

CURVE TABLE						
CURVE	Δ	R	L	T	CHORD BRG.	CHORD
33	15°26'48"	508.69'	137.14'	69.00'	S43°07'30"E	136.73'
34	61°16'25"	59.00'	63.10'	34.94'	N14°14'07"E	60.13'

BOUNDARY TABLE		
LINE	BEARING	DISTANCE
1	N13°04'59"E	160.11'
2	N08°45'09"E	61.37'
3	S04°31'52"W	112.65'
4	N78°48'31"W	47.29'
5	S78°48'31"E	42.24'
6	S06°00'36"E	111.27'
7	S06°24'52"W	266.75'
8	N29°09'06"E	40.98'

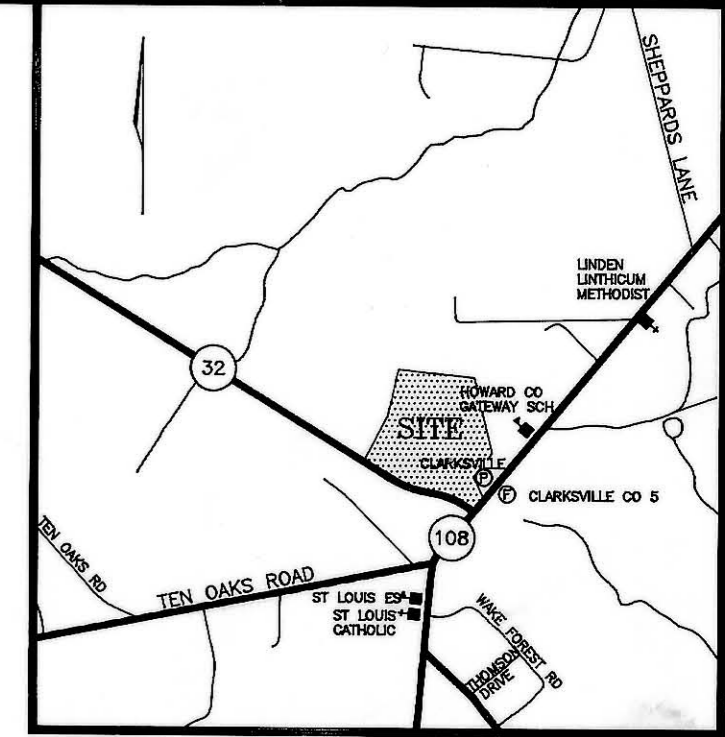
COORDINATE TABLE		
POINT	NORTHING	EASTING
33	561496.5745	1328976.9182
34	561670.5399	1328656.7661
35	561915.0988	1327985.8862
524	562097.7756	1327886.8156
528	562782.5603	1327854.1069
494	562717.6171	1328206.7402
489	562775.9029	1328221.5271
527	562820.9332	1327977.0180
526	563535.9587	1327910.5343
11	563446.4412	1328799.8446
22	562298.1013	1329078.0306
23	562212.6637	1329185.8706
502	562009.0820	1329018.4005
444	561909.2897	1329111.8663
453	561814.9073	1329227.7905
451	561817.4930	1329264.1344
521	561730.5249	1329184.1887
288	561649.7023	1329112.9193
289	561655.0822	1329107.3536
600	563369.1117	1327899.7820
601	563361.8883	1328011.8795

SCHEDULE A  
PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO ROADWAYS	ADJACENT TO PERIMETER PROPERTIES	ADJACENT TO PERIMETER PROPERTIES	ADJACENT TO PERIMETER PROPERTIES
LANDSCAPE TYPE	B	A	B	C
LINEAR FEET	1653*	1580'	210'	2570'
CREDIT FOR VEGETATION	NO	YES 400'	YES 210'	YES
CREDIT FOR WALL FENCE OR BERM	NO	NO	NO	NO
NUMBER OF PLANTS REQUIRED:				
SHADE TREES	1:40=41 TREES	1:60=20 TREES	1:50=5 TREES	1:40=65 TREES
EVERGREEN TREES	1:20=82 TREES	0	1:40=6 TREES	1:20=129 TREES
SHRUBS	0	0	0	0
NUMBER OF PLANTS PROVIDED	TO BE SHOWN ON S.D.P. & PROVIDED BY INDIVIDUAL LOT OWNERS	TO BE SHOWN ON S.D.P. & PROVIDED BY INDIVIDUAL LOT OWNERS	0 CREDIT FOR EXISTING TREES	SEE FOREST CONSERVATION PLAN

