

20. Open Trench
1:00 1/24/97
SAT 3/11/97 11:00
WPI # or 1
CORRECT

PERMIT

SEWAGE DISPOSAL SYSTEM

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

P 57646
A 49918A

HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
~~XXXXXXXXXX~~ 313-2640

04-315760

DISTRICT 4th

DATE 1/22/97

DATE SYSTEM APPROVED 3-12-97

INSPECTOR KM

INDEXED

Arnold Backhoe & Septic Services IS PERMITTED TO INSTALL ALTER

ADDRESS P.O. Box 15 Woodbine, MD 21797 PHONE 795-7873

SUBDIVISION Royal Hollow LOT 1 ROAD 901 Lady Ann Court

PROPERTY OWNER Douglas & Sharon Brown

ADDRESS _____

SEPTIC TANK CAPACITY 1250 GALLONS

NUMBER OF BEDROOMS 4

240 SQUARE FEET PER BEDROOM

LINEAR FEET OF TRENCH REQUIRED 240

**BLDG. PERMIT SIGNED
AND RETURNED 2-3-97**
*Septic Box 106603
dash*

TRENCHES - Trench to be 2 feet wide. Inlet 3 feet below original grade. Bottom maximum depth 7 feet below original grade. Effective area begins at 3 feet below original grade. 4 feet of stone below distribution pipe.

LOCATION - Place the distribution box 50 feet from the left (100') lot line and 100 feet from the front lot line as viewed from Lady Ann Court. Install trenches on contour toward right lot line.

NOTES - No trench to exceed 100 feet in length. Provide 6" - 8" diameter cleanout and cap to grade or above on septic tank. OK 1/15/97 DKS

PLANS APPROVED BY Ronald J. Pinkley/Amy McMillen DATE 07/07/95

COVER NO WORK UNTIL INSPECTED AND APPROVED

NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM

NOTE: CLEANOUT REQUIRED EVERY 70 FEET OF SEWER LINE AND/OR AT 90° SWEEPS IN LINES FROM HOUSE TO DRAIN FIELDS, 90° ELBOWS NOT ACCEPTABLE.

NOTE: ALL PARTS OF SEPTIC SYSTEMS (I.E. TANK, DISTRIBUTION BOX TRENCHES) TO BE 100 FEET FROM WELL (UNLESS OTHERWISE SPECIFICALLY AUTHORIZED)

NOTE: IF DEEP TRENCH(ES) ARE USED CALL FOR INSPECTION BEFORE AND AFTER PLACING GRAVEL IN TRENCH(ES)

NOTE: NO DRY WELL SHALL EXCEED 15 FOOT IN DIAMETER NO ABSORPTION TRENCH TO EXCEED 100 FEET IN LENGTH

NOTE: ALL PIPE FROM HOUSE TO SEPTIC TANK MUST BE CAST IRON OR SCHEDULE 35/40 PVC OR ABS

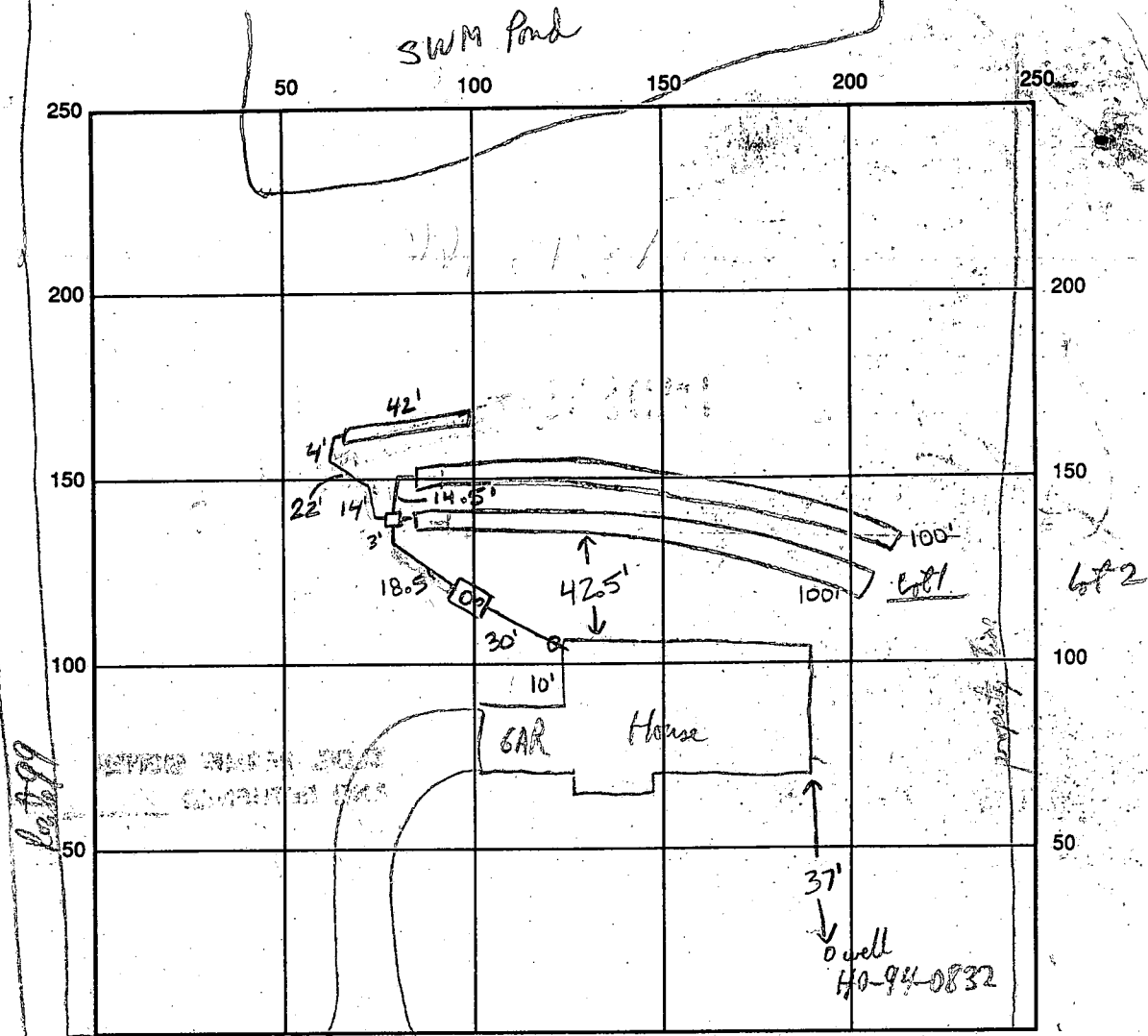
PERMIT VOID AFTER TWO YEARS

NOTE: INSTALL STAND PIPE ON SEPTIC TANK AND DRY WELL STAND PIPES MUST BE 6 INCHES IN DIAMETER CAST IRON. CONCRETE OR TERRA COTTA OR PVA OR ABS ACCEPTED. IF TOP OF SEPTIC TANK IS DEEPER THAN 3 FEET. MANHOLE TO GRADE REQUIRED.

