

SOILS LEGEND			
SYMBOL	NAME / DESCRIPTION	GROUP	'K' FACTOR
GbC	GLENELG LOAM, 0 TO 3 PERCENT SLOPES	A	0.28
GmC	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	C	0.43
GmB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	C/D	0.37
GbB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	A	0.28

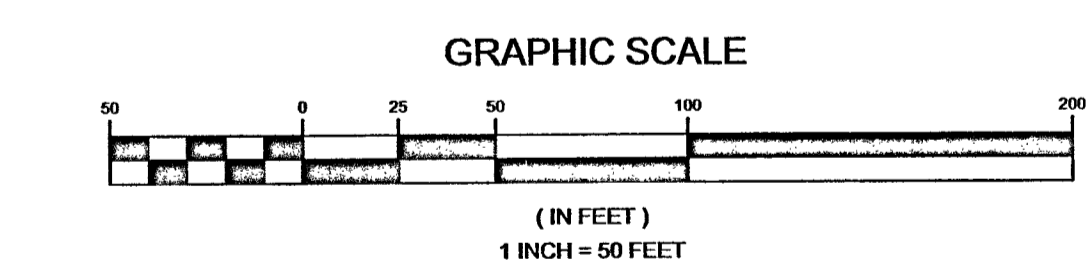
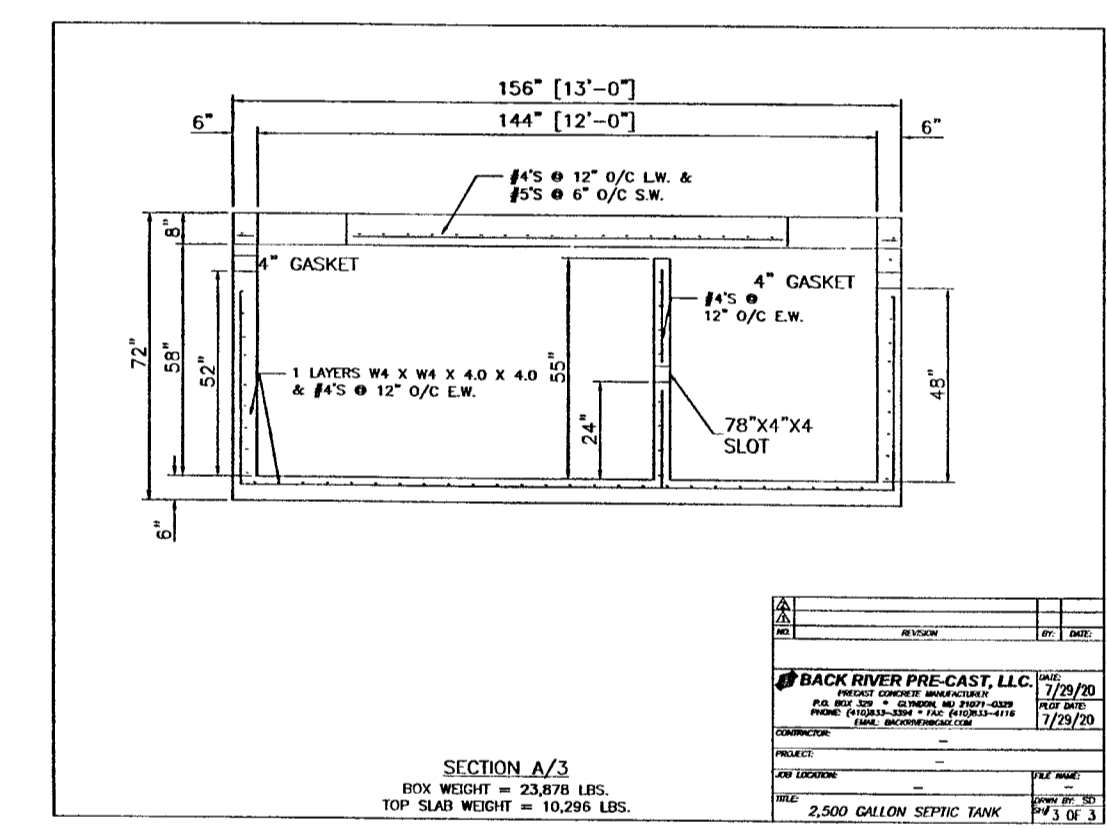
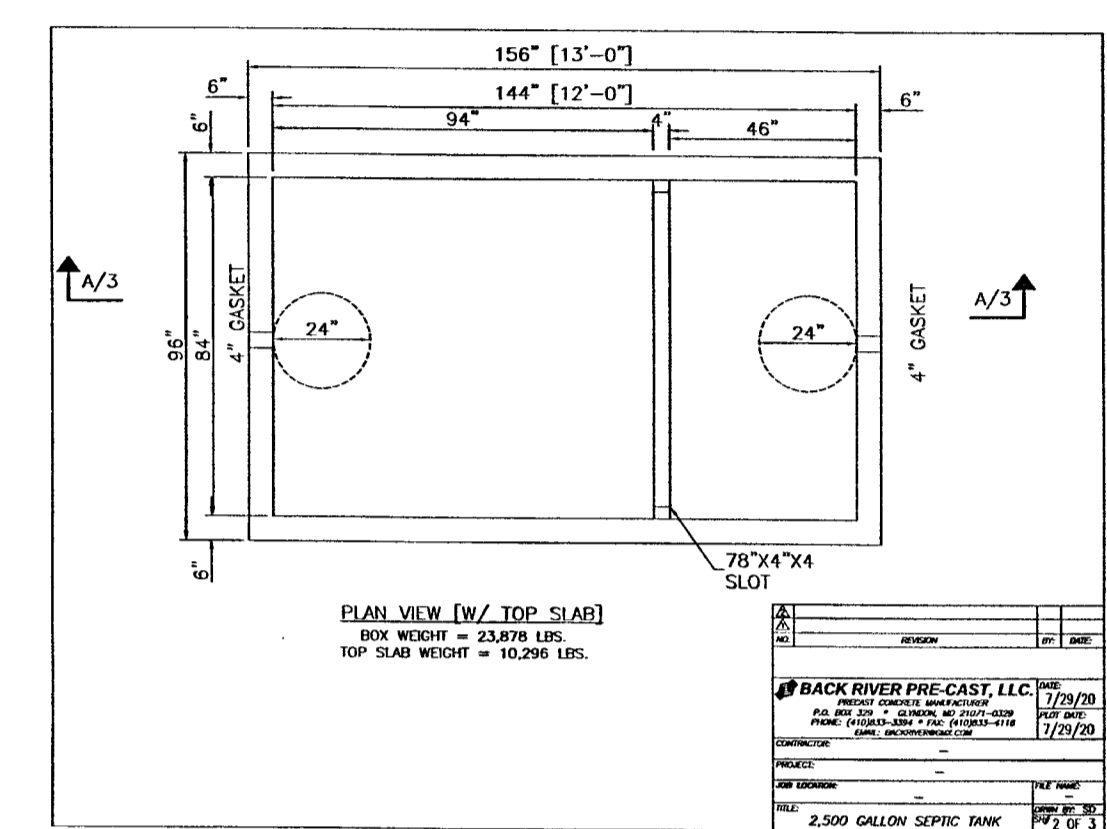
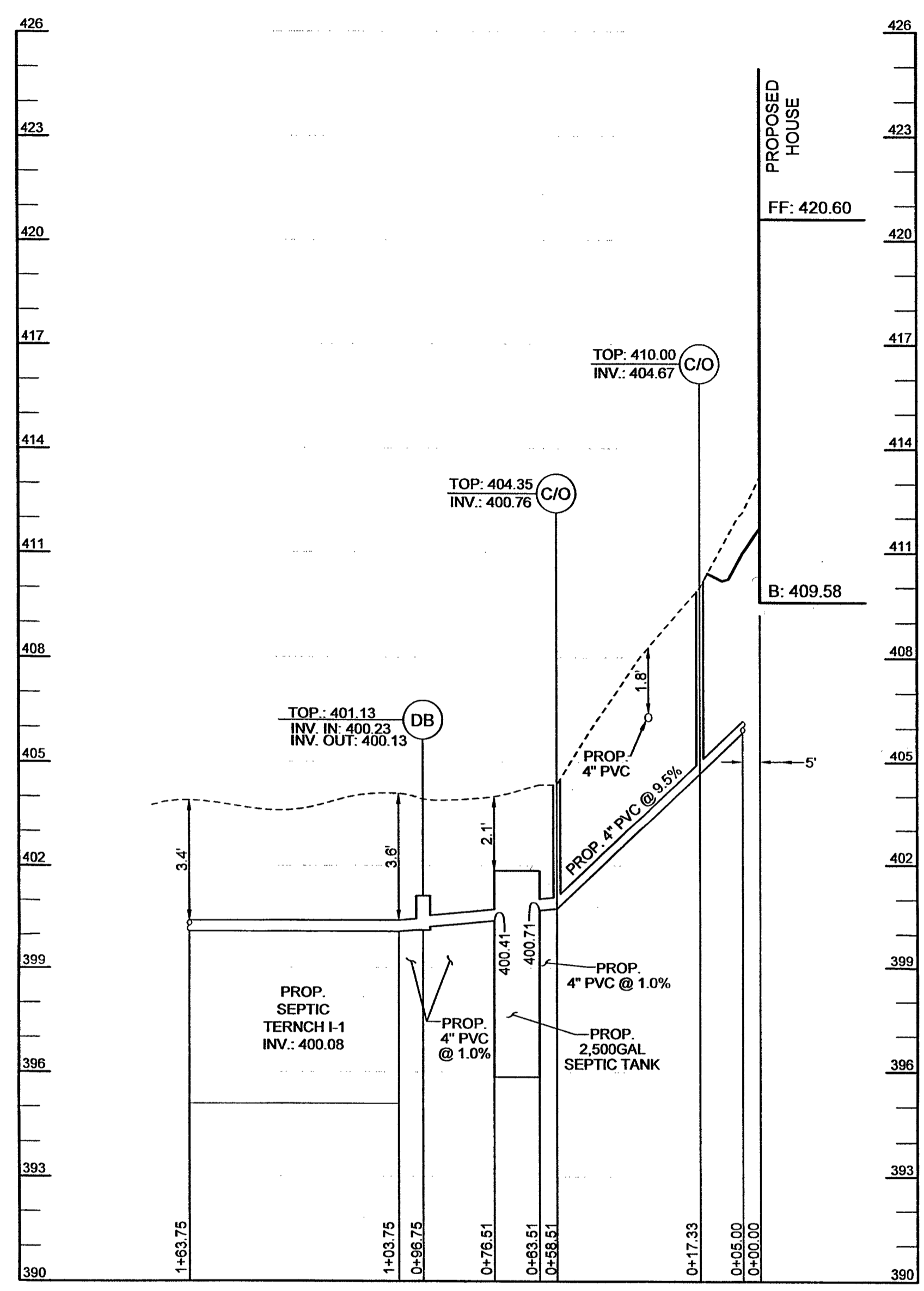
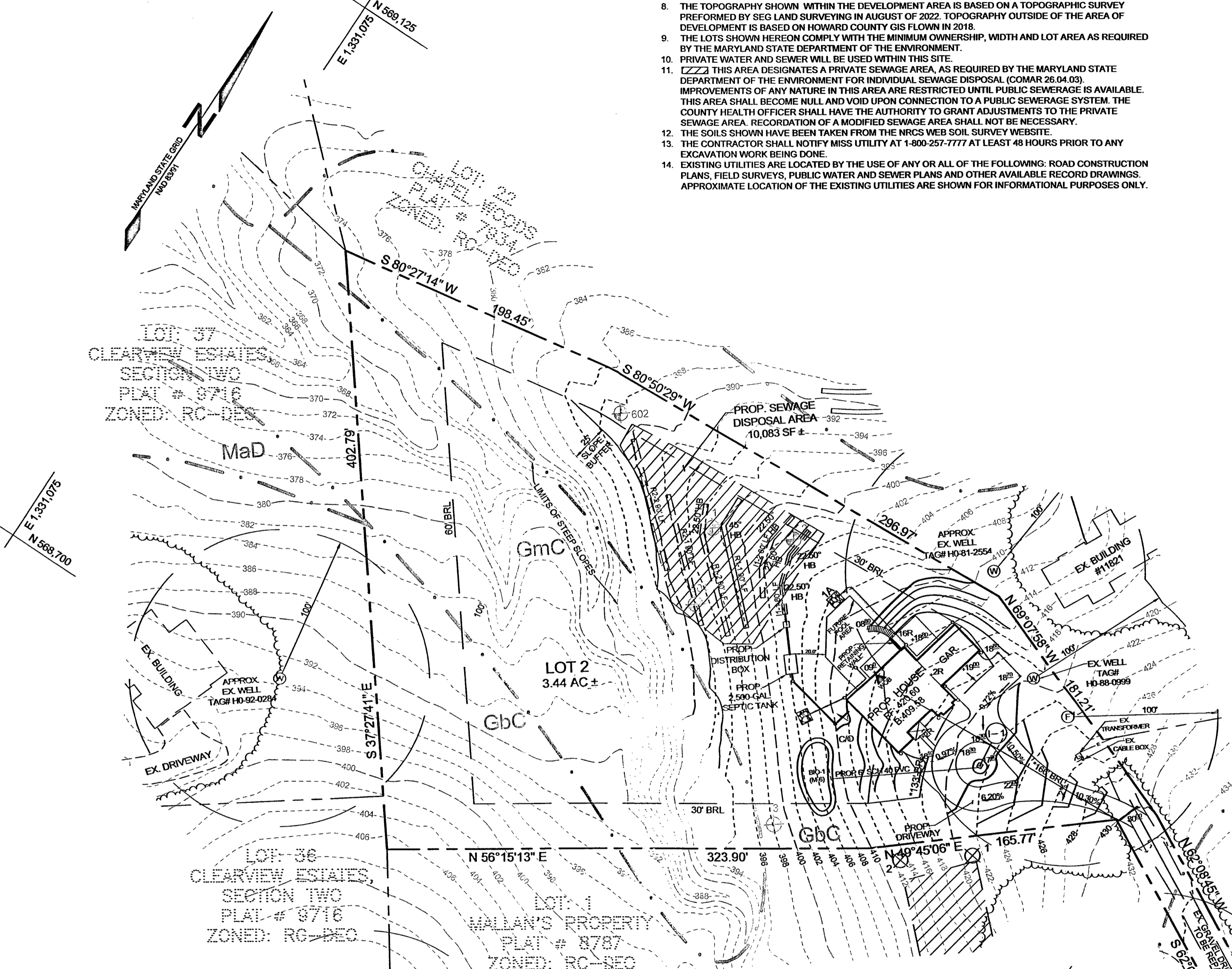
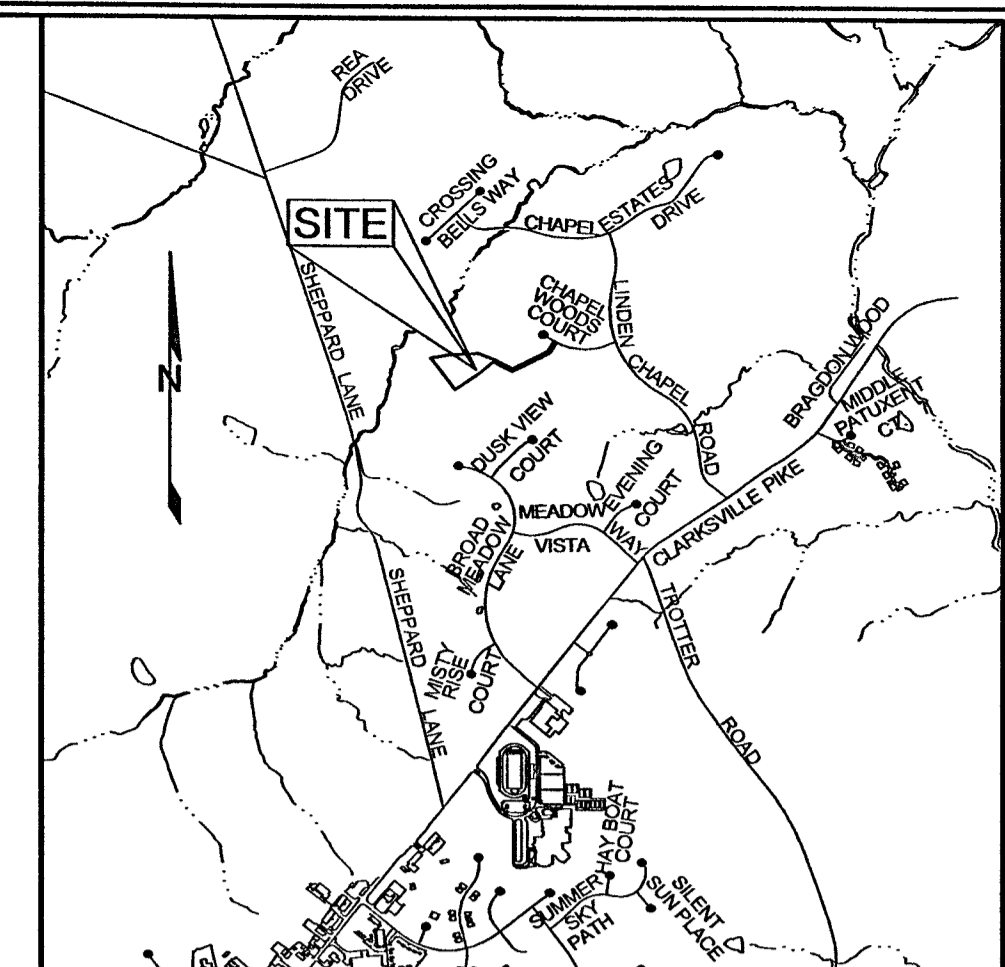
NOTES:
 1) SOIL INFORMATION HAS BEEN TAKEN FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, WEB SOIL SURVEY.
 2) HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR 'K' GREATER THAN 0.35 AND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

