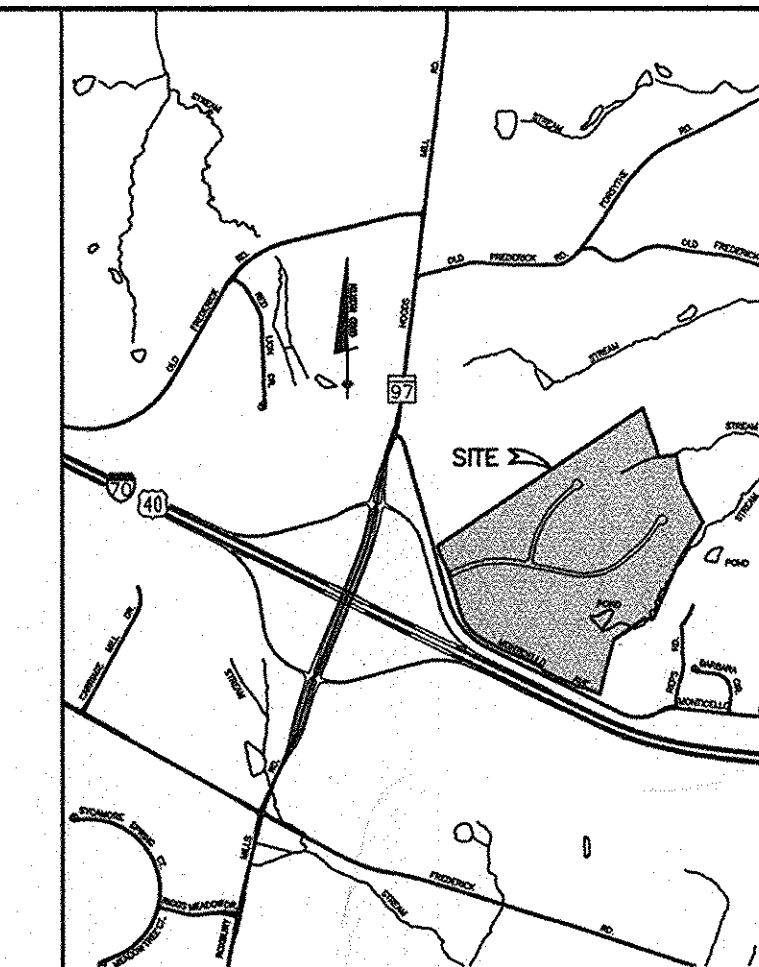


KNAPP PROPERTY

4th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

PRELIMINARY EQUIVALENT SKETCH PLAN



OVERALL SITE DATA

LOCATION: TAX MAP 8, PARCEL 110 (DESCRIBED AS TWO PARCELS)
 ZONING: RC-DEO
 DEED REFERENCE:
 PARCEL 1: LIBER 346 FOLIO 79
 PARCEL 2: LIBER 641 FOLIO 521

TOTAL TRACT AREA: 103.13± AC.
 NUMBER OF PROPOSED CLUSTER LOTS: 49 LOTS
 NUMBER OF PROPOSED OPEN SPACE LOTS: 1
 NUMBER OF PROPOSED PRESERVATION PARCELS: 2
 WITH SINGLE RESIDENCE: 2
 WITHOUT SINGLE RESIDENCE: 3
 AREA OF PROPOSED ROAD RIGHT-OF-WAY: 3.76± AC.
 AREA OF PROPOSED CLUSTER LOTS: 55.97± AC.
 AREA OF PROPOSED PRESERVATION PARCELS: 31.20± AC.
 WITH SINGLE RESIDENCE: 7.44± AC.
 WITHOUT SINGLE RESIDENCE: 5.16± AC.
 AREA OF APPROXIMATE 100 YR. FLOODPLAIN: 1.00± AC.
 AREA OF STEEP SLOPES (25% OR GREATER): 1.49± AC.
 AREA OF APPROXIMATE WETLANDS: 3.11± AC.

