



Howard County  
Health Department

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](http://www.hchealth.org)

Facebook: [www.facebook.com/hocohealth](http://www.facebook.com/hocohealth)

RECEIPT DATE: 3/3/2020 **ONSITE SEWAGE DISPOSAL SYSTEM**

P 567333

APPROVAL DATE: 03/12/2020 **PERMIT: CONSTRUCTION**

A \_\_\_\_\_

PROPERTY ADDRESS: 4375 OLD ROXBURY ROAD

SUBDIVISION: ELEANOR HELEN JOHNSON PROPERTY LOT: 2 TAX ID: 04-320050

CONTRACTOR: FARM & HOME EXCAVATION EMAIL: farmhomeex@verizon.net

CONTRACTOR ADDRESS: 901 DRIVER ROAD, MARRIOTTSVILLE, MD 21104 PHONE: 410-984-0189

PROPERTY OWNER: EMMANUEL MATIVO AND JUDY KITUSA EMAIL: \_\_\_\_\_

OWNER ADDRESS: 14304 BALD HILL CT, BURTONSVILLE, MD 20866 PHONE: \_\_\_\_\_

SEPTIC TANK SIZE (GALLONS): 1500 TANK MANUFACTURER: BABYLON

PUMP MODEL: n.a. PUMP SIZE n.a. PUMP TANK CAPACITY: n.a.

DISTRIBUTION SYSTEM:  GRAVITY  PRESSURE DOSED BEDROOMS: 4 APPLICATION RATE: 0.8

TRENCHES:	LINEAR FEET REQUIRED: <u>165</u>	INLET DEPTH: <u>3.2</u>
	TRENCH WIDTH: <u>2</u>	MAXIMUM BOTTOM DEPTH: <u>7.0</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>3.2</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 CLEANOUTS AS INDICATED INSTALL 6-INCH METAL SLEEVE OVER SHC WHERE THE SHC CROSSES A 8-INCH PVC PIPE FOR ROOF DRAINAGE.	

ISSUED BY: R BRICKER ISSUE DATE: 3/6/2020 EXPIRATION DATE: 3/6/2021

**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.**

279489279189

NOT TO SCALE

TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
2'	*	7'
NUMBER OF TRENCHES		3
TOTAL LENGTH		121 F
ABSORPTION AREA		342 SF
DISTRIBUTION BOX LEVEL		SPEED
DISTRIBUTION BOX BAFFLE		YES
DISTRIBUTION BOX PORT		YES

PRE-CONSTRUCTION:

SEPTIC TANK DATA

SEPTIC TANK I LEVEL \_\_\_\_\_  
 MANUFACTURER BABYLON  
 CAPACITY 1500 GAL  
 SEAM LOC TOP  
 TANK LID DEPTH \_\_\_\_\_  
 BAFFLES YES  
 BAFFLE FILTER \_\_\_\_\_  
 MANHOLE LOC FRONT/BACK  
 6" PORT LOC \_\_\_\_\_  
 WATERTIGHT TEST \_\_\_\_\_  
 SLOTTED YES  
 DATE ON LID 01/20/20

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 \_\_\_\_\_

SEE ATTACHED AS BUILT

\* INLET MARKED ON AS BUILT

ROAD NAME

OLD KOKBURY ROAD

03/09/2020 SDA STAKED; TANK STAKED. CONFIRMED CONTOUR OF 3x55' TRENCHES OR TO START. (e)

INSTALLATION: 03/11/2020 TANK SET. SHC INSTALLED. D Box SET AND FIRST 2 TRENCHES (LOWER = MID) INSTALLED. (e)  
 3/12/2020 UPPER TRENCH COMPLETE. D Box LEVELED W/ SPEED LEVELS. DIFFICULTY W/ FALL TO UPPER TRENCH PER PLAN. INLET AS HIGH AS POSSIBLE. (e)

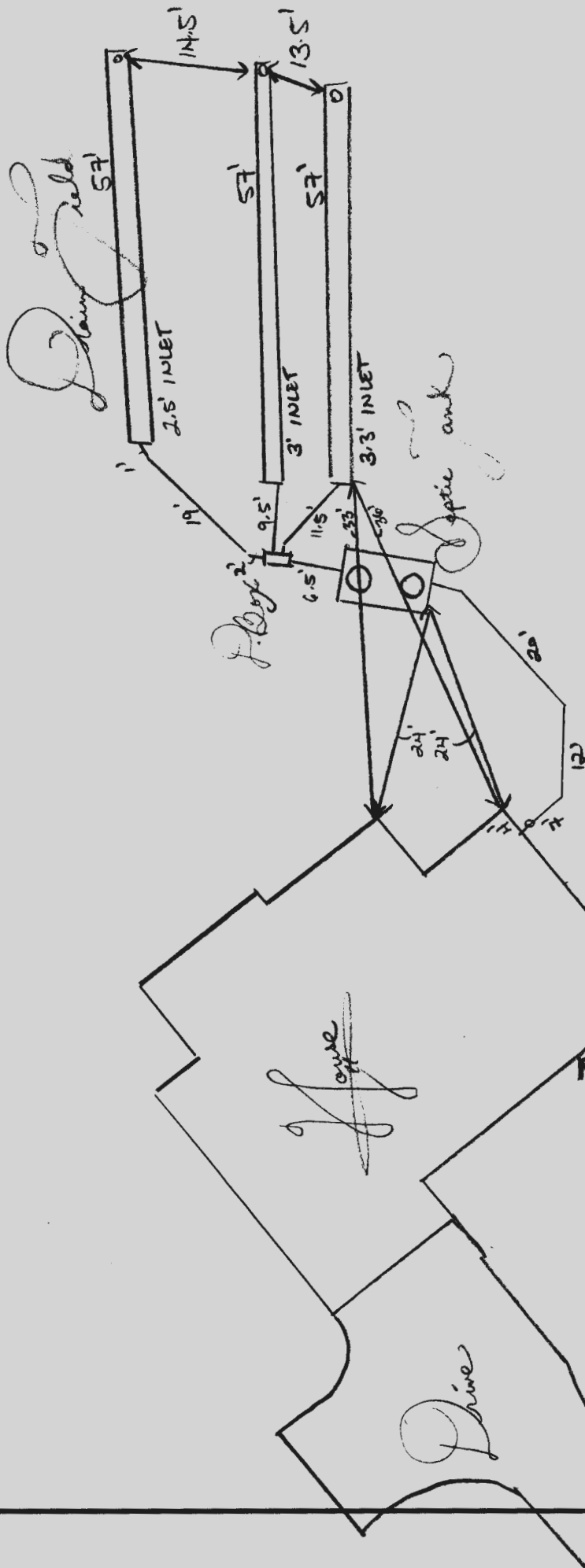
FINAL INSPECTOR

DATE OF APPROVAL

03/12/2020

NOT TO SCALE

11x20



HO-95-1973

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

**MEMORANDUM**

**TO:** NJR & Associates  
2770 Route 32  
West Friendship, MD 21794

**FROM:** Hank Oswald, L.E.H.S.  
Well & Septic Program

**RE:** OSDS Plan  
Eleanor Helen Johnson Property, Lot 2  
4375 Old Roxbury Road

**Date:** September 17, 2019

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The following comments pertain to the review of the OSDS Plan for **Eleanor Helen Johnson Property, Lot 2**:

- 1.) Add note: Per F-09-077, the septic disposal area on this lot can only support a 4-bedroom house.
- 2.) Add test hole locations to plan.
- 3.) According to SDAT, the address is 4375 Old Roxbury Road.
- 4.) The yard inlet must meet 50-foot setback to all wells locations.
- 5.) Show sleeve on 4-inch septic line at intersection of 8-inch storm water line.
- 6.) Show sleeve on well line at intersection of storm water inlet line.
- 7.) Show cross section detail for both the well and septic lines at the intersection of the storm water lines.

## Oswald, Hank

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**From:** Oswald, Hank  
**Sent:** Friday, November 08, 2019 9:51 AM  
**To:** MRED; Williams, Jeffrey  
**Cc:** Monica Lanigan; Najib Roshan  
**Subject:** RE: Eleanor Helen Johnson Property / Lot 2 Plat 20858  
**Attachments:** PIA Request Form.pdf; plan.pdf; perc test info.pdf

Hi Greg:

Attached, please find the information that you requested for the Eleanor Helen Johnson Property, Lot 2.

For future reference, any requested information outside of your own immediate work (i.e. older records) should be done by filling out a PIA request form (see attachment) and submitting it via fax to the well and septic program. You may also try accessing septic information through our public file search on our website. [http://hcenvhealthinfo.org/hcenvapp\\_2/](http://hcenvhealthinfo.org/hcenvapp_2/)

Should you have any questions, please don't hesitate to ask.

Respectfully,

Hank

**From:** MRED <gphillips@mred.us>  
**Sent:** Tuesday, November 05, 2019 11:09 AM  
**To:** Oswald, Hank <hoswald@howardcountymd.gov>; Williams, Jeffrey <jewilliams@howardcountymd.gov>  
**Cc:** Monica Lanigan <mlanigan@carusohomes.com>; Najib Roshan <roshannj@aol.com>  
**Subject:** Re: Eleanor Helen Johnson Property / Lot 2 Plat 20858

[Note: This email originated from outside of the organization. Please only click on links or attachments if you know the sender.]

Gentlemen,

I hope this email finds you both well.

I wrote you both on September 7th 2019 regarding Eleanor Helen Johnson Property / Lot 2 Plat 20858 and again on October 28, 2019.

Can you not find the data requested?

Please advise ASAP that you are receiving these emails and how you want us to proceed.

