

**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: 7/1/2019 **ONSITE SEWAGE DISPOSAL SYSTEM** P 565539  
 APPROVAL DATE: 07/22/2019 **PERMIT: CONSTRUCTION** A \_\_\_\_\_  
 PROPERTY ADDRESS: 7407 HAVEN COURT  
 SUBDIVISION: ESTATES AT SCHOOLEY MILL LOT: 'A' TAX ID: 05-600718  
 CONTRACTOR: \_\_\_\_\_ EMAIL: \_\_\_\_\_  
 CONTRACTOR ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_  
 PROPERTY OWNER: WBG ESM LLC (WILLIAMSBURG GROUP, LLC) EMAIL: bmcbride@williamsburggroup.com  
 OWNER ADDRESS: 5485 HARPER'S FARM ROAD, COLUMBIA, MD 21044 PHONE: (410)997-8800  
 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: 6 APPLICATION RATE: 0.8

TRENCHES:	LINEAR FEET REQUIRED: <u>208.5</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>10.0</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>3.5</u>
LOCATION:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND TANK LOCATIONS MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	
NOTES:	Install SHC with cleanouts per plan. <u>3x 70' TRENCHES</u>	

ISSUED BY: R BRICKER ISSUE DATE: 7/1/2019 EXPIRATION DATE: 7/1/2020

- 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  
 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.**

NOT TO SCALE

SEE ATTACHED  
AS BUILT

ROAD NAME

**TRENCH/DRAINFIELD DATA**

WIDTH	INLET	BOTTOM
3'	2'	6'
NUMBER OF TRENCHES		3
TOTAL LENGTH		216 F
ABSORPTION AREA		648 SF
DISTRIBUTION BOX LEVEL		SPEED
DISTRIBUTION BOX BAFFLE		YES
DISTRIBUTION BOX PORT		YES

**SEPTIC TANK DATA**

SEPTIC TANK 1 LEVEL YES  
 MANUFACTURER BABYLON  
 CAPACITY 2000 GAL  
 SEAM LOC TOP  
 TANK LID DEPTH <3'  
 BAFFLES YES  
 BAFFLE FILTER NO  
 MANHOLE LOC FRONT/BACK  
 6" PORT LOC -  
 WATERTIGHT TEST -  
 SLOTTED YES  
 DATE ON LID 05/27/2019

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:

7/8/2019 TANK, S/A, TRENCHES STAKED. CONTOUR CONFIRMED. MIDDLE TRENCH HAS KNOLL ON PROXIMAL END. DIG ALL TRENCHES LASER LEVEL FROM DISTAL END (2)

INSTALLATION:

7/19/2019 TRENCH AND D BOX SET. TRENCH INVERT @ 3'. (CA) RAISE I/O TO 2'. BOTTOM TRENCH AND HALF OF MID CONSTRUCTED. CORRECTIVE ACTION RISK MINIMAL. (2) 7/22/2019 TRENCHES CORRECTED. TANK INSTALLED. SHC + SEWER LINE COMPLETE. (2)

