

Bureau of Environmental Health
 8930 Stanford Boulevard, Columbia, MD 21045
 Main: 410-313-2640 | Fax: 410-313-2648
 TDD 410-313-2323 | Toll Free 1-866-313-6300
www.hchealth.org
 Facebook: www.facebook.com/hocohealth

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

RECEIPT DATE: 3/1/24 **ONSITE SEWAGE DISPOSAL SYSTEM** P 586605

APPROVAL DATE: 10/17/2024 **PERMIT: NEW CONSTRUCTION** A _____

PROPERTY ADDRESS: 14850 Old Frederick Road

SUBDIVISION: Minglewood LOT: 4 TAX ID: _____

CONTRACTOR: _____ EMAIL: _____

CONTRACTOR ADDRESS: _____ PHONE: _____

PROPERTY OWNER: David and Carol Melton EMAIL: _____

OWNER ADDRESS: 4131 Pemberton Court, Ellicott City, MD 21043 PHONE: 443-545-4468

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

PUMP MODEL: Goulds PUMP SIZE We03 PUMP TANK CAPACITY: 1500

DISTRIBUTION SYSTEM: GRAVITY PRESSURE DOSED BEDROOMS: _____ APPLICATION RATE: _____

TRENCHES:	LINEAR FEET REQUIRED: <u>114 120'</u>	INLET DEPTH: <u>2.5</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>7</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>13</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>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:	<u>2 trenches @ 57'</u> <u>2 trenches @ 60'</u>	

ISSUED BY: Hank Oswald ISSUE DATE: 4/8/2024 EXPIRATION DATE: 4/8/2025

- 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 24001239
- 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

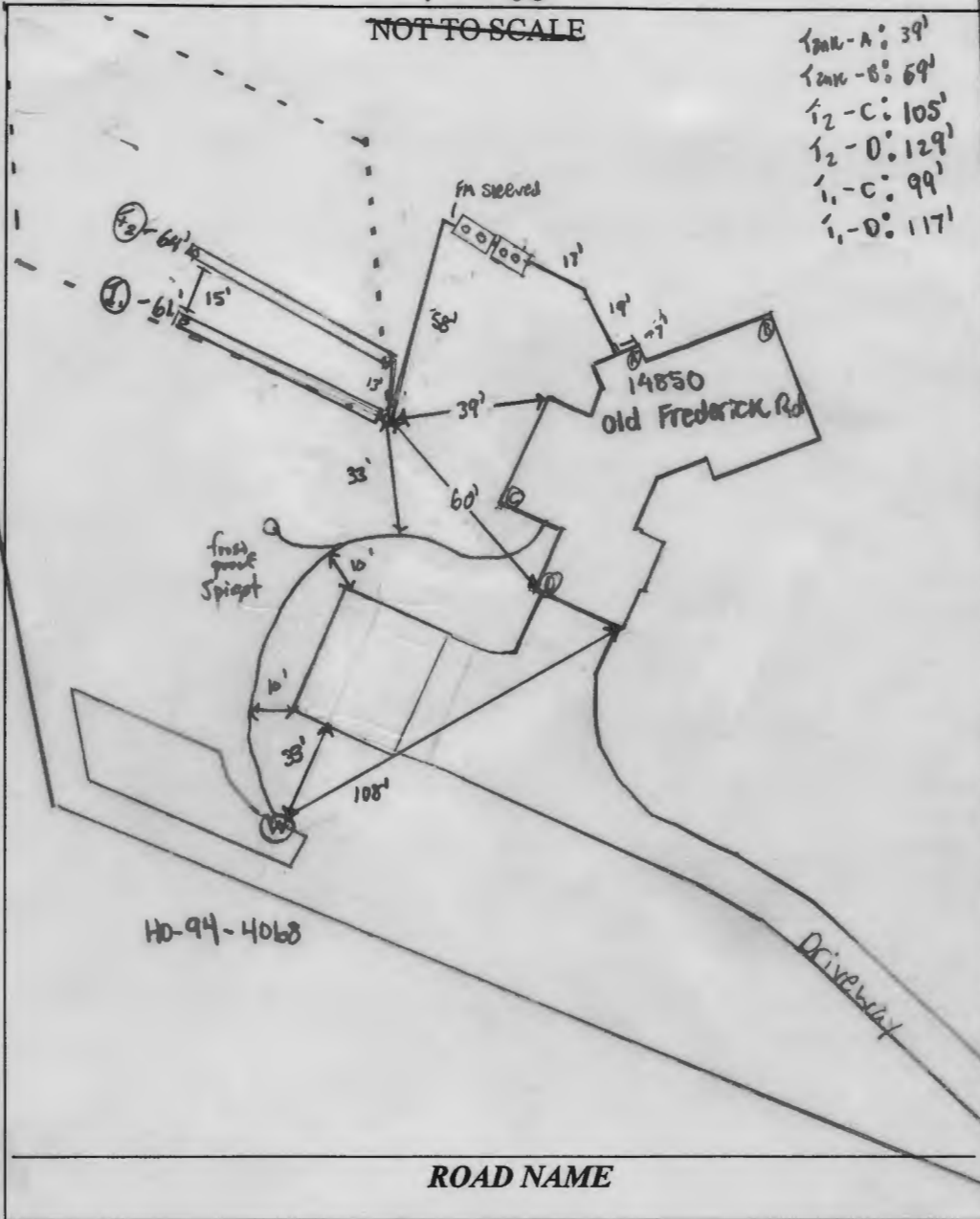
**NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM.
 PERMITTEE RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT.
 CALL 410-313-1771 TO SCHEDULE INSPECTIONS.**

1" ≈ 50'

NOT TO SCALE

Tank-A: 39'
 Tank-B: 69'
 1/2-C: 105'
 1/2-D: 129'
 1-C: 99'
 1-D: 117'

TRENCH/DRAINFIELD DATA		
WIDTH	INLET	BOTTOM
3'	2.5'	
NUMBER OF TRENCHES		2
TOTAL LENGTH		125'
ABSORPTION AREA		375 ft ²
DISTRIBUTION BOX LEVEL		
DISTRIBUTION BOX BAFFLE		
DISTRIBUTION BOX PORT		YES



SEPTIC TANK DATA	
SEPTIC TANK 1 LEVEL	YES
MANUFACTURER	Babylon
CAPACITY	1500 GAL
SEAM LOC	Top
TANK LID DEPTH	2.5'-1"
BAFFLES	6" Front
BAFFLE FILTER	
MANHOLE LOC	Front & back
6" PORT LOC	
WATERTIGHT TEST	
SLOTTED	YES
DATE ON LID	2/14/2024
PUMP/SEPTIC TANK LEVEL YES	
MANUFACTURER	Back River
CAPACITY	1500 GAL
SEAM LOC	Top
TANK LID DEPTH	2'-1"
BAFFLES	
BAFFLE FILTER	
MANHOLE LOC	Front & back
6" PORT LOC	
WATERTIGHT TEST	
SLOTTED	
DATE ON LID	1/24/2024

SEPTIC CONTRACTOR ONSITE INSTALLING SYTEM: Dan Farrow
 SEPTIC CONTRACTOR ONSITE LICENSED WITH THE STATE OF MD: YES/NO

PRE-CONSTRUCTION NOTES:
4/14/2024 - licensed contractor onsite for layout. SDA staked.

trenches & d-box staked, trench ends moved down slightly to be closer to contact. Lengths @ 57' ST.
space between trenches 12' ± 17'. Tank staked per plan. FM will go around SDA per plan.
OK to start work.

INSTALLATION NOTES:
4/17/2024 - install bit rock @ initial trenches. Both trenches had ~50% rock. Left out 1" replacement trenches
both lengths @ 60' upper trench on center within 1", lower trench on center within 5". Dig middle of upper &
end of lower trench, soil was much better, ~60% rock; some siltstone. About construction w/ no vinyl stating he is ok
and contractor installing app: trench instead ok to start work. Line from house to tank install, 40' seen & set to 40
for total, forms @ 3' conc, FM is 200' PSI sch 40 OK to break. 4/17/2024 - EA connected to d-box w/
turn-down. trench 2 finished, length @ 64', inlet @ 2.5'. Stone & P&B ok.

FINAL INSPECTOR S. Pese / M. Burns DATE OF APPROVAL 10/17/2024
 4/18/2024 - trench 1 finished, length @ 61', inlet @ 2.5', stone & P&B ok. Reinspect for baffle in tank & P&A tot. ST.
 10/17/2024 - inspector onsite for P&A. Rheims installed inside house @ separate breaker from pump. pump

CONTROL PANEL DATA	
CONTROL PANEL HEIGHT	> 30" (MIN 30")
INSPECTION DATE	10/17/2024
INSPECTION:	PASS/FAIL (CIRCLE ONE)

Oswald, Hank

From: Oswald, Hank
Sent: Wednesday, May 3, 2023 11:52 AM
To: Kathleen Makusky
Subject: OSDS Plan_14850 Old Frederick Road
Attachments: Septic Spec_14850 Old Frederick Road.pdf

Hi Kathleen:

Attached, please find the septic spec sheet for 14850 Old Frederick Road. Please adjust the calculations per the spec sheet, and add two alternate well sites or a well box to the OSDS plan.

Should you have any questions or concerns, please don't hesitate to contact me.

