

VICINITY MAP  
SCALE: 1" = 2000'

**BENCHMARK INFORMATION NAD'83**

Ho. Co. STATION 28HA STAMPED DISC SET ON TOP OF CONCRETE COLUMN 14.2' EAST OF THE EDGE OF THE EDGE OF PAVING FOR HIGHLAND ROAD AND 29.0' NORTH OF BG&E POLE No. 343598	Ho. Co. STATION 34AA STAMPED DISC SET ON TOP OF CONCRETE COLUMN 7.4' SOUTH OF THE EDGE OF PAVING FOR TRIADDELPHIA MILL ROAD AND 57.2' EAST OF CAP POLE NUMBER 32.
NORTHING: 565347.937' EASTING: 1319266.269' ELEVATION: 588.708'	NORTHING: 564468.943' EASTING: 1318257.375' ELEVATION: 561.105'

**LEGEND**

EXISTING CONTOURS (AERIAL 12/02)	---
PROPOSED CONTOURS	---
LIMIT OF WETLANDS	---
EXISTING WOODS LINE	---
PROPOSED WOODS LINE	---
EXISTING STRUCTURE	---
PROPOSED STRUCTURE	---
EXISTING WELL	⊙ EX. WELL
PROPOSED WELL	⊙
EXISTING SEPTIC FIELD	---
PROPOSED SEPTIC FIELD	---
PERCOLATION TEST LOCATION - PASSING	● P-10 522.3
PERCOLATION TEST LOCATION - FAILING	○ P-11 522.6
1500 S.F. WELL ENVELOP	---
EX. 100 YEAR FLOODPLAIN (B.E.I. 3/03)	---
DRAINAGE AREA	---
LIMIT OF DISTURBANCE	---
STABILIZED CONSTRUCTION ENTRANCE	---
SILT FENCE	---
SUPER SILT FENCE	---
SOIL STABILIZATION MATTING	---
EARTH DIKE	---
INLET PROTECTION	---

**SITE DATA TABULATION**

- GENERAL SITE DATA
  - PRESENT ZONING: RR-DEO
  - APPLICABLE DPZ FILE REFERENCES: WP-03-093
  - DEED REFERENCE: L.1050 / F.0119
  - PROPOSED USE OF SITE: 22 BUILDABLE LOTS, 1 BUILDABLE PRESERVATION PARCEL AND 3 NON-BUILDABLE PRESERVATION PARCELS
- PROPOSED WATER AND SEWER SYSTEMS: PRIVATE
- AREA TABULATION
  - TOTAL AREA OF SITE: 80.75 AC.±
  - AREA OF 100 YEAR FLOODPLAIN (APPROX.): 8.30 AC.±
  - AREA OF STEEP SLOPES (25% OR GREATER): 0.67 AC.±
  - AREA OF STEEP SLOPES NOT IN THE FLOODPLAIN: 0.54 AC.±
  - NET AREA OF SITE: 71.91 AC.±
  - AREA OF THIS PLAN SUBMISSION: 80.75 AC.±
  - AREA OF PROPOSED BUILDABLE LOTS: 22.38 AC.±
  - AREA OF PRESERVATION PARCELS: 54.82 AC.±
  - AREA OF PROPOSED PUBLIC ROAD R/W: 3.55 AC.±
- LOT TABULATION
  - ALLOWABLE RESIDENTIAL LOTS AT 1 UNIT PER 4.25 ACRES: 80.75 AC.± / 4.25 AC. = 19 UNITS
  - ALLOWABLE RESIDENTIAL LOTS USING THE DEO/CEO DENSITY EXCHANGE OPTION AT 1 UNIT PER 2.0 ACRES: 71.91 AC. - 0.61 AC.± / 2.0 AC. = 35 UNITS
  - TOTAL NUMBER OF DEO/CEO UNITS REQUIRED = 4 UNITS
  - TOTAL NUMBER OF RESIDENTIAL UNITS PROPOSED = 23 UNITS
  - TOTAL NUMBER OF BUILDABLE PRESERVATION PARCELS = 1
  - TOTAL NUMBER OF NON-BUILDABLE PRESERVATION PARCELS = 3
- OPEN SPACE DATA
  - MINIMUM RESIDENTIAL LOT SIZE: 40,000 S.F.
  - OPEN SPACE REQUIRED (0%): N/A
  - TOTAL AREA OF PROPOSED OPEN SPACE LOTS: N/A
  - TOTAL AREA OF NON-CREDITED NARROW O.S.: N/A
  - TOTAL CREDITED OPEN SPACE PROVIDED: N/A
  - OPEN SPACE AREA MINUS AREAS LESS THAN 35' IN WIDTH: N/A
  - AREA OF RECREATIONAL OPEN SPACE REQUIRED: N/A
  - AREA OF RECREATIONAL OPEN SPACE PROVIDED: N/A

**GENERAL NOTES**

- ALL ASPECTS OF THIS PROJECT SHALL BE IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVER(S) HAVE BEEN APPROVED.
- THE EXISTING TOPOGRAPHY SHOWN IS TAKEN FROM AN AERIAL SURVEY WITH TWO-FOOT CONTOUR INTERVALS PREPARED BY WINGS INC. DATED DECEMBER, 2002.
- HORIZONTAL AND VERTICAL DATUMS FOR THIS PLAN ARE BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM NAD'83 AS PROJECTED FROM HOWARD COUNTY CONTROL POINTS 28HA AND 34AA.
- PRIVATE WATER AND SEWER SYSTEMS SHALL BE PROVIDED FOR THIS DEVELOPMENT. ALL WELLS SHALL BE DRILLED PRIOR TO FINAL PLAT SUBMITTAL FOR SIGNATURE. IT IS THE DEVELOPER'S RESPONSIBILITY TO DRILL THE WELLS. IT WILL NOT BE CONSIDERED TO BE GOVERNMENTAL DELAY IF THE WELLS ARE NOT COMPLETED PRIOR TO THE SUBMISSION'S MILESTONE DATE. THE DEVELOPER MAY BE ELIGIBLE FOR RELIEF FROM THIS REQUIREMENT IF ADEQUATE WELL SUCCESS RATE ARE ACHIEVED AT VARIOUS LOCATIONS IN THE SUBDIVISION.
- STORMWATER MANAGEMENT SHALL BE PROVIDED BY THE USE OF NON-STRUCTURAL AND STRUCTURAL METHODS. NON-STRUCTURAL METHODS SHALL BE UTILIZED FOR MEETING GRASSLAND WATER RECHARGE VOLUMES, SHALLOW WETLAND AND MICROPOOL. EXTENDED DETENTION SHALL BE CONSTRUCTED TO MEET THE WATER QUALITY AND CHANNEL PROTECTION VOLUME REQUIREMENTS. ALL FACILITIES ARE TO BE CLASS 'A' STRUCTURES. THESE FACILITIES WILL BE PRIVATELY OWNED AND MAINTAINED BY THE HOMEOWNER'S ASSOC.
- THE PRINCIPAL USE OF PRESERVATION PARCEL 'A' IS TO BE STORMWATER MANAGEMENT & ENVIRONMENTAL CONSERVATION. THIS PARCEL SHALL BUFFER THE PROPOSED LOTS FROM THE EXISTING PROPERTIES TO THE WEST. THIS WILL LESSEN THE VISUAL IMPACTS THAT THE PROPOSED DEVELOPMENT WILL HAVE ON THE EXISTING LOTS. PRESERVATION PARCEL 'A' WILL BE PRIVATELY OWNED AND BUILDABLE.
- THE PRINCIPAL USES OF PRESERVATION PARCELS 'B' THROUGH 'D' ARE TO BE STORMWATER MANAGEMENT AND ENVIRONMENTAL CONSERVATION. THESE PARCELS SHALL BUFFER THE PROPOSED LOTS FROM THE EXISTING PROPERTIES TO THE EAST. THIS WILL LESSEN THE VISUAL IMPACTS THAT THE PROPOSED DEVELOPMENT WILL HAVE ON THE EXISTING LOTS. PRESERVATION PARCELS 'B' THRU 'D' WILL BE PRIVATELY OWNED AND ARE NON-BUILDABLE.
- EXISTING UTILITIES ARE BASED ON APPROVED CONTRACT DRAWINGS AND FIELD LOCATIONS.
- THE WETLAND DELINEATION FOR THIS PROJECT WAS PERFORMED BY ECO-SCIENCE PROFESSIONALS, INC., DATED FEBRUARY, 2003 AND WAS SUBMITTED AS PART OF THIS PLAN FOR THE AREAS OF ANY POTENTIAL DISTURBANCES. AREAS NOT NEAR POTENTIAL DISTURBANCES WERE NOT DELINEATED IN ACCORDANCE WITH SECTION 16.116(a)(4) OF THE HOWARD COUNTY SUBDIVISION REGULATIONS. A CERTIFICATION LETTER HAS BEEN PROVIDED TO D.P. & Z. STATING THAT THE RESIDENTIAL LOTS, DRIVEWAYS AND ROADS WILL NOT IMPACT WETLANDS, STREAMS OR THEIR BUFFERS AREAS THAT ARE NOT DELINEATED.
- THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY TRAFFIC CONCEPTS, INC., DATED FEBRUARY, 2003 AND WAS SUBMITTED AS PART OF THIS PLAN.
- A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.
- THE GEOTECHNICAL REPORT FOR THIS PROJECT WAS PREPARED BY HILLIS-CARNESE ENGINEERING ASSOC., INC., DATED MARCH, 2003 AND WAS SUBMITTED AS PART OF THIS PLAN.
- FOREST STAND DELINEATION IS NOT PROVIDED BECAUSE ECO-SCIENCE PROFESSIONALS, INC. DETERMINED THAT THERE ARE NO FOREST RESOURCES ON SITE. FOREST CONSERVATION PLAN PREPARED BY ECO-SCIENCE PROFESSIONALS, INC., DATED FEBRUARY, 2003. THE FOREST CONSERVATION OBLIGATIONS WILL BE MET BY ON-SITE AFFORESTATION AND OFF-SITE RETENTION.
- THERE ARE NO PREVIOUS APPLICABLE HO. CO. DPZ FILE REFERENCES FOR THIS PROJECT.
- A SIGHT DISTANCE ANALYSIS FOR THE INTERSECTION OF BRODCOLINO WAY AND TRIADDELPHIA MILL ROAD HAS BEEN COMPLETED BY BENCHMARK ENGINEERING, INC. DATED FEBRUARY, 2003 AND WAS SUBMITTED AS PART OF THIS PLAN. A DESIGN MANUAL WAIVER WAS APPROVED BY D.E.A. LETTER DATED APRIL 3, 2003 TO ALLOW THE USE OF A 25 MPH STOPPING SIGHT DISTANCE IN LIEU OF INTERSECTION SIGHT DISTANCE AND TO ALLOW THE USE OF A 25 MPH DESIGN SPEED FOR THE COMPUTATION OF VERTICAL CURVES.

