



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
Facebook: www.facebook.com/hocohealth

RECEIPT DATE: 2/22/23 **ONSITE SEWAGE DISPOSAL SYSTEM**

P 572796

APPROVAL DATE: 3/2/2023 **PERMIT: CONSTRUCTION**

A _____

PROPERTY ADDRESS: 530 Watersville Road

SUBDIVISION: Hay Meadow Overlook

LOT: 2

TAX ID: 4593627

CONTRACTOR: Legacy Septic

EMAIL: _____

CONTRACTOR ADDRESS: 530 Watersville Rd.

PHONE: _____

PROPERTY OWNER: Russell & Lydia Moore

EMAIL: _____

808 Harvest Terrace

OWNER ADDRESS: New Market, MD 21774

PHONE: 410-977-0864

SEPTIC TANK SIZE (GALLONS): 1500 GAL

TANK MANUFACTURER: N/A

PUMP MODEL: N/A

PUMP SIZE _____

N/A

PUMP TANK CAPACITY: _____

N/A

DISTRIBUTION SYSTEM: ☒ GRAVITY

☐ PRESSURE DOSED

BEDROOMS: 5

APPLICATION RATE: 0.8

TRENCHES:	LINEAR FEET REQUIRED: <u>147' (3 @ 49')</u>	INLET DEPTH: <u>4'</u>
	TRENCH WIDTH: <u>3'</u>	MAXIMUM BOTTOM DEPTH: <u>6'</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10'</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>4'</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: ~~Zack Silvest~~ Spencer Freeman ISSUE DATE: 2/27/2023 EXPIRATION DATE: 2/27/2024

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 NA

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

Sheet

ROAD NAME

TRENCH/DRAINFIELD DATA

WIDTH 3' INLET 4' BOTTOM 6'
NUMBER OF TRENCHES 4
TOTAL LENGTH 200
ABSORPTION AREA 600 F²
DISTRIBUTION BOX LEVEL yes
DISTRIBUTION BOX BAFFLE yes
DISTRIBUTION BOX PORT yes

SEPTIC TANK DATA

SEPTIC TANK 1 LEVEL yes
MANUFACTURER Monarch
CAPACITY 1500 GAL
SEAM LOC top
TANK LID DEPTH 2.5'
BAFFLES 6" Front & 4" back
BAFFLE FILTER back
MANHOLE LOC Front & back
6" PORT LOC —
WATERTIGHT TEST —
SLOTTED yes
DATE ON LID —

PUMP/SEPTIC TANK LEVEL NA

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

PRE-CONSTRUCTION:

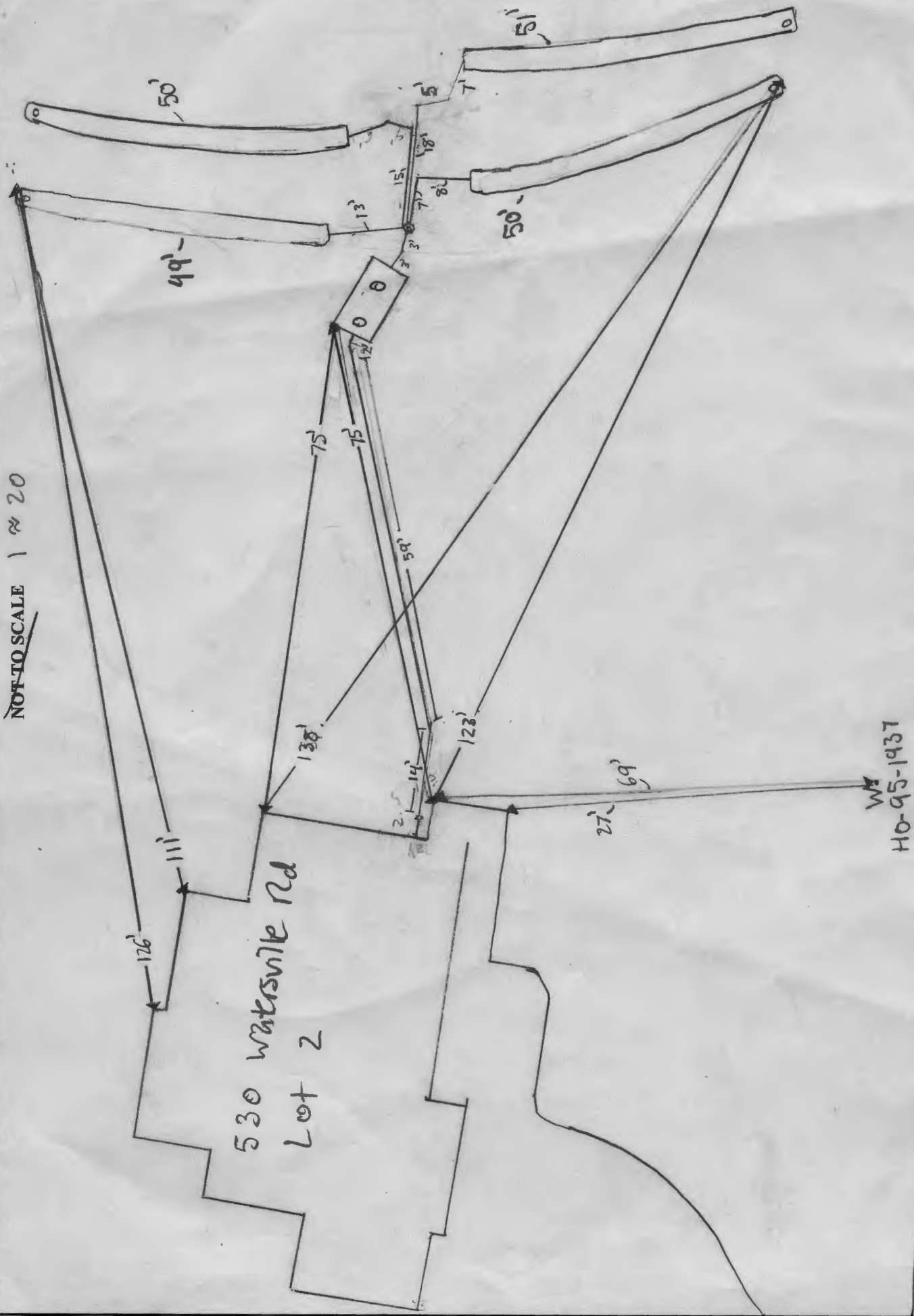
2/27/2023 - Laid out tank location. Installer stated location out of foundation of house would be moved to left instead of right side of wall. Can still make full, no date on lid of tank but has receipts of tanks delivered & location set.
3/1/2023 - Laid out trenches. Upper trench moved to be on center. (W/SP)

INSTALLATION: 2/28/2023 - saw tank & measured lid depth. (SP)

3/1/2023 - Before layout, lower trench was dug, to show the soils. Saw installers laying stone into lower trench, stone to grade per plan. Came back around 3, saw rest of trenches; width & inlet per plan, & length OK. Installer started D box. Gave OK to start backfilling trenches. reinspect Hase to tank to D box to trenches. (SP)
3/2/2023 - Inspected Hase to tank, had 1% fall. D box set, leveled D box. Finished as built for Hase to tank. Tank to D box, D box to beginning of trenches (SP)

FINAL INSPECTOR Shepsura Page DATE OF APPROVAL 3/2/2023

NOT TO SCALE 1" = 20'



WATERSVILLE RD



02/02/2023

NON-BUILDABLE
PRESERVATION
PARCEL 'B'

HAY MEADOW OVERLOOK
PLAT No. 21740

SWM ACCESS MAINTENANCE
AND DRAINAGE EASEMENT
PLAT No. 21740

N 45°53'09" E 159.27'

S 57°58'08" E 100.58'

EXISTING
SEWAGE DISPOSAL AREA

(30' BRL)
211.3'±

(75' BRL)

LOT 2
HAY MEADOW OVERLOOK
PLAT No. 21740
53,662 SF

Wall Check
OK

2/27/2023

EX. WELL
TAG#: HO-95-1937

PUBLIC SIGHT DISTANCE & UTILITY EASEMENT
PLAT No. 21740

L=304.31'
R=455.00'

EX. EDGE OF PAVEMENT

LOT 3
HAY MEADOW OVERLOOK
PLAT No. 21740

N 27°35'47" E 178.69'

(30' BRL)

38.9'±

BAY WINDOW

2 STORY FRAME
WITH BASEMENT
FF=710.60

COVERED CONC. PORCH

EXISTING
WELL RESERVE BOX

80.4'±

(10' BRL)

48.6'±

LOT 1
HAY MEADOW OVERLOOK
PLAT No. 21740

N 56°26'15" W

151.15'

41.20'
N 56°26'15" W

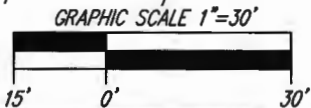
WATERSVILLE ROAD
SCENIC ROAD, MINOR COLLECTOR
50' RIGHT OF WAY
EX. EDGE OF PAVEMENT

PREPARED BY:



NJR & ASSOCIATES, LLC.
LAND SURVEYING AND PLANNING
2770 TERRAPIN RUN
WEST FRIENDSHIP, MD 21794
TEL: (240) 508-3200

WALL CHECK SURVEY
HAY MEADOW OVERLOOK
LOT 2
PLAT No. 21740
530 WATERSVILLE ROAD, MOUNT AIRY, MD, 21771
TAX MAP 2, GRID 15, PARCEL 18
4TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
JOB NO.: 3696 DATE: FEB. 2, 2023



Silvast, Zackary

From: Silvast, Zackary
Sent: Tuesday, August 30, 2022 10:32 AM
To: Gregory Phillips
Cc: Najib Roshan
Subject: RE: Septic Discharge Review Status Request

Hello,

Unfortunately I cannot tell you exactly how to do your design or "draw it out" for you. I can only tell you that you have a 10,000 SF area. And I see a lot of cramming in of the septic systems, 45 degree bends without proper labeling, and a waste of usable area.

The tank could be moved higher to allow the dbx to come down even with the first set of trenches. I would make the initial system 4 lines, the 1st replacement system 5 lines, and the second replacement system 7 lines. And I would keep the lines as straight and on contour as possible.

The well arc is shown but could be properly labeled, and it's not in the legend. I would add the SF of the SDA like this for example, existing 10,005sf Septic Reserve Area, right on the site plan.

I think that's all the points. Let me know if you have any other questions or concerns.

- ZS

From: Gregory Phillips <mred.mreb@icloud.com>
Sent: Tuesday, August 30, 2022 9:19 AM
To: Silvast, Zackary <zsilvast@howardcountymd.gov>
Cc: Najib Roshan <roshannj@aol.com>
Subject: Re: Septic Discharge Review Status Request

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

Zack,

I think we are waiting for clarification from you on NJ's email from Last week.

I would like to get this permit issued ASAP.

Gregory B. Phillips
Maryland Real Estate Development
6100 Daylong Lane
Suite 100
Clarksville, Maryland 21029

Email: mred.mreb@icloud.com

Website: WWW.MRED.US

Direct 410.977.0864



On Aug 23, 2022, at 3:22 PM, roshannj@aol.com wrote:

Good afternoon,

As you know, due to the poor quality of the soil on this site, we need a total of 652 linear feet of trenches for the three systems and by spacing the trenches at 10' and following the contours, this was a very tight fit.

At the locations where we have up to 20' gaps, if offset the edge by 10', you will find the gaps to be barely enough. As far as the trench bending goes, I had my other plans previously rejected for not being parallel to contours.

Would it be possible if you can mark up a copy of our site plan for the way you prefer these trenches so I can follow that as a guide as I had a tough time fitting these trenches?

I am attaching the plan as it was printed for our previous submission as your comment number 5 is indicating the need for a 100' circle around a proposed well where on this site, the well is existing and a 100' circle around a proposed 1500 sf well reserve box is included. Also comment number 6 indicates the 10,000 sf SDA to be labeled. Our plan has this area labeled as "Ex. Septic Reserve Area" and the plat of subdivision has this area labeled as "Private Septic Easement, 10,003 sf", can you please clarify which one is the preferred label?

Thank you
Najib Roshan, LS
NJR & Associates, LLC
2770 Terrapin Run
West Friendship, MD 21794
PH (240) 508-3200
roshannj@aol.com

-----Original Message-----

From: Russell Moore <rjmoore0630@yahoo.com>
To: Gregory Phillips <mred.mreb@icloud.com>
Cc: Najib Roshan <roshannj@aol.com>
Sent: Tue, Aug 23, 2022 10:20 am
Subject: Re: Septic Discharge Review Status Request

Good morning Greg.

Just wanted to check in to see if we had any updates on the septic approval ?

Thank you.

Sent from my iPhone

On Aug 5, 2022, at 6:10 PM, Gregory Phillips <mred.mreb@icloud.com> wrote:

Silvast, Zackary

From: Silvast, Zackary
Sent: Friday, August 5, 2022 5:36 PM
To: Gregory Phillips; Wolf, Kevin
Cc: Najib Roshan; Freemon, Robert; Oswald, Hank; Williams, Jeffrey
Subject: RE: Septic Discharge Review Status Request

Hello,

It was under review. I was having a hard time locating the file and it appears to have had an extensive history with Robert Bricker's previous final approval. I gave it an initial review two weeks ago.

With 5 people from this office tagged/associated with this project, I was concerned if anything else had to be addressed besides gaining new approval for this amended OSDS plan? Can anyone else shed any light that I don't know about?

I had a sticky note on this plan stating that without a building permit with floor plans provided; this OSDS system could be subject to change. And since this house is a larger number of bedrooms with a basement. The property owners may want to consider updating the plans to accommodate a 6 bedroom house with a 2000 GAL septic tank if they desired.

I will provide my revision comments down below now that I have obtained the file today:

1. **The initial system's trenches need to be adjusted, it's too cramped.**
 - a. I suggest going back to a 4 line design for the initial.
2. **The spacing of all three systems seems unnecessary with large gaps of 20' or larger.**
 - a. This is unnecessarily wasting precious SDA.
3. **The trench lines should remain on contour as best as possible but bending some pipes and not bending others is not realistic.**
 - a. Ideally the lines should be as straight as possible within reason.
4. **Generally, a distributions box will have a 45 degree bend in it in order to be even in line with the first two trenches.**
 - a. A d-box higher away from the beginning drainfield lines with 3 spider stems coming out of the box is not economical nor ergodynamic.
5. **Should show the 100' well arc around the proposed well box.**
6. **Label the 10,000 sf SDA.**

We look forward to your re-submittal.

- ZS

From: Gregory Phillips <mred.mreb@icloud.com>
Sent: Thursday, August 4, 2022 5:04 PM
To: Silvast, Zackary <zsilvast@howardcountymd.gov>; Wolf, Kevin <KWolf@howardcountymd.gov>
Cc: Najib Roshan <roshannj@aol.com>; Freemon, Robert <rffreemon@howardcountymd.gov>
Subject: Septic Discharge Review Status Request

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

Zack and Kevin,

Maryland Real Estate Development



Transmittal

DATE: July 7, 2022

TO: Zackary Silvast

Gregory Phillips
Maryland Real Estate Development LLC
7846 River Rock Way
Columbia, MD 21044

gphillips@mred.us

Direct 410-977-0864

Howard County Health Department
Bureau of Environmental Health
Well & Septic Program
8930 Stanford Boulevard
Columbia, MD 21045
410.313.1786 (Office)
hoswald@howardcountymd.gov

Regarding:

Septic Discharge

Lot 2

**530 East Watersville Road
Mount Airy, MD 21771**

Regards,

Greg P.

Silvast, Zackary

From: Silvast, Zackary
Sent: Wednesday, November 23, 2022 11:01 AM
To: Gregory Phillips
Cc: Najib Roshan; Williams, Jeffrey
Subject: RE: Septic Discharge Review Status Request

Hello all,

I have the following revision comments that need to be addressed on the OSDS plan submittal from November 9th, 2021.

Please see the following below:

1. The newest stormwater management is in the direct path of the SDA and is not meeting the minimum 25' setback. This is not a rule that can be bent as expressed previously.
 - a. I don't see any issue with sliding it up 5-10' to meet the required setback.
 - b. Right now I'm measuring 20' off the edges.
2. The calculations involving the second replacement trench are 260 LF of trench. ON the plot plan it is showing the correct trench length of 37.5' for the seven trenches but in the written calculation it is calling for seven trenches @ 43.5'.
 - a. Please correct.
3. Trench labeled as "2nd replacement- trench 2" is not meeting the minimum setback between trenches at 10' and should be moved and positioned in a way that is more uniform with the other 6 trenches.
4. 10,000 sf SDA should be labeled as sewage disposal area on plot plan.
 - a. Please correct.

After these comments are addressed, we should have swift approval. Thank you.

- ZS

From: Gregory Phillips <mred.mreb@icloud.com>
Sent: Monday, November 21, 2022 2:26 PM
To: Silvast, Zackary <zsilvast@howardcountymd.gov>
Subject: Re: Septic Discharge Review Status Request

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

Hi Zack,

I called and left a message today.

Just trying to confirm that you got the paper copies back on the 9th of November.

Please advise as this is the last task to get this building permit approved.

