

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: 6-19-15 ~~9/2/15~~ **ONSITE SEWAGE DISPOSAL SYSTEM** P 556495

APPROVAL DATE: 7/17/15 SEC **PERMIT: CONSTRUCTION** A _____

PROPERTY ADDRESS: 14310 Bensworth Way

SUBDIVISION: Edgewood Farm LOT: 35 TAX ID: _____

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

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

CONTRACTOR CERTIFIED FOR BAT INSTALLATION: MDE MANUFACTURER:

PROPERTY OWNER: Toll MD III LP EMAIL: _____

OWNER ADDRESS: 14590 Edgewoods Way, Glenelg, MD 21042 PHONE: 410-489-2275

BAT UNIT MODEL: Norweco TNTLP-500 PUMP SIZE: _____ PUMP TANK CAPACITY: _____

OPERATION & MAINTENANCE AGREEMENT DATE SIGNED: 10/9/14 DATE RECORDED: 7/9/15

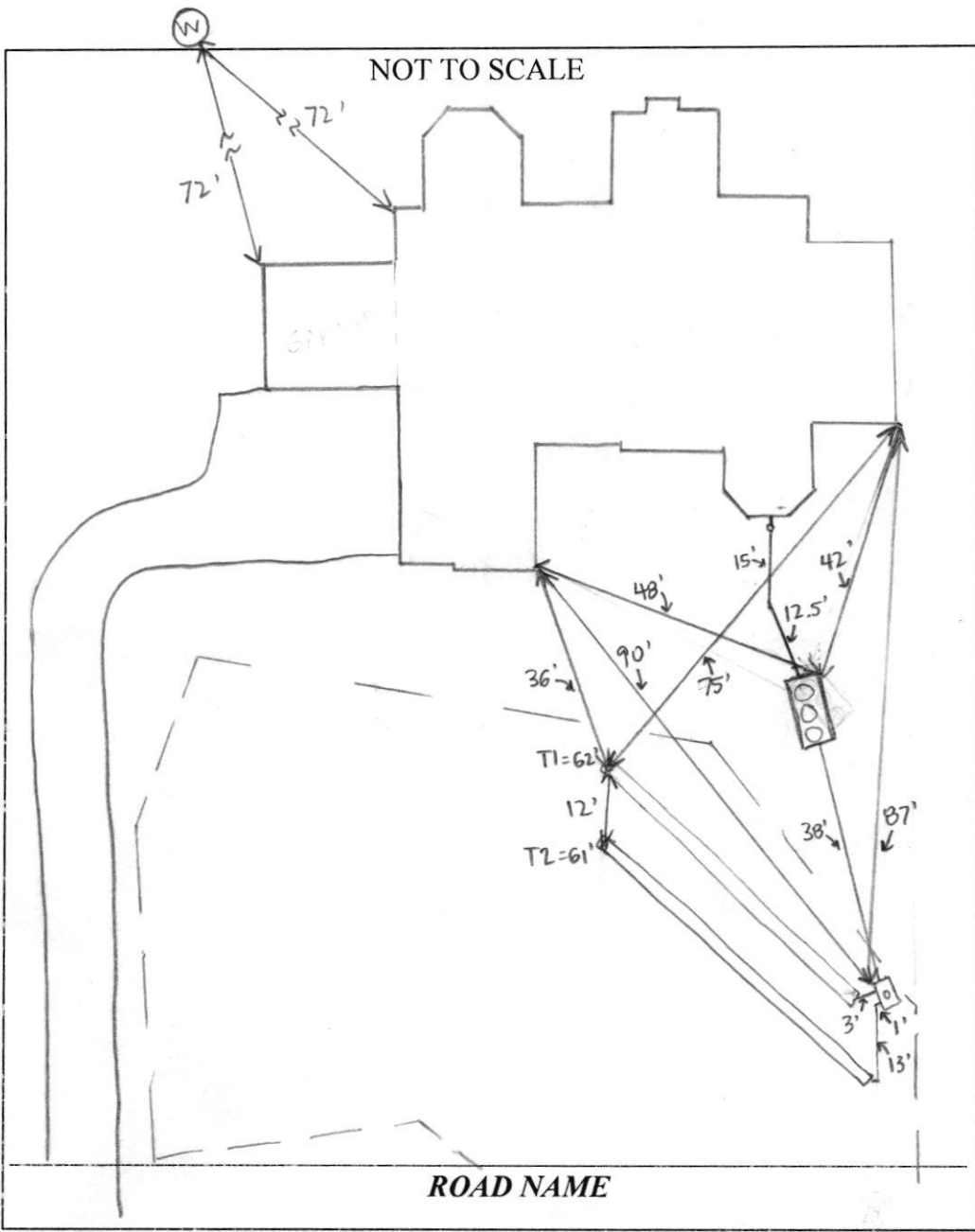
DISTRIBUTION SYSTEM: GRAVITY PRESSURE DOSED BEDROOMS: 5 APPLICATION RATE: 1.2

TRENCHES:	LINEAR FEET REQUIRED: <u>94' 125'</u>	INLET DEPTH: <u>4.5</u>
	TRENCH WIDTH: <u>3' 2'</u>	MAXIMUM BOTTOM DEPTH: <u>8</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10' 9'</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:	Install 2 x 47' trenches <u>62.5'</u> or 3 x 42'	

ISSUED BY: Hank Oswald ISSUE DATE: 7/9/15 EXPIRATION DATE: 7/9/16

- 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 15003201
- 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'	45'	8'
NUMBER OF TRENCHES 2		
TOTAL LENGTH 123'		
ABSORPTION AREA 246' + SIDEWALL		
DISTRIBUTION BOX LEVEL YES		
DISTRIBUTION BOX BAFFLE YES		
DISTRIBUTION BOX PORT YES		

