Howard County Health Department

Bureau of Environmental Health
8930 Stanford Boulevard, Columbia, MD 21045
Main: 410-313-2640 | Fax: 410-313-2648
TDD 410-313-2323 | Toll Free 1-866-313-6300
www.hchealth.org
Facebook: www.facebook.com/hocohealth

Maura J. Rossman, M.D., Health Officer

RECEIPT DATE: 3/11/16 **ONSITE SEWAGE DISPOSAL SYSTEM** P 558026

APPROVAL DATE: 3/29/16 (SEC) **PERMIT: REPAIR** A

PROPERTY ADDRESS: **17105 Spring Hollow Court**

SUBDIVISION: **Spring Hollow** LOT: **2** TAX ID: **04-362748**

CONTRACTOR: **Fogle's Septic Clean Inc.** EMAIL: **kevin@foglesinc.com**

CONTRACTOR ADDRESS: **580 Obrecht Road, Sykesville, MD 21784** PHONE: **410-795-5670**

PROPERTY OWNER: **Mike Baker** EMAIL:

OWNER ADDRESS: **17105 Spring Hollow Court, Mount Airy, MD 21771** PHONE: **301-461-5751**

SEPTIC TANK SIZE (GALLONS): PUMP CHAMBER CAPACITY (GALLONS): PUMP SIZE:

NUMBER OF BEDROOMS: 6 HOUSE SQ. FT. APPLICATION RATE:

DISTRIBUTION SYSTEM: GRAVITY FED ☐ LOW PRESSURE DOSED ☐

TRENCHES:	LINEAR FEET REQUIRED:	INLET DEPTH:
	TRENCH WIDTH:	MAXIMUM BOTTOM DEPTH:
	MINIMUM SPACE BETWEEN TRENCHES:	EFFECTIVE AREA BEGINNING DEPTH:
LOCATION:	**TO BE STAKED BY SANITARIAN DURING PRE-CONSTRUCTION INSPECTION.**	
NOTES:	Properly abandon existing septic tank & install new HOT BNA H-600 BAT unit. Additionally install separate line from water softner inside house to new trench. See BAT plan for details	

ISSUED BY: H. Dowald ISSUE DATE: 3/11/16 EXPIRATION DATE: 3/11/17

NOTE: CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION INSPECTION PRIOR TO BEGINNING ANY INSTALLATION

NOTE: CONTRACTOR MUST SCHEDULE AN INSPECTION AND GAIN APPROVAL OF ALL COMPONENTS PRIOR TO COVERING

NOTE: STONE MUST BE APPROVED BY HEALTH DEPARTMENT AND GRAVEL TICKET MUST BE AVAILABLE FOR REVIEW.

NOTE: WATERTIGHT SEPTIC TANKS REQUIRED

NOTE: ALL PARTS OF SEPTIC SYSTEM SHALL BE AT LEAST 100 FEET DOWNGRADIENT FROM ANY WATER WELL

NOTE: MANHOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAMBERS

NOTE: AN ELECTRICAL PERMIT IS REQUIRED FOR INSTALLATION OF ANY ELECTRICAL COMPONENTS OF THE SYSTEM

☐ *ELECTRICAL PERMIT ISSUED* E 1600376

NOTE: THE HCHD DOES NOT WARRANTY ANY SYSTEM AND CANNOT GUARANTEE THE PERFORMANCE OF THIS SYSTEM AS DESIGNED. BY ACCEPTING THIS PERMIT, THE OWNER AND/OR APPLICANT ACKOWLEDGE THAT THE SPECIFICATIONS DETAILED IN THIS DESIGN ARE ONE POSSIBLE OPTION AND THAT THE HCHD WILL REVIEW OTHER PROPOSALS. YOU HAVE THE OPTION TO SEEK THE ADVICE OF A QUALIFIED DESIGN CONSULTANT OR PROFESSIONAL ENGINEER FOR FURTHER GUIADNCE.

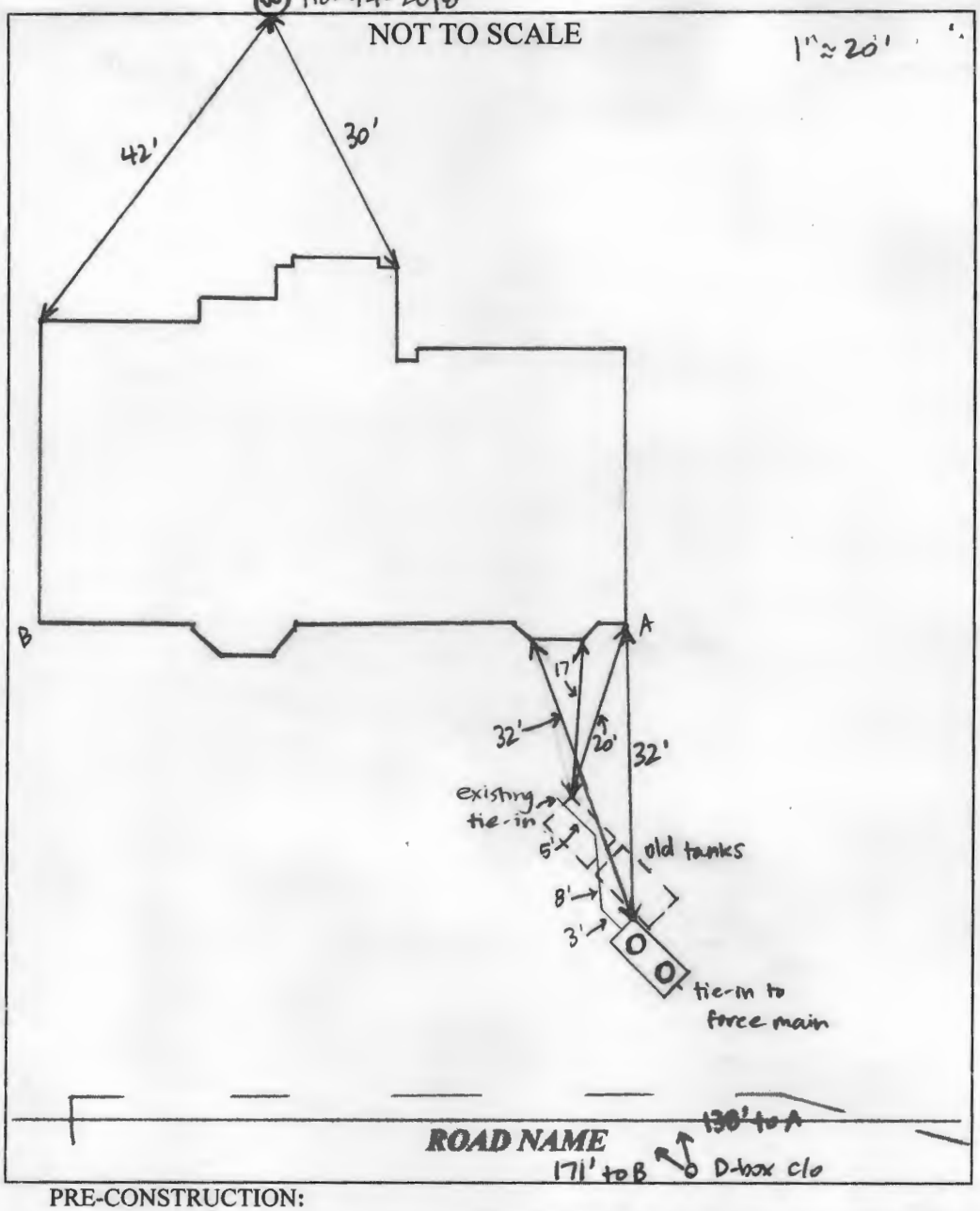
NOTE: MDE RECOMMENDS SEPTIC TANKS, BAT, AND OTHER PRETREATMENT UNITS BE PUMPED AT A FREQUENCY ADEQUATE TO ENSURE THAT SOLIDS ARE NOT DISCHARGED TO THE DISPOSAL AREA

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.

CALL 410-313-1771 TO SCHEDULE INSPECTIONS.

(W) HO-94-2018



TRENCH/DRAINFIELD DATA

	WIDTH	INLET	BOTTOM

NUMBER OF TRENCHES _____

TOTAL LENGTH _____

ABSORPTION AREA _____

DISTRIBUTION BOX LEVEL _____

DISTRIBUTION BOX BAFFLE _____

DISTRIBUTION BOX PORT _____

SEPTIC TANK DATA

SEPTIC TANK 1 LEVEL YES

MANUFACTURER MAYER BROS./HOOT

CAPACITY 1500 GAL

SEAM LOC TDP

TANK LID DEPTH 2'

BAFFLES YES

BAFFLE FILTER NO

MANHOLE LOC FRONT + REAR

6" PORT LOC NONE

WATERTIGHT TEST NO

SLOTTED NO

DATE ON LID —

PUMP/SEPTIC TANK LEVEL _____

MANUFACTURER _____

CAPACITY _____ GAL

SEAM LOC _____

TANK LID DEPTH _____

BAFFLES _____

BAFFLE FILTER _____

MANHOLE LOC _____

6" PORT LOC _____

WATERTIGHT TEST _____

SLOTTED _____

DATE ON LID _____

PRE-CONSTRUCTION:

INSTALLATION: 3/18/16 Fogle's on site. Existing tank uncovered, new tank hole dug. Waiting on tank delivery. Well is not in location shown on BAT site plan. Informed Mike (homeowner) that water softener discharge into BAT tank could affect performance and potentially reduce efficiency and lifespan of septic system. (SC) 3/18/16 On site during tank delivery. No obvious cracks on sides or bottom of tank. Fogle's to abandon old tanks. (SC) 3/21/16 Old tanks filled in with #57 stone. House connection made, covered but I saw pics. Fogle's connecting pump line. RO discharge line tied into main sewer line, goes into tank / Need Hoot startup certification. (SC) 3/28/16 Hoot startup received. (SC)

3/29/16 On site for Hoot startup. Fogle's added an observation port to D-box - pump effluent to D-box. (SC)

FINAL INSPECTOR Sarah Collins DATE OF APPROVAL 3/29/16

MAYER BROS., INC.
Precast Concrete Products
6264 Race Rd. Elkridge, MD 21075

Letter of Satisfaction
Hoot System Installation

Address of Property: 17105 Spring Hollow Ct.
Mt. Airy, MD. 21797

Date of Final Inspection: 3/25/16

Installer: Fogles Septic

Hoot Technician/Inspector: Mike Sample

I hereby certify that the Hoot system installed at the property listed above has been installed according to proper Hoot installation practices. I have also verified the startup of the system and it is in proper working order.