Regards,

Maryland Real Estate Development



Transmittal

DATE: Tuesday, November 8, 2022

TO:

Zackary Silvast

Gregory Phillips
Maryland Real Estate Development LLC
7846 River Rock Way
Columbia, MD 21044

gphillips@mred.us

Direct 410-977-0864

Howard County Health Department
Bureau of Environmental Health
Well & Septic Program
8930 Stanford Boulevard
Columbia, MD 21045
410.313.1786 (Office)
zsilvast@howardcountymd.gov

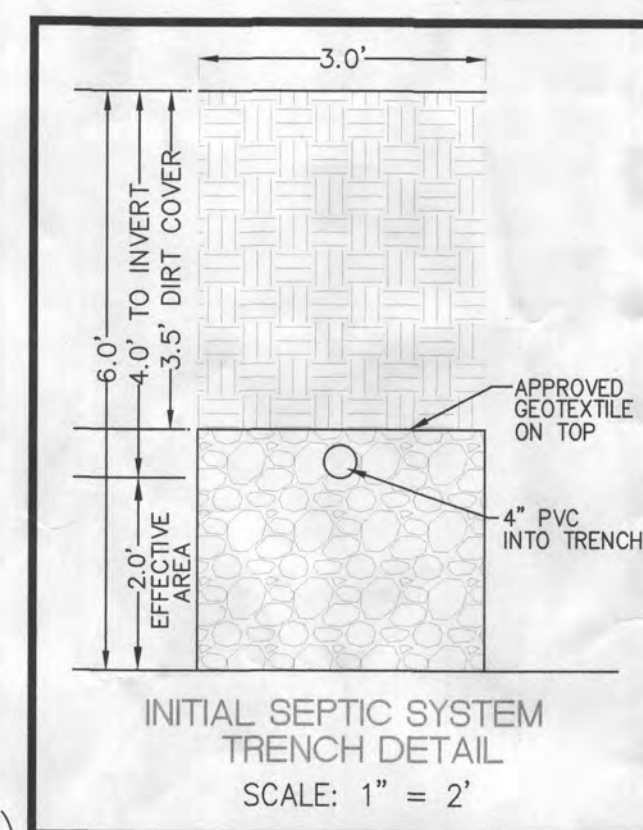
Regarding:

**Septic Discharge Plan Lot 2
530 Watersville Road
BP - B22003851**

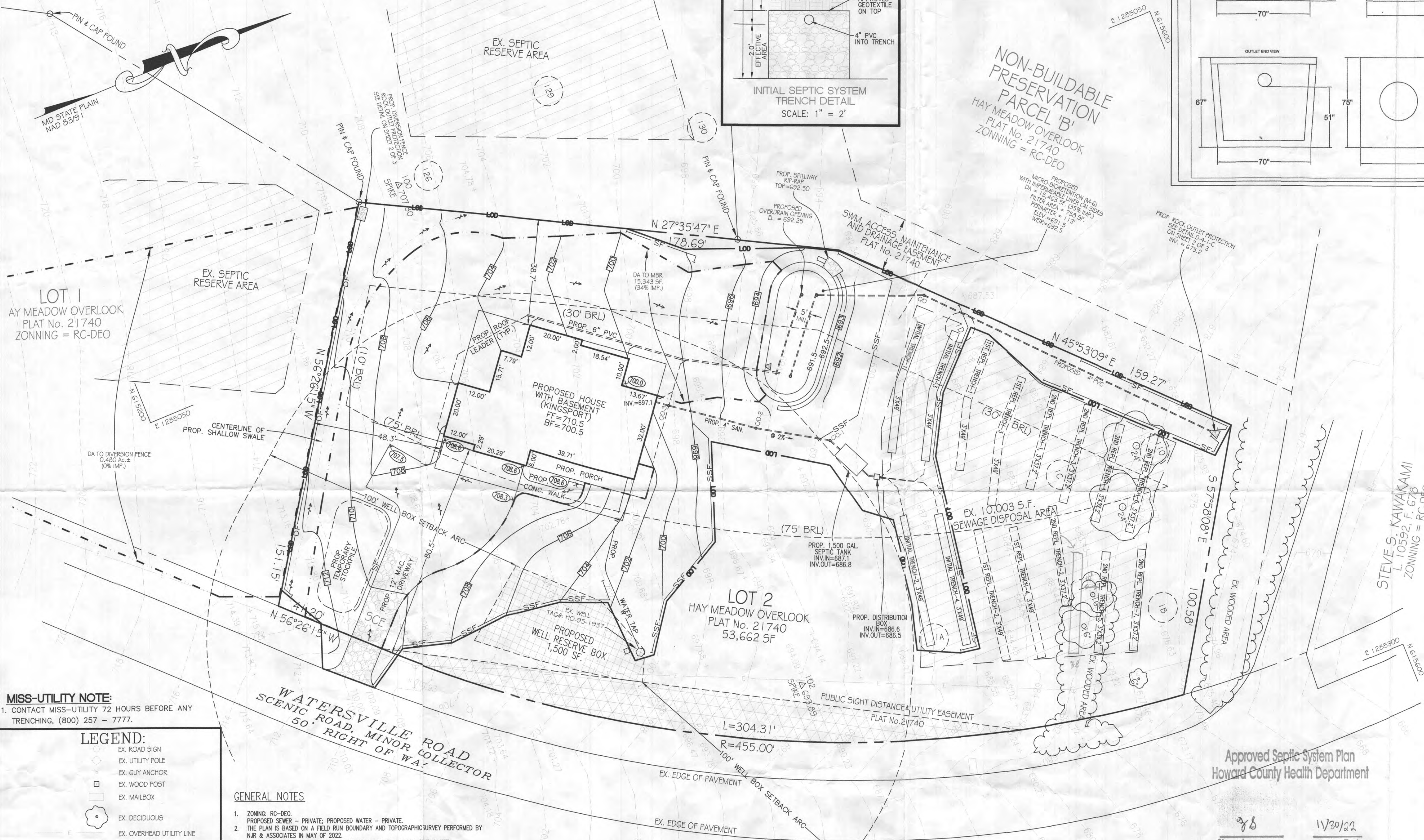
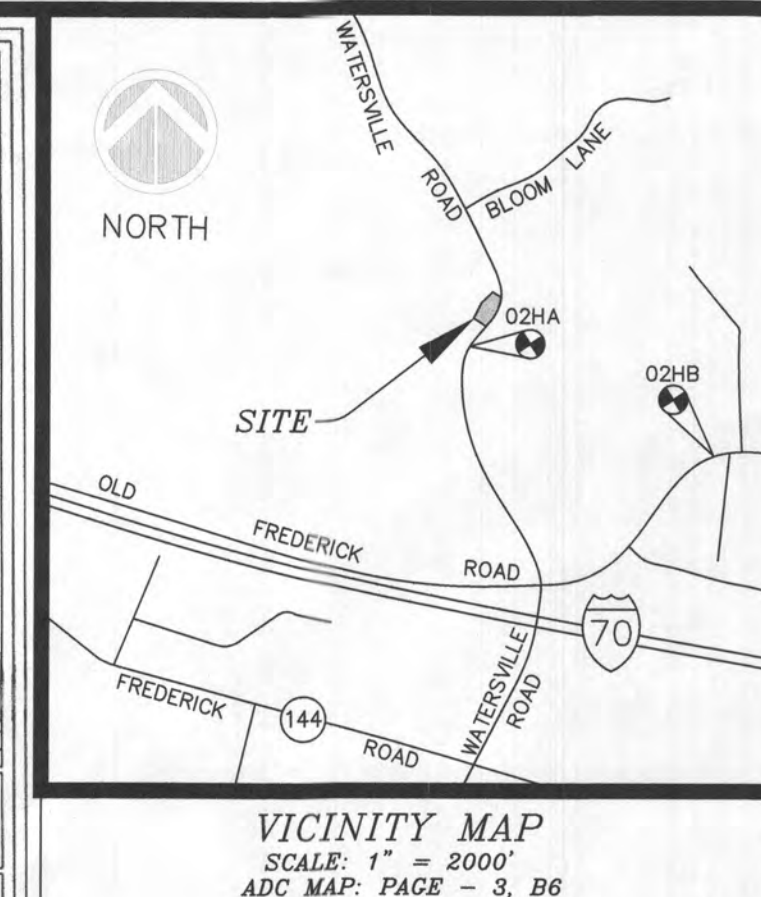
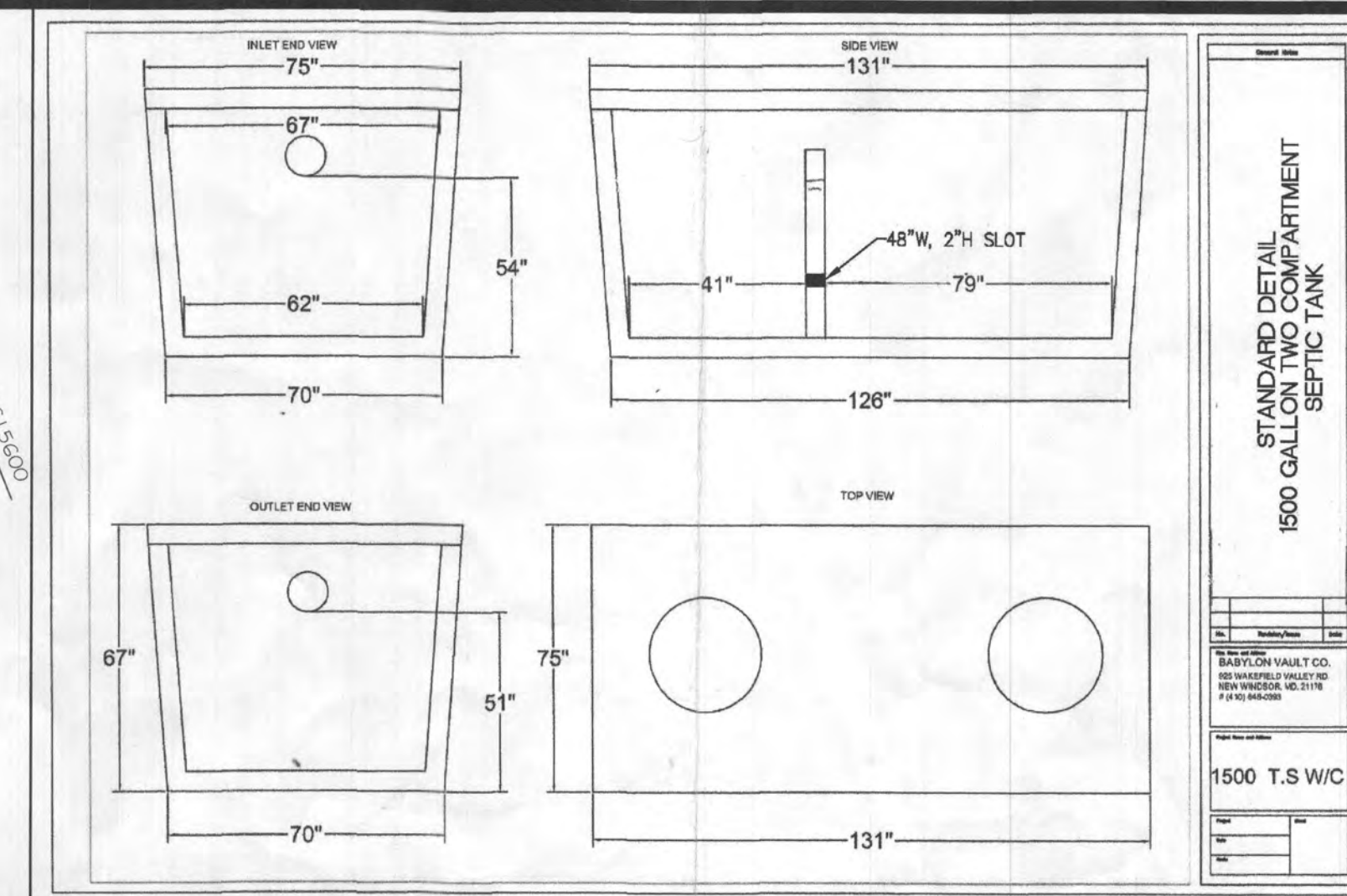
On Behalf of NJR Associates

SEPTIC SYSTEM NOTES:
1- 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.
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 # HO-95-1937) HAS BEEN FIELD LOCATED AND ACCURATELY SHOWN ON THIS PLAN.
4- 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.
5- THIS SURVEY IS TIED TO MARYLAND STATE PLANE NAD 83/91 COORDINATE SYSTEM.
6- THE LOT SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT ARE AS REQUIRED BY THE MARYLAND DEPARTMENT OF ENVIRONMENT.

LOT 3
HAY MEADOW OVERLOOK
PLAT No. 21740
ZONING = RC-DEO



SOIL TABLE			
SYMBOL	NAME/DESCRIPTION	TYPE	HYDROLIC
O/C	OCCOQUAN LOAM 0 to 15 percent slopes	B	No



MISS-UTILITY NOTE:
1. CONTACT MISS-UTILITY 72 HOURS BEFORE ANY TRENCHING, (800) 257 - 7777.

LEGEND:

- EX. ROAD SIGN
- EX. UTILITY POLE
- EX. GUY ANCHOR
- EX. WOOD POST
- EX. MAILBOX
- EX. DECIDUOUS
- EX. OVERHEAD UTILITY LINE
- EX. WATER WELL
- PROP. SPOT ELEVATION
- EX. CONTOUR
- PROP. CONTOUR
- PROP. MBR DRAINAGE AREA
- PROP. SUPER SILT FENCE
- PROP. SILT FENCE
- PROP. DIVERSION FENCE
- PROP. LIMIT OF DISTURBANCE
- EX. EDGE WOODED AREA
- EX. PRIVATE SEPTIC RESERVE AREA
- PROP. WELL RESERVE BOX
- EX. PUBLIC SIGHT DISTANCE AND UTILITY EASEMENT
- PROP. STABILIZED CONSTRUCTION ENTRANCE
- EX. PASSING PERCOLATION TEST LOCATION

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 N.J.R. & ASSOCIATES IN MAY OF 2022.
- THERE IS NO FLOODPLAIN, WETLAND, STREAMS OR THEIR BUFFERS ON THIS SITE.
- THERE ARE NO CRITICAL HABITATS OF RARE, THREATENED OR ENDANGERED SPECIES ON SITE.
- TOTAL AREA WITHIN LOD = 30,428 SQ.FT.
- WATERSHED = SOUTH BRANCH PATAPUSCO.
- 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.
- EXISTING PASSING SEPTIC PERCOLATION TESTS WITH ADEQUATE INFILTRATION RATES ARE LOCATED WITHIN 50' OF THE PROPOSED STORM WATER MANAGEMENT FACILITY, THEREFORE, NO ADDITIONAL SOIL TESTS ARE PROPOSED.
- PREVIOUS HOWARD COUNTY FILE NUMBERS: F-09-110, F-19-089 AND SP-08-011.
- 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	= 1,232 ACRES
LOT AREA "PROP. TO BE DISTURBED"	= (53,662)
TOTAL LOT IMPERVIOUS AREA PROPOSED	= (30,428 SF)
TOTAL PROPOSED GREEN AREA	= (5,191 SF)
SITE AREA WITHIN WETLAND	= 0 ACRES
SITE AREA WITHIN 25' WETLAND BUFFER	= 0 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 ACRES
SITE TOTAL EXISTING FORESTED AREA	= 0 ACRES
SITE ULTIMATE FORESTED AREA	= 0 ACRES

SEPTIC TRENCH INFO, INITIAL SYSTEM

TRENCH	TRENCH LENGTH	TRENCH WIDTH	EX. TOP OF GROUND	TOP OF GRAVEL	INV. INTO TRENCH	BOTTOM OF TRENCH
1	49'	3'	688.4±	684.9	684.4	682.4
2	49'	3'	688.1±	684.6	684.1	682.1
3	49'	3'	686.5±	683.0	682.5	680.5
4	49'	3'	686.3±	682.8	682.3	680.3

REVISIONS

No.	DESCRIPTION	DATE
1		



PROFESSIONAL CERTIFICATE
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 NUMBER 1113, WITH EXPIRATION DATE OF FEBRUARY 10, 2023.
NOVEMBER 23, 2022
DATE

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF DEVELOPER

DATE

DEVELOPER
CARUSO HOMES
2120 BALDWIN AVENUE, Ste 200
CROFTON, MD 21114
(301) 261-0277

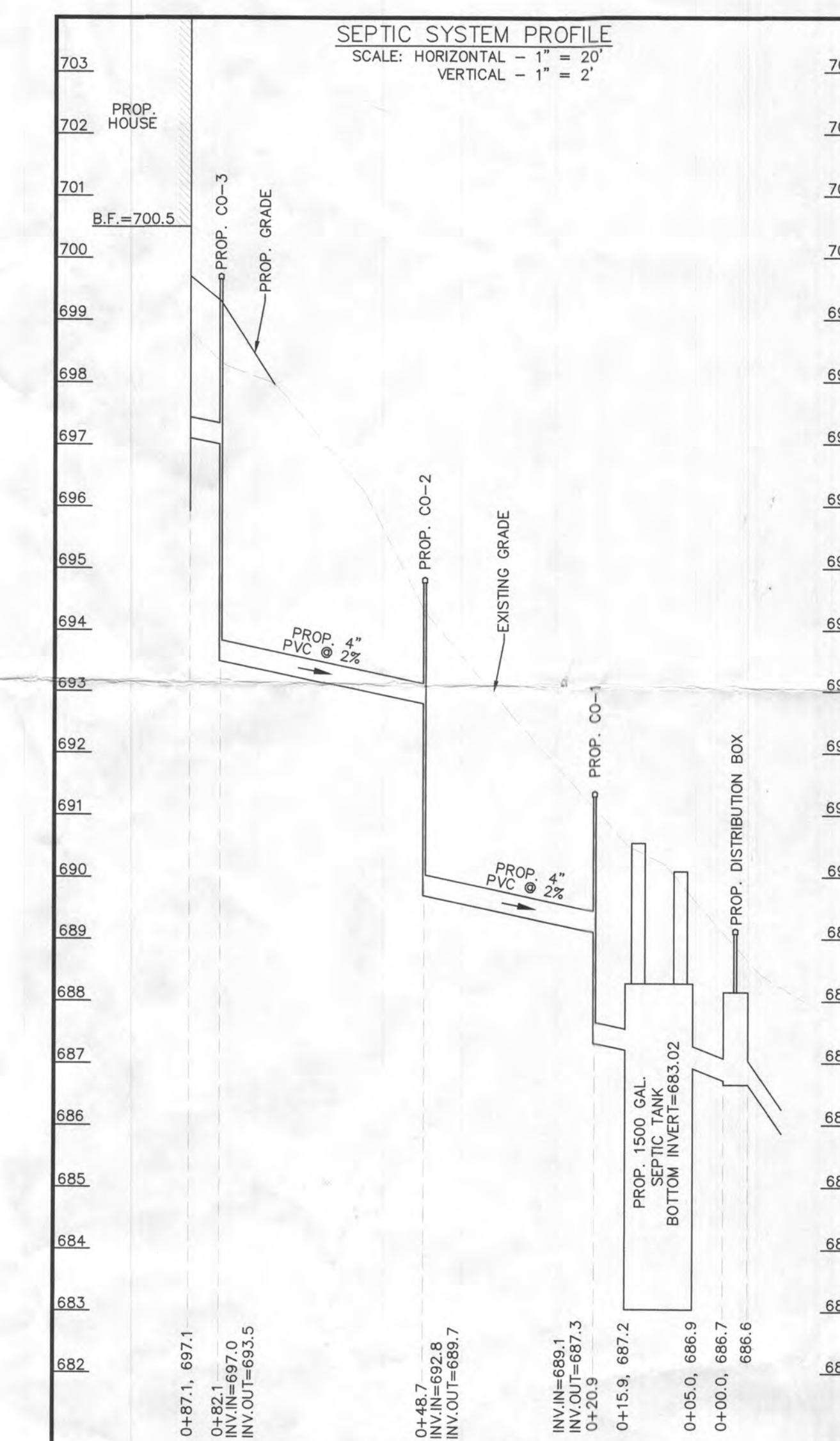
OWNER
RUSSELL J. MOORE
808 HARVEST TERRACE
NEW MARKET, MD 21794
(410) 977-0864

PLAN PREPARED BY:

NJR & ASSOCIATES
Land Surveying and Planning
2770 TERRAPIN RUN
WEST FRIENDSHIP, MD 21794
TEL: (240) 608-3200

ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN

HAY MEADOW OVERLOOK
LOT 2
PLAT No. 21740
530 WATERSVILLE ROAD, MOUNT AIRY, MD, 21771
TAX MAP 2, GRID 15, PARCEL 18
4TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE: 1" = 20'
JOB NO.: 3696
DATE: JUNE 2, 2022
SHEET: 1 OF 1



SEPTIC SYSTEM CALCULATIONS, INITIAL SYSTEM:

ABS. RATE= 0.8, EFFECTIVE DEPTH= 4'-6" = 2.0'
DRAINFIELD AREA: 5 BEDROOMS AT 750 gpd / 0.8 ABSORPTION RATE=938 SQ. FT.
SIDEWALL REDUCTION CREDIT: $\frac{WID+2}{WID+1+2(DEPTH)} = \frac{3+2}{3+1+2(2)} = \frac{5}{8} = 0.625$
LENGTH OF TRENCHES: $\frac{938 \times 0.625}{3} = 196$ LINEAR FEET
INITIAL SYSTEMS: FOUR TRENCHES OF 49 FEET IN LENGTH EACH, 3 FEET WIDE, 10 FEET MINIMUM SPACED ARE PROVIDED.

