

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

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

RECEIPT DATE: 5/31/2019 ONSITE SEWAGE DISPOSAL SYSTEM P 565509

APPROVAL DATE: 10/11/2019 PERMIT: CONSTRUCTION A

PROPERTY ADDRESS: 12407 ALL DAUGHTERS LANE, HIGHLAND, MD 20777

SUBDIVISION: ORCHARD ESTATES LOT: 2 TAX ID: 05-451078

CONTRACTOR: HATFIELD'S EQUIPMENT, INC. EMAIL: ken@hatfieldsequipment.com

CONTRACTOR ADDRESS: P.O. BOX 519, ANNAPOLIS JUNCTION, MD 20701 PHONE: (410)984-0101

PROPERTY OWNER: MB BROWNS BRIDGE COURT LLC EMAIL: MQuint@mitchellbest.com

OWNER ADDRESS: 1686 E.GUDE DRIVE, ROCKVILLE, MD 20850 PHONE: (301) 762-9511

SEPTIC TANK SIZE (GALLONS): 2000 TANK MANUFACTURER: BABYLON

PUMP MODEL: WS1012BF (Goulds) PUMP SIZE 1.0 Hp PUMP TANK CAPACITY: 1500

DISTRIBUTION SYSTEM: [] GRAVITY [X] PRESSURE DOSED BEDROOMS: 5 APPLICATION RATE: 0.6

Table with 2 columns: Field Name (TRENCHES, LOCATION, NOTES) and Field Value (Linear feet required, trench width, etc.)

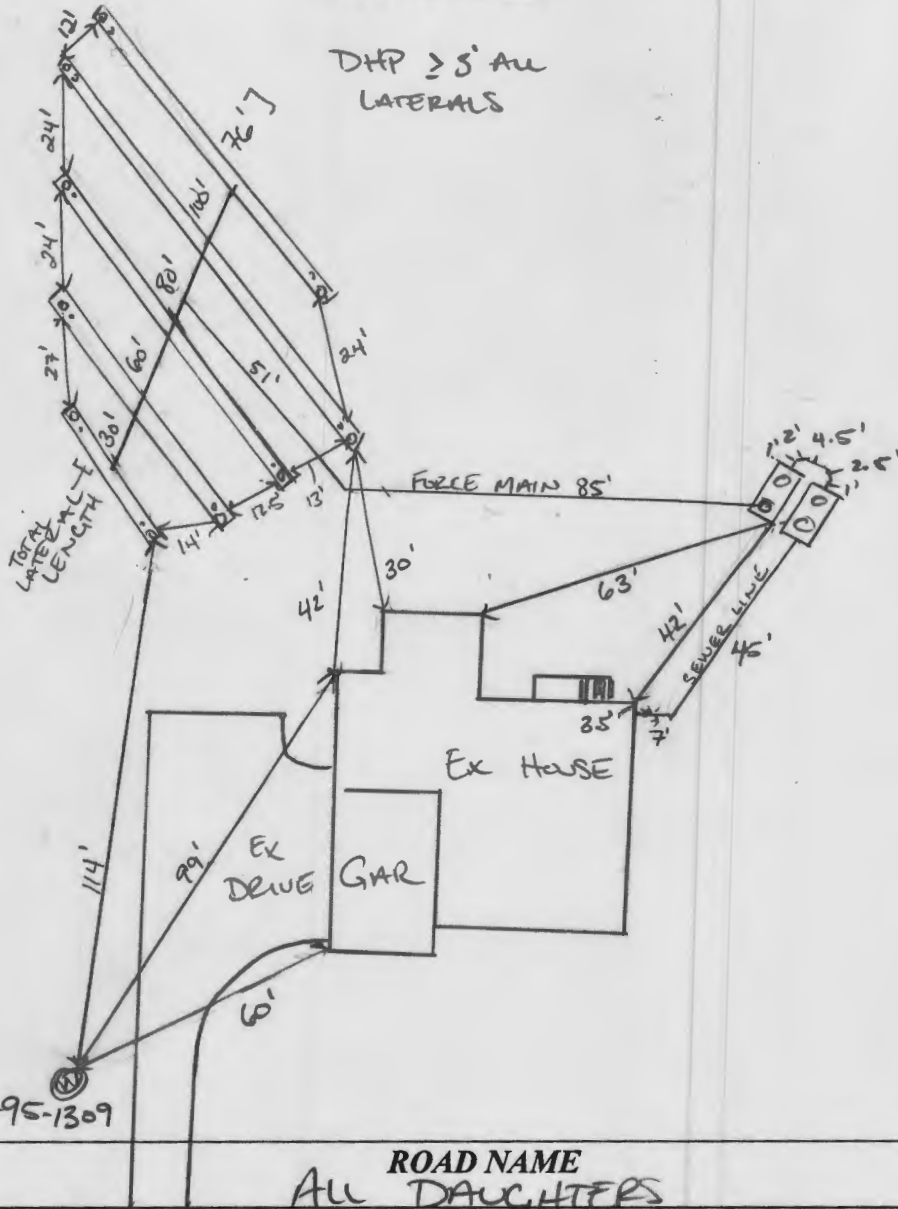
ISSUED BY: R BRICKER ISSUE DATE: 5/31/2019 EXPIRATION DATE: 5/31/2020