SITE DATA

PARCEL 1 SUBDIVISION

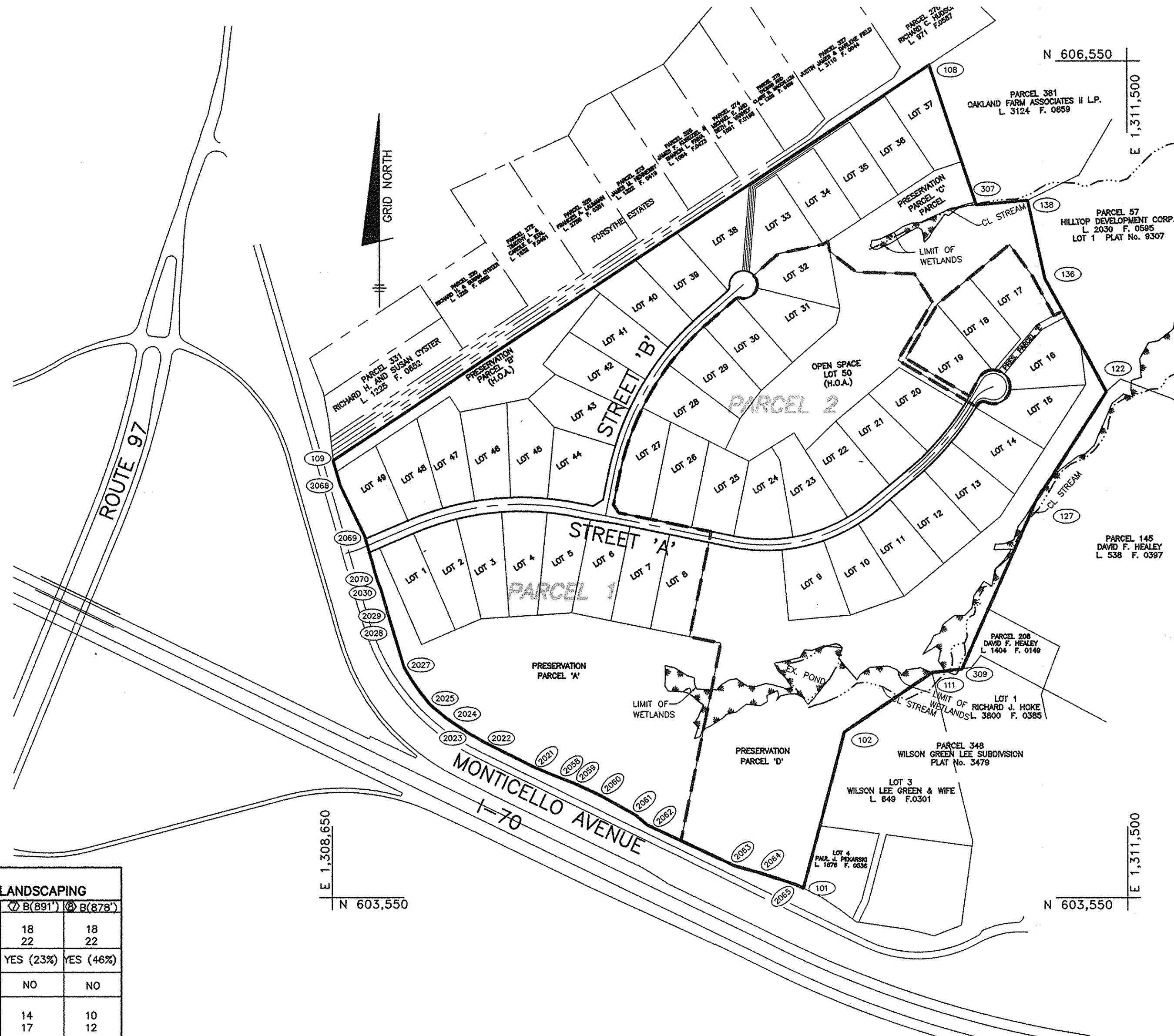
GROSS AREA: 52.12± AC.
 NUMBER OF CLUSTER LOTS ALLOWED BY RIGHT: 12 (11 CLUSTER, 1 PRES.)
 @ 1 PER 4.25 GROSS ACRES.
 MAXIMUM NUMBER OF LOTS ALLOWED AS A RECEIVING PARCEL: 26 (25 CLUSTER, 1 PRES.)
 TOTAL NUMBER OF PROPOSED LOTS: 25**
 CLUSTER LOTS: 25**
 PRESERVATION PARCEL W/ RESIDENCE: 1
 PRESERVATION PARCEL W/O RESIDENCE: 2
 TOTAL UNITS: 26 (52.12/2=26)
 AREA OF PROPOSED ROAD RIGHT-OF-WAY: 2.72 AC.
 AREA OF PROPOSED PRESERVATION PARCEL WITH RESIDENCE: 13.39± AC.
 PARCEL WITHOUT RESIDENCE: 7.27± AC.

