**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.orgFacebook: www.facebook.com/hocohealth

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

RECEIPT DATE: 10/2/18**ONSITE SEWAGE DISPOSAL SYSTEM**P 564016APPROVAL DATE: 11/1/18 SEC**PERMIT: CONSTRUCTION**

A

PROPERTY ADDRESS: 13810 Mill Creek CourtSUBDIVISION: Crawford and O'Keefe Property (Mill Creek) LOT: 2 TAX ID: 05-600760CONTRACTOR: South Carroll Backhoe EMAIL: scbackhoe@comcast.comCONTRACTOR ADDRESS: 4410 Salem Bottom Road, Westminster, MD 21157 PHONE: 410-596-3618PROPERTY OWNER: NVR INC. EMAIL:OWNER ADDRESS: 9720 Patuxent Woods Drive, Columbia, MD 21046 PHONE: 410-379-5956SEPTIC TANK SIZE (GALLONS): 2000 TANK MANUFACTURER: Mayer Brothers or EquivalentPUMP MODEL: N/A PUMP SIZE: N/A PUMP TANK CAPACITY: N/ADISTRIBUTION SYSTEM: ☒ GRAVITY ☐ PRESSURE DOSED BEDROOMS: 6 APPLICATION RATE: 1.2

TRENCHES:	LINEAR FEET REQUIRED: <u>156.3</u>	INLET DEPTH: <u>3/4</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 TANK LOCATIONS MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	
NOTES:		

ISSUED BY: Dana BernardISSUE DATE: 10/2/18EXPIRATION DATE: 10/2/19

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 DOWNGRAIDENT 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

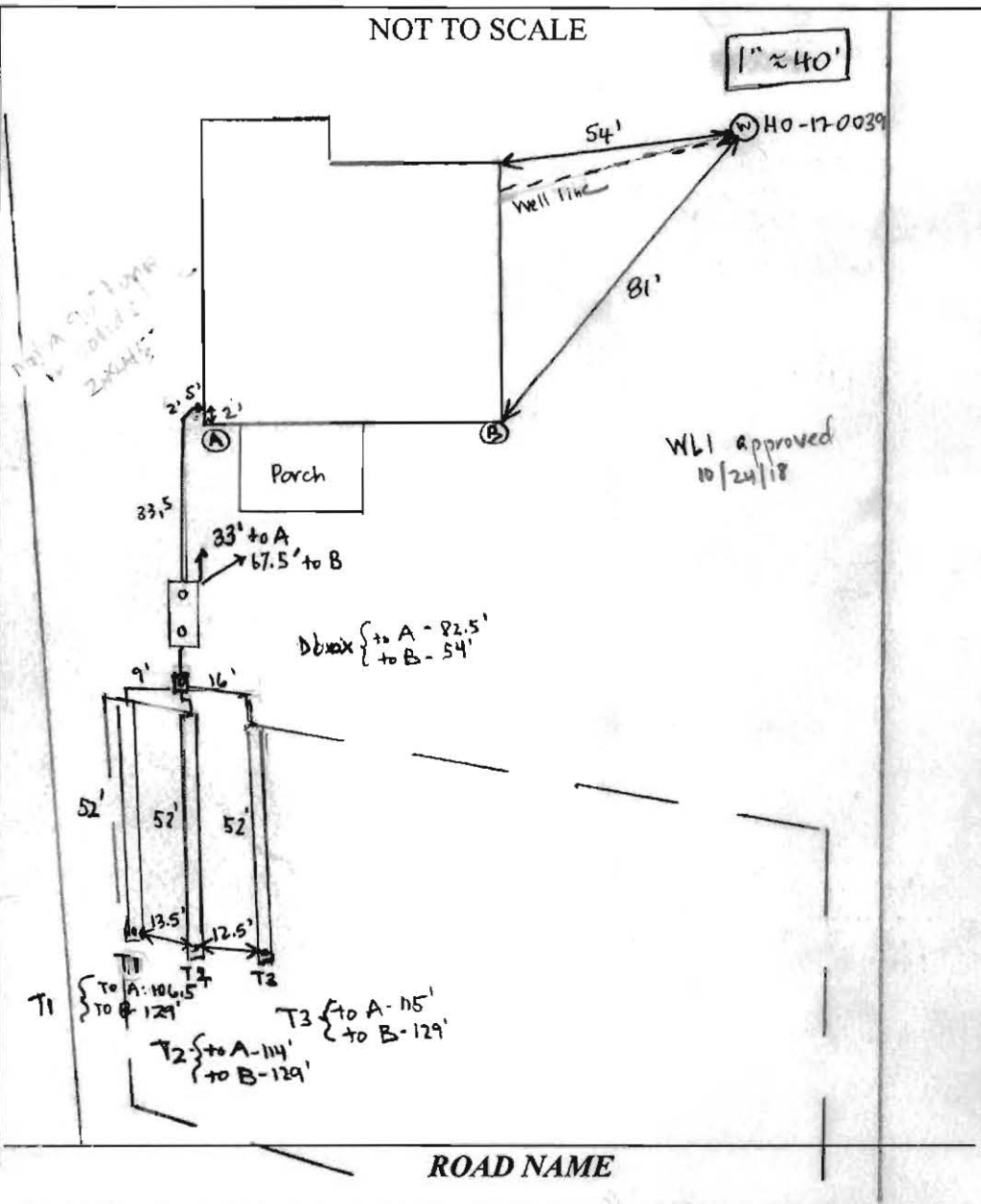
NOTE: MDE RECOMMENDS SEPTIC TANKS, BAT, AND OTHER PRETREATMENT UNITS BE PUMPED AT A FREQUENCY ADEQUATE TO ENSURE THAT SOLIDS ARE NOT DISCHARGED TO THE DISPOSAL AREA