NOTE: DISTRIBUTION BOXES MUST HAVE BAFFLES

***INSTALLER IS RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT**

A 49918A



SEPTIC TANK LEVEL OK, manhole on tank

CLEANOUTS 1 at house, 1 on tank

DISTRIBUTION BOX LEVEL OK

DRAIN FIELD/TITLE DEPTH 7 FT. TRENCH WIDTH 2 FT. INLET DEPTH 3 FT.

EFFECTIVE GRAVEL DEPTH 4 FT. TOTAL LENGTH $\frac{2 \times 100}{1 \times 42}$ FT. $\rightarrow 242$

NUMBER OF TRENCHES 3 ONE SIDEWALL/BOTTOM AREA 968 SQ. FT.

DRYWALL INSIDE DIAMETER FT. EFFECTIVE DEPTH BELOW INLET FT.

ABSORBENT AREA SQ. FT.

REMARKS: Invert of septic line exits below Basement Footers (chart elevation below that shown on ground BP)

3-11-97 (12:30pm) house connection made, ok to cover first two trenches leave ends open KM

3-12-97 ok to cover all work, make sure cleanout on tank is above grade KM

DATE SYSTEM APPROVED 3-12-97

INSPECTOR Kimberly Maisto

APPLICATION

PERCOLATION TESTING

A 49918A

P _____

HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
3525-H ELLICOTT MILLS DRIVE/ELLICOTT CITY, MARYLAND 21043
TELEPHONE: 313-2640

DISTRICT _____

DATE 3/10/94

TO: THE COUNTY HEALTH OFFICER
ELLICOTT CITY, MARYLAND

I HEREBY APPLY FOR THE NECESSARY TEST PRIOR TO APPLICATION FOR PERMIT TO CONSTRUCT (OR RECONSTRUCT) A SEWAGE DISPOSAL SYSTEM.

PROPERTY OWNER MISSLER FARM JOINT VENTURE HOLDING INC. Douglas & Sharon Brown

ADDRESS LEE PLAZA, SUITE 200 8601 GA. AVE. SILVER SPRING, MD PHONE (301) 585-7000

AGENT OR PROSPECTIVE BUYER _____

ADDRESS _____ PHONE _____

PROPERTY LOCATION:

SUBDIVISION ROYAL HOLLOW LOT NO. 1

ROAD AND DESCRIPTION OLD FREDERICK RD. & WOODBINE RD.

(901 Lady Ann Court)

TAX MAP 7 PARCEL # 84

SIZE OF LOT 1 AC. ± TYPE BLDG. _____
(SINGLE FAMILY DWELLING OR COMMERCIAL)

BLDG. PERMIT SIGNED
AND RETURNED 11/1/93
Serial # BM/02800
SFD - 4/1/94

THE SYSTEM INSTALLED UNDER THIS APPLICATION IS ACCEPTABLE ONLY UNTIL PUBLIC FACILITIES BECOME AVAILABLE. I FULLY UNDERSTAND THE FEE CONNECTED WITH THE FILING OF THIS PERC TEST APPLICATION IS NON-REFUNDABLE UNDER ANY CIRCUMSTANCES. I ALSO AGREE TO COMPLY WITH ALL M.O.S.H.A. REQUIREMENTS IN TESTING THIS LOT.

Douglas FOR VMA
(SIGNATURE OF APPLICANT)

APPROVED BY _____ FOR _____ DATE _____

DISAPPROVED BY _____ FOR _____ DATE _____

HOLD PENDING FURTHER TESTS _____

REASONS FOR REJECTION OR HOLDING _____

PERCOLATION TEST PLAT/PRELIMINARY PLAT - TITLE OR I.D. # _____ DATE _____

SITE DEVELOPMENT PLAN/FINAL PLAT - TITLE OR I.D. # _____ DATE _____

THIS IS NOT A PERMIT

Lot/ 49918A

Note all Times are Eastern Standard Time (records shall be at the faster than shown)

