

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: 9/8/15 **ONSITE SEWAGE DISPOSAL SYSTEM** P 557360
 APPROVAL DATE: 2/26/16 **PERMIT: CONSTRUCTION** A _____
 PROPERTY ADDRESS: 1850 Millers Mill Road
 SUBDIVISION: Griffin Property LOT: Par/2 TAX ID: _____
 CONTRACTOR: Freedom Septic EMAIL: _____
 CONTRACTOR ADDRESS: _____ PHONE: 410-795-2947
 CONTRACTOR CERTIFIED FOR BAT INSTALLATION: MDE MANUFACTURER:

PROPERTY OWNER: Trinity Quality Homes EMAIL: _____
 OWNER ADDRESS: 3675 Park Avenue Suite 301, Ellicott City, MD 21042 PHONE: 443-324-9806

BAT UNIT MODEL: Norweco TNTLP-500 PUMP SIZE: WE03L PUMP TANK CAPACITY: 1000 GAL

OPERATION & MAINTENANCE AGREEMENT DATE SIGNED: _____ DATE RECORDED: _____

DISTRIBUTION SYSTEM: GRAVITY PRESSURE DOSED BEDROOMS: 5 APPLICATION RATE: 1.2

TRENCHES:	LINEAR FEET REQUIRED: <u>150</u>	INLET DEPTH: <u>4</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>7</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>4.5</u>

LOCATION: **PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND BAT UNIT LOCATION MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.**

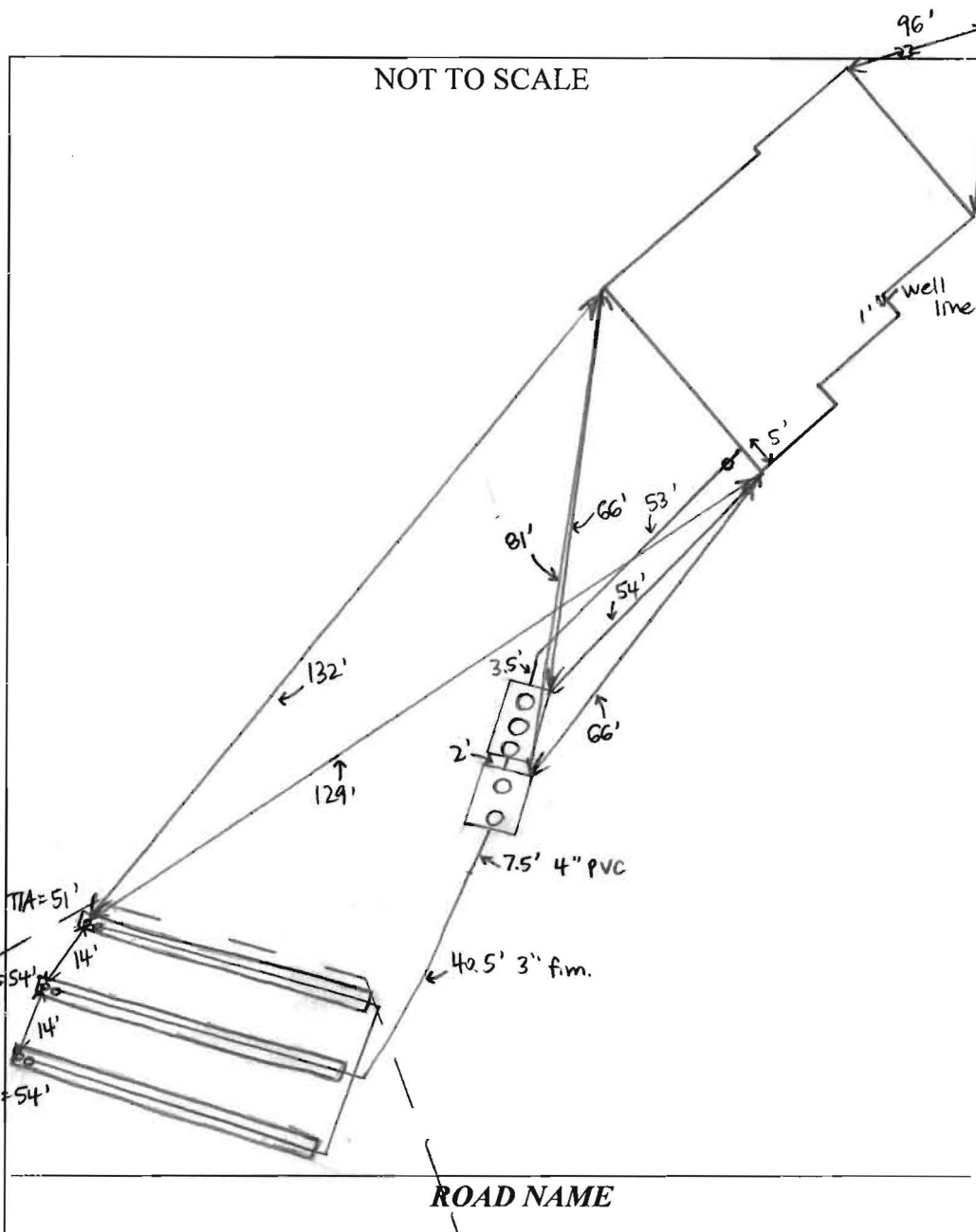
NOTES: See BAT plan for Lateral details.

