

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: 3/27/15 **ONSITE SEWAGE DISPOSAL SYSTEM** P 555781

INSTALLATION APPROVAL DATE: 6/19/05 SEC **PERMIT** A _____
CONSTRUCTION

PROPERTY ADDRESS: 15058 Double Bridges Court

SUBDIVISION: Meriwether Farm LOT: 5 TAX ID: 04-375122

CONTRACTOR: Ben Lewis Plumbing EMAIL: _____

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

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: _____ PUMP TANK CAPACITY: 600GPD

DISTRIBUTION SYSTEM: GRAVITY LOW PRESSURE DOSED NUMBER OF BEDROOMS: 4

TRENCHES:	LINEAR FEET REQUIRED: <u>240</u>	INLET DEPTH: <u>3 3.5'</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>5</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>3.5</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:	Initial system 40' trench lengths along right side of SDA (#3017 & #3018). Possibly LPD. 80 tons of stone 4x60'	

ISSUED BY: Hank Oswald 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 DOWNGRADE 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
- 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.**

NOT TO SCALE

See separate sheet
for as-built drawing

ROAD NAME

TRENCH/DRAINFIELD DATA

WIDTH 3' INLET 3.5' BOTTOM 5'

NUMBER OF TRENCHES 4

TOTAL LENGTH 239'

ABSORPTION AREA 418' + SIDEWALL

DISTRIBUTION BOX LEVEL YES

DISTRIBUTION BOX BAFFLE YES

DISTRIBUTION BOX PORT YES

SEPTIC TANK DATA

SEPTIC TANK I LEVEL YES

MANUFACTURER MAYER BROS

CAPACITY 1500 GAL

SEAM LOC TOP

TANK LID DEPTH 2'-3"

BAFFLES YES

BAFFLE FILTER NO

MANHOLE LOC FRONT + REAR

6" PORT LOC NONE

WATERTIGHT TEST NO

SLOTTED NO Yes

DATE ON LID NONE

~~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~~

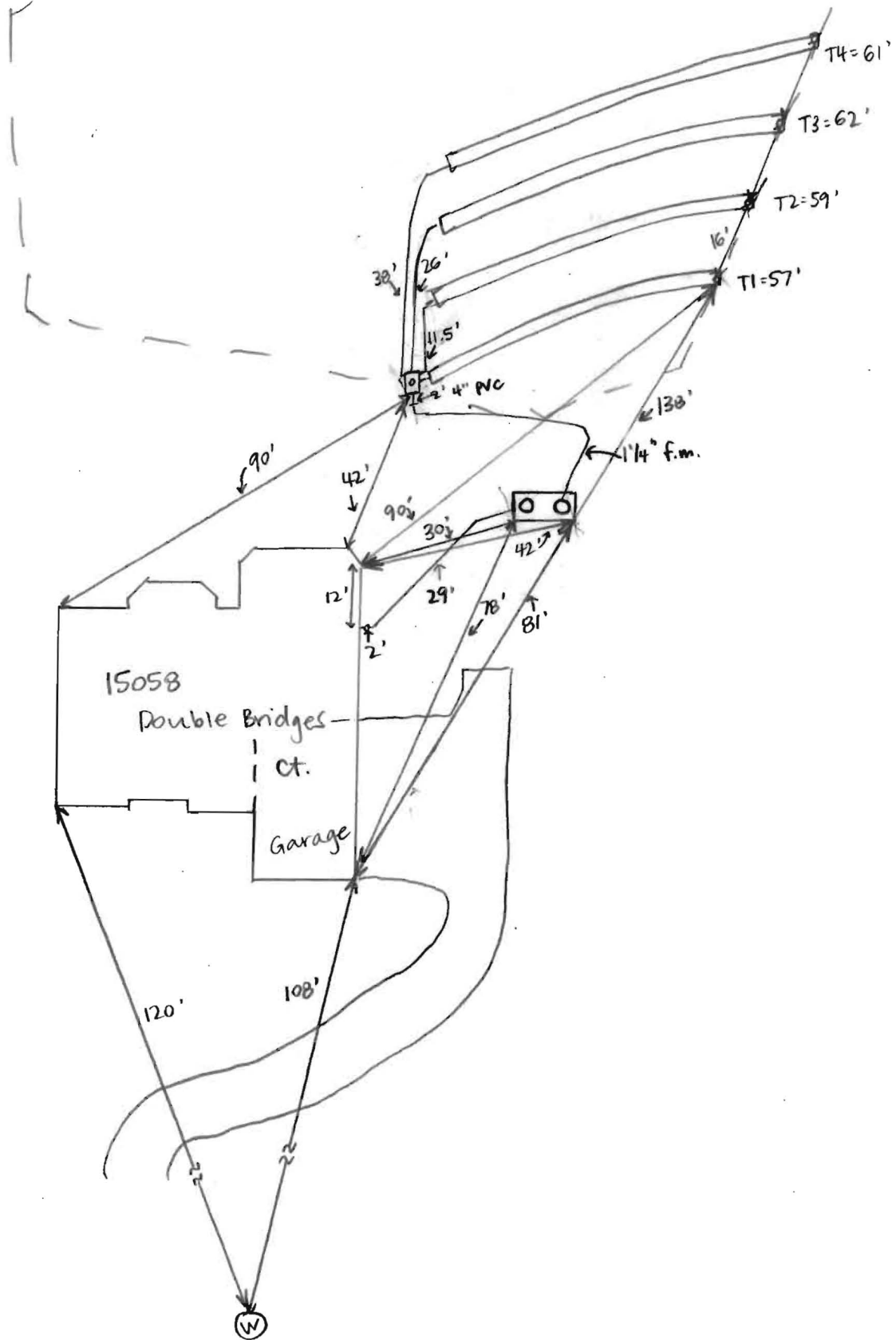
PRE-CONSTRUCTION:

5/11/14 layout w/ Andy from Ben Lewis. He requested to change tank location so as not to have to dig on hill and have lots more fill on one end of tank. Top tank stake same, rotated tank 90° CW so now parallel w/ contour. Superintendent on site + notified. Super also described retaining wall - will be wood, no drainage features. Trenches to be 4 x 60' on contour. (SC/KW)

