

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

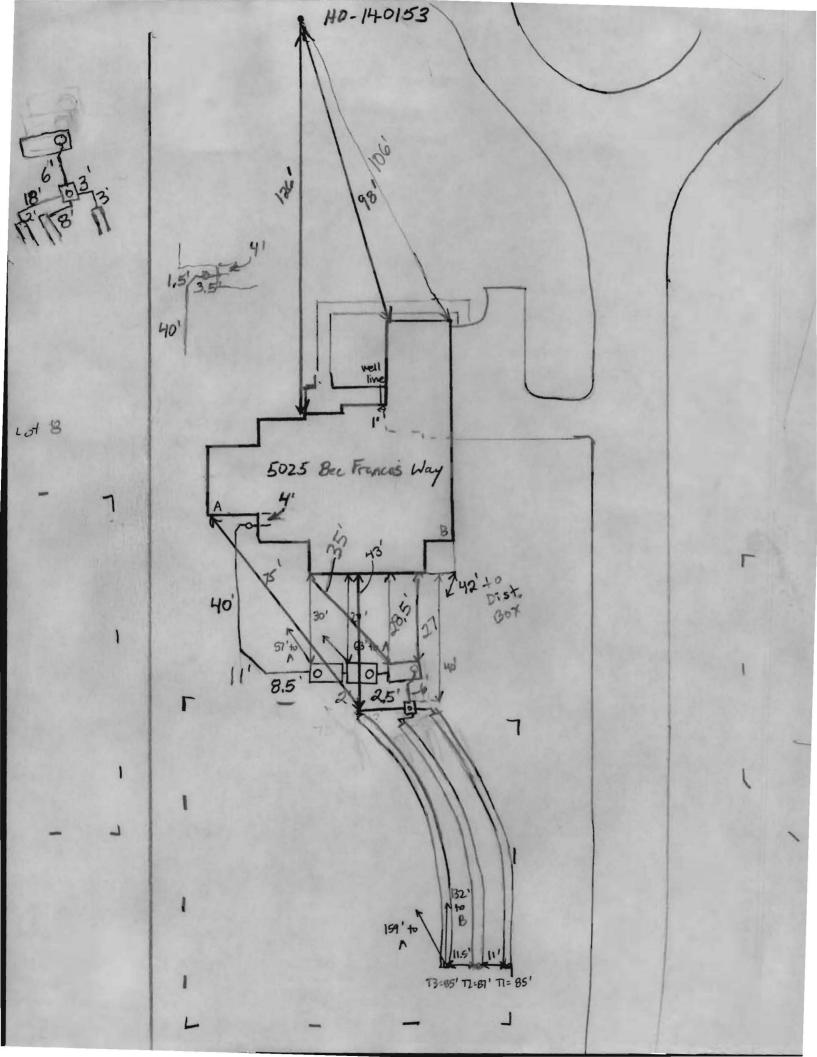
| RECEIPT | DATE: 41416 ONSITE SEWAGE DISPOS | BAL SYSTEM P 558075 |
|--------------|---|---|
| APPROVAL | DATE: 6/20/16 PERMIT: CONS | TRUCTION |
| PROPERTY A | DDRESS: 5025 Bee Frances Way | |
| SUBDIVISION | N: Greenberry | LOT: 7 TAX ID: 05-598670 |
| CONTRACTO | R: South Carroll Backhoe | EMAIL: <u>scbackhoe@comcast.net</u> |
| CONTRACTOR | ADDRESS: 4410 Salem Bottom Road | PHONE: 410-596-3618 |
| CONTRACT | TOR CERTIFIED FOR BAT INSTALLATION: 🔀 MDE | MANUFACTURER: |
| PROPERTY C | OWNER: NVR Inc. | EMAIL: |
| OWNER ADDR | RESS: 9720 Patuxent Woods Road | PHONE: 410-379-5956 |
| BAT UNIT M | ODEL: Hoot H-1000A PUMP SIZE: 0.4 | PUMP TANK CAPACITY: 2000 |
| OPERATION & | MAINTENANCE AGREEMENT DATE SIGNED: 2/10/16 | DATE RECORDED: 2/10/16 |
| DISTRIBUTIO | N SYSTEM: GRAVITY PRESSURE DOSED | BEDROOMS: 6 APPLICATION RATE: 0.8 |
| | LINEAR FEET REQUIRED: 232.5 261 | INLET DEPTH: 4 |
| TRENCHES: | TRENCH WIDTH: 22 | MAXIMUM BOTTOM DEPTH: ** 8 |
| <i>)</i> | MINIMUM SPACE BETWEEN TRENCHES: 10 100 EFF | FECTIVE AREA BEGINNING DEPTH: 5 |
| | PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND B | |
| LOCATION: | SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION. | |
| | Install cleanout at bend in SHC | |
| NOTES: | 3 × 87 | |
| | | |
| ISSUED BY: | Robert Bricker ISSUE DATE: | 2/14/16 EXPIRATION DATE: 4/14/17 |
| NOTE: CON | TRACTOR MUST SCHEDULE A PRE-CONSTRUCTION INSPECTIO | N PRIOR TO BEGINNING ANY INSTALLATION |
| NOTE: CON | TRACTOR MUST SCHEDULE AN INSPECTION AND GAIN APPROV | /AL OF ALL COMPONENTS PRIOR TO COVERING |
| | IE MUST BE APPROVED BY HEALTH DEPARTMENT AND GRAVE | L TICKET MUST BE AVAILABLE FOR REVIEW. |
| | ERTIGHT SEPTIC TANKS REQUIRED | COADIENT EDOM ANY WATER WELL |
| | PARTS OF SEPTIC SYSTEM SHALL BE AT LEAST 100 FEET DOWN (HOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHA | |
| | LECTRICAL PERMIT IS REQUIRED FOR INSTALLATION OF ANY | |
| | ELECTRICAL PERMIT ISSUED E 16001400 | |
| | NDIVIDUAL CERTIFIED BY MDE AND THE MANUFACTURER FO | R BAT INSTALLATION MUST BE PRESENT AT ALL TIMES |
| NOTE: MDE | RECOMMENDS SEPTIC TANKS, BAT, AND OTHER PRETREATM NSURE THAT SOLIDS ARE NOT DISCHARGED TO THE DISPOSAL | |
| | | |