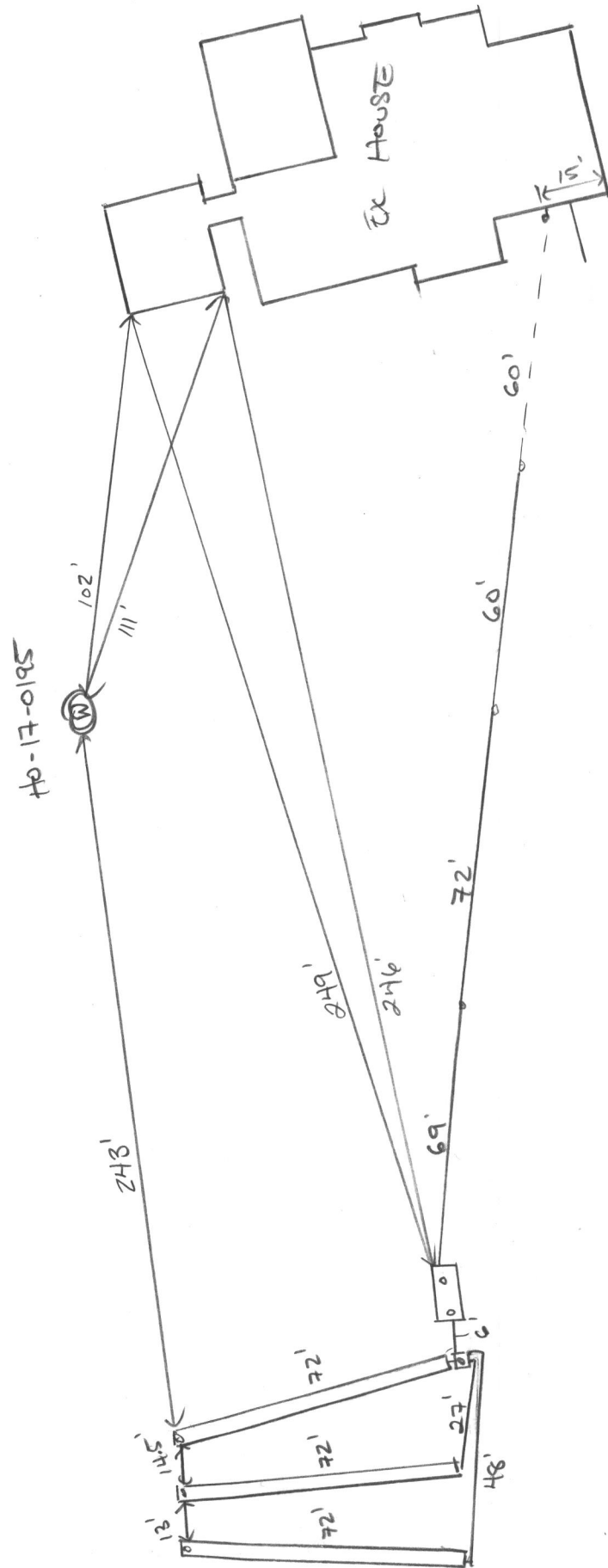
FINAL INSPECTOR

DATE OF APPROVAL

07/22/2019

# HAVEN COURT

NOT TO SCALE



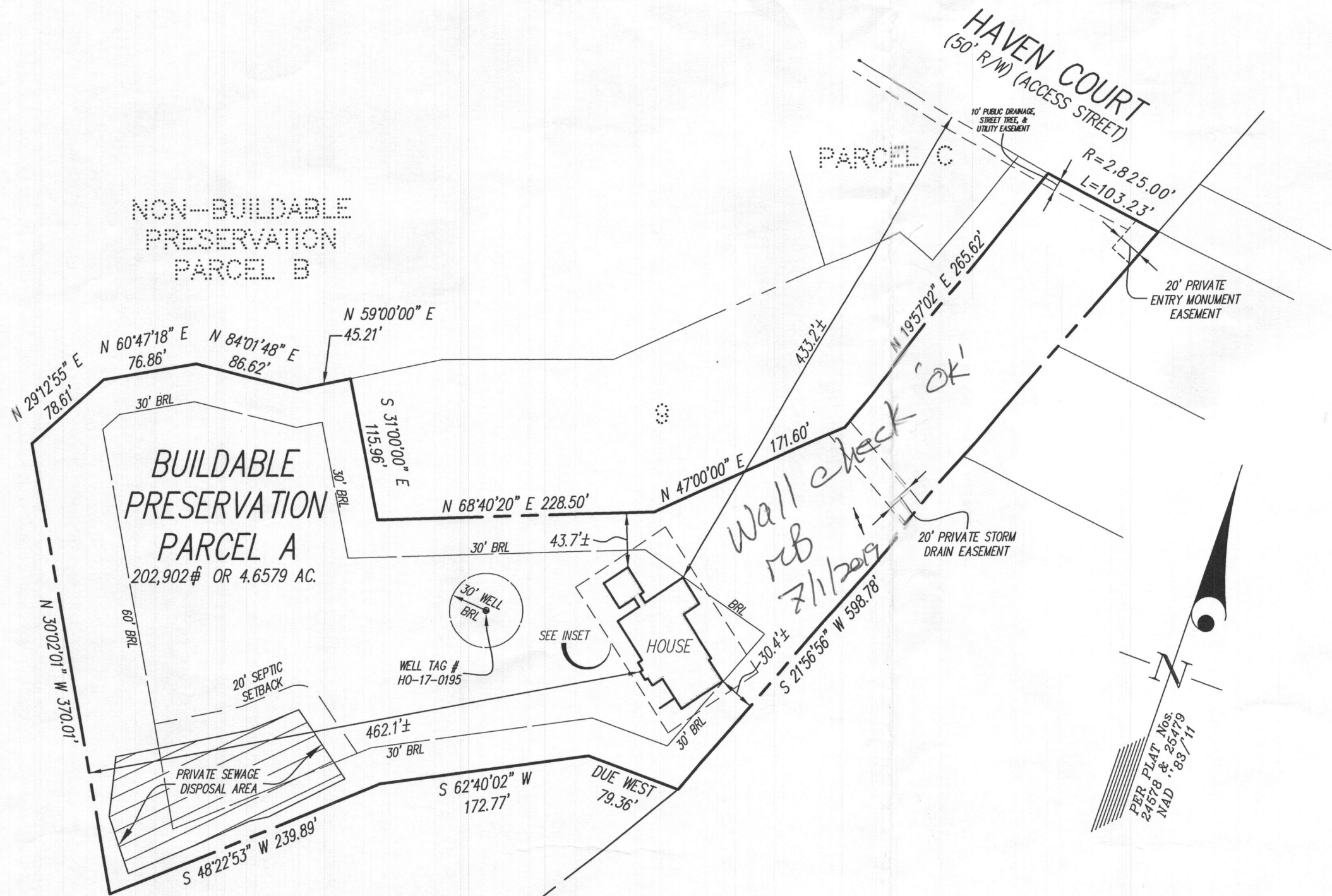
NOTES:

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.

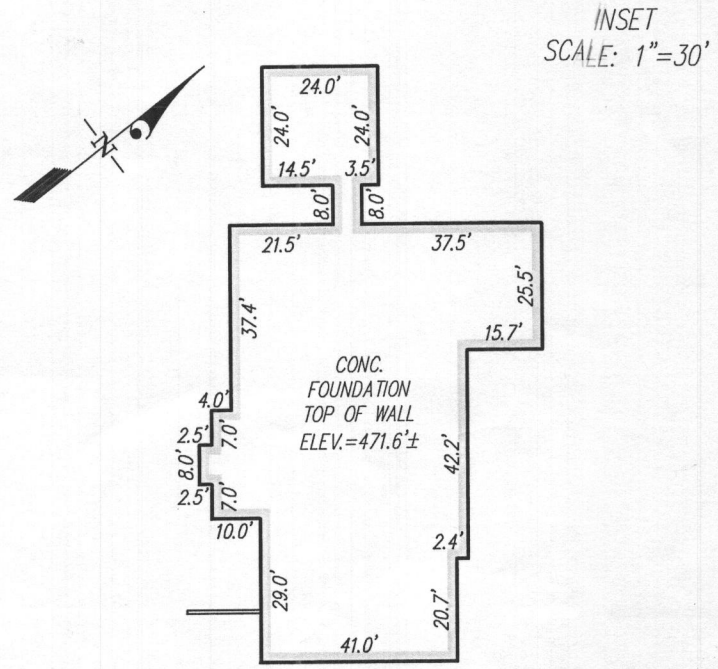
HIS IS NOT A "LOCATION DRAWING" AND IS NOT TO BE USED FOR SETTLEMENT PURPOSES.

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 NO. 24027C0140D, EFFECTIVE DATE NOVEMBER 6, 2013.

BUILDING SETBACKS (BRL's) SHOWN HEREON PER PLAT Nos. 24578 & 25479. WELL & SEPTIC SETBACK's (BRL'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.



Handwritten note: "Wall check OK" with initials "rb" and date "7/1/2019".



INSET SCALE: 1"=30'

SURVEYOR'S CERTIFICATE

THIS IS TO CERTIFY TO:  
'WILLIAMSBURG GROUP, 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.

*[Signature]* 3/26/2019  
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)