- 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 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
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

DHP ≥ 5' ALL
LATERALS



TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
3'	2'	5'
NUMBER OF TRENCHES	5	
TOTAL LENGTH	346 F	
ABSORPTION AREA	1038 SF	
DISTRIBUTION BOX LEVEL	N/A	
DISTRIBUTION BOX BAFFLE	N/A	
DISTRIBUTION BOX PORT	N/A	

SEPTIC TANK DATA

SEPTIC TANK I LEVEL	YES	
MANUFACTURER	BABYLON	
CAPACITY	2000	GAL
SEAM LOC	TOP	
TANK LID DEPTH	2'-1.5'	
BAFFLES	YES	
BAFFLE FILTER	NO	
MANHOLE LOC	FRONT/BACK	
6" PORT LOC	-	
WATERTIGHT TEST	-	
SLOTTED	YES	
DATE ON LID	06/12/2019	
PUMP/SEPTIC TANK LEVEL	YES	
MANUFACTURER	BABYLON	
CAPACITY	1500	GAL
SEAM LOC	TOP	
TANK LID DEPTH	1.5'-2'	
BAFFLES	NO	
BAFFLE FILTER	-	
MANHOLE LOC	FRONT/BACK	
6" PORT LOC	-	
WATERTIGHT TEST	-	
SLOTTED	-	
DATE ON LID	06/11/2019	

PRE-CONSTRUCTION:

7/19/2019 TANK, SDA, TRENCHES AND FM STAKED. CONFIRMED TRENCH LENGTH AND CONTOUR. OK TO START. INSP. LATERAL HOLE SPACE PRIOR TO COVER. (P)

INSTALLATION:

7/24/2019 LATERAL HOLES INSPECTED, ALL TRENCHES. LOWER THREE TRENCHES COMPLETED. ST AND PUMP TANK SET. (P) 7/25/2019 UPPER TRENCHES COMPLETED. FORCE MAIN INSTALLED. SHC AND SEWER LINE CONNECTED TO TANK. REINSP. PUMP AND ALARM. (P) 10/11/2019 SEPTIC PUMP 3/4. SEPTIC ALARM 22. ALARM WORKS. DHP ≥ 3' ALL LATERALS. (P)

FINAL INSPECTOR

DATE OF APPROVAL

10/11/2019



GLW

PLANNING | ENGINEERING | SURVEYING

3909 NATIONAL DR. SUITE 250
BURTONSVILLE, MD 20866
301-421-4024 | FAX: 301-421-4186
WWW.GLWPA.COM

LETTER OF TRANSMITTAL

TO: Bureau of Environmental Health
8930 Stanford Blvd.
Columbia, MD 21045

ATTN: Robert Freemon

DATE	4-18-2019	JOB NO.	15112
PROJECT	Orchard Estates		
	Lot 2 (12407 All Daughters Lane)		

WE ARE SENDING THE FOLLOWING ITEMS: ATTACHED UNDER SEPARATE COVER

MYLARS PRINTS COST ESTIMATES DESCRIPTIONS GRADE SHEETS

COPY OF LETTER APPLICATIONS COMPUTATIONS OTHER _____

VIA: MAIL OVERNIGHT GLW COURIER COURIER OTHER _____

COPIES	DATE	PAGES	DESCRIPTION
3		1 of 1	OSDS plan for Lot 2 (updated per Health Comments)

THESE ARE TRANSMITTED as checked below:

FOR APPROVAL SIGN & RETURN

FOR YOUR USE AS SUBMITTED TO _____

FOR REVIEW & COMMENT AS REQUESTED BY _____

PER YOUR REQUEST _____

REMARKS: Hi Spencer, the OSDS has been updated per your comments. For comment responses see attached.

