

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: 4/21/22 **ONSITE SEWAGE DISPOSAL SYSTEM** P 571509
 APPROVAL DATE: 9/2/2022 **PERMIT: CONSTRUCTION** A _____
 PROPERTY ADDRESS: 5644 DOSA COURT, CLARKSVILLE, MD 21029 410-984-0101
 SUBDIVISION: THE WOODLANDS LOT: Par A TAX ID: 05-601712
 CONTRACTOR: Hetfields Equipment EMAIL: keg@hetfieldsequipment.com
 CONTRACTOR ADDRESS: P.O. Box 507, Annapolis Junction, MD 20701 PHONE: 301-489-4287
 PROPERTY OWNER: WILLIAMSBURG GROUP EMAIL: marinamorris@williamsburgllc.com
 OWNER ADDRESS: 5485 HARRIS FARM LANE, COLUMBIA, MD 21044 PHONE: (410)997-8800
 SEPTIC TANK SIZE (GALLONS): 2000 TANK MANUFACTURER: BABYLON
 PUMP MODEL: MYERS ME100 PUMP SIZE: 1 Hp PUMP TANK CAPACITY: 2000

DISTRIBUTION SYSTEM: GRAVITY PRESSURE DOSED BEDROOMS: 6 APPLICATION RATE: 0.8

TRENCHES:	LINEAR FEET REQUIRED: <u>159</u>	INLET DEPTH: <u>2.0</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>8.0</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>11</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>4.0</u>
LOCATION:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND TANK LOCATIONS MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	
NOTES:	INSTALL TWO 45-DEGREE BENDS TO MAKE 90-DEGREE TURN BEFORE SEPTIC TANK A PUMP AND ALARM TEST MUST BE SATISFACTORILY COMPLETED BEFORE FINAL APPROVAL OF THIS PERMIT AND RELEASE OF USE AND OCCUPANCY.	

ISSUED BY: R BRICKER ISSUE DATE: 4/21/22 EXPIRATION DATE: 4/21/23

- 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 _____
- 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.**

5644 Dosa Ct

NOT TO SCALE

* see attached

ROAD NAME

TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
3'	2'	8'
NUMBER OF TRENCHES		3
TOTAL LENGTH		159'
ABSORPTION AREA		477' + sidewalk
DISTRIBUTION BOX LEVEL		yes
DISTRIBUTION BOX BAFFLE		yes
DISTRIBUTION BOX PORT		yes

SEPTIC TANK DATA

SEPTIC TANK 1 LEVEL yes
 MANUFACTURER Babylon
 CAPACITY 2000 GAL
 SEAM LOC top
 TANK LID DEPTH 2.5'
 BAFFLES front 6" / back 4"
 BAFFLE FILTER -
 MANHOLE LOC front / back
 6" PORT LOC -
 WATERTIGHT TEST -
 SLOTTED yes
 DATE ON LID 3/23/22

PUMP/SEPTIC TANK LEVEL

SEPTIC TANK 2 LEVEL yes
 MANUFACTURER Babylon
 CAPACITY 2000 GAL
 SEAM LOC top
 TANK LID DEPTH 2.5'-3'
 BAFFLES -
 BAFFLE FILTER -
 MANHOLE LOC front / back
 6" PORT LOC -
 WATERTIGHT TEST -
 SLOTTED -
 DATE ON LID 1/2/22

PRE-CONSTRUCTION:

4/27/22 Laid out 3x53' trenches on contour according to plan. (ST)

INSTALLATION:

4/27/22 FM partially constructed, tied into d-box (ST) 4/28/22 - 2 trenches complete (T1; T2), trench T3 being constructed, stone looks ok, soil consistent w/ perc results, geotextile fabric in place, ok to continue (PA) 4/28/22 - sewer line constructed, no SHC, both tanks set, baffles on ST ok, pump 1 HP, ok to continue FM. (PA) 5/2/22 FM completed, SHC completed. (ST) And front of septic tank
 9/2/22 - pump's alarm ok, note: builder graded right to the top of the septic tank risers, septic tank
 Contractor said he asked the builder to add 1' of riser to the 3 manholes. (K) ↓
 9/6/22 - rec'd notification that 1' of riser added to 3 manholes - see pic - (R2)

2nd ST 1 on PT

FINAL INSPECTOR

R. Rappaport

DATE OF APPROVAL

9/2/22

5644 Dosa Ct

NOT TO SCALE 1" = 50'

(W) H0-17-0399

189'

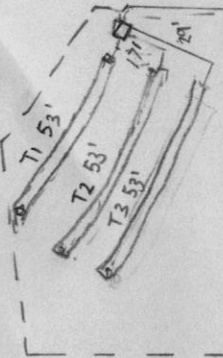
157'