time - dosed:
recirc. 3 mins
pump 1 min. 1x every 2 hrs.
short + frequent dose

Sincerely,

W. Michael Sanger
Name of Inspector
Mayer Bros. ,Inc.

PH: 410-796-1434
FX: 410-796-1438

WBE
NPCA Certified Plant

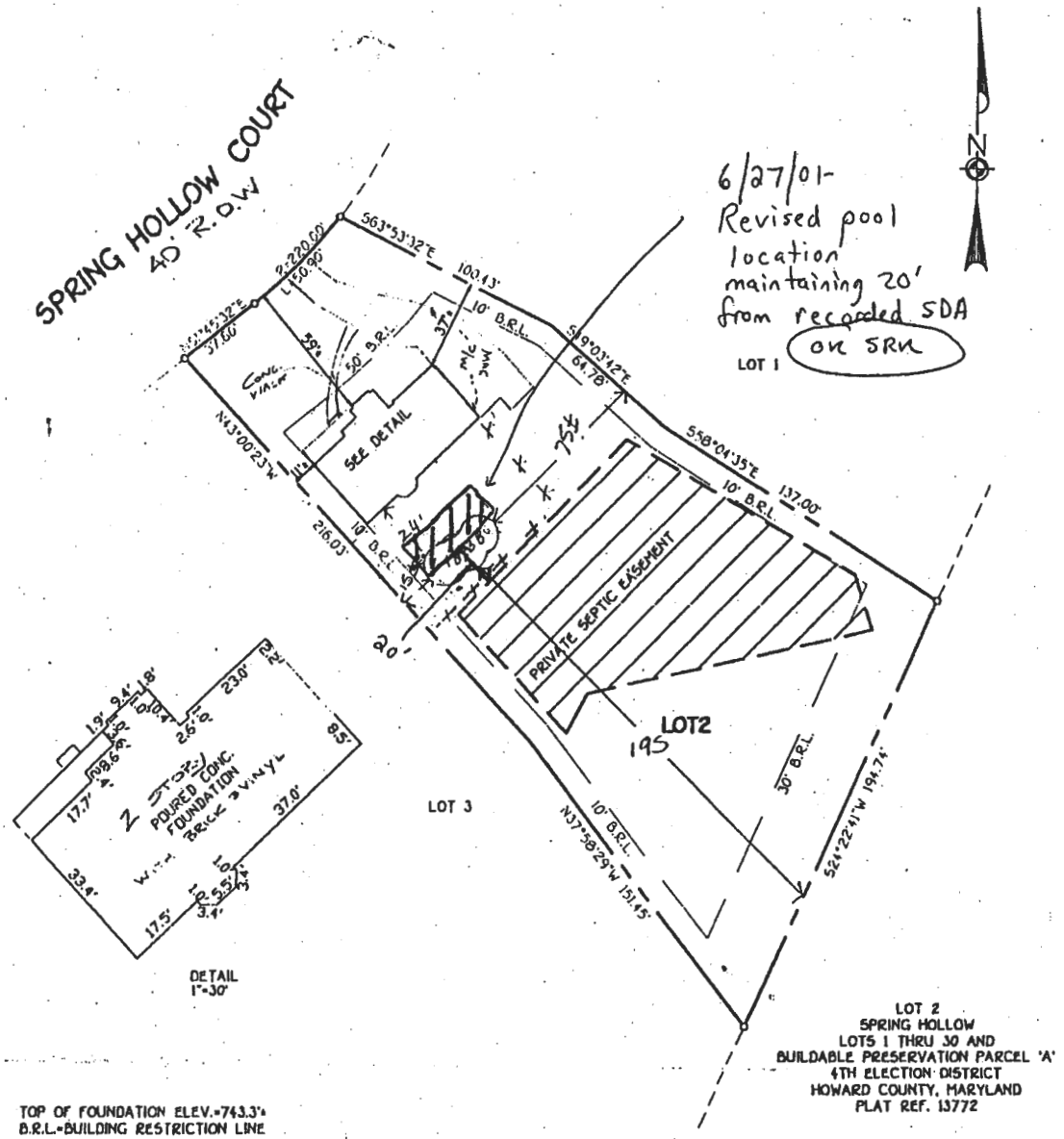
mayerbro@connext.net
www.mayerbrosprecast.com

GENERAL NOTES:

1) THIS PLAT IS PREPARED FOR THE BENEFIT OF THE CLIENT. SIGNING THE HOUSE LOCATION SURVEY APPROVAL FORM INSOFAR AS IT IS REQUIRED BY A LENDER OR TITLE INSURANCE COMPANY OR ITS AGENTS IN CONNECTION WITH THE CONTEMPLATED TRANSFER, FINANCING OR RE-FINANCING. UNLESS INDICATED AS BEING A BOUNDARY SURVEY, THIS PLAT IS NOT INTENDED FOR USE IN THE ESTABLISHMENT OF PROPERTY LINES AND IS NOT TO BE RELIED UPON FOR THE ESTABLISHMENT OR LOCATIONS OF FENCES, GARAGES, BUILDINGS OR OTHER EXISTING OR FUTURE IMPROVEMENTS. AS A RESULT, THIS PLAT DOES NOT PROVIDE FOR ACCURATE IDENTIFICATION OF PROPERTY LINE, BUT SUCH IDENTIFICATION MAY NOT BE REQUIRED FOR THE TRANSFER OF TITLE OR SECURING FINANCING OR RE-FINANCING.

2) SUBJECT PROPERTY IS SHOWN IN ZONE C ON THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP OF "HOWARD" COUNTY, MARYLAND, COMMUNITY PANEL No. 240044 0007, EFFECTIVE DATE: DEC. 1, 1996.

3) THE OFFSETS FROM BUILDING LINE TO PROPERTY LINE AS SHOWN ON THE PLAT HEREON ARE TO AN ACCURACY OF 0.5' PLUS OR MINUS (±).



TOP OF FOUNDATION ELEV.=743.3'±
B.R.L.=BUILDING RESTRICTION LINE

LOT 2
SPRING HOLLOW
LOTS 1 THRU 30 AND
BUILDABLE PRESERVATION PARCEL 'A'
4TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
PLAT REF. 13772

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

FCC •

STATE OF MARYLAND
ALBERT F. CARTER, JR.
No. 5602
REGISTERED
PROPERTY LINE SURVEYOR

PROFESSIONAL LAND SURVEYOR REG. • 5602 — 1/5/01 DATE

HOUSE LOCATION DRAWING

FOUNDATION LOCATION: 1/17/00
FINAL LOCATION: 1/5/01
BOUNDARY SURVEY:

SCALE: 1"=60'
DATE: 1/10/00
DRAWN BY: T.P.F.
CHECKED BY: C.C.
PROJECT No.: 61434

Oswald, Hank

From: Kevin Davis <kevin@foglesinc.com>
Sent: Monday, March 14, 2016 7:59 AM
To: Oswald, Hank
Cc: Karen@transformingarchitecture.com
Subject: Hoot specs for 17105 Spring Hollow Ct.
Attachments: Hoot BBlaster.pdf; Hoot Details.pdf

Hank,

Attached are some specs for the HOOT system for 17105 Spring Hollow Ct.
The pump included with this unit is the 20EB blaster pump. Pump curve and specs are also attached.

Let me know if you need anything further

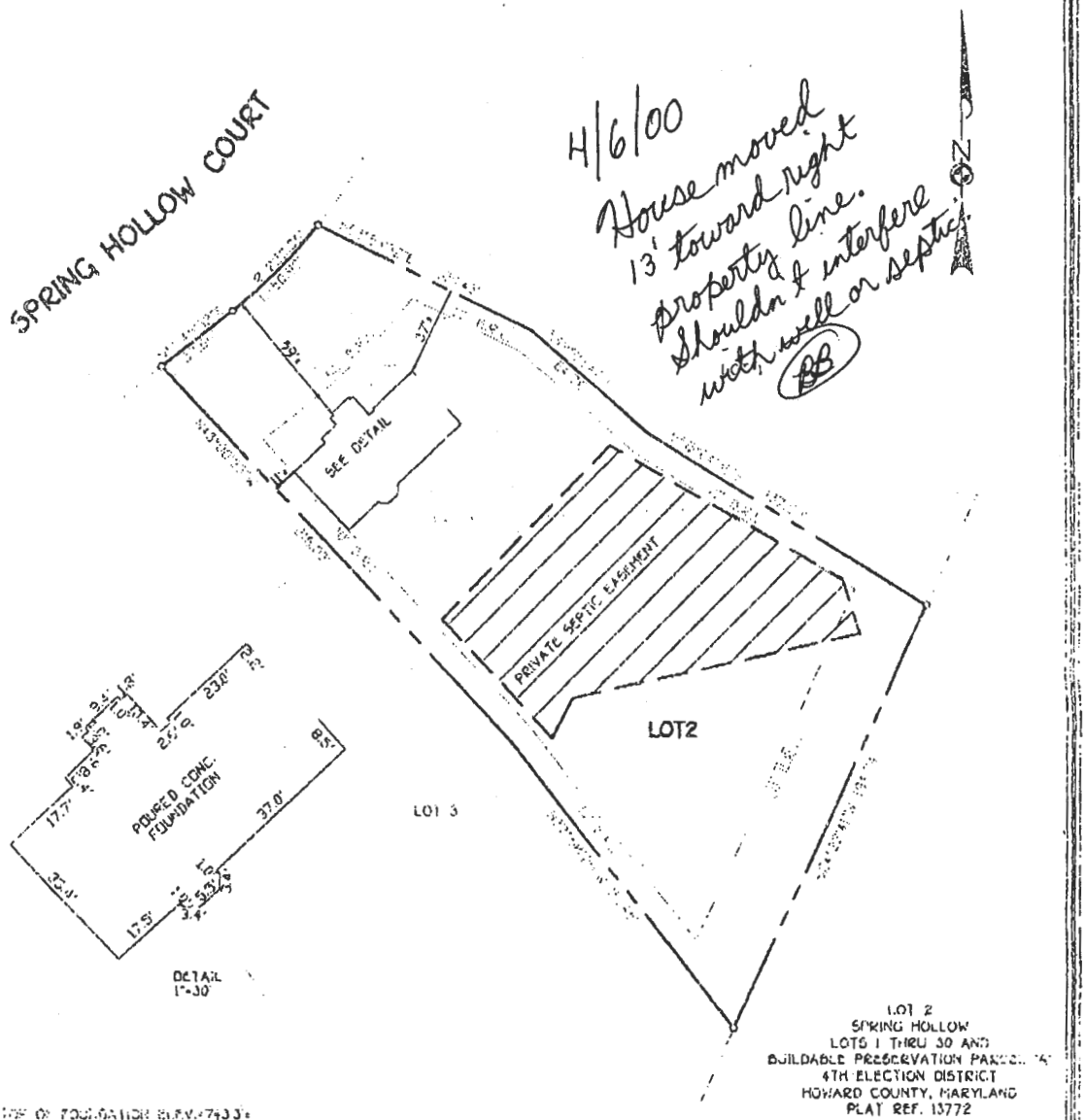
Kevin Davis
Fogle's Septic Clean
240.278.8925 cell
410.795.5670 office

GENERAL NOTES:

1) THIS PLAT IS PREPARED FOR THE BENEFIT OF THE CLIENT SIGNING THE HOUSE LOCATION SURVEY APPROVAL FORM INSOFAR AS IT IS REQUIRED BY A LENDER OR TITLE INSURANCE COMPANY OR ITS AGENTS IN CONNECTION WITH THE CONTEMPLATED TRANSFER, FINANCING OR RE-FINANCING. UNLESS INDICATED AS BEING A BOUNDARY SURVEY, THIS PLAT IS NOT INTENDED FOR USE IN THE ESTABLISHMENT OF PROPERTY LINES AND IS NOT TO BE RELIED UPON FOR THE ESTABLISHMENT OR LOCATIONS OF FENCES, GARAGES, BUILDINGS OR OTHER EXISTING OR FUTURE IMPROVEMENTS. AS A RESULT, THIS PLAT DOES NOT PROVIDE FOR ACCURATE IDENTIFICATION OF PROPERTY LINE, BUT SUCH IDENTIFICATION MAY NOT BE REQUIRED FOR THE TRANSFER OF TITLE OR SECURING FINANCING OR RE-FINANCING.