- THE TRACT BOUNDARY FOR THIS PROJECT WAS ESTABLISHED BY A MONUMENTED FIELD-RUN SURVEY SEALED BY BENCHMARK ENGINEERING, INC. DATED DECEMBER, 2002.
- MINIMUM BUILDABLE LOT SIZE SHALL BE 40,000 SQUARE FEET. MAXIMUM BUILDABLE LOT SIZE SHALL BE 50,000 SQUARE FEET.
- THIS PROPERTY IS NOT WITHIN THE METROPOLITAN DISTRICT.
- TO THE BEST OF OUR KNOWLEDGE THERE ARE NO CEMETERY LOCATIONS ON-SITE.
- SEDIMENT CONTROL SHALL BE PROVIDED FOR THIS PROJECT. SEPTIC EASEMENT AREAS SHALL BE PROTECTED FROM ROAD CONSTRUCTION GRADING OPERATIONS.
- THERE ARE EXIST. STRUCTURES LOCATED ON THIS PROPERTY, NONE OF WHICH ARE TO REMAIN.
- ALL LANDSCAPING REQUIREMENTS AS SET FORTH IN THE LANDSCAPE MANUAL SHALL BE COMPLIED WITH.
- FOR FLAG OR PIPE STEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPE STEM AND ROAD RIGHT-OF-WAY LINE AND NOT THE FLAG OR PIPE STEM LOT DRIVEWAY.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
  - WIDTH - 12' (14' SERVING MORE THAN ONE RESIDENCE)
  - SURFACE - 6" OF COMPACT CRUSHER RUN BASE WITH TAR AND CHIP COATING.
  - GEOMETRY - MAX. 15% GRADE, MAX. 10% GRADE CHANGE & MIN. 45' TURNING RADIUS.
  - STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (HDS LOADING).
  - DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOODPLAIN WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY.
  - STRUCTURE CLEARANCES - MINIMUM 12 FEET.
  - MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE.
- THIS AREA DESIGNATES A PRIVATE SEWAGE EASEMENT OF AT LEAST 10,000 S.F. PER LOT AS 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. THIS EASEMENT SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWAGE EASEMENT. RECORDATION OF A MODIFIED SEWAGE EASEMENT SHALL NOT BE NECESSARY.
- EXISTING WELLS AND/OR SEWAGE EASEMENTS WITHIN 100' OF THE PROPERTY HAVE BEEN SHOWN FROM THE BEST AVAILABLE INFORMATION.
- THERE ARE CONTIGUOUS AREAS OF STEEP SLOPES (25% OR GREATER) OF 20,000 S.F. OR GREATER ON THIS SITE. GRADING OF STEEP SLOPE AREAS LESS THAN 20,000 S.F. IS PERMITTED UNDER SECTION 16.116(b)(1) OF THE SUBDIVISION REGULATIONS.
- THE SUBJECT PROPERTY IS ZONED RR-DEO PER THE 10/18/93 COMPREHENSIVE ZONING PLAN.
- THIS PLAN IS SUBJECT TO THE 5th EDITION OF THE HOWARD COUNTY SUBDIVISION REGULATIONS AND THE AMENDED HOWARD COUNTY ZONING REGULATIONS, COUNCIL BILL 50-2001
- WAIVER PETITION WP-03-093 WAS APPROVED BY THE DIRECTOR OF THE DEPARTMENT OF PLANNING AND ZONING ON JULY 10, 2003. WP-03-93 WAVES SECTIONS 16.116(a)(1) & (2), PROTECTION OF WETLANDS & STREAMS; 16.147, FINAL SUBDIVISION PLAN AND FINAL PLAT FOR THE ADJOINER TRANSFER; AND 16.115(c) AND (e), FLOODPLAIN PRESERVATION, OF THE SUBDIVISION REGULATIONS.
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, NEW STRUCTURES AND PAVING IS PERMITTED WITHIN WETLANDS, STREAMS OR THEIR REQUIRED BUFFERS AND 100-YEAR FLOODPLAIN AREA, EXCEPT AS PERMITTED PER WP-03-93.
- A DESIGN MANUAL WAIVER WAS GRANTED BY THE DIRECTOR OF THE DEPARTMENT OF ENGINEERING PLANNING AND ZONING ON JULY 17, 2003, GRANTING THE USE OF A USE-IN-COMMON DRIVEWAY TO ACCESS FIVE LOTS.
- A WETLAND CROSSING PERMIT MUST BE OBTAINED FROM THE MARYLAND DEPARTMENT OF THE ENVIRONMENT PRIOR TO BUILDING PERMIT APPROVAL ON PRESERVATION PARCEL 'A'.

**COORDINATE TABLE (NAD'83)**

NO.	NORTHING	EASTING	NO.	NORTHING	EASTING
1120	563,810.0526	1,316,263.3172	1140	564,167.0150	1,318,573.7616
1121	563,824.0485	1,316,998.0363	1141	564,090.7894	1,318,301.8544
1122	562,979.3776	1,315,417.5173	1142	563,986.5741	1,318,074.2268
1123	562,855.9841	1,315,604.9457	1143	563,871.1508	1,317,975.7103
1124	562,721.0706	1,316,011.4841	1144	563,713.8520	1,317,723.0804
1125	561,988.8355	1,315,775.3117	1145	563,465.7231	1,317,554.1904
1126	561,300.4736	1,315,984.3388	1146	563,821.5504	1,316,272.4897
1127	561,208.5229	1,316,686.0011	1147	563,604.6210	1,317,086.1212
1128	561,489.8066	1,316,752.0453	1148	563,608.4069	1,317,149.0630
1129	561,451.8542	1,317,271.4813	1149	563,550.4025	1,317,368.5184
1130	562,331.6355	1,317,311.5906	1150	563,604.1268	1,317,543.2123
1131	562,629.9985	1,317,306.8558	1151	564,098.7614	1,317,968.0835
1132	563,045.0234	1,317,176.6369	1152	564,131.5494	1,318,060.4668
1133	563,263.7796	1,317,243.6732	1153	564,135.2172	1,318,360.7561
1134	563,672.2489	1,317,752.6916	1154	564,138.0226	1,318,380.1330
1135	563,763.2322	1,317,889.2494	1155	564,174.8541	1,318,510.8309
1136	563,745.1183	1,317,934.7857	1156	564,209.5106	1,318,518.9395
1137	563,946.5118	1,318,105.4624	1157	564,220.6446	1,318,928.9910
1138	564,045.1754	1,318,316.7637	1158	564,200.0838	1,318,951.7659
1139	564,128.1047	1,318,614.0719	1159	564,165.4982	1,318,984.3312
			1160	564,145.0138	1,318,625.2680