BENCHMARKS  
HOWARD COUNTY MONUMENT 34 CZ ELEV. 483.68  
N(83) 562321.7983 E(83) 1329750.7217  
BRASS DISK IN CONC. MONUMENT S.E. SIDE RTE. 108  
HOWARD COUNTY MONUMENT 0013 ELEV. 484.67  
N(83) 564285.9408 E(83) 1331309.7150  
CONC. MONUMENT RTE. 108 & SHEPPARD LANE

SITE ANALYSIS  
PROPERTY ZONED: B-2  
GROSS AREA OF TRACT: 45.30 AC.  
AREA OF WETLANDS: 0.43 AC.  
AREA OF FLOODPLAIN: 0.85 AC.  
AREA OF SWM PARCEL (1) PUBLIC: 0.10 AC.  
AREA OF PROPOSED RIGHT OF WAY: 2.15 AC.  
AREA OF BUFFER (NON-BUILDABLE): 9.34 AC.  
NO. OF SWM LOTS (NON-BUILDABLE): 1  
NO. OF BUILDABLE LOTS: 9  
NO. OF NON-BUILDABLE LOTS: 2



COMMENTS: TYPE A CREDIT FOR EXISTING TREES - MINIMUM 20' WIDE  
TYPE C ALTERNATIVE COMPLIANCE FOR LANDSCAPE TYPE C ALONG RESIDENTIAL PROPERTY LINE - SUBSTITUTE AFFORESTATION BUFFER - SEE FOREST CONSERVATION PLAN.

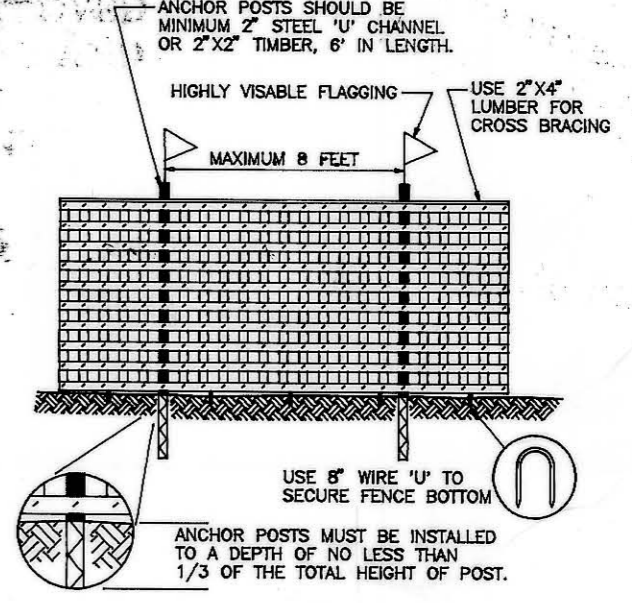
SCHEDULE B  
STREET TREES

AS REQUIRED BY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE DEPARTMENT OF PUBLIC WORKS DESIGN MANUAL.  
ROAD FRONTAGE = NEW ROAD 'A' - 2900  
STREET TREES REQUIRED: 1 TREE PER 40'  
2900 ÷ 40 = 73 STREET TREES  
TREES TO BE SHOWN ON FINAL PLANS AND PLANTED BY DEVELOPER

AREA OF EXISTING PROPERTY: 45.561 AC  
AREA OF PROPOSED TRANSFER TO LOT 2 HOLWECK PROPERTY: -1.806 AC  
AREA OF PROPOSED TRANSFER TO LOT 2 R. JOHNSTON SUBDIVISION: -0.226 AC  
AREA OF PROPOSED TRANSFER TO PARCEL 195 (SANDY SPRING BANK): -0.450 AC  
AREA OF PROPOSED TRANSFER FROM LOT 2 HOLWECK PROPERTY: +1.004 AC  
AREA OF PROPOSED TRANSFER FROM LOT 2 R. JOHNSTON SUBDIVISION: +0.989 AC  
AREA OF PROPOSED TRANSFER FROM PARCEL 195 (SANDY SPRING BANK): +0.230 AC  
TOTAL AREA OF PROPOSED SUBDIVISION: 45.300 AC