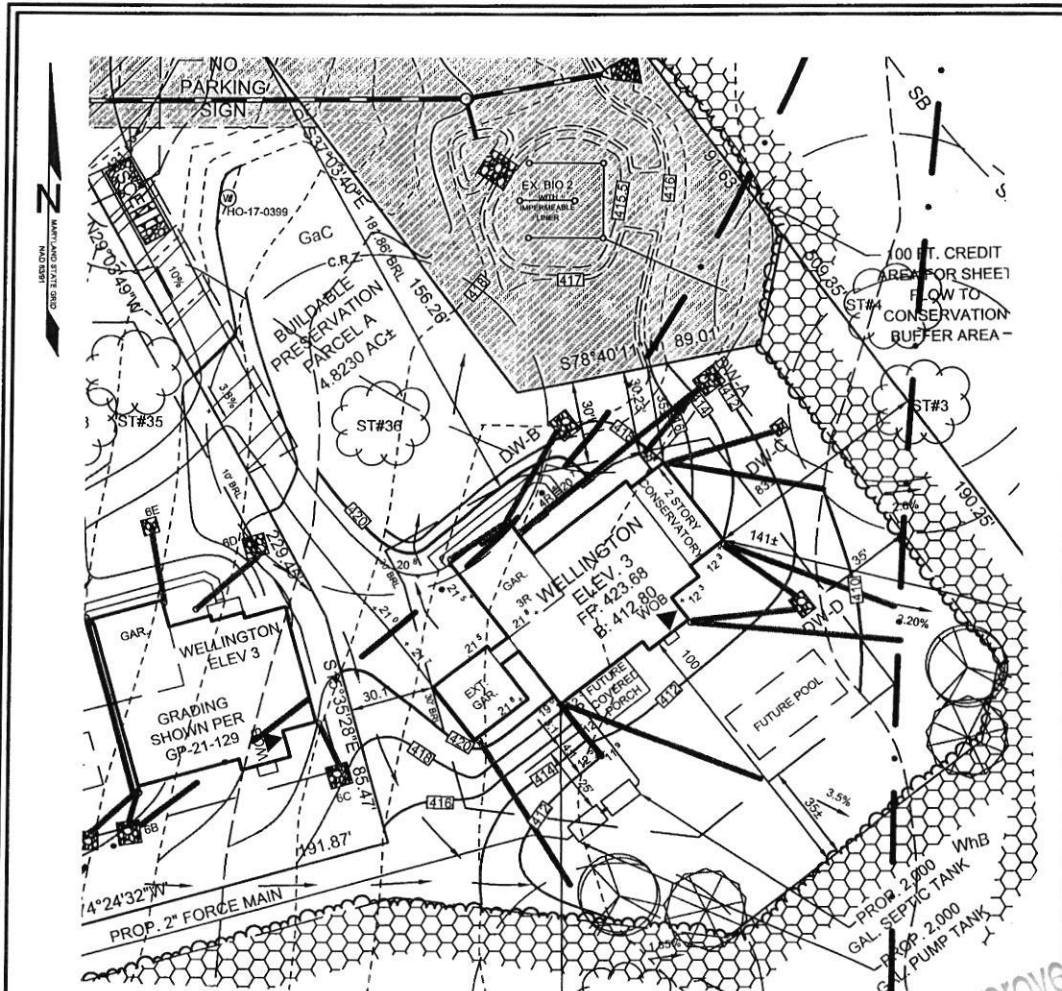
ex. house

A

- T1 - 510' to A
- T2 - 498' to A
- T3 - 492' to A

510'





16005 Frederick Road, 2nd Floor
 Woodbine, Maryland 21797
 Phone: 443.325.5076
 Fax: 410.696.2022
 Email: info@sillengineering.com
 Civil Engineering for Land Development



DESIGN BY: PS
 DRAWN BY: JC
 CHECKED BY: PS
 SCALE: 1"=50'
 DATE: NOVEMBER 19, 2021
 PROJECT #: 20-003
 SHEET #: 1 OF 1

HOUSE RESITE
 THE WOODLANDS
 PARCEL A

TAX MAP 28 GRID 23
 5TH ELECTION DISTRICT

PARCEL 15
 HOWARD COUNTY, MARYLAND

Approved Septic System Plan
 Howard County Health Department
 6 Bedroom Residence
 as illustrated

12/9/2021
 Date

Signature

9/6/22

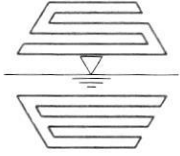
5644 Dosa Ct.

Riser extension completed
by Hatfields 



9/2/22 - 5644 Dosa Ct.





16005 Frederick Road, 2nd Floor
Woodbine, MD 21797
Website: www.sillengineering.com

Office: 443-325-5076
Fax: 410-696-2022
Email: info@sillengineering.com
Civil Engineering for Land Development

SILL ENGINEERING GROUP, LLC

The Woodlands

Parcel A

5644 Dosa Court

Onsite Sewage Disposal System Report

April 5, 2021

Revised October 4, 2021

Revised November 9, 2021

Approved Septic System Plan
Howard County Health Department
[Signature]
Signature
12/1/2021
Date

Prepared For:

Williamsburg Group
5485 Harpers Farm Road, Suite 200
Columbia, Maryland 21044



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. 32025, Expiration Date: June 20, 2023

Pressure Network Design

- Design Flow: 900 gpd
- Diameter of force main = 2.0"
- Material: Schedule 40 PVC

Septic System Trench Design Specifications

Initial System:

- Design Flow:
 - 6 bedrooms at 150 gpd
 - $6 \times 150 \text{ gpd} = 900 \text{ gpd}$
- Application Rate: 0.8
 - Effective Area Beginning Depth: 4.0'
 - Bottom Maximum Depth: 8.0'
- Square Footage of Drain Field Required:
 - Design Flow (900 gpd) / Application Rate (0.8) = 1,125 sf
- Sidewall Reduction Credit:
 - Trench Width (W) = 3'
 - Trench Effective Depth (D) = 4.0'
 - $(W+2) / (W+1+2D) \times 100 = 42\%$
- Linear Length of Trench Required:
 - $$\frac{\text{Drain Field Square Footage (1,125)} \times \text{Sidewall Reduction Credit (0.42)}}{\text{Trench Width (3')}}$$

Liner Length of Trench Required = 157.5'
- Linear Length of Trench Provided = 159.0'
 - Three trenches at 53.0 LF each

Pumping System Design

- Dose Calculations:
 - Design Flow: 900 gpd
 - Force Main: 509.56'
 - Volume of 2.0" pipe: 17.4 gallons per 100'
 - Dose to be the larger of:
 - $1/6^{\text{th}}$ the design flow: $1/6 \times 900 \text{ gallons} = 150 \text{ gallons}$
 - OR
 - Volume of Force Main:
 - 88.66 gallons
 - Minimum Dose = 150 gallons + 88.66 gallons (from force main volume) = 238.66.
 - Use 239 gallons.
- Pump Design:
 - Pump flow required: 35.4 gpm: Use 36 gpm
 - Dose amount: 239 gallons
 - Pump run time: 6.75 minutes

The Woodlands, Parcel A
 5644 Dosa Court
 November 9, 2021

- Static head (see profile for detail): 53.1'

- Pipe Lengths:
 - 2.0" Force Main: 491.46'
- Friction head calculation (Table 4.3):

Pipe	2.0" Force Main	3.0" Manifold	1.5" Lateral
1/4 Bend (90°)	3 @ 7.0' = 21.0'	-	-
1/8 Bend (45°)	3 @ 4.0' = 12.0'	-	-
1/16 Bend (22.5°)	1 @ 2.0' = 2.0'	-	-
1/32 Bend (11.25°)	1 @ 1.0' = 1.0'	-	-
5° Sweep	1 @ 1.0' = 1.0'	-	-
Standard Tee		-	-
Run Tee	-	-	-
Cross	-	-	-
Reducer	-	-	-
Couplings	31 @ 3.0' = 93.0'	-	-
Quick Connect/Disconnect	1 @ 1.35' = 1.35'	-	-
Total Equivalent Length of pipe	131.35'	N/A	N/A

- Flow at 2.0" pipe (force main) = 36 gpm
 - Friction loss per 100' (Table 4.4) of 2.0" schedule 40 plastic pipe: 2.16
 - Total equivalent length of 2.0" FM and appurtenances =
 $509.56' + 131.35' = 640.91/100 = 6.409 \times 2.16 = 13.84'$

- Total Friction Head = 13.84'

- Total Dynamic Head = Static head + Friction head =
 $53.1' + 13.84' = 66.94'$ Use 67'

- Pump Chamber Design:
 - For pump tank dimensions and detail, see plans.
 - Cross sectional area of tank: 75.0272 cf per one vertical foot
 - Pump chamber elevations:
 - Proposed grade at top of tank (at inlet): 411.74
 - Top of pump tank (interior): 408.55
 - Pump chamber invert in: 407.88
 - High Water Alarm: ~~406.55~~ 406.69 *reb*
 - Pump On: ~~406.05~~ 406.19
 - Pump Off: 405.76
 - Bottom inside slab of tank: 403.71

32,266.7
 241

The Woodlands, Parcel A
5644 Dosa Court
November 9, 2021

- Pump Chamber volumes:

Invert In to High Water Alarm: ~~99.7862~~ cf or 746.45 gallons

Pump On to Pump Off: ~~21.7579~~ cf or 162.76 gallons

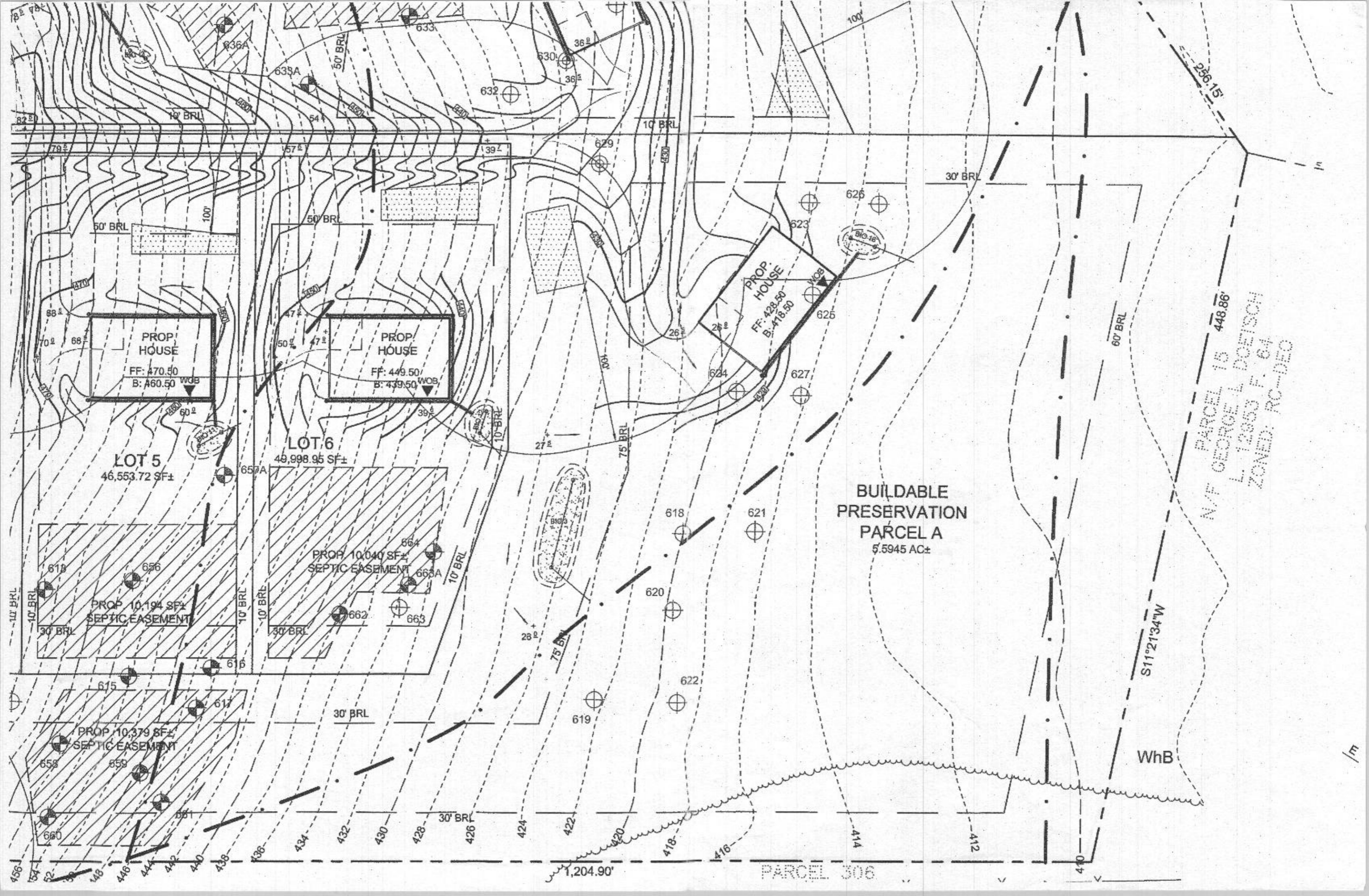
Excess volume above Pump On: 187.5680 cf or 1,403.11 gallons

- Design based on:

- Myers ME100 1 HP series model pump or equivalent

- Babylon Vault 2,000-gallon septic tank or equivalent

RB
89.2823 ft³ 667.8321 gal
~~98.0326~~ ~~673~~ gal
~~31.5774~~ 322617 ft³ 241.3175 gal
139.5506 ft³ 1,043.8384 gal RB



PROP HOUSE
FF: 470.50
B: 460.50
WOB

PROP HOUSE
FF: 449.50
B: 439.50
WOB

PROP HOUSE
FF: 428.50
B: 418.50
WOB

LOT 5
46,553.72 SF±

LOT 6
49,998.95 SF±

PROP 10,194 SF±
SEPTIC EASEMENT

PROP 10,040 SF±
SEPTIC EASEMENT

PROP 10,379 SF±
SEPTIC EASEMENT

BUILDABLE PRESERVATION
PARCEL A
5.5945 AC±

N/F PARCEL 15 448.86'
L/ GEORGE L. DOEISELICH
12953 F. 64
ZONED: RC-DEO

PARCEL 306

S11°21'34"W

WhB

1,204.90'

SOILS LEGEND			
SYMBOL	NAME / DESCRIPTION	GROUP	'K' FACTOR
GaC	GALA LOAM, 8 TO 15 PERCENT SLOPES	B	0.24
GpB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	B	0.20
GpB	GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES	C	0.37
MaD	MANOR LOAM, 15 TO 25 PERCENT SLOPES	B	0.24
WpB	WILTSHIRE SILT LOAM, 3 TO 8 PERCENT SLOPES	C	0.24