COPY TO: Mike Tran

SIGNED: *Kristy Pierce*

Kristy Pierce

If enclosures are not as noted, kindly notify us at once.



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Twitter: [HowardCoHealthDep](https://twitter.com/HowardCoHealthDep)

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

MEMORANDUM

TO: GLW
3909 National Drive, Suite 250
Burtonsville, MD 20866

FROM: Robert Freemon *RF*
Well & Septic Program

RE: Orchard Estates, Lot 2
12407 All Daughters Lane
Highland, MD 20777
"OSDS Comments"

DATE: 4/10/2019

I have reviewed the OSDS plan and here are my comments.

- The perforated holes in the laterals should be 5/16ths. The 1/4th perforations have a higher risk of clogging. Changed hole size to 5/16". Updated distal head to 2' & tweaked trench lengths a tad keep the flow per linear feet of trench well below a ratio of 1.10 (10% difference) for all the trenches.
- In the calculations two laterals are being counted as one. With a center feed manifold its considered two laterals one on either side of the manifold. Acknowledged, please see response below
- All lateral diameters should be the same. This design may be a bit complex for the contractor so we would like to keep it as simple as possible. Noted, made all laterals 1.5" diameter as the number of holes have all been reduced for using the larger 5/16" diameter
- Force main should go around the SDA and not through it. We don't want to disturb the future replacement area. Updated the force main to go around the future replacement area. The force main now connects to the manifold between Trench Nos. 3 & 4.

The spreadsheet calculations account for both center and end-feed lateral configurations to produce the system or Network Discharge Rate (NDR). Since the NDR is based on the number of holes (either 1/4" or 5/16"), the laterals on each side of the center-feed manifold would have half the number of holes, distributing effluent to half the trench length. As a result, the same GPM is produced by two center-feed laterals or an end-feed lateral when the total number of holes are the same for both lateral configurations for a particular trench. Though the trench length is the same for both end-feed and center-feed configurations (with the same number of sized holes), it may be possible to use a smaller pipe diameter for each half of the center-feed lateral when an end-feed lateral needs a larger pipe.

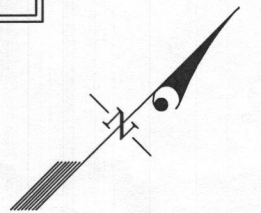
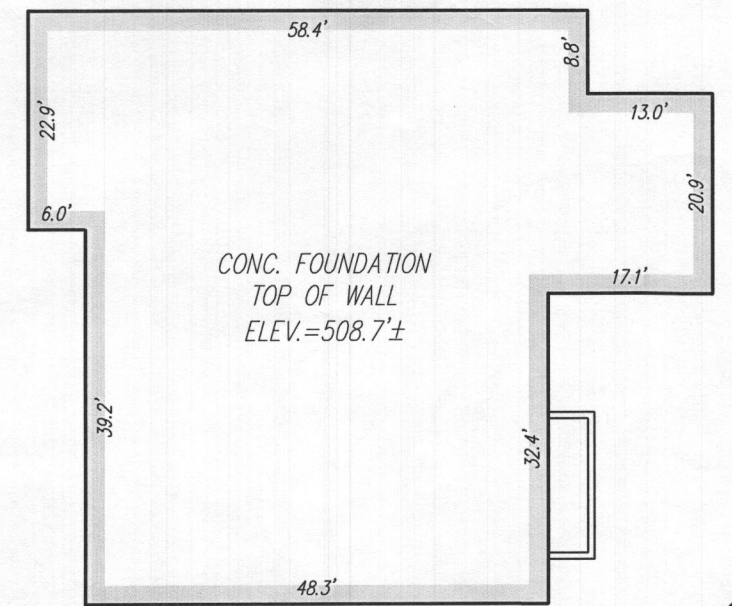
Also, added this note: "Electrical work for the installation must be preformed by a licensed electrician" per your email.