2) SUBJECT PROPERTY IS SHOWN IN ZONE C ON THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP OF HOWARD COUNTY, MARYLAND, COMMUNITY PANEL No. 240044 0002 C, EFFECTIVE DATE DEC. 1, 1986.

3) THE OFFSETS FROM BUILDING LINE TO PROPERTY LINE AS SHOWN ON THE PLAT HEREON ARE TO AN ACCURACY OF 0.5' PLUS OR MINUS (±).



TOP OF FOUNDATION ELEV.=763.3±
B.R.L.=BUILDING RESTRICTION LINE

RICHARD, COLLINS & CARTER, INC.
CIVIL ENGINEERS & LAND SURVEYORS
ELLICOTT CITY, MARYLAND

STATE OF MARYLAND
CHARLES J. CROSS, JR.
No. 10763
REGISTERED
PROFESSIONAL LAND SURVEYOR

PROFESSIONAL LAND SURVEYOR REG. #10763 — DATE 11/22/00

HOUSE LOCATION DRAWING

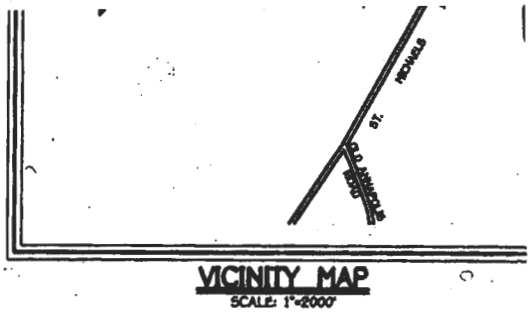
FOUNDATION LOCATION: 12/7/00
FINAL LOCATION:
BOUNDARY SURVEY:

SCALE: 1"=60'
DATE: 11/18/00
DRAWN BY: T.P.F.
CHECKED BY: C.C.
PROJECT No.: 61434

FCC

Approved Septic System Plan
Howard County Health Department

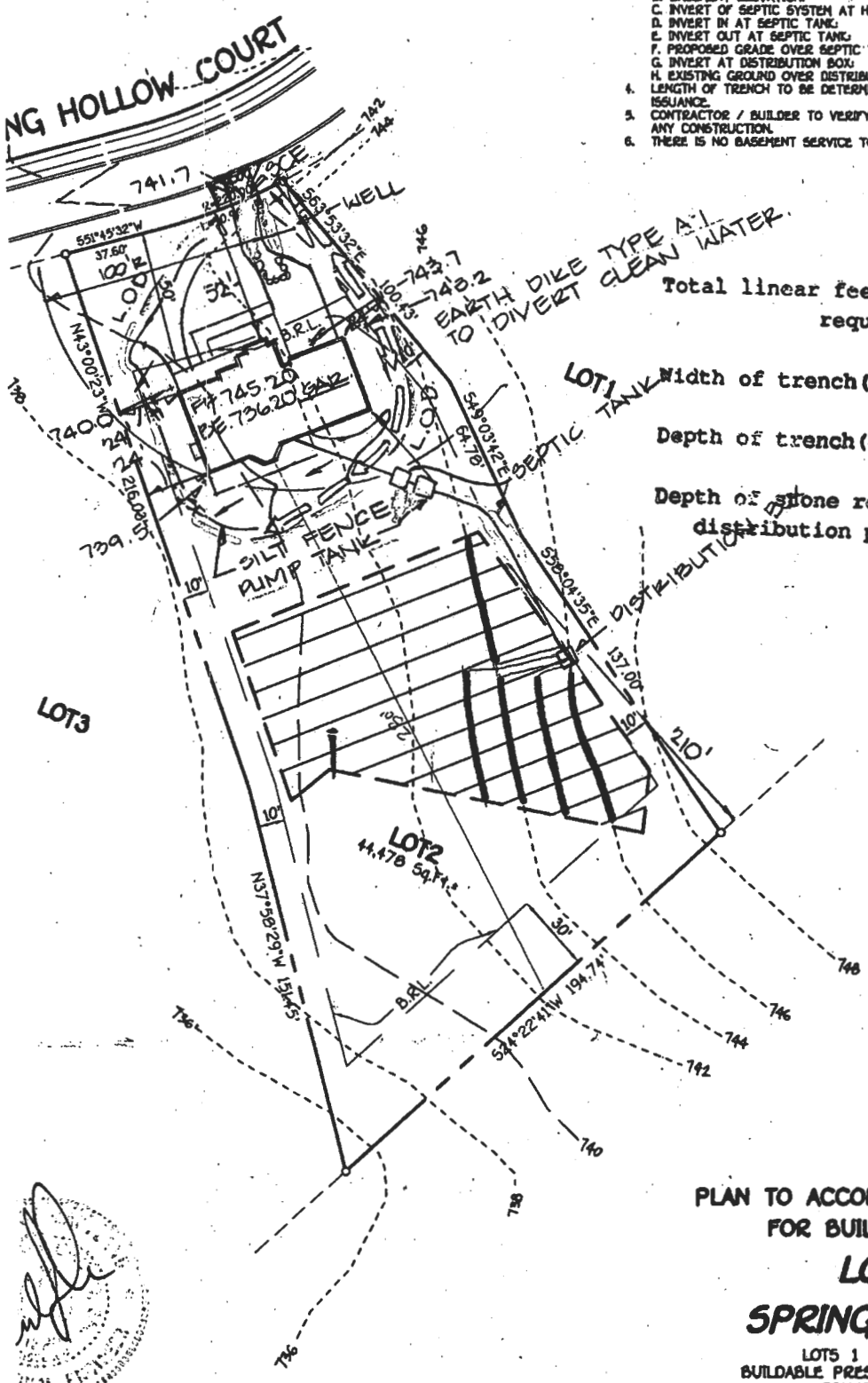
Amy F. McMullen 11/24/99
Signature Date



VICINITY MAP
SCALE: 1"=2000'

GENERAL NOTES

1. SEPTIC EASEMENT SUBJECT TO HOWARD COUNTY HEALTH DEPARTMENT No.
2. PROPOSED 1500 GALLON SEPTIC TANK.
3. A. FIRST FLOOR ELEVATION:
   B. BASEMENT ELEVATION:
   C. INVERT OF SEPTIC SYSTEM AT HOUSE: 739.5
   D. INVERT IN AT SEPTIC TANK: ~~739.5~~ 739.0
   E. INVERT OUT AT SEPTIC TANK: ~~739.5~~ 738.7
   F. PROPOSED GRADE OVER SEPTIC TANK: ~~745.5~~ 743.0
   G. INVERT AT DISTRIBUTION BOX: 743.00
   H. EXISTING GROUND OVER DISTRIBUTION BOX: 746.00
4. LENGTH OF TRENCH TO BE DETERMINED AT TIME OF SEPTIC PERMIT ISSUANCE.
5. CONTRACTOR / BUILDER TO VERIFY ELEVATIONS IN FIELD BEFORE BEGINNING ANY CONSTRUCTION.
6. THERE IS NO BASEMENT SERVICE TO SEPTIC SYSTEM.