Thank you,

Gregory Phillips  
Maryland Real Estate Development

6100 Day Long Lane  
Suite 100  
Clarksville, Maryland 21029

Direct 410.977.0864  
[gphillips@MRED.US](mailto:gphillips@MRED.US)



On Sep 7, 2019, at 3:12 PM, [gphillips@mred.us](mailto:gphillips@mred.us) wrote:

Hank & Jeff,

I am dropping off Septic Discharge Plans to Hank for three projects. Please distribute them accordingly if Hank is not the reviewer for all as follows:

1. Allnut Farm Estates, Section -4 Lot 15
2. Meadowood. Section 2, Area 2 Lot 39
3. Eleanor Helen Johnson Property / Lot 2 Plat 20858

Regards,

Gregory Phillips  
Maryland Real Estate Development  
6100 Day Long Lane  
Suite 100  
Clarksville, Maryland 21029

Direct 410.977.0864  
[gphillips@MRED.US](mailto:gphillips@MRED.US)

<PastedGraphic-3.png>

## Oswald, Hank

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**From:** Oswald, Hank  
**Sent:** Thursday, December 12, 2019 10:35 AM  
**To:** 'gphillips@mred.us'; Monica Lanigan; 'roshannj@aol.com'  
**Cc:** Bernard, Dana  
**Subject:** RE: B19003907\_4375 OLD ROXBURY ROAD\_BP Status  
**Attachments:** osds plan review comments.pdf

Hi Greg:

It looks like I did the initial OSDS Plan review, so I am going to reassign this building permit to myself. The OSDS Plan review comments were sent to NJR & Assoc. on September 17, 2019 (see attached). To date, I have not received a revised plan. The building permit floor plan appears to show 5 bedrooms. I'm counting the Hobby room in the basement because it looks like it has a window and direct access to a full bathroom. Perhaps Ms. Lanigan could confirm this.

Once I have an approved OSDS Plan for either a 4 or 5 bedroom depending on the final BR count, I should be able to sign off on the building permit.

Thanks,

Hank

**From:** Oswald, Hank  
**Sent:** Thursday, December 12, 2019 8:01 AM  
**To:** 'gphillips@mred.us' <gphillips@mred.us>  
**Cc:** Bernard, Dana <dbernard@howardcountymd.gov>  
**Subject:** B19003907\_4375 OLD ROXBURY ROAD\_BP Status

Hi Greg:

Good morning. I received your v/m regarding status of building permit # B19003907 (SFD). It is assigned to my coworker Dana Bernard. I've cc'd her on this for follow-up.

Thanks,

Hank

Hank Oswald  
Licensed Environmental Health Specialist  
Howard County Health Department  
Bureau of Environmental Health  
Well & Septic Program  
8930 Stanford Boulevard  
Columbia, MD 21045  
410.313.1786 (Office)  
[hoswald@howardcountymd.gov](mailto:hoswald@howardcountymd.gov)



Hank

Hank Oswald  
Licensed Environmental Health Specialist  
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## Oswald, Hank

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**From:** Oswald, Hank  
**Sent:** Monday, August 19, 2019 9:34 AM  
**To:** 'roshannj@aol.com'  
**Cc:** 'gphillips@mred.us'; mlanigan@carusohomes.com; Williams, Jeffrey  
**Subject:** Septic Specs Sheets  
**Attachments:** Septic Spec Sheet\_Old Roxbury Road.pdf; Septic Spec Sheet\_Brighton Dam.pdf; Septic Spec Sheet\_Nicholas Sharp\_Lot10.pdf

Good morning All:

Attached, please find septic specs for the following properties:

- 1- 4375 Old Roxbury Road, Brookeville. Lot-2, Plat 20858.
- 2- Parcel 232, Tax Map-34, Grid 13 off of Brighton Dam Road, Clarksville.
- 3- Lot-10, Property of Nicholas O Sharp, 3720 Sharp Road, Glenwood.

Thanks,

Hank

Hank Oswald  
Licensed Environmental Health Specialist  
Howard County Health Department  
Bureau of Environmental Health  
Well & Septic Program  
8930 Stanford Boulevard  
Columbia, MD 21045  
410.313.1786 (Office)  
[hoswald@howardcountymd.gov](mailto:hoswald@howardcountymd.gov)



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## Oswald, Hank

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**From:** Oswald, Hank  
**Sent:** Tuesday, September 17, 2019 2:23 PM  
**To:** 'roshannj@aol.com'  
**Cc:** 'gphillips@mred.us'  
**Subject:** OSDS Plan Review Comments\_4375 Old Roxbury Road (Roxbury Road)  
**Attachments:** sdat.pdf; OSDS Memo\_NJR\_Johnson Property Lot 2\_2019.pdf

Hello Mr. Roshann:

Good afternoon. Attached, please find memo containing comments to the review of the OSDS Plan for 4375 Old Roxbury Road (Roxbury Road).

Should you have any questions, please don't hesitate to ask.

Respectfully,

Hank

Hank Oswald  
Licensed Environmental Health Specialist  
Howard County Health Department  
Bureau of Environmental Health  
Well & Septic Program  
8930 Stanford Boulevard  
Columbia, MD 21045  
410.313.1786 (Office)  
[hoswald@howardcountymd.gov](mailto:hoswald@howardcountymd.gov)



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W

MARYLAND ROUTE 97 (60' R.O.W.)

R=559.61'  
L=155.19'

ADDRESS:  
4375 OLD ROXBURY ROAD  
BROOKEVILLE, MD 20729

NOTES:  
1. THE LEVEL OF ACCURACY SETBACK DISTANCES IS ONE TENTH OF A FOOT, MORE OR LESS.  
2. THIS PLAT WAS PREPARED WITHOUT BENEFIT OF A TITLE REPORT

PREPARED BY:

**NJR & ASSOCIATES, LLC.**  
LAND SURVEYING AND PLANNING  
2770 STATE ROUTE 32  
WEST FRIENDSHIP, MARYLAND 21794  
TEL: (240) 508-3200 FAX: (410) 799-9093

LOT 1  
ELEANOR HELEN JOHNSON PROPERTY  
LOTS 1 AND 2  
Plat no. 20858

LOT 1  
ELEANOR HELEN JOHNSON PROPERTY  
LOTS 1 AND 2  
Plat no. 20858

UNMITIGATED 65 dBA NOISE CONTOUR LINE  
PLAT No. 20858  
35' ENVIRONMENTAL SETBACK  
PLAT No. 20858

EX. 100' STREAM BANK BUFFER  
PLAT No. 20858

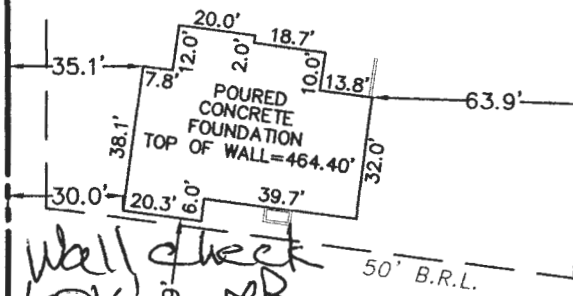
**LOT 2**  
ELEANOR HELEN JOHNSON PROPERTY  
LOTS 1 AND 2  
PLAT NO. 20858  
1.907 Ac.±

N 52°39'06" W

490.85'  
10' B.R.L.

515.45'  
S 50°49'15" E

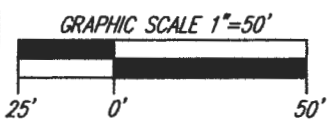
EX. SEPTIC AREA



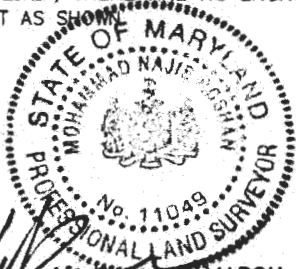
Wall check OK  
3/6/2020  
EX. WELL # HO-95-1793  
S 44°58'48" W  
156.72'

OLD ROXBURY ROAD  
(50' R.O.W.)

PROPERTY OF  
James & Bobbie Olivari  
Tax Map 21 Parcel 161  
Liber 1232, Folio 686



I HEREBY CERTIFY THAT IMPROVEMENTS ARE LOCATED AS SHOWN HEREON AND TO THE BEST OF MY INFORMATION, PROFESSIONAL KNOWLEDGE AND BELIEF, THERE ARE NO ENCROACHMENTS EXCEPT AS SHOWN.



MARCH 3, 2020

M.N. ROSHAN, L.S.  
MD REG. No. 11049

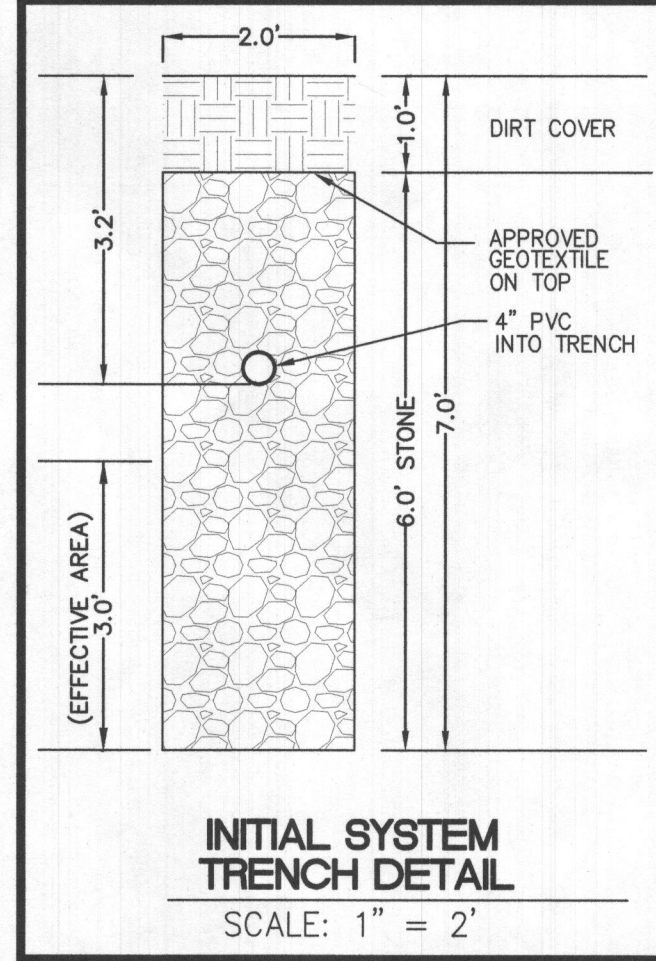
DATE

**WALL CHECK**  
ELEANOR HELEN JOHNSON PROPERTY  
**LOT 2**

PLAT No. 20858  
LIBER 18920, FOLIO 125  
TAX MAP 21, GRID 19, PARCEL 82  
5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
SCALE: 1" = 50' DATE: JANUARY 21, 2020

