

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: 10/22/19 **ONSITE SEWAGE DISPOSAL SYSTEM** P 566416
 APPROVAL DATE: 11/13/2019 **PERMIT: CONSTRUCTION** A _____
 PROPERTY ADDRESS: 5059 GAITHER'S CHANCE DRIVE, CLARKSVILLE, MD 21029
 SUBDIVISION: GAITHER'S CHANCE LOT: 11 TAX ID: 05-598957
 CONTRACTOR: HATFIELDS EQUIPMENT EMAIL: ken@hatfieldsequipment.com
 CONTRACTOR ADDRESS: P.O. BOX 519, ANNAPOLIS JUNCTION, MD 20701 PHONE: (410)490-4289
 PROPERTY OWNER: NVR, INC. EMAIL: ccagle@nvrinc.com
 OWNER ADDRESS: 9720 PATUXENT WOODS DRIVE, COLUMBIA, MD 21046 PHONE: (410)379-5956
 SEPTIC TANK SIZE (GALLONS): 2000 TANK MANUFACTURER: BABYLON (or equivalent)
 PUMP MODEL: n.a. PUMP SIZE n.a. PUMP TANK CAPACITY: n.a.

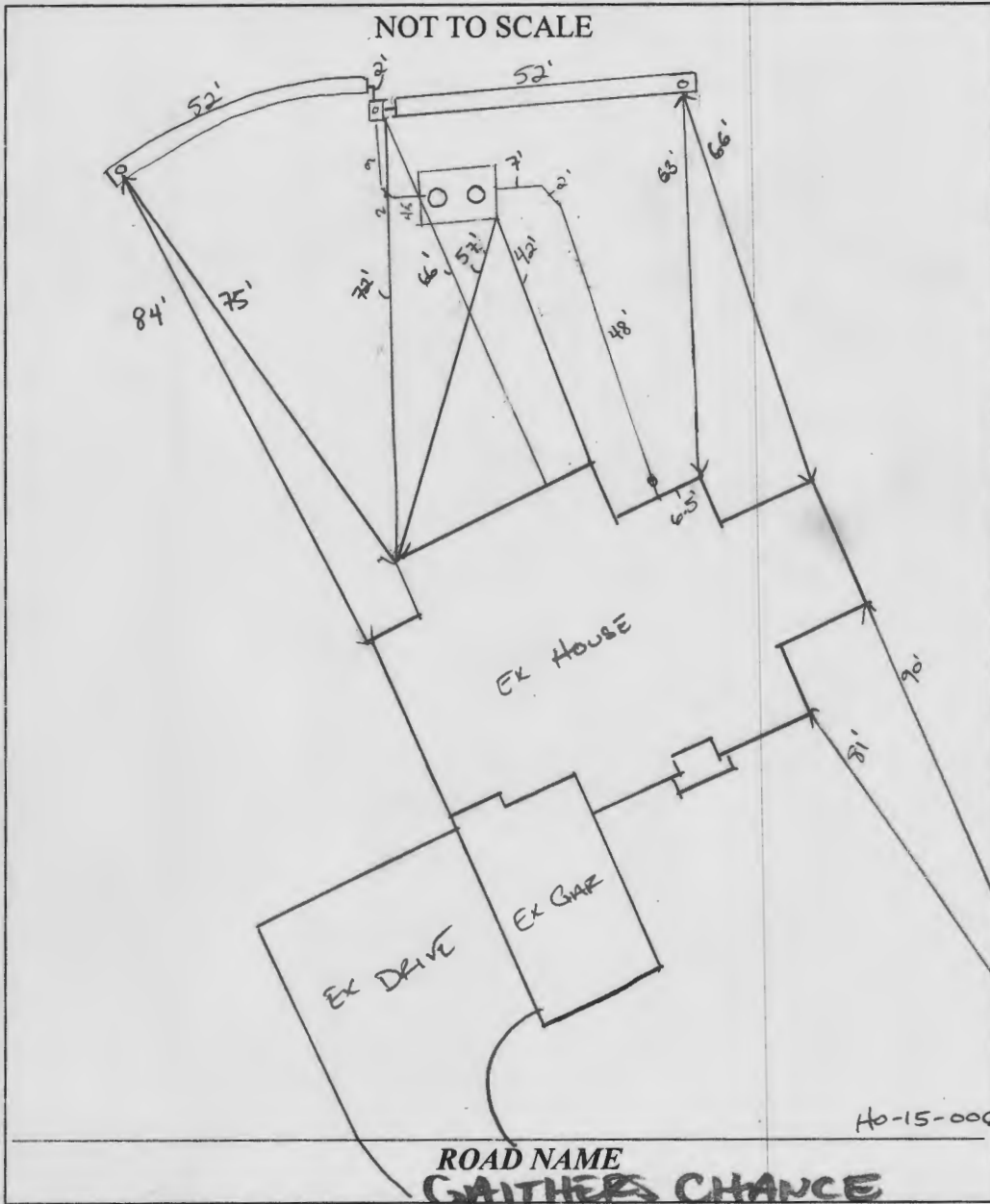
DISTRIBUTION SYSTEM: GRAVITY PRESSURE DOSED BEDROOMS: 5 APPLICATION RATE: 1.2

TRENCHES:	LINEAR FEET REQUIRED: <u>104</u>	INLET DEPTH: <u>2.0</u>
	TRENCH WIDTH: <u>3.0</u>	MAXIMUM BOTTOM DEPTH: <u>6.0</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>11</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>2.0</u>
LOCATION:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND TANK LOCATIONS MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	
NOTES:		

ISSUED BY: R BRICKER ISSUE DATE: 10/22/19 EXPIRATION DATE: 10/22/20

- 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
 ELECTRICAL PERMIT ISSUED E n.a.
- 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.**



TRENCH/DRAINFIELD DATA		
WIDTH	INLET	BOTTOM
3'	2'	6'
NUMBER OF TRENCHES		2
TOTAL LENGTH		104 F
ABSORPTION AREA		312 SF
DISTRIBUTION BOX LEVEL		SPEED
DISTRIBUTION BOX BAFFLE		YES
DISTRIBUTION BOX PORT		YES

SEPTIC TANK DATA	
SEPTIC TANK 1 LEVEL	
MANUFACTURER	BABYLON
CAPACITY	2000 GAL
SEAM LOC	TOP
TANK LID DEPTH	1.5' - 2'
BAFFLES	YES
BAFFLE FILTER	NO
MANHOLE LOC	FRONT/BACK
6" PORT LOC	
WATERTIGHT TEST	-
SLOTTED	YES
DATE ON LID	09/30/2019
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: 11/5/2019 TANK LOCATION, SDA, TRENCHES STAKED. CONFIRMED CONTOUR. OK TO START. (P)

INSTALLATION: 11/8/2019 TANK SET. SEWER LINE AND SHC INSTALLED. STEP DOWN INSTALLED IN LONG RUN OF SEWER LINE. OK TO CONTINUE. (P)
