



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: 12-18-24

ONSITE SEWAGE DISPOSAL SYSTEM

P 58790

APPROVAL DATE: 7/11/2015

PERMIT:

NEW CONSTRUCTION

A

PROPERTY ADDRESS: 4248 Maisel Farm Lane

SUBDIVISION: Buckskin Woods

LOT: 64

TAX ID: 05-405548

CONTRACTOR: Hatfields Equipment

EMAIL: Ken@hatfieldsequipment.com

CONTRACTOR ADDRESS: P.O. Box 517 Annapolis Junction MD 20701

PHONE: 301-490-1809

PROPERTY OWNER: Thomas H. Price III

EMAIL:

OWNER ADDRESS: 4248 Maisel Farm Lane, Ellicott City, MD 21042

PHONE:

PHONE:

SEPTIC TANK SIZE: 2000

PUMP SIZE: 1.5hp

PUMP TANK CAPACITY: 2000

DISTRIBUTION SYSTEM: [X] GRAVITY

[] PRESSURE DOSED

BEDROOMS: 6

APPLICATION RATE: 1.2

Table with trench specifications: LINEAR FEET REQUIRED: 104.52, TRENCH WIDTH: 3, MINIMUM SPACE BETWEEN TRENCHES: 11, INLET DEPTH: 2, MAXIMUM BOTTOM DEPTH: 8, EFFECTIVE AREA BEGINNING DEPTH: 4. LOCATION: SYSTEM TO BE STAKED BY DESIGNER AND VERIFIED BY APPROVING AUTHORITY DURING PRE-CONSTRUCTION INSPECTION.

ISSUED BY: DBeward

ISSUE DATE: 2-18-25

EXPIRATION DATE: 12-18-25

NOTE: CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION INSPECTION PRIOR TO BEGINNING ANY INSTALLATION

NOTE: CONTRACTOR REGISTERED WITH THE STATE OF MD ON-SITE WASTEWATER PROFESSIONALS BOARD: CONFIRMED [X]

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 SEPTIC TANKS REQUIRED

NOTE: ALL PARTS OF SEPTIC SYSTEM SHALL BE AT LEAST 100 FEET DOWNGRADE 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

[X] ELECTRICAL PERMIT ISSUED E 25000636

NOTE: THE HCHD DOES NOT WARRANT ANY SYSTEM AND CANNOT GUARANTEE THE PERFORMANCE OF THIS SYSTEM AS DESIGNED. BY ACCEPTING THIS PERMIT, THE OWNER AND/OR APPLICANT ACKNOWLEDGE THAT THE SPECIFICATIONS DETAILED IN THIS DESIGN ARE ONE POSSIBLE OPTION AND THAT THE HCHD WILL REVIEW OTHER PROPOSALS. YOU HAVE THE OPTION TO SEEK THE ADVICE OF A QUALIFIED DESIGN CONSULTANT OR PROFESSIONAL ENGINEER FOR FURTHER GUIDANCE.

NOTE: AN INDIVIDUAL CERTIFIED BY MDE AND THE MANUFACTURER FOR BAT INSTALLATION MUST BE PRESENT AT ALL TIMES DURING BAT INSTALLATION.

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

7/11/25 Visual and audible alarms are on separate breakers. Contractor used Goulds Pump. Contractor has Highwater and pump on/off alarms are tested. Adequate flow to d-box. Control panel is 30". Contractor to raise control panel height. (MB) 7/11/2025 Contractor graded ground around control panel and is now 30" to grade (MB)

* See Separate Sheet for As-Built *

TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
3'	2'	8'
NUMBER OF TRENCHES		3
TOTAL LENGTH		111'
ABSORPTION AREA		333 sq. ft. + Sidewalk
DISTRIBUTION BOX LEVEL		Yes
DISTRIBUTION BOX BAFFLE		-
DISTRIBUTION BOX PORT		Yes

SEPTIC TANK DATA

SEPTIC TANK 1 LEVEL Yes
 MANUFACTURER Babylon
 CAPACITY 2000 GAL
 SEAM LOC Top
 TANK LID DEPTH 1 1/2'
 BAFFLES 6" front / 4" back
 BAFFLE FILTER -
 MANHOLE LOC Front/Back
 6" PORT LOC -
 WATERTIGHT TEST -
 SLOTTED Yes
 DATE ON LID 1-13-25

PUMP/SEPTIC TANK LEVEL Yes

MANUFACTURER Babylon
 CAPACITY 2000 GAL
 SEAM LOC Top
 TANK LID DEPTH 1'
 BAFFLES -
 BAFFLE FILTER -
 MANHOLE LOC Front/Back
 6" PORT LOC -
 WATERTIGHT TEST -
 SLOTTED -
 DATE ON LID 1-13-25

ROAD NAME

SEPTIC CONTRACTOR ONSITE INSTALLING SYTEM: Ken Hatfield, Jr.
 SEPTIC CONTRACTOR ONSITE LICENSED WITH THE STATE OF MD: YES/NO

PRE-CONSTRUCTION NOTES:

2/27/25 Met with contractor on site. Shot the staked trenches. They are on

Contour and lengths are per plan. Septic tanks and pump tank staked locations are closer than what is shown on plan. Sewer house location does not appear to be as deep as plan. FF to BF is 9'10". Floor joist height is 1'.

Contractor plans to start trenches on Monday, March 3rd. (MB/SP)

INSTALLATION NOTES:

3/3/25 Contractor has d-boy set and first trench installed. 35' long and inlet at 2' OK to backfill. 2nd trench being dug, 8' bottom (MB) 3/4/25 All three trenches are complete and are per specs. 369' of FM has been completed. OK to backfill Contractor to install trenches and remainder of FM tomorrow (MO) 3/7/25 Pump tank and septic tank are set and leveled. Pump tank inlet is lower than septic tank inlet. Cleanout is w/in 6' of house. Plenty of fall from house to septic tank. P+A to be completed on Monday. (MB) 3/10/25 Installer onsite FM sleeved out of tank. Tank has water on 1 side, but did not float. part of FM sleeved, 90' up FM, pressure rated, installed. (SP)

CONTROL PANEL DATA

CONTROL PANEL HEIGHT 30"
 (MIN 30")
 INSPECTION DATE 7/11/25
 INSPECTION: PASS FAIL (CIRCLE ONE)

FINAL INSPECTOR Matt Burns

DATE OF APPROVAL 7/11/25

4248 Marsel Farm Lane - P+A Inspection



7/11/25 1st Inspection - Control panel is 24" to grade.



7/11/25 2nd inspection. Control panel @ 30" above grade

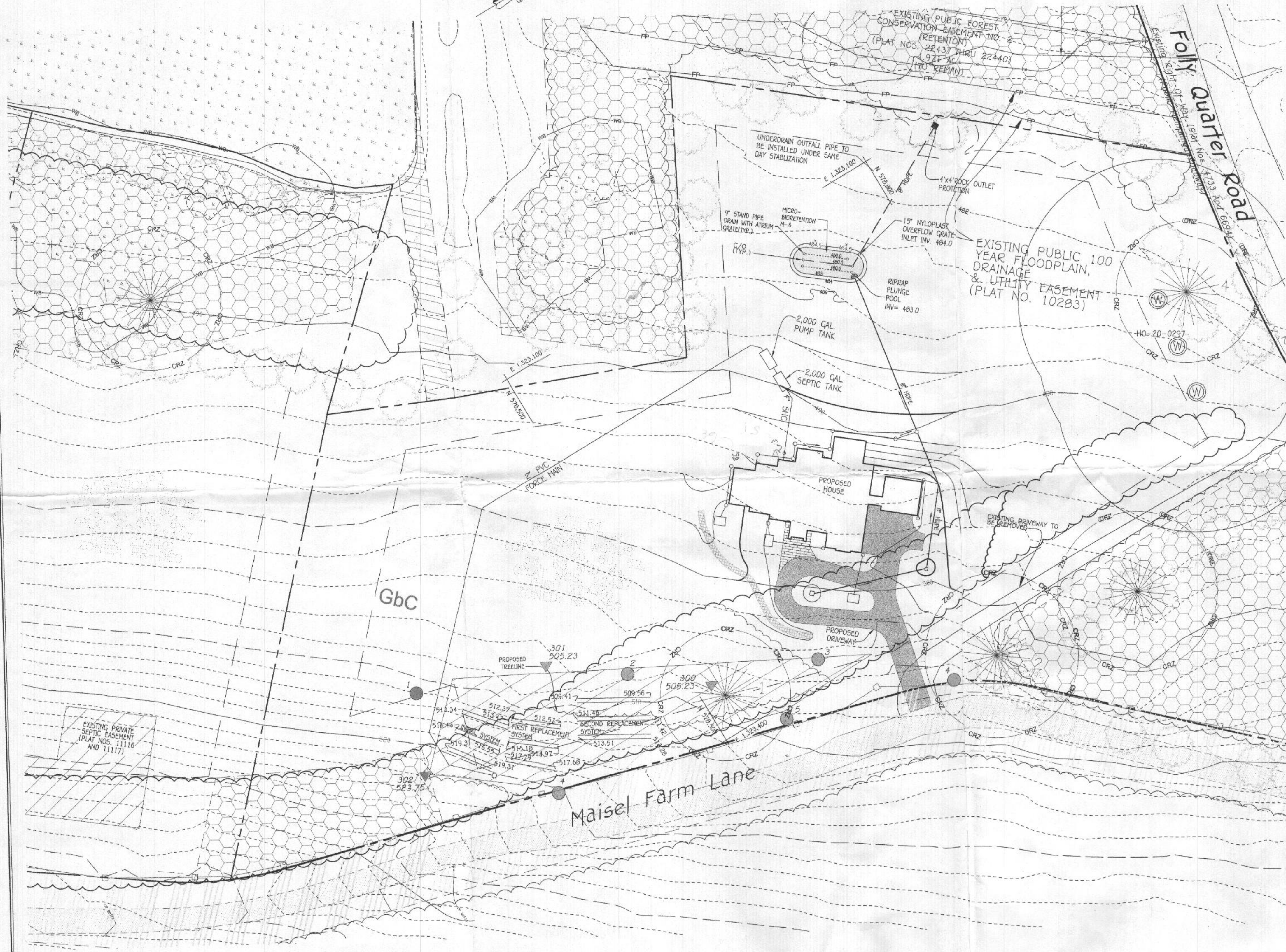
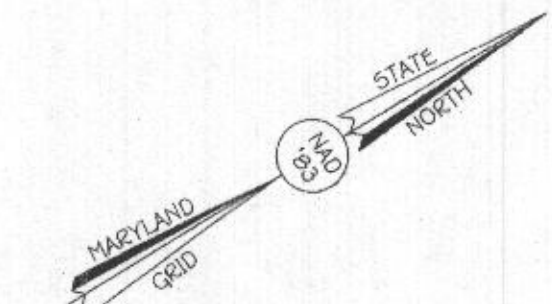
Unfinished	Base	18
Dedicated	Warm. Drains	
Guest -	Living	20
Both toilet	Room	
Foyer	House	22
	GFI	
Game	septic	24
Room	120	
Front	240	26
landscape	septic	
27	septic	28
Future		
landscaping		
29		30
31		32
33		34
35		36
		38
		40



7/11/25 1st Inspection

Audio Alarm and Visual Alarm on separate breakers

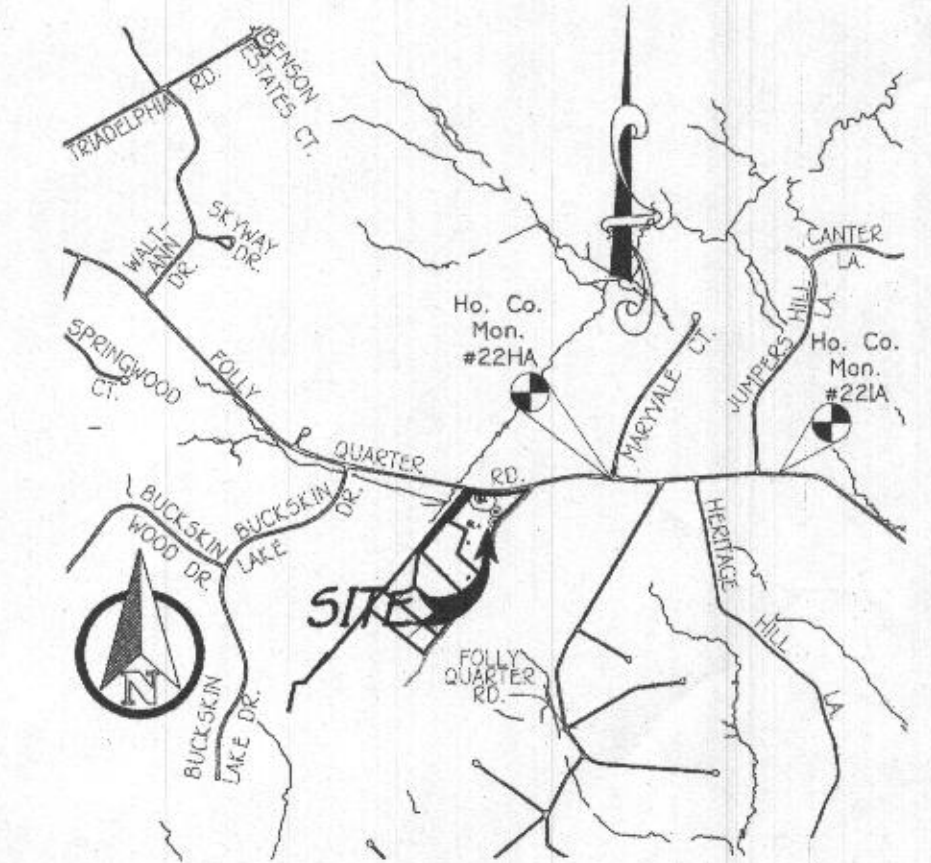
1. ANY CHANGE TO THE LOCATIONS OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED SITE PLAN MAY BE REQUIRED.
2. THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
3. ELECTRICAL WORK FOR THE INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
4. THE WELL HO-20-0297 HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.
5. 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.
6. THE ENGINEER IS REGISTERED WITH MDE TO PROVIDE ON-SITE WASTEWATER SERVICE IN MARYLAND.
7. CONTRACTOR TO PERFORM CONSTRUCTION PER CURRENT O.S.H.A. STANDARDS.



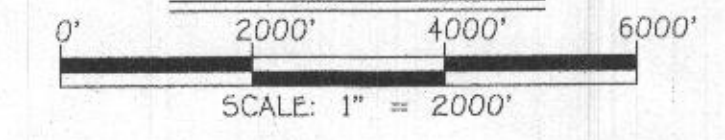
TRENCH DATA:

- TRENCH 1:
 EX. GROUND ABOVE = 519.31
 INV. IN = 517.31
 BOTTOM TRENCH = 511.31
- TRENCH 2:
 EX. GROUND ABOVE = 516.49
 INV. IN = 514.49
 BOTTOM TRENCH = 508.49
- TRENCH 3:
 EX. GROUND ABOVE = 513.41
 INV. IN = 511.41
 BOTTOM TRENCH = 505.41

- FFE 524.00
 BSE 492.83
 INV. CUT OF HOUSE = 490.33
 PROP. GROUND AT CLEANOUT #1 = 493.00
 INV. INTO CLEANOUT = 490.23
 INV. CUT OF CLEANOUT = 487.16
 EX. GROUND AT SEPTIC TANK = 489.79
 PROP. GRADE ABOVE SEPTIC TANK = 489.79
 INV. INTO SEPTIC TANK = 486.22
 INV. CUT OF SEPTIC TANK = 486.05
 EX. GROUND AT SEPTIC TANK = 488.94
 TOP OF PUMP TANK = 487.12
 INV. INTO PUMP TANK = 485.95
 INV. CUT OF PUMP TANK = 485.70
 EX. GROUND AT DISTRIBUTION BOX = 520.48
 INV. INTO DISTRIBUTION BOX = 518.98
 INV. CUT OF DISTRIBUTION BOX = 518.88



VICINITY MAP



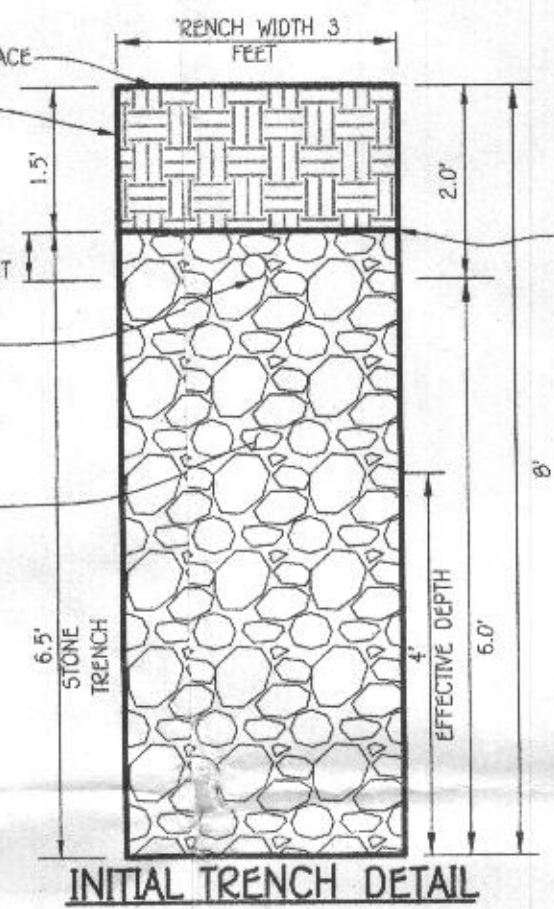
LEGEND

- - - - - EXISTING 2' CONTOURS
- - - - - EXISTING 10' CONTOURS
- EXISTING TREE LINE
- DENOTES WELL LOCATION
- DENOTES FAILED PERC 7/1992
- DENOTES PASSED PERC 7/1992
- ▲ DENOTES PASSED PERC 7/2022
- ▨ DENOTES SEWAGE DISPOSAL AREA

