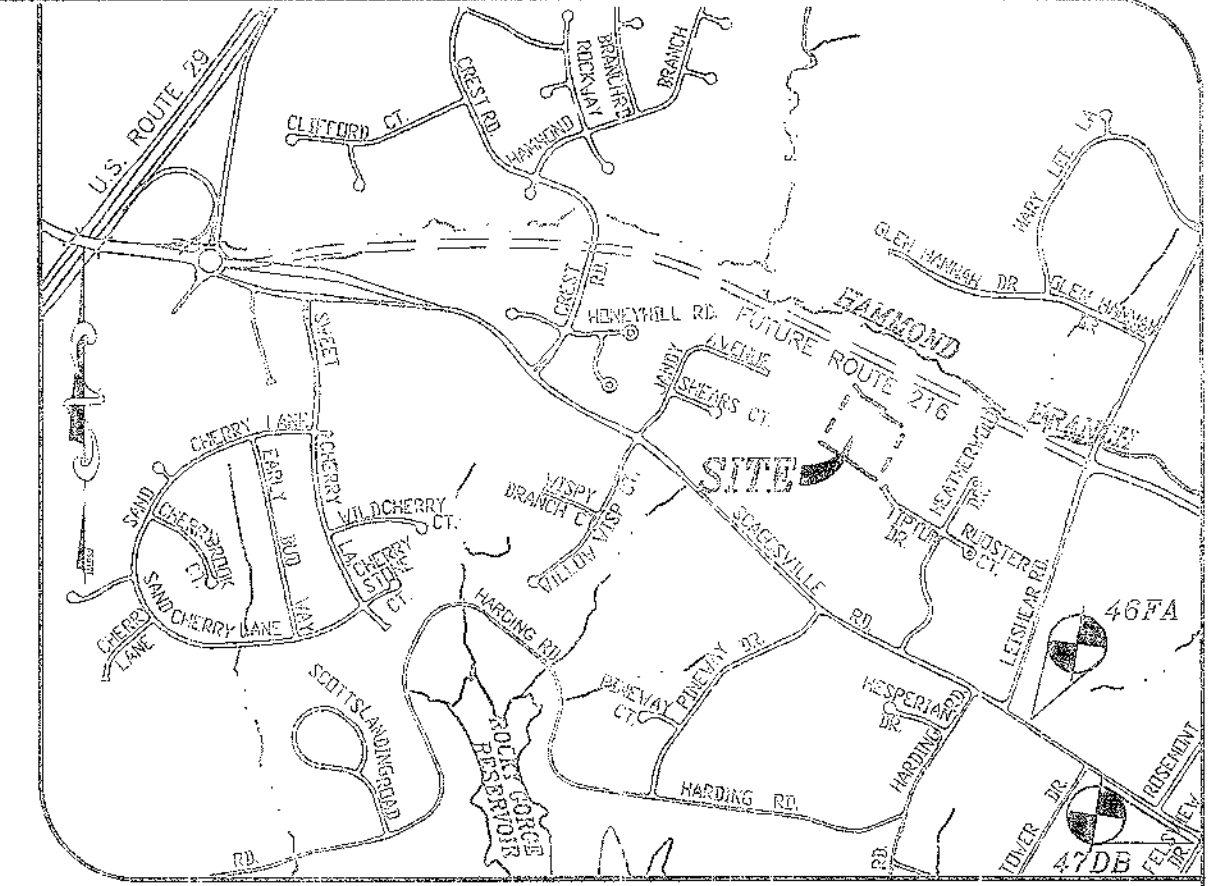
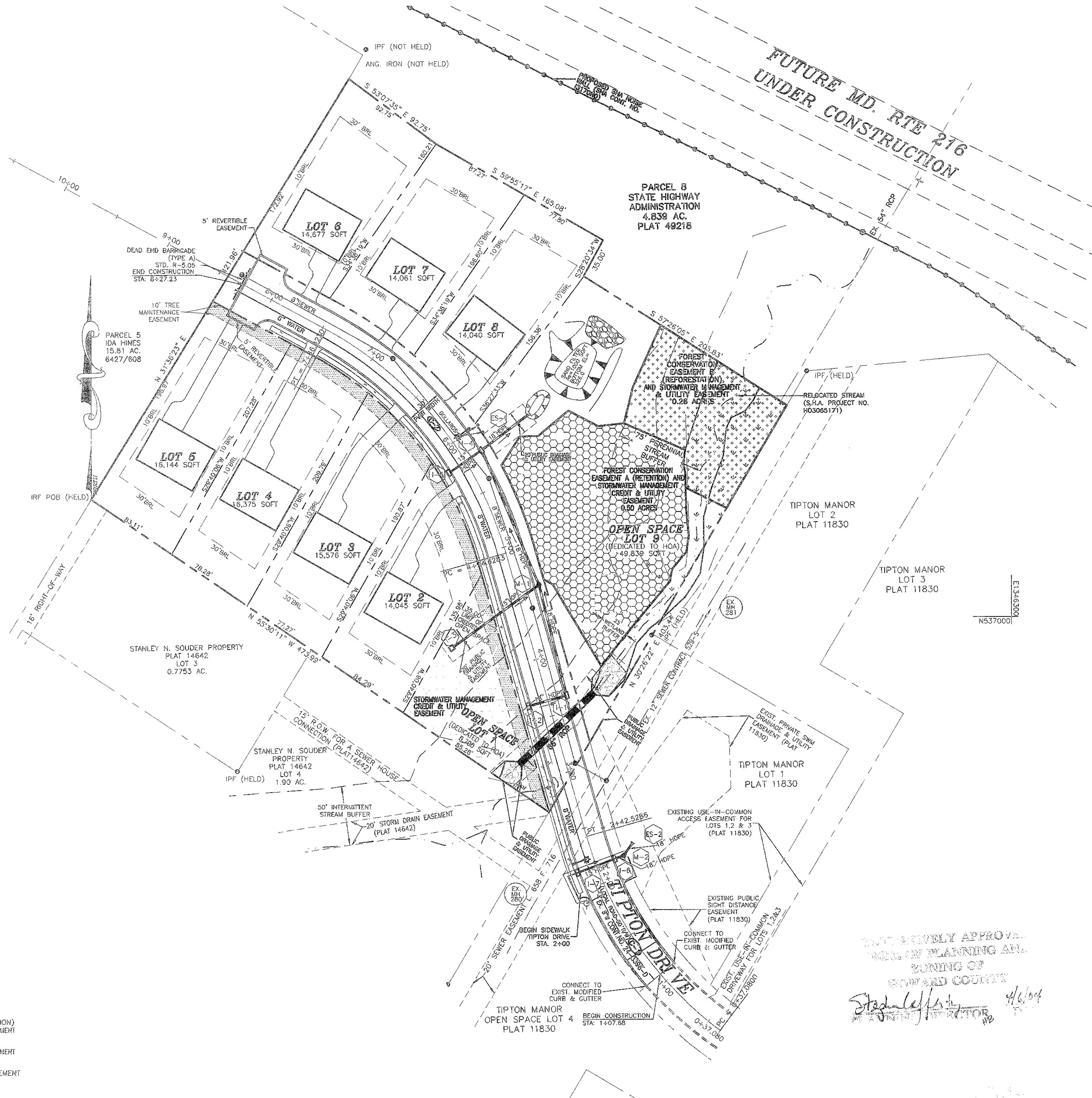


