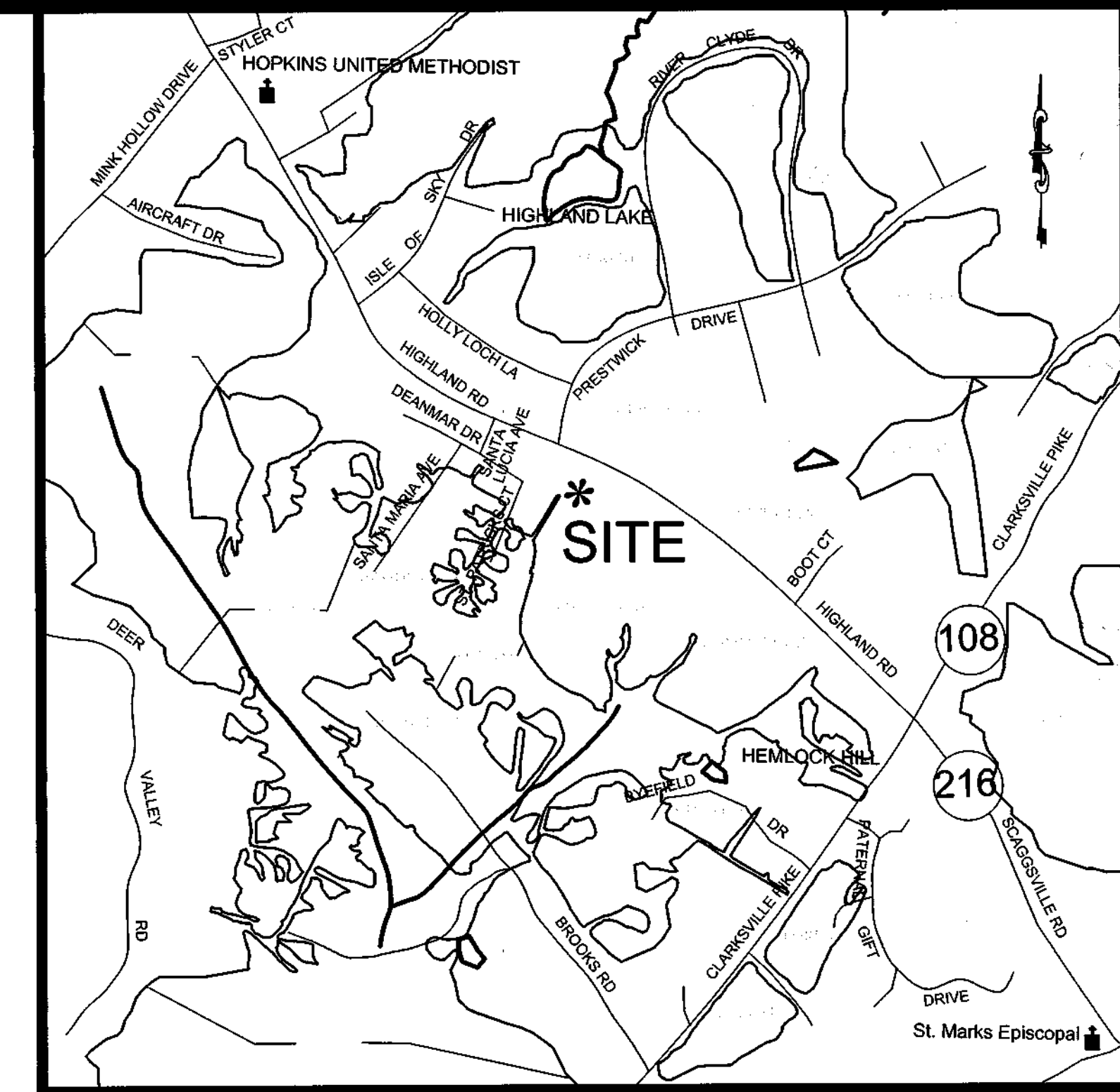
NOTE: \* CANDIDATE SPECIMEN TREE WITH A 30" OR GREATER DBH

PREPARED BY:  
MARC N. JUBA  
QUALIFIED PROFESSIONAL  
PER COMAR 08.18.06.01  
FOREST STAND DELINEATION &  
FOREST CONSERVATION PLANNING