THE PURPOSE OF THIS REVISED SEPTIC INSTALL PLAN IS TO REVISE THE HOUSE LOCATION FROM A PREVIOUSLY APPROVED SEPTIC INSTALLATION PLAN DATED 12/12/23

INITIAL SYSTEM

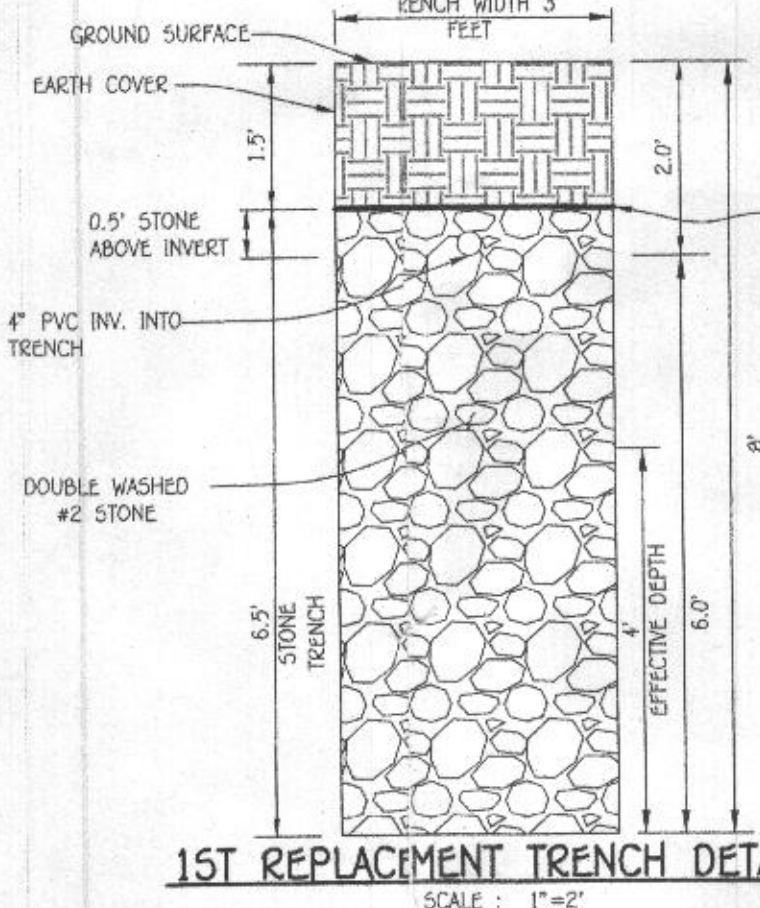
SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 6 BEDROOMS
 LOADING RATE = 6 BEDROOMS X 150 GPD/BEDROOM = 900 GPD
 APPLICATION RATE = 1.2
 EFFECTIVE SIDEWALL BEGINS AT 4 FEET
 TRENCH DEPTH = 8 FEET
 TRENCH WIDTH (W) = 3 FEET
 EFFECTIVE DEPTH (D) = 4 FEET
 SF OF DRAINFIELD = 900 GPD / 1.2 = 750 SF
 COEFFICIENT OF REDUCTION OF TRENCH LENGTH = (W+2)/(W+1+2D) = (3+2)/(3+1+(2*4)) = 0.417
 TRENCH LENGTH = 250 SF x 0.417 = 104.25 FEET (USE 3 TRENCHES AT 35 LF.)
 TRENCH SPACING = 2D+W = ((2*4) + 3) = 11' USE 11'



INITIAL TRENCH DETAIL
SCALE: 1"=2'

1ST REPLACEMENT SYSTEM

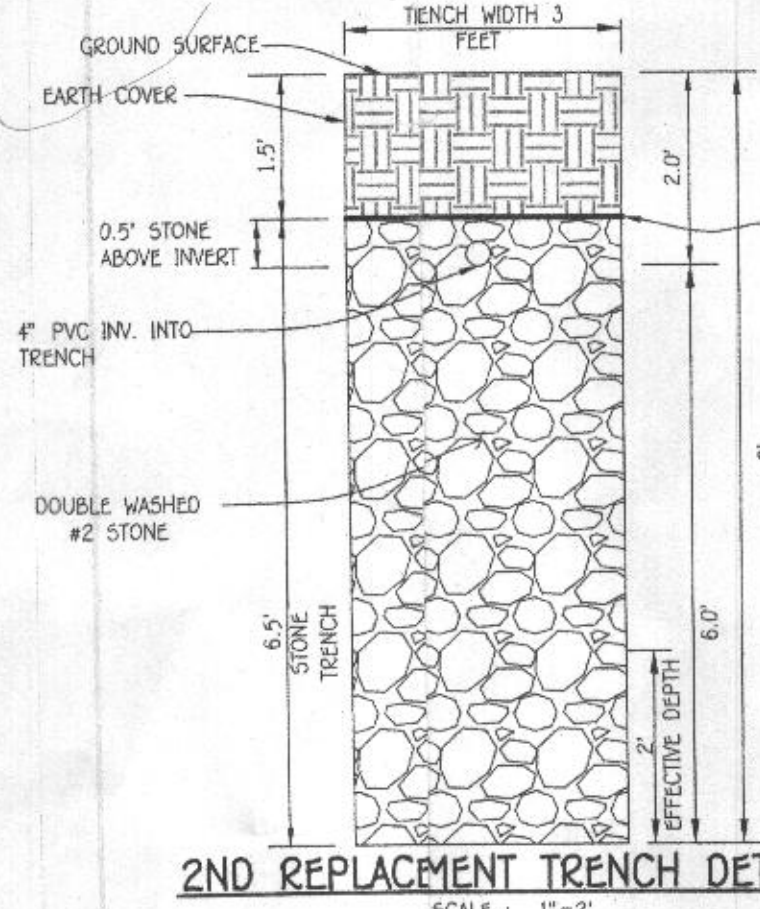
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 TRENCH LENGTH = 250 SF x 0.417 = 104.25 FEET (USE 3 TRENCHES AT 35 LF.)
 TRENCH SPACING = 2D+W = ((2*4) + 3) = 11' USE 11'



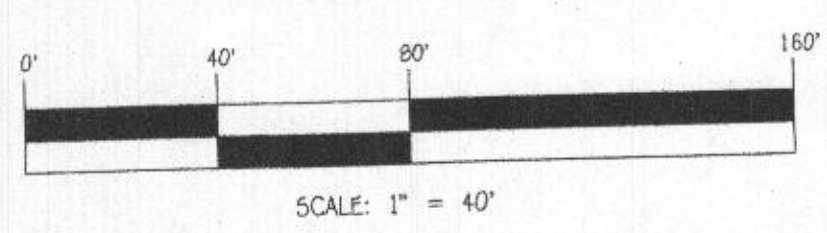
1ST REPLACEMENT TRENCH DETAIL
SCALE: 1"=2'

2ND REPLACEMENT SYSTEM

SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 6 BEDROOMS
 LOADING RATE = 6 BEDROOMS X 150 GPD/BEDROOM = 900 GPD
 APPLICATION RATE = 1.2
 EFFECTIVE SIDEWALL BEGINS AT 6 FEET
 TRENCH DEPTH = 8 FEET
 TRENCH WIDTH (W) = 3 FEET
 EFFECTIVE DEPTH (D) = 2 FEET
 SF OF DRAINFIELD = 900 GPD / 1.2 = 750 SF
 COEFFICIENT OF REDUCTION OF TRENCH LENGTH = (W+2)/(W+1+2D) = (3+2)/(3+1+(2*2)) = 0.625
 TRENCH LENGTH = 250 SF x 0.625 = 156.25 FEET (USE 3 TRENCHES AT 53 LF.)
 TRENCH SPACING = 2D+W = ((2*2) + 3) = 7' USE 10'



2ND REPLACEMENT TRENCH DETAIL
SCALE: 1"=2'



PLAN
SCALE: 1" = 40'



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. 46091, EXPIRATION DATE: 02/14/2025.