Thanks,

Hank

Hank Oswald
Licensed Environmental Health Specialist
Bureau of Environmental Health
Howard County Health Department
8930 Stanford Blvd. Columbia, MD 21045
(410) 313 - 1786
www.hchealth.org

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From: [Eshenbaugh, Melanie](#)
To: [Rob Vogel](#)
Cc: christy@freedomseptic.com
Subject: 14850 Old Frederick Road
Date: Thursday, March 7, 2024 11:21:00 AM
Attachments: [image001.png](#)

Good morning Rob,

I am reaching out regarding the wall check for 14850 Old Frederick. During my review of the plans I noticed a TOW elevation of 632.1 nearly 3' difference from the FF elevation on the OSDS plan. Can you confirm the Basement floor elevation currently, as my concern is whether or not that elevation may have changed from the OSDS plan. The OSDS shows 2% of fall to the tank & if the BF/FF elevation is lower that may impact the design. Also, since the system requires a pump tank an electrical permit is needed before the install. Please let know & thank you kindly.

Melanie Eshenbaugh
Bureau of Environmental Health
Howard County Health Dept.
8930 Stanford Blvd. Columbia, MD 21045
www.hchealth.org



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14880 Old Fred Rd

INDEXED

PERMIT

SEWAGE DISPOSAL SYSTEM

MARYLAND STATE DEPARTMENT OF HEALTH
HOWARD COUNTY

P 16688

A _____

ELLICOTT CITY

DISTRICT 4

DATE 1/25/72

Jack Fyock IS PERMITTED TO INSTALL ALTER X
ADDRESS Ten Oaks Road, Glenelg, Md. PHONE 286-2939

A SEWAGE DISPOSAL SYSTEM LOCATED AT _____

SUBDIVISION _____ ROAD 14880 Old Frederick Rd. LOT _____

PROPERTY OWNER Ridgely Pue (turn right on Old Frederick Road off Route 40 - 3rd house on Old Frederick Rd. on right)

ADDRESS _____

SPECIFICATIONS

DRAIN FIELD _____ DEPTH _____ FEET, BOTTOM AREA _____ SQ. FT.

SEEPAGE PITS _____ ABSORBENT SIDE-WALL AREA _____ SQ. FT.

SEPTIC TANK CAPACITY _____ GALLONS

FOR GARBAGE GRINDER, INCREASE DISPOSAL AREA 22% & TANK CAPACITY 50%.

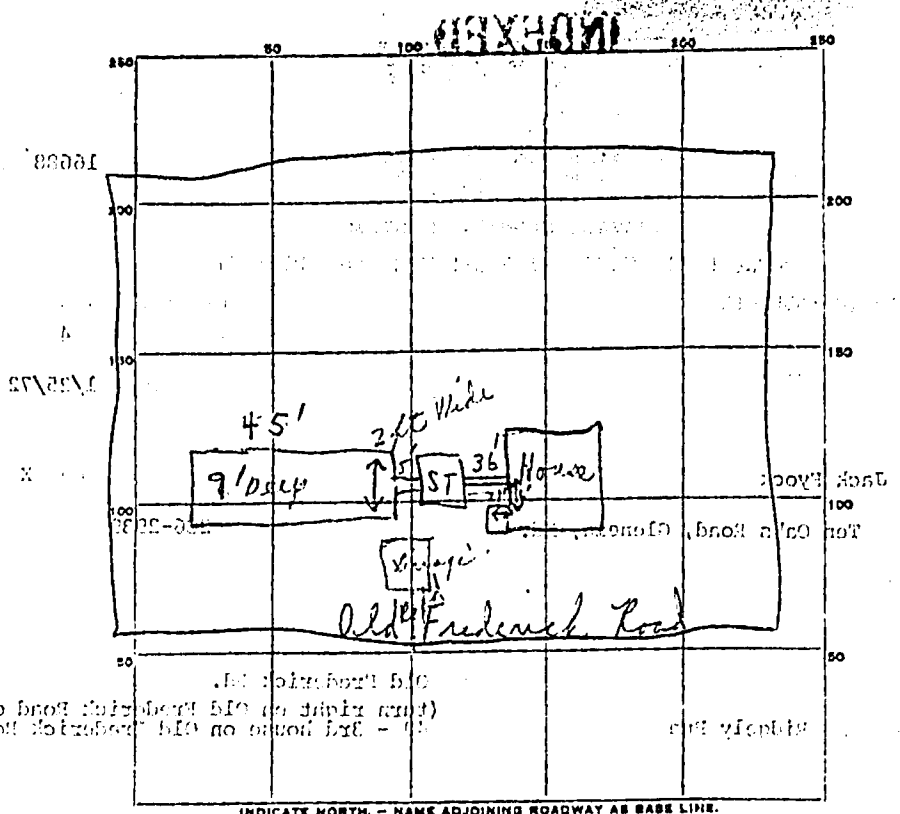
OTHER REPAIR - Call for inspection when ground is opened up and Sanitarian will recommend repair system.

PLANS APPROVED BY Palmer F. Wine DATE 1/25/72

FILL SEPTIC TANK AND DISTRIBUTION BOX WITH WATER BEFORE CALLING FOR AN INSPECTION. COVER NO WORK UNTIL INSPECTED AND APPROVED.

NEITHER THE HOWARD COUNTY COMMISSIONERS NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM.

16688



INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE.

PERMIT CARD Signed & Posted

SEPTIC TANK, LEVEL OK CLEANOUTS OK

DISTRIBUTION BOX, LEVEL _____

TILE FIELD: DEPTH _____ FT. TRENCH WIDTH _____ FT.

GRAVEL DEPTH 6' TOTAL LENGTH 45 FT.

NUMBER OF TRENCHES 1 TOTAL BOTTOM AREA _____

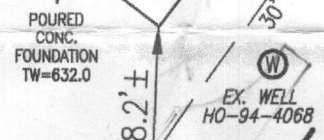
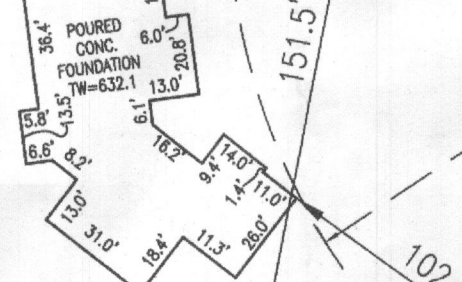
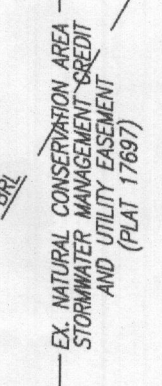
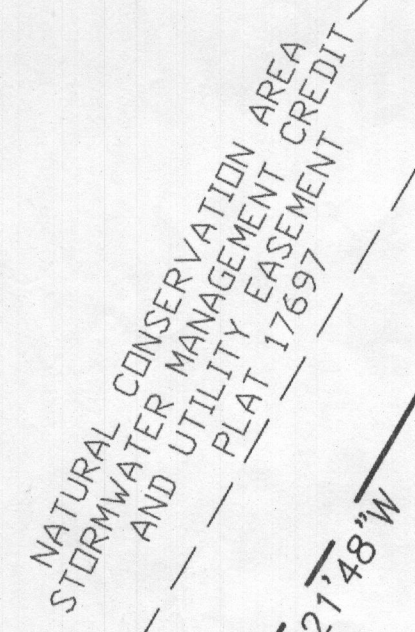
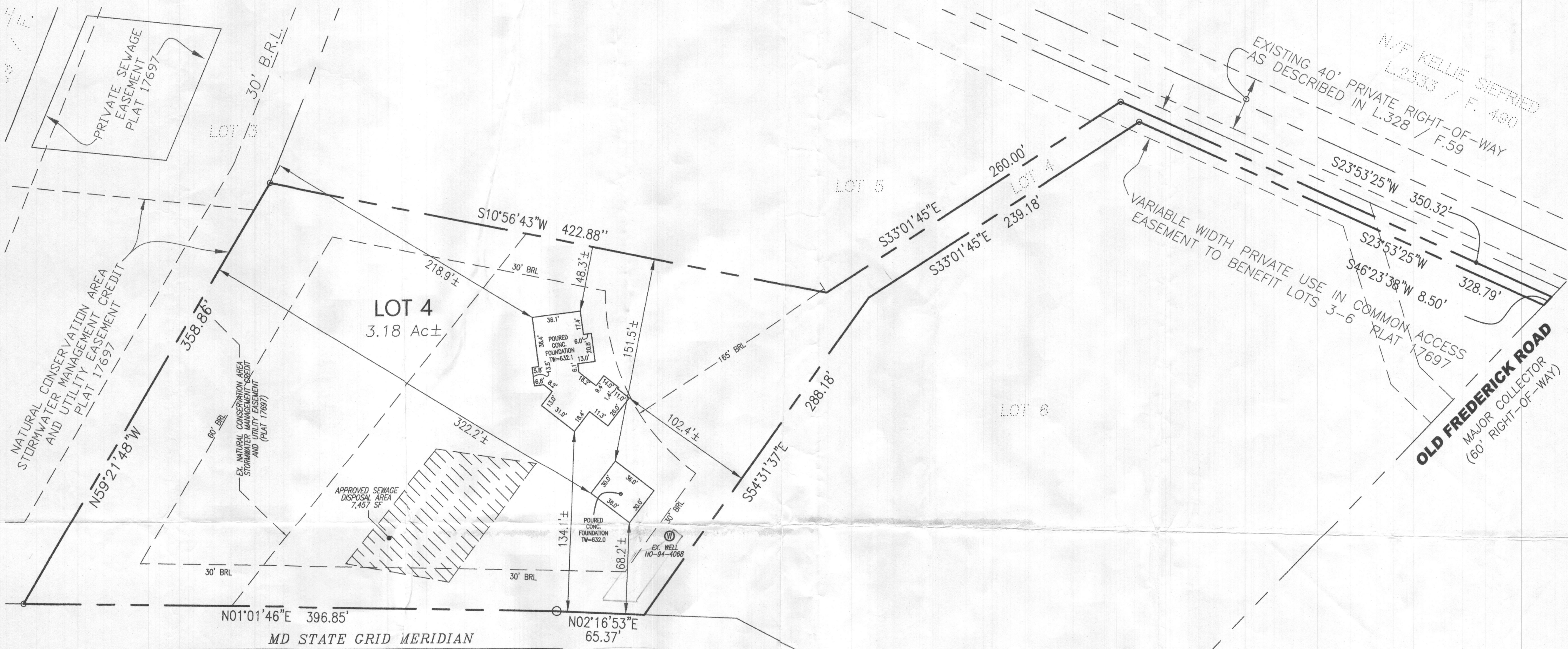
SEEPAGE PITS, INSIDE DIAMETER _____ FT. DEPTH BELOW INLET _____ FT.