Total linear feet of trench required 280 feet

Width of trench(es) 3.0 feet

Depth of trench(es) 5.0 feet

Depth of stone required below distribution pipe 2.0 feet

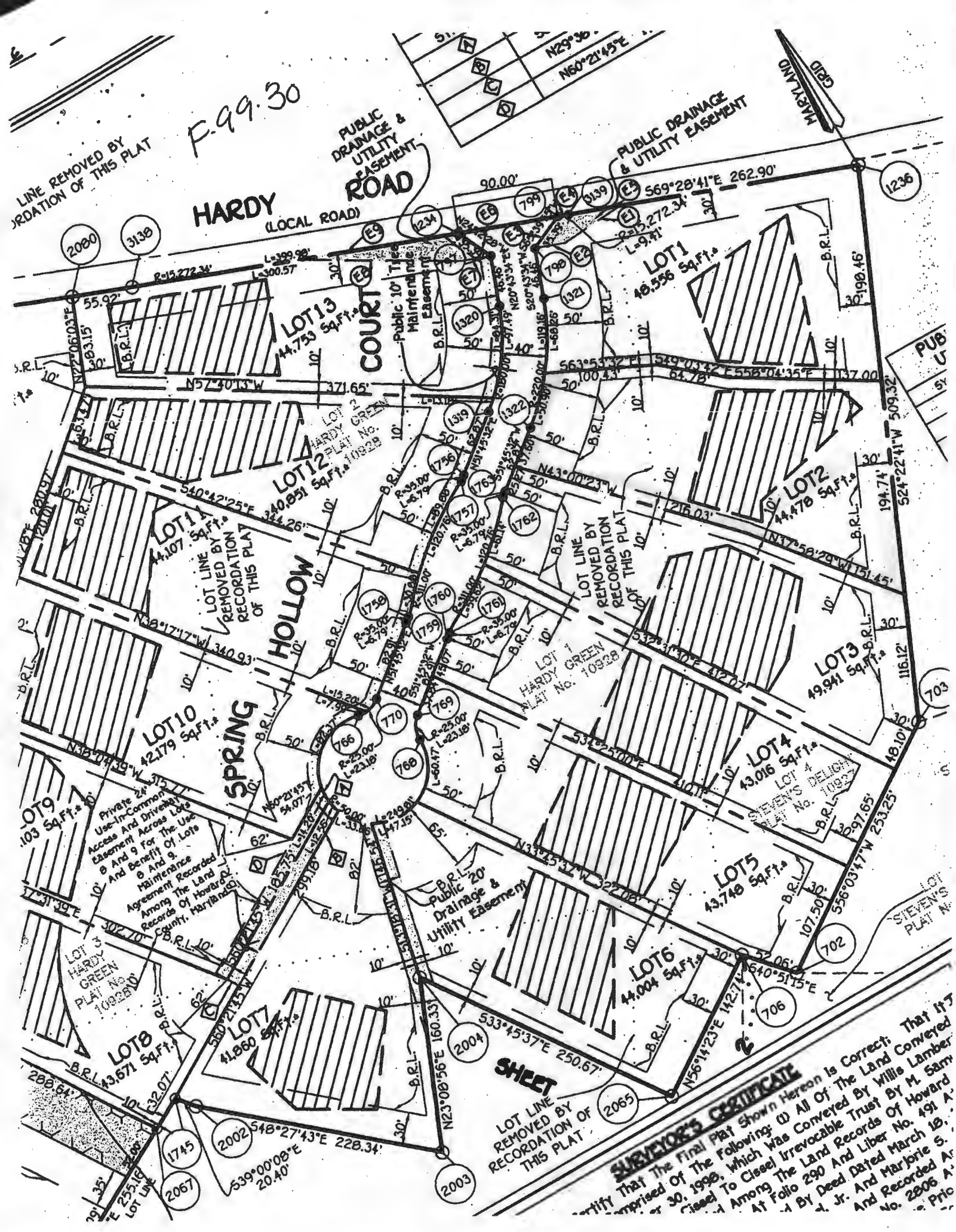
PLAN TO ACCOMPANY APPLICATION
FOR BUILDING PERMIT

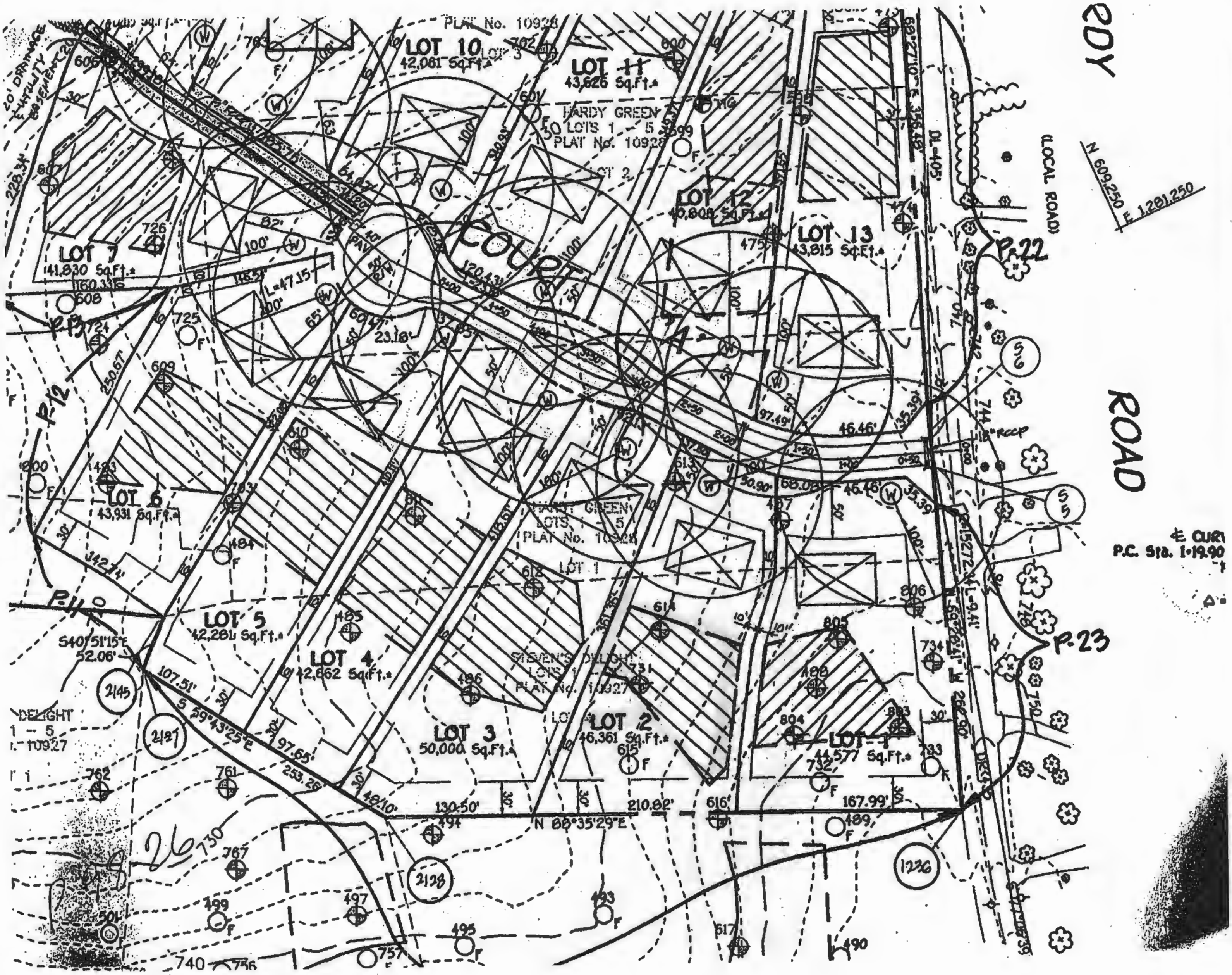
LOT 2

SPRING HOLLOW

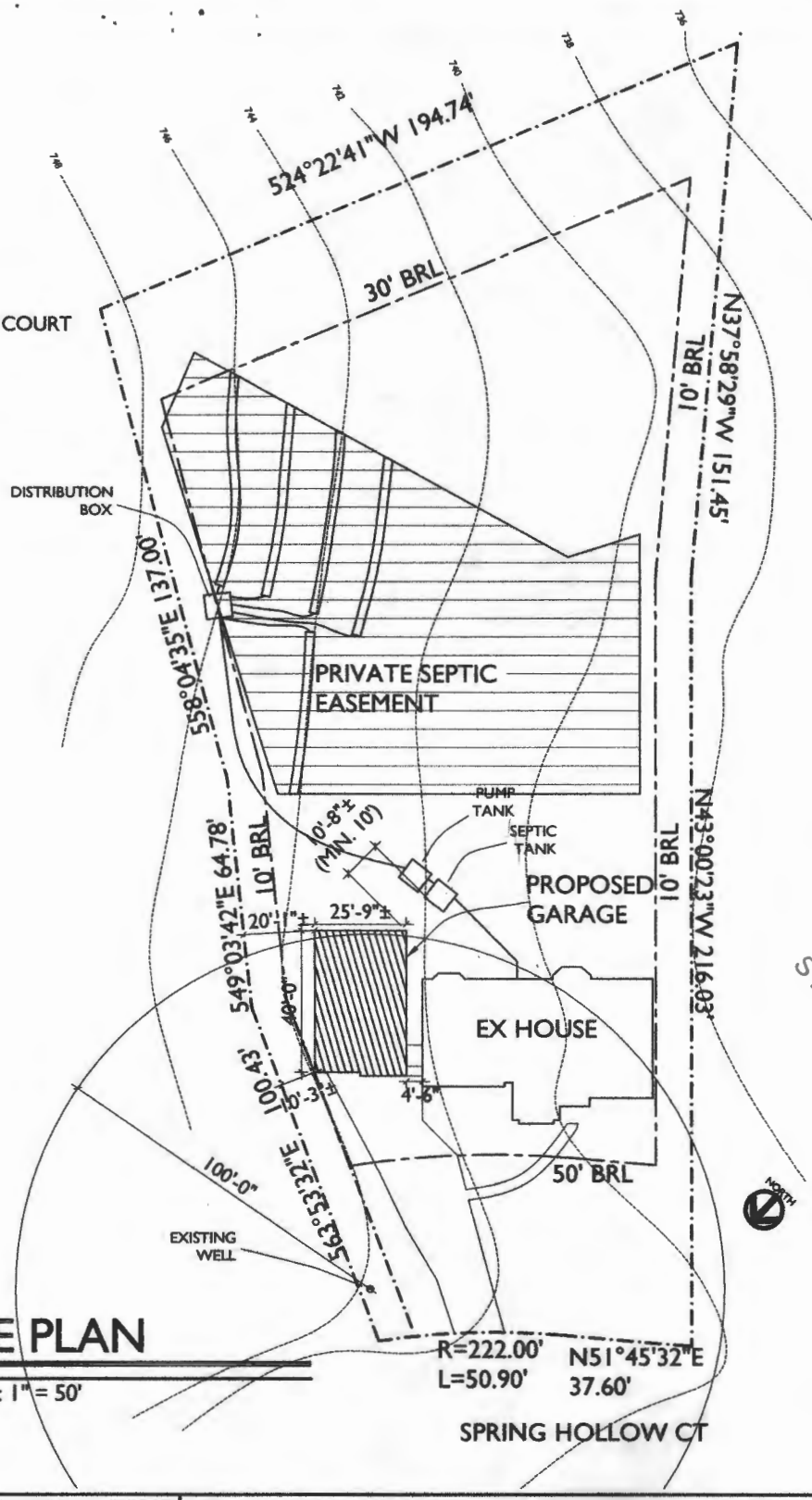
LOTS 1 THRU 30 AND
BUILDABLE PRESERVATION PARCEL 'A'
ZONED: RC-DEO

TAX MAP NO. 7 PARCEL NOS. 38,144,341,394 AND 522


F-99-30
HARDY
(LOCAL ROAD)
ROAD
PUBLIC DRAINAGE & UTILITY EASEMENT
PUBLIC DRAINAGE & UTILITY EASEMENT
MARYLAND GRID
LINE REMOVED BY RECORDATION OF THIS PLAT
COURT
HOLLOW
SPRING
LOT13 44,753 Sq.Ft.±
LOT12 40,851 Sq.Ft.±
LOT11 44,107 Sq.Ft.±
LOT10 42,179 Sq.Ft.±
LOT9 43,103 Sq.Ft.±
LOT8 43,671 Sq.Ft.±
LOT7 41,860 Sq.Ft.±
LOT6 44,004 Sq.Ft.±
LOT5 43,748 Sq.Ft.±
LOT4 43,016 Sq.Ft.±
LOT3 49,941 Sq.Ft.±
LOT2 44,478 Sq.Ft.±
LOT1 48,556 Sq.Ft.±
LOT 1 HARDY GREEN PLAT No. 10328
LOT 2 HARDY GREEN PLAT No. 10328
LOT 3 HARDY GREEN PLAT No. 10328
LOT 4 STEVEN'S DELIGHT PLAT No. 10327
Public 10' Title Maintenance Easement
Public 20' Drainage & Utility Easement
Private 24' Use-In-Common Access And Driveway Easement Across Lots 8 And 9 For The Use And Benefit Of Lots 8 And 9. Maintenance Agreement Recorded Among The Land Records Of Howard County, Maryland.
LOT LINE REMOVED BY RECORDATION OF THIS PLAT
SHEET
SURVEYOR'S CERTIFICATE
That The Final Plat Shown Hereon Is Correct. That It
Comprised Of The Following: (1) All Of The Land Conveyed
30, 1998, Which Was Conveyed By Willis Lamber
Cissel To Cissel Irrevocable Trust By M. Sam
Among The Land Records Of Howard
At Folio 290 And Liber No. 491 A
By Deed Dated March 18,
Jr. And Marjorie S.
And Recorded A
No. 2806 A
Pric