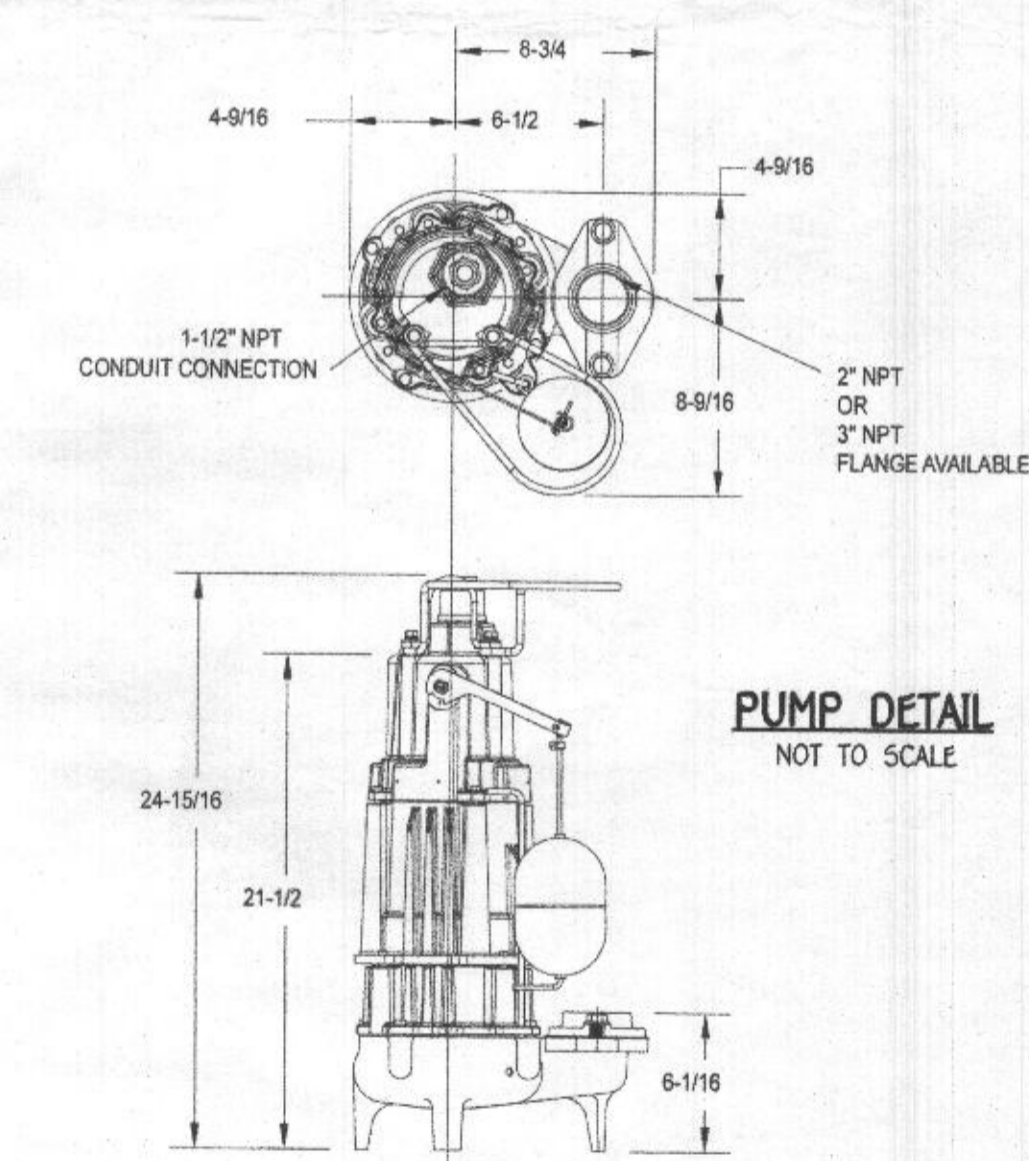
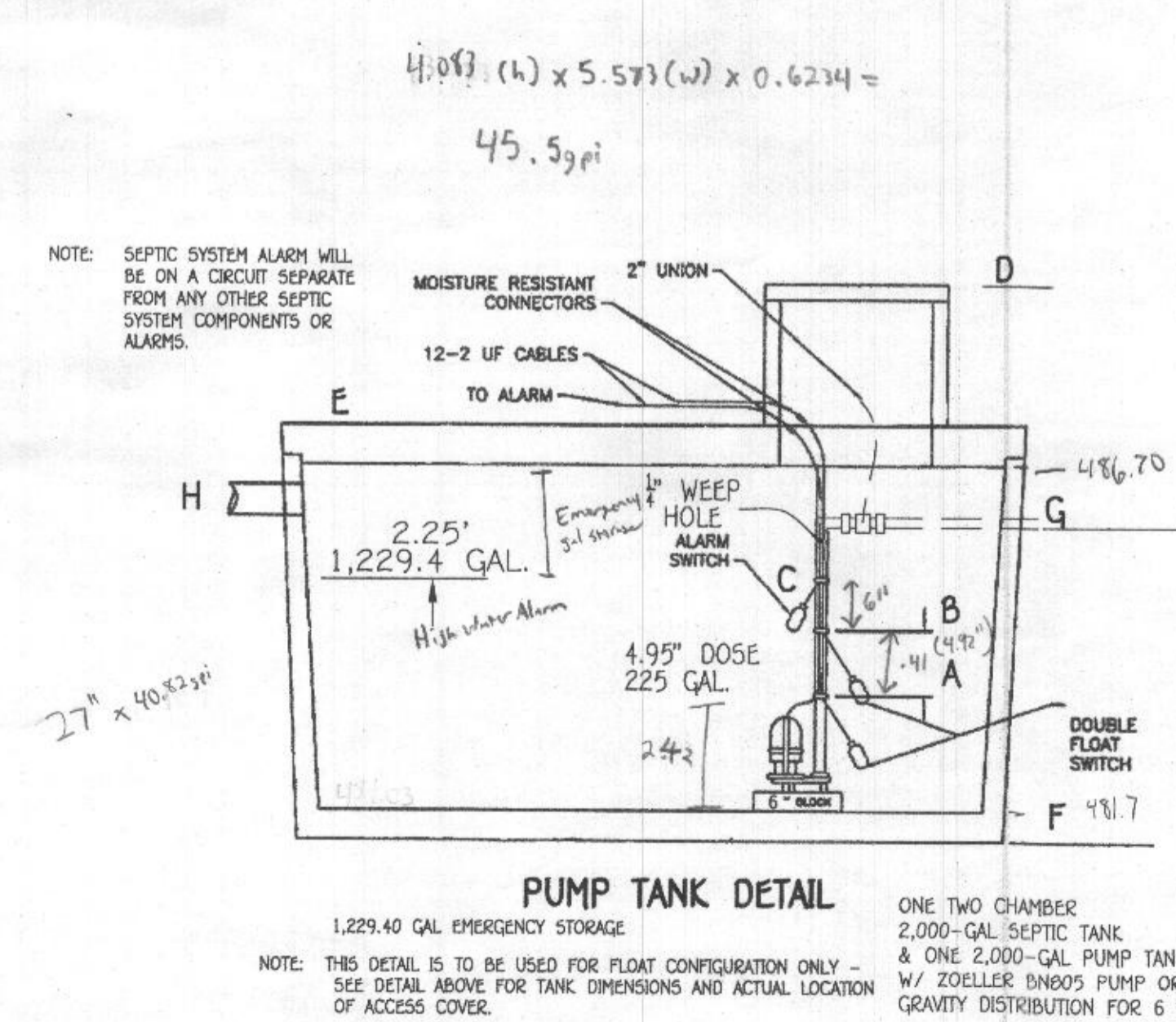
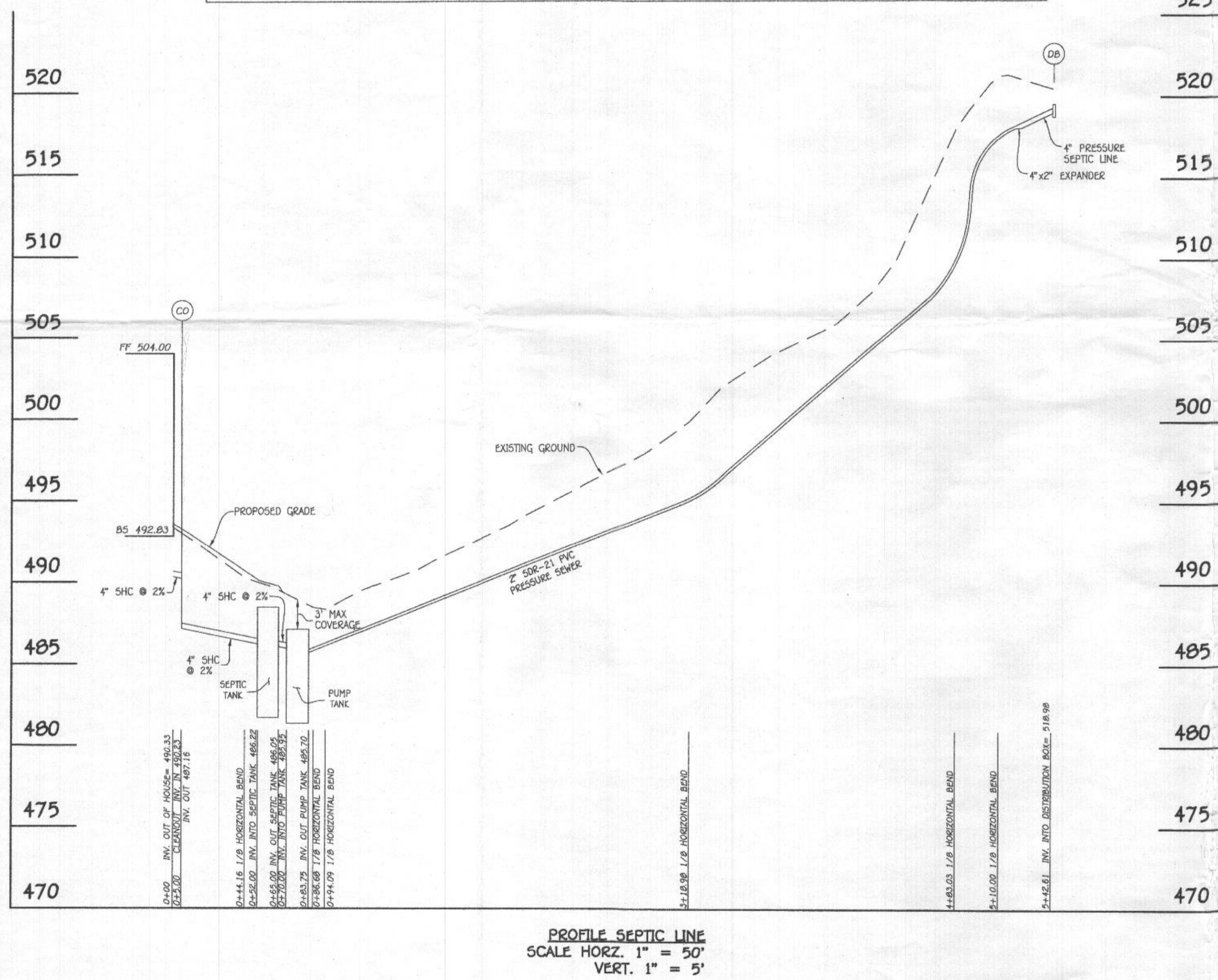
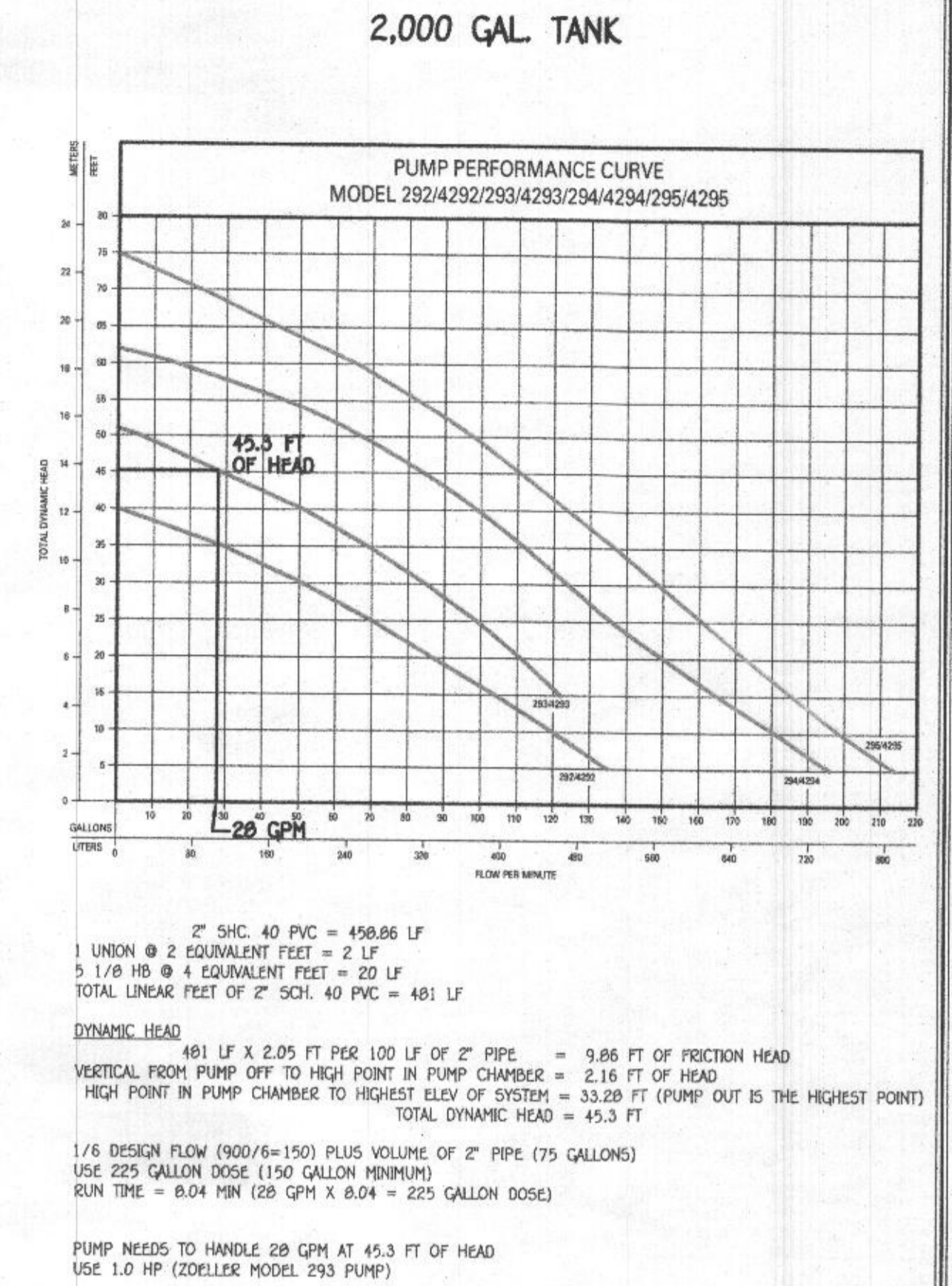
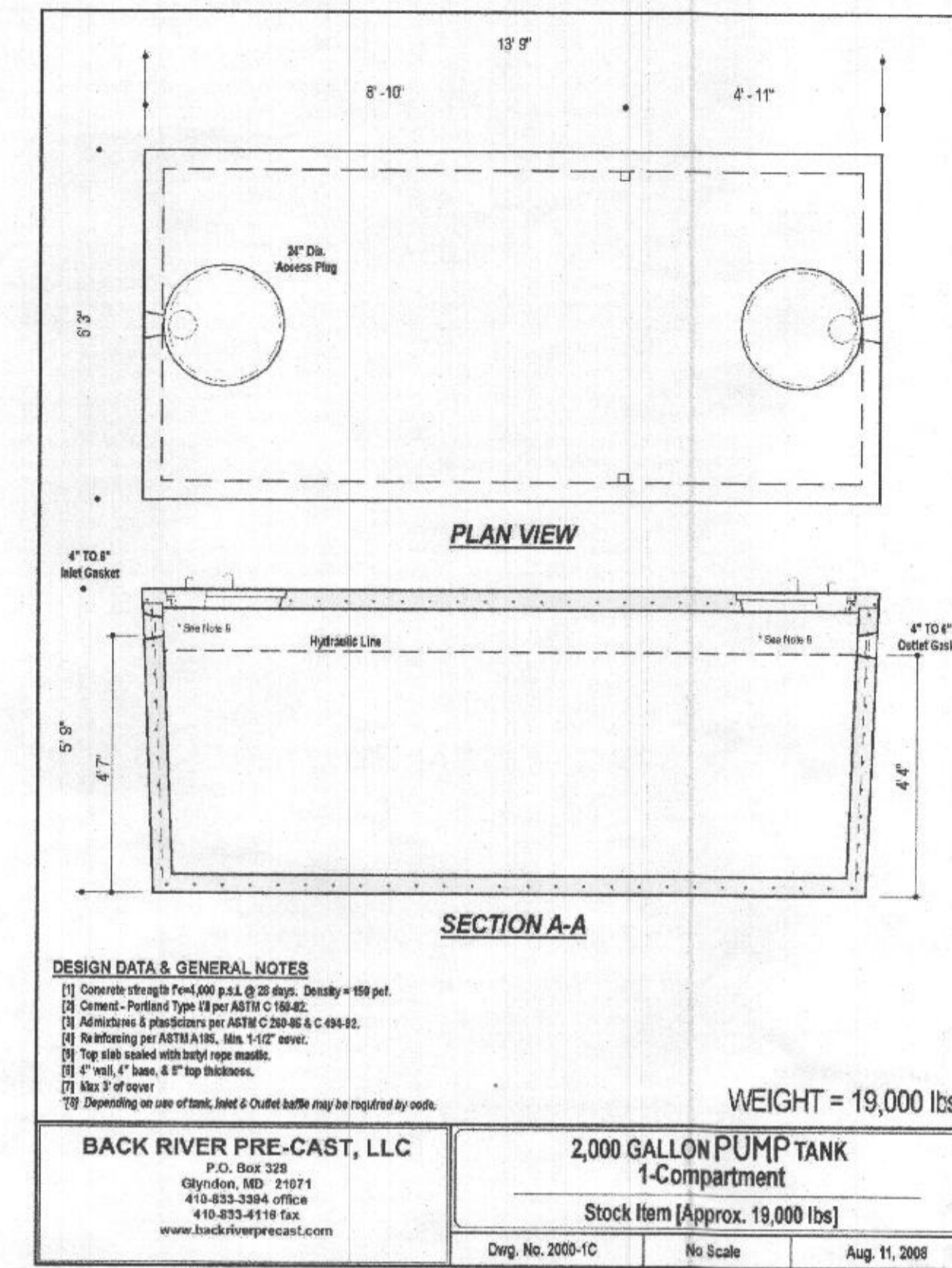
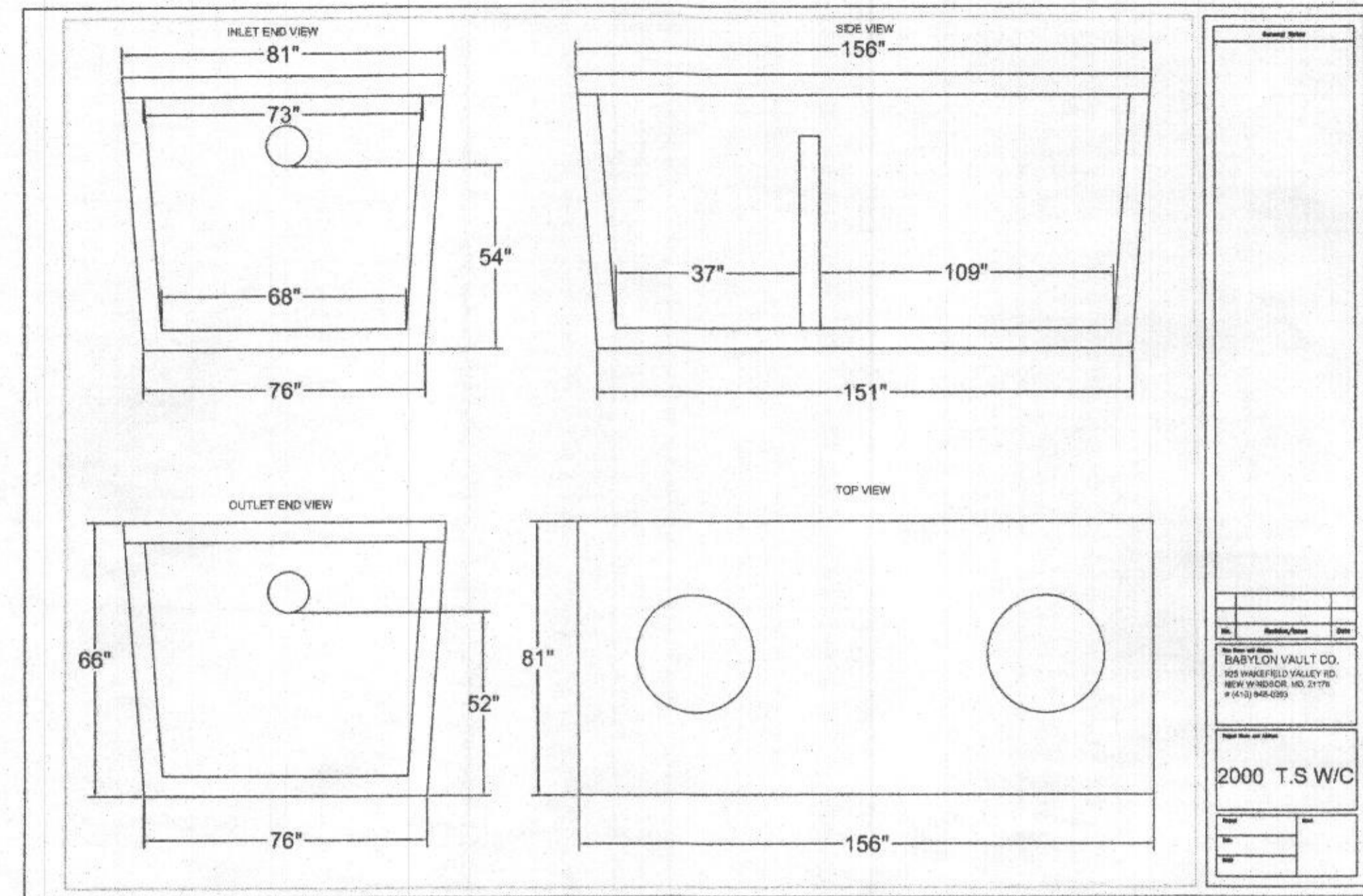
Luke Green
 Signature Of Professional Engineer
 DATE: 8-14-24

DAILY STABILIZATION IN CONTRACTOR SHALL DISTURB THAT AREA WHICH CAN BE COMPLETED AND STABILIZED BY THE END OF EACH WORKING DAY. STABILIZATION SHALL BE AS FOLLOWS:
 1. FOR AREAS TO BEAVED, THAT APPLICATION OF STONE BASE.
 2. FOR AREAS TO BE NEGATIVELY STABILIZED:
 A. PERMANENT SEED SOIL STABILIZATION MATING OR SOD FOR ALL STEEP SLOPES, CHANNELS OR SWALES.
 B. PERMANENT SEED MULCH FOR ALL OTHER AREAS.
 ANY AREAS WHICH CANT BE STABILIZED BY THE END OF EACH WORKING DAY MUST HAVE SILT FENCE INSTALLED ON DOWN SLOPE SIDE.

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL FREE
 BLUETT CITY, MARYLAND 21046
 (410) 461-2855

OWNER
 SURJIT SINGH JULKA
 CHANPREET SINGH JULKA
 10 BROOKSTONE COURT
 LUTHERVILLE, MD 21093

Approved Septic System Plan
 Howard County Health Department
Ant Johnson 8/27/2024
 Signature Date
**SEPTIC SYSTEM
 INSTALLATION SITE PLAN**
4248 MAISEL FARM LANE
 LOT 64 ZONED: RR-DEO
 TAX MAP NO.: 22 GRID NO.: 22 PARCEL NO.: 535
 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: 1"=30' DATE: AUGUST 14, 2024
 SHEET 1 OF 2



Approved Septic System Plan
Howard County Health Department

Signature: [Signature]
Date: 8/27/2024

SEPTIC SYSTEM INSTALLATION SITE PLAN
4248 MAISEL FARM LANE

LOT 64 ZONED: RR-DEO
TAX MAP NO.: 22 GRID NO.: 22 PARCEL NO.: 535
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: 1"=30' DATE: AUGUST 14, 2024
SHEET 2 OF 2

OWNER
SURJIT SINGH JULKA
CHANDPREET SINGH JULKA
10 BROOKSTONE COURT
LUTHERVILLE, MD 21093

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. 46091, EXPIRATION DATE: 05/14/2025.