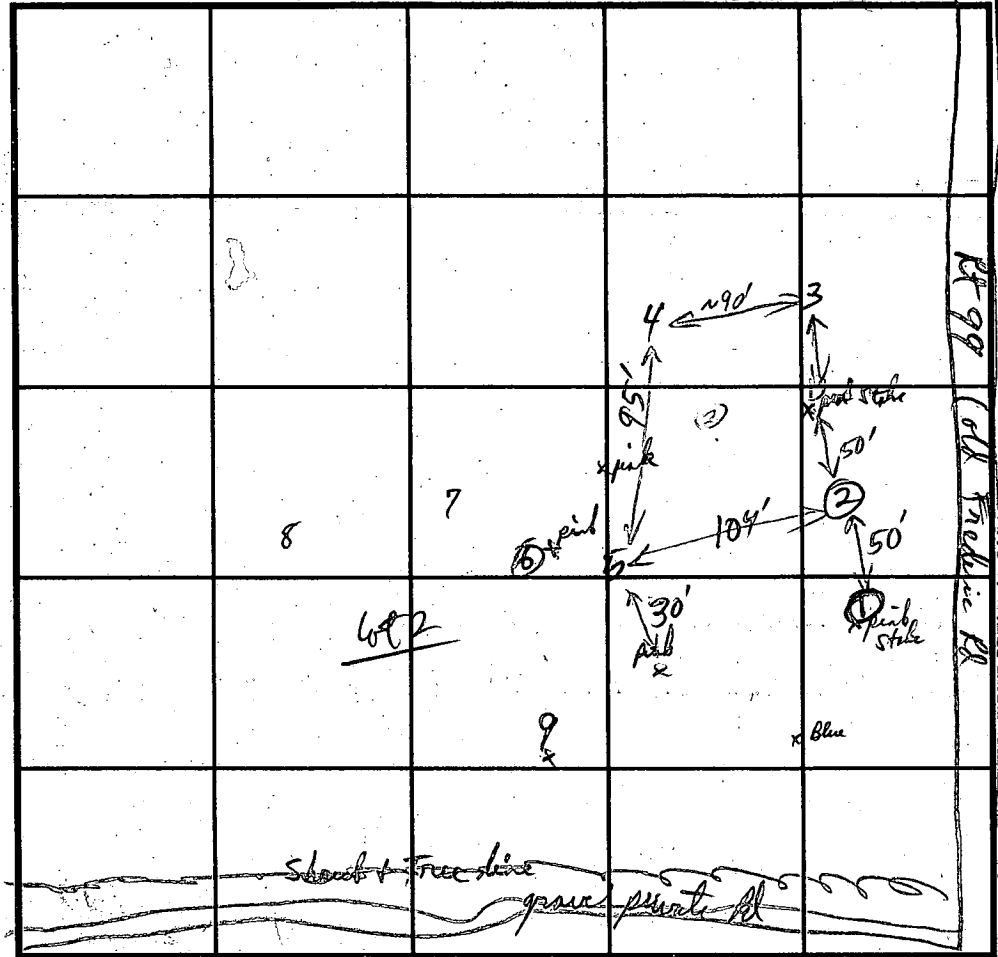
COUNTY #

SOIL PROFILE

0' 2
 Yel Brn
 SiCL
 2'
 Red Brn
 -str Brn
 SiCL
 nDI
 5-6'
 gravel boundary
 dark-pink
 str Brn
 -yel Brn
 mixed
 LL-CL
 -SiCL
 sgrubble
 11'
 grey SL
 Mica Schist
 12'

SOIL PROFILE

0' 5
 8'
 Dk Brn loam
 chL-
 chSL
 Red Brn
 Ls Str
 mufr
 20-40
 channers
 v. Kricom
 12'



INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE.

3
 Str Brn
 -yel Red
 CL
 3-4'
 gravel boundary
 yel Red
 Loam
 12'

4
 1'
 3
 yel Brn
 SiCL
 Red SiL-L
 Red-Red Brn
 Loam
 12'
 Red Brn Mix
 SiL
 30-45%
 hard mica
 channers
 in profile
 + mica

DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME
			START	STOP	START	STOP	
4-4-94	①		Dug & Closed Rocks 9' (Not seen)				Fail
	②	3 1/2	9:34:20	9:57:00	9:57:00	10:12:00	19 min
		8 1/2	9:33:00	9:57:00	9:57:00	10:09:50	18 min
		V12					
	③	3 1/2	9:47:00	Mixed		10:12:00	13 min
		V12 8 1/2	9:44:30	9:49:30	9:49:30	10:07:00	17 min
	④	3 1/2	10:05:30	10:11:00	10:11:00	10:15:00	5 min
		V12 8'	10:05:00	10:14:00	10:14:00	10:30:00	16 min
				0.5' long depth			
	⑤	3 1/2	10:18:30	10:24:00	10:24:00	10:27:00	2 min
		V12 8'	10:19:00	10:31:00	10:31:00	10:56:00	25 min

14
 8/115
 35
 32
 3

REMARKS _____
 TYPE OF SOIL Chesapeake
 TESTED BY R. P. ... ALSO PRESENT Dwight & Bud ...
 TRENCH DESIGN DATA: AVERAGE PERCOLATION TIME 15 min TRENCH WIDTH 2
 INLET DEPTH 3 MAXIMUM BOTTOM DEPTH 7 SQ. FT./BEDROOM 240

1/31/97 Royal Hollow Lot 1

Obs

Specs were written assuming trenches go to Highest part of Septic Field (only 20ft from house as built, outlet pipe at house walk is under Basement Footer (5'+ deeper than approved Plan, i.e. BP, shows) Need a pump system for High Placement.

If you allow low placement - require the P.C. installation (as usual) and because of Water Table concerns (unplanned nearness and some deviation on S.W. Pond (also see "grey" soils in original Test notes)) I recommend shallow Trench Design (i.e. Bottom @ 5' rather than 7', 2' top fill, 3' wide Trenches and 320 Lin Ft (vs 240 L.F. shown) of Septic Trench. Bottom line - either option will cost Builder More \$.

RW 1/31/97

C1 7933 SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

FILL IN THIS FORM COMPLETELY PLEASE PRINT OR TYPE

COUNTY NUMBER A49918A

ST/CO USE ONLY DATE Received 09/16/96

DATE WELL COMPLETED 07/12/96

Depth of Well 22 200 26 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" 110-94-0232

OWNER Lee Development Group STREET OR RFD last name: Lee, first name: Development TOWN Cremon SUBDIVISION SECTION LOT

WELL LOG Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

Table with columns: DESCRIPTION (Use additional sheets if needed), FEET (FROM, TO), check if water bearing

GROUTING RECORD WELL HAS BEEN GROUTED (Y) (N)

TYPE OF GROUTING MATERIAL (Circle one) CEMENT (CM) BENTONITE CLAY (BC) NO. OF BAGS NO. OF POUNDS GALLONS OF WATER DEPTH OF GROUT SEAL

CASING RECORD casing types insert appropriate code below: ST (STEEL), CO (CONCRETE), PL (PLASTIC), OT (OTHER)

MAIN CASING TYPE Nominal diameter top (main) casing (nearest inch)! Total depth of main casing (nearest foot)

OTHER CASING (if used) diameter inch depth (feet) from to

SCREEN RECORD screen type or open hole insert appropriate code below: ST (STEEL), BR (BRASS BRONZE), PL (PLASTIC), HO (OPEN HOLE), OT (OTHER)

NUMBER OF UNSUCCESSFUL WELLS:

WELL HYDROFRACTURED (Y) (N)

CIRCLE APPROPRIATE LETTER A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED E ELECTRIC LOG OBTAINED P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT...

TYPE: MWD/MSD/MGD DRILLERS LIC. NO.

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO.

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

Table for screen depth: DEPTH (nearest ft.) with columns for depth intervals (8-9, 11-15, 17-21, 23-24, 26-30, 32-36, 38-39, 41-45, 47-51) and rows for screen diameter (1, 2, 3) and slot size.

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER) T (E.R.O.S.) W Q

TELESCOPE CASING LOG INDICATOR OTHER DATA

C 3 PUMPING TEST

HOURS PUMPED (nearest hour) 3

PUMPING RATE (gal. per min.) 120

METHOD USED TO MEASURE PUMPING RATE WATER LEVEL (distance from land surface)

BEFORE PUMPING 39 ft.

WHEN PUMPING 130 ft.

TYPE OF PUMP USED (for test) A air, P piston, T turbine, C centrifugal, R rotary, O other, J jet, S submersible

PUMP INSTALLED DRILLER WILL INSTALL PUMP (YES) (NO)

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29.

