

Bureau of Environmental Health  
7178 Columbia Gateway Drive, Columbia, MD 21046-2147  
(410) 313-2640 Fax (410) 313-2648  
TDD (410) 313-2323 Toll Free 1-866-313-6300  
website: www.hchealth.org

Peter L. Beilenson, M.D., M.P.H., Health Officer

August 7, 2009

To: Jacob Hickmat, P.E.  
Mildenberg-Boender & Assoc., Inc.

From: Robert Bricker, CPSS, R.S.  
Environmental Sanitarian Supervisor  
Well and Septic Program

RE: Cadogan Property, Percolation Certification Plan comments, PC530963

The following corrections, deletions or amendments are needed for approval of this plan:

1. Correct the Health Officer signature statement (Public water and private sewage)
2. Do not show these locations that were staked but not dug: 3013, 3014, 3015, 3016, 3017.
3. Do not show a test at location identified on the submitted plan as '3003'.
4. Correct these test locations as indicated: correct '3002' to **3001**; correct '3001' to **3002**, and correct '3000' to **3003**.
5. Place test location **3020** on plat as indicated. (Indicate 3020 as a Fail.)
6. Place **A1, A2, and A3** on plat as indicated.
7. You may add a note: Percolation test location 3020, and auger holes A1, A2 and A3 were recorded and plotted by the inspecting Environmental Sanitarian and were referenced to surveyed stake locations.
8. Correctly identify infiltrometer test locations as **101, 102, 103-A, 103, 104, 105-A, 105 and 106**, respectively, rather than 1 thru 6, etc.
9. Show (all) the gravel bed dimensions as 9'X70'.
10. Orient the gravel bed for the top most mound such that it is primarily at a lower elevation than 105-A but having a corner near to 105-A (see graphic). Approximate dimensions for this mound are 36' X 95'.
11. The dimensions for mound 103, 103-A are 45' X95'. The gravel bed is centered near 103 but probably downhill of 103.
12. The dimensions for mound 101, 102 are 36' X 95'. Orient the gravel bed downhill of locations 101 and 102.

If you have any questions regarding these requirements, please contact me at the above address or by calling (410) 313-2691.

Enclosure  
Copy: File



July 27, 2009

Mr. Robert C. Bricker, Jr. CPSS, RS  
Howard County Health Department  
Bureau of Environmental Health  
7178 Columbia Gateway Drive  
Columbia, MD 21046

**RE: Cadogan Property**  
**TM 16 Par 248**  
**A530963**

Dear Mr. Bricker:

Pursuant to your letter dated June 3, 2009, I am transmitting to you the original Perc Certification Plat for the Cadogan Property for your review and approval.