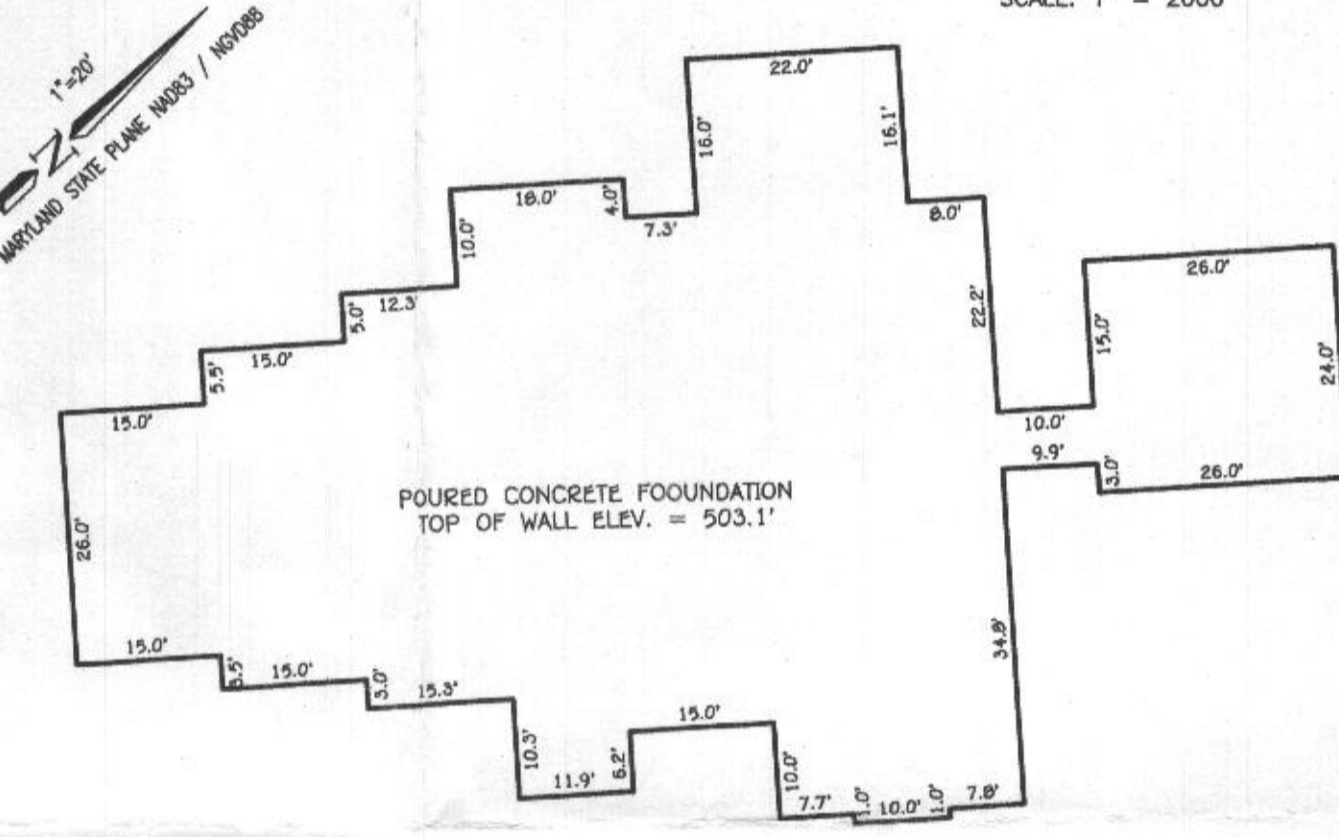
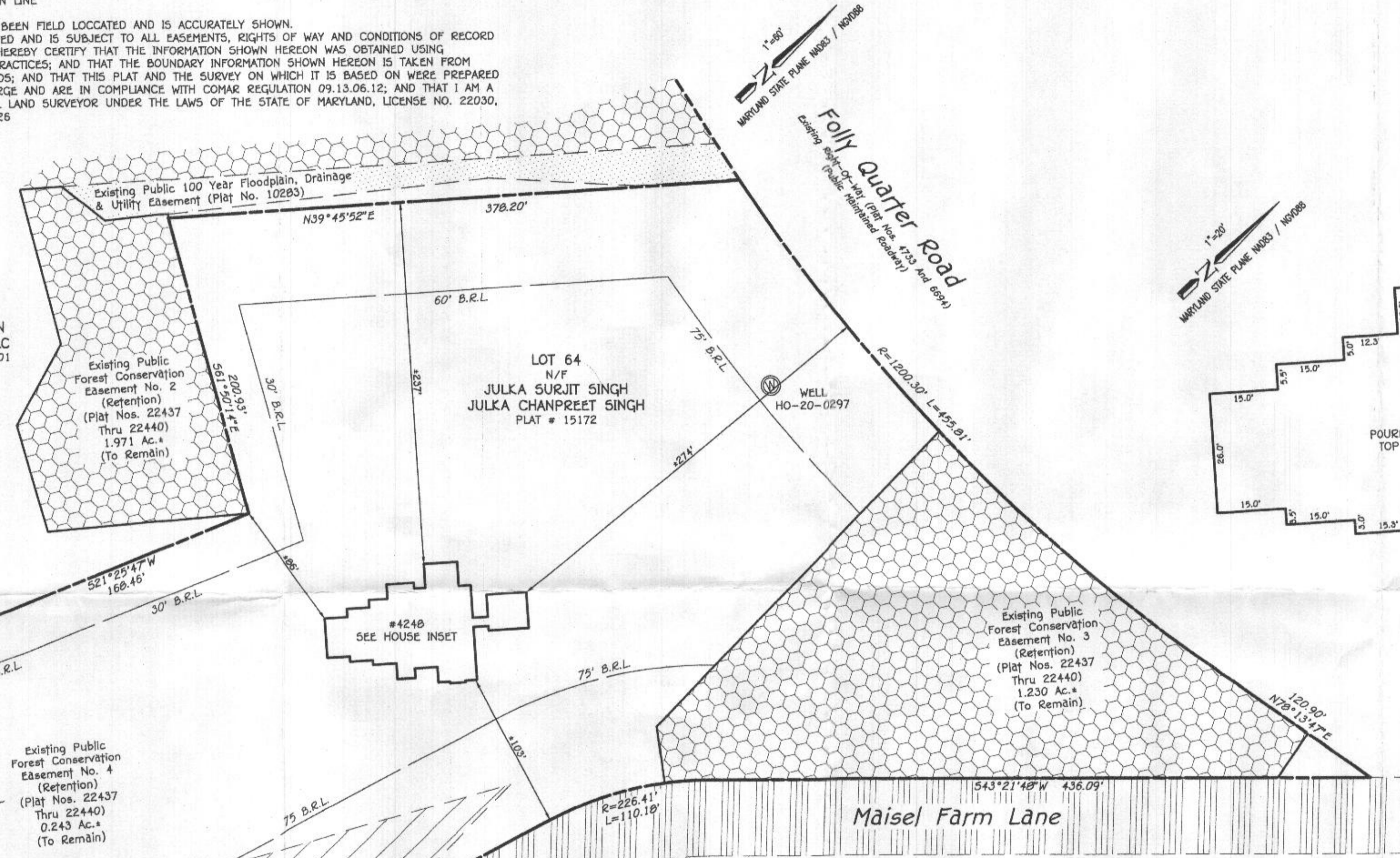
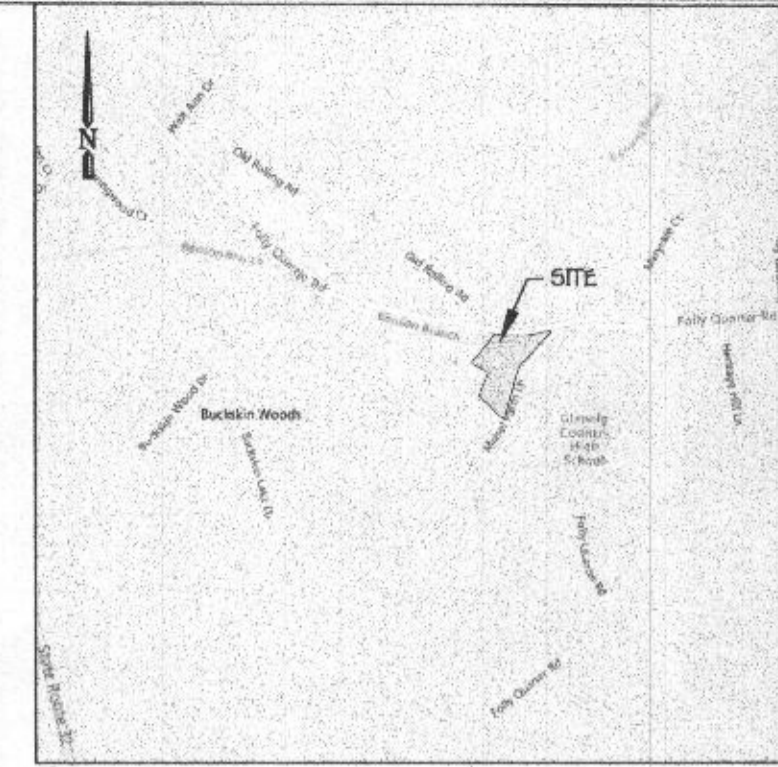
Yube Ghosh
Signature of Professional Engineer
8-14-24
DATE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALTHORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21042
(410) 461-2095

STATE OF MARYLAND
LUKE A. CROW
PROFESSIONAL ENGINEER
46091

GENERAL NOTES:

1. THE PURPOSE OF THIS SURVEY IS TO REPRESENT THE POSITION OF THE POURED CONCRETE FOUNDATION AND OTHER VISIBLE IMPROVEMENTS AFFECTING THE SUBJECT PROPERTY BASED OFF OF A FIELD RUN SURVEY PERFORMED NOVEMBER 20, 2024
2. THIS SURVEY IS NOT TO BE RELIED UPON FOR THE ESTABLISHMENT OR LOCATION OF FENCES, GARAGES, BUILDINGS OR OTHER EXISTING OR FUTURE IMPROVEMENTS; AND DOES NOT PROVIDE FOR THE ACCURATE IDENTIFICATION OF PROPERTY BOUNDARY LINES.
3. DIMENSIONS TO THE BOUNDARY LINES SHOWN HEREON ARE PLUS OR MINUS ONE FOOT (1.0').
4. THE SUBJECT PROPERTY LIES WITHIN FLOOD ZONE X, WHICH IS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD HAZARD, AS SHOWN ON THE FEMA FLOOD INSURANCE RATE MAP FOR HOWARD COUNTY, MARYLAND, MAP NUMBER 24027C00650 WITH AN EFFECTIVE DATE OF NOVEMBER 06, 2013
5. B.R.L. = BUILDING RESTRICTION LINE
6. BUILDING PERMIT: B24002928
7. THE WELL HO-20-0297 HAD BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.
8. NO TITLE REPORT WAS REVIEWED AND IS SUBJECT TO ALL EASEMENTS, RIGHTS OF WAY AND CONDITIONS OF RECORD SURVEYORS CERTIFICATION: I HEREBY CERTIFY THAT THE INFORMATION SHOWN HEREON WAS OBTAINED USING ACCEPTED LAND SURVEYING PRACTICES; AND THAT THE BOUNDARY INFORMATION SHOWN HEREON IS TAKEN FROM AVAILABLE DEEDS AND RECORDS; AND THAT THIS PLAT AND THE SURVEY ON WHICH IT IS BASED ON WERE PREPARED UNDER MY RESPONSIBLE CHARGE AND ARE IN COMPLIANCE WITH COMAR REGULATION 09.13.06.12; AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 22030, EXPIRATION DATE MAY 11, 2026
- 9.



12/18/24 - Wall check
okay. - Hank

SURVEYOR'S CERTIFICATE:

I HEREBY CERTIFY THAT THE INFORMATION SHOWN HEREON WAS OBTAINED USING ACCEPTED LAND SURVEYING PRACTICES; THAT THE BOUNDARY INFORMATION SHOWN HEREON IS TAKEN FROM AVAILABLE DEEDS AND RECORDS; THAT THIS PLAT AND THE SURVEY ON WHICH IT IS BASED WERE PREPARED UNDER MY RESPONSIBLE CHARGE AND ARE IN COMPLIANCE WITH COMAR REGULATION 09.13.06.12

Robert Walker
ROBERT E. WALKER
PROFESSIONAL LAND SURVEYOR
MD LIC. # 22030 EXP. 5/11/2026



DATE: 11/22/2024

REVISIONS:	DATE

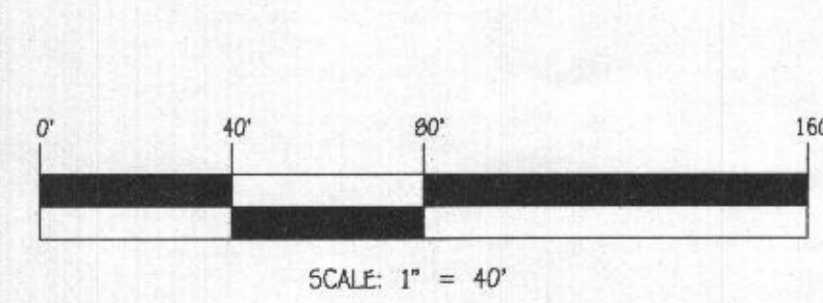
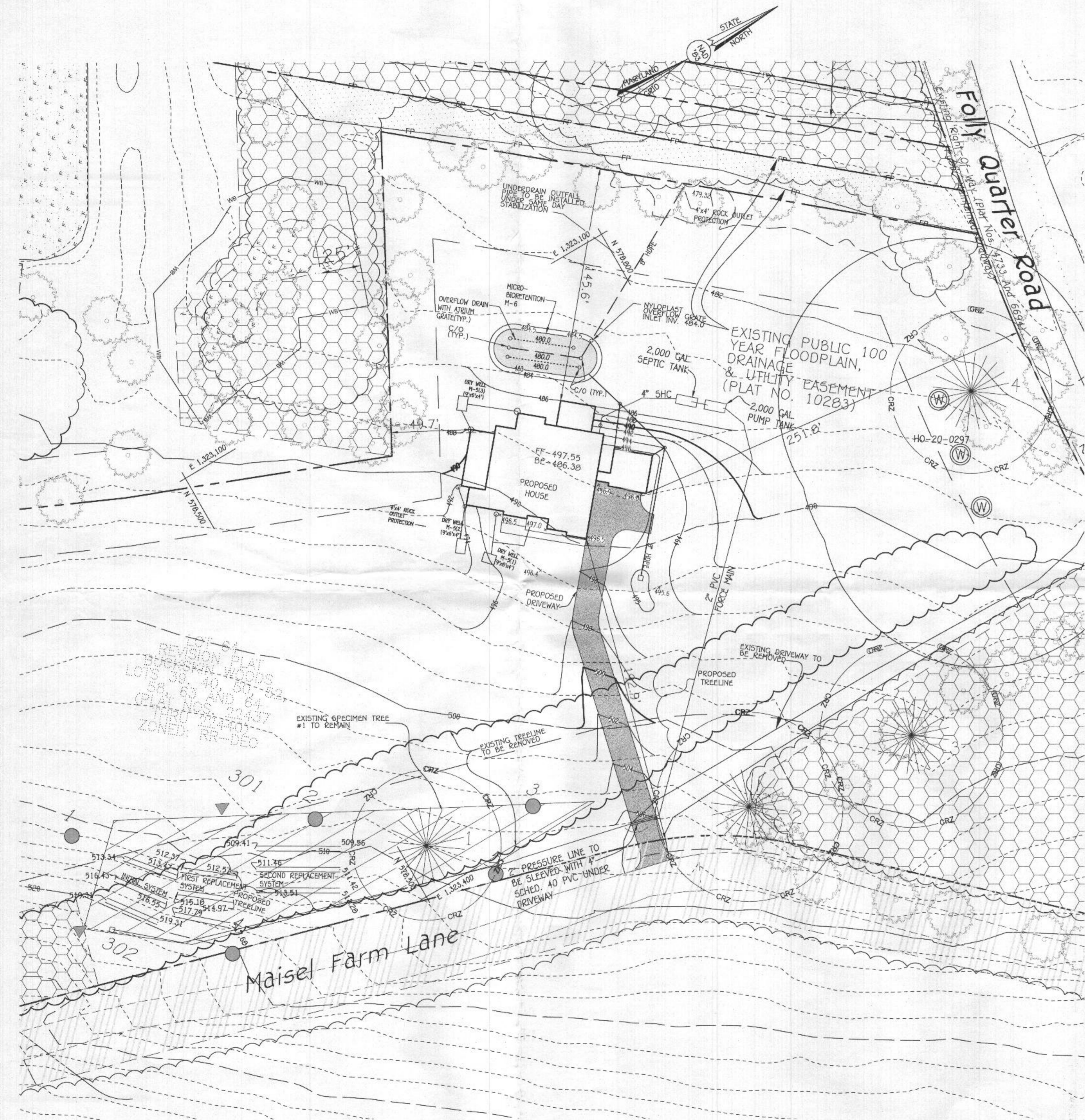
SPECIAL PURPOSE SURVEY
BUCKSKIN WOODS
LOT 64

4248 MAISEL FARM LANE, ELLICOTT CITY MD 21042
294,726 S.F. or 6.766 ACRES
TAX MAP 22, GRID 22, PARCEL 535
LIBER/FOLIO: 22379 / 79
TAX I.D. 05-405548
FIFTH ELECTION DISTRICT - HOWARD COUNTY, MARYLAND

OWNER(S) JULKA SURJIT SINGH JULKA CHANPREET SINGH 10 BROOKSTONE COURT LUTHERVILLE MD 21093	GRAPHIC SCALE 1" = 60' 0 60' 120'
DATE: 11/22/2024 DRAWN BY: MD CHECKED BY: REW	PROJECT NUMBER 61260
SHEET 1 OF 1	

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042 (410) 461 - 2855

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6. THE ENGINEER IS REGISTERED WITH MDE TO PROVIDE ON-SITE WASTEWATER SERVICE IN MARYLAND.



PLAN
SCALE: 1" = 40'