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

THE PROPERTY SHOWN HEREON LIES WITHIN ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AS SHOWN ON THE F.E.M.A. FLOOD INSURANCE RATE MAP, MAP NUMBER 24027C0140D, EFFECTIVE DATE NOVEMBER 6, 2013.

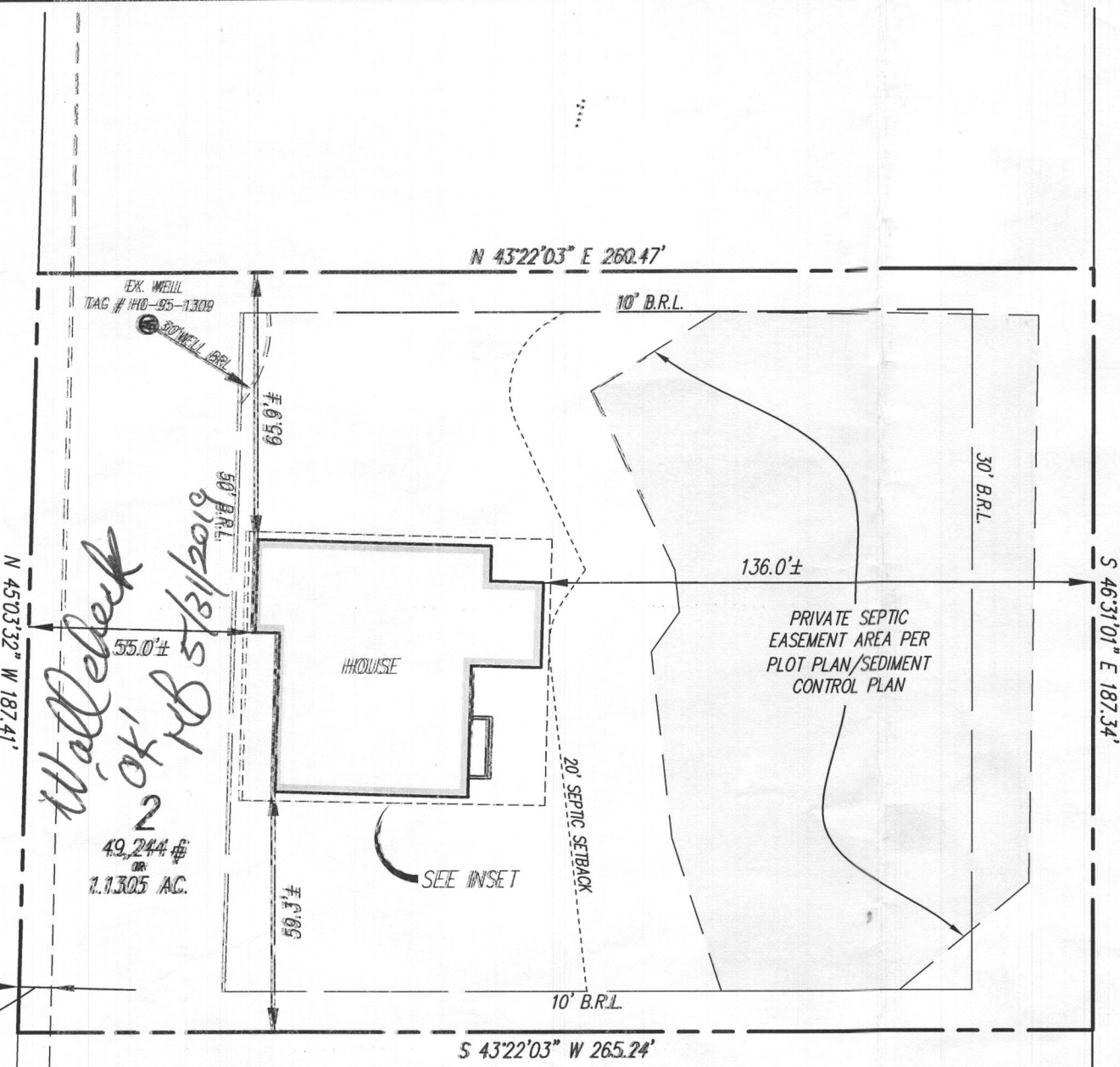
BUILDING SETBACKS (B.R.L.'s) SHOWN HEREON PER PLOT PLAN/SEDIMENT CONTROL PLAN. SETBACK DISTANCES SHOWN HEREON ARE TO THE OUTERMOST FACE OF THE FOUNDATION WALLS AND HAVE AN ACCURACY OF ± 0.1' FOOT.