SEPTIC TANK DATA	
SEPTIC TANK I LEVEL	YES
MANUFACTURER	BACKRIVER
CAPACITY	1300 GAL
SEAM LOC	TOP
TANK LID DEPTH	2'
BAFFLES	NO
BAFFLE FILTER	NO
MANHOLE LOC	FRONT, MID, REAR
6" PORT LOC	NONE
WATERTIGHT TEST	NO
SLOTTED	NO
DATE ON LID	5-17-15
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:
 7/13/15 Met Fogle's on site. They uncovered house connection - it's in the middle of the front of the house, coming out under the footer. Tank and SDA stakes not all present. 1'-2.5' of fill over SDA - Fogle's dug two holes to check. Spoke with Toll Bros. and requested they fix house connection to hung sewer, have SDA staked, and remove fill over SDA before we proceed with layout + installation. (SC) 7/14/15 SDA + tank location staked. Toll Bros. removed some fill - a few inches remain. Jamie from Fogle's dug down 1-2' to confirm. Laid out two 63' trenches. Fogle's must use transit while digging. (SC) 7/15/15 Tank set and connection to D-box made. Fogle's digging T1 and filling with stone + pipe. House connection not yet made. Stayed on site while Fogle's dug T2. Using laser transit while digging. 8' to bottom, 4' to stone. Levelled speed levelers in D-box. Toll Bros. will contact office when house connection is ready for inspection. Need BAT startup certification. (SC) 7/16/17 BAT startup certification received. (SC) 7/17/15 House connection made. (SC)

FINAL INSPECTOR Sarah Collins DATE OF APPROVAL 7/17/15

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 Singulair TNT 600 GPD Septic Tank installed at 14310 Bensworth Way, Glenelg, MD 21737 was installed on July 15, 2015 according to the manufacture's specifications.

Installer: Matt Cooney

Property Owner: Toll MD V Limited Partnership

Permit #



MATTHEW GECKLE

Vice-President

14310 Bensworth Way.

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: Toll MDV LP
Reference/Control #: 182

LR - Agreement Surcharge
1x 40.00 40.00

=====

SubTotal: 60.00
Total: 60.00

=====

REV-Check-BOA 60.00
Number : 09545040

07/09/2015 12:09 CC13-KD
#4511979 /1342/109

~ Thank you for visiting us today~

$$\frac{S \text{ BR} \times 150 \text{ GPD}}{1.2} = 625 \text{ ft}^2 \div 2 = 312.5$$

8' bottom, 4.5' inlet +

$$312.5 \times .40 = 125' = 62.5' \times 2$$



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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 9th day of July 2015, among _____
TOLL MDV LP, 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
14310 Bensworth Way Glenelg, 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 10677 Folio 461.

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 SINGULAR

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 indicated above.

Bert Nijzen 7/9/2015
Howard County Health Department

David Erat 6/30/15
Owner #1 Signature Date

Owner #2 Signature Date

Owner #1 Print Name

Owner #2 Print Name

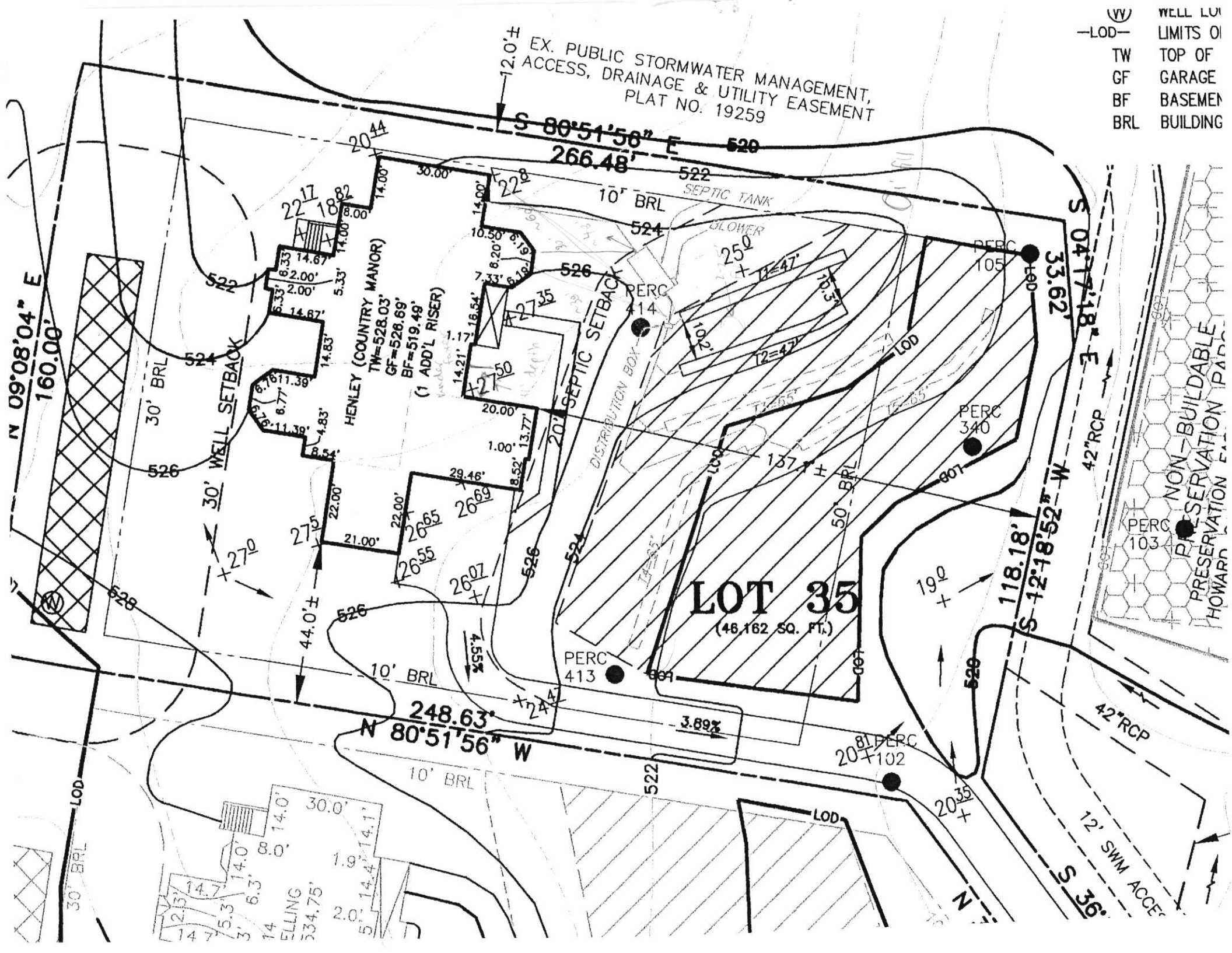
Dila K... 10/19/2014
Buyer #1 Signature Date