ISSUED BY: Hank Oswald ISSUE DATE: 9/8/15 EXPIRATION DATE: 9/8/16

- 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 _____
- NOTE: AN INDIVIDUAL CERTIFIED BY MDE AND THE MANUFACTURER FOR BAT INSTALLATION MUST BE PRESENT AT ALL TIMES DURING BAT INSTALLATION.
- 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.**

NOT TO SCALE



TRENCH/DRAINFIELD DATA		
WIDTH	INLET	BOTTOM
3'	4'	7'
NUMBER OF TRENCHES		3
TOTAL LENGTH		153'
ABSORPTION AREA		459' + SIDEWALL
DISTRIBUTION BOX LEVEL		---
DISTRIBUTION BOX BAFFLE		---
DISTRIBUTION BOX PORT		---

SEPTIC TANK DATA	
SEPTIC TANK I LEVEL	YES
MANUFACTURER	BACKRIVER/NORWECO
CAPACITY	1300 GAL
SEAM LOC	TOP
TANK LID DEPTH	1.5'
BAFFLES	NO
BAFFLE FILTER	NO
MANHOLE LOC	FRONT, MID, REAR
6" PORT LOC	NONE
WATERTIGHT TEST	NONE
SLOTTED	NO
DATE ON LID	8-1-15

PUMP/SEPTIC TANK LEVEL	YES
MANUFACTURER	BACKRIVER
CAPACITY	1000 GAL
SEAM LOC	TOP
TANK LID DEPTH	1.5'
BAFFLES	NO
BAFFLE FILTER	NO
MANHOLE LOC	FRONT + REAR
6" PORT LOC	NONE
WATERTIGHT TEST	NO
SLOTTED	NO
DATE ON LID	7-31-15
Pump	WS30M

PRE-CONSTRUCTION:

9/8/15 Met Freedom on site for layout. SDA staked, but tank and lateral stakes not present. Reschedule layout once laterals are staked. 9/11/15 Laterals and tanks now staked. Elevations along trench are within 1" (confirmed with transit). Trenches staked = 50' each, 13' center spacing. Line comes out as hung sewer at location shown on BAT plan. (SC)

INSTALLATION: 9/17/15 House connection made. Tanks installed and all pipe run from house to tanks. T3 dug + Freedom currently filling with stone. 4' to stone below pipe. Holes drilled in laterals - clean drill, spacing as shown on BAT plan. Force main run from pump tank to laterals. (SC) 9/17/15 T2 finished, adding stone on top of pipe in T3. Need observation ports in all trenches. Lateral turn-ups do not have 4" PVC surrounding - Freedom will cut to grade after pump test. On site while Freedom installed observation pipes - T2 + T3 extended ~3'. Need pump + alarm and BAT startup certification. (SC)

*lateral turnups need surrounding 4" PVC pipes or turf box for protection. 2/25/16 Met Freedom on site for pump + alarm. Lateral turnups protected with 4" PVC. Initially when pump ran, head > 3'.

FINAL INSPECTOR Sarah Collins DATE OF APPROVAL 2/26/16

Installed ball valve - closed 1/4 turn and head heights are 1A/1B/1C 15"/24"/28". Norweco alarm sounds + aerator runs. (SC) 2/26/16 BAT startup received (SC)

Back River Pre-Cast, LLC

PO BOX 329
Glyndon, MD 21071
Phone # 410-833-3394
Fax # 410-833-4116

Letter of Certification

This is to certify that the Norweco Singulair TNT 600 GPD Septic Tank installed at 1850 Millers Mill Rd. September 16, 2015 was installed according to the manufacture's specifications.

Installer: Daniel Farrow

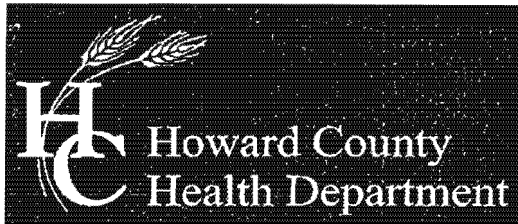
Property Owner: Rainmaker Development, Inc.

Permit #



MATTHEW GECKLE

Vice-President



Bureau of Environmental Health

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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 7th day of March 2016, among Gary A. Shapley
and Stephanie L. Shapley, 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
1850 Millers Mill Road, Cooksville, MD 21723, in the 923 Election District of Howard
County, Maryland, and the deed and subdivision plat of the property is recorded among the Land
Records of Howard County, Maryland, Tax Map # 0008, Block # 22, Parcel # 0090, Deed
Reference # 16014/00274 and Tax Account # 04-371216 ("the Property").

WHEREAS, The Property 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
Norweco.

NOW, THEREFORE, the parties hereto agree as follows:

- A. Owner hereby grants to the County the right to enter upon the Property at any reasonable time with prior notice 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.
- 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 Property 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 Property that the system shall require maintenance or other attention. Upon taking title to the Property, 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.

Beit Ruffin 3/7/2012
Howard County Health Department

[Signature] 3/7/16
Owner #1 Signature Date

Bary Shapley
Owner #1 Print Name

[Signature] 3/7/16
Owner #2 Signature Date

Stephanie Shapley
Owner #2 Print Name

Buyer #1 Signature Date

Buyer #2 Signature Date

Buyer #1 Print Name

Buyer #2 Print Name



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Norweco

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21
41
2100

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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.

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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.

