

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: 2-19-14 **ONSITE SEWAGE DISPOSAL SYSTEM** P 246254

INSTALLATION APPROVAL DATE: 6/10/14 (KMW) **PERMIT** A _____
CONSTRUCTION

PROPERTY ADDRESS: 2915 Winterhazel Court

SUBDIVISION: Belle Haven Estates LOT: 32 TAX ID: 04-373987

CONTRACTOR: McKim Construction EMAIL: _____

CONTRACTOR ADDRESS: 38979 Housholder Road, Lovettsville, VA 20180 PHONE: 540-338-3583

PROPERTY OWNER: K Hovnanian Homes EMAIL: _____

OWNER ADDRESS: 1802 Brightseat Road, Landover, MD 20785 PHONE: 301-683-6268

BAT UNIT MODEL: HOOT ABNR 600 BAT UNIT SIZE: 600 GPD ✓

PUMP CHAMBER CAPACITY (GALLONS): 750 PUMP SIZE: ? EP, 04

NUMBER OF BEDROOMS: 4 HOUSE SQ. FT. 3434 APPLICATION RATE: 0.8 OK

DISTRIBUTION SYSTEM: GRAVITY FED LOW PRESSURE DOSED

TRENCHES:	LINEAR FEET REQUIRED: <u>155' 160'</u>	INLET DEPTH: <u>2'</u>
	TRENCH WIDTH: <u>2' 0.12'</u>	MAXIMUM BOTTOM DEPTH: <u>6.5'</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>9</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>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 and pump tank per plan. <u>3x55'</u> Set distribution box per plan. Install equal length trenches on contour. Basement will not sewer by gravity. * Top corner of SRA compromised. Future repair area may need to move over perc test hole 204	

ISSUED BY: Heidi Scott ISSUE DATE: _____ EXPIRATION DATE: _____

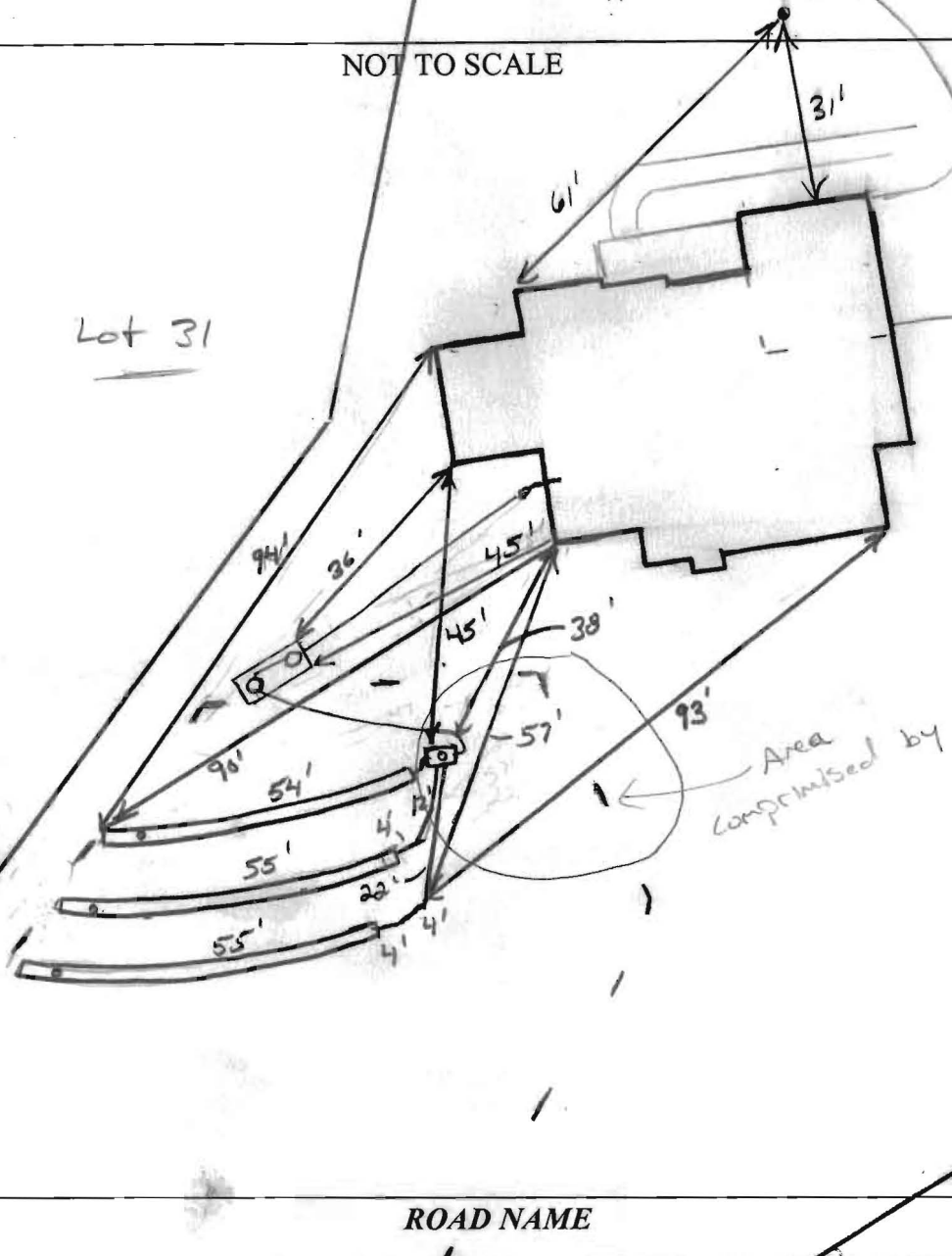
- NOTE: CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION INSPECTION PRIOR TO BEGINNING ANY INSTALLATION
- NOTE: CONTRACTOR MUST SCHEDULE AN INSPECTION AND GAIN APPROVAL OF ALL COMPONENTS PRIOR TO COVERING
- NOTE: STONE MUST BE APPROVED BY HEALTH DEPARTMENT AND GRAVEL TICKET MUST BE AVAILABLE FOR REVIEW.
- NOTE: WATERTIGHT SEPTIC TANKS REQUIRED
- NOTE: ALL PARTS OF SEPTIC SYSTEM SHALL BE AT LEAST 100 FEET DOWNGRAIENT 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.