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



TRENCH/DRAIN/FIELD DATA

WIDTH	INLET	BOTTOM
3'	4'	8'
NUMBER OF TRENCHES <u>3</u>		
TOTAL LENGTH <u>156'</u>		
ABSORPTION AREA <u>468 ft² + Side Wall</u>		
DISTRIBUTION BOX LEVEL <u>yes</u>		
DISTRIBUTION BOX BAFFLE <u>yes</u>		
DISTRIBUTION BOX PORT <u>yes</u>		

SEPTIC TANK DATA

SEPTIC TANK LEVEL	<u>yes</u>
MANUFACTURER	<u>Baby Ion</u>
CAPACITY	<u>2000</u> GAL
SEAM LOC	<u>top</u>
TANK LID DEPTH	<u>2'</u>
BAFFLES	<u>Front 6" / Back 4"</u>
BAFFLE FILTER	<u>-</u>
MANHOLE LOC	<u>front / back</u>
6" PORT LOC	<u>-</u>
WATERTIGHT TEST	<u>-</u>
SLOTTED	<u>yes</u>
DATE ON LID	<u>9/5/18</u>

PUMP/SEPTIC TANK LEVEL

MANUFACTURER	
CAPACITY	
SEAM LOC	
TANK LID DEPTH	
BAFFLES	
BAFFLE FILTER	
MANHOLE LOC	
6" PORT LOC	
WATERTIGHT TEST	
SLOTTED	
DATE ON LID	

PRE-CONSTRUCTION:

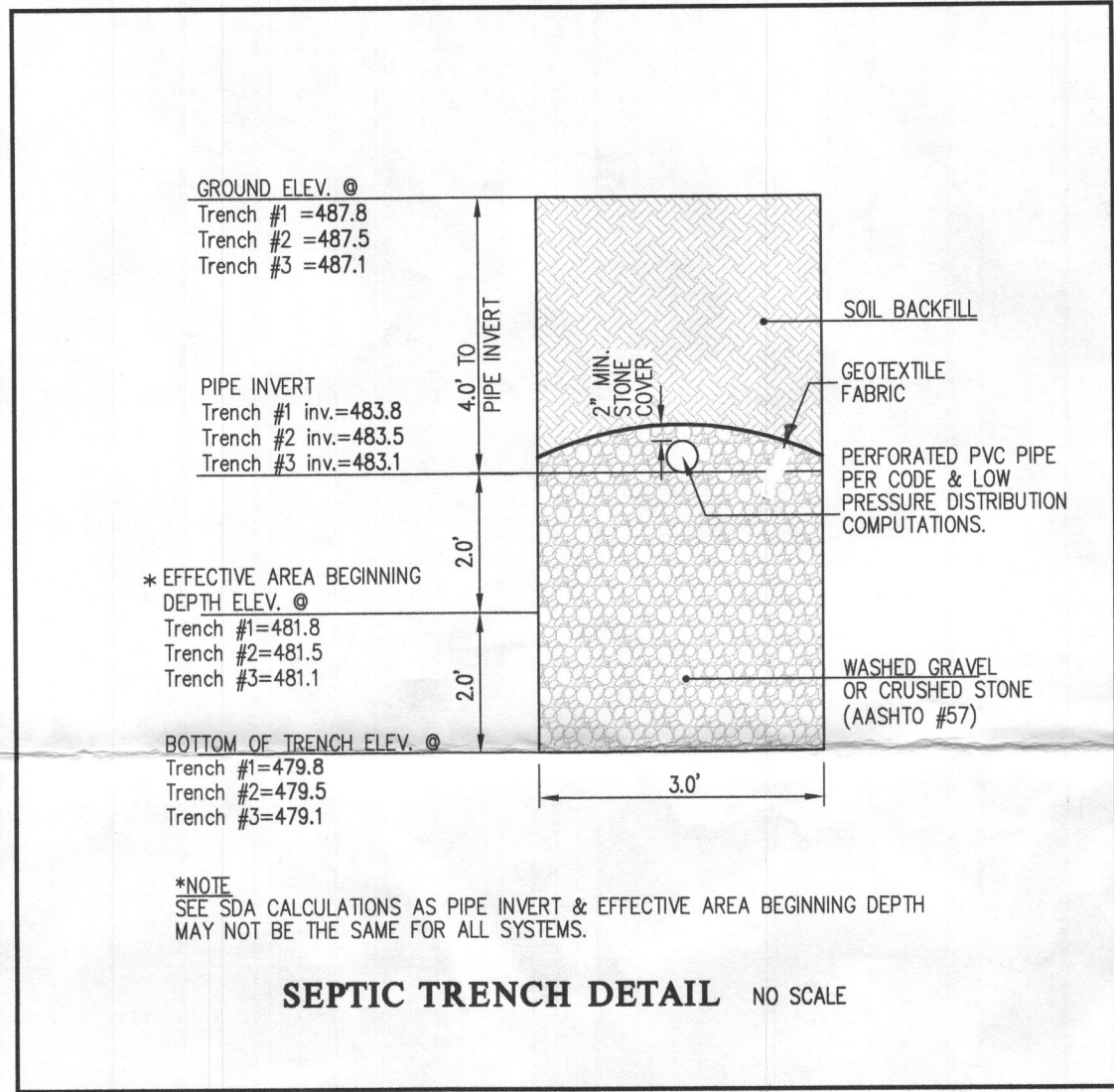
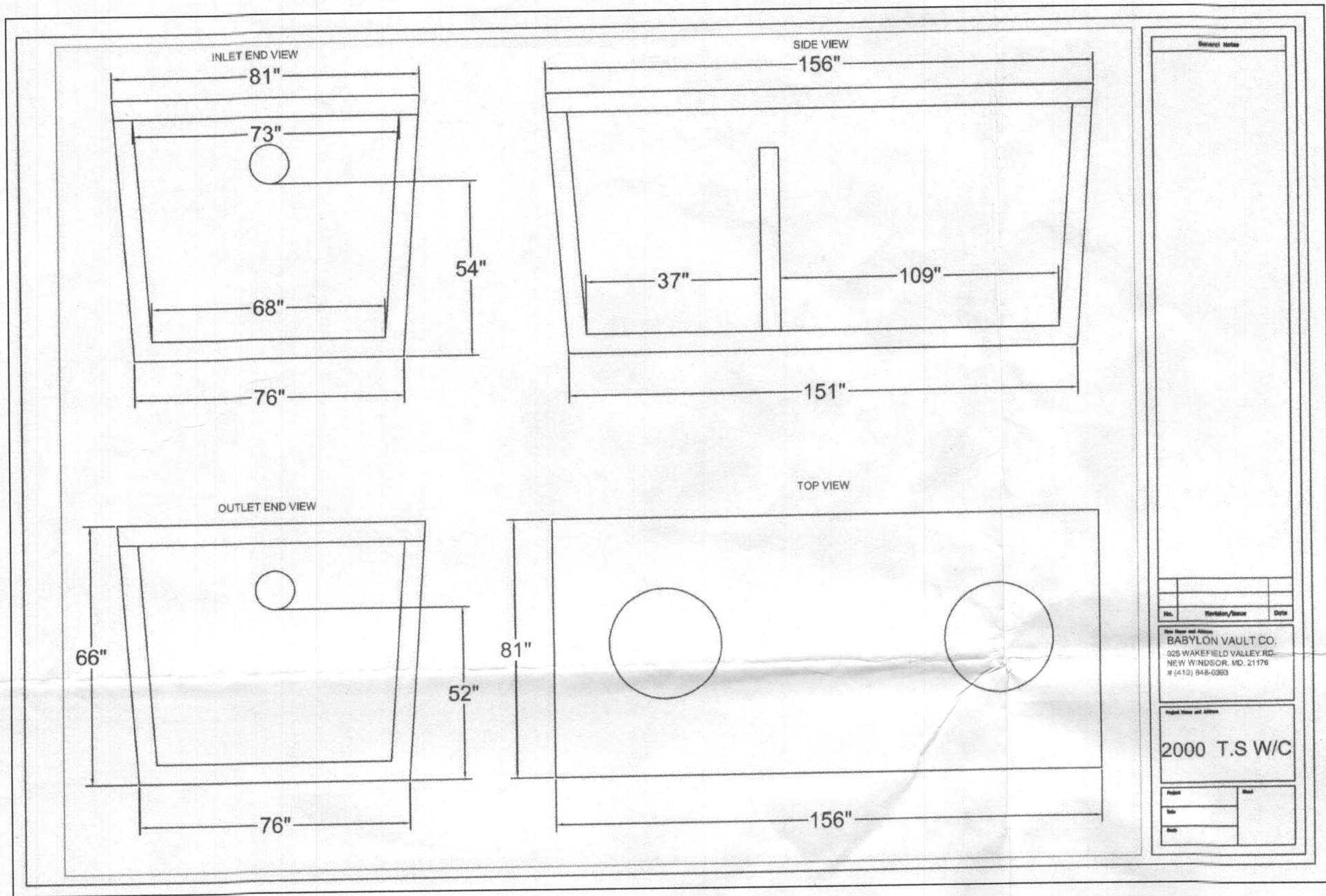
10/19/18 Met S. Carroll on site for layout. SDA corner stakes + tank stake present. Shot contour + laid out 3x52' trenches. (SC)

