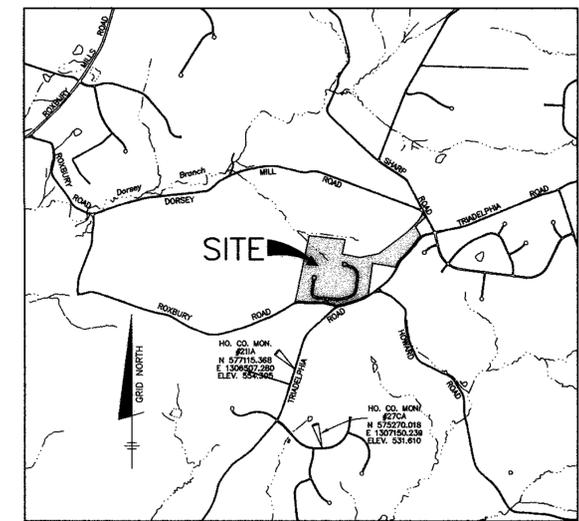
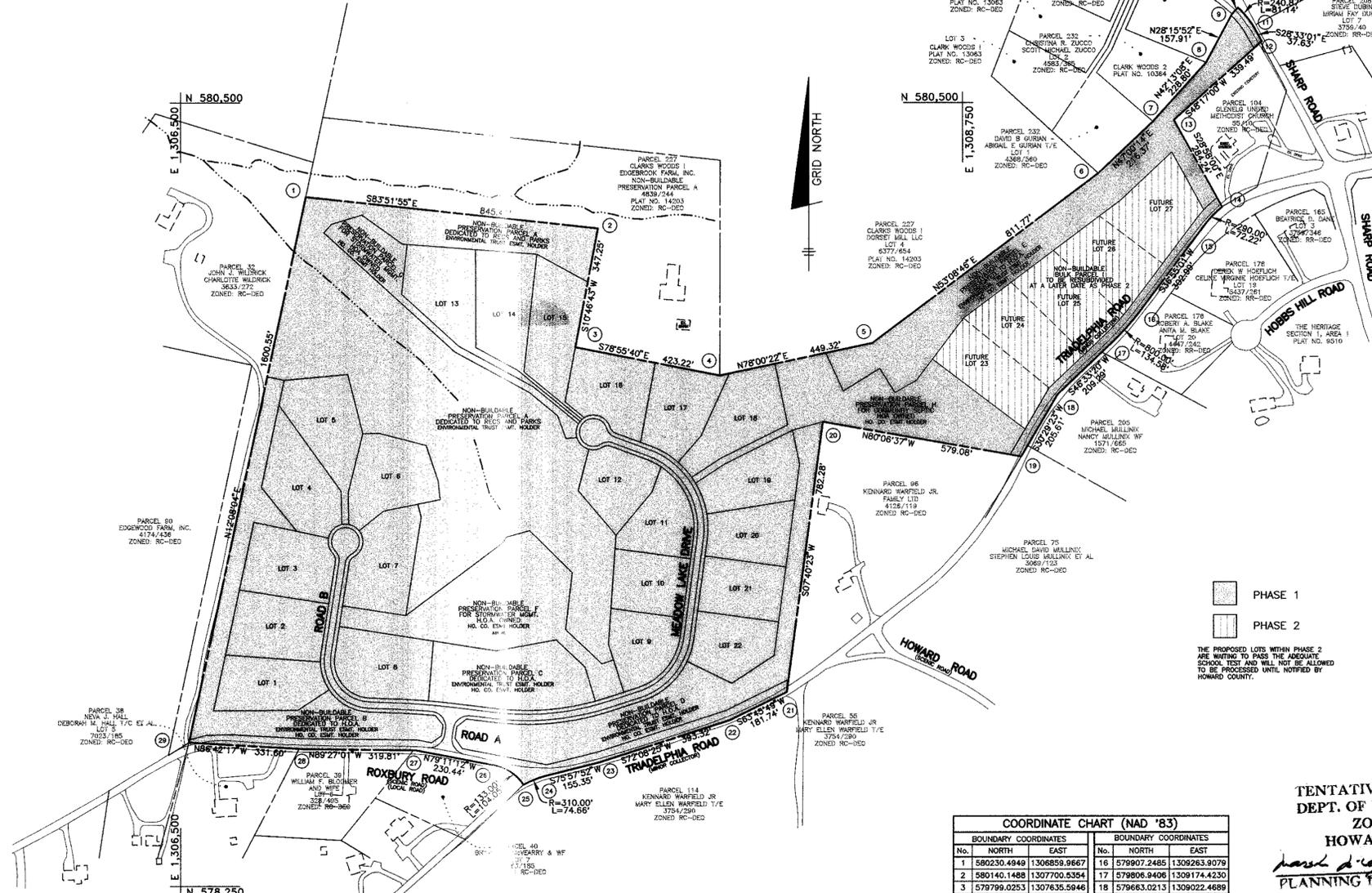


