

Bureau of Environmental Health

7178 Gateway Drive

Columbia, MD 21046 Fax (410) 313-2648

(410) 313-2640 TDD (410) 313-2323

Toll Free 1-866-313-6300

website: www.hchealth.org

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

ONSITE SEWAGE DISPOSAL SYSTEM RECEIPT DATE: 4/26/13 P 545016 INSTALLATION PERMIT APPROVAL DATE: Repair PROPERTY ADDRESS: 4396 Route 97 TAX ID: No SUBDIVISION: LOT: CONTRACTOR: **Bill Ingram Farm and Home Excavating** EMAIL: CONTRACTOR ADDRESS: 901 Driver Rd Marriottsville, MD 21104 PHONE: 410-984-0189 PROPERTY OWNER: Warren Sargent EMAIL: MIER ADDRESS: 4396 State Route 97, Brookeville, MD 20833 PHONE: 410-489-6520 AT UNIT MODEL: Hoot 600 BNR BAT UNIT SIZE: 600 GPD **PUMP CHAMBER CAPACITY (GALLONS): 720** PUMP SIZE: **WUMBER OF BEDROOMS: 3** HOUSE SQ. FT. 768 APPLICATION RATE: 0.8 **DISTRIBUTION SYSTEM: GRAVITY FED LOW PRESSURE DOSED** LINEAR FEET REQUIRED: 140' INLET DEPTH: 1.5 TRENCHES: TRENCH WIDTH: 2 MAXIMUM BOTTOM DEPTH: 4 MINIMUM SPACE EFFECTIVE AREA BEGINNING DEPTH: 1.5 BETWEEN TRENCHES: PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND BAT UNIT LOCATION MUST BE STAKED BY LICENSED LOCATION: SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION. Set BAT unit per plan. Install LPD system per plan. NOTES: Install 2 x 70' trenches on contour. SSUED BY: Robert Bricker ISSUE DATE: EXPIRATION DATE: 4/26/14

MOTE: 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

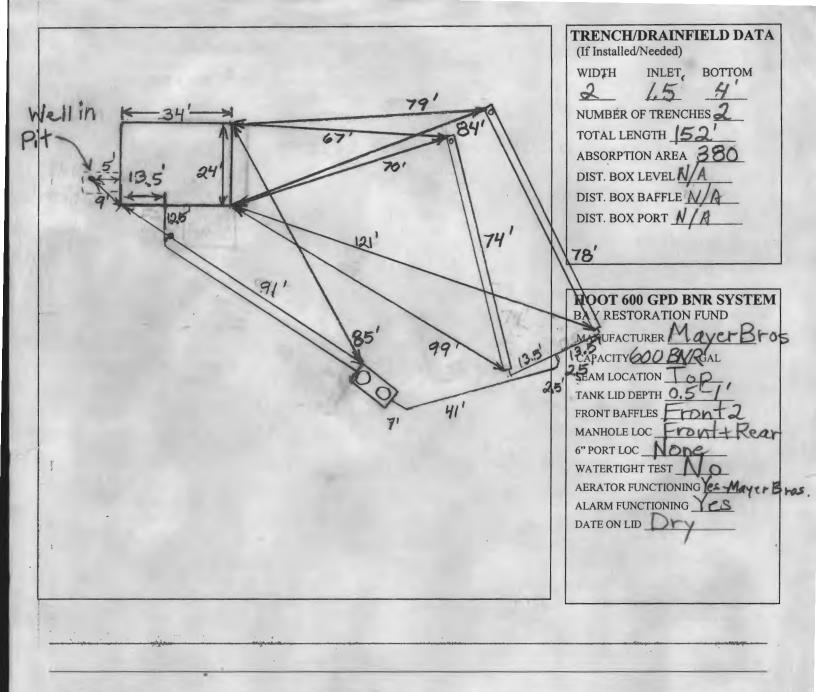
NOTE: MANHOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAMBERS

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

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.



10/1/2013 Tanks set. House connection made No one on sete BB 10/8/2013 No workdone BB) 10/9/2013 Pump line run to trench area BB) 10/10/2013 Pump and aerator tank wired up BB) 10/17/2013 System finished. O. X. to backfill aerator, high water alarm etc., and pumps working. Top trench has around 2,5 of head, Bottom trench has around 4 of head. Hole spacing not correct BB) FINAL INSPECTOR B Baker DATE OF APPROVAL 10/17/2013



MAYER BROS., INC.