PLAT No. 10928
LOT 10
42,061 Sq.Ft.±
LOT 11
43,626 Sq.Ft.±
HARDY GREEN
LOTS 1 - 5
PLAT No. 10928
LOT 12
LOT 13
43,815 Sq.Ft.±
LOT 7
41,830 Sq.Ft.±
COURT
LOT 6
43,931 Sq.Ft.±
LOT 5
42,281 Sq.Ft.±
LOT 4
42,662 Sq.Ft.±
LOT 3
50,000 Sq.Ft.±
LOT 2
46,361 Sq.Ft.±
LOT 1
44,577 Sq.Ft.±
HARDY GREEN
LOTS 1 - 5
STEVEN'S DELIGHT
N 88°35'29"E
S 59°43'25"E
S40°51'15"E
52.06'
EDY
ROAD
(LOCAL ROAD)
N 609,250
E 1,281,250
P-22
P-23
P-12
P-11
P.C. Sta. 1+19.90
20' DRAINAGE & UTILITY EASEMENT



SITE INFO:
17105 SPRING HOLLOW COURT
MT. AIRY, MD 21771
LOT 2
PARCEL: 0528
ELECTION DISTRICT: 4
HOWARD COUNTY
ZONED - RC-DEO

ARCHITECT
13662
KAREN LYNN PITSLEY
STATE OF MARYLAND
Exp. 10/24/17

1 / A-4 SITE PLAN
SCALE: 1" = 50'

TRANSFORMING ARCHITECTURE
CUSTOM DESIGNS. FLAT FEES.

7612 Browns Bridge Rd
Highland, MD 20777
301-776-2666
301-776-2886 fax
1-877-828-7267
info@TransformingArchitecture.com
www.TransformingArchitecture.com

The Baker Residence

17105 Spring Hollow Ct. Mt. Airy, MD 21771

SCALE : AS NOTED	DATE: 02-05-16	PROJECT No: 11-069

17105 Spring Hollow

Kevin w/ Eagles

240-278-8925

H_2O softner Discharge

~100-160 gallons/week

Avg - 38-40g/2K week

Oswald, Hank

From: Oswald, Hank
Sent: Tuesday, February 16, 2016 1:03 PM
To: 'Karen Pitsley, AIA'
Subject: RE: 17105 Spring Hollow Septic Issue
Attachments: BAT Site Plan Requirements.pdf

Hi Karen:

My phone is currently down. To receive BP approval by the Health Department, the septic tank and pump tank would have to upgraded to a BAT unit designed for 6 bedrooms and pump tank capable of handling one day of emergency storage for a 6 bedroom house (Under current standards, septic systems are designed by # of bedrooms - COMAR 26.04.02). The existing trenches are large enough to accommodate 6 bedrooms so nothing has to be done with them. In addition to the tank and pump tank upgrades, we need to see how one replacement trench system will fit inside the existing sewage disposal area. This information would have to be outlined on a BAT Plan usually designed by an engineer for review and approval. Please see attached BAT Plan requirements. Also, a septic permit and inspection will also be required by this office for this upgrade. Should you have any questions, please don't hesitate to ask

Hank

From: Karen Pitsley, AIA [mailto:karen@transformingarchitecture.com]
Sent: Tuesday, February 16, 2016 10:11 AM
To: Oswald, Hank
Cc: 'Baker, Mike (Hunt Valley)'; 'Claudine Baker'; 'Bernadette Roussel'; "Paul Lewis"
Subject: 17105 Spring Hollow Septic Issue

Hank,

I left a message, but I have several questions about this property and what we can do to keep moving forward. Please call me when you get a chance. 301-776-2666.
See history below.

Warm regards,

Karen Pitsley, AIA, CAPS
President, Transforming Architecture

2015, 2013 & 2011 Maryland's Top 100 Women
2014 Top 100 MBE in Mid-Atlantic Region
2012 Woman of Distinction, Business Women's Network of Howard County
2011 Innovator of the Year

301-776-2666
www.TransformingArchitecture.com
Houzz.com Profile

Do we know if the septic tank is the issue that HoCo is citing? How can we work around this issue? To gain a full understanding of the options, how much is a 2000 gallon septic tank, installed? I presume we would need another permit for this? Obviously, if this ends up being the solution, we would want to do this before Paul starts (or gets too far along with) the garage. Any other considerations?

-Mike

Michael S.
Baker
Department Manager
Environmental & Transportation Planning
Environmental Construction Management
D +1-410-891-9222
M +1-443-286-1780
mike.baker@aecom.com

AECOM
4 North Park Drive, Suite 300
Hunt Valley, Maryland 21030, United States
T +1-410-785-7220
aecom.com

Oswald, Hank

From: Oswald, Hank
Sent: Wednesday, February 10, 2016 2:12 PM
To: 'Paul Lewis'
Subject: RE: B16000185_17105 Spring hollow Court_Floor Plans for the Remaining House

Hi Paul:

The existing system is currently sized for 4 bedrooms. The floor plan shows a total of 6 bedrooms. Before this office can approve the building permit, the septic system would have to be upgraded to a BAT unit sized for 6 BR's and a pump tank capable of handling 1 day of emergency storage. The existing trenches are sized properly for the proposed use but we will need to see how one replacement system will fit inside the existing sewage disposal area (SDA).

Should you have any questions, please don't hesitate to ask.

Hank

From: Oswald, Hank
Sent: Tuesday, February 09, 2016 3:32 PM
To: 'Paul Lewis'
Subject: RE: B16000185_17105 Spring hollow Court_Floor Plans for the Remaining House

The floor plan needs to include windows, full and half bathrooms, and rooms in the house. It can be hand drawn. A list will not suffice.

Thanks,

Hank
From: Paul Lewis [mailto:lewisandassociatescontracting@gmail.com]
Sent: Tuesday, February 09, 2016 2:28 PM
To: Oswald, Hank
Subject: Re: B16000185_17105 Spring hollow Court_Floor Plans for the Remaining House

Hank,
How detailed do you need this floor plan? Would a list of the number of bathrooms and half bathrooms suffice?

Paul Lewis

Lewis & Associates Contracting, LLC
10611 Gramercy Place Unit 124
Columbia, MD 21044
443-597-2657

On Feb 9, 2016 11:57 AM, "Oswald, Hank" <hoswald@howardcountymd.gov> wrote:

Paul Lewis:

Thank you for submitting the revised site plan & floor plan for the first floor plus changes to existing garage. In order to determine if the existing septic system is sized properly for the existing house plus proposed changes, this office will also need to see a floor plan of the existing basement and second floor.

Should you have any questions, please don't hesitate to ask.

Thanks,

Hank

Hank Oswald, L.E.H.S.

Howard County Health Department

Bureau of Environmental Health

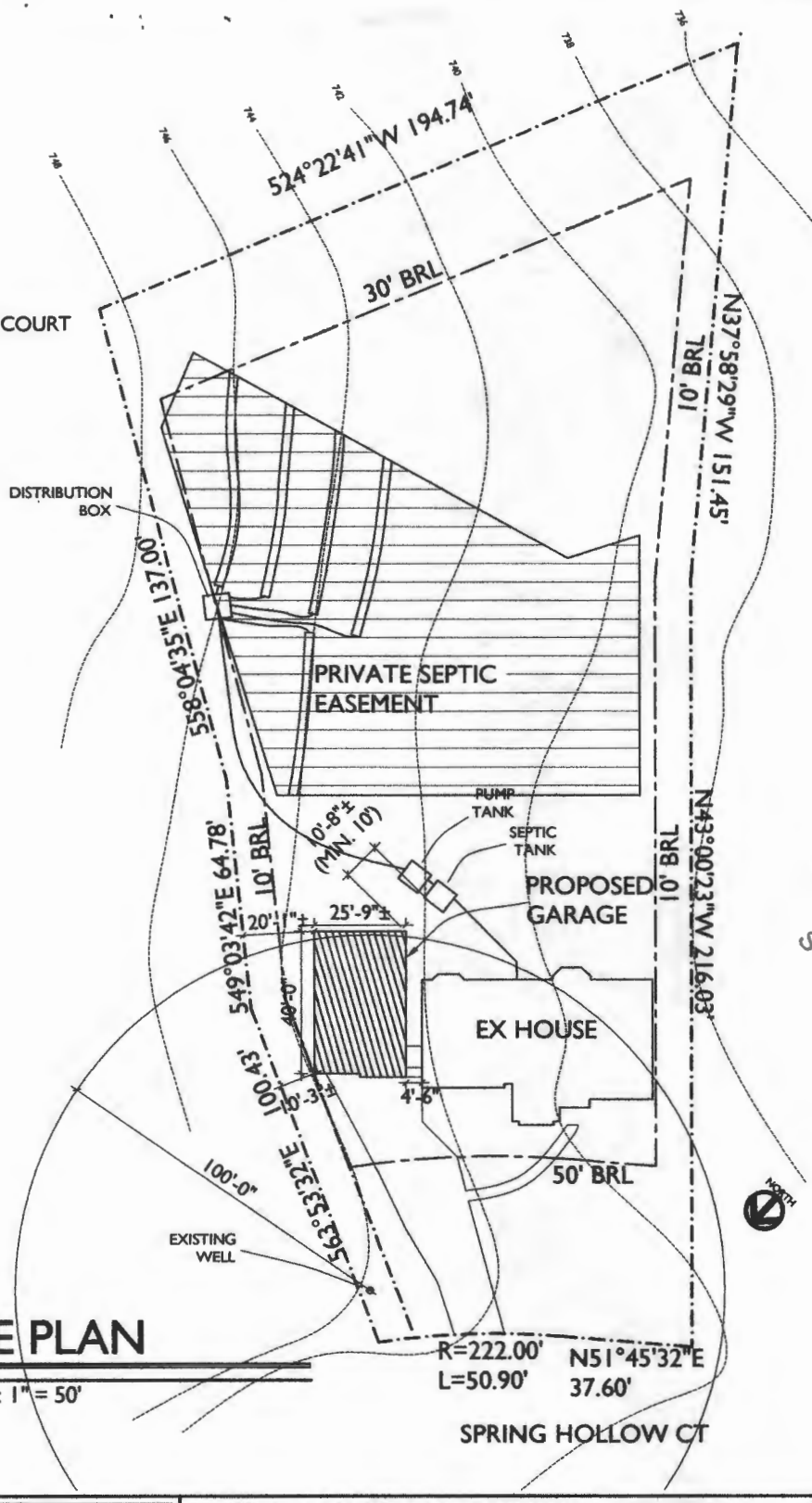
Well & Septic Program

8930 Stanford Boulevard

Columbia, MD 21045

410.313.1786 (Office)