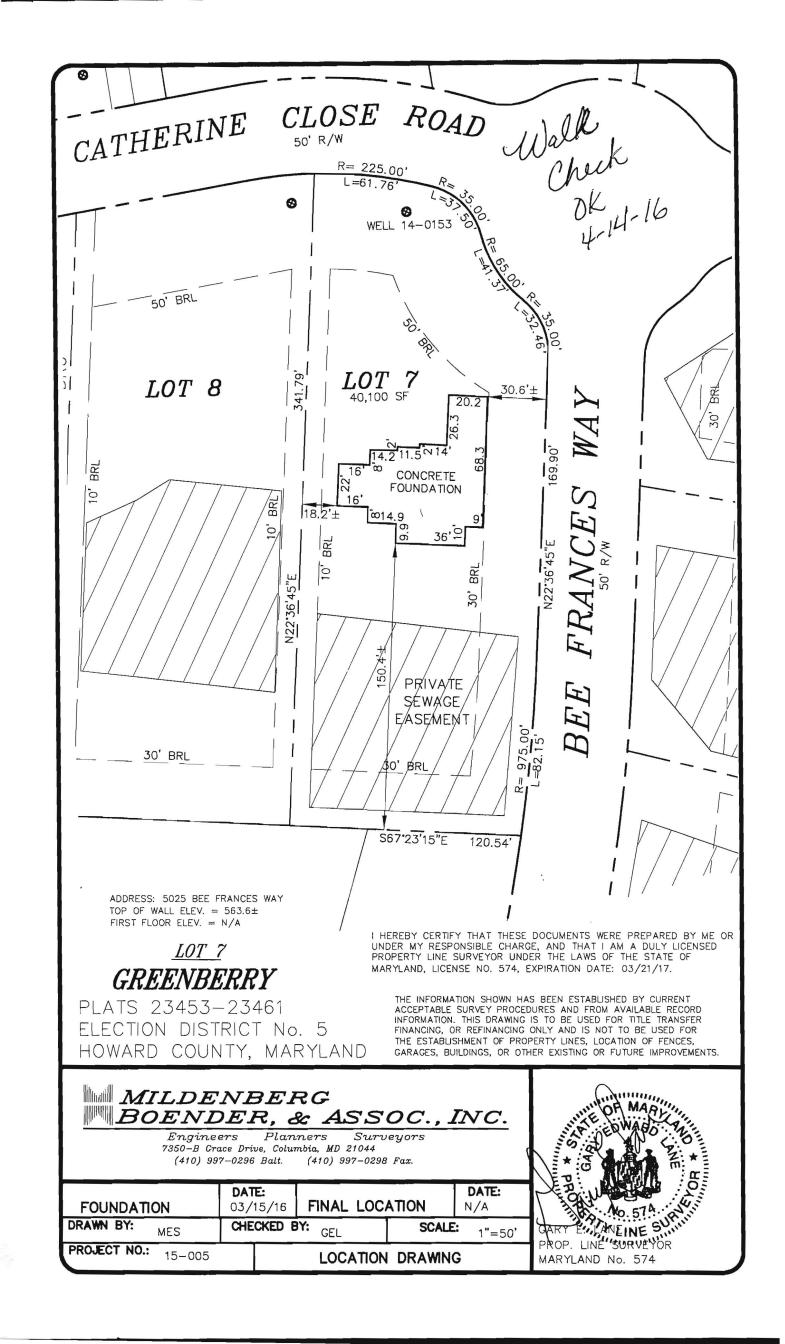
NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM.