Precast Concrete Products
6264 Race Rd. Elkridge, MD 21075

Letter of Satisfaction Hoot System Installation

Address of Property: 4396 MD RT-97 Brookvills, mp 2083	3
Date of Final Inspection: 10/3/13	
Installer: Farm + Home Excaveling Inc. BUL	
Hoot Technician/Inspector: Mike Sample	
I hereby certify that the Hoot system installed at the property listed above has been installed at the property listed above his listed above his list listed above his list l	
Sincerely,	
Name of Inspector Mayer Bros., Inc.	,

PH: 410-796-1434

FX: 410-796-1438

WBE NPCA Certified Plant

mayerbro@connext.net www.mayerbrosprecast.com

Grease Interceptors, Grease Solutions, Acrobic Treatment Units, Septic Tunks, Helding Tanks, Sterm Water Structures, Hydroceptors.

Bench Barrier, Water Meter Vanks, Sectional Valve Vanks, Top Slake, Curb Hends, Curb Bumpers, Penalintry Basement Entries,

Scapewal Window Wells, Custom Precast Products

14881 129

AGREEMENT AND EASEMENT FOR INSTALLATION 000149 OF BEST AVAILABLE TECHNOLOGY SYSTEMS WITH BAY RESTORATION FUNDS.

WHEREAS, Owner owns a tract of land located on 396 505 Date 17, 500 VENUE, MD, in the Election District of 4Howard County, Maryland, and the deed to same is recorded among the Land Records of Howard County, Maryland, in Maryland, in Liber 07294

Folio 00662.

WHEREAS, the Bay Restoration Fund (BRF) may provide a grant for the cost attributable to upgrading an onsite sewage disposal system to the Best Available Technology (BAT) for the removal of nitrogen.

WHEREAS, the BRF may also provide a grant for the cost difference between a traditional onsite sewage disposal system and a system that utilizes the BAT for the removal of nitrogen.

WHEREAS, Owner understands that participation in the Bay Restoration Fund is voluntary.

NOW, THEREFORE, the parties hereto agree as follows:

- A. Owner hereby grants to the Department and the County the right to enter upon the property at any reasonable time for access to the system to make periodic inspections and the Owner agrees to provide any information and data requested and needed by the Department to develop accurate and thorough test results.
- B. Owner acknowledges and agrees that a manufacturer-approved installer will install the BAT system.

- C. Owner acknowledges and agrees the manufacturer will provide for Operation and Maintenance of the BAT for a period of 5 years as a condition of sale of the BAT. After the 5 year period the Operation and Maintenance contract can be further extended at the behest of the property owner. The Department and County encourage the property owner to continuously maintain an Operation and Maintenance contract during the lifetime of the system.
- D. Owner acknowledges and agrees that the manufacturer appointed Operation and Maintenance provider will have access to the BAT system at all times.
- E. Owner acknowledges and agrees that the manufacturer or manufacturers designee will have access to sample the effluent of the BAT system. Owner acknowledges and agrees that the proposed installation of a BAT system funded by the BRF is voluntary. Owner agrees that there shall be no liability on the part of the County or Department to Owner if this BAT system fails, and that the County and the Department do not warrant or guarantee that the BAT system will adequately or properly function.
- F. Owner acknowledges and agrees that neither the County nor the Department nor any of its agents or employees, either officially or individually, underwrites the operation of any system approved by them.
- G. The Owner will devote such care and effort to the maintenance of the BAT system so that any malfunction is not the result of poor maintenance, faulty operation, or neglect.
- H. The Canaan Valley Institute agrees to grant \$ 13,000 toward the cost of installation of the BAT system, and financial responsibility is limited to this amount. Operating costs will be at the Owners expense.
- I. The Owner acknowledges that the BRF grant can only be used for that portion of the OSDS attributable to (BAT) for the removal of nitrogen.