410.313.2648 (Fax)



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ARCHITECT
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KAREN LYNN PITSLEY
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SCALE: 1" = 50'

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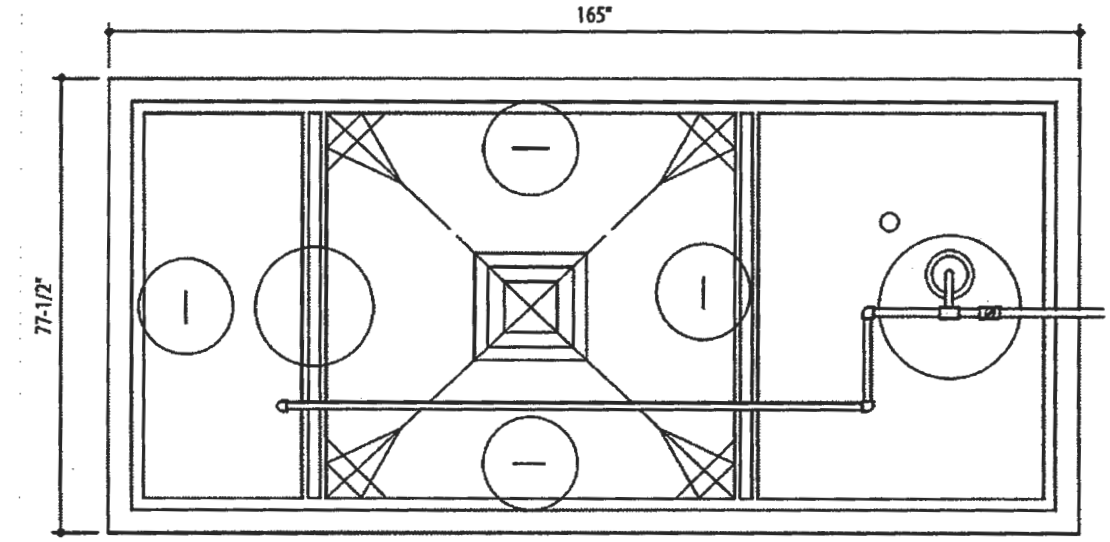
www.TransformingArchitecture.com

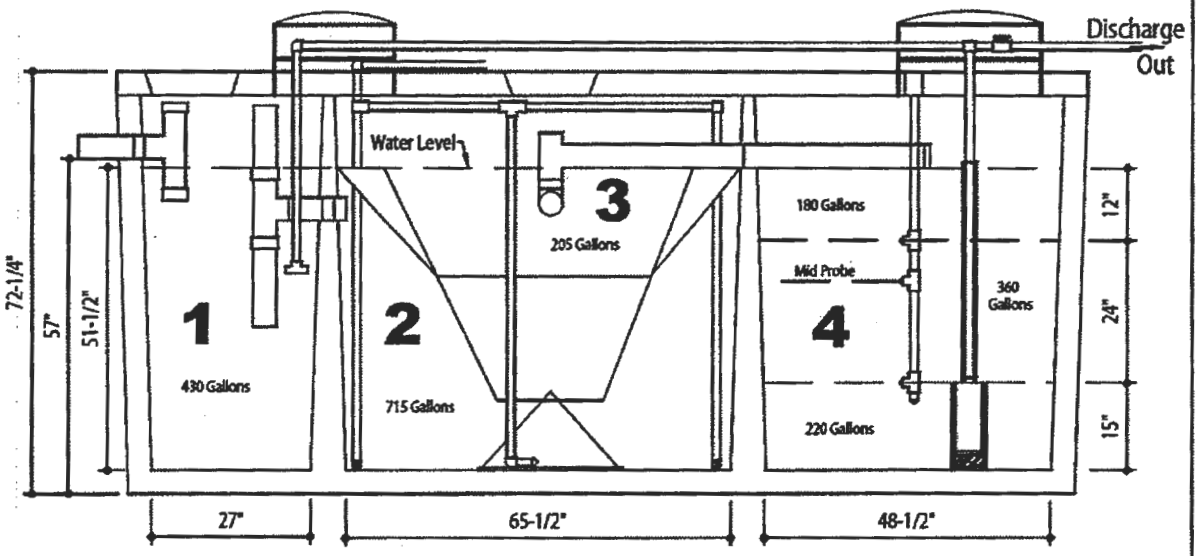
The Baker Residence

17105 Spring Hollow Ct. Mt. Airy, MD 21771

SCALE : AS NOTED	DATE: 02-05-16	PROJECT No: 11-069

I. HOW THE HOOT SYSTEM WORKS





DESIGN DATA & GENERAL NOTES

[1] Concrete strength f'c=4,000 p.s.i. @ 28 days. Density = 150 pcf.
[2] Cement - Portland Type I/II per ASTM C 150-92.
[3] Admixtures & plasticizers per ASTM C 260-86 & C 494-92.
[4] Reinforcing per ASTM A185. Min. 1-1/2" cover.

Mayer Brothers, Inc.
6264 Race Road
Elkridge, Maryland 21075
Tel. 410.796.1434
Fax. 410.796.1438
www.mayerbrosprecast.com

MBI

600 GPD BNR SYSTEM
H-600 ABNR
with 750 GALLON PUMP CHAMBER

Dwg. No. Hoot Form #1	No Scale	March 19, 2009

GENERAL HOOT INFORMATION
VERY IMPORTANT

1. Electrical requirements: **110V 30 AMP (NOT 20 AMP)** with a stand-alone breaker. Less than 30 AMPS will cause the system to malfunction.

2. Probes should be installed according to the following site evaluations:
   a. If there is less than 15" of cover over tank, install standard probe in top of tank as usual (through precut 3" opening in top of tank).
   b. If there are 15" to 36" of cover over rank, install probe inside the riser, and seal the precut probe opening with a 3" cap.
   c. **If the tank is more than 50' from the control panel, a Float Probe must be installed.** Please call Mayer Bros. in advance to order parts and discuss.

3. **DO NOT GLUE** the sensor probe staff into the 3" collar cast into the lid, since it may need to be removed for inspection or repair. Tapping it firmly into the sleeve is sufficient.

4. **USE ONLY SILICON II** (Silicon I gives off gas when drying, which may cause flame.)

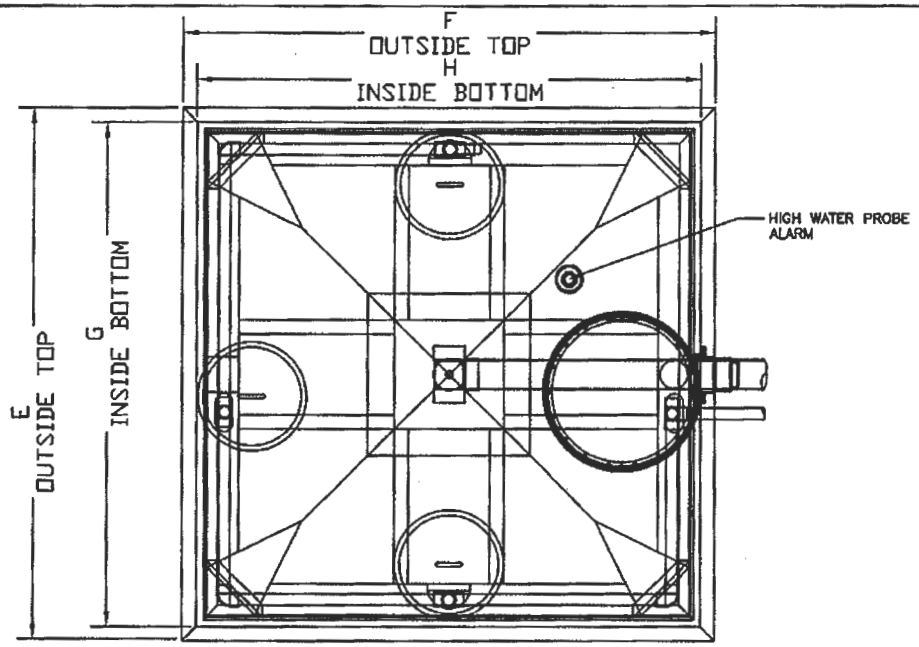
5. **Locating Control Panel**: All systems ordered from Mayer Bros. include a Remote Mounting Kit for the control panel, to mount the panel remotely from the tank (usually at the house). If the tank is located within 100' of the house, attach the Control Panel box to the house (preferably in an area where the homeowner will see and hear the alarms). If the tank is further than 100' from the house, the panel should be mounted at tank location - typically on a **Panel Pole** (...a 2x10 plank of treated lumber 10' long, inserted vertically along the side of the excavated tank and backfilled in place, leaving 3-4 feet above grade on which to mount the panel.) The length of wires attached to the probe staff determines where the panel should be located. **THESE WIRES CANNOT BE SPLICED.**

6. Locate the Blower adjacent to the Control Panel, for ease of operation & maintenance. It must be within 100' of the tank location to assure sufficient air pressure.

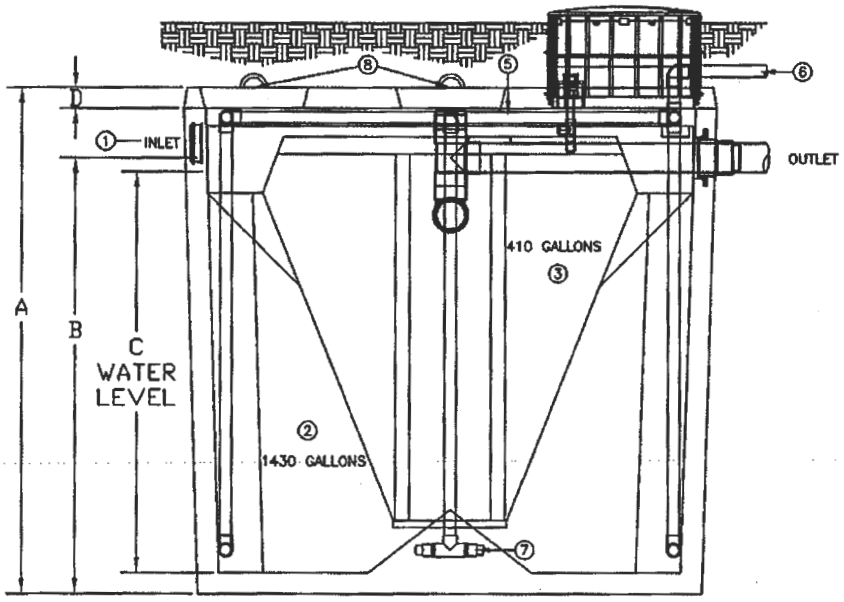
7. Maryland Distributor BNR Hoot System Tank Dimensions:
   a. Width at Top Slab: 77.5"
   b. Length at Top Slab: 165"
   c. Overall Height: 72.25"
   d. Bottom of Tank to Bottom of Inlet: 57.5"

8. All *PolyLok* Risers over the trash/aeration chamber (20" dia) and pump chamber (24"dia) must be brought to grade with Riser extensions. Grade should be finished so that homeowner can mow over them.