PERMITTEE RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT.

CALL 410-313-1771 TO SCHEDULE INSPECTIONS.

| NOT TO SCALE | TRENCH/DRAINFIELD DATA WIDTH INLET BOTTOM 2' 4' 8' NUMBER OF TRENCHES 3 TOTAL LENGTH 257' ABSORPTION AREA 514'+S1DEWALL DISTRIBUTION BOX LEVEL Yes DISTRIBUTION BOX BAFFLEE/DOW DISTRIBUTION BOX PORT Yes |
|---|--|
| See Seperate Sheet For As-Built 6/20/16 Grade taken dawn april 10" one Pump Tank. (RW) ROAD NAME | SEPTIC TANK DATA SEPTIC TANKS LEVEL MANUFACTURER CAPACITY 1000 2000 GAL SEAM LOC TANK LID DEPTH 2, 3 BAFFLES F+R, F BAFFLE FILTER NO MANHOLE LOC Front, Rear 6" PORT LOC None, None WATERTIGHT TEST 1000 gallon? SLOTTED NO DATE ON LID Dry MANUFACTURER HOOT MAYER CAPACITY 1980 GAL SEAM LOC TOP TANK LID DEPTH 3-3,5 BAFFLES None BAFFLES None BAFFLE FILTER NO MANHOLE LOC Rear 6" PORT LOC None WATERTIGHT TEST YES? SLOTTED DATE ON LID |
| PRE-CONSTRUCTION: 4/27/16 58A staked tak stakes look good. 5/ Trench speck adjusted as shown, set Dbox p trenchs on satour as positivel out in field. K slopes. Call for imp. (mw) INSTALLATION: 5/10/16 TI finished + left open at ends, T2 finished digging T3 2' wide 35-14'to stone Using transit while digging, 8' to finished, 35' to stone, 2' wide (SO 5/11/16 On site during install Both have hydraulic cement patches that mayer Bros, confi | of trash + Hoot touries. |
| confirmed with builder that grade can be out down over Pump tank set. Dank los deep. Not traff FINAL INSPECTOR / Way DATE OF APPROV | pump tank. (2) 5/13/2016 in bearing (3) 5/16/2016 |







MAYER BROS., INC.