- J. Owner acknowledges in the event the total project cost is greater than \$25,000 the proposal will have to be approved by the Maryland State Board of Public Works.
- K. The Owner agrees to contact both the Water Management Administration, On-Site Systems Division of the Wastewater Permits Program and the County at least forty-eight (48) hours prior to system installation, so that the Department has the opportunity to be present at the time of installation or thereafter for inspection.
- L. The Owner must install BAT system according to the manufacturer recommended plans and specifications approved by the Department.
- M. The Owner agrees and acknowledges that if installation deviates substantially from the approved plans or changes such that performance of the system is compromised or reduced, BRF funding will not be provided.
- N. This agreement shall run with the land and binds the Owner, his heirs, successors, assigns except that the provisions of paragraph A, C, D and E shall be binding for a period of 5 years only after installation of the system and occupation of the home. Owner further agrees that he shall inform in writing any purchaser or lessee of the property that the system may require maintenance or other attention. The Owner agrees to record this agreement in the land records of _Howard_ County.
- O. This agreement shall not be construed to limit any authority of the Department to protect the public health, safety or comfort or to issue any other orders to take any other action that is now or may hereafter be within its authority.
- P. This agreement may be voided at the discretion of the Department if the system construction is not completed within six (6) months of the effective date of this agreement.
- Q. This agreement contains the entire agreement and understanding between the County and the Owner and the Department. There are no additional terms other than as contained in this

agreement. This agreement may not be modified except in writing signed by each of the parties or by their authorized representatives.

R. The laws of the State of Maryland govern the provisions of all transactions pursuant to this agreement.

IN WITNESS WHEREOF, the parties have signed and sealed this agreement on the date indicated

above.

DATE: 5/1/13

DATE: 5/1/13

Owner

WARREN G. SARGOUT

Howard County Health Department

LR - Agreement Recording Fee 20.00 Grantor/Grantee Name:

sargent
Reference/Control #: 149
LR - Agreement Surcharge

40.00

SubTotal: 60.00

Total: 60.00 \$1527365-1 05/01/2013 03:39 CC13-NN \$1527365 CC0503 - Howard Co Columbia/CC05.03.01 -Register 01 396

Clerk of the Circuit Court for Howard County Land Records/Licensing

The Thomas Dorsey Building 9250 Bendix Road Columbia, MD 21045 410-313-5850

LR - Agreement Recording Fee
1x 20.00 20.00
Grantor/Grantee Name: Sargent
Reference/Control #: 122

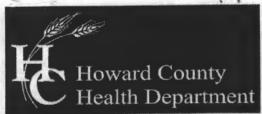
LR - Agreement Surcharge
1x 40.00 40.00
LR - Additional Recording Fee - linked
1x 0.00 0.00

SubTotal: 60.00 Total: 60.00 REV-Cash 60.00

05/01/2013 14:40 CC13-VB #1525117 /497/109 Thank you for visiting us today

> Surgent Property 4396 Rtc 97

14380 244



Bureau of Environmental Health000122

7178 Columbia Gateway Drive, Columbia, MD 21046-2147

Main: 410-313-2640 | Fax: 410-313-2648

TDD 410-313-2323 | Toll Free 1-866-313-6300

www.hchealth.org

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Twitter: HowardCoHealthDep

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

OPERATION AND MAINTENANCE AGREEMENT FOR AN ON-SITE SEWAGE DISPOSAL SYSTEM HAVING AN ADVANCED PRE-TREATMENT SYSTEM

THIS AGREEMENT is made this ______ day of ________, hereinafter collectively referred to as "Owner", and the Howard County Health Department hereinafter referred to as the "County".

WHEREAS, Owner is the owner or contract owner of a parcel of land located at 43965 TATE POINTE 97, BROCKEWIE, 20833, in the 04 Election District of Howard County, Maryland, and the deed to same is recorded or shall be recorded among the Land Records of Howard County, Maryland in Liber 01294 Folio 00662

WHEREAS, The Lot is suitable for the installation of a conventional on-site sewage disposal system, but an advanced pre-treatment system, utilizing best available technology to perform nitrogen reduction, must be installed as part of the sewage disposal system for a bedroom home with 168 square feet of finished living space and square feet of unfinished living space. Advanced pre-treatment has been required (pick one):

To minimize the potential impact of the on-site sewage disposal system on down grade wells.

For an existing lot of record that does not have enough area available for an initial and two replacement onsite sewage disposal systems.

For the purpose of repairing a failing onsite sewage disposal system on an existing lot of record.