**SHEET INDEX**

NO.	DESCRIPTION
1 & 2	PRELIMINARY EQUIVALENT SKETCH PLAN
3 & 4	PRELIM. GRADING, SEDIMENT & EROSION CONTROL PLAN, NOTES AND DETAILS
5 & 6	PRELIMINARY LANDSCAPE PLAN, NOTES AND DETAILS
7 & 8	PRELIMINARY FOREST CONSERVATION PLAN, NOTES AND DETAILS
9 & 10	EXISTING CONDITIONS & SOILS MAP

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

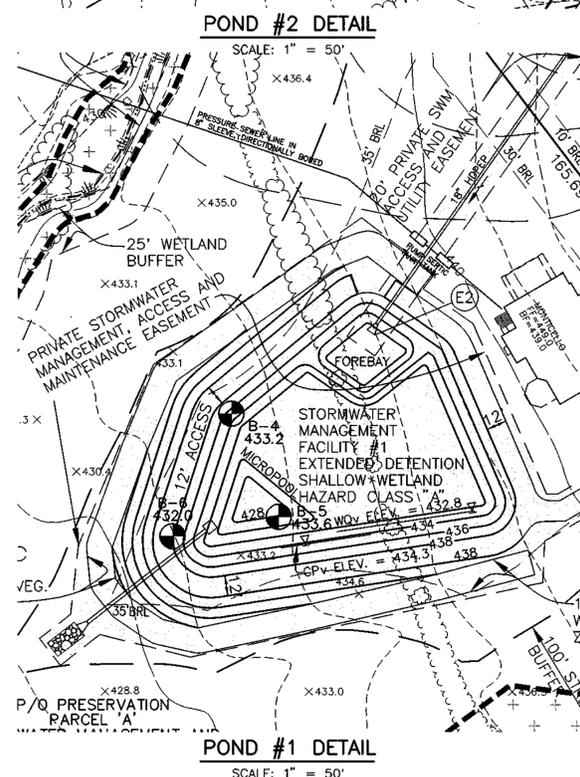
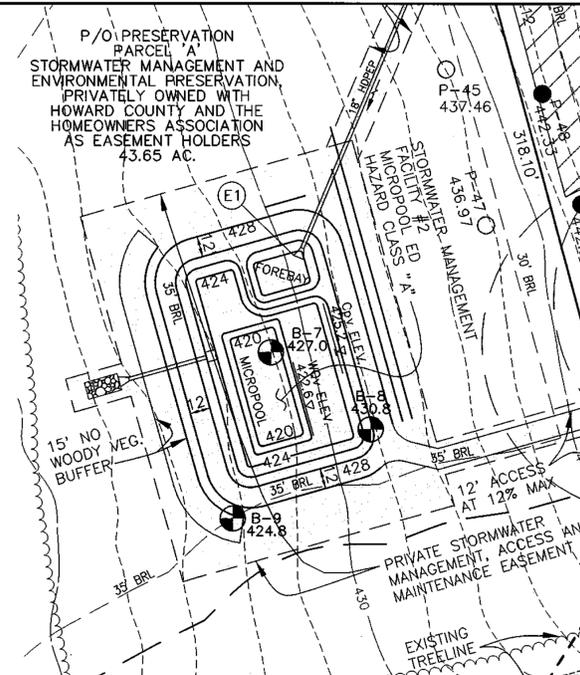
NO.	DATE	REVISION
<b>BENCHMARK ENGINEERING, INC.</b>		
8480 BALTIMORE NATIONAL PIKE & SUITE 418 ELLCOTT CITY, MARYLAND 21043 PHONE: 410-465-6105 FAX: 410-465-6644 E-MAIL: benchmark@ccis.com		
OWNER:	THOMAS C. CURTIS AND BETTY JEAN CURTIS, H/W 13471 TRIADDELPHIA MILL ROAD CLARKSVILLE, MD 21029-1026	PROJECT: CURTIS PROPERTY LOTS 1 THROUGH 22, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THROUGH 'D'
CONTRACT PURCHASER/DEVELOPER:	HIGHLAND DEVELOPMENT CORPORATION P.O. BOX 228 CLARKSVILLE, MARYLAND 21029 410-531-5539	LOCATION: TAX MAP No. 34, GRID No. 2 PARCEL 2 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND
TITLE:	PRELIMINARY EQUIVALENT SKETCH PLAN	DATE: JUNE 12, 2003 JULY 20, 2003
Design: JMC	Draft: JMC/MCR	Check: DAM
SCALE:	1" = 100'	PROJECT NO. 1513 DRAWING 1 OF 10

APPROVED FOR PRIVATE WATER AND SEWAGE SYSTEM  
HOWARD COUNTY HEALTH DEPARTMENT  
DATE: 03-03

APPROVED FOR PRIVATE WATER AND SEWERAGE SYSTEM  
 HOWARD COUNTY HEALTH DEPARTMENT  
*James M. Stover* 8-21-03  
 HOWARD COUNTY HEALTH OFFICER JMS DATE

MINIMUM LOT SIZE CHART			
LOT NO.	GROSS AREA	PIPESTEM AREA	MIN. LOT SIZE
5	43,328 S.F.	596 S.F.	42,742 S.F.
11	46,014 S.F.	3,529 S.F.	42,485 S.F.
12	47,839 S.F.	1,881 S.F.	45,958 S.F.
13	48,942 S.F.	5,377 S.F.	43,565 S.F.
14	44,244 S.F.	1,518 S.F.	42,726 S.F.
15	43,563 S.F.	2,277 S.F.	41,273 S.F.
16	41,673 S.F.	1,671 S.F.	40,002 S.F.
17	44,225 S.F.	1,751 S.F.	42,474 S.F.

CENTERLINE CURVE DATA							
CURVE	STREET NAME	STATION	RADIUS	ARC	DELTA	TANGENT	CHORD
C1	BRODCOLOINO WAY	PC=+0+22.63 PT=+0+53.32	50.00'	30.69'	35°10'01"	15.85'	N 56°40'42" E 30.21'
C2	BRODCOLOINO WAY	PC=+1+99.34 PT=+2+25.52	100.00'	26.18'	15°00'00"	13.17'	N 81°45'43" E 26.11'
C3	BRODCOLOINO WAY	PC=+5+25.83 PT=+6+09.85	100.00'	83.81'	48°01'17"	44.55'	S 65°15'04" W 81.38'
C4	BRODCOLOINO WAY	PC=+12+54.15 PT=+14+78.49	200.00'	222.34'	63°41'42"	124.23'	N 73°05'17" E 211.08'
C5	BRODCOLOINO WAY	PC=+17+03.21 PT=+18+03.16	80.00'	99.95'	71°35'05"	57.68'	S 69°08'35" W 93.58'
C6	BRODCOLOINO WAY	PC=+22+95.18 PT=+23+39.66	50.00'	44.49'	50°58'38"	23.84'	S 07°51'43" W 43.03'
C7	BRODCOLOINO WAY	PC=+28+81.27 PT=+29+73.26	50.00'	8.01'	0°10'31"	4.01'	N 13°02'20" W 8.00'
C8	BRODCOLOINO WAY	PC=+30+31.04 PT=+30+66.59	50.00'	35.55'	40°44'02"	18.56'	N 11°54'57" E 34.80'
C9	BRODCOLOINO WAY	PC=+32+94.77 PT=+33+45.73	50.00'	50.96'	58°23'30"	27.94'	S 03°05'12" W 48.78'