ABSORBENT AREA 540 SQ. FT.

REMARKS ① 1/25/92 Trench dug 50 ft long, 2 ft wide, 9 ft deep. Put gravel in to 6 feet depth. ② Gravel in to 3 ft from top with pipe covered 6" of gravel + paper. Trench back filled, C.K.S.

DATE SYSTEM APPROVED 1/25/92 INSPECTOR C. Stricker

THIS WALL CHECK DRAWING CONTAINS A HORIZONTAL TOLERANCE IN ACCURACY OF 0.1' AND A VERTICAL TOLERANCE IN ACCURACY OF 0.2'



N/F PATRICK FAMILY LTD. PARTNERSHIP
L.3980 / F. 53

* Gary has sketched NW encroaching on the 30' setback to the ex. well box
2/13/2024

I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF THAT THE IMPROVEMENTS ARE LOCATED AS SHOWN AND THAT THERE ARE NO ENCROACHMENTS EXCEPT AS SHOWN; THAT THIS DOCUMENT WAS PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE, AND THAT I AM A DULY LICENSED PROPERTY LINE SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND.

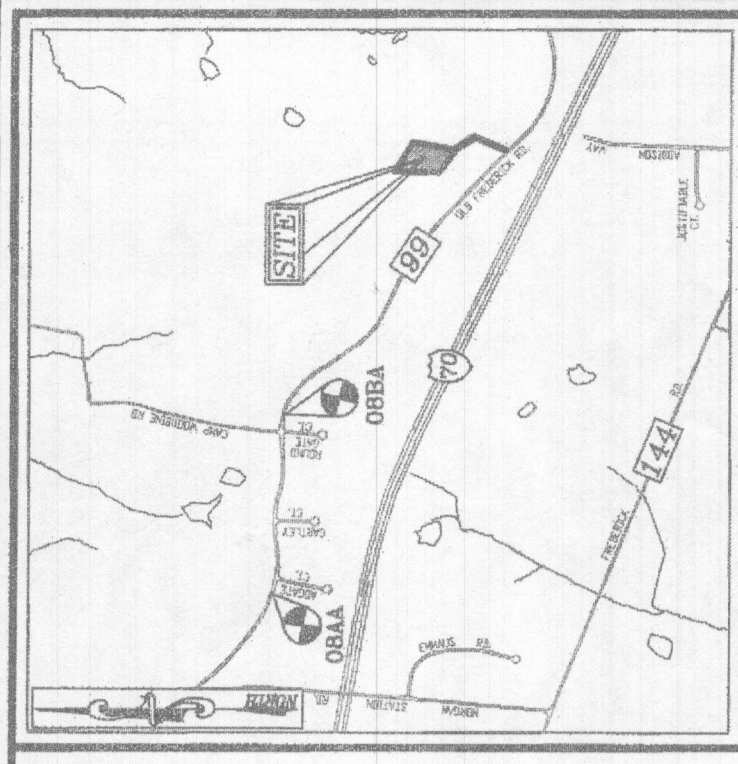
Thomas M. Hoffman Jr.
THOMAS M. HOFFMAN, JR.
PROPERTY LINE SURVEYOR
LICENSE NO. 267
EXP. DATE: JULY 28, 2024
1/24/24
DATE



SCALE 1" = 50'	DATE 01/24/2024
DRAWN BY J.T.F.	CHECKED BY T.M.H.
PLAT NUMBER 17697	JOB NUMBER 2017145

VOGEL ENGINEERING
TIMMONS GROUP
3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
P: 410.461.7666 F: 410.461.8961 www.timmons.com

WALL CHECK DRAWING
14850 OLD FREDERICK ROAD
LOT 4
MINGLEWOOD
PLAT NO. 17697
FOURTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND



VICINITY MAP
SCALE: 1"=500'
ADD. MAP: 4832-47

BENCHMARKS
HOWARD COUNTY BENCHMARK 088A (CONC. MON.)
L: 809275.04 E: 129547.59 ELEV: 805.57
LOCATION: RT-98 WEST OF ROUND GATE CT.

HOWARD COUNTY BENCHMARK 088A (CONC. MON.)
L: 809275.04 E: 129547.59 ELEV: 805.57
LOCATION: RT-98 EAST OF ADAMS CT.

LEGEND:

(Symbol)	PROPERTY LINE
(Symbol)	MUNICIPAL PROPERTY LINE
(Symbol)	SEPTIC SYSTEM LINE
(Symbol)	EXISTING SIDE OF PAVING
(Symbol)	EXISTING WELL
(Symbol)	EXISTING TRENCH
(Symbol)	EXISTING TO CONTINUE
(Symbol)	EXISTING 2' CONTOUR
(Symbol)	APPROVED PRIVATE
(Symbol)	SEWAGE DISPOSAL AREA
(Symbol)	EXISTING NATURAL CONSERVATION AREA (STATE/LOCAL MANAGEMENT PLAN 1997)
(Symbol)	EXISTING 40' FRAZEE
(Symbol)	EXISTING 15' FRAZEE
(Symbol)	EXISTING 10' FRAZEE
(Symbol)	EXISTING 5' FRAZEE
(Symbol)	PROPOSED 10' CONTOUR
(Symbol)	PROPOSED 2' CONTOUR
(Symbol)	PHASED PERC TEST

Approved Septic System Plan
Howard County Health Department
Signature: *[Signature]* Date: 5/13/23

Approved Septic System Plan
Howard County Health Department
Signature: *[Signature]* Date: 4/18/23

OWNER/DEVELOPER
DAVID B. WELTON
4131 ELMGERTON COURT
ELLCOTT CITY, MD 21043
(443) 545-4468

NO.	REVISION	DATE
1	REVISE THE FIRST FLOOR AND BASEMENT FLOOR ELEVATION OF THE HOUSE, THE LOCATION OF THE DETACHED GARAGE, THE WELL BOX AND THE GRADING	09/14/24

ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN
MINGLEWOOD - LOT 4
14850 OLD FREDERICK ROAD
WOODBINE, MD 21797
(3.18 AC.)

PARCEL: 26
ZONED: RC-BED
HOWARD COUNTY, MARYLAND

L: 19736 / F: 89
4TH ELECTION DISTRICT
TAX MAP: 8 GRID: 10

VOGEL ENGINEERING
TIMMONS GROUP
330 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
P: 410.661.7666 F: 410.661.6961 www.timmons.com

DESIGN BY: RVL
DRAWN BY: JMR
CHECKED BY: BRK
DATE: MAY, 2023
SCALE: AS SHOWN
W.O. NO.: 2017145

PROFESSIONAL CERTIFICATE
NUMBER: 10000000000000000000
ISSUED: 01/01/2023
EXPIRES: 12/31/2026

1 5-SHEET OF 2



GENERAL NOTES:

- THE EXISTING TOPOGRAPHY SHOWN HEREON IS TAKEN FROM FIELD SURVEY WITH 5' CONTOUR INTERVALS. THE EXISTING ELEVATIONS SHOWN ARE THE MEAN SEA LEVEL ELEVATIONS.
- ANY CHANGES TO A PRIVATE SEWAGE AREA SHALL REQUIRE A REVISION PERIODICALLY CERTIFIED PLAN.
- THE EXISTING SEWAGE SYSTEM SHALL BE MAINTAINED UNLESS OTHERWISE NOTED OTHERWISE. ALL BELLS WITHIN 200' DOWN GRADE OF EXISTING OR PROPOSED SEPTIC SYSTEMS OR SEWAGE DISPOSAL AREAS HAVE BEEN SHOWN USING ALL REASONABLE EFFORTS.
- BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT, WISDOM, AND CDT AREA AS REQUIRED.
- 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 REVISION SITE PLAN MUST BE SUBMITTED TO THE HOWARD COUNTY HEALTH DEPARTMENT FOR APPROVAL. A REVISION SITE PLAN WILL REQUIRE A HEAVY LOAD BEARING BANK.