PARCEL 2 SUBDIVISION

GROSS AREA: 51.01 AC.
 NUMBER OF CLUSTER LOTS ALLOWED BY RIGHT: 12 (11 CLUSTER, 1 PRES.)
 @ 1 PER 4.25 GROSS ACRES.
 MAXIMUM NUMBER OF LOTS ALLOWED AS A RECEIVING PARCEL: 25 (24 CLUSTER, 1 PRES.)
 TOTAL NUMBER OF PROPOSED LOTS: 24**
 CLUSTER LOTS: 24**
 PRESERVATION PARCEL W/ RESIDENCE: 1
 PRESERVATION PARCEL W/O RESIDENCE: 1
 TOTAL UNITS: 25 (51.01/2=25.5)
 OPEN SPACE LOT (TO H.O.A.): 1
 AREA OF PROPOSED ROAD RIGHT-OF-WAY: 1.04 AC.
 AREA OF PROPOSED PRESERVATION PARCEL WITH RESIDENCE: 17.81± AC.
 AREA OF PROPOSED PRESERVATION PARCEL WITHOUT RESIDENCE: 0.17± AC.
 AREA OF PROPOSED OPEN SPACE LOT: 0.16± AC.

* THE TWO PARCEL SUBDIVISIONS REPRESENTED ON THIS PLAN ARE BASED ON THE PARCEL DIVISIONS AFTER ADJOINER TRANSFERS.

** GROSS AREA: 103.13± AC.
 (RC-DEO ZONE)
 MAXIMUM PERMISSIBLE DENSITY (RECEIVING PARCEL): 1
 @ 1 LOT PER 2 ACRES: 51
 NUMBER OF CLUSTER LOTS PERMITTED IN RC ZONE: 24
 @ 1 LOT PER 4.25 ACRES: 24 (BY RIGHT)
 NUMBER OF CEO CLUSTER LOTS PROVIDED: 27 (TO BE RECEIVED)
 (SENDING PARCEL TO BE DETERMINED AT A LATER DATE.)