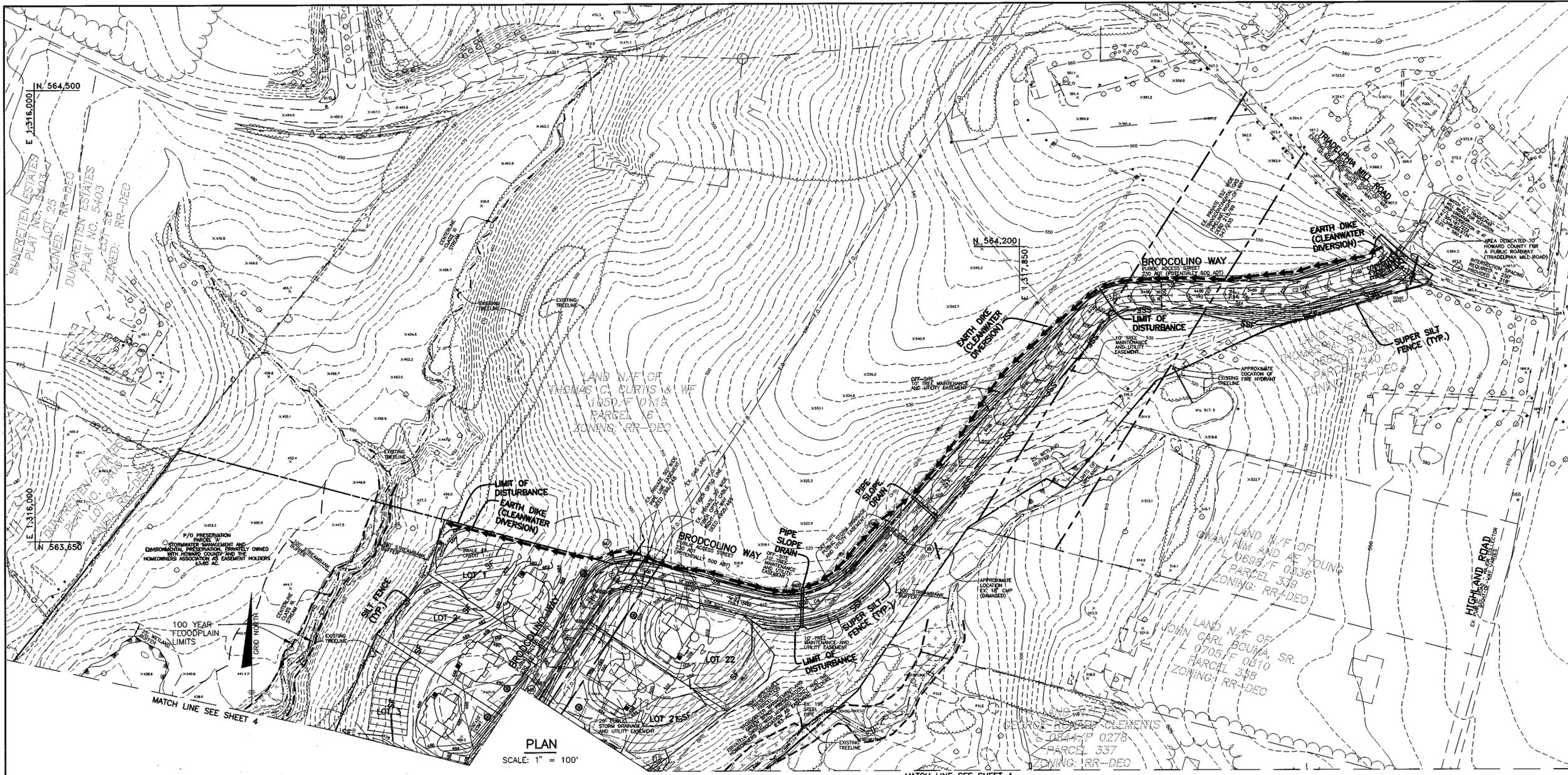


TENTATIVELY APPROVED  
 DEPT. OF PLANNING AND ZONING  
 HOWARD COUNTY  
*Mark A. Taylor*  
 PLANNING DIRECTOR  
 8/21/03  
 DATE

NO.	DATE	REVISION

**BENCHMARK**  
 ENGINEERS & LAND SURVEYORS & PLANNERS  
**ENGINEERING, INC.**  
 8480 BALTIMORE NATIONAL PIKE & SUITE 418  
 ELLICOTT CITY, MARYLAND 21043  
 PHONE: 410-465-6105 FAX: 410-465-6644  
 E-MAIL: benchmark@cois.com

OWNER: <b>THOMAS C. CURTIS AND BETTY JEAN CURTIS, H/W</b> 13471 TRIADDELPHIA MILL ROAD CLARKSVILLE, MD 21029-1026	PROJECT: <b>CURTIS PROPERTY</b> LOTS 1 THROUGH 22, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THROUGH 'D'
CONTRACT PURCHASER/DEVELOPER: <b>HIGHLAND DEVELOPMENT CORPORATION</b> P.O. BOX 228 CLARKSVILLE, MARYLAND 21029 410-531-5539	LOCATION: TAX MAP No. 34, GRID No. 2 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND
TITLE: <b>PRELIMINARY EQUIVALENT SKETCH PLAN</b>	DATE: JUNE 12, 2003 JULY 29, 2003
Design: JMC Draft: JMC/MCR Check: DAM	PROJECT NO. 1513 SCALE: AS SHOWN DRAWING 2 OF 10



**LEGEND**

SOILS CLASSIFICATION	C&S2
SOILS DELINEATION	---
EXISTING CONTOURS (AERIAL 12/02)	---
PROPOSED CONTOURS	---
LIMIT OF WETLANDS	---
EXISTING WOODS LINE	---
PROPOSED WOODS LINE	---
EXISTING STRUCTURE	---
PROPOSED STRUCTURE	---
EXISTING WELL	○
PROPOSED WELL	⊙
EXISTING SEPTIC FIELD	---
PROPOSED SEPTIC FIELD	---
1500 S.F. WELL ENVELOP	---
SLOPES 15% TO 24.9%	---
SLOPES 25% OR GREATER	---
EX. 100 YEAR FLOODPLAIN (B.E.I. 3/03)	---
DRAINAGE AREA	---
LIMIT OF DISTURBANCE	---
STABILIZED CONSTRUCTION ENTRANCE	---
SILT FENCE	---
SUPER SILT FENCE	---
SOIL STABILIZATION MATTING	---
EARTH DIKE	---
INLET PROTECTION	---

**PLAN**  
SCALE: 1" = 100'

TENTATIVELY APPROVED  
DEPT. OF PLANNING AND ZONING  
HOWARD COUNTY  
*Paul A. Wagner* 8/28/03  
PLANNING DIRECTOR DATE

NO.	DATE	REVISION

**BENCHMARK**  
ENGINEERS • LAND SURVEYORS • PLANNERS  
**ENGINEERING, INC.**  
8480 BALTIMORE NATIONAL PIKE & SUITE 418  
ELLICOTT CITY, MARYLAND 21043  
PHONE: 410-465-6105 FAX: 410-465-6644  
E-MAIL: benchmark@cois.com

OWNER: THOMAS C. CURTIS AND BETTY JEAN CURTIS, H/W 13471 TRIADPHIA MILL ROAD CLARKSVILLE, MD 21029-1026	PROJECT: <b>CURTIS PROPERTY</b> LOTS 1 THROUGH 22, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THROUGH 'D' LOCATION: TAX MAP No. 34, GRID No. 2 PARCEL 2 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND
CONTRACT PURCHASER/DEVELOPER: HIGHLAND DEVELOPMENT CORPORATION P.O. BOX 228 CLARKSVILLE, MARYLAND 21029 410-531-5539	TITLE: <b>PRELIMINARY GRADING AND SEDIMENT &amp; EROSION CONTROL PLAN</b>
DATE: JUNE 12, 2003 JULY 20, 2003	PROJECT NO. 1513
Design: JMC Draft: JMC/MCR Check: DAM	SCALE: AS SHOWN DRAWING 3 OF 10



Summary of General Storage Requirement Drainage Area 1

Step	Requirement	Volume Required (ac-ft)	Notes
1.	Water Quality Volume (WQv)	S-1: 0.39 S-2: 0.00 S-3: 0.15	These volumes are reduced by the non-structural method of open channel use, remaining volume is treated in an ED shallow wetland.
2.	Recharge Volume (Rev)	S-1: 0.10 (or 1.17 acres) S-2: 0.00 (or 0.00 acres) S-3: 0.01 (or 0.10 acres)	This volume is reduced by open channel use. Rev not provided in this area is provided in Drainage Area #3, sub-area #1. No new impervious proposed. This volume is eliminated by open channel use.
3.	Channel Protection Volume (Cpv)	0.46	This volume is for sub area 1 only all other areas are eliminated by sheet flow to buffer or no disturbance. This volume is treated by a ED shallow wetland.
4.	Overbank Flood Protection Volume (Op)	N/A	Not required
5.	Extreme Flood Volume (Of)	N/A	Not required

Summary of General Storage Requirement Drainage Area 2

Step	Requirement	Volume Required (ac-ft)	Notes
1.	Water Quality Volume (WQv)	S-1: 0.05 S-2: 0.00	These volumes are eliminated by open channel use or no new impervious areas are proposed.
2.	Recharge Volume (Rev)	S-1: 0.01 (or 0.05 acres) S-2: 0.00 (or 0.00 acres)	These volumes are eliminated by open channel use. No new impervious areas are proposed.
3.	Channel Protection Volume (Cpv)	0.00	This volume is eliminated by sheet flow to buffer. D.A. #2 bypasses the site. The culvert under Brodcolino Way is a bottomless arch and the storm drain crosses above the culvert to deliver runoff to facility #1.
4.	Overbank Flood Protection Volume (Op)	N/A	Not required
5.	Extreme Flood Volume (Of)	N/A	Not required