HO-95-06410

NOT TO SCALE

Lot 31



ROAD NAME

TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
2'	2'	6.5'
NUMBER OF TRENCHES		3
TOTAL LENGTH		145'
ABSORPTION AREA		330'±SW
DISTRIBUTION BOX LEVEL		Levelers
DISTRIBUTION BOX BAFFLE		
DISTRIBUTION BOX PORT		Yes (side)

SEPTIC TANK DATA

SEPTIC TANK I LEVEL	Yes
MANUFACTURER	Mayor Bro's
CAPACITY	1600 GAL
SEAM LOC	Top
TANK LID DEPTH	2.5'
BAFFLES	Yes
BAFFLE FILTER	-
MANHOLE LOC	Front/Rear
6" PORT LOC	none
WATERTIGHT TEST	4-28-14 OK
SLOTTED	Yes
DATE ON LID	N/A
PUM /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:

4/4/14 Top 2 SRA stakes missing. No layout given. at this time sewer out location (hung sewer) exposed above existing grade. Told contractor may need to add #57 stone under pipe. (KW)

4/9/14 SRA still not staked. (KW) 4/17/14 Top corner SRA compromised. Explained to builder on-site that it may be necessary to fence off SRA to help minimize other use in the approved area other than septic related.

INSTALLATION: set Dbox @ top corner of septic, @ start of upper trench, install 3x55' trenches on contour running towards lot 31. Set BAT unit closer towards lot line near corner SRA stake.

4/22/14 Dbox set. Trenches installed. S166 started and ran up to tank location. Tank hole dig. no one on-site. OK to cover trenches (KW)

4/23/14 Tank on deliver. Tank set. Lid not looks sealed correctly. Bottom of tank OK. Told contractor tank must be watertight tested. (KW)

4/28/14 Watertight test started. 1:40pm stop 2:45pm. No measured drop in water levels contractor stated Lid was re-set, OK to cover tank before run set in.

FINAL INSPECTOR 6/10/14 DATE OF APPROVAL 6/10/14

Need BAT start-up prior to final insp. (KW)

CURVE TABLE						
CURVE	RADIUS	LENGTH	DELTA	TAN	CHD. BRG.	CHD. DIST.
C-1	60.00'	49.37'	47°08'35"	26.18'	N89°15'41"E	47.99'