 11/13/2019 D BOX SET, LEVELED W/ BUCKET PRES INTO WATER OK TO BACKFILL. (P)

FINAL INSPECTOR [Signature] DATE OF APPROVAL 11/13/2019

FILE INQUIRY NOTES

Marshall Property Subdivision

DATE

RESULTS OF REVIEW FOR FILE

(5027 Ten Oaks Road)

ANY LOT

Design Septic System

Distribution Trenches

as shallow as possible

AND still have at least

3 drain fields in SDA.

req per Bert



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

SEWAGE DISPOSAL SYSTEM SPECIFICATIONS WORKSHEET

Address: _____

Subdivision: Gaither's Chance Lot: 11

Initial system: Application rate: 1.2 Effective area beginning depth: 2 Bottom maximum depth: 6
 1st Replacement: Application rate: 1.2 Effective area beginning depth: 2 Bottom maximum depth: 6
 2nd Replacement: Application rate: 1.2 Effective area beginning depth: 3 Bottom maximum depth: 7

Design Flow = 150 gallons per day per bedroom

Design flow + application rate = square footage of drainfield required

Linear length of trench required = drainfield square footage x sidewall reduction percentage ÷ trench width

Sidewall reduction credit formula:

$$\frac{W + 2}{W + 1 + 2D} \times 100 = \text{Percent of length of standard trench where } W = \text{trench width and } D = \text{depth between effective area beginning depth and trench bottom.}$$

Standard design requirements:

- All trenches must be equal length unless low pressure dosed
- All trenches must be on contour
- Minimum trench spacing: 10' for all trenches utilizing sidewall reduction credit. Additional spacing may be necessary for any trench using over 3.5' of effective sidewall. In those cases, the spacing formula is 2D + W up to a maximum spacing of 18'.
- Minimum trench spacing for trenches with no sidewall credit (bottom area only) is 6' for a 2' wide trench and 9' for a 3' wide trench (spacing is measured edge to edge)
- Maximum trench length is 100'
- Maximum pipe depth is 4'

Additional requirements: BAT & LPD (requires Pump Tank/Chamber)

Design septic system Distribution Trenches to be as shallow as possible and still have 3 drainfields.