GENERAL NOTES

- PROPERTY BOUNDARY TAKEN FROM PLAT #9455 (DATED JULY 23, 1990).
- EXISTING TOPOGRAPHY FROM AERIAL PHOTOGRAMMETRIC SURVEY DATED DECEMBER 1992 BY POTOMAC AERIAL SURVEYS.
- RIGHT OF WAY, PROPOSED CONSTRUCTION AND ROAD 'A' ENTRANCE ON MD ROUTE 108 TAKEN FROM SHA PLAT #52399 AND CONTRACT HO 292-510-770, R. JOHNSTON SUBDIVISION LOT 2, HOLWECK PROPERTY LOT 2, AND PARCEL 195 TO BE INCLUDED ON SEPARATE FINAL PLAT.
- WETLANDS DELINEATED BY EXPLORATION RESEARCH AND LOCATED BY BOENDER ASSOCIATES NOVEMBER 1992.
- BUFFER AREA, ADDITIONAL BUFFER AREA AND NO BUILDING AREA DICTATED BY RATIFIED AGREEMENT BETWEEN HOLWECKS AND ROUTE 108 LIMITED PARTNERSHIP (L 2451 F 699).
- PRIVATE WATERLINE EASEMENTS WILL BE RELOCATED AS NECESSARY.
- ALL AREA WITHIN LIMIT OF DISTURBANCE TO BE CLEARED. WETLAND, WETLAND BUFFER, AND OTHER DELINEATED AREAS NOT TO BE DISTURBED OR CLEARED.
- FLOODPLAIN DELINEATION BY MARKS-VOGEL ASSOCIATES REPORT DATED FEBRUARY 1993, REVISED MAY, 1993.
- STORMWATER MANAGEMENT FOR THIS DEVELOPMENT SHALL BE EXTENDED DETENTION. ACCESS TO STORMWATER MANAGEMENT FACILITIES (PARCEL J) TO BE PROVIDED BY EASEMENTS THROUGH PARCELS F, AND G.
- AFFORESTATION TO BE ACCOMMODATED IN BUFFER AREA (NON-BUILDABLE PARCELS & M) WHICH IS CURRENTLY OPEN FIELD.
- THIS PLAN DOES NOT PROPOSE ANY ENCROACHMENT IN THE WETLANDS OR WETLANDS BUFFER.
- DIRECT ACCESS FROM PARCELS 'A' & 'B' TO MARYLAND ROUTE 108 PROHIBITED.
- LANDSCAPING REQUIREMENTS AS THEY ARE CONCURRENT WITH THE PROPOSED REFORESTATION, AFFORESTATION OR RETENTION, INCLUDING STREET TREES, ARE PART OF THE FINAL PLAN AND ARE THE DEVELOPER'S RESPONSIBILITY. OTHER LANDSCAPING REQUIREMENTS ARE THE RESPONSIBILITY OF THE INDIVIDUAL LOT OWNERS AND WILL BE ADDRESSED AT SITE DEVELOPMENT PLAN.
- SUBJECT TO WP 93-90, APPROVED 7/16/93 TO ALLOW GRADING IN THE 50' STREAM BANK BUFFER.
- AGRICULTURAL PRESERVATION BOARD APPROVED PROPOSED EXCHANGES MAY 19, 1993.
- THE DEVELOPER MUST RESTABILIZE/REVEGETATE ALL GRADED AREAS WITHIN THE 50 FOOT STREAMBANK BUFFER. GRADING AND DISTURBANCE MAY NOT EXTEND INTO THE 25 FOOT WETLANDS BUFFER.
- IN AREAS WHERE GRADING WILL BE DONE IN PROXIMITY TO EXISTING TREES WITHIN THE WETLANDS BUFFER, TREE PROTECTION FENCING SHALL BE UTILIZED. SEE FOREST CONSERVATION PLAN FOR LOCATION OF FENCING.



- NOTES
- FOREST PROTECTION DEVICE ONLY. RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.
  - BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND FLAGGED.
  - PRIOR TO INSTALLING DEVICE.
  - ROOT DAMAGE SHOULD BE AVOIDED.
  - PROTECTIVE SIGNAGE MAY ALSO BE USED.
  - DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION.