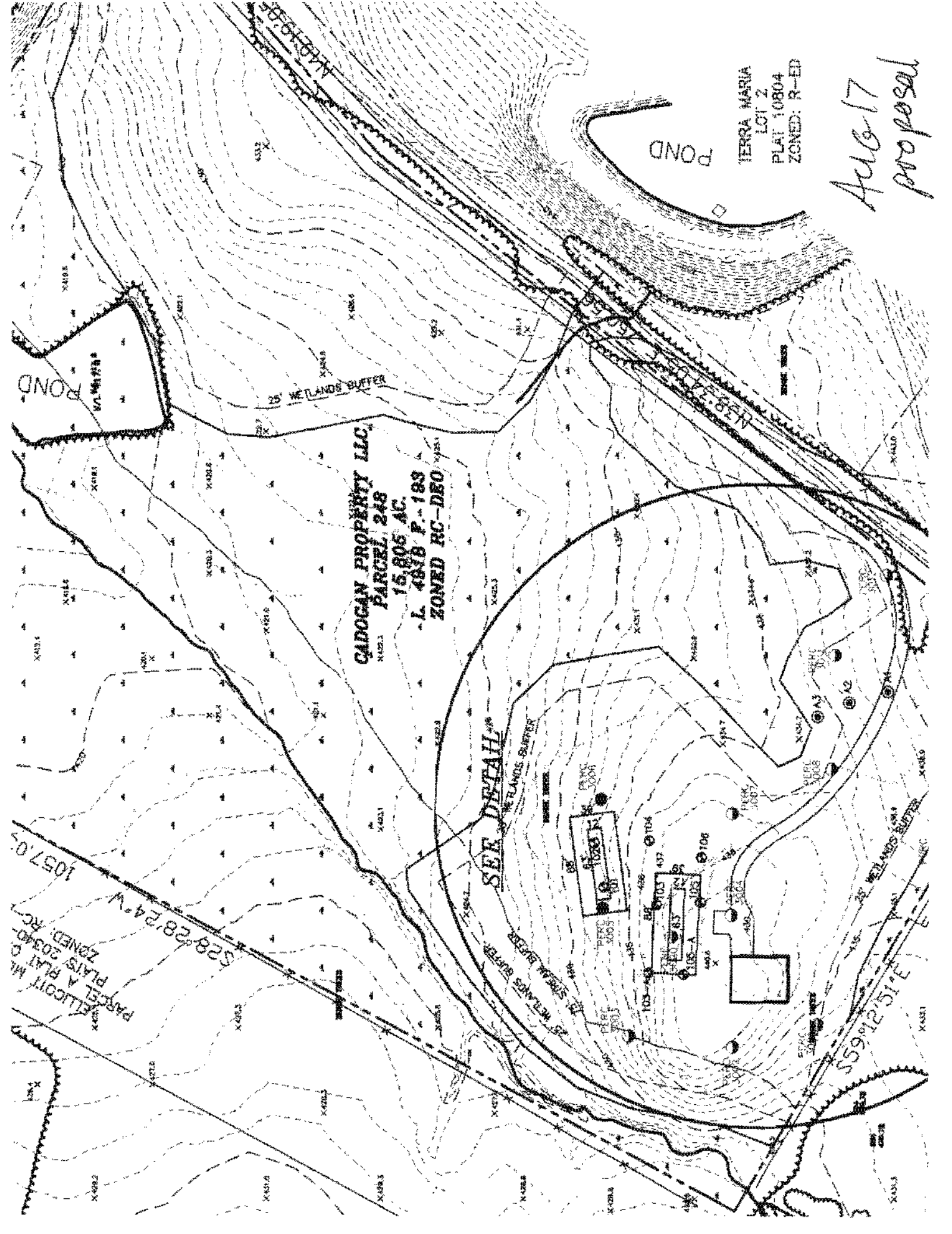
I have updated the plat per the comments in your letter. Should you have any more comments, please do not hesitate to contact me at this office.

Very truly yours,  
Mildenberg, Boender & Assoc., Inc.



Mark Sweadner, Chief of Surveys  
Project Manager

cc: Robert Sheesly  
Jamal Ramamni



CADOGAN PROPERTY LLC.  
PARCEL 248  
15,805 AC.  
- L. 4818 P. - 193  
ZONED RC-DEO

TERRA MARIA  
LOT 2  
PLAT 10804  
ZONED: R-ED

Aug 17  
proposal

SEE DETAIL

1057.03  
328'28"24" W  
PARCELS A PLAT O  
ZONED: RC  
MILICOTT MA

559'12"51"E

POND

POND

25' WETLANDS BUFFER

25' WETLANDS BUFFER

25' WETLANDS BUFFER

25' WETLANDS BUFFER

X4002

X4010

X4013

X4016

X4018

X4013

X4011

X4010

X4009

X4008

X4007

X4006

X4005

X4004

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X3697

X3696

X3695

X3694





## Robert Bricker

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**From:** Robert Bricker  
**Sent:** Friday, October 02, 2009 4:58 PM  
**To:** 'msweadner@mba-eng.com'  
**Subject:** RE: Cadogan Perc Plat

Mark,

1. Stake both mound locations for field review.
2. Plan the driveway location so that it is at least 10 feet from the sand mound footprint and the runoff is directed away from the sand mound.
3. Delete test locations 3008 and 3011 as they were not dug.
4. Edit Notes as follow: delete #8 as it is irrelevant to this property; correct spelling of DISTRIBUTION in #11; replace #12 with the following AN ADVANCED PRE-TREATMENT SYSTEM, WHICH UTILIZES BEST AVAILABLE TECHNOLOGY TO PERFORM NITROGEN REDUCTION, MUST BE INSTALLED ON THE SEPTIC SYSTEM DUE TO THERE ONLY BEING AN INITIAL SYSTEM AND ONE REPAIR SYSTEM. A SUPPLEMENTAL SITE PLAN WITH ALL OF THE NECESSARY DETAILS FOR INSTALLATION OF THE SYSTEM WILL BE REQUIRED PRIOR TO THE RELEASE OF THE BUILDING PERMIT AND SEPTIC SYSTEM INSTALLATION PERMIT.