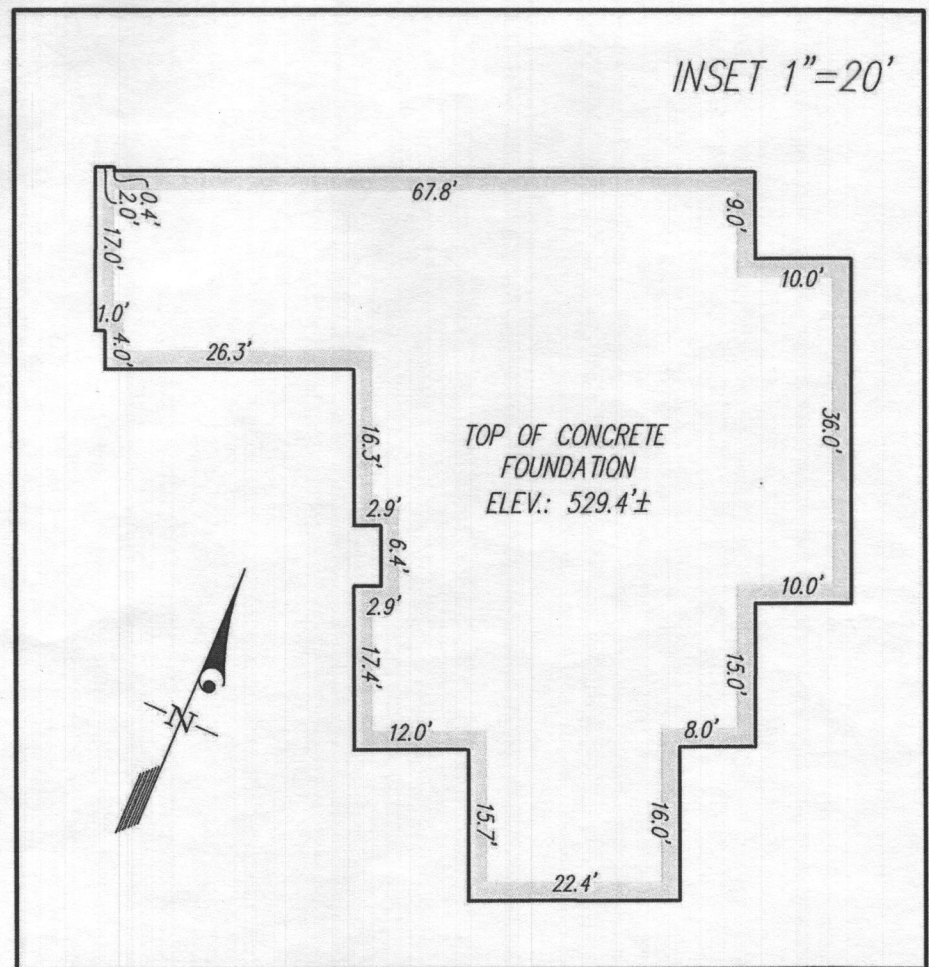