FOREST PROTECTION FENCE  
NOT TO SCALE

TENTATIVELY APPROVED  
DEPT. OF PLANNING AND ZONING OF HOWARD COUNTY  
9/20/93  
PLANNING DIRECTOR DATE

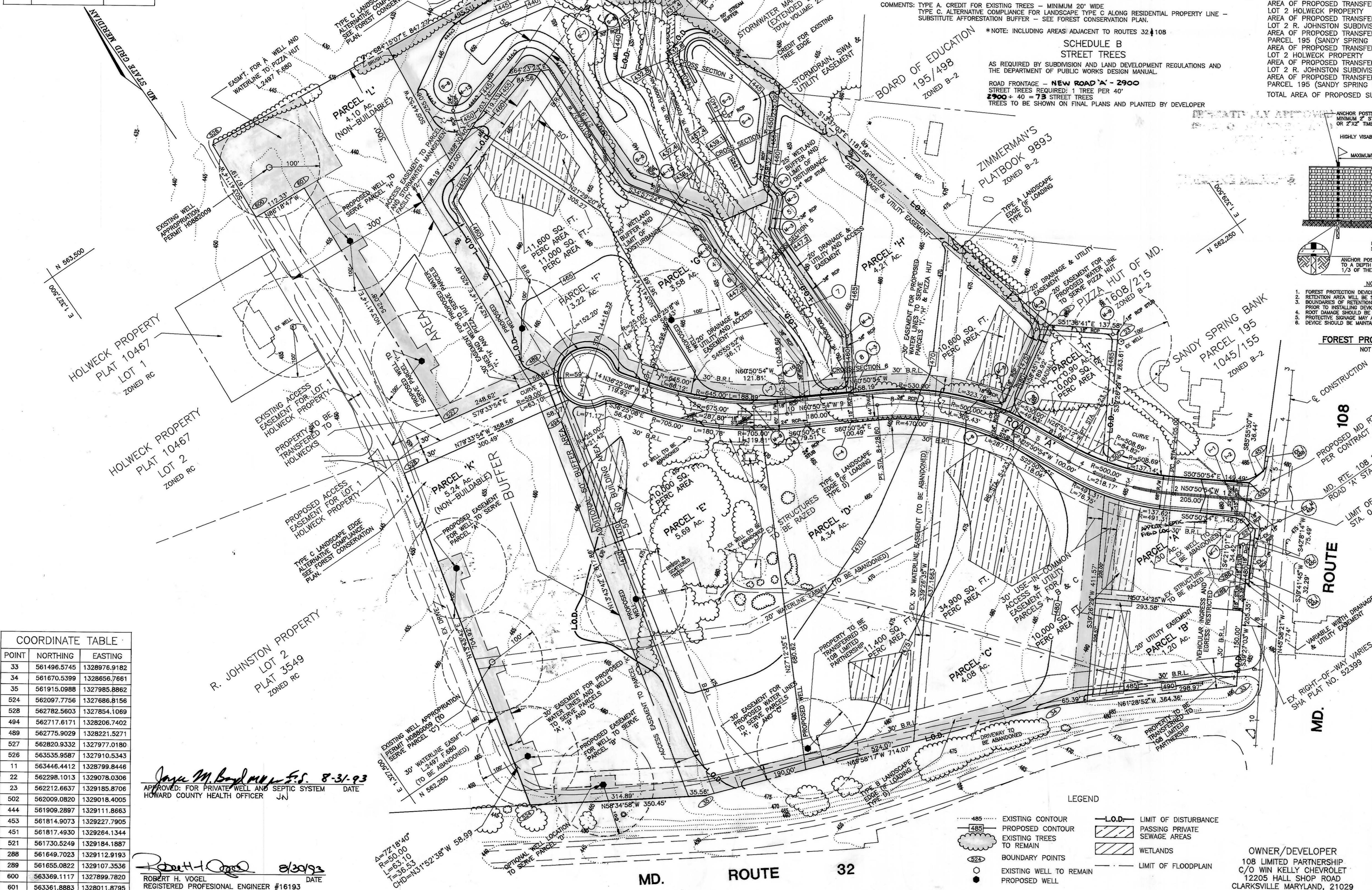
PRELIMINARY EQUIVALENT SKETCH PLAN  
COLUMBIA AUTO MALL  
A RESUBDIVISION OF THE R. JOHNSTON SUBDIVISION  
LOT 4 AND PARCEL 256

TAX MAP #34 SP 93-14 PARCELS 256, 365  
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