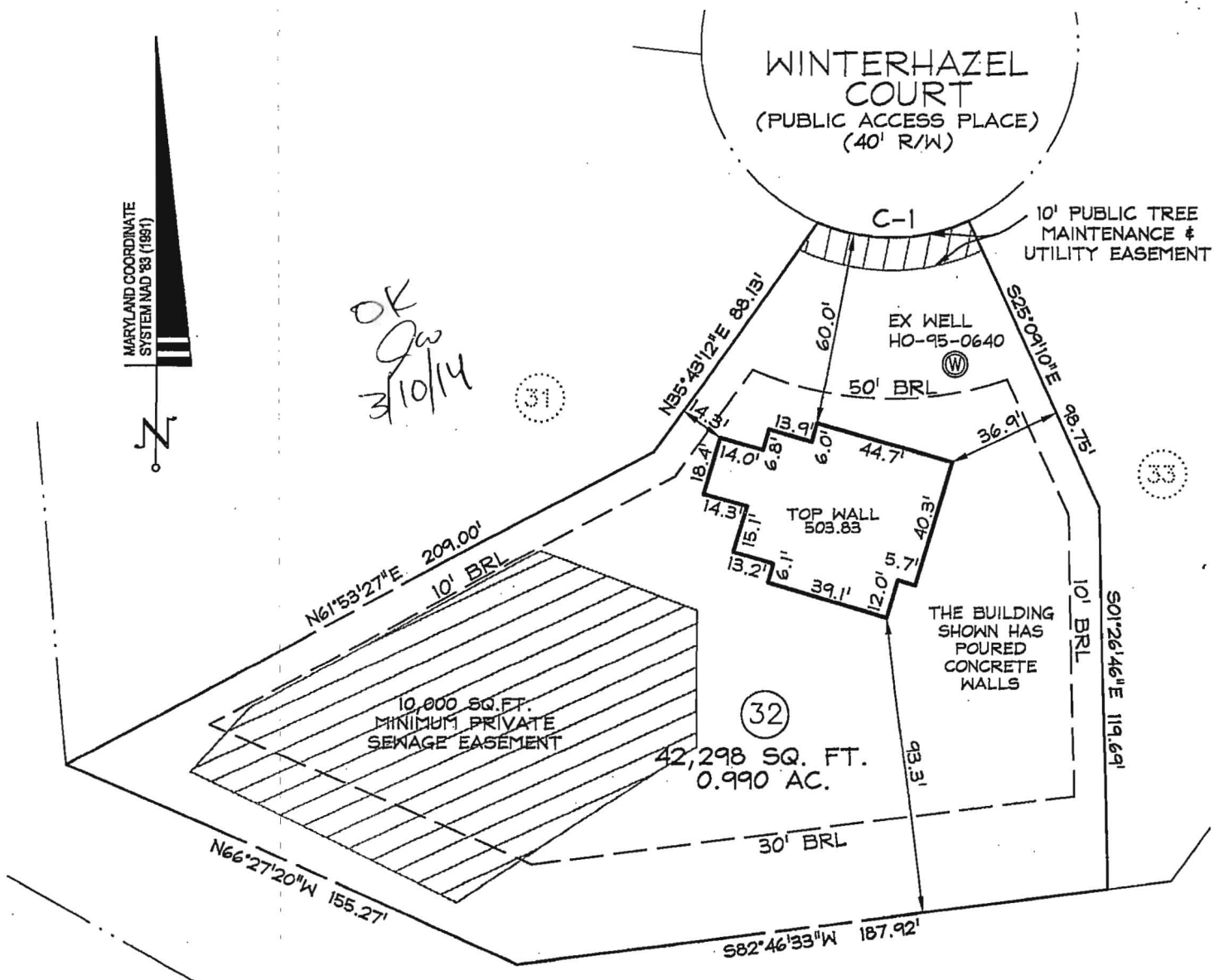
MARYLAND COORDINATE SYSTEM NAD 83 (1983)



OK
Jw
3/10/14

WINTERHAZEL COURT
(PUBLIC ACCESS PLACE)
(40' R/W)

10' PUBLIC TREE MAINTENANCE & UTILITY EASEMENT



NON-BUILDABLE PRESERVATION PARCEL C

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT I EITHER PERSONALLY PREPARED OR WAS IN RESPONSIBLE CHARGE OVER THE PREPARATION OF THIS DRAWING AND THE SURVEYING WORK REFLECTED IN IT, AND THAT IT IS IN COMPLIANCE WITH REQUIREMENTS SET FORTH IN REGULATION .12 OF CHAPTER 06, MINIMUM STANDARDS OF PRACTICE. I AM A DULY LICENSED PROPERTY LINE SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 239, EXPIRATION DATE 7/6/14.



Robert B. Smith 2-11-14



Planners
Surveyors
Engineers
Landscape Architects

192 East Main Street
Westminster, MD 21157
410.386.0560
410.386.0564 (Fax)
DDC@DDCinc.us
www.DDCinc.us

WALL CHECK SURVEY 2915 WINTERHAZEL COURT LOT 32 BELLE HAVEN ESTATES PLAT No. 19952 ELECTION DIST. No. 4 HOWARD COUNTY, MD	
DDC JOB#:	06116.5
DATE:	02-06-2014
SCALE:	1"=50'
DRN. BY:	DAP
CHK. BY:	RBS



MAYER BROS., INC.

Precast Concrete Products

6264 Race Rd. Elkridge, MD 21075

Letter of Satisfaction Hoot System Installation

Address of Property: 2915 Winterhazel Ct.
Woodbine, MD. 21797

Date of Final Inspection: 6/10/14

Installer: McKim Construction

Hoot Technician/Inspector: Mike Sample

I hereby certify that the Hoot system installed at the property listed above has been installed according to proper Hoot installation practices. I have also verified the startup of the system and it is in proper working order.

Sincerely,

Name of Inspector
Mayer Bros., Inc.