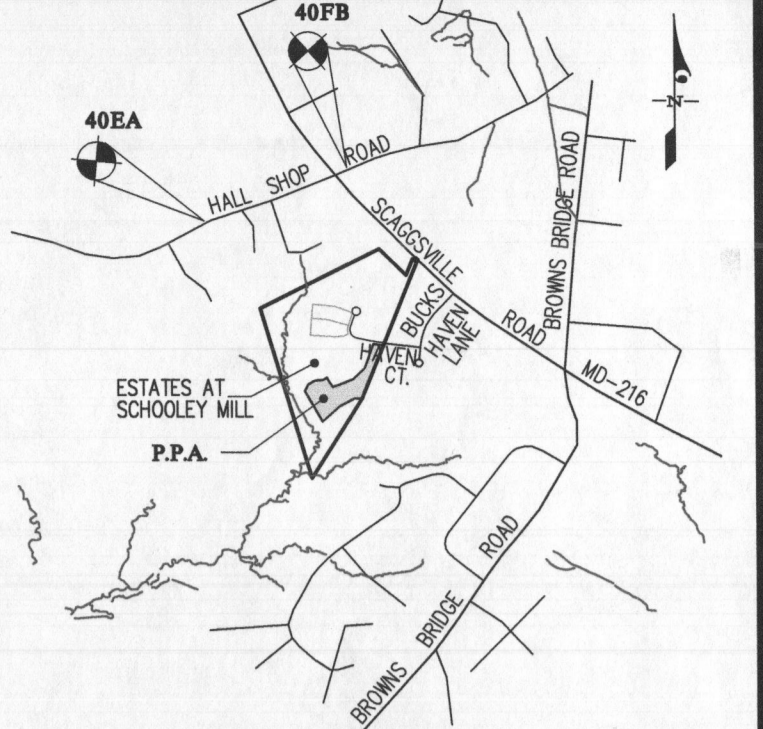
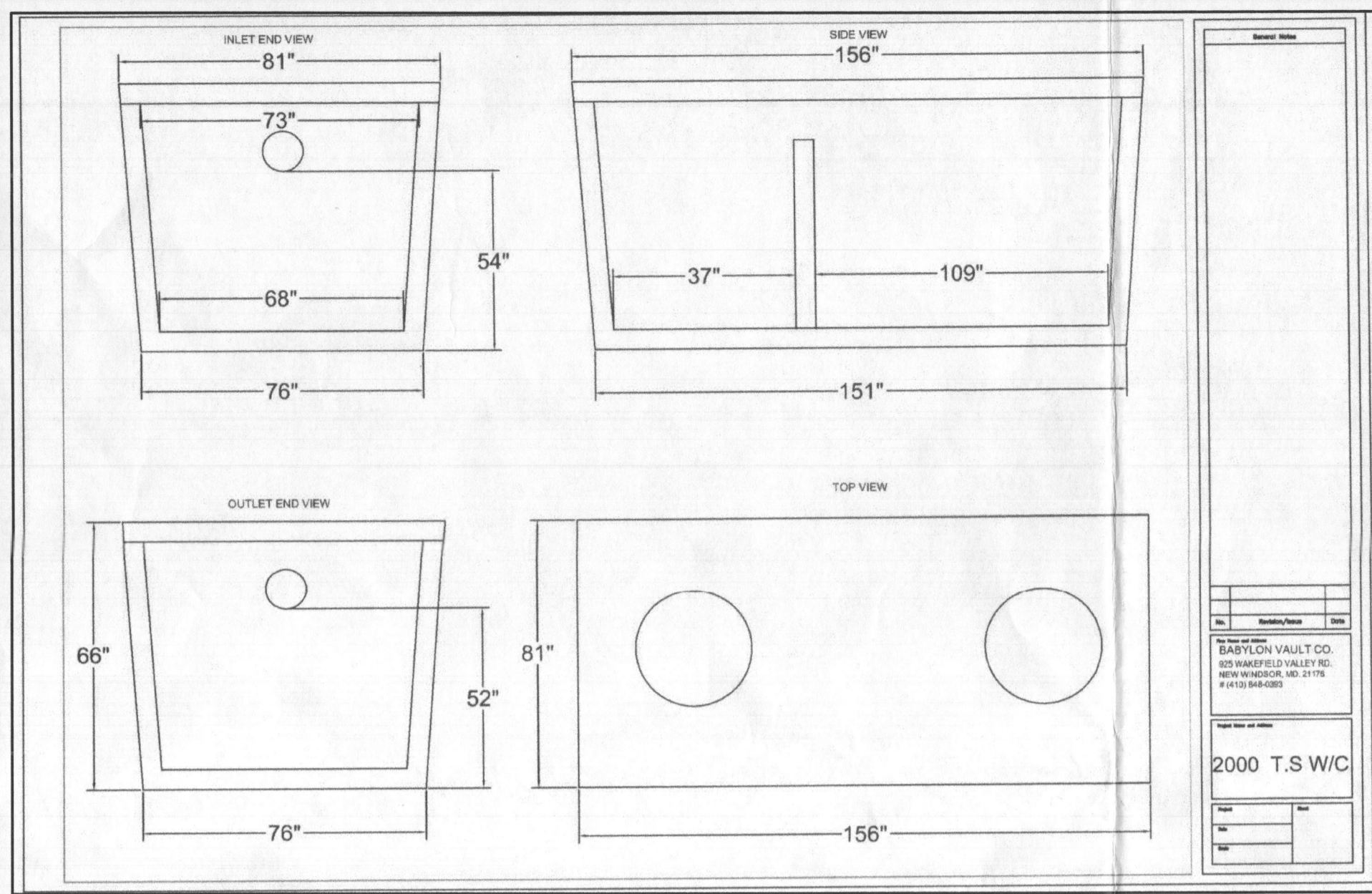
ESTATES AT SCHOOLEY MILL  
BUILDABLE PRESERVATION PARCEL A  
7407 HAVEN COURT