GENERAL NOTES

- 1) THE PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
- 2) THE EXISTING TOPOGRAPHY IS TAKEN FROM AERIAL SURVEY WITH 2-FOOT CONTOUR INTERVALS PREPARED BY AIR SURVEY, INC. DATED MARCH, 2001.
- 3) 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. 21A AND 27CA WERE USED FOR THIS PROJECT.
- 4) WATER IS PRIVATE.
- 5) SEWER IS PRIVATE.
- 6) STORMWATER MANAGEMENT SHALL BE PROVIDED BY AN EXTENDED DETENTION POND WITH MICRO-POND, A BIO-RETENTION FACILITY AND BARRIERS/DRYWELLS. SWM FOR THE CLARK WOODS 2 DEVELOPMENT LOTS 1-3 WAS DEFERRED UNDER F-98-29. UNDER THE CURRENT SWM CRITERIA, QUANTITY MANAGEMENT IS NOT REQUIRED. WATER QUALITY SHALL BE PROVIDED BY VEGETATIVE FILTER STRIPS AS ALLOWED PRIOR TO THE CURRENT 2000 SWM REGULATIONS.
- 7) EXISTING UTILITIES ARE BASED UPON FIELD SURVEY LOCATIONS.
- 8) THE FLOODPLAIN STUDY FOR THIS PROJECT WAS PREPARED BY BENCHMARK ENGINEERING, INC., DATED AUGUST 2003.
- 9) THE WETLANDS DELINEATION FOR THIS PROJECT WAS PREPARED BY JEFFREY A. WOLINSKI, CONSULTING ECOLOGIST IN FEBRUARY, 2001 AND WAS APPROVED UNDER THE SKETCH PLAN FOR THIS PROJECT (S-01-23).
- 10) THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY INTEGRATED TRANSPORTATION SOLUTIONS, INC. IN FEBRUARY, 2001 AND WAS APPROVED UNDER THE SKETCH PLAN FOR THIS PROJECT (S-01-23).
- 11) A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.
- 12) THE GEOTECHNICAL REPORT FOR THIS PROJECT WAS PREPARED BY HILLIS CARNES ENGINEERING ASSOCIATES, INC. IN MAY, 2001 FOR BORINGS 1, 2 AND 3. THE GEOTECHNICAL REPORT FOR BORINGS 4, 5, 6 AND 7 AND ADDITIONAL IN-SITU TESTING OF BORINGS 1, 2 AND 3 WAS PREPARED BY HILLIS CARNES ENGINEERING ASSOCIATES, INC. IN OCTOBER, 2003.
- 13) THE SUBJECT PROPERTY IS ZONED RC-DEO PER THE 10-18-83 COMPREHENSIVE ZONING PLAN. ALL ADJACENT AREAS ARE ZONED RC-DEO PER THE 10-18-83 COMPREHENSIVE ZONING PLAN.
- 14) TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO BURIAL GROUNDS OR CEMETERIES LOCATED ON THIS SITE.
- 15) THERE SHALL BE NO DISTURBANCE WITHIN THE 100-YR FLOODPLAIN, WETLANDS, STREAMS, THEIR BUFFERS OR STEEP SLOPES THAT ARE AT LEAST 20,000 S.F. UNLESS APPROVED BY THE DEPARTMENT OF PLANNING AND ZONING.
- 16) BOUNDARY IS BASED ON A FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED DURING SEPTEMBER, 2000 BY CLARK, FINEFOOK & SACKETT, INC.
- 17) FOREST STAND DELINEATION WAS PREPARED BY ECO-SCIENCE PROFESSIONALS IN OCTOBER, 2001. AND REVISED IN JANUARY, 2002.
- 18) THIS PROJECT IS NOT LOCATED WITHIN THE METROPOLITAN DISTRICT.
- 19) THE STORMWATER MANAGEMENT SYSTEM SHOWN ON THIS PLAN IS AN APPROXIMATION OF THE SIZE, SHAPE AND LOCATION. IT IS UNDERSTOOD THAT THIS SYSTEM HAS NOT BEEN DESIGNED AND THE ACTUAL DESIGN MAY CHANGE ALTERING THE NUMBER OF UNITS ALLOWED FOR THIS DEVELOPMENT.
- 20) THIS PLAN IS SUBJECT TO COMPLIANCE WITH THE FOURTH EDITION OF THE SUBDIVISION REGULATIONS AS A CONSEQUENCE FOR ITS SUBMISSION PRIOR TO 11-15-2001. THIS PROJECT IS SUBJECT TO COMPLIANCE WITH COUNTY COUNCIL BILL 50-2001 WHICH AMENDS PORTIONS OF THE ZONING REGULATIONS AS A CONSEQUENCE FOR NOT HAVING PRELIMINARY PLAN APPROVAL PRIOR TO 11-15-2001.
- 21) THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF 10,000 SQUARE FEET AS REQUIRED BY THE STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA IS RESTRICTED UNTIL PUBLIC SEWER IS AVAILABLE. THIS EASEMENT 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 SEWERAGE EASEMENT. RECORDATION OF A MODIFIED SEWERAGE EASEMENT PLAT SHALL NOT BE NECESSARY.
- 22) THE PURPOSE OF THE PRESERVATION PARCELS AND THE JUSTIFICATION FOR THE DESIGN OF THE CLUSTER SUBDIVISION IS AS FOLLOWS:
 PRESERVATION PARCEL 'A' IS PROPOSED AS NON-BUILDABLE PARCEL TO PRESERVE ENVIRONMENTALLY SENSITIVE AREAS INCLUDING STEEP SLOPES, STREAM BUFFERS, WETLANDS, FLOODPLAIN AND EXISTING FOREST. IT WILL BE DEDICATED TO THE HOWARD COUNTY DEPARTMENT OF RECREATION AND PARKS.
 PRESERVATION PARCELS 'B', 'C', 'D' AND 'E' ARE PROPOSED AS NON-BUILDABLE PARCELS TO PRESERVE ENVIRONMENTALLY SENSITIVE AREAS INCLUDING STEEP SLOPES, STREAM BUFFERS, WETLANDS, FLOODPLAIN AND EXISTING FOREST. THEY WILL BE DEDICATED TO THE HOMEOWNERS ASSOCIATION.
 PRESERVATION PARCELS 'F' AND 'G' ARE PROPOSED AS NON-BUILDABLE PARCELS FOR STORMWATER MANAGEMENT FACILITIES AS A REQUIREMENT TO CONTROL STORMWATER RUNOFF.
 PRESERVATION PARCEL 'H' IS PROPOSED AS NON-BUILDABLE PARCEL FOR A COMMUNITY SEPTIC FIELD IN ORDER TO PROVIDE SEWER DISPOSAL FOR LOTS 9-12 AND 19-22.
 BULK PARCEL 'I' IS PROPOSED AS A BULK PARCEL FOR A FUTURE RESUBDIVISION UNDER PHASE 2 THERE IS POTENTIAL FOR 5 ADDITIONAL CLUSTER LOTS.
 THE TOTAL FOREST CONSERVATION OBLIGATION AMOUNT OF 25.7 ACRES INCURRED BY THIS PRELIMINARY PLAN WILL BE MET THROUGH THE RETENTION, IN AN EASEMENT, OF 6.8 ACRES OF EXISTING FOREST AND THE ONSITE RESTORATION OF 13.8 ACRES OF FOREST. THE OUTSTANDING RESTORATION OBLIGATION OF 3.3 ACRES WILL BE MET BY OFFSITE PLANTING, PURCHASE OF CREDIT IN A FCA BANK PAYMENT OF THE COUNTY FEE-IN-LIEU, OR SOME COMBINATION THEREOF.
- 24) THE CREATION OF CLARK WOODS 1, LOTS 1-3 NECESSITATED THE FUTURE CREATION OF A 9.38 ACRE PRESERVATION PARCEL (2 x 4.25 = 8.50 + 0.88 PER SECTION 104.1.1 OF THE ZONING ORDINANCE UPON THE RESUBDIVISION OF THE RESIDUE OF PARCEL 97. THAT 9.38 ACRES IS INCLUDED ON THIS SITE.