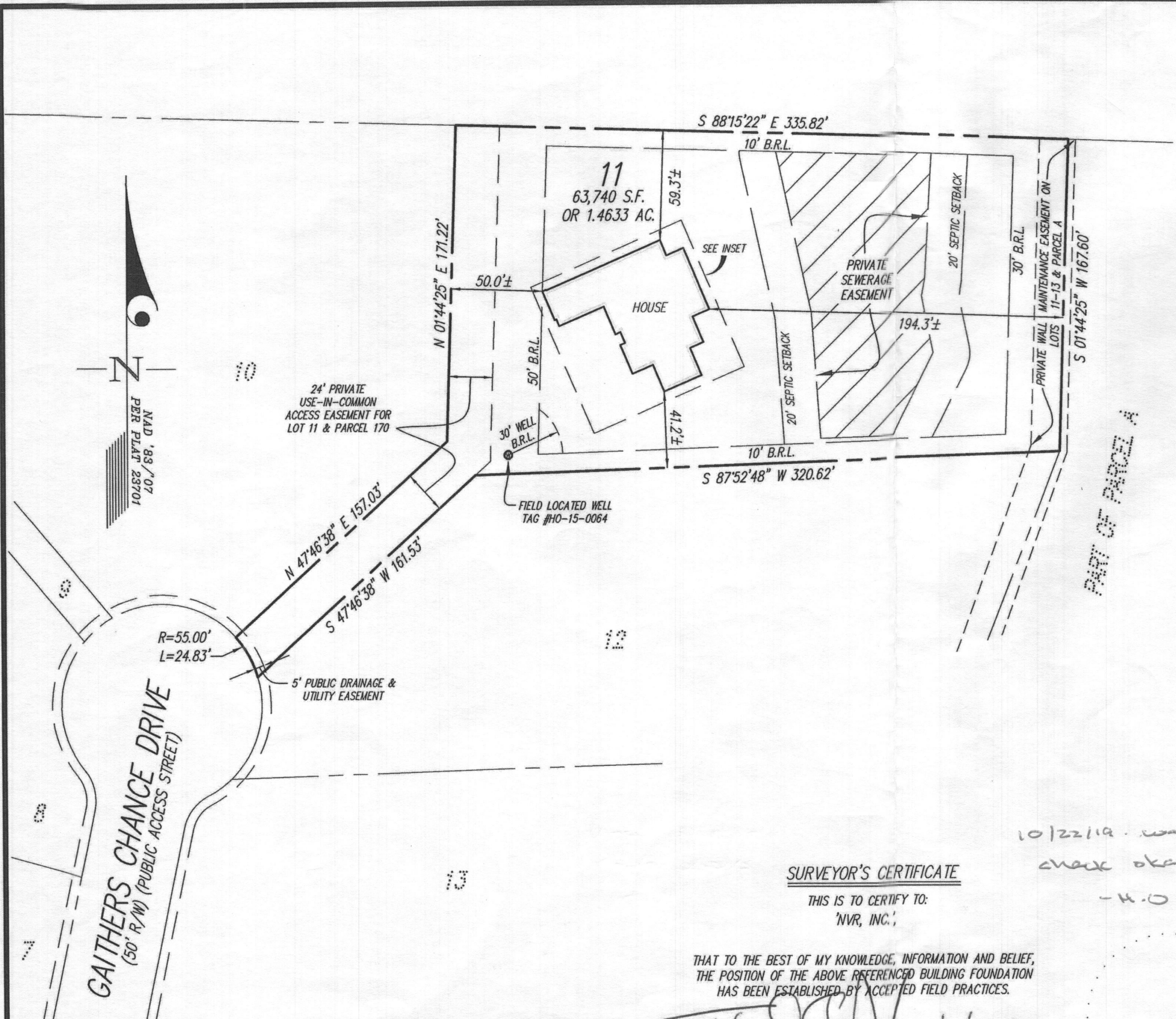
Approved: J. Bicker

