



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: 7-29-15 **ONSITE SEWAGE DISPOSAL SYSTEM** P SS6558

APPROVAL DATE: 10/30/15 SEC **PERMIT: CONSTRUCTION** A _____

PROPERTY ADDRESS: 6203 Heather Glen Way

SUBDIVISION: Preserve at Clarksville LOT: 34 TAX ID: _____

CONTRACTOR: Hatfield's Equipment EMAIL: ken@hatfieldsequipment.com

CONTRACTOR ADDRESS: P.O. Box 519, Annapolis Junction, MD 20701 PHONE: 301-480-4289

CONTRACTOR CERTIFIED FOR BAT INSTALLATION: MDE MANUFACTURER:

PROPERTY OWNER: Williamsburg Group LLC EMAIL: bobcorbett@williamsburgllc.com

OWNER ADDRESS: 5485 Harpers Farm Road, Columbia, MD 21044 PHONE: 410-997-8800

NORWECO TNTLP-

BAT UNIT MODEL: 600GPD PUMP SIZE: N/A PUMP TANK CAPACITY: N/A

OPERATION & MAINTENANCE AGREEMENT DATE SIGNED: 3/18/15 DATE RECORDED: 3/19/15

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

TRENCHES:	LINEAR FEET REQUIRED: <u>95 160'</u>	INLET DEPTH: <u>3 4</u>
	TRENCH WIDTH: <u>2 2</u>	MAXIMUM BOTTOM DEPTH: <u>8</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>4.5</u> <u>~80ft</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: Install cleanouts in SHC. 4x

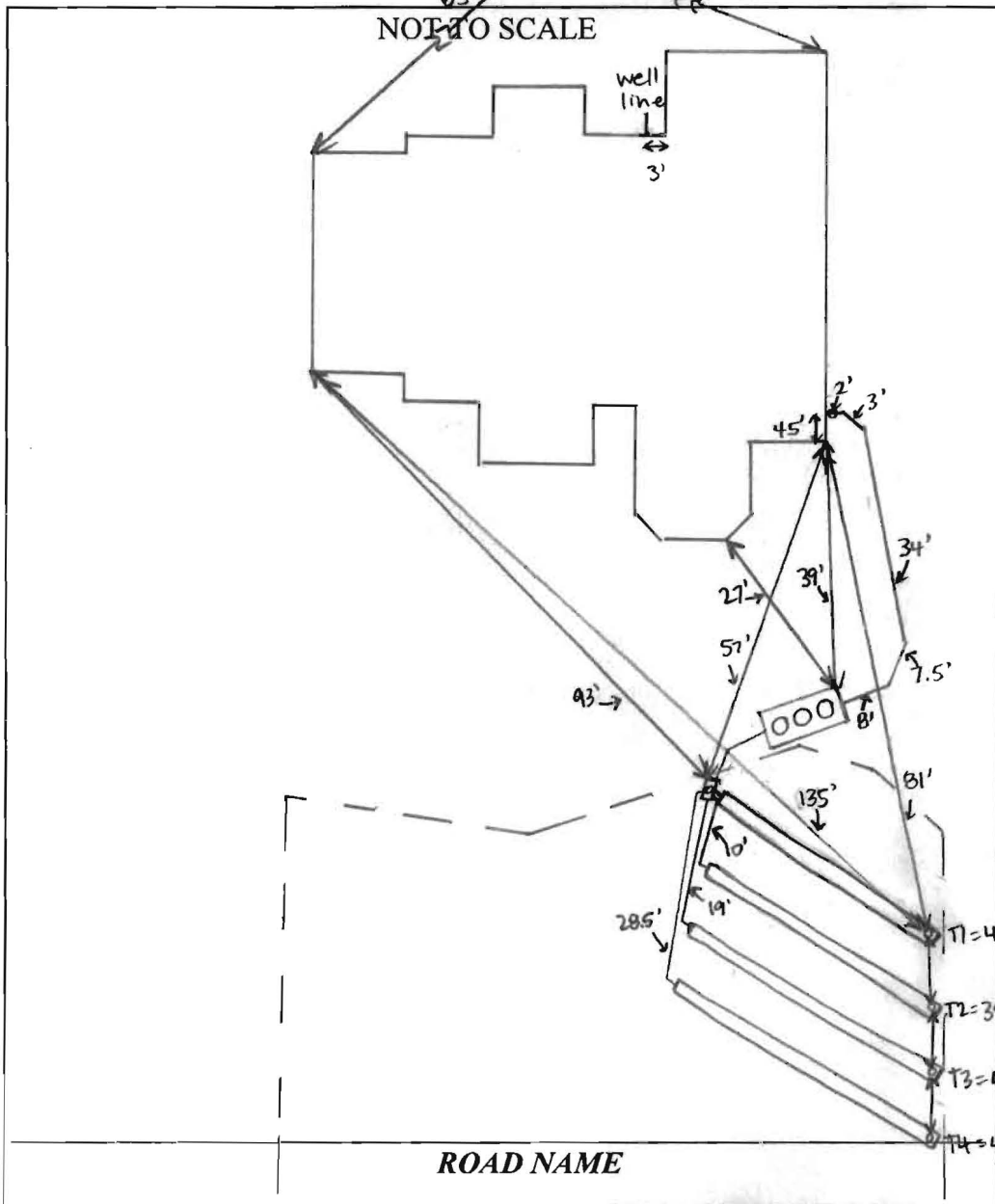
ISSUED BY: Robert Bricker ISSUE DATE: 8-21-15 ~~7-29-15~~ EXPIRATION DATE: 7-29-16