INSTALLATION:

10/22/18 - Site visit contractor on site. Septic tank in the ground and working on 1st trench (T1), Solids line to the tank installed but SHC not completed yet, stone looks good. T1 trench has 8' bottom and the inlet will be at 4', there was a T1 side wall collapse due to an old perc hole, verified date on tank but forgot to write down on permit, slot in tank verified by contractor 6" baffle on front end of tank and 4" baffle on back end, contractor adding stone to T1 trench and observation pipe in place, will leave ends open for inspection tomorrow. (RA) 10/20/18 - site visit contractor on site, system install is completed except for SHC, trenches 10' ETE, all observation pipes in place, levelers in dbx are good for even distribution, OK to backfill + NOTE: SHC needed for final. (RP)

11/1/18 House connection made. (SC)

FINAL INSPECTOR Sarah Collins DATE OF APPROVAL 11/1/18



SDA TRENCH SIZE CALCULATIONS

Crawford Subdivison (Mill Creek)

Lot 2

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	6.0	5.0	4.0
Effective area maximum bottom depth	8.0	8.0	8.0
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 s.f.	750 s.f.	750 s.f.
Effluent pipe depth to invert (cannot exceed 4'. If < 2', then field run topo at 1-ft interval is required).	4.0	4.0	4.0
Effective sidewall depth "D" = depth between the effective beginning depth or pipe depth (which ever is deeper) and maximum trench bottom.	2.0	3.0	4.0
Trench Width "W" (2 or 3 feet)	3.0	3.0	3.0
Sidewall Reduction Percent = $(W+2)/(W+1+2D)$	62.50%	50.00%	41.67%
Linear feet of trench required = (drainfield area x sidewall reduction)/W	156.3	125.0	104.2

Trench Layout Information

Number of trenches to use	3	2	2
Min. length (linear feet)	52.1	62.5	52.1
Total (linear feet)	156.3	125.0	104.2
Minium Trench Spacing :	10.0	10.0	11.0

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 18'.

Approved Septic System Plan
Howard County Health Department
DBurns
Signature Date 8-6-18

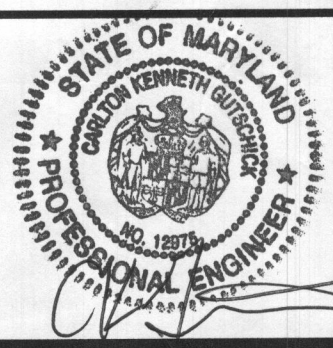
DESIGNED BY: MBT					
DRAWN BY: KLP					
CHECKED BY: CKG					
DATE	REVISION	BY	APP'R		

PREPARED FOR:

NVR INC.
9720 PATUXENT WOODS DRIVE
COLUMBIA, MARYLAND 21046
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. 12875
EXPIRATION DATE: MAY 28, 2020
7/24/18



ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN

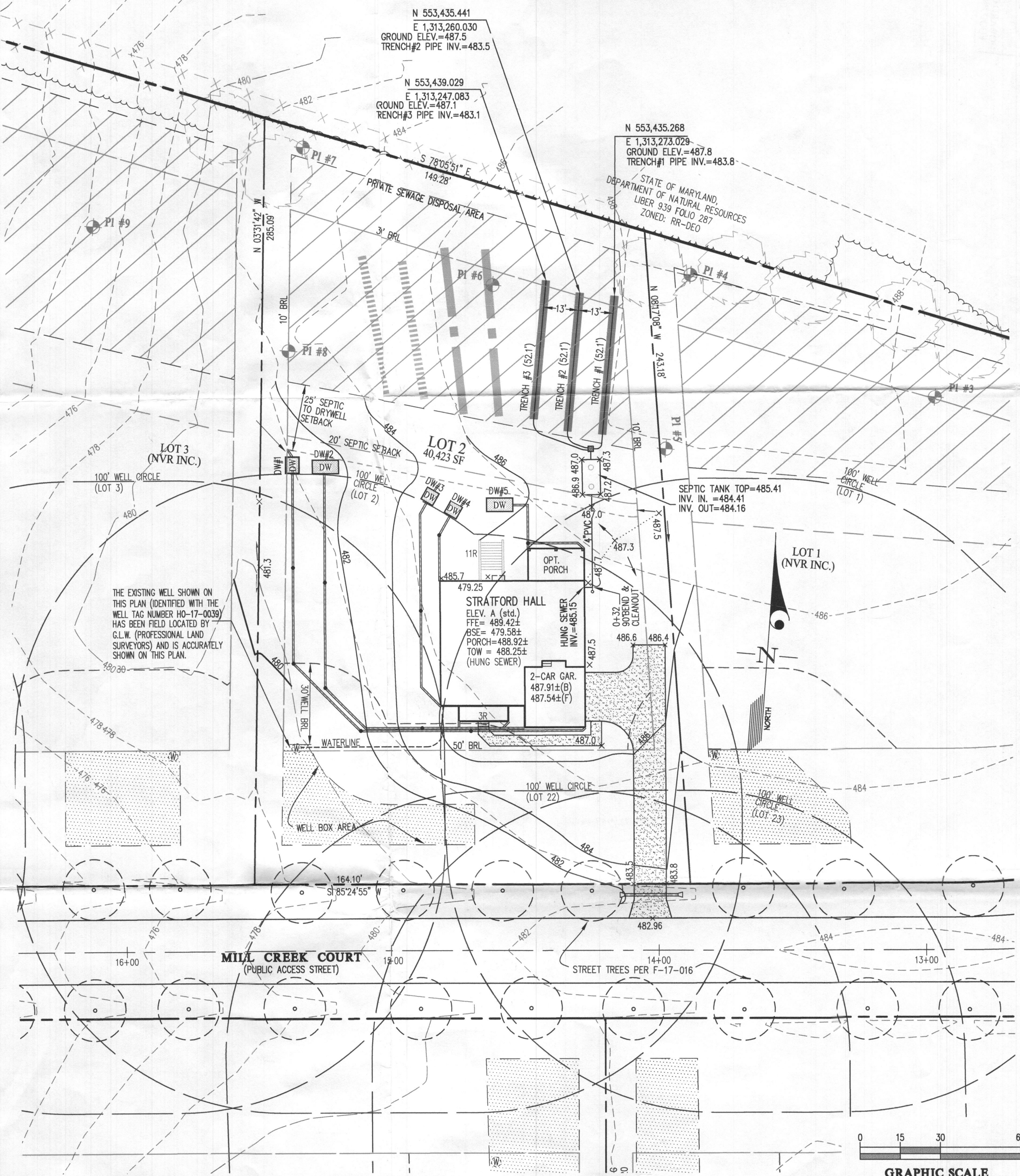
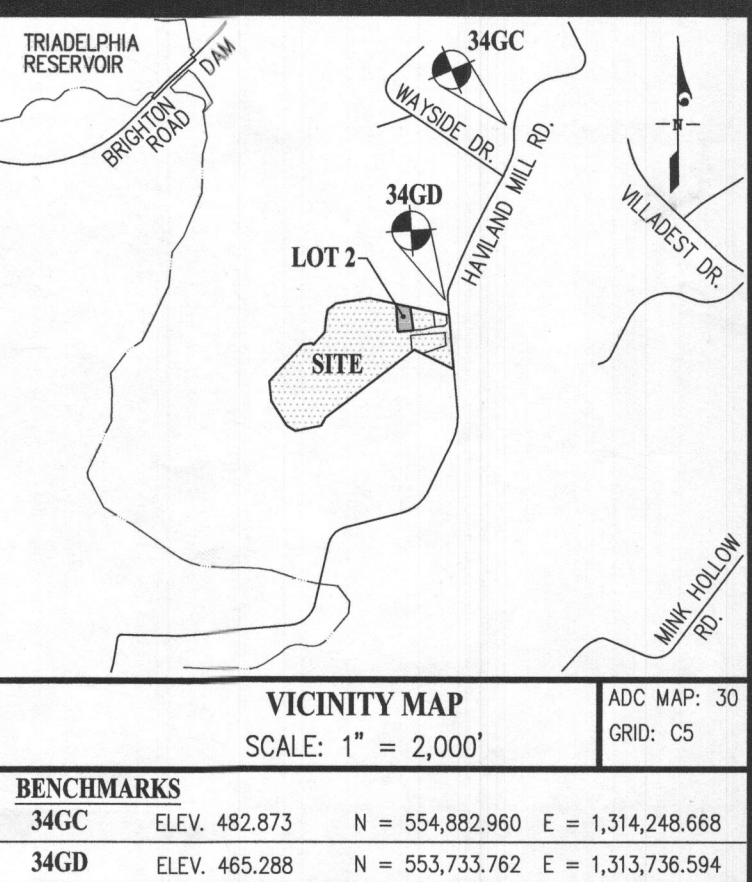
CRAWFORD SUBDIVISION
LOT 2 (13801 MILL CREEK COURT)
PLAT No. 24600-24607