000085

JW 2/22/2016

LR - Agreement 20.00
Recording Fee 20.00
Grantor/Grantee Name: Shapley
Reference/Control #:
LR - Agreement 40.00
Succroee 40.00
Total: 60.00
Date: 03/07/2016 12:53
62.00
CC13-S8
#201607 CC0503 -
Howard Co
Columbia/CC05-03-04
Register 04

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Bert Ryan 3/7/2012
Howard County Health Department

[Signature] 3/7/16
Owner #1 Signature Date

[Signature] 3/7/16
Owner#2 Signature Date

Bary Shapley
Owner #1 Print Name

Stephanie Shapley
Owner #2 Print Name

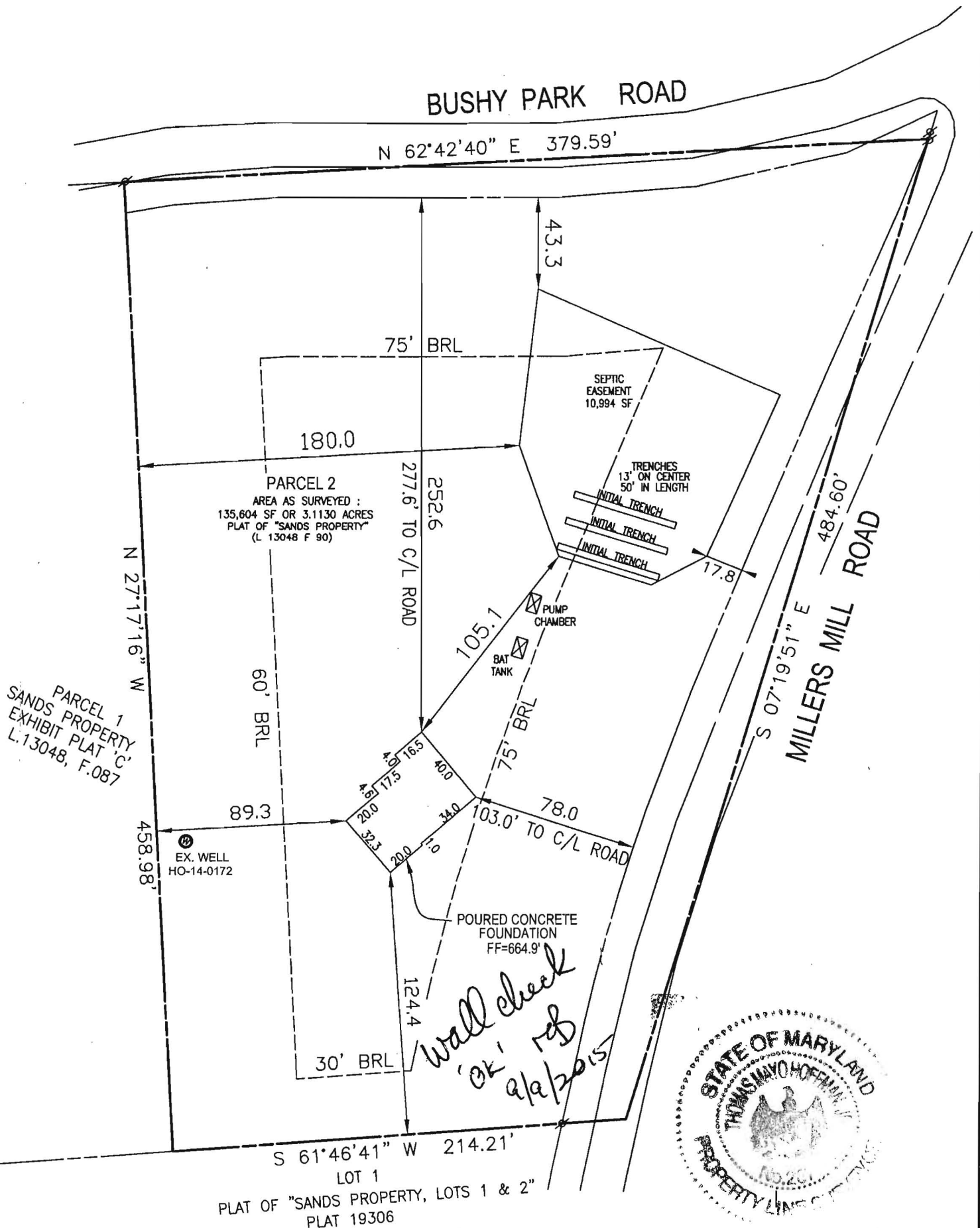
Buyer #1 Signature Date

Buyer #2 Signature Date

Buyer #1 Print Name

Buyer #2 Print Name

THIS WALL CHECK DRAWING CONTAINS A HORIZONTAL TOLERANCE IN ACCURACY OF 0.1' AND A VERTICAL TOLERANCE IN ACCURACY OF 0.2'



I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF THAT THE IMPROVEMENTS ARE LOCATED AS SHOWN AND THERE ARE NO ENCROACHMENTS EXCEPT AS SHOWN.

Thomas M. Hoffman Jr. **9-9-15**
 THOMAS M. HOFFMAN JR., PROPERTY LINE SURVEYOR #267 DATE

PROFESSIONAL CERTIFICATION; I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE, AND THAT I AM A DULY LICENSED PROPERTY LINE SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 267, EXPIRATION DATE JULY 28, 2016.

BUILDING PERMIT #12001244

SCALE 1" = 60'	DATE 07/08/2015
DRAWN BY B.D.A.	CHECKED BY T.M.H.
PLAT NUMBER	JOB NUMBER 14-63.00

ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS - SURVEYORS - PLANNERS
 8407 MAIN STREET
 ELLICOTT CITY, MARYLAND 21043
 TEL: 410-461-7666 FAX: 410-461-8961

WALL CHECK DRAWING
 1850 MILLERS MILL ROAD
 PARCEL 2
 GRIFFIN PROPERTY
 LIBER 16014, FOLIO 274
 FOURTH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

Bricker, Robert

From: Steven Krieg -MDE- <steven.krieg@maryland.gov>
Sent: Monday, November 17, 2014 8:32 AM
To: Bricker, Robert
Cc: Williams, Jeffrey
Subject: Re: Nancy Griffin project

Robert

ok, approved.

On Wed, Nov 12, 2014 at 4:53 PM, Bricker, Robert <RBricker@howardcountymd.gov> wrote:

Steve, Attached is a graphic related to a request for variance to allow the SDA to be upgradient of the neighboring well. We recommend that a BAT unit be included in the septic system and that it discharge to the drainfield via LPD.