GENERAL NOTES

- SUBJECT PROPERTY ZONED RC-DEO IN ACCORDANCE WITH THE OCTOBER 6, 2013 COMPREHENSIVE ZONING PLAN.
- TOTAL AREA OF PROPERTY = 3.44 ACRES±.
- PROPERTY ADDRESS: 11813 CHAPEL WOODS COURT, CLARKSVILLE MD 21029
- PLAT REFERENCE: PLAT #8787
- DEED REFERENCE: LIBER 3743 FOLIO 00571
- PREVIOUS HOWARD COUNTY FILE NUMBERS: STATE OF MARYLAND DEPARTMENT OF THE ENVIRONMENT, WATER AND SCIENCE ADMINISTRATION AUTHORIZATION NUMBER 20-NT-3094/2020060742.
- THE BOUNDARY SHOWN HERE ON IS BASED ON A BOUNDARY SURVEY PERFORMED BY SEG LAND SURVEYING IN NOVEMBER OF 2021.
- THE TOPOGRAPHY SHOWN WITHIN THE DEVELOPMENT AREA IS BASED ON A TOPOGRAPHIC SURVEY PERFORMED BY SEG LAND SURVEYING IN AUGUST OF 2022. TOPOGRAPHY OUTSIDE OF THE AREA OF DEVELOPMENT IS BASED ON HOWARD COUNTY GIS FLOWN IN 2018.
- THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP, WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
- PRIVATE WATER AND SEWER WILL BE USED WITHIN THIS SITE.
- THIS AREA DESIGNATES A PRIVATE SEWAGE AREA, 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. THIS AREA 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 SOILS SHOWN HAVE BEEN TAKEN FROM THE NRCS WEB SOIL SURVEY WEBSITE.
- THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- 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 INFORMATIONAL PURPOSES ONLY.

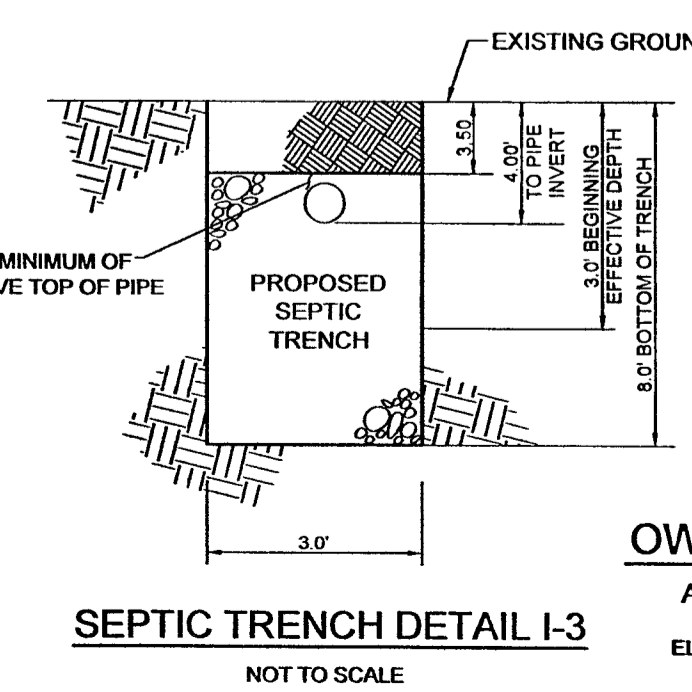
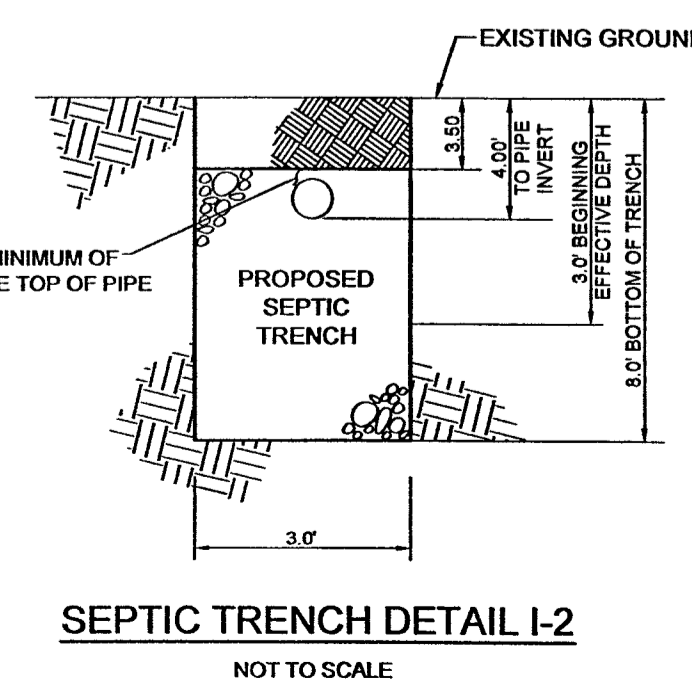
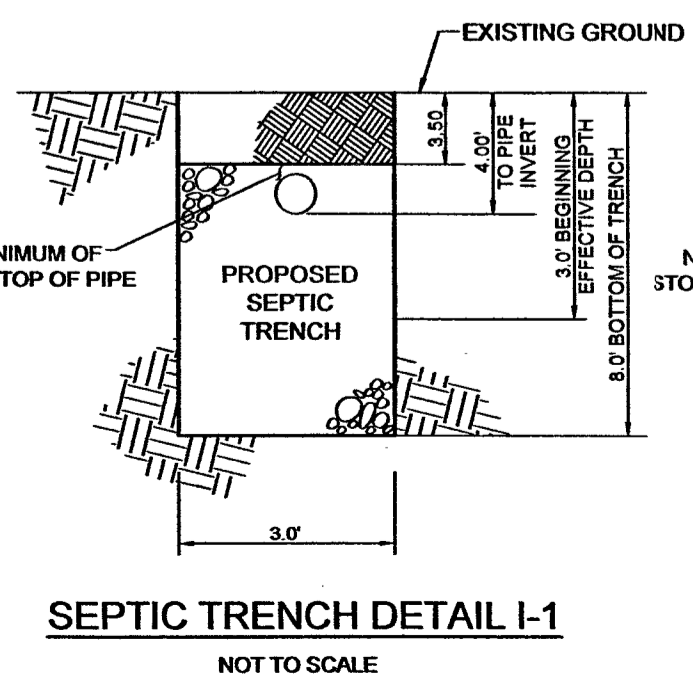
LEGEND

- | | | | | | |
|----------------------------|-----|---------------------|-------|-------------------------------|--|
| EXISTING GIS CONTOUR | --- | EXISTING TREELINE | ~~~~~ | STEEP SLOPES, 25% OR GREATER | |
| EXISTING FIELD RUN CONTOUR | --- | PROPOSED TREELINE | ~~~~~ | PROPOSED SEWAGE DISPOSAL AREA | |
| PROPOSED CONTOUR | --- | EXISTING WELL | (W) | PASSED PERCOLATION TEST HOLE | |
| SOIL BOUNDARY | --- | PROPOSE FUTURE WELL | (F) | FAILED PERCOLATION TEST HOLE | |



SEPTIC SYSTEM TRENCH DESIGN SPECIFICATIONS

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| <ul style="list-style-type: none"> INITIAL SYSTEM SYSTEM: <ul style="list-style-type: none"> - APPLICATION RATE: 1.2 - EFFECTIVE AREA BEGINNING DEPTH: 3.0' - BOTTOM MAXIMUM DEPTH: 8.0' 1. DESIGN FLOW: <ul style="list-style-type: none"> - 8 BEDROOMS AT 150 GALLONS PER DAY (GPD) - 8 X 150 GPD = 1,200 GPD 2. SQUARE FOOTAGE OF DRAIN FIELD REQUIRED: <ul style="list-style-type: none"> - DESIGN FLOW (1,200 GPD) / APPLICATION RATE (1.2) = 1,000 SF 3. SIDEWALL REDUCTION CREDIT: <ul style="list-style-type: none"> - TRENCH WIDTH (W) = 3.0' - TRENCH EFFECTIVE DEPTH (D) = 5.0' - (W*2) / (W+1.2D) X 100 = 36% 4. LINEAR LENGTH OF TRENCH REQUIRED: <ul style="list-style-type: none"> - DRAIN FIELD SQUARE FOOTAGE (1,000) X SIDEWALL REDUCTION CREDIT (36%) / TRENCH WIDTH (3.0) = 120' 5. LINEAR LENGTH OF TRENCH PROVIDED = 120' - TWO TRENCHES AT 60 LF EACH 6. EXISTING GROUND: <ul style="list-style-type: none"> TRENCH I1: 403.7 INVERT: TRENCH I1: 402.0 INVERT: TRENCH I1: 398.0 | <ul style="list-style-type: none"> FIRST REPLACEMENT SYSTEM: <ul style="list-style-type: none"> - APPLICATION RATE: 0.8 - EFFECTIVE AREA BEGINNING DEPTH: 3.0' - BOTTOM MAXIMUM DEPTH: 8.0' 1. DESIGN FLOW: <ul style="list-style-type: none"> - 8 BEDROOMS AT 150 GALLONS PER DAY (GPD) - 8 X 150 GPD = 1,200 GPD 2. SQUARE FOOTAGE OF DRAIN FIELD REQUIRED: <ul style="list-style-type: none"> - DESIGN FLOW (1,200 GPD) / APPLICATION RATE (0.8) = 1,500 SF 3. SIDEWALL REDUCTION CREDIT: <ul style="list-style-type: none"> - TRENCH WIDTH (W) = 3.0' - TRENCH EFFECTIVE DEPTH (D) = 5.0' - (W*2) / (W+1.2D) X 100 = 36% 4. LINEAR LENGTH OF TRENCH REQUIRED: <ul style="list-style-type: none"> - DRAIN FIELD SQUARE FOOTAGE (1,500) X SIDEWALL REDUCTION CREDIT (36%) / TRENCH WIDTH (3.0) = 139' 5. LINEAR LENGTH OF TRENCH PROVIDED = 180' - TWO TRENCHES 90 LF EACH 6. EXISTING GROUND: <ul style="list-style-type: none"> TRENCH R1-1: 398.0 INVERT: TRENCH R1-1: 394.0 EXISTING GROUND: TRENCH R1-2: 396.0 INVERT: TRENCH R1-2: 392.0 | <ul style="list-style-type: none"> SECOND REPLACEMENT SYSTEM: <ul style="list-style-type: none"> - APPLICATION RATE: 0.8 - EFFECTIVE AREA BEGINNING DEPTH: 3.0' - BOTTOM MAXIMUM DEPTH: 8.0' 1. DESIGN FLOW: <ul style="list-style-type: none"> - 8 BEDROOMS AT 150 GALLONS PER DAY (GPD) - 8 X 150 GPD = 1,200 GPD 2. SQUARE FOOTAGE OF DRAIN FIELD REQUIRED: <ul style="list-style-type: none"> - DESIGN FLOW (1,200 GPD) / APPLICATION RATE (0.8) = 1,500 SF 3. SIDEWALL REDUCTION CREDIT: <ul style="list-style-type: none"> - TRENCH WIDTH (W) = 3.0' - TRENCH EFFECTIVE DEPTH (D) = 5.0' - (W*2) / (W+1.2D) X 100 = 36% 4. LINEAR LENGTH OF TRENCH REQUIRED: <ul style="list-style-type: none"> - DRAIN FIELD SQUARE FOOTAGE (1,500) X SIDEWALL REDUCTION CREDIT (36%) / TRENCH WIDTH (3.0) = 139' 5. LINEAR LENGTH OF TRENCH PROVIDED = 180' - TWO TRENCHES 90 LF EACH 6. EXISTING GROUND: <ul style="list-style-type: none"> TRENCH R2-1: 392.0 INVERT: TRENCH R2-1: 388.0 EXISTING GROUND: TRENCH R2-2: 390.0 INVERT: TRENCH R2-2: 386.0 |
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ONSITE SEWAGE DISPOSAL SYSTEM PLAN