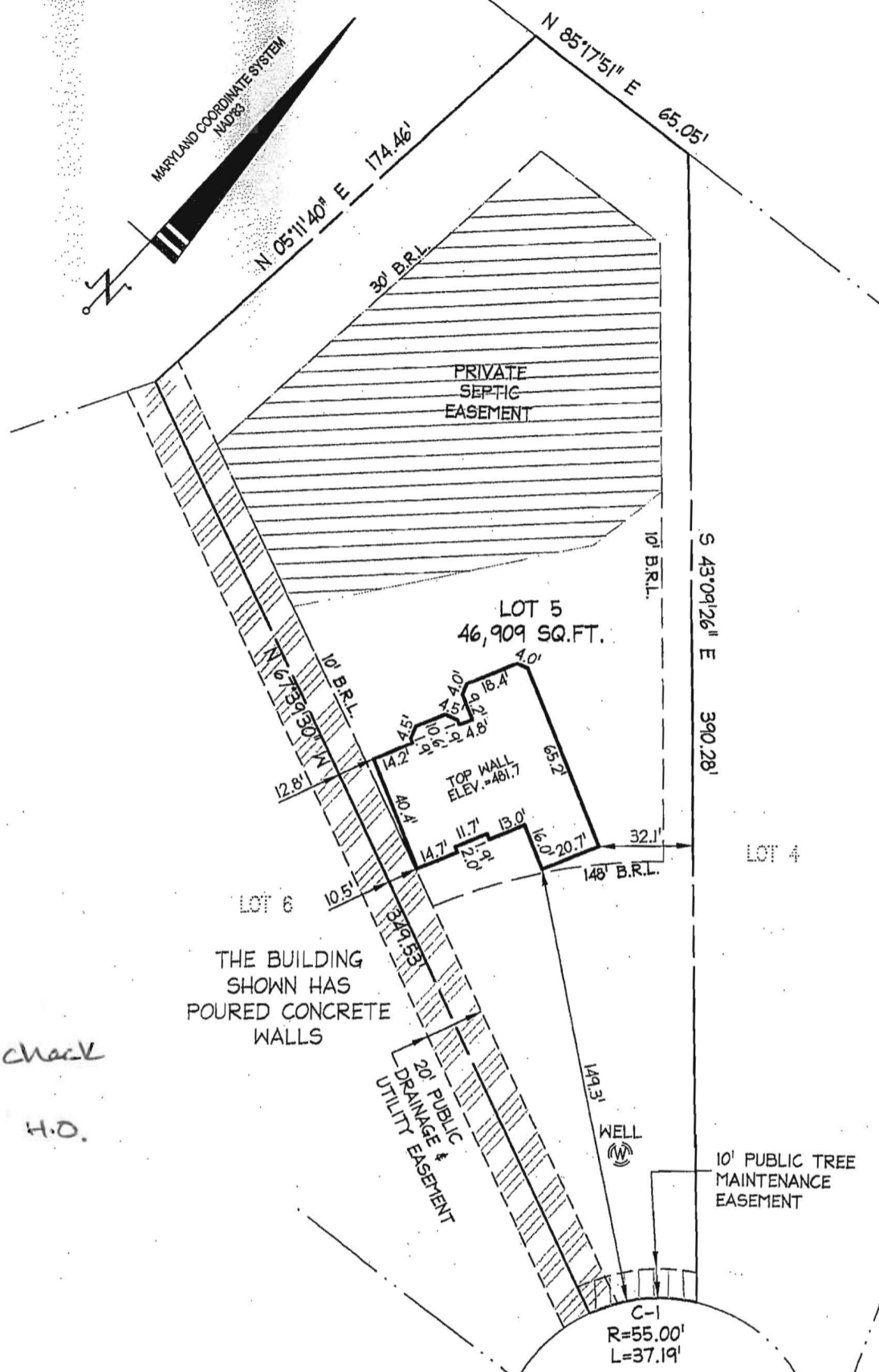
INSTALLATION: 5/12/15 House connection made. Tank hole dug + bedded - tank will arrive later today. SCH 40 4" DWV pipe from house to tank location. D-box installed; Andy said soil was slightly moist in area of pipe from D-box to trenches. T1 finished + left open at ends. T2 finished + left uncovered. Andy hit some rock in T2, 17' from end in top 2' of trench - trench is slightly wider in that area. (SC) 5/13/15 Tank installed and all connections made. T3 and T4 finished and left uncovered. Line from house to tank is bedded. Need BAT startup certification. (SC) 6/17/15 BAT startup with Mike Sample. Pump and alarm both good. (SC)

FINAL INSPECTOR Sarah Collins DATE OF APPROVAL 6/19/05

NOT TO SCALE



CURVE TABLE						
CURVE	RADIUS	LENGTH	DELTA	TAN	CHD. BRG.	CHD. DIST.
C-1	55.00'	37.19'	38°44'55"	19.34'	S 41°42'58" W	36.49'



4.6.15
Wall check
OKay - H.O.

THE BUILDING SHOWN HAS
POURED CONCRETE
WALLS

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 7/6/16

Robert B. Southard



C-1
R=55.00'
L=37.19'
DOUBLE BRIDGES COURT
(PUBLIC ACCESS PLACE)
50' R/W

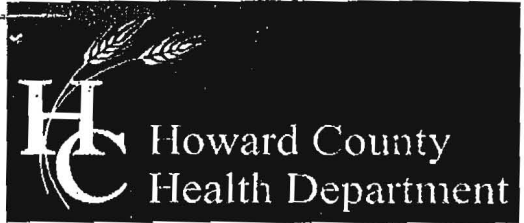
WALL CHECK SURVEY
#15058 DOUBLE BRIDGES COURT
LOT 5
MERIWETHER FARM
SECTION ONE
PLAT NO. 21343
4TH ELECTION DISTRICT HOWARD COUNTY, MD

DDC JOB#: 13085.2
DATE: 01-14-2015
SCALE: 1"=50'
DRN. BY: RC
CHK. BY: RBS



Planners
Surveyors
Engineers
Landscape Architects

192 East Main Street
Westminster, MD 21157
410.386.0560
410.386.0564 (Fax)
DDC@DDCinc.us
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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 27th day of March, among R. AGINMAN
HOMES OF MARYLAND, hereinafter collectively referred to as
 "Owner", and the Howard County Health Department hereinafter referred to as the "County".

050

WHEREAS, Owner is the owner or contract owner of a parcel of land located at
15058 Double Bridge Court, Glendy, MD 21738, 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 15908 Folio 84. 04/375122

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 Gallon
PUMP TANK

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.

Michael J. Davis 3/27/15
Howard County Health Department

Steve Snyder 3-18-15
Owner #1 Signature Date
V.P. CONSTRUCTION Steve
K. Hovnanian Homes Maryland SN you
Owner #1 Print Name

NOT SOLD AS OF 3/27/15
Buyer #1 Signature Date

Buyer #1 Print Name

LR - Agreement
Recording Fee 20.00
Grantor/Grantee Name:
K Hovnanian Homes of
MD
Reference/Control #:
B4
LR - Agreement
Surcharge 40.00
=====
Owner#2 Signature Date Total: 60.00
=====
Total: 60.00
03/27/2015 12:13
CC13-DS
#4014959 CC0503 -
Howard Co
Columbia/CC05.03.07 -
Register 07
=====
Owner #2 Print Name
=====
Buyer #2 Signature Date
=====
Buyer #2 Print Name



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 27th day of March, among K. AGNANANDI
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
15058 Double Bridge Court, Glen Ridge, MD 21738, 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 15908 Folio 84. 04/375122

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 PWT SYSTEM w/ 750 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



Planners
Surveyors
Engineers
Landscape Architects

192 East Main Street
Westminster, MD 21157

410 386 0560
Fax 410 386 0564

DDC@DDCinc.us
www.DDCinc.us

October 27, 2014

Mr. Hank Oswald, LEHS
Howard County Health Department
8930 Stanford Blvd.
Columbia, MD 21045

Reference: Meriwether Farm, Lot 5
15058 Double Bridges Court
BAT Site Plan
DDC Project No.: 13085.1

Mr. Oswald,

The following are responses to comments issued October 24th, 2014 (via email) for the above referenced project.