VICINITY MAP
SCALE: 1" = 2000'

SITE ANALYSIS DATA CHART

GENERAL SITE DATA

- 1) PRESENT ZONING: RC-DEO
- 2) APPLICABLE DPZ FILE REFERENCES: S-01-23, F-98-29
- 3) PROPOSED USE OF SITE: RESIDENTIAL (RD)
- 4) PROPOSED WATER AND SEWER SYSTEMS: PRIVATE

AREA TABULATION

- 1) GROSS TRACT AREA: 62.31±
- 2) AREA WITHIN 100-YEAR FLOODPLAIN: 1.81 AC±
- 3) TOTAL AREA OF 25% OR GREATER STEEP SLOPES: 0.00 AC±
AREA NOT IN FLOODPLAIN (FOR NTA CALC): 0.00 AC±
- 4) NET TRACT AREA: 60.50 AC±
- 5) TOTAL NUMBER OF LOTS ALLOWED PER ZONING: 14
1 UNIT PER 4.25 GROSS ACRES: 30
- 6) TOTAL NUMBER OF RESIDENTIAL UNITS/LOTS PROPOSED ON THIS SUBMISSION (POTENTIAL 5 ADDITIONAL LOTS IN PHASE 2): 22
- 7) AREA OF CLUSTER LOTS: 22.57 AC±
- 8) AREA OF NON-BUILDABLE PRESERVATION PARCELS: 30.02 AC± (PARCELS A - H)
- 9) AREA OF BUILDABLE PRESERVATION PARCELS: N/A
- 10) AREA OF NON-BUILDABLE BULK PARCELS: 5.23 AC± (PARCEL I)
- 11) AREA OF BUILDABLE BULK PARCELS: N/A
- 12) AREA OF ROAD RIGHT-OF-WAY: 4.49 AC±
- 13) OPEN SPACE ON-TOTAL SITE: N/A
- 14) AREA OF RECREATIONAL OPEN SPACE REQUIRED: N/A

* 5% OF GROSS REQUIRED (3.12 AC±) OR NONE IF THE PRES. PARCEL IS DEDICATED TO THE HOA OR HOWARD COUNTY.

TENTATIVELY APPROVED
DEPT. OF PLANNING AND
ZONING OF
HOWARD COUNTY

David D. Eagle
PLANNING DIRECTOR

[Signature]
DATE

COORDINATE CHART (NAD '83)

BOUNDARY COORDINATES		BOUNDARY COORDINATES	
No.	EAST	No.	EAST
1	580230.4949	16	579907.2485
2	580140.1488	17	579808.8406
3	579799.0253	18	579663.0213
4	579717.7475	19	579485.8456
5	579811.1195	20	579585.3040
6	580298.0005	21	579810.0284
7	580445.5538	22	578728.6863
8	580614.9992	23	578608.0593
9	580754.0818	24	578571.3823
10	580772.3777	25	578544.7695
11	580708.9131	26	578600.3429
12	580675.8581	27	578643.5770
13	580449.9464	28	578646.6446
14	580201.2641	29	578665.7059
15	580149.4911	30	578623.5210

GENERAL STORAGE REQUIREMENT SUMMARY TABLES

DRAINAGE AREA 1			
REQUIREMENT	VOLUME REQUIRED (cc-ft)	VOLUME PROVIDED (cc-ft)	NOTES
WATER QUALITY VOLUME (WQV)	0.2988 (1,324.6 cf)	0.2988 (1,324.6 cf)	PROVIDED BY NATURAL CONSERVATION AREA CREDIT AND ED POND
RECHARGE VOLUME (REV)	0.143 (629 cf)	0.143 (629 cf)	PROVIDED BY GRASS CHANNEL IN ROADSIDE DITCHES
CHANNEL PROTECTION VOL. (CPV)	4.86	4.86	PROVIDED IN THE ED POND
OVERBANK FLOOD PROTECTION VOL. (OFV)	N/A	N/A	NOT REQUIRED FOR THIS AREA
EXTREME FLOOD VOLUME (EFV)	N/A	N/A	NOT REQUIRED FOR THIS AREA

DRAINAGE AREA 2			
REQUIREMENT	VOLUME REQUIRED (cc-ft)	VOLUME PROVIDED (cc-ft)	NOTES
WATER QUALITY VOLUME (WQV)	0	0	PROVIDED BY SHEET FLOW THROUGH LAWN AND WOODS (AREA IS GOING FROM ROW CRIPS/WOODS TO LAWN/WOODS)
RECHARGE VOLUME (REV)	0	0	PROVIDED BY SHEET FLOW THROUGH LAWN AND WOODS (AREA IS GOING FROM ROW CRIPS/WOODS TO LAWN/WOODS)
CHANNEL PROTECTION VOL. (CPV)	N/A	N/A	CPV RELEASE RATE IS < 2 CFS (0.78 CFS)
OVERBANK FLOOD PROTECTION VOL. (OFV)	N/A	N/A	NOT REQUIRED FOR THIS AREA
EXTREME FLOOD VOLUME (EFV)	N/A	N/A	NOT REQUIRED FOR THIS AREA

DRAINAGE AREA 3			
REQUIREMENT	VOLUME REQUIRED (cc-ft)	VOLUME PROVIDED (cc-ft)	NOTES
WATER QUALITY VOLUME (WQV)	0.107 (466 cf)	0.107 (466 cf)	PROVIDED BY ROOFTOP AND NON-ROOFTOP DISCONNECTION FOR ON-SITE IMPERVIOUS AREAS IN D.A. #3
RECHARGE VOLUME (REV)	0.0443 cc.	0.0443 cc.	PROVIDED IN ROAD DITCHES IN D.A. #1
CHANNEL PROTECTION VOL. (CPV)	N/A	N/A	CPV RELEASE RATE IS < 2 CFS (1.10 CFS)
OVERBANK FLOOD PROTECTION VOL. (OFV)	N/A	N/A	NOT REQUIRED FOR THIS AREA
EXTREME FLOOD VOLUME (EFV)	N/A	N/A	NOT REQUIRED FOR THIS AREA

DRAINAGE AREA 4			
REQUIREMENT	VOLUME REQUIRED (cc-ft)	VOLUME PROVIDED (cc-ft)	NOTES
WATER QUALITY VOLUME (WQV)	0.107 (466 cf)	0.107 (466 cf)	LOTS 17, 18, 25 & 27 PROVIDED BY ROOFTOP DISCONNECTION. EX. LOTS 1 & 2 PROVIDED BY VEGETATIVE BUFFER STRIPS. LOTS 23, 24 & 28 PROVIDED BY DRYWELL OR ROADSIDE
RECHARGE VOLUME (REV)	0.0227 (1,207 cf)	0.0227 (1,207 cf)	PROVIDED IN ROAD DITCHES IN D.A. #1
CHANNEL PROTECTION VOL. (CPV)	N/A	N/A	CPV RELEASE RATE IS < 2 CFS (1.92 CFS)
OVERBANK FLOOD PROTECTION VOL. (OFV)	N/A	N/A	NOT REQUIRED FOR THIS AREA
EXTREME FLOOD VOLUME (EFV)	N/A	N/A	NOT REQUIRED FOR THIS AREA

