

Bureau of Environmental Health
 7178 Gateway Drive Columbia, MD 21046
 (410) 313-2640 Fax (410) 313-2648
 TDD (410) 313-2323 Toll Free 1-866-313-6300
 website: www.hchealth.org

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

RECEIPT DATE: 9-12-14 **ONSITE SEWAGE DISPOSAL SYSTEM**

P 554624-A

INSTALLATION APPROVAL DATE: _____

**PERMIT
CONSTRUCTION**

A _____

PROPERTY ADDRESS: 14909 Meriwether Drive

SUBDIVISION: Meriwether Farm LOT: 24 TAX ID: _____

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

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

PROPERTY OWNER: Toll MD VIII LP EMAIL: _____

OWNER ADDRESS: 7164 Columbia Gateway Drive, Columbia, MD 21046 PHONE: _____

BAT UNIT MODEL: Ecopod BAT UNIT SIZE: 600 GPD

PUMP CHAMBER CAPACITY (GALLONS): _____ PUMP SIZE: _____

NUMBER OF BEDROOMS: _____ HOUSE SQ. FT. _____ APPLICATION RATE: _____

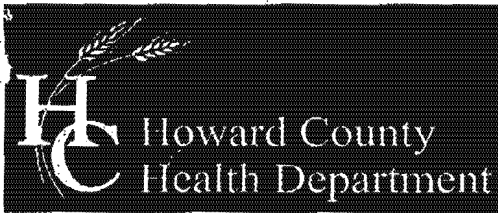
DISTRIBUTION SYSTEM: GRAVITY FED LOW PRESSURE DOSED

TRENCHES:	LINEAR FEET REQUIRED: <u>See Bat Plan 155'</u>	INLET DEPTH: <u>See Bat Plan 4'</u>
	TRENCH WIDTH: <u>See Bat Plan 3'</u>	MAXIMUM BOTTOM DEPTH: <u>See Bat Plan 6'</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>See Bat Plan</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>See Bat Plan 4'</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:	Set BAT unit per plan. Set distribution box per plan. Install trenches per plan.	

ISSUED BY: Jeff Williams ISSUE DATE: _____ EXPIRATION DATE: 9-12-15

- 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

**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.**



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

Twitter: HowardCoHealthDep

000083

15899 POL 134

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 15th day of DECEMBER, 2014, among Maura Rossman Lynch and Jennifer M. Lynch, 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 14909 Mountview Drive, Glenlyon MD, in the 4 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.

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 600 BNR.

20
40
72

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 indicated above.

Beit Nyan 12/1/14
Howard County Health Department

LR - Agreement
Recording Fee 20.00
Grantor/Grantee Name:
Synch
Reference/Control #:
F3
LR - Agreement
Surcharge 40.00
=====
SubTotal: 60.00
=====
Total: 60.00
12/01/2014 03:53
CC13-TR
#3503209 CC0503 -
Howard Co
Columbia/CC05.03.01 -
Register 01

[Signature] 11/25/14
Owner #1 Signature Date

Owner#2 Signature Date

Michael Lynch
Owner #1 Print Name

Owner #2 Print Name

[Signature]
Buyer #1 Signature Date

[Signature] 11/25/14
Buyer #2 Signature Date

MICHAEL B LYNCH
Buyer #1 Print Name

JENNIFER M. LYNCH
Buyer #2 Print Name

Williams, Jeffrey

From: Williams, Jeffrey
Sent: Thursday, March 13, 2014 11:57 AM
To: 'Michael Boyce'
Subject: RE: Septic data sheets

Here is data for the lots in question. I am working on a new form to provide this data, but for now here are the numbers. You can plug them into the following equations:

#of bedrooms x 150gpd / application rate = square footage absorption area needed. Divide by width of trench used to get linear length of trench needed

Sidewall credit: $(W+2)/(W+1+2D) \times 100$, where W is width of trench and D is depth in feet between effective depth and bottom depth.

Meriwether lot 5: app rate-0.6, effective depth-4', bottom-5.5'

Homewood Xing lot 71: app rate-1.2, eff depth-5', bottom-8'

Edgewood Farm lot 57: app rate-0.8, eff depth-5', bottom-8'

Meriwether lot 24: app rate-1.2, eff depth-4', bottom-6'

Homewood xing lot 77: app rate-1.2, eff depth-4.5', bottom-7'

Homewood xing lot 44: *****This lot has a condition to put the initial septic system in the farthest part of the area from the wells on lots 66 and 67*****

App rate-0.6, eff depth-7', bottom-8'

From: Michael Boyce [mailto:MBOYCE@eseeng.com]
Sent: Thursday, March 13, 2014 9:27 AM
To: Williams, Jeffrey
Subject: Septic data sheets

Reminder to send the data sheets from the list I dropped off on Tuesday.

thanks

Michael Boyce
Regional Director
ESE Consultants, Inc.
7164 Columbia Gateway Dr. | Suite203 | Columbia MD 21046
P: 410-872-3058 | C: 410-365-4175
mboyce@eseeng.com

MEMBER N. C. B. V. A.

MEMBER P. C. B. V. A.

Babylon

V A U L T

S I N C E 1 9 3 0

Burial Vaults - Septic Tanks

PHONE:
410-848-0393

FAX:
410-848-3551

925 WAKEFIELD VALLEY ROAD
NEW WINDSOR, MD 21776

**Five Year Initial Service Policy
On Site Wastewater Treatment System**

Brand Name: <u>ECOPOD</u>	Model Number: <u>ECOPED 60</u>
Purchase Date: <u>12/4/14</u>	Serial Number: <u>EGON-02229-CA</u>

INITIAL POLICY:

A five (5) year service policy shall be furnished to the user by the Installer.

This policy is included in the original purchase price and shall provide the following:

1. An inspection/service call every six months which includes inspections, adjustment and servicing of the mechanical and electrical component parts as necessary to ensure proper function for the first year. And once a year there after.
2. An effluent quality inspection every six months consisting of a visual check for color, turbidity, scum overflow, and an examination for odors for the first year. And then once a year there after.
3. A sample shall be pulled from the aeration tank once a year as described in the "Solids Removal" Section to determine if there is an excess of solids in the treatment plant. If the test results determine if there is an excess of solids in the treatment plant. If the test results determine a need for solids removal, the user will bear the cost and responsibility for doing so.
4. If any improper operation is observed which cannot be corrected at that time, the user shall be notified immediately in writing of the conditions and the estimated date of correction.

Violations of Warranty including shutting off the electric current to the system for more than 24 hours, disconnecting the alarm system restricting ventilation to the aerator, overloading the system above its rated capacity, or introducing excessive amounts of harmful matter into the system, or any other form of unusual abuse.