Comment 1: Under General Notes item # 20, it mentions an existing well with tag # HO-95-1027 but the well tag # on record for this lot is HO-95-1693. Please confirm correct well tag #.

Response: General Note #20 has been updated to reflect the correct well tag number HO-95-1963. The survey point number was inadvertently used in the previous note.

Comment 2: The last 5 feet of the sewer line needs to level off to 2% as it enters tank.

Response: The profile has been adjusted to show the last 5 feet at 2%.

Comment 3: Reduce dose rate on the plan to 90 gallons/minute with a runtime of 2 minutes to help prevent overwhelming the trench system.

Response: The pump runtime was reduced to 2 minutes generating a dose of 92.6 gallons.

We believe these responses adequately address your comments. Should you have any questions please do not hesitate to contact this office.

Very truly yours,
Development Design Consultants, Inc.

Brian Collins, RLA, LEED AP
Project Manager



MAYER BROS., INC.

Precast Concrete Products

6264 Race Rd. Elkridge, MD 21075

Letter of Satisfaction Hoot System Installation

Address of Property: 15058 Double Bridges Ct.
Glenelg, md. 21737

Date of Final Inspection: 6/17/15

Installer: Ben Lewis Plumbing

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

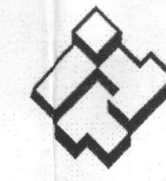
mayerbro@connect.net

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, PermEntry Basement Entries,
Scopewal Window Walks, Custom Precast Products

GENERAL NOTES

1. BASE SQUARE FOOTAGE OF HOUSE: 4,144 SQ. FT.
2. NUMBER OF BEDROOMS: 4
3. EJECTOR PUMP IS NOT REQUIRED TO SEWER BASEMENT DRIVEWAY CULVERT IS NOT REQUIRED PER THE APPROVED ROAD DRAWINGS, F-07-38.
4. 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.
5. PLAT REFERENCE: #21359
6. BASE INFORMATION SHOWN ON THIS PLAN IS SHOWN PER THE APPROVED FINAL PLAN, F-08-1891 PREPARED BY FISHER, COLLINS AND CARTER INC. AND DATED 12/17/08.
7. 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.
8. THE CONTRACTOR OR DEVELOPER SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS / BUREAU OF ENGINEERING / CONSTRUCTION INSPECTION DIVISION AT (410)918-1891 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
9. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
10. TOTAL LIMIT OF DISTURBANCE: 22,110 SQ. FT. / 0.51 AC.
11. STORMWATER MANAGEMENT FOR THIS LOT IS PROVIDED PER THE PREVIOUSLY APPROVED FINAL PLAN (F-08-1891) OR PAVED PUBLIC ROADS SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTORS EXPENSE IN ACCORDANCE WITH THE HOWARD COUNTY STANDARDS AND SPECIFICATIONS.
12. DEVIATIONS FROM THESE PLANS AND SPECIFICATIONS WITHOUT PRIOR WRITTEN CONSENT OF THE CIVIL ENGINEER (DDC, INC.) MAY CAUSE THE WORK TO BE UNACCEPTABLE.
13. THE DIMENSIONED DISTANCES SHALL GOVERN IF SCALED AND DIMENSIONED DISTANCES ON THIS PLAN ARE FOUND TO BE IN DISAGREEMENT.
14. THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM LOT AREA AND OWNERSHIP WIDTH AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT.
15. 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 OF THE ENVIRONMENT FOR 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.
16. 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.
17. ANY CHANGES TO A PRIVATE SEWAGE DISPOSAL AREA SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
18. 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.
19. THE DEVELOPMENT OF THIS LOT DOES NOT REQUIRE AN ENVIRONMENTAL CONCEPT PLAN SINCE STORMWATER MANAGEMENT HAS PREVIOUSLY APPROVED UNDER F-07-38.
20. THE EXISTING WELL SHOWN ON THIS PLAN (HO-095-1643) HAS BEEN FIELD LOCATED AND IS SHOWN ACCURATELY.



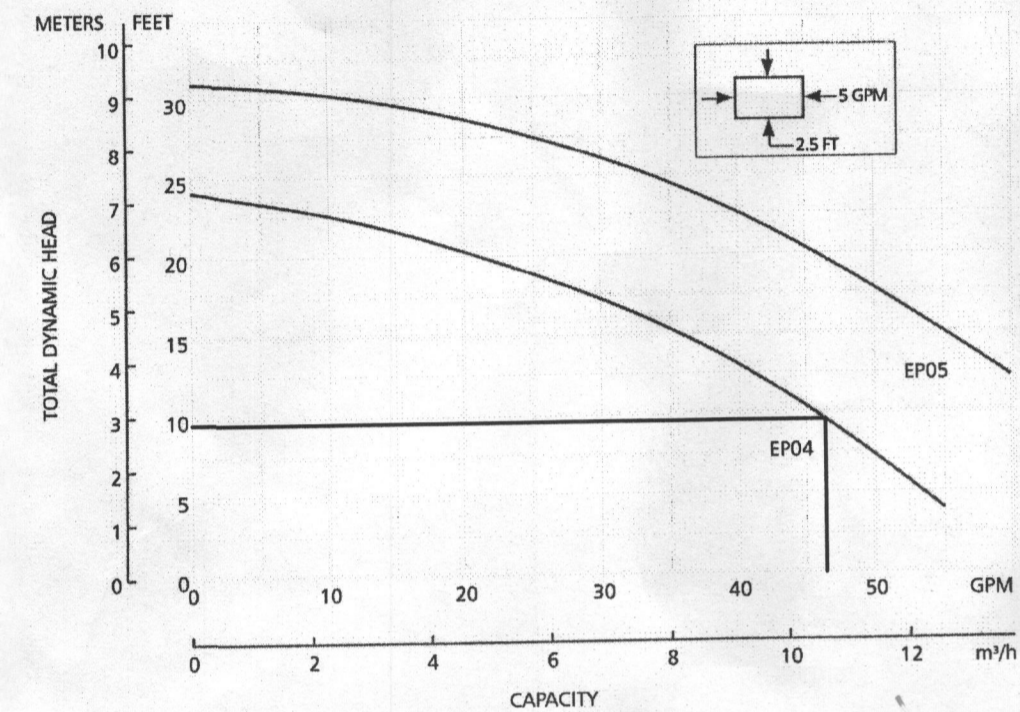
ITT

GOULDS PUMPS
Wastewater

PERFORMANCE RATINGS

Total Head (ft. of water)	Gallons Per Minute	EP04	EP05
5	33	-	-
10	46	62	-
15	36	55	-
20	21	46	-
25	0	33	-
30	-	11	-

