

LAYOUT 11/24/03-1:30 INSP 4 _____
 INSP 2 11/26/03-2PM INSP 5 _____
 INSP 3 12/1/03-2pm INSP 6 _____

ISSUE DATE: 9/12/03
 APPROVAL DATE: 12/2/03 FA

P 519571
 A 50225-M

PERMIT
INDEXED

Tax ID # 04366034
ON-SITE SEWAGE DISPOSAL SYSTEM
HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH

Fogles Septic Clean, Inc IS PERMITTED TO INSTALL ALTER

ADDRESS: 580 Obrecht Rd, Sykesville PHONE NUMBER: 410-795-5670

SUBDIVISION: Vineyards @ Cattail Creek LOT NUMBER: 17

ADDRESS: 15330 Leondina Drive PROPERTY OWNER: James P. Ryan, Jr.

SEPTIC TANK CAPACITY (GALLONS): 2000 OUTLET BAFFLE FILTER REQUIRED

PUMP CHAMBER CAPACITY (GALLONS): N/A COMPARTMENTED TANK REQUIRED

NUMBER OF BEDROOMS: 6

SQUARE FEET PER BEDROOM: 180

LINEAR FEET OF TRENCH REQUIRED: 280 263 HOUSE SERVED BY PUBLIC WATER

TRENCHES:	Trench to be 3.0 feet wide. Inlet 2.5 feet below original grade. Bottom maximum depth 4.5 feet below original grade. Effective area begins at 3.5 feet below original grade. 2.0 feet of stone below distribution pipe.
LOCATION:	Install the distribution box per layout inspection.
NOTES:	

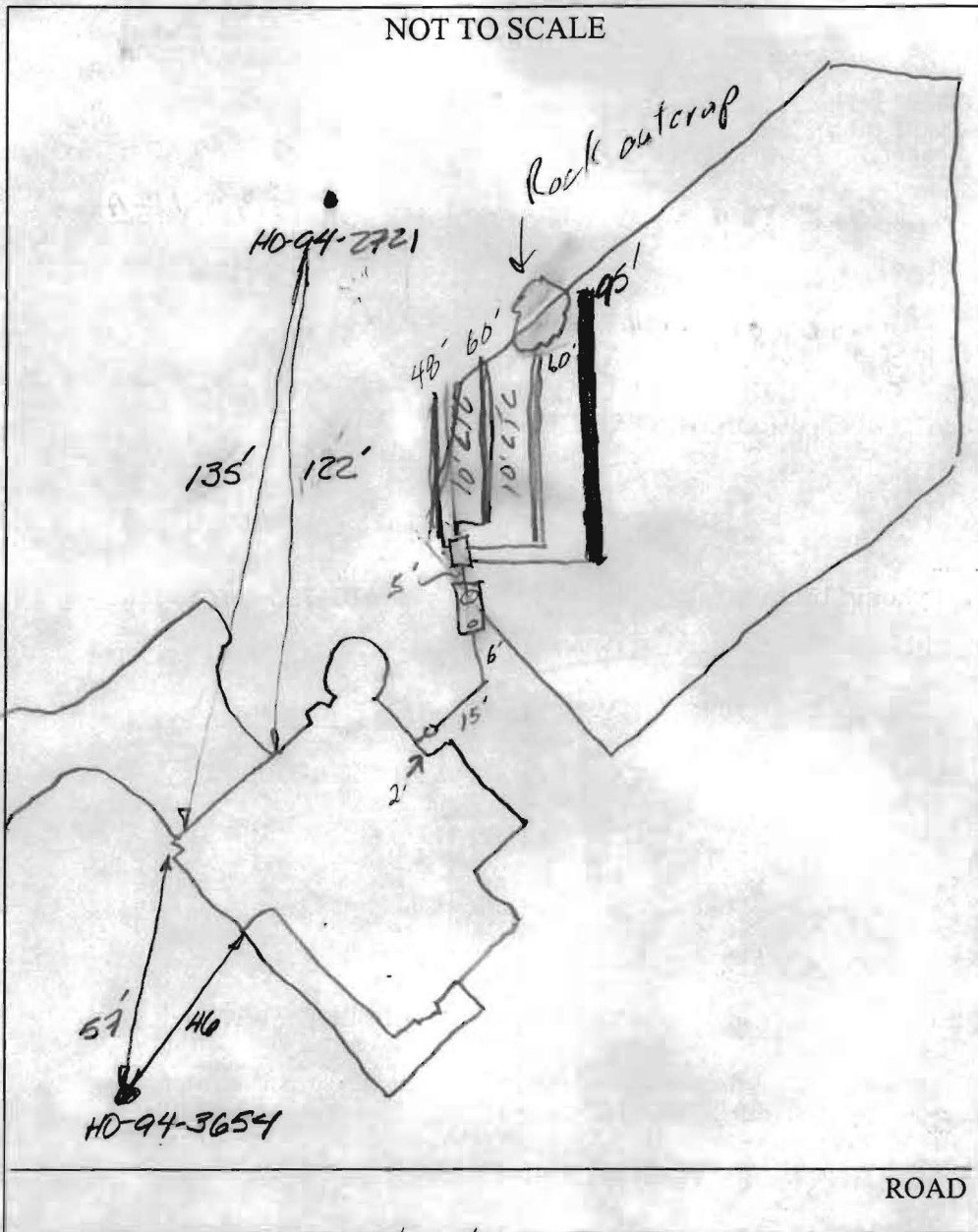
PLANS APPROVED: Mark Rifkin 5/11/03 DATE: 5/9/03