MARKS-VOGEL ASSOCIATES, INC.  
ENGINEERS - SURVEYORS - PLANNERS

4704 YORKSHIRE DRIVE BELLCOTT CITY, MARYLAND 21043 TELEPHONE AND FAX (410) 461-5888

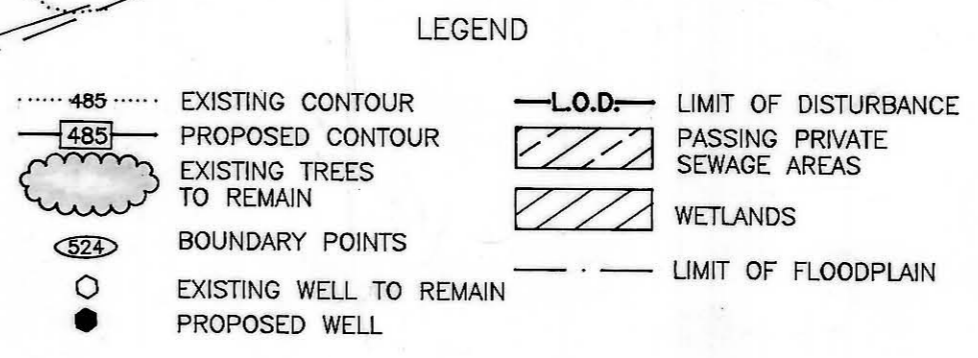
DESIGN BY: R.H.V.  
DRAWN BY: C.A.D.  
CHECKED BY: R.H.V.  
DATE: FEB. 1993  
SCALE: 1"=100'  
W.O. NO.: 92-103



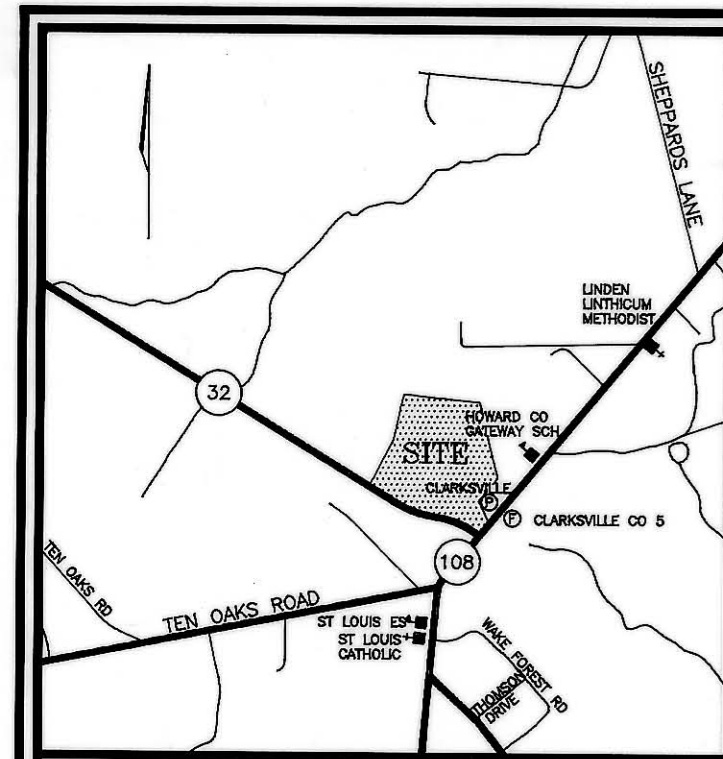
APPROVED: FOR PRIVATE WELL AND SEPTIC SYSTEM DATE  
HOWARD COUNTY HEALTH OFFICER JN

ROBERT H. VOGEL  
REGISTERED PROFESSIONAL ENGINEER #16193

MD. ROUTE 32



OWNER/DEVELOPER  
108 LIMITED PARTNERSHIP  
C/O WIN KELLY CHEVROLET  
12205 HALL SHOP ROAD  
CLARKVILLE MARYLAND, 21029



VICINITY MAP  
SCALE: 1"=2000'

- NOTES (CONT.):
10. WATER SUPPLY TO BE APPROVED BY MARYLAND DEPARTMENT OF THE ENVIRONMENT, WATER SUPPLY PROGRAM PRIOR TO SITE DEVELOPMENT PLAN APPROVAL.
  11. APPROVAL OF THE WATER SUPPLY IS PENDING THE APPROVAL OF A GROUNDWATER APPROPRIATIONS PERMIT FROM THE MARYLAND DEPARTMENT OF NATURAL RESOURCES PRIOR TO SITE DEVELOPMENT PLAN APPROVAL.
  12. STORMWATER MANAGEMENT CONSTRUCTION WILL BE SUPERVISED BY REGISTERED PROFESSIONAL ENGINEER IN ORDER TO ASSURE THAT ALL REQUIREMENTS AND GUIDELINES OF THE HEALTH DEPARTMENT ARE MET. REFERENCE SP 93-14 AND SUBSEQUENT APPROVED FINAL AND SITE DEVELOPMENT PLANS.
  13. THE LOTS HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT.