ELECTION DISTRICT No. 5

HOWARD COUNTY, MARYLAND

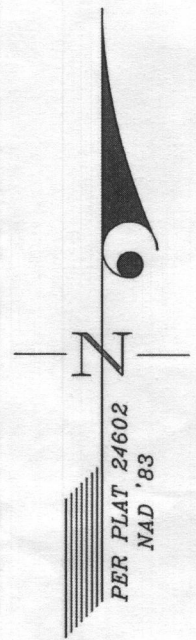
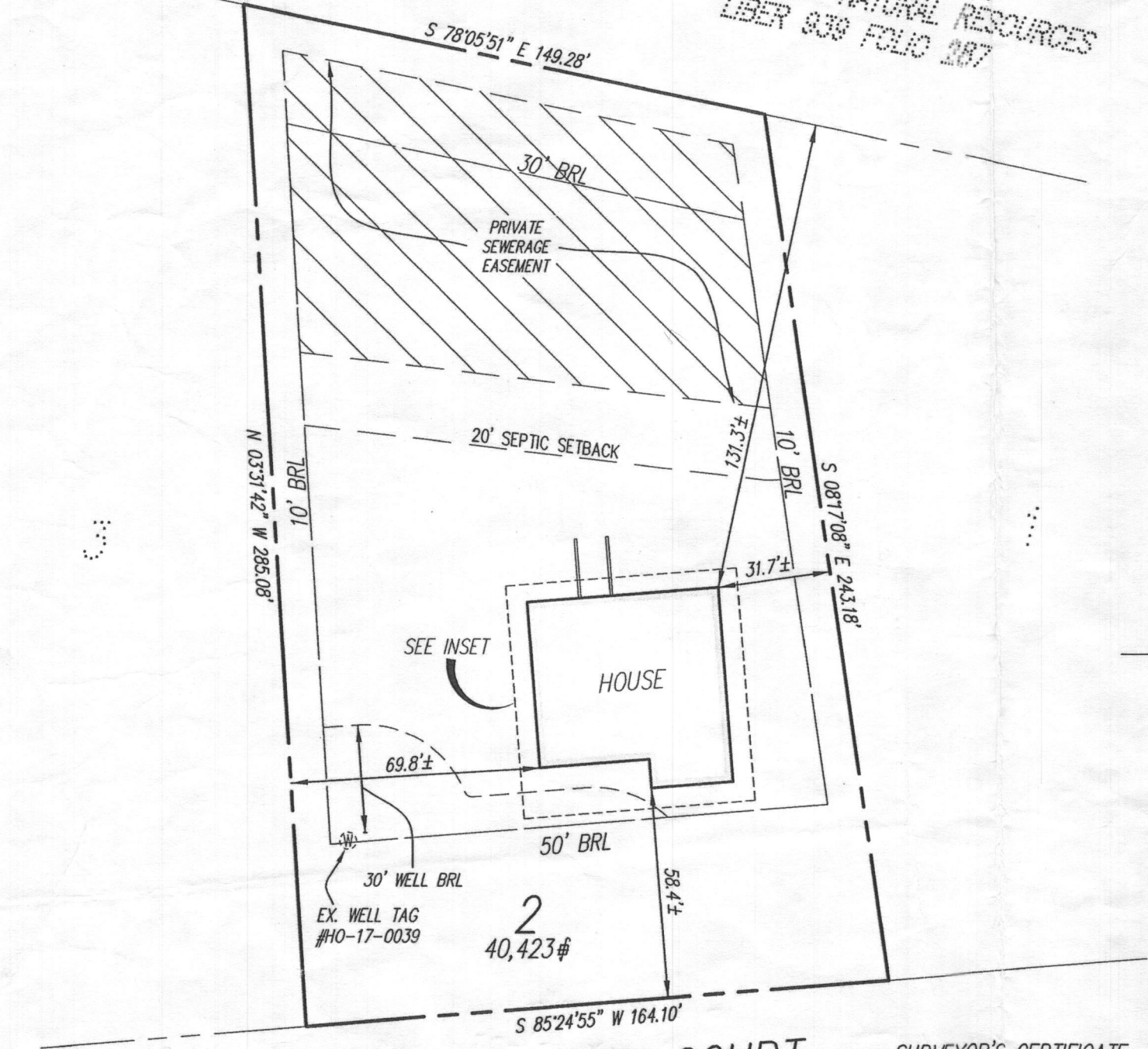
SCALE 1"=30'	ZONING RR-DEO	G. L. W. FILE No. 17071
DATE JULY 2018	TAX MAP - GRID 34&39-19&6	SHEET 1 OF 1