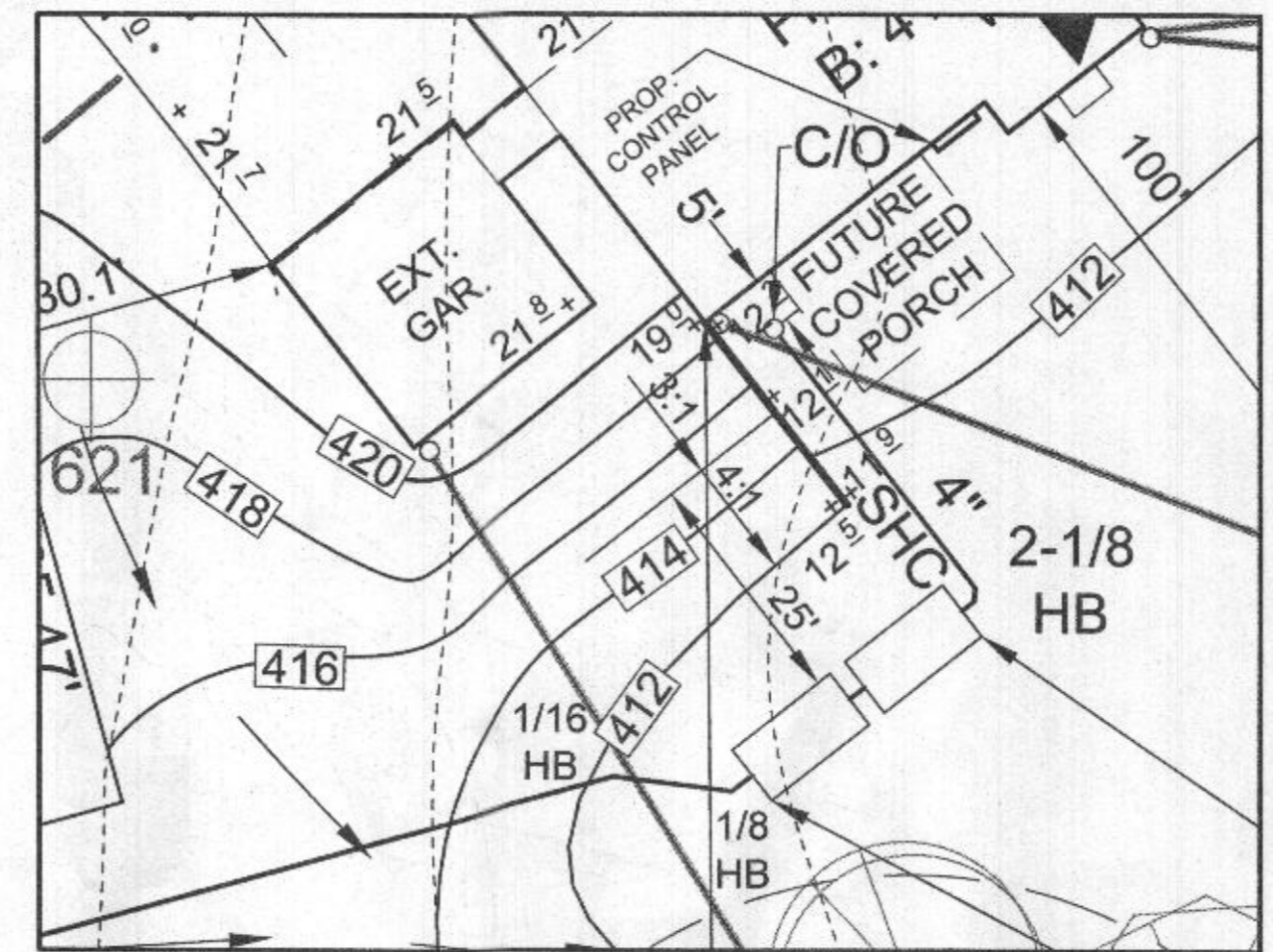
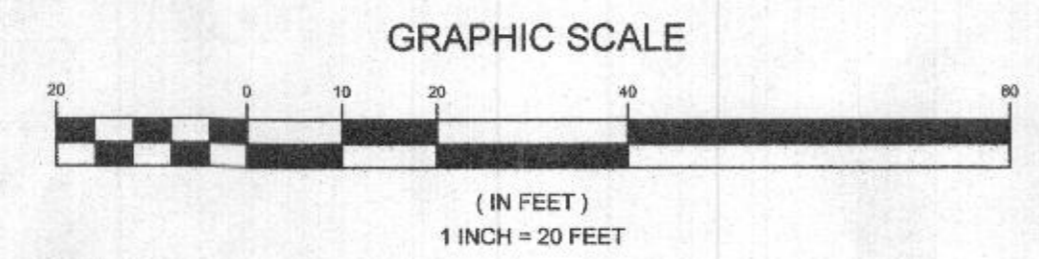
NOTES:
 1) SOIL INFORMATION HAS BEEN TAKEN FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, WEB SOIL SURVEY.
 2) HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR 'K' GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT.

SEPTIC SYSTEM TRENCH DESIGN SPECIFICATIONS

- INITIAL SYSTEM SYSTEM**
 -APPLICATION RATE: 0.8
 -EFFECTIVE AREA BEGINNING DEPTH: 4.0'
 -BOTTOM MAXIMUM DEPTH: 8.0'
- DESIGN FLOW:
 -8 BEDROOMS AT 150 GALLONS PER DAY (GPD)
 -6X150 GPD = 900 GPD
 - SQUARE FOOTAGE OF DRAIN FIELD REQUIRED:
 -DESIGN FLOW (900 GPD) / APPLICATION RATE (0.8) = 1,125 SF
 - SIDEWALL REDUCTION CREDIT:
 -TRENCH WIDTH (W) = 3.0'
 -TRENCH EFFECTIVE DEPTH (D) = 4.0'
 - $(W^2) / (W+1.2D) \times 100 = 42\%$
 - LINEAR LENGTH OF TRENCH REQUIRED:
 -DRAIN FIELD SQUARE FOOTAGE (1,125) X SIDEWALL REDUCTION CREDIT (42%) / TRENCH WIDTH (3.0') = 157.5'
 - LINEAR LENGTH OF TRENCH PROVIDED = 199'
 -THREE TRENCHES AT 63 LF EACH
 - EXISTING GROUND:
 TRENCH 11: 457.3
 INVERT:
 TRENCH 12: 456.6
 TRENCH 13: 454.6
 TRENCH 14: 454.1
 TRENCH 15: 452.1

- FIRST REPLACEMENT SYSTEM**
 -APPLICATION RATE: 0.8
 -EFFECTIVE AREA BEGINNING DEPTH: 4.0'
 -BOTTOM MAXIMUM DEPTH: 8.0'
- DESIGN FLOW:
 -8 BEDROOMS AT 150 GALLONS PER DAY (GPD)
 -6X150 GPD = 900 GPD
 - SQUARE FOOTAGE OF DRAIN FIELD REQUIRED:
 -DESIGN FLOW (900 GPD) / APPLICATION RATE (0.8) = 1,125 SF
 - SIDEWALL REDUCTION CREDIT:
 -TRENCH WIDTH (W) = 3.0'
 -TRENCH EFFECTIVE DEPTH (D) = 4.0'
 - $(W^2) / (W+1.2D) \times 100 = 42\%$
 - LINEAR LENGTH OF TRENCH REQUIRED:
 -DRAIN FIELD SQUARE FOOTAGE (1,125) X SIDEWALL REDUCTION CREDIT (42%) / TRENCH WIDTH (3.0') = 157.5'
 - LINEAR LENGTH OF TRENCH PROVIDED = 159'
 -TWO TRENCHES 79 LF EACH
 - EXISTING GROUND:
 TRENCH R1-1: 451.4
 INVERT:
 TRENCH R1-2: 448.0
 TRENCH R1-2: 447.0