**THIS POLICY DOES NOT INCLUDE PUMPING
SLUDGE FROM UNIT IF NECESSARY**

PERMITTING AUTHORITY:

Howard County

SYSTEM OWNER:

Toll Beatnes

INSTALLATION LOCATION:

4909 Marie Wether Way
Glennloch MD 21737

DISTRIBUTOR:

Babylon Vault Co
925 Wakefield Valley Rd
New Windsor MD 21776

INSTALLER:

Fagle Septic
Obrecht Rd
Sykesville MD 21784

SERVICE COMPANY:

Babylon Vault
Service Operators License Number: Stuart R. Koontz

I agree to abide by the service policy as stated above: _____

Witness: _____

e3 Environmental LLC

302-725-0788 www.e3onsite.com

ECOPOD-N Completion Statement

Installation Information

Owners Name		# of Bedrooms / GPD	600
Street	14909 Merri Weather Way	Repair	<input type="checkbox"/>
City	Glenelgh	New Construction	<input checked="" type="checkbox"/>
State	MD		
Zip	21737		

Installation Company

Company	Eogles	Installed Date	1/1/
Certified Installer	Ricky Colson	Startup Date	12/18/14
Street	Obrecht Rd		
City	Sykesville		
State	MD		
Zip	21784		

ECOPOD-N

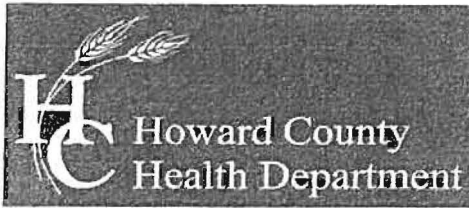
Model #	Serial #
E50	
E60	EGON-0229-CA
E75	
E100	
E150	

Blower Voltage	Good
Blower Running Amps	Good
Inches of water over media with blower turned off	2 inches
Vent Installed	yes
Tanks and Risers Water tight	yes
Alarm Functional	yes

I hereby certify that the ECOPOD-N wastewater treatment system has been installed and started up in accordance with the construction permit and is in compliance with the manufacturers recommendations

Company Babylon Vault Co.
 Signature Steven R Korantz
 Printed Name Steven R Korantz

Date 12/18/14



Bureau of Environmental Health

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

Facebook: www.facebook.com/hocohealth

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 ^{17th} ~~8th~~ day of ^{NOVEMBER, 2014} ~~October~~, among Michael Brandon Lynch and Jennifer Mastros Lynch, 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 14909 Meriwether Drive, Glenelg MD, 21737, in the 4 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 _____. ^{HOOT: 600 BNR}

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.

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.

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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.

[Signature] 10/7/14
Owner Date

[Signature] 10/08/2014
Owner Date

[Signature] 11/19/2014
Howard County Health Department

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 1/8/15.

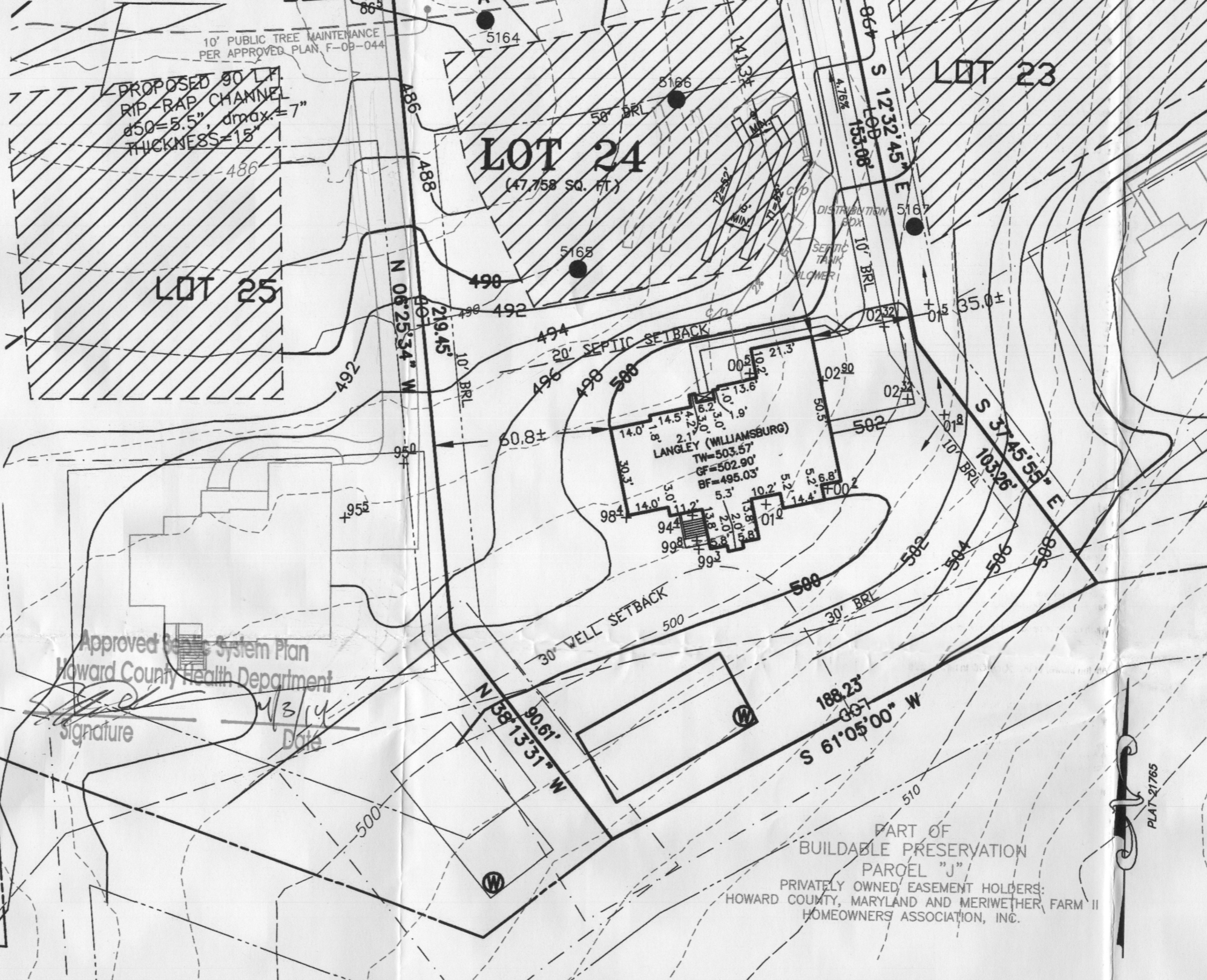
HOUSE OPTIONS:

TYPE: LANGLEY (WILLIAMSBURG)
 THREE CAR SIDE ENTRY GARAGE
 DAYLIGHT BASEMENT UNDER STUDY
 EXPANDED FAMILY ROOM/GREAT ROOM
 GUEST ELITE SUITE
 ADD'L 1' TO HEIGHT OF BASEMENT FOUNDATION
 PALLADIAN KITCHEN ADDITION

OPTION No. 001
 OPTION No. 018
 OPTION No. 023
 OPTION No. 035
 OPTION No. 070
 OPTION No. 532

LEGEND:

- PERC TEST LOCATION
- ⊙ WELL LOCATION
- LO- LIMITS OF DISTURBANCE
- TW TOP OF WALL
- GF GROUND FLOOR/FIRST FLOOR
- BF BASEMENT FLOOR
- BRL BUILDING RESTRICTION LINE



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.