Kathleen ... 10/15/2014
Buyer #2 Signature Date

Buyer #1 Print Name

Buyer #2 Print Name

(W) WELL LOC
 -LOD- LIMITS OF
 TW TOP OF
 GF GARAGE
 BF BASEMENT
 BRL BUILDING



LOT 35
 (46,162 SQ. FT.)

NON-BUILDABLE
 PRESERVATION PARK
 HOWARD

EX. PUBLIC STORMWATER MANAGEMENT,
 ACCESS, DRAINAGE & UTILITY EASEMENT
 PLAT NO. 19259

N 09°08'04" E
 160.00'

S 04°17'18" E
 33.62'

S 12°18'52" W
 118.18'

N 80°51'56" W
 248.63'

30' BRL
 LOD

SELLING
 334.75'
 2.0'
 5.0'
 14.4'
 14.1'
 1.9'
 30.0'
 14.0'
 14.0'
 8.0'
 14.0'

S 36°
 12' SWM ACCE

42" RCP

42" RCP

42" RCP

42" RCP

42" RCP

42" RCP

42" RCP

42" RCP

42" RCP

42" RCP

42" RCP

42" RCP

42" RCP

42" RCP

42" RCP

42" RCP

Oswald, Hank

From: Oswald, Hank
Sent: Friday, December 12, 2014 10:04 AM
To: mboyce@eseeng.com
Subject: 14301 Bensworth Way_Lot 35_BAT Plan

Mr. Boyce:

The BAT plan for Edgewood Farm, Lot 35 doesn't have the septic components (septic tank, distr. box and trench) on it. Please revise and submit for review.

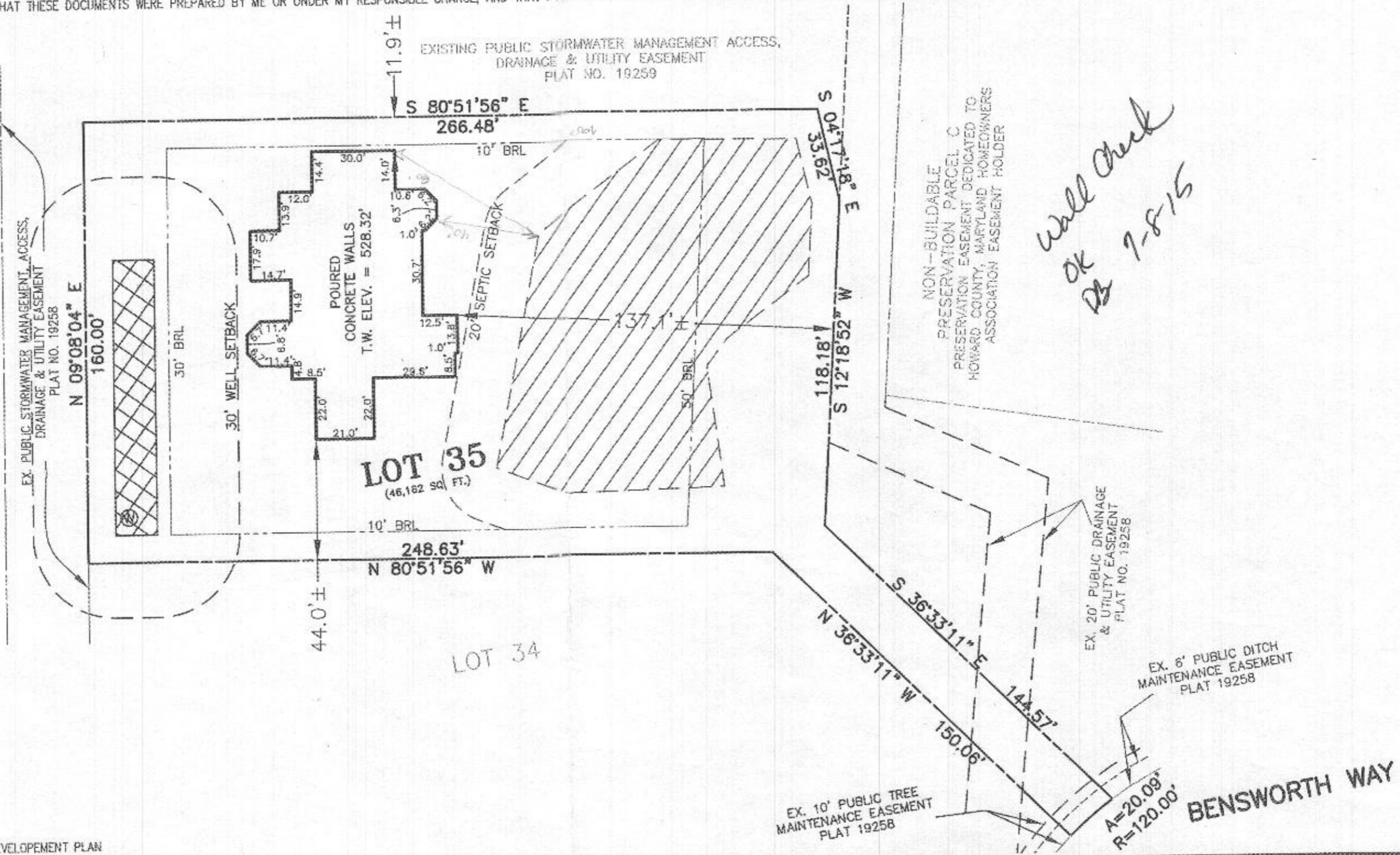
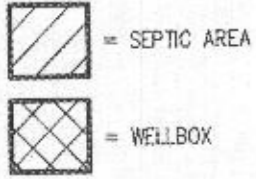
Thanks,