LEGEND	
---	EXISTING CONTOUR
---	PROPOSED CONTOUR
---	FIRST FLOOR ELEVATION
---	TOW
---	BSE
---	PRIVATE SEWAGE DISPOSAL AREA
---	INITIAL SYSTEM 3' WIDE TRENCH
---	1st REPLACEMENT SYSTEM TRENCH
---	2nd REPLACEMENT SYSTEM TRENCH
P #	PERCOLATION TEST HOLES (PASSED)
⊕ P#	PERCOLATION TEST HOLES (FAILED)
⊙	EXISTING WELL LOCATION



S:\Survey Drawings\WALLCHECK\MILL CREEK-17071WCK\17071WCK-2.dwg, 9/19/2018 2:27:35 PM, morganb, 5501_SURVEY (COLOR).pc3, 1:1

STATE OF MARYLAND
DEPARTMENT OF NATURAL RESOURCES
LIBER 939 FOLIO 207



MILL CREEK COURT
(PUBLIC ACCESS STREET)

SURVEYOR'S CERTIFICATE

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

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

[Signature] 9/19/2018
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.

NOTES:

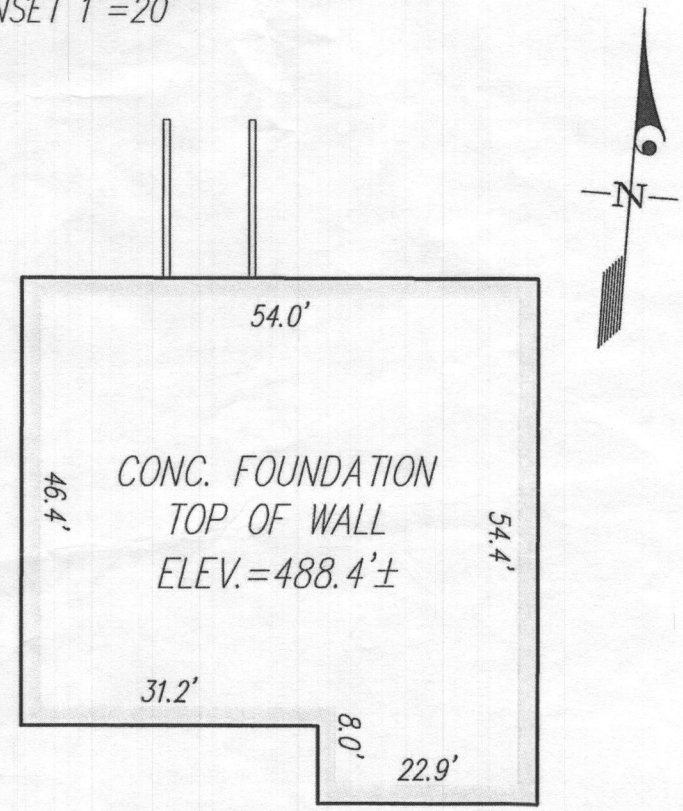
THIS WALLCHECK WAS PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE REPORT.
THIS PROPERTY IS SUBJECT TO ANY AND ALL EASEMENTS, RIGHTS-OF-WAY, COVENANTS,
AND RESTRICTIONS, ETC. OF RECORD, SOME OR ALL OF WHICH MAY OR MAY NOT BE
SHOWN AND/OR REFERENCED HEREON. BEARINGS AND DISTANCES OF THE PROPERTY
BOUNDARY 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 24027C0140D, EFFECTIVE DATE NOVEMBER 6, 2013.

BUILDING SETBACKS (B.R.L.'S) SHOWN HEREON PER PLOT 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'



WALLCHECK
(SPECIAL PURPOSE SURVEY)

CRAWFORD SUBDIVISION

LOT 2
13810 MILL CREEK COURT

HOWARD COUNTY, MARYLAND

DATE OF LATEST FIELD WORK: 9/18/2018

G.L.W. FILE No. 17071

REFERENCE : PLAT No.: 24602

SCALE: 1"=50'