Date: 1/29/2016

NOTES:
 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 24027C01300, EFFECTIVE DATE NOVEMBER 6, 2013.

BUILDING SETBACKS (B.R.L.'S) SHOWN HEREON PER PLOT/SEDIMENT CONTROL PLAN. SETBACK DISTANCES SHOWN HEREON AS "±" HAVE AN ACCURACY OF ± 0.1 FOOT.



10/22/19 wall
check okay
-H.O

SURVEYOR'S CERTIFICATE

THIS IS TO CERTIFY TO:
 'NVR, INC.'

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.

[Signature] 10/8/2019
 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)

GAITHER'S CHANCE

LOT 11

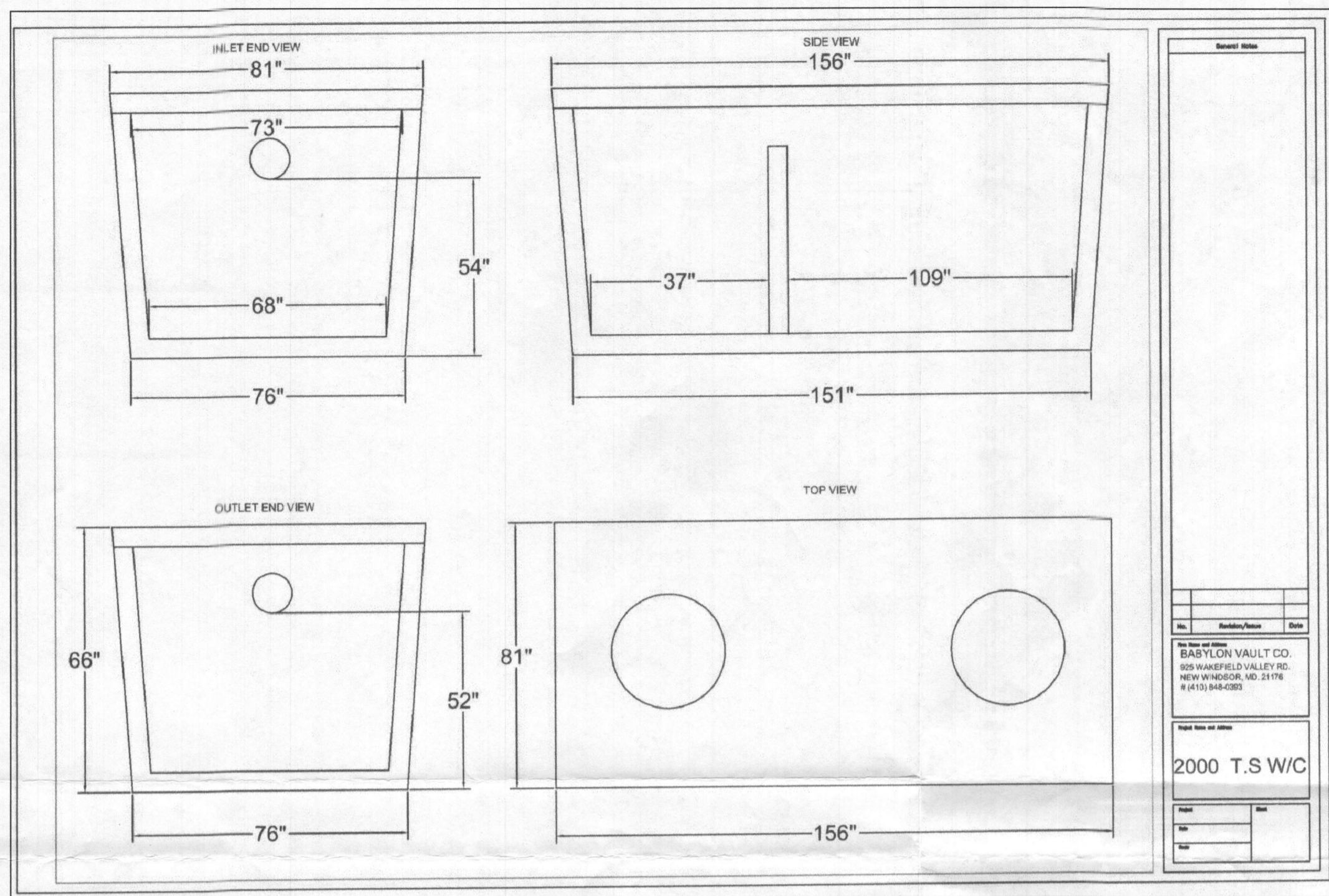
5059 GAITHERS CHANCE DRIVE

HOWARD COUNTY, MARYLAND

DATE OF LATEST FIELD WORK: 10/7/2019 G.L.W. FILE No. 18-065

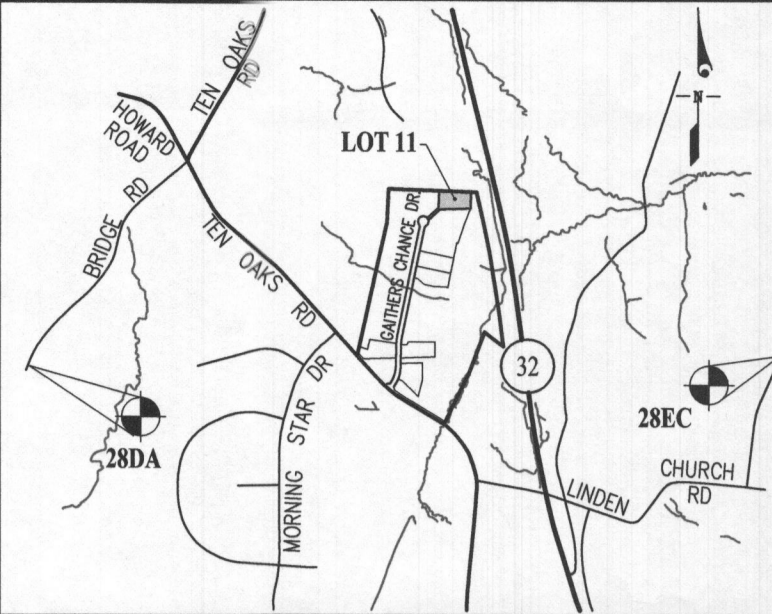
REFERENCE: PLAT BOOK: N/A PLAT No. 23701 SCALE: 1"=50'