Hank

Hank Oswald, L.E.H.S.
Howard County Health Department
Bureau of Environmental Health
Well & Septic Program
410.313.1786

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE, AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21245, EXPIRATION DATE 1/27/17.

LEGEND:
 TW TOP OF WALL
 ELEV ELEVATION
 BRL BUILDING RESTRICTION LINE



*Wall Check
 OK
 DS 7-8-15*

ADDRESS: 14310 BENS WORTH WAY
 GLENELG, MD 21737

WELL TAG NUMBER: HO-95-0792

BUILDING SETBACKS (B.R.L.'s) SHOWN HEREON PER SITE DEVELOPMENT PLAN
 SETBACK DISTANCES SHOWN HEREON AS "±" HAVE AN ACCURACY OF ±0.1' FOOT.

SURVEYOR'S CERTIFICATE

THIS WALLCHECK WAS PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE REPORT. THIS PROPERTY IS SUBJECT TO ANY AND ALL EASEMENTS, RIGHT-OF-WAYS, COVENANTS, AND RESTRICTIONS, ETC. OF RECORD, SOME OR ALL OF WHICH MAY OR MAY NOT BE SHOWN AND/OR REFERENCED HEREON. BEARINGS AND DISTANCES OF THE PROPERTY BOUNDARY LINES SHOWN HEREON ARE PER AVAILABLE RECORDS AND HAVE NOT BEEN FIELD VERIFIED. THIS IS NOT A "LOCATION DRAWING" AND IS NOT TO BE USED FOR SETTLEMENT PURPOSES.



Gregory Van Stewart
 SIGNATURE

21245
 MD. LIC. NO.

5/1/15
 DATE

WALLCHECK
 LOT 35
EDGEWOOD FARM
 LIBER 10677, FOLIO 461
 PLAT NO. 19268
 ELECTION DISTRICT No. 4
 HOWARD COUNTY, MARYLAND

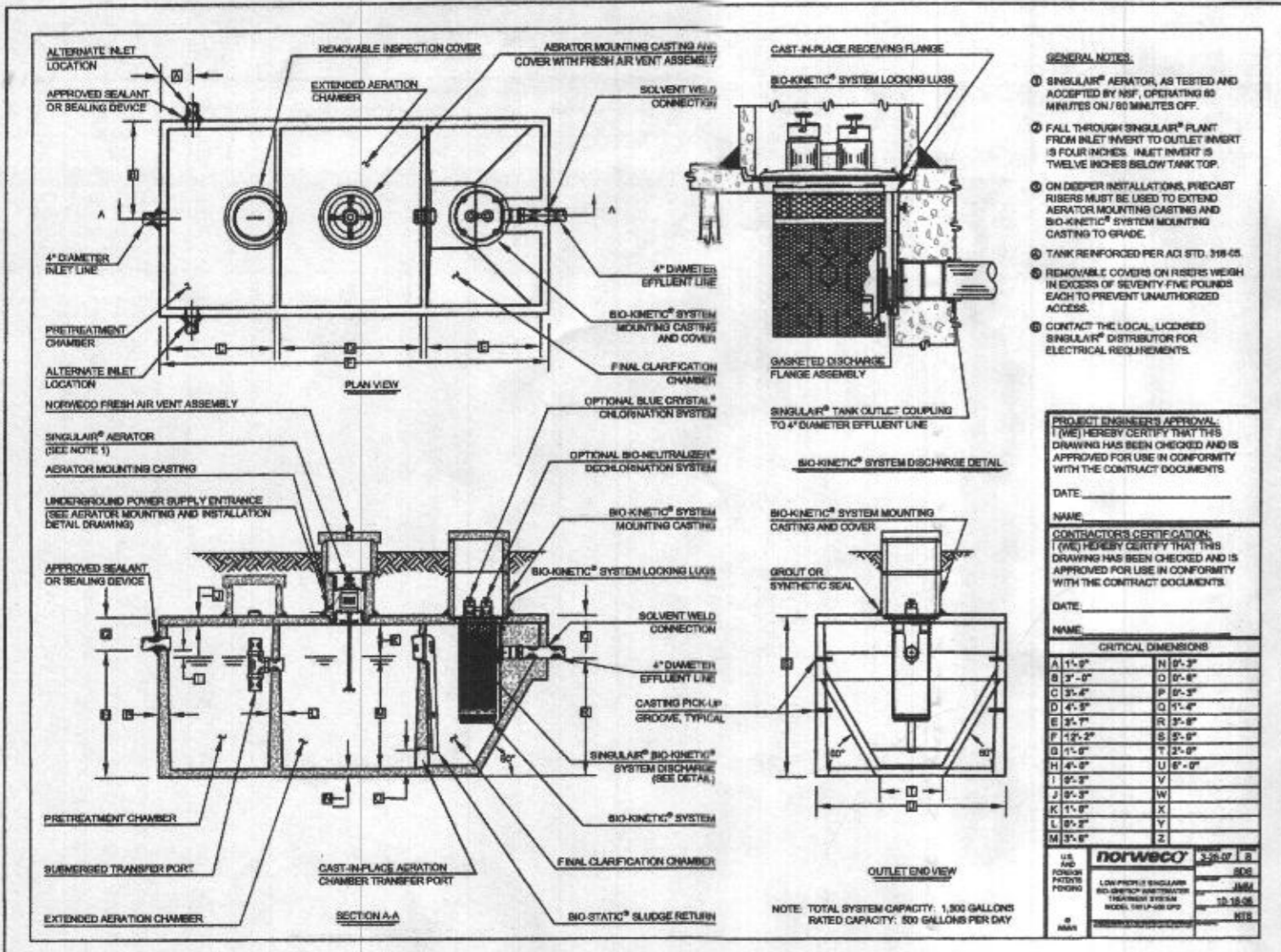
ESE Land Planning
 Engineering
 Land Surveying