Precast Concrete Products
6264 Race Rd. Elkridge, MD 21075

Letter of Satisfaction Hoot System Installation

| Address of Property: | 5025 | Bee Fre | ances Dr. | | |
|--|----------------------|---------|-----------|-----|----|
| , | Clarksvill | e, mo. | 21029 | | , |
| | | | * | | |
| Date of Final Inspection: | 6/13/ | 16 | | | |
| Installer: South (| Carroll Ba | chhoe | Service | | |
| Hoot Technician/Inspector | mike | Sample | | • | |
| I hereby certify that the Ho according to proper Hoot in it is in proper working order | stallation practices | | | | |
| Sincerely, | | | | · · | |
| Name of Inspector Mayer Bros.,Inc. | ~ | | , | | t. |

PH: 410-796-1434

FX: 410-796-1438

WBE NPCA Certified Plant

mayerbro@connext.net ww.mayerbrosprecast.com



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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 3 day of Cambe among SWATI DAIN 9 NVR. Inc., hereinaster collectively reserved to as "Owner", and the Howard County Health Department hereinaster reserved to as the "County". |
|--|
| WHEREAS, Owner is the owner or contract owner of a parcel of land located at 5 CA5 Bee Frances were in the 5 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 Folio PLAT # 23455 |
| WHEREAS, The Lot is suitable for the installation of a conventional on-site sewage disposal system with an advanced pre-treatment system, utilizing best available technology to perform nitrogen reduction, in accordance with the Code of Maryland Regulations 26.04.02.07, effective January 1, 2013. The pre-treatment device being installed is |

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

JW 8/8/2014

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 indicated above.

| Howard County Health Department | | |
|---------------------------------|---------------------|------|
| Owner #1 Signature Date | Owner#2 Signature | Date |
| Owner #1 Print Name | Owner #2 Print Name | - 1 |
| Buyer #1 Signature Date | Buyer #2 Signature | Date |
| SWATE JAIN Buyer #1 Print Name | Buyer #2 Print Name | |

JW 8/8/2014

5025 Bee Frances Lot it Way Green berry

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

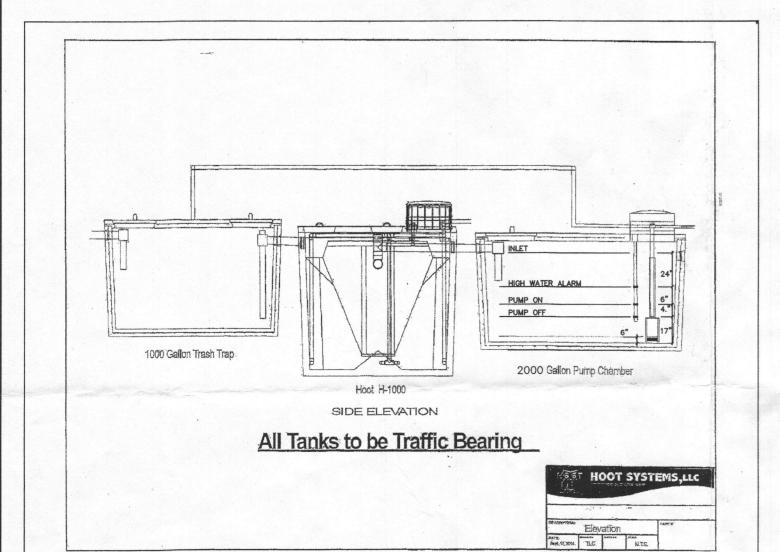
The Thomas Dorsey Building 9250 Bendix Road Columbia, MD 21045 410-313-5850

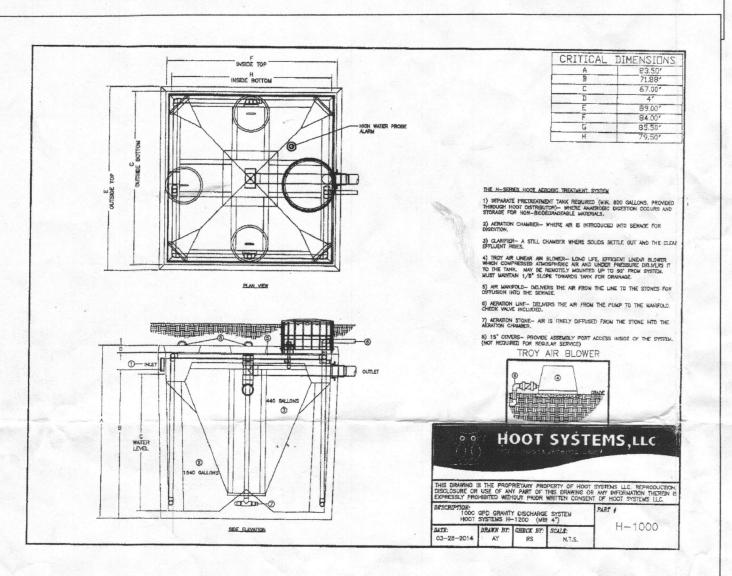
| LR - Agreement Recording Fee | |
|--|-------|
| 1x 20.00 | 20.00 |
| Grantor/Grantee Name: NVR INC Reference/Control #: 51 | |
| LR - Agreement Surcharge | |
| 1x 40.00 | 40.00 |
| SubTotal: | 50.00 |
| Total: | 60.00 |
| REV-Check-BOA | 60.00 |
| Number : 3017 | |