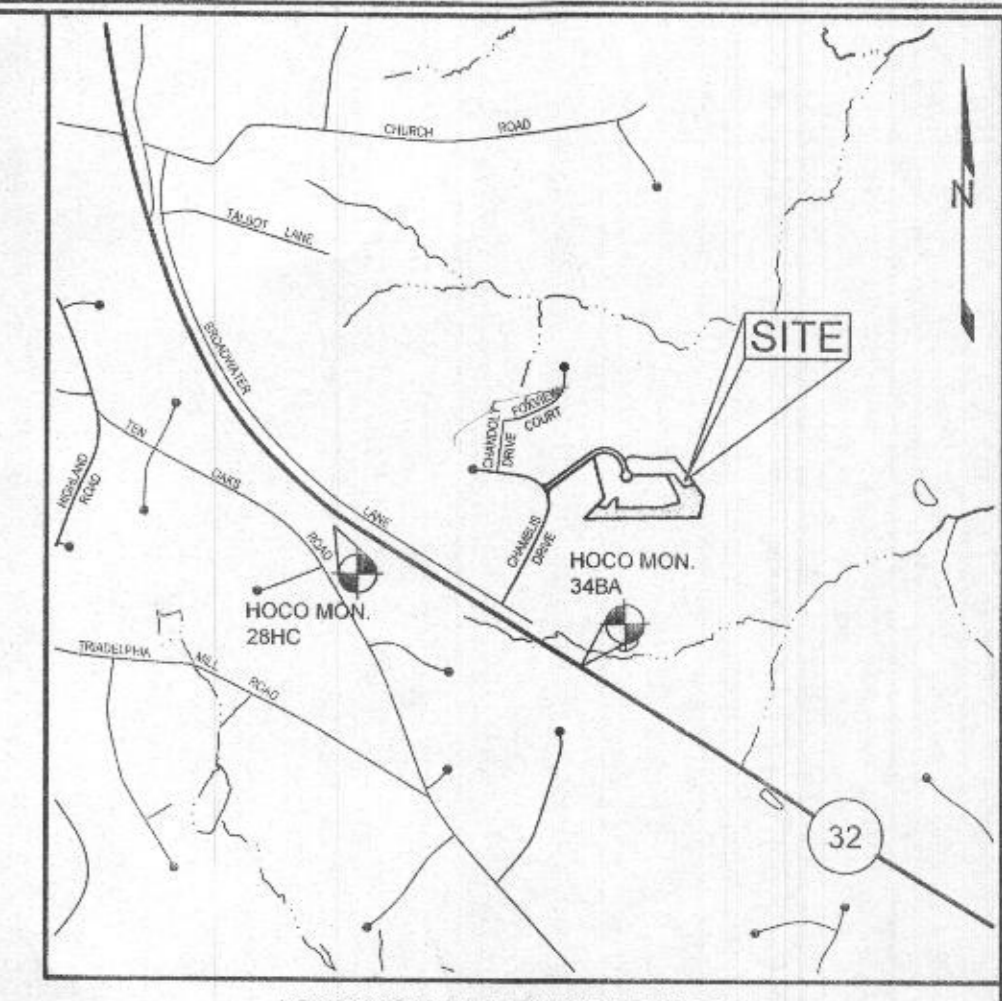
- SECOND REPLACEMENT SYSTEM**
 -APPLICATION RATE: 1.2
 -EFFECTIVE AREA BEGINNING DEPTH: 4.0'
 -BOTTOM MAXIMUM DEPTH: 7.0'
- DESIGN FLOW:
 -8 BEDROOMS AT 150 GALLONS PER DAY (GPD)
 -6X150 GPD = 900 GPD
 - SQUARE FOOTAGE OF DRAIN FIELD REQUIRED:
 -DESIGN FLOW (900 GPD) / APPLICATION RATE (1.2) = 750 SF
 - SIDEWALL REDUCTION CREDIT:
 -TRENCH WIDTH (W) = 3.0'
 -TRENCH EFFECTIVE DEPTH (D) = 3.0'
 - $(W^2) / (W+1.2D) \times 100 = 50\%$
 - LINEAR LENGTH OF TRENCH REQUIRED:
 -DRAIN FIELD SQUARE FOOTAGE (750) X SIDEWALL REDUCTION CREDIT (50%) / TRENCH WIDTH (3.0') = 125.0'
 - LINEAR LENGTH OF TRENCH PROVIDED = 125'
 -TWO TRENCHES 62.5 LF EACH
 - EXISTING GROUND:
 TRENCH R2-1: 446.6
 INVERT:
 TRENCH R2-1: 444.6
 TRENCH R2-2: 444.5
 TRENCH R2-2: 442.5



SEPTIC TANK AND PUMP TANK PLAN VIEW
SCALE: 1"=20'