DRAINAGE AREA 5			
REQUIREMENT	VOLUME REQUIRED (cc-ft)	VOLUME PROVIDED (cc-ft)	NOTES
WATER QUALITY VOLUME (WQV)	0.031 (1,320 cf)	0.031 (1,320 cf)	EX. LOT 3 PROVIDED BY VEGETATIVE BUFFER STRIPS
RECHARGE VOLUME (REV)	0.009 (449 cf)	0.009 (449 cf)	PROVIDED IN ROAD DITCHES IN D.A. #1
CHANNEL PROTECTION VOL. (CPV)	N/A	N/A	CPV RELEASE RATE IS < 2 CFS (0.46 CFS)
OVERBANK FLOOD PROTECTION VOL. (OFV)	N/A	N/A	NOT REQUIRED FOR THIS AREA
EXTREME FLOOD VOLUME (EFV)	N/A	N/A	NOT REQUIRED FOR THIS AREA

DRAINAGE AREA 6			
REQUIREMENT	VOLUME REQUIRED (cc-ft)	VOLUME PROVIDED (cc-ft)	NOTES
WATER QUALITY VOLUME (WQV)	0.027 (1,179 cf)	0.027 (1,179 cf)	PROVIDED BY ROOFTOP AND NON-ROOFTOP DISCONNECTION FOR LOTS 25-27 AND EXISTING LOT 2
RECHARGE VOLUME (REV)	0.007 (305 cf)	0.007 (305 cf)	PROVIDED IN ROAD DITCHES IN D.A. #1
CHANNEL PROTECTION VOL. (CPV)	N/A	N/A	CPV RELEASE RATE IS < 2 CFS (0.78 CFS)
OVERBANK FLOOD PROTECTION VOL. (OFV)	N/A	N/A	NOT REQUIRED FOR THIS AREA
EXTREME FLOOD VOLUME (EFV)	N/A	N/A	NOT REQUIRED FOR THIS AREA

DRAINAGE AREA 7			
REQUIREMENT	VOLUME REQUIRED (cc-ft)	VOLUME PROVIDED (cc-ft)	NOTES
WATER QUALITY VOLUME (WQV)	0.007 (2919 cf)	0.007 (2919 cf)	PROVIDED IN BIO-RETENTION FACILITY
RECHARGE VOLUME (REV)	0.016 (697 cf)	0.016 (697 cf)	PROVIDED IN ROAD DITCHES IN D.A. #1
CHANNEL PROTECTION VOL. (CPV)	N/A	N/A	CPV RELEASE RATE IS < 2 CFS (1.18 CFS)
OVERBANK FLOOD PROTECTION VOL. (OFV)	N/A	N/A	NOT REQUIRED FOR THIS AREA
EXTREME FLOOD VOLUME (EFV)	N/A	N/A	NOT REQUIRED FOR THIS AREA

SWM DISCHARGE SUMMARY TABLES

DRAINAGE AREA 1			
STORM FREQUENCY (YR)	EXISTING RUNOFF (cfs)	DEVELOPED RUNOFF (cfs)	DISCHARGE (cfs)
1	13.25	0.15	13.40
10	83.71	7.82	91.53
100	160.26	4.97	165.23

DRAINAGE AREA 2			
STORM FREQUENCY (YR)	EXISTING RUNOFF (cfs)	DEVELOPED RUNOFF (cfs)	DISCHARGE (cfs)
1	0.13	0.76	0.89
10	5.89	7.39	13.28
100	13.99	14.82	28.81

DRAINAGE AREA 3			
STORM FREQUENCY (YR)	EXISTING RUNOFF (cfs)	DEVELOPED RUNOFF (cfs)	DISCHARGE (cfs)
1	0.10	1.10	1.20
10	1.34	4.46	5.80
100	2.81	7.71	10.52

DRAINAGE AREA 4			
STORM FREQUENCY (YR)	EXISTING RUNOFF (cfs)	DEVELOPED RUNOFF (cfs)	DISCHARGE (cfs)
1	0.71	1.92	2.63
10	17.14	18.39	35.53
100	38.07	37.83	75.90

DRAINAGE AREA 5			
STORM FREQUENCY (YR)	EXISTING RUNOFF (cfs)	DEVELOPED RUNOFF (cfs)	DISCHARGE (cfs)
1	0.40	0.46	0.86
10	3.06	3.22	6.28
100	5.07	6.21	11.28

DRAINAGE AREA 6			
STORM FREQUENCY (YR)	EXISTING RUNOFF (cfs)	DEVELOPED RUNOFF (cfs)	DISCHARGE (cfs)
1	0.09	0.82	0.91
10	1.66	4.22	5.88
100	3.79	7.89	11.68

DRAINAGE AREA 7			
STORM FREQUENCY (YR)	EXISTING RUNOFF (cfs)	DEVELOPED RUNOFF (cfs)	DISCHARGE (cfs)
1	0.83	1.78	2.61
10	9.40	12.38	21.78
100	19.84	23.85	43.69

PLAN VIEW
SCALE: 1" = 200'

SHEET INDEX

NO.	DESCRIPTION
1	TITLE SHEET
2	PRELIMINARY PLAN
3	GRADING, SEDIMENT AND EROSION CONTROL PLAN
4	LANDSCAPE PLAN
5	FOREST CONSERVATION PLAN
6	FOREST CONSERVATION PLAN
7	PERCOLATION CERTIFICATION PLAN
8	PERCOLATION CERTIFICATION PLAN

MINIMUM LOT SIZE CHART

LOT NO.	GROSS AREA	PIPESTEM AREA	MINIMUM LOT SIZE
1	51,099	1,845	49,254
3	52,903	4,950	47,953
14	51,495	1,718	49,777
15	50,558	559	49,999

CENTER LINE CURVE DATA

STREET NAME	STATION	RAIUS	LENGTH	TANGENT	DELTA	CHORD
ROAD A	0+56.14 TO 0+79.05	500.00'	22.91'	11.46'	237°32'	N08°17'30" E 22.91'
ROAD B	0+00.00 TO 1+48.20	1770.00'	148.20'	74.14'	44°70'55"	N85°25'05" W 148.15'
MEADOW LAKE DRIVE	1+24.15 TO 4+55.80	765.00'	331.65'	168.47'	96°42'07"	N39°27'59" W 186.61'
	5+50.10 TO 7+75.14	200.00'	225.03'	126.11'	64°28'02"	N39°54'24" E 213.35'
	10+60.82 TO 13+72.06	230.00'	311.24'	184.71'	77°32'04"	N31°05'39" W 288.03'

BENCHMARK ENGINEERING, INC.
ENGINEERS • LAND SURVEYORS • PLANNERS

8480 BALTIMORE NATIONAL PIKE & SUITE 418
ELICOTT CITY, MARYLAND 21043
phone: 410-465-6105 • fax: 410-465-6644
email: Benchmark@cois.com

STATE OF MARYLAND
REGISTERED PROFESSIONAL ENGINEER
[Signature]