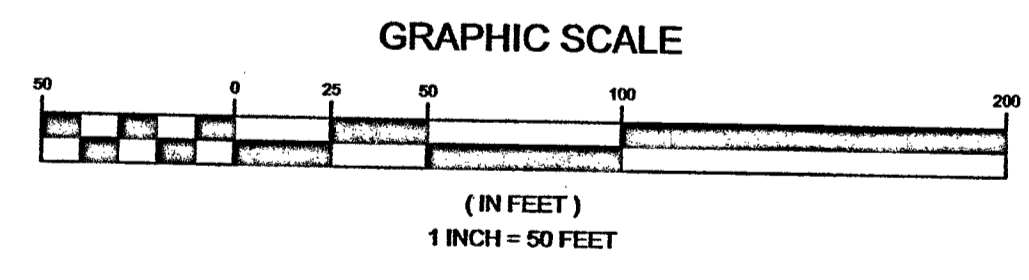
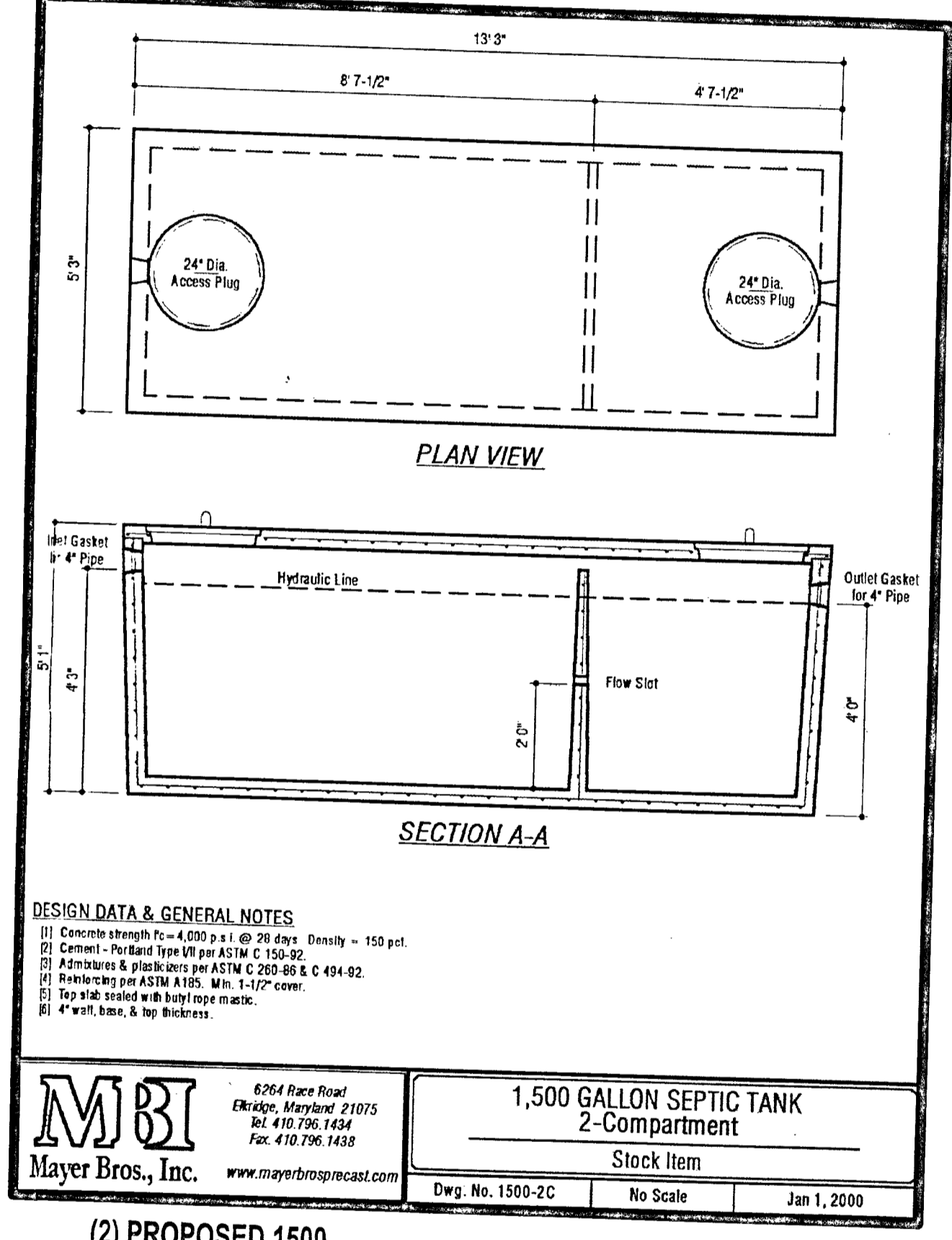
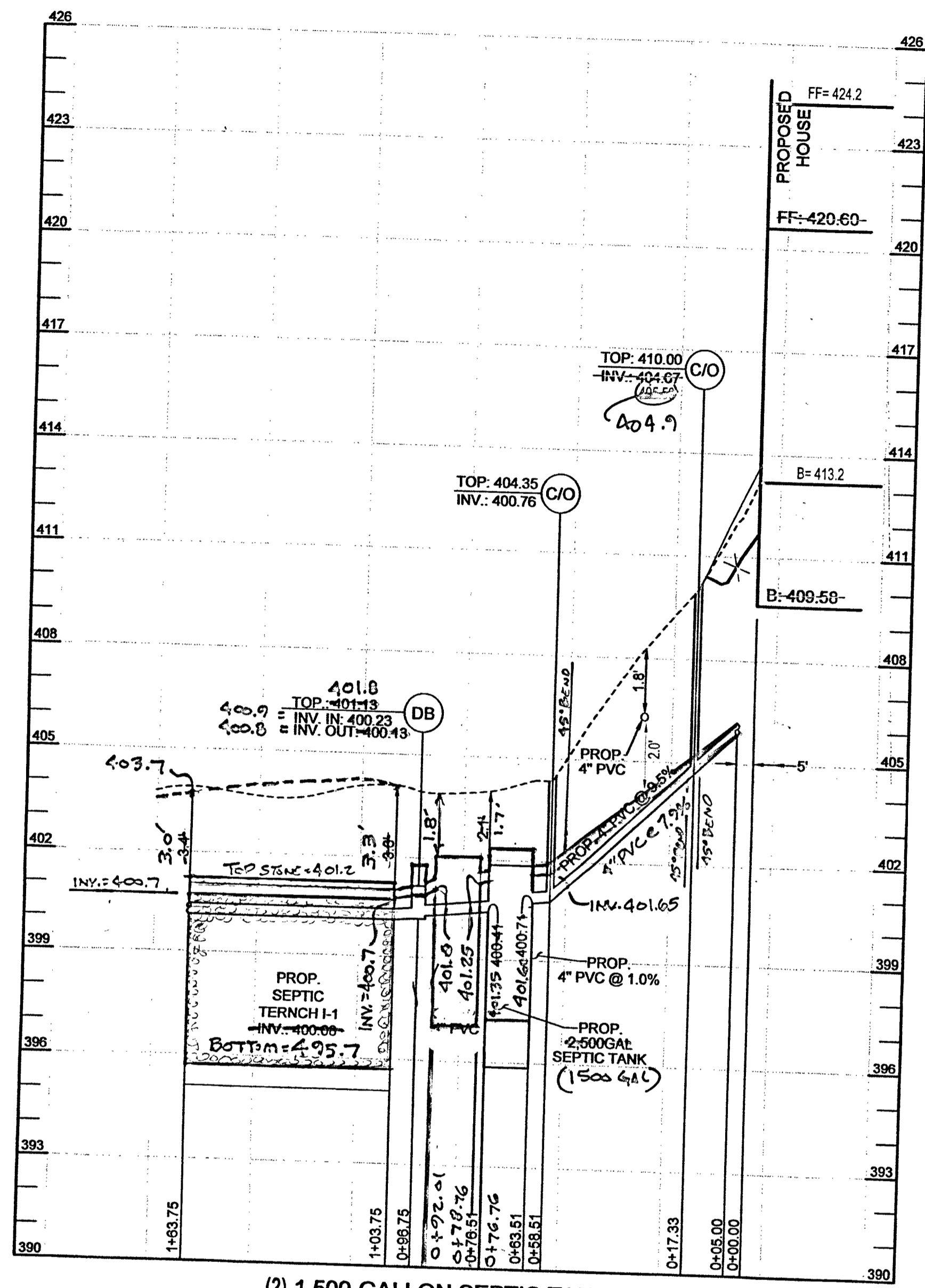
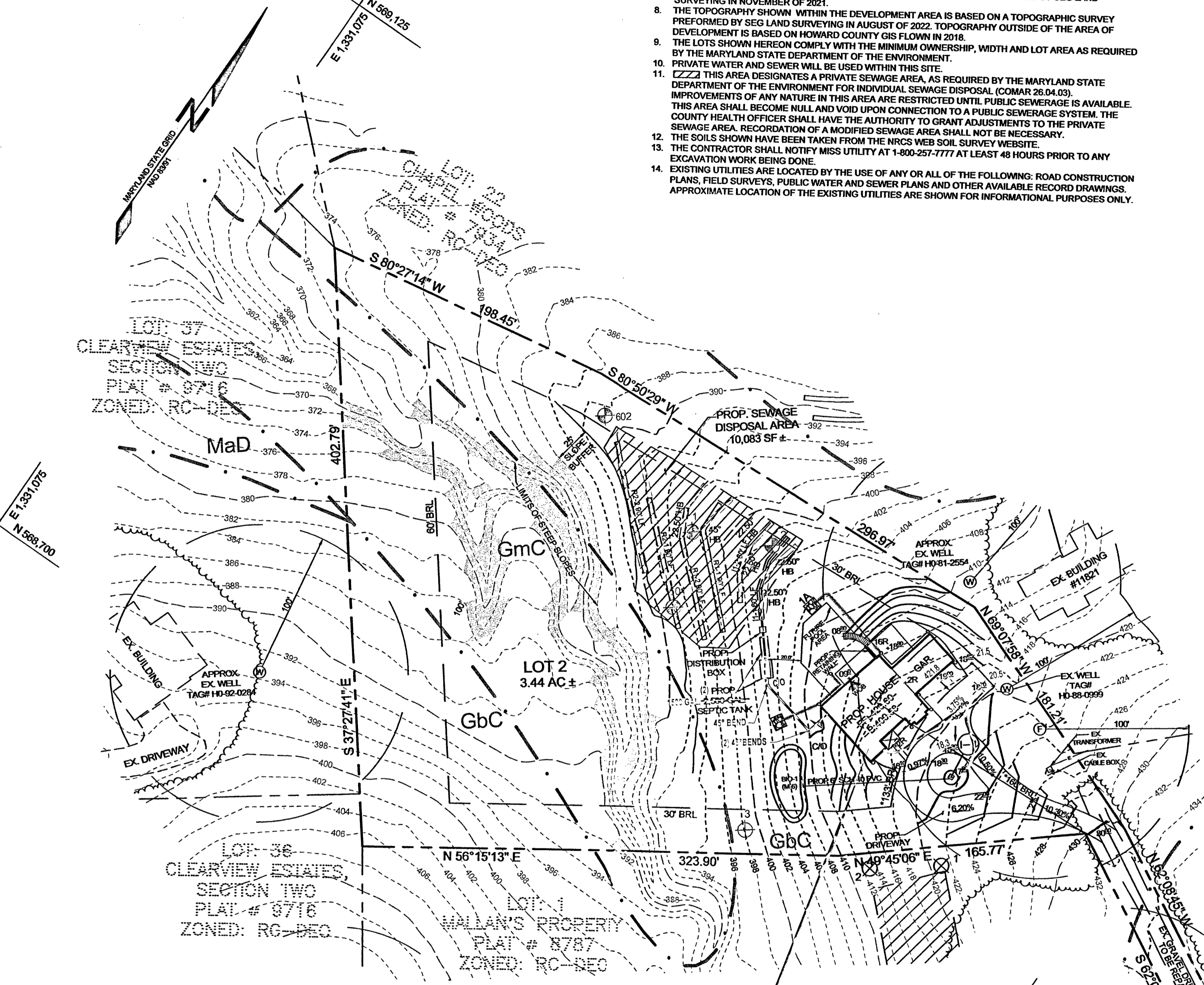
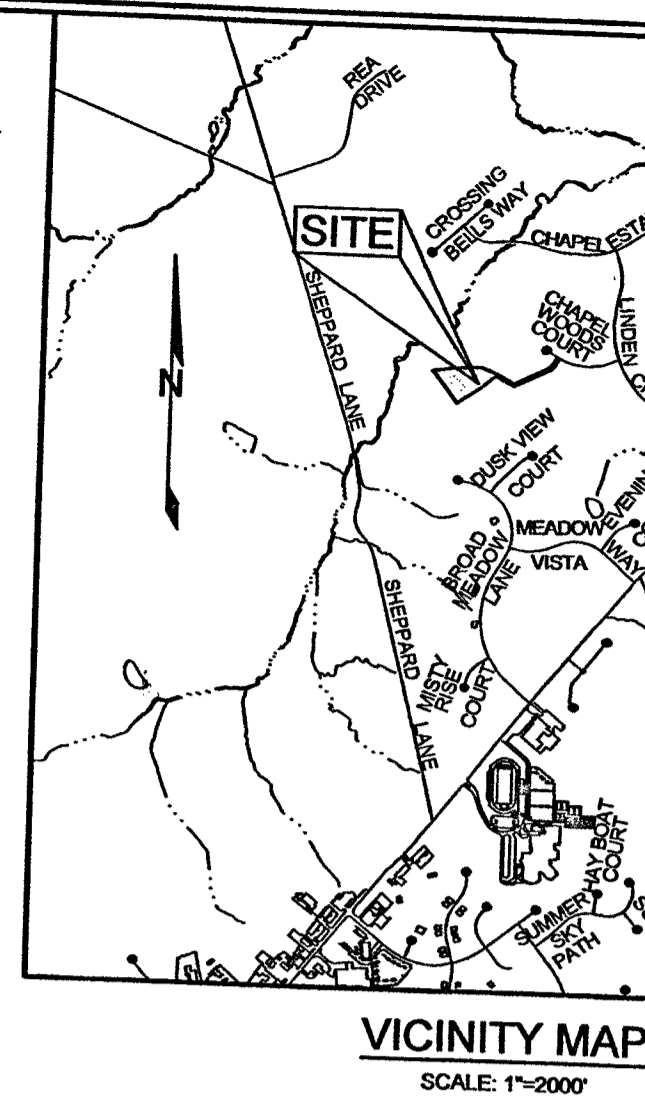
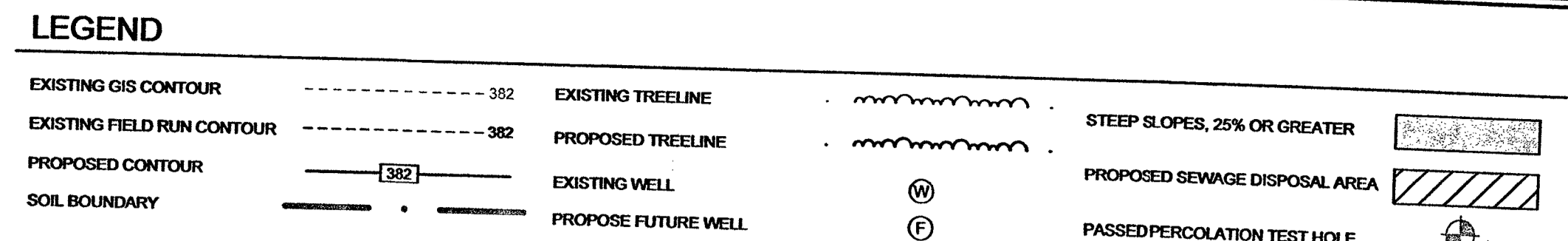
CHANDE PROPERTY
 11813 CHAPEL WOODS COURT
 LOT 2 MALLAN'S PROPERTY
 TAX MAP 29 GRID 13
 5TH ELECTION DISTRICT
 PARCEL 36 LOT 2
 HOWARD COUNTY, MARYLAND

	SILL ENGINEERING GROUP, LLC 16005 Frederick Road, 2nd Floor Woodbine, Maryland 21797 Phone: 443.325.5076 Fax: 410.696.2022 Email: info@sillengineering.com Civil Engineering for Land Development	DESIGN BY: PS DRAWN BY: ZS CHECKED BY: PS SCALE: AS SHOWN DATE: APRIL 8, 2024 PROJECT #: 20-067 SHEET #: 1 of 1
	OWNER/DEVELOPER ALHAD & KAREN CHANDE 11101 DORSCH FARM ROAD 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. 32002, EXPIRATION DATE: JUNE 30, 2025.	