Let me know when the mounds are staked so I may schedule a field review.  
Robert Bricker, R.S. CPSS

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**From:** msweadner@mba-eng.com [mailto:msweadner@mba-eng.com]  
**Sent:** Monday, September 28, 2009 3:06 PM  
**To:** Robert Bricker  
**Subject:** Cadogan Perc Plat

Robert,

I've addressed your comments, here's another PDF for your review. Thanks,

Mark Sweadner

----- Original Message -----

**From:** Robert Bricker  
**To:** Mark Sweadner  
**Sent:** Thursday, September 17, 2009 3:42 PM  
**Subject:** RE: comment\_Aug21-RE: Cadogan Perc Plat

Mark,

Here is a pencil and protractor drawing of what I am suggesting. The center section of the gravel bed on both the uphill and downhill sides is 31.3 feet, and the uphill sides of the end sections are each 15.6 feet. The downhill sides of the end sections may be a little more than 15.6 feet. The bends (in the gravel bed as well as in the laterals) are 22 degrees. The sand mound conforms to the divergent shape of the slope. The setbacks uphill and to the sides of the gravel bed generally by design, though the length on the downhill side will be a little longer than the design length of the standard rectangular form.

Hope this helps. Send a PDF of the mound(s); best to teak them and do a field check before finalizing the plan.

Robert Bricker, R.S.

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**From:** msweadner@mba-eng.com [mailto:msweadner@mba-eng.com]  
**Sent:** Thursday, September 17, 2009 2:39 PM

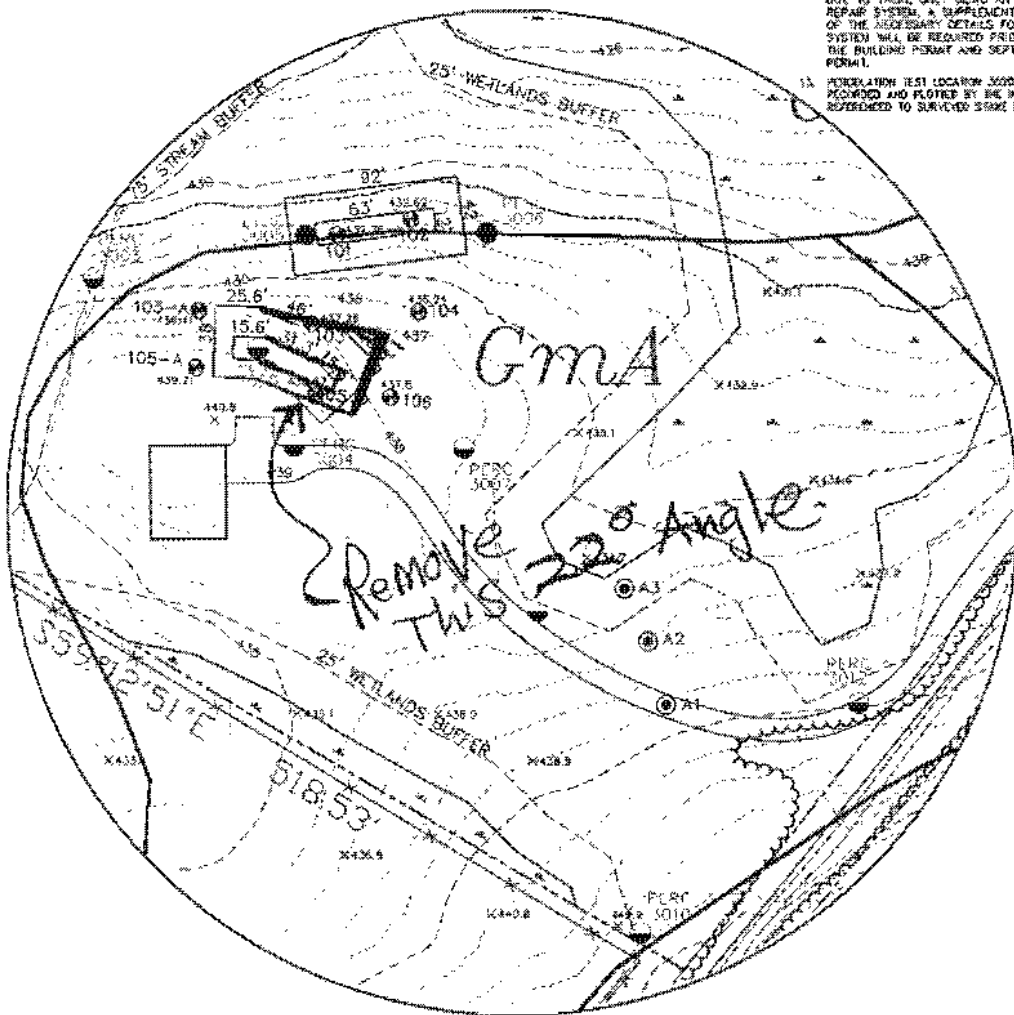
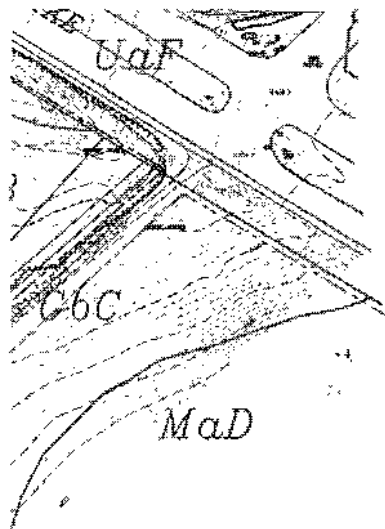