NOW, THEREFORE, the parties hereto agree as follows:

- A. Owner hereby grants to the County the right to enter upon the Lot at any reasonable time for access to the system to make periodic inspections and the Owner agrees to provide any information and data in Owner's possession reasonably requested and needed by the County to develop accurate and thorough test results.
- B. Owner acknowledges and agrees that neither the County nor any of its agents or employees, either officially or individually, underwrites the operation of any system approved by them.
- C. The Owner will devote reasonable care and effort to the operation and maintenance of the system in perpetuity or until a public sewer connection is made so that a system malfunction is not the result of poor maintenance, faulty operation, or neglect.



- D. The Owner agrees to enter into a contract reasonably acceptable to the Owner and the County with a private entity to operate and maintain on a regularly scheduled basis an approved advanced pre-treatment system. The owner shall supply a copy of the contract to the County when it is renewed or altered.
- E. This agreement shall run with the land and upon Owner's taking title to the Lot shall bind the Owner, their heirs, successors, and assigns to the provisions of the agreement as long as the property is in existence and after installation of the system. Owner further agrees that they shall inform in writing any subsequent purchaser or lessee of the Lot that the system shall require maintenance or other attention. Upon taking title to the Lot, the Owner agrees to cause this agreement to be recorded in the Land Records of Howard County and assure that it becomes part of the Deed for the subject property in order that prospective buyers may be aware of the special conditions affecting this property.
- F. This agreement shall not be construed to limit any authority of the County to protect the public health, safety or comfort or to issue any other orders to take any other action which is now or may hereafter be within its authority.
- G. This agreement may be voided at any time at the discretion of the County.
- H. This agreement contains the entire agreement and understanding between the County and the Owner. There are no additional terms other than as contained in this agreement. This agreement may not be modified, except in writing signed by each of the parties or by their authorized representatives.
- I. The laws of the State of Maryland govern the provisions of all transactions pursuant to this agreement.
- J. Owner acknowledges and agrees that interior renovations to increase the number of bedrooms or an increase in living space shall not be permitted without approval from the County.

IN WITNESS WHEREOF, the parties have signed and sealed this agreement on the date cording fee indicated above. Grantor/Grantee Name: Sargent Reference/Control #: 122 LR - Agreement Surcharge 40.00 LR - Additional Recording Owner 0.00 SubTotal: 60.00 60.00 Total: #1525117-1 05/01/2013 62:40 CC13-VB Howard County/Health Departmen #1525117 CC@5@3 - Howard Co

Columbia/CC05.03.05 -Register 05 497

BACK RIVER PRE-CAST, LLC - P.O. BOX 329 nera GLYNDON, MD 21071-0329 PHONE: 410-833-3394 FAX: 410-833-4116

Field Elevations

SITE INSPECTION SHEET

OWNER:	PHONE #:		
ADDRESS:	CONTRACTOR:		
	WELL TAG #:		
SUBDIVISION:LOT:	COUNTY #:		
PROPOSAL:			
	,		
LOCATION	N DIAGRAM		
Slab elei	1440		
T . 6/11	445,1"		
1 +8.1	1.9" 438'.4"		
Top of SHC at Band - C			
To Tank Inlet	438'2"		
10 land Inlet	7.5		
12 to Tank Out 7			
	14" 437 911-16"= 436.8"		
125 to Trench 1 center 7	436.		
51 \$ (3/1) - 1 - 1 8	18" 23'3"-1'6"= 434.9" groundat. (13.3', Center of manifold 7 11-1'6"		
# 26 to Trench 2 center 8	Center of manifell		
Mani Rold length	(B.3)		
Force Main to Manif	435,8		
TOTCE I CAIN TO Manis	En -40 Pump quambe		
	out.		
2			
F.M. Zelbiw (900) Man	: Rold FM & HOV: Rold = 3!		
OMMENTS: Tee ends	FM. & Havilled = 3in at 90° elbow 2×3' to 1/4"		
OMMEN 1S:	2 3 10 1/8		
(1/2) or 1/2 ho	(3002 d 210/2)		
ATE; INSPEC	TOR:		