SYSTEM CALCULATIONS:

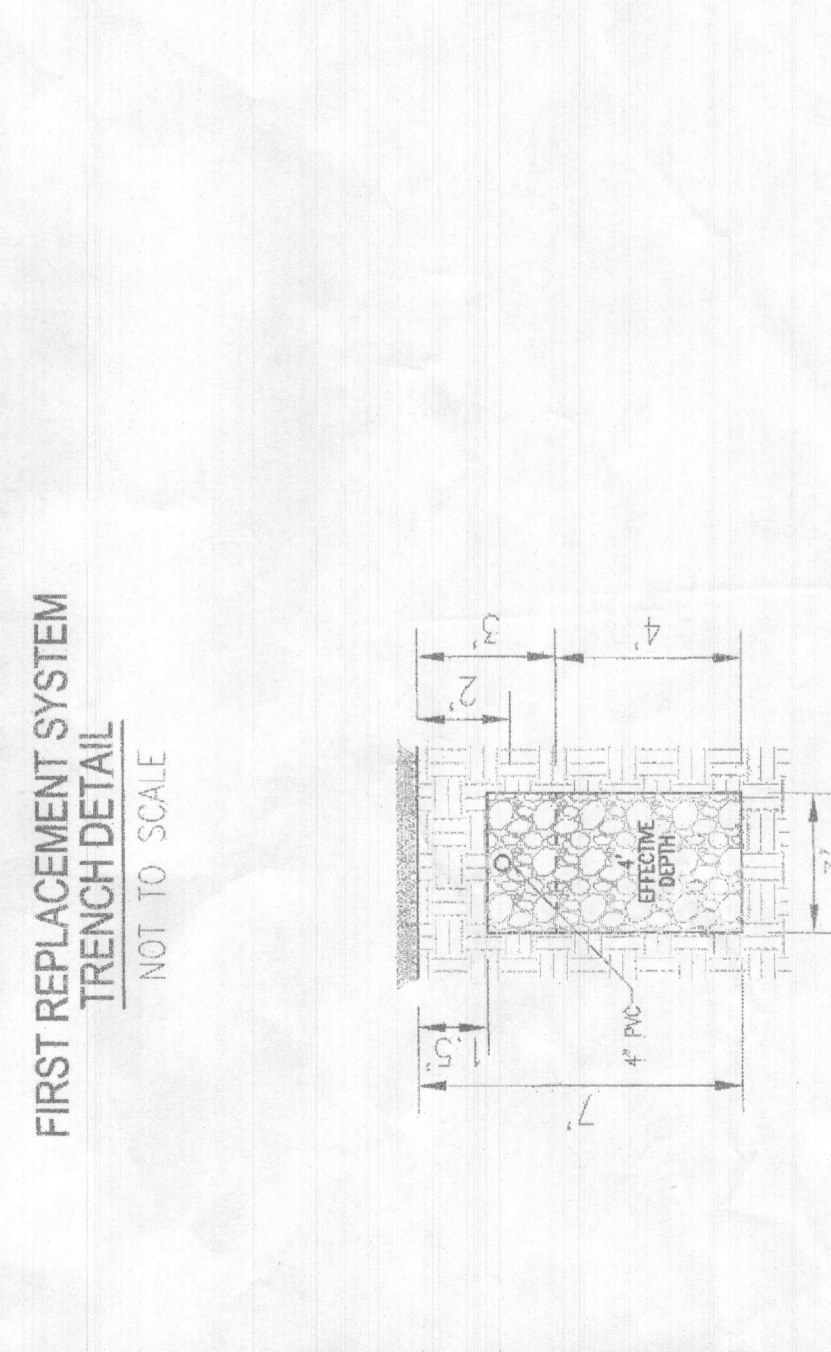
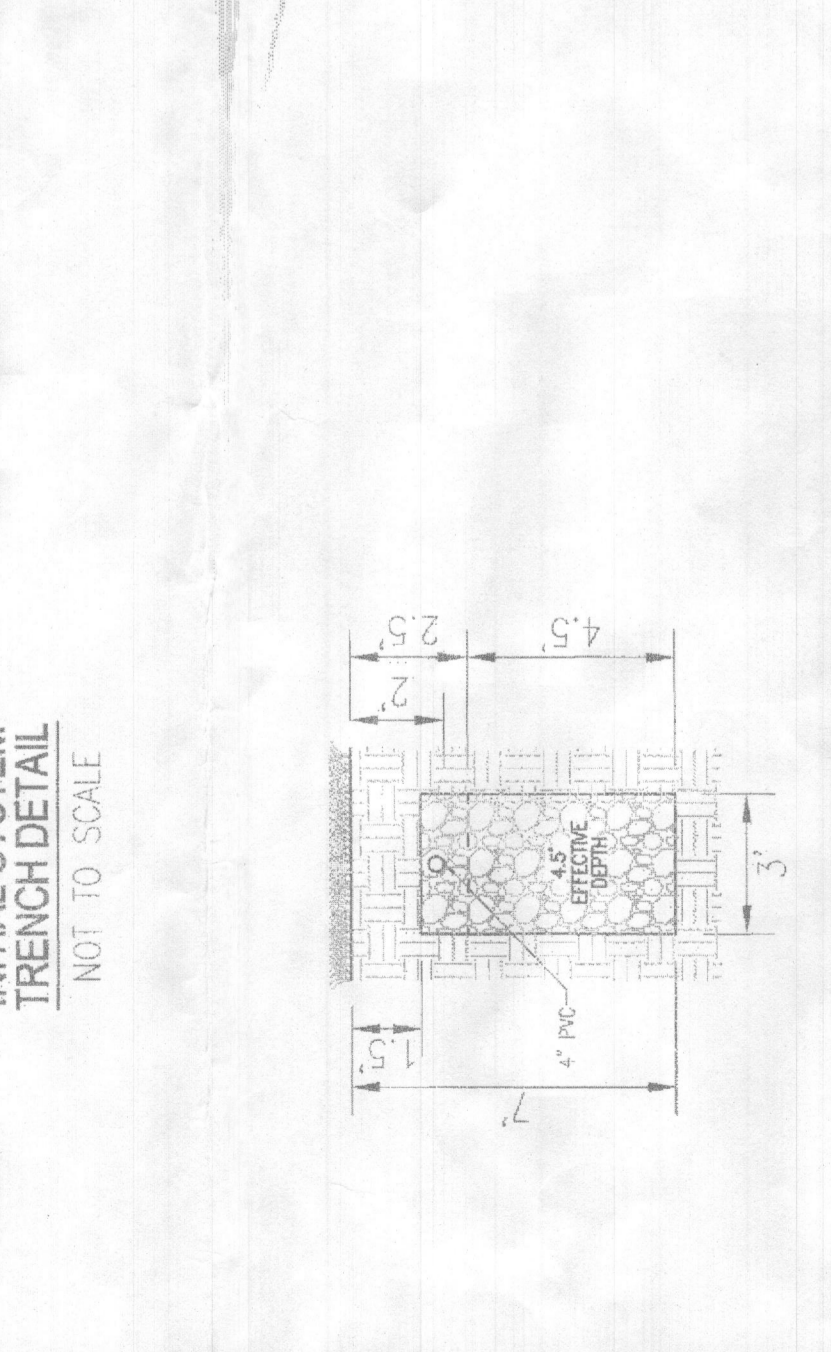
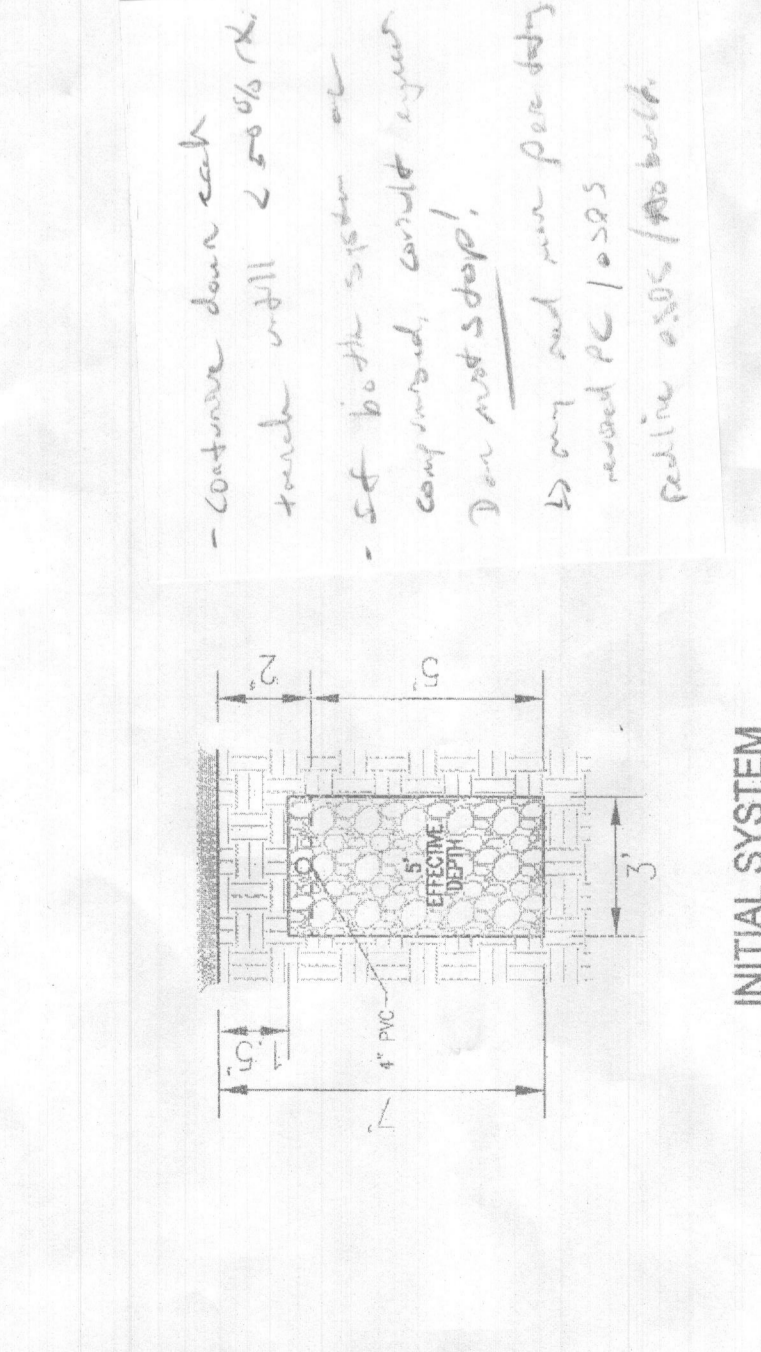
INITIAL SYSTEM
5 BEDROOMS AT 750gpd / 0.8 ABSORPTION RATE = 838 SQ. FT.
938 SQ. FT. / 3 (TRENCH WIDTH) x .26 (SIDEWALL REDUCTION) = 113 LINEAR FEET
114 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE INITIAL SYSTEM.
(2 TRENCHES OF 57 FEET IN LENGTH)