VICINITY MAP  
SCALE: 1" = 1,000'

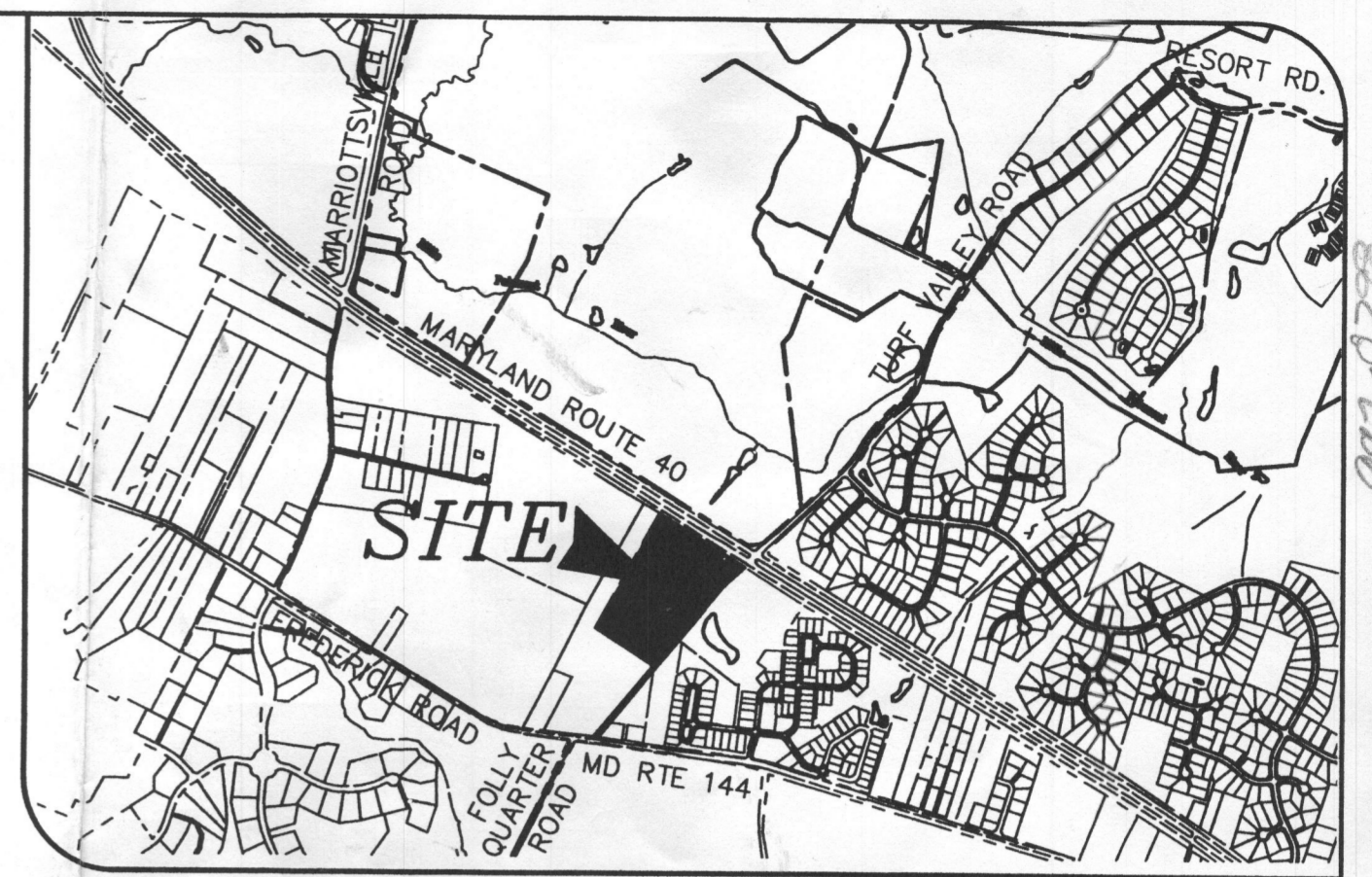
GENERAL NOTES:

1. SUBJECT PROPERTY ZONED RC-650 WITHIN THE AGRICULTURAL LAND PRESERVATION DISTRICT PER THE 02/02/2004 COMPREHENSIVE ZONING PLAN AND THE "COMP. USE" ZONING AMENDMENTS EFFECTIVE 1/28/08.
2. BOUNDARY SHOWN HEREON IS BASED ON DEED INFORMATION.
3. SITE LOCATION:  
TAX MAP 16, PARCEL 548  
DEED REFERENCE: 4918/103 & 4053/420  
SITE AREA: 15.81 ACRES ±
4. TOPOGRAPHIC DATA SHOWN HEREON IS BASED ON AERIAL TOPOGRAPHY PROVIDED BY WARD, KERN, HARRING INC. ON OR ABOUT APRIL, 2008 PERCE ELEVATIONS SHOWN ARE BASED ON FIELD RUN TOPOGRAPHY.
5. BASED ON AVAILABLE COUNTY DATA, NO HISTORIC STRUCTURES OR BURIAL COUSURES EXIST ON SITE.
6. SOILS DATA BASED ON HOWARD COUNTY SOIL SURVEY DATED 1958, SHEET 8.
7. PUBLIC WATER AND PRIVATE SEWERAGE WILL BE UTILIZED.
8. STORMWATER DESIGN WILL BE UTILIZED.
9. THE SAND MOUND AREAS(DENOTATED AND IDENTIFIED ON THIS PLAN) MUST BE PROTECTED BY A FENCED BARRIER AT ALL TIMES DURING DEVELOPMENT, GRADING, AND CONSTRUCTION ACTIVITIES. POSTERIOR PROTECTIVE MEASURES SHOULD BE IMPLEMENTED TO PREVENT ROAD AREAS FROM EROSION AND ENCODUREMENT BY WHEELED VEHICLES. SUBSEQUENT EROSION PERMITS APPLICATIONS MAY BE NEEDED SHOULD THE SAND MOUND AREAS BE EVALUATED AND FOUND TO BE UNSATISFACTORY FOR THE INTENDED USE.
10. A PRESSURIZED DISTRIBUTION NETWORK WILL BE UTILIZED TO DISTRIBUTE WASTEWATER EFFLUENT EVENLY ACROSS THE SAND MOUND ABSORPTION AREA.
11. BUILDING PERMITS APPROVAL WILL REQUIRE THE INSTALLATION OF ADVANCED PRE-TREATMENT FOR THE SEPTIC SYSTEM. THESE DEVICES ARE DESIGNED TO REDUCE RELEASE OF NITROGEN BY USING BEST AVAILABLE TECHNOLOGY (BAT). ON-GOING MAINTENANCE IS REQUIRED. AN AGREEMENT MONITORING THE NEED FOR MAINTENANCE SUCH A SYSTEM & SERVICE CONTRACT WITH AN AUTHORIZED SERVICE PROVIDER MUST BE RECORDED IN THE HOWARD COUNTY LAND RECORDS PRIOR TO RELEASE OF SEPTIC SYSTEM INSTALLATION PERMITS.
12. AN ADVANCED PRE-TREATMENT SYSTEM WHICH UTILIZES BEST AVAILABLE TECHNOLOGY TO PERFORM NITROGEN REDUCTION, MUST BE INSTALLED ON THE SEPTIC SYSTEM. ONE TO THREE ONLY BEING AN INITIAL SYSTEM AND ONE REPAIR SYSTEM. A SUPPLEMENTAL SITE PLAN WITH ALL OF THE NECESSARY DETAILS FOR INSTALLATION OF THE SYSTEM WILL BE REQUIRED PRIOR TO THE RELEASE OF THE BUILDING PERMIT AND SEPTIC SYSTEM INSTALLATION PERMITS.
13. POPULATION TEST LOCATION 3000 AND ALIEN HOLES A1, A2 AND A3 WERE RECORDED AND PLOTTED BY THE INSPECTING ENVIRONMENTAL SANITARIAN AND WERE REFERENCED TO SURVEYED STAKE LOCATIONS.