SEWAGE DISPOSAL SYSTEM DATA (4 BDRM):

- PROPOSED INVERT AT FOUNDATION WALL: 493.6'
- ECO ECOPOD SYSTEM
 EX. GRADE OVER TANK: 496.0'
 PROPOSED GRADE OVER TANK: 496.0'
 INVERT IN: 492.6' INVERT OUT: 492.3'
 - DISTRIBUTION BOX
 EXISTING GRADE OVER TANK: 495.6'
 PROPOSED GRADE OVER TANK: 495.6'
 INVERT IN: 491.9' INVERT OUT: 491.6'
 - TRENCH DESIGN (4 BDRM x 150 GPD/BDRM = 600 GPD)
 600 GPD ÷ 1.2 APP. RATE = 500 SF
 USE 3' WIDE TRENCH WITH 36" GRAVEL BELOW PIPE
 9' MIN. SPACING BETWEEN TRENCH EDGES
 500 SF ÷ 3' WIDTH = 166.67 LF x 0.62 = 103.34 LF MIN. TRENCH
 USE 2 52' LONG TRENCHES = 104 LF

TRENCH DATA:

- BOTTOM MAX. DEPTH (6")
- TRENCH 1 (11):**
 GROUND ABOVE = 494.6'
 INV. IN = 490.6'
 BOTTOM TRENCH = 488.6'
- TRENCH 2 (12):**
 GROUND ABOVE = 493.5'
 INV. IN = 489.5'
 BOTTOM TRENCH = 487.5'

APPROVED: FOR HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION _____ DATE _____

DIRECTOR _____ DATE _____

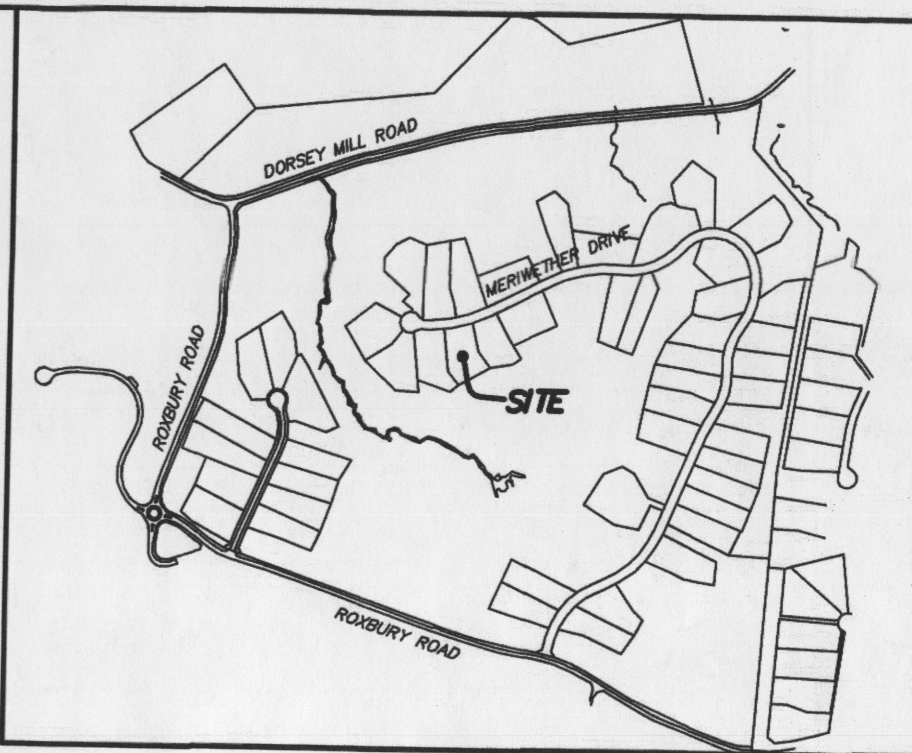
PROFESSIONAL ENGINEER _____ DATE _____

LOT PLAN FOR BAT INSTALLATION
LOT 24
MERIWETHER FARMS
 LIBER 13779, FOLIO 478
 PLAT No. 21765
 TAX No. 04-593665
 FOURTH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 ADDRESS: 14909 MERIWETHER DRIVE
 GLENELG, MARYLAND

ESE Land Planning
 Engineering
 Land Surveying

ESE Consultants Inc.
 7164 Columbia Gateway Dr.
 Suite 203
 Columbia, MD 21046
 TEL: 410-872-9105
 FAX: 410-872-4870

DATE: 03/26/14 SCALE: 1"=40' FILE: PP LOT 24
 CHK'D: M.J.B. JOB NO: 3184 DRAWN: R.C.K.



- GENERAL NOTES:** 1" = 1000'
- 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. 21765.
 - 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 4/20/11.
 - 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: 47,758 SQ. FT. / 1.10 AC.±
 - STORMWATER MANAGEMENT FOR THIS LOT IS PROVIDED BY PREVIOUSLY APPROVED PLAN F-09-044
 - 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-09-044.
 - A STANDARD SEDIMENT CONTROL PLAN MAY BE USED FOR DEVELOPMENT OF THIS LOT. REFERENCE GRADING PLAN DATED 12/18/13.
 - THE EXISTING WELL(S) SHOWN ON THIS PLAN (IDENTIFIED WITH THE ATTACHED WELL TAG NUMBER HO-95-2162 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 PER F-09-044.

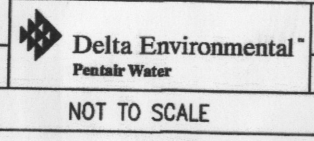
NOTES:

- Blower piping to ECOPOD not to exceed 100 FT total length in the piping system. For distances greater than 100 FT, consult factory. Blower must be located above flood levels on a solid base.
- Vent to be located above finish grade or higher to avoid infiltration. Cap on vent must be secured with a stainless steel screw.
- All other tanks to/from ECOPOD must conform to applicable country, state, province, and local plumbing and electrical codes.
- The primary tank/compartment volume must be 1 to 2 times the rated ECOPOD GPD. Primary and Reactor tank volumes are listed in the ECOPOD Design Manual. The primary tank may be integrated with the reactor tank or stand alone in a separate tank.
- All manways, pump out ports, and vents must be secured to prevent accidental or unauthorized access.
- ECOPOD media is recommended to be atleast 19" from bottom of tank. Distances not 19" need factory approval.
- ECOPOD media EV19PVC224
- Tanks with higher inlets, install SCH 40 PVC pipe over legs to elevate reactor to correct height.
- Air supply line should be secured with non-corrosive clamps where required to prevent vibration damage.
- Effluent discharge level must be at a height no more, or no less than 2" above vertical tube PVC media.
- Use epoxy, or use another approved method or substance, to create strong connection & watertight seal (TYP.)
- Risers must conform to country, state, province, and local acceptable codes. Fireglass riser shown.

