

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: 3/14/16 **ONSITE SEWAGE DISPOSAL SYSTEM** P 558030

APPROVAL DATE: _____ **PERMIT: CONSTRUCTION** A _____

PROPERTY ADDRESS: 15225 Sweetbay Street

SUBDIVISION: Belle Haven Estates LOT: 42 TAX ID: _____

CONTRACTOR: Ben Lewis Plumbing EMAIL: _____

CONTRACTOR ADDRESS: 23407 Frederick Road, Clarksburg, MD 20871 PHONE: 301) 428-3900

CONTRACTOR CERTIFIED FOR BAT INSTALLATION: MDE MANUFACTURER:

PROPERTY OWNER: K Hovnanian Homes EMAIL: cwillet@khov.com

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

BAT UNIT MODEL: Hoot 600 BNR PUMP SIZE: Ep0511 PUMP TANK CAPACITY: 750gal

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

DISTRIBUTION SYSTEM: GRAVITY PRESSURE DOSED BEDROOMS: 5 APPLICATION RATE: 0.8

TRENCHES:	LINEAR FEET REQUIRED: <u>157</u>	INLET DEPTH: <u>4</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>8</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>6</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 BAT unit per plan.

ISSUED BY: Hank Oswald ISSUE DATE: 3/16 EXPIRATION DATE: 3/17

- 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 16001559
- 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

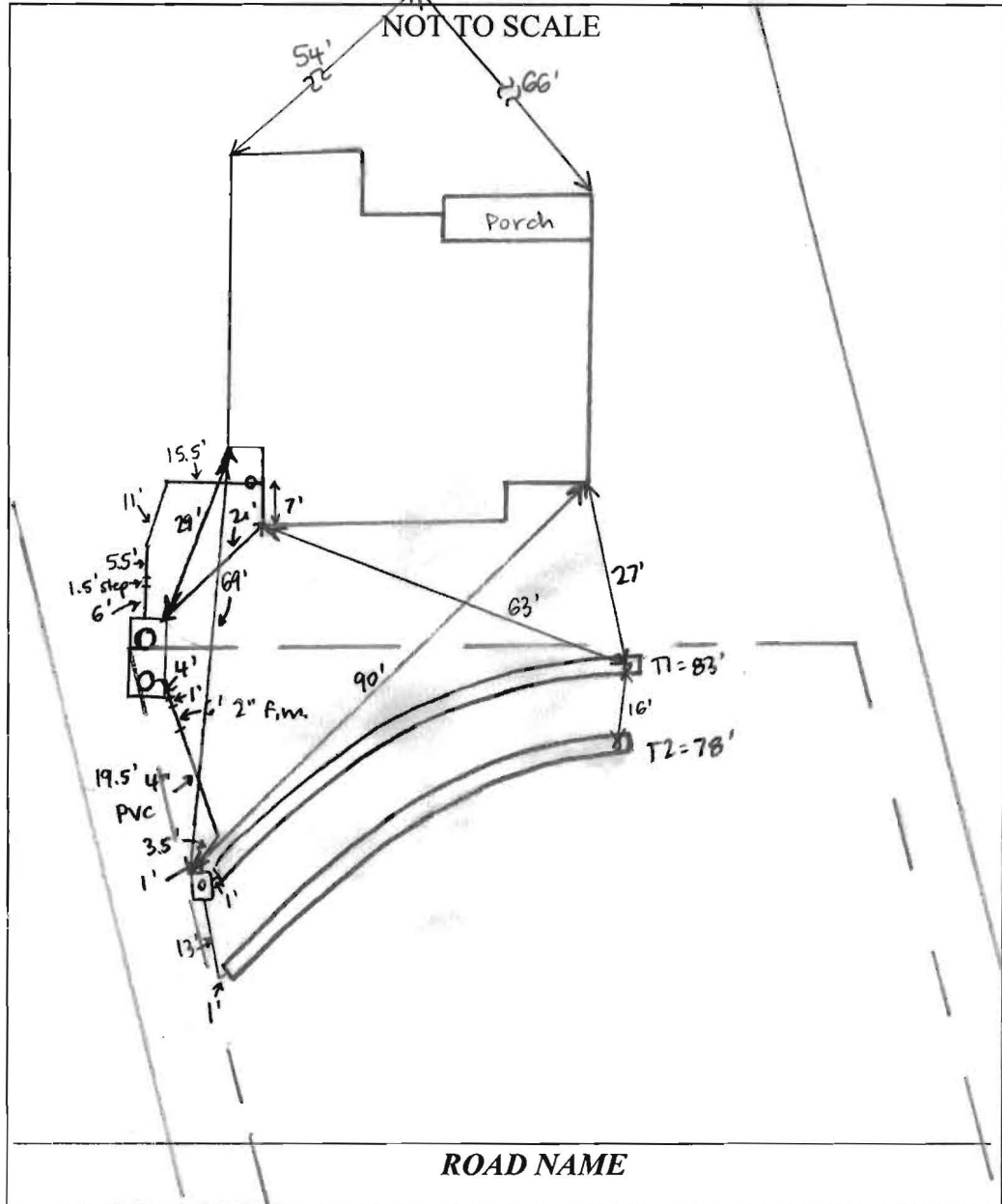
NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM.

PERMITTEE RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT.

CALL 410-313-1771 TO SCHEDULE INSPECTIONS.