OWNER
THOMAS H. PRICE III
4248 MAISEL FARM LANE
ELLICOTT CITY, MARYLAND 21042

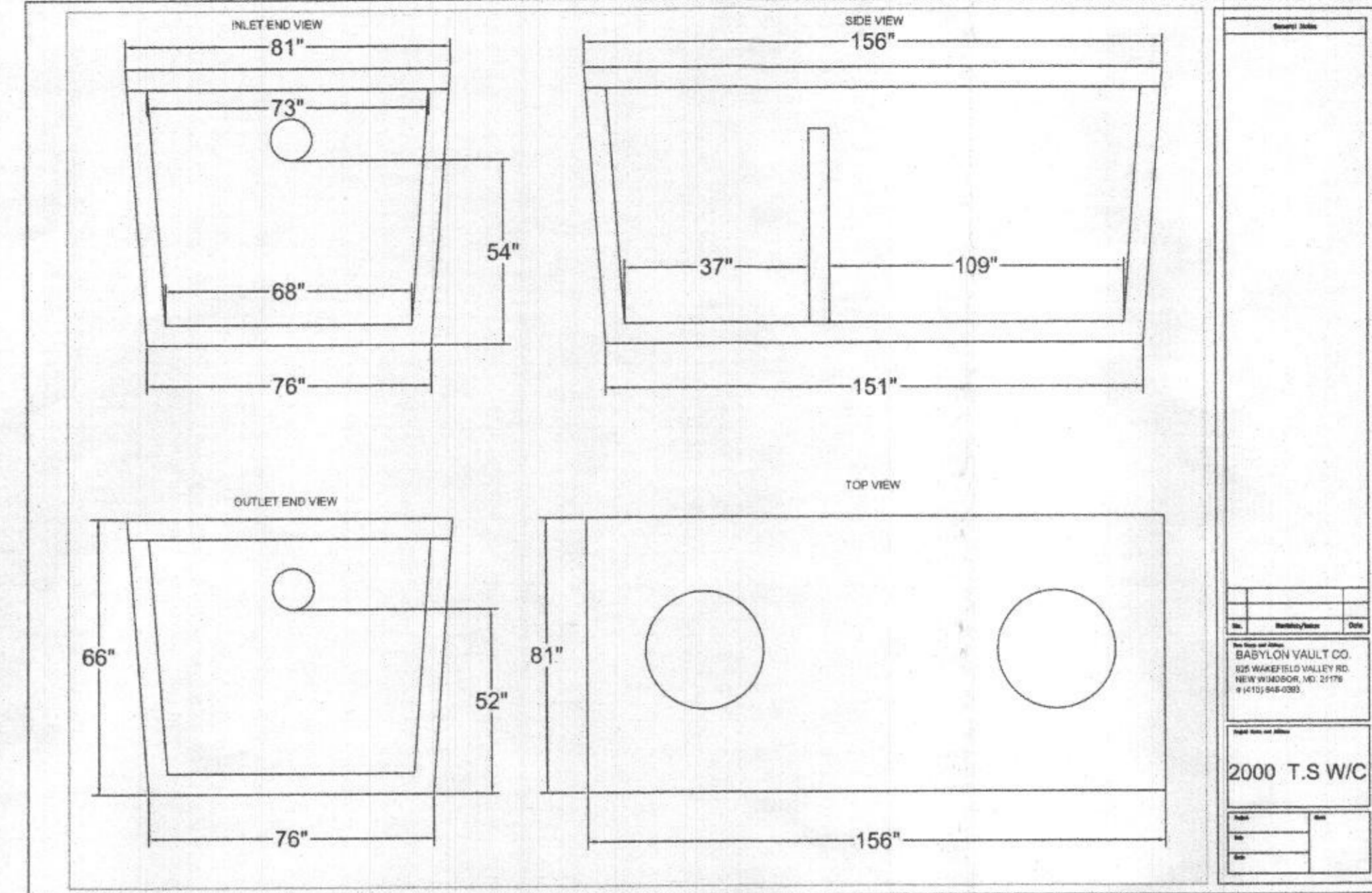


PROFESSIONAL CERTIFICATION

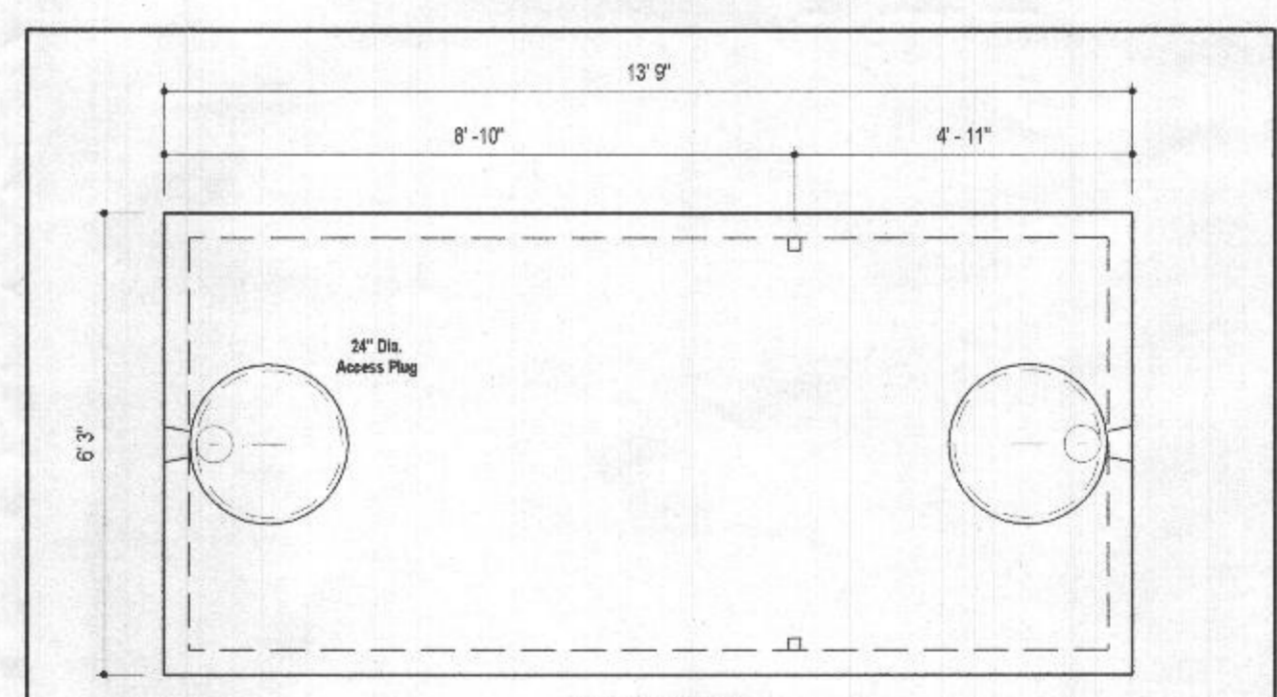
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 46091, EXPIRATION DATE: 09/14/2025.

Signature of Professional Engineer: *Yuk Brown*
DATE: 12-12-23

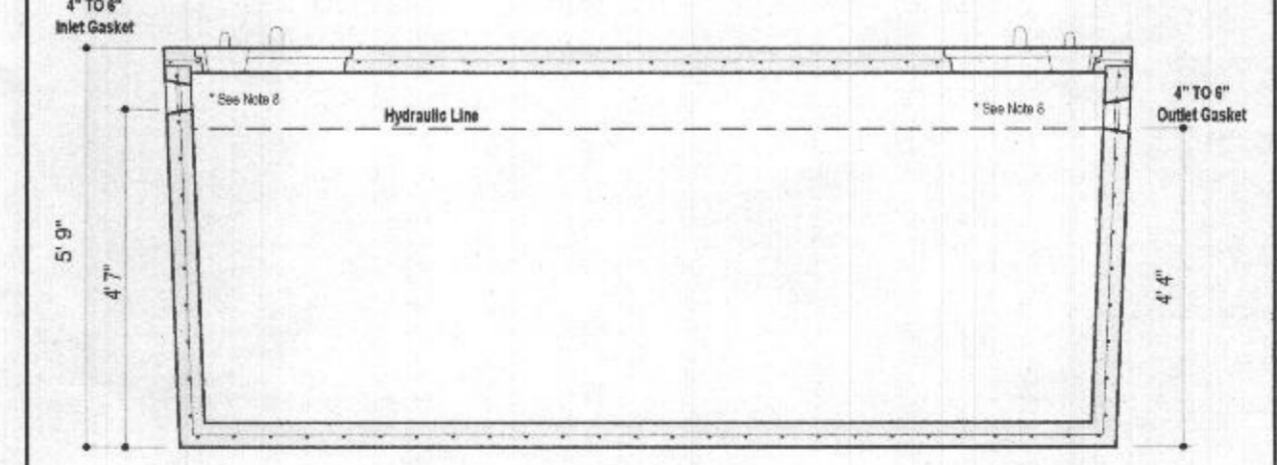
DAILY STABILIZATION NOTE:
CONTRACTOR SHALL ONLY DISTURB THAT AREA WHICH CAN BE COMPLETED AND STABILIZED BY THE END OF EACH WORKING DAY. STABILIZATION SHE BE AS FOLLOWS:
1. FOR AREAS TO BE PAVED, THAT APPLICATION OF STONE BASE.
2. FOR AREAS TO BE VEGETATIVELY STABILIZED:
A. PERMANENT SEED AND SOIL STABILIZATION MATTING OR SOO FOR ALL STEEP SLOPES, CHANNELS OR SWALES.
B. PERMANENT SEED AND MULCH FOR ALL OTHER AREAS.
ANY AREAS WHICH CAN NOT BE STABILIZED BY THE END OF EACH WORKING DAY MUST HAVE SILT FENCE INSTALLED ON THE DOWN SLOPE SIDE.



- FFE 497.55
- BSE 486.38
- INV. OUT OF HOUSE = 483.88
- PROP. GROUND AT CLEANOUT #1 = 491.60
- INV. INTO CLEANOUT = 483.78
- INV. OUT OF CLEANOUT = 483.11
- EX. GROUND AT SEPTIC TANK = 485.06
- PROP. GRADE ABOVE SEPTIC TANK = 485.06
- TOP OF SEPTIC TANK = 483.53
- INV. INTO SEPTIC TANK = 482.02
- INV. OUT OF SEPTIC TANK = 481.85
- TOP OF PUMP TANK = 482.83
- INV. INTO PUMP TANK = 481.75
- INV. OUT OF PUMP TANK = 481.50
- EX. GROUND AT DISTRIBUTION BOX = 521.05
- INV. INTO DISTRIBUTION BOX = 520.52
- INV. OUT OF DISTRIBUTION BOX = 520.42



PLAN VIEW



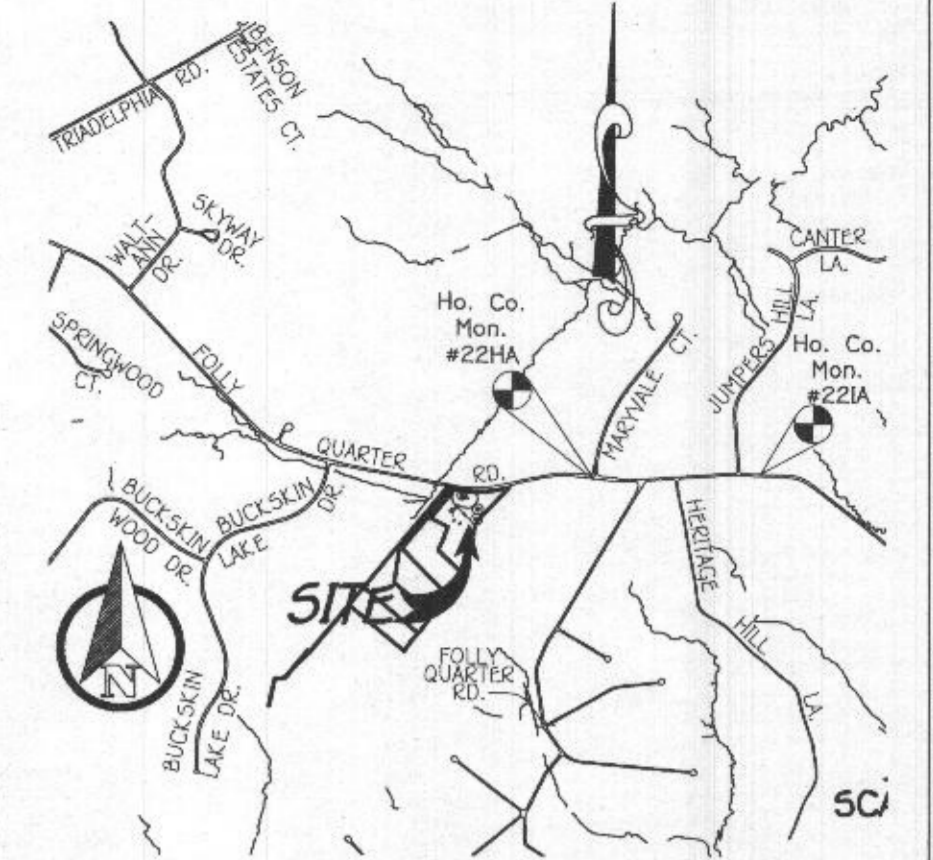
SECTION A-A

DESIGN DATA & GENERAL NOTES
 (1) Concrete strength F_{cm} 4000 p.s.i. @ 28 days. Density = 145 pcf.
 (2) Cement: Portland Type II per ASTM C 150.
 (3) Admixtures & proportions per ASTM C 309-96 & C 684-02.
 (4) Reinforcing per ASTM A193, Min. 5/8" cover.
 (5) Top slab casted with hand rope mats.
 (6) 4" wall, 4" base, & 4" top thickness.
 (7) Min 2" of cover.
 (8) Depending on use of tank, Inlet & Outlet baffles may be required by code.

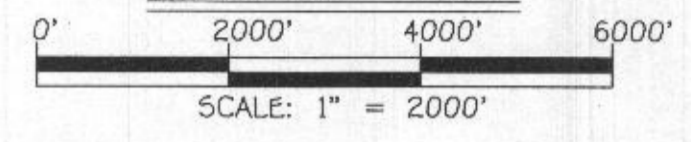
WEIGHT = 19,000 lbs.

BACK RIVER PRE-CAST, LLC P.O. Box 139 Glyndon, MD 21071 410-833-2394 office 410-833-4116 fax www.backriverprecast.com	2,000 GALLON PUMP TANK 1-Compartment Stock Item [Approx. 19,000 lbs]
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Dwg. No. 2000-1C No Scale Aug. 11, 2008



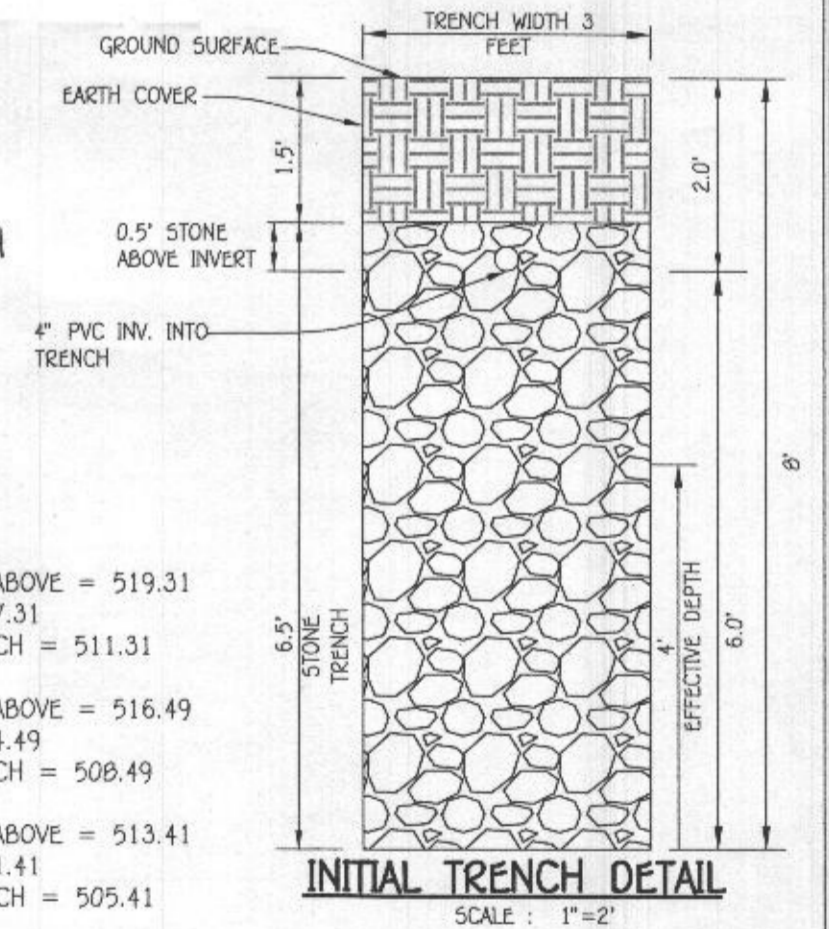
VICINITY MAP



LEGEND

- EXISTING 2' CONTOURS
- EXISTING 10' CONTOURS
- EXISTING TREE LINE
- ⊙ DENOTES WELL LOCATION
- DENOTES FAILED PERC
- DENOTES PASSED PERC
- ▨ DENOTES SEWAGE DISPOSAL AREA

Approved Septic System Plan
Howard County Health Department
1/24/2024
Signature: _____ Date: _____
Sponsored By
Approved OSDS
8/27/2024



INITIAL SYSTEM

SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 6 BEDROOMS
LOADING RATE = 6 BEDROOMS X 150 GPD/BEDROOM = 900 GPD
APPLICATION RATE = 1.2
EFFECTIVE SIDEWALL BEGINS AT 4 FEET
TRENCH DEPTH = 8 FEET
TRENCH WIDTH (W) = 3 FEET
EFFECTIVE DEPTH (D) = 4 FEET
SF OF DRAINFIELD = 900 GPD / 1.2 = 750 SF
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = (W+2)/(W+1+2D) = (3+2)/(3+1+(2x4)) = 0.417
TRENCH LENGTH = 250 SF x 0.417 = 104.25 FEET
(USE 3 TRENCHES AT 35 L.F.)
TRENCH SPACING = 2D+W = ((2x4) + 3) = 11' USE 11'

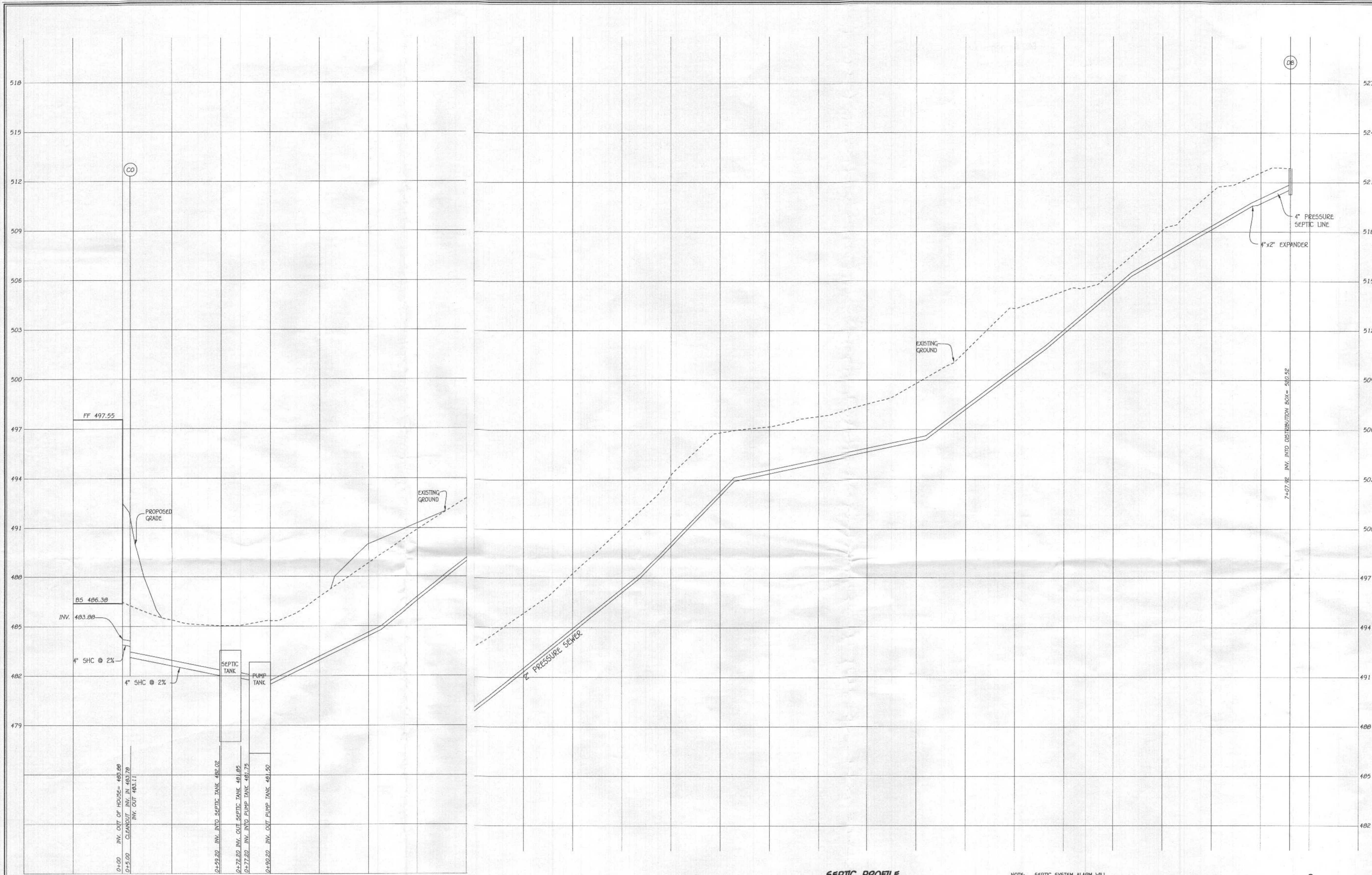
1ST REPLACEMENT SYSTEM

SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 6 BEDROOMS
LOADING RATE = 6 BEDROOMS X 150 GPD/BEDROOM = 900 GPD
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TRENCH WIDTH (W) = 3 FEET
EFFECTIVE DEPTH (D) = 4 FEET
SF OF DRAINFIELD = 900 GPD / 1.2 = 750 SF
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = (W+2)/(W+1+2D) = (3+2)/(3+1+(2x2)) = 0.625
TRENCH LENGTH = 250 SF x 0.625 = 156.25 FEET
(USE 3 TRENCHES AT 53 L.F.)
TRENCH SPACING = 2D+W = ((2x2) + 3) = 7' USE 11'