FILE No. 3551

TRENCH INFO, INITIAL SYSTEM					
TRENCH	TRENCH LENGTH	EX. TOP OF GROUND	TOP OF GRAVEL	INV. INTO TRENCH	BOTTOM OF TRENCH
A-1	55'	456.4±	455.4	453.2	449.4
A-2	55'	454.8±	453.8	451.6	447.8
A-3	55'	453.7±	452.7	449.5	446.7



**INITIAL SEPTIC SYSTEM CALCULATIONS:** ABS. RATE=0.8, EFF. DEPTH=4'-7"  
 DRAINFIELD AREA: 4 BEDROOMS AT 600 gpd / 0.8 ABSORPTION RATE=750 SQ. FT.  
 SIDEWALL REDUCTION CREDIT:  $\frac{WIDTH+2}{2} = \frac{2+2}{2} = 2$   $\frac{4}{9} = 0.44$   
 LENGTH OF TRENCHES:  $750 \text{ SQ. FT.} \times 0.44 = 165 \text{ LINEAR FEET}$   
 3 TRENCHES OF 55 FEET IN LENGTH, 10 FOOT SPACED ARE PROVIDED

**FIRST REPLACEMENT SYSTEM CALCS:** ABS. RATE=0.8, EFF. DEPTH=6'-7"  
 DRAINFIELD AREA: 4 BEDROOMS AT 600 gpd / 0.8 ABSORPTION RATE=750 SQ. FT.  
 SIDEWALL REDUCTION CREDIT:  $\frac{WIDTH+2}{2} = \frac{2+2}{2} = 2$   $\frac{4}{5} = 0.80$   
 LENGTH OF TRENCHES:  $750 \text{ SQ. FT.} \times 0.80 = 300 \text{ LINEAR FEET}$   
 3 TRENCHES OF 100 FEET IN LENGTH, 10 FOOT SPACED ARE PROVIDED

**SECOND REPLACEMENT SYSTEM CALCS:** ABS. RATE=1.2, EFF. DEPTH=6'-7"  
 DRAINFIELD AREA: 4 BEDROOMS AT 600 gpd / 1.2 ABSORPTION RATE=500 SQ. FT.  
 SIDEWALL REDUCTION CREDIT:  $\frac{WIDTH+2}{2} = \frac{2+2}{2} = 2$   $\frac{4}{5} = 0.80$   
 LENGTH OF TRENCHES:  $500 \text{ SQ. FT.} \times 0.80 = 200 \text{ LINEAR FEET}$   
 2 TRENCHES OF 100 FEET IN LENGTH, 10 FOOT SPACED ARE PROVIDED

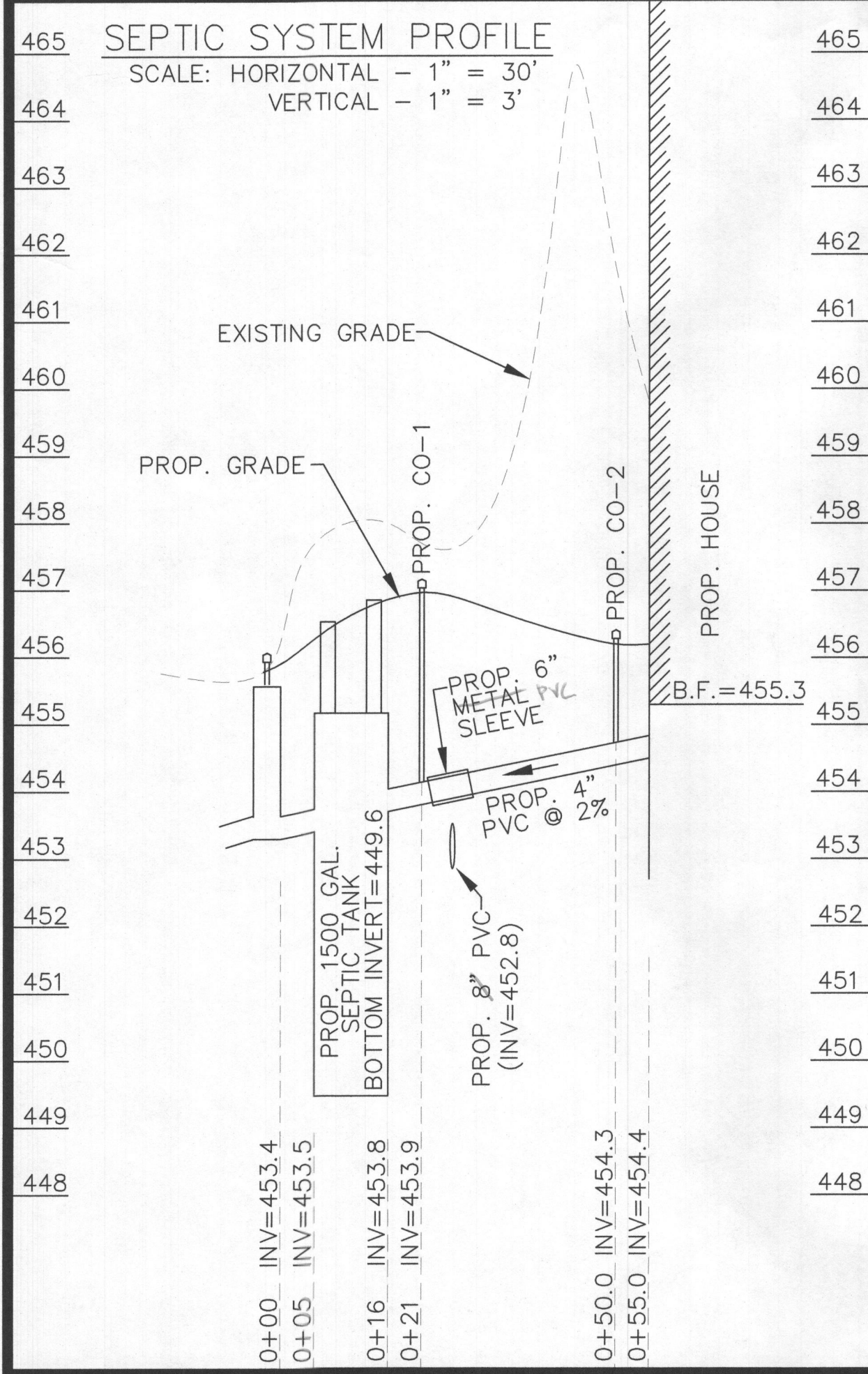
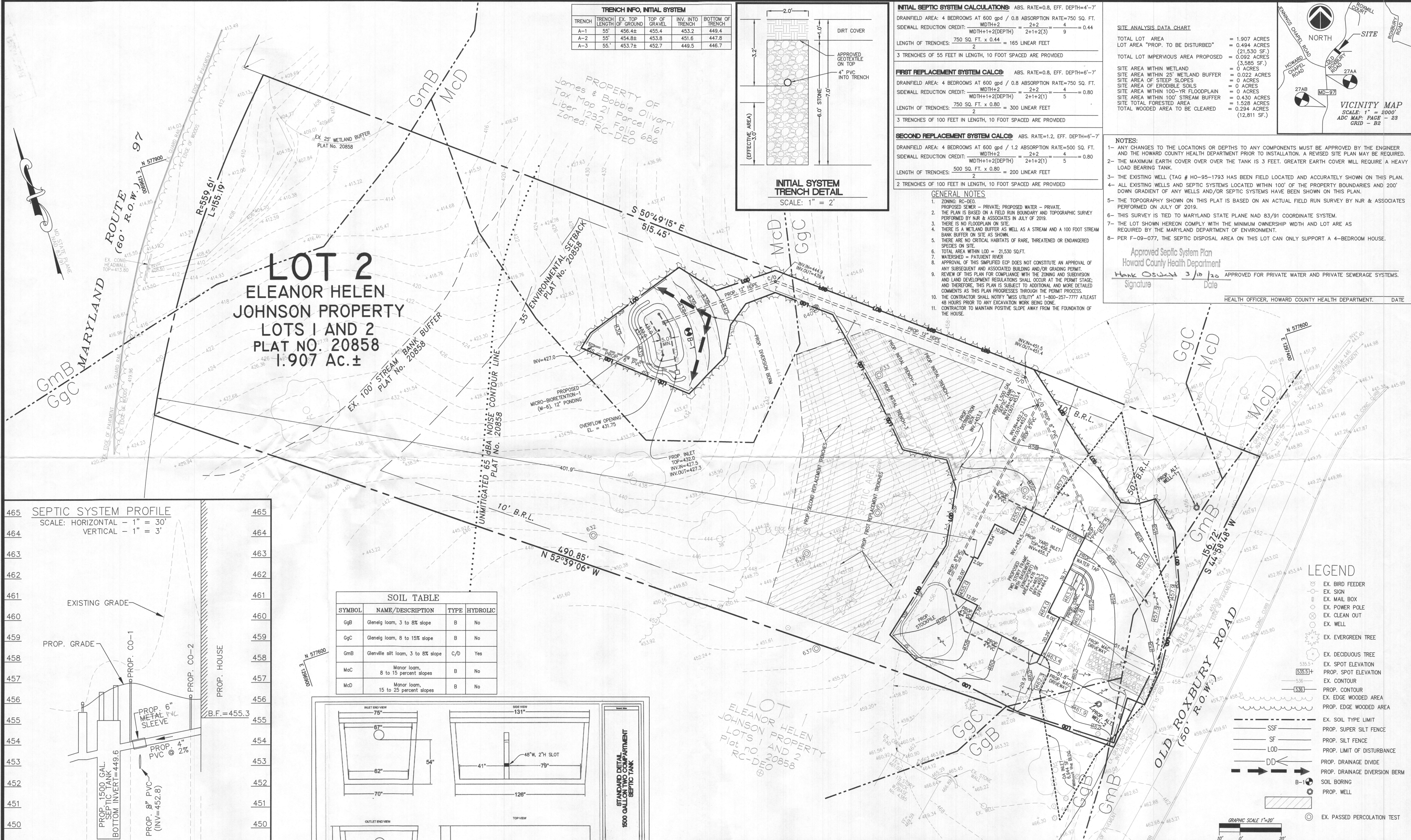
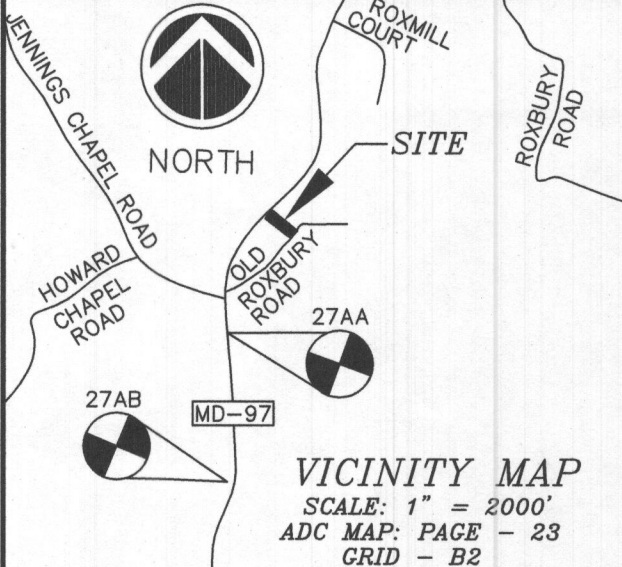
**SITE ANALYSIS DATA CHART**