- GENERAL NOTES**
- ALL ASPECT OF THIS PROJECT SHALL BE IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
 - TOPOGRAPHY SHOWN HEREON WAS PURCHASED FROM THE HOWARD COUNTY GEOGRAPHICAL INFORMATION SERVICES AND 5 FOOT CONTOURS WERE INTERPOLATED TO SHOW 2 FOOT INTERVALS. FOR THIS PROJECT SHALL BE PRIVATE AND WILL BE PROVIDED ON THE LOTS.
 - EXISTING UTILITIES SHOWN ARE TAKEN FROM RECORD INFORMATION AND FIELD LOCATIONS.
 - WETLAND LIMITS SHOWN HEREON ARE BASED ON A DELINEATION BY ECO-SCIENCE PROFESSIONALS, INC., DATED JULY, 1998.
 - FOREST STAND DELINEATION WAS PREPARED BY ECO-SCIENCE PROFESSIONALS, INC., DATED JULY, 1998.
 - ADEQUATE PUBLIC FACILITIES ORDINANCE TRAFFIC ANALYSIS WAS PREPARED BY LEE CUNNINGHAM & ASSOCIATES DATED JULY, 1998.
 - COORDINATES ARE BASED ON NAD 83, MARYLAND STATE PLAN GRID AS PROJECTED BY HOWARD CO. GEODETIC CONTROL STATIONS NO. 08FA AND 08IB.
 - NOISE STUDY WAS PREPARED FOR THIS SITE BY TSA GROUP, INC., DATED JUNE, 1998.
 - ALL LANDSCAPING REQUIREMENTS AS SET FORTH IN THE LANDSCAPE MANUAL SHALL BE COMPLIED WITH. PRESERVATION OF SPECIMEN TREES AND FOREST STANDS SHALL BE INCORPORATED IN THE FINAL PLAN STAGES.
 - THE FLOODPLAIN LIMIT SHOWN HAS BEEN CALCULATED BY TSA GROUP, INC., DATED JUNE, 1998.
 - NO DISTURBANCE SHALL OCCUR IN THE WETLANDS, 25' WETLAND BUFFER, 75' STREAM BUFFER, OR 100-YEAR FLOODPLAIN, EXCEPT AS APPROVED UNDER THE FINAL PLANS.
 - MINIMUM BUILDABLE LOT SIZE SHALL BE 40,000 SQ. FEET.
MAXIMUM BUILDABLE LOT SIZE SHALL BE 50,000 SQ. FEET.
 - A REQUEST TO THE DEVELOPMENT ENGINEERING DIVISION HAS BEEN MADE TO WAIVE THE STORM WATER MANAGEMENT REQUIREMENTS FOR THE CLUSTER LOTS AS SPECIFIED IN SECTION 10.2.1.A OF HOWARD COUNTY DESIGN MANUAL VOL. 1 - STORM DRAINAGE BASED ON THE "GUIDELINES FOR STORM WATER MANAGEMENT IN CLUSTERED SUBDIVISION", AUG. 1993.
 - WATER QUALITY AND QUANTITY TREATMENT FOR THE PROPOSED ROADWAY SHALL BE PROVIDED BY DETENTION PONDS. THESE FACILITIES WILL BE PUBLICLY OWNED AND MAINTAINED BY HOWARD COUNTY.
 - ALL LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREAS AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
 - THIS AREA DESIGNATES A PRIVATE SEWAGE EASEMENT OF 10,000 SQUARE FEET 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 SEWER IS AVAILABLE. THESE EASEMENTS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT VARIANCES FOR ENCROACHMENT INTO THE PRIVATE SEWAGE EASEMENT. RECORDATION OF A MODIFIED SEWERAGE EASEMENT PLAT SHALL NOT BE NECESSARY.
 - EXISTING WELLS AND/OR SEWERAGE EASEMENTS WITHIN 100 FEET OF THE PROPERTY HAVE BEEN SHOWN FROM THE BEST AVAILABLE INFORMATION.
 - THE GEOTECHNICAL REPORT FOR THIS PROJECT WAS PREPARED BY HILLS-CARNES AND ASSOCIATES DATED JUNE, 1998.

SCHEDULE A PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO ROADWAYS		ADJACENT TO PERIMETER PROPERTIES			
	① B	② A	③ A	④ A	⑤ A	⑥ A
LANDSCAPE TYPE						
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	650	1350	1790	3686	135	3441
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	*YES 175	*YES 80	*YES 600	NO	NO	*YES 510
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	10	21	20	62	2	49
EVERGREEN TREES	12	-	-	-	-	-
OTHER TREES (2:1 SUBSTITUTE)	-	-	-	-	-	-
SHRUBS	-	-	-	-	-	-

SCHEDULE D STORMWATER MANAGEMENT AREA LANDSCAPING

LINEAR FEET OF PERIMETER	⑦ B (81%)	⑧ B (87%)
NUMBER OF TREES REQUIRED	18	18
SHADE TREES	22	22
EVERGREEN TREES	-	-
CREDIT FOR EXISTING VEGETATION (NO, YES AND %) (YES AND %)	YES (23%)	YES (46%)
CREDIT FOR OTHER LANDSCAPING (NO, YES AND %)	NO	NO
NUMBER OF TREES PROVIDED		
SHADE TREES	14	10
EVERGREEN TREES	17	12
OTHER TREES (2:1 SUBSTITUTE)	-	-

* - EXISTING TREES TO REMAIN

STREET TREE REQUIREMENTS

REQUIRED: 1 PER 40' O.C.
 AT 720' = 180
 PROVIDED: 180

LANDSCAPING NOTES

- THE DEVELOPER SHALL BE RESPONSIBLE FOR THE STREET TREES, STORMWATER MANAGEMENT POND PLANTING, PERIMETER LANDSCAPE PLANTING AND THE PRESERVATION OF THE PERIMETER VEGETATION AS SHOWN ON THESE PLANS.