SEPTIC SYSTEM CALCULATIONS, 1ST REPLACEMENT SYSTEM:

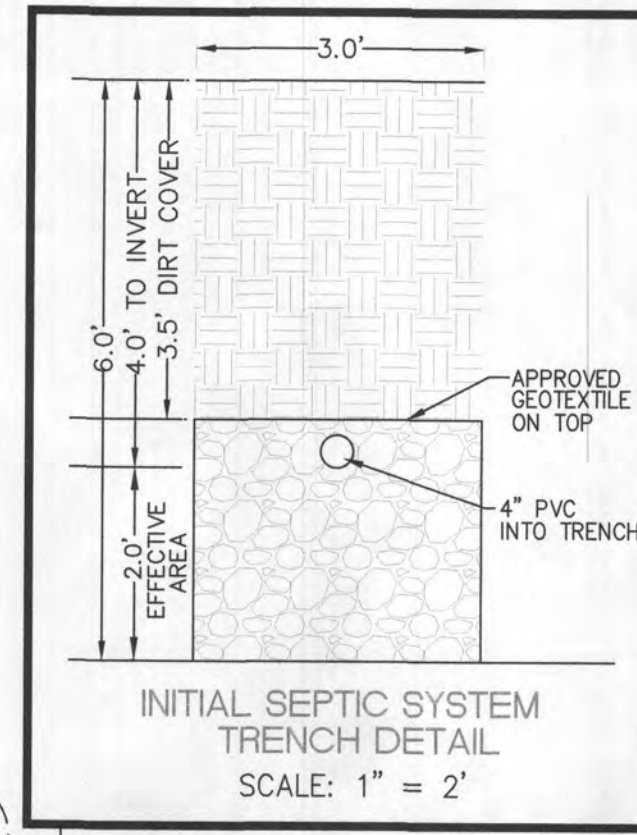
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DRAINFIELD AREA: 5 BEDROOMS AT 750 gpd / 0.8 ABSORPTION RATE=938 SQ. FT.
SIDEWALL REDUCTION CREDIT: $\frac{WID+2}{WID+1+2(DEPTH)} = \frac{3+2}{3+1+2(2)} = \frac{5}{8} = 0.625$
LENGTH OF TRENCHES: $\frac{938 \times 0.625}{3} = 196$ LINEAR FEET
INITIAL SYSTEMS: FOUR TRENCHES OF 49 FEET IN LENGTH EACH, 3 FEET WIDE, 10 FEET MINIMUM SPACED ARE PROVIDED.

SEPTIC SYSTEM CALCULATIONS, 2ND REPLACEMENT SYSTEMS:

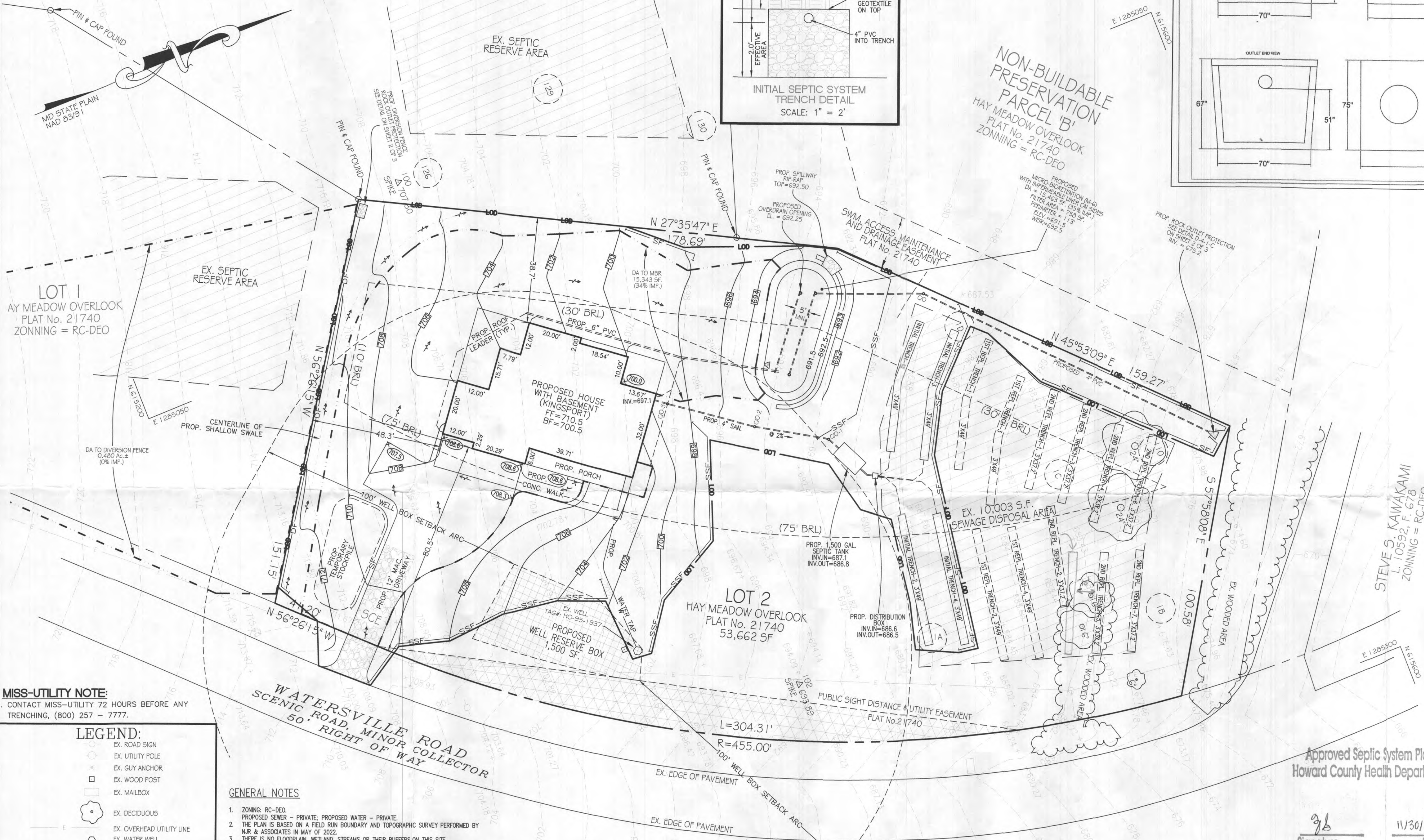
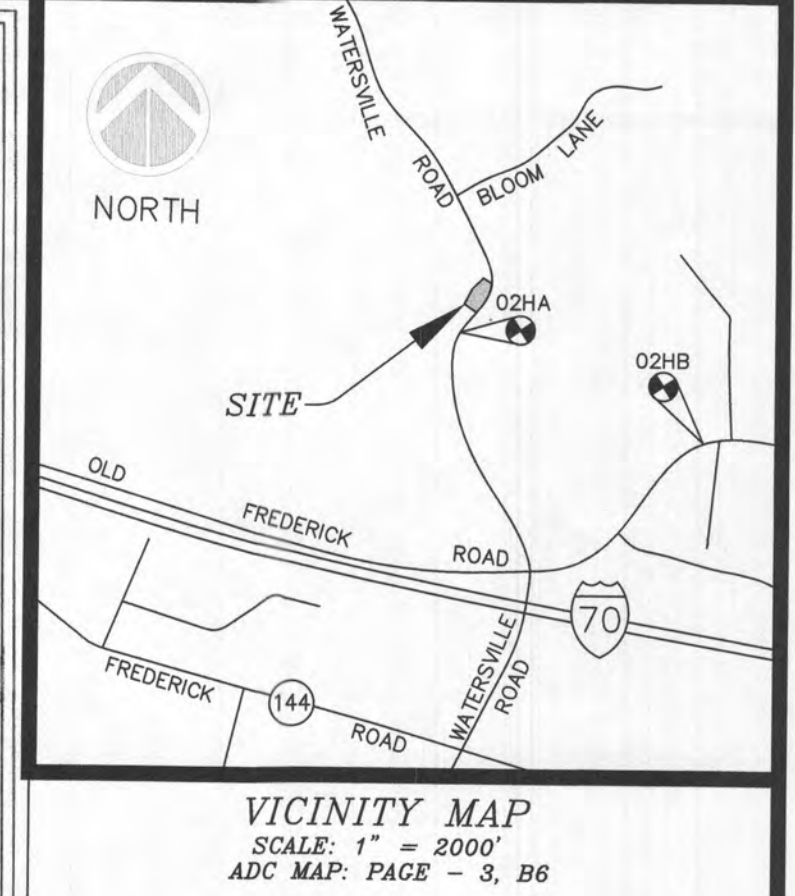
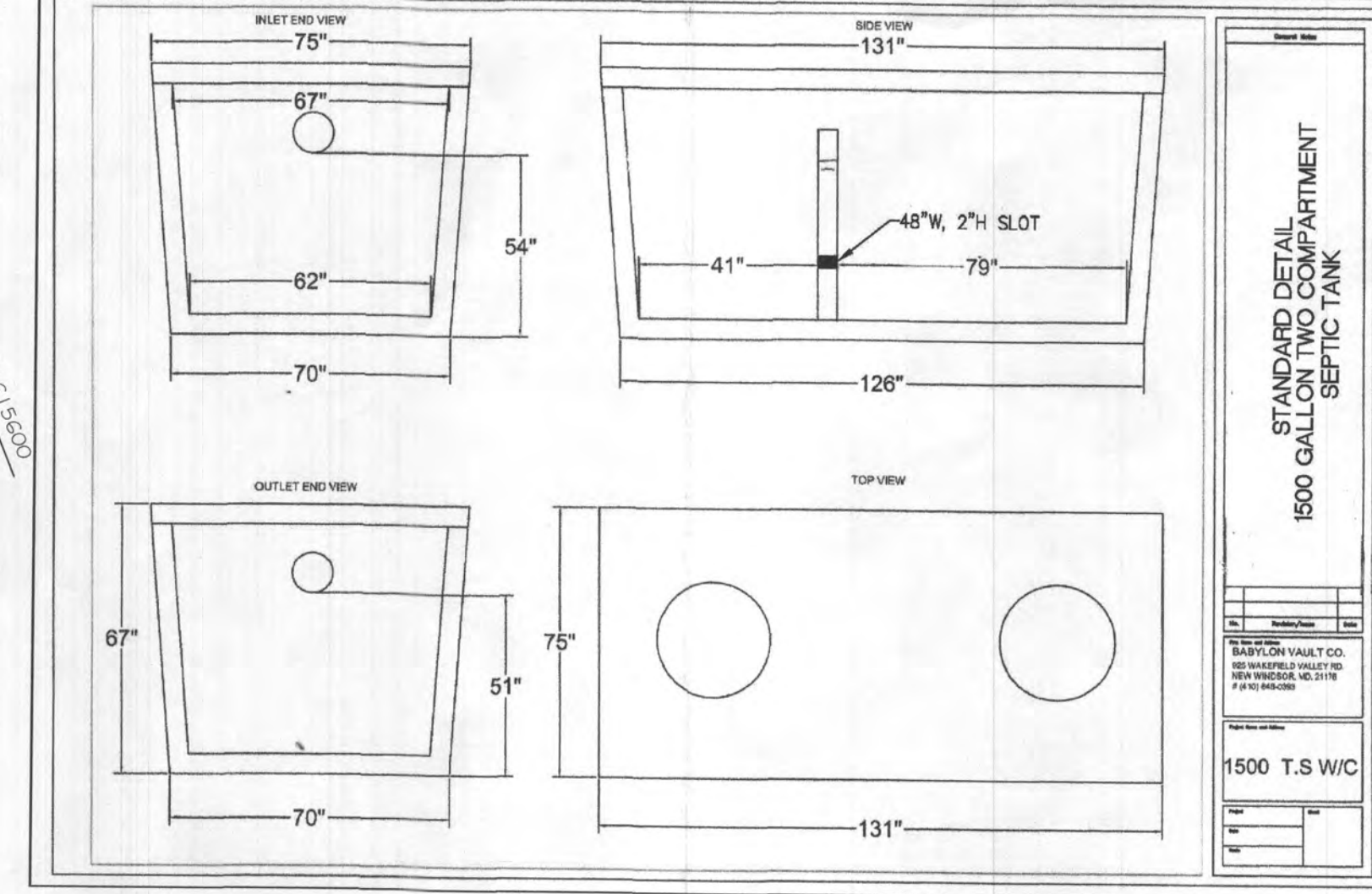
ABS. RATE= 0.6, EFFECTIVE DEPTH= 4'-6" = 2.0'
DRAINFIELD AREA: 5 BEDROOMS AT 750 gpd / 0.6 ABSORPTION RATE=1,250 SQ. FT.
SIDEWALL REDUCTION CREDIT: $\frac{WID+2}{WID+1+2(DEPTH)} = \frac{3+2}{3+1+2(2)} = \frac{5}{8} = 0.625$
LENGTH OF TRENCHES: $\frac{1250 \times 0.625}{3} = 260$ LINEAR FEET
REPLACEMENT SYSTEMS: SEVEN TRENCHES OF 37.2 FEET IN LENGTH EACH, 3 FEET WIDE, 10 FEET MINIMUM SPACED ARE PROVIDED.

- SEPTIC SYSTEM NOTES:**
- 1- 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.
 - 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 # HO-95-1937) HAS BEEN FIELD LOCATED AND ACCURATELY SHOWN ON THIS PLAN.
 - 4- 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.
 - 5- THIS SURVEY IS TIED TO MARYLAND STATE PLANE NAD 83/91 COORDINATE SYSTEM.
 - 6- THE LOT SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT ARE AS REQUIRED BY THE MARYLAND DEPARTMENT OF ENVIRONMENT.

LOT 3
HAY MEADOW OVERLOOK
PLAT No. 21740
ZONING = RC-DEO



SOIL TABLE			
SYMBOL	NAME/DESCRIPTION	TYPE	HYDROLOGIC
O/C	OCOCQUAN LOAM 8 to 15 percent slopes	B	No



MISS-UTILITY NOTE:

1. CONTACT MISS-UTILITY 72 HOURS BEFORE ANY TRENCHING, (800) 257 - 7777.

- LEGEND:**
- EX. ROAD SIGN
 - EX. UTILITY POLE
 - EX. GUY ANCHOR
 - EX. WOOD POST
 - EX. MAILBOX
 - EX. DECIDUOUS
 - EX. OVERHEAD UTILITY LINE
 - EX. WATER WELL
 - PROP. SPOT ELEVATION
 - EX. CONTOUR
 - PROP. CONTOUR
 - PROP. MDR DRAINAGE AREA
 - PROP. SUPER SILT FENCE
 - PROP. SILT FENCE
 - PROP. DIVERSION FENCE
 - PROP. LIMIT OF DISTURBANCE
 - EX. EDGE WOODED AREA
 - EX. PRIVATE SEPTIC RESERVE AREA
 - PROP. WELL RESERVE BOX
 - EX. PUBLIC SIGHT DISTANCE AND UTILITY EASEMENT
 - PROP. STABILIZED CONSTRUCTION ENTRANCE
 - EX. PASSING PERCOLATION TEST LOCATION

GENERAL NOTES

1. ZONING: RC-DEO. PROPOSED SEWER - PRIVATE, PROPOSED WATER - PRIVATE.
2. THE PLAN IS BASED ON A FIELD RUN BOUNDARY AND TOPOGRAPHIC SURVEY PERFORMED BY NJR & ASSOCIATES IN MAY OF 2022.
3. THERE IS NO FLOODPLAIN, WETLAND, STREAMS OR THEIR BUFFERS ON THIS SITE.
4. THERE ARE NO CRITICAL HABITATS OF RARE, THREATENED OR ENDANGERED SPECIES ON SITE.
5. TOTAL AREA WITHIN LOD = 30,428 SQ.FT.
6. WATERSHED = SOUTH BRANCH PATAPSCO.
7. 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.
8. EXISTING PASSING SEPTIC PERCOLATION TESTS WITH ADEQUATE INFILTRATION RATES ARE LOCATED WITHIN 50' OF THE PROPOSED STORM WATER MANAGEMENT FACILITY, THEREFOR, NO ADDITIONAL SOIL TESTS ARE PROPOSED.
9. PREVIOUS HOWARD COUNTY FILE NUMBERS: F-09-110, F-19-089 AND SP-08-011.
10. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
11. CONTRACTOR TO MAINTAIN POSITIVE SLOPE AWAY FROM THE FOUNDATION OF THE HOUSE.