NOTES: PERMIT VOID AFTER 2 YEARS
 CONTRACTOR IS RESPONSIBLE FOR SCHEDULING A PRE-CONSTRUCTION INSPECTION FOR ALL INSTALLATIONS
 WATERTIGHT SEPTIC TANKS REQUIRED
 ALL PARTS OF SEPTIC SYSTEM SHALL BE 100 FEET FROM ANY WATER WELL UNLESS SPECIFICALLY AUTHORIZED
 MANHOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAMBERS UNLESS SPECIFICALLY AUTHORIZED
 CONTRACTOR RESPONSIBLE FOR COMPLIANCE WITH APPLICABLE REGULATIONS, GUIDELINES AND THE TERMS OF THIS PERMIT

NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM PERMITTEE RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT ALL 410-313-2640 FOR INSPECTION OF SEPTIC SYSTEM

519571

NOT TO SCALE



TRENCH/DRAINFIELD DATA		
WIDTH	INLET	BOTTOM
3'	2.5'	4.5'
NUMBER OF TRENCHES		4
TOTAL LENGTH		263
ABSORPTION AREA		769
DISTRIBUTION BOX LEVEL		YES
DISTRIBUTION BOX BAFFLE		YES
DISTRIBUTION BOX PORT		NO

SEPTIC TANK DATA	
SEPTIC TANK 1 LEVEL	<input checked="" type="checkbox"/>
CAPACITY	2000 GAL
SEAM LOC	TOP
TANK LID DEPTH	2'
BAFFLES	<input checked="" type="checkbox"/>
BAFFLE FILTER	—
MANHOLE LOC	Back
6" PORT LOC	Front
WATERTIGHT TEST	—
SEPTIC TANK 2 LEVEL	—
CAPACITY	— GAL
SEAM LOC	—
TANK LID DEPTH	—
BAFFLES	N/A
BAFFLE FILTER	—
MANHOLE LOC	—
6" PORT LOC	—
WATERTIGHT TEST	—

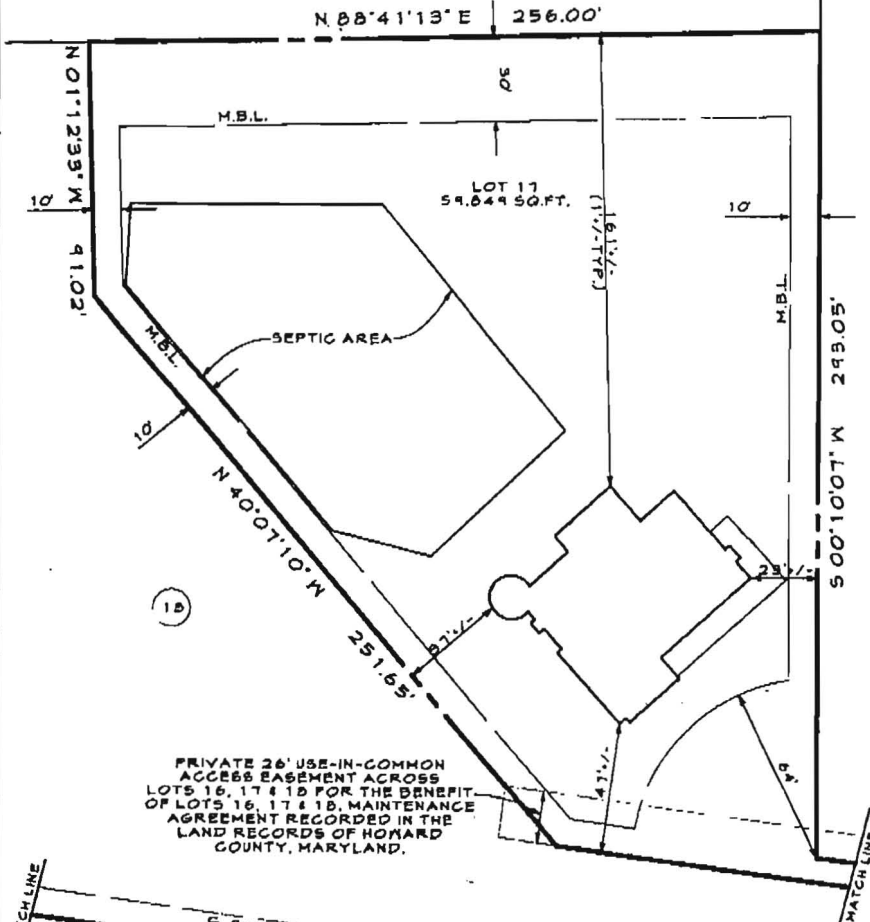
PRE-CONSTRUCTION 11/24/03 - SRA missing upper stakes, tank set is SRA pulled back out. Triangulated to get upper stake locations. House conn changed. Set tank parallel to house & upper SRA line to leave room for future deck (Door right above house conn) Install 45'/60'/80'/95' trenches on contour. Also, contours off & fill in SRA's.