SOILS LEGEND			
SYMBOL	NAME / DESCRIPTION	GROUP	'K' FACTOR
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GmB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	A	0.28

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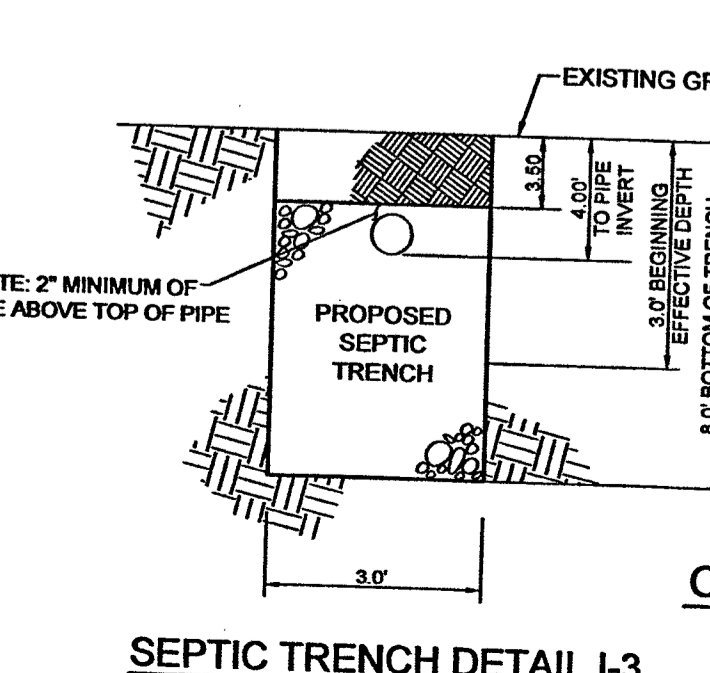
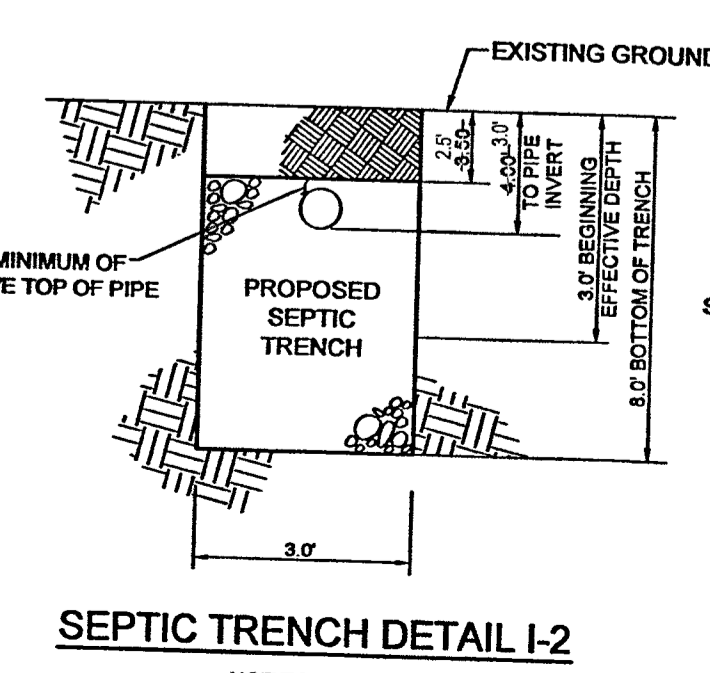
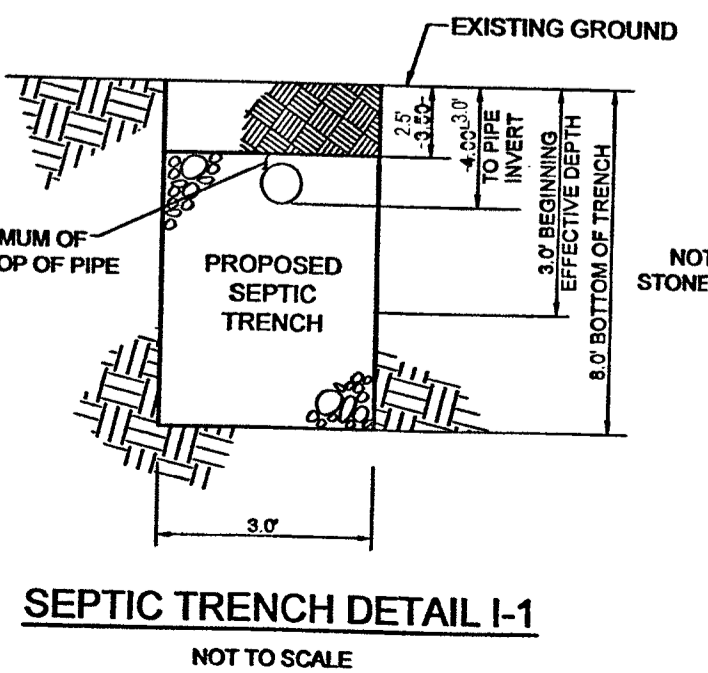
- ### GENERAL NOTES
- SUBJECT PROPERTY ZONED RC-DEO IN ACCORDANCE WITH THE OCTOBER 6, 2013 COMPREHENSIVE ZONING PLAN.
 - TOTAL AREA OF PROPERTY = 3.44 ACRES.
 - PROPERTY ADDRESS: 11813 CHAPEL WOODS COURT, CLARKSVILLE MD 21029
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AS-BUILT
 FIRST FLOOR = ELEV. 424.2
 BASEMENT FLOOR = ELEV. 413.2

SEPTIC SYSTEM TRENCH DESIGN SPECIFICATIONS

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| <p>INITIAL SYSTEM SYSTEM</p> <ul style="list-style-type: none"> - APPLICATION RATE: 1.2 - EFFECTIVE AREA BEGINNING DEPTH: 3.0' - BOTTOM MAXIMUM DEPTH: 8.0' <p>1. DESIGN FLOW:
 - 8 BEDROOMS AT 150 GALLONS PER DAY (GPD)
 - 8 X 150 GPD = 1,200 GPD</p> <p>2. SQUARE FOOTAGE OF DRAIN FIELD REQUIRED:
 - DESIGN FLOW (1,200 GPD) / APPLICATION RATE (0.8) = 1,500 SF</p> <p>3. SIDEWALL REDUCTION CREDIT:
 - TRENCH WIDTH (W) = 3.0'
 - TRENCH EFFECTIVE DEPTH (D) = 5.0'
 - (W+2) / (W+1+2D) X 100 = 36%</p> <p>4. LINEAR LENGTH OF TRENCH REQUIRED:
 - DRAIN FIELD SQUARE FOOTAGE (1,500) X SIDEWALL REDUCTION CREDIT (36%) / TRENCH WIDTH (3.0') = 120'</p> <p>5. LINEAR LENGTH OF TRENCH PROVIDED = 120'
 - TWO TRENCHES AT 60 LF EACH</p> <p>6. EXISTING GROUND:
 TRENCH I-1: 403.7
 TRENCH I-1: 402.0 (TRENCH I-2)
 TRENCH I-1: 399.0 (TRENCH I-2) 399.0</p> | <p>FIRST REPLACEMENT SYSTEM:</p> <ul style="list-style-type: none"> - APPLICATION RATE: 0.8 - EFFECTIVE AREA BEGINNING DEPTH: 3.0' - BOTTOM MAXIMUM DEPTH: 8.0' <p>1. DESIGN FLOW:
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 - TWO TRENCHES 90 LF EACH</p> <p>6. EXISTING GROUND:
 TRENCH R1-1: 398.0 - 398.2
 TRENCH R1-1: 394.0 - 395.2
 TRENCH R1-2: 395.0 - 395.8
 TRENCH R1-2: 392.0 - 392.9</p> | <p>SECOND REPLACEMENT SYSTEM:</p> <ul style="list-style-type: none"> - APPLICATION RATE: 0.8 - EFFECTIVE AREA BEGINNING DEPTH: 3.0' - BOTTOM MAXIMUM DEPTH: 8.0' <p>1. DESIGN FLOW:
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 - TWO TRENCHES 90 LF EACH</p> <p>6. EXISTING GROUND:
 TRENCH R2-1: 392.0 - 392.2
 TRENCH R2-1: 882.0 - 398.2
 TRENCH R2-2: 392.0 - 390.0
 TRENCH R2-2: 392.0 - 387.0</p> |
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OWNER/DEVELOPER
 ALHAD & KAREN CHANDE
 11101 DORSCH FARM ROAD
 ELLICOTT CITY, MARYLAND 21042

ONSITE SEWAGE DISPOSAL SYSTEM FOR CHANDE PROPERTY

11813 CHAPEL WOODS COURT
 LOT 2 MALLAN'S PROPERTY

TAX MAP 29 GRID 13
 5TH ELECTION DISTRICT

HOWARD COUNTY

SILL ENGINEERING GROUP, LLC
 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

DESIGNER: SILL ENGINEERING GROUP, LLC
 DRAWN: SILL ENGINEERING GROUP, LLC
 CHECKED: SILL ENGINEERING GROUP, LLC
 SCALE: AS SHOWN
 DATE: 04-11-2025
 PROJECT: 1500-2C
 SHEET # 1

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, A LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 36025, EXP. DATE 03-31-2026.

REVISED - RED LINED PLANNING BUILDING PERMIT B240003
 REDLINE REVISIONS BY: RTF ASSOCIATES, INC. (JOHN LEMMERMAN, MDE 142 EAST MAIN STREET WESTMINSTER, MARYLAND 410-848-2040, 410-876-1222)

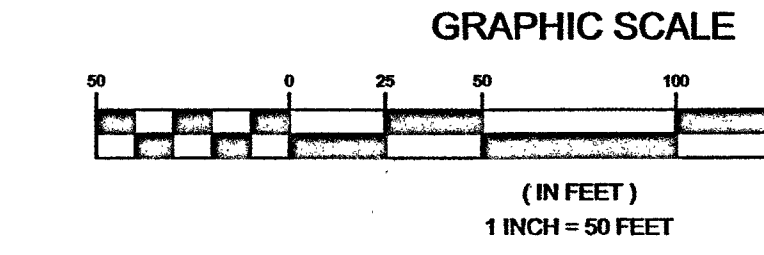
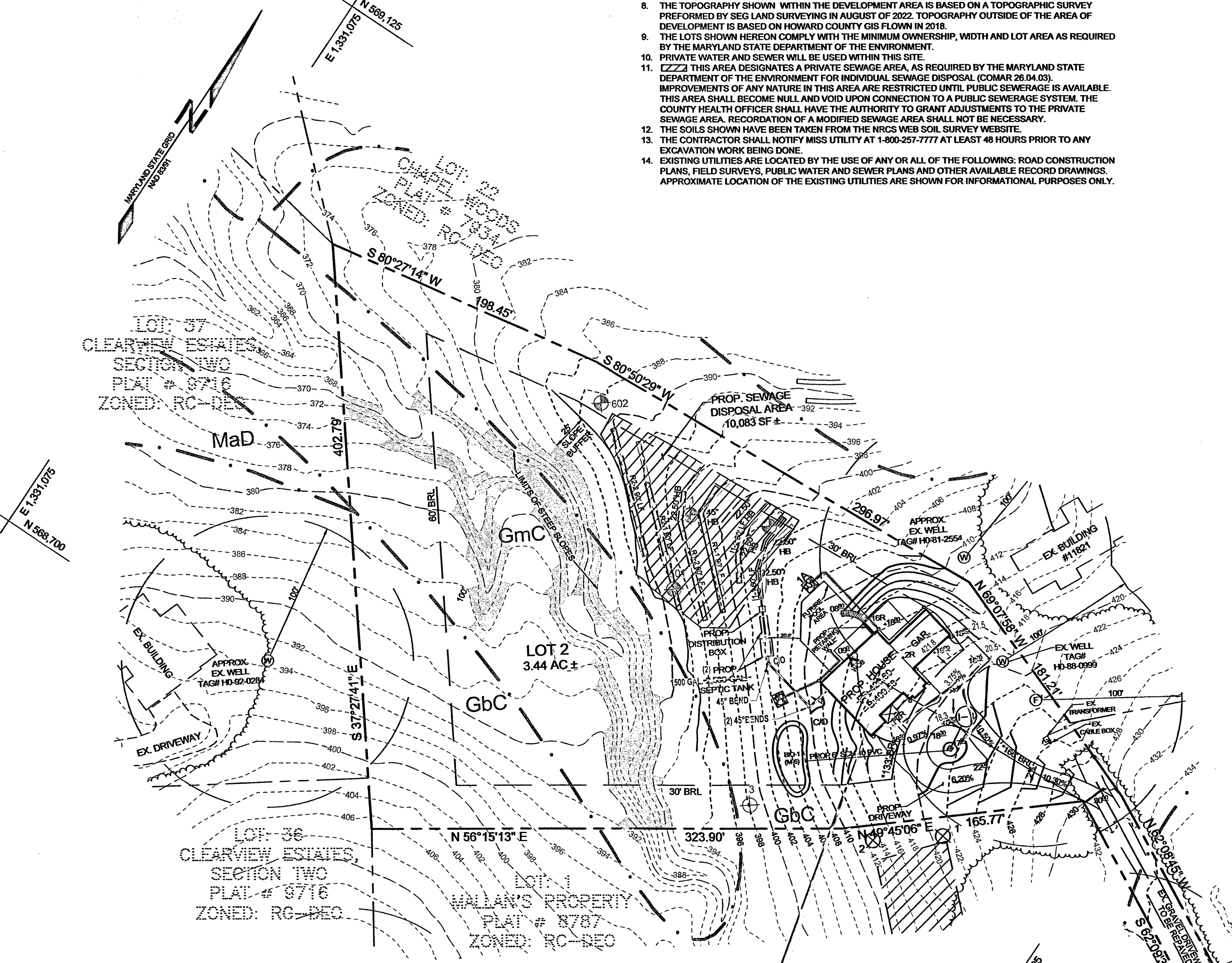
REVISED: (2) SEPTIC TANKS = 04-11-2025
 REVISED: COUNTY COMMENTS = 04-07-2025
 REVISED FLOOR ELEVATIONS = 03-19-2025