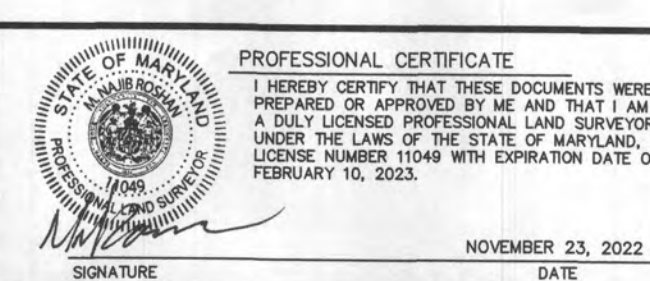
SITE ANALYSIS DATA CHART

TOTAL LOT AREA	= 1.232 ACRES (33,662 SF)
LOT AREA "PROP. TO BE DISTURBED"	= 0.698 ACRE (30,428 SF)
TOTAL LOT IMPERVIOUS AREA PROPOSED	= 0.119 ACRE (5,191 SF)
TOTAL PROPOSED GREEN AREA	= 1.113 ACRES (48,571 SF)
SITE AREA WITHIN WETLAND	= 0 ACRE
SITE AREA WITHIN 25' WETLAND BUFFER	= 0 ACRE
SITE AREA OF STEEP SLOPES	= 0 ACRE
SITE AREA OF ERODIBLE SOILS	= 0 ACRE
SITE AREA WITHIN 100'-YR FLOODPLAIN	= 0 ACRE
SITE AREA WITHIN 100' STREAM BUFFER	= 0 ACRE
SITE TOTAL EXISTING FORESTED AREA	= 0 ACRE
SITE ULTIMATE FORESTED AREA	= 0 ACRE

SEPTIC TRENCH INFO, INITIAL SYSTEM

TRENCH	TRENCH LENGTH	TRENCH WEDTH	EX. TOP OF GROUND	TOP OF GRAVEL	INV. INTO TRENCH	BOTTOM OF TRENCH
1	49'	3'	688.4±	684.9	684.4	682.4
2	49'	3'	688.1±	684.6	684.1	682.1
3	49'	3'	686.5±	683.0	682.5	680.5
4	49'	3'	686.3±	682.8	682.3	680.3

REVISIONS		
No.	DESCRIPTION	DATE
1		



DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

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

OWNER
RUSSELL J MOORE
808 HARVEST TERRACE
NEW MARKET, MD 21774
(410) 977-0864

SIGNATURE OF DEVELOPER _____ DATE _____

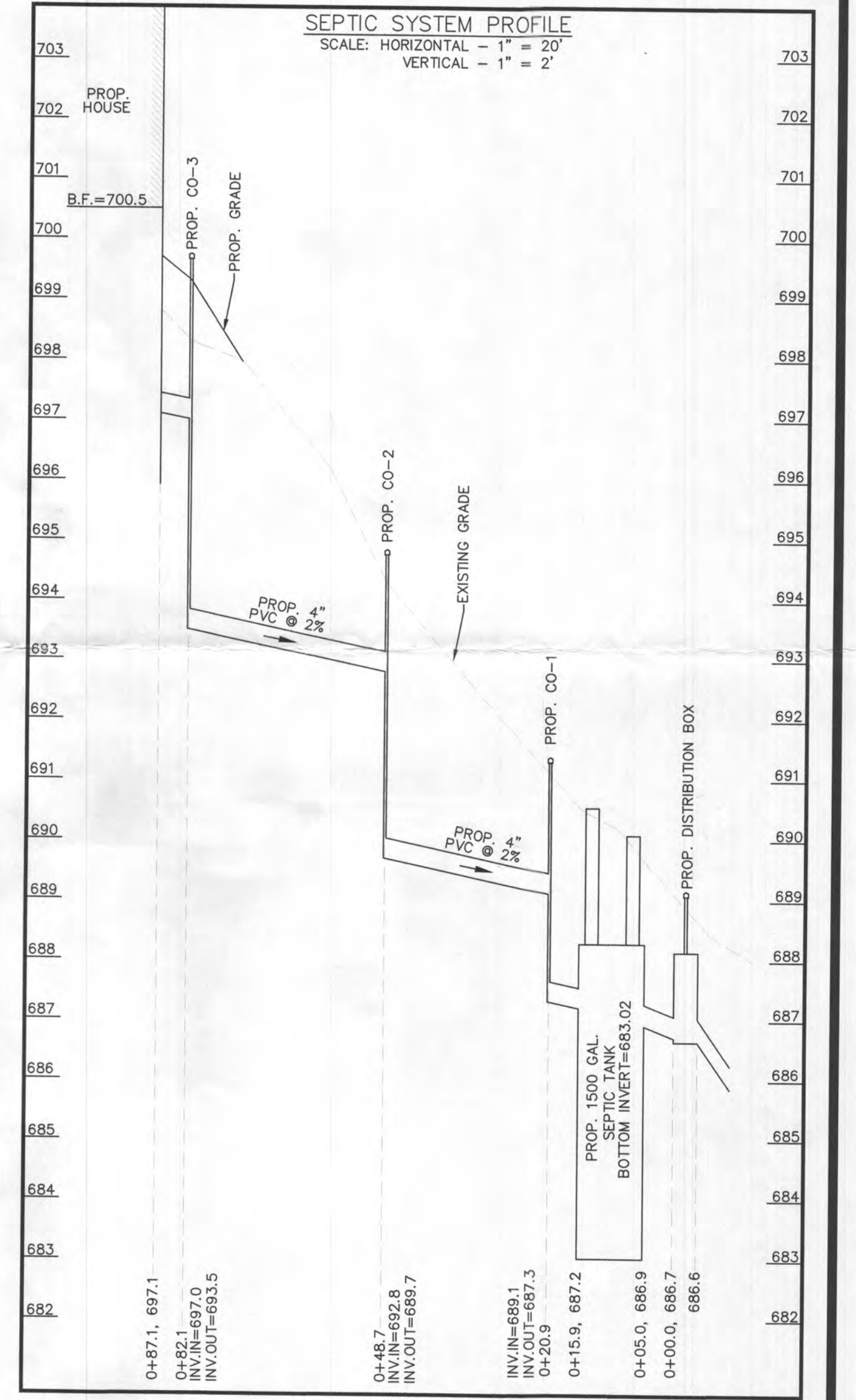
PLAN PREPARED BY:

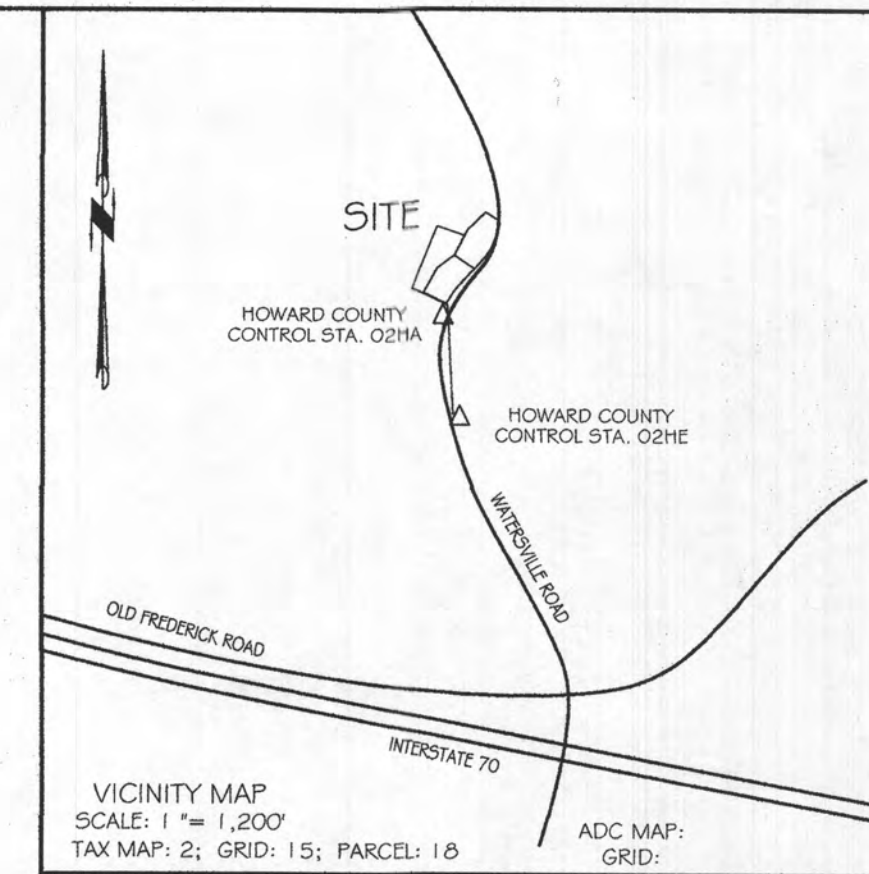
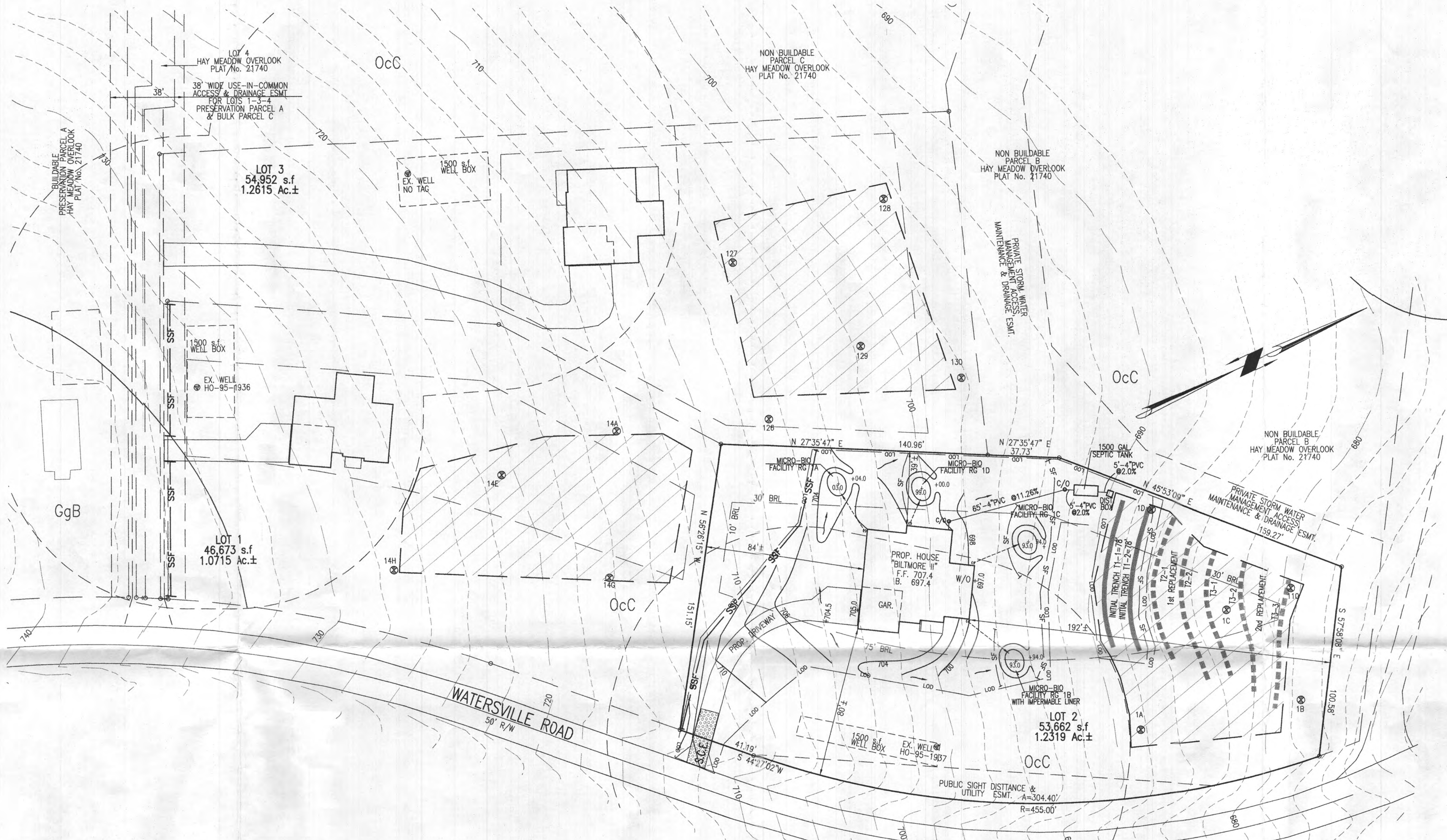
NJR & ASSOCIATES
Land Surveying and Planning
2770 TERRAPIN RUN
WEST FRIENDSHIP, MD 21774
TEL. (240) 508-3200

ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN

HAY MEADOW OVERLOOK
LOT 2
PLAT No. 21740
530 WATERSVILLE ROAD, MOUNT AIRY, MD, 21771
TAX MAP 2, GRID 15, PARCEL 18
4TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE: 1" = 20' JOB NO.: 3696 DATE: JUNE 2, 2022 SHEET: 1 OF 2





SEPTIC SYSTEM TRENCH DESIGN

INITIAL NUMBER OF BEDROOMS = 4
APPLICATION RATE = 0.8 GPD / sq.ft.
DESIGN FLOW: 150 GPD X 4 BEDROOMS = 600 GPD
600 GPD / 0.8 GPD/sq.ft. = 750 sq.ft.
750 sq.ft. / 3 ft. WIDE TRENCH = 250 LF TRENCH
250 LF TRENCH X 0.625 REDUCTION CREDIT = 156 LF TRENCH
TRENCH T1-1 EX. GRD=689.0 - INV. TRENCH=686.5 - B. TRENCH=683.0
TRENCH T1-2 EX. GRD=687.8 - INV. TRENCH=684.8 - B. TRENCH=681.3

1st REPLACEMENT
APPLICATION RATE = 0.8 GPD / sq.ft.
DESIGN FLOW: 150 GPD X 4 BEDROOMS = 600 GPD
600 GPD / 0.8 GPD/sq.ft. = 750 sq.ft.
750 sq.ft. / 3 ft. WIDE TRENCH = 250 LF TRENCH
250 LF TRENCH X 0.625 REDUCTION CREDIT = 156 LF TRENCH
TRENCH 2-1 EX. GRD=685.5 - INV. TRENCH=683.0 - B. TRENCH=679.5
TRENCH 2-2 EX. GRD=684.5 - INV. TRENCH=682.0 - B. TRENCH=678.5

2nd REPLACEMENT
APPLICATION RATE = 0.6 GPD / sq.ft.
DESIGN FLOW: 150 GPD X 4 BEDROOMS = 600 GPD
600 GPD / 0.6 GPD/sq.ft. = 1000 sq.ft.
1000 sq.ft. / 3 ft. WIDE TRENCH = 333 LF TRENCH
333 LF TRENCH X 0.625 REDUCTION CREDIT = 208 LF TRENCH
TRENCH 3-1 EX. GRD=683.3 - INV. TRENCH=680.8 - B. TRENCH=677.3
TRENCH 3-2 EX. GRD=682.0 - INV. TRENCH=679.5 - B. TRENCH=676.0
TRENCH 3-3 EX. GRD=679.5 - INV. TRENCH=677.0 - B. TRENCH=673.5

GENERAL NOTES:

- TOPOGRAPHY & PLANNIMETRIC FEATURES SHOWN HEREON TAKEN FROM COPYRIGHTED GIS DATA FROM HOWARD COUNTY, SUPPLEMENTED WITH FIELD LOCATIONS BY VANMAR ASSOCIATES, INC. CONTOUR INTERVAL IS 2 FEET. VERTICAL DATUM IS NAVD88.
- THE EXISTING WELLS SHOWN ON THIS PLAN HAVE BEEN FIELD LOCATED BY VANMAR ASSOCIATES OR TAKEN FROM AVAILABLE RECORDS AND ACCURATELY SHOWN.
- ZONING DISTRICT: RC-DEO
- LIMIT OF DISTURBANCE (LOD) = 21,750 SQ.FT.
- THERE ARE NO STREAMS, PONDS, FLOODPLAINS OR WETLANDS ON THIS LOT.