CAPACITY: GALLONS PER MINUTE (to nearest gallon)

PUMP HORSE POWER

PUMP COLUMN LENGTH (nearest ft.)

CASING HEIGHT (circle appropriate box and enter casing height) + above, - below, LAND SURFACE (nearest foot)

LOCATION OF WELL ON LOT SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND /OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)

3/12/97

WPI, ok to cover well line

P.A. 4.5' below grade

Casing 2.5' above grade

2 piece watertight cap will be installed
KM

HOWARD COUNTY HEALTH DEPARTMENT
Bureau of Environmental Health
3525-H Ellicott Mills Drive
Ellicott City, MD 21043
461-9933

APPLICATION FOR PITLESS ADAPTER, WELL PUMP AND PRESSURE TANK INSTALLATION

New Installation
Replacement

Receipt # _____
Date 1-28-97

Name of Installer CAVANAUGH Plumbing Inc.

Telephone (301) 735-1715

License Number MD 23765

Certified Well Pump Installer _____ Well Driller _____ Registered Plumber

Name of Property Owner Douglas Brown

Telephone (410) 319-5639

Subdivision ROYAL Hollow Lot # 1 Well Tag # HD-94-0832

Site Address 901 LADY ANNE CT. WOODBINE

Pump

- 1. Type
 - a. Deep well jet _____
 - b. Shallow well jet _____
 - c. Submersible
- 2. Make JACUZZI
- 3. Model # _____
- 4. Capacity 5 GPM

Motor

- 1. Horsepower 1/2
- 2. RPM _____
- 3. Voltage _____
 - a. 110 _____
 - b. 220

Pitless Adapter

- 1. Make HARVARD
- 2. Model # PT 800
- 3. Depth 4 Ft.

- 5. Pump exceeds well capacity Yes _____ No
- 6. If Yes, is low pressure cutoff switch installed? Yes _____ No _____
- 7. What methods are used to protect the pump and electrical wiring from vibrations? Torque arrestors Cable guards Other TAPE

Tank

- 1. Capacity 10
- 2. Pressure relief valve? yes

Piping

- 1. Type YARDEY
- 2. Size 1"
- 3. NSF and/or BOCA Code approved
- 4. Depth of supply line 4 Ft.

Well data

- 1. Depth 200 ft.
- 2. Yield 12 GPM
- 3. Static water level 70 ft.
- 4. Will water supply be disinfected by installer? yes

I understand that it is my responsibility to notify the Howard County Health Department when the installation is ready for inspection (otherwise this permit is null and void).

All information given above is true to the best of my knowledge.

Signature of Applicant: Kevin Cough

Date: 1/28/97

Note: A sticker indicating approval/status of the installation will be placed on the well casing at the time of the inspection.

MARYLAND FOR PURPOSE OF A PUBLIC ROAD - 31.402 ± OR 0.1227 AC ±

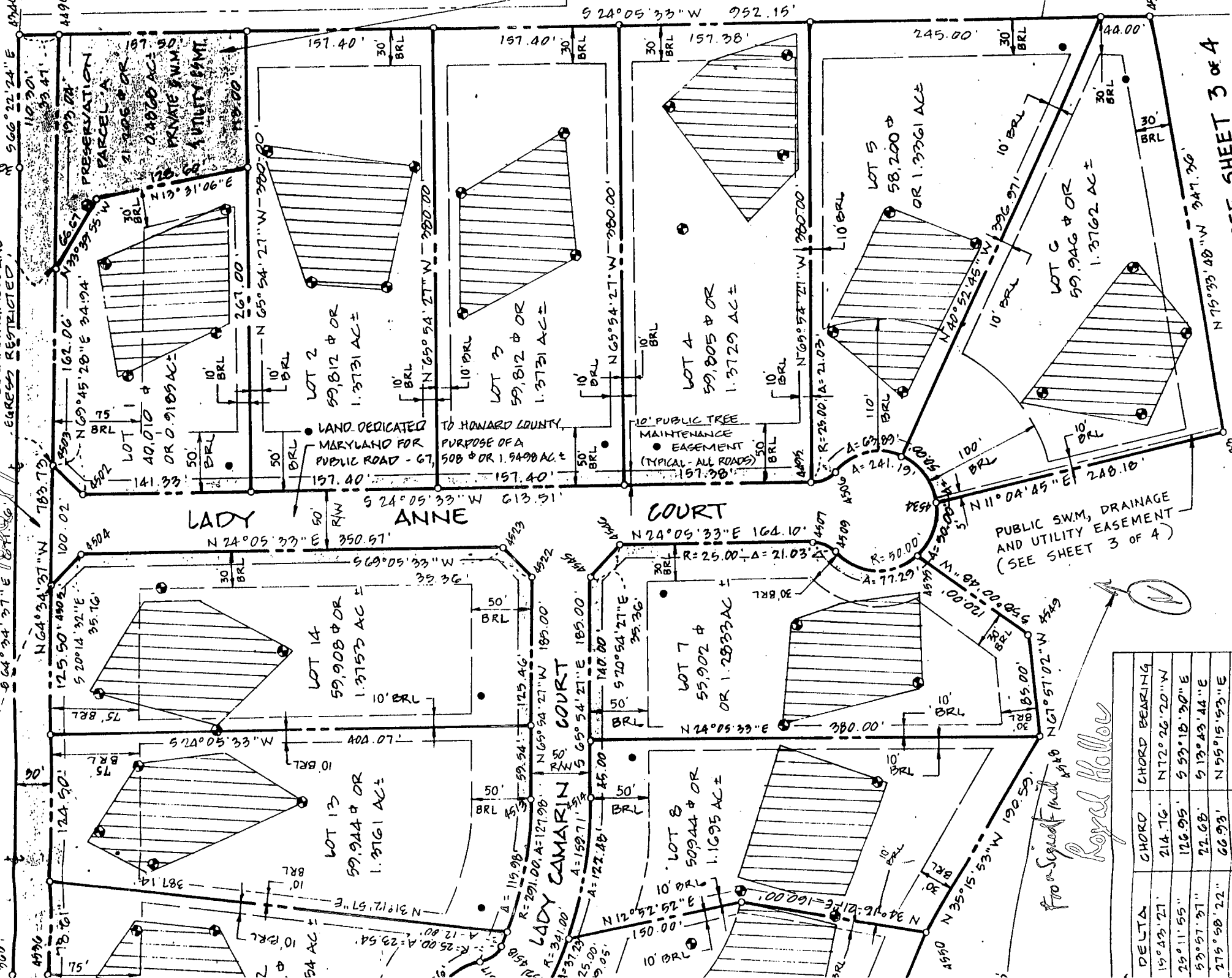
VEHICULAR INGRESS AND EGRESS RESTRICTED

60' R/W

VEHICULAR INGRESS RESTRICTED

L. 701, P. 067

S 24°05'33" W 752.15'