DETAIL  
SCALE: 1" = 50'

CADDIAN BROTHERS



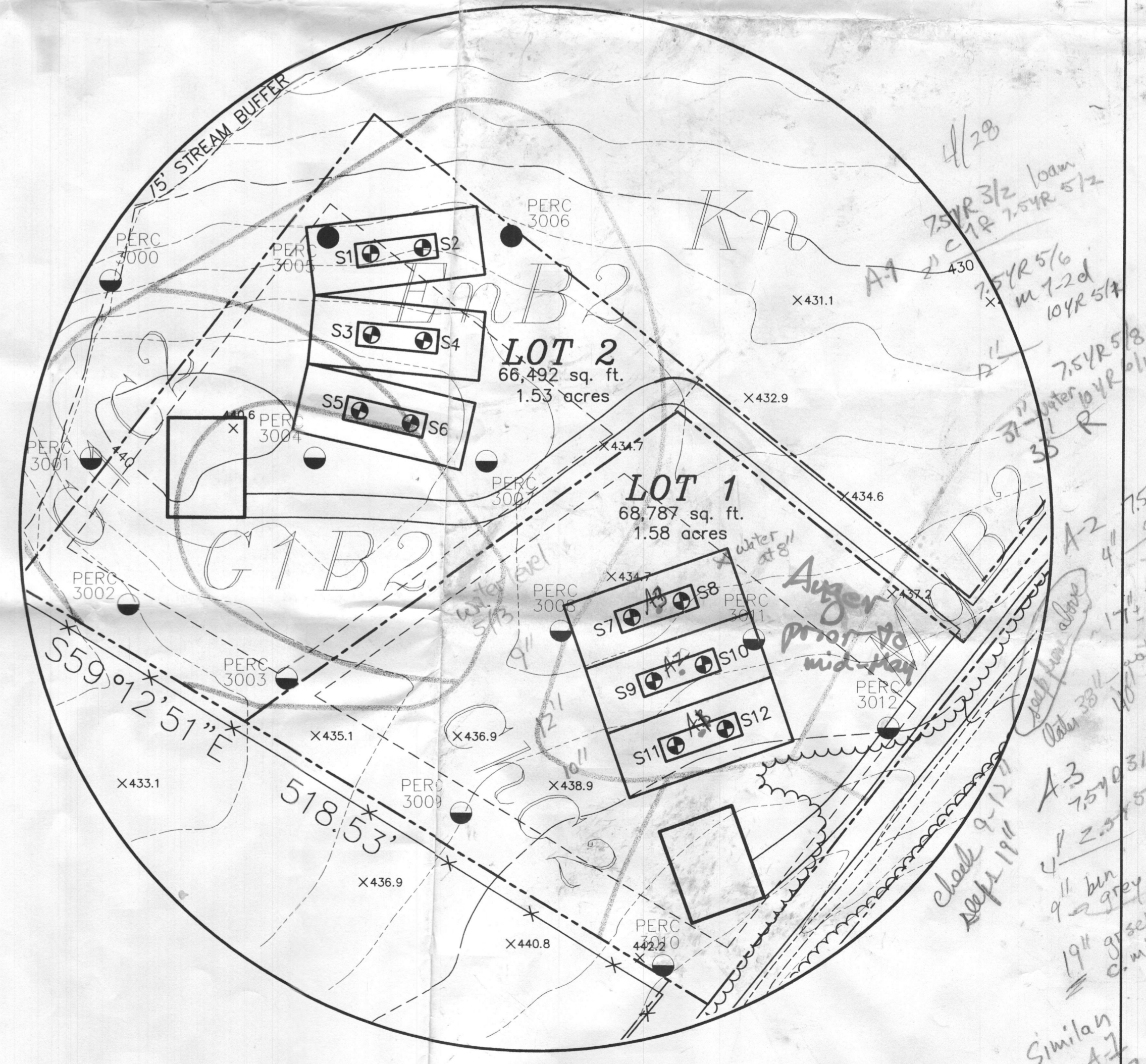
VICINITY MAP  
SCALE: 1" = 1,000'