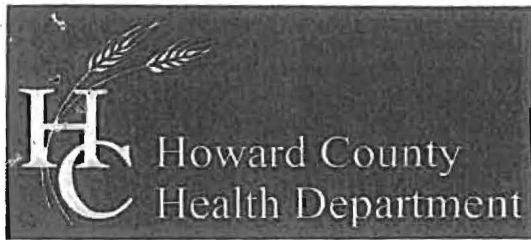
PH: 410-796-1434

FX: 410-796-1438

WBE
NPCA Certified Plant

mayerbro@connext.net
www.mayerbrosprecast.com

Grease Interceptors, Grease Solutions, Aerobic Treatment Units, Septic Tanks, Holding Tanks, Storm Water Structures, Hydroceptors, Bench Barrier, Water Meter Vaults, Sectional Valve Vaults, Top Slabs, Curb Heads, Curb Bumpers, FernEntry Basement Entries, Scupper Window Wells, Custom Precast Products



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 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

BA32

000114

LIBER | 5468 FOLIO | 44

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 February 2014 among K. HOVNANIAN HOMES OF MARYLAND, 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 2.915 (WINTERHART) CT. WOODBINE, MD. 21777, in the 04 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 15356 Folio 465.

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.

23
40
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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.

Steven Smyth Sr.
Owner V.P. CONSTRUCTION Date 2/18/14
K. HOVHANIAN HOMES

Owner Date

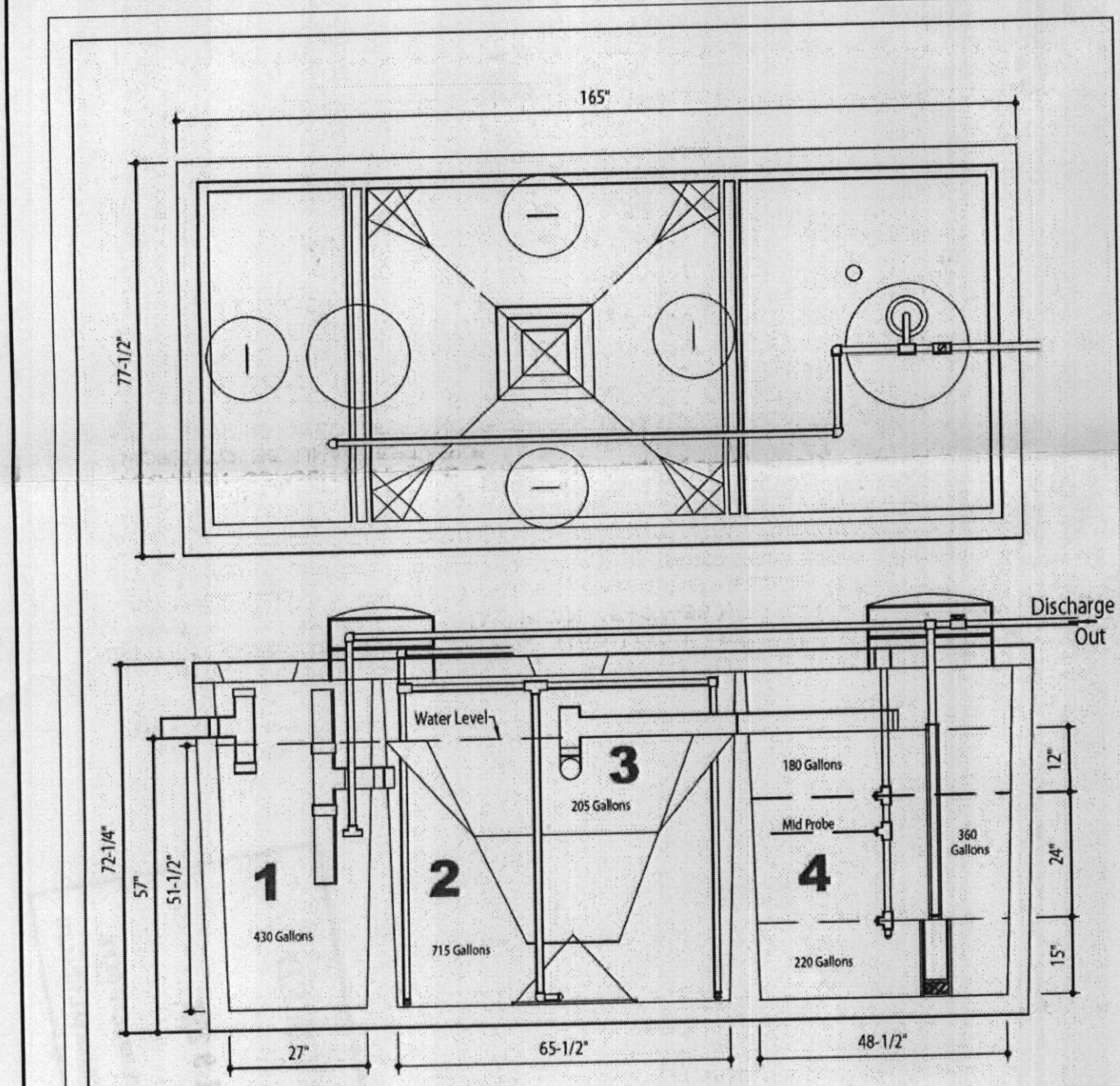
Barb Ripon 2/19/2014
Howard County Health Department