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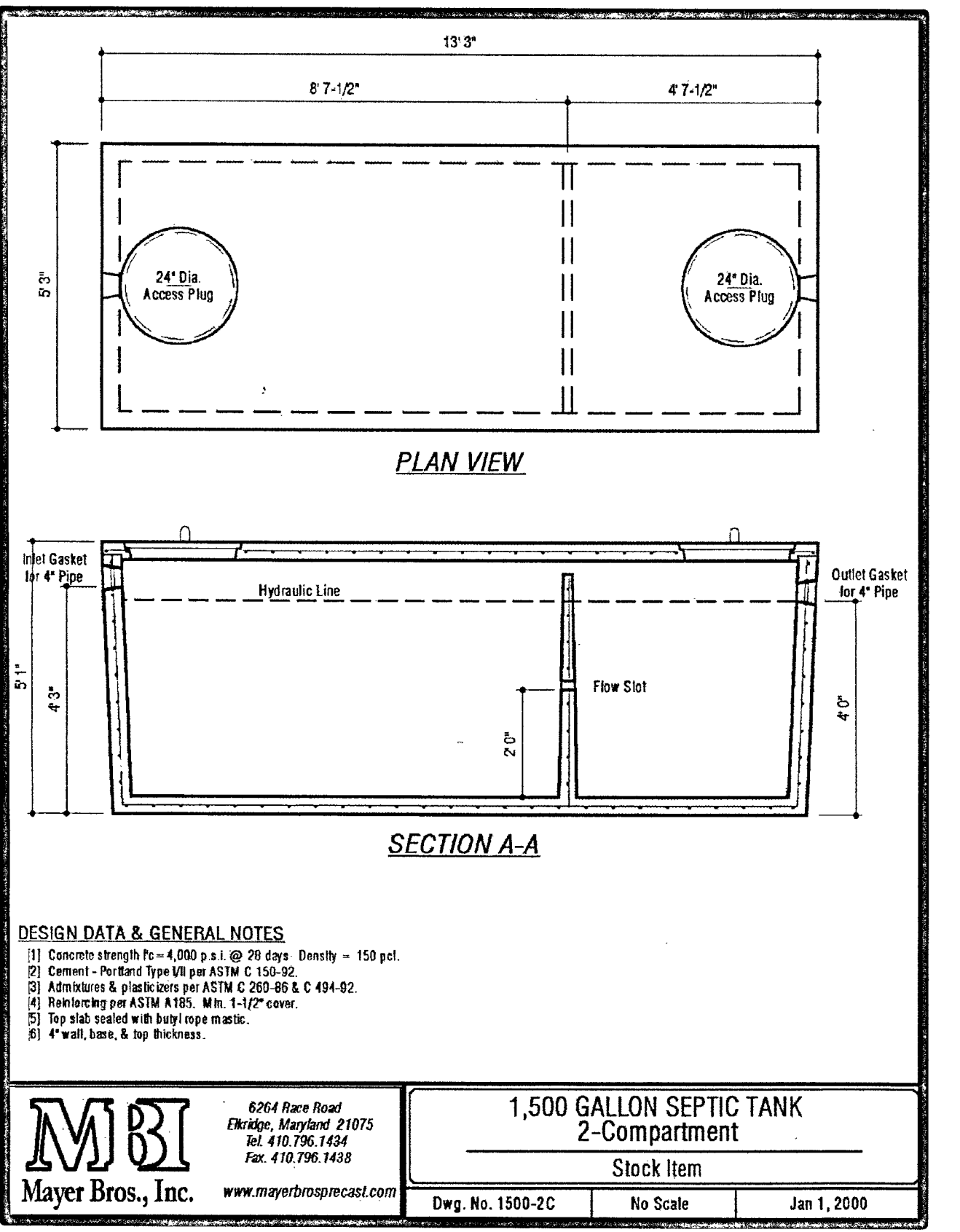
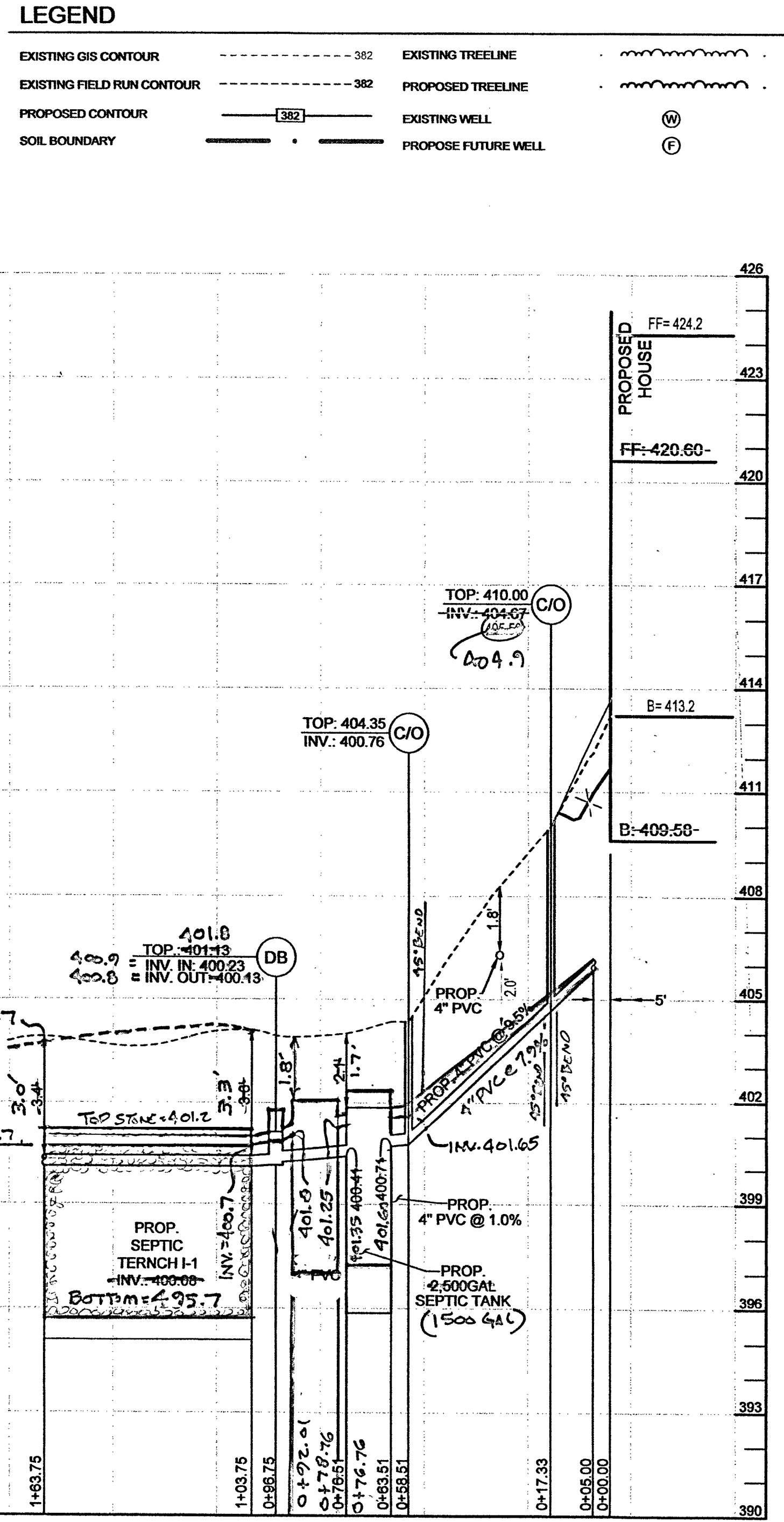
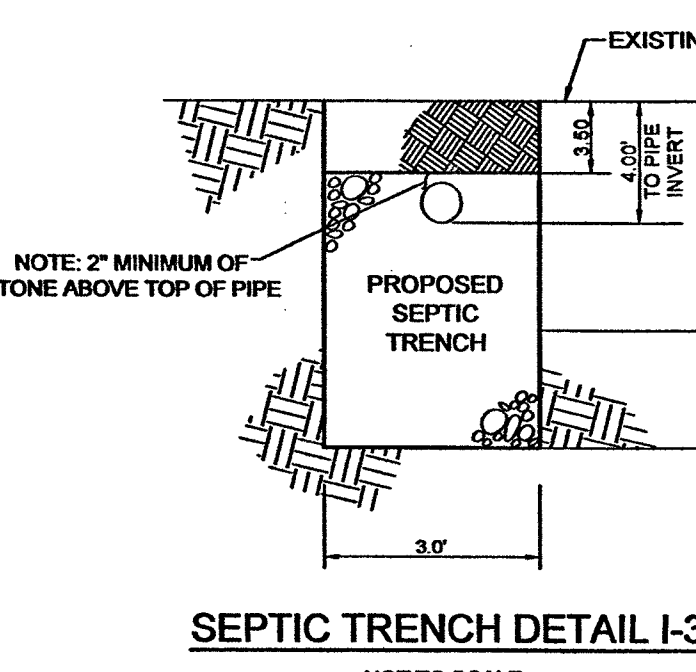
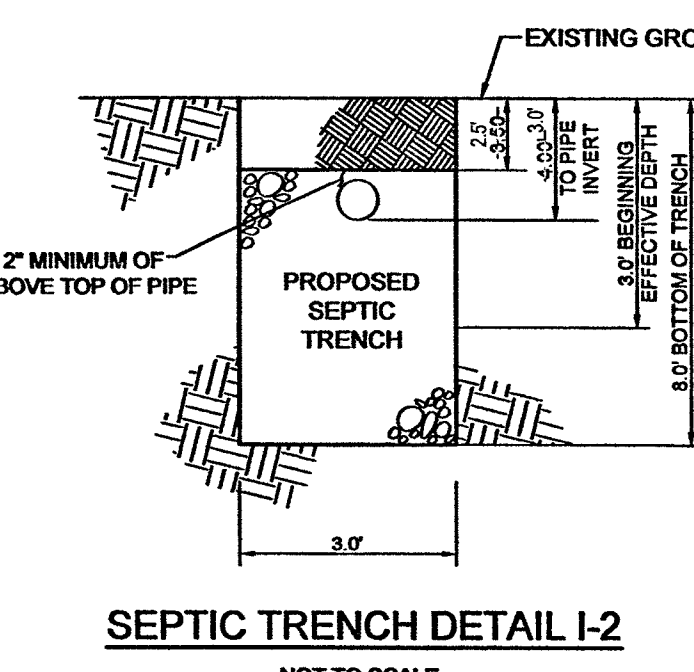
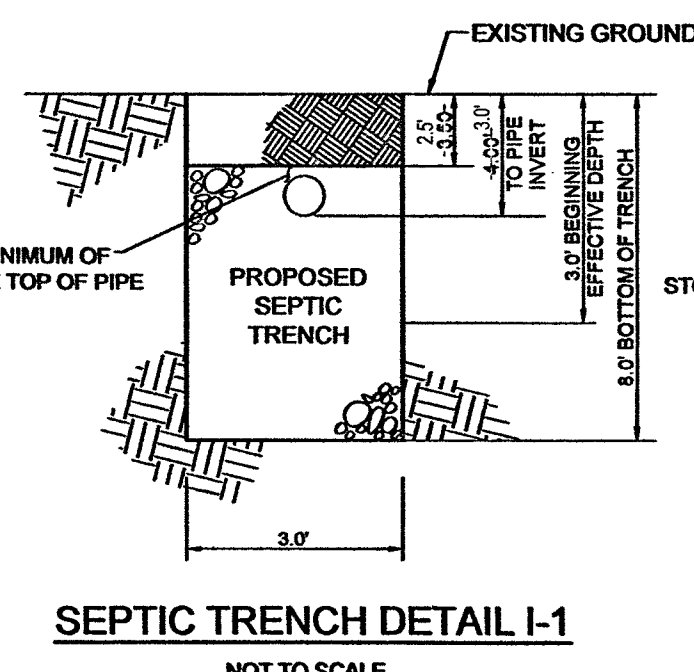
GENERAL NOTES

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- PREVIOUS HOWARD COUNTY FILE NUMBERS: STATE OF MARYLAND DEPARTMENT OF THE ENVIRONMENT, WATER AND SCIENCE ADMINISTRATION AUTHORIZATION NUMBER 20-NT-3094/202006742
- THE BOUNDARY SHOWN HERE ON IS BASED ON A BOUNDARY SURVEY PERFORMED BY SEG LAND SURVEYING IN NOVEMBER OF 2021.
- THE TOPOGRAPHY SHOWN WITHIN THE DEVELOPMENT AREA IS BASED ON A TOPOGRAPHIC SURVEY PERFORMED BY SEG LAND SURVEYING IN AUGUST OF 2022. TOPOGRAPHY OUTSIDE OF THE AREA OF DEVELOPMENT IS BASED ON HOWARD COUNTY GIS FLOWN IN 2016.
- THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP, WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
- PRIVATE WATER AND SEWER WILL BE USED WITHIN THIS SITE.
- ZZZ THIS AREA DESIGNATES A PRIVATE SEWAGE AREA, 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. THIS AREA 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. RECORDED OF A MODIFIED SEWAGE AREA SHALL NOT BE NECESSARY.
- THE SOILS SHOWN HAVE BEEN TAKEN FROM THE NRCS WEB SOIL SURVEY WEBSITE.
- THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- 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 INFORMATIONAL PURPOSES ONLY.

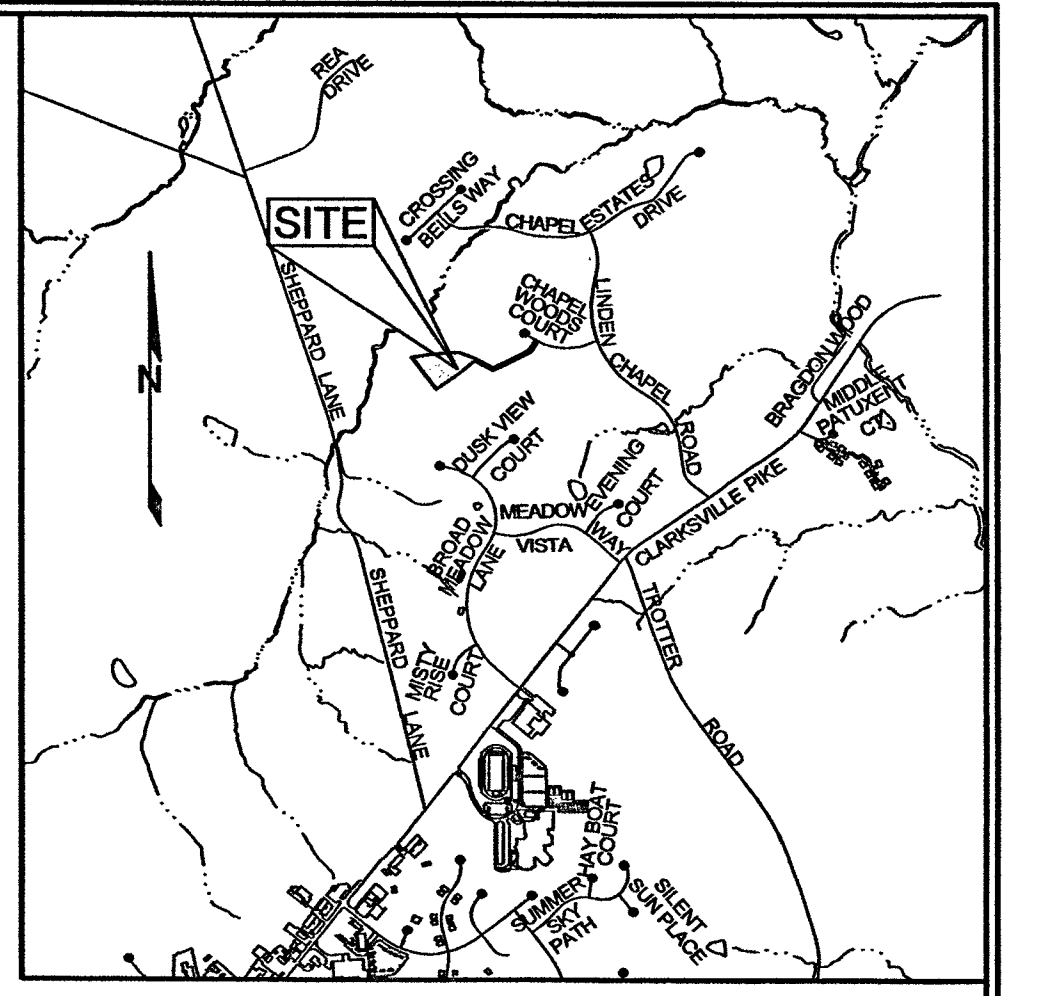


SEPTIC SYSTEM TRENCH DESIGN SPECIFICATIONS

- INITIAL SYSTEM:**
 - APPLICATION RATE: 1.2
 - EFFECTIVE AREA BEGINNING DEPTH: 3.0'
 - BOTTOM MAXIMUM DEPTH: 8.0'
- DESIGN FLOW:**
 - 8 BEDROOMS AT 150 GALLONS PER DAY (GPD)
 - 8 X 150 GPD = 1,200 GPD
- SQUARE FOOTAGE OF DRAIN FIELD REQUIRED:**
 - DESIGN FLOW (1,200 GPD) / APPLICATION RATE (1.2) = 1,000 SF
- 3. SIDEWALL REDUCTION CREDIT:**
 - TRENCH WIDTH (W) = 3.0'
 - TRENCH EFFECTIVE DEPTH (D) = 5.0'
 - (W+2) / (W+1+2D) X 100 = 36%
- 4. LINEAR LENGTH OF TRENCH REQUIRED:**
 - DRAIN FIELD SQUARE FOOTAGE (1,000) X SIDEWALL REDUCTION CREDIT (36%) / TRENCH WIDTH (3.0') = 120'
- 5. LINEAR LENGTH OF TRENCH PROVIDED = 120'**
- 6. EXISTING GROUND:**
 - TRENCH 1: 403.7
 - TRENCH 1: 400.7
 - TRENCH 1: 402.0 (TRENCH 1) 2
 - TRENCH 1: 399.0 (TRENCH 1) 2



(2) PROPOSED 1500 GALLON SEPTIC TANK PROFILE
 (2) PROPOSED 2,500-GALLON SEPTIC TANK DETAIL



VICINITY MAP
 SCALE: 1"=2000'

REVISED - RED LINED PLAN BUILDING PERMIT B24000366
 REDLINE REVISIONS BY: RTF ASSOCIATES, INC. (JOHN LEMMERMAN, MDE #00678)
 142 EAST MAIN STREET WESTMINSTER, MARYLAND 21157
 410-848-2040, 410-876-1222

REVISED: (2) SEPTIC TANKS = 04-11-2025
 REVISED: COUNTY COMMENTS = 04-07-2025
 REVISED FLOOR ELEVATIONS = 03-19-2025

ONSITE SEWAGE DISPOSAL SYSTEM PLAN

CHANDE PROPERTY

11813 CHAPEL WOODS COURT
 LOT 2 MALLAN'S PROPERTY

TAX MAP 29 GRID 13
 5TH ELECTION DISTRICT

PARCEL 36 LOT 2
 HOWARD COUNTY, MARYLAND

SILL ENGINEERING GROUP, LLC
 16005 Frederick Road, 2nd Floor
 Woodbine, Maryland 21797
 Phone: 410.325.5076
 Fax: 410.696.2022
 Email: info@sillengineering.com
 Civil Engineering for Land Development

DESIGN BY: PS
 DRAWN BY: ZS
 CHECKED BY: PS
 SCALE: AS SHOWN
 DATE: APRIL 8, 2024
 PROJECT #: 20-067
 SHEET #: 1 of 1

OWNER/DEVELOPER
 ALHAD & KAREN CHANDE
 11101 DORSCH FARM ROAD
 ELLICOTT CITY, MARYLAND 21042

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A QUALIFIED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 33025, EXPIRATION DATE JUNE 20, 2025.