--

Steven R. Krieg, LEHS
Regional Consultant for Mid and Western MD

Onsite Systems Division
Wastewater Permits Program
Water Management Administration
Maryland Department of the Environment

October 28, 2014

Mr. Mike Davis
Howard County Health Department
Bureau of Environmental Health
7178 Columbia Gateway Drive
Columbia, Maryland 21046-4544

Re: Parcel 90 Par 2 Bushy Park Rd
Percolation Certification Plat
Waiver Request

Dear Mr. Davis:

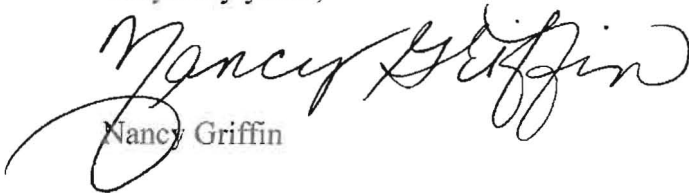
In response to an email dated October 20, 2014 from Mr. Robert Bricker with the Howard County Health Department to Mr. Chuck Zepp, we are requesting a variance for the proposed septic easement on Par 2 for the above referenced project. THE MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) APPROVAL FOR A VARIANCE TO ALLOW THE SEWAGE DISPOSAL AREAS (SDA) ON THE SUBJECT PROPERTY (SANDS PROPERTY PAR. 2) TO BE UPGRADIENT OF WELL HO-95-0235 WHICH IS AT 14790 BUSHY PARK ROAD (SUN NURSERIES, INC.) THIS APPROVAL BY MDE IS GRANTED PURSUANT TO THE FOLLOWING CONDITIONS:

1. THE SEPTIC SYSTEM INSTALLED ON THE SUBJECT PROPERTY MUST INCLUDE A BEST AVAILABLE TECHNOLOGY (BAT) UNIT.
2. ALL SEPTIC SYSTEM DRAIN FIELDS ON THE SUBJECT PROPERTY MUST BE DESIGNED FOR PRESSURE DISTRIBUTION OR EQUIVALENT.

The one and two conditions will be on the perc certification plan.

Thank you for your consideration of this request.

Very truly yours,


Nancy Griffin



Bureau of Environmental Health

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

November 20, 2014

Nancy Griffin.
38 Spyce Mill Court
Randallstown, Maryland 21133

RE: Variance request
Nancy Griffin Property (formerly Sands Property), Bushy Park Road
Tax Map 8 Parcel 90 Parcel 2
Howard County, Maryland

Dear Ms. Griffin,

The Health Department submitted a variance request on your behalf and in relation to a development proposal for your property at the corner of Bushy Park Road and Miller's Mill Road (Howard County Tax Map 8, Parcel 90, Parcel 2). The septic system planned for the subject property is upgradient of a well serving Sun Nurseries on Bushy Park Road.

Consideration of the soil conditions and percolation test results, assumed groundwater flow patterns, landscape position, and documentation of water quality at the primary well location were some of the factors used in making our recommendation for approval.

The Maryland Department of the Environment (MDE) has accepted our recommendation to approve the variance request subject to the specific conditions that are described below. The pending approval will allow for designating a sewage disposal area for the subject property.

The variance is approvable subject to the following conditions:

1. A BAT unit is installed as a component of the septic system.
2. All distribution systems installed in the sewage disposal area approved on this plan will have low-pressure distribution design or equivalent.

If you have any questions regarding this letter, you may contact me at the above address or by calling (410) 313-1771.

A handwritten signature in black ink, appearing to read 'Jeffrey Williams', is written over a horizontal line.