PARCEL #	PERC #	EX. ELEV.	PROP. ELEV.	NORTH	EAST	RESULTS
H	46	454.0	464.0	562881.00	1328852.99	FAIL
	47	477.0	469.0	562413.14	1328994.52	FAIL
	48	481.0	476.0	562334.84	1329022.18	PASS
	49	480.0	476.0	562270.22	1328920.13	PASS
	50	475.0	469.0	562333.90	1328869.39	FAIL
	127	482.2	477.0	561780.63	1328842.71	PASS
	128	482.0	477.0	561699.29	1328811.96	PASS
	129	480.1	475.0	562905.71	1328807.21	PASS
	130	478.0	475.0	562297.97	1328895.61	PASS
	131	479.7	475.0	562369.59	1329011.33	PASS
	52	486.0	481.0	562184.73	1328981.61	PASS
	53	488.5	485.0	562102.14	1329082.00	PASS
	54	488.7	485.0	562024.86	1329018.43	PASS
	55	487.3	483.0	562114.77	1329008.00	PASS

PARCEL #	PERC #	EX. ELEV.	PROP. ELEV.	NORTH	EAST	RESULTS
A	1	486.7	482.0	561804.08	1328862.71	PASS
	2	486.0	482.0	561941.54	1328975.79	PASS
	3	483.4	481.0	561994.60	1329014.87	PASS
	4	485.5	481.5	561765.98	1328909.06	PASS
	5	484.5	481.5	561855.16	1328940.48	PASS
B	7	480.2	485.0	561614.12	1328781.55	PASS
	8	480.2	485.0	561645.42	1328731.22	PASS
	10	480.0	482.5	561699.29	1328811.96	PASS
	11	484.0	478.5	562905.71	1328907.21	PASS
C	14	486.0	480.0	562023.09	1328903.77	FAIL
	16	475.4	475.5	562010.54	1328679.78	PASS
	19	478.0	476.0	562181.09	1328620.09	PASS
	100	474.2	474.0	562176.68	1328743.97	PASS
	102	475.0	470.2	561933.38	1328636.44	FAIL
	103	480.0	476.8	562044.82	1328791.10	PASS
	104	480.8	477.5	561914.69	1328721.18	PASS
	105	487.0	480.0	561807.94	1328753.40	PASS
	111	482.2	478.0	562119.15	1328665.24	PASS
	112	484.5	478.5	562011.41	1328856.79	PASS
D	20	470.0	471.0	562197.69	1328710.32	FAIL
	22	465.0	465.0	562219.12	1328613.39	FAIL
	24	469.0	470.5	562294.12	1328941.66	PASS
	106	477.8	474.0	561957.16	1328358.96	PASS
	107	481.0	476.0	561878.73	1328312.67	PASS
	109	477.0	475.5	561908.16	1328473.92	PASS
	110	479.0	476.0	561832.58	1328419.08	PASS
E	113	468.0	466.0	562423.92	1328474.62	FAIL
	29	468.0	468.0	562456.53	1328471.11	PASS
	29	468.0	468.0	562456.53	1328471.11	PASS
	30	464.0	465.0	562716.59	1328157.11	FAIL
	31	467.0	470.2	562693.09	1328207.98	FAIL
	32	466.0	466.0	562583.94	1328152.39	PASS
	114	466.8	466.5	562395.38	1328391.28	PASS
	115	465.0	466.0	562457.37	1328402.84	PASS
	116	468.0	466.0	562596.39	1328226.56	PASS
	117	470.8	469.0	562509.84	1328299.29	PASS
	124	473.2	466.5	562373.24	1328444.39	NOT DEEP ENOUGH
	125	478.3	468.0	562333.90	1328365.55	NOT DEEP ENOUGH
	126	479.0	468.0	562325.63	1328327.23	NOT DEEP ENOUGH
F	34	447.0	447.0	563134.09	1328195.28	FAIL
	36	457.0	457.0	563257.39	1328346.92	PASS
	37	452.0	460.0	563155.65	1328247.98	PASS
	118	458.8	461.5	563132.99	1328261.46	PASS
	119	462.5	461.0	563177.25	1328405.03	PASS
	132	460.2	462.2	563066.28	1328321.20	PASS
	133	460.0	462.7	563044.02	1328405.50	PASS
	134	462.7	461.7	563104.75	1328372.53	PASS
	135	461.7	462.2	563075.62	1328364.24	FAIL
G	38	458.0	462.0	563085.41	1328467.33	PASS
	39	454.0	462.0	562982.19	1328354.22	FAIL
A	457.8	462.4	462.8	562982.75	1328444.21	FAIL
B	465.8	464.4	462.7	562718.99	1328468.21	PASS
C	462.3	461.7	462.8	562860.34	1328549.19	FAIL
D	462.3	464.3	462.8	562866.16	1328477.61	FAIL
42	453.0	463.0	462.8	562992.24	1328505.70	FAIL
120	459.8	461.5	463.1	563119.51	1328617.36	PASS
121	461.8	461.5	463.1	563173.98	1328504.40	PASS
122	463.0	461.0	462.8	563255.46	1328444.46	PASS
123	462.0	460.0	462.8	563271.88	1328507.01	FAIL