PUBLIC SWM, DRAINAGE AND UTILITY EASEMENT (SEE SHEET 3 OF 4)

From Squared Inlet #480
Royal Hollow

DELTA	CHORD	CHORD BEARING
15°43'27"	214.76'	N 72°26'20" W
25°11'55"	126.95'	S 53°18'30" E
53°57'37"	22.68'	S 13°43'44" E
275°58'22"	66.93'	N 55°15'53" E
35°30'54"	18.59'	N 60°53'51" W

SEE SHEET 3 OF 4

Date 2/28/97

Number of pages including cover sheet 2

TO: HAL MARKER
ROYAL HOLLOW
LOT 1
Phone
Fax Phone 901 776-0130

FROM:
LDE Inc
9250 Rumsey Road
Suite 106
Columbia, MD 21045
Phone 410-715-1070
Fax Phone 410-715-9540

cc: ARNOLD SEPTIC / KENNY 410 795 0287
HO. CO. HEALTH DEPT. / RON PINKLEY 313 2648
REMARKS: Urgent For your review Reply ASAP Please Comment

HAL I'VE REVIEWED THE SEPTIC SITUATION @ ROYAL HOLLOW
IT APPEARS THAT SHIFTING THE BOX DOWNHILL TO PICK UP
10"-12" OF FALL WILL STILL PROVIDE GRAVITY SERVICE.
THERE ALSO LOOKS LIKE OVER TWO FUTURE SYSTEMS COULD BE
INSTALLED WITHIN THE AVAILABLE SEPTIC EASEMENT AREA.
PLEASE REVIEW AND GET BACK TO ME.

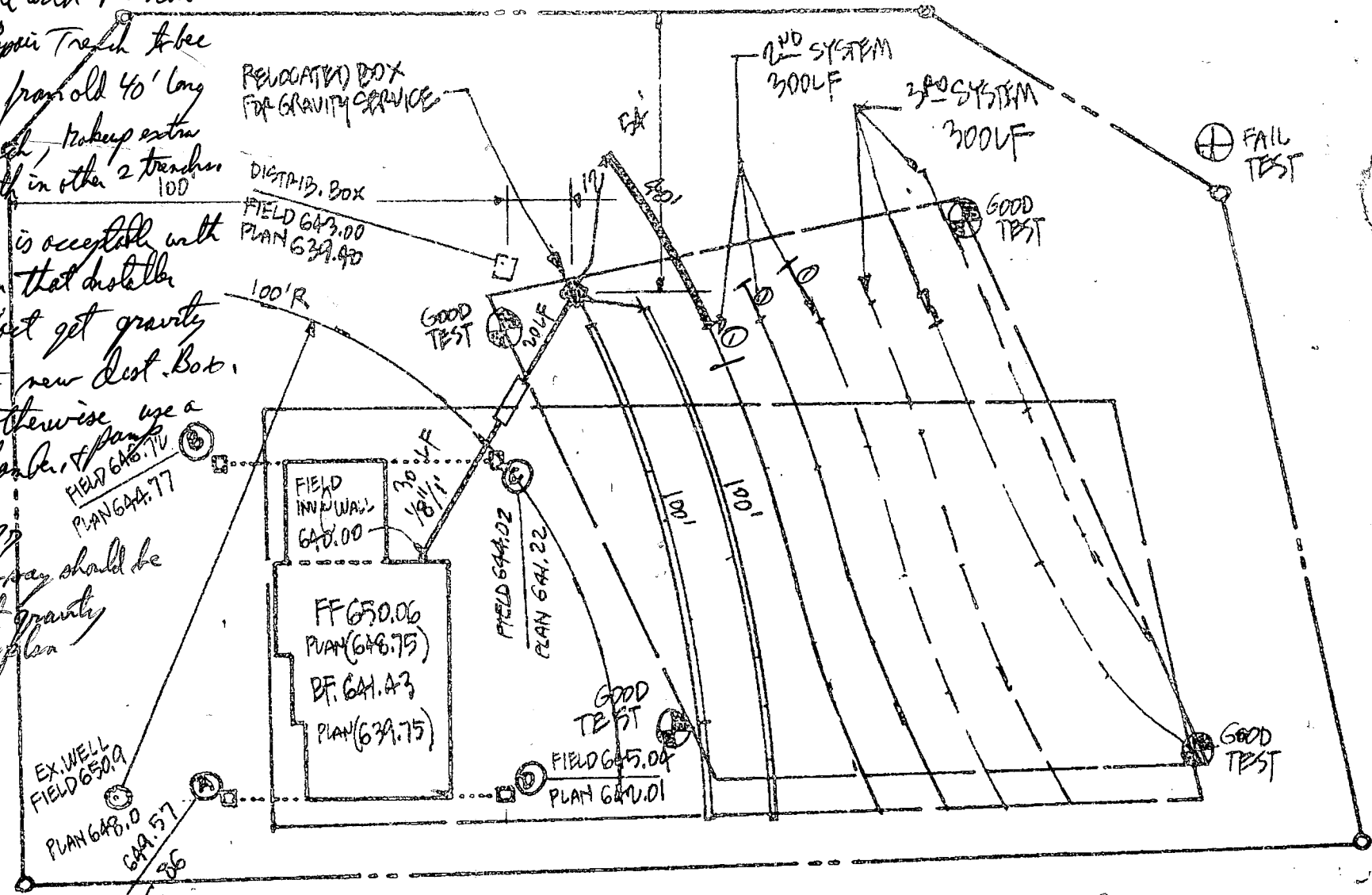
BRUCE BURTON

11/28/97
 - relayed by T.C. to Bruce Banta
 Revised plan appears
 acceptable with provision

INV. @ WALL 640.00
 TANK IN 639.69
 OUT 639.39
 BOX IN 639.18
 TOP 640.18

① 1st Repair Trench to be
 10' ft from old 40' long
 trench, pickup extra
 length in other 2 trenches
 100'

② Plan is acceptable with
 provision that installer
 can inspect get gravity
 flow to new Dist. Box.
 otherwise use a
 pump chamber & pump
 off 3/3/97
 Arnold's say should be
 able to get gravity
 per New plan



INITIAL SYSTEM
 INSTALL 2-100' TRENCHES
 AND 1-40' TRENCH

2ND SYSTEM & 3RD SYSTEM
 ENOUGH AREA
 EXISTS TO INSTALL
 300 LF. TRENCH

REVISED
 ROYAL HOLLOW
 LOT #1
 2/28/97

**HOWARD SOIL CONSERVATION DISTRICT
PERMANENT SEEDING NOTES**

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived 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:

- PREFERRED** -- Apply 20 tons per acre dolomitic limestone (92 lbs/1000sq ft) and 500 lbs per acre 10-10-10 fertilizer (14 lbs/1000sq ft) before seeding. Harrow or disk into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 ureaform fertilizer (9 lbs/1000sq ft).
- ACCEPTABLE** -- Apply 20 tons per acre dolomitic limestone (92 lbs/1000sq ft) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000sq ft) before seeding. Harrow or disk into upper three inches of soil.