Jeffrey Williams, L.E.H.S.
Program Supervisor
Well and Septic Program

COPY: Steven Krieg, Maryland Department of the Environment



ITT

GOULDS PUMPS
Wastewater

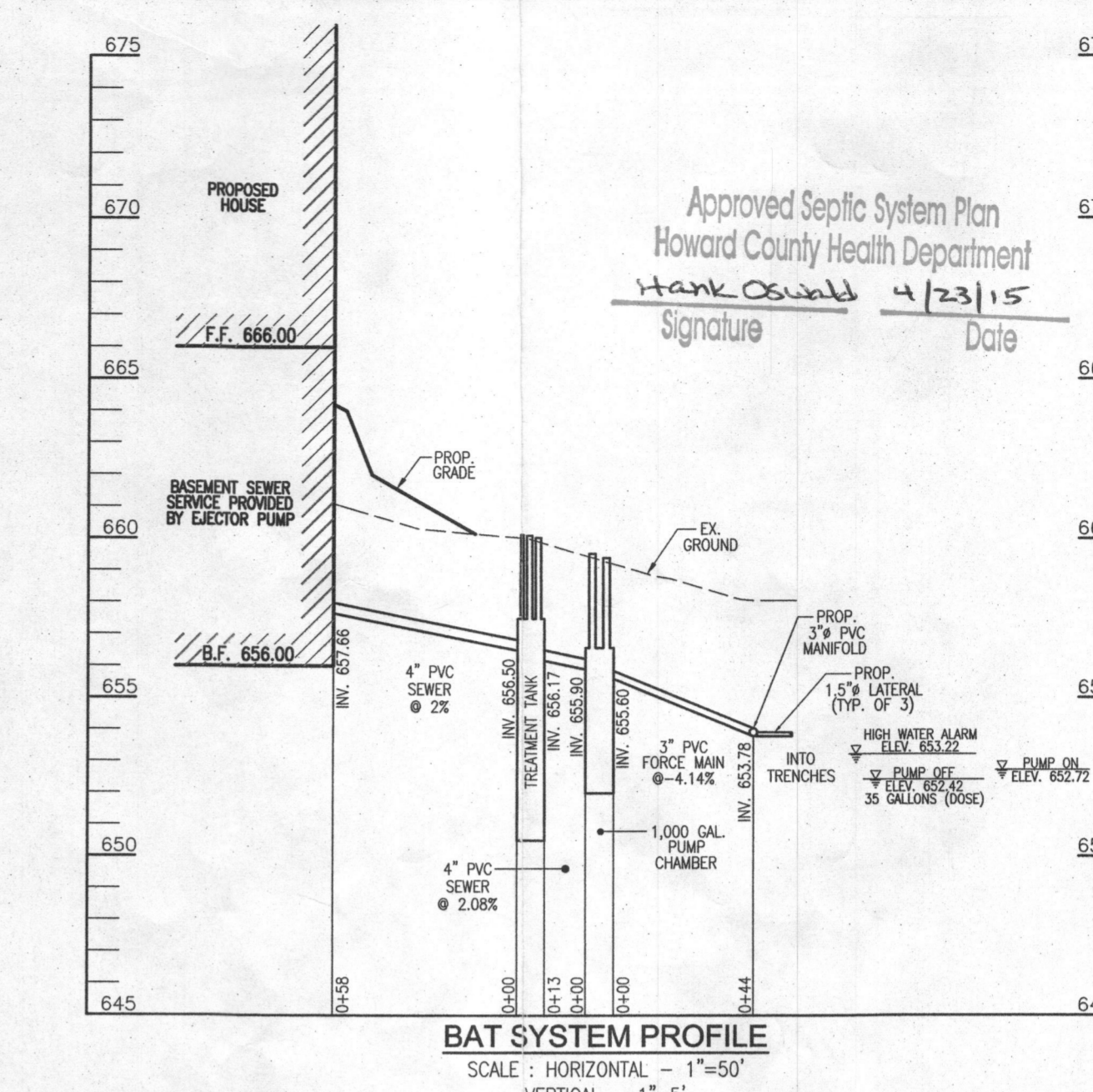
APPLICATIONS:
Specifically designed for the following uses:
• Homes, Farms, Trailer Courts, Mosquito, Schools, Hospitals, Industry Effluent Systems

SPECIFICATIONS:
• Solids handling capabilities: V maximum.
• Discharge size: 2" I/P
• Capacity: up to 140 GPM.
• Total head: up to 128 feet T.H.L.
• Temperature:
• 100°F (38°C) continuous, 140°F (60°C) intermittent.
• Seal water medium on motor side for specific: 100 voltages, phase and 60/50 available.

NOTES:
• Fully submerged to high grade turbine of for location, size and efficient best choice.
• Class I installation on 1/4" - 1 1/2" models.
• Class F installation on 2" BP models.
• Power Cables: heavy duty, oil and water resistant. Epoxy seal on motor end provides secondary resistance barrier to one of water jacket design used to prevent all leaking. Standard seal is 20". Optional lengths are available.
• O-ring: Accurate positive sealing against contaminants and all leakage.
• Power Cables: heavy duty, oil and water resistant. Epoxy seal on motor end provides secondary resistance barrier to one of water jacket design used to prevent all leaking. Standard seal is 20". Optional lengths are available.
• Agency Listings:
• Capactor start motors for maximum starting torque.
• Multi covered with automatic reset.
• 5/70W or 5/70W severe duty oil and water resistant power cable.

AGENCY LISTINGS:
• Ingersoll Rand 400 333 333 (in Canada)
• Ingersoll Rand 400 333 333 (in Canada)
• Ingersoll Rand 400 333 333 (in Canada)

50.9 GPM
TDH=7.12
USE WEO3L (1/3 HP)



SYSTEM CALCULATIONS:
INITIAL SYSTEM:
5 BEDROOMS AT 750GPD / 1.2 ABSORPTION RATE = 625 SQ. FT.
625 SQ. FT. / 3 (TRENCH WIDTH) X .56 (SIDEWALL REDUCTION) = 117 LINEAR FEET
3 TRENCHES (13' ON CENTER) OF 50 FEET IN LENGTH ARE PROVIDED WITH THE INITIAL SYSTEM.

BUSHY PARK AND MILLERS MILL

*** BAT SYSTEM:**
5 BEDROOMS = 5 X 150 GPD = 750 GPD
USE NORWECO MODEL 500 BAT SYSTEM

*** TRENCH DESIGN**
750 GPD / 1.2 APPLICATION RATE = 625 SF
SIDEWALL REDUCTION (3+2)/(3+1+(2)(2.5)) = 0.56
USE 10' TRENCH SPACING; 3 TRENCHES 50 LF EACH
USE END MANIFOLD CONFIGURATION AND 5/16" DIAMETER HOLES
5' HOLE SPACING

*** LATERAL DISCHARGE RATE**
10 5/16" HOLES WITH 2' DISTAL END HEAD
TOTAL LATERAL DISCHARGE RATE 50.9
USE 3" PVC FORCE MAIN 10.58'/100'
USE 3" PVC MANIFOLD

*** DETERMINE MINIMUM DOSE**
DOSE= (5X LATERALS) + FORCE MAIN + MANIFOLD
150' X 1 1/2" LATERAL (150/100)(10.6) = 15.9 GALLONS X 5 = 79.5 GALLONS
20' X 3" MANIFOLD (20/100) 38.4 = 7.7 GALLONS
40' X 3" FORCE (40/100) 38.4 = 15.4 GALLONS
TOTAL: 102.6 GALLONS MIN DOSE OR 1/6 DAILY DISCHARGE 125 GALLONS