TOTAL LOT AREA	= 1.907 ACRES
LOT AREA "PROP. TO BE DISTURBED"	= 0.494 ACRES (21,530 SF.)
TOTAL LOT IMPERVIOUS AREA PROPOSED	= 0.092 ACRES (3,585 SF.)
SITE AREA WITHIN WETLAND	= 0 ACRES
SITE AREA WITHIN 25' WETLAND BUFFER	= 0.022 ACRES
SITE AREA OF STEEP SLOPES	= 0 ACRES
SITE AREA OF ERODIBLE SOILS	= 0 ACRES
SITE AREA WITHIN 100-YR FLOODPLAIN	= 0 ACRES
SITE AREA WITHIN 100' STREAM BUFFER	= 0.430 ACRES
SITE TOTAL FORESTED AREA	= 1.528 ACRES
TOTAL WOODED AREA TO BE CLEARED	= 0.284 ACRES (12,811 SF.)

**NOTES:**

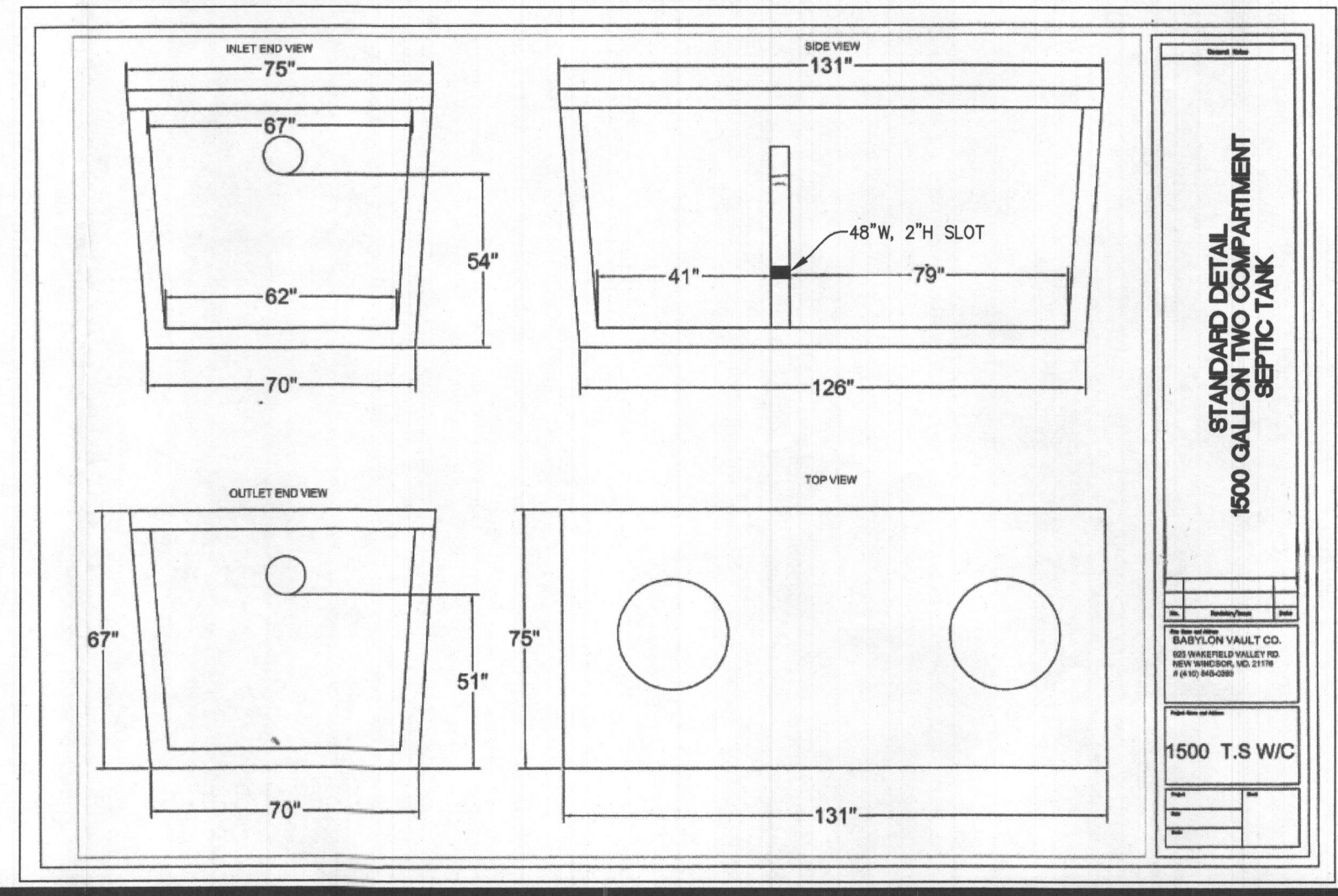
- ANY CHANGES TO THE LOCATIONS OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED SITE PLAN MAY BE REQUIRED.
- THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
- THE EXISTING WELL (TAG # HO-95-1793) HAS BEEN FIELD LOCATED AND ACCURATELY SHOWN ON THIS PLAN.
- ALL EXISTING 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 ON THIS PLAN.
- THE TOPOGRAPHY SHOWN ON THIS PLAN IS BASED ON AN ACTUAL FIELD RUN SURVEY BY NJR & ASSOCIATES PERFORMED ON JULY OF 2019.
- THIS SURVEY IS TIED TO MARYLAND STATE PLANE NAD 83/91 COORDINATE SYSTEM.
- THE LOT SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND DEPARTMENT OF ENVIRONMENT.
- PER F-09-077, THE SEPTIC DISPOSAL AREA ON THIS LOT CAN ONLY SUPPORT A 4-BEDROOM HOUSE.