STATIC HEAD	5.0 (MIN)
FRICTION HEAD	4.3'
DISTAL END HEAD	0'
TOTAL DYNAMIC HEAD	9.3'
GALLONS PER MINUTE	46.3 GPM
DOSE	92.6 GAL
PUMP RUN TIME	2.0 MINS



TOTAL DYNAMIC HEAD CALCULATIONS

STATIC HEAD
OFF FLOAT ELEVATION: 460.3'
HIGH POINT OF THE SYSTEM: + 465.3'
VERTICAL ELEVATION CHANGE: 5.0'

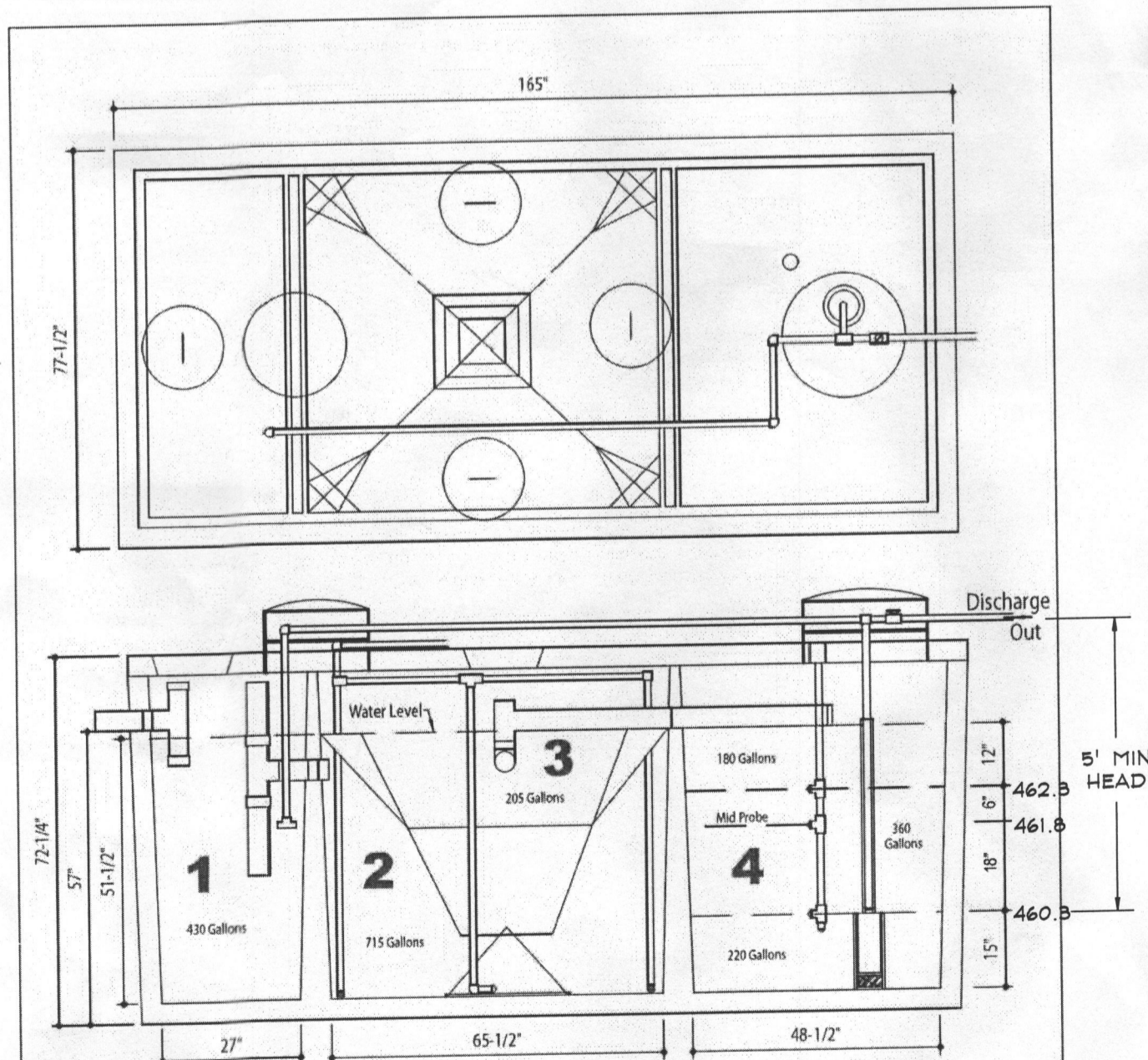
FRICTION HEAD
FITTINGS: 13.8'
LENGTH OF PVC PIPE: + 18.1'
TOTAL LENGTH: 31.9'

31.9/100 x 18.62 = 4.3' TOTAL FRICTION LOSS

TOTAL HEAD
VERTICAL ELEVATION CHANGE: 5.0'
TOTAL FRICTION LOSS: 4.3'
SYSTEM PRESSURE REQUIREMENTS: + 0.0'
TOTAL DYNAMIC HEAD: 9.3'

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.