 PLANNING ENGINEERING SURVEYING	DES.	PREPARED FOR:
	DRN. MAB	NVR, INC.
	CHK.	9720 PATUXENT WOODS DRIVE COLUMBIA, MD 21046



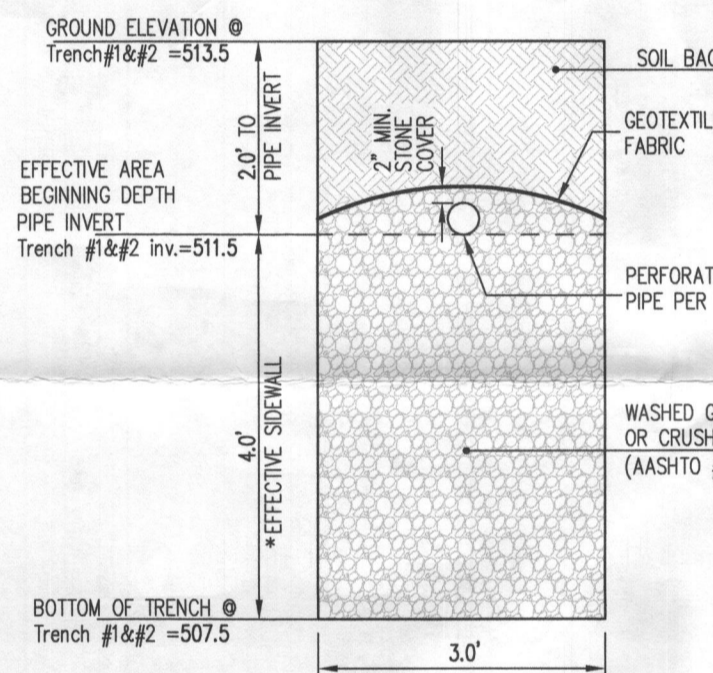
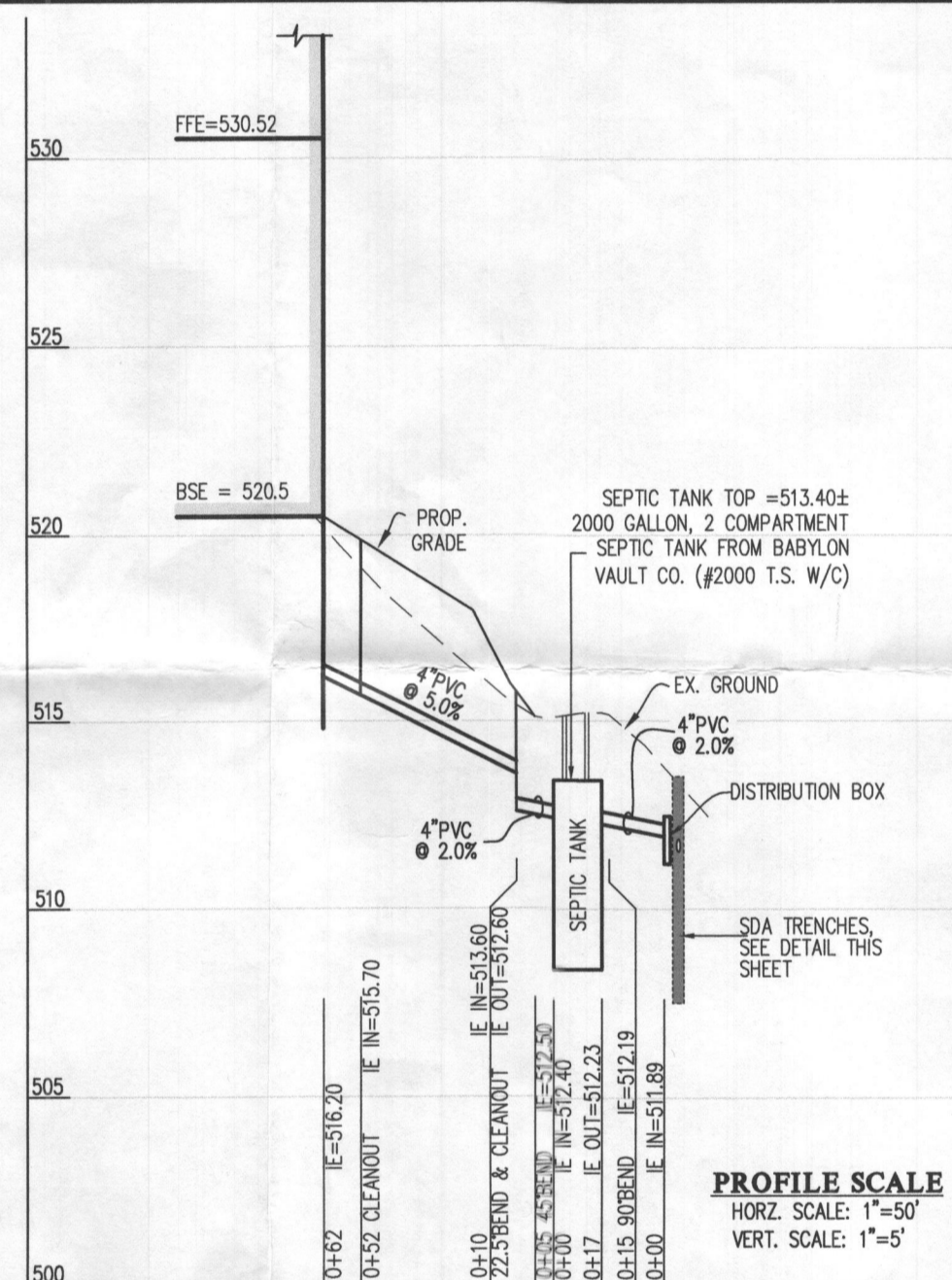
NOTES:

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 EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
3. THE EXISTING WELL (TAG #15-0064) HAS BEEN FIELD LOCATED BY G.L.W. (PROFESSIONAL LAND SURVEYORS) AND IS ACCURATELY SHOWN ON THIS PLAN.
4. ALL WELLS AND SEPTIC SYSTEMS LOCATED WITHIN 100' OF THE PROPERTY BOUNDARIES AND 200' DOWN GRADIENT OF ANY WELLS AND/OR SEPTIC SYSTEMS HAVE BEEN SHOWN.