SHEET INDEX	
SHEET	TITLE
1	PRELIMINARY PLAN
2	PRELIMINARY GRADING PLAN
3	PRELIMINARY LANDSCAPE AND FOREST CONSERVATION PLAN



Project	03-051	Date	MAR 2004
Illustration	MAP	Engineering	MAP
Scale	1" = 50'	Approval	RAH



**GENERAL NOTES**

- SITE DATA:**  
 TAX MAP: 46, PARCEL: 6, BLOCK: 12  
 DEED REFERENCE: L. 5280, F. 270  
 AREA OF SITE: 4.44 ACRES  
 ZONING: R-20  
 MINIMUM LOT SIZE: 14,000 SQ. FT.  
 NUMBER OF PROPOSED BUILDABLE LOTS: 7  
 AREA OF PROPOSED BUILDABLE LOTS: 2.41 AC±  
 AREA OF REQUIRED OPEN SPACE: 30% x 4.44 AC OR 1.33 AC (57,935 SQ. FT.)  
 AREA OF PROPOSED OPEN SPACE: 1.34 AC± (58,539 SQ. FT.)  
 AREA OF CREDITED OPEN SPACE: 1.33 AC± (57,935 SQ. FT.)  
 AREA IN PROPOSED ROAD DEDICATION: 0.69 AC±  
 DPZ REFERENCE: S-01-03, 117-03-136
- TOPOGRAPHIC DATA SHOWN HEREON IS BASED ON A FIELD RUN TOPOGRAPHIC SURVEY CONDUCTED IN AUGUST 2003 BY MILDENBERG, BOENDER & ASSOCIATES, INC.
- BOUNDARY SHOWN HEREON BASED ON FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR ABOUT AUGUST 2003 BY MILDENBERG, BOENDER & ASSOCIATES, INC.
- NO HISTORIC STRUCTURES OR BURIAL GROUNDS EXIST ON-SITE PER THE HOWARD COUNTY HISTORIC SITES LIST DATED DECEMBER 1998 AND THE HOWARD COUNTY CEMETERIES AND GRAVESITES INVENTORY, RESOLUTION # 47-1994, 27.041.19.2, 28.0.11.
- APFD TRAFFIC TEST EVALUATION PERFORMED BY THE TRAFFIC GROUP ON OR ABOUT JULY 2000 AND APPROVED UNDER S-01-03.
- PUBLIC WATER WILL BE UTILIZED VIA AN EXTENSION OF EXISTING PUBLIC WATER CONTRACT NUMBER 24-3336-D.
- PUBLIC 8" SEWER WILL BE CONSTRUCTED BY THE DEVELOPER AS PART OF THIS SUBDIVISION AND WILL CONNECT TO 12" SEWER CONTRACT NUMBER 529-S.
- NOISE STUDY PREPARED BY WILDMAN ENVIRONMENTAL ASSOCIATES AND APPROVED UNDER S-01-03. ADDITIONAL NOISE STUDY OF MSHA NOISE WALL PROVIDED BY MARS GROUP ON OR ABOUT DECEMBER 2003.
- NOISE WALL TO BE PROVIDED BY MARYLAND STATE HIGHWAY ADMINISTRATION AS PART OF THE MARYLAND ROUTE 276 RELOCATION. NOISE ANALYSIS PERFORMED BY MARS GROUP IN DECEMBER 2003 SHOWS THAT ADEQUATE NOISE MITIGATION FOR TIPTON OVERLOOK IS PROVIDED BY THE MSHA NOISE WALL. THEREFORE, THE NOISE MITIGATION BERM PROPOSED UNDER S-01-03 IS NOT REQUIRED.
- ALL AREAS ARE MORE OR LESS.
- THIS SUBDIVISION IS IN THE METROPOLITAN DISTRICT.
- STORMWATER MANAGEMENT REQUIREMENTS WILL BE MET ON-SITE VIA A SAND FILTER. Rev. REED IS 1.525 CFT, PROVIDED IN A GRAVEL STORAGE RESERVOIR BENEATH THE SAND FILTER. CFT TREATMENT IS NOT RECD AS DISCHARGE FROM SITE IS 1.3 CFS (<2 cfs). SURFACE SAND FILTER WILL BE PRIVATELY OWNED AND MAINTAINED.
- THE FOREST CONSERVATION REQUIREMENTS PER SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION BY RETENTION OF 0.50 ACRES OF FOREST, REFORESTATION OF 0.26 ACRES, AND PAYMENT OF A FEE-IN-LIEU OF REFORESTATION FOR 0.57 ACRES (24,829.2 SQ. FT.) IN THE AMOUNT OF \$12,414.60. FINANCIAL SURETY FOR THE ON-SITE RETENTION (0.50 ACRES OR 21,780 SQ. FT. IN THE AMOUNT OF \$4,366.00) AND REFORESTATION (0.26 ACRES OR 11,325.6 SQ. FT. IN THE AMOUNT OF \$5,662.80) HAS BEEN POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$10,018.80. 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.
- WETLAND DELINEATION PERFORMED BY ECO-SCIENCE PROFESSIONALS ON OR ABOUT AUGUST 2000 AND PREVIOUSLY APPROVED UNDER S-01-03.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:  
 A) WIDTH - 12 FEET (14 FEET SERVING MORE THAN ONE RESIDENCY)  
 B) SURFACE - 6 INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING.  
 C) GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND MINIMUM OF 45-FOOT RADII.  
 D) STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING).  
 E) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE.  
 F) STRUCTURE CLEARANCES - MINIMUM 12 FEET  
 G) MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE.
- THIS PLAN IS GRANDFATHERED TO THE FOURTH EDITION OF THE SUBDIVISION REGULATIONS (2nd AMENDMENT) AND THE ZONING REGULATIONS, AS AMENDED BY COUNCIL BILL 50-2003.
- WAIVER TO HOWARD COUNTY SUBDIVISION REGULATIONS SECTION 16.116.c.2.(i), WHICH PROHIBITS GRADING WITH 75'-FT OF A PERENNIAL STREAM, APPROVED ON JUNE 24, 2003. THE APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS: (1) THE SUBDIVISION REVIEW COMMITTEE WILL MAKE A FINAL DETERMINATION ON THE EXTENT OF ALLOWED DISTURBANCE, IF ANY, AS PART OF THE REVIEW OF [THIS] PRELIMINARY PLAN. THE DEVELOPER/PETITIONER IS ADVISED THAT DISTURBANCE TO THE RELOCATED STREAM BUFFER WILL ONLY BE ALLOWED AS A LAST RESORT, AND WILL BE MINIMIZED TO THE EXTENT POSSIBLE BY SHIFTING THE SWIM FACILITY AWAY FROM THE STREAM BUFFER AND/OR RECONFIGURING IT. THE SRC WILL NOT REQUIRE RECONFIGURATION OR DELETION OF RESIDENTIAL LOTS SHOWN ON THE APPROVED SKETCH PLAN (S-01-03). (2) THE DEVELOPER'S ENGINEER SHALL SHOW THE CONCEPTUAL MSHA STREAM RESTORATION IMPROVEMENTS ON THE PRELIMINARY PLAN. STORMWATER MANAGEMENT RELEASE RATES FOR THIS SUBDIVISION SHALL BE COORDINATED WITH THE STREAM DESIGN BANK FULL FLOWS SO NOT TO EXCEED.
- THE STREET LIGHT LOCATIONS AND TYPES OF LIGHTS SHOWN ON THESE PLANS ARE AS FOLLOWS:  
 - 100-WATT PREMIER STREET LIGHTS AT STATION 2+24, 18-FT LEFT, AND STATION 6+02, 18-FT RIGHT.
- EXISTING HOUSE ON LOT 4 WILL BE REMOVED AFTER RECORDATION OF FINAL PLAT. ALL EXISTING ACCESSORY STRUCTURES WILL ALSO BE REMOVED.
- HORIZONTAL AND VERTICAL DATUMS ARE RELATED TO THE MARYLAND MDD83 (HORZ) AND NAVD83 (VERT) AS PROJECTED FROM HOWARD COUNTY CONTROL STATION NOS. 48FA & 47DB (ALL UNITS IN FEET).  
 STA. No. 46FA      N 535,140.888      ELEV. 403.850  
                           N 1,346,392.69      E 1,346,392.69  
 STA. No. 47DB      N 534,316.917      ELEV. 398.560  
                           N 1,348,131.25      E 1,348,131.25