LOT 5 PUMP ELEVATIONS

OFF	ON	ALARM
460.3	461.8	462.3

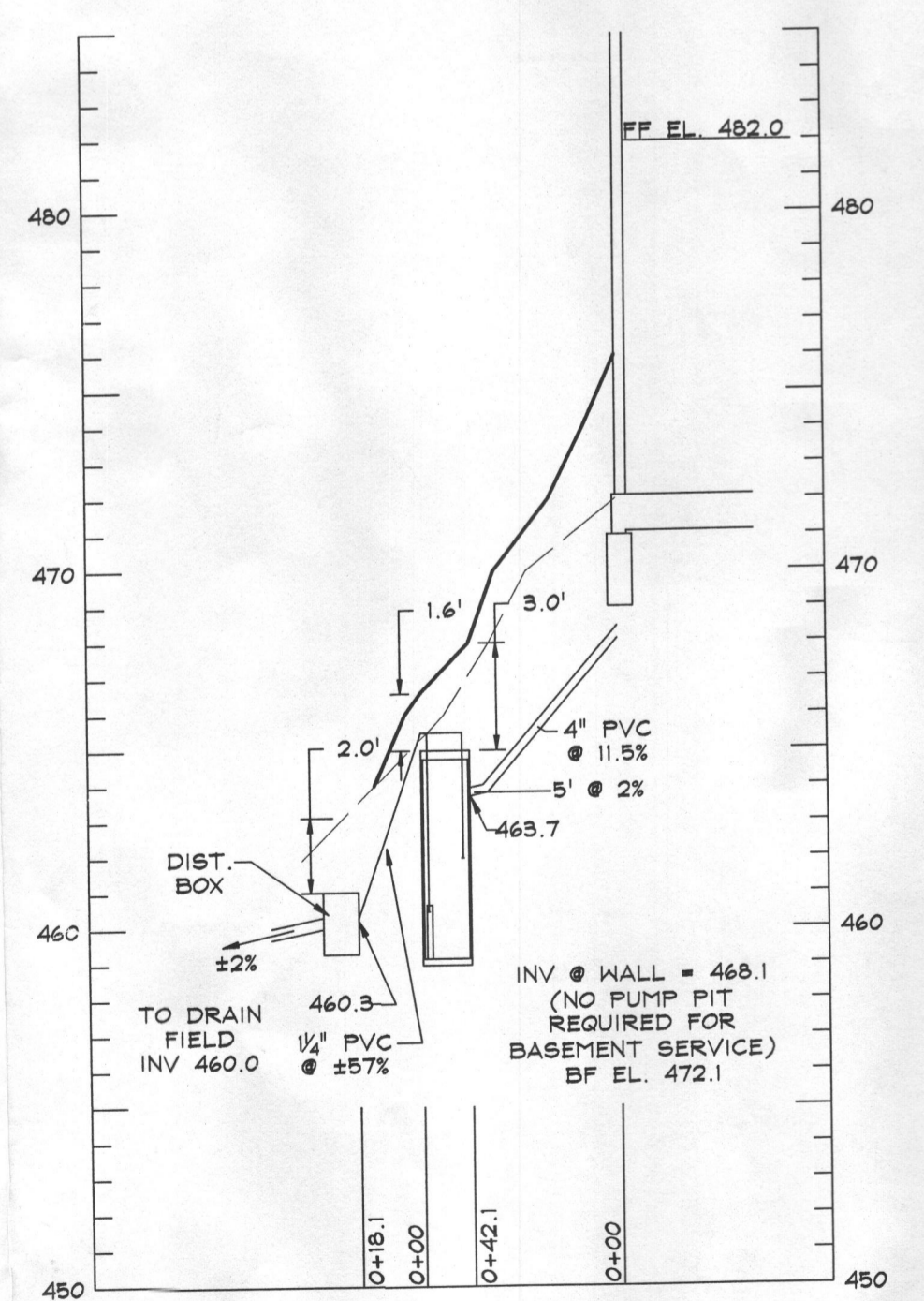
600 GPD BNR SYSTEM
H-600 ABNR
with 750 GALLON PUMP CHAMBER

DESIGN DATA & GENERAL NOTES

- (1) Concrete strength (f'c) = 4000 psi @ 28 days. Density = 150 pcf.
- (2) Cement - Portland Type III per ASTM C 150-92.
- (3) Admixtures & plasticizers per ASTM C 260-96 & C 494-92.
- (4) Reinforcing per ASTM A108. Min. 1/2" cover.

Mayer Brothers, Inc.
6264 Race Road
Elkridge, Maryland 21075
Tel. 410.796.1434
Fax. 410.796.1438
www.mayerbrothers.com

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



SEPTIC SYSTEM PROFILE
LOT 5
SCALE: HORIZ. 1"=50'
VERT. 1"=5'

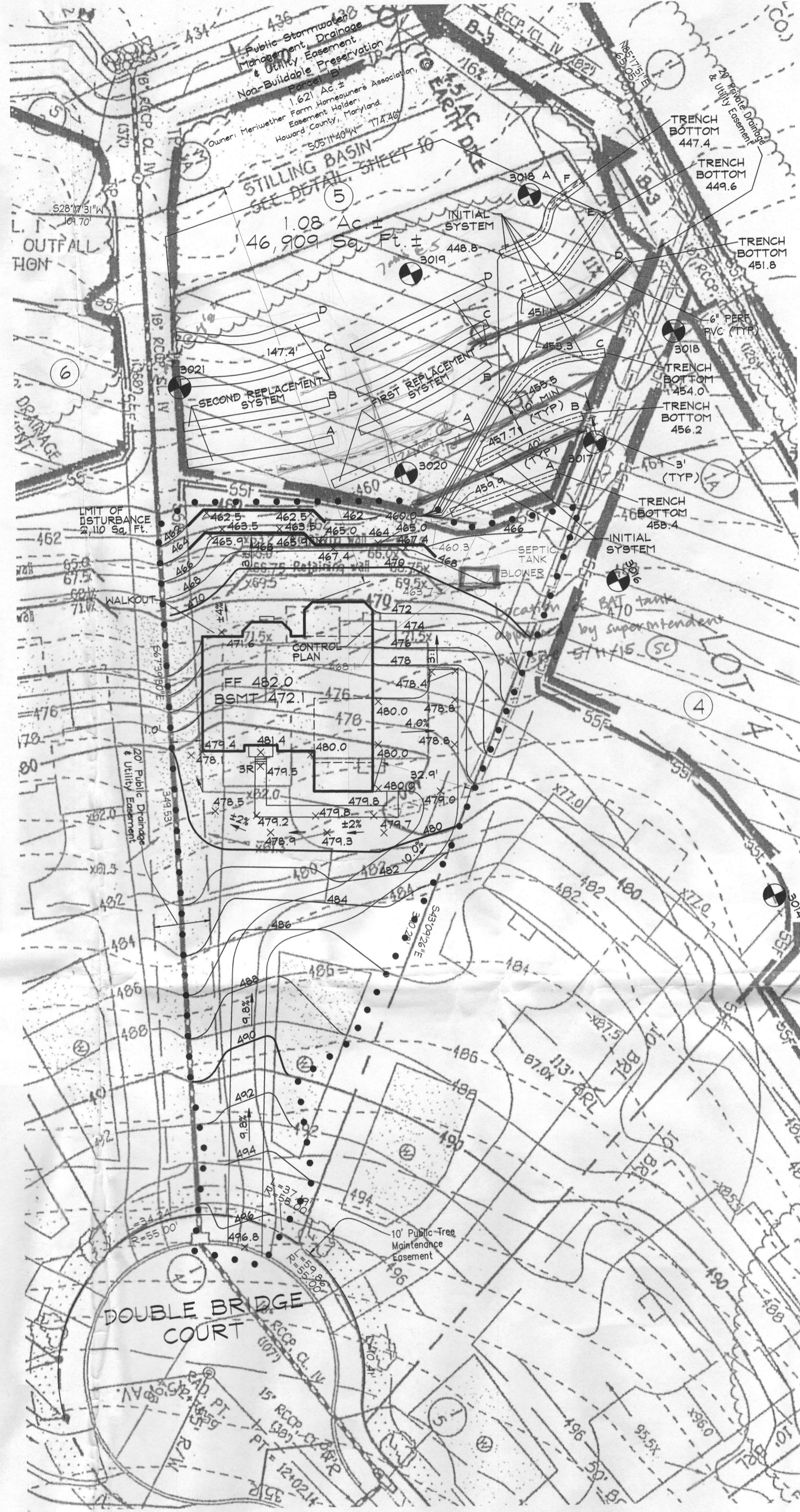
SEWAGE DISPOSAL SYSTEM DATA (4 BEDROOM):