LOCATION PLAN

SCALE: 1" = 300'

TENTATIVELY APPROVED
 DEPT. OF PLANNING AND ZONING OF
 HOWARD COUNTY

Mark S. ...
 PLANNING DIRECTOR
 DATE: 4/1/95

NOTE:
 WAIVER PETITION WP-99-24 WAS REVIEWED AND DENIED ON NOVEMBER 3, 1998 FOR A WAIVER TO SECTION 16.120(b)(5) TO ALLOW NOISE LEVELS ADJACENT TO A PROPOSED DWELLING TO EXCEED THE STANDARDS SET IN THE DESIGN MANUAL WITHOUT PROVISION OF NOISE MITIGATION.

BOUNDARY COORDINATES DATA

POINT NO.	NORTH	EAST
101	603583.8085	1310339.2536
102	604145.1284	1310486.0835
108	606535.9728	1310792.0828
109	605118.7230	1308654.9459
110	604356.1902	1310800.8015
122	603363.9016	1311425.0155
127	604971.6590	1311172.0036
136	605770.0282	1311205.5151
138	605770.0282	1311205.5151
307	606035.5375	1310960.3784
309	604356.1902	1310800.8015
2021	604017.4343	1309376.9777
2022	604106.7357	1309198.0216
2023	604143.7412	1309134.2434
2024	604188.7928	1309066.3433
2025	604241.1354	1309002.4836
2027	604375.8704	1308907.7252
2028	604532.9064	1308860.6505
2029	604562.9546	1308851.5711
2030	604656.2319	1308825.3600
2058	603976.8173	1309475.4282
2059	603961.1582	1309516.3655
2060	603919.2974	1309607.1822
2061	603946.5177	1309728.8001
2062	603811.9659	1309777.9283
2063	603863.6343	1310094.9531
2064	603636.3047	1310182.4657
2065	603597.6843	1310309.6943
2068	605029.7105	1308679.9586
2069	604846.6355	1308767.7583
2070	604688.6447	1308812.1541

SHEET INDEX

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	PRELIMINARY AND LANDSCAPE PLAN
3	GRADING AND SEDIMENT & EROSION CONTROL PLAN
4	PERCOLATION CERTIFICATION PLAN

NO. DATE REVISION

BENCHMARK ENGINEERING, INC.
 ENGINEERS • LAND SURVEYORS • PLANNERS
 8480 BALTIMORE NATIONAL PIKE • SUITE 418 • ELLICOTT CITY, MARYLAND 21043
 PHONE: 410-465-6105 FAX: 410-465-6644