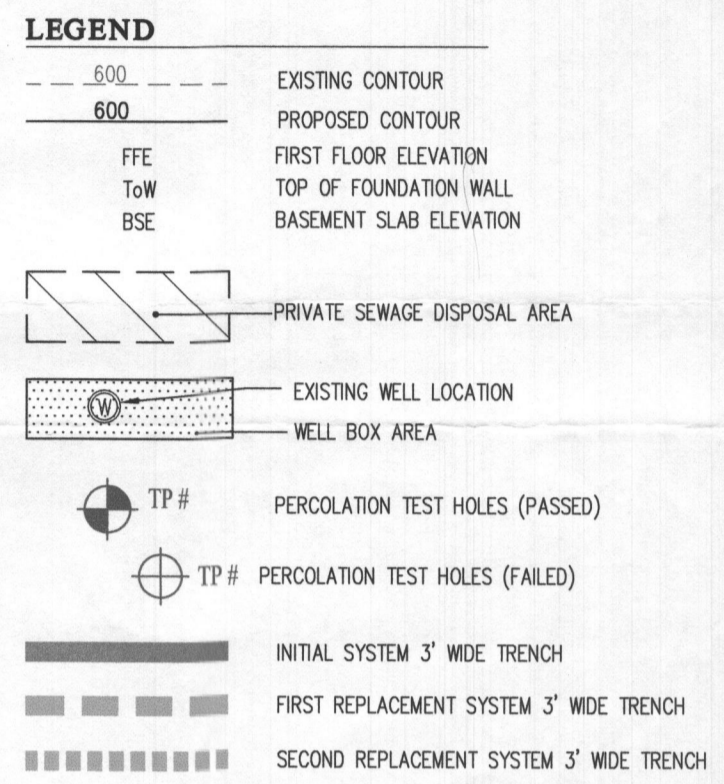
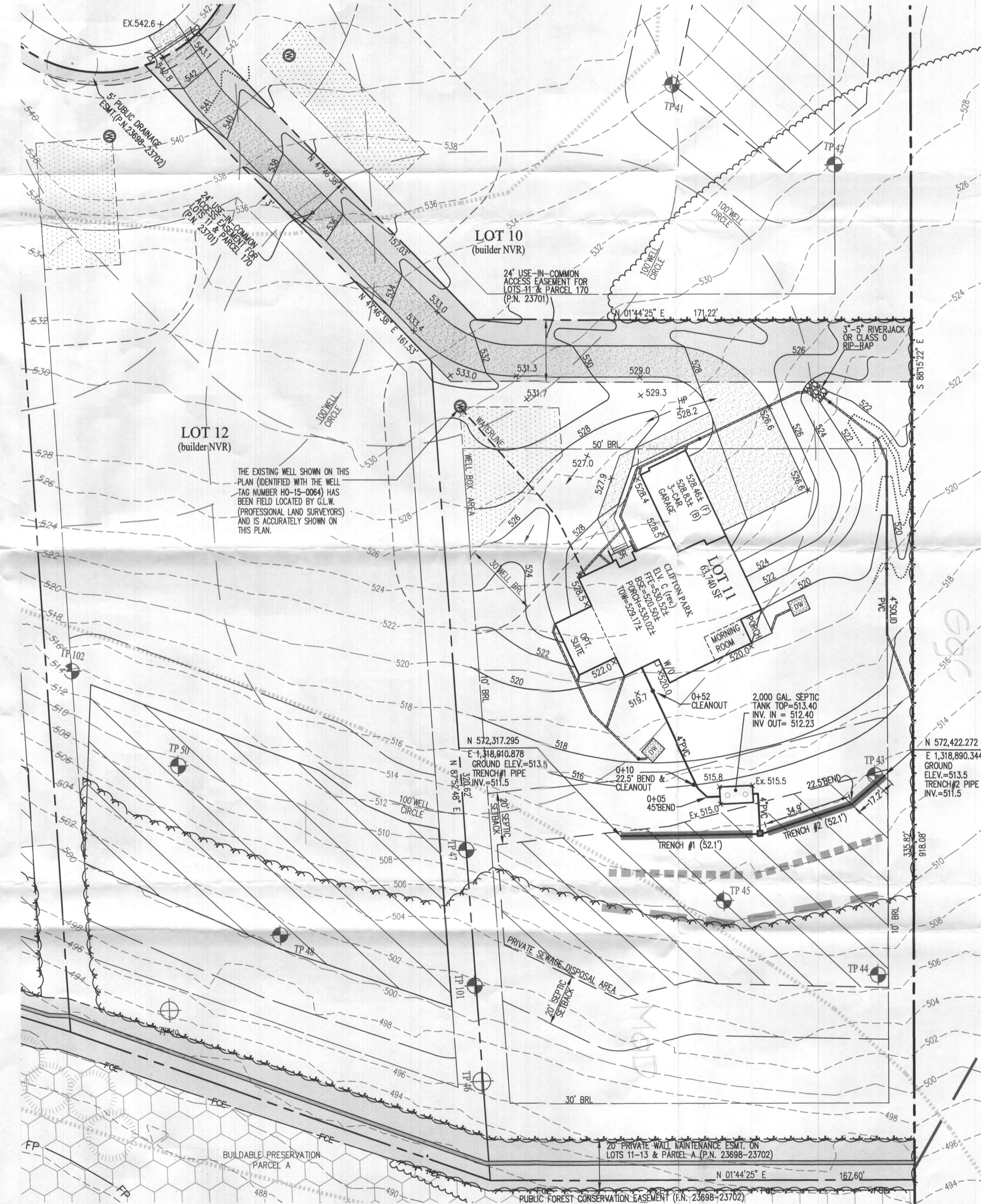