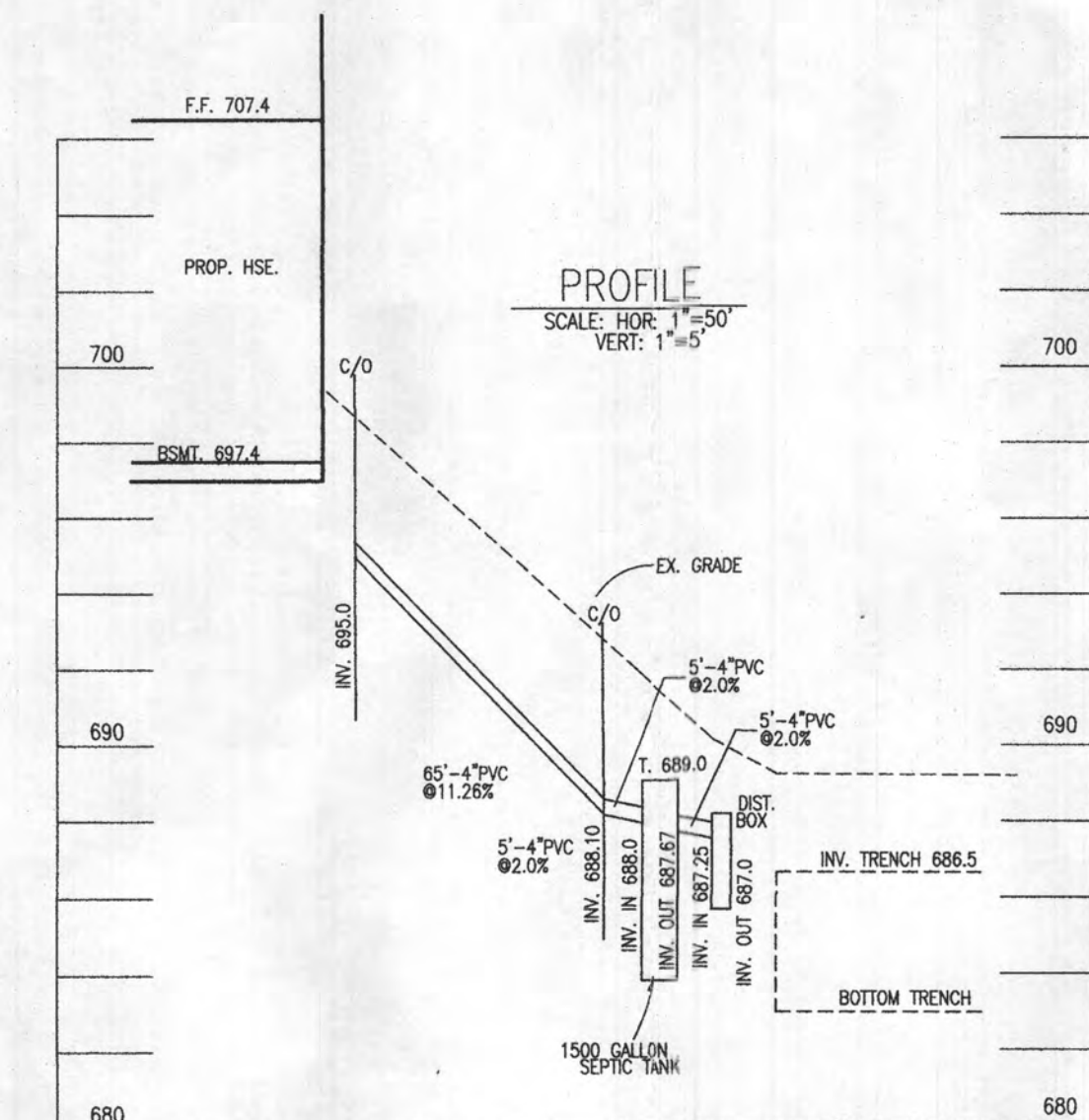
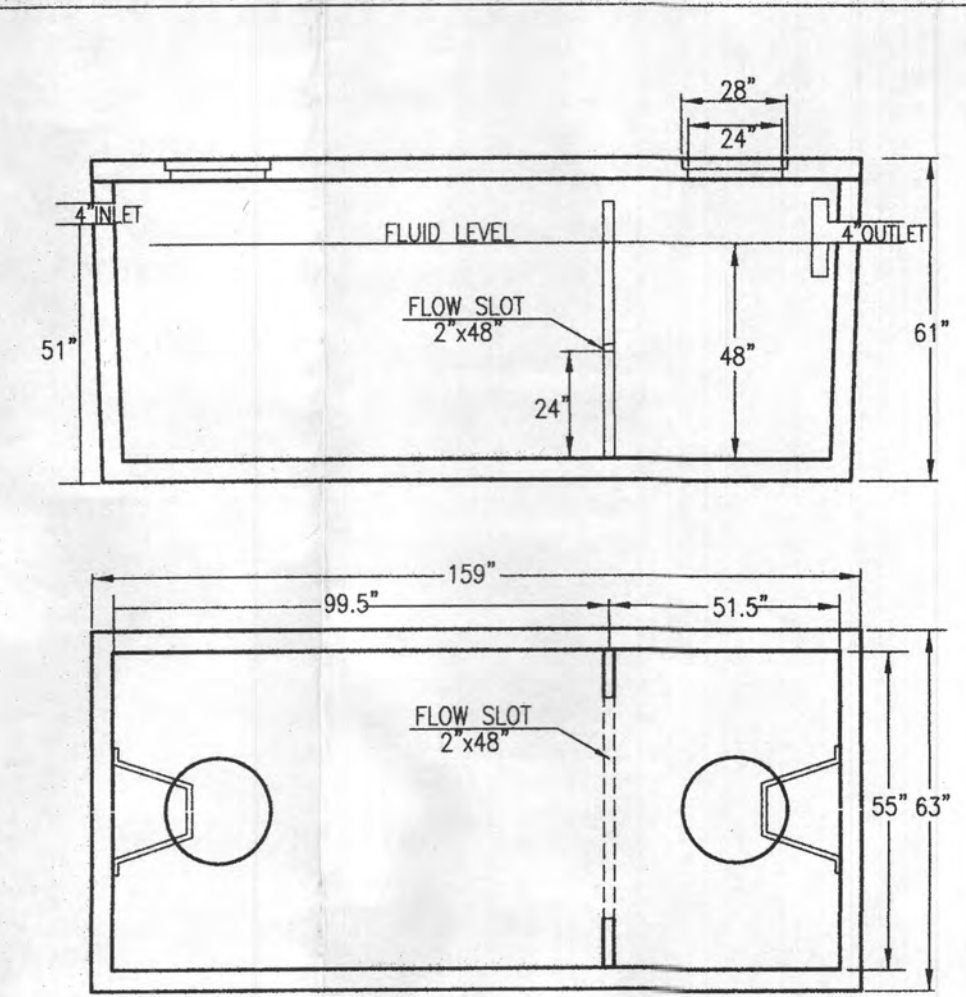
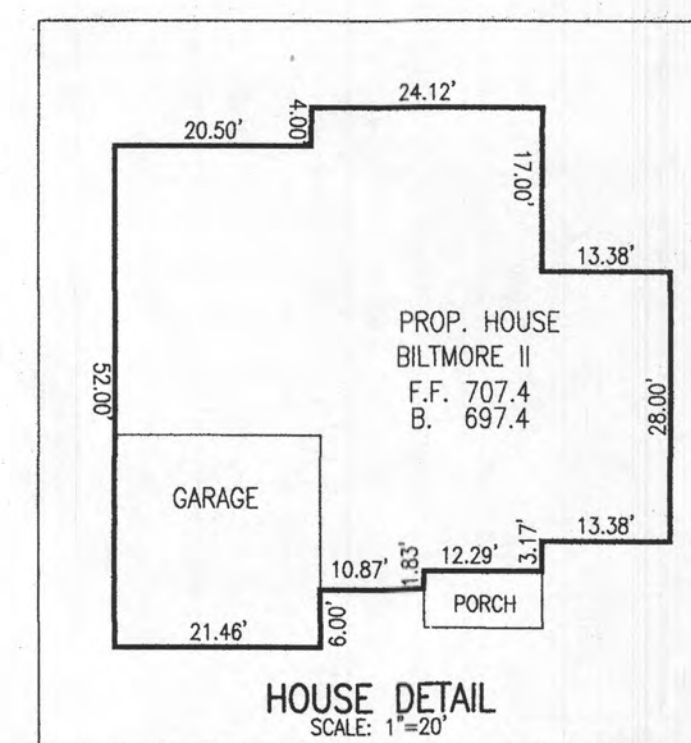
SITE PLAN NOTES:

- 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.
- MAXIMUM COVER OVER THE TANK IS 3 FEET. GREATER DEPTH WILL REQUIRE A HEAVY LOAD BEARING TANK.
- ELECTRICAL WORK FOR THE INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
- THE WELL (TAG #HO-95-1937) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.
- 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.

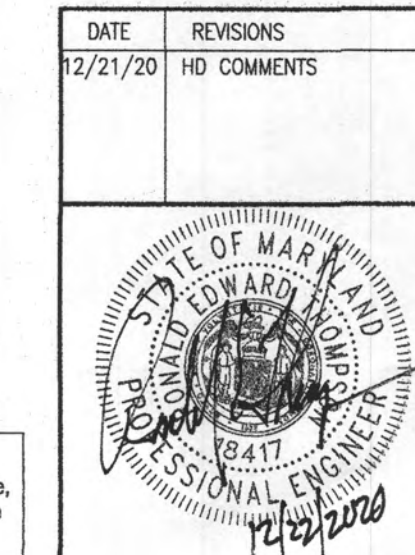
Approved Septic System Plan
Howard County Health Department
500-gal Septic Tank
to Gravity Distribution
for 4-bedroom SFD
R. Buick
Signature Date 4/6/2021

OWNER:
PHILLIP H. DORSEY
13090 OLD FREDERICK ROAD
STYKESVILLE, MD. 21784

DEVELOPER:
RYLEA HOMES
P O BOX 68
GLENWOOD, MARYLAND 21738
410-489-6030



PROFESSIONAL CERTIFICATION
I hereby certify that these documents 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. 18412, Expiration Date: 9-18-21.



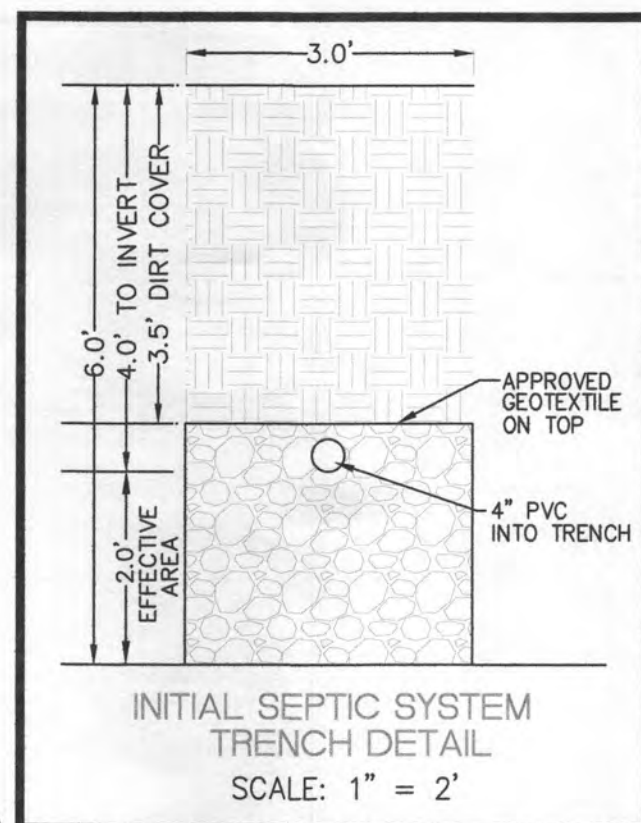
DATE	REVISIONS
12/21/20	HD COMMENTS

TAX MAP: 2 GRID NO: 15 PARCEL NO: 18	ELECTION DISTRICT: No. 4 DATE: NOVEMBER, 2020 EX. ZONING: RC-DEO	SCALE: AS SHOWN SHEET 1 OF 1
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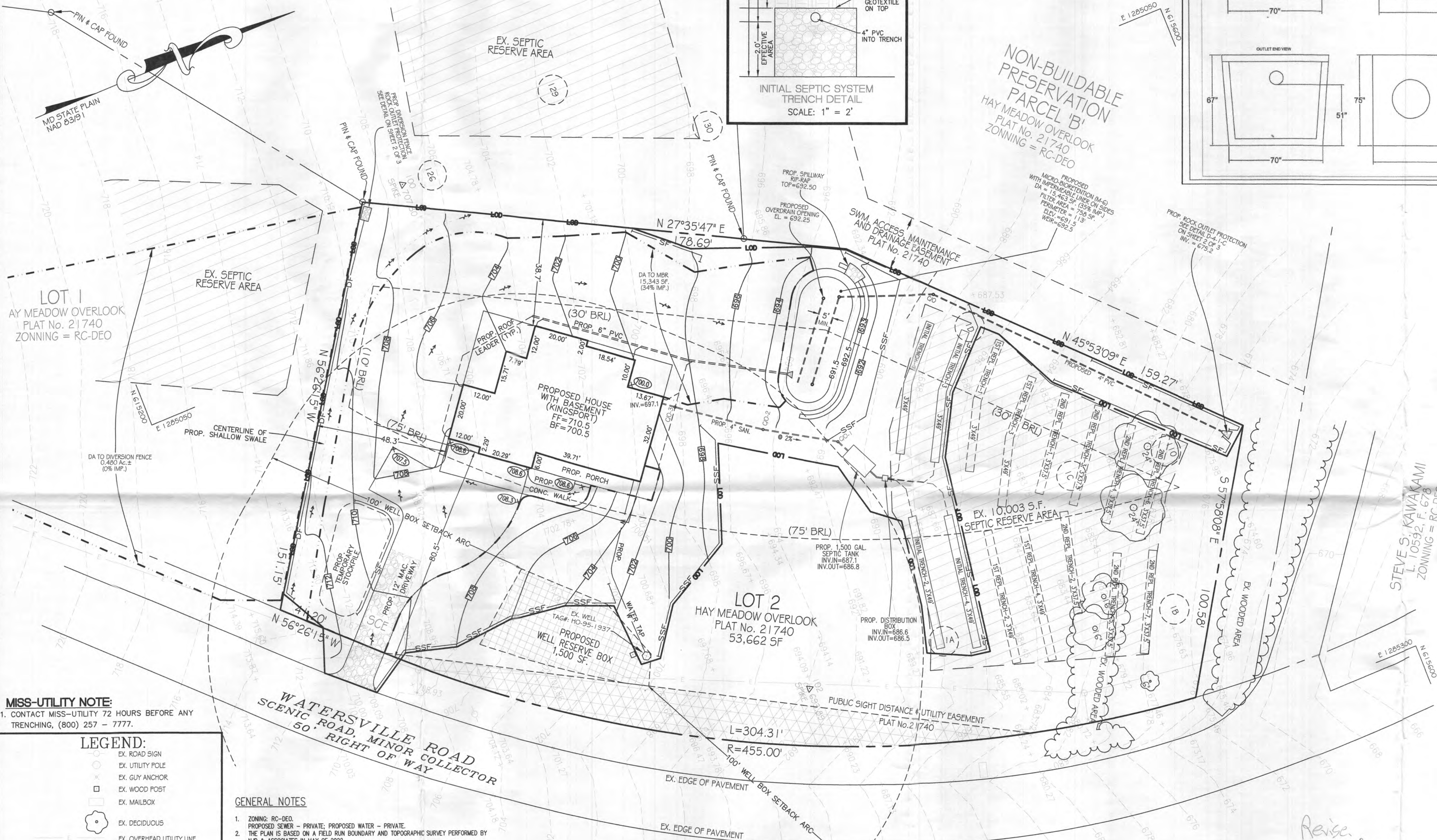
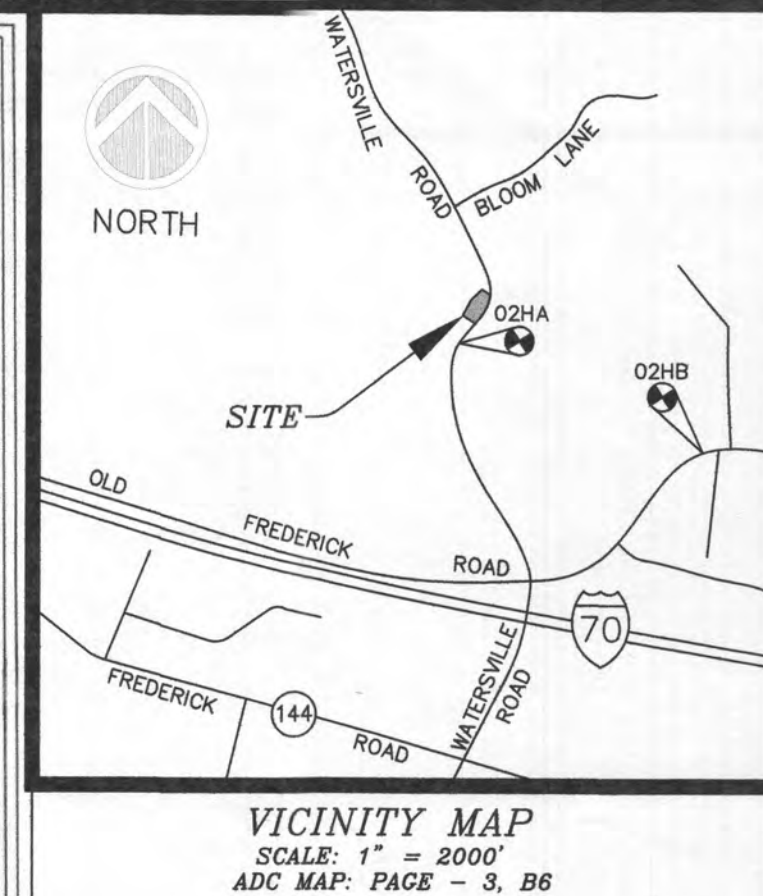
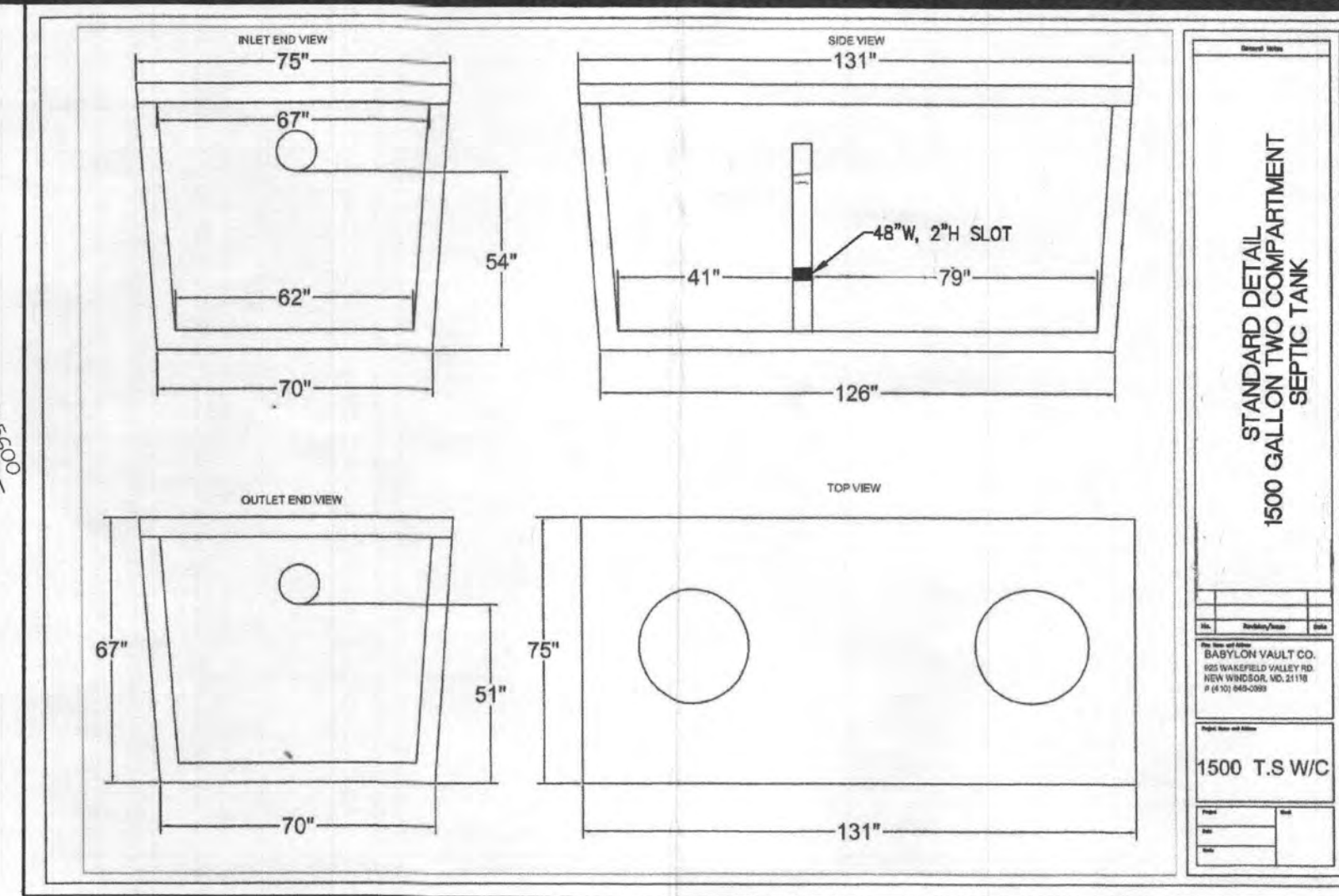
	VANMAR ASSOCIATES, INC. Engineers Surveyors Planners 310 South Main Street Mount Airy, Maryland 21771 (301) 829-2890 (301) 831-5015 (410) 549-2751 Fax (301) 831-5603 ©Copyright, Latest Date Shown
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- SEPTIC SYSTEM NOTES:**
- 1- ANY CHANGES TO THE LOCATIONS 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.
 - 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 # HO-95-1937) HAS BEEN FIELD LOCATED AND ACCURATELY SHOWN ON THIS PLAN.
 - 4- 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.
 - 5- THIS SURVEY IS TIED TO MARYLAND STATE PLANE NAD 83/91 COORDINATE SYSTEM.
 - 6- THE LOT SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT ARE AS REQUIRED BY THE MARYLAND DEPARTMENT OF ENVIRONMENT.