Summary of General Storage Requirement Drainage Area 3

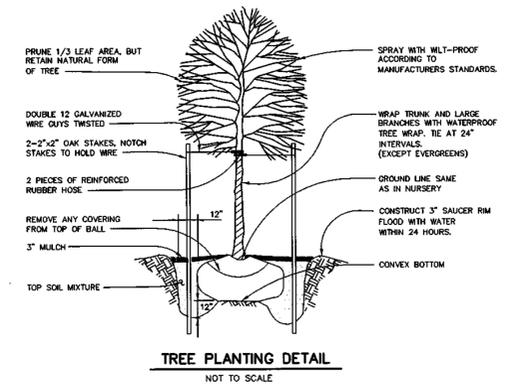
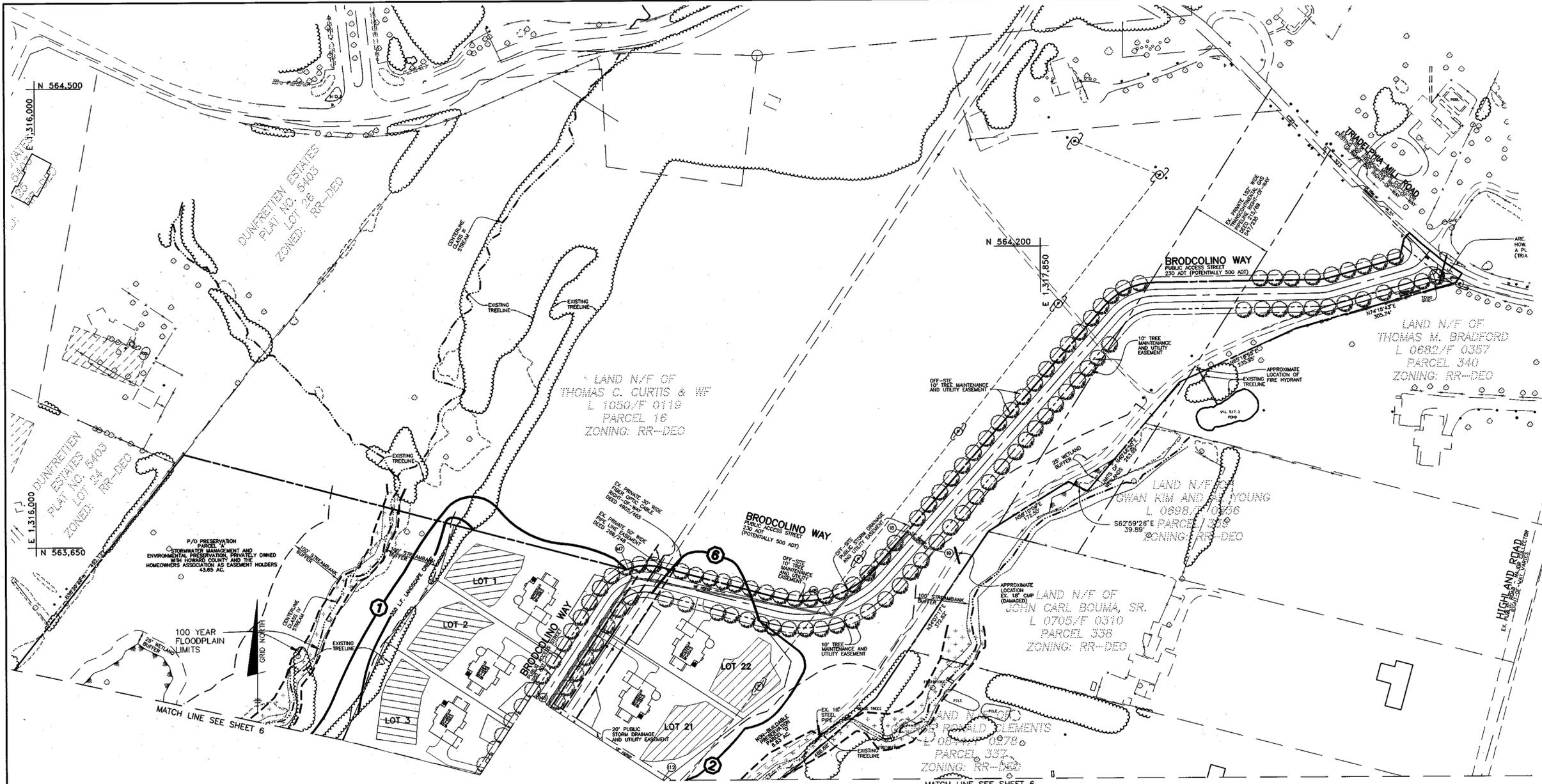
Step	Requirement	Volume Required (ac-ft)	Notes
1.	Water Quality Volume (WQv)	S-1: 0.23 S-2: 0.11 S-3: 0.05	These volumes are reduced by open channel use and disconnection of rooftop runoff. Facility #2, micropool ED, addresses the remaining water quality volume.
2.	Recharge Volume (Rev)	S-1: 0.06 (or 0.61 acres) S-2: 0.008 (or 0.04 acres) S-3: 0.005 (or 0.028 acres)	These volumes are eliminated by open channel use. Rev for Drainage Area #1 is provided for within this area.
3.	Channel Protection Volume (Cpv)	0.28	This volume is for sub area 1 only all other areas are eliminated by sheet flow to buffer or no disturbance. Facility #2, micropool ED, controls this volume.
4.	Overbank Flood Protection Volume (Op)	N/A	Not required
5.	Extreme Flood Volume (Of)	N/A	Not required

TENTATIVELY APPROVED  
DEPT. OF PLANNING AND  
ZONING OF  
HOWARD COUNTY  
*Mark Wilby*  
PLANNING DIRECTOR DATE 6/23/03

NO.	DATE	REVISION

**BENCHMARK**  
ENGINEERS & LAND SURVEYORS & PLANNERS  
**ENGINEERING, INC.**  
8480 BALTIMORE NATIONAL PIKE A SUITE 418  
ELLICOTT CITY, MARYLAND 21043  
PHONE: 410-465-6105 FAX: 410-465-6644  
E-MAIL: benchmark@ccis.com

OWNER: THOMAS C. CURTIS AND BETTY JEAN CURTIS, H/W 13471 TRIADDELPHIA MILL ROAD CLARKSVILLE, MD 21029-1026	PROJECT: <b>CURTIS PROPERTY</b> LOTS 1 THROUGH 22, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THROUGH 'D'
CONTRACT PURCHASER/DEVELOPER: HIGHLAND DEVELOPMENT CORPORATION P.O. BOX 228 CLARKSVILLE, MARYLAND 21029 410-531-5539	TITLE: <b>PRELIMINARY GRADING AND SEDIMENT &amp; EROSION CONTROL PLAN</b>
DATE: JUN 12, 2003 JULY 20, 2003	PROJECT NO. 1513
Design: JMC Draft: JMC/MCR Check: DAM	SCALE: AS SHOWN DRAWING 4 OF 10



- NOTES:**
- TREES SHOULD BE PLANTED A MINIMUM OF 6 FEET FROM THE EDGE OF PAVING AND MUST BE A MINIMUM OF 5 FEET FROM ANY STORM DRAIN.
  - TREES MUST BE PLANTED A MINIMUM OF 5 FEET FROM AN OPEN SPACE ACCESS STRIP AND 10 FEET FROM A DRIVEWAY.
  - SEE TREE PLANTING DETAIL - THIS SHEET.
  - THE DEVELOPER SHALL BE RESPONSIBLE FOR STREET TREES, STORMWATER MANAGEMENT FACILITY PERIMETER PLANTING AND PRESERVATION OF THE PERIMETER VEGETATION AS SHOWN ON THESE PLANS.
  - THIS LANDSCAPE PLAN IS PREPARED IN CONFORMANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
  - ALL VEGETATION IS TO BE REMOVED WITHIN 15' OF THE TOE OF THE SLOPE OF THE PROPOSED EMBANKMENT.