FIRST REPLACEMENT SYSTEM
5 BEDROOMS AT 750gpd / 0.8 ABSORPTION RATE = 838 SQ. FT.
938 SQ. FT. / 3 (TRENCH WIDTH) x .26 (SIDEWALL REDUCTION) = 113 LINEAR FEET
120 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE FIRST REPLACEMENT SYSTEM.
(2 TRENCHES OF 60 FEET IN LENGTH)

SECOND REPLACEMENT SYSTEM
5 BEDROOMS AT 750gpd / 0.8 ABSORPTION RATE = 838 SQ. FT.
938 SQ. FT. / 3 (TRENCH WIDTH) x .22 (SIDEWALL REDUCTION) = 131 LINEAR FEET
132 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE SECOND REPLACEMENT SYSTEM.
(3 TRENCHES OF 44 FEET IN LENGTH)

INITIAL SYSTEM TRENCH INFO

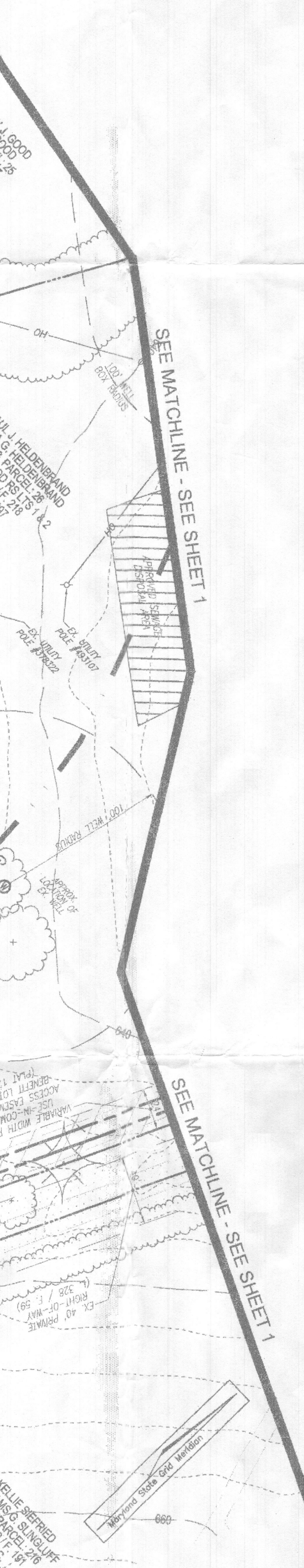
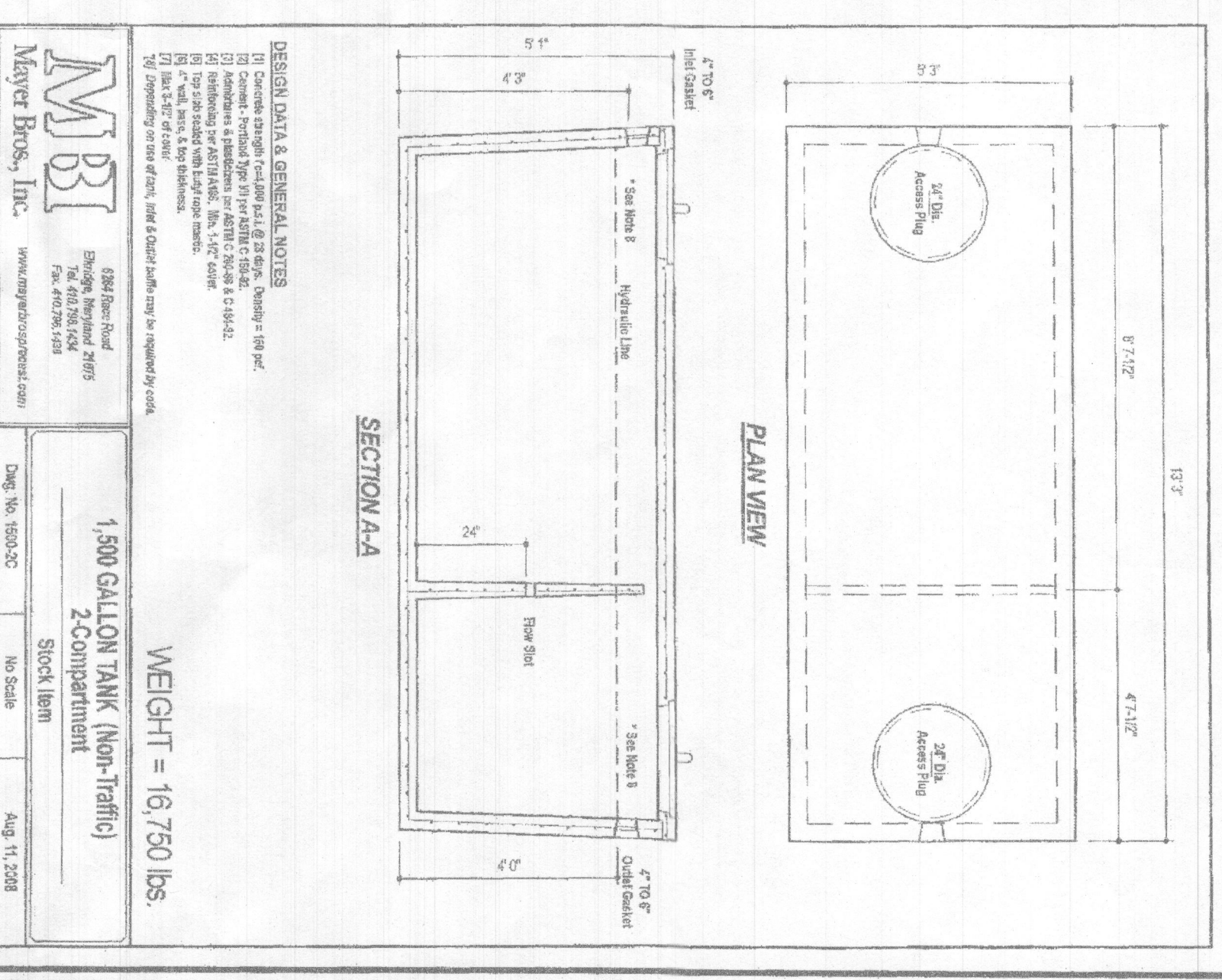
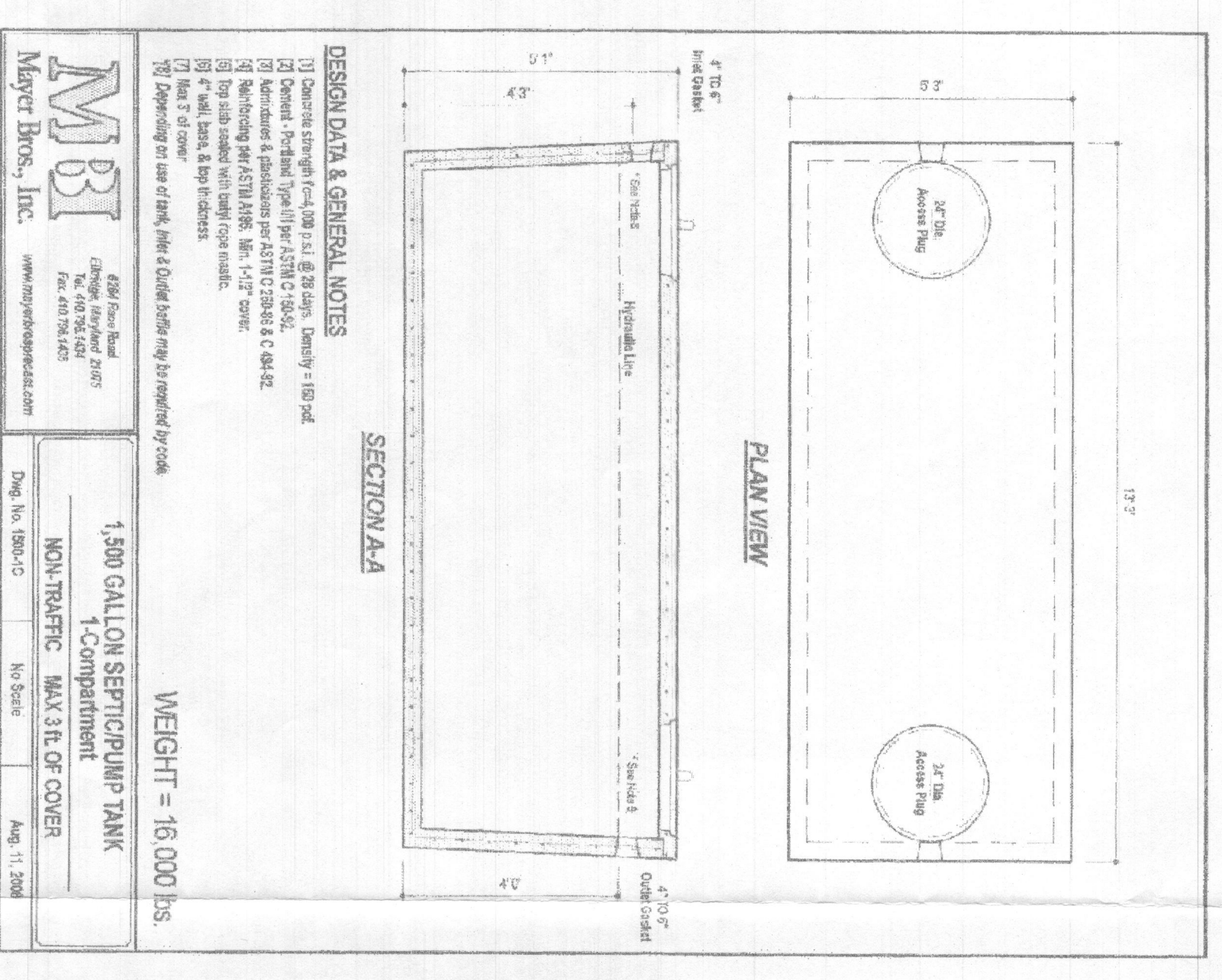
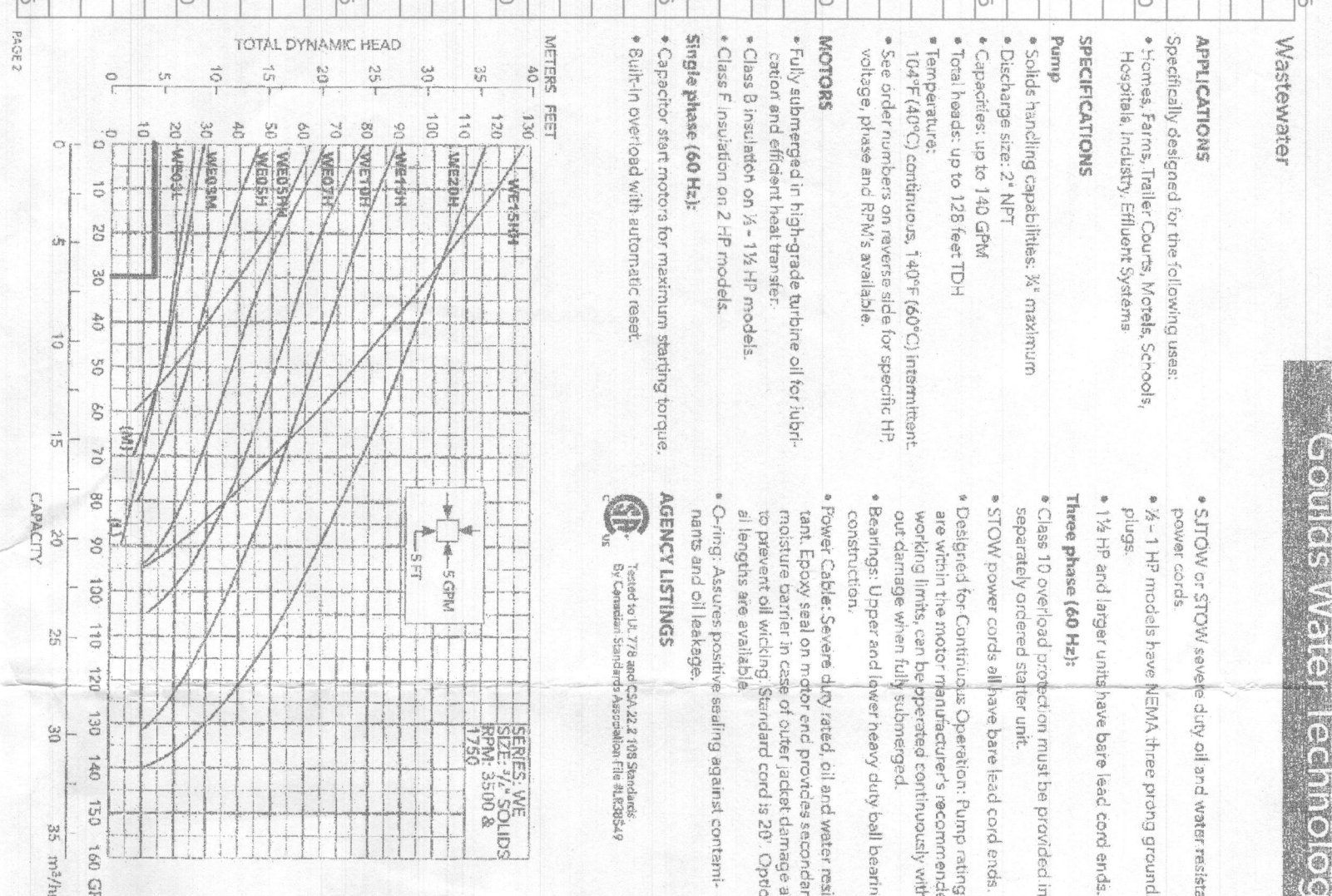
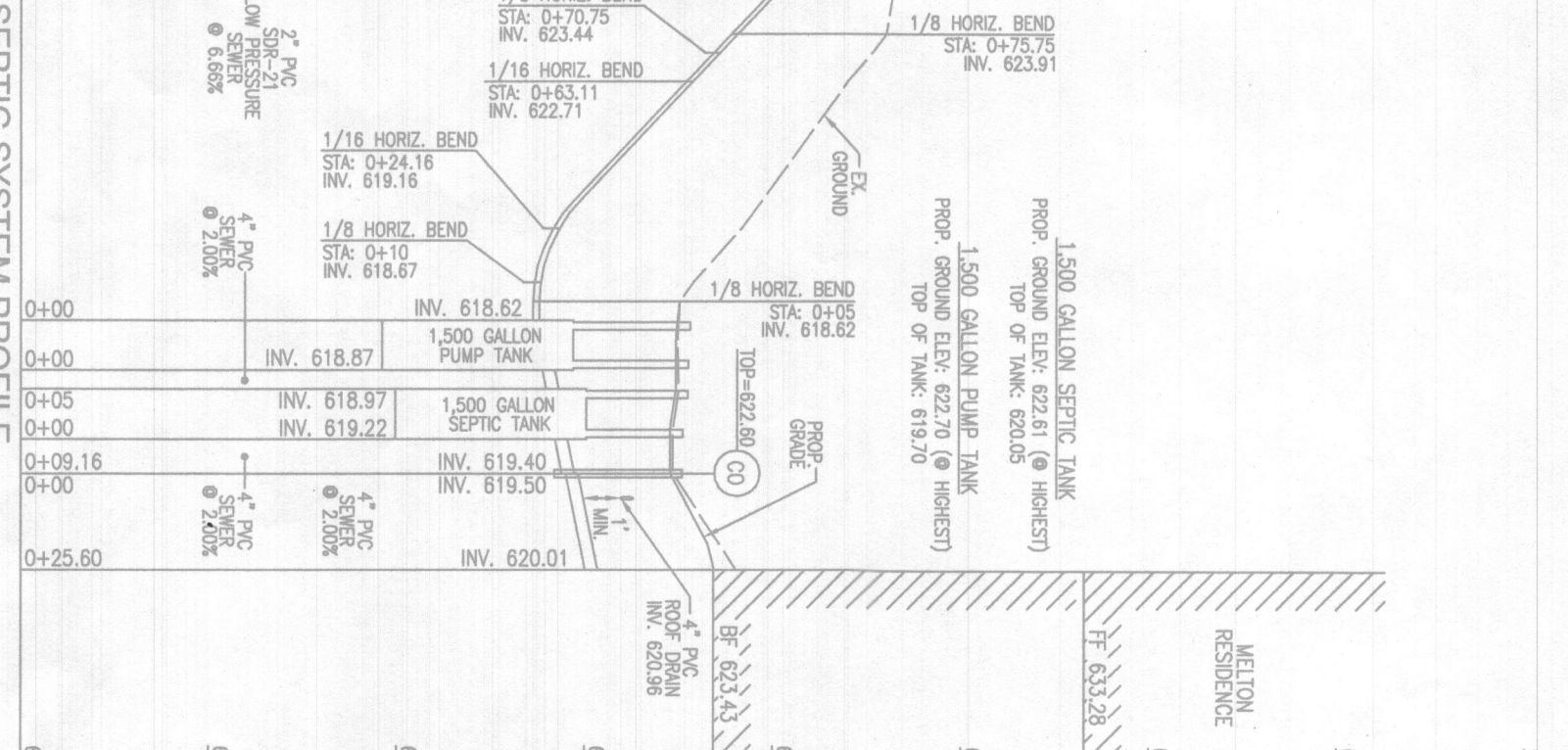
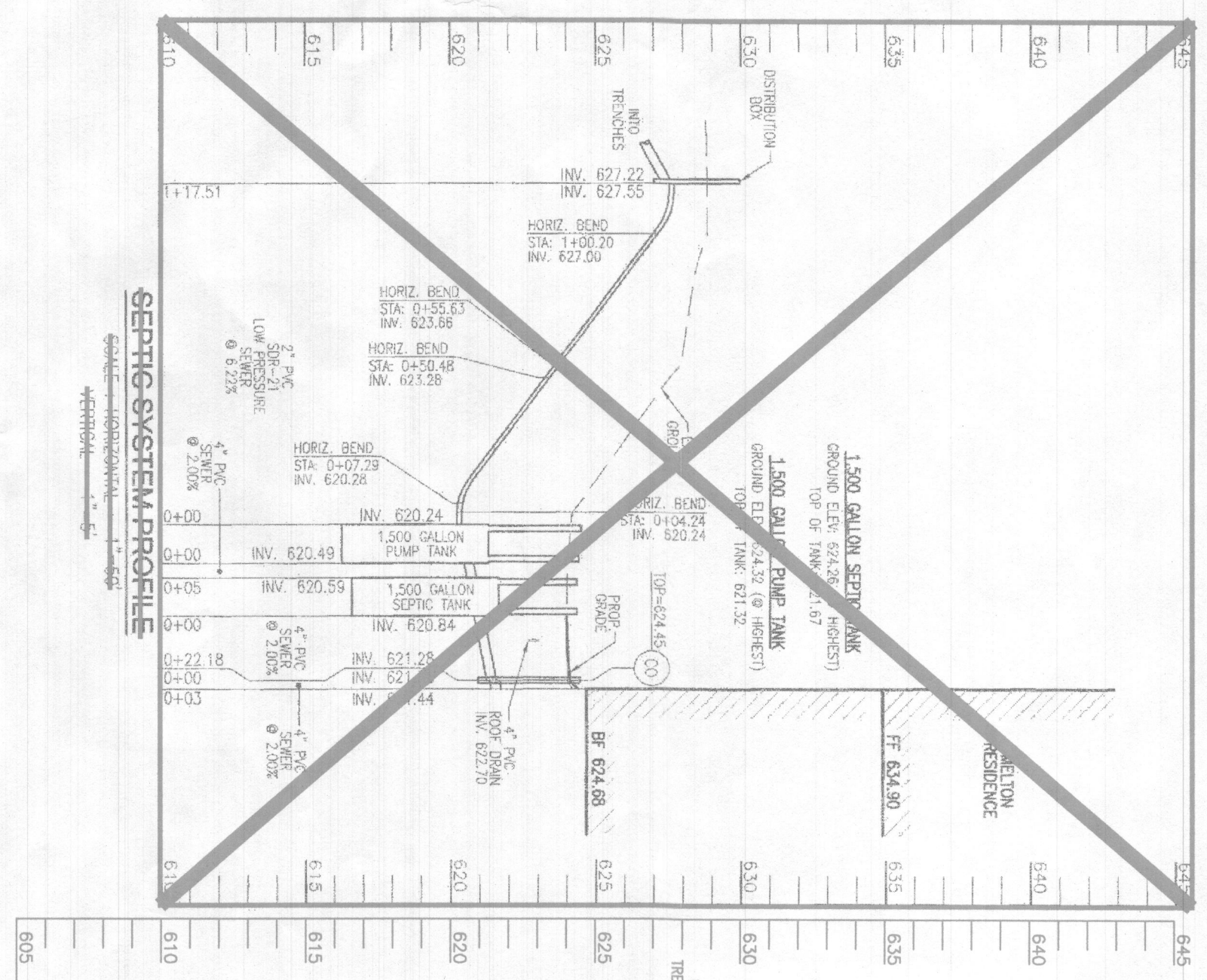
TRENCH LENGTH	INCHES	FEET
1	57	4.75
2	57	4.75