NOTE  
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**PRELIMINARY EQUIVALENT SKETCH PLAN  
OWINGS PROPERTY**  
RESUBDIVISION OF LOT 1  
CONSISTING OF LOTS 25-28, PARCELS H & I  
5TH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

Section: NA	Area:	Phase: NA	Scale: 1" = 100'	Sheet: 1 of 1
Tax Map Grid & Parcel: MAP 40, PARCEL 44	Date: JUNE 2003	Prior Submittal: PRELIMINARY/SKETCH PLAN SUBMITTED FEB. 14, 2003 SUBMITTED MAY 7, 2003	File number:	



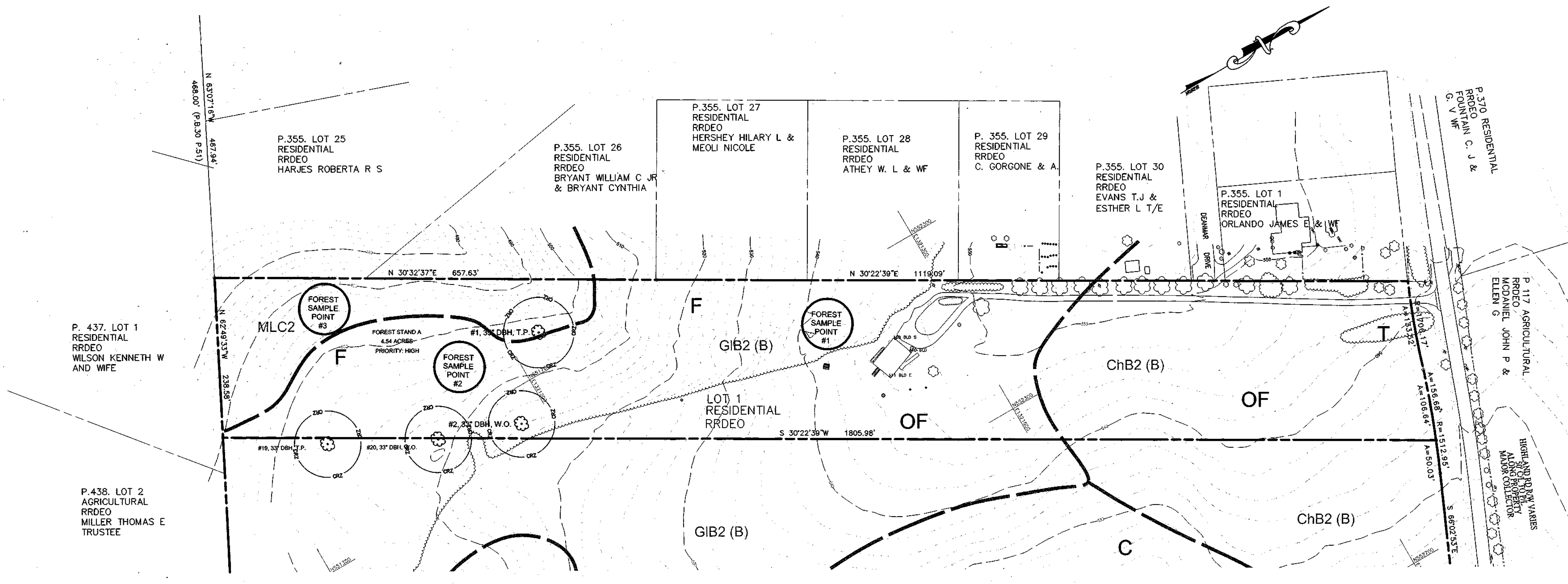
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