**LEGEND**

- PROPOSED STREET LIGHT LOCATION
- FOREST CONSERVATION EASEMENT (REFORESTATION) AND STORMWATER MANAGEMENT CREDIT & UTILITY EASEMENT
- FOREST CONSERVATION EASEMENT (RETENTION) AND STORMWATER MANAGEMENT CREDIT & UTILITY EASEMENT
- 100-YR FLOODPLAIN, DRAINAGE & UTILITY EASEMENT
- WETLANDS
- 10' TREE MAINTENANCE EASEMENT
- 20' PUBLIC DRAINAGE & UTILITY EASEMENT
- PRIVATE SWIM & UTILITY EASEMENT
- STORMWATER MANAGEMENT CREDIT & UTILITY EASEMENT

CURVE	RADIUS	LENGTH	TANGENT	DELTA
C1	316.00'	241.29'	126.87'	43°45'00"
C2	316.00'	251.79'	133.01'	45°39'16"

NOT FINALLY APPROVED  
 BY PLANNING AND ZONING OF HOWARD COUNTY  
 [Signature]

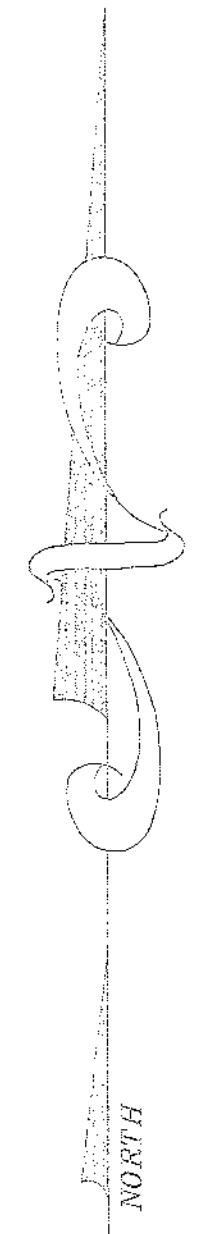
MM  
 3/24/04

**OWNER AND DEVELOPER**  
 ELLICOTT CITY LAND HOLDING, INC.  
 c/o LAND DESIGN & DEVELOPMENT, INC.  
 8000 MAIN STREET  
 ELLICOTT CITY, MARYLAND 21043  
 410-480-9105

**TIPTON OVERLOOK**  
 LOTS 1-9  
 TAX MAP 46 - PARCEL 6 - GRID 12  
 HOWARD COUNTY, MARYLAND  
**PRELIMINARY PLAN**

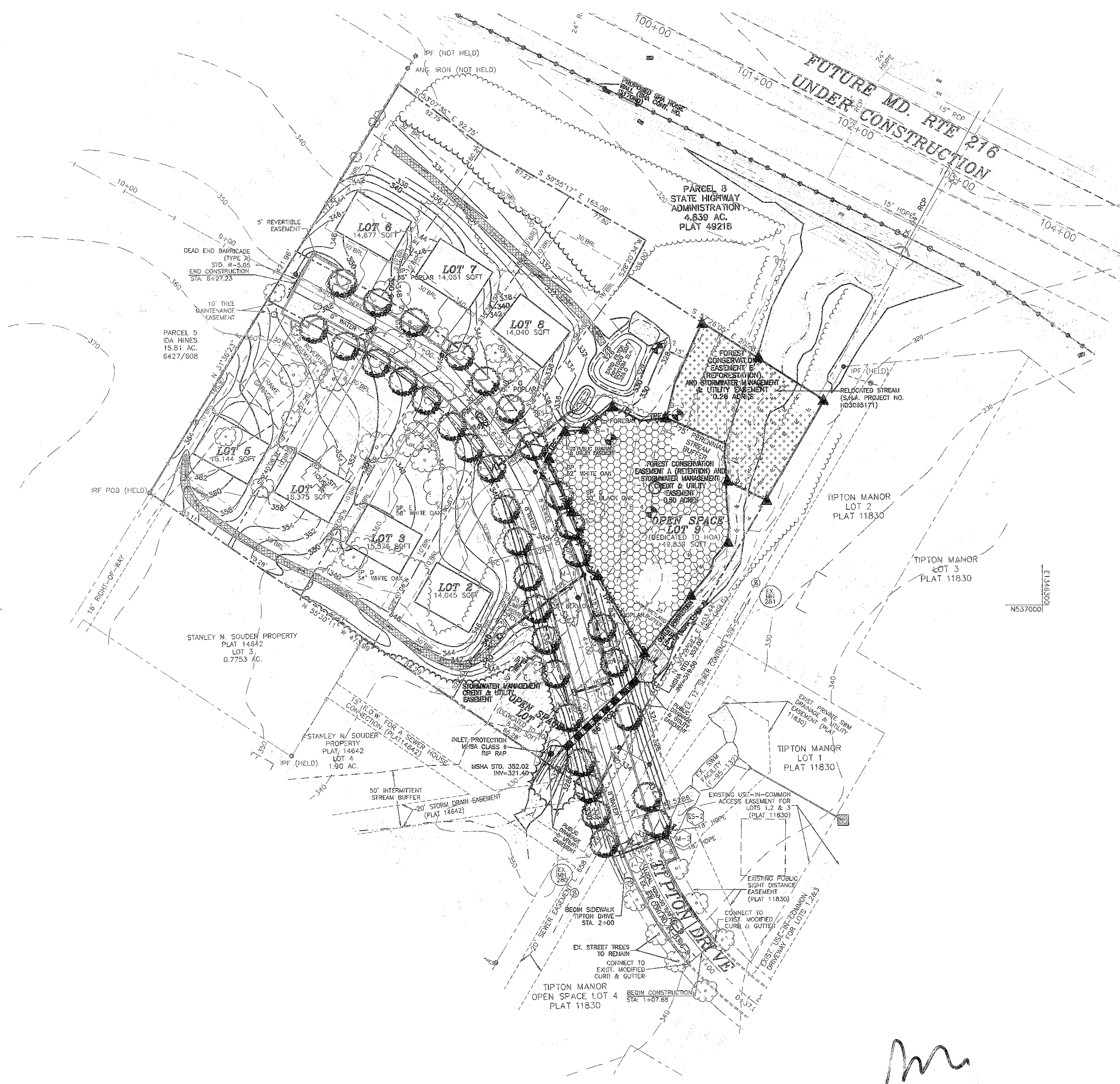
**MILDENBERG, BOENDER & ASSOC., INC.**  
 Surveyors  
 Engineers  
 5072 Horsey Hall Drive, Suite 202, Ellicott City, Maryland 21042  
 (410) 997-0296 Fax: (301) 651-5521 Wash. (410) 997-0299 Fax