Approved Septic System Plan  
 Howard County Health Department  
 Hank Oswald 3/10/20 APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS.  
 Signature Date HEALTH OFFICER, HOWARD COUNTY HEALTH DEPARTMENT. DATE



**SOIL TABLE**

SYMBOL	NAME/DESCRIPTION	TYPE	HYDROLOGIC
GgB	Glenely loam, 3 to 8% slope	B	No
GgC	Glenely loam, 8 to 15% slope	B	No
GmB	Glenville silt loam, 3 to 8% slope	C/D	Yes
MaC	Manor loam, 8 to 15 percent slopes	B	No
McD	Manor loam, 15 to 25 percent slopes	B	No



PLAN PREPARED BY:  
**NJR & ASSOCIATES**  
 Land Surveying and Planning  
 2770 STATE ROUTE 32  
 WEST FRIENDSHIP, MD 21794  
 TEL: (240) 508-3200

PROFESSIONAL CERTIFICATION:  
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE # 11048, EXPIRATION DATE: 2/10/2021.  
 March 10, 2019  
 DATE

DEVELOPER  
 CARUSO HOMES  
 2120 BALDWIN AVENUE,  
 Ste 200  
 CROFTON, MD 21144  
 (301) 261-0277

**ON SITE SEWAGE DISPOSAL PLAN**  
 ELEANOR HELEN JOHNSON PROPERTY  
 LOT 2  
 PLAT NUMBER 20858  
 TAX MAP 21, GRID 19, PARCEL 82  
 4375 OLD ROXBURY ROAD, BROOKVILLE, MD 20729  
 5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

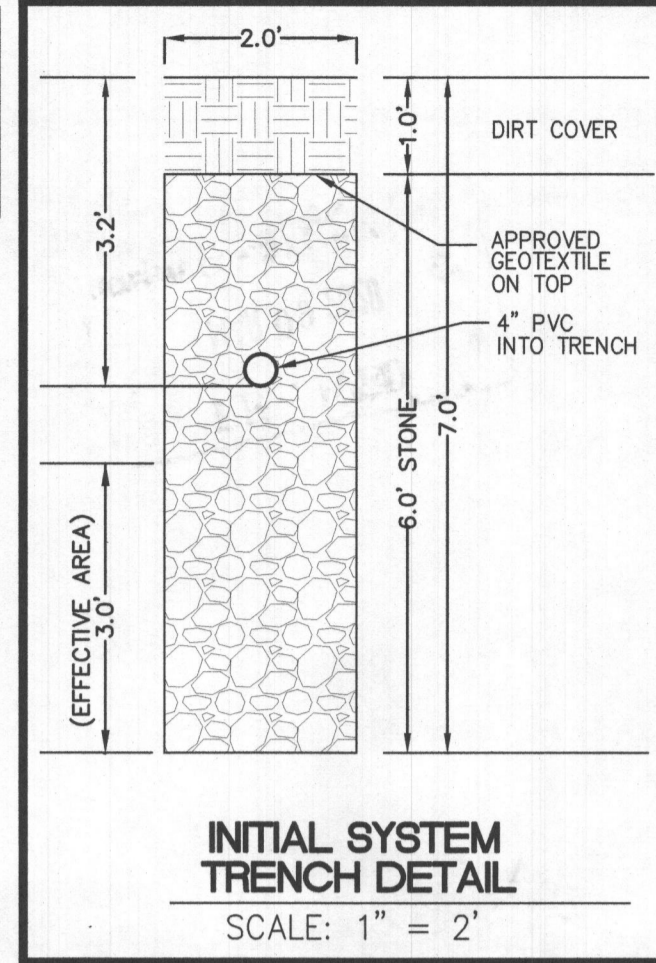
SCALE: 1" = 20' JOB NO.: 3551 DATE: AUG. 15, 2019 SHEET: 1 OF 1

**LEGEND**

- EX. BIRD FEEDER
- EX. SIGN
- EX. MAIL BOX
- EX. POWER POLE
- EX. CLEAN OUT
- EX. WELL
- EX. EVERGREEN TREE
- EX. DECIDUOUS TREE
- EX. SPOT ELEVATION
- PROP. SPOT ELEVATION
- EX. CONTOUR
- PROP. CONTOUR
- EX. EDGE WOODED AREA
- PROP. EDGE WOODED AREA
- EX. SOIL TYPE LIMIT
- PROP. SUPER SILT FENCE
- PROP. SILT FENCE
- PROP. LIMIT OF DISTURBANCE
- PROP. DRAINAGE DIVIDE
- PROP. DRAINAGE DIVERSION BERM
- SOIL BORING
- PROP. WELL
- EX. PASSED PERCOLATION TEST

GRAPHIC SCALE 1"=20'

TRENCH INFO, INITIAL SYSTEM					
TRENCH	TRENCH LENGTH	EX. TOP OF GROUND	TOP OF GRAVEL	INV. INTO TRENCH	BOTTOM OF TRENCH
A-1	55'	456.4±	453.4	453.2	449.4
A-2	55'	454.9±	453.8	451.6	447.8
A-3	55'	453.7±	452.7	449.5	446.7



**INITIAL SEPTIC SYSTEM CALCULATIONS:** ABS. RATE=0.8, EFF. DEPTH=4'-7"  
 DRAINFIELD AREA: 4 BEDROOMS AT 600 gpd / 0.8 ABSORPTION RATE=750 SQ. FT.  
 SIDEWALL REDUCTION CREDIT:  $\frac{WIDTH+2}{2} = \frac{2+2}{2} = 2$  4 = 0.44  
 LENGTH OF TRENCHES:  $750 \text{ SQ. FT.} \times 0.44 = 165 \text{ LINEAR FEET}$   
 3 TRENCHES OF 55 FEET IN LENGTH, 10 FOOT SPACED ARE PROVIDED

**FIRST REPLACEMENT SYSTEM CALCS:** ABS. RATE=0.8, EFF. DEPTH=6'-7"  
 DRAINFIELD AREA: 4 BEDROOMS AT 600 gpd / 0.8 ABSORPTION RATE=750 SQ. FT.  
 SIDEWALL REDUCTION CREDIT:  $\frac{WIDTH+2}{2} = \frac{2+2}{2} = 2$  4 = 0.80  
 LENGTH OF TRENCHES:  $750 \text{ SQ. FT.} \times 0.80 = 300 \text{ LINEAR FEET}$   
 3 TRENCHES OF 100 FEET IN LENGTH, 10 FOOT SPACED ARE PROVIDED

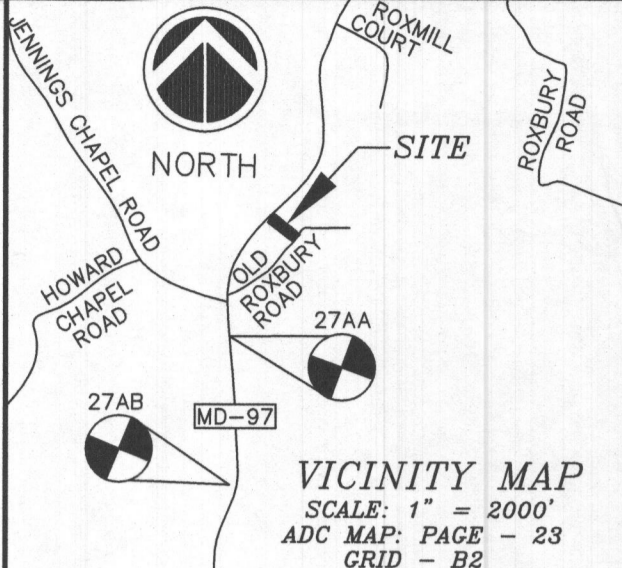
**SECOND REPLACEMENT SYSTEM CALCS:** ABS. RATE=1.2, EFF. DEPTH=6'-7"  
 DRAINFIELD AREA: 4 BEDROOMS AT 600 gpd / 1.2 ABSORPTION RATE=500 SQ. FT.  
 SIDEWALL REDUCTION CREDIT:  $\frac{WIDTH+2}{2} = \frac{2+2}{2} = 2$  5 = 0.80  
 LENGTH OF TRENCHES:  $500 \text{ SQ. FT.} \times 0.80 = 200 \text{ LINEAR FEET}$   
 2 TRENCHES OF 100 FEET IN LENGTH, 10 FOOT SPACED ARE PROVIDED