LR - Agreement
Recording Fee 20
Grantor/Grantee Name
K. Hovhanian Homes
Reference/Control #
114
LR - Agreement
Surcharge 40
Subtotal: 60
Total: 120
#2481052-1
02/19/2014 12:18
CC13
#2481052 000508 -
HOWARD CO
Columbia/CO05.03.04
Register 04 496

GENERAL NOTES

1. BASE SQUARE FOOTAGE OF HOUSE: 3,530 SQ.FT.
2. NUMBER OF BEDROOMS: 4
3. EJECTOR PUMP REQUIRED TO SEWER BASEMENT
4. DRIVEWAY CULVERT IS NOT REQUIRED PER THE APPROVED ROAD DRAWINGS, F-07-38.
5. 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.
6. PLAT REFERENCE: #19445
7. BASE INFORMATION SHOWN ON THIS PLAN IS BASED ON PLANS PREPARED BY DMN, AND DATED 06/25/07. EXISTING TOPOGRAPHY BASED ON GRADING PLAN PREPARED BY DENARIO DESIGN CONSULTANTS DATED 07/09/07 AND FIELD RUN TOPOGRAPHY PREPARED BY DDC INC IN JAN. 2012.
8. SEE ARCHITECTURAL PLANS FOR BUILDING DIMENSIONS AND DESIGN DETAILS. PRIOR TO STAKEOUT FOR CONSTRUCTION, IT SHALL BE THE OWNER/BUILDERS RESPONSIBILITY TO PROVIDE DDC, INC. WITH THE MOST RECENT SET OF HOUSE PLANS.
9. THE CONTRACTOR OR DEVELOPER SHALL NOTIFY THE DEVELOPMENT OF PUBLIC WORKS / BUREAU OF ENGINEERING / CONSTRUCTION INSPECTION DIVISION AT (410)313-1851 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
10. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
11. TOTAL LIMIT OF DISTURBANCE: 19,325 SQ. FT. / 0.44 AC.
12. STORMWATER MANAGEMENT FOR THIS LOT IS PROVIDED PER THE PREVIOUSLY APPROVED FINAL PLAN (F-07-38).
13. 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.
14. DEVIATIONS FROM THESE PLANS AND SPECIFICATIONS WITHOUT PRIOR WRITTEN CONSENT OF THE CIVIL ENGINEER (DDC, INC.) MAY CAUSE THE WORK TO BE UNACCEPTABLE.
15. THE DIMENSIONED DISTANCES SHALL GOVERN IF SCALED AND DIMENSIONED DISTANCES ON THIS PLAN ARE FOUND TO BE IN DISAGREEMENT.
16. THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM LOT AREA AND OWNERSHIP WIDTH AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT.
17. THIS AREA DESIGNATES A PRIVATE SEWAGE DISPOSAL AREA OF AT LEAST 10,000 SQ.FT. AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED. THIS SEWAGE DISPOSAL AREA 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.
18. 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.
19. ANY CHANGES TO A PRIVATE SEWAGE AREA SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
20. UPON BUILDING PERMIT REVIEW THE SEPTIC SYSTEMS OF ALL PROPOSED STRUCTURES AND OR EXISTING STRUCTURE EXPANSIONS SHALL BE RE-EVALUATED TO DETERMINE SUFFICIENT SYSTEM CAPACITY.
21. THE DEVELOPMENT OF THIS LOT DOES NOT REQUIRE AN ENVIRONMENTAL CONCEPT PLAN SINCE STORMWATER MANAGEMENT WAS PREVIOUSLY APPROVED UNDER F-07-38.

- SEPTIC SYSTEM/BEST AVAILABLE TECHNOLOGY (BAT) 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 BLOWER MAY NOT BE LOCATED MORE THAN 10 FEET FROM THE TANK BASED ON THE MANUFACTURER'S SPECIFICATIONS.
 4. THE BAT SYSTEM SHALL BE MAINTAINED AND OPERATED FOR THE LIFE OF THE SYSTEM.
 5. THE BAT SHALL BE OPERATED BY AND MAINTAINED BY A CERTIFIED SERVICE PROVIDER.
 6. 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.
 7. ELECTRICAL WORK FOR THE BAT INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
 8. AN AGREEMENT AND EASEMENT MUST BE COMPLETED AND SIGNED BY ALL APPLICABLE PARTIES, AND RECORDED IN LAND RECORDS OF HOWARD COUNTY.
 9. THE HEALTH DEPARTMENT REQUIRES DOCUMENTATION FOR THE START-UP CERTIFICATION FROM THE MANUFACTURER PRIOR TO FINAL APPROVAL OF THE INSTALLATION.