W) HO-14-0177

NOT TO SCALE



TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
3'	4'	8'
NUMBER OF TRENCHES		2
TOTAL LENGTH		161'
ABSORPTION AREA		322' + SIDEWALL
DISTRIBUTION BOX LEVEL		YES
DISTRIBUTION BOX BAFFLE		YES
DISTRIBUTION BOX PORT		YES

SEPTIC TANK DATA

SEPTIC TANK 1 LEVEL	YES
MANUFACTURER	MAYER BROS. MAVT
CAPACITY	1500 GAL
SEAM LOC	TOP
TANK LID DEPTH	2-2.5'
BAFFLES	YES
BAFFLE FILTER	NO
MANHOLE LOC	FRONT • REAR
6" PORT LOC	NONE
WATERTIGHT TEST	NO
SLOTTED	NO
DATE ON LID	

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:

4/12/16 Met Ben Lewis on site for layout. All SDA stakes present. Tank stake missing - moved location partway out of SDA with builder's okay. Shot contour and laid out 2x80' trenches. (SC)

INSTALLATION: 4/13/16

4/14/16 Both trenches complete. T1 left open. 3' wide, 3.5' to stone. D-box installed and connected to trenches. (SC) 4/18/16 Tank installed + house connection made. Need BAT startup certification. (SC)
6/14/2016

FINAL INSPECTOR B. Baker

DATE OF APPROVAL 6/14/16

Letter of Satisfaction

Hoot System Installation

Address of Property 15225 Sweetbay St.
Woodbine, MD. 21797

Date of Final Inspection 6/14/16

Installer Ben Lewis Plumbing

Hoot Technician/Inspector M. H. 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,

H. Michel Sage
Name of Inspector
Mayer Bros., Inc.

PH: 410-796-1434

WBE

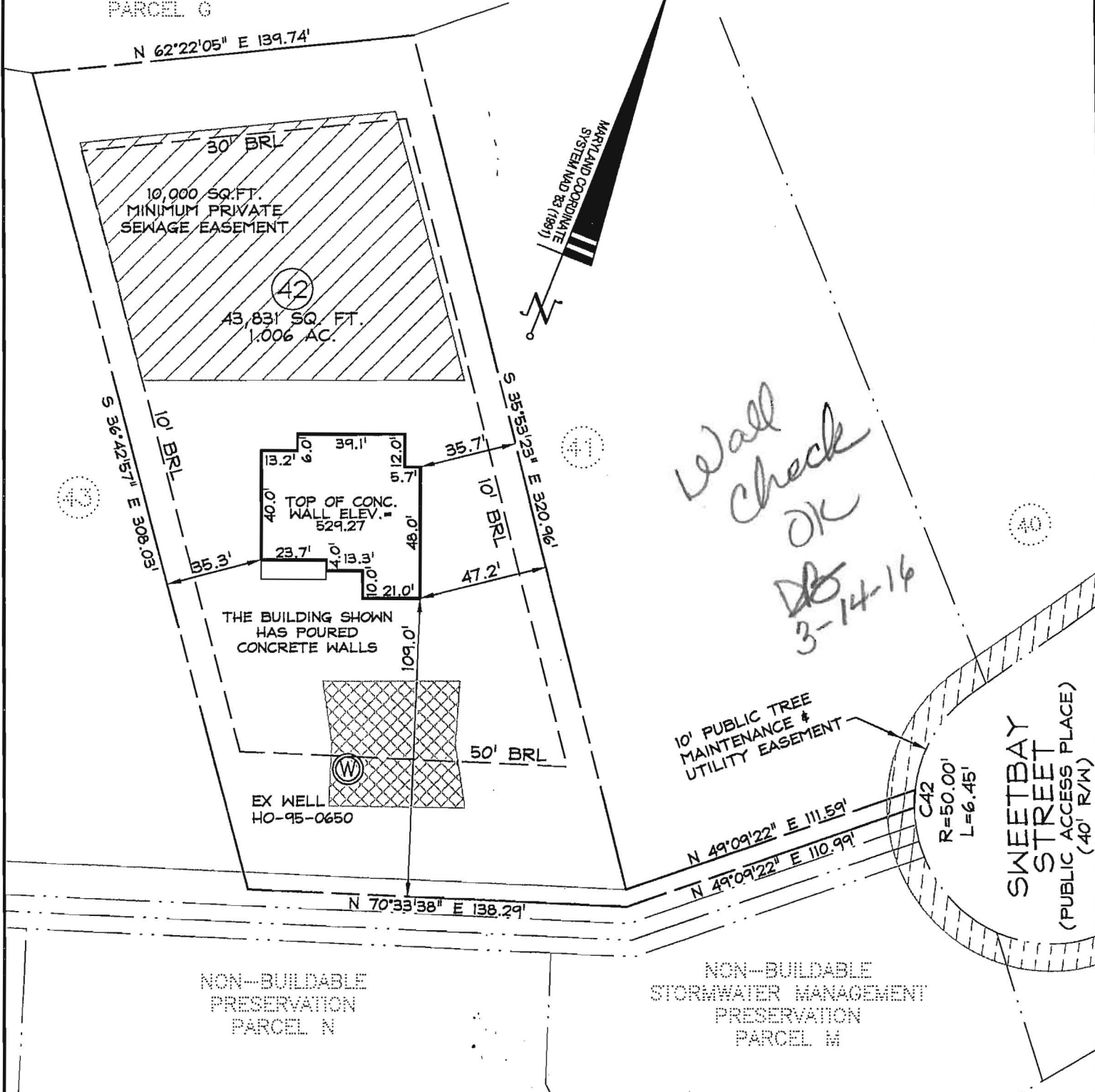
FX: 410-796-1438

www.mayerbrosprecast.com

Gross Interceptors, Gross 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 Sweeps,
Custom Precast Products