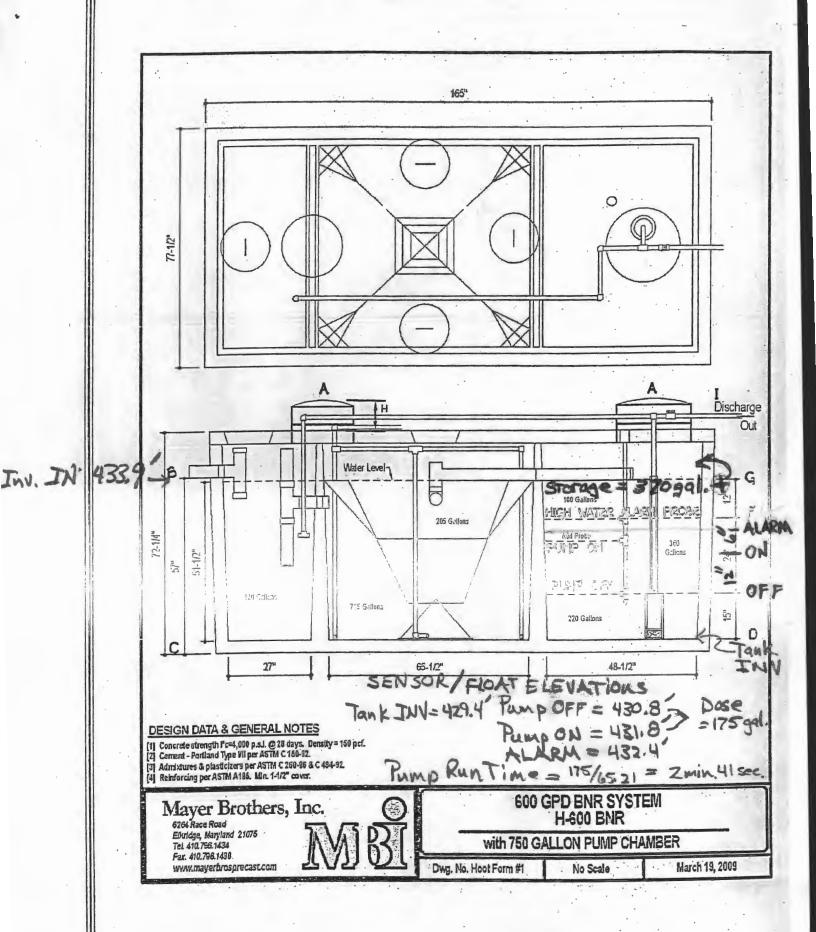


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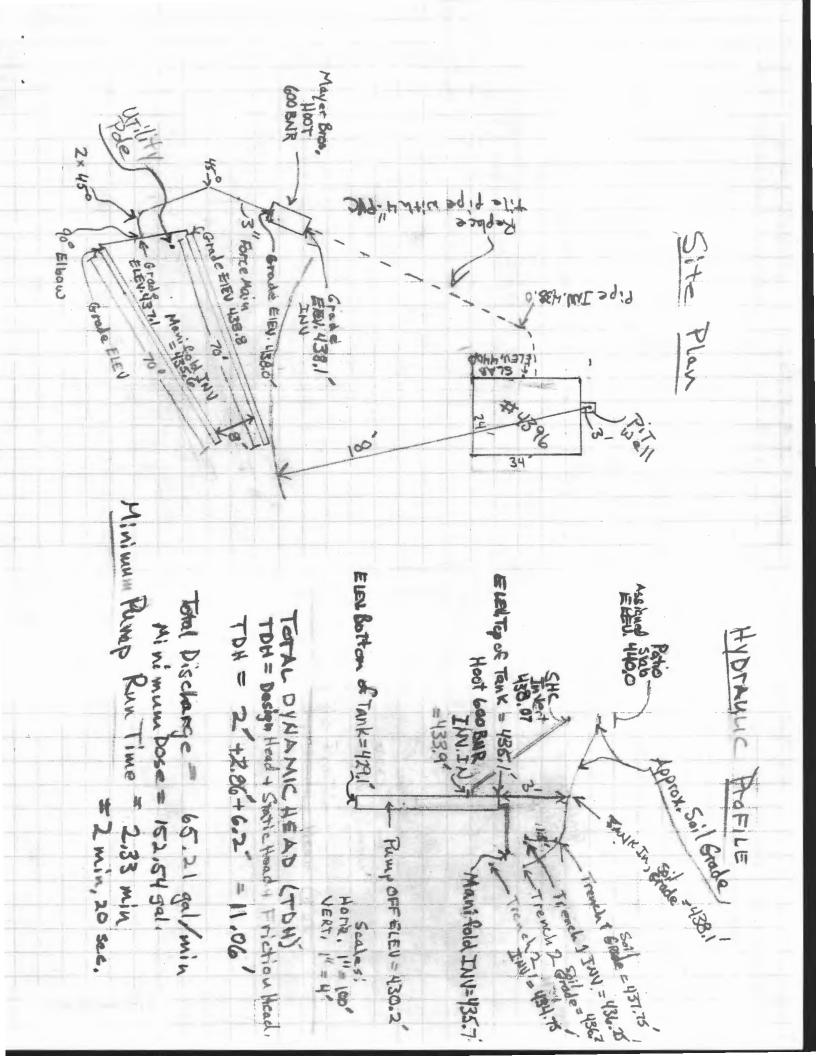
Service Visits