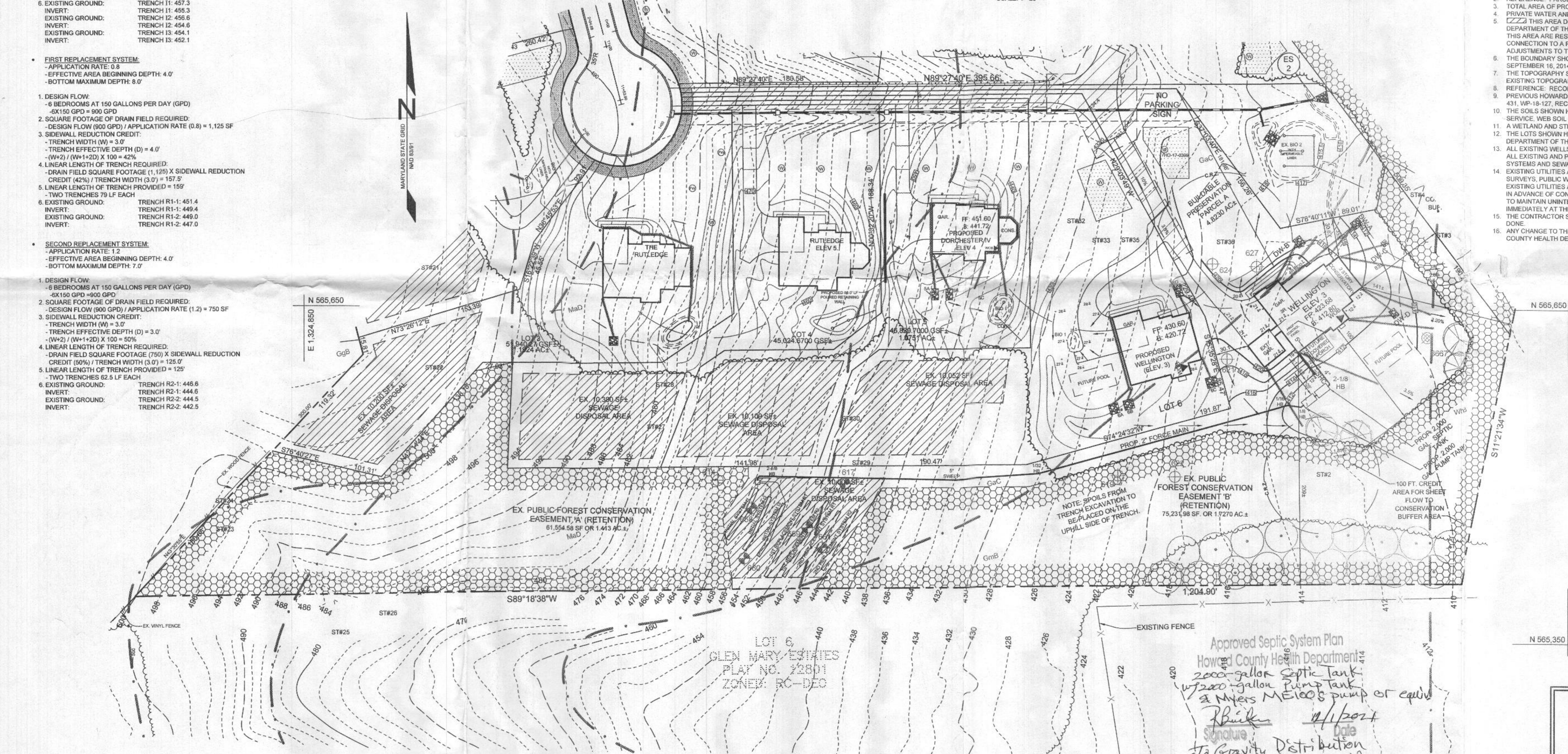
LEGEND

- EXISTING CONTOUR
- PROPOSED CONTOUR
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- DIRECTION OF FLOW
- EXISTING TREELINE
- SOIL BOUNDARY
- EXISTING STREAM
- 100' STREAM BUFFER
- EXISTING SPECIMEN TREE APPROVED FOR REMOVAL IF NECESSARY
- EXISTING WELL
- FUTURE WELL LOCATION
- WALK OUT BASEMENT
- FAILED PERC TEST
- PASSED PERC TEST
- FOREST CONSERVATION EASEMENT

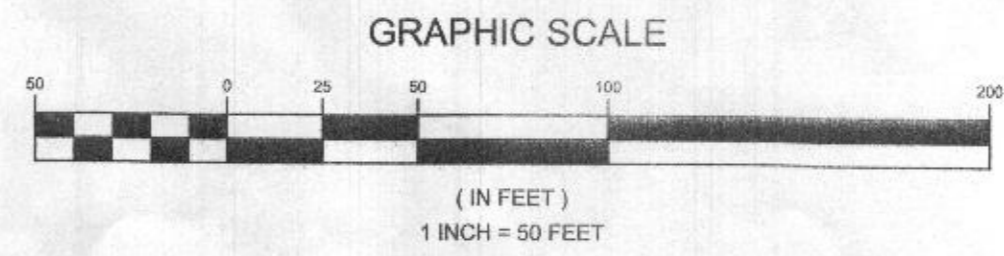


GENERAL NOTES

- SUBJECT PROPERTY ZONED RC-DEO PER 1006/13 COMPREHENSIVE ZONING PLAN.
- REFERENCE: PARCEL A, 5644 DOSA COURT, CLARKSVILLE 21029.
- TOTAL AREA OF PROPERTY = 4.8230 AC ±
- PRIVATE WATER AND PRIVATE SEWER WILL BE USED WITHIN THIS SITE.
- THIS AREA DESIGNATES A PRIVATE SEWAGE DISPOSAL AREA OF AT LEAST 10,000 SF AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL (COMAR 26.04.03). IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THESE AREAS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWAGE AREA. RECORDATION OF A MODIFIED SEWAGE AREA SHALL NOT BE NECESSARY.
- THE BOUNDARY SHOWN HEREON IS BASED ON A FIELD RUN BOUNDARY SURVEY PREPARED BY ADCOCK & ASSOCIATES, LLC ON SEPTEMBER 16, 2014.
- THE TOPOGRAPHY SHOWN HEREON HAS BEEN FIELD RUN BY ADCOCK & ASSOCIATES, LLC ON SEPTEMBER 16, 2014. THE EXISTING TOPOGRAPHY SHOWN OUTSIDE THE SITE IS BASED ON HOWARD COUNTY AERIAL TOPOGRAPHY FLOWN IN 2004. REFERENCE: RECORDED PLAT NO. 25051.
- PREVIOUS HOWARD COUNTY FILE NUMBERS: RECORD PLAT NO. 5471, F-83-114, ECP-15-032, WP-16-017, WP-17-000, SP-16-008, PB 431, WP-18-127, RECORD PLAT NO. 25051, F-18-094.
- THE SOILS SHOWN HAVE BEEN TAKEN FROM THE US DEPARTMENT OF AGRICULTURE, NATURAL RESOURCE CONSERVATION SERVICE, WEB SOIL SURVEY WEBSITE. HOWARD COUNTY SOILS GRID 12, SUB-GRID 205.
- A WETLAND AND STREAM STUDY HAS BEEN PREPARED BY ECO SCIENCE PROFESSIONALS, INC. IN NOVEMBER 2014.
- THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP, WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT.
- ALL EXISTING WELLS, SEPTIC SYSTEMS AND SEWAGE DISPOSAL AREAS WITHIN 100 FEET OF THE PROPERTY BOUNDARIES AND ALL EXISTING AND PROPOSED WELLS THAT ARE LOCATED WITHIN 200 FEET DOWN-GRADIENT OF EXISTING OR PROPOSED SEPTIC SYSTEMS AND SEWAGE DISPOSAL AREAS HAVE BEEN FIELD LOCATED.
- EXISTING UTILITIES ARE LOCATED BY THE USE OF ANY OR ALL OF THE FOLLOWING: ROAD CONSTRUCTION PLANS, FIELD SURVEYS, PUBLIC WATER AND SEWER PLANS AND OTHER AVAILABLE RECORD DRAWINGS. APPROXIMATE LOCATION OF THE EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTOR'S INFORMATION. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO THE CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- 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.



PLAN VIEW
SCALE: 1"=50'



Approved Septic System Plan
 Howard County Health Department
 2000-gallon Septic Tank
 w/ 2000-gallon Pump Tank
 & 1/2" Meters M-100's pump or equal
 [Signature]
 Date: 11/18/2021
 To Gravity Distribution
 for 6-bedroom residence

OWNER
 WILLIAMSBURG GROUP
 5485 HARPERS FARM ROAD, SUITE 200
 COLUMBIA, MARYLAND 21044
 410.997.8800

DEVELOPER
 DOSA CLARKSVILLE, LLC
 5600 WHALE BOAT DRIVE UNIT #206
 CLARKSVILLE, MD, 21029
 301.370.6868

ONSITE SEWAGE DISPOSAL SYSTEM PLAN THE WOODLANDS 5644 DOSA COURT, PARCEL A

TAX MAP 28 GRID 23
 5TH ELECTION DISTRICT

P/O PARCEL 15
 HOWARD COUNTY, MARYLAND



SILL ENGINEERING GROUP, LLC
 16905 Frederick Road, 2nd Floor
 Woodbine, Maryland 21797
 Phone: 443.325.5076
 Fax: 410.696.2022
 Email: info@sillengineering.com
 Civil Engineering for Land Development

DESIGN BY: PS
 DRAWN BY: TB
 CHECKED BY: PS
 SCALE: AS SHOWN
 DATE: NOVEMBER 18, 2021
 PROJECT #: 20-003
 SHEET #: 1 of 2

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. 32025, EXPIRATION DATE JUNE 20, 2023.