HOWARD COUNTY, MARYLAND	
DATE OF LATEST WORK: 3/22/2019	G.L.W. FILE No. 17-061
REFERENCE: PLAT No.: 24578 & 24579	SCALE: 1"=100'



3909 NATIONAL DRIVE | SUITE 250 | BURTONSVILLE, MD 20886 | GLWPA.COM  
PHONE: 301-421-4024 | BALT: 410-880-1620 | DC&VA: 301-889-2524 | FAX: 301-421-4188

DES.	PREPARED FOR: WILLIAMSBURG GROUP, LLC 5485 HAPERS FARM RD SUITE 200 COLUMBIA, MD 21044
DRN. MAB	RODGER HENRITZ (410) 997-8800
CHK.	



**VICINITY MAP**  
SCALE: 1" = 2,000'

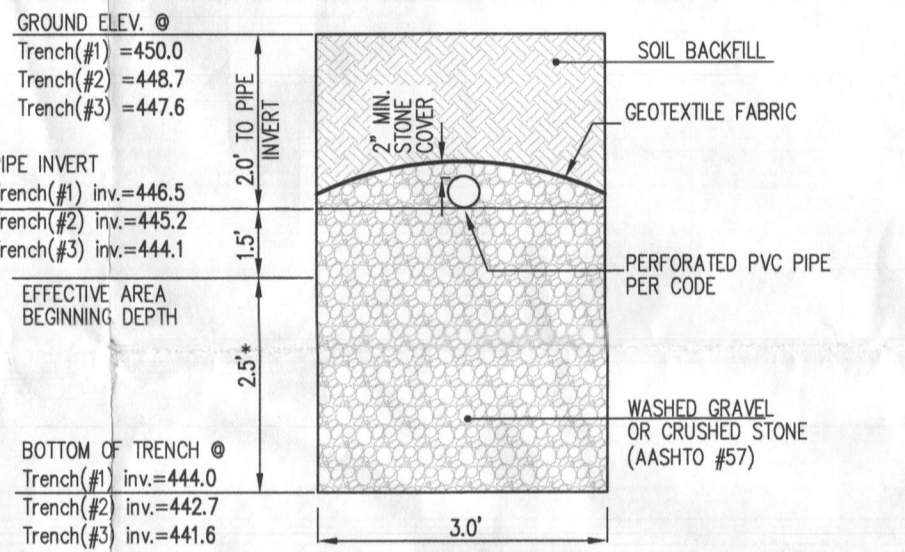
**BENCHMARKS**

40BA	ELEV. = 503.201	N = 547,911.368	E = 1,324,510.138
40FB	ELEV. = 504.340	N = 548,470.376	E = 1,326,000.845

**LEGEND**

- EXISTING CONTOUR
- - - - PROPOSED CONTOUR
- FFE FIRST FLOOR ELEVATION
- TOW TOP OF FOUNDATION WALL
- BSE BASEMENT SLAB ELEVATION
- ▨ PRIVATE SEWAGE DISPOSAL AREA
- ⊕ ALTERNATE WELL LOCATION
- ⊙ EXISTING WELL LOCATION
- ⊖ DRYWELL LOCATION
- ▬ INITIAL SYSTEM 3' WIDE TRENCH
- ▬ 1st REPLACEMENT SYSTEM TRENCH
- ▬ 2nd REPLACEMENT SYSTEM TRENCH
- ⊕ PERCOLATION TEST PIT PASSED FEB. 4-6, 2015
- ⊖ PERCOLATION TEST PIT FAILED FEB. 4-6, 2015
- ⊕ PERCOLATION TEST PIT PASSED MAY 11-13, 2015
- ⊖ PERCOLATION TEST PIT FAILED MAY 11-13, 2015
- ⊕ PERCOLATION TEST PIT PASSED APRIL 24, 2018