Change Page Size ▼	Extract To Excel					
Install Service Date Date	<u>Property</u>	County Installation Status	Visit Type	<u>Provider</u>	Reason for Visit	<u>BAT</u> System
10/1/201310/1/2013	4396 MD Route 97 Brookeville MD 20833	Howard Acceptable	Installation		Installation	Hoot BNR®
10/1/20134/24/2014	4396 MD Route 97 Brookeville MD 20833	Howard Acceptable	Service Visit	Mike Sample	Routine	Hoot BNR®
10/1/201310/16/2014	4396 MD Route 97 Brookeville MD 20833	Howard Acceptable	Service Visit	Mike Sample	Routine	Hoot BNR®
10/1/20137/24/2015	4396 MD Route 97 Brookeville MD 20833	Howard Acceptable	Service Visit	Mike Sample	Annual	Hoot BNR®
10/1/20137/24/2015	4396 MD Route 97 Brookeville MD 20833	Howard Acceptable	Service Visit	Mike Sample	Routine	Hoot BNR®
10/1/201312/29/2015	4396 MD Route 97 Brookeville MD 20833	Howard Acceptable	Service Visit	greg Minahan	Routine	Hoot BNR®
10/1/201312/31/2015	4396 MD Route 97 Brookeville MD 20833	Howard Acceptable	Service Visit	Matt Breitenother	Audit	Hoot BNR®
10/1/20137/29/2016	4396 MD Route 97 Brookeville MD 20833	Howard Acceptable	Service Visit	Mike Sample	Routine	Hoot BNR®
10/1/201310/27/2016	34396 MD Route 97 Brookeville MD 20833	Howard Acceptable	Service Visit	LEE PUMPHREY	Routine	Hoot BNR®
10/1/2013 5/31/2017	4396 MD Route 97 Brookeville MD 20833	Howard Acceptable	Service Visit	Mike Sample	Routine	Hoot BNR®
10/1/201310/17/2017	4396 MD Route 97 Brookeville MD 20833	Howard Acceptable	Service Visit	LEE PUMPHREY	Routine	Hoot BNR®
10/1/2013 5/3/2018	4396 MD Route 97 Brookeville MD 20833	Howard Acceptable	Service Visit	LEE PUMPHREY	Routine	Hoot BNR®

Total: 12



/



CALCULATIONS at (65gpm) Schedule 40 Head loss per 100 (3" pipe) 1.85+ 113-.85

tal Frietian Head = (10) (300) = 2.86 Total Friction Head = (10) (300) = 2.86 Force main, 3", pump to manifold = 45 45 ell, (3) × 6=18; 90° Sidetee (1) x15= 15 feet Ball Valve; 100 feet (assigned value) Manifold, 3", (26) center Trench 1 to center Trench 2 Center Fittings, 98 sideTee (2) x15 = 30 feet 3 702" reducer, (2) x 25 = 50 feet * Volume 3 pip - (45 +26) 38 484/100 Gt = 27.26 gal. 3 Volume/102 = 38,4 3" Pipe at 65 gpm 2 Volume/100 87 - 17.4 27,26 900 +125,28 gal 2×72-(44)(174) x5=125.28 gal 152,549al, min dose hadeintend=3.59 = 42" 5/16" hole discharge: Cateral 1 at 2 pressure head @1.63 the Lateral 2 at 2+1,5=3,5 pressure head 2,15gpm Lateral 1 hole interval = 42 inches; 20 holes Lateral 2 hole interval = 56 inches; 15 holes * Lateral 1 length = 68.25 (68'6"); Qui = 1.63 gpm; Qui = 32.76gpm * Lateral 2 length = 67.67 (67'8"); Quie=2.15gpm; Qui=32.45gpm Que = QLat. 1 + Qlat. 2 = 32.76+32.45 = Total Discharge Total Discharge = 65.21 gal /min.