SOILS LEGEND			
SYMBOL	NAME / DESCRIPTION	GROUP	'K' FACTOR
CgC	GAILA LOAM, 6 TO 15 PERCENT SLOPES	B	0.24
CgB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	B	0.20
CmB	GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES	C	0.37
MaD	MANOR LOAM, 15 TO 25 PERCENT SLOPES	B	0.24
WmB	WILTSHIRE SILT LOAM, 3 TO 8 PERCENT SLOPES	C	0.24

NOTES:
 1) SOIL INFORMATION HAS BEEN TAKEN FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, WEB SOIL SURVEY.
 2) HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR 'K' GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT.

EFFLUENT PUMPS

MYERS® ME SERIES

DIMENSIONS **PUMP PERFORMANCE**

Capacity liters per minute

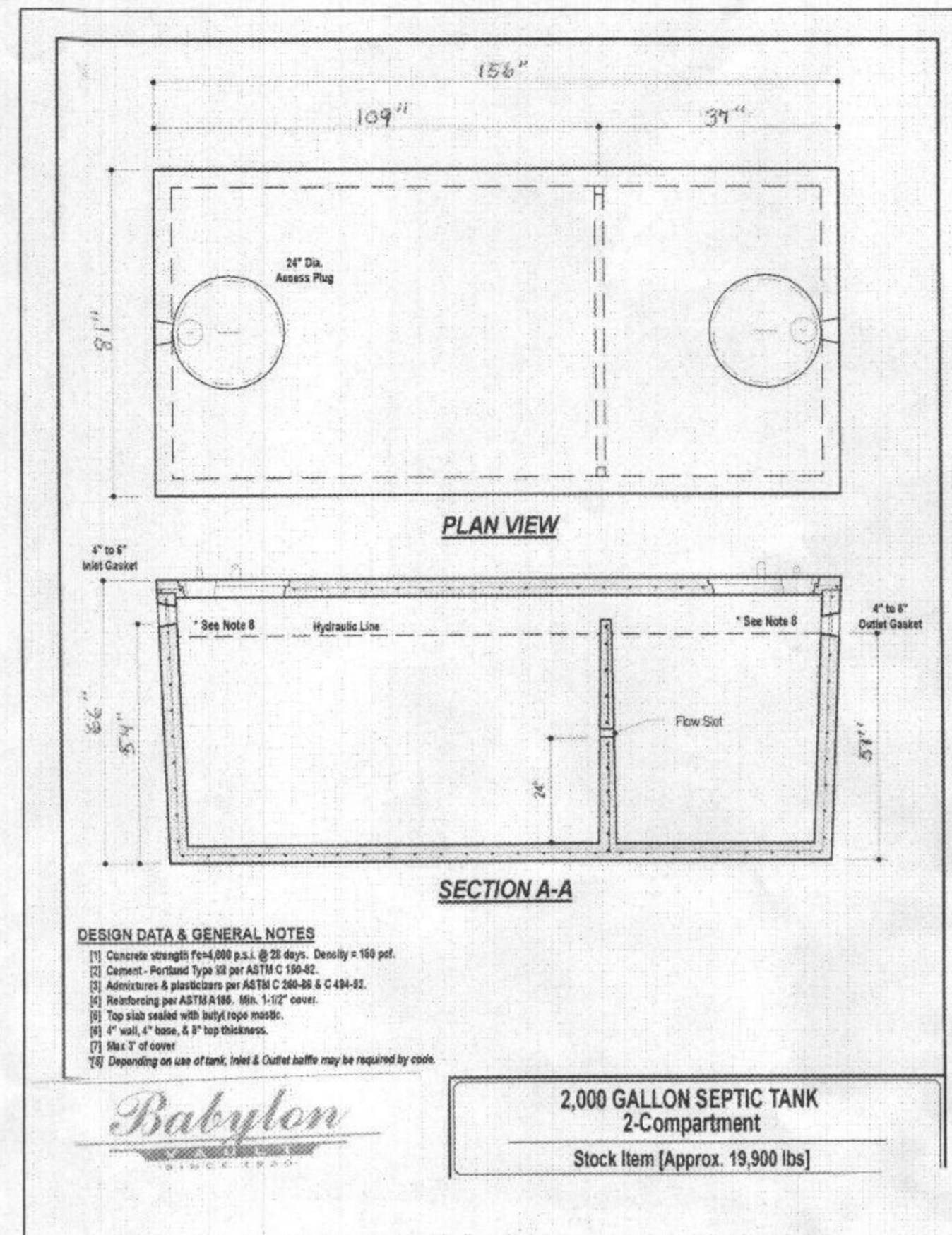
Capacity gallons per minute

36 GPM

Catalog Number	A	B	C	F
ME305	16.8	4.99	1.03	12.13
ME307	16.8	4.99	1.03	12.13
ME309	16.8	4.99	1.03	12.13
ME355, ME1005, ME1505	16.8	4.99	1.03	12.13
ME750, ME1000, ME1500	16.8	4.99	1.03	12.13