- 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.



TRENCH/DRAINFIELD DATA		
WIDTH	INLET	BOTTOM
2'	4'	8'
NUMBER OF TRENCHES		4
TOTAL LENGTH		161'
ABSORPTION AREA		322' + SIDEWALL
DISTRIBUTION BOX LEVEL		YES
DISTRIBUTION BOX BAFFLE		YES
DISTRIBUTION BOX PORT		YES

SEPTIC TANK DATA	
SEPTIC TANK I LEVEL	YES
MANUFACTURER	BACKRIVER/MIRVICC
CAPACITY	1300 GAL
SEAM LOC	TOP
TANK LID DEPTH	2.5'-3'
BAFFLES	NO
BAFFLE FILTER	NO
MANHOLE LOC	FRONT, MID, REAR
6" PORT LOC	NONE
WATERTIGHT TEST	NO
SLOTTED	NO
DATE ON LID	9-20-15
PUMP/SEPTIC TANK LEVEL	
MANUFACTURER	
CAPACITY	
SEAM LOC	
TANK LID DEPTH	
BAFFLES	
BAFFLE FILTER	
MANHOLE LOC	
6" PORT LOC	
WATERTIGHT TEST	
SLOTTED	
DATE ON LID	

PRE-CONSTRUCTION: 10/15/15 BAT location staked. Install 4x40' trenches on contour as staked in field. Trenches per adjusted as is. Call for E/U resp. (KW)

INSTALLATION: 10/27/15 House connection made. Tank installed - Hatfield's connecting tank to house. Tank is coated with black finish, date sprayed on lid. Some rock hit near inlet to tank while digging line. (SC) 10/27/15 D-box installed. Hatfield's digging T1, using transit. Pocket of rocks about halfway down T1, 5'-8', 3' wide, 3.5' to stone. On site to see completion of T1. (SC) 10/28/15 T2 + T3 complete + left open at ends. T4 complete + left open. Donny with Hatfield's said there were large rocks < 5' in trenches. D-box leveled with speed levelers. Need BAT startup certification. (SC) 10/30/15 BAT startup received. (SC)

FINAL INSPECTOR Sarah Collins DATE OF APPROVAL 10/30/15

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 Singlair TNT 600 GPD Septic Tank installed at 6203 Heather Glen Way, Clarksville, MD 21029 on October 27, 2015 was installed according to the manufacture's specifications.

Installer: Jeff Reiter

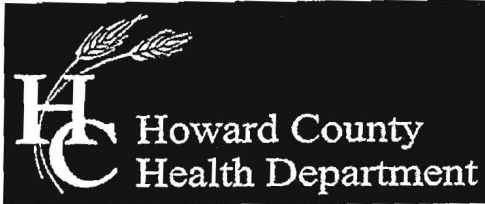
Property Owner: Williamsburg Group

Permit #



MATTHEW GECKLE

Vice-President



LIBER | 608 | FOLIO 367

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Twitter: HowardCoHealthDep

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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 18th day of March, 2015, among Williamsburg Group LLC, Rajiv & Hina Goyal, 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 Preserves at Clarksville, Lot 34, Heather Glen Way, in the 5th 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 15231 Folio 0004.