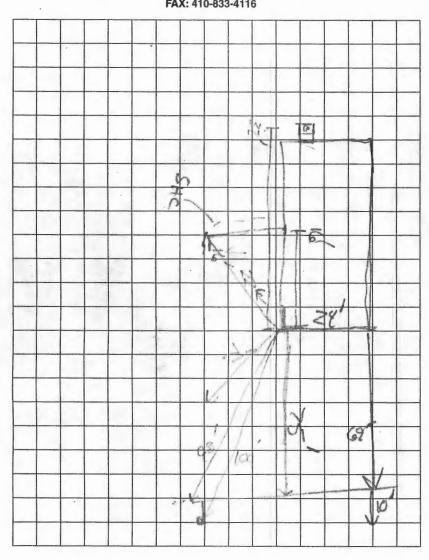
Field ElevationsITE INSPECTION SHEET

OWNER:	PHONE #:
ADDRESS:	CONTRACTOR:
	WELL TAG #:
SUBDIVISION:LOT: _	COUNTY #:
PROPOSAL:	
LOCA	TION DIAGRAM
Top of SHC at Band To Tank Inlet In to Tank Inlet In to Tank Out To Trench I center Hanifold length Force Main to M	-6.9" 438:4" 6.11" 438'2" 7'1" 438'2" 135.5-436 7'4" 438'3" 436. Groundat. 8'8" Center Trench I to 437'2" 13.3', Center of manifold 7'11-1'6"
- Lata	Manifold +M. & Havifold + 3in 2 nds at 90°elbow 2×3' to 1/4" (3+0> 4>+01/5)
DATE: IN	SPECTOR:

BACK RIVER PRE-CAST, LLC P.O. BOX 329 GLYNDON, MD 21071-0329 PHONE: 410-833-3394 FAX: 410-833-4116







SEPTIC SPECIFICATIONS WORKSHEET					
Subdivision SEPTIC SPECIFICATIONS WORKSHEET BAT installatio					
Street Name 4396 State Rte. 97 Lot Number					
Average Percolation Rate (min./in.) 5 min./inch Application Rate (GPD/sq. ft.)					
Number of Bedrooms Design Flow (#BRx150) = $\frac{450}{100}$					
Square Footage (of House) 768 Septic Tank Capacity (gal.)					
Sidewall Credit / % Reduction 25 feet /% Total Length of Trench (ft.)					
*All Septic/Pump tanks must be top seamed unless otherwise approved by this agency.					
*All Septic tanks must be compartmented unless otherwise approved by this agency.					
Baffle Filter Required? Yes No					
TRENCH DIMENSIONS: Trench to 2 feet wide. Inlet is at / 5 feet below original grade with feet					
of stone below the distribution pipe. Bottom maximum depth is 4 feet below original grade. Effective					
sidewall begins at steet below original grade. Maintain at least spacing between trenches.					
PUMP SYSTEM PROPOSED? YES NO					
Pump system details: 720 gallon pump chamber					
Note 1: Septic pump detail to be provided by installer prior to issuance of septic permit.					
Note 2: Pump performance test required prior to Health Department approval of pumped septic system.					
LOCATION:					
1. Set septic tank per plan 2. Set distribution box Install LPD system per plan					
2. Set distribution box Install LPD system per plan					
3. Install 2x70 trenches on contour					
ADDITIONAL NOTES Do not order the septic tank until after layout inspection and Sanitarian approval. Stake					
septic easement corners. Call for layout inspection. Mark utilities. Gravel tickets must be available for					
Environmental Sanitarians. Stone must be approved by the Howard County Health Department. A written variance					
request is required for tanks deeper than 3 feet. A traffic bearing lid is required for tanks deeper than 4 feet.					
Reviewed by: Date: 85/3					