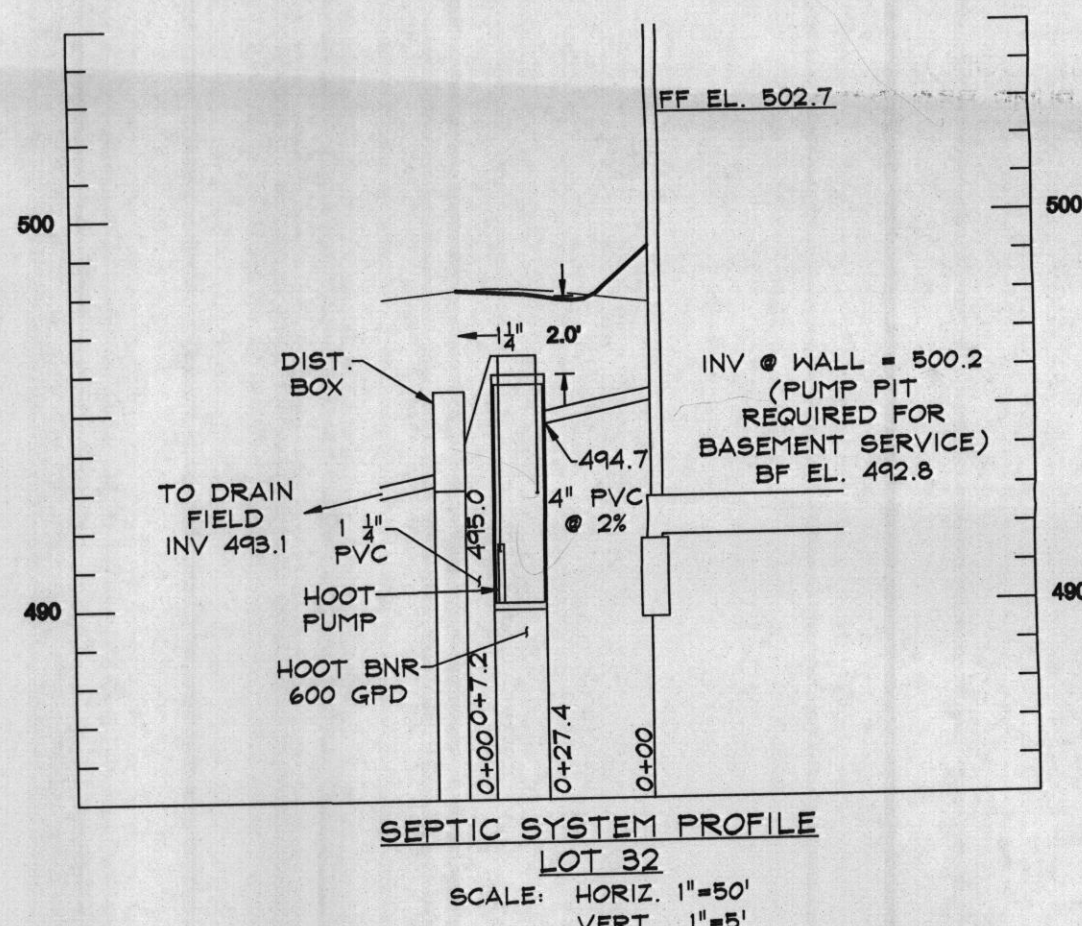
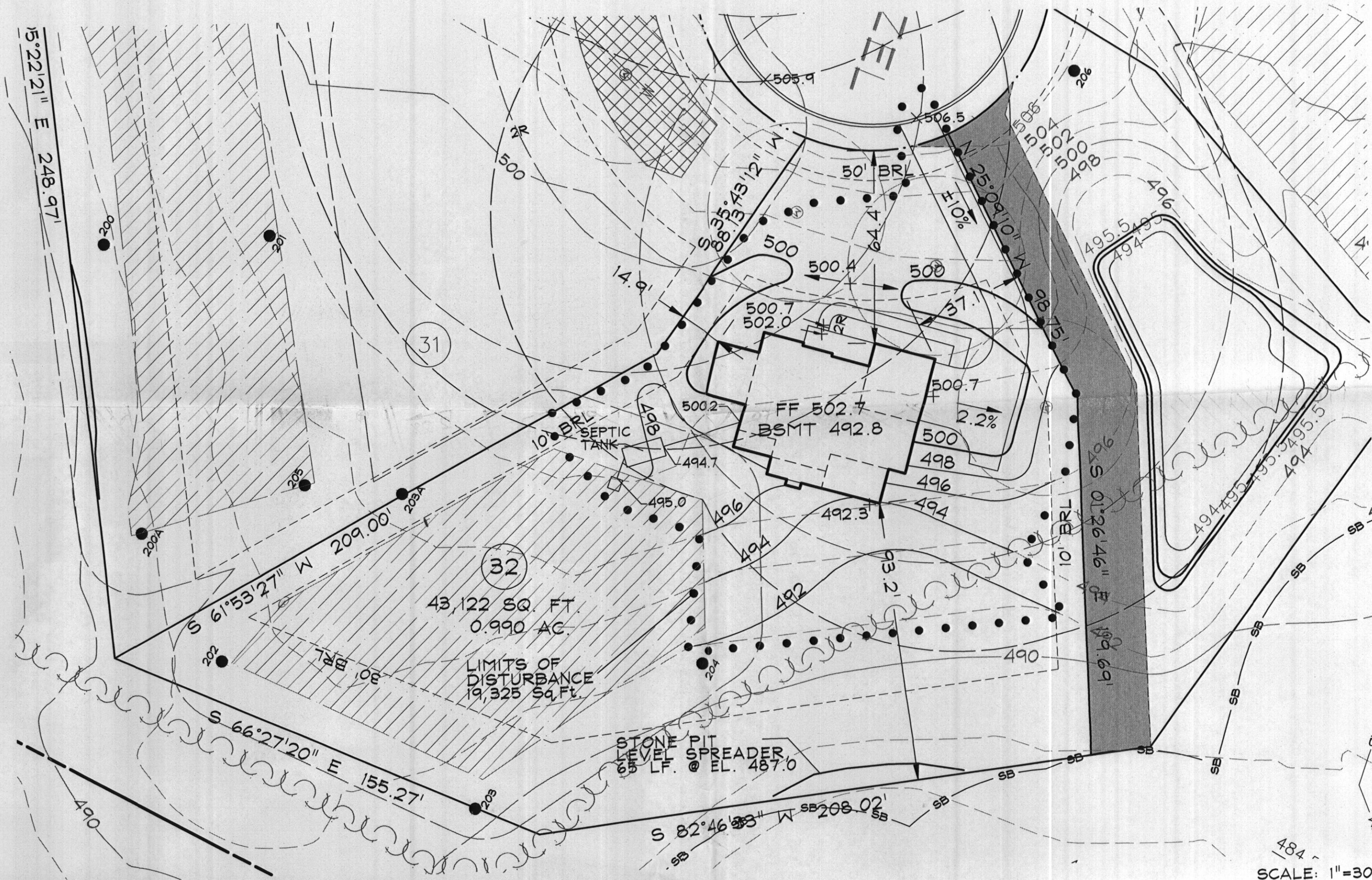
DESIGN DATA & GENERAL NOTES