SOILS LEGEND			
SYMBOL	NAME / DESCRIPTION	GROUP	'K' FACTOR
GbC	GLENELG LOAM, 0 TO 3 PERCENT SLOPES	A	0.26
GmC	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	C	0.43
GmB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	GD	0.37
GbB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	A	0.26

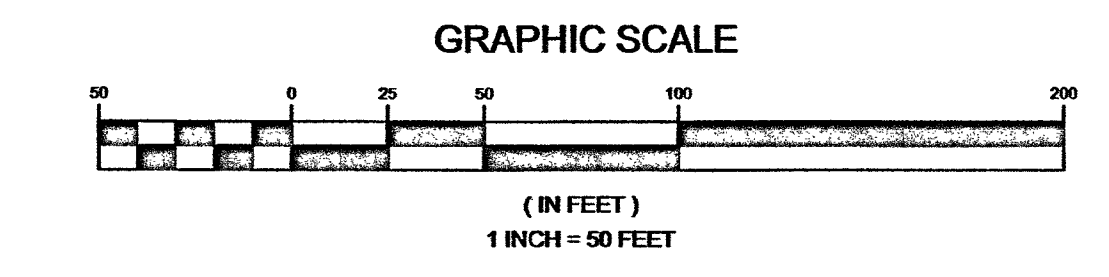
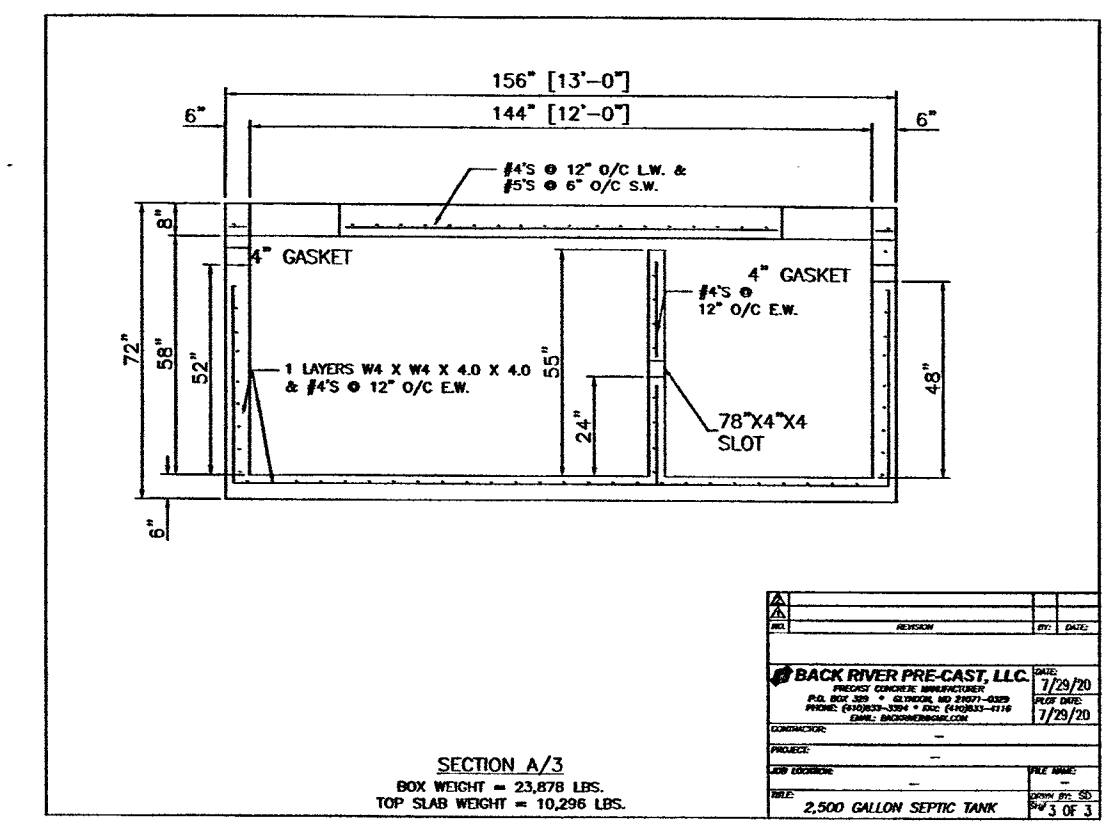
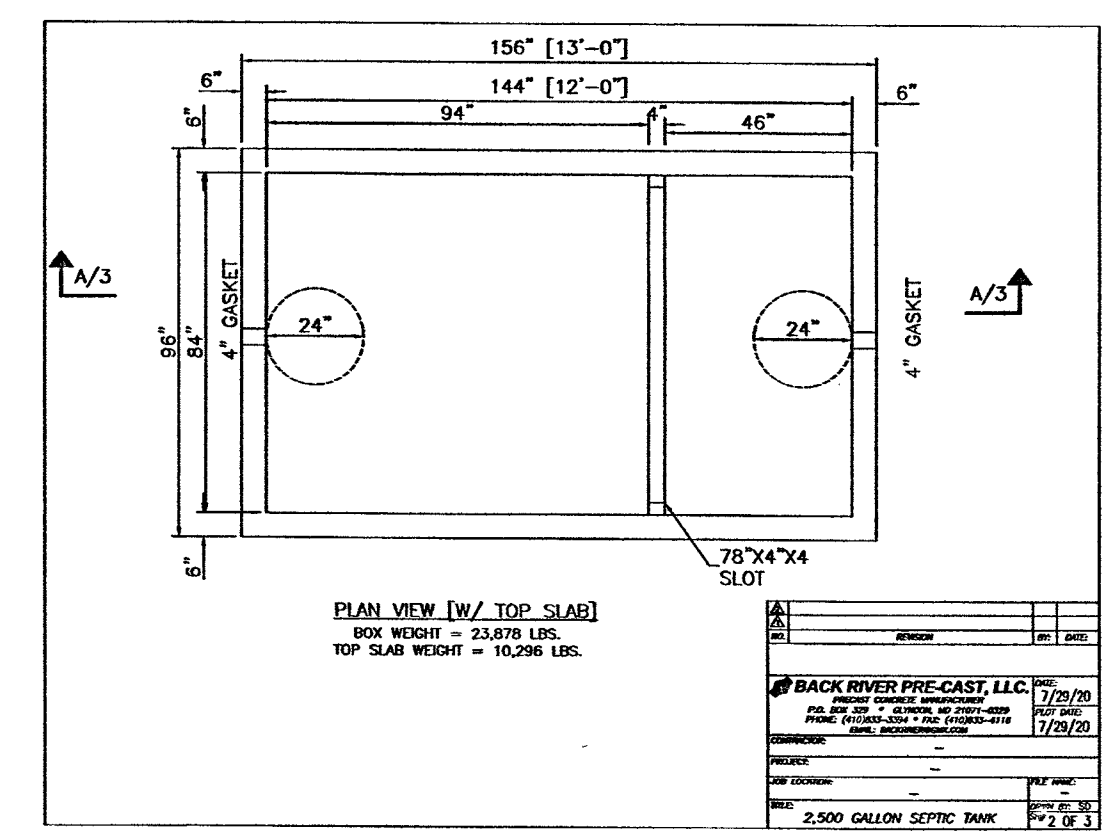
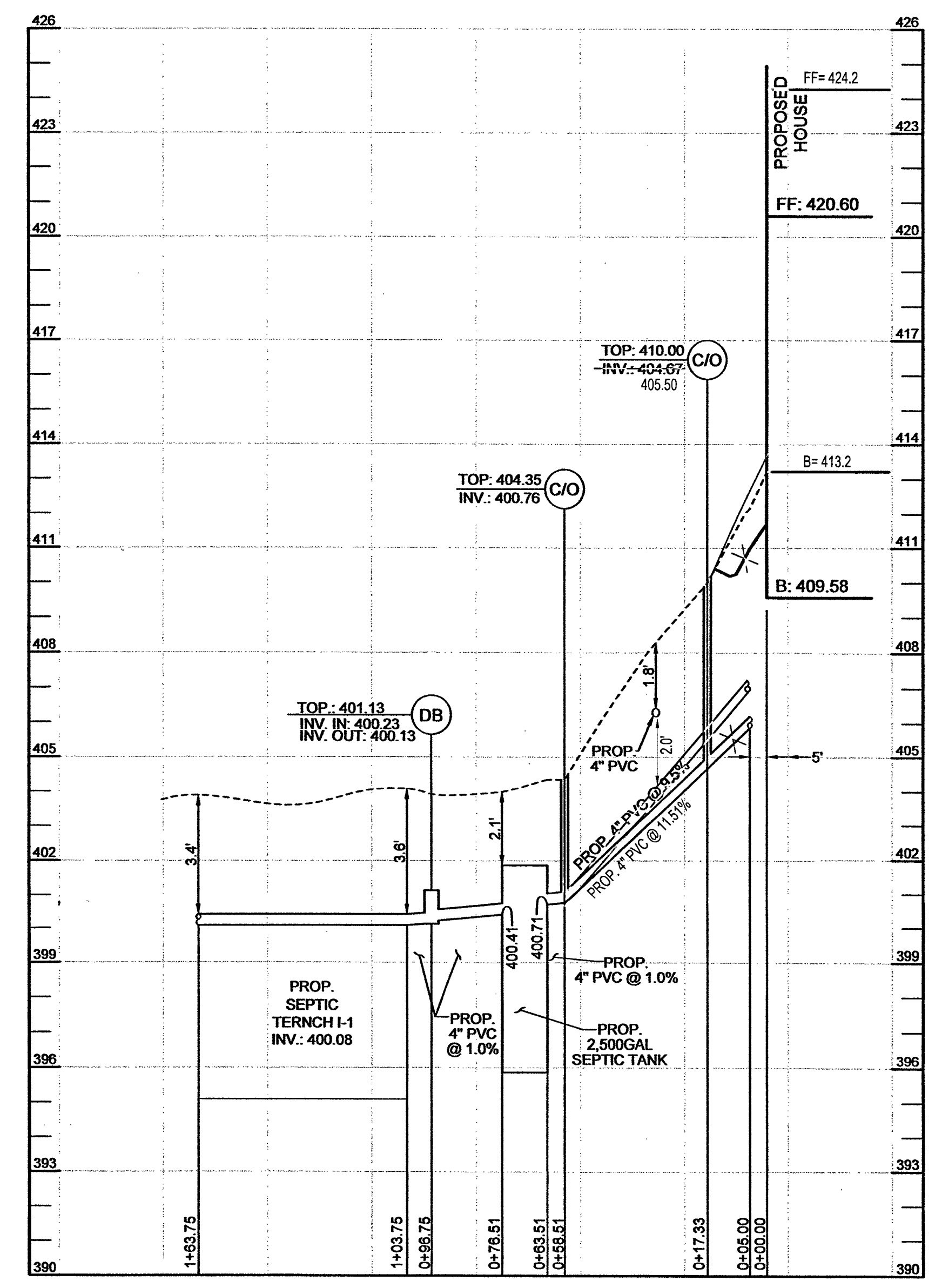
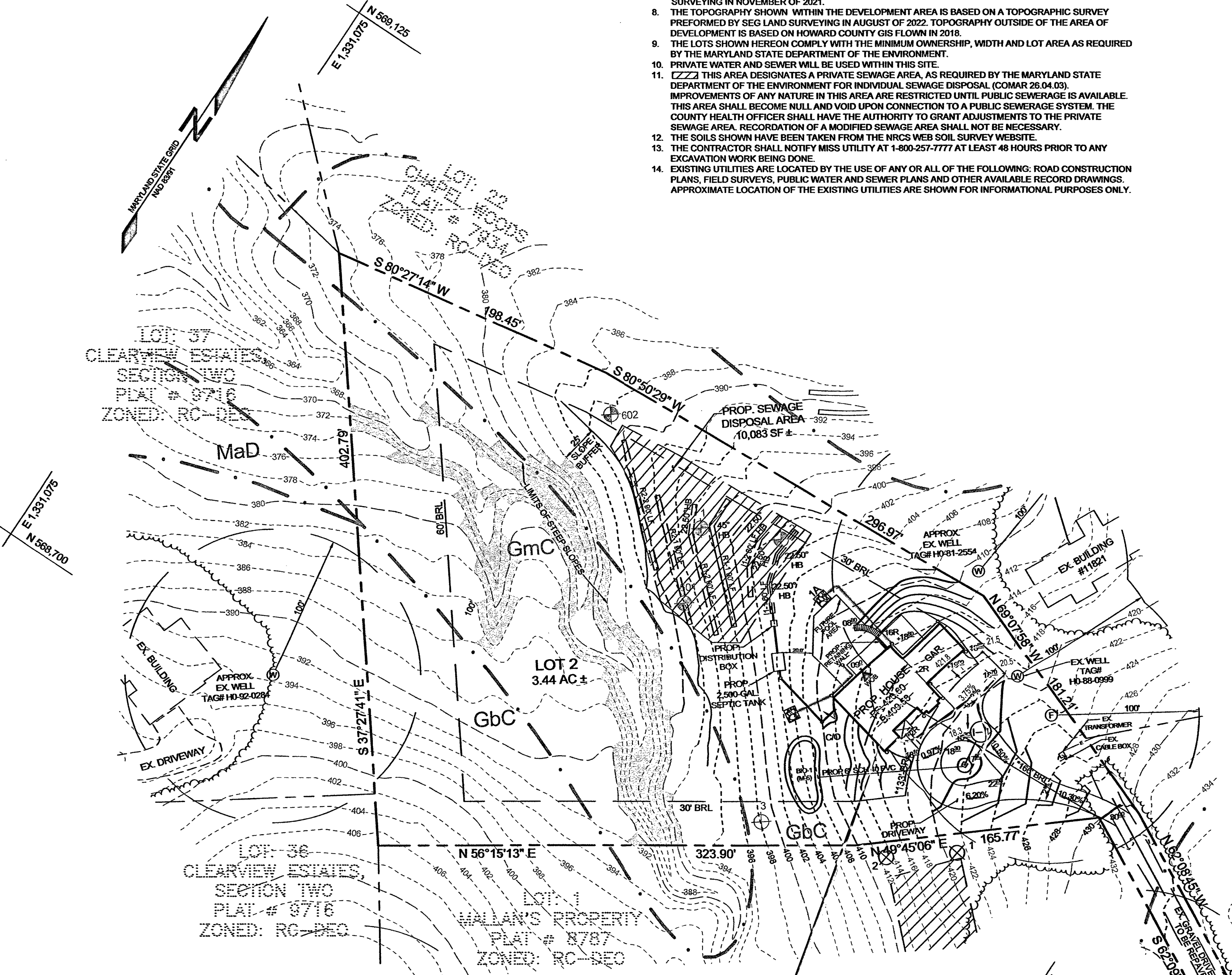
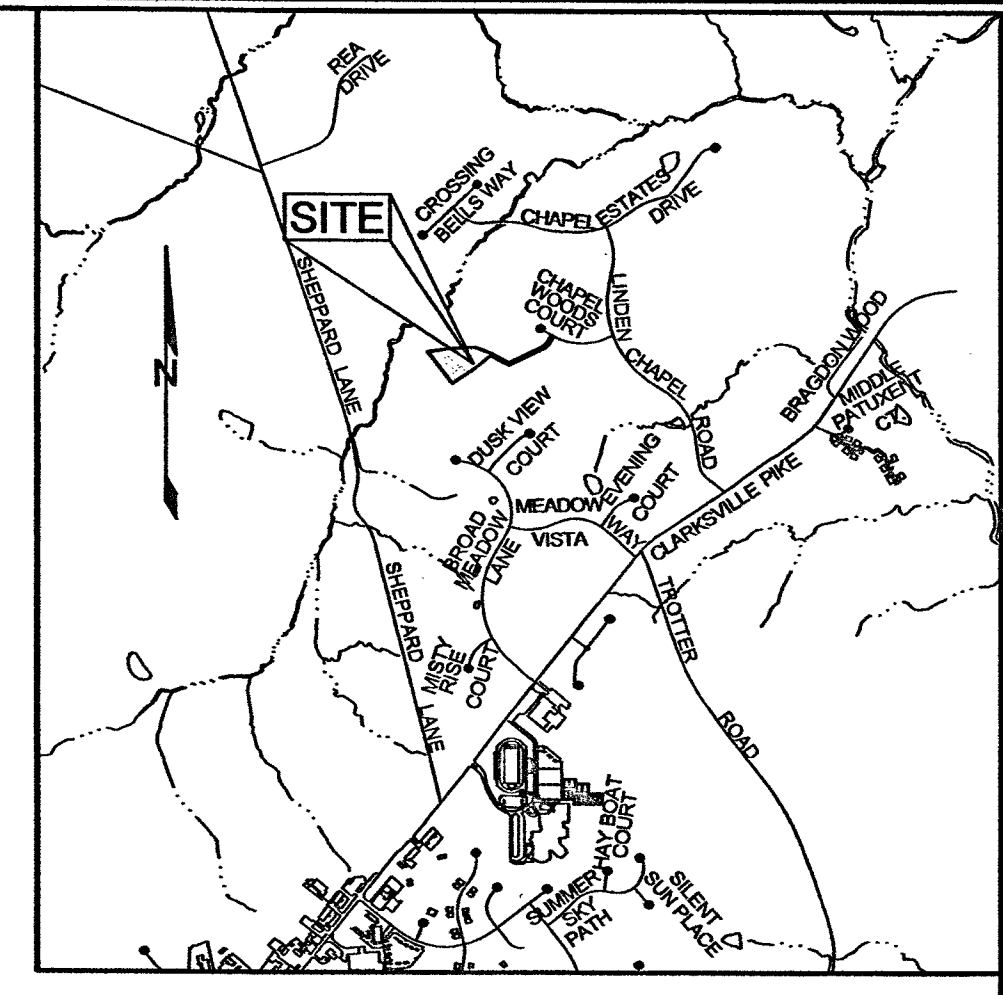
NOTES:
 1) SOIL INFORMATION HAS BEEN TAKEN FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, WEBB SOIL SURVEY.
 2) HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR 'K' GREATER THAN 0.35 AND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