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 NORWECO.

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

20
90
dx

JW 8/8/2014

LR - Agreement
Recording Fee 20.00
Grantor/Grantee Name:
Goyal
Reference/Control #:
Agreement
Charge 40.00
03/21/2015 11:08
CC13-CH
#00919 CC0503
Howard Co
Columbia/CC05.03.03
Poster 03

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.

Bert Nelson 3/18/2015
Howard County Health Department

[Signature] 2-23-15

Owner #1 Signature Date

BOB CORRETT

WILLIAMSBURG GROUP LLC

Owner #1 Print Name

Rajiv Goyal 3/14/15

Buyer #1 Signature Date

RAJIV GOYAL

Buyer #1 Print Name

Owner #2 Signature Date

Owner #2 Print Name

[Signature] 3/14/15

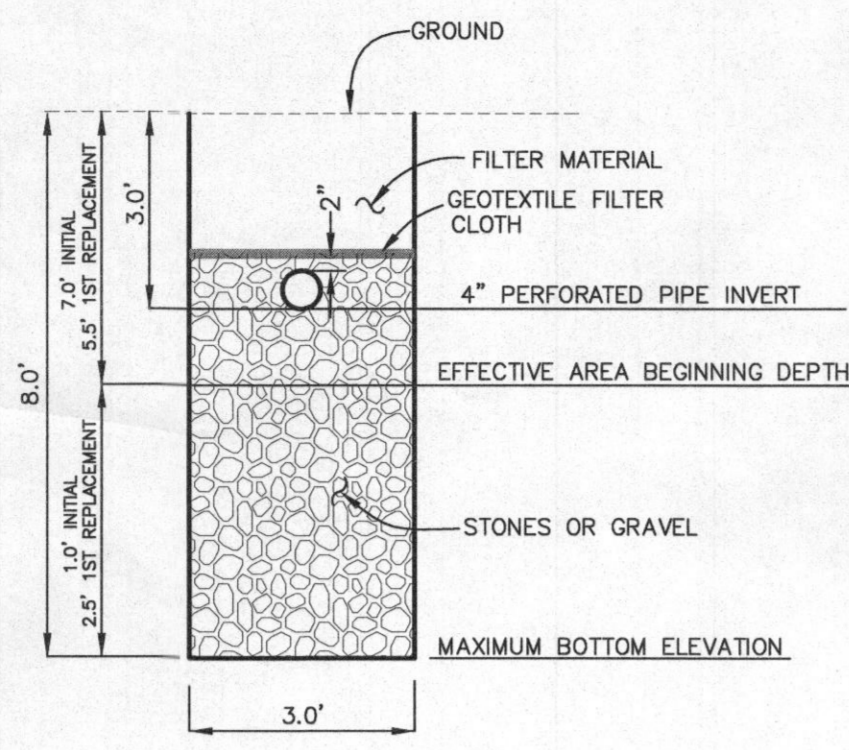
Buyer #2 Signature Date

ANNA GOYAL

Buyer #2 Print Name

NOTES:

1. 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 MANUFACTURER'S SPECIFICATION IS 3 FEET.
3. THE BAT SYSTEM SHALL BE MAINTAINED AND OPERATED FOR THE LIFE OF THE SYSTEM.
4. THE BAT SHALL BE OPERATED BY AND MAINTAINED BY A CERTIFIED SERVICE PROVIDER.
5. WITHIN ONE (1) 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.
6. ELECTRICAL WORK FOR THE BAT INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
7. AN AGREEMENT AND EASEMENT MUST BE COMPLETED AND SIGNED BY ALL APPLICABLE PARTIES, AND RECORDED IN LAND RECORDS OF HOWARD COUNTY.
8. THE HEALTH DEPARTMENT REQUIRES DOCUMENTATION FOR THE START-UP CERTIFICATION FROM THE MANUFACTURER PRIOR TO FINAL APPROVAL OF THE INSTALLATION.
9. AT ANY TIME IN THE FUTURE THAT A BUILDING PERMIT IS SUBMITTED TO FINISH THE BASEMENT WHICH ADDS A 6TH BEDROOM, THE EXISTING SEPTIC SYSTEM MAY HAVE TO BE UPGRADED.