SEEDING -- For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs per acre (1.4 lbs/1000sq ft) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs per acre (1.4 lbs/1000sq ft) of Kentucky 31 Tall Fescue and 2 lbs per acre (0.5 lbs/1000sq ft) of weeping lovegrass. During the period of October 16 thru February 28, practice 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 sod. Option (3) -- Seed with 80 lbs per acre Kentucky 31 Tall Fescue and mulch 2 tons / acre well anchored straw.

MULCHING -- Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000sq ft) of unrotted wood free straw immediately after seeding. Anchor mulch immediately after application using 218 gallons per acre (5 gal/1000sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000sq ft) for anchoring.

MAINTENANCE -- Inspect all seeding areas and make needed repairs, replacements and reseeding.

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/1000sq ft).

SEEDING -- For periods March 1 thru April 30, and from August 15 thru October 15 seed with 2-12 bushels per acre of annual ryegrass (3.2 lbs/1000sq ft). For the period May 1 thru August 14, seed with 3 lbs per acre of weeping lovegrass (0.7 lbs/1000sq ft). For the period November 16 thru February 28, practice site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

MULCHING -- Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000sq ft) of unrotted wood free straw immediately after seeding. Anchor mulch immediately after application using 218 gallons per acre (5 gal/1000sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000sq ft) for anchoring.

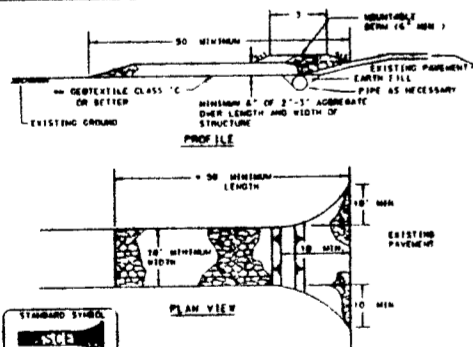
Refer to the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for additional rates and methods not covered.

**HOWARD SOIL CONSERVATION DISTRICT
STANDARD SEDIMENT CONTROL NOTES**

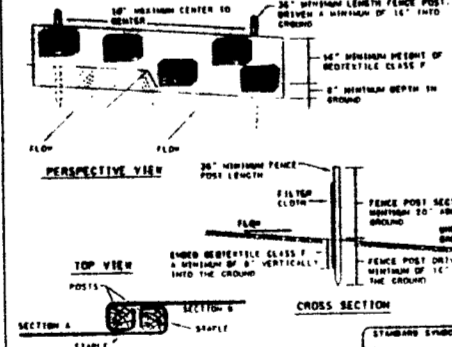
- A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction. (13-225)
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in accordance with the most current MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and revisions thereto.
- Following initial site disturbance or re-disturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all permanent sediment control structures, perimeter ditches, and all areas greater than 300 sq. ft. b) 14 days as to all other disturbed or graded areas on the project site.
- All sediment traps/ditches shall be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 7, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- All disturbed areas shall be stabilized within the time period specified above in accordance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL (Section G) for permanent seeding, sod, temporary seeding, and mulching. Temporary stabilization with mulch shall only be done when recommended seeding rates do not allow for proper germination and establishment of grasses.
- All sediment control structures are to remain in place and are to be maintained in operating condition until permission for their removal has been obtained from the Howard County Sediment Control Division.
- Site Analysis:

Total Area of Site	0.9185 Acres
Area Disturbed	0.50 Acres
Area to be vegetated or paved	0.07 Acres
Additional sediment stabilized	0.33 Acres
Total CUL	1.04 CUL Yds.
Total FILL	1.65 CUL Yds.
- Any sediment control practice which is disturbed by ground activity for placement of utilities must be repaired on the same day of disturbance.
- Additional sediment control must be provided, if deemed necessary by the Howard County Sediment Control Inspector.
- On 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 approvals may not be authorized until this initial approval by the inspection agency is made.
- Trenches for the construction of utilities is limited to three pipe lengths or that which can be back filled and stabilized within one working day, whichever is shorter.

DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE



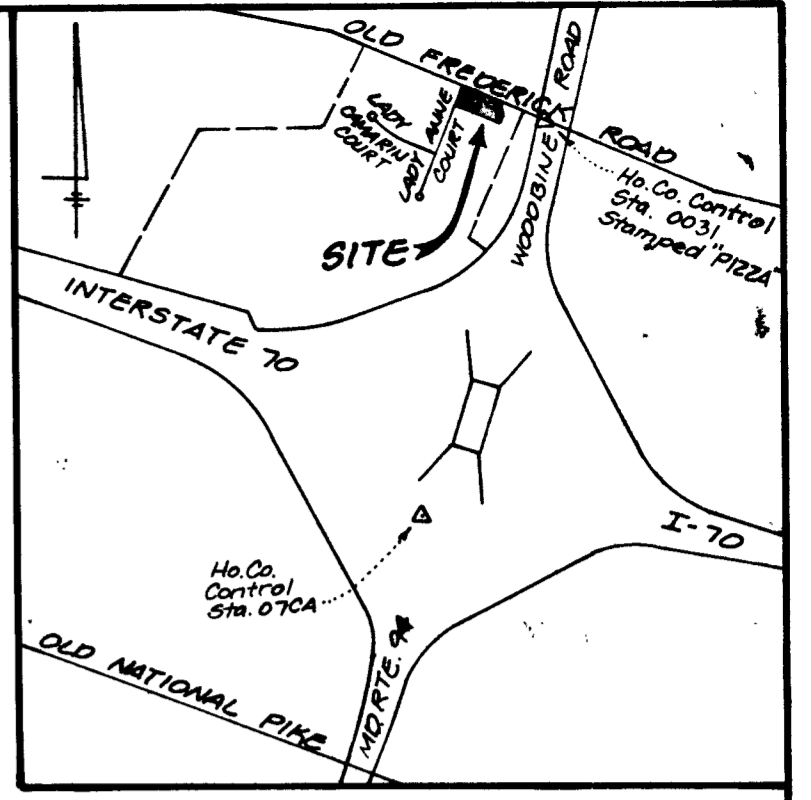
DETAIL 25 - SILT FENCE



SEPTIC SYSTEM DESIGN:

- 4 Bedrooms
- Inv. @ Wall: 637.25
- 1250 Gallon Septic Tank (Provide Manhole To Grade) Ex. Grade @ Tank: 641.20 Fin. Grade @ Tank: 642.00 Inv. In: 636.90 Inv. Out: 636.60
- Distribution Box: Ex. Grade @ Box: 639.40 Fin. Grade @ Box: 639.40 Inv. In: 636.40 (Provide 3 Min. Outlets)
- Trench Design: 240 SF/18R 4BR X 240 SF = 960 SF Provide (3) 80 Lf Trenches

	(A)	(B)	(C)
Ex. ground @ trench:	639.30	638.70	637.60
Fin. grade:	639.30	638.70	637.60
Invert:	636.30	635.70	634.60
Bottom El:	632.30	631.70	630.60
Trench Width:	2'-0"	2'-0"	2'-0"
Trench Length:	80'	80'	80'



VICINITY MAP

Scale: 1" = 1200'

SEE STANDARD AND SPECIFICATIONS

FOR TOPSOIL DELIVERY

Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

DESIGN

To provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.

Conditions Where Positive Analysis:

- This practice is limited to areas having 2:1 or flatter slopes where:
 - The texture of the exposed subsoil material is not adequate to produce vegetative growth.
 - The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish containing supplies of moisture and plant nutrients.
 - The original soil to be vegetated contains material toxic to plant growth.
 - The soil is so erodible that treatment with limestone is not feasible.
- For the purpose of these Standards and Specifications, areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. Areas having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plan.

Construction and Material Specifications

- Topsoil imported from the existing area may be used provided that it meets the standards set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile sections in the Soil Survey published by USDA-SCS in cooperation with Maryland Agricultural Experiment Station.
- Topsoil Specifications: Soil to be used as topsoil must meet the following:
 - Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textured materials and shall contain less than 5% volume of cinders, stones, slag, coarse fragments, gravel, sticky clays, or other materials larger than 1/2" in diameter.
 - Topsoil must be free of plants or plant parts such as twigs, grass, weeds, roots, tubers, and other debris.
 - Where the subsoil is either highly erodible or composed of heavy clays, general limestone shall be spread at the rate of 4.0 pounds (200.0 pounds per 1000 square feet) prior to the placement of topsoil. Limestone shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.
- Five sites having disturbed areas under 3 acres:
 - Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section 1: Vegetative Stabilization Methods and Materials.
- Five sites having disturbed areas over 3 acres:
 - On soil meeting Topsoil specifications, obtain test results including fertilizer and lime amendments required to bring the soil into compliance with the following:
 - pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sulfuric lime shall be prescribed to raise the pH to 6.5 or higher.
 - Organic content of topsoil shall be not less than 1.5 percent by weight.
 - Topsoil having soluble salt content greater than 200 parts per million shall not be used.
 - No soil or seed shall be placed on soil which has been treated with soil conditioners or chemicals used for weed control until sufficient time has elapsed (14 days) to permit dissipation of phytotoxic materials.
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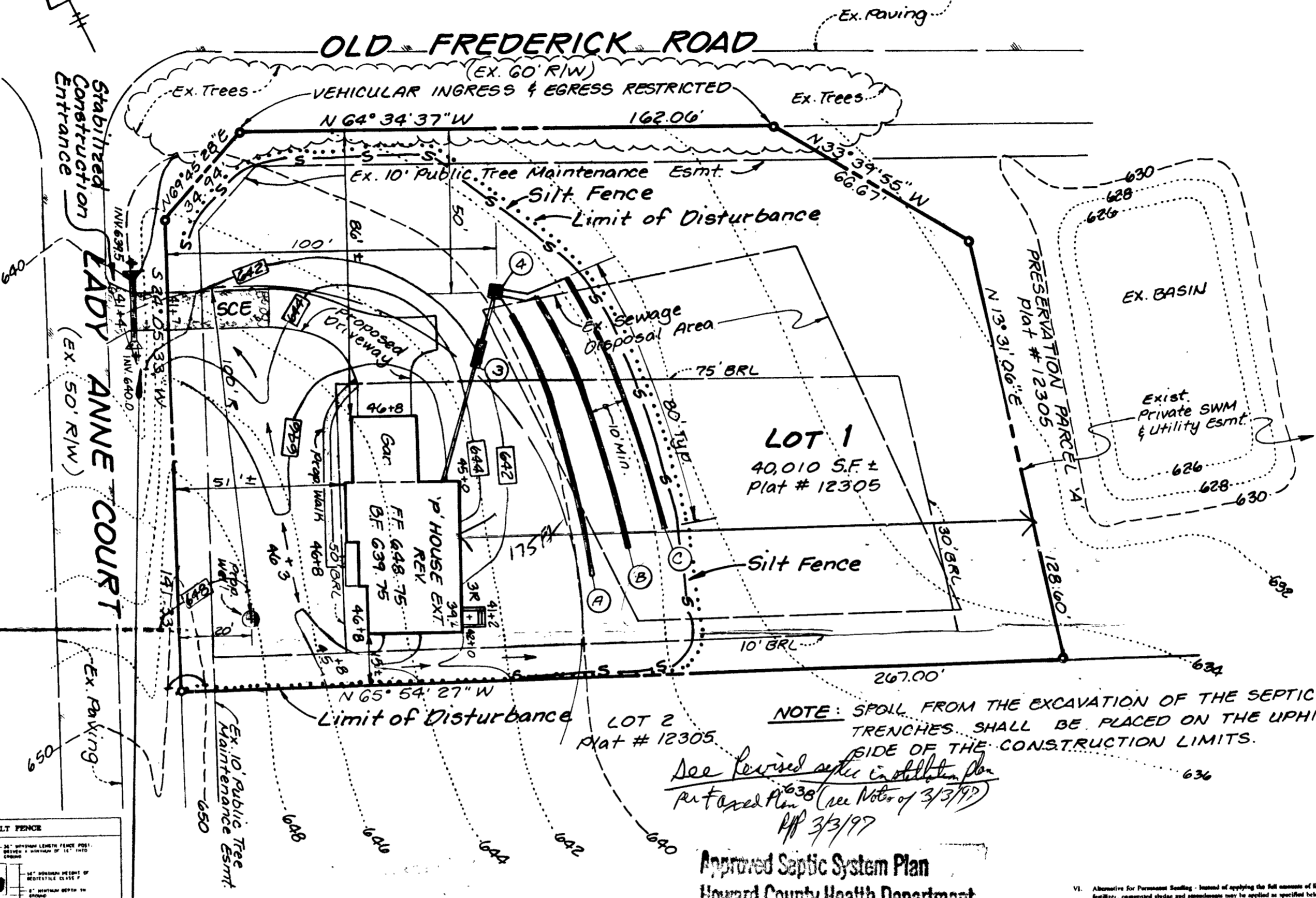
VI. Alternative for Permanent Seeding - Instead of applying the full amount of lime and commercial fertilizer, composted sludge and amendments may be applied as specified below.