OWNER/DEVELOPER: TOLL BROTHERS, INC.
7164 COLUMBIA GATEWAY DRIVE SUITE 230
COLUMBIA, MARYLAND 21046
410-872-9105

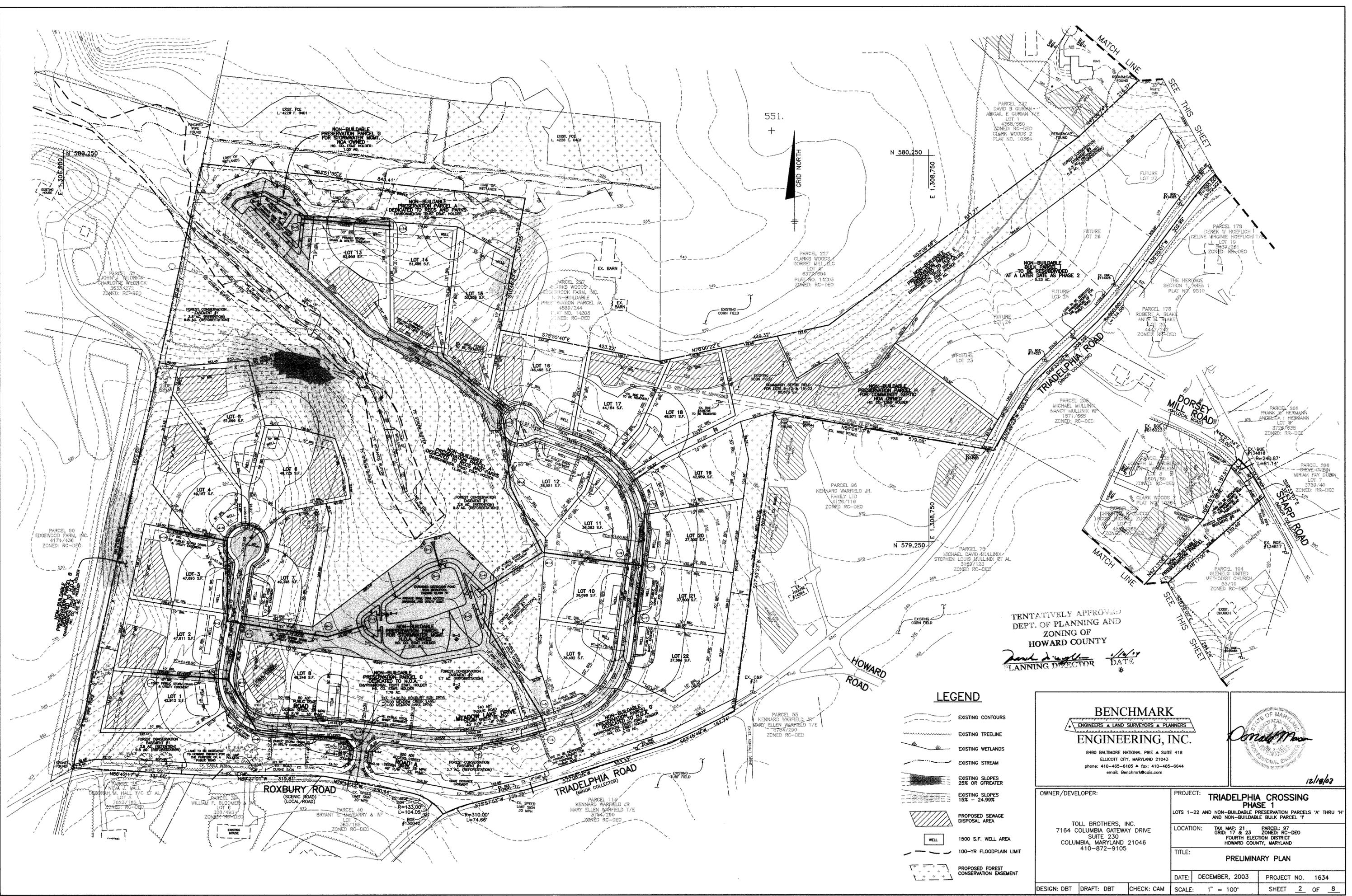
PROJECT: TRIADELPHIA CROSSING PHASE 1
LOTS 1-22 AND NON-BUILDABLE PRESERVATION PARCELS 'A' THRU 'H' AND NON-BUILDABLE BULK PARCEL 'I'

LOCATION: TAX MAP: 21 PARCEL: 87
GRID: 17 & 23 ZONED: RC-DEO
FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE: PRELIMINARY PLAN TITLE SHEET