INSET: 1"=20'

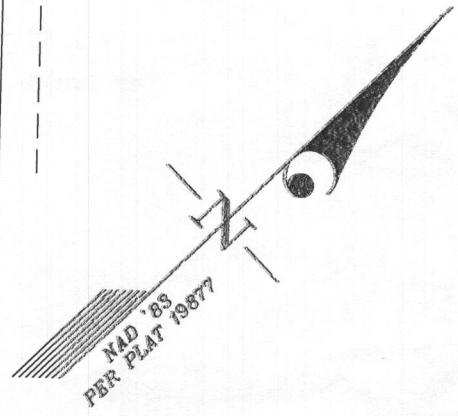


ALL DAUGHTERS LANE

8' PUBLIC DRAINAGE & UTILITY EASEMENT



Wallcheck
2 OK MB 5/19/19
 49,244 sq ft
 1.1305 AC.



SURVEYOR'S CERTIFICATE

THIS IS TO CERTIFY TO:
 "MB ORCHARD ESTATES, LLC"

THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THE POSITION OF THE ABOVE REFERENCED BUILDING FOUNDATION HAS BEEN ESTABLISHED BY ACCEPTED FIELD PRACTICES.

For Gutschick, Little and Weber, P.A. :
 Thomas C. O'Connor, Jr.,
 Professional Land Surveyor, No. 10954 (EXP. DATE: 07/03/2020)

THIS WALLCHECK IS VALID ONLY WITH AN ORIGINAL SIGNATURE AND EMBOSSED SEAL OF THE ABOVE SURVEYOR.

WALLCHECK
 (SPECIAL PURPOSE SURVEY)

ORCHARD ESTATES

LOT 2

12407 ALL DAUGHTERS LANE

HOWARD COUNTY, MD

DATE OF LATEST FIELD WORK: 5/24/2019

G.L.W. FILE No. 15112

REFERENCE : PLAT BOOK: N/A

PLAT No. 19877

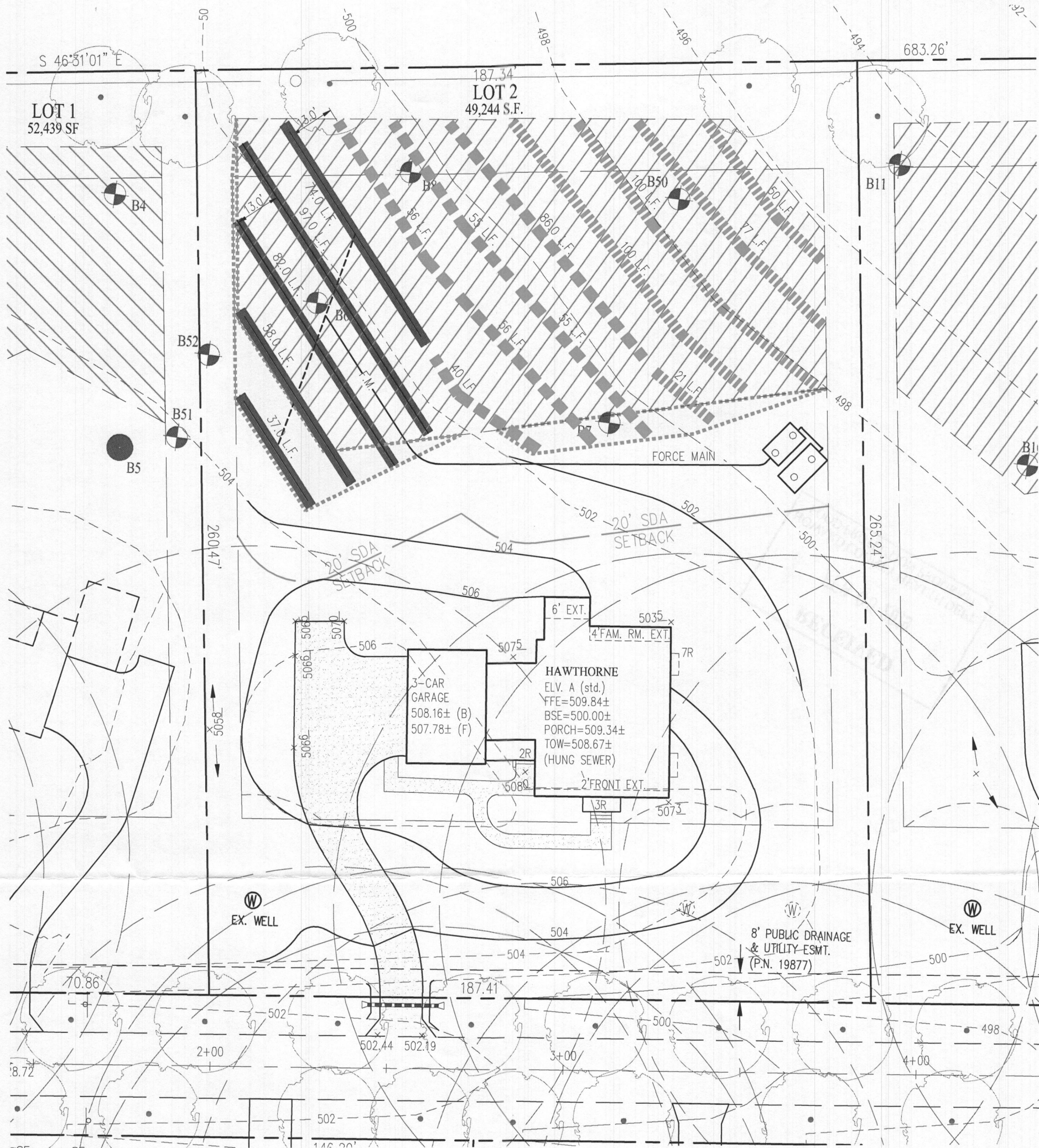
SCALE: 1"=40'