\\05-051\eng\02051-rd\017.mwg



N537500  
E1143350

N537000  
E1143300



**SOILS CLASSIFICATION:**

Ba (D) BAILE SILT LOAM, 10% TO 30% SLOPES, SEVERLY ERODED  
 GIB2 (B) GLENELG LOAM, 3% TO 8% SLOPES, MODERATELY ERODED  
 MEB2 (A) HT. AIRY CHANNERY LOAM, 3% TO 8% SLOPES, MODERATELY ERODED  
 M1C3 (A) SASSAFRAS LOAM, 8% TO 15% SLOPES, MODERATELY ERODED

APPROVED  
 PART OF PLANNING AND  
 ZONING OF  
 HOWARD COUNTY  
 [Signature]  
 4/16/04

- LEGEND**
- [Symbol] FOREST CONSERVATION EASEMENT (REFORESTATION) & STORMWATER MANAGEMENT CREDIT & UTILITY EASEMENT
  - [Symbol] FOREST CONSERVATION EASEMENT (RETENTION) & STORMWATER MANAGEMENT CREDIT & UTILITY EASEMENT
  - [Symbol] 15% TO 24% SLOPES
  - [Symbol] STEEP SLOPES, 25% AND GREATER
  - [Symbol] DENOTES FLOODPLAIN
  - [Symbol] DENOTES WETLANDS
  - [Symbol] EXISTING TREE LINE
  - [Symbol] PROPOSED TREE LINE
  - [Symbol] EXISTING SPECIEM TREES
  - [Symbol] GRASS CHANNEL WITH EROSION CONTROL MATTING

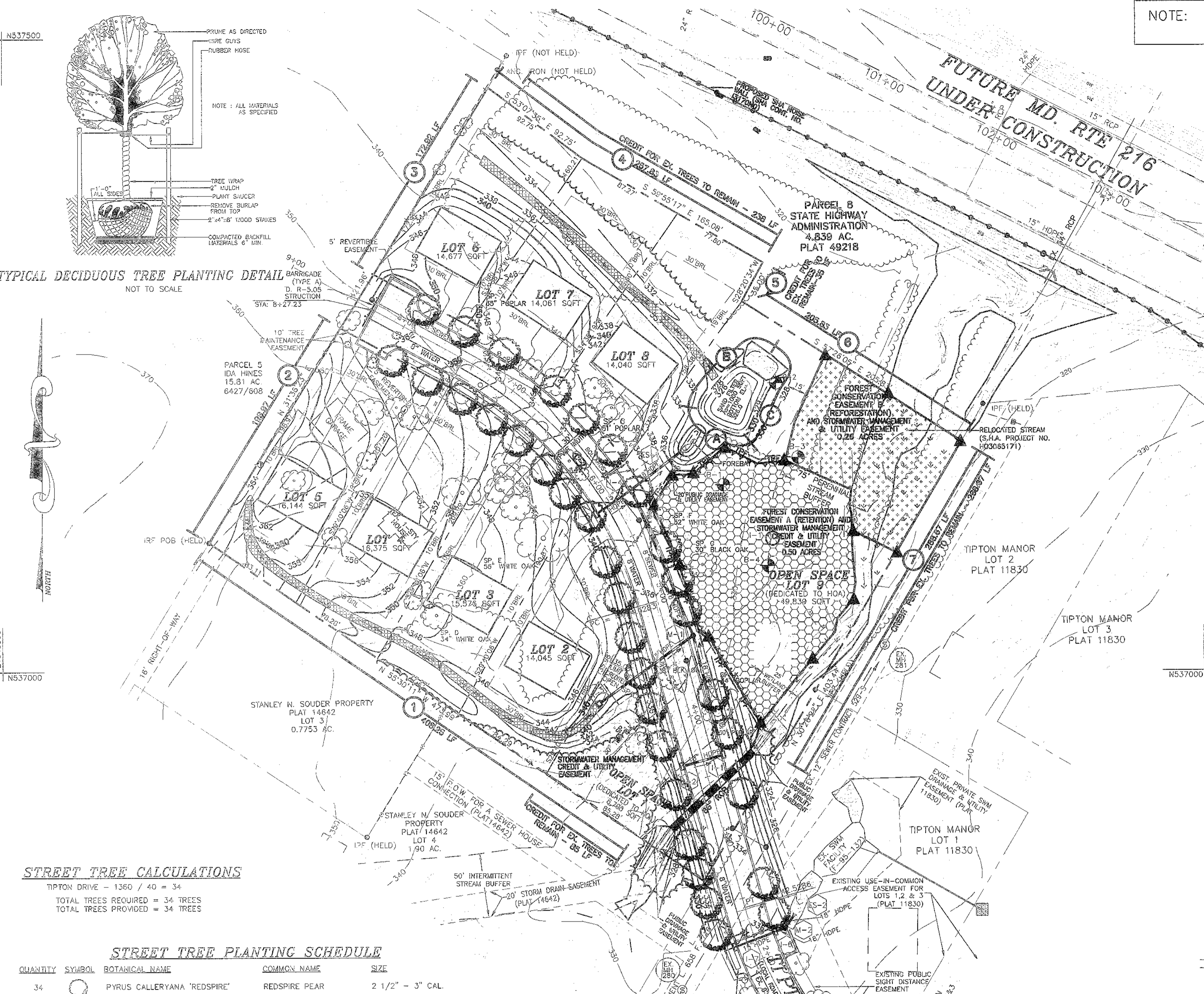
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 3/24/04