DATE: DECEMBER, 2003 PROJECT NO. 1634

DESIGN: DBT DRAFT: DBT CHECK: DAM SCALE: AS SHOWN SHEET 1 OF 8

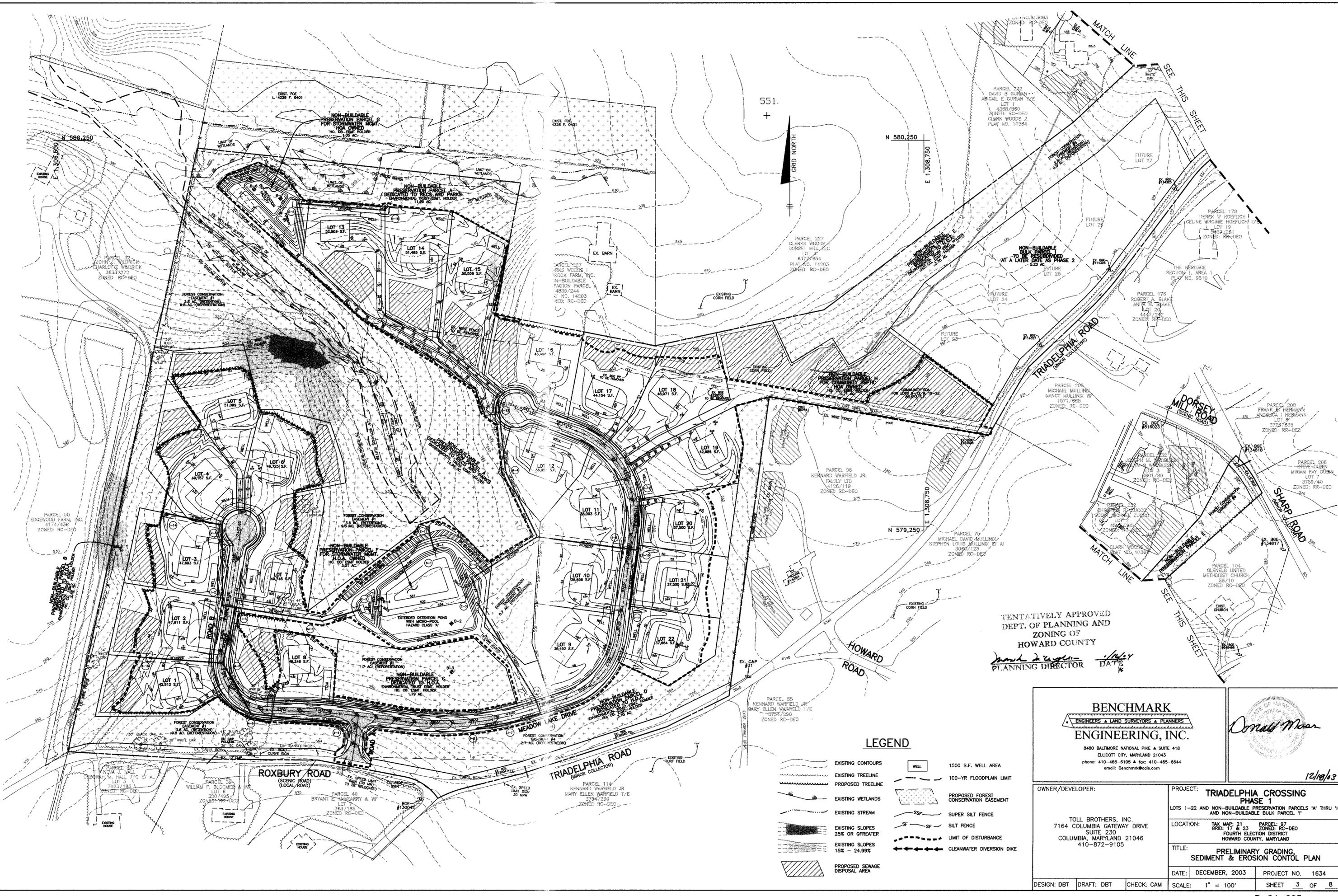


TENTATIVELY APPROVED
 DEPT. OF PLANNING AND
 ZONING OF
 HOWARD COUNTY
David D. Ingalls
 PLANNING DIRECTOR
 DATE: 12/16/03

LEGEND

- EXISTING CONTOURS
- EXISTING TREELINE
- EXISTING WETLANDS
- EXISTING STREAM
- EXISTING SLOPES 25% OR GREATER
- EXISTING SLOPES 15% - 24.99%
- PROPOSED SEWAGE DISPOSAL AREA
- 1500 S.F. WELL AREA
- 100-YR FLOODPLAIN LIMIT
- PROPOSED FOREST CONSERVATION EASEMENT

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 email: Benchmark@cois.com		
OWNER/DEVELOPER: TOLL BROTHERS, INC. 7164 COLUMBIA GATEWAY DRIVE SUITE 230 COLUMBIA, MARYLAND 21046 410-872-9105	PROJECT: TRIADELPHIA CROSSING PHASE 1 LOTS 1-22 AND NON-BUILDABLE PRESERVATION PARCELS 'A' THRU 'H' AND NON-BUILDABLE BULK PARCEL 'I'	
DESIGN: DBT DRAFT: DBT CHECK: CAM	LOCATION: TAX MAP: 21 GRID: 17 & 23 FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	TITLE: PRELIMINARY PLAN
DATE: DECEMBER, 2003 SCALE: 1" = 100'	PROJECT NO. 1634 SHEET 2 OF 8	12/16/03



551.



N 580,250
E 1,308,750

N 579,250
E 1,308,750

TENTATIVELY APPROVED
DEPT. OF PLANNING AND
ZONING OF
HOWARD COUNTY
David A. Engler
PLANNING DIRECTOR

LEGEND

- EXISTING CONTOURS
- EXISTING TREELINE
- PROPOSED TREELINE
- EXISTING WETLANDS
- EXISTING STREAM
- EXISTING SLOPES 25% OR GREATER
- EXISTING SLOPES 15% - 24.99%
- PROPOSED SEWAGE DISPOSAL AREA
- WELL
- 1500 S.F. WELL AREA
- 100-YR FLOODPLAIN LIMIT
- PROPOSED FOREST CONSERVATION EASEMENT
- SSF
- SILT FENCE
- LIMIT OF DISTURBANCE
- CLEANWATER DIVERSION DIKE

BENCHMARK
ENGINEERS & LAND SURVEYORS & PLANNERS
ENGINEERING, INC.
8480 BALTIMORE NATIONAL PIKE & SUITE 418
ELLCOTT CITY, MARYLAND 21043
phone: 410-485-6105 A fax: 410-485-6844
email: Benchmark@ccis.com

Donald Mean
12/18/03

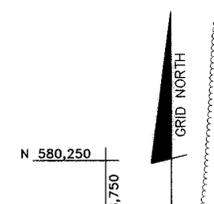
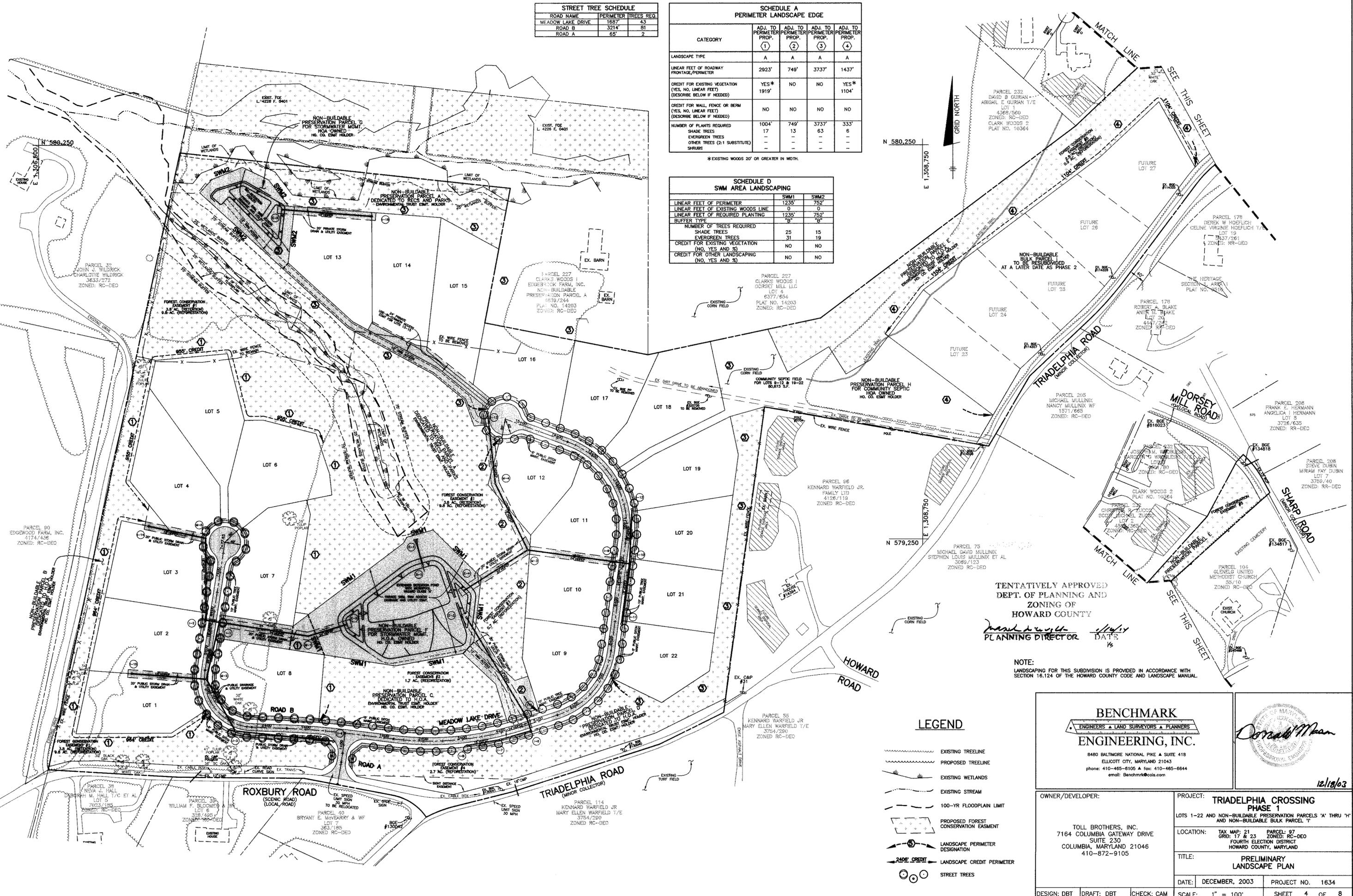
OWNER/DEVELOPER: TOLL BROTHERS, INC. 7164 COLUMBIA GATEWAY DRIVE SUITE 230 COLUMBIA, MARYLAND 21046 410-872-9105		PROJECT: TRIADELPHIA CROSSING PHASE 1 LOTS 1-22 AND NON-BUILDABLE PRESERVATION PARCELS 'A' THRU 'H' AND NON-BUILDABLE BULK PARCEL 'I'	
LOCATION: TAX MAP: 21 GRID: 17 & 23 FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND		PARCEL: 97 ZONED: RC-DEO	
TITLE: PRELIMINARY GRADING, SEDIMENT & EROSION CONTROL PLAN			
DATE: DECEMBER, 2003	PROJECT NO. 1634	SHEET 3 OF 8	
DESIGN: DBT	DRAFT: DBT	CHECK: CAM	SCALE: 1" = 100'