**LEGEND**

- LIMIT OF WETLANDS
- EXISTING WOODS LINE
- PROPOSED WOODS LINE
- EXISTING STRUCTURE
- PROPOSED STRUCTURE
- EXISTING WELL
- EXISTING SEPTIC FIELD
- PROPOSED SEPTIC FIELD
- 1500 S.F. WELL ENVELOP
- EX. 100 YEAR FLOODPLAIN
- PROP. STREET TREE

**PLAN**  
SCALE: 1" = 100'

TENTATIVELY APPROVED  
DEPT. OF PLANNING AND  
ZONING OF  
HOWARD COUNTY

*David A. ...* 8/29/03  
PLANNING DIRECTOR DATE

**SCHEDULE A PERIMETER LANDSCAPE EDGE**

CATEGORY	ADJACENT TO PERIMETER PROPERTIES					
	1A	2A	3A	4A	5A	6B
LANDSCAPE BUFFER TYPE	1531	864	1671	1452	1969	205
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	1531	864	1671	1452	1969	205
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	YES 350	NO	NO	YES 39	YES 1103	NO
REMAING PERIMETER AREA	1181	864	1671	1413	866	205
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO	NO	NO	NO	NO
NUMBER OF PLANTS REQUIRED						
SHADE TREES	20	14	28	24	14	4
EVERGREEN TREES	-	-	-	-	-	5
OTHER TREES (2:1 SUBSTITUTE)	-	-	-	-	-	-
SHRUBS	-	-	-	-	-	-
NUMBER OF PLANTS PROVIDED						
SHADE TREES	20	14	28	24	14	4
EVERGREEN TREES	-	-	-	-	-	5
OTHER TREES (2:1 SUBSTITUTE)	-	-	-	-	-	-
SHRUBS (10:1 SUBSTITUTE)	-	-	-	-	-	-

\* EXISTING VEGETATION TO REMAIN

**SCHEDULE D STORMWATER MANAGEMENT AREA LANDSCAPING**

LINEAR FEET OF PERIMETER BUFFER TYPE	910	846
	TYPE 'B'	TYPE 'B'
NUMBER OF TREES REQUIRED		
SHADE TREES (1:50)	10	17
EVERGREEN TREES (1:40)	23	21
CREDIT FOR EXISTING VEGETATION (NO, YES AND %)	NO	NO
CREDIT FOR OTHER LANDSCAPING (NO, YES AND %)	NO	NO
NUMBER OF TREES PROVIDED		
SHADE TREES	10	17
EVERGREEN TREES	23	21
OTHER TREES (2:1 SUBSTITUTE)	-	-

\* EXISTING VEGETATION TO REMAIN

**STREET TREE CALCULATIONS**

STREET TREES REQUIRED FOR 6820 LF OF RIGHT-OF-WAY, 6820 / 40 = 171

TREES PROVIDED 171

**STREET TREE PLANTING LIST**

SYMBOL	QUANTITY	NAME	REMARKS
○	171	ACER SACCHARUM "Green Mountain" (Green Mountain Sugar Maple)	2 1/2" MIN. CAL. B&B FULL HEAD

**BENCHMARK ENGINEERING, INC.**  
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ELLCOTT CITY, MARYLAND 21043  
PHONE: 410-465-6105 FAX: 410-465-6644  
E-MAIL: benchmark@comcast.com

**OWNER:** THOMAS C. CURTIS AND BETTY JEAN CURTIS, H/W 13471 TRIADDELPHIA MILL ROAD CLARKSVILLE, MD 21029-1026

**PROJECT:** CURTIS PROPERTY LOT 1 THROUGH 22, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THROUGH 'D'

**CONTRACT PURCHASER/DEVELOPER:** HIGHLAND DEVELOPMENT CORPORATION P.O. BOX 228 CLARKSVILLE, MARYLAND 21029 410-531-5539

**TITLE:** PRELIMINARY LANDSCAPE PLAN, NOTES AND DETAILS

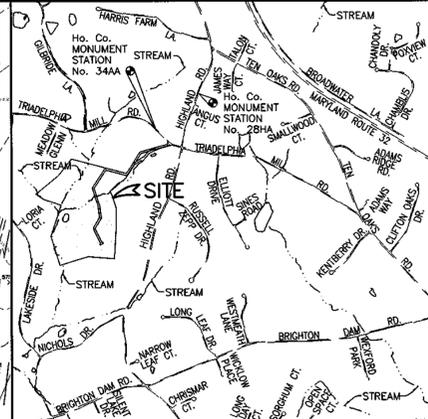
DATE: JUNE 12, 2003  
JULY 19, 2003

PROJECT NO. 1513

Design: JMC Draft: MAN Check: DAM SCALE: AS SHOWN DRAWING 5 OF 10







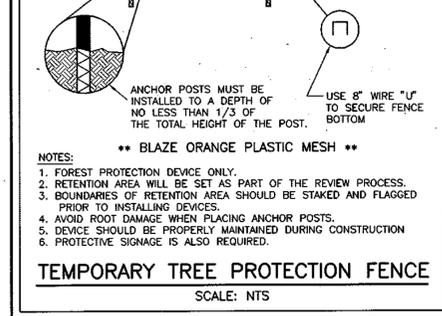
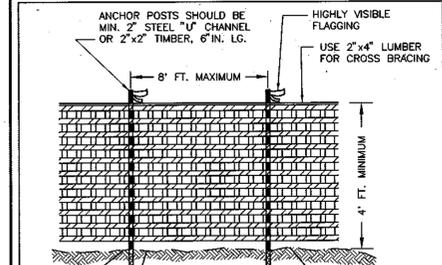
VICINITY MAP  
SCALE: 1" = 2000'

LEGEND

- SOILS CLASSIFICATION
- SOILS DELINEATION
- EXISTING CONTOURS (AERIAL 12/02)
- LIMIT OF WETLANDS
- EXISTING WOODS LINE
- PROPOSED WOODS LINE
- EXISTING STRUCTURE
- PROPOSED STRUCTURE
- EXISTING WELL
- PROPOSED SEPTIC FIELD
- PROPOSED WELL
- 1500 S.F. WELL ENVELOP
- SLOPES 15% TO 24.9%
- SLOPES 25% OR GREATER
- EX. 100 YEAR FLOODPLAIN
- PROPOSED FOREST CONSERVATION EASEMENT
- TREE PROTECTION FENCE
- FCE PERMANENT SIGNAGE

SEQUENCE OF CONSTRUCTION

1. SEDIMENT CONTROL AND TREE PROTECTION DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH GENERAL CONSTRUCTION PLAN FOR SITE. SITE SHALL BE GRADED IN ACCORDANCE WITH THE GENERAL CONSTRUCTION PLANS.
2. REMOVE HAZARDOUS TREES (DEAD, DISEASED OR THOSE SUBJECT TO WIND THROWS) ALONG THE EDGE OF THE FOREST RETENTION AREAS AS WELL AS WITHIN OTHER TREE SAVE AREAS.
3. SIGNAGE SHALL BE INSTALLED AS PER THE FOREST PROTECTION DEVICES SHOWN ON THE FOREST CONSERVATION PLAN.



**SITE DATA**

GROSS AREA (INCL. ALL PROP. LOTS) ..... 80.8 AC.±  
 PRES. PARCELS, TRANS. LINE R/W ..... 18.8 AC.±  
 NET TRACT AREA (NTA) ..... 62.0 AC.±  
 EXISTING FOREST (NTA) ..... 0.0 AC.±  
 AFFORESTATION THRESHOLD ..... 12.5 AC.±  
 AFFORESTATION PROPOSED ..... 6.5 AC.±  
 OFF-SITE RETENTION ON SENDING PARCEL ..... 12.0 AC.±

**FOREST CONSERVATION TABULATION**

DESIGNATION:	TYPE:	ACREAGE:
1	AFFORESTATION	5.2 AC.±
2	AFFORESTATION	1.3 AC.±
TOTAL:		6.5 AC.±

ACRES OF AFFORESTATION (APPENDIX E) FOREST CONSERVATION WORKSHEET

**I. BASIC SITE DATA**

GROSS SITE AREA (INCLUDING ALL PROPOSED LOTS) ..... 80.8 AC.±  
 AREA WITHIN 100 YEAR FLOOD PLAN ..... 8.3 AC.± (PRES. PARCEL)  
 AREA WITHIN AGRICULTURAL USE OR PRESERVATION PARCEL ..... 3.5 AC.±  
 AREA WITHIN UNDERGROUND TRANSMISSION LINES ..... 6.5 AC.±  
 NET TRACT AREA ..... 62.5 AC.±  
 LAND USE CATEGORY (R-RD, R-RMD, R-S, C/V/O, I) ..... RR-DEO

**II. INFORMATION FOR CALCULATIONS**

(A) NET TRACT AREA ..... 62.5 AC.±  
 (B) REFORESTATION THRESHOLD (25% x NTA) ..... 15.6 AC.±  
 (C) AFFORESTATION MINIMUM (20% x NTA) ..... 12.5 AC.±  
 (D) EXISTING FOREST ON NET TRACT AREA ..... 0 AC.±  
 (E) EXISTING FOREST ABOVE CONSERVATION THRESHOLD ..... 0 AC.±  
 (F) BREAK EVEN POINT (IF APPLICABLE) ..... 0 AC.±  
 (G) FOREST AREAS TO BE CLEARED ..... 0 AC.±  
 (H) FOREST AREAS TO BE RETAINED (RETENTION) ..... 0 AC.±

**SELECT THE ALTERNATE THAT APPLIES:**

1. No clearing below the minimum  
 If existing forests are less than the afforestation minimum (if D is less than C) and no clearing is proposed, the following calculations apply:  
 Total afforestation required ..... 12.5 AC.±  
 Afforestation must make total forest area equal to the minimum required.