project	05-051	date	MAR 2004
illustration	MAP	engineering	MAP
scale	1" = 50'	approval	RFH

no.	
description	
revision	

**TIPTON OVERLOOK**  
 LOTS 1-9  
 TAX MAP 46 - PARCEL 8 - GRID 12  
 HOWARD COUNTY, MARYLAND  
 6th ELECTION DISTRICT  
**PRELIMINARY GRADING PLAN**

**MILDENBERG, BOENDER & ASSOC., INC.**  
 Engineers Planners Surveyors  
 5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042  
 (410) 497-8295 Fax: (301) 571-5521 Fresh (410) 397-0298 Tex.



**NOTE: THIS DRAWING IS TO BE USED FOR PRELIMINARY LANDSCAPE & FOREST CONSERVATION PLAN PURPOSES ONLY.**

- NOTE:**
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
  - FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING WILL BE POSTED AS PART OF THE DPW DEVELOPERS AGREEMENT.
  - THE FOREST CONSERVATION REQUIREMENTS PER SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION BY RETENTION OF 0.50 ACRES OF FOREST, REFORESTATION OF 0.26 ACRES, AND PAYMENT OF A FEE-IN-LIEU OF REFORESTATION FOR 0.57 ACRES (24,829.2 SQ. FT.) IN THE AMOUNT OF \$12,414.60. FINANCIAL SURETY FOR THE ON-SITE RETENTION OF 0.50 ACRES OR 21,780 SQ. FT. IN THE AMOUNT OF \$4,356.00 AND REFORESTATION (0.26 ACRES OR 11,326.6 SQ. FT. IN THE AMOUNT OF \$5,662.80) HAS BEEN POSTED AS PART OF THE DEVELOPERS AGREEMENT IN THE AMOUNT OF \$10,018.80.
  - THE FOREST CONSERVATION EASEMENT HAS BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE. FOREST CONSERVATION ACTIVITY INCLUDING 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.

**FOREST CONSERVATION WORKSHEET**

NET TRACT AREA:

A. Total tract area = 4.4

B. Area within 100 year floodplain = 0.13

C. Area to remain in agricultural production or utility ROW = 0.00

D. Net forest area = 4.29

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 DA HDR MPO CIA

E. Afforestation threshold = 158 x D + 0.64

Conservation Threshold = 205 x D + 0.66

EXISTING FOREST COVER:

G. Existing forest cover (excluding floodplain) = 1.33

H. Area of forest above afforestation threshold = 0.29

I. Area of forest above conservation threshold = 0.17

BREAK EVEN POINT:

J. Forest retention above threshold with no mitigation = 0.25

K. Clearing permitted without mitigation = 0.38

PROPOSED FOREST CLEARING:

L. Total area of forest to be cleared = 0.33

M. Total area of forest to be retained = 0.50

PLANTING REQUIREMENTS:

N. Reforestation for clearing above conservation threshold = 0.12

O. Reforestation for clearing below conservation threshold = 0.72

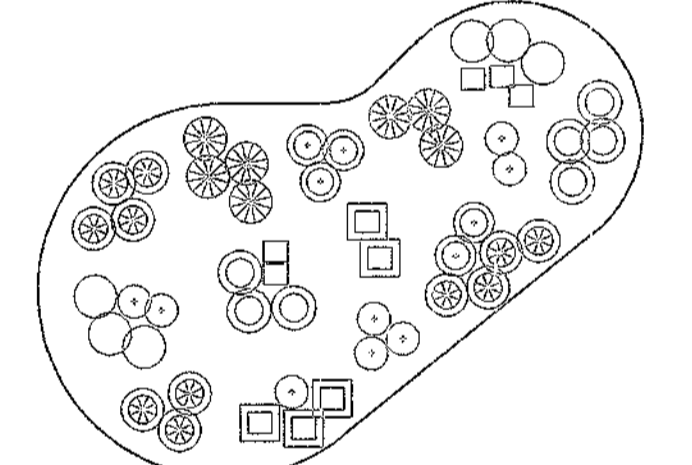
P. Credit for retention above conservation threshold = 0.00