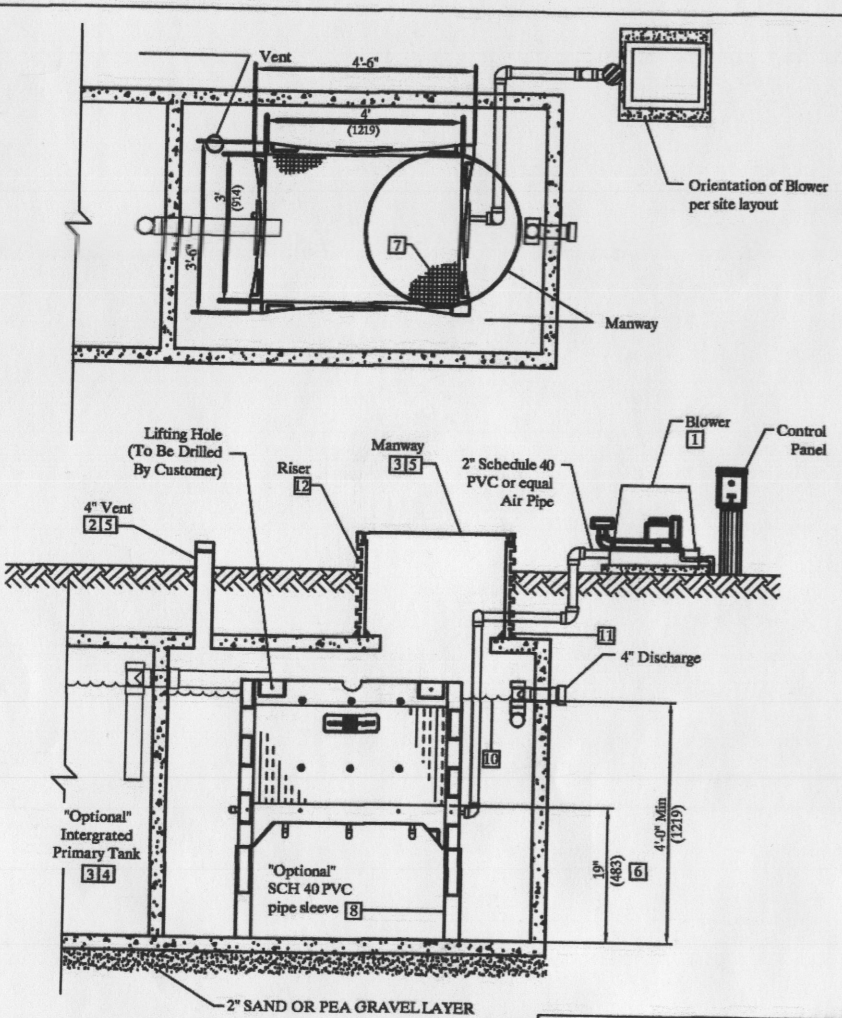
600 GPD TREATMENT UNIT			
Discharge From Tank	4'-0"	Reactor Volume	840 Gallons
Recommended Distance Under Reactor Box	19"		

E60NCA REACTOR IN CONCRETE TANK

DWN BY: D.WRICKET DATE: 06/09/10 SCALE: N.T.S. DWG. NO.: E60NCA REACTOR IN CONCRETE TANK RNO: 2 PAGE: 1 OF 3



NOT TO SCALE

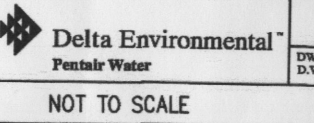


NOTES:

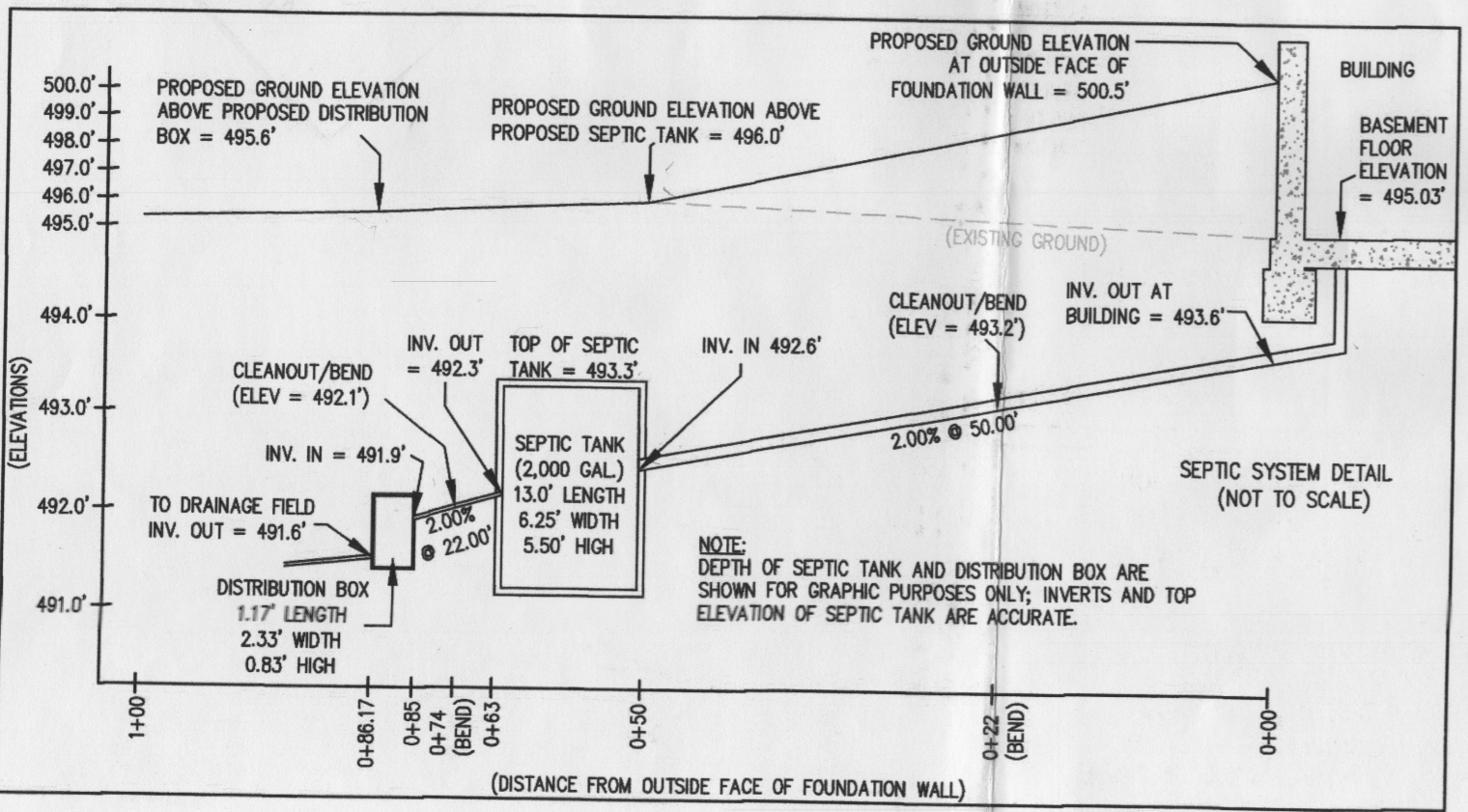
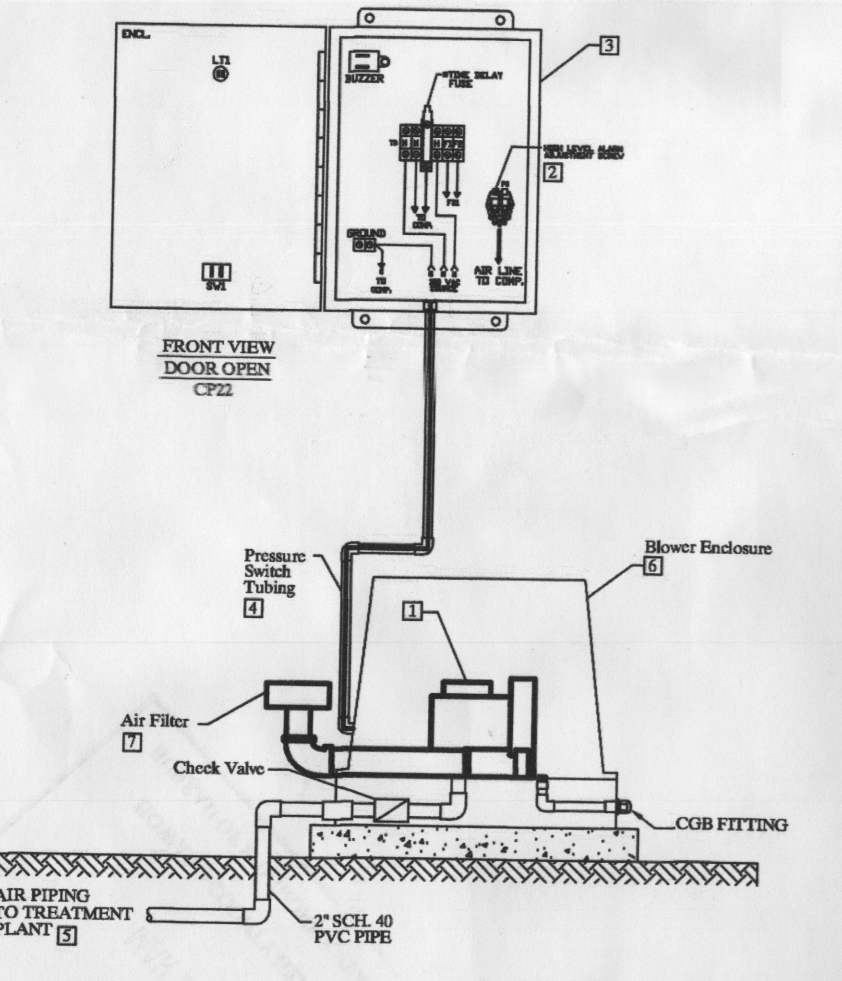
- Blower Model Delta 06
- Setting High Level Pressure Switch Bring plant to operating water level with compressor turned on. Using properly sized screw driver, turn high level alarm adjustment screw clockwise until alarm occurs. Once alarm stops, turn the screw counter-clockwise until alarm stops. Setting Low Level Pressure Switch Factory set
- All of Delta's control panels are manufactured to UL508A requirements. All enclosures are NEMA rated.
- Pressure switch tubing is used for high and low level pressure detection.
- All piping from the blower to the ECOPOD to be 2" sch-40 PVC pipe.
- All blowers are housed in a polyethylene enclosure supplied with necessary piping for installation.
- Inlet Filters must be mounted on outside of enclosure. Filters not mounted on outside could contribute to blower malfunction and void manufacturer's warranty.
- Filter elements must be non-paper type.

E60NCA BLOWER/CP DETAIL

DWN BY: D.WRICKET DATE: 06/09/10 SCALE: N.T.S. DWG. NO.: E60NCA BLOWER/CP DETAIL RNO: 3 PAGE: 1 OF 3



NOT TO SCALE



NOTE: DEPTH OF SEPTIC TANK AND DISTRIBUTION BOX ARE SHOWN FOR GRAPHIC PURPOSES ONLY; INVERTS AND TOP ELEVATION OF SEPTIC TANK ARE ACCURATE.

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 1/8/15.