NON-BUILDABLE
PRESERVATION
PARCEL G

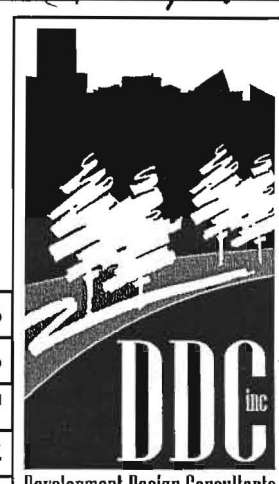
CURVE TABLE						
CURVE	RADIUS	LENGTH	DELTA	TAN	CHD. BRG.	CHD. DIST.
C42	50.00'	6.19'	7°06'22"	3.10'	S 26°27'56" E	6.19'



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 07/06/16.

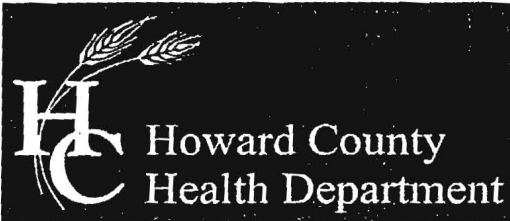


Planners
Surveyors
Engineers
Landscape Architects

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

LOCATION DRAWING / WALL CHECK
#15225 SWEETBAY STREET
LOT 42
BELLE HAVEN ESTATES
PLAT No. 19953
ELECTION DIST. No. 4 HOWARD COUNTY, MD

DDC JOB#:	06116.5
DATE:	3-08-2016
SCALE:	1"=50'
DRN. BY:	RC
CHK. BY:	RBS



Bureau of Environmental Health

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

**OPERATION AND MAINTENANCE AGREEMENT
FOR AN ON-SITE SEWAGE DISPOSAL SYSTEM
HAVING AN ADVANCED PRE-TREATMENT SYSTEM**

THIS AGREEMENT is made this 14th day of MARCH 2016, among K HUNNANIAN
OWNER OF MARYLAND I LLC, 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
15225 SWINGWAY ST. WOODBINE 21797, in the 4th 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 16537 Folio 00010. 107 42 / 04, 374096

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 GPD BNR SYSTEM w/ 750 (HOOT)
GALLON PUMP CHAMBER

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.

Barry Nyefer 3/14/2016
Howard County Health Department

Steven J. Snyder 3/11/16
Owner #1 Signature Date

STEVEN J. SNYDER / VP CONSTRUCTION
Owner #1 Print Name
REHOMES OF MARYLAND I LLC

Buyer #1 Signature Date

Buyer #1 Print Name

Owner #2 Signature Date

Owner #2 Print Name

Buyer #2 Signature Date

Buyer #2 Print Name



HOWARD COUNTY HEALTH DEPARTMENT

58030

DATE 3/14/16

PS

Received From K Hovanian

PHONE # 240 375-4515

CASH
 CHECK
NO. 000
25594

For Septic Permit / lot 42
15225 Sweetbay Street

Three hundred ninety five Dollars

\$ 395.00

Received By Orkin

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: K Hovanian Homes
of MD inc
Reference/Control #: 31

LR - Agreement Surcharge
1x 40.00 40.00

SubTotal: 60.00
Total: 60.00

REV-Check-BDA 60.00
Number : 00025593

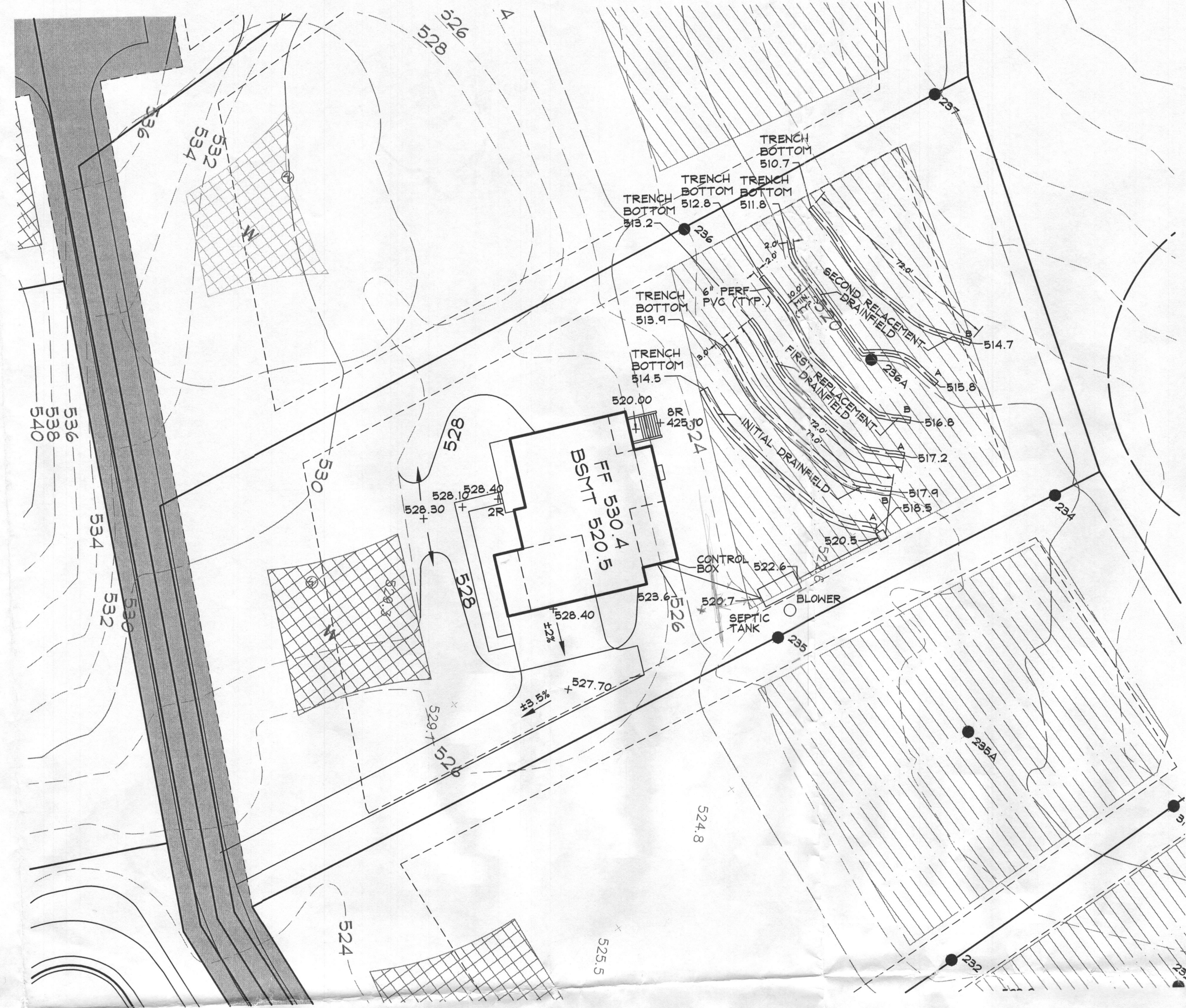
03/14/2016 14:35 CC13-DS
#5749172 /1246/109
Thank you for visiting us today~