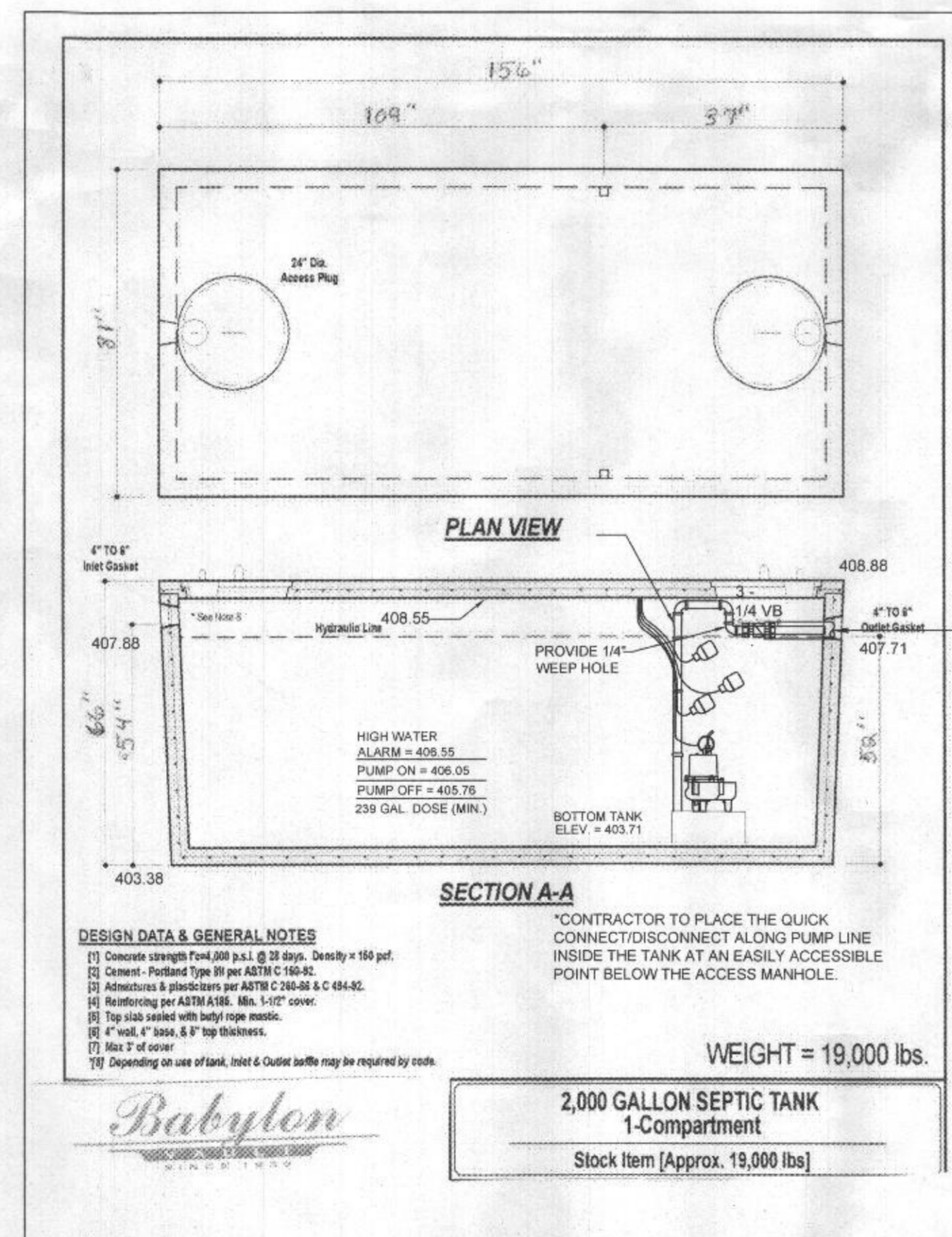
PENTAIR

*NOTE: A MYERS ME100 1 HP SERIES MODEL PUMP OR EQUIVALENT IS RECOMMENDED FOR THIS DESIGN.



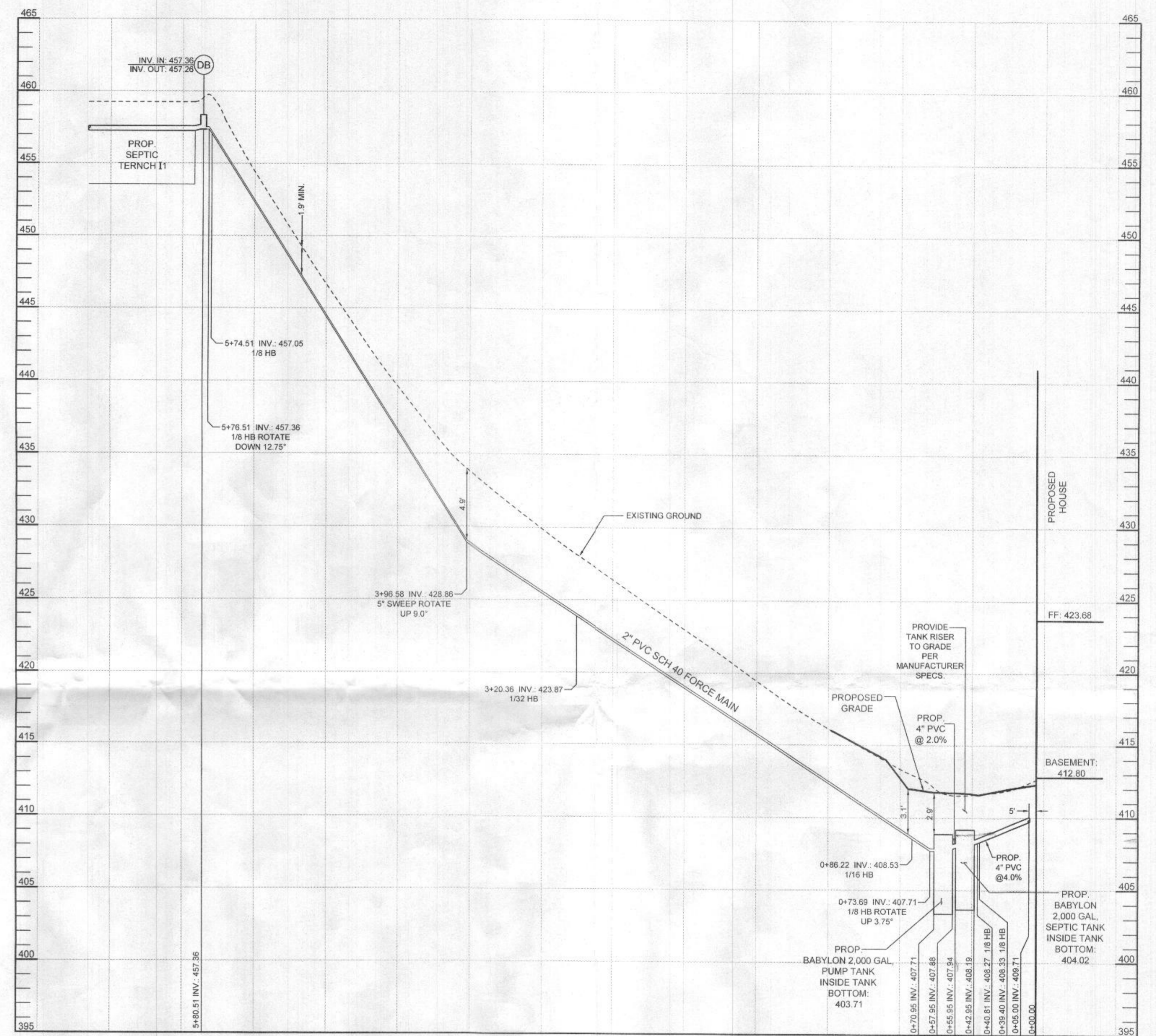
PROPOSED 2,000-GALLON SEPTIC TANK DETAIL

NOT TO SCALE



PROPOSED 2,000-GALLON PUMP TANK DETAIL

NOT TO SCALE



PROFILE VIEW

HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'

Approved Septic System Plan
Howard County Health Department

Signature _____ Date _____

OWNER

WILLIAMSBURG GROUP
5485 HARRIS FARM ROAD, SUITE 200
COLUMBIA, MARYLAND 21044
410.997.8800

DEVELOPER

DOSA CLARKSVILLE LLC
5900 WHALE BOAT DRIVE UNIT #206
CLARKSVILLE, MD, 21029
301.370.6666

**ONSITE SEWAGE DISPOSAL SYSTEM
PROFILE & DETAILS
THE WOODLANDS**

5644 DOSA COURT, PARCEL A

TAX MAP 28 GRID 23
5TH ELECTION DISTRICT

PIO PARCEL 15
HOWARD COUNTY, MARYLAND



SILL ENGINEERING GROUP, LLC
16005 Frederick Road, 2nd Floor
Woodbine, Maryland 21797
Phone: 443.325.5076
Fax: 410.696.2022
Email: info@sillengrping.com
Civil Engineering for Land Development

DESIGN BY: PS
DRAWN BY: TB
CHECKED BY: PS
SCALE: AS SHOWN
DATE: NOVEMBER 18, 2021
PROJECT #: 20-003
SHEET #: 2 of 2

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. 50205, EXPIRATION DATE: JUNE 20, 2023