GENERAL NOTES

- SUBJECT PROPERTY ZONED RC-DEO IN ACCORDANCE WITH THE OCTOBER 6, 2013 COMPREHENSIVE ZONING PLAN.
- TOTAL AREA OF PROPERTY = 3.44 ACRES.
- PROPERTY ADDRESS: 11813 CHAPEL WOODS COURT, CLARKEVILLE MD 21029
- PLAT REFERENCE: PLAT # 8787
- DEED REFERENCE: LIBER 3743 FOLIO 00571
- PREVIOUS HOWARD COUNTY FILE NUMBERS: STATE OF MARYLAND DEPARTMENT OF THE ENVIRONMENT, WATER AND SCIENCE ADMINISTRATION AUTHORIZATION NUMBER 20-NT-3094/2020060742.
- THE BOUNDARY SHOWN HEREON IS BASED ON A BOUNDARY SURVEY PERFORMED BY SEG LAND SURVEYING IN NOVEMBER OF 2021.
- THE TOPOGRAPHY SHOWN WITHIN THE DEVELOPMENT AREA IS BASED ON A TOPOGRAPHIC SURVEY PERFORMED BY SEG LAND SURVEYING IN AUGUST OF 2022. TOPOGRAPHY OUTSIDE OF THE AREA OF DEVELOPMENT IS BASED ON HOWARD COUNTY GIS FLOWN IN 2018.
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- THE SOILS SHOWN HAVE BEEN TAKEN FROM THE NRCS WEB SOIL SURVEY WEBSITE.
- THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- 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 INFORMATIONAL PURPOSES ONLY.

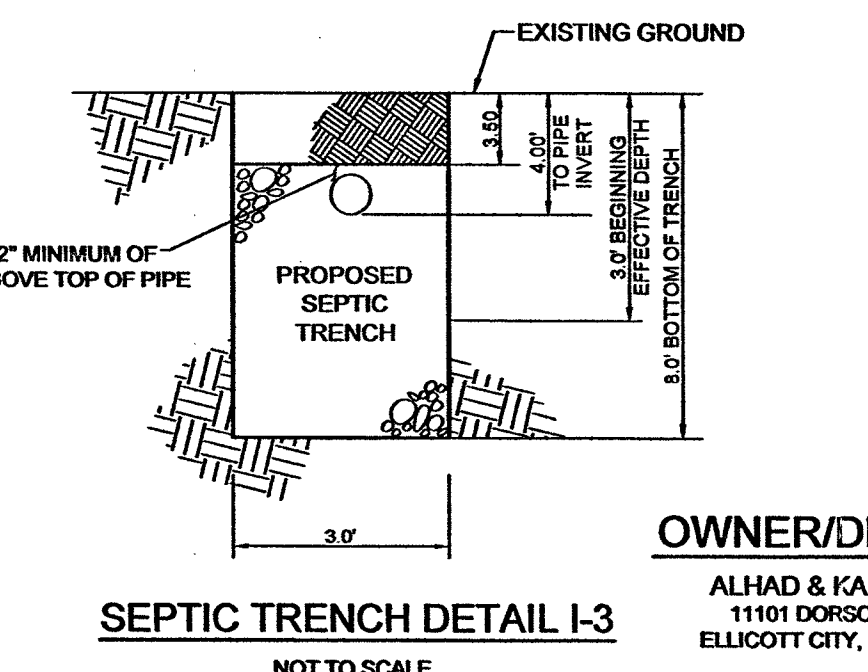
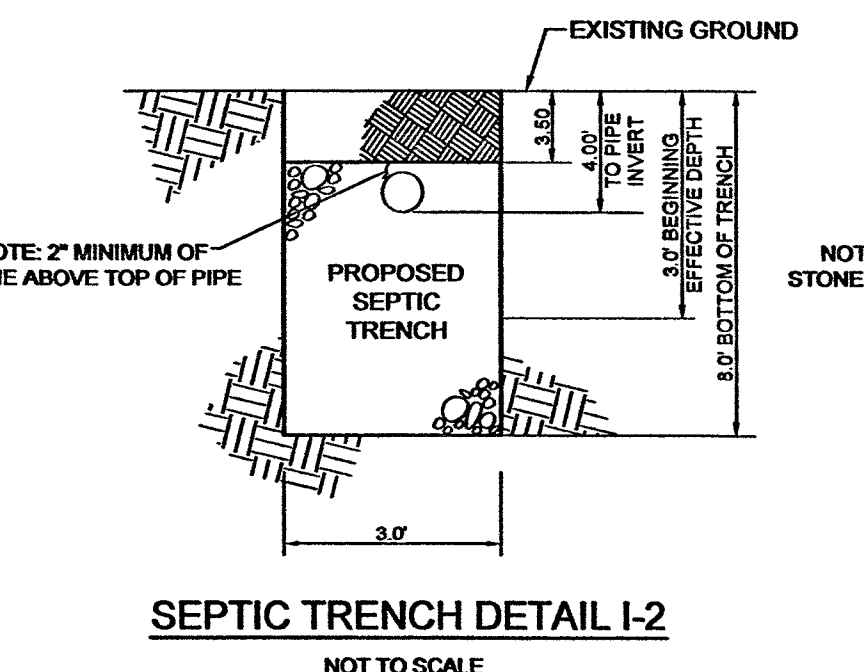
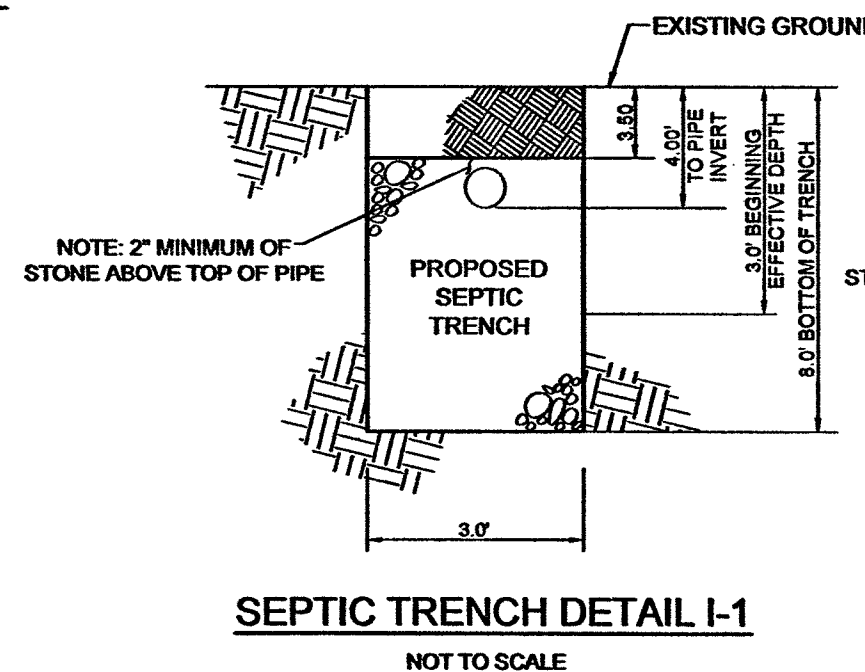
LEGEND

EXISTING GIS CONTOUR	--- 382	EXISTING TREELINE		STEEP SLOPES, 25% OR GREATER	
EXISTING FIELD RUN CONTOUR	--- 382	PROPOSED TREELINE		PROPOSED SEWAGE DISPOSAL AREA	
PROPOSED CONTOUR	--- 382	EXISTING WELL	(W)	PASSED PERCOLATION TEST HOLE	
SOIL BOUNDARY	---	PROPOSE FUTURE WELL	(F)	FAILED PERCOLATION TEST HOLE	



SEPTIC SYSTEM TRENCH DESIGN SPECIFICATIONS

- INITIAL SYSTEM SYSTEM:**
 - APPLICATION RATE: 1.2
 - EFFECTIVE AREA BEGINNING DEPTH: 3.0'
 - BOTTOM MAXIMUM DEPTH: 8.0'
 - FIRST REPLACEMENT SYSTEM:**
 - APPLICATION RATE: 0.8
 - EFFECTIVE AREA BEGINNING DEPTH: 3.0'
 - BOTTOM MAXIMUM DEPTH: 8.0'
 - SECOND REPLACEMENT SYSTEM:**
 - APPLICATION RATE: 0.8
 - EFFECTIVE AREA BEGINNING DEPTH: 3.0'
 - BOTTOM MAXIMUM DEPTH: 8.0'
- DESIGN FLOW:**
 - 8 BEDROOMS AT 150 GALLONS PER DAY (GPD)
 - 8 X 150 GPD = 1,200 GPD
 - SQUARE FOOTAGE OF DRAIN FIELD REQUIRED:**
 - DESIGN FLOW (1,200 GPD) / APPLICATION RATE (1.2) = 1,000 SF
 - SIDEWALL REDUCTION CREDIT:**
 - TRENCH WIDTH (W) = 3.0'
 - TRENCH EFFECTIVE DEPTH (D) = 5.0'
 - (W*2) / (W*1+2D) X 100 = 36%
 - LINEAR LENGTH OF TRENCH REQUIRED:**
 - DRAIN FIELD SQUARE FOOTAGE (1,000 X) SIDEWALL REDUCTION CREDIT (36%) / TRENCH WIDTH (3.0') = 120'
 - LINEAR LENGTH OF TRENCH PROVIDED = 120'**
 - TWO TRENCHES AT 60 LF EACH
 - EXISTING GROUND:**
 - TRENCH I-1: 403.7
 - INVERT: TRENCH I-1: 400.7
 - EXISTING GROUND: TRENCH I-1: 402.0
 - INVERT: TRENCH I-1: 399.0
 - EXISTING GROUND:**
 - TRENCH R2-1: 392.0
 - INVERT: TRENCH R2-1: 389.0
 - EXISTING GROUND: TRENCH R2-2: 396.0
 - INVERT: TRENCH R2-2: 389.0



OWNER/DEVELOPER
 ALHAD & KAREN CHANDE
 1101 DORSCH FARM ROAD
 ELLICOTT CITY, MARYLAND 21042

REVISED - RED LINED PLAN
 BUILDING PERMIT B24000366
 REDLINE REVISIONS BY:
 RTF ASSOCIATES, INC.
 142 EAST MAIN STREET
 WESTMINSTER, MARYLAND 21157
 410-848-2040, 410-876-1222
 REVISED FLOOR ELEVATIONS = 03-19-2025

ONSITE SEWAGE DISPOSAL SYSTEM PLAN
CHANDE PROPERTY
 11813 CHAPEL WOODS COURT
 LOT 2 MALLAN'S PROPERTY
 TAX MAP 29 GRID 13
 5TH ELECTION DISTRICT
 PARCEL 36 LOT 2
 HOWARD COUNTY, MARYLAND

SILL ENGINEERING, LLC
 16005 Frederick Road, 2nd Floor
 Woodlawn, Maryland 21797
 Phone: 410.325.5076
 Fax: 410.696.2022
 Email: info@sillengineering.com
 Civil Engineering for Land Development

DESIGN BY: PS
 DRAWN BY: ZS
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 SCALE: AS SHOWN
 DATE: APRIL 8, 2024
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 SHEET #: 1 of 1