GENERAL NOTES

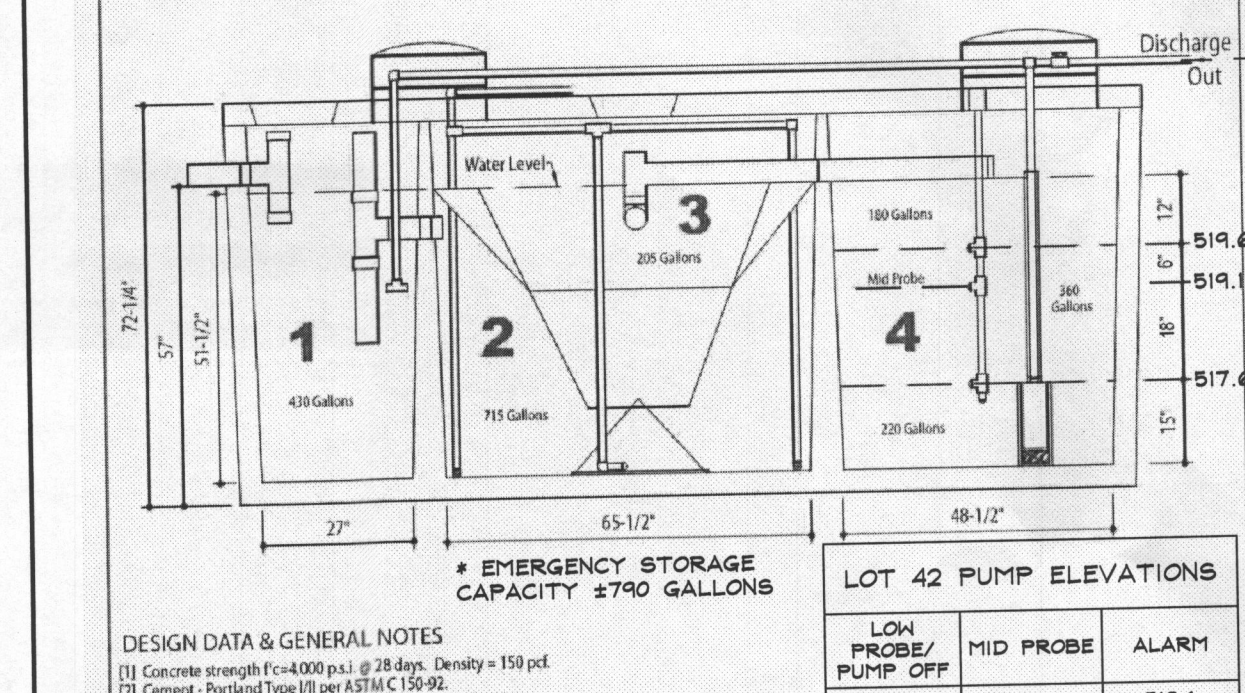
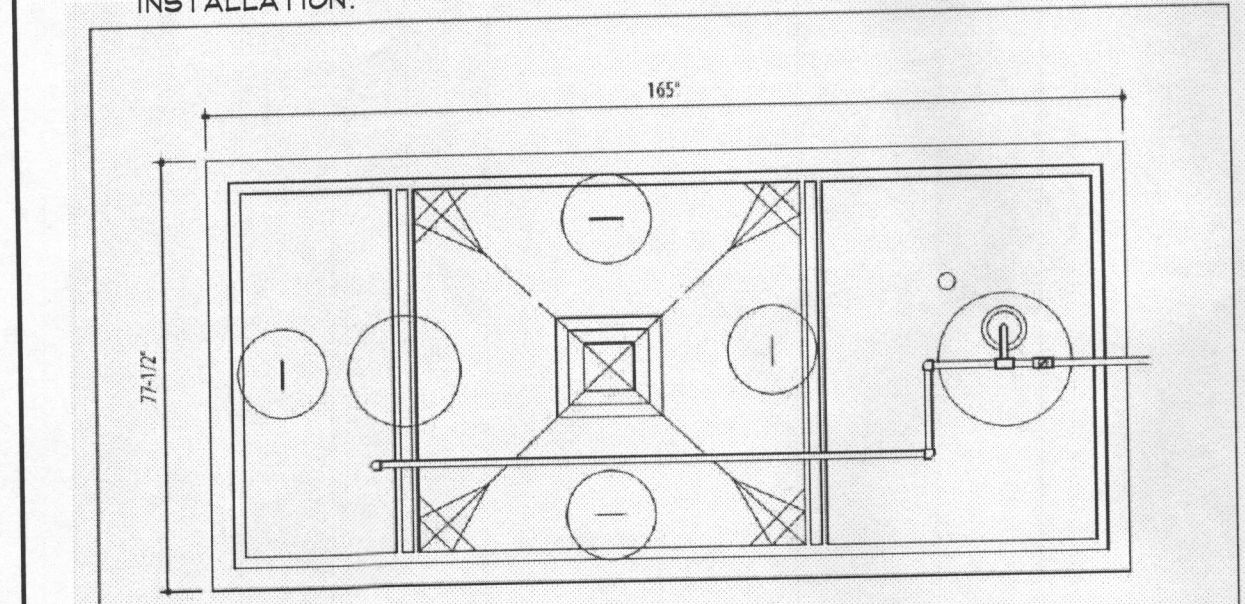
1. BASE SQUARE FOOTAGE OF HOUSE: 3,592 SQ. FT.
2. NUMBER OF BEDROOMS: 4
3. EJECTOR PUMP REQUIRED TO SEWER BASEMENT
4. PER THE APPROVED ROAD DRAWINGS, F-07-38, A DRIVEWAY CULVERT IS NOT REQUIRED
5. THE SUBJECT PROPERTY IS ZONED RC-DEO PER THE 2/2/04 COMPREHENSIVE ZONING PLAN AND PER COMP-LITE ZONING REGULATIONS DATED 7/28/06.
6. PLAT REFERENCE: #19948
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 DEMARIO 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/BUILDER'S RESPONSIBILITY TO PROVIDE DDC, INC. WITH THE MOST RECENT SET OF HOUSE PLANS.
9. THE CONTRACTOR OR DEVELOPER SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS / BUREAU OF ENGINEERING / CONSTRUCTION INSPECTION DIVISION AT (410)919-1881 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: 17,487 SQ. FT. / 0.40 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 CONTRACTOR'S 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 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.
22. THE EXISTING WELL SHOWN (40-095-0650) HAS BEEN FIELD LOCATED AND IS SHOWN ACCURATELY.
23. AT ANY TIME IN THE FUTURE THAT A BUILDING PERMIT IS SUBMITTED TO FINISH THE AREA CURRENTLY IDENTIFIED AS OPTIONAL DEN, THEN A SEPTIC SYSTEM UPGRADE WILL BE REQUIRED AS FINISHING THE OPTIONAL DEN CREATES A FIFTH BEDROOM PER HOWARD COUNTY CODE 3.801(B).