STATE OF MARYLAND PROFESSIONAL ENGINEER

OWNER/DEVELOPER: HOODS MILL CORPORATION
 C/O P.O. BOX 417
 ELLICOTT CITY, MD 21041
 410-465-4244

PROJECT: **KNAPP PROPERTY**

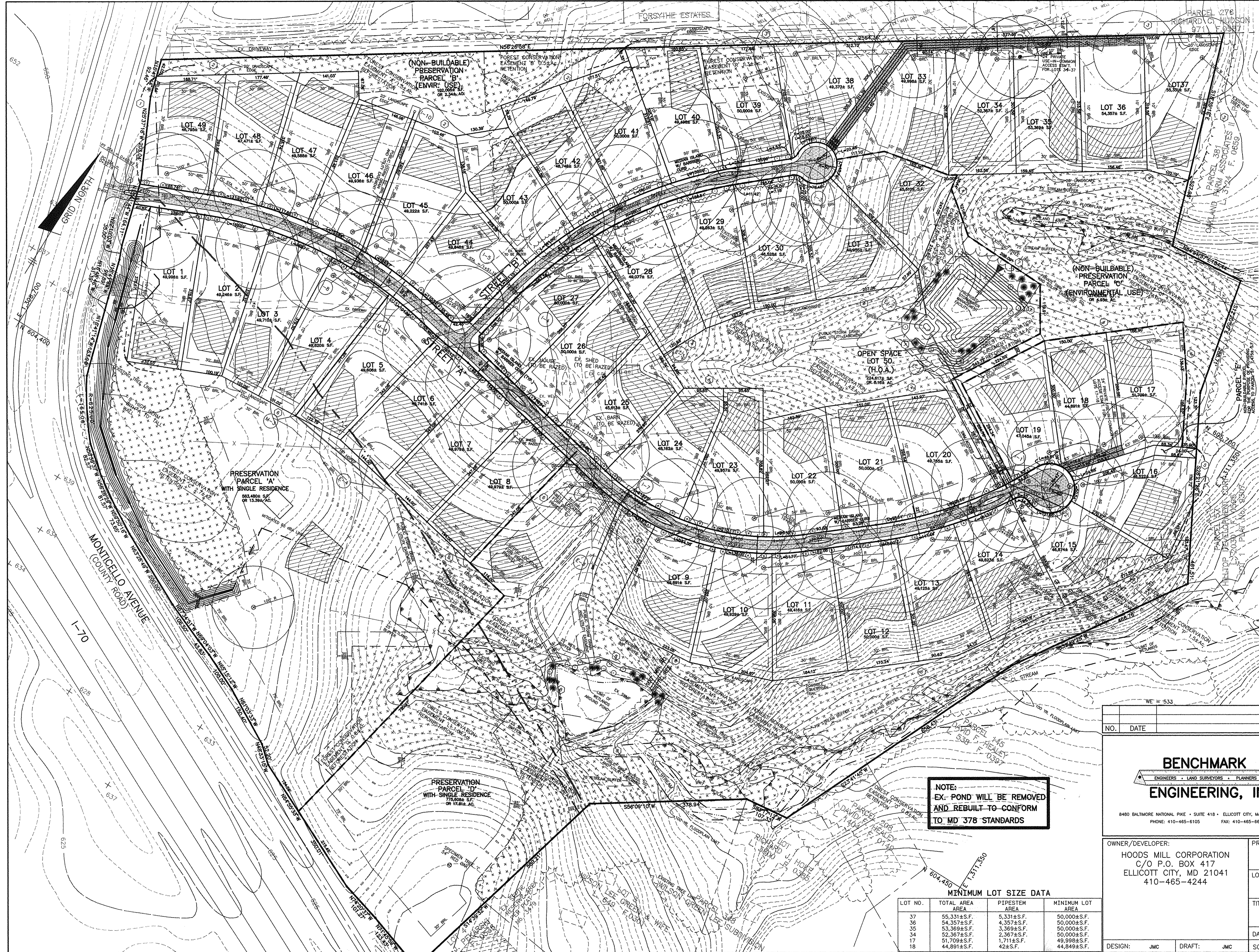
LOCATION: TAX MAP 8 - BLOCK 18 - PARCEL 110
 4TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

TITLE: **COVER SHEET**
 WP-99-24

DATE: JULY, 1998
 NOVEMBER, 1998

PROJECT NO. 1122

DESIGN: JMC DRAFT: JMC SCALE: AS SHOWN DRAWING 1 OF 4



LEGEND

- STEEP SLOPES 15% - 25%
- STEEP SLOPES GREATER THAN 25%
- EX. STREAM OR EDGE OF POND
- EX. CONTOUR (5 FOOT CONTOUR INTERVALS)
- EX. TREE LINE
- SPECIMEN TREE
- WETLANDS
- EXISTING WELL
- PROPOSED WELL
- PROPOSED SEPTIC RESERVE AREAS
- FOREST CONSERVATION EASEMENT