- Composted sludge material for use as a soil conditioner for sites having disturbed areas over 3 acres shall conform to the following requirements:
 - Composted sludge shall be supplied by, or originate from, a person or persons that are permitted in the time of application of the compost by the Maryland Department of the Environment under COMAR 26.04.06.
 - 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.
 - Composted sludge shall be applied at a rate of 1 ton/1,000 square feet.
 - Composted sludge shall be amended with a potassium fertilizer applied at the rate of 4.0-1.000 square feet, and 1/5 the normal lime application rate.

References: Guidelines Specifications, Soil Preparation and Seeding, MD-VA, Pub. #1, Cooperative Extension Service, University of Maryland and Virginia Polytechnic Institute, Revised 1973.

Topsoil Applications

- When topsoiling, maintain needed erosion and sediment control practices such as diversion, Onsite Stabilization Structures, Erosion Ditches, Slope Erosion Control Mats and Basins.
- Grades on the areas to be topsoiled, which have been previously established, shall be maintained about 4" higher in elevation.
- Topsoil shall be uniformly distributed as a 4" - 8" layer and tightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that no rind or crusting can be formed with a minimum of subsoil soil compaction and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.
- Topsoil shall not be placed while the exposed or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seeded preparation.



NOTE: SPOIL FROM THE EXCAVATION OF THE SEPTIC TRENCHES SHALL BE PLACED ON THE UPHILL SIDE OF THE CONSTRUCTION LIMITS.

See Revised Septic Installation Plan
Per Revised Plan #36 (see Notes of 3/3/99)
AP 3/3/99

Approved Septic System Plan
Howard County Health Department

CONSTRUCT RESIDENTIAL DRIVEWAY ENTRANCE (STD. DETAIL R G.06) PROVIDE 15" CMP OR 11" X 18" CMP ARCH AREA = 0.15 AC. ± Tc = 5.0 Min. C = 0.50 (42% Imp.) I = 8.5 Q10 = 1.0 CFS

CONSTRUCTION SEQUENCE:

- OBTAIN GRADING PERMIT. (1 day)
 - CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE. (1 day)
 - INSTALL SILT FENCE. (1 day)
 - CLEAR AND GRUB SITE TO SUBGRADE. (1 day)
 - EXCAVATE FOR HOUSE FOUNDATION AND BEGIN HOUSE CONSTRUCTION. (60 days)
 - INSTALL SEPTIC SYSTEM. (1 day)
 - THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON THE SEDIMENT CONTROL DEVICES SHOWN ON THIS PLAN AFTER EACH RAINFALL AND ON A DAILY BASIS.
 - REMOVE SEDIMENT FROM LADY ANNE COURT AND DRESS STABILIZED CONSTRUCTION ENTRANCE AS REQUIRED (daily)
 - FINE GRADE SITE AND STABILIZE WITH PERMANENT SEEDING MIXTURE AND STRAW MULCH. (1 day)
- TOTAL TIME: 66 DAYS

ENGINEER'S CERTIFICATE

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

Signature: Bruce D. Burton DATE: 10/18/96

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ONSITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."

Signature: Hal C. Marker DATE: 10/10/96

*Per Bruce Burton, this is the accurate BP plan

LDE, INC. 9250 Rumsey Road, Suite 106, Columbia, MD. 21045
(410) 715-1070 (301) 596-3424 (410) 715-9540 (Fax)

DES: BOB	GRADING AND SEDIMENT CONTROL PLAN	SCALE: 1" = 30'
DRAWN: KBW	ROYAL HOLLOW LOT No. 1	SHEET No. 1 OF 1
CHECKED: BOB	TAX MAP No. 7 P10 PARCEL No. 84	JOB No. 96-068
DATE: Oct. 1996	4th ELECTION DISTRICT HOWARD COUNTY, MD	FILE No.
	Previous Submittals: SP 94-05, F 95-145	
	DEVELOPER: HAL C. MARKER Co. 10524 Hunters Way Laurel, MD 20723 (301) 710-8228	

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

HOWARD SOIL CONSERVATION DISTRICT DATE: _____

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

DATE: _____

Property known as: LOT 1 ROYAL HOLLOW
 PLAT #12305, LOTS 1-14 AND
 RESERVATION PARCELS A & B
 4TH ELECTION DISTRICT, HOWARD
 COUNTY, MD.

THIS PLAT CAN NOT BE USED TO ESTABLISH PROPERTY
 LINES OR CORNERS.

7-3-97
 owner informed that
 future deck is in possible
 conflict with septic
 (KM)

OLD FREDERICK ROAD
 MD. RT #144
 Ex 60' ROFW

N64°34'37"W 162.06'

N33°39'55"W 66.67'

N13°31'06"E 128.60'

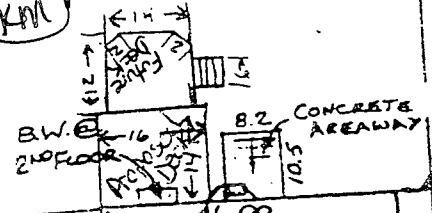
VEHICULAR INGRESS & EGRESS
 RESTRICTED

7-3-97
 Future deck in conflict
 with septic. Proposed deck
 OK as shown, no impact
 on well + septic. (KM)

LOT 1
 40,010±

PUBLIC

MAC. DRIVEWAY



2 STORY
 BRICK & FRAME
 W/BASEMENT

CONCRETE STOOP

Well

N69°45'28"E 34.94'

10' TREE MAINTENANCE EASEMENT

S 24°05'33"W 141.33'

75' BRL

30' BRL

10' BRL

267.00'

S 65°54'27"E

LADY ANNE COURT
 Ex 50' ROFW

FINAL 4-24-97
 FIRST FLOOR