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.



SCALE = 1"=30'



LOT 42 PUMP ELEVATIONS

LOW PROBE / PUMP OFF	MID PROBE	ALARM
517.6	519.1	519.6

DESIGN DATA & GENERAL NOTES

- 1) Concrete strength $f_c = 4000$ psi, $f_y = 60,000$ psi, Density = 150 pcf
- 2) Cement Portland Type I or II, ASTM C 150
- 3) Admixtures & plasticizers per ASTM C 260 & C 494-02
- 4) Reinforcing per ASTM A618, Max. 1/2" cover

Mayer Brothers, Inc.
 6354 River Road
 Beltsville, Maryland 21075
 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. Hoot Form #1 No Scale March 19, 2009

TOTAL DYNAMIC HEAD CALCULATIONS

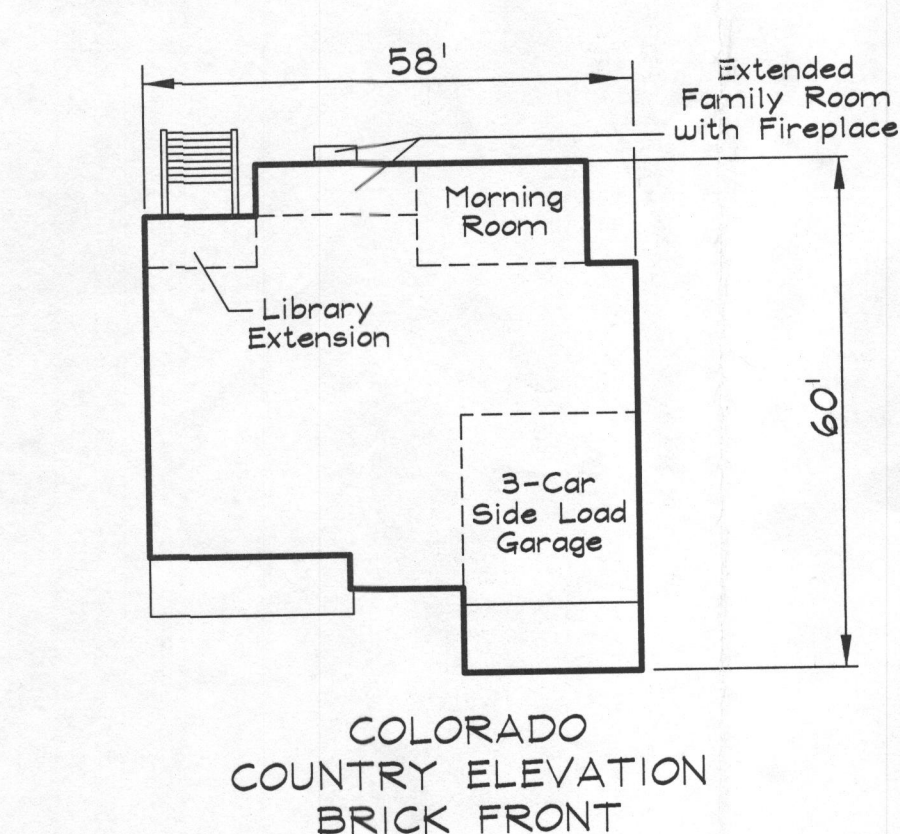
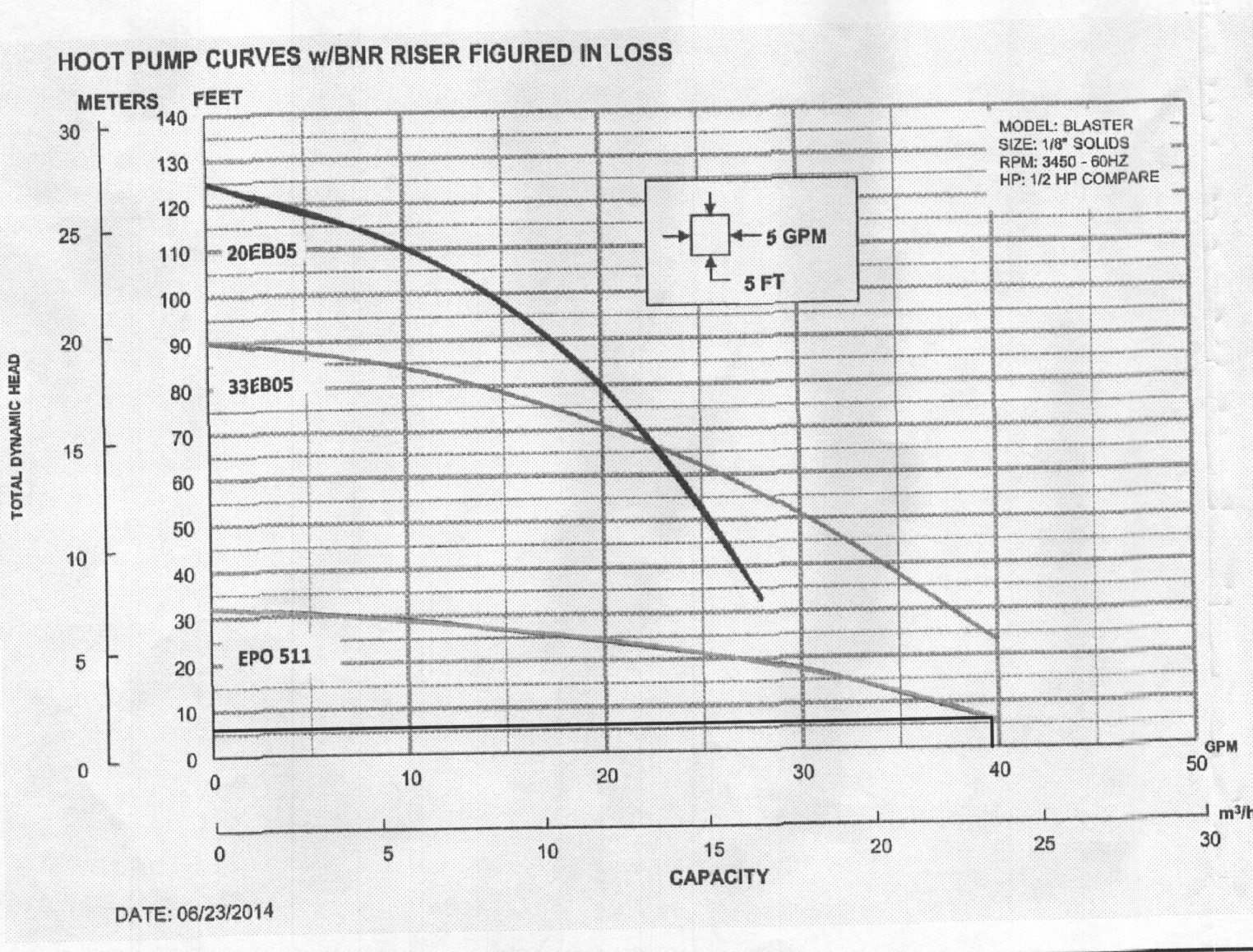
STATIC HEAD	5.0'
FRICITION HEAD	1.6'
DISTAL END HEAD	0'
TOTAL DYNAMIC HEAD	6.6'
GALLONS PER MINUTE	39 GPM
DOSE	78
PUMP RUN TIME	2.0 MIN

FRICITION HEAD
 FITTINGS: 19.7'
 LENGTH OF PVC PIPE: + 31.5'
 TOTAL LENGTH: 51.2'

51.2/100 x 3.1' = 1.6' TOTAL FRICITION LOSS

TOTAL HEAD
 VERTICAL ELEVATION CHANGE: 5.0'
 TOTAL FRICTION LOSS: 1.6'
 SYSTEM PRESSURE REQUIREMENTS: + 0.0'
 TOTAL DYNAMIC HEAD: 6.6'

* PER AMERICAN MANUFACTURING COMPANY, INC. FRICTION HEAD LOSS TABLE.