11/26/03 - At end of 2nd & 3rd trenches hit heavy rock. Back 3rd trench up to 60' & fill end w/ soil. Dig on lower side of out crop, soils looked ok. Tank not comp, install baflc filter. (SD) 12/1/03 Baflc filter installed found additional well of tag.

HO-94-2721 (FA) 12/2/03 Call from Kurt of Fish's to say that last trench installed 15' long. (FA)

FINAL INSPECTOR FA DATE OF APPROVAL 12/2/03

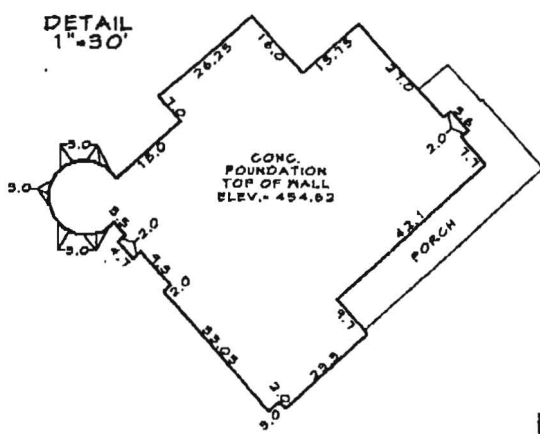
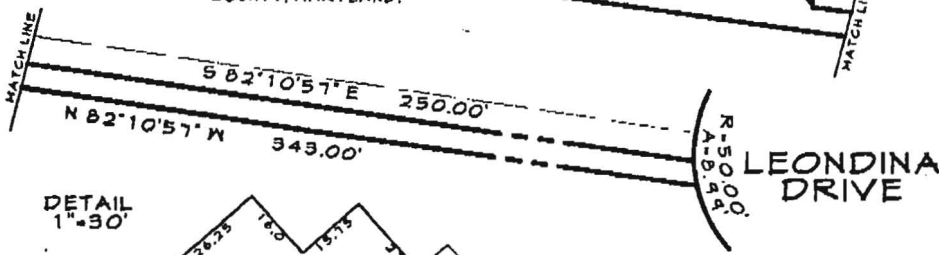
OPEN SPACE
LOT 14
3.966 AC.



18

5/12/03
B well
check
O.K

PRIVATE 26' USE-IN-COMMON
ACCESS EASEMENT ACROSS
LOTS 16, 17 & 18 FOR THE BENEFIT
OF LOTS 16, 17 & 18, MAINTENANCE
AGREEMENT RECORDED IN THE
LAND RECORDS OF HOWARD
COUNTY, MARYLAND.



FOUNDATION CERTIFICATION
LOT 17

VINEYARDS AT
CATTAIL CREEK

4th ELECTION DISTRICT HOWARD COUNTY, MD
PLATBOOK No. 14836

I hereby certify that I have surveyed the property shown hereon for the sole purpose of locating the improvements. This plan is a benefit to the consumer only in so far as it is required by a lender or a title insurance company or its agent in connection with contemplated transfer, financing or refinancing. It is not to be relied upon for the establishment of boundary, easement or right-of-way lines for any reason, such as the location of fences, garages, buildings, or other existing or future improvements.