R. Total reforestation required = 0.33

T. Total reforestation and afforestation required = 0.33

**GENERAL NOTES**

- FOREST PROTECTION:**
- ALL FOREST RETENTION AREAS SHALL BE TEMPORARILY PROTECTED BY WELL ANCHORED PLATE OR PLASTIC FENCING. FENCING SHALL BE INSTALLED TO PROTECT THE FOREST RETENTION BOUNDARY PRIOR TO ANY LAND CLEARING, GRUBBING, OR GRADING ACTIVITIES.
  - THE FOREST PROTECTION DEVICES SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION, INCLUDING SITE PREPARATION AND CONSTRUCTION. FENCING SHALL BE MAINTAINED IN PLACE UNTIL ALL CONSTRUCTION HAS CEASED IN THE IMMEDIATE VICINITY.
  - ATTACHMENT OF SIGNS, OR ANY OTHER OBJECTS TO TREES IS PROHIBITED. NO EQUIPMENT, BARNHORN, VEHICLES, MATERIALS OR EXCESSIVE FEEDSTUFF SHALL BE STORED WITHIN THESE PROTECTED AREAS. INSTALLATION AND MAINTENANCE OF PROTECTIVE FENCING AND SIGNAGE SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR SHALL TAKE THE UTMOST CARE TO PROTECT TREE ROOT SYSTEMS DURING ALL CONSTRUCTION ACTIVITIES. TREE ROOT SYSTEMS SHALL BE PROTECTED FROM SHOULDERING, FLOODING, EXCESSIVE TESTING, OR STUMPING OF EARTH WITHIN FOREST CONSERVATION EASEMENTS.
  - THE GENERAL CONTRACTOR SHALL PREVENT PARKING OF CONSTRUCTION VEHICLES AND EQUIPMENT, AND THE STORAGE OF BUILDING SUPPLIES OR STOCKPILING OF EARTH WITHIN FOREST CONSERVATION EASEMENTS.
  - REMOVAL OF TOPSOIL OR ROOT MAT WITHIN THE TREE PRESERVATION AREA SHALL BE PROHIBITED.
  - THE GENERAL CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY TREES DAMAGED OR DESTROYED WITHIN THE FOREST CONSERVATION EASEMENTS. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND REPLACEMENT OF DAMAGED TREES WITHIN THE FOREST CONSERVATION EASEMENTS. REPAIR AND REPLACEMENT SHALL BE IN ACCORDANCE WITH THE FOREST CONSERVATION EASEMENT. REPAIR AND REPLACEMENT SHALL BE IN ACCORDANCE WITH THE FOREST CONSERVATION EASEMENT.
- PRE-CONSTRUCTION MEETING:**
- AFTER THE BOUNDARIES OF THE FOREST RETENTION AREAS HAVE BEEN FIELD LOCATED AND MARKED, AND AFTER THE FOREST PROTECTION DEVICES HAVE BEEN INSTALLED, BUT BEFORE ANY OTHER DISTURBANCE HAS TAKEN PLACE ON SITE, A PRE-CONSTRUCTION MEETING SHALL TAKE PLACE ON SITE. THE DEVELOPER, CONTRACTOR OR PROJECT MANAGER AND HOWARD COUNTY INSPECTORS SHALL ATTEND THE PURPOSE OF THIS MEETING WILL BE:
    - TO IDENTIFY THE LOCATIONS OF THE FOREST RETENTION AREAS, SPECIFIC TREES WITHIN 50 FEET OF THE LIMIT OF DISTURBANCE, LIMITS OF CONSTRUCTION, EMPLOYEE PARKING AREAS AND EQUIPMENT STORAGE AREAS.
    - INSPECT ALL FLAGGED BOUNDARIES AND PROTECTION DEVICES.
    - MAKE NECESSARY ADJUSTMENTS.
    - ASSIGN RESPONSIBILITIES AS APPROPRIATE AND DISCUSS PENALTIES.
- CONSTRUCTION MONITORING:**
- THE SITE SHALL BE INSPECTED PERIODICALLY DURING THE CONSTRUCTION PHASE OF THE PROJECT. A QUALIFIED PROFESSIONAL SHALL BE RESPONSIBLE FOR MONITORING DAMAGE TO PROTECTED FOREST AREAS OR INDIVIDUAL TREES WHICH MAY BE CAUSED BY CONSTRUCTION ACTIVITIES, SUCH AS SOIL COMPACTING, EXCESSIVE TRAFFIC, TREE INJURY OR STRESS CAUSED BY FLOODING OR DROUGHT CONDITIONS.
  - ANY SUCH DAMAGE THAT MAY OCCUR SHALL BE REMEDIATED IMMEDIATELY USING APPROPRIATE MEASURES. THE CONTRACTOR SHALL CONSULT WITH THE CONSULTATION WITH A PROFESSIONAL ARBORIST.
  - THE CONSTRUCTION PROCEDURE SHALL NOT DAMAGE AREAS OUTSIDE OF THE LIMITS OF DISTURBANCE AS DESIGNATED ON THE PLANS. ANY DAMAGE SHALL BE RESTORED BY THE CONTRACTOR AT HIS EXPENSE AND TO THE SATISFACTION OF THE DESIGN TEAM OR ENGINEER.
- PLANTING SPECIFICATIONS AND NOTES:**
- SITE PREPARATION AND SOILS:**
- PROTECTION FENCING AND SALT FENCES FOR SEDIMENT AND EROSION CONTROL ARE TO BE INSTALLED AS A FIRST ORDER OF BUSINESS. SEE PLAN FOR LOCATION.
  - DISTURBANCE OF SOILS SHOULD BE LIMITED TO THE PLANTING FIELD FOR EACH PLANT. AS SHOWN ON THE DETAIL, THE PLANTING FIELD OF RADIUS = 5 X DIAMETER OF THE ROOT BALL OR CONTAINER IS RECOMMENDED.
  - SOIL MAY NOT BE ALL PLANTS EXCEPT ERICACEOUS MATERIAL. SOIL MIX SHALL CONSIST OF EXISTING NATIVE TOPSOIL SECURED AT EACH PLANTING FIELD LOCATION INTO WHICH THE CONTRACTOR SHALL THOROUGHLY INCORPORATE 25% BY VOLUME OF COMPOSTED SLUDGE.
  - SOIL MIX FOR ERICACEOUS MATERIALS SHALL CONSIST OF EXISTING NATIVE TOPSOIL MIXTURE AT EACH PLANTING FIELD LOCATION INTO WHICH THE CONTRACTOR SHALL THOROUGHLY INCORPORATE 25% BY VOLUME OF COMPOSTED SLUDGE.
  - ALL MIXING IN 3 AND 4 SHALL BE LIMITED TO CONTAINER GROWN OR BALL AND BURLAP STOCK ONLY AND CONFINED TO THE PLANTING FIELD AND IMMEDIATE ADJACENT SOIL SURFACE AREA AND SHALL BE DONE TO THE SATISFACTION OF THE DESIGN TEAM OR ENGINEER.
- PLANT STORAGE AND INSPECTION:**
- FOR CONTAINER GROWN NURSERY STOCK, PLANTING SHOULD OCCUR WITHIN 2 WEEKS AFTER DELIVERY TO THE SITE.
  - FOR BALL AND BURLAP NURSERY STOCK, PLANTING SHOULD OCCUR WITHIN THREE DAYS AFTER DELIVERY TO THE SITE.
  - PLANTING STOCK SHOULD BE INSPECTED PRIOR TO PLANTING. PLANTS SHOULD BE INSPECTED TO STANDARD NURSERYMAN SPECIFICATIONS FOR SIZE, FOLIAGE, ROOTS, TRUNK WOUNDS, INSECTS AND DISEASE. DAMAGED PLANTS SHOULD BE REPLACED.
  - UNTIL PLANTED, ALL PLANT STOCK SHALL BE KEPT IN A SHADED, COOL, AND MOISTENED ENVIRONMENT.
- PLANT INSTALLATION:**
- THE PLANTING FIELD SHOULD BE PREPARED AS SPECIFIED (SEE DETAIL). NATIVE STOCKPILED SOILS SHOULD BE USED FOR SOIL MIX AND BACKFILL FOR PLANTING FIELD. AFTER PLANT INSTALLATION, BACKFILL SHOULD BE PLACED OVER THE PLANTING FIELD AND COVER WITH AT LEAST 1 INCHES OF MULCH. WATER, GENEROUSLY, TO SETTLE SOIL BACKFILLED AROUND TREES.
  - PLANTING FIELD DIMENSIONS SHOULD BE PREPARED ON PLANTING FIELD MIXED IF APPLICABLE. EXCESSIVE EXISTING ROOT DAMAGE MAY OCCUR DURING EXISTING OPERATION NEAR EXISTING FOREST.
  - CARE SHALL BE TAKEN WHEN DIGGING PLANTING FIELDS NOT TO CHOP THROUGH EXISTING ROOTS FROM EXISTING MATURE TREES. IF ROOTS GREATER THAN 1/2 INCH ARE ENCOUNTERED PLEASE TRY TO DIG AROUND THEM AS FAR AS POSSIBLE TO MINIMIZE IMPACT TO EXISTING TREES. THEY WERE HERE FIRST.
  - CONTAINER GROWN STOCK SHOULD BE REMOVED FROM THE CONTAINER AND ROOTS GENTLY LOOSENED FROM THE SOIL. IF THE ROOTS ENCLOSE THE ROOT BALL, SUBSTITUTION IS STRONGLY RECOMMENDED.
  - SHADED OR WINDED ROOT SYSTEMS SHOULD ALSO BE NOTED. ROOTS MAY NOT BE TRIMMED ON SITE, DUE TO THE INCREASED CHANCES OF SOIL BORNE DISEASES.
- LEGEND:**
- FOREST CONSERVATION EASEMENT (REFORESTATION)
  - FOREST CONSERVATION EASEMENT (RETENTION)
  - 1:50 TO 2:00 SLOPES
  - STEEP SLOPES, 2:00 AND GREATER
  - DEVICES FLOODPLAIN
  - DESIGNATES WETLANDS
  - EXISTING TREE LINE
  - PROPOSED TREE LINE
  - EXISTING SPECIMEN TREES
  - JURY OF DISTURBANCE
  - TREE PROTECTIVE FENCE
  - FOREST CONSERVATION SHELTER
  - GRASS CHANNEL WITH EROSION CONTROL MATTING