SDA TRENCH SIZE CALCULATIONS

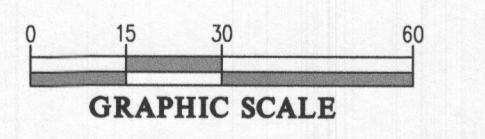
GAITHER'S CHANCE	Lot 11		
System Input Information	Initial System	Replacem't System No.1	Replacem't System No.2
Application Rate	1.2	1.2	1.2
Effective area beginning depth	2	2	3
Effective area maximum bottom depth	6	6	7
Number of Bedrooms	6	6	6
Design flow at 150 gal./day/bedroom	900	900	900
Absorption Trench Calculations			
Drainfield area required (Design flow/application rate)	750	750	750
Effluent pipe depth to invert	2.0	2.0	3.0
Effective sidewall depth "D" Depth between the effective beginning depth or pipe depth (which ever is deeper) and maximum trench bottom.	4	4	4
Trench Width "W" (2 or 3 feet)	3	3	3
Sidewall Reduction Percent = (W+2)/(W+1+2D)	41.67%	41.67%	41.67%
Linear feet of trench required = (drainfield area x sidewall reduction)/W	104.17	104.17	104.17
Trench Layout Information			
Approximate length available on contour & not exceeding 100-ft	100	100	100
Number of trenches to use	2	2	2
Min. length (linear feet)	52.1	52.1	52.1
Total (linear feet)	104.2	104.2	104.2
Minimum Trench Spacing: For trenches with no sidewall credit the spacing is 6' for a 2' wide trench and 9' for a 3' wide trench (measured edge to edge). All trenches utilizing sidewall reduction credit must be spaced a min. of 10' for effective sidewall not over 3.5'. If >3.5', then spacing formula is 2D+W up to a maximum of 38'.			
	11	11	11



GAITHERS CHANCE DRIVE



Approved Septic System Plan
Howard County Health Department
2000-gal septic tank
to gravity drainfield
(6 Bedrooms)
Builder Signature
7/12/2019 Date



GLW
PLANNING | ENGINEERING | SURVEYING
3909 NATIONAL DRIVE | SUITE 250 | BURTONSVILLE, MD 20886 | GLWPA.COM
PHONE: 301-421-4024 | BALT: 410-880-1820 | DC/VA: 301-989-2524 | FAX: 301-421-4186

DESIGNED BY:	DATE	REVISION	BY	APPR.
MBT				
DRAWN BY:				
KLP				
CHECKED BY:				
CKG				

PREPARED FOR:
NVR INC
9720 PATUXENT WOODS DRIVE
COLUMBIA, MARYLAND 21045
PH: 410-379-5956

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE PLANS 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. 12975
EXPIRATION DATE: MAY 26, 2020
7/8/19

ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN
GAITHER'S CHANCE
LOT 11 (5059 Gaithers Chance Drive)
PLAT No. 23699
ELECTION DISTRICT No. 5
HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1"=30'	RR-DEO	13070
DATE	TAX MAP - GRID	SHEET
JULY 2019	28-8,9,14&15	1 OF 1