Dennis E. Heckley Date 6/20/03
Dennis E. Heckley Property Line Surveyor No. 108A4

CLSI

Carroll Land Services
INCORPORATED
Engineers - Surveyors - Land Development Consultants
Landscape Architects - Environmental Specialists
439 East Main Street Westminster, MD 21157-3533
(410) 876-2011 FAX (410) 876-0009

DRAWN BY:	CDD
DESIGN BY:	
REVIEW BY:	DEM
DATE:	6-19-03
SCALE:	1"=50'
JOB NO.:	2001225
SHEET:	1 OF 1

BY THE ENGINEER
 I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL, REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Michael J. Howard
 SIGNATURE OF ENGINEER
 MD # 22444
 DATE 9/26/03

DEVELOPER'S CERTIFICATE
 I CERTIFY THAT ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE DONE ACCORDING TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION OF THIS PROJECT HAS A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY.

 SIGNATURE OF DEVELOPER
 DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

 SIGNATURE OF DISTRICT ENGINEER
 DATE

USDA - NATURAL RESOURCE CONSERVATION SERVICE
 DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

 SIGNATURE OF DISTRICT ENGINEER
 DATE

STANDARDS AND SPECIFICATIONS FOR TOPSOIL CONSTRUCTION AND MATERIAL SPECIFICATIONS

I. Topsoil salvaged from the existing site may be used provided that it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged can be found in the soil survey published by USDA-SCS in cooperation with Maryland Agriculture Experiment Station.

A. Topsoil Specifications - Soil to be used as topsoil must meet the following:

1. Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, silty loam. Other soils may be used if recommended by an agronomist or soil scientist and approved by the Inspector. The topsoil shall consist of a mixture of contrasting textured subsoils and shall contain less than 5% by volume of cinders, stones, brick, coal, slag, gravel, glass, rocks, trash, or other material larger than 1" in diameter.

II. Topsoil must be free of plants or plant parts such as bermuda grass, quack grass, Johnson grass, nutgrass, poison ivy, thistle, or others as specified.

III. Where the subsoil is either high acidic or composed of heavy clay, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.

IV. For sites having disturbed areas under 5 acres:

1. Place topsoil (if required) and apply soil amendments as specified in 200 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.

2. For sites having disturbed areas over 5 acres:

1. On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:

a) pH for topsoil shall be between 5.0 and 7.5. If the tested soil demonstrates a pH of less than 5.0, sufficient lime shall be prescribed to raise the pH to 6.5 or higher.

b) Organic content of topsoil shall be not less than 1.5 percent by weight.

c) Topsoil having soluble salt content greater than 500 parts per million shall not be used.

d) No sod or seed shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phytotoxic materials.

Note: Topsoil substitutes or amendments, as recommended by a qualified agronomist, or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.

II. Place topsoil (if required) and apply soil amendments as specified in 200 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.

V. Topsoil Application

I. When topsoiling, maintain needed erosion and sediment control practices such as diversions, grade stabilization structures, earth dikes, slope silt fence and sediment traps and pans.

II. Grades on the areas to be topsoiled, which have been previously established, shall be maintained, about 4"-8" higher in elevation.

III. Topsoil shall be uniformly distributed in a 4"-8" layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil.

IV. Preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be smoothed out in order to prevent the formation of depressions or water pockets.

V. Topsoil shall not be placed while the topsoil or subsoil is in a frozen or muddy condition when the subsoil is excessively wet or in a condition where otherwise be detrimental to proper grading and seedbed preparation.

VI. Alternative for Permanent Seeding - Instead of applying the full amounts of lime and commercial fertilizer, composted sludge and amendments may be applied as specified below:

I. Composted Sludge Material for use as a soil conditioner for sites having disturbed areas over 5 acres shall be tested to prescribe amendments and for sites having disturbed areas under 5 acres shall conform to the following requirements:

a) Composted sludge shall be supplied by, or originate from, a person or persons that are permitted at the time of acquisition by the Maryland Department of the Environment under COMAR 26.04.06.

b) Composted sludge shall contain at least 1 percent nitrogen, 1.5 percent phosphorus, and 0.2 percent potassium and have a pH of 7.0 to 8.0. If compost does not meet these requirements, the appropriate constituents must be added to meet the requirements prior to use.

c) Composted sludge shall be applied at a rate of 1 ton/1,000 square feet.