**TYPICAL TREE PLANTING PLAN**  
NOT TO SCALE  
SEE GENERAL NOTES 6 & 7 UNDER "PLANT INSTALLATION"  
GROUND PLANT TO BE MULCHED AFTER INSTALLATION OF PLANT MATERIAL.

**REFORESTATION PLANT LIST**

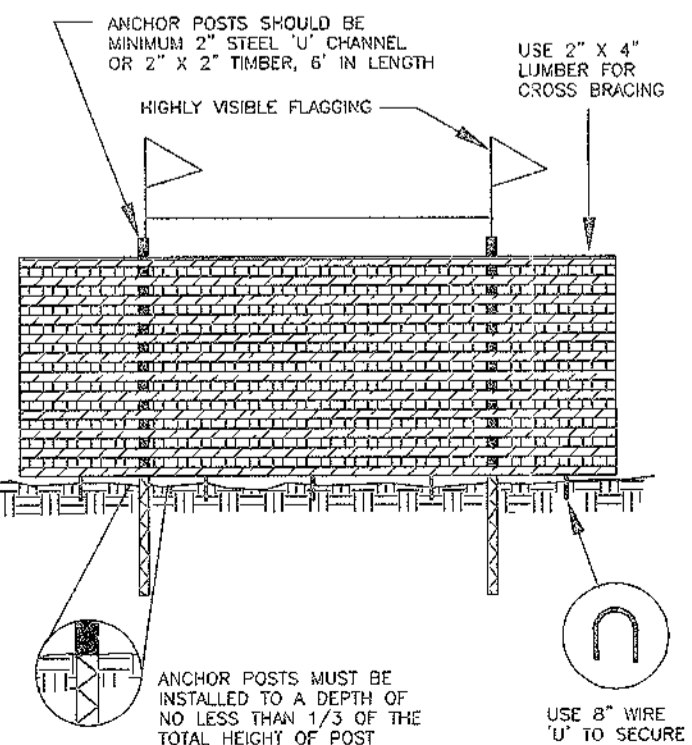
**FOE B (ALTERNATIVE 1)**

QTY. SPECIES	SHADE TOL.	MOIST. REGIME	WET. STATUS	MIN.O.C.	SIZE & SPACING	REMARKS
14 Acer rubrum	VT	D-W	FAC	15'	CONT/2 & B	1' CAL/PLANT
9 Cornus florida	VT	D-M	FACU	11'	CONT/2 & B	3'-5' HEIGHT
10 Lindero benzoin	T	M	FACU	11'	3 GAL. CONT.	SPECIES
5 Liriodendron tulipifera	MT	M-W	FAC	15'	CONT/2 & B	1' CAL/PLANT
8 Nyssa sylvatica	M-W	FAC	15'	CONT/2 & B	1' CAL/PLANT	
5 Prunus serotina	I	M	FACU	15'	CONT/2 & B	3'-5' HEIGHT
8 Quercus alba	I	M-W	FACU	15'	CONT/2 & B	1' CAL/PLANT
8 Quercus rubra	MT	D-M	UPL	15'	CONT/2 & B	1' CAL/PLANT
<b>TOTAL</b>						<b>61 TREES &amp; SHRUBS (52 TREES REQUIRED)</b>

**FOE B (ALTERNATIVE 2)**

QTY. SPECIES	SHADE TOL.	MOIST. REGIME	WET. STATUS	MIN.O.C.	SIZE & SPACING	REMARKS
25 Acer rubrum	VT	D-W	FAC	11'	SEEDLING/SHIP WITH TREE SHELTER	
9 Cornus florida	VT	D-M	FACU	8'	SEEDLING/SHIP WITH TREE SHELTER	
10 Lindero benzoin	T	M	FACU	8'	1 GAL. CONT.	
8 Liriodendron tulipifera	MT	M-W	FAC	11'	SEEDLING/SHIP WITH TREE SHELTER	
13 Nyssa sylvatica	T	M-W	FAC	11'	SEEDLING/SHIP WITH TREE SHELTER	
9 Prunus serotina	I	M	FACU	11'	SEEDLING/SHIP WITH TREE SHELTER	
13 Quercus alba	I	M-W	FACU	11'	SEEDLING/SHIP WITH TREE SHELTER	
13 Quercus rubra	MT	D-M	UPL	11'	SEEDLING/SHIP WITH TREE SHELTER	
<b>TOTAL</b>						<b>100 TREES &amp; SHRUBS (81 TREES REQUIRED)</b>