- NOTES:**
- 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.
  - THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
  - THE EXISTING WELL (TAG #17-095) HAS BEEN FIELD LOCATED BY GLW (PROFESSIONAL LAND SURVEYORS) AND IS ACCURATELY SHOWN ON THIS PLAN.
  - 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.

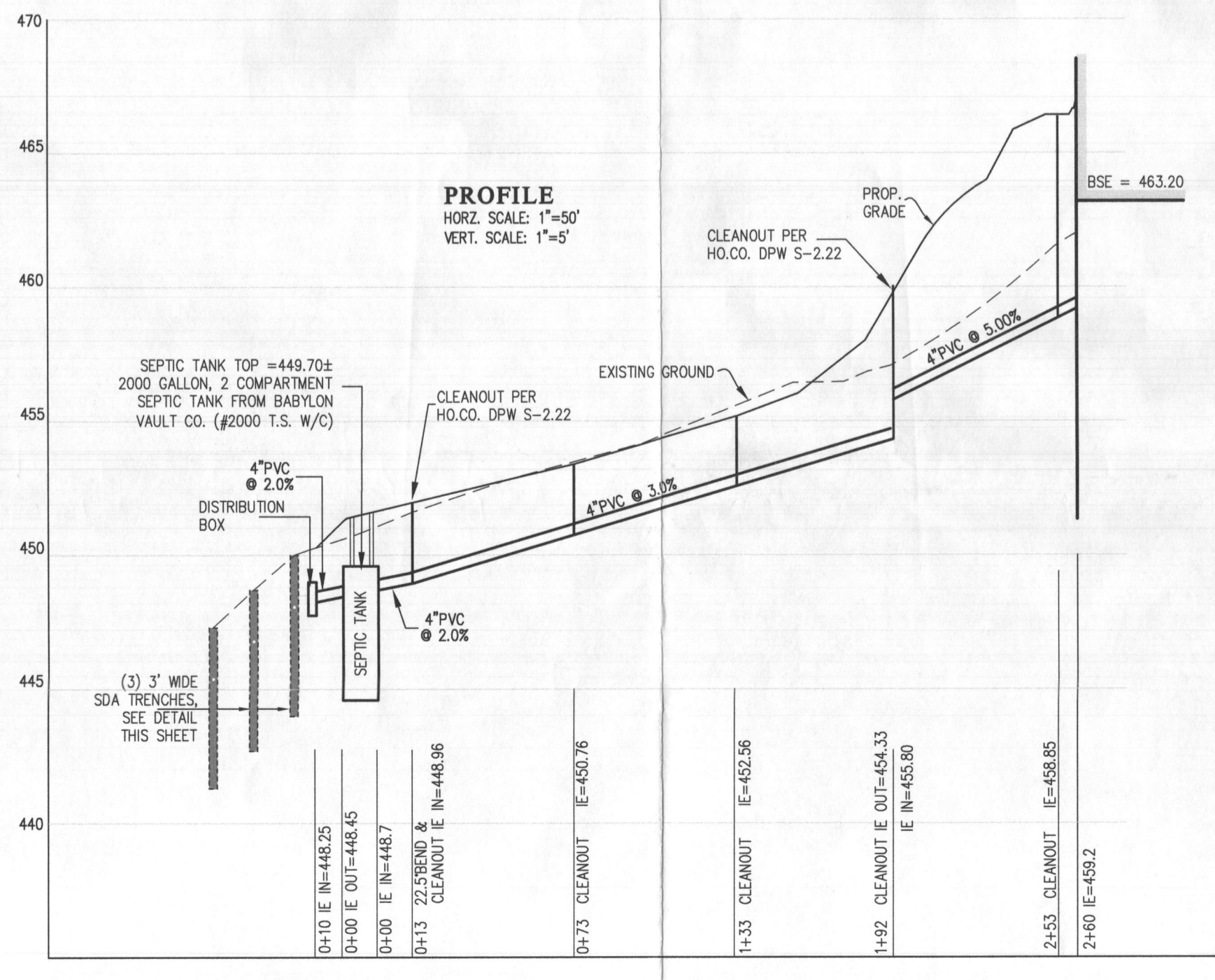


**SEPTIC TRENCH DETAIL** NO SCALE

GROUND ELEV. @ Trench #1 = 450.0  
Trench #2 = 448.7  
Trench #3 = 447.6

PIPE INVERT Trench #1 = 446.5  
Trench #2 = 445.2  
Trench #3 = 444.1

EFFECTIVE AREA BEGINNING DEPTH Trench #1 = 444.0  
Trench #2 = 442.7  
Trench #3 = 441.6



**ESTATES AT SCHOOLEY MILL**

**SDA Trench Size Calculations (Parcel A)**

System Input Information	Initial System No. 1	Replacement System No. 2	Replacement System No. 2
Application Rate	0.8	0.8	0.6
Effective area beginning depth	3.5	6.5	5.5
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

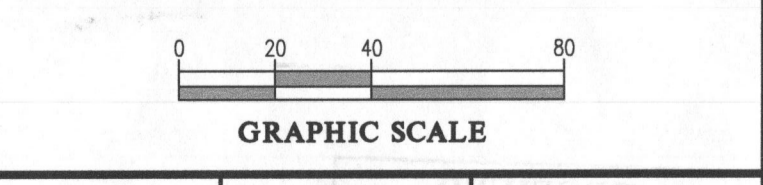
**Absorption Trench Calculations**

Drainfield area required (Design flow application rate)	1,125 s.f.	1,125 s.f.	1,500 s.f.
Effluent pipe depth to invert (Cannot exceed 2' if UPD. Cannot exceed 4' if conventional. Field run top to at 1-ft interval is required. Depth is less 2')	2.0	2.0	2.0
Effective sidewall depth "D" (Depth between the effective beginning (depth or pipe depth which ever is deeper) and maximum trench bottom.)	2.5	1.5	2.5
Trench Width "W" (2 or 3 feet)	3.0	3.0	3.0