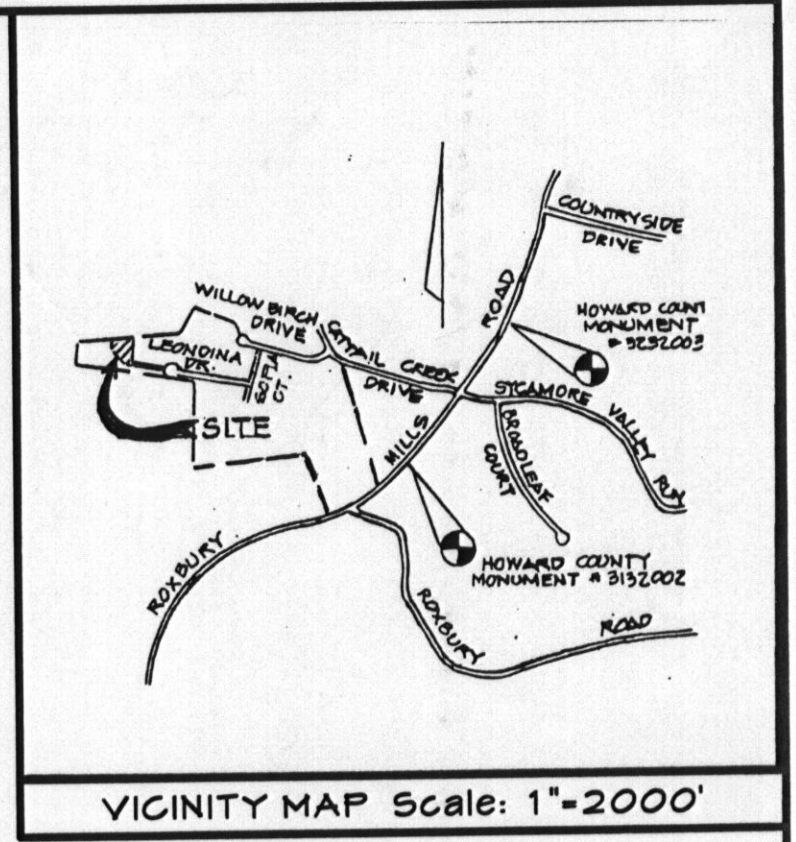
II. Composted sludge shall be amended with a potassium fertilizer applied at the rate of 4 lb/1,000 square feet, and 1/3 the normal lime application rate.

SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT.
2. INSTALL SEDIMENT CONTROLS AS SHOWN ON PLAN. (1 DAY)
3. PERFORMED NECESSARY GRADING AND STABILIZE TH SITE. BUILD HOUSE (6 MOS.)
4. AFTER THE SITE IS STABILIZED AND PERMISSION IS GRANTED FROM THE SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROLS AND STABILIZE ANY REMAINING DISTURBED AREAS. (2 DAYS)

SEPTIC SYSTEM NOTES

1. SEPTIC EASEMENT SUBJECT TO HOWARD COUNTY HEALTH DEPARTMENT NO.
 2. PROPOSED 1500 GALLON SEPTIC TANK 454.00
 3. A. FIRST FLOOR ELEVATION 444.00
 - B. BASEMENT ELEVATION 444.00
 - C. INVERT OF SEPTIC SYSTEM AT HOUSE 444.00
 - D. INVERT AT SEPTIC TANK 444.00
 - E. INVERT OUT AT SEPTIC TANK 444.00
 - F. PROPOSED GRADE OVER SEPTIC TANK 441.00
 - G. INVERT AT DISTRIBUTION BOX 445.00
 - H. EXISTING GROUND OVER DISTRIBUTION BOX 445.00
 - I. LENGTH OF TRENCH TO BE DETERMINED AT TIME OF SEPTIC PERMIT ISSUANCE.
 2. CONTRACTOR / BUILDER TO VERIFY ELEVATIONS IN FIELD BEFORE BEGINNING ANY CONSTRUCTION.
- BUILDER TO VERIFY AVAILABILITY OF BASEMENT SEWER SERVICE PRIOR TO DWELLING STAKEOUT.



Standard Sediment Control Notes

1. A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction (8:15 - 18:35).
2. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the most current MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL and revisions thereto.
3. Following initial soil disturbance or re-disturbance, permanent or temporary stabilization shall be completed within a 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1 to 1:4 days as to all other disturbed or graded areas on the project site.
4. All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12 of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
5. All disturbed areas must be stabilized within the time period specified above in accordance with the 1984 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. For permanent seeding (Sec. 5.1), soil (Sec. 5.4), temporary seeding (Sec. 5.0) and mulching (Sec. 5.2), temporary stabilization with mulch inspection only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
6. All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
7. Site Analysis:
 Total Area of Site 13.74 Acres
 Area Disturbed 0.43 Acres
 Area to be roofed or paved 0.19 Acres
 Area to be vegetatively stabilized 0.30 Acres
 Total Cut 100 Cu Yds.
 Total Fill 100 Cu Yds.
 Offsite waste/borrow area location
8. Any sediment control practice which is disturbed by grading activity for placement of utilities, must be repaired on the same day of disturbance.
9. Additional sediment control must be provided, if deemed necessary by the Howard County Sediment Control Inspector.
10. On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
11. Trenches for the construction of utilities is limited to three pipe lengths or that which shall be back-filled and stabilized by the end of each working, whichever is shorter.