- (1) Concrete strength f'c=4000 psi @ 28 days, Density = 150 pcf.
- (2) Cement - Portland Type I/II per ASTM C 150-92.
- (3) Admixtures & plasticizers per ASTM C 390-98 & C 494-92.
- (4) Reinforcing per ASTM A 618, Min. 1-1/2" cover.

Mayer Brothers, Inc.
 6264 Race Road
 Ellicott City, Maryland 21035
 Tel: 410.796.1434
 Fax: 410.796.1438
 www.mayerbrothers.com

**600 GPD BNR SYSTEM
 H-600 ABNR
 with 750 GALLON PUMP CHAMBER**

Dwg. No. Hoop Form #1 No Scale March 19, 2009

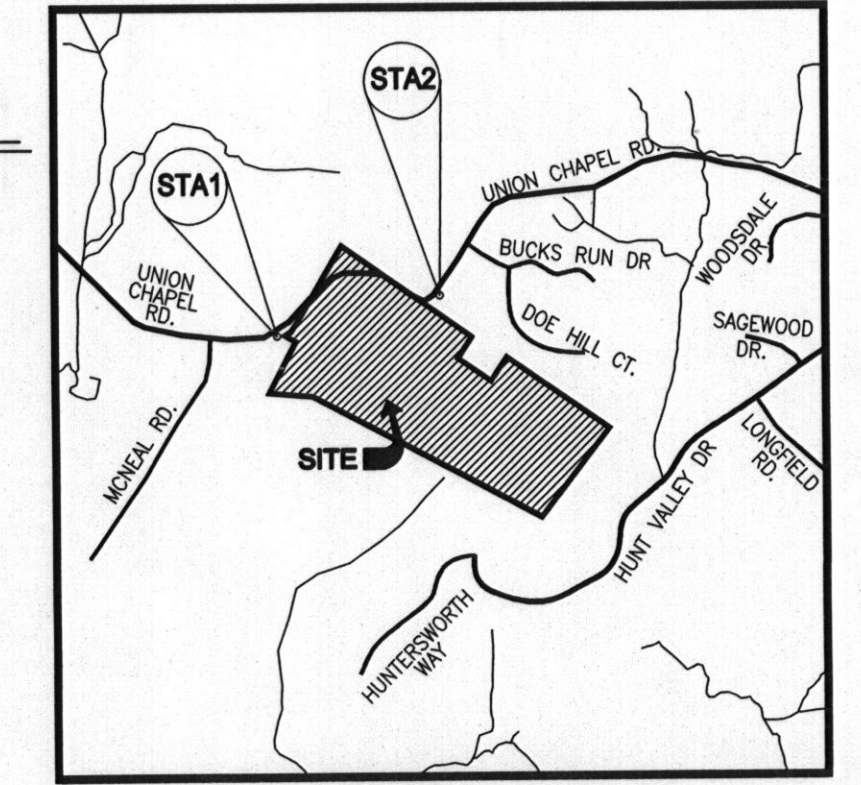


SEWAGE DISPOSAL SYSTEM DATA (4 BEDROOM):