TYPICAL TRENCH DETAIL
NOT TO SCALE

LEGEND

- BOUNDARY
- EXISTING TOPOGRAPHY
- SEWAGE DISPOSAL AREA
- 1,500 SF WELLBOX
- INITIAL TRENCH SYSTEM
- 1st REPLACEMENT SYSTEM
- WELL LOCATION
- PASSED TEST HOLE TESTED APRIL/MAY 2003
- FAILED TEST HOLE TESTED APRIL/MAY 2003
- PASSED TEST HOLE TESTED JANUARY/FEB 2004
- FAILED TEST HOLE TESTED JANUARY/FEB 2004
- FAILED TEST HOLE TESTED JUNE 2004
- PASSED TEST HOLE TESTED JUNE 2004
- PASSED TEST HOLE TESTED NOV-DEC 2001
- GgB SOILS CLASSIFICATION
- SOILS DELINEATION LINE

NRCS SOILS CHART - HoCo Soils Map No. 16

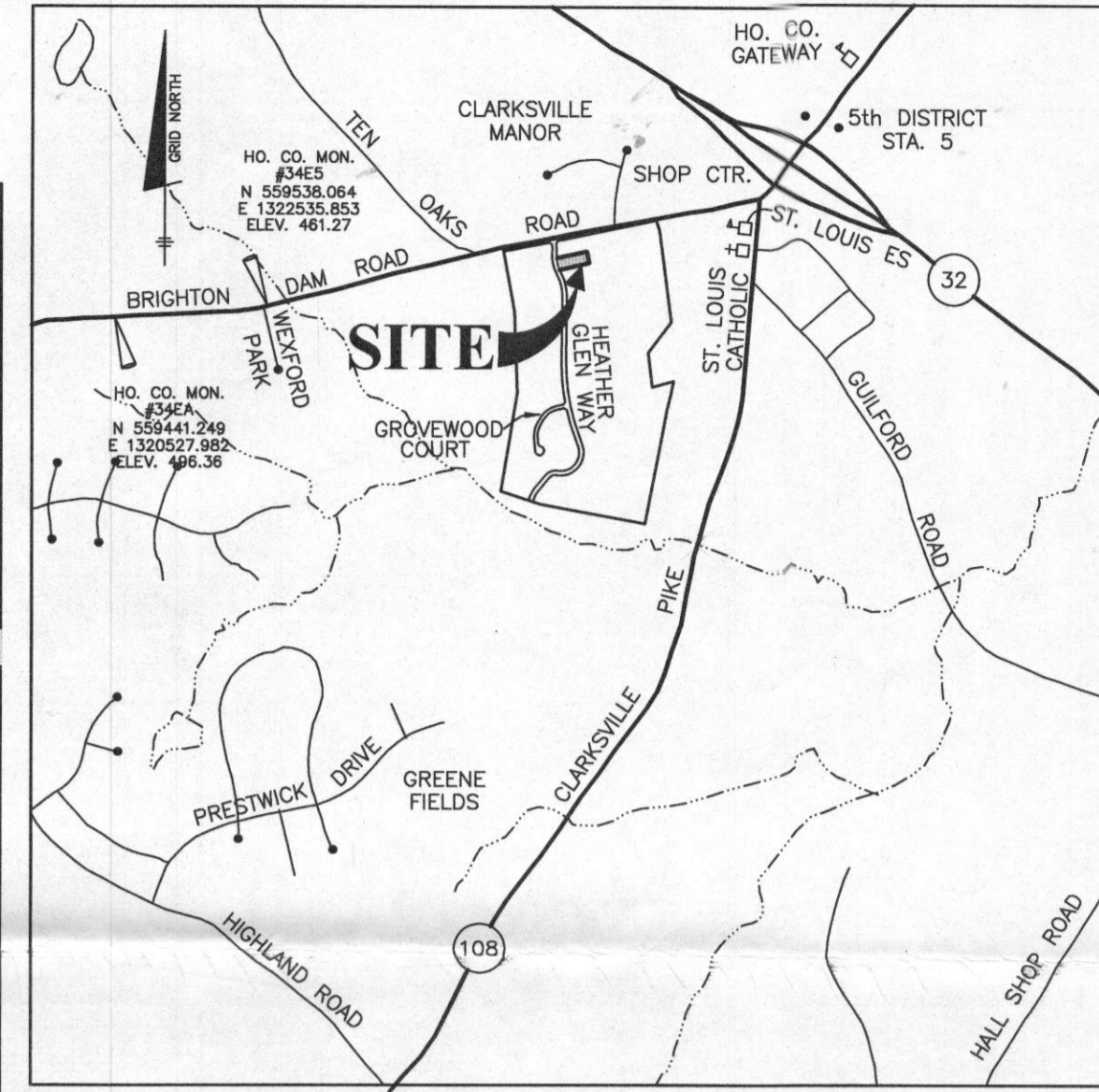
SYMBOL	HYDRIC	GROUP	Kw	MAP UNIT NAME
GgB		B	0.37	GLENELG LOAM, 3 TO 8 PERCENT SLOPES