COLORADO COUNTRY ELEVATION BRICK FRONT

LOT 36 INITIAL SYSTEM TRENCH SPECIFICATIONS

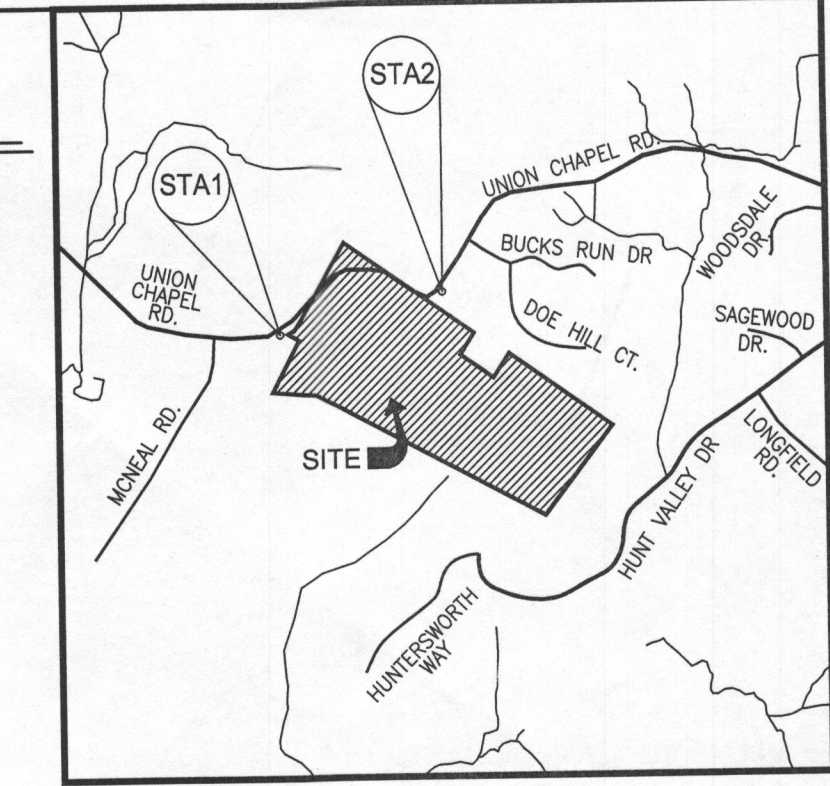
	GROUND ELEVATION	INVERT ELEVATION	BOTTOM ELEVATION
INITIAL SYSTEM TRENCH (A)	522.5	515.5	514.5
INITIAL SYSTEM TRENCH (B)	521.9	517.9	515.9
FIRST REPLACEMENT TRENCH (A)	521.2	517.2	515.2
FIRST REPLACEMENT TRENCH (B)	520.8	516.8	512.8
SECOND REPLACEMENT TRENCH (A)	519.8	515.8	511.8
SECOND REPLACEMENT TRENCH (B)	518.7	514.7	510.7

BENCHMARK

GEODETTIC SURVEY CONTROL #1	
N.	591450.42
E.	1297571.25
A.A. ELEV.	146A
	535.43

GEODETTIC SURVEY CONTROL #2	
N.	591683.88
E.	1299121.60
B.M. ELEV.	146B
	542.23

ADC MAP COORDINATES
 481254



VICINITY MAP
 SCALE: 1" = 2000'