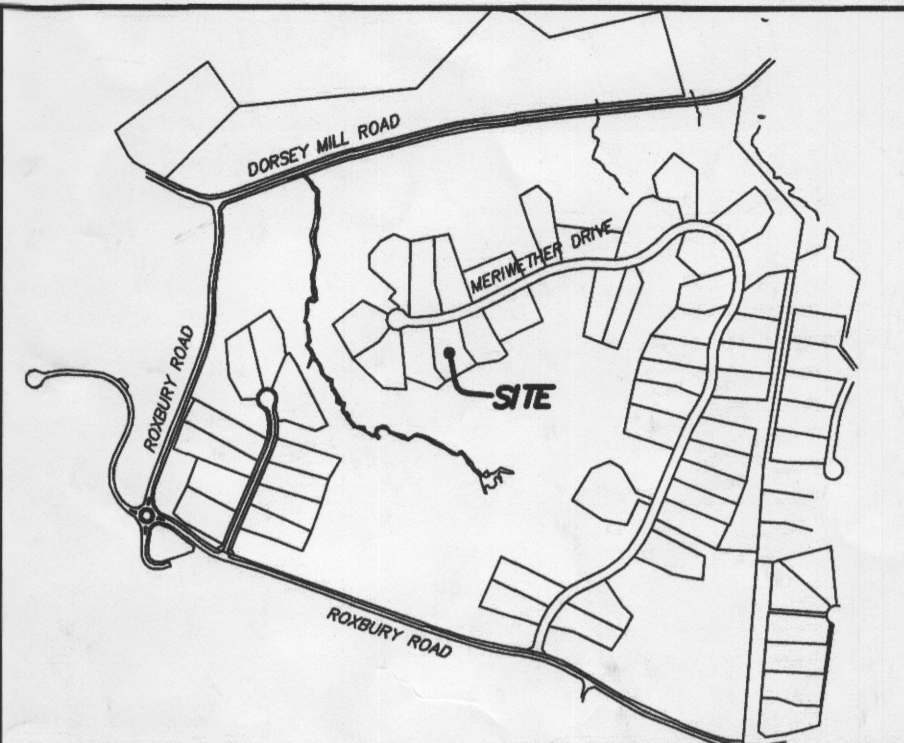
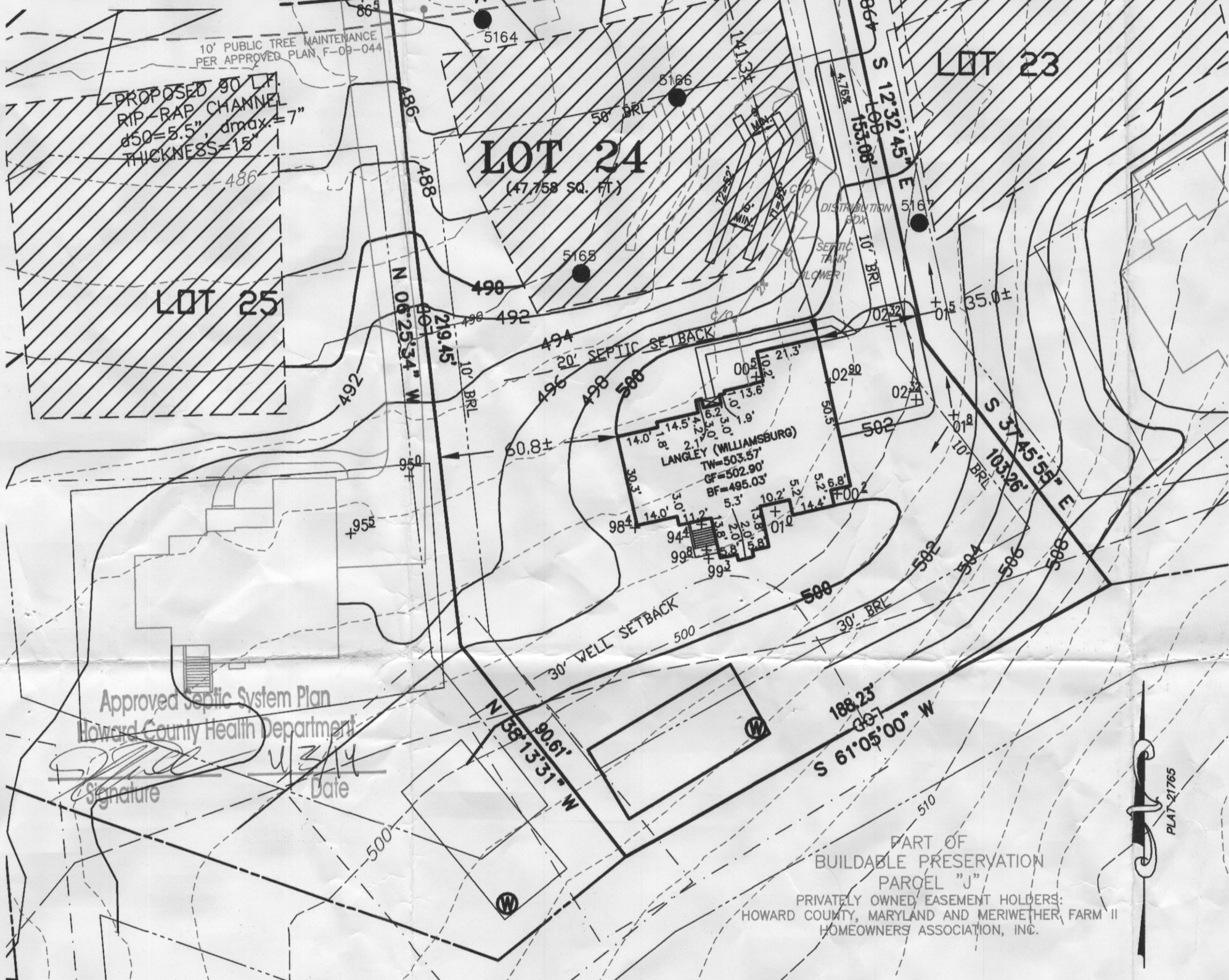
HOUSE OPTIONS:

TYPE: LANGLEY (WILLIAMSBURG)
THREE CAR SIDE ENTRY GARAGE
DAYLIGHT BASEMENT UNDER STUDY
EXPANDED FAMILY ROOM/GREAT ROOM
GUEST ELITE SUITE
ADD'L 1' TO HEIGHT OF BASEMENT FOUNDATION
PALLADIAN KITCHEN ADDITION

OPTION No. 001
OPTION No. 018
OPTION No. 023
OPTION No. 035
OPTION No. 070
OPTION No. 532

LEGEND:

- PERC TEST LOCATION
- ⊙ WELL LOCATION
- LOD- LIMITS OF DISTURBANCE
- TW TOP OF WALL
- GF GROUND FLOOR/FIRST FLOOR
- BF BASEMENT FLOOR
- BRL BUILDING RESTRICTION LINE



VICINITY MAP
1" = 100'

- GENERAL NOTES:**
- 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. 21765.
 - 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 4/20/11.
 - 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: 47,758 SQ. FT. / 1.10 AC.±
 - STORMWATER MANAGEMENT FOR THIS LOT IS PROVIDED BY PREVIOUSLY APPROVED PLAN F-09-044
 - 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 PLANES 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 INTO 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-09-044.
 - A STANDARD SEDIMENT CONTROL PLAN MAY BE USED FOR DEVELOPMENT OF THIS LOT. REFERENCE GRADING PLAN DATED 12/18/13.
 - THE EXISTING WELL(S) SHOWN ON THIS PLAN (IDENTIFIED WITH THE ATTACHED WELL TAG NUMBER HO-95-2162 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 PER F-09-044.