9. Versions of the Control Chip located in the Control Panel box are as follows:
   a. Version Universal 1.02 (all installations since May 2009)
10. Version 6.98 BNR (units older than May 2009)



PLAN VIEW



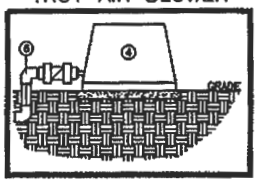
SIDE ELEVATION

REVISIONS	DESCRIPTION

CRITICAL DIMENSIONS

A	80.00"
B	70.25"
C	65.00"
D	4.00"
E	92.00"
F	92.00"
G	80.00"
H	80.00"

TROY AIR BLOWER



THE HOOT AEROBIC TREATMENT SYSTEM

1) SEPERATE PRETREATMENT TANK REQUIRED (MIN. 800 GALLONS)– WHERE ANAEROBIC DIGESTION OCCURS AND STORAGE FOR NON–BIODEGRADEABLE MATERIALS.

2) AERATION CHAMBER– WHERE AIR IS INTRODUCED INTO SEWAGE FOR DIGESTION.

3) CLARIFIER– A STILL CHAMBER WHERE SOLIDS SETTLE OUT AND THE CLEAR EFFLUENT RISES.

4) TROY AIR LINEAR AIR BLOWER– LONG LIFE, EFFICIENT LINEAR BLOWER WHICH COMPRESSES ATMOSPHERIC AIR AND UNDER PRESSURE DELIVERS IT TO THE TANK. MAY BE REMOTELY MOUNTED UP TO 50' FROM SYSTEM. MUST MAINTAIN 1/8" SLOPE TOWARDS TANK FOR DRAINAGE TO TANK.

5) AIR MANIFOLD– DELIVERS THE AIR FROM THE LINE TO THE STONES FOR DIFFUSION INTO THE SEWAGE.

6) AERATION LINE– DELIVERS THE AIR FROM THE PUMP TO THE MANIFOLD. CHECK VALVE INCLUDED.

7) AERATION STONE– AIR IS FINELY DIFFUSED FROM THE STONE INTO THE AERATION CHAMBER.

8) 15" COVERS– PROVIDE ACCESS TO EACH COMPONENT OF THE SYSTEM FOR REPAIR. ARE BROUGHT TO GRADE IF REQUIRED PER LOCAL CODE.

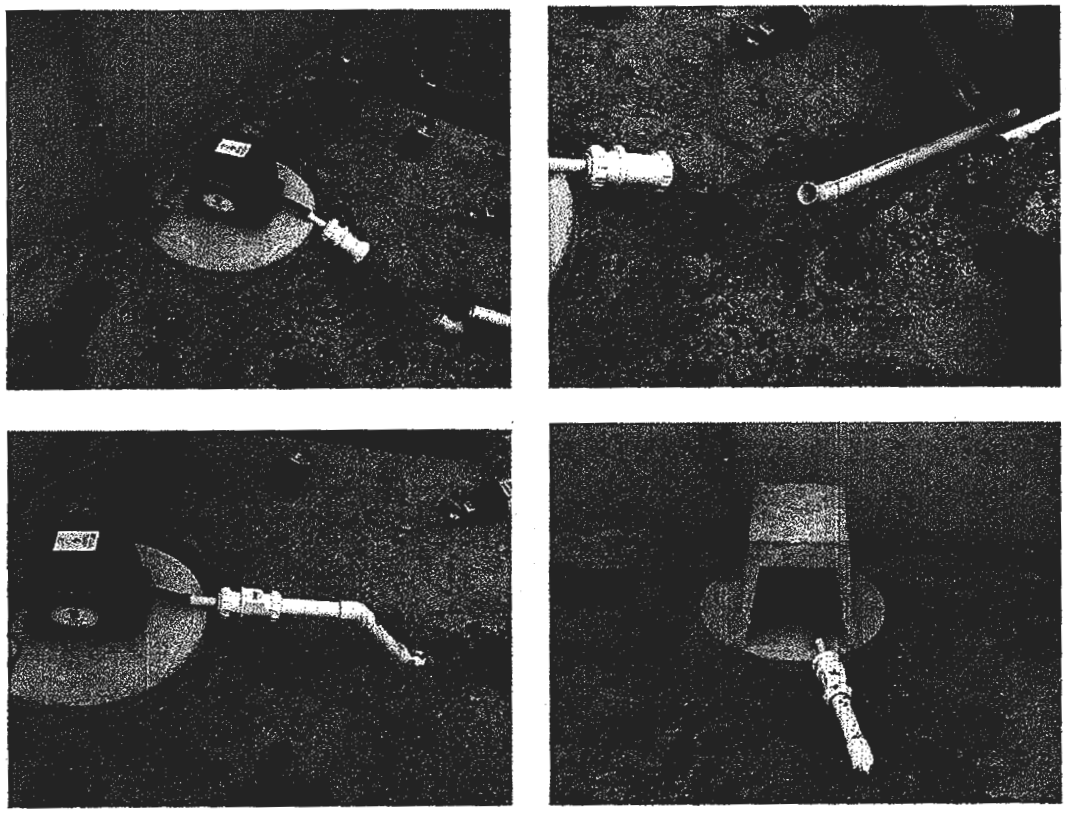
HOOT SYSTEMS, LLC
www.hootsystems.com

DESCRIPTION:	PART #
1000 GPD GRAVITY DISCHARGE SYSTEM H–1000–A w/ POLYLOK ACCESS 4" WALLS	H–1000–A

DATE:	DRAWN BY:	CHECK BY:	SCALE:
9–11–10	AY	RS	N.T.S.

j. If the 90 degree bends line up, then **prime and glue** the pieces in place.

k. **Measure** the distance between the 90 degree bends, and cut piping to connect them. **(NOTE: This section of pipe is useful in supporting the check valve to best advantage. <u>While the blower itself should always rest firmly on the level pad, the check valve should be not be touching the concrete pad. The vibrations caused by air flowing through it can cause it to rub against the concrete and wear out prematurely.</u> Use the vertical pipe coming up from the trench to support the valve a little above the concrete pad. To accomplish this, the air pipe itself must be well supported from underneath in the trench, particularly underneath the 45 or 90 degree bend turning upward. Tamp the earth well in this area, or place a brick under the end of the pipe.)**



Installing the air blower and connecting it to the air pipe.

l. **Prime and glue in place**, once all is right.

<u>Attach the back-pressure hose:</u>

m. **Locate** the small black rubber hose line that is wound up inside the control panel. **This is the back-pressure hose that will connect to the blower, and enable the control panel to monitor the amount of air being pumped into the aeration chamber. For the system to function properly, it MUST be installed correctly.**

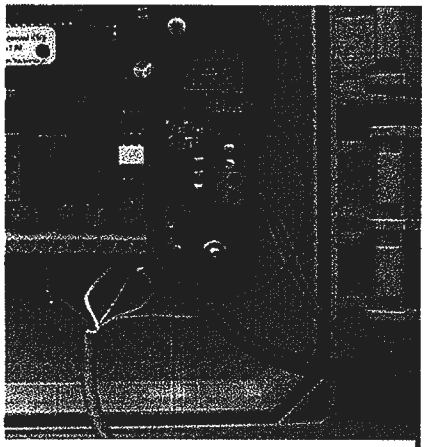
16. WIRING THE RECIRCULATION SOLENOID IN THE PANEL

a. **Locate** the two remaining wires that you have pulled into the panel for the recirculation solenoid.

b. **Locate** the small solenoid terminal on the control panel door.

c. Strip back each wire ¼" and twist very tightly. **(REMINDER: Leave enough wire inside so that the door can be fully opened, but not so much that it will interfere with panel operation.)**

d. Insert the two wires into either terminal point and secure. **(NOTE: It does not matter which way you connect these two wires, since the current here is D.C.)**



Solenoid wires properly connected

(REMINDER: Always use standard wire – not solid – so that it is flexible.)

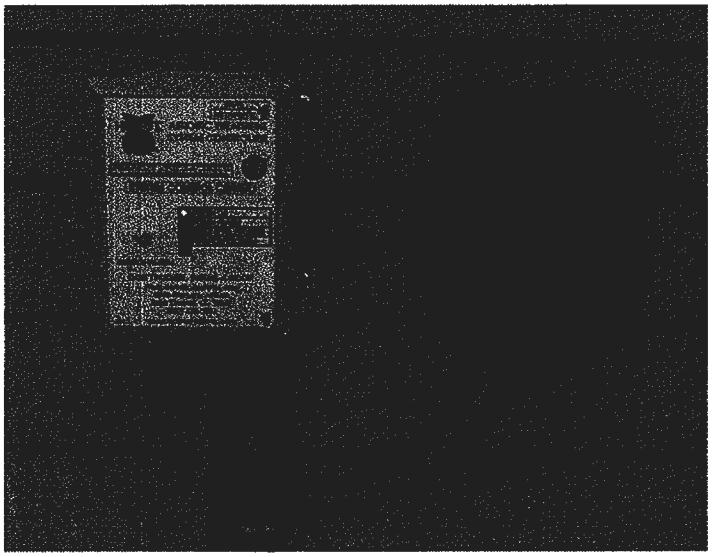
17. CLOSE AND SECURE THE CONTROL PANEL DOOR.

a. **Silicone all conduit penetration points where the wires entered to keep out pests, moisture, and gases. Wiggle wires to make certain seals are complete.**

b. Tuck all the wires in neatly, close and secure the panel door.