2ND REPLACEMENT SYSTEM

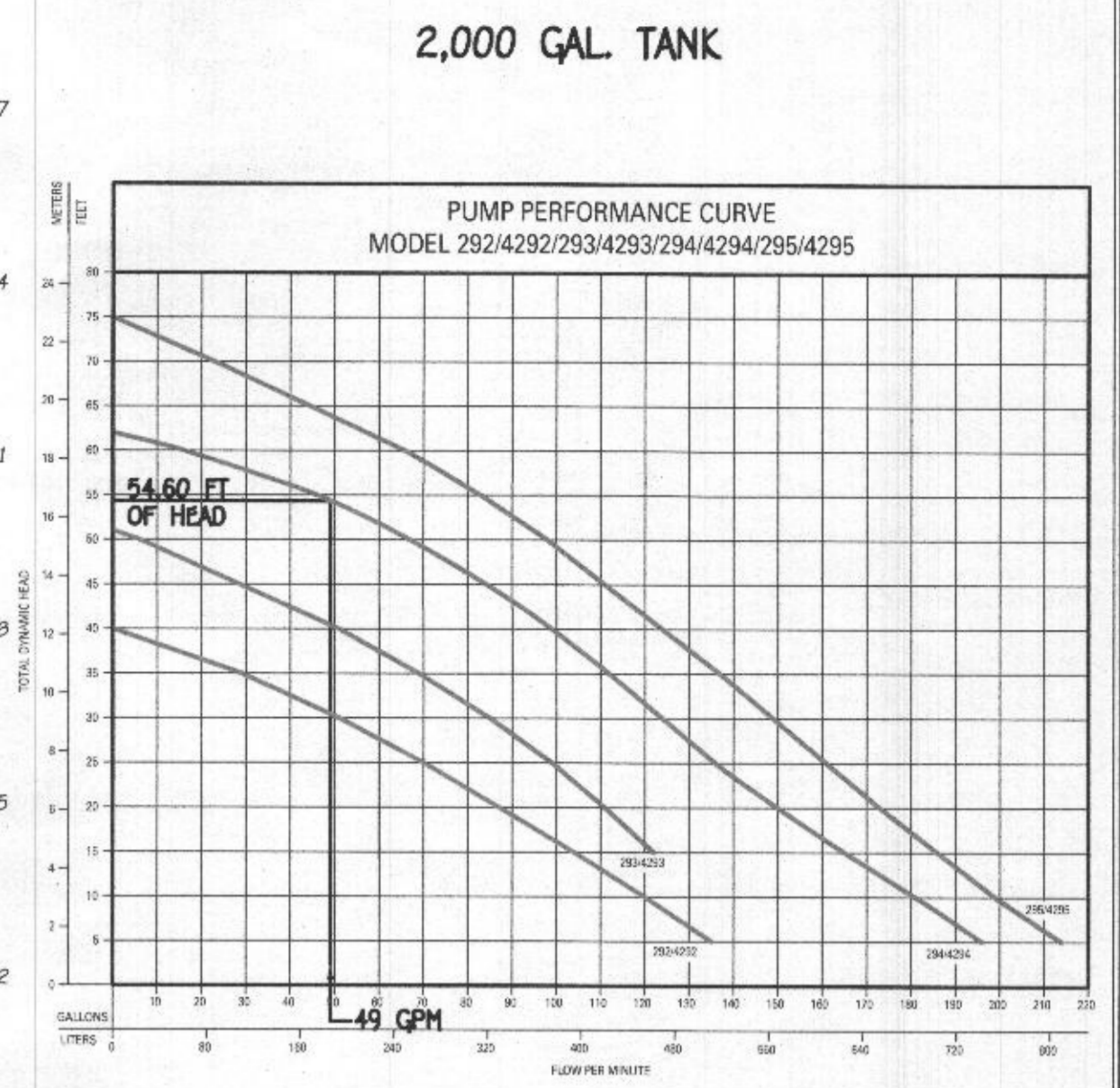
SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 6 BEDROOMS
LOADING RATE = 6 BEDROOMS X 150 GPD/BEDROOM = 900 GPD
APPLICATION RATE = 1.2
EFFECTIVE SIDEWALL BEGINS AT 6 FEET
TRENCH DEPTH = 8 FEET
TRENCH WIDTH (W) = 3 FEET
EFFECTIVE DEPTH (D) = 2 FEET
SF OF DRAINFIELD = 900 GPD / 1.2 = 750 SF
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TRENCH LENGTH = 250 SF x 0.625 = 156.25 FEET
(USE 3 TRENCHES AT 53 L.F.)
TRENCH SPACING = 2D+W = ((2x2) + 3) = 7' USE 10'

SEPTIC SYSTEM INSTALLATION SITE PLAN
4248 MAISEL FARM LANE
LOT 64 ZONED: RR-DEO
TAX MAP NO.: 22 GRID NO.: 22 PARCEL NO.: 535
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: 1" = 30' DATE: DECEMBER 12, 2023
SHEET 1 OF 2



SEPTIC PROFILE
SCALE: 1" = 30'

SEPTIC PROFILE
SCALE: 1" = 30'



2,000 GAL. TANK

PUMP PERFORMANCE CURVE
MODEL 292/4292/293/4293/294/4294/295/4295

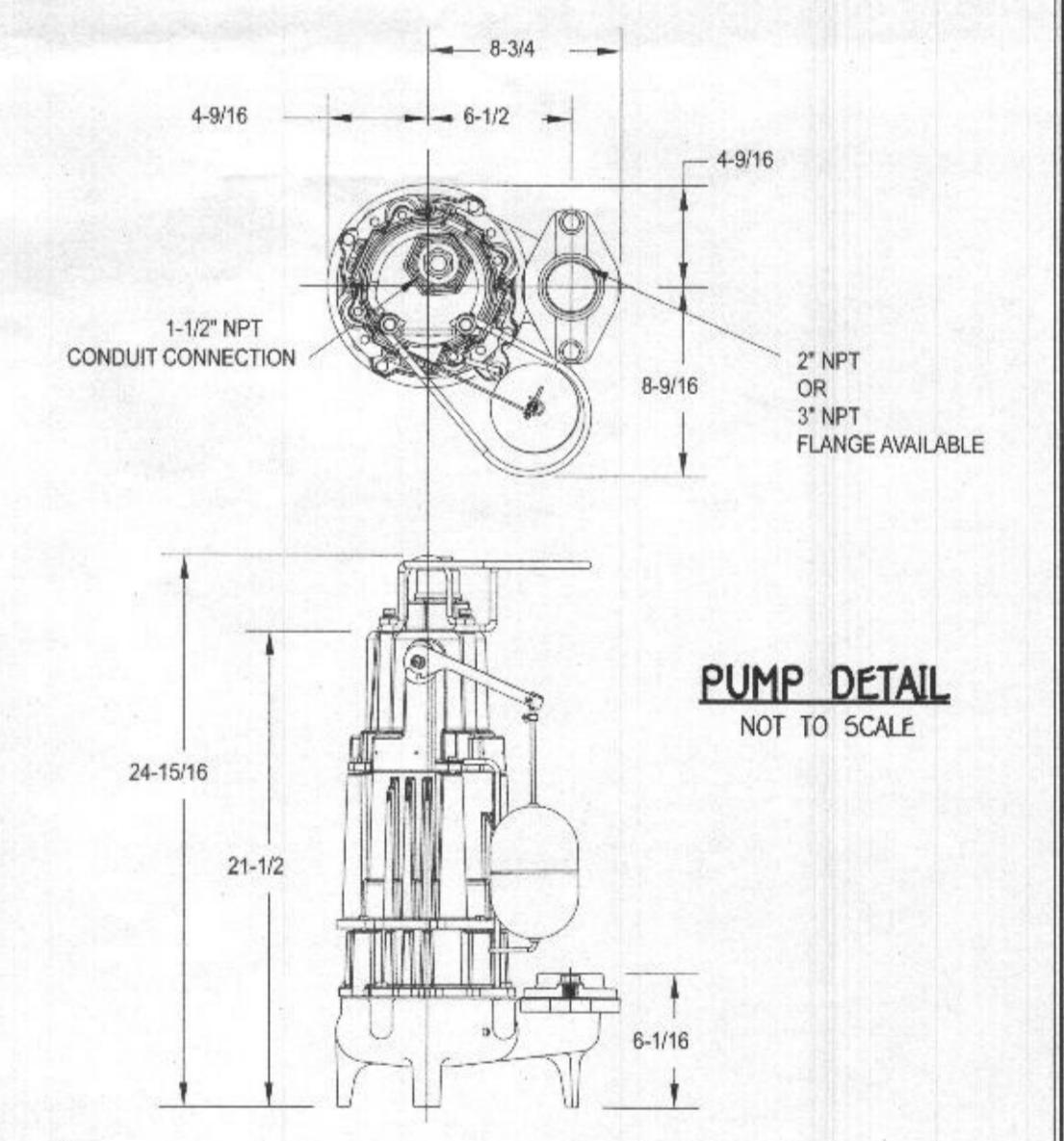
49 GPM
54.60 FT OF HEAD

2" SHC, 40 PVC = 617 LF
1 UNION @ 2 EQUIVALENT FEET = 2 LF
6 1/8" HD @ 4 EQUIVALENT FEET = 24 LF
TOTAL LINEAR FEET OF 2" SHC, 40 PVC = 643 LF

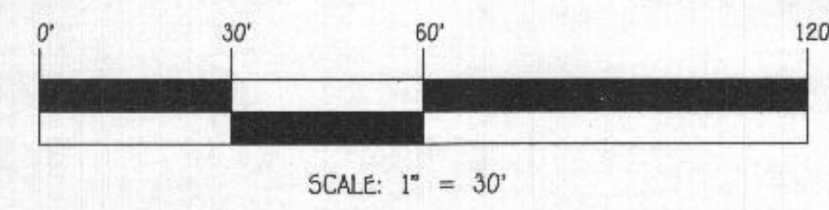
DYNAMIC HEAD
643 LF X 2.05 FT PER 100 LF OF 2" PIPE = 13.18 FT OF FRICTION HEAD
VERTICAL FROM PUMP OFF TO HIGH POINT IN PUMP CHAMBER = 2.40 FT OF HEAD
HIGH POINT IN PUMP CHAMBER TO HIGHEST ELEV. OF SYSTEM = 39.02 FT (PUMP OUT IS THE HIGHEST POINT)
TOTAL DYNAMIC HEAD = 54.60 FT

1/6 DESIGN FLOW (900/6=150) PLUS VOLUME OF 2" PIPE (101 GALLONS)
USE 251 GALLON DOSE (150 GALLON MINIMUM)
RUN TIME = 5.12 MIN (49 GPM X 5.12 = 251 GALLON DOSE)

PUMP NEEDS TO HANDLE 49 GPM AT 54.60 FT OF HEAD
USE 1.5 HP (ZOELLER MODEL 294 PUMP)



PUMP DETAIL
NOT TO SCALE



SCALE: 1" = 30'



PROFESSIONAL CERTIFICATION

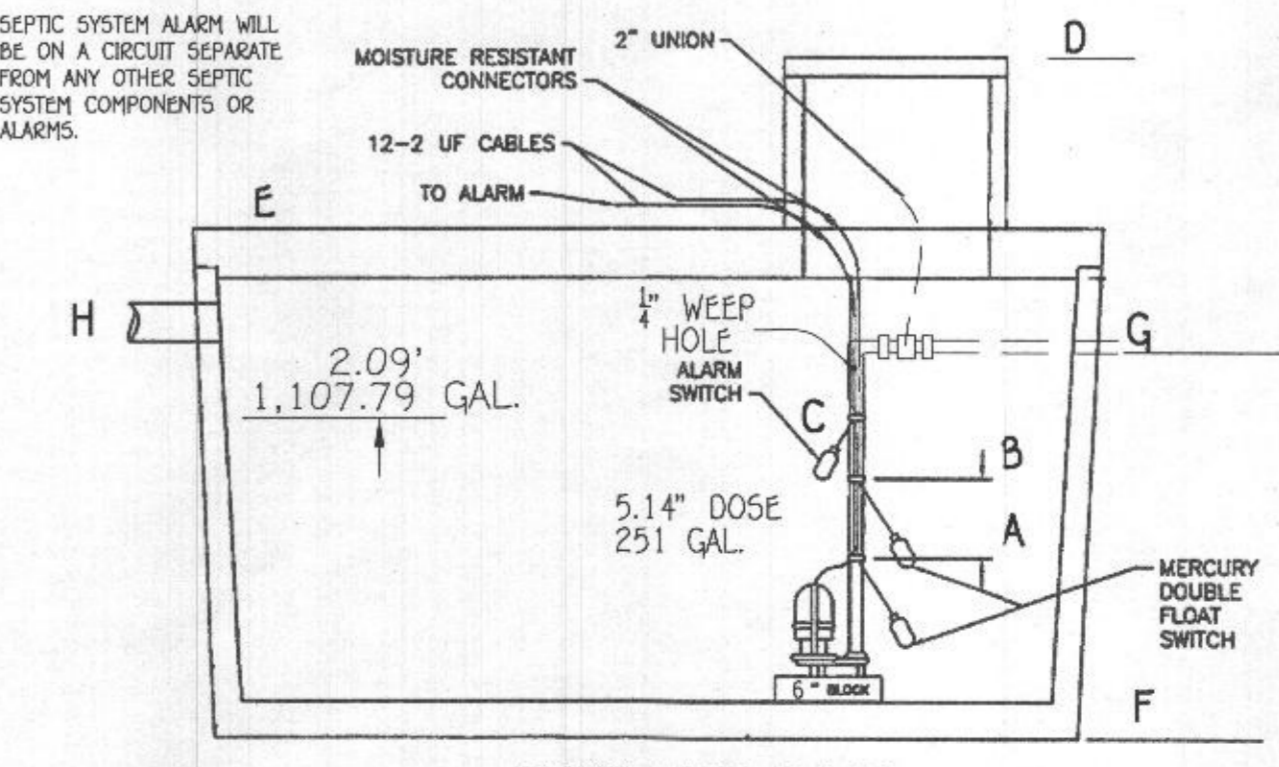
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 46091, EXPIRATION DATE: 09/14/2025.

John Brown 12-12-23
Signature Of Professional Engineer DATE

OWNER
THOMAS H. PRICE III
4248 MAISEL FARM LANE
ELLICOTT CITY, MARYLAND 21042

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALDORRE NATIONAL PARK
ELLICOTT CITY, MARYLAND 21042
(410) 461-2895

NOTE: SEPTIC SYSTEM ALARM WILL BE ON A CIRCUIT SEPARATE FROM ANY OTHER SEPTIC SYSTEM COMPONENTS OR ALARMS.