ESE Consultants, Inc.
 7164 Columbia Gateway Dr.
 Suite 230
 Columbia, MD 21046
 Tel: 410-872-9105
 Fax: 410-872-4870

DATE: 04/30/15
 CHK'D: G.V.S.

SCALE: 1"=40'
 JOB NO: 1498

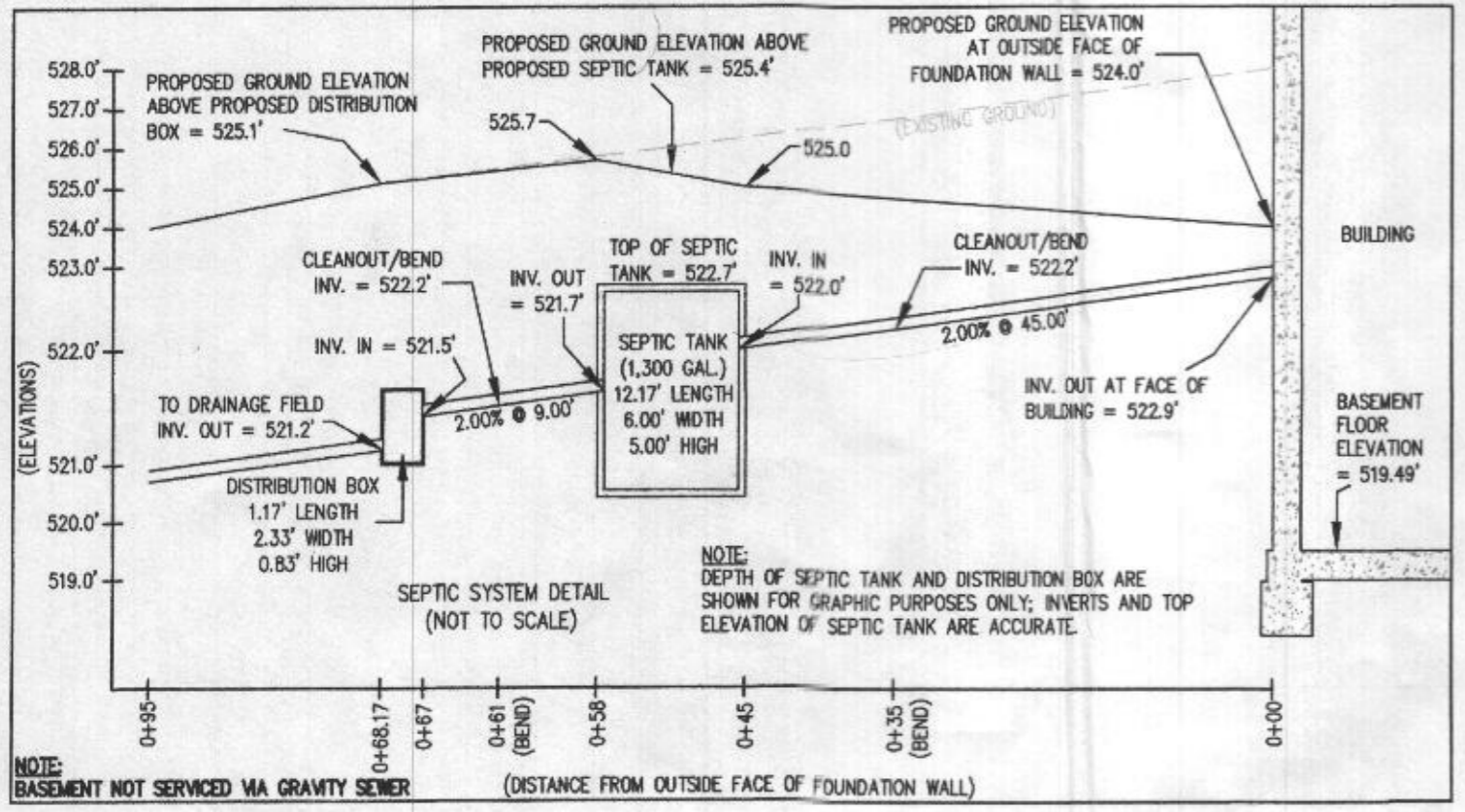
FILE: WC LOT 35
 DRAWN: R.C.K.