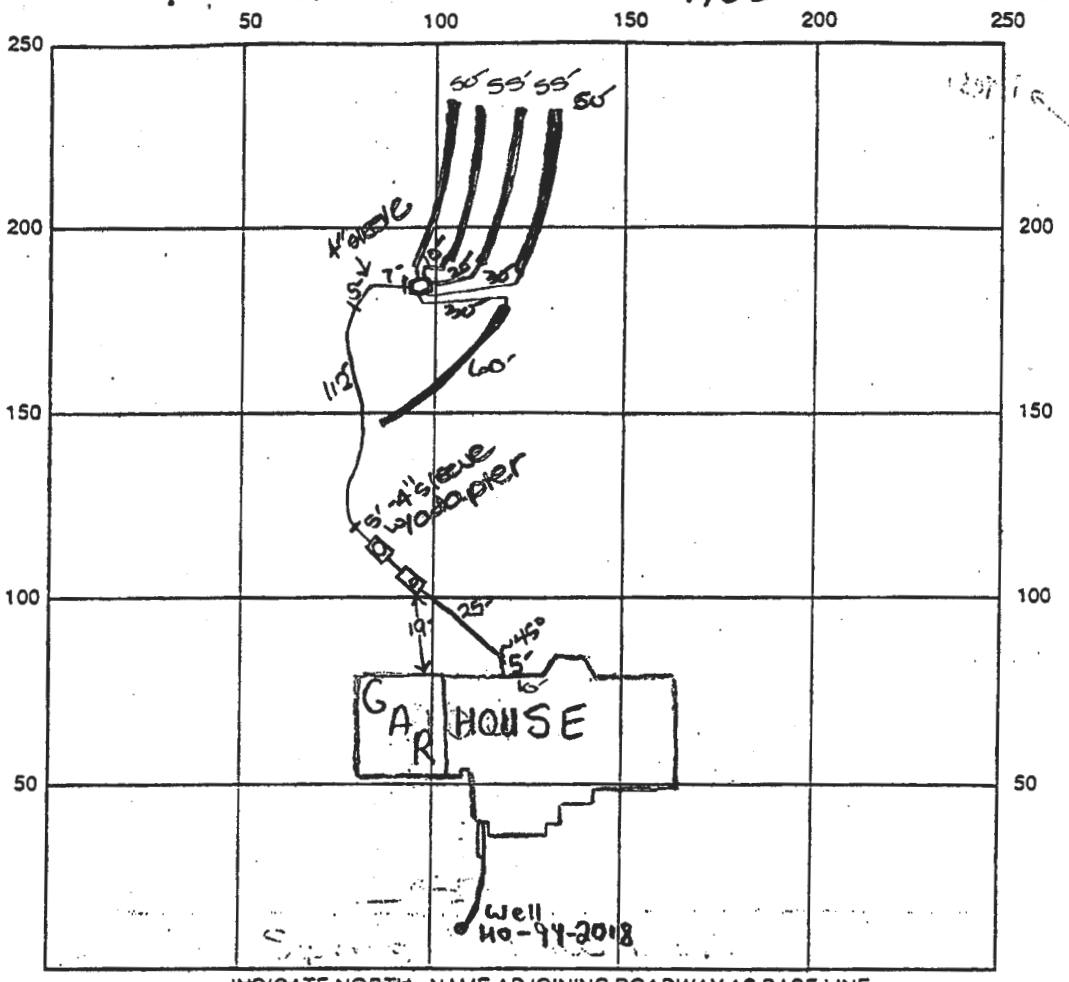
c. Leave the quick disconnect power disconnected. The startup technician will do this.

d. **Before leaving make certain the 30 AMP breaker inside the house is ON.**



Completed control panel installation

NOT TO SCALE



~~INDICATE NORTH~~ - NAME ADJOINING ROADWAY AS BASE LINE
SPRING HOLLOW COURT

SEPTIC TANK LEVEL OK-1250 gal pre s.t. CLEANOUTS one on s.t., manhole on PP

DISTRIBUTION BOX LEVEL OK

DRAIN FIELD/~~TITLE~~ TILE DEPTH 5 FT. TRENCH WIDTH 3 FT. INLET DEPTH 3 FT.

EFFECTIVE GRAVEL DEPTH 2 FT. TOTAL LENGTH 280 FT.

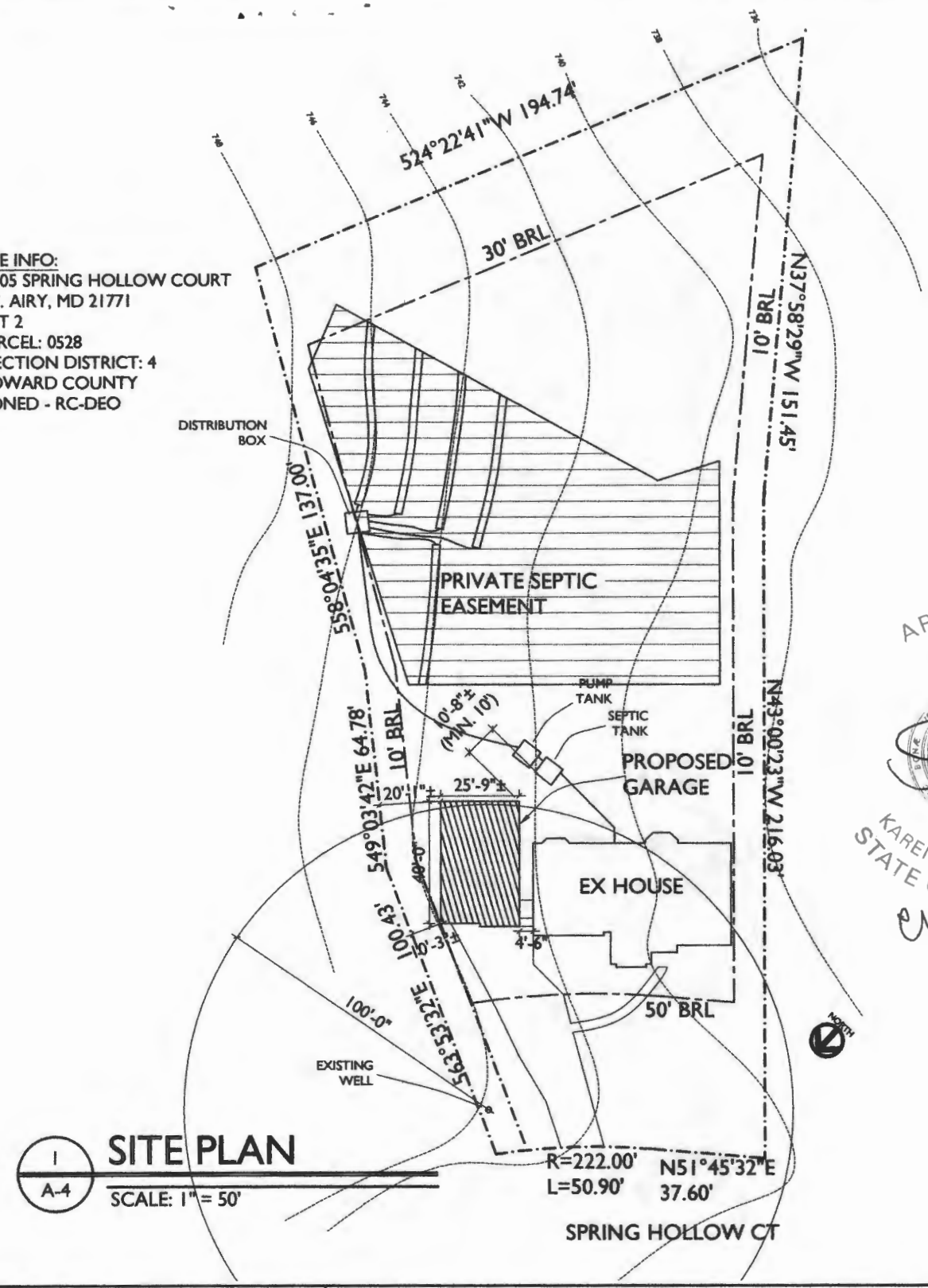
NUMBER OF TRENCHES 5 ~~ONE SIDEWALL~~/BOTTOM AREA 840 SQ. FT.

DRYWELL INSIDE DIAMETER N/A FT. EFFECTIVE DEPTH BELOW INLET N/A FT.

ABSORBENT AREA N/A SQ. FT.

REMARKS: 4/20/00 OK to cover all septic work. Need pump performance test for final approval. DKS
1/4/01 PUMP/ALARM OK (MR)

DATE SYSTEM APPROVED 1/4/01 INSPECTOR M. Rifkin



SITE INFO:
17105 SPRING HOLLOW COURT
MT. AIRY, MD 21771
LOT 2
PARCEL: 0528
ELECTION DISTRICT: 4
HOWARD COUNTY
ZONED - RC-DEO

ARCHITECT
13662
KAREN LYNN PITSLEY
STATE OF MARYLAND
exp. 10/22/17

1
A-4
SITE PLAN
SCALE: 1" = 50'

TRANSFORMING ARCHITECTURE
CUSTOM DESIGNS. FLAT FEES.

7612 Browns Bridge Rd
Highland, MD 20777
301-776-2666
301-776-2886 fax
1-877-828-7267
info@TransformingArchitecture.com
www.TransformingArchitecture.com

The Baker Residence
17105 Spring Hollow Ct. Mt. Airy, MD 21771

SCALE : AS NOTED	DATE: 02-05-16	PROJECT No: 11-069

4/26/00 Needs pump perf. test

12/26/00
2-3:00
1/4/00 → Pump Test
11:00

PERMIT

SEWAGE DISPOSAL SYSTEM

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

04-362721

P 513373

A 57610-B

DISTRICT

DATE 4-6-2000

DATE SYSTEM APPROVED 1/4/01

INSPECTOR M.Rifkin

HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
~~XXXXXXX~~ 410-313-2640

INDEXED

WTC III Plumbing & Heating IS PERMITTED TO INSTALL X ALTER

ADDRESS 1820 Gillis Falls Road, Woodbine, MD 21797 PHONE 410-489-4457

SUBDIVISION Spring Hollow LOT 2 ROAD 17105 Spring Hollow Court

PROPERTY OWNER ~~Vance Merson~~ ANNE LINN

ADDRESS

SEPTIC TANK CAPACITY 1250 GALLONS

NUMBER OF BEDROOMS 4

210 SQUARE FEET PER BEDROOM

LINEAR FEET OF TRENCH REQUIRED 280

Pumped Septic System Proposed

INSTALL: 1-1250 Gallon Pump Chamber

NOTES: - Septic pump detail to be provided by installer prior to issuance of septic permit.
- Pump performance test is necessary prior to Health Department approval of pumped septic system.

TRENCHES - Trench to be 3 feet wide. Inlet 3.0 feet below original grade. Bottom maximum depth 5.0 feet below original grade. Effective area begins at 3.0 feet below original grade. 2.0 feet of stone below distribution pipe.

LOCATION - Begin trenches 225 feet off the front lot line and 10 feet off the left lot line as seen when facing the lot from Spring Hollow Court. Run trenches on contour as shown on approved septic plan.

NOTES - No trench to exceed 100 feet in length. Provide 6" - 8" diameter cleanout and cap to grade or above on septic tank. 12/28/99 O.K. (EB)

PLANS APROVED BY Amy McMillen DATE 11-24-1999

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

JG. PERMIT SIGNED AND RETURNED 6/14/01
B00130849 - deck

BLDG. PERMIT SIGNED AND RETURNED 6/27/01
B00131174 - inground pool

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**

*CALL 461-9933 FOR INSPECTION OF SEPTIC SYSTEM.

HD-260(6-90)

A 57610B

$\frac{w+2}{w+1+2(d)} = \frac{3+2}{3+1+2(2)}$

$\frac{5}{8} < 0.625$

$280' \times 3' = \boxed{840}$

$840 \div 0.625 =$

$\boxed{1360} \times .8 =$

$\boxed{1,088}$

* Lots created aft march 72' 10,000 sq.ft.
* Lots created before march 72' 1 initial + 2 replacements