NOTE: FOR TECHNICAL INFORMATION REGARDING WELL AND SEPTIC LOCATIONS AND NOTES SEE SHEET 4.
 TENTATIVELY APPROVED
 DEPT. OF PLANNING AND ZONING OF
 HOWARD COUNTY

MANUEL D. GARDNER, JR. 4/1/99
 PLANNING DIRECTOR DATE

SA

STREET CENTERLINE CURVE DATA

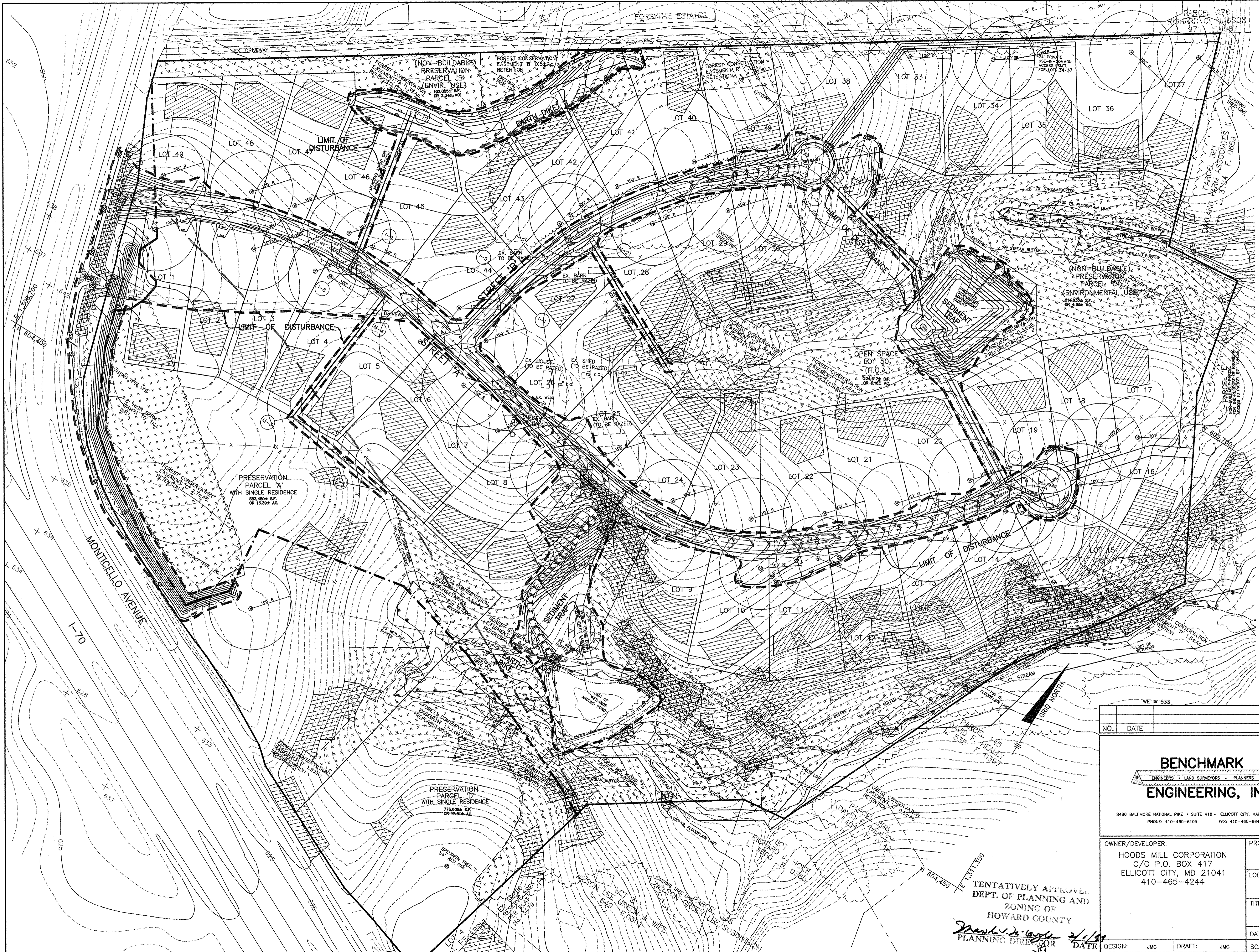
CURVE	RADIUS	LENGTH	TANGENT	CHORD	DELTA
1	500.00'	38.69'	19.37'	38.68'	07°23'19"
2	1000.00'	608.96'	313.15'	507.68'	34°46'34"
3	600.00'	537.87'	268.52'	520.04'	51°21'44"
4	1000.00'	342.14'	172.76'	340.48'	19°36'12"
5	175.75'	84.10'	44.00'	82.27'	47°37'45"
6	1000.00'	648.44'	336.08'	637.14'	37°59'11"