Handwritten notes:
- Contain down each trench until 2-3% slope
- Set biotic system at compound, correct sign
- Don't stop!
- 20' and min. possible around RC 1025
- Reduce slope, no work

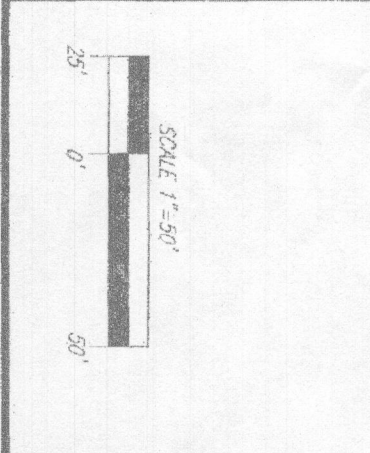
WELL LOCATION CERTIFICATION:
THE EXISTING WELL SHOWN ON THIS PLAN (NO. 084-0080) HAS BEEN FIELD LOCATED AND IS ASSUMED SHOWN.

THIS AREA IS PRIVATE AND NOT TO BE USED FOR ANY OTHER PURPOSES WITHOUT THE WRITTEN CONSENT OF THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT. THE USE OF THIS PLAN FOR ANY OTHER PURPOSES IS PROHIBITED. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE USER SHALL HAVE THE AUTHORITY TO OBTAIN ADJUSTMENTS TO THE PRIVATE SEWAGE AREA, RECORDATION OF A MODIFIED SEWAGE AREA SHALL NOT BE NECESSARY.



LEGEND:

- PROPERTY LINE
- ADJACENT PROPERTY LINE
- RIGHT-OF-WAY LINE
- DISTING. EDGE OF PAVING
- DRAINAGE DITCH
- EXISTING TO CONDUIT
- EXISTING TO CONDUIT
- APPROVED FRONT SETBACK FROM AREA
- EXISTING MAINT. CONCERN (SEE PLAN 1788)
- EXISTING MAINT. CONCERN (SEE PLAN 1788)
- EXISTING MAINT. CONCERN (SEE PLAN 1788)
- EXISTING MAINT. CONCERN (SEE PLAN 1788)
- EXISTING MAINT. CONCERN (SEE PLAN 1788)



OWNER/DEVELOPER:
DAVID B. WELTON
4131 FREDERICK ROAD
ELLSWORTH, MD 21115
(410) 545-4688

ON-SITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN
MINGLEWOOD - LOT 4
14850 OLD FREDERICK ROAD
WOODBINE, MD 21797
(3.18 AC.)

Vogel Engineering
HOWARD COUNTY, MARYLAND

TIMMONS GROUP
3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
P: 410.461.7666 F: 410.461.8951 www.timmons.com

PROFESSIONAL CERTIFICATE
I HEREBY CERTIFY THAT THESE OCCUPANCY PERMITS AND SEWAGE DISPOSAL SYSTEM DESIGN PLAN HAVE BEEN PREPARED BY ME OR UNDER MY SUPERVISION AND I AM A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MARYLAND.
DATE: MAY 2023
SCALE: AS SHOWN
W.O. NO.: 201745

DESIGNER: JIM VOGEL
CHECKED BY: JIM VOGEL
DATE: MAY 2023
SCALE: AS SHOWN

REVISION:

NO.	DESCRIPTION	DATE
1	REVISE THE FIRST FLOOR AND BASEMENT FLOOR ELEVATION OF THE HOUSE, THE LOCATION OF THE DETACHED GARAGE, THE WELL BOY AND THE GRADING	03/14/24

PROJECT: 26 ZONED: R-2

PAGE: 2 OF 2

- GENERAL NOTES:**
1. THE EXISTING TOPOGRAPHY SHOWN HEREON IS TAKEN FROM FIELD SURVEY WITH 2' CONTOUR INTERVALS PREPARED BY WOOD AND ASSOCIATES, INC., DATED FEBRUARY 2001. INFORMATION IS SUPPLEMENTED WITH THE FOLLOWING INFORMATION:
 2. ANY CHANGES TO A PRIVATE SEWAGE AREA SHALL REQUIRE A REVED PERCOLATION CERTIFICATION PLAN.
 3. EXISTING WELLS, SEPTIC SYSTEMS AND SEWAGE DISPOSAL AREAS WITHIN 100' OF THE PROPERTY AND THOSE HAVE BEEN SHOWN USING ALL REASONABLE EFFORTS.
 4. THE LOT SHOWN HEREON COMPARES WITH THE MUNICIPAL OWNERSHIP, WIDTH AND LOT AREA AS REQUIRED BY THE HOWARD COUNTY ZONING ORDINANCE.
 5. ANY CHANGE TO THE LOCATION OR PERMITS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVED SITE PLAN MAY BE REQUIRED.
 6. THE MAXIMUM EARTH COVER OVER THE TANK IS THREE FEET. GREATER EARTH COVER WILL REQUIRE A 1500 PSI CONCRETE TANK.