**PROTECTIVE FENCE DETAIL**  
BLAZE ORANGE PLASTIC MESH



**ANCHOR POSTS MUST BE INSTALLED TO A DEPTH OF NO LESS THAN 1/3 OF THE TOTAL HEIGHT OF POST.**

**ANCHOR POSTS SHOULD BE MINIMUM 2" STEEL U CHANNEL OR 2" X 2" LUMBER, 6" IN LENGTH.**

**USE 1/2" X 4" LUMBER FOR CROSS BRACING.**

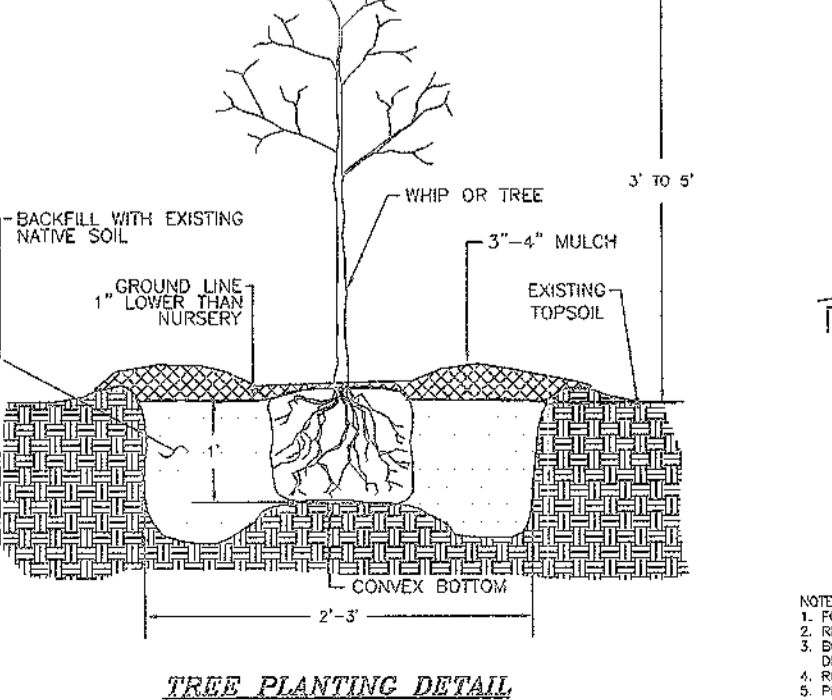
**USE 2" X 4" LUMBER FOR POSTS.**

**ANCHOR POSTS MUST BE INSTALLED TO A DEPTH OF NO LESS THAN 1/3 OF THE TOTAL HEIGHT OF POST.**

**ANCHOR POSTS SHOULD BE MINIMUM 2" STEEL U CHANNEL OR 2" X 2" LUMBER, 6" IN LENGTH.**

**USE 1/2" X 4" LUMBER FOR CROSS BRACING.**

**USE 2" X 4" LUMBER FOR POSTS.**



**TREE PLANTING DETAIL**  
CONTRACTOR OPTION

**1. PROTECTIVE FENCE DETAIL.**

**2. PROTECTIVE FENCE DETAIL.**

**3. PROTECTIVE FENCE DETAIL.**

**4. PROTECTIVE FENCE DETAIL.**

**5. PROTECTIVE FENCE DETAIL.**

**6. PROTECTIVE FENCE DETAIL.**

**STREET TREE CALCULATIONS**

TIPTON DRIVE = 1360 / 40 = 34  
TOTAL TREES REQUIRED = 34 TREES  
TOTAL TREES PROVIDED = 34 TREES

**STREET TREE PLANTING SCHEDULE**

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
34	○	PYRUS CALLERYANA 'REDSPIRE'	REDSPIRE PEAR	2 1/2" - 3" CAL.
<b>TOTAL</b>				
34 STREET TREES				

**SCHEDULE D : STORMWATER MANAGEMENT AREA LANDSCAPING**

LINEAR FEET OF PERIMETER	64 LF (PERIMETER A)	85 LF (PERIMETER B)	90 LF (PERIMETER C)	250 LF (TOTAL)
CREDIT FOR EXISTING VEGETATION (NO. YES AND LINEAR FEET)	YES, 21 LF OF EX. TREES	NO	YES, 74 LF OF EX. TREES	NO
CREDIT FOR OTHER LANDSCAPING (NO. YES AND LF)	N/A	N/A	N/A	N/A
NUMBER OF TREES REQUIRED	1 SHADE TREE 1 EVERGREEN TREE	2 SHADE TREES 2 EVERGREEN TREES	0 SHADE TREES 0 EVERGREEN TREE	2 SHADE TREES 4 EVERGREEN TREES
NUMBER OF TREES PROVIDED	1 SHADE TREE 1 EVERGREEN TREE 0 SUBSTITUTION TREES	1 SHADE TREE 1 EVERGREEN TREE 0 SUBSTITUTION TREES	0 SHADE TREES 0 EVERGREEN TREE 0 SUBSTITUTION TREES	2 SHADE TREES 4 EVERGREEN TREES 0 SUBSTITUTION TREES

**SCHEDULE A : PERIMETER LANDSCAPED EDGE**

CATEGORY	ADJACENT TO PERIMETER PROPERTIES				ADJACENT TO ROADWAYS
	A (PERIMETER 1)	A (PERIMETER 2)	A (PERIMETER 3)	B (PERIMETER 4)	
LINEAR FEET OF PERIMETER	408.25 LF	198.97 LF	172.92 LF	257.83 LF	
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET)	YES, 85 LF OF EXISTING TREES	NO	NO	YES, 238 LF OF EXISTING TREES	
NUMBER OF PLANTS REQUIRED	6 SHADE TREES 4 EVERGREEN TREES 0 SHRUBS	3 SHADE TREES 4 EVERGREEN TREES 0 SHRUBS	3 SHADE TREES 4 EVERGREEN TREES 0 SHRUBS	0 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	
CATEGORY	ADJACENT TO ROADWAYS	ADJ. TO PERIMETER PROPERTIES		TOTAL	
LINEAR FEET OF PERIMETER	35.00 LF	205.83 LF	288.67 LF		
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET)	YES, 35 LF OF EXISTING TREES	NO	YES, 288.67 LF OF EXISTING TREES		
NUMBER OF PLANTS REQUIRED	0 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	4 SHADE TREES 5 EVERGREEN TREES 0 SHRUBS	0 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	16 SHADE TREES 5 EVERGREEN TREES 0 SHRUBS	

**APPROVED AS PART OF PLANNING AND ZONING OF HOWARD COUNTY**

**LEGEND**

**OWNER**  
ELLCOTT CITY LAND HOLDING, INC.  
1400 MARSH STREET  
ELLCOTT CITY, MARYLAND 21043  
(410) 680-9105

**QUALIFIED PROFESSIONAL**

**REGISTERED PROFESSIONAL ENGINEER**  
MILDENBERG & BOENDER & ASSOC., INC.  
6072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland, 21042  
(410) 997-0296 Fax (410) 621-5521 Res. (410) 997-0296 Fax

**DATE**  
MAR 2004  
09-061  
05-001

**PROJECT**  
TIPTON OVERLOOK LOTS 1-9  
TAX MAP 46 - PARCEL 8 - GRID 12  
6TH ELECTION DISTRICT

**DESCRIPTION**  
TIPTON OVERLOOK LOTS 1-9  
PRELIMINARY LANDSCAPE & FOREST CONSERVATION PLAN

**DATE**  
1"-1" GS

**SCALE**  
MAP/STD

**APPROVAL**  
SID  
1"-1" GS