**SITE ANALYSIS DATA CHART**

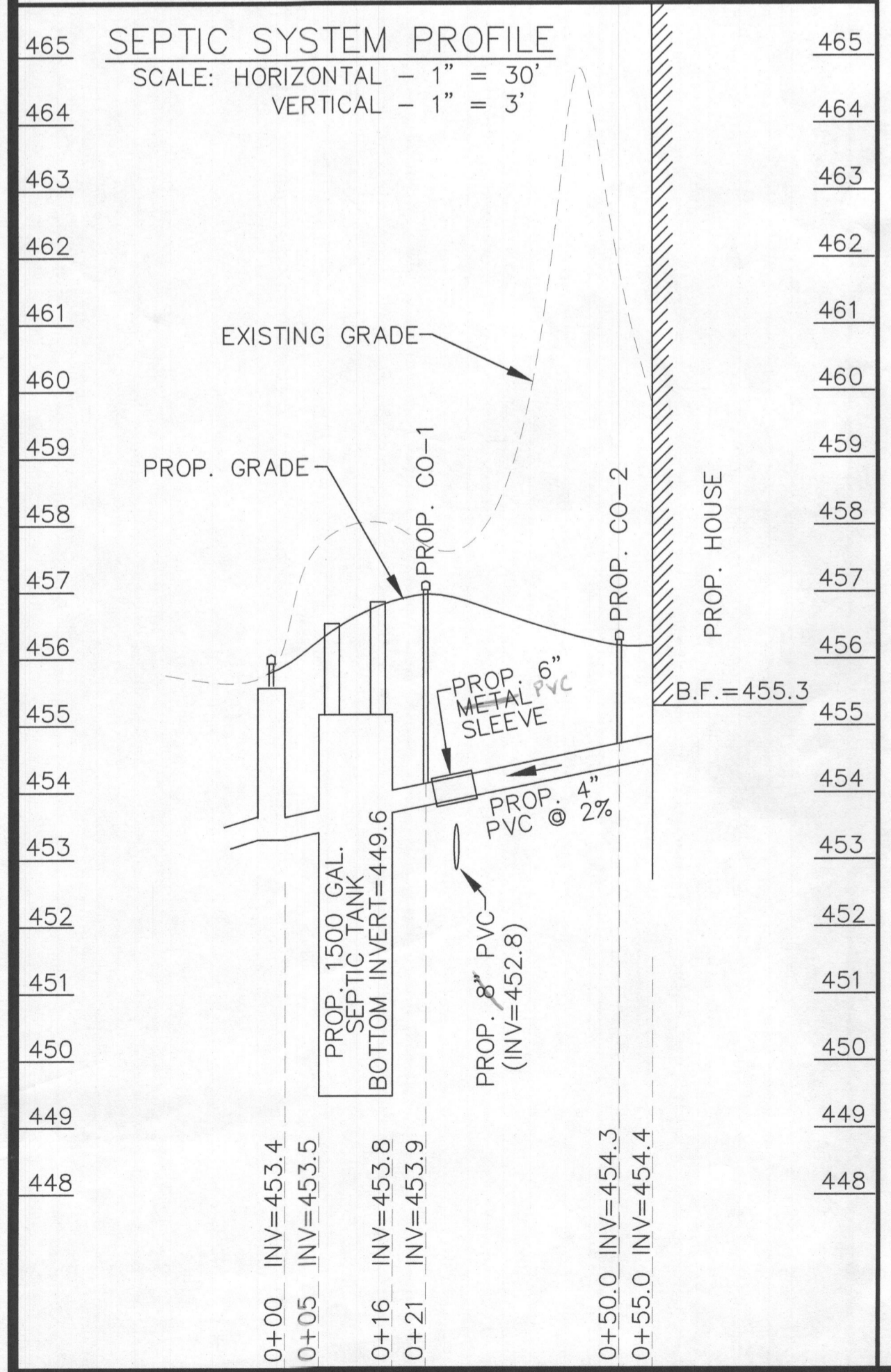
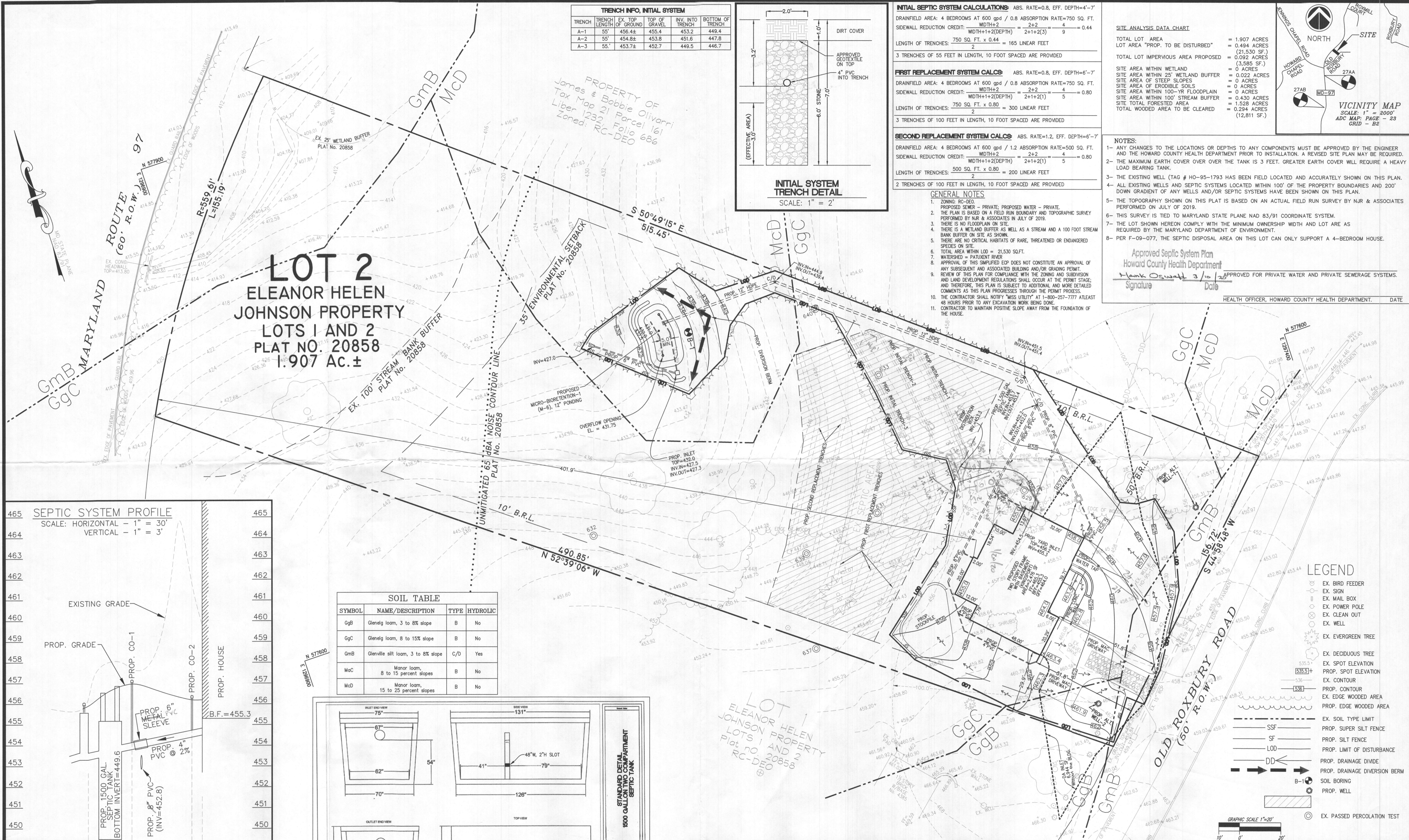
TOTAL LOT AREA	= 1.907 ACRES
LOT AREA "PROP. TO BE DISTURBED"	= 0.494 ACRES (21,530 SF.)
TOTAL LOT IMPERVIOUS AREA PROPOSED	= 0.092 ACRES (3,985 SF.)
SITE AREA WITHIN WETLAND	= 0 ACRES
SITE AREA WITHIN 25' WETLAND BUFFER	= 0.022 ACRES
SITE AREA OF STEEP SLOPES	= 0 ACRES
SITE AREA OF ERODIBLE SOILS	= 0 ACRES
SITE AREA WITHIN 100-YR FLOODPLAIN	= 0 ACRES
SITE AREA WITHIN 100' STREAM BUFFER	= 0.430 ACRES
SITE TOTAL FORESTED AREA	= 1.528 ACRES
TOTAL WOODED AREA TO BE CLEARED	= 0.284 ACRES (12,811 SF.)

**NOTES:**

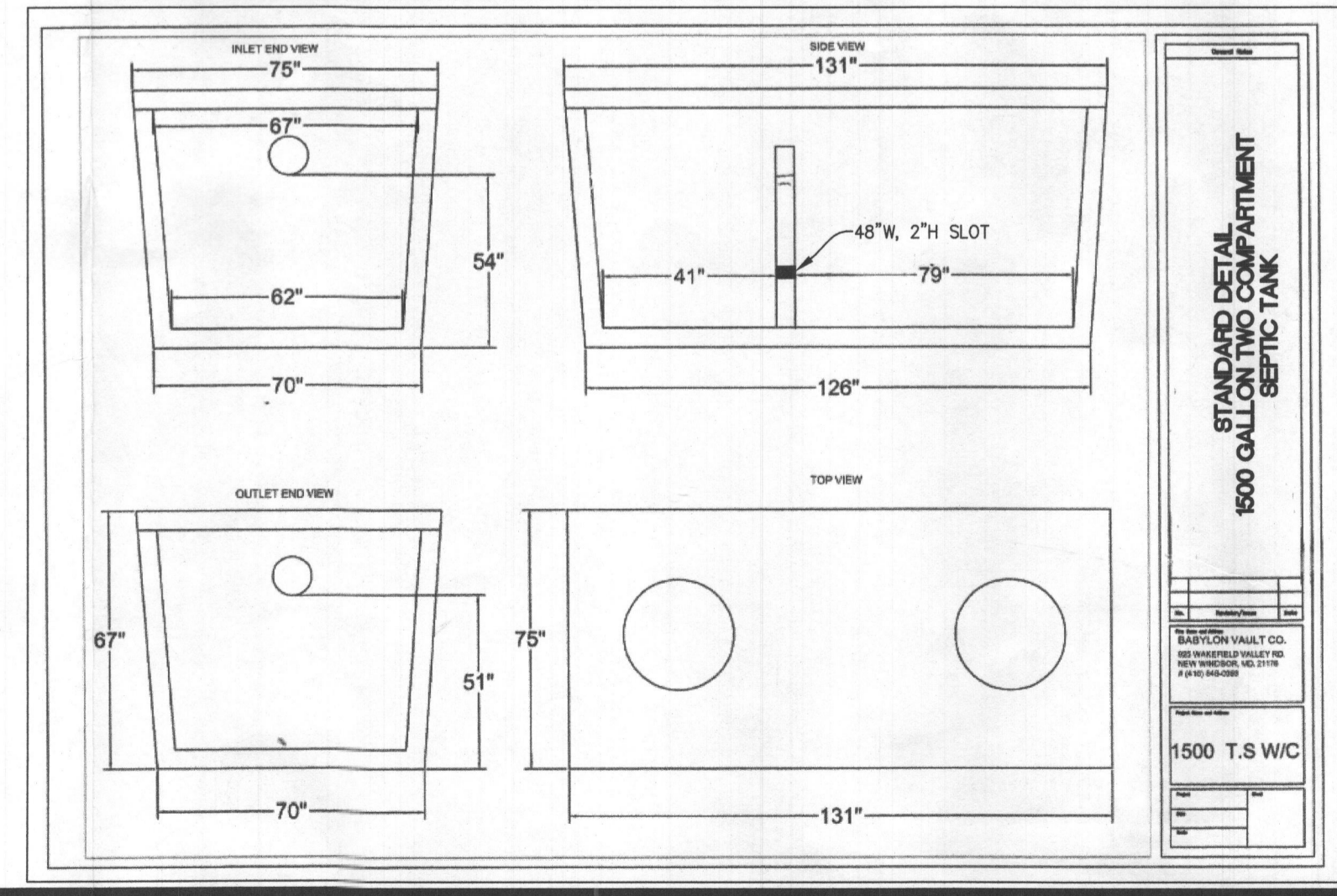
- ANY CHANGES TO THE LOCATIONS OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED SITE PLAN MAY BE REQUIRED.
- THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
- THE EXISTING WELL (TAG # HO-95-1793) HAS BEEN FIELD LOCATED AND ACCURATELY SHOWN ON THIS PLAN.
- ALL EXISTING 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 ON THIS PLAN.
- THE TOPOGRAPHY SHOWN ON THIS PLAN IS BASED ON AN ACTUAL FIELD RUN SURVEY BY NJR & ASSOCIATES PERFORMED ON JULY OF 2019.
- THIS SURVEY IS TIED TO MARYLAND STATE PLANE NAD 83/91 COORDINATE SYSTEM.
- THE LOT SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND DEPARTMENT OF ENVIRONMENT.
- PER F-09-077, THE SEPTIC DISPOSAL AREA ON THIS LOT CAN ONLY SUPPORT A 4-BEDROOM HOUSE.