**GENERAL NOTES:**

- SUBJECT PROPERTY ZONED RC-DEQ WITHIN THE AGRICULTURAL LAND PRESERVATION DISTRICT PER THE 02/02/2004 COMPREHENSIVE ZONING PLAN AND THE "COMP. LITE" ZONING AMENDMENTS EFFECTIVE 7/28/08.
- BOUNDARY SHOWN HEREON IS BASED ON DEED INFORMATION.
- SITE LOCATION:  
TAX MAP 16, PARCEL 248  
DEED REFERENCE: 4918/193 & 4053/420  
SITE AREA: 15.81 ACRES ±
- TOPOGRAPHIC DATA SHOWN HEREON IS BASED ON HOWARD COUNTY 2' CONTOUR AERIAL TOPOGRAPHIC MAPS.
- BASED ON AVAILABLE COUNTY DATA, NO HISTORIC STRUCTURES OR BURIAL GROUNDS EXIST ON SITE.
- SOILS DATA BASED ON HOWARD COUNTY SOIL SURVEY DATED 1968, SHEET 6.
- PUBLIC WATER AND PRIVATE SEWERAGE WILL BE UTILIZED.
- SEPTIC AREA DRAINS TO AN INTERIOR SWALE AND WILL NOT DRAIN TOWARD OFF-SITE WELLS. THE PROPOSED WELL IS SET ON A HIGHPOINT, OFF-SITE SEPTIC AREAS WILL NOT DRAIN TOWARD PROPOSED WELL.
- SANDMOUND DESIGN WILL BE UTILIZED.

**LEGEND**

- PASSED CONVENTIONAL PERC HOLE
- FAILED CONVENTIONAL PERC HOLES
- PROPOSED SAND MOUND SYSTEM WITH TEST PITS



**DETAIL**  
SCALE: 1" = 50'

**SOILS DESCRIPTION**

SYMBOL	DESCRIPTION
ChC2	Chester silt loam, 8% to 15% slopes, moderately eroded -- Type B
DeA	Dalanco silt loam, 0% to 3% slopes, moderately eroded -- Type B
EnB2	Elainboro loam, 3% to 8% slopes, moderately eroded -- Type B
G1B2	Glensig loam, 3% to 8% slopes, moderately eroded -- Type B
G1C2	Glensig loam, 8% to 15% slopes, moderately eroded -- Type B
Ha	Hatboro silt loam -- Type D
Kn	Kinkora silt loam, 0% to 3% slopes -- Type D
Md	Made land
MgB2	Manor gravelly loam, 3% to 8% slopes, moderately eroded -- Type B
MgC2	Manor gravelly loam, 8% to 15% slopes, moderately eroded -- Type B

**OWNER/DEVELOPER**  
CADOGAN PROPERTY, LLC  
5072 DORSEY HALL DRIVE  
ELIJACOTT CITY, MD 21042  
CONTACT: R. JACOB HIKMAT  
(410) 997-0296

**FOLLY QUARTER ROAD**

**FREDERICK ROAD (MD ROUTE 144)**  
(MINOR ARTERIAL-PUBLIC)

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS  
HOWARD COUNTY HEALTH DEPARTMENT