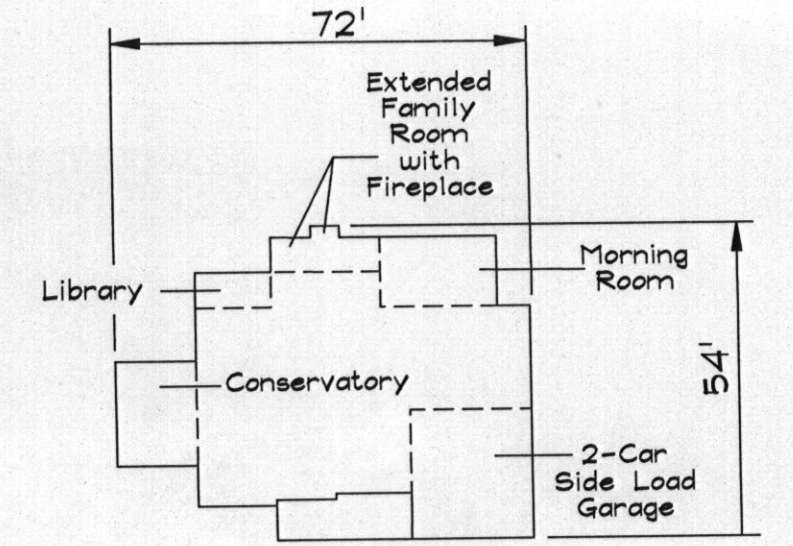
1. INVERT @ FOUNDATION WALL: 500.2 (BASEMENT PUMP REQUIRED)
2. 600 GPD BNR SYSTEM W/ 750 GALLON PUMP CHAMBER
 EX. GRADE OVER TANK: 498.1
 PROPOSED GRADE OVER TANK: 498.0
3. DISTRIBUTION BOX
 EX & PROPOSED GRADE OVER TANK: 497.6
 INVERT: 494.1

BENCHMARK

GEODEIC SURVEY CONTROL #1	
N.	59745.42
E.	1297571.25
A.A.	146A
ELEV.	836.43
GEODEIC SURVEY CONTROL #2	
N.	911663.85
E.	1299121.80
B.M.	142B
ELEV.	842.23
ADC MAP COORDINATES 4812/04	



VICINITY MAP
 SCALE: 1" = 200'



**COLORADO
 ELEVATION 'A'
 BRICK FRONT
 REVERSE UNIT
 WALKOUT**

DATA SOURCES:

DRAWING LEGEND

- 500 PROPOSED GRADE
- 502 PROPOSED GRADE
- EX. FAILED PERCOLATION TEST
- EX. PASSED PERCOLATION TEST
- ● ● ● PROPOSED LIMIT OF DISTURBANCE
- ← + 665.5 PROP. SPOT ELEV./FLOW ARROW
- ▨ SEPTIC RESERVE AREA
- ▩ WELL AREA

DDC Inc.
 Development Design Consultants

Planners
 Surveyors
 Engineers
 Landscape Architects

192 East Main Street
 Westminster, MD 21157
 410.386.0560
 410.386.0564 (Fax)
 DDC@DDCinc.us
 www.DDCinc.us

OWNER:
 K. HOWANIAN HOMES
 1802 Brightleaf Rose
 Landover, Maryland 20785
 (301) 663-6288

DEVELOPER:

SITE ADDRESS:
 LOT 32, 2115
 2500 Whitman Court
 Woodbine, Maryland 21797

**BELLE HAVEN ESTATES
 LOT 32
 SITE PLAN FOR
 BAT INSTALLATION**

Professional Certification:
 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. 27022, Expiration Date 01/25/14.

10/18/13
 DATE

3rd ELECTION DISTRICT		HOWARD COUNTY	
REVISIONS			
NO.	DESCRIPTION OF CHANGES	DRN.	REV. DATE
CO. FILE #:	DES. BY: JHK		
TAX ACC. #:	DRN. BY: BKS		
TAX MAP: 14	CHK BY: PGC		
BLOCK / GRID:	DATE: 10/21/13		
PARCEL #:	DDC JOB#: 06116.5		
ZONE / USE: RC-DEO	SHEET NUMBER:		
DWG. SCALE: 1"=30'	1 of 1		