LOT 3
HAY MEADOW OVERLOOK
PLAT No. 21740
ZONING = RC-DEO



SOIL TABLE			
SYMBOL	NAME/DESCRIPTION	TYPE	HYDROLOGIC
OCC	OCCOQUAN LOAM 8 to 15 percent slopes	B	No



MISS-UTILITY NOTE:
1. CONTACT MISS-UTILITY 72 HOURS BEFORE ANY TRENCHING, (800) 257 - 7777.

LEGEND:

- EX. ROAD SIGN
- EX. UTILITY POLE
- EX. GUY ANCHOR
- EX. WOOD POST
- EX. MAILBOX
- EX. DECIDUOUS
- EX. OVERHEAD UTILITY LINE
- EX. WATER WELL
- PROP. SPOT ELEVATION
- EX. CONTOUR
- PROP. CONTOUR
- PROP. MBR DRAINAGE AREA
- PROP. SUPER SILT FENCE
- PROP. SILT FENCE
- PROP. DIVERSION FENCE
- PROP. LIMIT OF DISTURBANCE
- EX. EDGE WOODED AREA
- EX. PRIVATE SEPTIC RESERVE AREA
- PROP. WELL RESERVE BOX
- EX. PUBLIC SIGHT DISTANCE AND UTILITY EASEMENT
- PROP. STABILIZED CONSTRUCTION ENTRANCE
- EX. PASSING PERCOLATION TEST LOCATION

GENERAL NOTES

1. ZONING: RC-DEO. PROPOSED SEWER - PRIVATE; PROPOSED WATER - PRIVATE.
2. THE PLAN IS BASED ON A FIELD RUN BOUNDARY AND TOPOGRAPHIC SURVEY PERFORMED BY NJR & ASSOCIATES IN MAY OF 2022.
3. THERE IS NO FLOODPLAIN, WETLAND, STREAMS OR THEIR BUFFERS ON THIS SITE.
4. THERE ARE NO CRITICAL HABITATS OF RARE, THREATENED OR ENDANGERED SPECIES ON SITE.
5. TOTAL AREA WITHIN LOD = 30,428 SQ.FT.
6. WATERSHED = SOUTH BRANCH PATAPSCO.
7. 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.
8. EXISTING PASSING SEPTIC PERCOLATION TESTS WITH ADEQUATE INFILTRATION RATES ARE LOCATED WITHIN 50' OF THE PROPOSED STORM WATER MANAGEMENT FACILITY, THEREFORE, NO ADDITIONAL SOIL TESTS ARE PROPOSED.
9. PREVIOUS HOWARD COUNTY FILE NUMBERS: F-09-110, F-19-089 AND SP-08-011.
10. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 ATLEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
11. CONTRACTOR TO MAINTAIN POSITIVE SLOPE AWAY FROM THE FOUNDATION OF THE HOUSE.

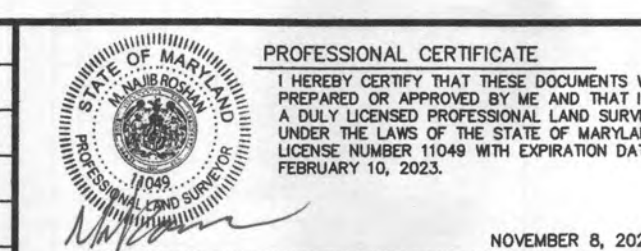
SITE ANALYSIS DATA CHART

TOTAL LOT AREA	= 1.232 ACRES (53,662)
LOT AREA "PROP. TO BE DISTURBED"	= 0.698 ACRE (30,428 SF)
TOTAL LOT IMPERVIOUS AREA PROPOSED	= 0.119 ACRE (5,191 SF)
TOTAL PROPOSED GREEN AREA	= 1.113 ACRES (48,471 SF)
SITE AREA WITHIN WETLAND	= 0 ACRE
SITE AREA WITHIN 25' WETLAND BUFFER	= 0 ACRE
SITE AREA OF STEEP SLOPES	= 0 ACRE
SITE AREA OF ERODIBLE SOILS	= 0 ACRE
SITE AREA WITHIN 100-YR FLOODPLAIN	= 0 ACRE
SITE AREA WITHIN 100' STREAM BUFFER	= 0 ACRE
SITE TOTAL EXISTING FORESTED AREA	= 0 ACRE
SITE ULTIMATE FORESTED AREA	= 0 ACRE

SEPTIC TRENCH INFO, INITIAL SYSTEM

TRENCH	TRENCH LENGTH	TRENCH WIDTH	EX. TOP OF GROUND	TOP OF GRAVEL	INV. INTO TRENCH	BOTTOM OF TRENCH
1	49'	3'	688.4±	684.9	684.4	682.4
2	49'	3'	688.1±	684.6	684.1	682.1
3	49'	3'	686.5±	683.0	682.5	680.5
4	49'	3'	686.3±	682.8	682.3	680.3

REVISIONS		
No.	DESCRIPTION	DATE
1		



DEVELOPER'S CERTIFICATE
"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."
SIGNATURE OF DEVELOPER _____ DATE _____

DEVELOPER
CARLUSO HOMES
2120 BALDWIN AVENUE, Ste 200
CROFTON, MD 21114
(301) 261-0277
OWNER
RUSSELL J. MOORE
808 HARVEST TERRACE
NEW MARKET, MD 21774
(410) 977-0864

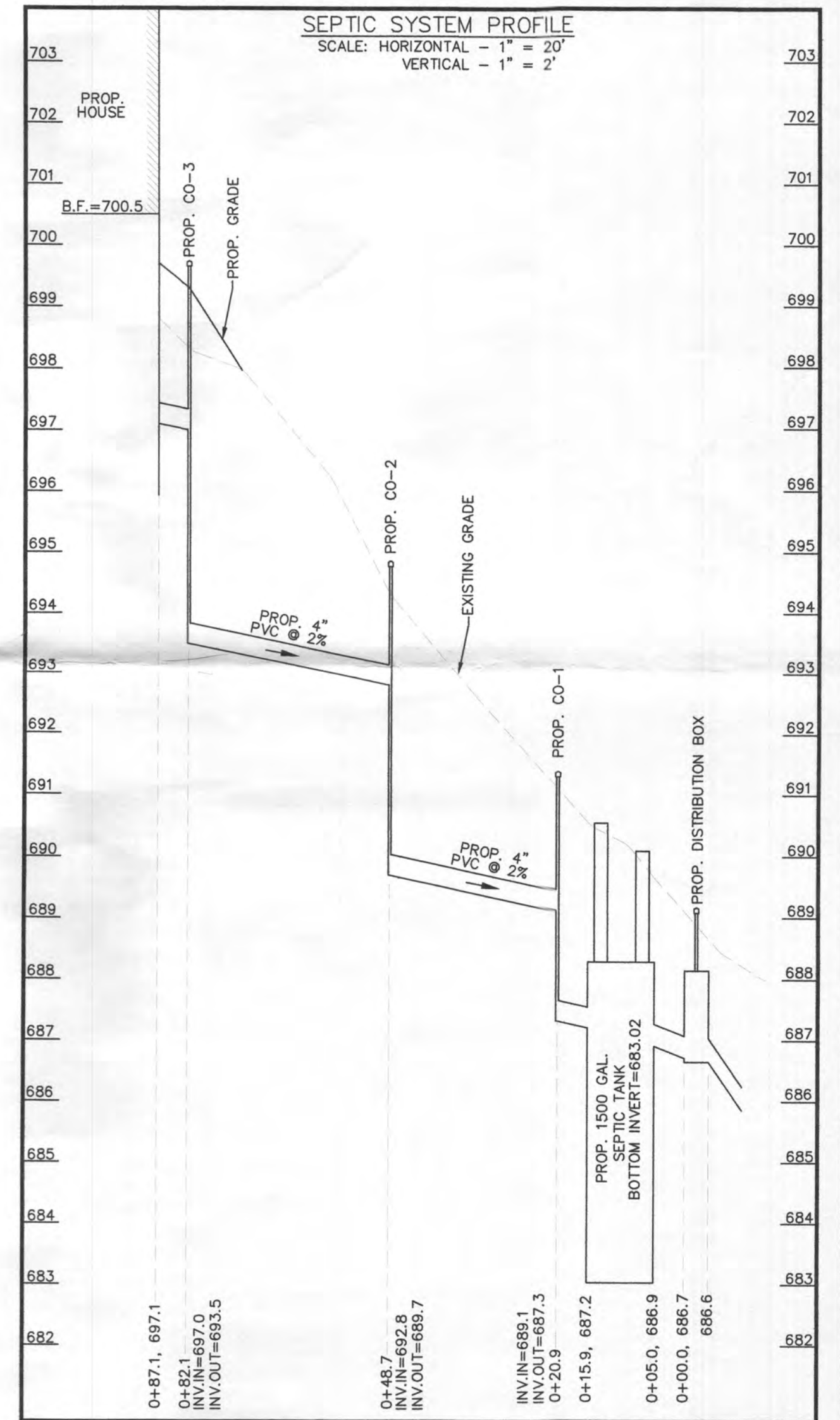
PLAN PREPARED BY:
NJR & ASSOCIATES
Land Surveying and Planning
2770 TERRAPIN BOY
WEST FRIENDSHIP, MD 21794
TEL: (240) 508-3200

ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN
HAY MEADOW OVERLOOK
LOT 2
PLAT No. 21740
530 WATERSVILLE ROAD, MOUNT AIRY, MD. 21771
TAX MAP 2, GRID 15, PARCEL 18
4TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE: 1" = 20' JOB NO.: 3696 DATE: JUNE 2, 2022 SHEET: 1 OF 2

SEPTIC SYSTEM CALCULATIONS, INITIAL SYSTEM:
ABS. RATE = 0.8, EFFECTIVE DEPTH = 4'-6" = 2.0'
DRAINFIELD AREA: 5 BEDROOMS AT 750 gpd / 0.8 ABSORPTION RATE = 938 SQ. FT.
SIDEWALL REDUCTION CREDIT: $\frac{WIDTH+2}{3+1+2(2)} = \frac{3+2}{8} = 0.625$
LENGTH OF TRENCHES: $\frac{938 \times 0.625}{3} = 196$ LINEAR FEET
INITIAL SYSTEMS: FOUR TRENCHES OF 49 FEET IN LENGTH EACH, 3 FEET WIDE, 10 FEET MINIMUM SPACED ARE PROVIDED.

SEPTIC SYSTEM CALCULATIONS, 1ST REPLACEMENT SYSTEM:
ABS. RATE = 0.8, EFFECTIVE DEPTH = 4'-6" = 2.0'
DRAINFIELD AREA: 5 BEDROOMS AT 750 gpd / 0.8 ABSORPTION RATE = 938 SQ. FT.
SIDEWALL REDUCTION CREDIT: $\frac{WIDTH+2}{3+1+2(2)} = \frac{3+2}{8} = 0.625$
LENGTH OF TRENCHES: $\frac{938 \times 0.625}{3} = 196$ LINEAR FEET
INITIAL SYSTEMS: FOUR TRENCHES OF 49 FEET IN LENGTH EACH, 3 FEET WIDE, 10 FEET MINIMUM SPACED ARE PROVIDED.

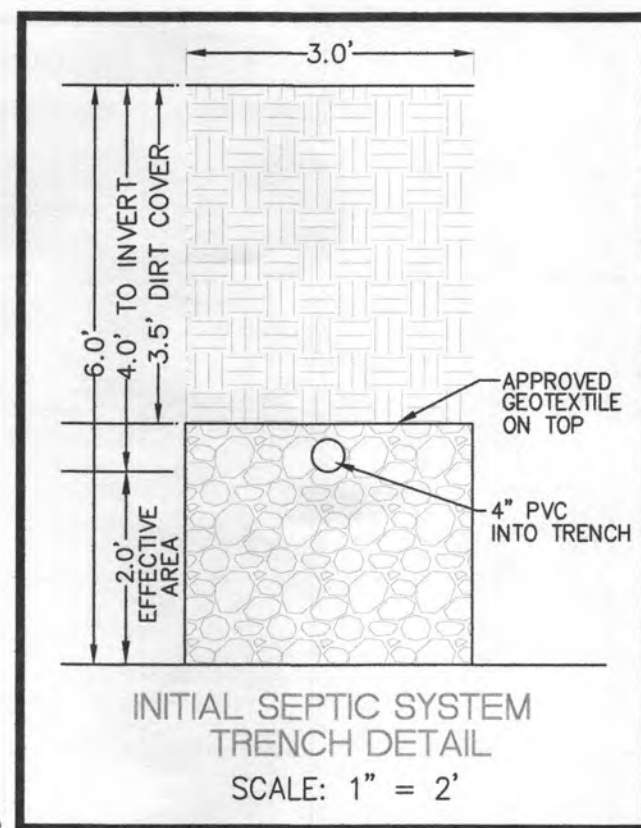
SEPTIC SYSTEM CALCULATIONS, 2ND REPLACEMENT SYSTEMS:
ABS. RATE = 0.6, EFFECTIVE DEPTH = 4'-6" = 2.0'
DRAINFIELD AREA: 5 BEDROOMS AT 750 gpd / 0.6 ABSORPTION RATE = 1,250 SQ. FT.
SIDEWALL REDUCTION CREDIT: $\frac{WIDTH+2}{3+1+2(2)} = \frac{3+2}{8} = 0.625$
LENGTH OF TRENCHES: $\frac{1250 \times 0.625}{3} = 260$ LINEAR FEET
REPLACEMENT SYSTEMS: SEVEN TRENCHES OF 43.5 FEET IN LENGTH EACH, 3 FEET WIDE, 10 FEET MINIMUM SPACED ARE PROVIDED.