STREET TREE SCHEDULE		
ROAD NAME	PERIMETER	TREES REQ.
MEADOW LAKE DRIVE	1687'	43
ROAD B	3214'	81
ROAD A	65'	2

SCHEDULE A PERIMETER LANDSCAPE EDGE				
CATEGORY	ADJ. TO PERIMETER PROP.			
	①	②	③	④
LANDSCAPE TYPE	A	A	A	A
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	2923'	749'	3737'	1437'
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	YES* 1919'	NO	NO	YES* 1104'
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO	NO	NO
NUMBER OF PLANTS REQUIRED	1004'	749'	3737'	333'
SHADE TREES	17	13	63	6
EVERGREEN TREES	-	-	-	-
OTHER TREES (2:1 SUBSTITUTE)	-	-	-	-
SHRUBS	-	-	-	-

*EXISTING WOODS 20' OR GREATER IN WIDTH.

SCHEDULE D SWM AREA LANDSCAPING		
	SWM1	SWM2
LINEAR FEET OF PERIMETER	1235'	752'
LINEAR FEET OF EXISTING WOODS LINE	0	0
LINEAR FEET OF REQUIRED PLANTING	1235'	752'
BUFFER TYPE	'8'	'8'
NUMBER OF TREES REQUIRED		
SHADE TREES	25	15
EVERGREEN TREES	31	19
CREDIT FOR EXISTING VEGETATION (NO, YES AND %)	NO	NO
CREDIT FOR OTHER LANDSCAPING (NO, YES AND %)	NO	NO



TENTATIVELY APPROVED
DEPT. OF PLANNING AND
ZONING OF
HOWARD COUNTY

Mark A. ...
PLANNING DIRECTOR DATE 12/16/03

NOTE:
LANDSCAPING FOR THIS SUBDIVISION IS PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL.

LEGEND

- EXISTING TREELINE
- PROPOSED TREELINE
- EXISTING WETLANDS
- EXISTING STREAM
- 100-YR FLOODPLAIN LIMIT
- PROPOSED FOREST CONSERVATION EASEMENT
- LANDSCAPE PERIMETER DESIGNATION
- LANDSCAPE CREDIT PERIMETER
- STREET TREES

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
email: Benchmark@comcast.com

12/16/03

OWNER/DEVELOPER: TOLL BROTHERS, INC.
7164 COLUMBIA GATEWAY DRIVE
SUITE 230
COLUMBIA, MARYLAND 21046
410-872-9105

PROJECT: TRIADELPHIA CROSSING PHASE 1
LOTS 1-22 AND NON-BUILDABLE PRESERVATION PARCELS 'A' THRU 'H' AND NON-BUILDABLE BULK PARCEL 'I'

LOCATION: TAX MAP: 21 PARCEL: 97
GRID: 17 & 23 ZONED: RC-DEO
FOURTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

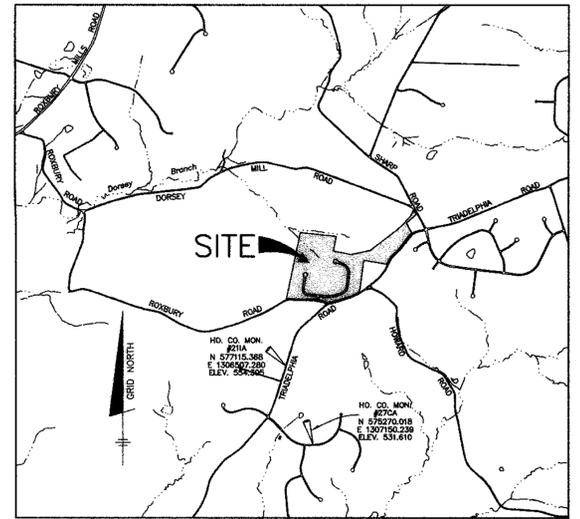
TITLE: PRELIMINARY LANDSCAPE PLAN

DATE: DECEMBER, 2003 PROJECT NO. 1634

DESIGN: DBT DRAFT: DBT CHECK: CAM SCALE: 1" = 100' SHEET 4 OF 8

SOILS LEGEND		
MAP SYMBOL	SOIL GROUP	SOIL TYPE
B ₀	D #	BAILE SILT LOAM
ChB2	B	CHESTER SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED
ChC3	B	CHESTER SILT LOAM, 8 TO 15 PERCENT SLOPES, SEVERELY ERODED
EKA	B	ELJOAK SILT LOAM, 0 TO 3 PERCENT SLOPES
EB2	B	ELJOAK SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED
GB2	B	GLENELG LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED
GC2	B	GLENELG LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED
ChB2	C #	GLENELG SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED
MIC2	B	MANOR LOAM, 8 TO 5 PERCENT SLOPES, MODERATELY ERODED
MIC3	B	MANOR LOAM, 8 TO 5 PERCENT SLOPES, SEVERELY ERODED
MID3	B	MANOR LOAM, 15 TO 25 PERCENT SLOPES, SEVERELY ERODED