1. INVERT @ FOUNDATION WALL: 466.1 (BASEMENT PUMP REQUIRED)
2. 600 GPD BNR SYSTEM W/ 750 GALLON PUMP CHAMBER
EX. GRADE OVER TANK: 470.9
PROPOSED GRADE OVER TANK: 472.2
INVERT: 463.7
3. DISTRIBUTION BOX
EX. & PROPOSED GRADE OVER TANK: 462.1
INVERT: 460.3
4. TRENCH DESIGN (4 BDRM x 150 GPD/BDRM = 600 GPD)
600 GPD / 0.6 GPD/SF (APP. RATE) = 1000 SF
USE 3' WIDE TRENCH W/ 18" OF GRAVEL BELOW PIPE
10' MIN SPACING BETWEEN TRENCH EDGES
1000 SF / 3' WIDE = 333.33 LF x 0.71 = 237 LF MIN. TRENCH
USE 6 - 40' LONG TRENCH = 240 LF FOR INITIAL SYSTEM

600 GPD / 0.8 GPD/SF (APP. RATE) = 750 SF
USE 3' WIDE TRENCH W/ 12" OF GRAVEL BELOW PIPE
10' MIN SPACING BETWEEN TRENCH EDGES
750 SF / 3' WIDE = 250 LF x 0.83 = 206 LF MIN. TRENCH
USE 4 - 52' LONG TRENCH = 208 LF FOR FIRST REPLACEMENT SYSTEM
USE 4' - 52' LONG TRENCH = 208 LF FOR SECOND REPLACEMENT SYSTEM

LOT 5 SYSTEM TRENCH SPECIFICATIONS

	GROUND ELEVATION	INVERT ELEVATION	BOTTOM ELEVATION
INITIAL SYSTEM TRENCH A (40')	463.4	459.9	458.4
INITIAL SYSTEM TRENCH B (40')	461.2	457.7	456.2
INITIAL SYSTEM TRENCH C (40')	459.0	455.5	454.0
INITIAL SYSTEM TRENCH D (40')	456.8	453.3	451.8
INITIAL SYSTEM TRENCH E (40')	454.6	451.1	449.6
INITIAL SYSTEM TRENCH F (40')	452.3	448.8	447.4
FIRST REPLACEMENT TRENCH A (52')	459.1	455.1	453.6
FIRST REPLACEMENT TRENCH B (52')	458.1	454.1	452.6
FIRST REPLACEMENT TRENCH C (52')	455.5	451.5	450.0
FIRST REPLACEMENT TRENCH D (52')	453.1	449.1	447.6
SECOND REPLACEMENT TRENCH A (52')	458.1	454.1	452.6
SECOND REPLACEMENT TRENCH B (52')	455.5	451.5	450.0
SECOND REPLACEMENT TRENCH C (52')	453.0	449.0	447.5
SECOND REPLACEMENT TRENCH D (52')	451.4	447.4	445.9

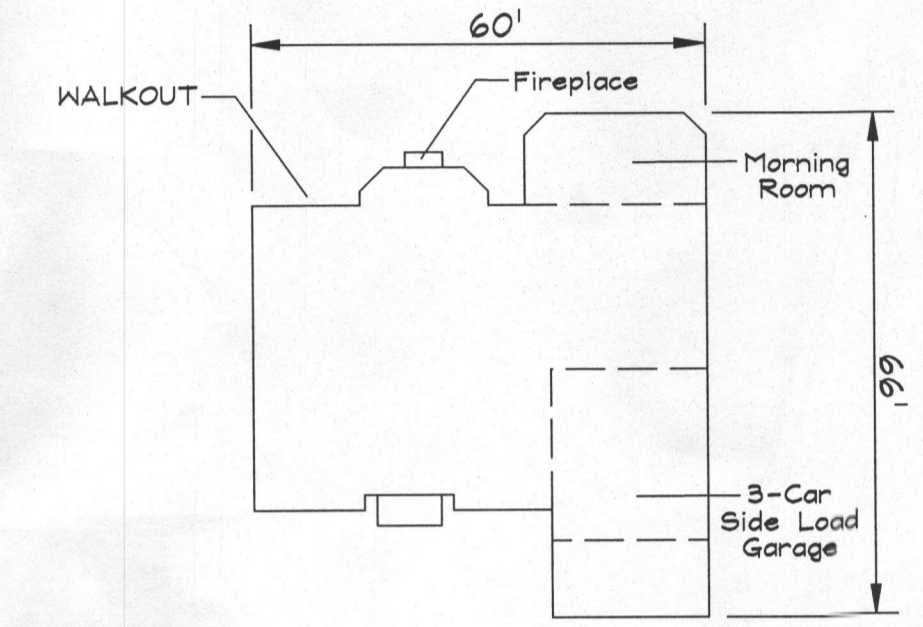
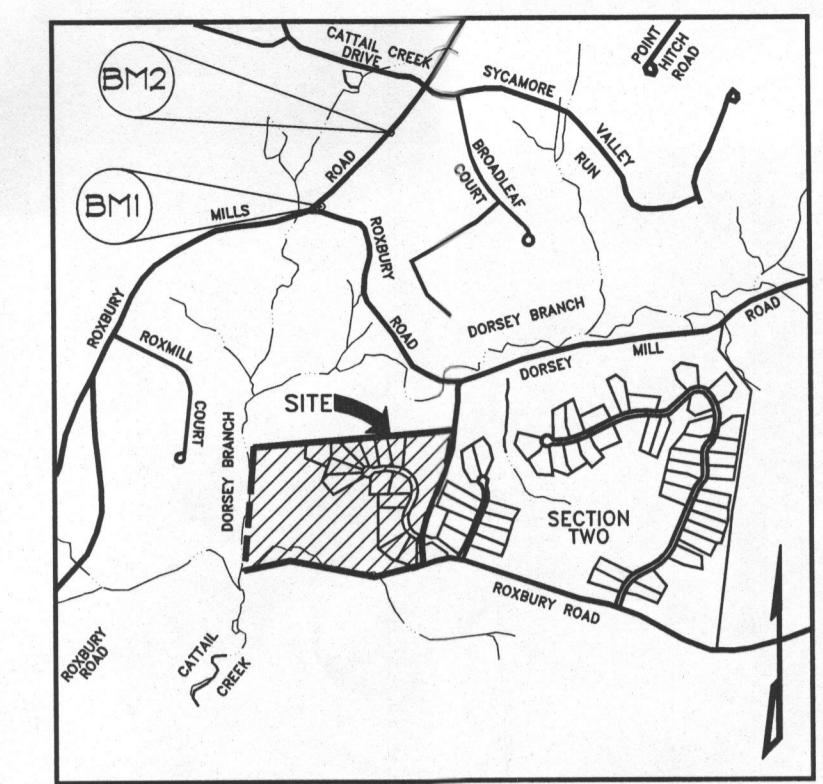


BENCHMARK

BENCHMARK #1
N. 562715.1745
E. 1300446.020
S.T.A. 21EA
ELEV. 450.23

BENCHMARK #2
N. 553066.329
E. 1300668.477
S.T.A. 21E2
ELEV. 475.95

ADC MAP COORDINATES
MAP 4812 DPN
39°04'00", E 76°47'30"



MANHATTAN ELEVATION 'C' BRICK FRONT

DATA SOURCES:
BASE INFORMATION SHOWN PER THE APPROVED FINAL PLAN, F-08-1891 PREPARED BY FISHER, COLLINS AND CARTER INC. AND DATED 12/17/08.