2. Clearing below the minimum  
 If existing forest area less than the afforestation minimum (if D is less than C) and clearing is proposed, the following calculations apply:  
 Afforestation for unforested areas below minimum ..... C - D  
 Afforestation for Clearing below Minimum ..... E x 2  
 TOTAL AFFORESTATION REQUIRED ..... (C - D) + (E x 2)  
 Afforestation required the total forest area be equal to the minimum and it requires compensation for clearing

**V. AFFORESTATION CALCULATIONS** (1/10 acres)

A. NET TRACT AREA ..... 62.5 AC.±  
 B. AFFORESTATION MINIMUM (20% x A) ..... 12.5 AC.±  
 C. EXISTING FOREST ON NET TRACT AREA ..... 0  
 D. FOREST AREAS TO BE CLEARED ..... 0  
 E. FOREST AREAS TO BE RETAINED ..... 0

SITE DATA TABULATION

- 1) GENERAL SITE DATA
- a. PRESENT ZONING: RR-DEO
  - b. APPLICABLE DPZ FILE REFERENCES: WP-03-093
  - c. DEED REF.: 2644/140
  - d. PROPOSED USE OF SITE: 22 BUILDABLE LOTS, 1 BUILDABLE PRESERVATION PARCEL AND 3 NON-BUILDABLE PRESERVATION PARCELS
  - e. PROPOSED WATER AND SEWER SYSTEMS: PRIVATE
- 2) AREA TABULATION
- a. TOTAL AREA OF SITE ..... 80.75 AC.±
  - b. AREA OF 100 YEAR FLOODPLAIN (APPROX.) ..... 8.3 AC.±
  - c. AREA OF STEEP SLOPES (25% OR GREATER) ..... 0.67 AC.±
  - d. AREA OF STEEP SLOPES NOT IN THE FLOODPLAIN ..... 0.54 AC.±
  - e. NET AREA OF SITE ..... 71.91 AC.±
  - f. AREA OF THIS PLAN SUBMISSION ..... 80.75 AC.±
  - g. AREA OF PROPOSED BUILDABLE LOTS ..... 22.38 AC.±
  - h. AREA OF PROPOSED PRESERVATION PARCELS ..... 54.82 AC.±
  - i. AREA OF PROPOSED PUBLIC ROAD R/W ..... 3.55 AC.±

**SOILS LEGEND**

MAP SYMBOL	SOIL GROUP	SOIL TYPE
ChB2	B	CHESTER GRAVELLY SILT LOAM, 3 TO 8% SLOPES, MODERATELY ERODED
ChA	B	CHESTER SILT LOAM, 0 TO 3% SLOPES
ChB2	B	CHESTER SILT LOAM, 3 TO 8% SLOPES, MODERATELY ERODED
ChC2	B	CHESTER SILT LOAM, 8 TO 15% SLOPES, MODERATELY ERODED
Co	C	COODRUS SILT LOAM
CoB	B	COODRUS SILT LOAM, LOCAL ALLUVIUM, 3 TO 8% SLOPES
GhB2	B	GLENELG SILT LOAM, 3 TO 8% SLOPES, MODERATELY ERODED
GhC2	B	GLENELG SILT LOAM, 8 TO 15% SLOPES, MODERATELY ERODED
GhD3	B	GLENELG SILT LOAM, 15 TO 25% SLOPES, SEVERELY ERODED
GhA	C	GLENELG SILT LOAM, 0 TO 3% SLOPES
GhB2	C	GLENELG SILT LOAM, 3 TO 8% SLOPES, MODERATELY ERODED
GhC2	C	GLENELG SILT LOAM, 8 TO 15% SLOPES, MODERATELY ERODED
Hs	D	HATBORO SILT LOAM
MaB	B	MANOR SILT LOAM, 0 TO 3% SLOPES
MaC2	B	MANOR SILT LOAM, 3 TO 8% SLOPES, MODERATELY ERODED
MaD3	B	MANOR SILT LOAM, 8 TO 15% SLOPES, MODERATELY ERODED
MaE3	B	MANOR SILT LOAM, 15 TO 25% SLOPES, SEVERELY ERODED
MaB	B	MANOR SILT LOAM, 0 TO 3% SLOPES
MaC2	B	MANOR SILT LOAM, 3 TO 8% SLOPES, MODERATELY ERODED
MaD3	B	MANOR SILT LOAM, 8 TO 15% SLOPES, SEVERELY ERODED
MaE3	B	MANOR SILT LOAM, 15 TO 25% SLOPES, SEVERELY ERODED

\* INDICATES HYDRIC SOILS  
 TAKEN FROM SOILS SURVEY, ISSUED JULY 1988, MAP NO. 22.

FCP NOTES:

1. ANY FOREST CONSERVATION EASEMENT (FCE) AREA SHOWN HEREON IS SUBJECT TO PROTECTIVE COVENANTS WHICH MAY BE FOUND IN THE LAND RECORDS OF HOWARD COUNTY WHICH RESTRICT THE DISTURBANCE AND USE OF THESE AREAS.
2. FORESTED AREAS OCCURRING OUTSIDE OF THE FCE SHALL NOT BE CONSIDERED PART OF THE FCE AND SHALL NOT BE SUBJECT TO PROTECTIVE LAND COVENANTS.
3. LIMITS OF DISTURBANCE SHALL BE RESTRICTED TO AREAS OUTSIDE THE LIMIT OF TEMPORARY FENCING OR THE FCE BOUNDARY, WHICHEVER IS GREATER.
4. THERE SHALL BE NO CLEARING, GRADING, CONSTRUCTION OR DISTURBANCE OF VEGETATION IN THE FOREST CONSERVATION EASEMENT, EXCEPT AS PERMITTED BY HOWARD COUNTY DPZ. NO STOCKPILES, PARKING AREAS, EQUIPMENT CLEARING AREAS, ETC. SHALL OCCUR WITHIN AREAS DESIGNATED AS FOREST CONSERVATION EASEMENTS.
5. TEMPORARY FENCING SHALL BE USED TO PROTECT FOREST RESOURCES DURING CONSTRUCTION. THE FENCING SHALL BE PLACED ALONG ALL FCE BOUNDARIES WHICH OCCUR WITHIN 25 FEET OF THE PROPOSED LIMITS.
6. PERMANENT SIGNAGE SHALL BE PLACED 50-100' APART ALONG THE BOUNDARIES OF ALL AREAS INCLUDED IN FOREST CONSERVATION EASEMENTS. SIGNS SHALL BE MOUNTED ON A PERMANENT WOOD POST OR METAL STAKE. FCE SIGNS SHALL NOT BE ATTACHED TO TREES.
7. THE FOREST CONSERVATION OBLIGATION FOR THIS SUBDIVISION WILL BE FULFILLED BY 6.5 ACRES OF ONSITE AFFORESTATION IN AND ADJACENT TO STREAM BUFFERS AND FLOODPLAIN AND 12.0 ACRES OF RETENTION PROVIDED ON THE SENDING PARCEL FOR THIS SUBDIVISION AT 2 TO 1.
8. THE FOREST CONSERVATION OBLIGATION CALCULATIONS FOR THIS SUBDIVISION ARE IN ACCORDANCE WITH D.P.Z. POLICY MEMORANDUM DATED AUGUST 14, 2002 AND APPENDIX "I" OF THE FOREST CONSERVATION MANUAL, OPTION "C" OF THE POLICY MEMORANDUM WHICH WAS USED.

TENTATIVELY APPROVED  
 DEPT. OF PLANNING AND ZONING OF  
 HOWARD COUNTY

PLANNING DIRECTOR DATE  
 Eco-Science Professionals, Inc.  
 CONSULTING ECOLOGISTS  
 P.O. Box 5006 Glen Arm, MD 21057 (410) 592-6752

THIS PLAN IS FOR FOREST CONSERVATION ONLY

**BENCHMARK ENGINEERING, INC.**  
 8480 BALTIMORE NATIONAL PIKE A SUITE 418  
 ELLICOTT CITY, MARYLAND 21043  
 PHONE: 410-465-6105 FAX: 410-465-6644  
 E-MAIL: benchmark@ecis.com

**CURTIS PROPERTY**  
 LOTS 1 THROUGH 22, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THROUGH 'D'  
 LOCATION: TAX MAP NO. 34, GRID NO. 2 PARCEL 2  
 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