**LOT 2**  
**ELEANOR HELEN JOHNSON PROPERTY**  
**LOTS 1 AND 2**  
**PLAT NO. 20858**  
**1.907 AC.±**



SOIL TABLE			
SYMBOL	NAME/DESCRIPTION	TYPE	HYDROLOGIC
GgB	Glenelg loam, 3 to 8% slope	B	No
GgC	Glenelg loam, 8 to 15% slope	B	No
GmB	Glenville silt loam, 3 to 8% slope	C/D	Yes
MaC	Manor loam, 8 to 15 percent slopes	B	No
McD	Manor loam, 15 to 25 percent slopes	B	No



PLAN PREPARED BY:  
**NJR & ASSOCIATES**  
 Land Surveying and Planning  
 2770 STATE ROUTE 32  
 WEST FRIENDSHIP, MD 21794  
 TEL: (240) 508-3200

PROFESSIONAL CERTIFICATION:  
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE # 11049, EXPIRATION DATE: 2/10/2021.  
 DATE: March 10, 2019

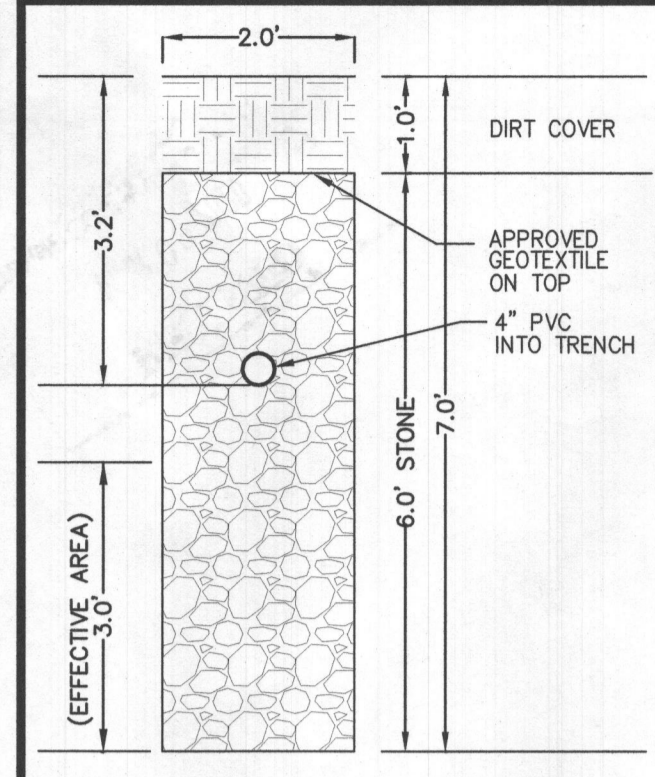
DEVELOPER  
 CARUSO HOMES  
 2120 BALDWIN AVENUE,  
 Ste 200  
 CROFTON, MD 21144  
 (301) 261-0217

**ON SITE SEWAGE DISPOSAL PLAN**  
**ELEANOR HELEN JOHNSON PROPERTY**  
**LOT 2**  
 PLAT NUMBER 20858  
 TAX MAP 21, GRID 19, PARCEL 82  
 4375 OLD ROXBURY ROAD, BROOKVILLE, MD 20729  
 5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

SCALE: 1" = 20' JOB NO.: 3551 DATE: AUG. 15, 2019 SHEET: 1 OF 1

- LEGEND**
- EX. BIRD FEEDER
  - EX. SIGN
  - EX. MAIL BOX
  - EX. POWER POLE
  - EX. CLEAN OUT
  - EX. WELL
  - EX. EVERGREEN TREE
  - EX. DECIDUOUS TREE
  - EX. SPOT ELEVATION
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 $\frac{2+1+2(3)}{9} = 0.44$   
 LENGTH OF TRENCHES: 750 SQ. FT. x 0.44 = 165 LINEAR FEET  
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 2 TRENCHES OF 100 FEET IN LENGTH, 10 FOOT SPACED ARE PROVIDED

- GENERAL NOTES**
- ZONING: RC-DEO. PROPOSED SEWER - PRIVATE; PROPOSED WATER - PRIVATE.
  - THE PLAN IS BASED ON A FIELD RUN BOUNDARY AND TOPOGRAPHIC SURVEY PERFORMED BY NJR & ASSOCIATES IN JULY OF 2019.
  - THERE IS NO FLOODPLAIN ON SITE.
  - THERE IS A WETLAND BUFFER AS WELL AS A STREAM AND A 100 FOOT STREAM BANK BUFFER ON SITE AS SHOWN.
  - THERE ARE NO CRITICAL HABITATS OF RARE, THREATENED OR ENDANGERED SPECIES ON SITE.
  - TOTAL AREA WITHIN LOD = 21,530 SQ.FT.
  - WATERCHED = PATIENT RIVER.
  - APPROVAL OF THIS SIMPLIFIED ECP DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED BUILDING AND/OR GRADING PERMIT.
  - REVIEW OF THIS PLAN FOR COMPLIANCE WITH THE ZONING AND SUBDIVISION AND LAND DEVELOPMENT REGULATIONS SHALL OCCUR AT THE PERMIT STAGE; AND THEREFORE, THIS PLAN IS SUBJECT TO ADDITIONAL AND MORE DETAILED COMMENTS AS THIS PLAN PROGRESSES THROUGH THE PERMIT PROCESS.
  - THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
  - CONTRACTOR TO MAINTAIN POSITIVE SLOPE AWAY FROM THE FOUNDATION OF THE HOUSE.