INITIAL SYSTEM

Number of Bedrooms	5
Application Rate	0.8 gpd/sf
Effective Area Beginning Depth	7 ft
Bottom Max Depth	8 ft
Design Flow	750 gpd
Drainage Field square footage	937.5 sf
Sidewall reduction credit	0.8
Trench width	3
Effective Area Depth	1
Linear Length of trench Required	260 lf

1st REPLACEMENT SYSTEM

Number of Bedrooms	5
Application Rate	0.8 gpd/sf
Effective Area Beginning Depth	5.5 ft
Bottom Max Depth	8 ft
Design Flow	750 gpd
Drainage Field square footage	937.5 sf
Sidewall reduction credit	0.6
Trench width	3
Effective Area Depth	2.5
Linear Length of trench Required	174 lf

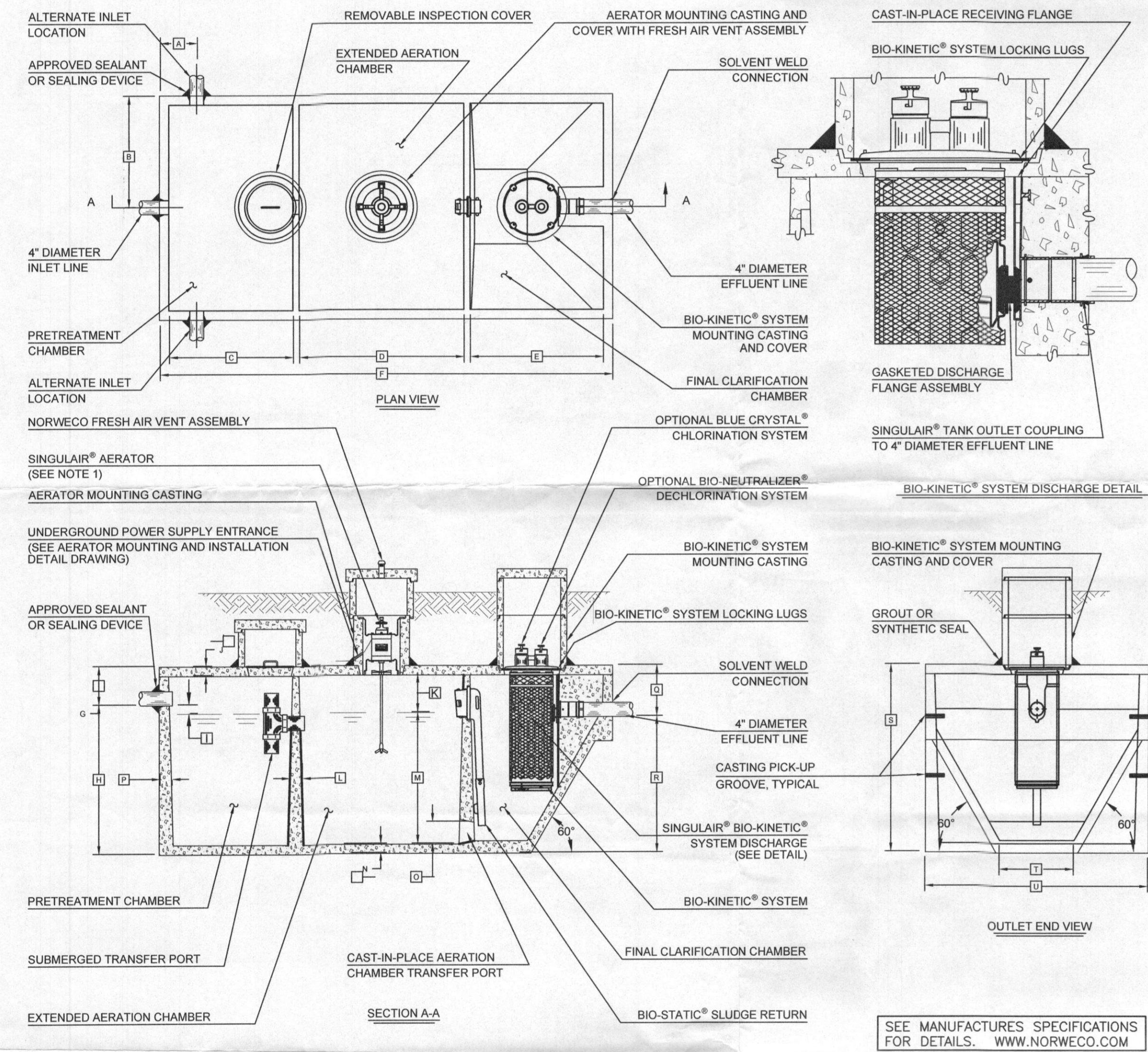


SEPTIC INVERT CHART

INV @ HOUSE	464.71
GROUND @ HOUSE	473.00
INV IN BAT TANK	464.08
INV OUT BAT TANK	463.75
TOP OF BAT TANK	465.08
GROUND OVER TANK	467.00
INV IN DIST BOX	463.45
INV OUT DIST BOX	463.20
GROUND AT DIST BOX	466.20

TRENCH INFORMATION

Point	Trench Length	Ground Elevation	Pipe Invert	Effective Beginning Elev	Max Bottom Elev
A	52 LF	462.2	463.2	459.2	458.2
B	52 LF	462.2	462.2	458.2	457.2
C	52 LF	461.2	461.2	457.2	456.2
D	52 LF	463.5	463.5	456.5	455.5
E	52 LF	463.5	463.5	456.5	455.5
F	58 LF	463.0	463.0	457.5	456.5
G	58 LF	463.0	462.2	457.5	456.5
H	58 LF	462.0	462.0	456.5	455.0