3909 NATIONAL DRIVE | SUITE 250 | BURTONSVILLE, MD 20886 | GLWPA.COM
 PHONE: 301-421-4024 | BALT: 410-880-1820 | DC&VA: 301-880-2524 | FAX: 301-421-4188

DES.
 DRN. MAB
 CHK.

PREPARED FOR:
 MB ORCHARD ESTATES, LLC
 1686 E. GUDE DRIVE
 ROCKVILLE, MARYLAND
 20850



SDA TRENCH SIZE CALCULATIONS

Orchard Estates	Lot 2 (12407 All Daughters Lane)		
System Input Information	Initial System	Replacem't System No.1	Replacem't System No.2
Application Rate	0.6	0.6	0.6
Effective area beginning depth	4	4	4
Effective area maximum bottom depth	5	5	5
Number of Bedrooms	5	5	5
Design flow at 150 gal./day/bedroom	750	750	750
Absorption Trench Calculations			
Drainfield area required (Design flow/application rate)	1250	1250	1250
Effluent pipe depth to invert	2	2	2
Effective sidewall depth "D" Depth between the effective beginning depth or pipe depth (which ever is deeper) and maximum trench bottom.	1	1	1
Trench Width "W" (2 or 3 feet)	3	3	3
Sidewall Reduction Percent = (W+2)/(W+1+2D)	83.33%	83.33%	83.33%
Linear feet of trench required = (drainfield area x sidewall reduction)/W	347.22	347.22	347.22
Trench Layout Information			
Number of trenches to use	5	6	6
Total (linear feet)	348	348	348
Minium Trench Spacing :	10	10	10

Lot-2 Septic Trench Tabulation

Total Trench Length Required	Provided (initial system)	Available (1st Replacement)	Available (2nd Replacement)
347.2 LF for a 5-bedroom house	37.0 LF	40.0 LF	21.0 LF
	58.0 LF	56.0 LF	100.0 LF
	82.0 LF	56.0 LF	100.0 LF
	97.0 LF	55.0 LF	77.0 LF
	74.0 LF	55.0 LF	50.0 LF
	86.0 LF		
Total	348 LF	348 LF	348 LF

LDP REQUIRED for unequal trench lengths.

ORCHARD ESTATES
LOT-2 (12407 All Daughters Lane)
LPD Trench Layout Exhibit for a 5-Bedroom House

2019 .02.04

Scale: 1' = 30'