DRAWING LEGEND

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

Approved Septic System Plan
Howard County Health Department
Yann Oswald 10/30/14
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, License No. 277020, Expiration Date: 01/28/18

10/27/2014
DATE
PAUL G. CAVANAUGH
PROFESSIONAL ENGINEER

DDC
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. HONNAN HONES
1812 BRISTLEBARK ROAD
LANDOVER, MD 20785
(301)683-6288

BUILDER:
K. HONNAN HONES
1812 BRISTLEBARK ROAD
LANDOVER, MD 20785
(301)683-6288

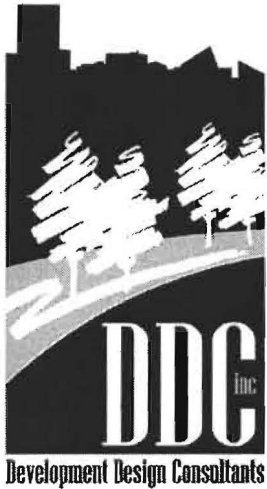
SITE ADDRESS:
18088 DOUBLE BRIDGES COURT
GLENWOOD, MD 21738

MERIWETHER FARMS
LOT 05

SITE PLAN FOR
BAT INSTALLATION

4TH ELECTION DISTRICT HOWARD COUNTY

NO.	DESCRIPTION OF CHANGES	DRN.	REV.	DATE
CO. FILE #:	F-08-139	DES. BY:	JHK	
TAX ACC. #:	1404375173	DRN. BY:	JHK	
TAX MAP:	21	CHK. BY:	BKCP/PGC	
BLOCK / GRID:	21	DATE:	10/27/2014	
PARCEL #:	24	DC JOB #:	13085.1	
ZONE / USE:	RC-DEO	SHEET NUMBER:		
DWG. SCALE:	1"=30'		1 of 1	



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Fax 410 386 0564

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www.DDCinc.us

October 27, 2014

Mr. Hank Oswald, LEHS
Howard County Health Department
8930 Stanford Blvd.
Columbia, MD 21045

Reference: Meriwether Farm, Lot 5
15058 Double Bridges Court
BAT Site Plan
DDC Project No.: 13085.1

Mr. Oswald,

The following are responses to comments issued October 24th, 2014 (via email) for the above referenced project.

Comment 1: Under General Notes item # 20, it mentions an existing well with tag # HO-95-1027 but the well tag # on record for this lot is HO-95-1693. Please confirm correct well tag #.

Response: General Note #20 has been updated to reflect the correct well tag number HO-95-1963. The survey point number was inadvertently used in the previous note.

Comment 2: The last 5 feet of the sewer line needs to level off to 2% as it enters tank.

Response: The profile has been adjusted to show the last 5 feet at 2%.

Comment 3: Reduce dose rate on the plan to 90 gallons/minute with a runtime of 2 minutes to help prevent overwhelming the trench system.

Response: The pump runtime was reduced to 2 minutes generating a dose of 92.6 gallons.

We believe these responses adequately address your comments. Should you have any questions please do not hesitate to contact this office.

Very truly yours,
Development Design Consultants, Inc.

Brian Collins, RLA, LEED AP
Project Manager

Oswald, Hank

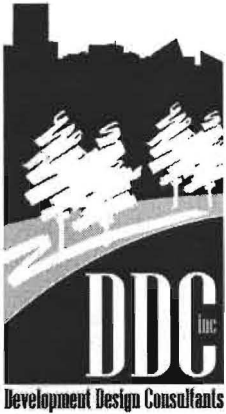
From: Brian Collins <BCollins@ddcinc.us>
Sent: Monday, October 27, 2014 9:50 AM
To: Oswald, Hank
Cc: 'cwillett@khov.com'; Shehata, Claudia
Subject: RE: BAT Plan_15058 Double Bridges Court_Meriweather Lot 5
Attachments: Meriwether Lot 5 Comment Response.pdf; 2014-10-27 LOT 5 BAT SITE PLAN.PDF

Mr. Oswald,

Please find attached the BAT plan for Meriwether Lot 5 revised per your comments. Included with the plan is a comment response letter identifying the changes made to the plan. KHOV will be submitting hard copies for your use.

If you have any questions or need additional information please let me know.

Thanks
Brian



Brian Collins, RLA, ASLA, LEED AP
Project Manager
bcollins@DDCinc.us

Development Design Consultants, Inc.

Planners, Surveyors, Engineers, Landscape Architects

192 East Main Street office 410.386.0560
Westminster, MD 21157 cell 410.336.6362
www.DDCinc.us fax 410.386.0564



Oswald, Hank

From: Victoria Meyer <mdbldgpermits@comcast.net>
Sent: Friday, October 24, 2014 5:14 PM
To: Oswald, Hank
Subject: RE: BAT Plan_15058 Double Bridges Court_Meriweather Lot 5

I will take care of this thanks Hank

From: Oswald, Hank [<mailto:hoswald@howardcountymd.gov>]
Sent: Friday, October 24, 2014 11:01 AM
To: mdbldgpermits@comcast.net
Subject: BAT Plan_15058 Double Bridges Court_Meriweather Lot 5

Hi Ms. Meyer:

Would you forward these comments to the Engineer "Paul Cavanaugh" and please have him respond. I tried calling the phone number on the plan to obtain his email address but it said the number was not in service.

Comments:

Upon review of the BAT Plan for 15058 Double Bridges Court, a couple of observations were made.

- 1.) Under General Notes item # 20, it mentions an existing well with tag # HO-95-1027 but the well tag # on record for this lot is HO-95-1693. Please confirm correct well tag #.
- 2.) The last 5 feet of the sewer line needs to level off to 2% as it enters tank.
- 3.) Reduce dose rate on the plan to 90 gallons/minute with a runtime of 2 minutes to help prevent overwhelming the trench system.

These items may be redlined unless you prefer to revise the BAT plan and resubmit for approval.

Please contact me with any questions.