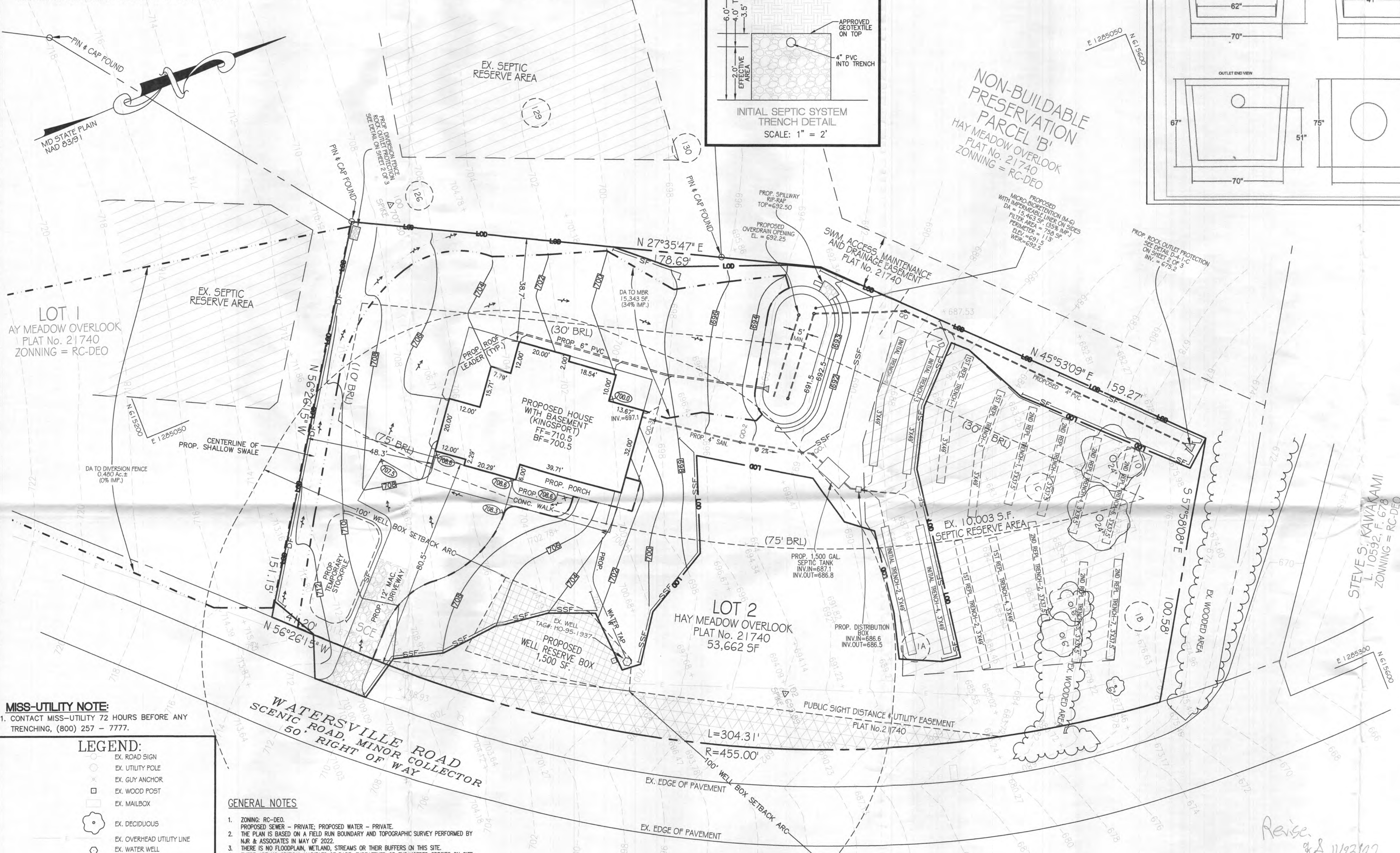
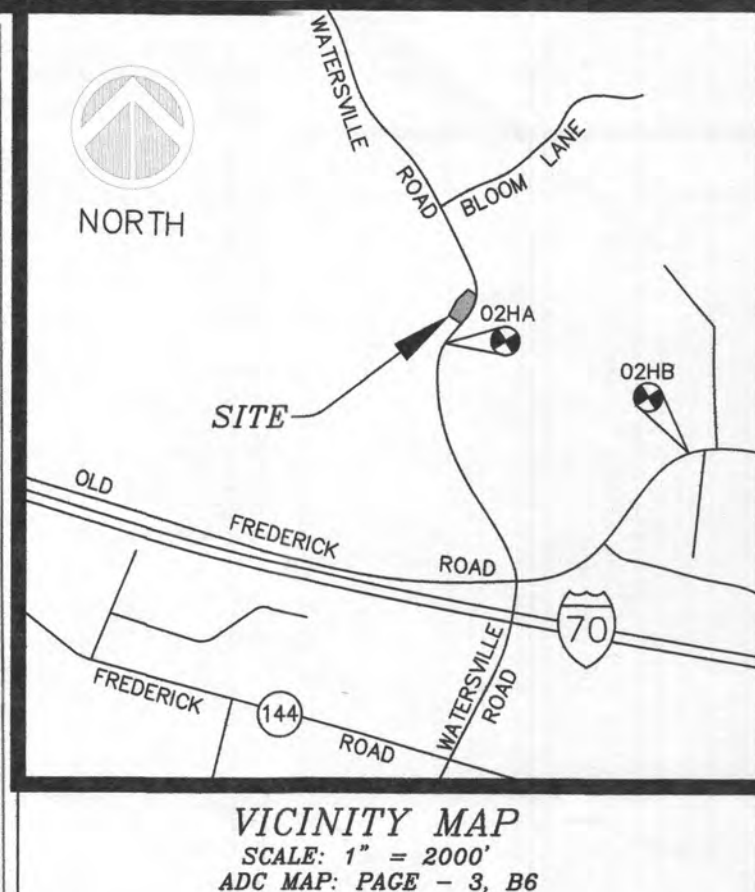
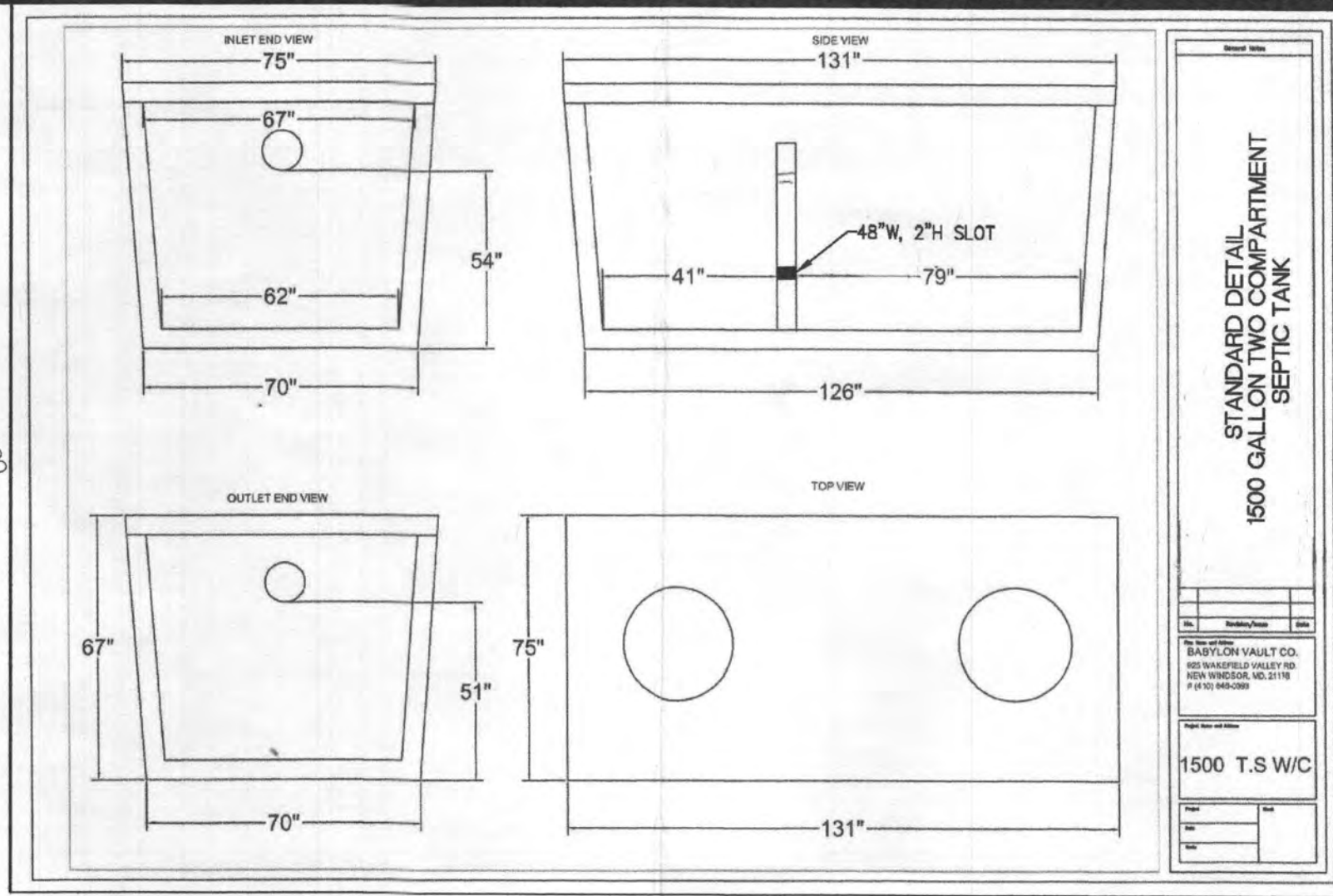
GRAPHIC SCALE 1"=20'
10' 0' 20'

- SEPTIC SYSTEM NOTES:**
- 1- 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.
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 - 3- THE EXISTING WELL (TAG # HO-95-1937) HAS BEEN FIELD LOCATED AND ACCURATELY SHOWN ON THIS PLAN.
 - 4- 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.
 - 5- THIS SURVEY IS TIED TO MARYLAND STATE PLANE NAD 83/91 COORDINATE SYSTEM.
 - 6- THE LOT SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT ARE AS REQUIRED BY THE MARYLAND DEPARTMENT OF ENVIRONMENT.

LOT 3
HAY MEADOW OVERLOOK
PLAT No. 21740
ZONING = RC-DEO



SOIL TABLE			
SYMBOL	NAME/DESCRIPTION	TYPE	HYDROLOGIC
OcC	OCCOQUAN LOAM 8 to 15 percent slopes	B	No



MISS-UTILITY NOTE:
1. CONTACT MISS-UTILITY 72 HOURS BEFORE ANY TRENCHING, (800) 257 - 7777.

LEGEND:

- EX. ROAD SIGN
- EX. UTILITY POLE
- EX. GUY ANCHOR
- EX. WOOD POST
- EX. MAILBOX
- EX. DECIDUOUS
- EX. OVERHEAD UTILITY LINE
- EX. WATER WELL
- PROP. SPOT ELEVATION
- EX. CONTOUR
- PROP. CONTOUR
- PROP. MBR DRAINAGE AREA
- PROP. SUPER SILT FENCE
- PROP. SILT FENCE
- PROP. DIVERSION FENCE
- PROP. LIMIT OF DISTURBANCE
- EX. EDGE WOODED AREA
- EX. PRIVATE SEPTIC RESERVE AREA
- PROP. WELL RESERVE BOX
- EX. PUBLIC SIGHT DISTANCE AND UTILITY EASEMENT
- PROP. STABILIZED CONSTRUCTION ENTRANCE
- EX. PASSING PERCOLATION TEST LOCATION

GENERAL NOTES

1. ZONING: RC-DEO. PROPOSED SEWER - PRIVATE; PROPOSED WATER - PRIVATE.
2. THE PLAN IS BASED ON A FIELD RUN BOUNDARY AND TOPOGRAPHIC SURVEY PERFORMED BY NJR & ASSOCIATES IN MAY OF 2022.
3. THERE IS NO FLOODPLAIN, WETLAND, STREAMS OR THEIR BUFFERS ON THIS SITE.
4. THERE ARE NO CRITICAL HABITATS OF RARE, THREATENED OR ENDANGERED SPECIES ON SITE.
5. TOTAL AREA WITHIN LDD = 30,428 SQ.FT.
6. WATERSHED = SOUTH BRANCH PATAPSCO.
7. 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.
8. EXISTING PASSING SEPTIC PERCOLATION TESTS WITH ADEQUATE INFILTRATION RATES ARE LOCATED WITHIN 50' OF THE PROPOSED STORM WATER MANAGEMENT FACILITY, THEREFORE, NO ADDITIONAL SOIL TESTS ARE PROPOSED.
9. PREVIOUS HOWARD COUNTY FILE NUMBERS: F-09-110, F-19-089 AND SP-08-011.
10. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 ATLEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
11. CONTRACTOR TO MAINTAIN POSITIVE SLOPE AWAY FROM THE FOUNDATION OF THE HOUSE.

SITE ANALYSIS DATA CHART

TOTAL LOT AREA	= 1.232 ACRES (53,662 SF)
LOT AREA "PROP. TO BE DISTURBED"	= 0.698 ACRE (30,428 SF)
TOTAL LOT IMPERVIOUS AREA PROPOSED	= 0.119 ACRE (5,191 SF)
TOTAL PROPOSED GREEN AREA	= 1.113 ACRES (48,471 SF)
SITE AREA WITHIN WETLAND	= 0 ACRE
SITE AREA OF STEEP SLOPES	= 0 ACRE
SITE AREA OF ERODIBLE SOILS	= 0 ACRE
SITE AREA WITHIN 100-YR FLOODPLAIN	= 0 ACRE
SITE AREA WITHIN 100' STREAM BUFFER	= 0 ACRE
SITE TOTAL EXISTING FORESTED AREA	= 0 ACRE
SITE ULTIMATE FORESTED AREA	= 0 ACRE

SEPTIC TRENCH INFO, INITIAL SYSTEM

TRENCH	TRENCH LENGTH	TRENCH WIDTH	EX. TOP OF GROUND	TOP OF GRAVEL	INV. INTO TRENCH	BOTTOM OF TRENCH
1	49'	3'	688.4±	684.9	684.4	682.4
2	49'	3'	688.1±	684.6	684.1	682.1
3	49'	3'	686.5±	683.0	682.5	680.5
4	49'	3'	686.3±	682.8	682.3	680.3

REVISIONS		
No.	DESCRIPTION	DATE
1		

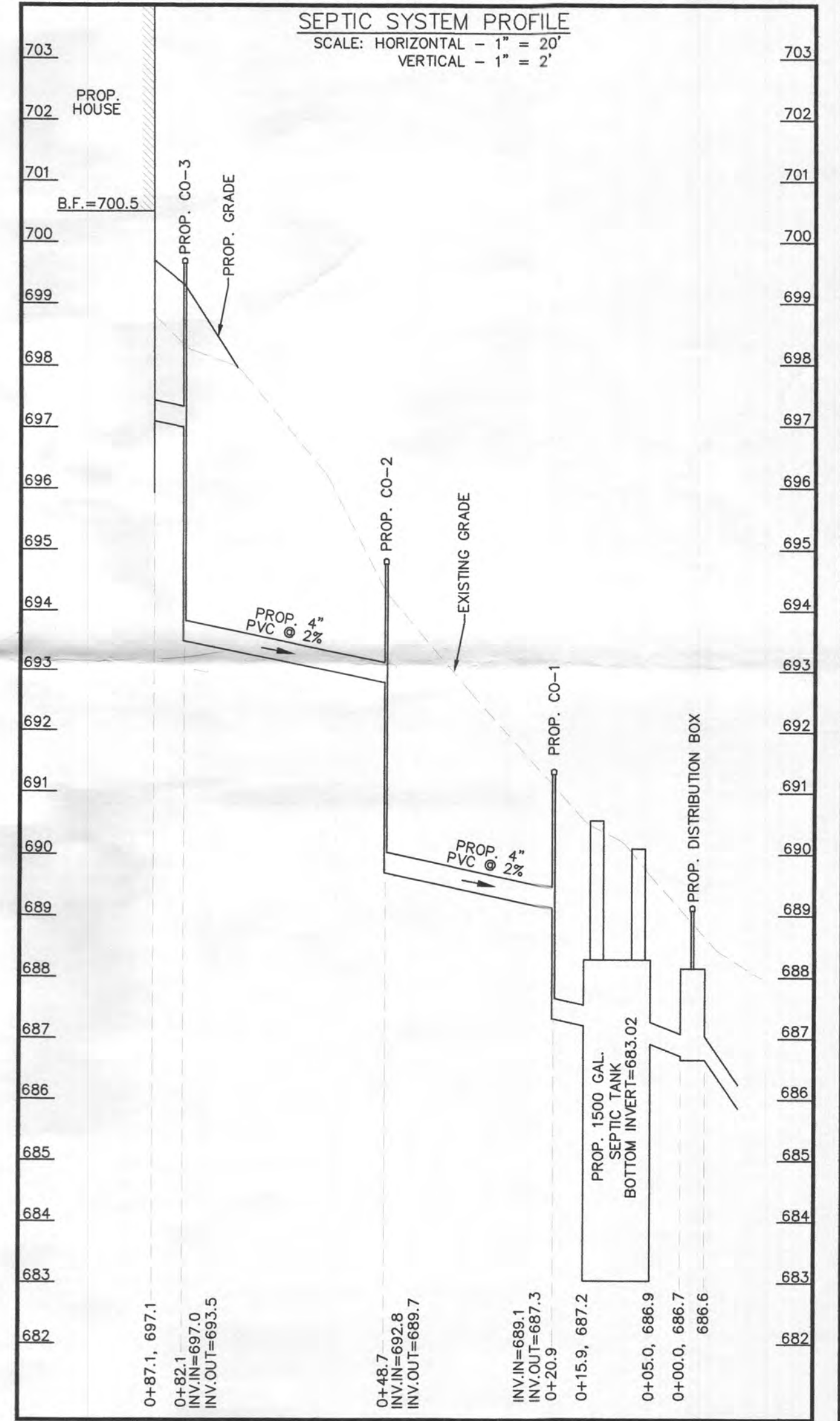
PROFESSIONAL CERTIFICATE
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A duly licensed PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NUMBER 11046 WITH EXPIRATION DATE OF FEBRUARY 10, 2023.
NOVEMBER 8, 2022
DATE

DEVELOPER'S CERTIFICATE
"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."
SIGNATURE OF DEVELOPER DATE

DEVELOPER
CARLUSO HOMES
2120 BALDWIN AVENUE, Ste 200
CROFTON, MD 21114
(301) 261-0277
OWNER
RUSSELL J MOORE
808 HARVEST TERRACE
NEW MARKET, MD 21774
(410) 977-0864

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

ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN
HAY MEADOW OVERLOOK
LOT 2
PLAT No. 21740
530 WATERSVILLE ROAD, MOUNT AIRY, MD. 21771
TAX MAP 2, GRID 15, PARCEL 18
4TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: 1" = 20' JOB NO.: 3696 DATE: JUNE 2, 2022 SHEET: 1 OF 2



SEPTIC SYSTEM CALCULATIONS, INITIAL SYSTEM:

ABS. RATE = 0.8, EFFECTIVE DEPTH = 4'-6" = 2.0'
DRAINFIELD AREA: 5 BEDROOMS AT 750 gpd / 0.8 ABSORPTION RATE = 938 SQ. FT.
SIDEWALL REDUCTION CREDIT: $\frac{WIDTH+2}{3+1+2(2)} = \frac{3+2}{8} = 0.625$
LENGTH OF TRENCHES: $\frac{938 \times 0.625}{3} = 196$ LINEAR FEET
INITIAL SYSTEMS: FOUR TRENCHES OF 49 FEET IN LENGTH EACH, 3 FEET WIDE, 10 FEET MINIMUM SPACED ARE PROVIDED.

SEPTIC SYSTEM CALCULATIONS, 1ST REPLACEMENT SYSTEM:

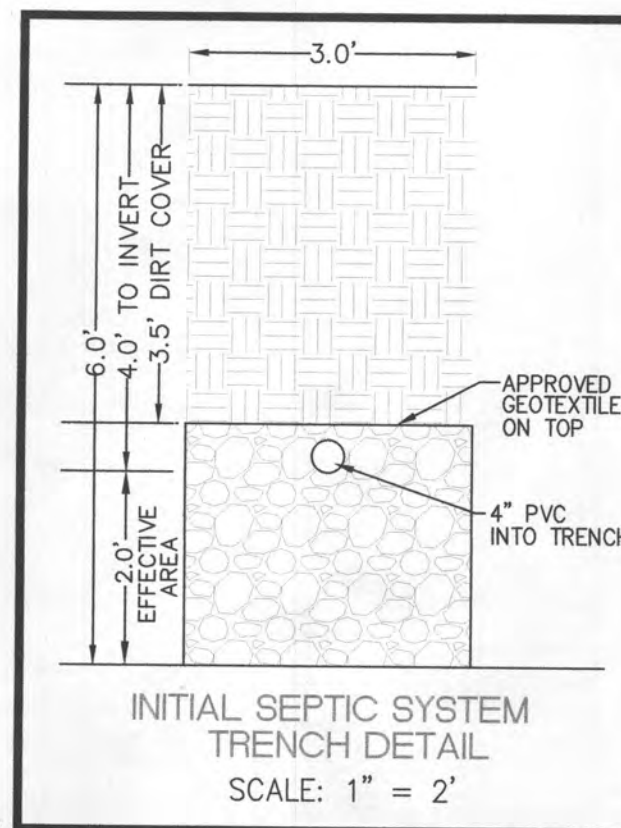
ABS. RATE = 0.8, EFFECTIVE DEPTH = 4'-6" = 2.0'
DRAINFIELD AREA: 5 BEDROOMS AT 750 gpd / 0.8 ABSORPTION RATE = 938 SQ. FT.
SIDEWALL REDUCTION CREDIT: $\frac{WIDTH+2}{3+1+2(2)} = \frac{3+2}{8} = 0.625$
LENGTH OF TRENCHES: $\frac{938 \times 0.625}{3} = 196$ LINEAR FEET
INITIAL SYSTEMS: FOUR TRENCHES OF 49 FEET IN LENGTH EACH, 3 FEET WIDE, 10 FEET MINIMUM SPACED ARE PROVIDED.