PARCEL #	APPLICATION NO.	TRENCH CONFIGURATION	AREA OF SEWAGE EASEMENT	MAX. SEWAGE DESIGN FLOW ALLOCATION**	MAX. PERMISSIBLE TRENCH INLET DEPTH
A	A49124	4' X 2'	10,000 S.F.	1,000 G.P.D.	9 FT.
B	A49125	2' X 3'	34,900 S.F.	3,490 G.P.D.	9 FT.
C	A49126	2' X 3'	11,400 S.F.	1,140 G.P.D.	9 FT.
D	A49127	2' X 3'	11,400 S.F.	1,140 G.P.D.	9 FT.
E	A49128	2' X 3'	11,900 S.F.	1,190 G.P.D.	6 FT.
F	A49129	4' X 2'	11,600 S.F.	1,160 G.P.D.	5.5 FT.
G	A49130	2' X 3'	11,000 S.F.	1,100 G.P.D.	6 FT.
H	A49131	2' X 3'	10,600 S.F.	1,060 G.P.D.	6 FT.
I	A49132	2' X 3'	10,000 S.F.	1,000 G.P.D.	9 FT.

\* DEPTH TO BE DETERMINED AT THE TIME OF SITE DEVELOPMENT PLAN SUBMITTAL INCLUDING GRADING AND TRENCH DETAIL.  
\*\* BASED UPON REVIEW OF SEPTIC SYSTEM PLANS.  
+ FROM ORIGINAL GRADE.

TENTATIVELY APPROVED  
DEPT. OF PLANNING AND ZONING OF  
HOWARD COUNTY  
*James D. Smith* 9/29/93  
PLANNING DIRECTOR DATE

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

- NOTES:
1. 20' TO BE MAINTAINED BETWEEN ALL WELL WATER DISTRIBUTION LINES AND SEWAGE DISPOSAL EASEMENTS.
  2. PROPOSED ELEVATIONS SHOWN HEREIN TO BE STRICTLY ENFORCED DURING GRADING AND SITE DEVELOPMENT. DISTURBANCE TO GROUND BELOW PROPOSED ELEVATIONS WILL RESULT IN LOSS OF PRIVATE SEWAGE EASEMENT.
  3. ALL PERCOLATION TESTS HAVE BEEN FIELD LOCATED.
  4. A WATER METER SHALL BE INSTALLED AT AN ACCESSIBLE LOCATION ON THE INCOMING WATER LINE TO EACH BUILDING.
  5. PERCOLATION TESTING CONDUCTED APRIL 20 THROUGH APRIL 30, 1993.
  6. LOCATIONS AND ELEVATIONS OF ALL EXCAVATED TEST HOLES AND SUITABLE WELL SITES HAVE BEEN FIELD VERIFIED.
  7. ALL WELLS AND SEPTIC SYSTEMS WITHIN 100 FEET OF PROPERTY BOUNDARIES ARE SHOWN ON THIS PLAN.
  8. EXISTING SEPTIC FIELDS TO BE LOCATED AND ABANDONED IN CONJUNCTION WITH GRADING PERMIT.
  9. APPROVAL OF COMMERCIAL SITE DEVELOPMENT PLAN SUBJECT TO COMPLIANCE TO INDUSTRIAL DISCHARGE PERMIT REQUIREMENTS AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT.