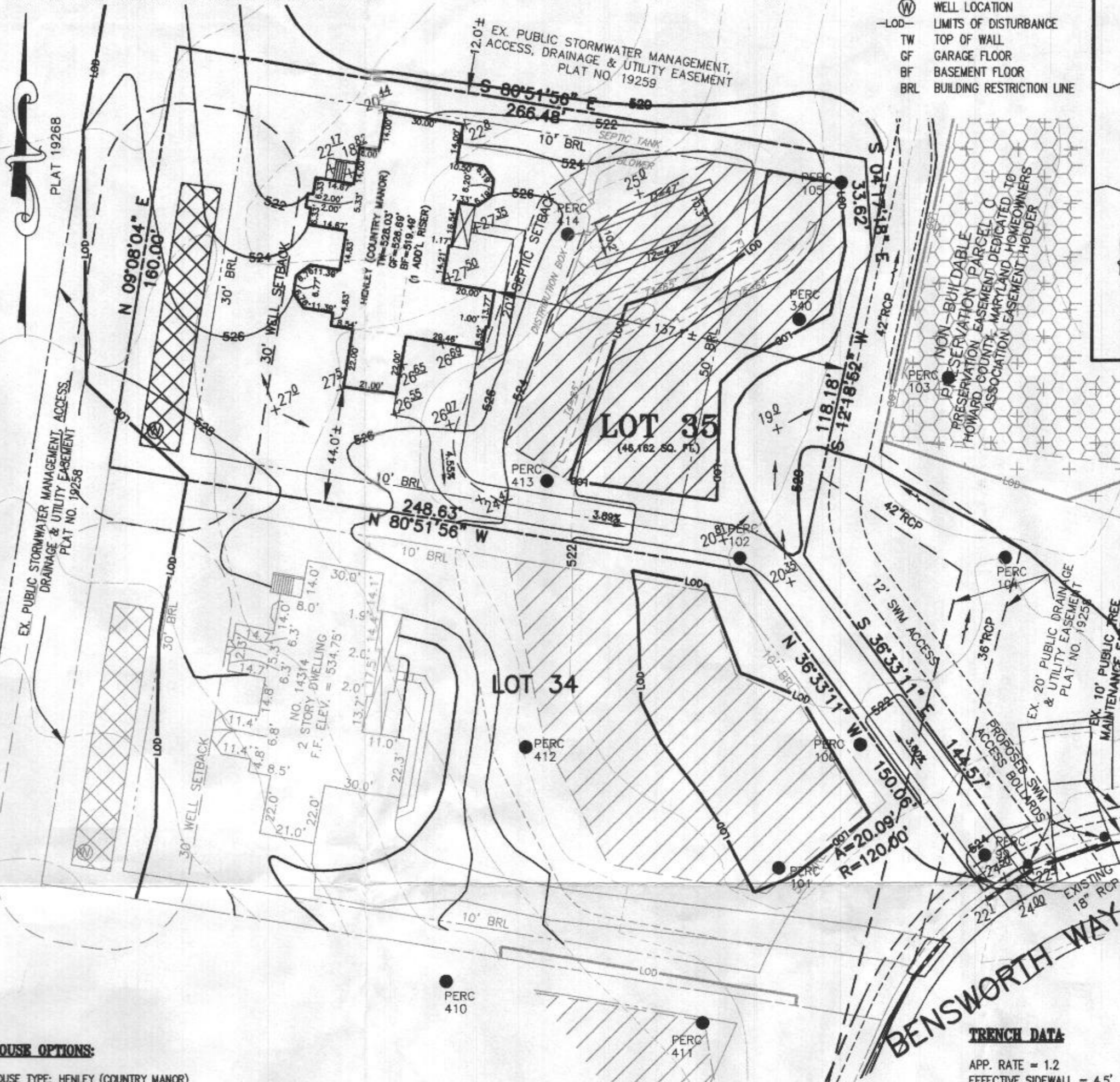
GENERAL NOTES (ADDITIONAL):

REVISED PLAN SHOWN HEREON IS TO CHANGE THE SEPTIC TANK THAT IS BEING INSTALLED ONLY. ALL CALCULATIONS ARE TO REMAIN THE SAME. THIS PLAN WAS APPROVED PREVIOUSLY WITH THE ECOPOD SYSTEM, BUT DUE TO THE MEMORANDUM FROM THE HOWARD COUNTY HEALTH DEPARTMENT DATED FEBRUARY 19, 2015; THOSE SYSTEMS ARE NO LONGER TO BE USED IF NOT INSTALLED BY MARCH 15, 2015.