**PRELIMINARY FOREST CONSERVATION PLAN, NOTES AND DETAILS**

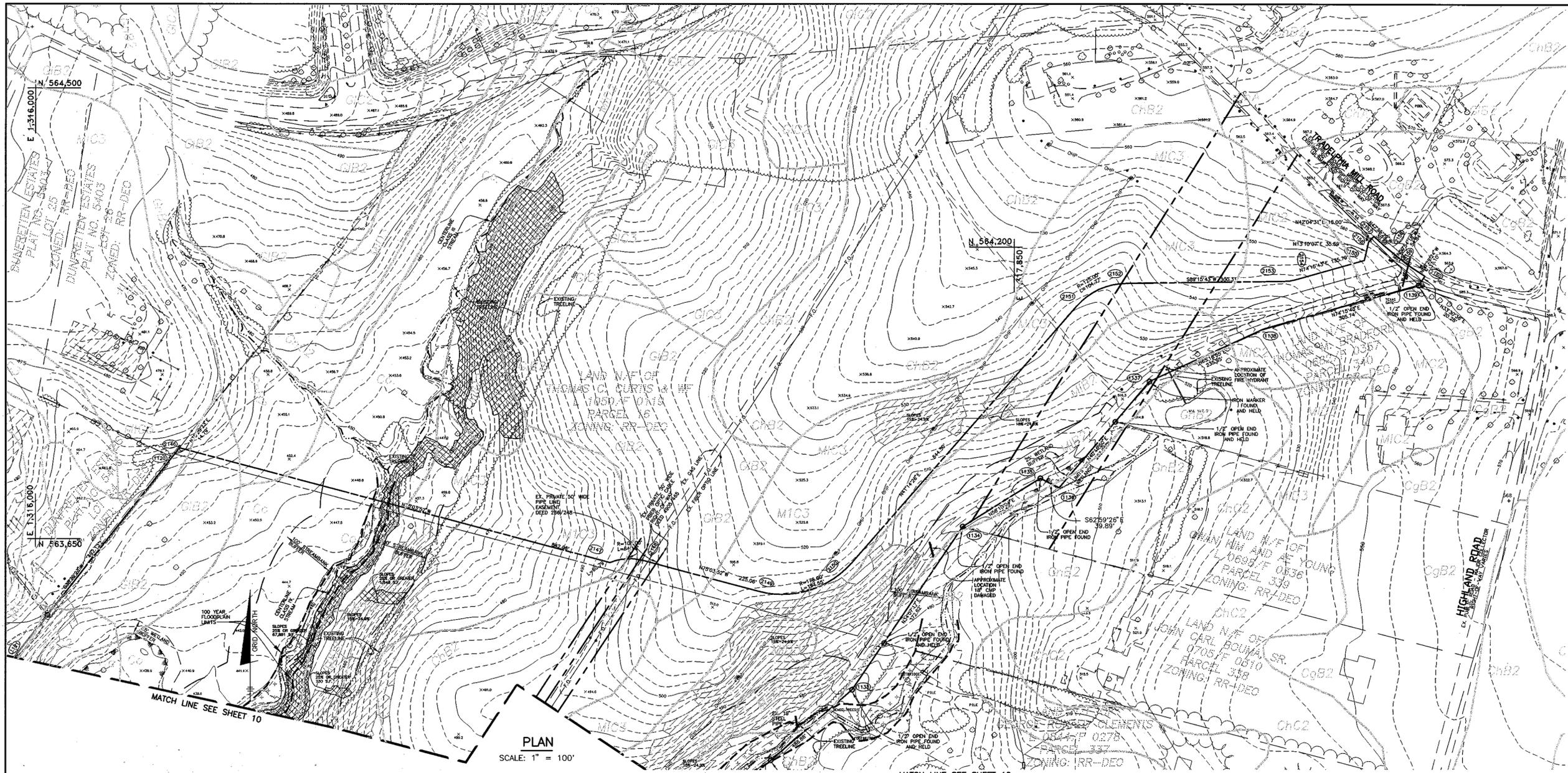
DATE: JUNE 12, 2003 PROJECT NO. 1513  
 JULY 20, 2003  
 SCALE: AS SHOWN DRAWING 7 OF 10

OWNER: THOMAS C. CURTIS AND BETTY JEAN CURTIS, H/W 13471 TRADELPHIA MILL ROAD CLARKSVILLE, MD 21029-1026

CONTRACT PURCHASER/DEVELOPER: HIGHLAND DEVELOPMENT CORPORATION P.O. BOX 228 CLARKSVILLE, MARYLAND 21029 410-531-5539

Design: JMC Draft: MAN Check: DAM





**LEGEND**

SOILS CLASSIFICATION	ChB2
SOILS DELINEATION	---
EXISTING CONTOURS (AERIAL 12/02)	---
LIMIT OF WETLANDS	---
EXISTING WOODS LINE	---
EXISTING STRUCTURE	[Symbol]
EXISTING WELL	[Symbol]
EXISTING SEPTIC FIELD	[Symbol]
SLOPES 15% TO 24.9%	[Symbol]
SLOPES 25% OR GREATER	[Symbol]
EX. 100 YEAR FLOODPLAIN (B.E.I. 3/03)	[Symbol]

**PLAN**  
SCALE: 1" = 100'

TENTATIVELY APPROVED  
DEPT. OF PLANNING AND  
ZONING OF  
HOWARD COUNTY

*Paul DeWitt* 7/28/03  
PLANNING DIRECTOR DATE

NO.	DATE	REVISION
-----	------	----------

SOILS LEGEND		
MAP SYMBOL	SOIL GROUP	SOIL TYPE
	B	CHESTER GRAVELLY SILT LOAM, 3 TO 8% SLOPES, MODERATELY ERODED
	B	CHESTER SILT LOAM, 0 TO 3% SLOPES
	B	CHESTER SILT LOAM, 3 TO 8% SLOPES, MODERATELY ERODED.
	B	CHESTER SILT LOAM, 8 TO 15% SLOPES, MODERATELY ERODED.
	C	CODORUS SILT LOAM
	B	COMUS SILT LOAM, LOCAL ALLUVIUM, 3 TO 8% SLOPES
	B	GLENELG LOAM, 3 TO 8% SLOPES, MODERATELY ERODED
	B	GLENELG LOAM, 8 TO 15% SLOPES, MODERATELY ERODED
	B	GLENELG LOAM, 8 TO 15% SLOPES, SEVERELY ERODED
	B	GLENELG LOAM, 15 TO 25% SLOPES, SEVERELY ERODED
	C	GLENVILLE SILT LOAM, 0 TO 3% SLOPES
	C	GLENVILLE SILT LOAM, 3 TO 8% SLOPES, MODERATELY ERODED
	C	GLENVILLE SILT LOAM, 8 TO 15% SLOPES, MODERATELY ERODED
	D	HATBORO SILT LOAM
	B	MANOR LOAM, 0 TO 3% SLOPES
	B	MANOR LOAM, 3 TO 8% SLOPES, MODERATELY ERODED
	B	MANOR LOAM, 8 TO 15% SLOPES, MODERATELY ERODED
	B	MANOR LOAM, 8 TO 15% SLOPES, SEVERELY ERODED
	B	MANOR LOAM, 15 TO 25% SLOPES, SEVERELY ERODED
	B	MANOR VERY STONY LOAM, 3 TO 25% SLOPES

\* INDICATES HYDRIC SOILS  
TAKEN FROM SOILS SURVEY, ISSUED JULY 1968, MAP NO. 22.

**BENCHMARK**  
ENGINEERS & LAND SURVEYORS & PLANNERS  
**ENGINEERING, INC.**  
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OWNER: THOMAS C. CURTIS AND BETTY JEAN CURTIS, H/W 13471 TRIADDELPHIA MILL ROAD CLARKSVILLE, MD 21029-1026	CONTRACT PURCHASER/DEVELOPER: HIGHLAND DEVELOPMENT CORPORATION P.O. BOX 228 CLARKSVILLE, MARYLAND 21029 410-531-5539	PROJECT: <b>CURTIS PROPERTY</b> LOTS 1 THROUGH 22, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THROUGH 'D' LOCATION: TAX MAP No. 34, GRID No. 2 PARCEL 2 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND	TITLE: <b>EXISTING CONDITIONS AND SOILS MAP</b>
Design: JMC	Draft: JMC/MCR	Check: DAM	DATE: JULY 20, 2003 PROJECT NO. 1513 SCALE: 1" = 100' DRAWING 9 OF 10



TENTATIVELY APPROVED  
 DEPT. OF PLANNING AND  
 ZONING OF  
 HOWARD COUNTY  
*Mark D. Ayler*  
 PLANNING DIRECTOR 8/29/03  
 DATE

NO.	DATE	REVISION

**BENCHMARK**  
 ENGINEERS • LAND SURVEYORS • PLANNERS  
**ENGINEERING, INC.**  
 6480 BALTIMORE NATIONAL PIKE A SUITE 418  
 ELLICOTT CITY, MARYLAND 21043  
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TITLE: <b>EXISTING CONDITIONS AND SOILS MAP</b>	DATE: JUNE 12, 2003 JULY 20, 2003
Design: JMC Draft: JMC/MCR Check: DAM	PROJECT NO. 1513 SCALE: AS SHOWN DRAWING 10 OF 10

PLAN  
 SCALE: 1" = 100'