SideWall Reduction Percent (W=2)(W=3)(20)	55.56%	71.43%	55.56%
Linear feet of trench required (Drainfield area x sidewall reduction)/W	208.3	267.9	277.8

**Trench Layout Information**

Number of trenches to use	3	4	4
Min. length (linear feet)	69.5	67.0	69.5
Total (linear feet)	208.5	268.0	278.0
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 30' for effective sidewall not over 3.5'. If 3.5' then spacing formula is 20-W up to a maximum of 38'	10.0	10.0	10.0

Approved Septic System Plan  
Howard County Health Department  
2000-gal, 2-chamber Septic Tank  
to D-Box at 208.5 linear feet  
of trench  
Signature: *R. Biely* 1/22/2019  
Date



**GLW**  
PLANNING | ENGINEERING | SURVEYING

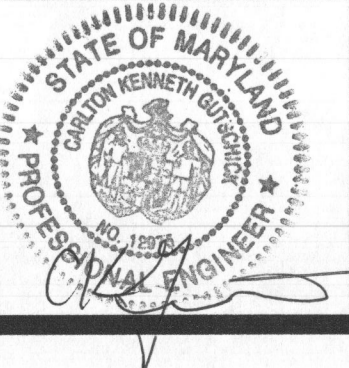
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PHONE: 301-421-4024 | BALT: 410-880-1820 | DC&VA: 301-989-2524 | FAX: 301-421-1186

DESIGNED BY: MBT  
DRAWN BY: KLP  
CHECKED BY: CKG

DATE	REVISION	BY	APP'R.

PREPARED FOR:  
WBG ESM, LLC  
5485 HARPERS FARM ROAD  
COLUMBIA, MD 21044  
PH: 410-997-8800

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. 12795  
EXPIRATION DATE: MAY 28, 2020  
1/7/19



**ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN**

**ESTATES AT SCHOOLEY MILL**  
BUILDABLE PRESERVATION PARCEL A (7407 Haven Court)  
Plot No. 24576-24583

ELECTION DISTRICT No. 5  
HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1" = 40'	RR-DEO	14067
DATE	TAX MAP - GRID	SHEET
JAN. 2019	40 - 11	1 OF 1