SEPTIC SYSTEM CALCULATIONS, 2ND REPLACEMENT SYSTEMS:

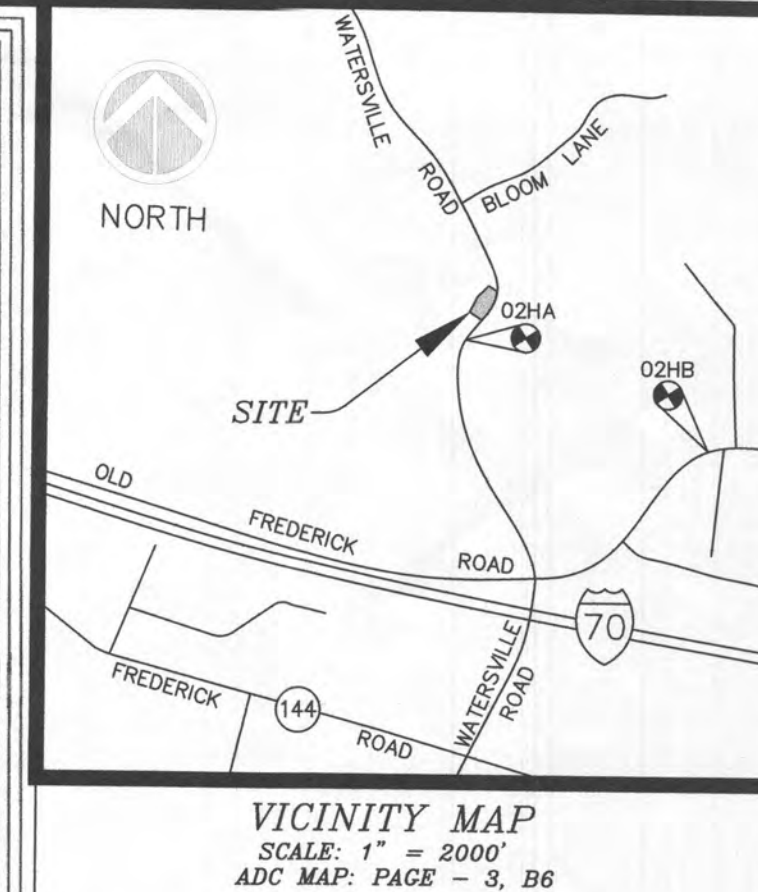
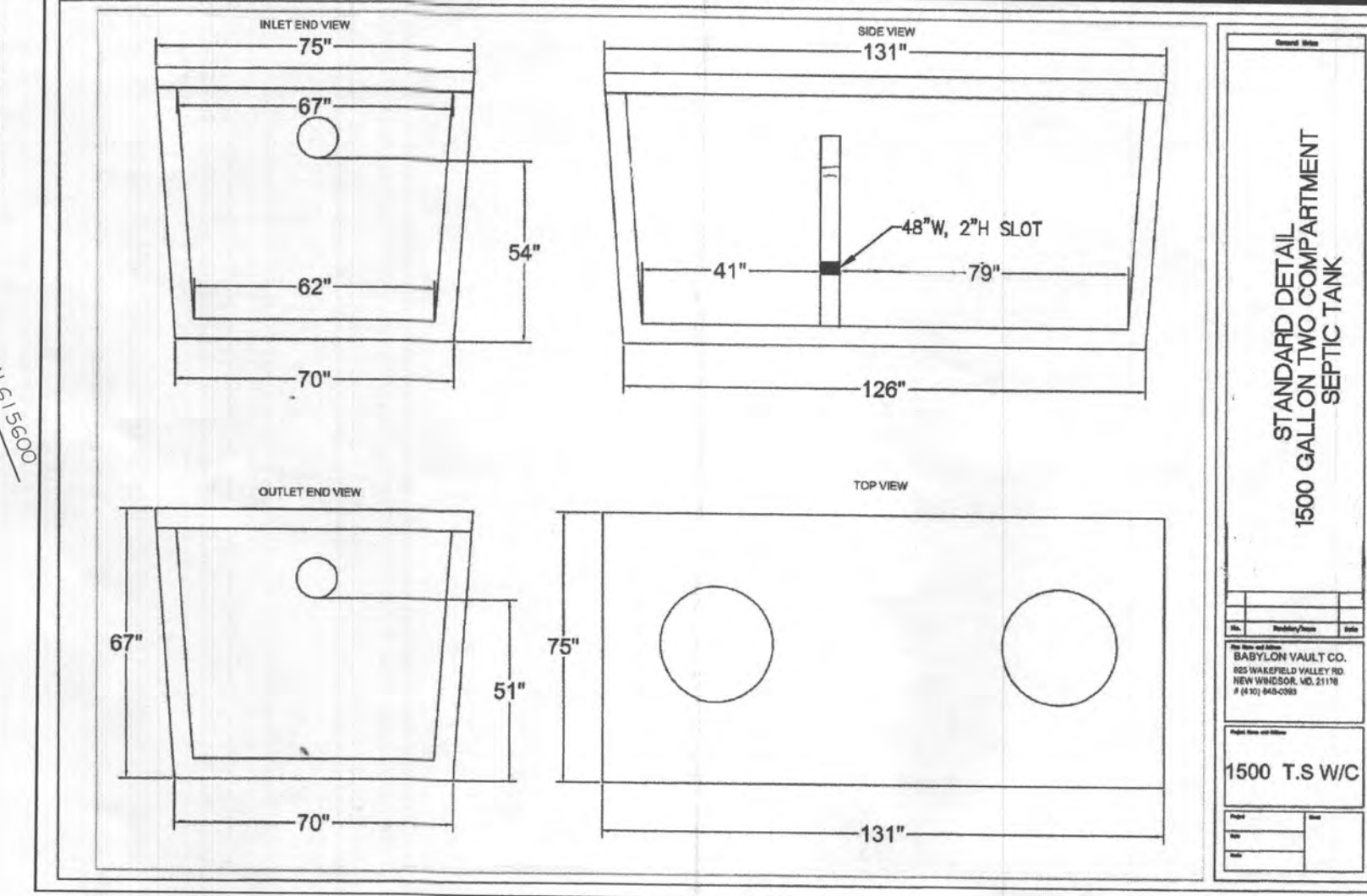
ABS. RATE = 0.6, EFFECTIVE DEPTH = 4'-6" = 2.0'
DRAINFIELD AREA: 5 BEDROOMS AT 750 gpd / 0.6 ABSORPTION RATE = 1,250 SQ. FT.
SIDEWALL REDUCTION CREDIT: $\frac{WIDTH+2}{3+1+2(2)} = \frac{3+2}{8} = 0.625$
LENGTH OF TRENCHES: $\frac{1250 \times 0.625}{3} = 260$ LINEAR FEET
REPLACEMENT SYSTEMS: SEVEN TRENCHES OF 43.5 FEET IN LENGTH EACH, 3 FEET WIDE, 10 FEET MINIMUM SPACED ARE PROVIDED.

- SEPTIC SYSTEM NOTES:
- 1- 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.
 - 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 # HO-95-1937) HAS BEEN FIELD LOCATED AND ACCURATELY SHOWN ON THIS PLAN.
 - 4- 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.
 - 5- THIS SURVEY IS TIED TO MARYLAND STATE PLANE NAD 83/91 COORDINATE SYSTEM.
 - 6- THE LOT SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT ARE AS REQUIRED BY THE MARYLAND DEPARTMENT OF ENVIRONMENT.

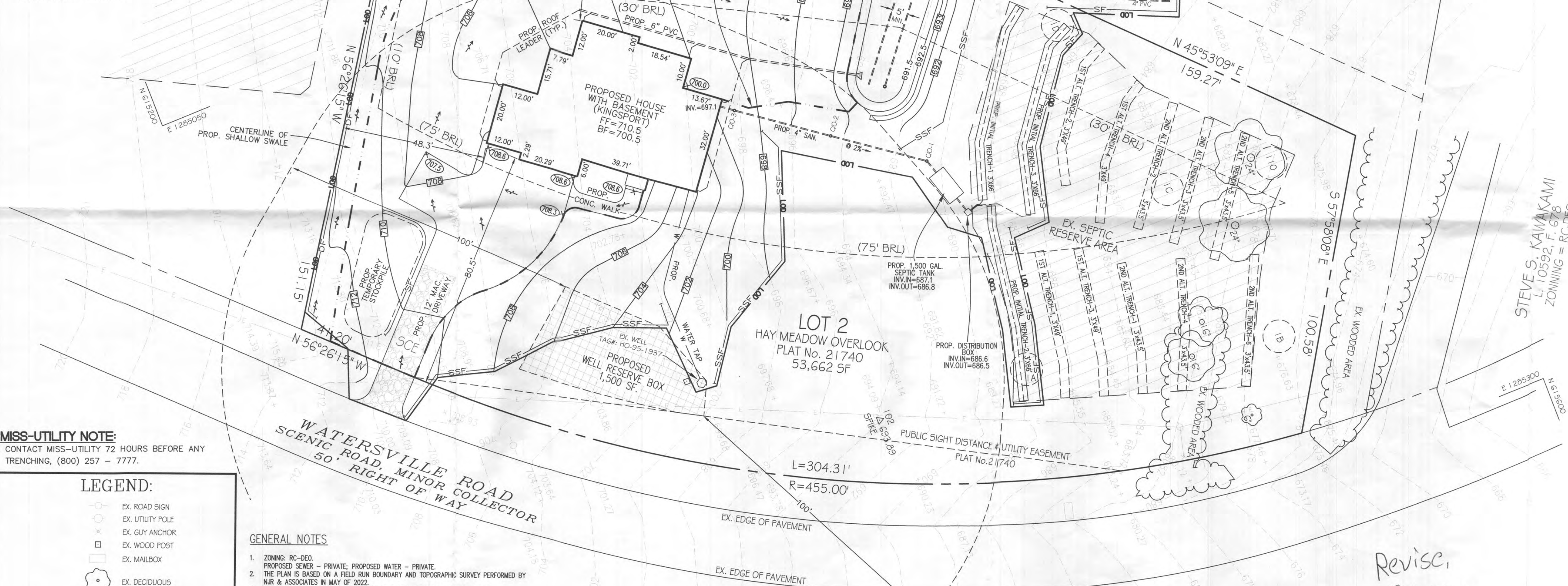
LOT 3
HAY MEADOW OVERLOOK
PLAT No. 21740
ZONING = RC-DEO



SOIL TABLE			
SYMBOL	NAME/DESCRIPTION	TYPE	HYDROLIC
OcC	OCCOQUAN LOAM 0 to 15 percent slopes	B	No



LOT 1
HAY MEADOW OVERLOOK
PLAT No. 21740
ZONING = RC-DEO



MISS-UTILITY NOTE:
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LEGEND:

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- EX. UTILITY POLE
- EX. GUY ANCHOR
- EX. WOOD POST
- EX. MAILBOX
- EX. DECIDUOUS
- EX. CONTOUR
- EX. OVERHEAD UTILITY LINE
- EX. WATER WELL
- PROP. SPOT ELEVATION
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- PROP. CONTOUR
- PROP. MDR DRAINAGE AREA
- PROP. SUPER SILT FENCE
- PROP. SILT FENCE
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- PROP. LIMIT OF DISTURBANCE
- EX. EDGE WOODED AREA
- EX. PRIVATE SEPTIC RESERVE AREA
- PROP. WELL RESERVE BOX
- PROP. STABILIZED CONSTRUCTION ENTRANCE
- EX. PASSING PERCOLATION TEST LOCATION

GENERAL NOTES

1. ZONING: RC-DEO.
2. PROPOSED SEWER - PRIVATE; PROPOSED WATER - PRIVATE.
3. THE PLAN IS BASED ON A FIELD RUN BOUNDARY AND TOPOGRAPHIC SURVEY PERFORMED BY NJR & ASSOCIATES IN MAY OF 2022.
4. THERE IS NO FLOODPLAIN, WETLAND, STREAMS OR THEIR BUFFERS ON THIS SITE.
5. THERE ARE NO CRITICAL HABITATS OF RARE, THREATENED OR ENDANGERED SPECIES ON SITE.
6. TOTAL AREA WITHIN LDD = 30,428 SQ.FT.
7. WATERSHED = SOUTH BRANCH PATAPSCO.
8. 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.
9. EXISTING PASSING SEPTIC PERCOLATION TESTS WITH ADEQUATE INFILTRATION RATES ARE LOCATED WITHIN 50' OF THE PROPOSED STORM WATER MANAGEMENT FACILITY, THEREFOR, NO ADDITIONAL SOIL TESTS ARE PROPOSED.
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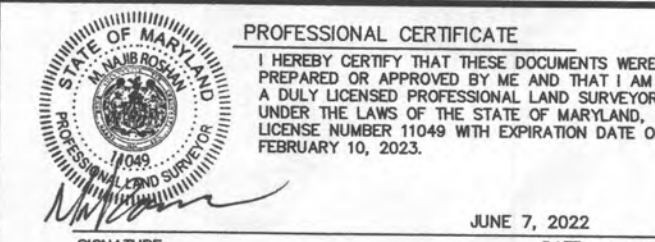
SITE ANALYSIS DATA CHART

TOTAL LOT AREA	= 1.232 ACRES (53,662)
LOT AREA "PROP. TO BE DISTURBED"	= 0.698 ACRES (30,428 SF)
TOTAL LOT IMPERVIOUS AREA PROPOSED	= 0.119 ACRES (5,191 SF)
TOTAL PROPOSED GREEN AREA	= 1.113 ACRES (48,471 SF)
SITE AREA WITHIN WETLAND	= 0 ACRES
SITE AREA WITHIN 25' WETLAND BUFFER	= 0 ACRES
SITE AREA OF ERODIBLE SOILS	= 0 ACRES
SITE AREA WITHIN 100-YR FLOODPLAIN	= 0 ACRES
SITE AREA WITHIN 100' STREAM BUFFER	= 0 ACRES
SITE TOTAL EXISTING FORESTED AREA	= 0 ACRES
SITE ULTIMATE FORESTED AREA	= 0 ACRES

SEPTIC TRENCH INFO, INITIAL SYSTEM

TRENCH	TRENCH LENGTH	TRENCH WEDTH	EX. TOP OF GROUND	TOP OF GRAVEL	INV. INTO TRENCH	BOTTOM OF TRENCH
1	66'	3'	688.4±	684.9	684.4	682.4
2	66'	3'	688.0±	684.5	684.0	682.0
3	66'	3'	686.5±	683.0	682.5	680.5

REVISIONS		
No.	DESCRIPTION	DATE
1		



DEVELOPER'S CERTIFICATE
"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

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SIGNATURE OF DEVELOPER
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ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN

HAY MEADOW OVERLOOK

LOT 2

PLAT No. 21740
530 WATERSVILLE ROAD, MOUNT AIRY, MD, 21771
TAX MAP 2, GRID 15, PARCEL 18
4TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE: 1" = 20'
JOB NO.: 3696
DATE: JUNE 2, 2022
SHEET: 1 OF 2

SEPTIC SYSTEM CALCULATIONS, INITIAL SYSTEM:

ABS. RATE = 0.8, EFFECTIVE DEPTH = 4'-6" = 2.0'
DRAINFIELD AREA: 5 BEDROOMS AT 750 gpd / 0.8 ABSORPTION RATE = 938 SQ. FT.
SIDEWALL REDUCTION CREDIT: $\frac{WIDTH+2}{WIDTH+1+2(DEPTH)} = \frac{3+2}{3+1+2(2)} = \frac{5}{8} = 0.625$
LENGTH OF TRENCHES: $\frac{938 \times 0.625}{3} = 196$ LINEAR FEET
INITIAL SYSTEMS: THREE TRENCHES OF 66 FEET IN LENGTH EACH, 3 FEET WIDE, 10 FEET MINIMUM SPACED ARE PROVIDED.

SEPTIC SYSTEM CALCULATIONS, 1ST REPLACEMENT SYSTEM:

ABS. RATE = 0.8, EFFECTIVE DEPTH = 4'-6" = 2.0'
DRAINFIELD AREA: 5 BEDROOMS AT 750 gpd / 0.8 ABSORPTION RATE = 938 SQ. FT.
SIDEWALL REDUCTION CREDIT: $\frac{WIDTH+2}{WIDTH+1+2(DEPTH)} = \frac{3+2}{3+1+2(2)} = \frac{5}{8} = 0.625$
LENGTH OF TRENCHES: $\frac{938 \times 0.625}{3} = 196$ LINEAR FEET
INITIAL SYSTEMS: FOUR TRENCHES OF 43 FEET IN LENGTH EACH, 3 FEET WIDE, 10 FEET MINIMUM SPACED ARE PROVIDED.

SEPTIC SYSTEM CALCULATIONS, 2ND REPLACEMENT SYSTEMS:

ABS. RATE = 0.6, EFFECTIVE DEPTH = 4'-6" = 2.0'
DRAINFIELD AREA: 5 BEDROOMS AT 750 gpd / 0.6 ABSORPTION RATE = 1,250 SQ. FT.
SIDEWALL REDUCTION CREDIT: $\frac{WIDTH+2}{WIDTH+1+2(DEPTH)} = \frac{3+2}{3+1+2(2)} = \frac{5}{8} = 0.625$
LENGTH OF TRENCHES: $\frac{1250 \times 0.625}{3} = 260$ LINEAR FEET
REPLACEMENT SYSTEMS: SIX TRENCHES OF 43.5 FEET IN LENGTH EACH, 3 FEET WIDE, 10 FEET MINIMUM SPACED ARE PROVIDED.