HOWARD SOIL CONSERVATION DISTRICT PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONGIVED VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:

- 1) PREFERRED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (12 LBS./1,000 SQ. FT.) AND 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1,000 SQ. FT.) BEFORE SEEDING. HARROW OR DISK INTO UPPER THREE INCHES OF SOIL. AT THE TIME OF SEEDING, APPLY 400 LBS. PER ACRE 30-0-0 UREA FORM FERTILIZER (4 LBS./1,000 SQ. FT.)
- 2) ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (12 LBS./1,000 SQ. FT.) AND 1,000 LBS. PER ACRE 10-10-10 FERTILIZER (25 LBS./1,000 SQ. FT.) BEFORE SEEDING. HARROW OR DISK INTO UPPER THREE INCHES OF SOIL.

SEEDING - FOR THE PERIODS MARCH 1 THROUGH APRIL 30 AND AUGUST 1 THROUGH OCTOBER 15, SEED WITH 60 LBS. PER ACRE (14 LBS./1,000 SQ. FT.) OF KENTUCKY 31 TALL FESCUE FOR THE PERIOD MAY 1 THROUGH JULY 31, SEED WITH 60 LBS. KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS. PER ACRE (0.5 LBS./1,000 SQ. FT.) OF KEPLER LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THROUGH FEBRUARY 28, PROTECT SITE BY OPTION (1) 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) - USE SOO OPTION (3) - SEED WITH 60 LBS./ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TON/ACRE PELL-ANCHORED STRAW.

MULCHING - APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 40 LBS./1,000 SQ. FT.) OF UNROTTED PINE STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING A MULCH ANCHORING TOOL OR 2 1/2 GAL PER ACRE (6 GAL/1,000 SQ. FT.) OF ENHANCED ASPHALT ON FLAT AREAS ON SLOPES OF 8 FEET OR HIGHER, USE 3/4 GAL PER ACRE (6 GAL/1,000 SQ. FT.) FOR ANCHORING.

MAINTENANCE - INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT TERM VEGETATIVE COVER IS NEEDED.