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

HOWARD COUNTY HEALTH OFFICER \_\_\_\_\_ DATE \_\_\_\_\_

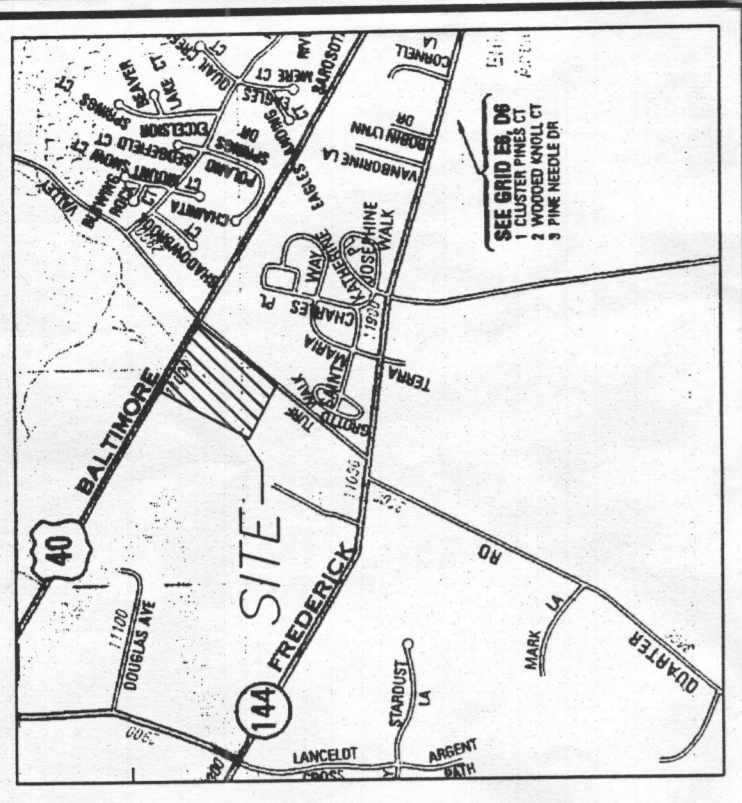
project	date	approval
CADOGAN	03/2008	RJH
illustration	scale	AS SHOWN
MFS		

description	date	revisions

**CADOGAN PROPERTY, LOTS 1-2 & NON-BUILDABLE BULK PARCEL A**  
TAX MAP 16 - PARCEL 248 - GRID 23  
THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
PERC CERTIFICATION PLAT

**MILDENBERG, BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors  
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland, 21042  
(410) 997-0296 Fax: (301) 927-5521 Wash. (410) 997-0288 Fax.





VICINITY MAP  
SCALE: 1"=2000'

- LEGEND**
- PROPOSED PERCOLATION TEST LOCATIONS  $\oplus$
  - PASSING PERCOLATION TEST LOCATIONS  $\ominus$
  - FAILED PERCOLATION TEST LOCATIONS  $\omin�$

- NOTES:**
1. EXIST. TOPOGRAPHY FROM HOWARD COUNTY AERIAL PHOTOMETRIC
  2. PROPERTY OUTLINE BASED ON HOWARD COUNTY GIS

D.23.06  
T. SHERA

NO.	REVISION	DATE

**PERCOLATION TEST PLAN**  
**PARCEL 248**  
**ROUTE 40 MARRIOTTSVILLE**

TAX MAP 16 GRDII 23  
3RD ELECTION DISTRICT

PARCEL 248  
HOWARD COUNTY, MARYLAND

**ROBERT H. VOGEL ENGINEERING, INC.**  
ENGINEERS • SURVEYORS • PLANNERS  
8407 MAIN STREET, ELICOTT CITY, MD 21043  
TEL: 410.461.7666  
FAX: 410.461.8961

DESIGN BY: JAR	1	SHEET	1
DRAWN BY: JAR	1	OF	1
CHECKED BY: JAR			
DATE: MARCH 2008			
SCALE: 1"=100'			
W.O. NO.: 08-21			



**SOILS LEGEND**

SYMBOL	NAME / DESCRIPTION	GROUP
DnA	DELANCO SILT LOAM, 0 TO 3 PERCENT	C
DnB	DELANCO SILT LOAM, 3 TO 8 PERCENT	C
Kn	KINCOR SILT LOAM	C
EzB	ELLSBORO SILT LOAM, 3 TO 8 PERCENT	B
Mg	MADE LAND	B
MgC	MAJOR GRAVELLY LOAM 8 TO 15 PERCENT	B
ChC	CHESTER SILT LOAM 8 TO 15 PERCENT	B

**DEVELOPER**  
THE SANFORD COMPANIES  
8600 SNOEDEN RIVER PARKWAY  
COLUMBIA, MD 21045

**OWNER**  
CAROL CADWAN  
P.O. BOX 245  
COLUMBIA, MD 21045

ROBERT H. VOGEL, PE #16193