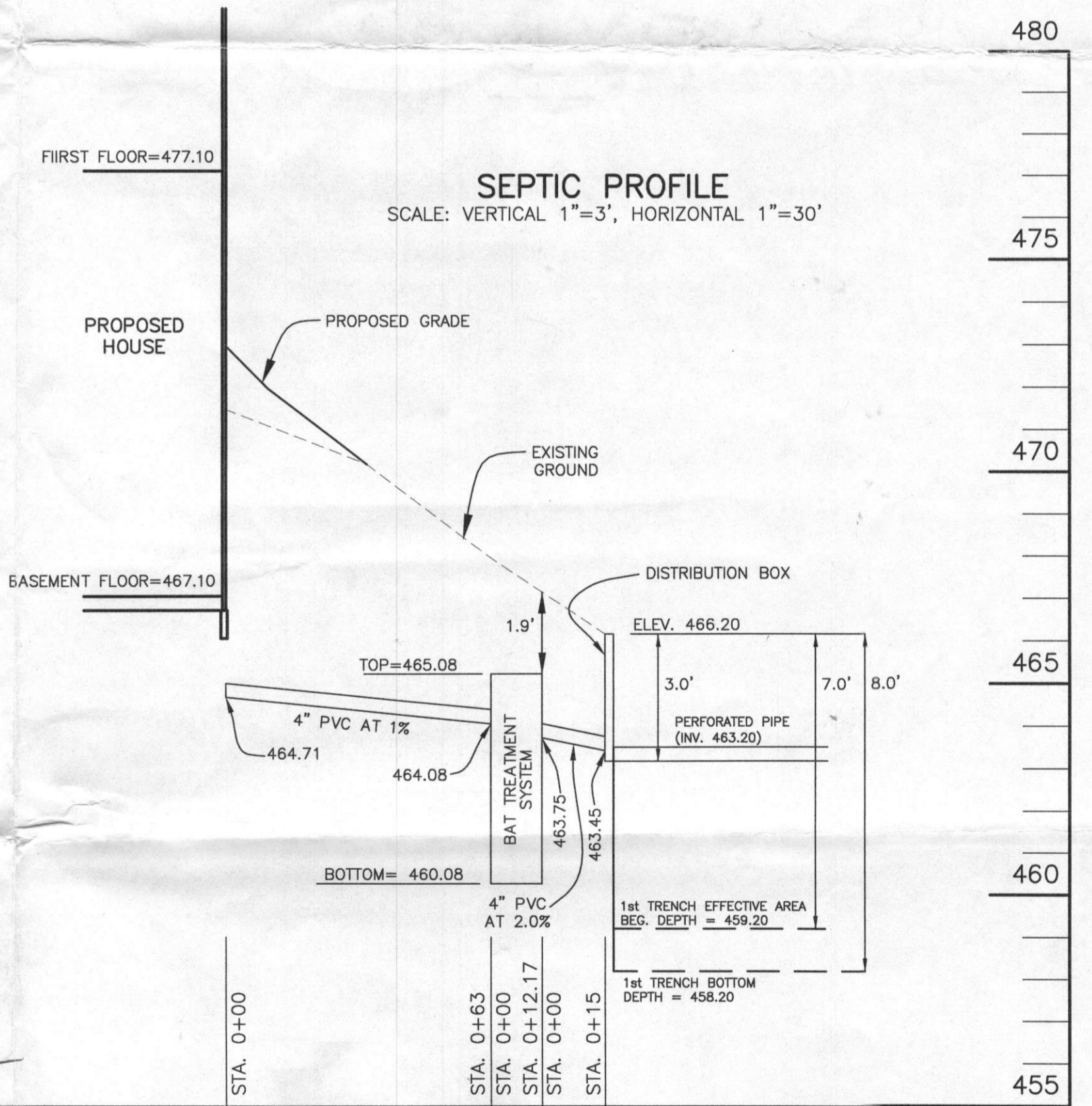
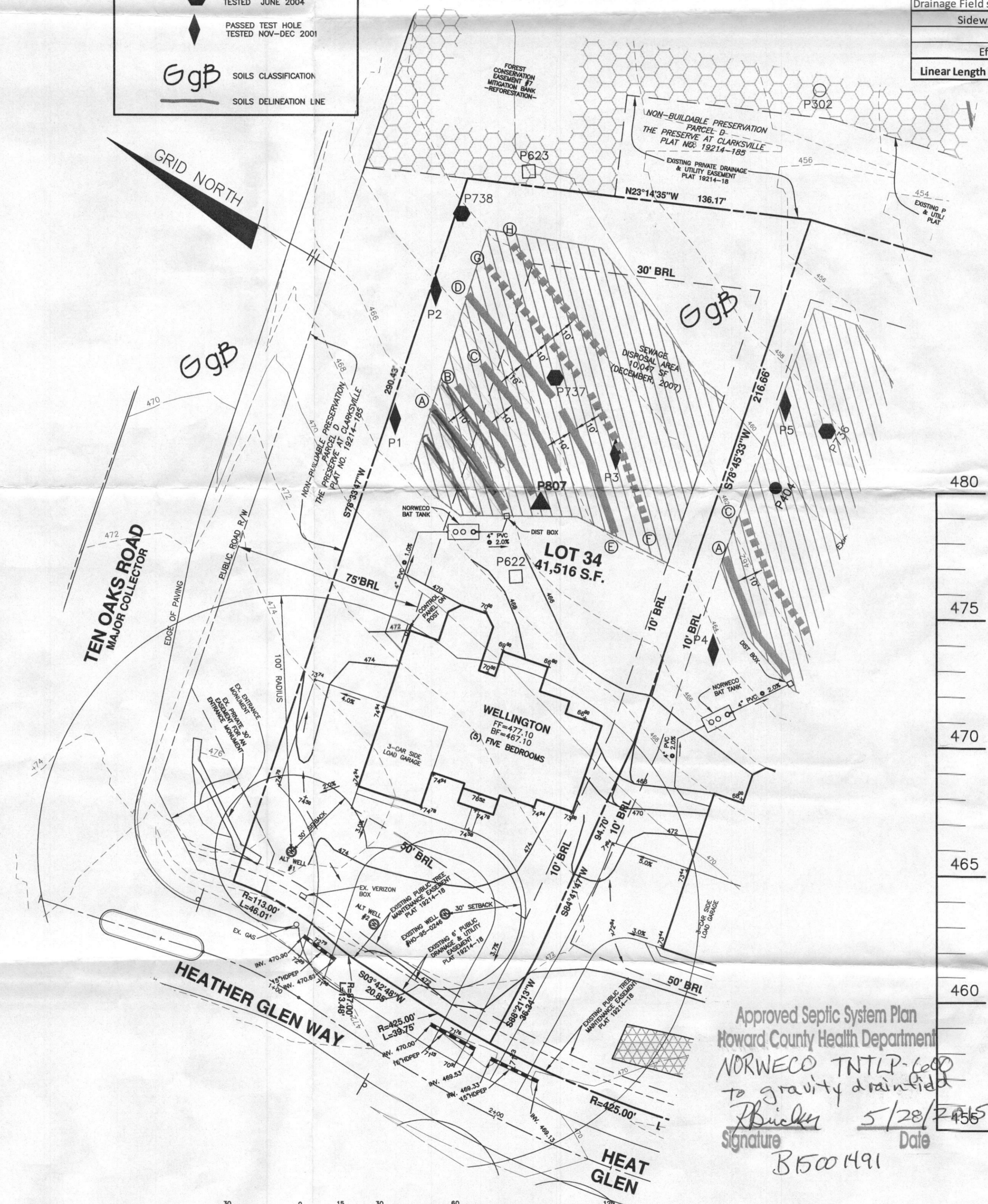
- GENERAL NOTES:**
1. SINGULAR® AERATOR, AS TESTED AND ACCEPTED BY NSF, OPERATING 60 MINUTES ON / 60 MINUTES OFF.
 2. FALL THROUGH SINGULAR® PLANT FROM INLET INVERT TO OUTLET INVERT IS FOUR INCHES. INLET INVERT IS TWELVE INCHES BELOW TANK TOP.
 3. ON DEEPER INSTALLATIONS, PRECAST RISERS MUST BE USED TO EXTEND AERATOR MOUNTING CASTING AND BIO-KINETIC® SYSTEM MOUNTING CASTING TO GRADE.
 4. TANK REINFORCED PER ACI STD. 318-05.
 5. REMOVABLE COVERS ON RISERS WEIGH IN EXCESS OF SEVENTY-FIVE POUNDS EACH TO PREVENT UNAUTHORIZED ACCESS.
 6. CONTACT THE LOCAL LICENSED SINGULAR® DISTRIBUTOR FOR ELECTRICAL REQUIREMENTS.
- NOTES: TOTAL SYSTEM CAPACITY: 1,300 GALLONS**
RATED CAPACITY: 600 GALLONS PER DAY PER MANUFACTURER.
ABLE TO SERVICE UP TO FIVE (5) BEDROOMS.