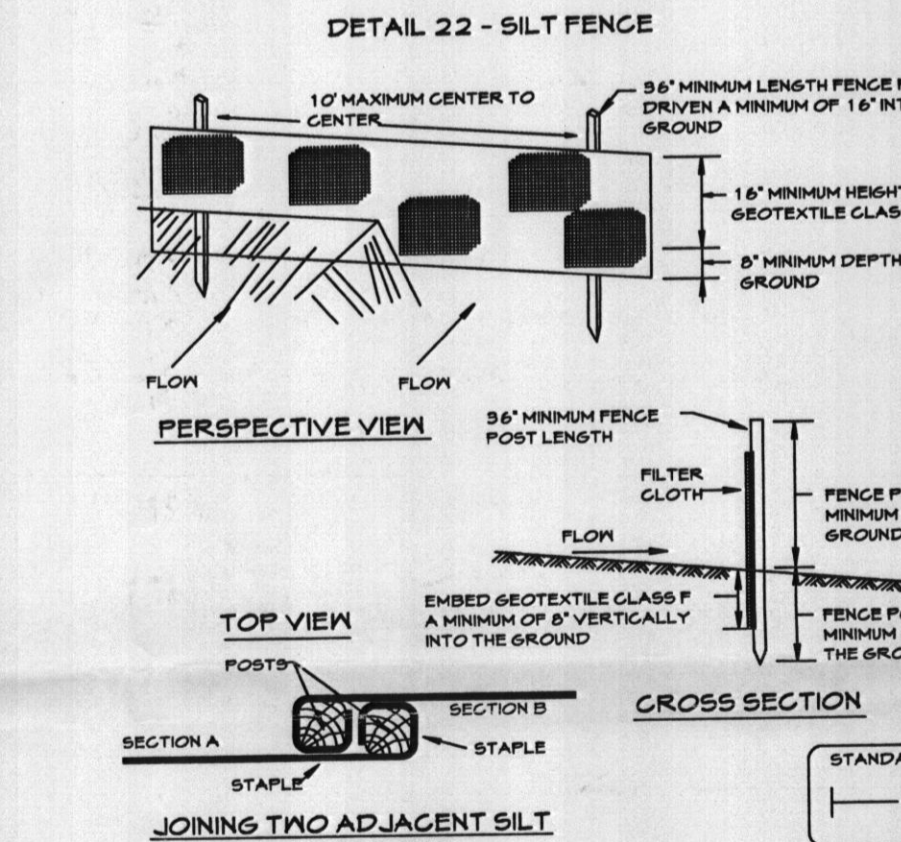
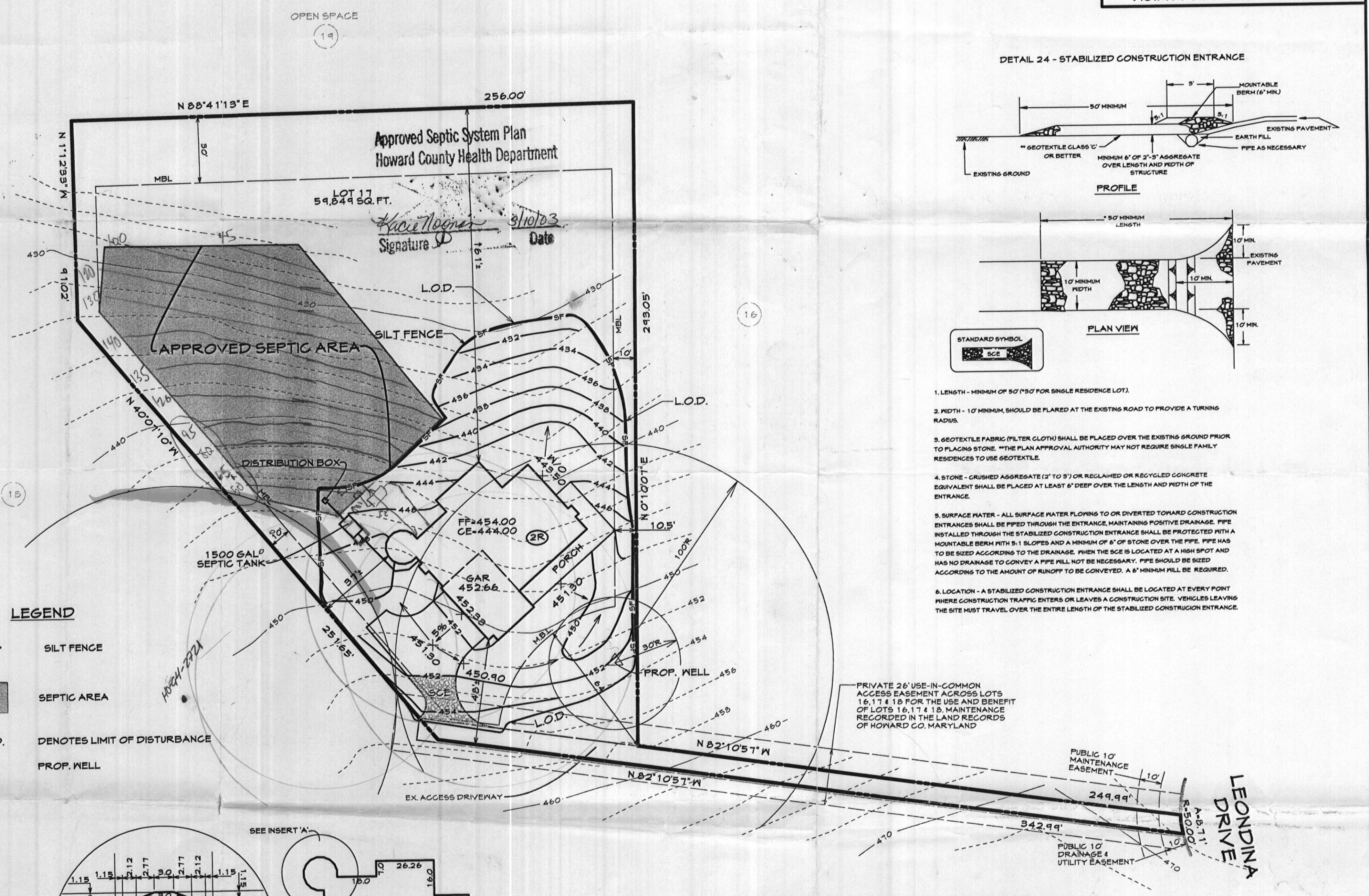
SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1,000 SQ. FT.)