* INDICATES HYDRIC SOILS
 TAKEN FROM SOIL SURVEY, HOWARD COUNTY, MARYLAND (ISSUED JULY 1968) MAP NO. 13 AND 17



LEGEND

- EXISTING CONTOURS
- EXISTING TREELINE
- EXISTING WETLANDS
- EXISTING STREAM
- EXISTING SLOPES 25% OR GREATER
- EXISTING SLOPES 15% - 24.99%
- SOILS DELINEATION LINE
- SOILS TYPE
- PERC HOLE - PASSED
- PERC HOLE - FAILED
- PROPOSED SEWAGE DISPOSAL AREA
- 1500 S.F. WELL AREA
- PROPOSED HOUSE AND DRIVEWAY
- FOREST CONSERVATION EASEMENT

GENERAL NOTES

- 1.) THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
- 2.) THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF 10,000 S.F. AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWER IS AVAILABLE. THIS EASEMENT SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWER SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWERAGE EASEMENT. RECORDATION OF A MODIFIED SEWERAGE EASEMENT PLAT SHALL NOT BE REQUIRED.
- 3.) EXACT LENGTH OF SEPTIC TRENCHES IS TO BE DETERMINED BY THE HEALTH DEPARTMENT AT THE TIME OF TRENCH LAYOUT AND INSPECTION.
- 4.) TOPOGRAPHY SHOWN IS BASED ON AERIAL PHOTOGRAPHY BY AIR SURVEY, INC. FLOWN IN MARCH, 2001. EXISTING TOPOGRAPHY NOT WITHIN THE PROJECT BOUNDARY IS BASED ON G.I.S. DIGITAL PURCHASED FROM HOWARD COUNTY.
- 5.) WELLS SHALL BE DRILLED PRIOR TO RECORD 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.
- 6.) THERE ARE NO EXISTING WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THIS PROJECT'S BOUNDARY EXCEPT AS NOTED.
- 7.) THE HEALTH DEPARTMENT MAY REQUIRE THAT WELLS WITHIN WELL SITE AREAS THAT ARE IN CLOSE PROXIMITY TO EACH OTHER BE FIELD TESTED SIMULTANEOUSLY.
- 8.) GROUNDWATER APPROPRIATION PERMIT SHALL BE OBTAINED PRIOR TO THE SUBMITTAL OF THE RECORD PLAT FOR SIGNATURE.

I CERTIFY THAT THE INFORMATION SHOWN HEREON IS BASED ON FIELD WORK PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, AND IS CORRECT, TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DAVID THOMPSON
 PLAN PREPARER

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

APPROVED FOR PRIVATE WATER AND SEWERAGE SYSTEM
 HOWARD COUNTY HEALTH DEPARTMENT
 HOWARD COUNTY HEALTH OFFICER
 DATE

BENCHMARK
 ENGINEERS & LAND SURVEYORS & PLANNERS
ENGINEERING, INC.
 8480 BALTIMORE NATIONAL PIKE & SUITE 418
 ELLICOTT CITY, MARYLAND 21043
 phone: 410-485-6105 A fax: 410-465-6644
 email: Benchmark@cais.com

Donald Mason
 REGISTERED PROFESSIONAL ENGINEER
 STATE OF MARYLAND
 No. 11304
 12/16/03

OWNER/DEVELOPER: TOLL BROTHERS, INC. 7164 COLUMBIA GATEWAY DRIVE SUITE 230 COLUMBIA, MARYLAND 21046 410-872-9105	PROJECT: TRIADELPHIA CROSSING PHASE 1 LOTS 1-22 AND NON-BUILDABLE PRESERVATION PARCELS 'A' THRU 'H' AND NON-BUILDABLE BULK PARCEL 'I'
LOCATION: TAX MAP: 21 PARCEL: 87 GRID: 17 & 23 ZONED: RC-DEO FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	TITLE: PERCOLATION CERTIFICATION PLAN
DATE: DECEMBER, 2003	PROJECT NO. 1634
DESIGN: DBT	DRAFT: DBT
CHECK: CAM	SCALE: 1" = 100'
	SHEET 7 OF 8



SOILS LEGEND	
MAP SYMBOL	SOIL GROUP
B*	BAILE SILT LOAM
ChB2	CHESTER SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED
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GC2	GLENELG LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED
GhB2	GLENELLE SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED
MC2	MANOR LOAM, 8 TO 5 PERCENT SLOPES, MODERATELY ERODED
MC3	MANOR LOAM, 8 TO 5 PERCENT SLOPES, SEVERELY ERODED
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* INDICATES HYDRIC SOILS
TAKEN FROM SOIL SURVEY, HOWARD COUNTY, MARYLAND (ISSUED JULY 1968) MAP NO. 13 AND 17



LEGEND

- EXISTING CONTOURS
- EXISTING TREELINE
- EXISTING WETLANDS
- EXISTING STREAM
- EXISTING SLOPES 25% OR GREATER
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I CERTIFY THAT THE INFORMATION SHOWN HEREON IS BASED ON FIELD WORK PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, AND IS CORRECT, TO THE BEST OF KNOWLEDGE AND BELIEF.

David Thompson
DAVID THOMPSON
PLAN PREPARER

TENTATIVELY APPROVED
DEPT. OF PLANNING AND
ZONING OF
HOWARD COUNTY
David Thompson
PLANNING DIRECTOR 12/14/03

APPROVED FOR PRIVATE WATER AND SEWERAGE SYSTEM
HOWARD COUNTY HEALTH DEPARTMENT
Darryl Hunter
HOWARD COUNTY HEALTH OFFICER *AK* 12-24-03
DATE

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
email: Benchmark@ccals.com

Donald Moon

OWNER/DEVELOPER: TOLL BROTHERS, INC. 7164 COLUMBIA GATEWAY DRIVE SUITE 230 COLUMBIA, MARYLAND 21046 410-872-9105	PROJECT: TRIADELPHIA CROSSING PHASE 1 LOTS 1-22 AND NON-BUILDABLE PRESERVATION PARCELS 'A' THRU 'H' AND NON-BUILDABLE BULK PARCEL 'I'
LOCATION: TAX MAP: 21 GRID: 17 & 23 FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	PARCEL: 97 ZONED: RC-DEO
TITLE: PERCOLATION CERTIFICATION PLAN	
DATE: DECEMBER, 2003	PROJECT NO. 1634
DESIGN: DBT	DRAFT: DBT
CHECK: CAM	SCALE: 1" = 100'
	SHEET 8 OF 8