SEPTIC SYSTEM/BEST AVAILABLE TECHNOLOGY (BAT) NOTES:

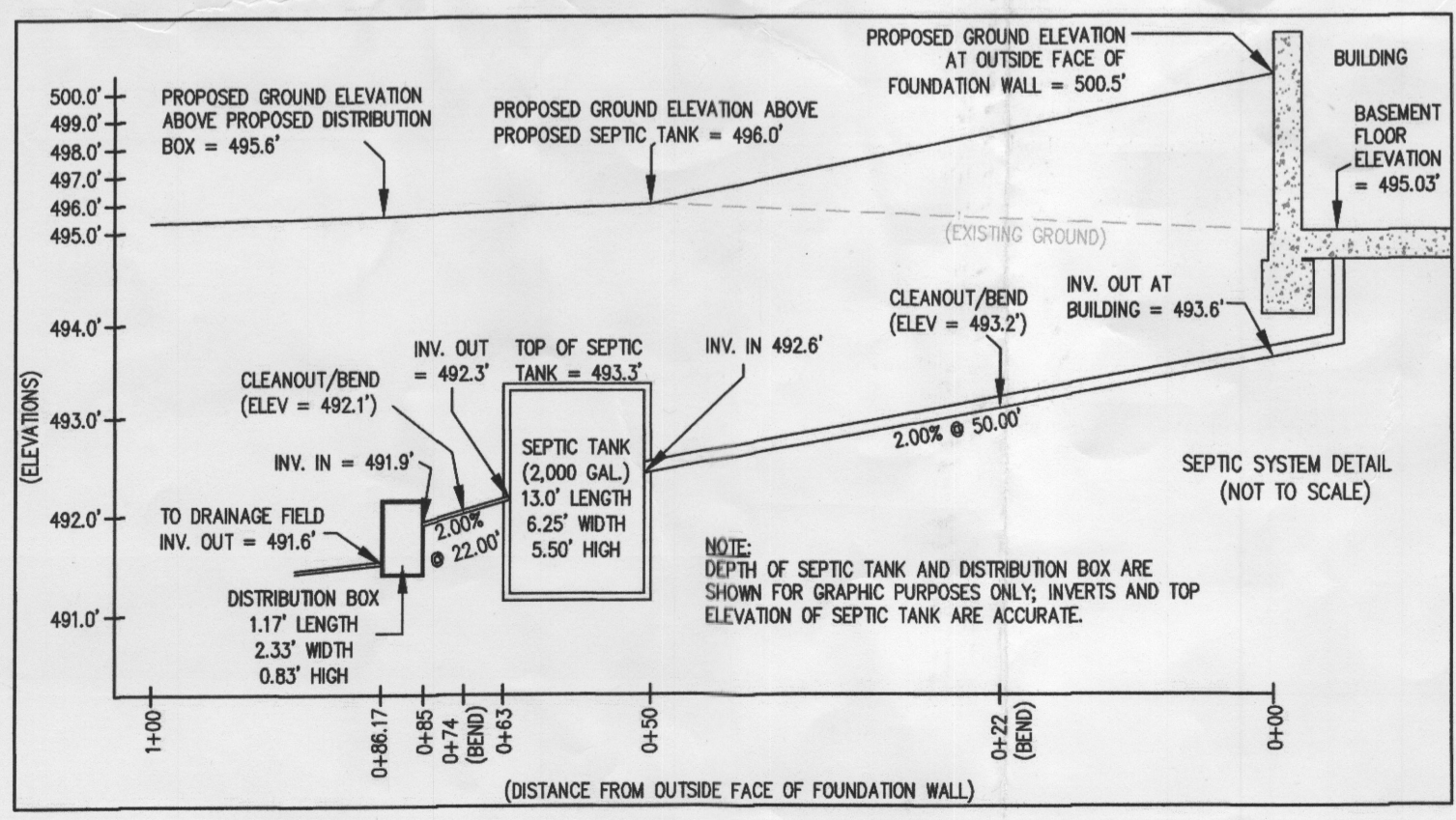
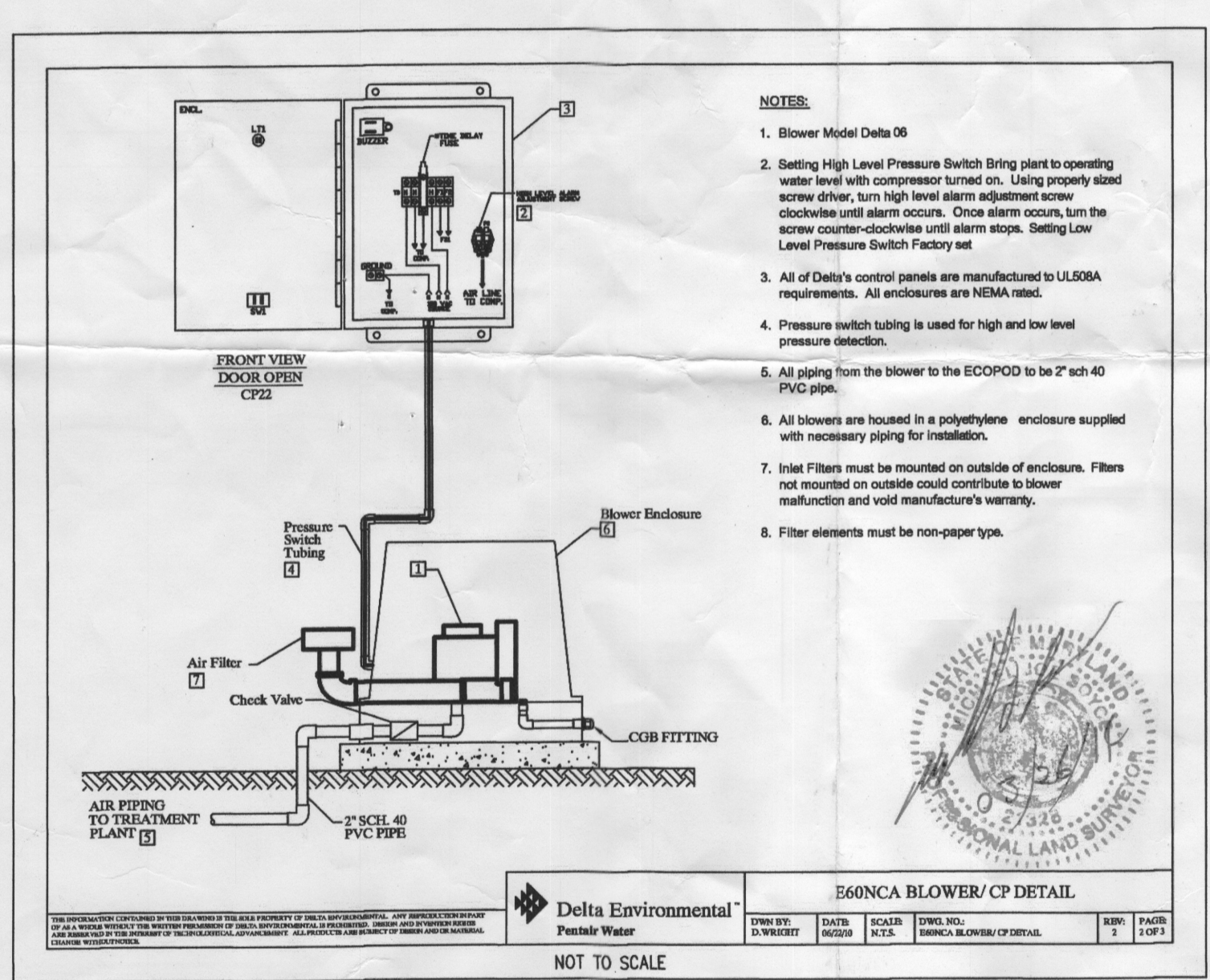
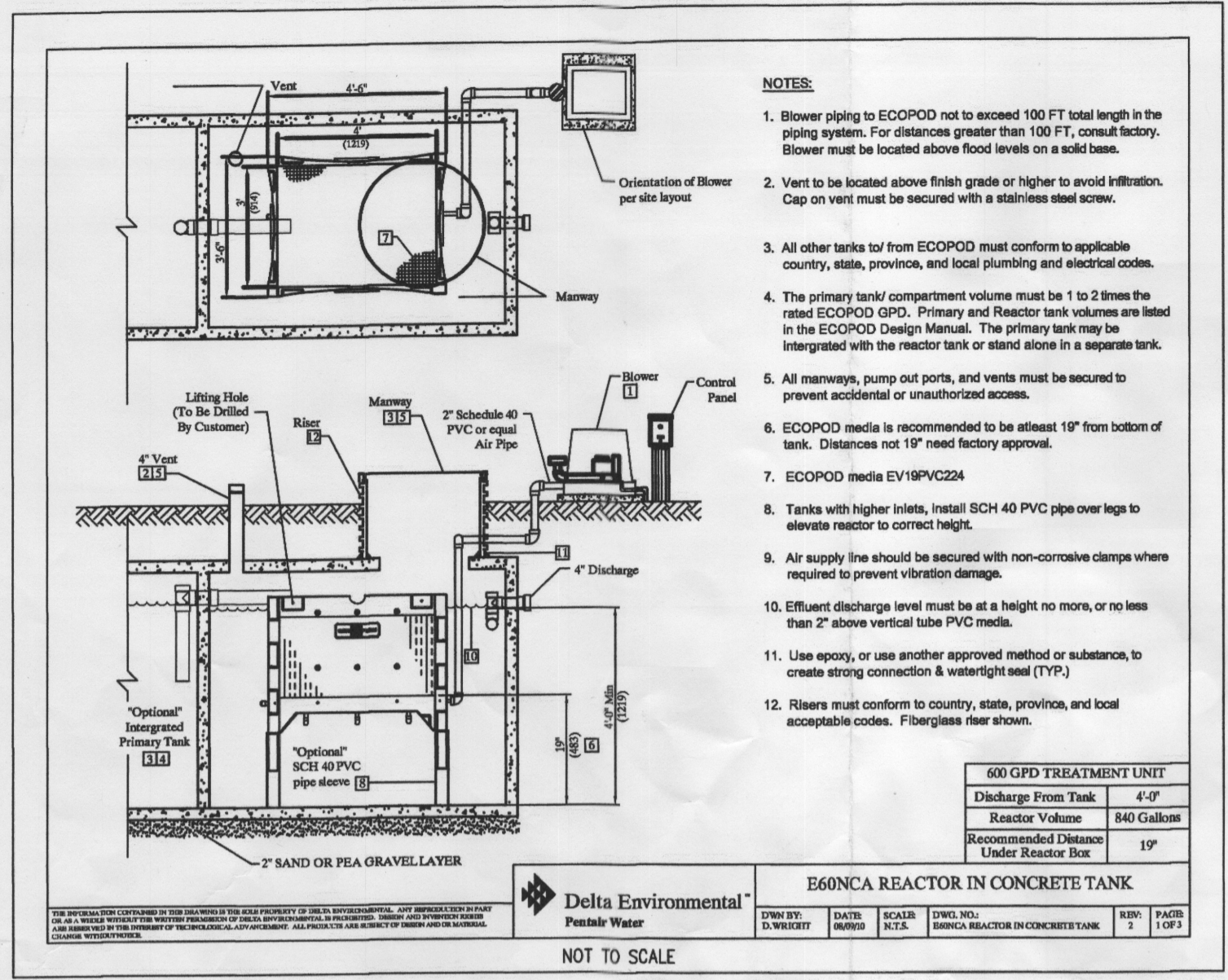
- ANY CHANGE TO THE LOCATIONS OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED SITE PLAN MAY BE REQUIRED.
- THE MAXIMUM DEPTH OF THE BAT PER THE MANUFACTURER'S SPECIFICATION IS 3 FEET COVER.
- THE BLOWER MAY NOT BE LOCATED 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.