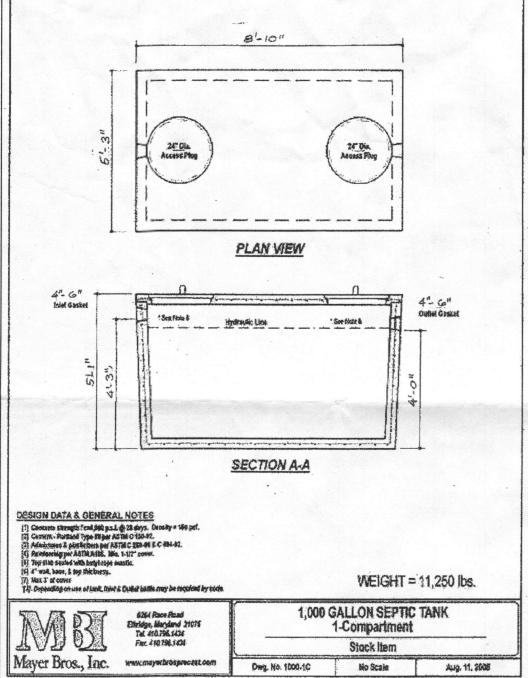
02/10/2016 09:56 CC13-CH #5568493 /495/109 Thank you for visiting us today

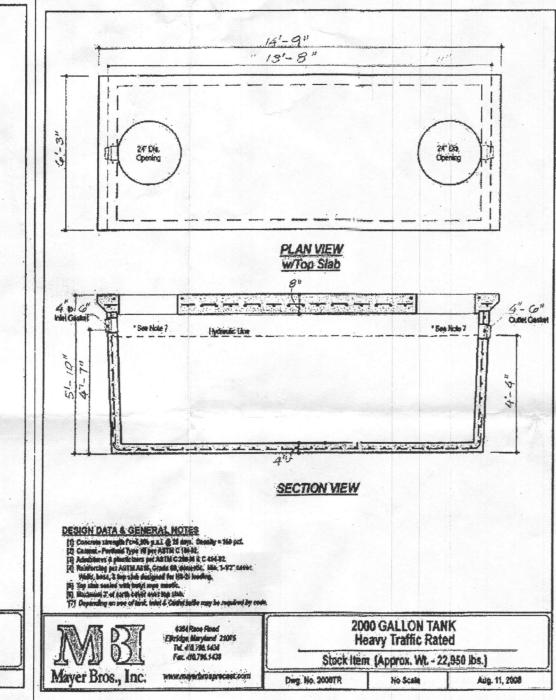
SOILS TABLE (WITHIN LOD)

| SYMBOL | RATING | NAME | K FACTOR |
|--------|--------|-----------------------------|----------|
| GgB | (B) | GLENELG LOAM, 3-8% SLOPES. | .20 |
| GgC | (B) | GLENELG LOAM, 8-15% SLOPES. | .20 |