*** PUMP SIZE**
FRICTION LOSS IN FORCE MAIN: 44'
FRICTION LOSS FITTINGS: 95 LF
2 X 45' = 12
2 X 90' = 20
COUPLING = 3
h = (79')(0.58'/100') = 0.46'
TDH = 0.46' (h) + 3.18' (hs) + 1.5' (LATERALS FRICTION) + 2' (DISTAL END HEAD) = 7.14'
FOR 50.9 GPM @ 7.12' TDH USE 1/3 HP GOULDS PUMP WEO3
ONE DAY RESERVE: 750 GALLONS, DEPTH: 2.68'
DOSE: 129 GALLONS, DEPTH: 0.44'
HIGH WATER ALARM: 653.22
PUMP ON: 652.75
PUMP OFF: 652.28

STATIC HEAD
HIGHEST POINT IN SYSTEM: 655.60
PUMP OFF: 652.42
hs = 3.18'

TDH = 0.46' (h) + 3.18' (hs) + 1.5' (LATERALS FRICTION) + 2' (DISTAL END HEAD) = 7.14'

INITIAL SYSTEM TRENCH DETAIL
NOT TO SCALE

TRENCH INFO.			
TRENCH	TRENCH LENGTH	W/ID BOTTOM OF TRENCH	EXISTING GROUND
1A	50'	654.58	651.58
1B	50'	654.28	651.28
1C	50'	653.85	650.85