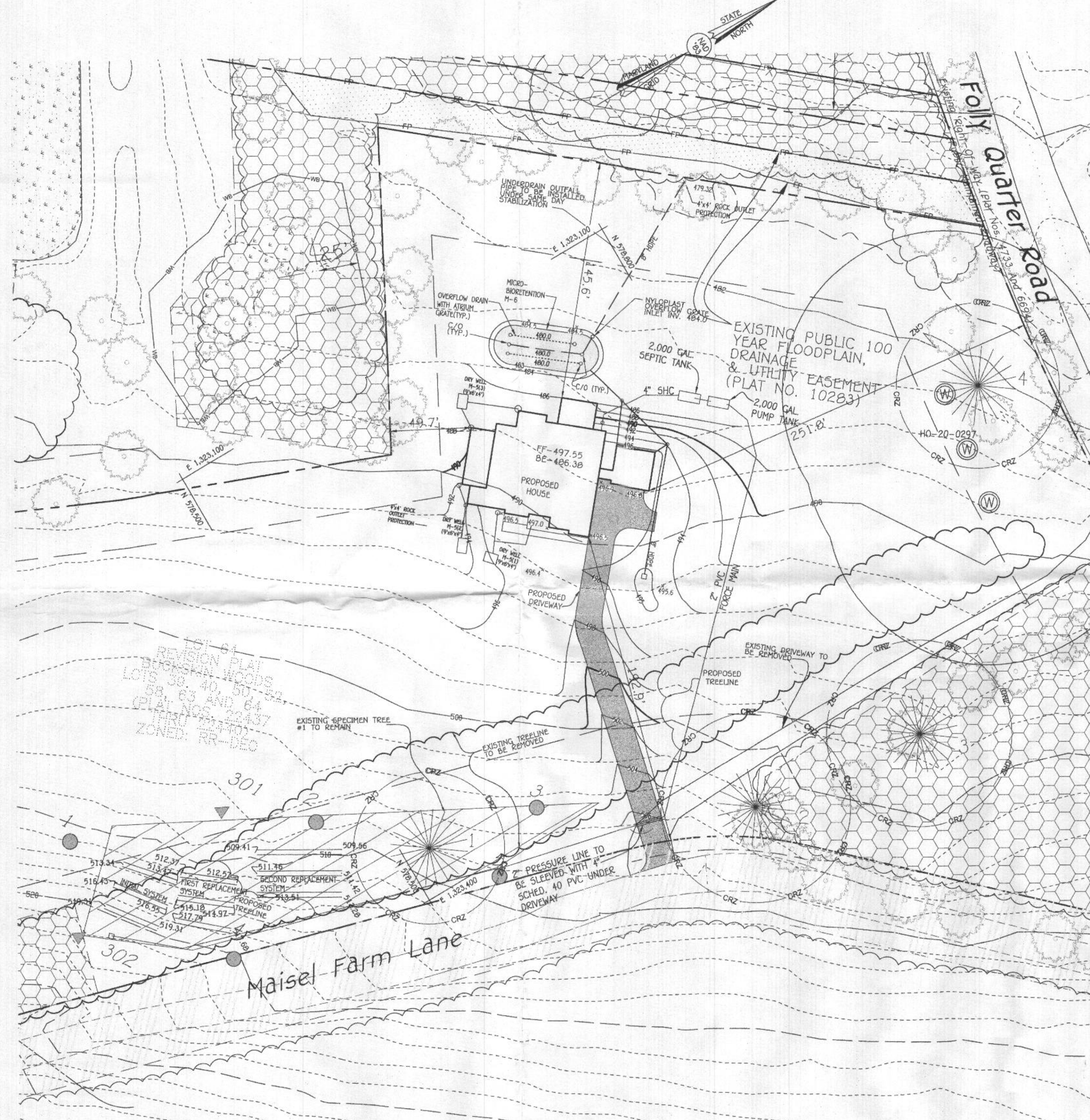
PUMP TANK DETAIL

1,107.79 GAL EMERGENCY STORAGE
NOTE: THIS DETAIL IS TO BE USED FOR FLOAT CONFIGURATION ONLY - SEE DETAIL ABOVE FOR TANK DIMENSIONS AND ACTUAL LOCATION OF ACCESS COVER.

PUMP ALARMS / INFORMATION
A PUMP OFF : 479.39'
B PUMP ON : 479.82'
C HIGH WATER ALARM : 480.32'
D TOP OF ACCESS COVER : 482.83'
E TOP OF TANK : 482.83'
F BOTTOM OF TANK : 477.17'
G DISCHARGE OUT OF TANK : 481.50'
H INVERT INTO TANK : 481.75'

**SEPTIC SYSTEM
INSTALLATION SITE PLAN**
4248 MAISEL FARM LANE
LOT 64 ZONED: RR-DEO
TAX MAP NO.: 22 GRID NO.: 22 PARCEL NO.: 535
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: 1" = 30' DATE: DECEMBER 12, 2023
SHEET 2 OF 2

1. ANY CHANGE TO THE LOCATIONS OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED SITE PLAN MAY BE REQUIRED.
2. THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
3. ELECTRICAL WORK FOR THE INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
4. THE WELLS HO-20-0297 HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.
5. 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.
6. THE ENGINEER IS REGISTERED WITH MDE TO PROVIDE ON-SITE WASTEWATER SERVICE IN MARYLAND.



PLAN
SCALE: 1" = 40'

OWNER
THOMAS H. PRICE III
4248 MAISEL FARM LANE
ELLCOTT CITY, MARYLAND 21042

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
REGIONAL SURVEY OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLCOTT CITY, MARYLAND 21042
(410) 461-2995



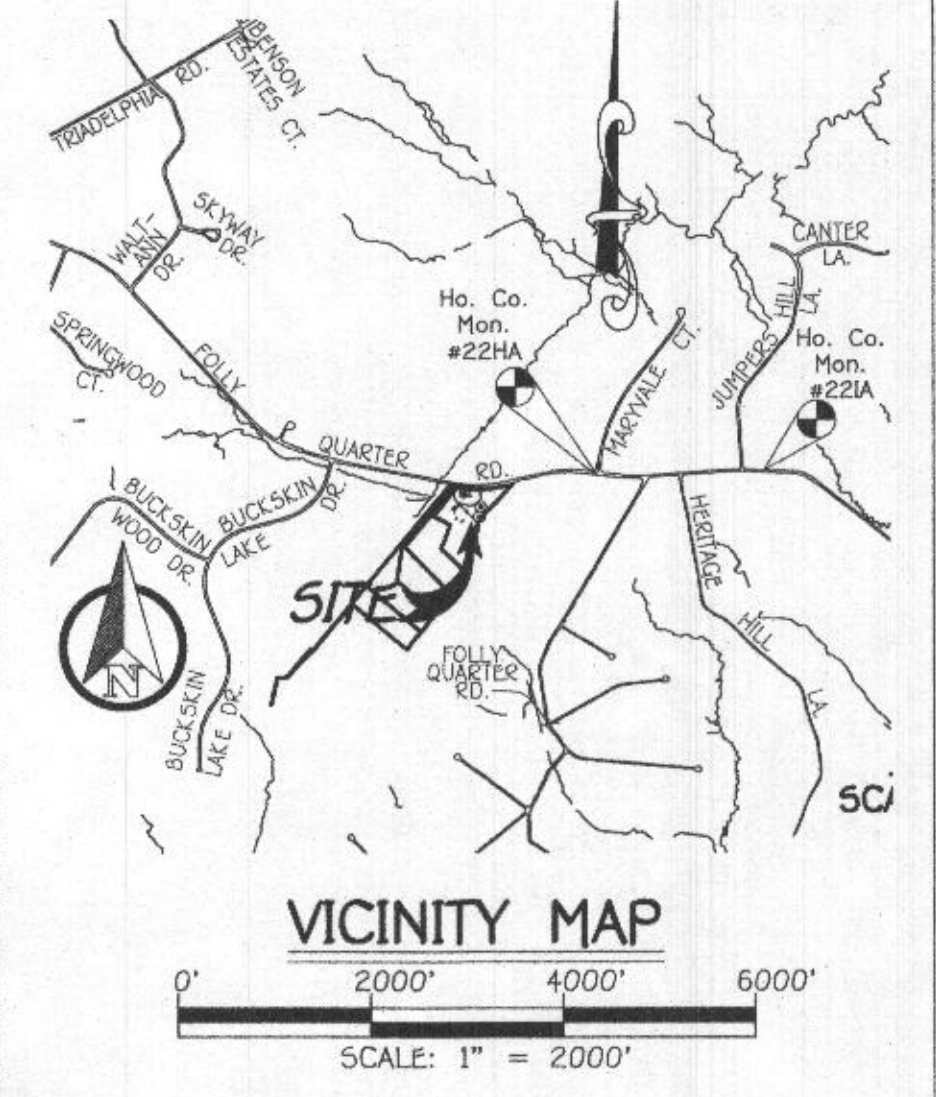
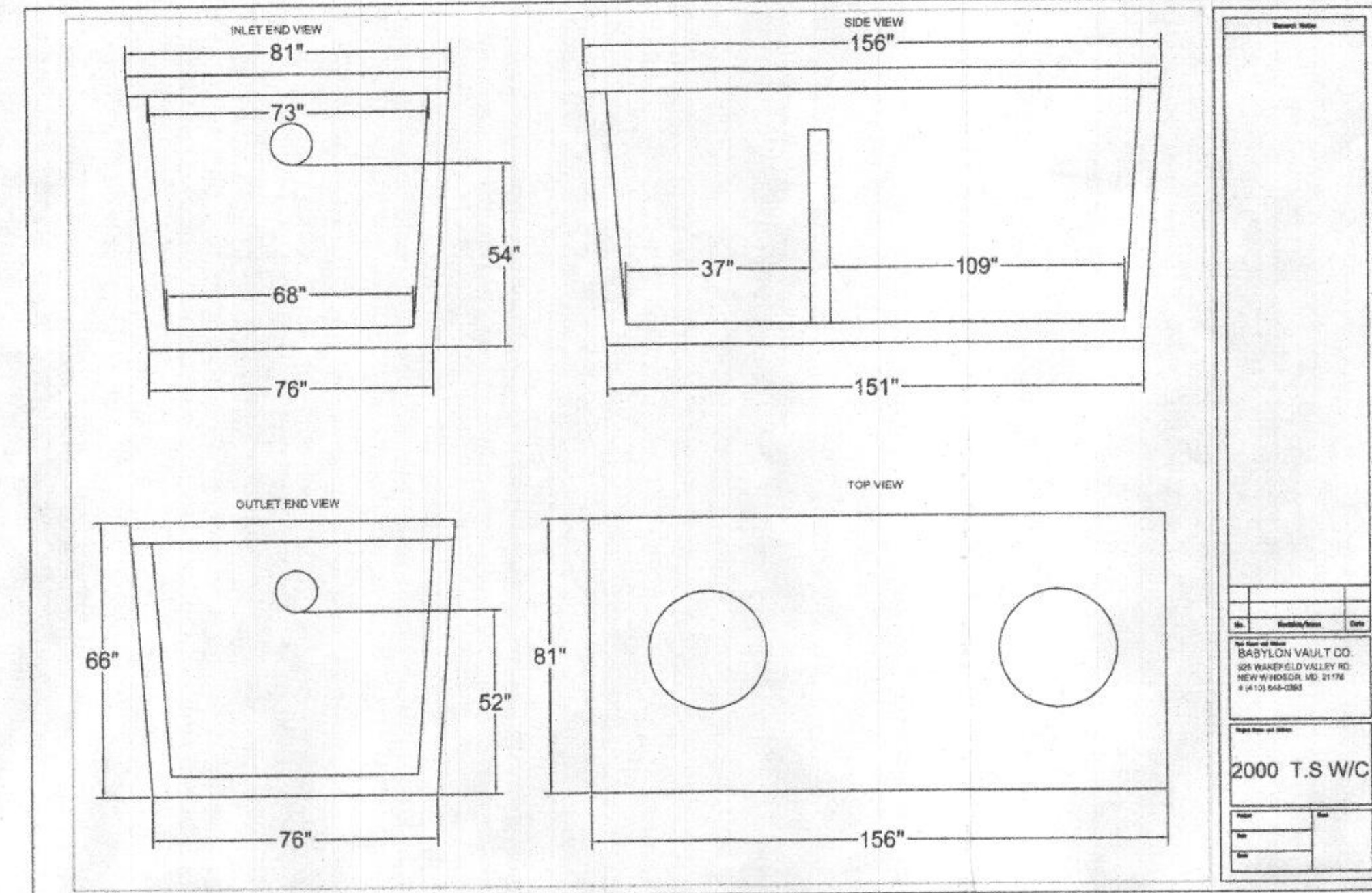
PROFESSIONAL CERTIFICATION

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. 46091, EXPIRATION DATE: 05/14/2025.

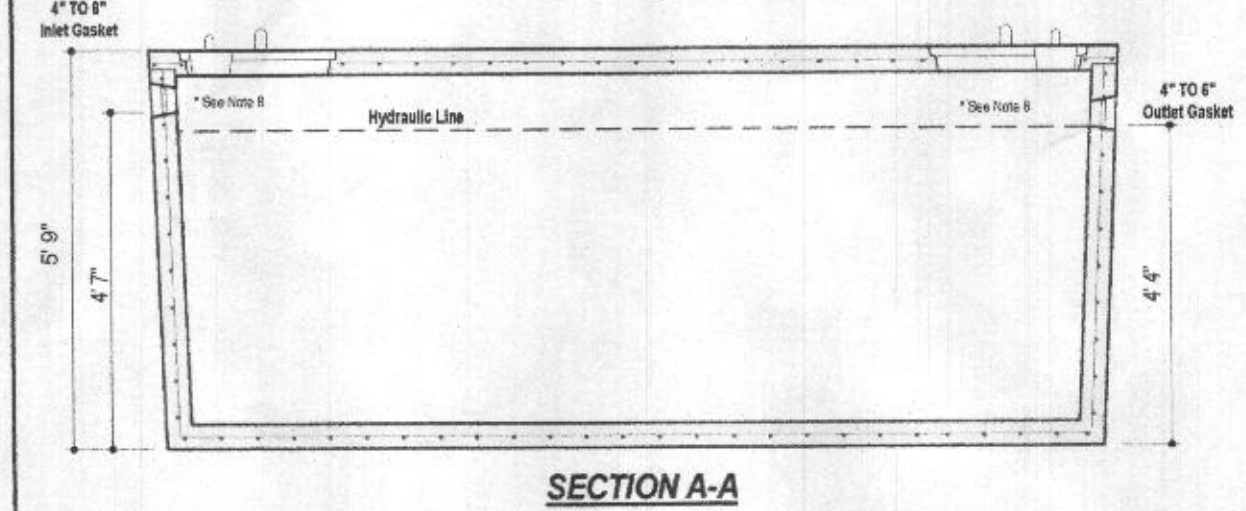
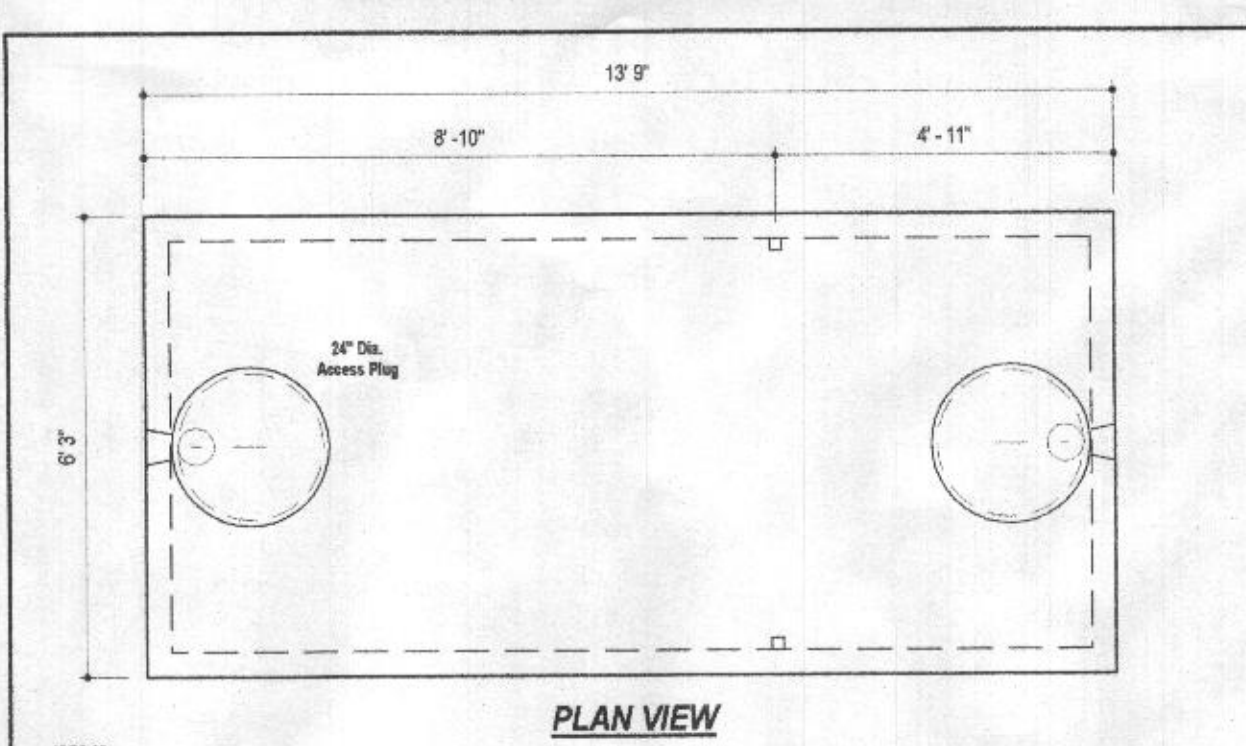
Yuh Brown 12-12-23
Signature of Professional Engineer DATE

DAILY STABILIZATION NOTE:
CONTRACTOR SHALL ONLY DISTURB THAT AREA WHICH CAN BE COMPLETED AND STABILIZED BY THE END OF EACH WORKING DAY. STABILIZATION SHALL BE AS FOLLOWS:
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2. FOR AREAS TO BE VEGETATIVELY STABILIZED:
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- INV. INTO CLEANOUT = 483.78
- INV. OUT OF CLEANOUT = 483.11
- EX. GROUND AT SEPTIC TANK = 485.06
- PROP. GRADE ABOVE SEPTIC TANK = 485.06
- TOP OF SEPTIC TANK = 483.53
- INV. INTO SEPTIC TANK = 482.02
- INV. OUT OF SEPTIC TANK = 481.85
- TOP OF PUMP TANK = 482.83
- INV. INTO PUMP TANK = 481.75
- INV. OUT OF PUMP TANK = 481.50
- EX. GROUND AT DISTRIBUTION BOX = 521.85
- INV. INTO DISTRIBUTION BOX = 520.52
- INV. OUT OF DISTRIBUTION BOX = 520.42



- LEGEND**
- EXISTING 2' CONTOURS
 - EXISTING 10' CONTOURS
 - EXISTING TREE LINE
 - ⊙ DENOTES WELL LOCATION
 - DENOTES FAILED PERC
 - DENOTES PASSED PERC
 - ▨ DENOTES SEWAGE DISPOSAL AREA



DESIGN DATA & GENERAL NOTES

- (1) Concrete strength F_{cm} = 4000 p.s.i. @ 28 days. Density = 150 pcf.
- (2) Cement - Portland Type III per ASTM C 150-02.
- (3) Aggregates & proportions per ASTM C 309-05 & C 484-02.
- (4) Reinforcing per ASTM A 618. Min. 1-1/2" cover.
- (5) Top slab finished with metal mesh.
- (6) 4" wall, 4" base, 3/8" top thickness.
- (7) Max 2' of cover.
- (8) Depending on use of tank, inlet & outlet baffles may be required by code.