SEEDING - FOR PERIODS MARCH 1 THROUGH APRIL 30 AND AUGUST 15 THROUGH OCTOBER 15, SEED WITH 2-1/2 TONS PER ACRE OF ANNUAL RYE (3 LBS./1,000 SQ. FT.) FOR THE PERIOD OF MAY 1 THROUGH AUGUST 14, SEED WITH 3 LBS. PER ACRE OF PERENNIAL BROMEGRASS (2 LBS./1,000 SQ. FT.) FOR THE PERIOD OF NOVEMBER 16 THROUGH FEBRUARY 28. PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OR USE SOO.

MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 40 LBS./1,000 SQ. FT.) OF UNROTTED PINE STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 2 1/2 GAL PER ACRE (6 GAL/1,000 SQ. FT.) OF ENHANCED ASPHALT ON FLAT AREAS ON SLOPES OF 8 FEET OR HIGHER, USE 3/4 GAL PER ACRE (6 GAL/1,000 SQ. FT.) FOR ANCHORING.

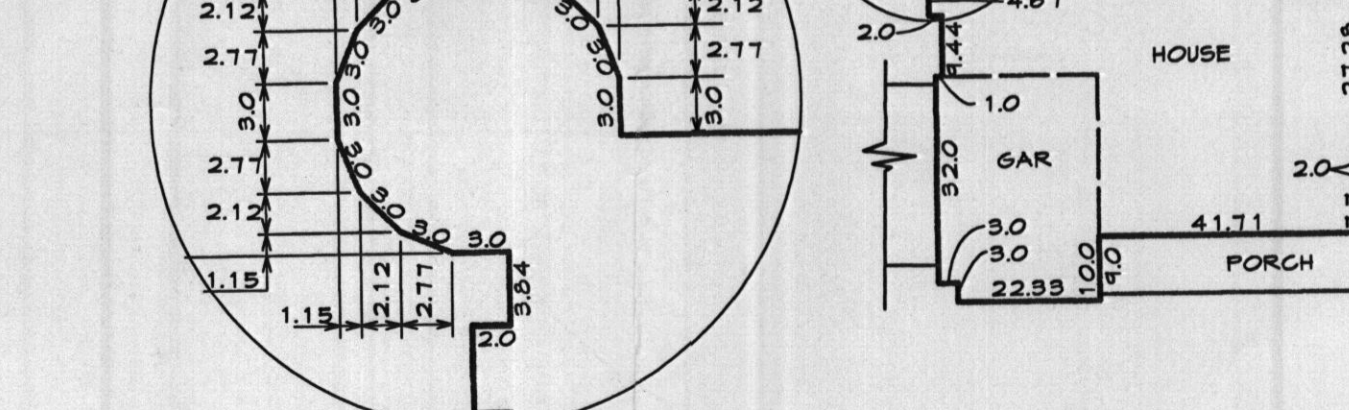
REFER TO THE 1985 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR ADDITIONAL RATES AND METHODS NOT COVERED.



Silt Fence Design Criteria

Slope Steepness	(Maximum) Slope Length	(Maximum) Silt Fence Length
Flatter than 5:1	unlimited	unlimited
5:1 to 10:1	125 feet	1,000 feet
10:1 to 5:1	100 feet	750 feet
5:1 to 3:1	80 feet	500 feet
3:1 to 2:1	40 feet	250 feet
2:1 and steeper	20 feet	125 feet

NOTE: IN AREAS OF LESS THAN 2% SLOPE AND BANY SOILS (BORA GENERAL CLASSIFICATION SYSTEM SOIL CLASS A) HORIZON SLOPE LENGTH AND SILT FENCE LENGTH WILL BE UNLIMITED. IN THESE AREAS A SILT FENCE MAY BE THE ONLY PERIMETER CONTROL REQUIRED.



PLAN TO ACCOMPANY APPLICATION FOR BUILDING PERMIT

VINEYARDS AT CATTAIL CREEK

LOT 17
 4TH ELECTION DISTRICT • HOWARD COUNTY, MARYLAND
 TAX MAP: 21 PARCEL: 225
 PLAT#14836

NOTE: HOUSE CAN ONLY BE GRAVITY SEWERED FROM FIRST FLOOR.

CLSI
 Carroll Land Services
 Incorporated
 Engineers • Surveyors • Land Development Consultants
 Landscape Architects • Environmental Specialists

439 East Main Street Westminster, MD 21157-5539
 (410) 876-2017 FAX (410) 876-0009

Professional Engineer Registration No. 29446
 Date: 2-5-03
 Drawing No: 2001225
 County File No:

County File No. F- -