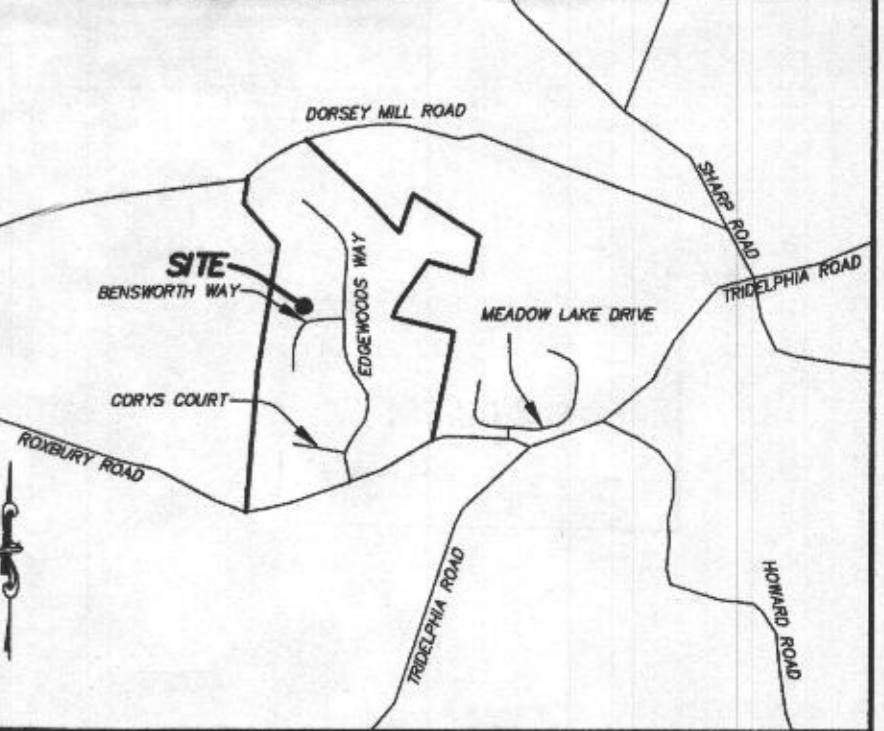
Approved Septic System Plan
 Howard County Health Department
 Hank Count 3/25/15
 Signature Date



PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE, AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21328, EXPIRATION DATE 1/8/17.



- LEGEND:**
- PERC TEST LOCATION
 - WELL LOCATION
 - LO- LIMITS OF DISTURBANCE
 - TW TOP OF WALL
 - GF GARAGE FLOOR
 - BF BASEMENT FLOOR
 - BRL BUILDING RESTRICTION LINE



VICINITY MAP

- GENERAL NOTES:** 1" = 2000'
- THE SUBJECT PROPERTY IS ZONED RC-DEO PER THE 2/2/04 COMPREHENSIVE ZONING PLAN AND PER COMP-LITE ZONING REGULATIONS DATED 7/28/06.
 - PLAT REFERENCE: PLAT No. 19269.
 - THE EXISTING TOPOGRAPHY WITHIN THE AREA OF PROPOSED WORK IS TAKEN FROM FIELD RUN SURVEY WITH MAXIMUM TWO FOOT CONTOUR INTERVALS PREPARED BY ESE DATED 4/27/11.
 - SEE ARCHITECTURAL PLANS FOR BUILDING DIMENSIONS AND DESIGN DETAILS. PRIOR TO STAKEOUT FOR CONSTRUCTION, IT SHALL BE THE OWNER/BUILDERS RESPONSIBILITY TO PROVIDE ESE CONSULTANTS INC. WITH THE MOST RECENT SET OF HOUSE PLANS.
 - THE CONTRACTOR OR DEVELOPER SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS / BUREAU OF ENGINEERING / CONSTRUCTION INSPECTION DIVISION AT (410-313-1881) AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
 - THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
 - TOTAL LIMIT OF DISTURBANCE: 39,956 SQ. FT. / 0.92 AC.±
 - STORMWATER MANAGEMENT PER PLAN F-06-108.
 - ANY DAMAGE TO PUBLIC "RIGHT-OF-WAYS" OR PAVED PUBLIC ROADS SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTORS EXPENSE IN ACCORDANCE WITH THE HOWARD COUNTY STANDARDS AND SPECIFICATIONS.
 - DEVIATIONS FROM THESE PLANS AND SPECIFICATIONS WITHOUT PRIOR WRITTEN CONSENT OF THE CIVIL ENGINEER (ESE) MAY CAUSE THE WORK TO BE UNACCEPTABLE.
 - THE DIMENSIONED DISTANCES SHALL GOVERN IF SCALED AND DIMENSIONED DISTANCES ON THIS PLAN ARE FOUND TO BE IN DISAGREEMENT.
 - THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM LOT AREA AND OWNERSHIP WIDTH AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT.
 - THESE AREAS DESIGNATE A PRIVATE SEWAGE EASEMENT OF AT LEAST 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWAGE IS AVAILABLE. THESE EASEMENTS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT VARIANCES FOR ENCROACHMENTS UNTO THE PRIVATE SEWAGE EASEMENT. RECORDATION OF A MODIFIED SEWAGE EASEMENT SHALL NOT BE NECESSARY.
 - EXISTING WELLS, SEPTIC SYSTEMS, AND SEWAGE 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.
 - ANY CHANGES TO A PRIVATE SEWAGE AREA SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
 - UPON BUILDING PERMIT REVIEW THE SEPTIC SYSTEMS FOR ALL PROPOSED STRUCTURES AND/OR EXISTING STRUCTURE EXPANSIONS SHALL BE RE-EVALUATED TO DETERMINE SUFFICIENT SYSTEM CAPACITY.
 - THE DEVELOPMENT OF THIS LOT DOES NOT REQUIRE AN ENVIRONMENTAL CONCEPT PLAN SINCE STORMWATER MANAGEMENT WAS PREVIOUSLY APPROVED UNDER F-06-108.
 - A STANDARD SEDIMENT CONTROL PLAN MAY BE USED FOR DEVELOPMENT OF THIS LOT. REFERENCE GRADING PLAN F-06-108.
 - THE EXISTING WELL(S) SHOWN ON THIS PLAN (IDENTIFIED WITH THE ATTACHED WELL TAG NUMBER HO-95-0792 HAS BEEN FIELD LOCATED BY ESE CONSULTANTS - PROFESSIONAL LAND SURVEYOR(S), AND IS ACCURATELY SHOWN.
 - BUILDING SETBACKS (B.R.L.'s) SHOWN HEREON PER SITE DEVELOPMENT PLAN SETBACK DISTANCES SHOWN HEREON AS "±" HAVE AN ACCURACY OF ±0.1' FOOT.
 - CULVERT FOR DRIVEWAY IS AN EXISTING 18" R.C.P. (REINFORCED CONCRETE PIPE) LOCATED ON 12/03/2014 AND SHOWN HEREON.