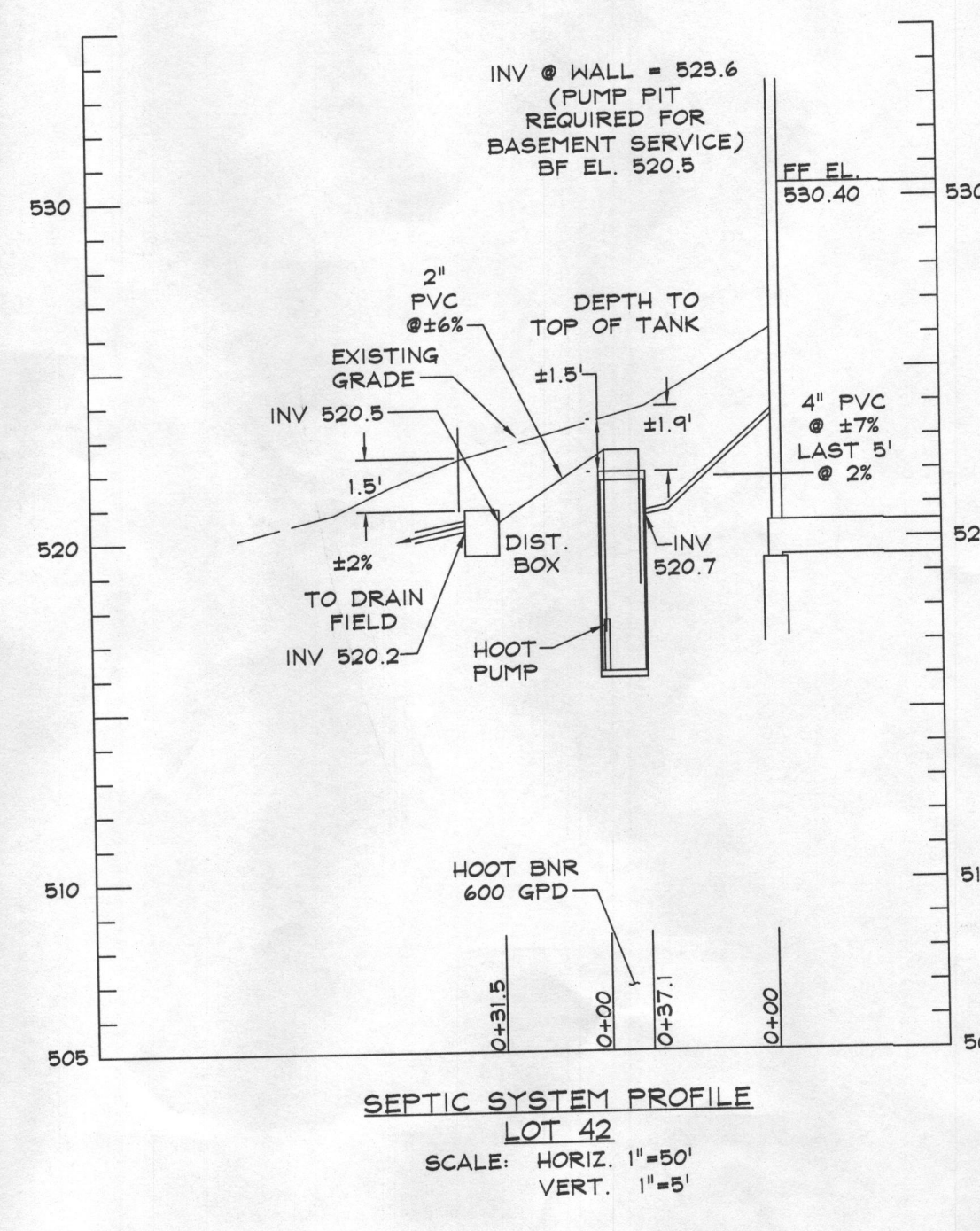
DRAWING LEGEND

- 500 PROPOSED GRADE
- 502 PROPOSED LIMIT OF DISTURBANCE
- + 665.5 PROP. SPOT ELEV./FLOW ARROW
- PROPOSED 20' SEPTIC RESERVE BUFFER
- EXISTING 30' WELL BUFFER
- EXISTING 100' WELL BUFFER
- BUILDING RESTRICTION LINE
- SEPTIC RESERVE AREA
- WELL AREA
- 174 PASSED PERCOLATION TEST
- 127 FAILED PERCOLATION TEST

DATA SOURCES:

SEWAGE DISPOSAL SYSTEM DATA (5 BEDROOM):

1. INVERT @ FOUNDATION WALL: 523.6 (BASEMENT PUMP REQUIRED)
 2. 600 GPD BNR SYSTEM W/ 750 GALLON PUMP CHAMBER
 EX. GRADE OVER TANK: 523.9
 PROPOSED GRADE OVER TANK: 523.9
 INVERT: 520.7
 3. DISTRIBUTION BOX
 EX. PROPOSED GRADE OVER TANK: 522.3
 INVERT: 520.5
 4. TRENCH DESIGN (4 BDRM x 150 GPD/BDRM = 600 GPD)
- INITIAL SYSTEM**
 600 GPD / 0.8 GPD/SF (APP. RATE) = 750 SF
 USE 3' WIDE TRENCH W/ 24" OF GRAVEL BELOW PIPE
 750 SF / 3' WIDTH = 250 LF x 0.625 = 157 LF MIN. TRENCH
- 1ST/2ND REPLACEMENT SYSTEM**
 600 GPD / 1.2 GPD/SF (APP. RATE) = 500 SF
 USE 2' WIDE TRENCH W/ 24" OF GRAVEL BELOW PIPE
 500 SF / 2' WIDTH = 250 LF x 0.57 = 143 LF MIN. TRENCH
- 10' MIN SPACING BETWEEN TRENCH EDGES
- USE 2 - 79' LONG TRENCH FOR INITIAL SYSTEM
 USE 2 - 72' LONG TRENCH FOR FIRST REPLACEMENT SYSTEM
 USE 2 - 72' LONG TRENCH FOR SECOND REPLACEMENT SYSTEM



Approved Septic System Plan
 Howard County Health Department
 Hank Oswald 1/11/16
 Signature Date

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.

12/16/2015
 DATE

PAUL G. CAVANAUGH
 PROFESSIONAL ENGINEER

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. HOVNANIAN HOMES
 1802 Brightseat Road
 Landover, Maryland 20785
 (301) 683-6288

DEVELOPER:

SITE ADDRESS:
 LOT 42
 15225 Sweetbay Street
 Woodbine, Maryland 21797

**BELLE HAVEN ESTATES
 LOT 42**

**SITE PLAN FOR
 BAT INSTALLATION**

3rd ELECTION DISTRICT HOWARD COUNTY

NO.	DESCRIPTION OF CHANGES	DRN.	REV.	DATE
CO. FILE #:	DES. BY: BKC			
TAX ACC. #:	DRN. BY: BKC			
TAX MAP: 14	CHK. BY: PGC			
BLOCK / GRID:	DATE: 12/16/15			
PARCEL #: 66	DDC JOB#: 06116.5			
ZONE / USE: RC-DEO	SHEET NUMBER:			
DWG. SCALE: 1"=30'	1 of 1			