**SITE ANALYSIS DATA CHART**

TOTAL LOT AREA	= 1.907 ACRES
LOT AREA "PROP. TO BE DISTURBED"	= 0.494 ACRES (21,530 SF.)
TOTAL LOT IMPERVIOUS AREA PROPOSED	= 0.092 ACRES (3,585 SF.)
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SITE TOTAL FORESTED AREA	= 1.528 ACRES
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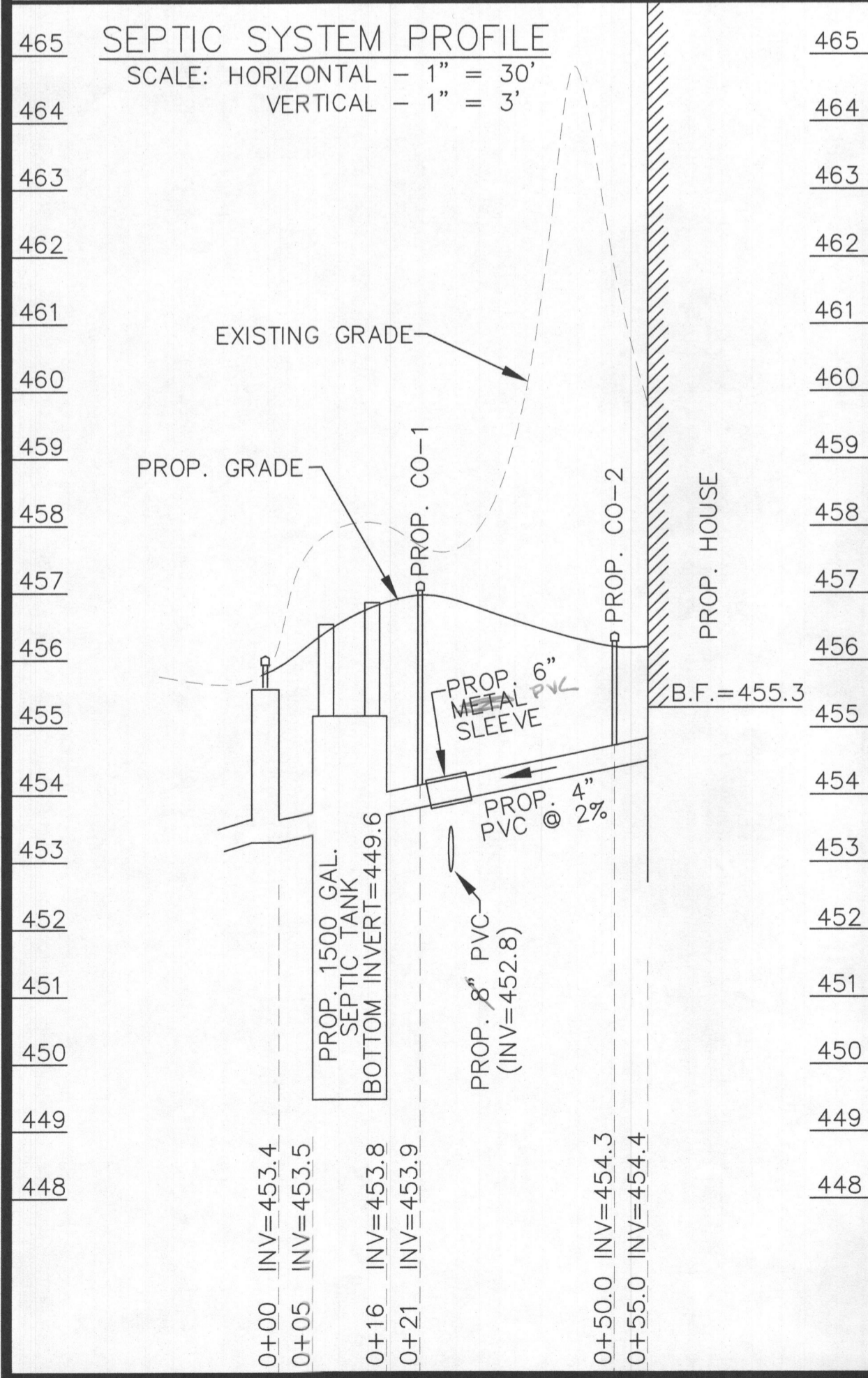
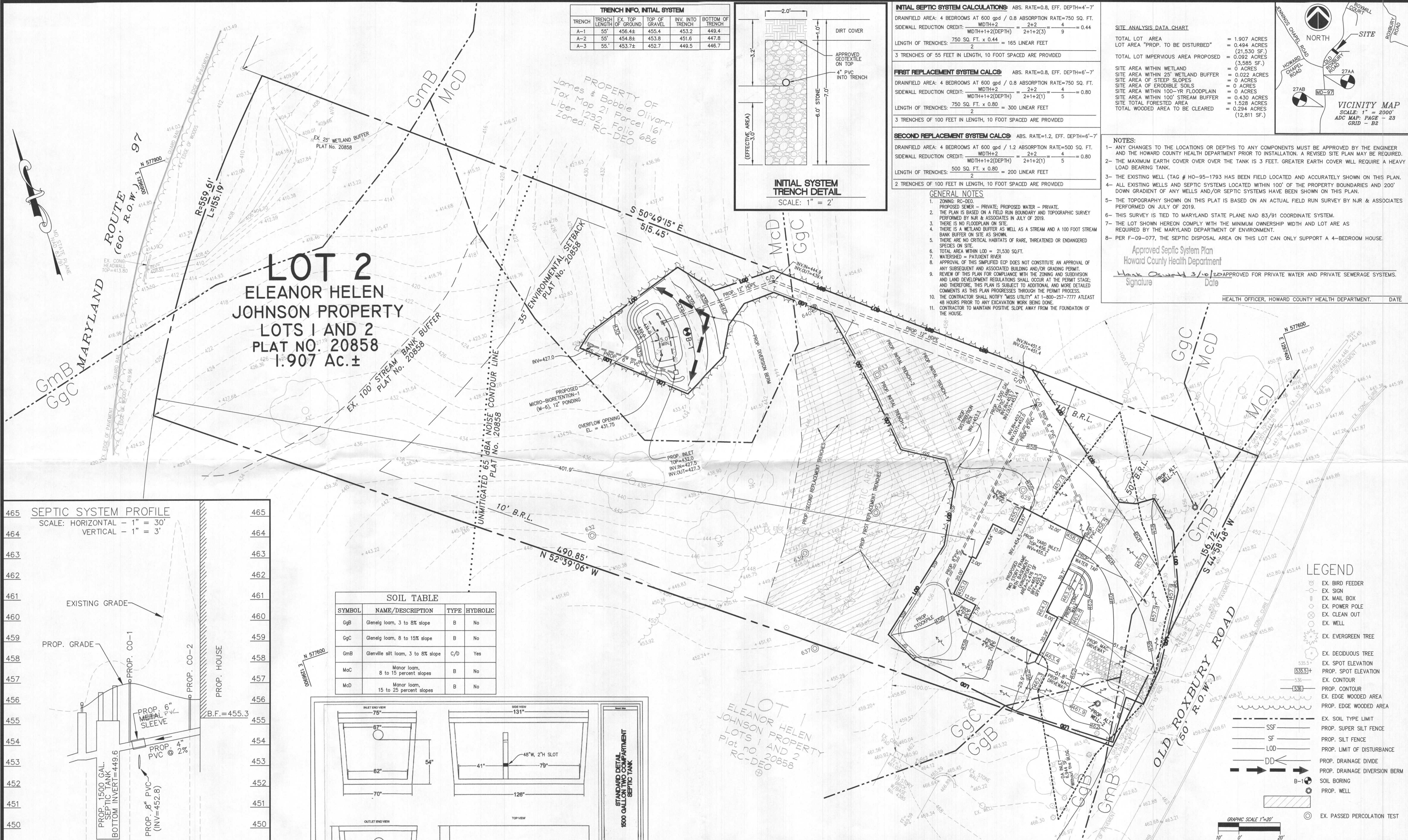
**VICINITY MAP**  
 SCALE: 1" = 2000'  
 ADC MAP: PAGE 23  
 GRID - B2

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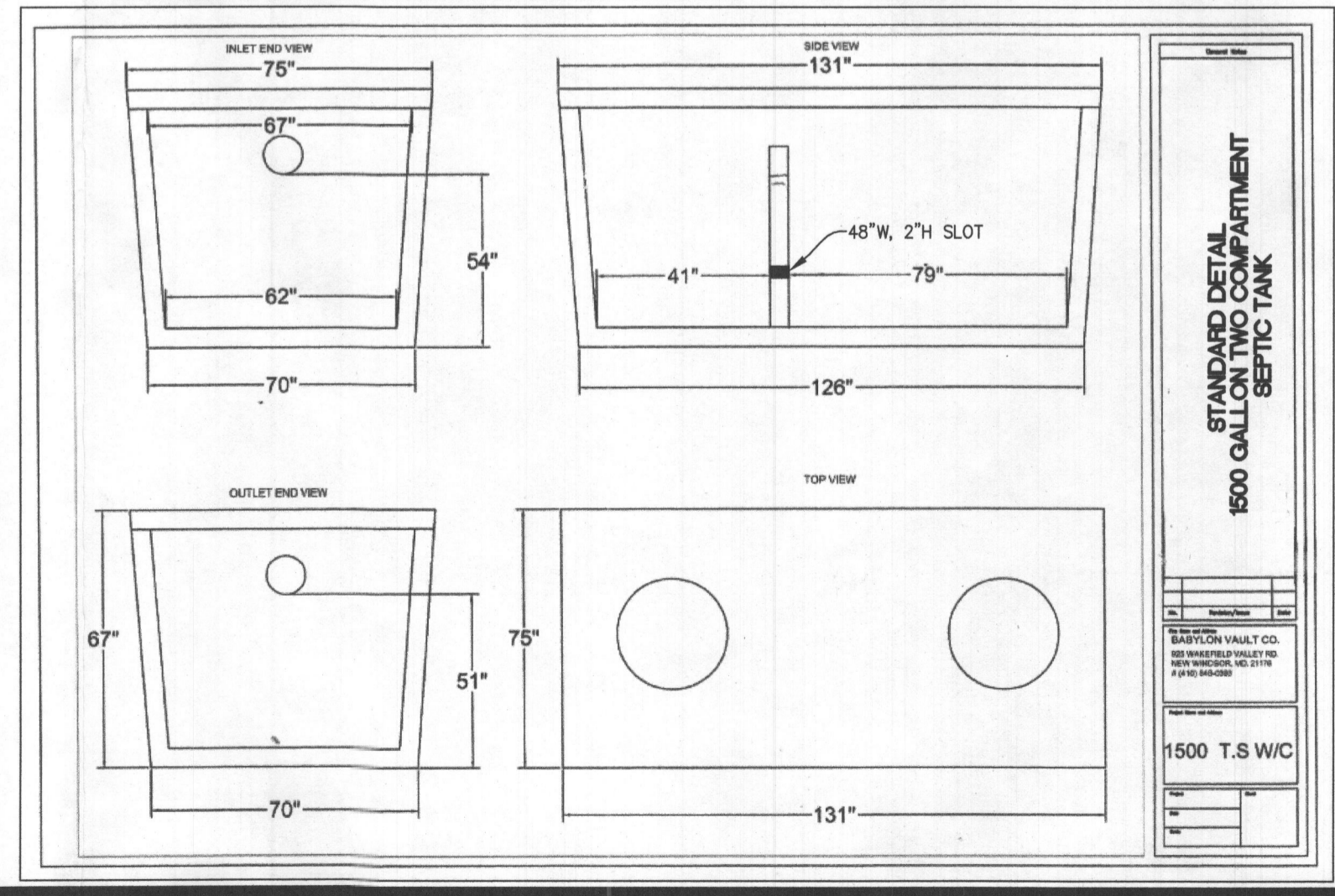
Approved Septic System Plan  
 Howard County Health Department  
 Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
 HEALTH OFFICER, HOWARD COUNTY HEALTH DEPARTMENT. DATE: \_\_\_\_\_

**LOT 2**  
**ELEANOR HELEN JOHNSON PROPERTY**  
**LOTS 1 AND 2**  
**PLAT NO. 20858**  
**1.907 AC.±**



**SOIL TABLE**

SYMBOL	NAME/DESCRIPTION	TYPE	HYDROLOGIC
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 March 10, 2019  
 DATE

**DEVELOPER**  
 CARUSO HOMES  
 2120 BALDWIN AVENUE,  
 Ste 200  
 CROFTON, MD 21144  
 (301) 261-0277

**ON SITE SEWAGE DISPOSAL PLAN**  
**ELEANOR HELEN JOHNSON PROPERTY**  
**LOT 2**  
 PLAT NUMBER 20858  
 TAX MAP 21, GRID 19, PARCEL 82  
 4375 OLD ROXBURY ROAD, BROOKEVILLE, MD 20729  
 5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

SCALE: 1" = 20' JOB NO.: 3551 DATE: AUG. 15, 2019 SHEET: 1 OF 1