NOTE:
 EX. POND WILL BE REMOVED
 AND REBUILT TO CONFORM
 TO MD 378 STANDARDS

MINIMUM LOT SIZE DATA

LOT NO.	TOTAL AREA	PIPESTEM AREA	MINIMUM LOT AREA
37	55,331±S.F.	5,331±S.F.	50,000±S.F.
38	54,357±S.F.	4,357±S.F.	50,000±S.F.
35	53,369±S.F.	3,369±S.F.	50,000±S.F.
34	52,367±S.F.	2,367±S.F.	50,000±S.F.
17	51,709±S.F.	1,711±S.F.	49,998±S.F.
18	44,891±S.F.	42±S.F.	44,849±S.F.

NO. DATE		REVISION	
BENCHMARK ENGINEERING, INC. ENGINEERS • LAND SURVEYORS • PLANNERS 8480 BALTIMORE NATIONAL PIKE • SUITE 418 • ELLICOTT CITY, MARYLAND 21043 PHONE: 410-465-6105 FAX: 410-465-6644			
OWNER/DEVELOPER: HOODS MILL CORPORATION C/O P.O. BOX 417 ELLICOTT CITY, MD 21041 410-465-4244		PROJECT: KNAPP PROPERTY	
LOCATION: TAX MAP 8 - BLOCK 18 - PARCEL 110 4TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND			
TITLE: PRELIMINARY PLAN			
DATE: JUNE, 1998 NOVEMBER, 1998	PROJECT NO. 1122		
DESIGN: JMC	DRAFT: JMC	SCALE: 1" = 100'	DRAWING 2 OF 4



LEGEND

	STEEP SLOPES 15% - 25%
	STEEP SLOPES GREATER THAN 25%
	EX. STREAM OR EDGE OF POND
	EX. CONTOUR (5 FOOT CONTOUR INTERVALS)
	SOIL BOUNDARY AND TYPE
	EX. TREE LINE
	SPECIMEN TREE
	WETLANDS
	EXISTING WELL
	PROPOSED WELL
	PROPOSED SEPTIC RESERVE AREAS
	LIMIT OF DISTURBANCE
	EARTH DIKE
	SILT FENCE
	SUPER SILT FENCE
	STABILIZED CONSTRUCTION ENTRANCE

NO.	DATE	REVISION

BENCHMARK
ENGINEERS • LAND SURVEYORS • PLANNERS
ENGINEERING, INC.

8480 BALTIMORE NATIONAL PIKE • SUITE 410 • ELLICOTT CITY, MARYLAND 21043
PHONE: 410-465-6105 FAX: 410-465-6644

OWNER/DEVELOPER: HOODS MILL CORPORATION C/O P.O. BOX 417 ELLICOTT CITY, MD 21041 410-465-4244	PROJECT: KNAPP PROPERTY
LOCATION: TAX MAP 8 - BLOCK 18 - PARCEL 110 4TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	TITLE: GRADING AND SEDIMENT & EROSION CONTROL PLAN
DATE: JULY, 1998 NOVEMBER, 1998	PROJECT NO. 1122 DRAWING 3 OF 4
DESIGN: JMC DRAFT: JMC	SCALE: 1" = 100'

TENTATIVELY APPROVED
DEPT. OF PLANNING AND ZONING OF HOWARD COUNTY

Richard C. Knapp 2/1/98
PLANNING DIRECTOR DATE