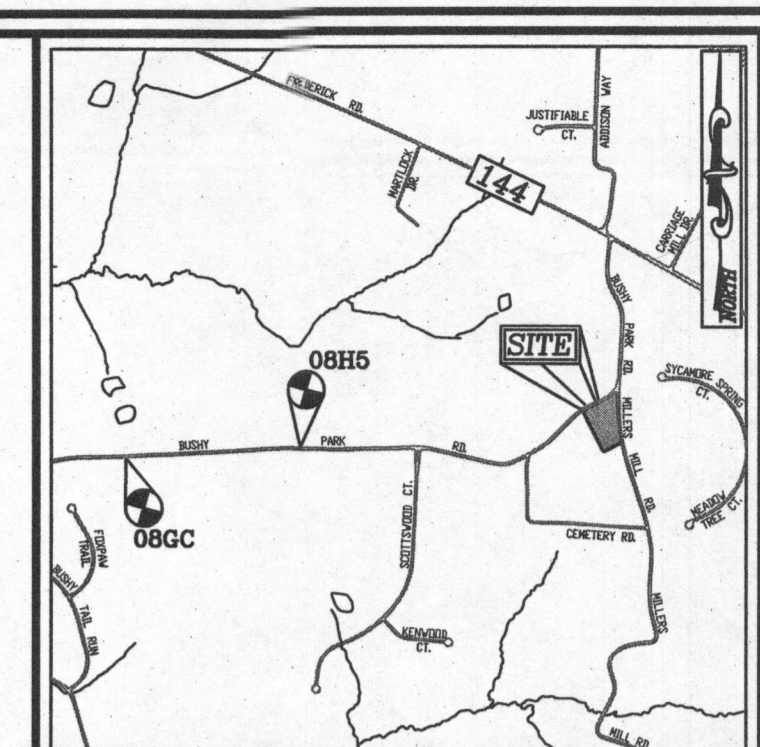
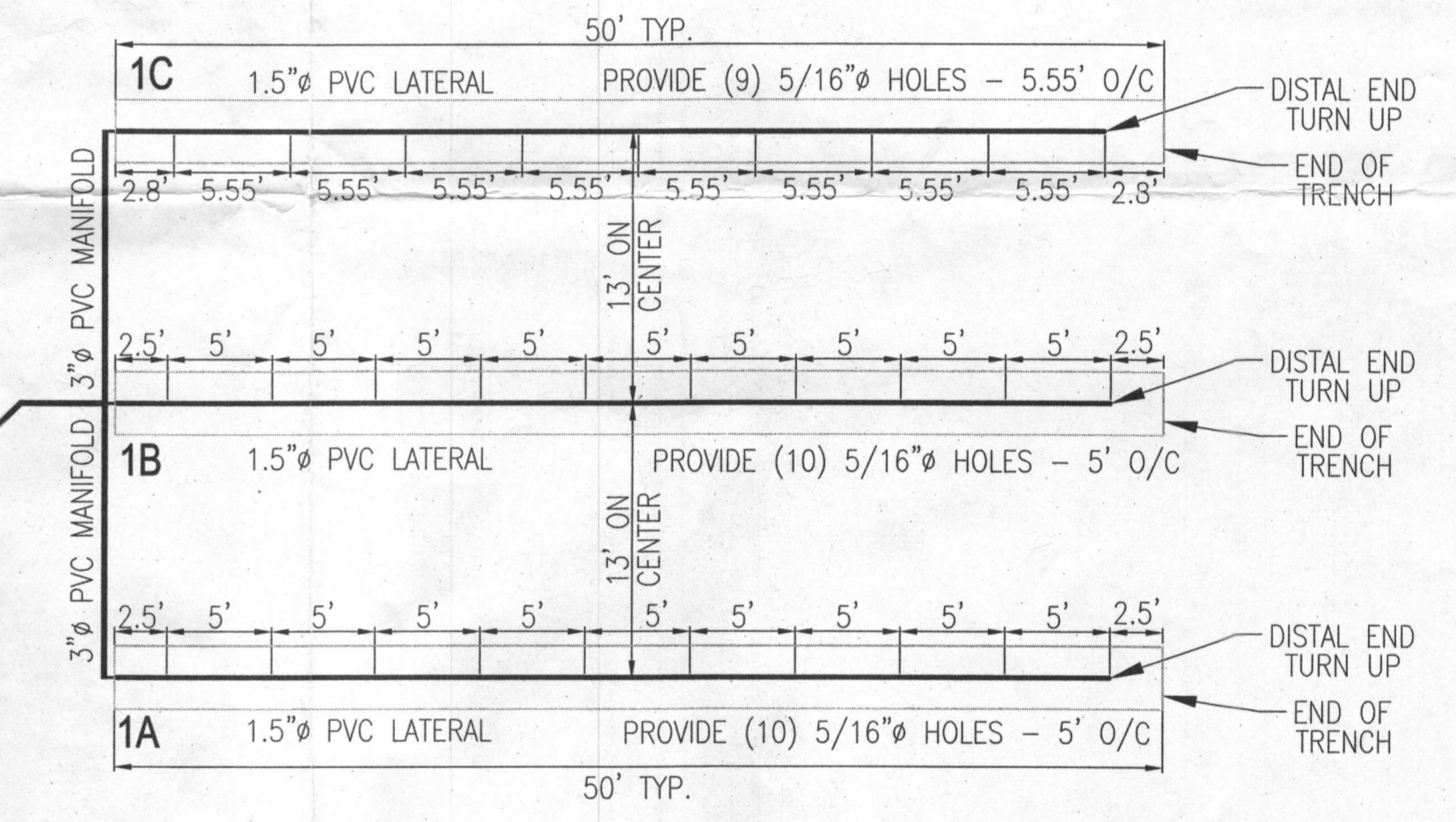
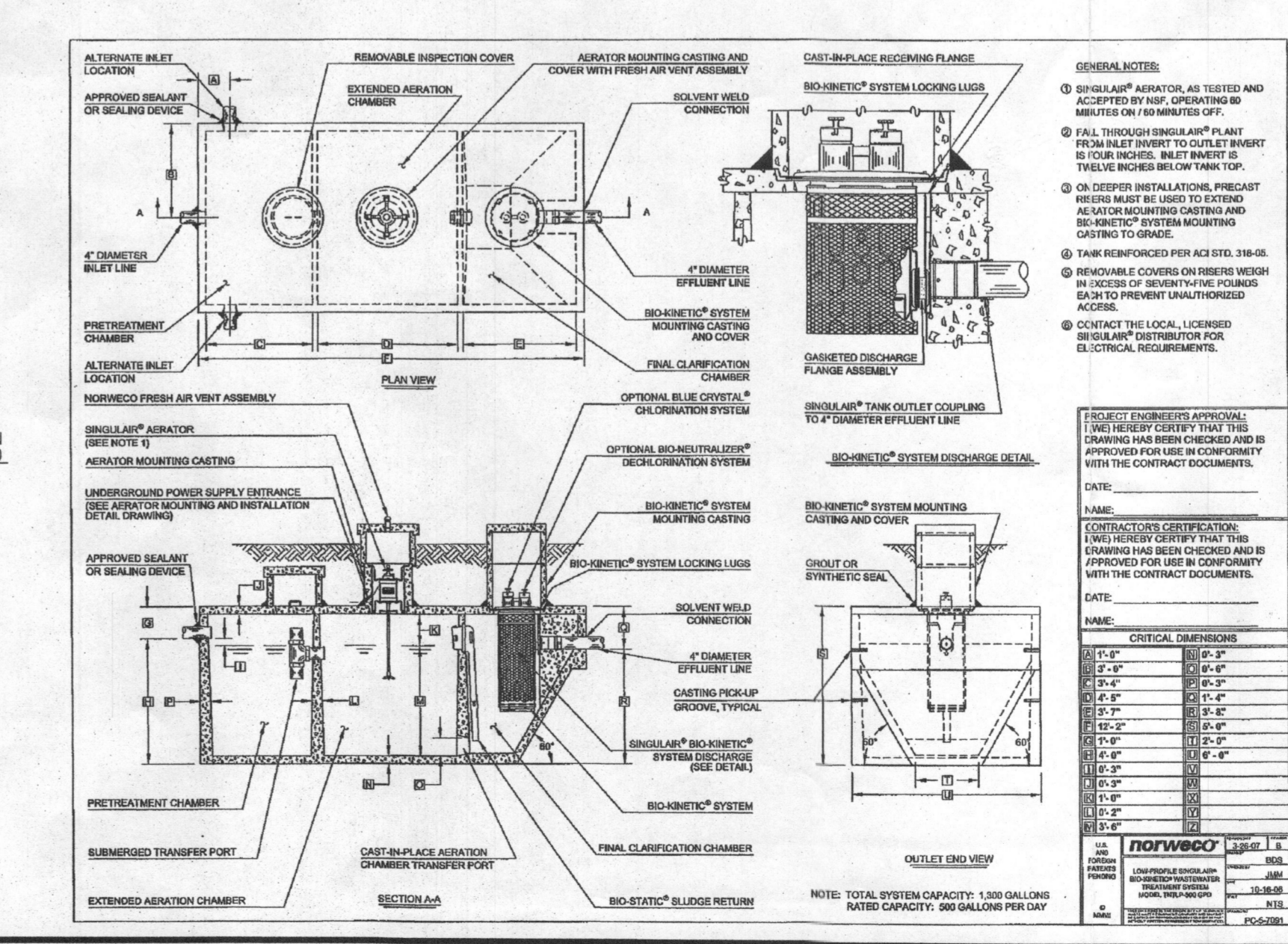
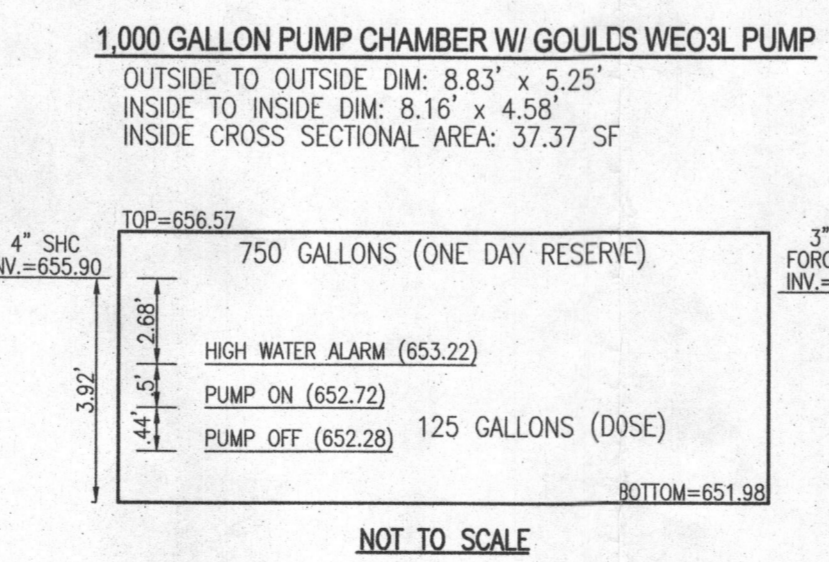
	LATERAL		
	1A	1B	1C
TRENCH LENGTH FT	50	50	50
LATERAL LENGTH	47.5	47.5	47.2
HOLE DIAMETER	5/16"	5/16"	5/16"
HOLE SEPARATION	5'	5'	5.55'
NO. OF HOLES	10	10	9
DISCHARGE/HOLE	1.63	1.74	1.91
DISCHARGE/LATERAL	16.3	17.4	17.2
DISTAL HEAD	2	2.3	2.73