HOUSE OPTIONS:

HOUSE TYPE: HENLEY (COUNTRY MANOR)	
DAYLIGHT BASEMENT	OPTION No. 018
CONSERVATORY ELITE ADDITION	OPTION No. 039
ADD'L 1' HEIGHT TO BASEMENT FOUNDATION WALLS	OPTION No. 070
PLAYROOM	OPTION No. 121
NAPLES SUNROOM	OPTION No. 529
GRAND FAMILY ROOM	OPTION No. 534
ADD'L TWO CAR FRONT ENTRY GARAGE	OPTION No. 263019

SEPTIC SYSTEM/BEST AVAILABLE TECHNOLOGY (BAT) 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.
- THE MAXIMUM DEPTH OF THE BAT PER THE MANUFACTURER'S SPECIFICATION IS 3 FEET COVER.
- THE BLOWER MAY NOT BE LOCATED MORE THAN 100 FEET FROM THE TANK BASED ON THE MANUFACTURER'S SPECIFICATIONS.
- THE BAT SYSTEM SHALL BE MAINTAINED AND OPERATED FOR THE LIFE OF THE SYSTEM.
- THE BAT 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 THE 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.

APPROVED: FOR HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
DIRECTOR	DATE
PROFESSIONAL ENGINEER	DATE

SEWAGE DISPOSAL SYSTEM DATA (5 BDRM)

NORWECO SINGULAIR TINTL-500 (3 CHAMBER SYSTEM)

PROPOSED INVERT AT FOUNDATION WALL: 522.9'

1. EX. GRADE OVER TANK: 526.0'
 PROPOSED GRADE OVER TANK: 525.4'
 INVERT IN: 522.0' INVERT OUT: 521.7'

2. DISTRIBUTION BOX:
 EXISTING GRADE OVER BOX: 525.1'
 PROPOSED GRADE OVER BOX: 525.1'
 INVERT IN: 521.5' INVERT OUT: 521.2'

3. TRENCH DESIGN: (INITIAL SYSTEM)
 (5 BDRM x 150 GPD/BDRM = 750 GPD)
 750 GPD + 1.2 APP. RATE = 625 SF
 USE 3' WIDE TRENCH WITH 48" GRAVEL BELOW PIPE
 10' MIN. SPACING BETWEEN TRENCH EDGES
 625 SF x 3' WIDTH = 208.33 LF x 0.45 = 93.75 LF MIN. TRENCH
 USE 2 47' LONG TRENCHES = 94 LF

TRENCH DESIGN: (FIRST REPLACEMENT)
 (5 BDRM x 150 GPD/BDRM = 750 GPD)
 750 GPD + 0.8 APP. RATE = 937.50 SF
 USE 3' WIDE TRENCH WITH 48" GRAVEL BELOW PIPE
 10' MIN. SPACING BETWEEN TRENCH EDGES
 937.50 SF + 3' WIDTH = 312.50 LF x 0.62 = 193.75 LF MIN. TRENCH
 USE 3 65' LONG TRENCHES = 195 LF

TRENCH DATA:

APP. RATE = 1.2
 EFFECTIVE SIDEWALL = 4.5'
 BOTTOM MAX. DEPTH = 8'

TRENCH 1 (T1):
 GROUND ABOVE = 524.8'
 INV. IN = 520.8'
 BOTTOM TRENCH = 516.8'

TRENCH 2 (T2):
 GROUND ABOVE = 524.2'
 INV. IN = 520.2'
 BOTTOM TRENCH = 516.2'

(FIRST REPLACEMENT SYSTEM)
 APP. RATE = 0.8
 EFFECTIVE SIDEWALL = 6'
 BOTTOM MAX. DEPTH = 8'

BACKUP TRENCH 3 (T3):
 GROUND ABOVE = 523.5'
 INV. IN = 519.5'
 BOTTOM TRENCH = 515.5'

BACKUP TRENCH 4 (T4):
 GROUND ABOVE = 522.6'
 INV. IN = 518.6'
 BOTTOM TRENCH = 514.6'

BACKUP TRENCH 5 (T5):
 GROUND ABOVE = 522.3'
 INV. IN = 518.3'
 BOTTOM TRENCH = 514.3'

BASEMENT NOT SERVICED VIA GRAVITY SEWER

SITE PLAN FOR BAT INSTALLATION
 LOT 35
EDGEWOOD FARM
 LIBER 10677, FOLIO 461
 PLAT No. 19269
 TAX No. 04-372638
 FOURTH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 ADDRESS: 14310 BENS WORTH WAY
 GLENELG, MARYLAND

ESE Land Planning
 Engineering
 Land Surveying

ESE Consultants Inc.
 7164 Columbia Gateway Dr.
 Suite 230
 Columbia, MD 21046
 TEL: 410-872-9105
 FAX: 410-872-4870

DATE: 03/14/15 SCALE: 1"=40' FILE: BAT LOT 35_rev2
 CHK'D: M.J.B. JOB NO: 1498 DRAWN: R.C.K.