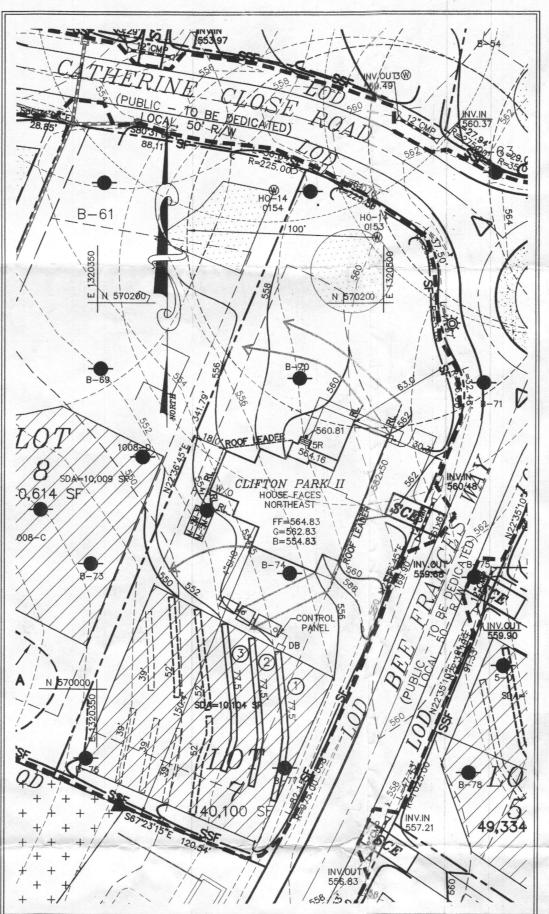


PRIMARY TRENCH DATA

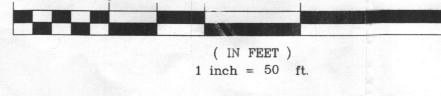
| RENCH | EX. GROUND ELEVATION | INVERT ELEVATION | BOTTOM OF TRENCH EL. | | | | |
|-------|-------------------------|---------------------|-------------------------|--|--|--|--|
| 1 | 554.1 | 550.1 | 547.1 | | | | |
| 2 | 553.2 | 549.2 | 546.2 | | | | |
| 3 | 552.1 | 548.1 | 545.1 | | | | |

SEPTIC TRENCH SIZING

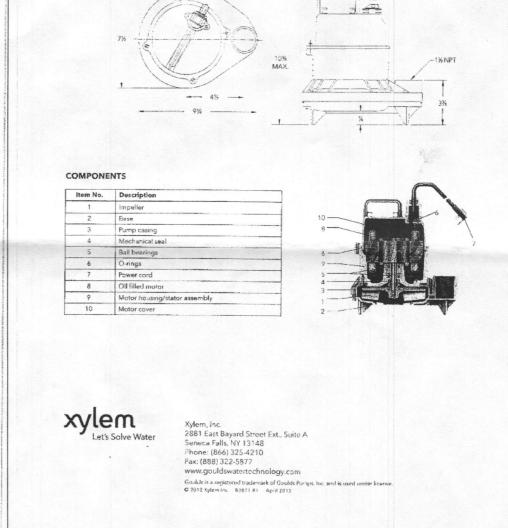
| SYSTEM | APPLICATION RATE (GPD / SF) | MAXIMUM FLOW RATE (GPD) | AREA OF REQUIRED TRENCH (SF) | TRENCH WIDTH (FT) | LENGTH OF REQUIRED TRENCH (LF) | EFFECTIVE DEPTH BEGINS (FT) | TRENCH BOTTOM DEPTH (FT) | TRENCH REDUCTION FACTOR** | | MINIMUM TRENCH SPACING (FT) | NUMBER OF TRENCHES | PROVIDED TRENCH LENGTH (FT) |
|-----------|-----------------------------------|-------------------------------|---------------------------------------|-------------------------|---|--------------------------------------|-----------------------------------|---------------------------------|-------|-----------------------------------|--------------------------|-----------------------------------|
| PRIMARY | 0.8 | 900 | 1,125 | 3 | 375 | 5.0 | 7.0 | 0.62 | 232.5 | 10.0' | 3 | 77.58 |
| SECONDARY | 1.2 | 900 | 750 | 3 | 250 | 5.0 | 7.0 | 0.62 | 155 | 10.0' | 3 | 52 |
| TERTIARY | 1.2 | 900 | 750 | 3 | 250 | 5.0 | 7.0 | 0.62 | 155 | 10.0' | 4 | 39 |