GENERAL 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.
- NO BLOWER IS REQUIRED. THE NORWECO WASTEWATER TREATMENT SYSTEM HAS AN AERATOR MOUNTED IN THE TANK.
- THE BAT SYSTEM SHALL BE MAINTAINED AND OPERATED FOR THE LIFE OF THE SYSTEM.
- THE MAXIMUM DEPTH OF THE BAT PER THE MANUFACTURER'S SPECIFICATION IS 3 FEET.
- THE BAT SYSTEM SHALL BE OPERATED BY AND MAINTAINED BY A CERTIFIED SERVICE PROVIDER.
- WITHIN ONE MONTH OF INSTALLATION, A PERSON INSTALLING THE BAT SYSTEM SHALL REPORT TO THE MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) IN A MANNER ACCEPTABLE TO MDE, THE ADDRESS AND DATE OF COMPLETION OF THE BAT INSTALLATION AND THE TYPE OF BAT INSTALLED.
- ELECTRICAL WORK FOR THE BAT INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
- AN AGREEMENT AND EASEMENT MUST BE COMPLETED AND SIGNED BY ALL APPLICABLE PARTIES, AND RECORDED IN LAND RECORDS OF HOWARD COUNTY.
- THE HEALTH DEPARTMENT REQUIRES DOCUMENTATION FOR THE START-UP CERTIFICATION FROM THE MANUFACTURER PRIOR TO FINAL APPROVAL OF THE INSTALLATION.
- ON-SITE WELL WAS FIELD LOCATED BY ROBERT H. VOGEL ENGINEERING, INC. OFFSITE WELLS LOCATED FROM HEALTH DEPARTMENT RECORDS.

BAT PLAN
SCALE: 1"=50'
SCALE: 1"=50'

THIS AREA DESIGNATES A PRIVATE SEWAGE EASEMENT OF AT LEAST 10,000 SQ. FT. AS REQUIRED BY THE MARYLAND DEPARTMENT OF ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS EASEMENT ARE RESTRICTED. THIS EASEMENT SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWAGE EASEMENT. RECORDATION OF A REVISED SEWAGE EASEMENT SHALL NOT BE NECESSARY.



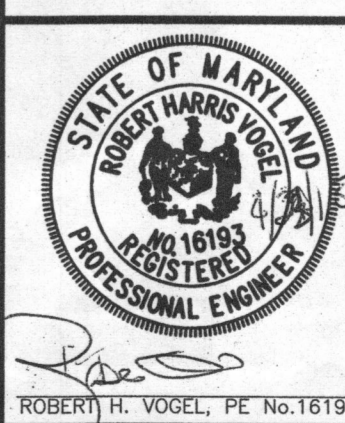
- LEGEND:**
- PROPERTY LINE
 - RIGHT-OF-WAY LINE
 - ADJACENT PROPERTY LINE
 - EXISTING SANITARY MANHOLE
 - EXISTING SANITARY LINE
 - EXISTING CLEANOUT
 - EXISTING FIRE HYDRANT
 - EXISTING WATER LINE
 - EXISTING 10' CONTOUR
 - EXISTING 2' CONTOUR
 - SOILS
 - EXISTING TREELINE
 - EXISTING TREELINE
 - EXISTING WELL
 - PROPOSED 10' CONTOUR
 - PROPOSED 2' CONTOUR
 - PROPOSED SPOT ELEVATION
 - FAILED PERC. TEST
 - PASSED PERC. TEST
 - APPROVED SEPTIC AREA

SITE PLAN FOR BAT INSTALLATION
GRIFFIN PROPERTY
PARCEL 2
1850 MILLERS MILL ROAD
WOODBINE, MD 21797
BUILDING PERMIT

4TH ELECTION DISTRICT
TAX MAP: 08 PARCEL: 90

BLOCK: 22
ZONE: RC-DEO
HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET
ELLICOTT CITY, MD 21043
TEL: 410.461.7666
FAX: 410.461.8961



PROFESSIONAL CERTIFICATE
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. 16193 EXPIRATION DATE: 09-27-2018

DESIGN BY: RHV
DRAWN BY: JMR
CHECKED BY: RHV
DATE: APRIL 2015
SCALE: AS SHOWN
W.O. NO.: 14-63

1 SHEET OF 1