SEWAGE DISPOSAL SYSTEM DATA (4 BDRM):

- PROPOSED INVERT AT FOUNDATION WALL: 493.6'**
E60 ECOPOD SYSTEM
EX. GRADE OVER TANK: 496.0'
PROPOSED GRADE OVER TANK: 496.0'
INVERT IN: 492.6' INVERT OUT: 492.3'
- DISTRIBUTION BOX**
EXISTING GRADE OVER TANK: 495.6'
PROPOSED GRADE OVER TANK: 495.6'
INVERT IN: 491.9' INVERT OUT: 491.6'
- TRENCH DESIGN (4 BDRM x 150 GPD/BDRM = 600 GPD)**
600 GPD ÷ 1.2 APP. RATE = 500 SF
USE 3" WIDE TRENCH WITH 36" GRAVEL BELOW PIPE
9' MIN. SPACING BETWEEN TRENCH EDGES
500 SF ÷ 3" WIDTH = 166.67 LF x 0.62 = 103.34 LF MIN. TRENCH
USE 2 52' LONG TRENCHES = 104 LF

TRENCH DATA:

- BOTTOM MAX. DEPTH (6')
- TRENCH 1 (T1):**
GROUND ABOVE = 494.6'
INV. IN = 490.6'
BOTTOM TRENCH = 488.6'
- TRENCH 2 (T2):**
GROUND ABOVE = 493.5'
INV. IN = 489.5'
BOTTOM TRENCH = 487.5'



APPROVED: FOR HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION _____ DATE _____

DIRECTOR _____ DATE _____

PROFESSIONAL ENGINEER _____ DATE _____

PLOT PLAN FOR BAT INSTALLATION
LOT 24
MERIWETHER FARMS
LIBER 13779, FOLIO 478
PLAT No. 21765
TAX No. 04-593665
FOURTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
ADDRESS: 14909 MERIWETHER DRIVE
GLENELG, MARYLAND

ESE Land Planning
Engineering
Land Surveying

ESE Consultants Inc.
7164 Columbia Gateway Dr.
Suite 203
Columbia, MD 21046
TEL: 410-872-9105
FAX: 410-872-4870

DATE: 03/26/14 SCALE: 1"=40' FILE: PP LOT 24
CHK'D: M.J.B. JOB NO: 3184 DRAWN: R.C.K.