GRAPHIC SCALE



Wastewater MODEL INFORMATION Order No. HP Volts Amps Minimum Circuit Phase Breaker Phase Style Style Cond Connection 21/9.5 20/9.1 21/9.5 20/9.1 20/9.1 22/10 23/10.4



SEWER SYSTEM CHART

| DESCRIPTION | ELEVATION |
|------------------------------------|-----------|
| BASEMENT ELEVATION | 554.83 |
| INVERT OUT OF THE HOUSE | 552.33 |
| FINISHED GRADE AT SEPTIC TANK | 554.00 |
| INVERT INTO SEPTIC TANK | 551.39 |
| INVERT OUT OF SEPTIC TANK | 551.14 |
| FINISHED GRADE AT HOOT SYSTEM | 554.00 |
| INVERT INTO HOOT SYSTEM | 551.10 |
| INVERT OUT OF HOOT SYSTEM | 550.97 |
| FINISHED GRADE AT PUMP TANK | 554.10 |
| TOP OF TANK | 552.18 |
| INVERT INTO PUMP TANK | 550.93 |
| INVERT OUT OF PUMP TANK | 552.29 |
| PUMP TANK FLOOR | 546.35 |
| FINISHED GRADE AT DISTRIBUTION BOX | 554.10 |
| INVERT INTO DISTRIBUTION BOX | 550.10 |
| PUMP OFF | 551.52 |
| PUMP ON | 551.85 |
| HIGH WATER ALARM | 552.85 |
| DOSED RATE | 50 GPM |
| PUMP RUNTIME | 3.0 MIN. |

MINIMUM TANK CAPACITY = 2,000 GALLONS PUMP: GOULDS MODEL 3871, EP04 SERIES

ON-SITE SEWAGE DISPOSAL SYSTEM:

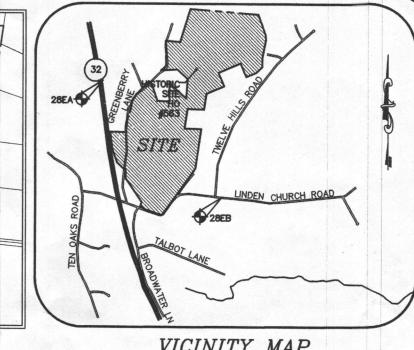
RESIDENTAL SYSTEM DESIGN: HOOT H-1000 6 BEDROOM HOUSE (LIVING AREA = 2,288 SQ.FT.) 150 GALLONS X # OF BEDROOMS = VOLUME OF WASTEWATER /DAY $150 \times 6 = 900 \text{ GPD}$

PERC RATE = 6-15 MINUTES/INCH APPLICATION RATE = 0.8 GPD/SQ.FT. DESIGN FLOW + APPLICATION RATE = SQ.FT. OF TRENCH REQUIRED 900 ÷ 0.8 = 1.125 SQ.FT. SQ.FT. REQUIRED : WIDTH OF TRENCH = LENGTH OF TRENCH

 $1,125 \div 3.0' = 375 \text{ FT}$ USE 24" OF GRAVEL BELOW DRAIN PIPE $375 \times 0.62 = 232.5$

PUMP: GOULDS MODEL 3871, EP04 SERIES

USE THREE (3) TRENCHES (77.5) A MINIMUM OF 10' BETWEEN TRENCHES UTILIZING SIDEWALL REDUCTION CREDIT. MINIMUM TANK CAPACITY = 1000 GALLONS



ADC MAP 24 GRID F6

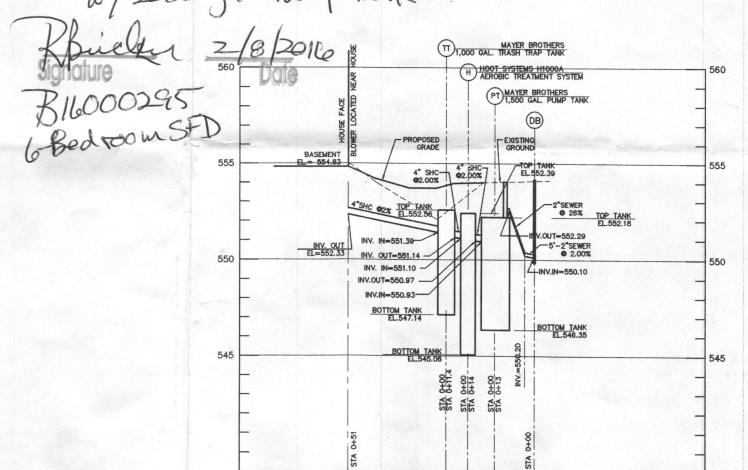
GENERAL NOTES:

- 1. THE SUBJECT PROPERTY IS ZONED RR-DEO PER THE OCTOBER 6, 2013 COMPREHENSIVE ZONING PLAN.
- PARCEL BACKGROUND: TAX MAP: 28 GRID: 9 DEED REFERENCE: LIBER 5891 FOLIO 307 ELECTION DISTRICT : FIFTH ZONING : RR-DEO.
- AREA: 40,100 S.F. DPZ FILES: ECP-13-025, SP-13-010, F-14-095, GP-15-081
- 2' TOPOGRAPHY FOR THE DEVELOPED AREAS IS BASED ON AERIAL SURVEY FLOWN BY WINGS TOPOGRAPHY INC. ON OR ABOUT MARCH 2007. 4. PRIVATE WELL AND SEPTIC WILL BE UTILIZED.
- 5. SOILS DATA BASED ON THE USDA SOIL SURVEY OF HOWARD COUNTY, MD, DATED
- THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF AT LEAST 10,000 SQ. FT. AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THIS EASEMENT SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWERAGE EASEMENT. RECORDATION OF A MODIFIED EASEMENT SHALL NOT BE NECESSARY.
- ANY CHANGES TO A PRIVATE SEWERAGE EASEMENT SHALL REQUIRE A REVISED PERC CERTIFICATION PLAN.
- 3. EXISTING WELLS, SEPTIC SYSTEMS, AND SEWERAGE DISPOSAL AREAS WITHIN 100' OF THE PROPERTY AND THOSE WELLS WITHIN 200' DOWN GRADIENT OF EXISTING OR PROPOSED SEPTIC SYSTEMS OR SEWAGE DISPOSAL AREAS HAVE BEEN SHOWN.

BEST AVAILABLE TECHNOLOGY SITE PLAN NOTES

- ANY CHANGE TO THE LOCATIONS OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED SITE PLAN MAY BE REQUIRED.
- 2. THE MAXIMUM DEPTH OF THE BAT PER THE MANUFACTOR'S SPECIFICATION IS 3.0'
- 3. THE BLOWER MAY NOT BE LOCATED MORE THAN 100 FEET FROM THE TANK BASED ON MANUFACTURER'S SPECIFICATIONS.
- 4. THE BAT SYSTEM SHALL BE MAINTAINED AND OPERATED FOR THE LIFE OF THE
- 5. THE BAT SHALL BE OPERATED BY AND MAINTAINED BY A CERTIFIED SERVICE PROVIDER.
- 6. WITHIN ONE (1) MONTH OF INSTALLATION, A PERSON INSTALLING THE BAT SYSTEM SHALL REPORT TO THE MARYLAND DEPARTMENT OF THE ENVIROMENT (MDE) IN A MANNER ACCEPTABLE TO MDE, THE ADDRESS AND DATE OF COMPLETION OF THE BAT INSTALLATION AND THE TYPE OF BAT INSTALLED.
- 7. ELECTRICAL WORK FOR THE BAT INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
- 8. AN AGREEMENT AND EASEMENT MUST BE COMPLETED AND SIGNED BY ALL APPLICABLE PARTIES, AND RECORDED IN THE LAND RECORDS OF HOWARD COUNTY.

Approved Septic System Prestriction from the Manufacturer Prior to final approval of the Installation.



PROFILE - PRIVATE SEWER SCALE: 1"=50' HOR 1"=5' VER

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS

COUNTY HEALTH OFFICER HOWARD COUNTY HEALTH DEPARTMENT



I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 17942, EXP DATE 09/03/2016.

WELL CERTIFICATION: THE EXISTING WELL, TAG NO. HO-14-0153, HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN

OF 1

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