BENCHMARK ENGINEERING, INC.
 ENGINEERS • LAND SURVEYORS • PLANNERS
 8480 BALTIMORE NATIONAL PkE & SUITE 315 & ELLICOTT CITY, MARYLAND 21043
 (P) 410-465-8105 (F) 410-465-6644
 WWW.BE-CIVLENGINEERING.COM

CRITICAL DIMENSIONS

A	1'-0"	N	0'-3"
B	3'-0"	O	0'-6"
C	3'-4"	P	0'-3"
D	4'-5"	Q	1'-4"
E	3'-7"	R	3'-8"
F	12'-2"	S	5'-0"
G	1'-0"	T	2'-0"
H	4'-0"	U	6'-0"
I	0'-3"	V	
J	0'-3"	W	
K	1'-0"	X	
L	0'-2"	Y	
M	3'-6"	Z	

norweco 3-26-07 B
 U.S. AND FOREIGN PATENTS PENDING
 LOW-PROFILE SINGULAR® BIO-KINETIC® WASTEWATER TREATMENT SYSTEM MODEL TNTLP-600 GPD
 © MMVII



Approved Septic System Plan
 Howard County Health Department
 NORWECO TNTLP-600
 to gravity drainfield
 Buckler 5/28/2015
 Signature Date
 B1501491

I CERTIFY THAT THE INFORMATION SHOWN HEREON IS BASED ON FIELD WORK PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, AND IS CORRECT, TO THE BEST OF MY KNOWLEDGE AND BELIEF.
 DAVID THOMPSON 5/20/2015

THE PRESERVE AT CLARKSVILLE LOT 34
 6203 HEATHER GLEN WAY
 CLARKSVILLE, MARYLAND 21029

BUILDER:
 WILLIAMSBURG HOMES, INC.
 5485 HARPERS FARM ROAD
 SUITE 200
 COLUMBIA, MARYLAND 21044
 410-997-8800

SITE PLAN FOR BAT INSTALLATION

DATE: MAY 20, 2015 BEI PROJECT NO: 1407-W
 SCALE: AS SHOWN SHEET 1 OF 1