Respectfully,

Hank

Hank Oswald, L.E.H.S.
Howard County Health Department
Well and Septic Program
(410) 313 - 1786

Oswald, Hank

From: Oswald, Hank
Sent: Friday, October 24, 2014 2:24 PM
To: 'cwilllett@khov.com'
Subject: Meriether Lot 5_B14003593

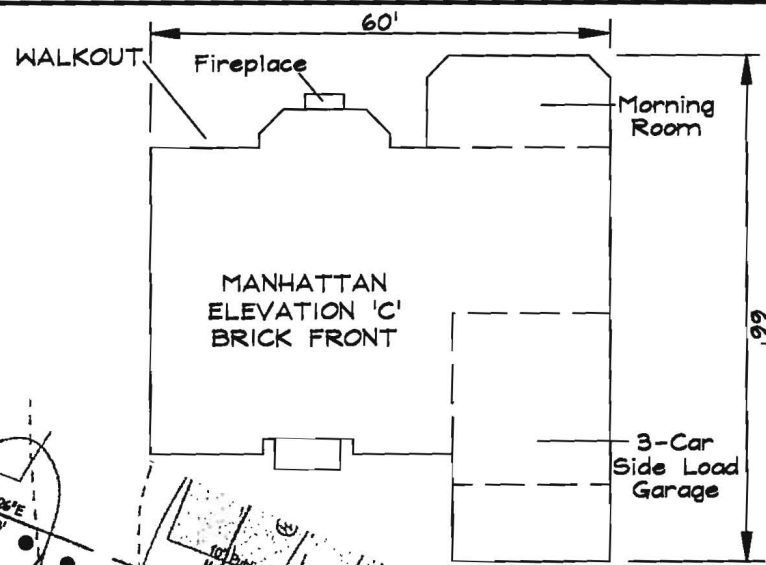
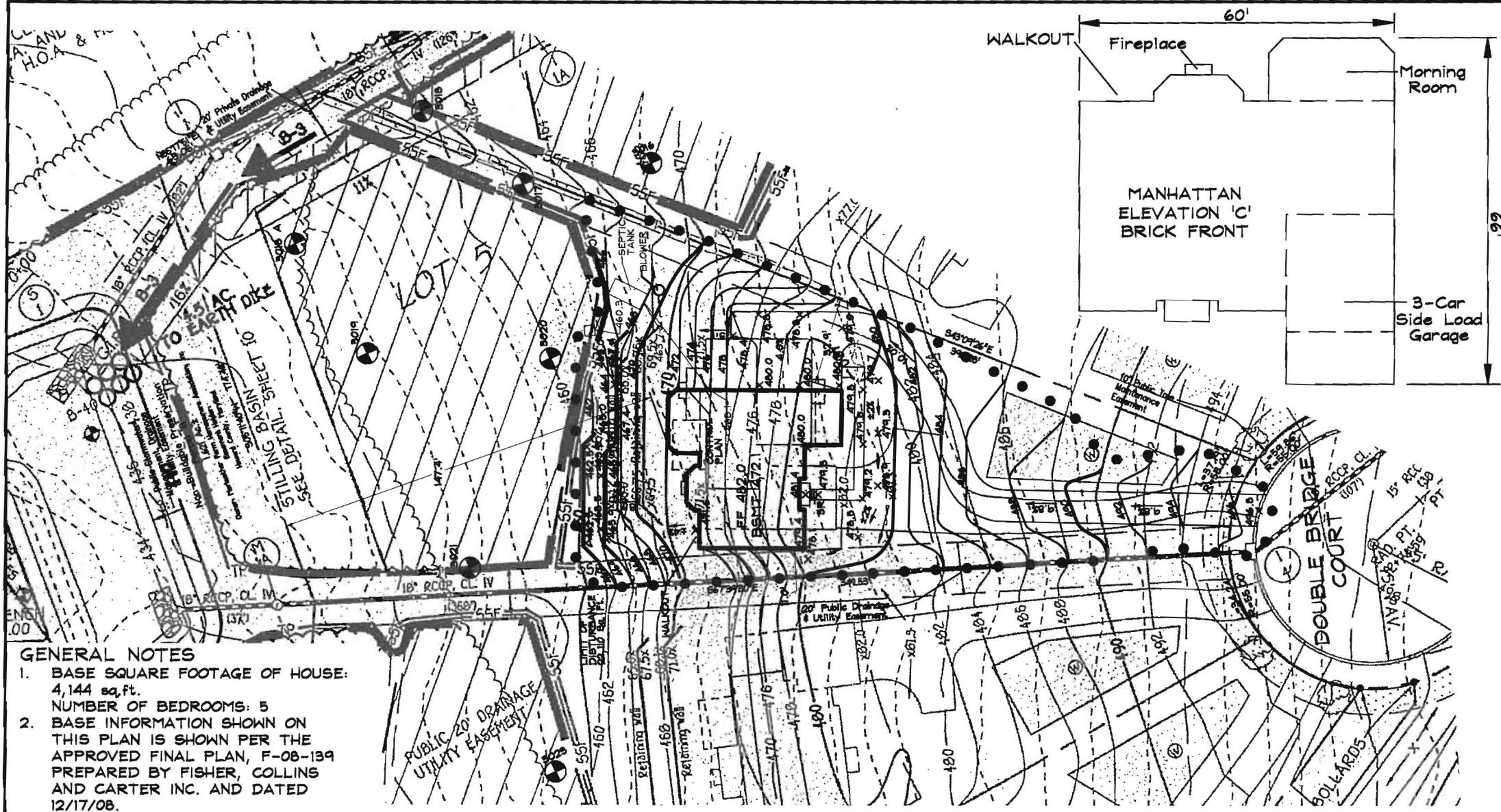
Mr. Willett:

The building permit application describes the SFD with 4 BRs, 2 FBs, 1 HB, full basement, and a 3 car garage. The floor plans submitted show 4 FB. It also shows a partially finished basement with the Optional Den adjacent the FB. Would you please provide some clarification on these floor plans as they do not match the BP description. Please note, the BAT Plan is sized for only 4 bedrooms. These floor plans are showing potentially 5 bedrooms altogether.

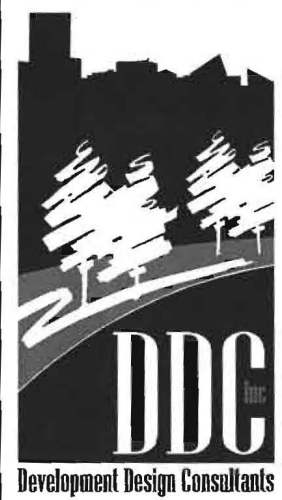
Thanks,

Hank

Hank Oswald, L.E.H.S.
Howard County Health Department
Bureau of Environmental Health
Well and Septic Program
(410) 313 - 1786



- GENERAL NOTES**
1. BASE SQUARE FOOTAGE OF HOUSE: 4,144 sq.ft.
 2. NUMBER OF BEDROOMS: 5
BASE INFORMATION SHOWN ON THIS PLAN IS SHOWN PER THE APPROVED FINAL PLAN, F-08-139 PREPARED BY FISHER, COLLINS AND CARTER INC. AND DATED 12/17/08.
 3. EJECTOR PUMP NOT REQUIRED TO SEWER BASEMENT



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410.386.0564 (Fax)
DDC@DDCinc.us
www.DDCinc.us

DDC JOB#:	06116.5
DATE:	09/19/2014
SCALE:	1" = 50'
DES. BY:	JHK
DRN. BY:	JHK
CHK. BY:	BKC

MERIWETHER FARM
4TH ELECTION DISTRICT HOWARD COUNTY
TAX MAP 21 PARCEL 24

LOT 5
1558 DOUBLE BRIDGE COURT
GLENWOOD, MD 21738
PLOT PLAN
KHOV ELEVATION

OWNER/BUILDER: K.HOVNANIAN HOMES
1802 Brightseat Road
Landover, Maryland 20785
(301)683-6268