WEIGHT = 19,000 lbs.

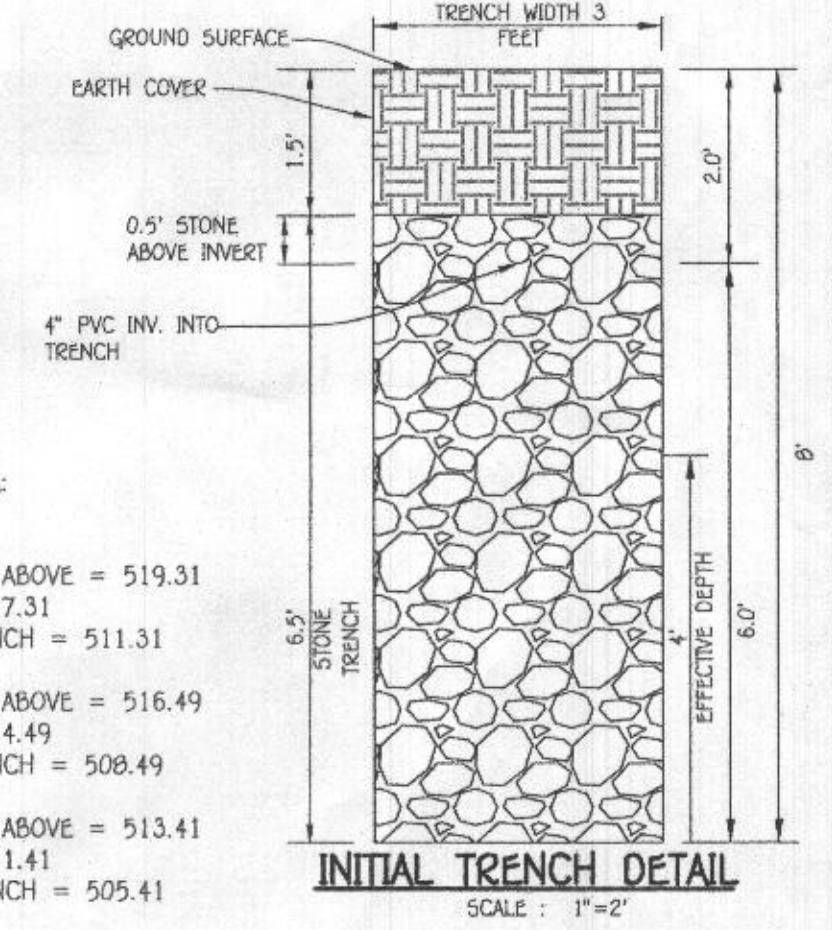
BACK RIVER PRE-CAST, LLC
P.O. Box 319
Glyndon, MD 21871
410-833-3354 (office)
410-833-4116 (fax)
www.backriverprecast.com

2,000 GALLON PUMP TANK
1-Compartment
Stock Item [Approx. 19,000 lbs]

Dwg. No. 2000-1C No Scale Aug. 11, 2008

Approved Septic System Plan
Howard County Health Department
Signature: *[Signature]* Date: 1/12/2024

Superseded By Approved OSDS 8/27/2024



INITIAL SYSTEM
SEWAGE DISPOSAL SYSTEM DATA DESIGN FOR 6 BEDROOMS
LOADING RATE = 6 BEDROOMS X 150 GPD/BEDROOM = 900 GPD
APPLICATION RATE = 1.2
EFFECTIVE SIDEWALL BEGINS AT 4 FEET
TRENCH DEPTH = 8 FEET
TRENCH WIDTH (W) = 3 FEET
EFFECTIVE DEPTH (D) = 4 FEET
SF OF DRAINFIELD = 900 GPD / 1.2 = 750 SF
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = (W+2)/(W+1+2D) = (3+2)/(3+1+(2x4)) = 0.417
TRENCH LENGTH = 250 SF x 0.417 = 104.25 FEET (USE 3 TRENCHES AT 35 LF.)
TRENCH SPACING = 2D+W = ((2x4) + 3) = 11' USE 11'

1ST REPLACEMENT SYSTEM
SEWAGE DISPOSAL SYSTEM DATA DESIGN FOR 6 BEDROOMS
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APPLICATION RATE = 1.2
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TRENCH SPACING = 2D+W = ((2x4) + 3) = 11' USE 11'

2ND REPLACEMENT SYSTEM
SEWAGE DISPOSAL SYSTEM DATA DESIGN FOR 6 BEDROOMS
LOADING RATE = 6 BEDROOMS X 150 GPD/BEDROOM = 900 GPD
APPLICATION RATE = 1.2
EFFECTIVE SIDEWALL BEGINS AT 6 FEET
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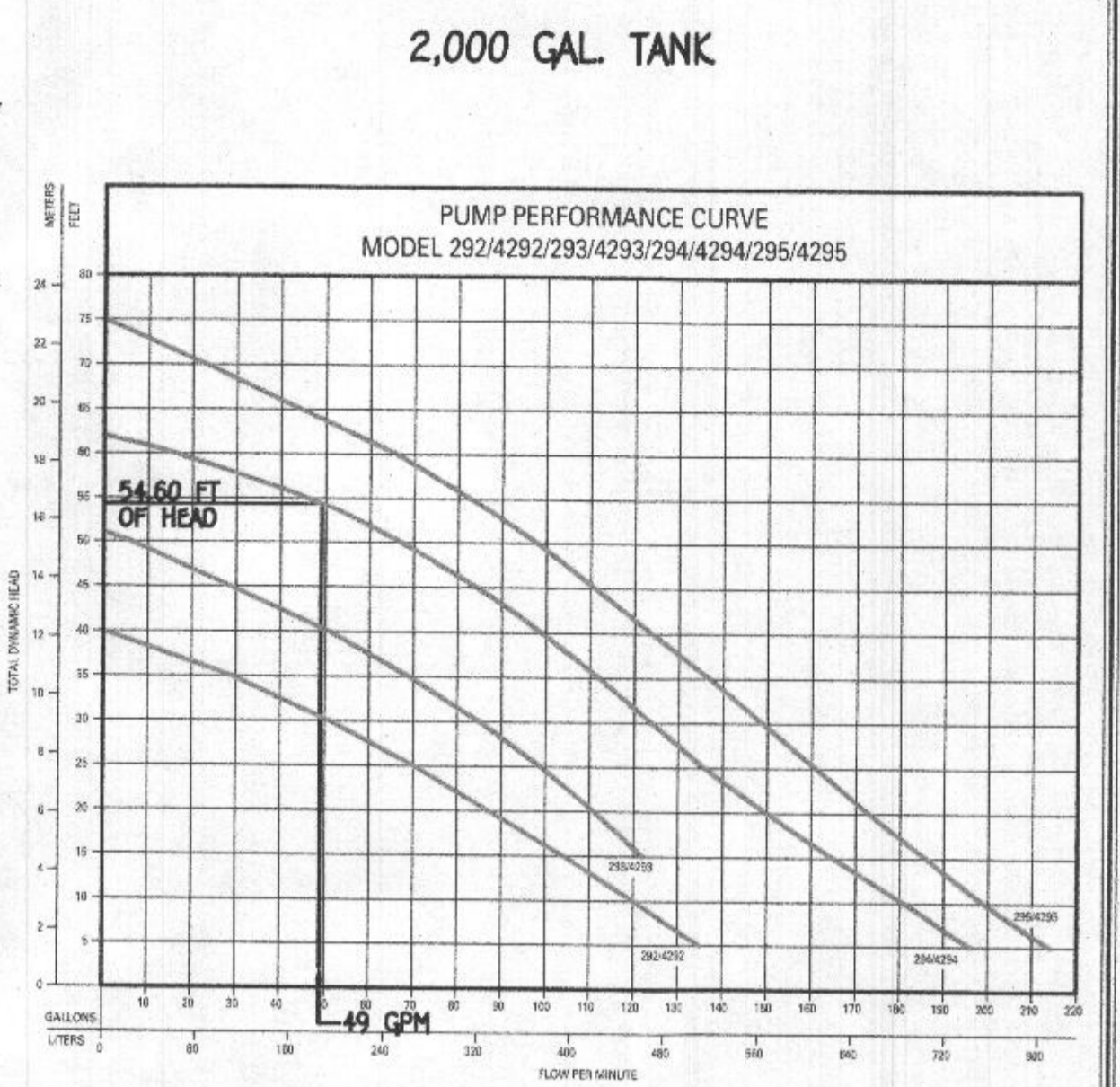
SEPTIC SYSTEM INSTALLATION SITE PLAN
4248 MAISEL FARM LANE

LOT 64 ZONED: RR-DEO
TAX MAP NO.: 22 GRID NO.: 22 PARCEL NO.: 535
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: 1" = 30' DATE: DECEMBER 12, 2023
SHEET 1 OF 2



SEPTIC PROFILE
SCALE: 1" = 30'

SEPTIC PROFILE
SCALE: 1" = 30'



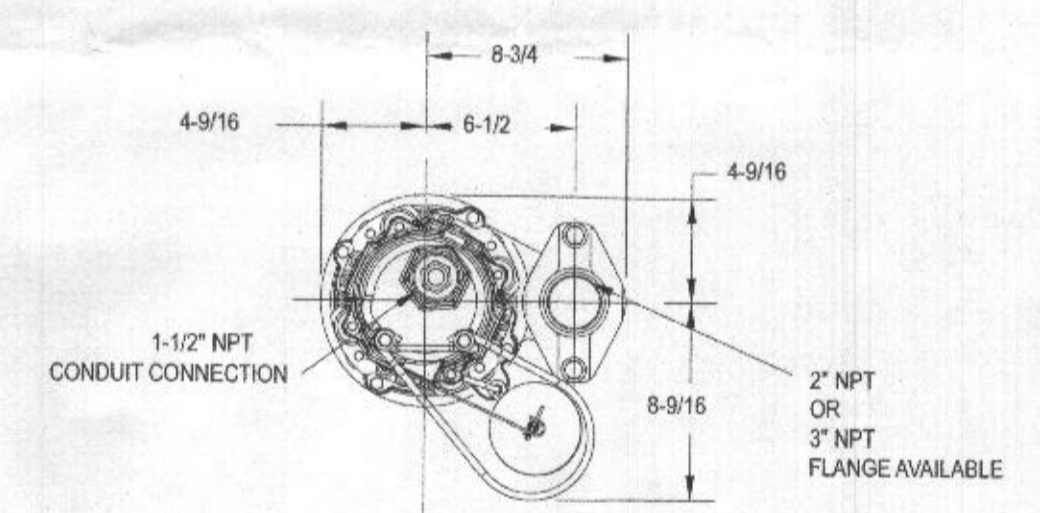
2,000 GAL TANK

2" SHC 40 PVC = 617 LF
 1 UNION @ 2 EQUIVALENT FEET = 2 LF
 5 1/8" HD @ 4 EQUIVALENT FEET = 24 LF
 TOTAL LINEAR FEET OF 2" SHC 40 PVC = 643 LF

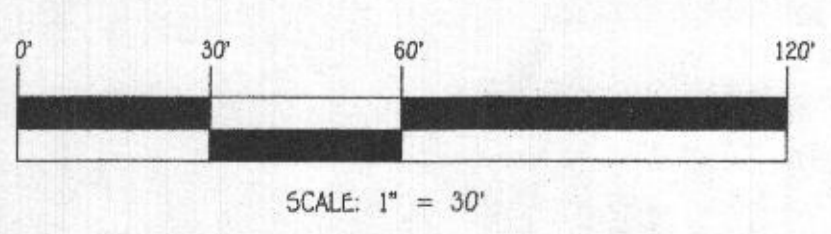
DYNAMIC HEAD
 643 LF X 2.05 FT PER 100 LF OF 2" PIPE = 13.18 FT OF FRICTION HEAD
 VERTICAL FROM PUMP OFF TO HIGH POINT IN PUMP CHAMBER = 2.40 FT OF HEAD
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 TOTAL DYNAMIC HEAD = 54.60 FT

1/6 DESIGN FLOW (900/6=150) PLUS VOLUME OF 2" PIPE (101 GALLONS)
 USE 251 GALLON DOSE (150 GALLON MINIMUM)
 RUN TIME = 5.12 MIN (49 GPM X 5.12 = 251 GALLON DOSE)

PUMP NEEDS TO HANDLE 49 GPM AT 54.60 FT OF HEAD
 USE 1.5 HP (ZOELLER MODEL 294 PUMP)



PUMP DETAIL
NOT TO SCALE



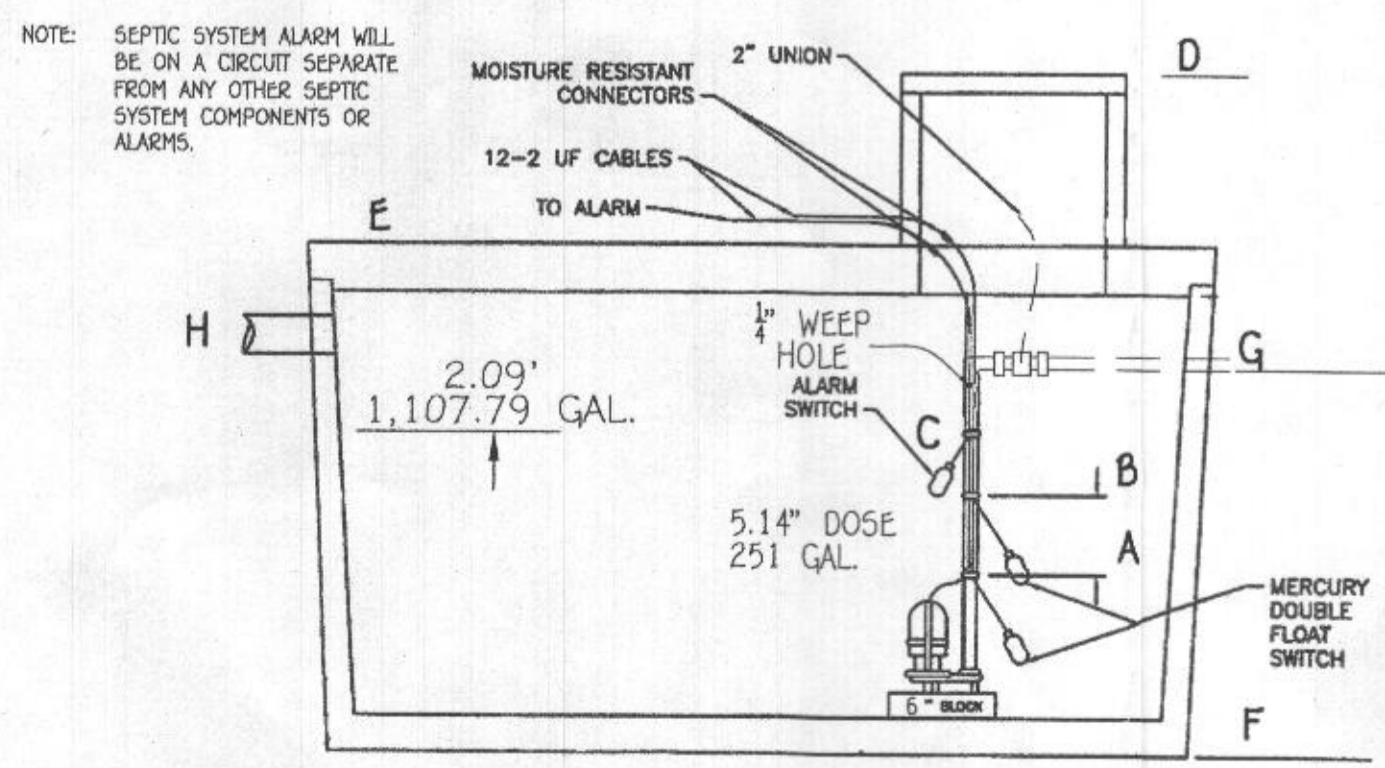
FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10772 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21042
 (410) 461-2895

OWNER
 THOMAS H. PRICE III
 4248 MAISEL FARM LANE
 ELICOTT CITY, MARYLAND 21042



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. 46091, EXPIRATION DATE: 05/14/2025.

Luke Brown 12-12-23
 Signature of Professional Engineer DATE



PUMP TANK DETAIL

1,107.79 GAL EMERGENCY STORAGE
 ONE-TWO CHAMBER
 2,000-GAL SEPTIC TANK
 & ONE 2,000-GAL PUMP TANK
 W/ ZOELLER BNB05 PUMP OR EQUAL TO
 QUANTITY DISTRIBUTION FOR 6 BEDROOM SFD

NOTE: THIS DETAIL IS TO BE USED FOR FLOAT CONFIGURATION ONLY -
 SEE DETAIL ABOVE FOR TANK DIMENSIONS AND ACTUAL LOCATION
 OF ACCESS COVER.

PUMP ALARMS / INFORMATION
 A PUMP OFF : 479.39'
 B PUMP ON : 479.82'
 C HIGH WATER ALARM : 480.32'
 D TOP OF ACCESS COVER : 482.83'
 E TOP OF TANK : 482.83'
 F BOTTOM OF TANK : 477.17'
 G DISCHARGE OUT OF TANK : 481.50'
 H INVERT INTO TANK : 481.75'

**SEPTIC SYSTEM
 INSTALLATION SITE PLAN**
4248 MAISEL FARM LANE
 LOT 64 ZONED: RR-DEO
 TAX MAP NO.: 22 GRID NO.: 22 PARCEL NO.: 535
 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: 1" = 30' DATE: DECEMBER 12, 2023
 SHEET 2 OF 2