SYSTEM CALCULATIONS:

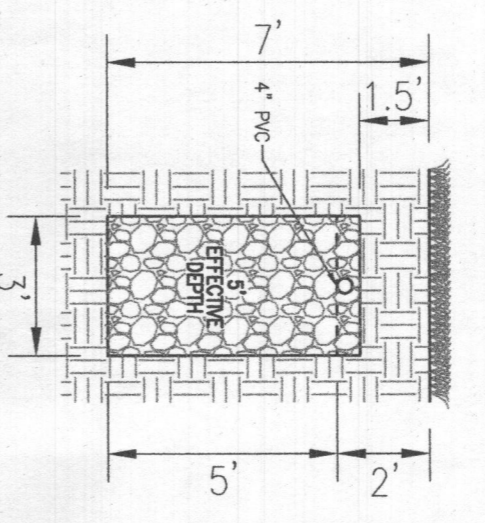
WIND SYSTEM:
 5 BEDROOMS AT 75GPM / 0.8 ABSORPTION RATE = 938 SQ. FT.
 5 BEDROOMS AT 75GPM / 0.8 ABSORPTION RATE = 938 SQ. FT. / 3 (TRENCH WIDTH) X 38 (SIGNAL REDUCTION) = 119 LINEAR FEET
 114' TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE WIND SYSTEM.
 (2) TRENCHES OF 57 FEET IN LENGTH

FIRST REPLACEMENT SYSTEM:
 5 BEDROOMS AT 75GPM / 0.8 ABSORPTION RATE = 938 SQ. FT.
 5 BEDROOMS AT 75GPM / 0.8 ABSORPTION RATE = 938 SQ. FT. / 3 (TRENCH WIDTH) X 38 (SIGNAL REDUCTION) = 119 LINEAR FEET
 120' TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE FIRST REPLACEMENT SYSTEM.
 (2) TRENCHES OF 60 FEET IN LENGTH

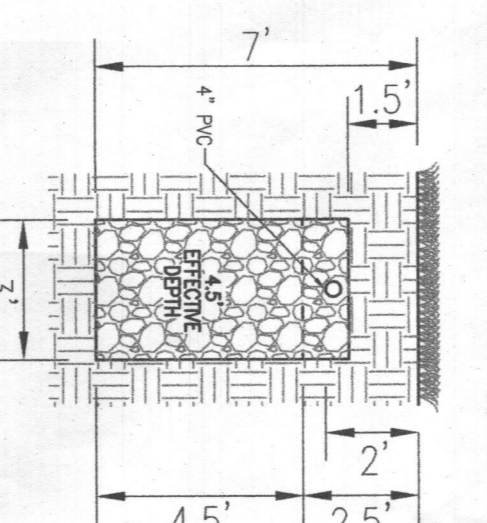
SECOND REPLACEMENT SYSTEM:
 5 BEDROOMS AT 75GPM / 0.8 ABSORPTION RATE = 938 SQ. FT.
 5 BEDROOMS AT 75GPM / 0.8 ABSORPTION RATE = 938 SQ. FT. / 3 (TRENCH WIDTH) X 42 (SIGNAL REDUCTION) = 131 LINEAR FEET
 132' TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE SECOND REPLACEMENT SYSTEM.
 (3) TRENCHES OF 44 FEET IN LENGTH

INITIAL SYSTEM TRENCH INFO

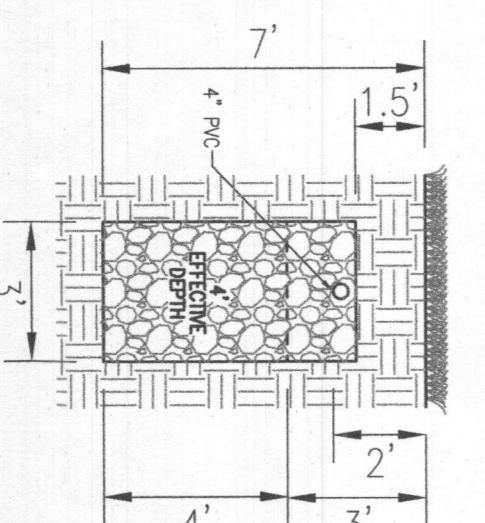
TRENCH LENGTH	TRENCH WIDTH	DEPTH
57'	38"	60.00'
60'	38"	60.00'
44'	42"	60.00'



INITIAL SYSTEM TRENCH DETAIL
NOT TO SCALE



FIRST REPLACEMENT SYSTEM TRENCH DETAIL
NOT TO SCALE



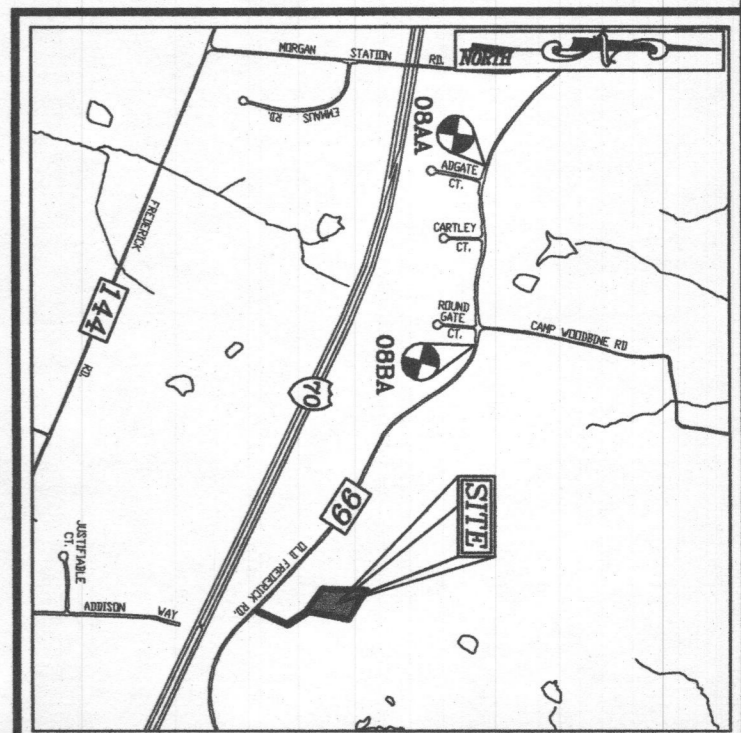
SECOND REPLACEMENT SYSTEM TRENCH DETAIL
NOT TO SCALE

THIS AREA DESIGNATES A PRIVATE SEWAGE AREA, OF AT LEAST 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF ENVIRONMENT AND GENERAL SERVICES. THIS AREA IS RESTRICTED WITH PUBLIC SEWERAGE IS AVAILABLE. THESE AREAS ARE NOT TO BE USED FOR ANY OTHER PURPOSES. A PUBLIC SEWERAGE SYSTEM, THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE AREA SHALL NOT BE NECESSARY.

WELL LOCATION CERTIFICATION:
 THE EXISTING WELL SHOWN ON THIS PLAN (60-94-468) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.



OSDS PLAN VIEW
SCALE: 1"=50'



VICINITY MAP
SCALE: 1"=2000'
A.C. MAP: 4892-47

BENCHMARKS
 HOWARD COUNTY BENCHMARK 068A (CONC. MON.)
 N. 609928.54 E. 1301409.15 ELEV. 630.72
 LOCATION: RT-99 WEST OF ROUND GATE CT.
 HOWARD COUNTY BENCHMARK 068A (CONC. MON.)
 N. 609215.04 E. 1298545.59 ELEV. 608.57
 LOCATION: RT-99 EAST OF ADAGE CT.

- LEGEND:**
- PROPERTY LINE
 - ADJACENT PROPERTY LINE
 - RIGHT-OF-WAY LINE
 - EXISTING EASEL OF FRAME
 - EXISTING WELL
 - EXISTING MEMLINE
 - EXISTING 1" CONTOUR
 - EXISTING 2" CONTOUR
 - APPROXIMATE PRIVATE SEWAGE DISPOSAL AREA
 - EXISTING WATER CONSERVATION AREA SYSTEMS/MANAGEMENT (PLAT 1789)
 - EXISTING 4" PRIVATE (1:58) / 1:59
 - EXISTING 6" PRIVATE (1:58) / 1:59
 - EXISTING 8" PRIVATE (1:58) / 1:59
 - EXISTING 10" PRIVATE (1:58) / 1:59
 - EXISTING 12" PRIVATE (1:58) / 1:59
 - PROPOSED 1" CONTOUR
 - PROPOSED 2" CONTOUR
 - PASSED PERC. TEST

Approved Septic System Plan
 Howard County Health Department
 Hans Oswald, SA, PE
 Signature: _____
 Date: _____

OWNER/DEVELOPER
 DAVID B. WELTON
 4131 BELLEFONTAINE COURT
 ELLEOTT CITY, MD 21043
 (443) 545-4468

ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN
MINGLEWOOD - LOT 4
 14850 OLD FREDERICK ROAD
 WOODBINE, MD 21797
 (3.18 AC.)

Vogel Engineering
 PARCEL: 26
 ZONED: RC-DEO
 HOWARD COUNTY, MARYLAND

TIMMONS GROUP
 3300 NORTH RIDGE ROAD, SUITE 110, ELLEOTT CITY, MD 21043
 P: 410-481-7068 F: 410-481-8953 WWW.TIMMONSGROUP.COM

PROFESSIONAL CERTIFICATE
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY ME OR UNDER MY CLOSE PERSONAL SUPERVISION AND THAT I AM A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF MARYLAND.
 DATE: MAY 2023
 SCALE: AS SHOWN
 W.O. NO.: 2017145