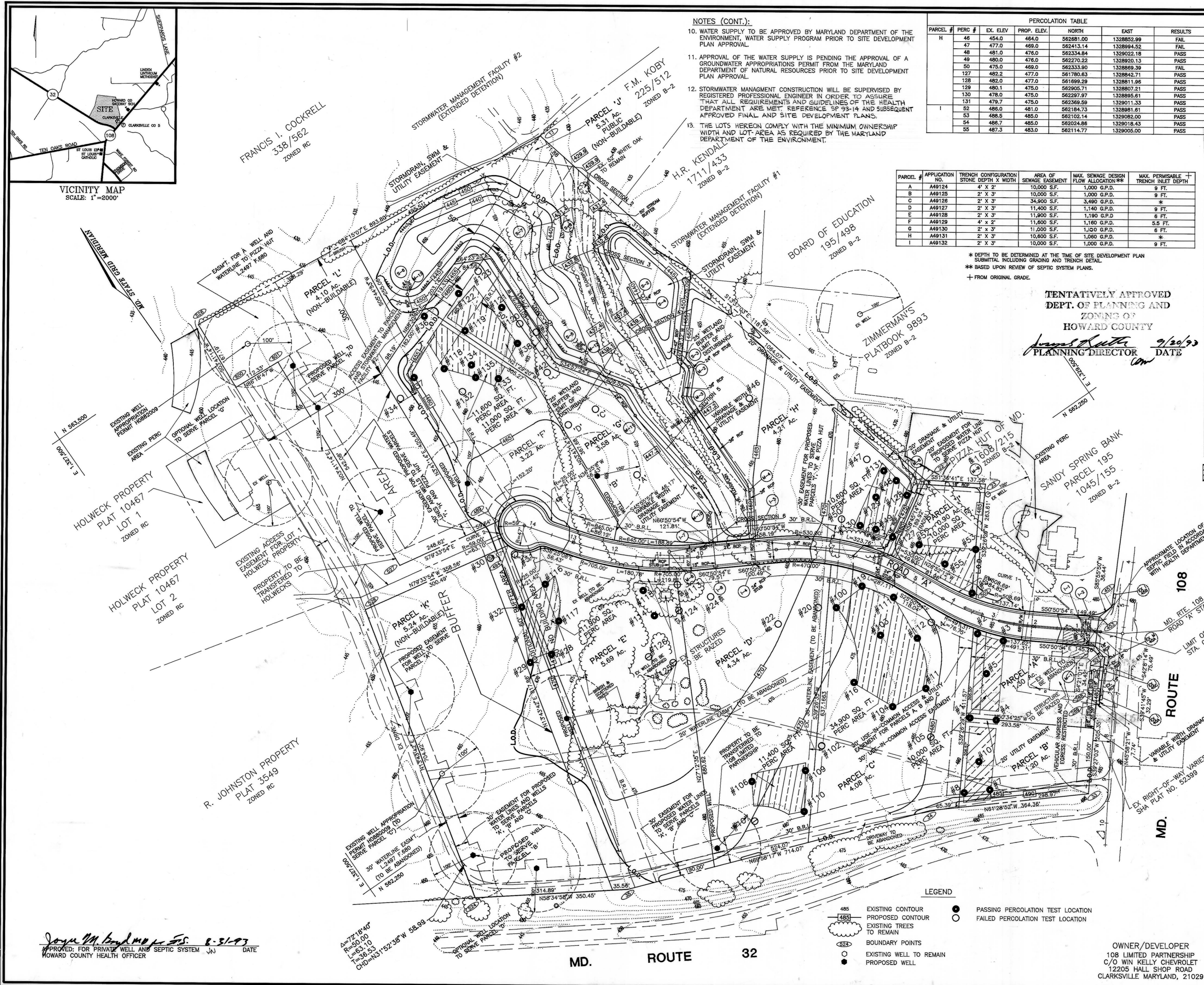
PRELIMINARY EQUIVALENT SKETCH PLAN  
PERCOLATION TEST PLAT  
COLUMBIA AUTO PARK  
A RESUBDIVISION OF THE R. JOHNSTON SUBDIVISION  
LOT 4 AND PARCEL 256  
TAX MAP #34 SP 93-14 PARCELS 256, 365  
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

MARKS-VOGEL ASSOCIATES, INC.

4704 YORKSHIRE DRIVE  
ELlicott CITY, MARYLAND 21043  
TELEPHONE AND FAX  
(410) 461-5628

DESIGN BY: R.H.V.  
DRAWN BY: D.G.H.  
CHECKED BY: R.H.V.  
DATE: JUNE, 1993  
SCALE: 1"=100'  
W.D. NO.: 92-103

2 SHEET OF 2



- LEGEND
- 485 EXISTING CONTOUR
  - 485 PROPOSED CONTOUR
  - 485 EXISTING TREES TO REMAIN
  - 524 BOUNDARY POINTS
  - EXISTING WELL TO REMAIN
  - PROPOSED WELL
  - PASSING PERCOLATION TEST LOCATION
  - FAILED PERCOLATION TEST LOCATION

APPROVED FOR PRIVATE WELL AND SEPTIC SYSTEM JJJ DATE 8-31-93  
HOWARD COUNTY HEALTH OFFICER

OWNER/DEVELOPER  
108 LIMITED PARTNERSHIP  
C/O WIN KELLY CHEVROLET  
12205 HALL SHOP ROAD  
CLARKSVILLE MARYLAND, 21029