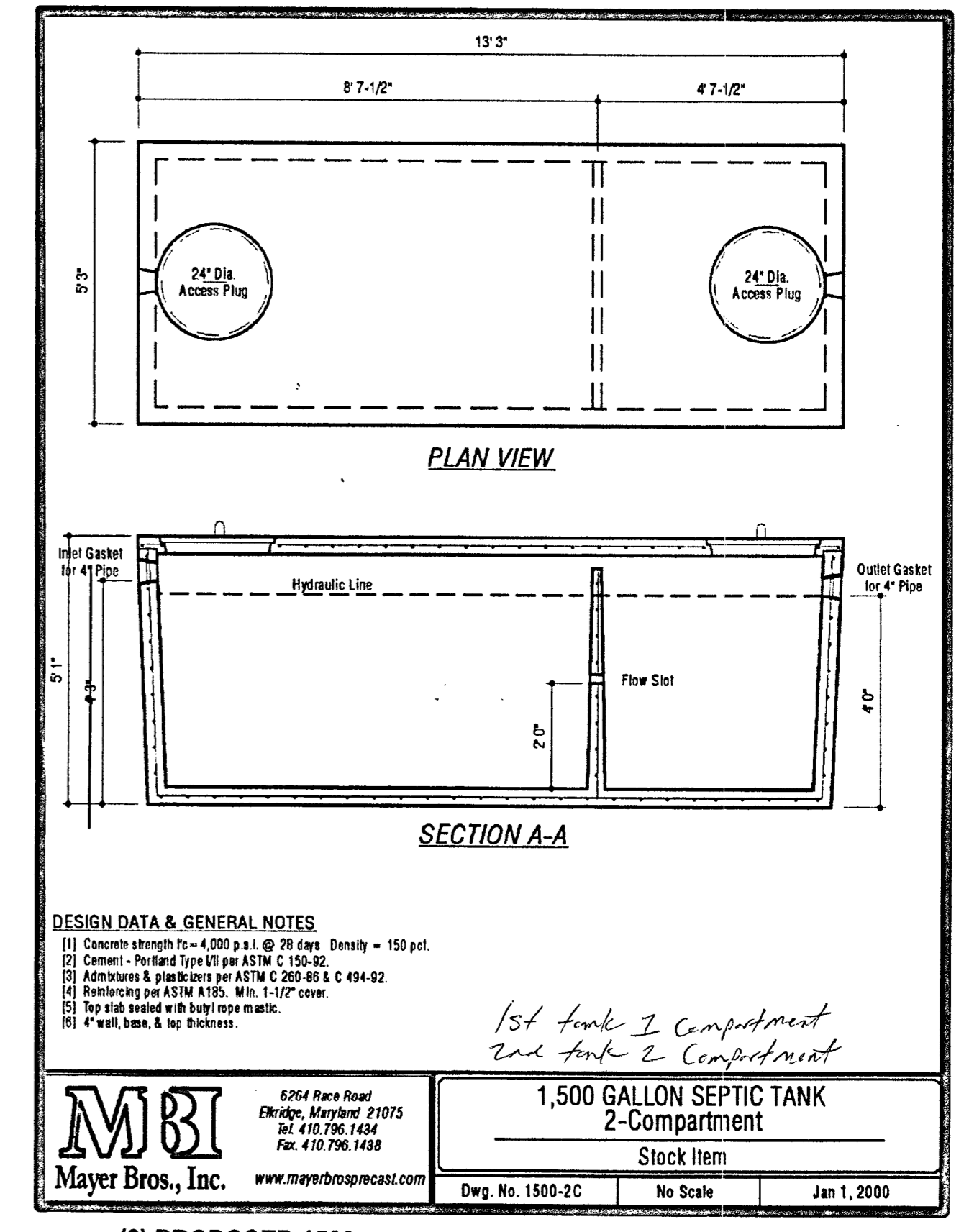
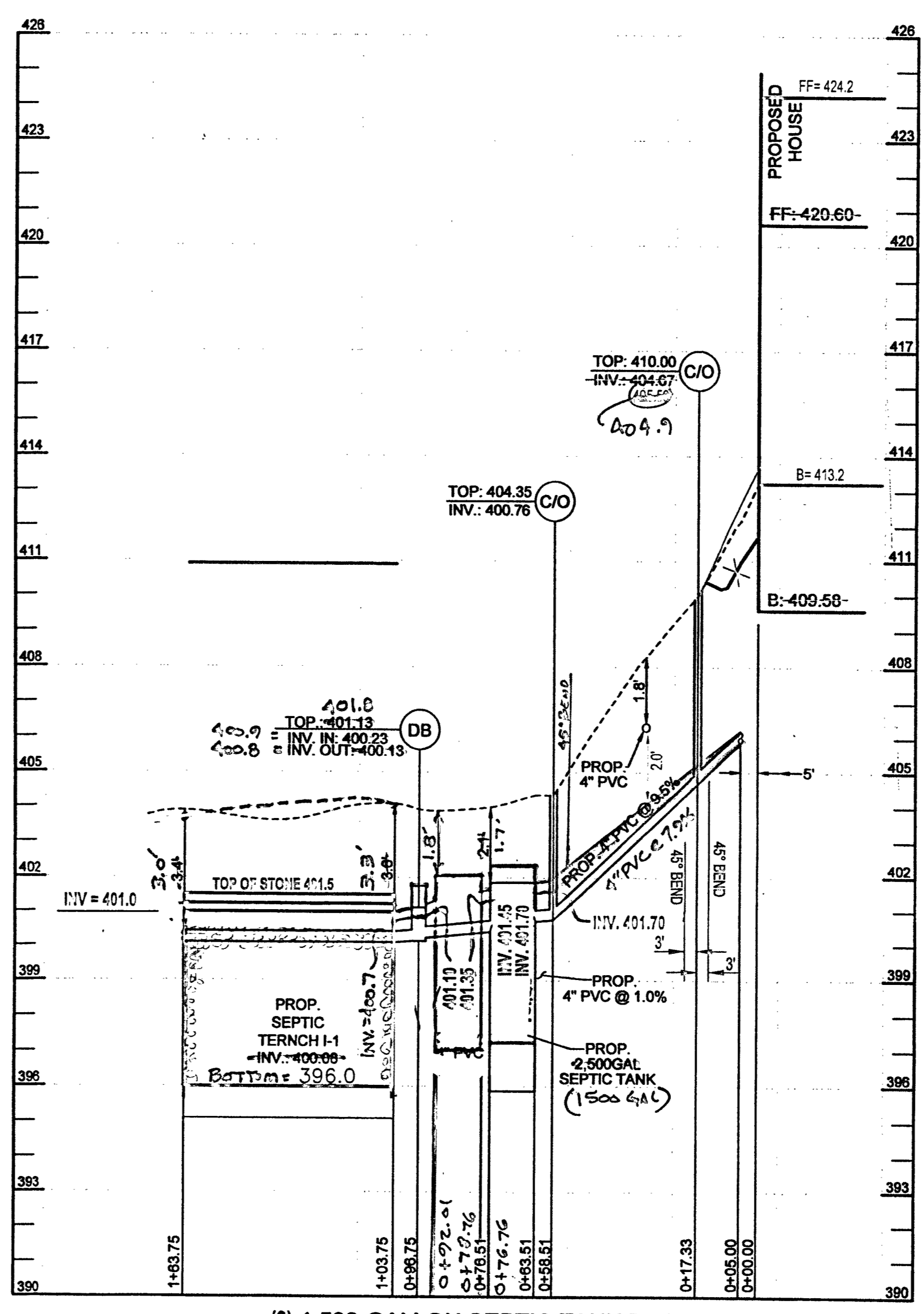
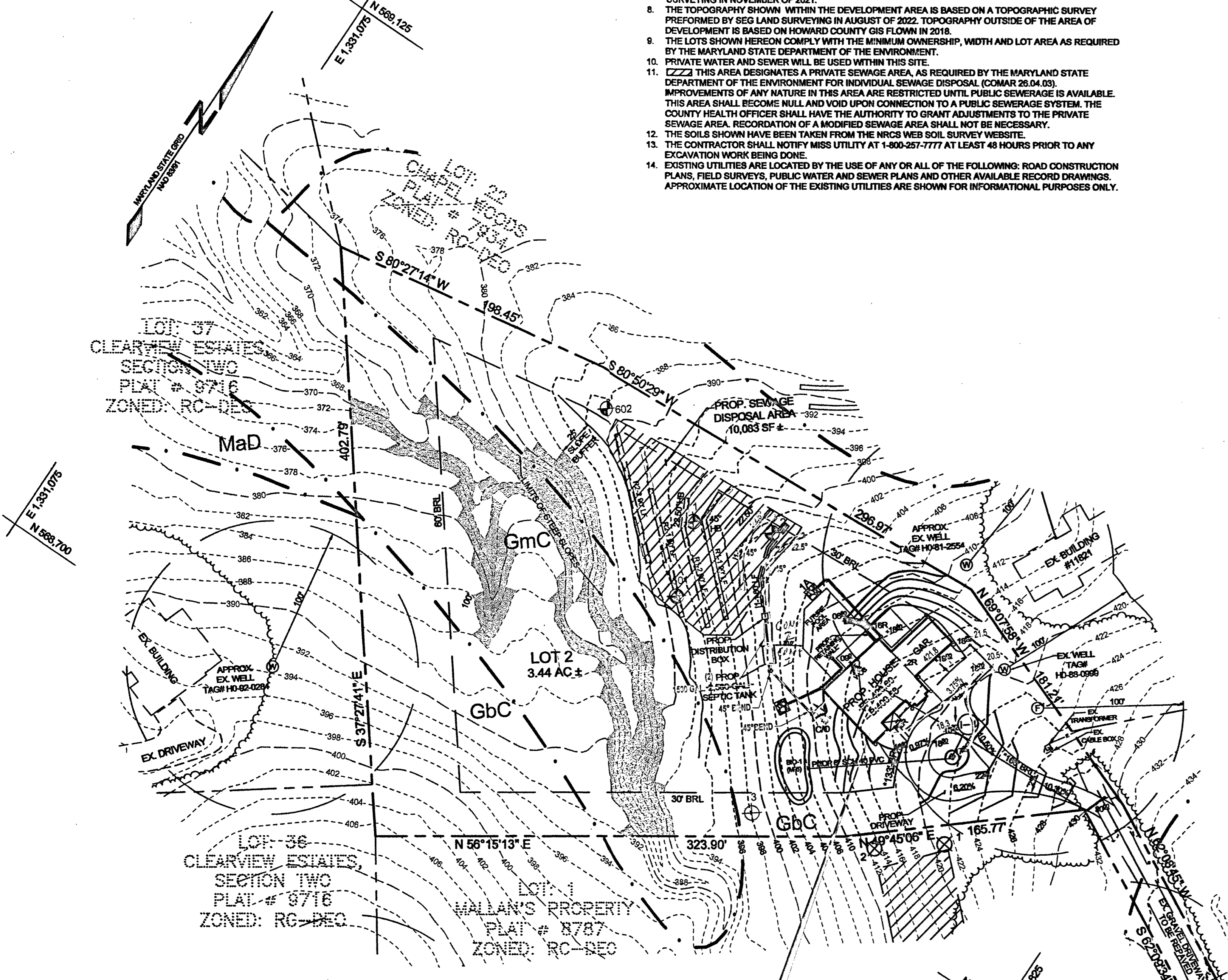
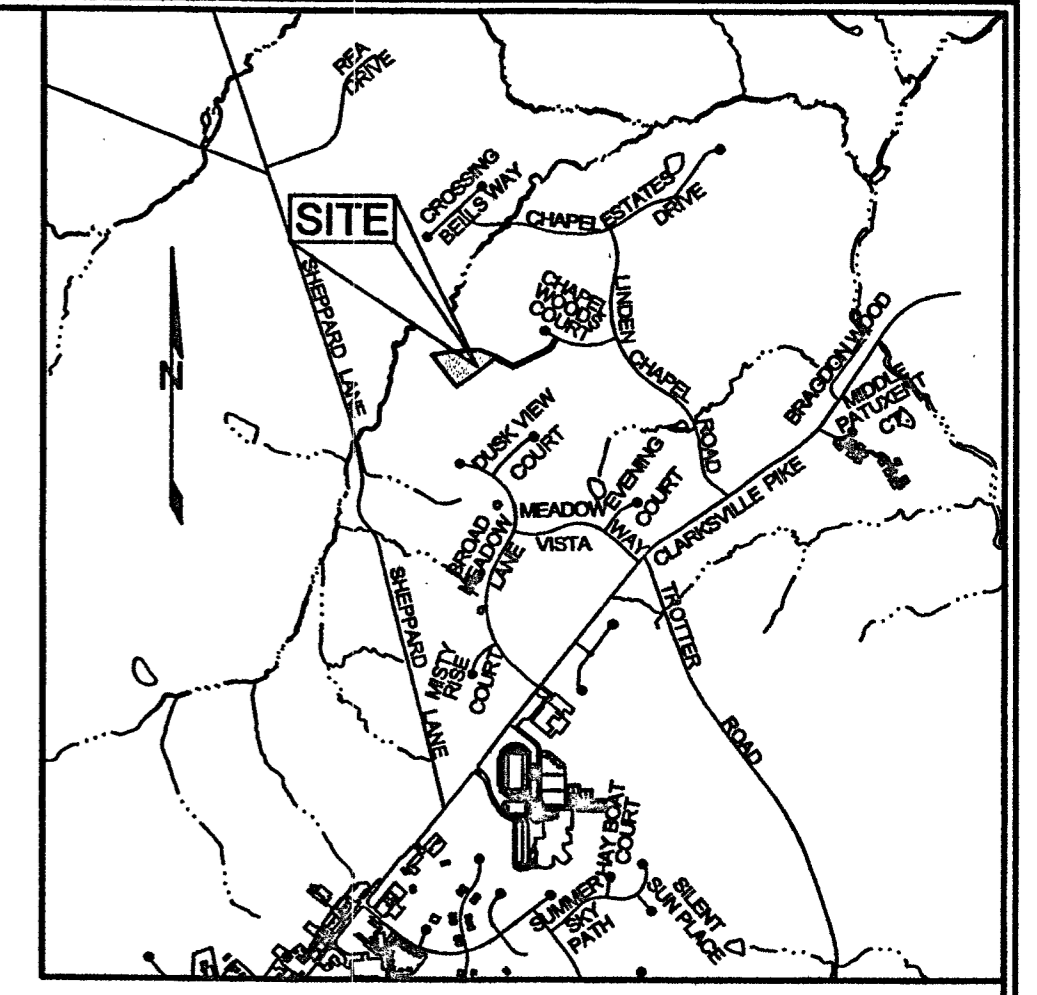
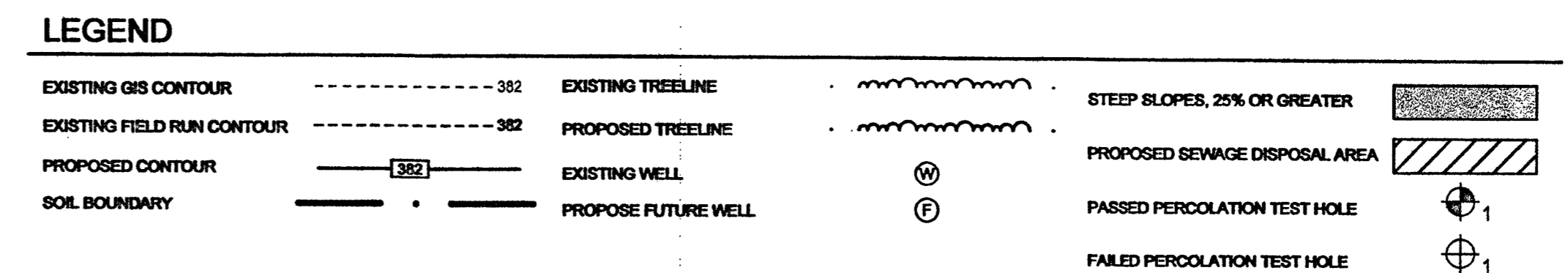
PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DAILY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 32026, EXPIRATION DATE JUNE 20, 2025

SOILS LEGEND			
SYMBOL	NAME / DESCRIPTION	GROUP	K FACTOR
GmC	GLENELG LOAM, 0 TO 3 PERCENT SLOPES	A	0.28
GmD	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	C	0.43
GmB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	C/D	0.37
GmE	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	A	0.28

NOTES:
 1) SOIL INFORMATION HAS BEEN TAKEN FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, WEBB 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.

GENERAL NOTES

- SUBJECT PROPERTY ZONED RC-DEO IN ACCORDANCE WITH THE OCTOBER 6, 2013 COMPREHENSIVE ZONING PLAN.
- TOTAL AREA OF PROPERTY = 3.44 ACRES±
- PROPERTY ADDRESS: 11813 CHAPEL WOODS COURT, CLARSKVILLE MD 21029
- PLAT REFERENCE: PLAT #8777
- THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP, WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT, WATER AND SCIENCE ADMINISTRATION AUTHORIZATION NUMBER 20-MT-3094/202000742.
- THE BOUNDARY SHOWN HERE ON IS BASED ON A BOUNDARY SURVEY PERFORMED BY SEG LAND SURVEYING IN NOVEMBER OF 2021.
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SEPTIC SYSTEM TRENCH DESIGN SPECIFICATIONS

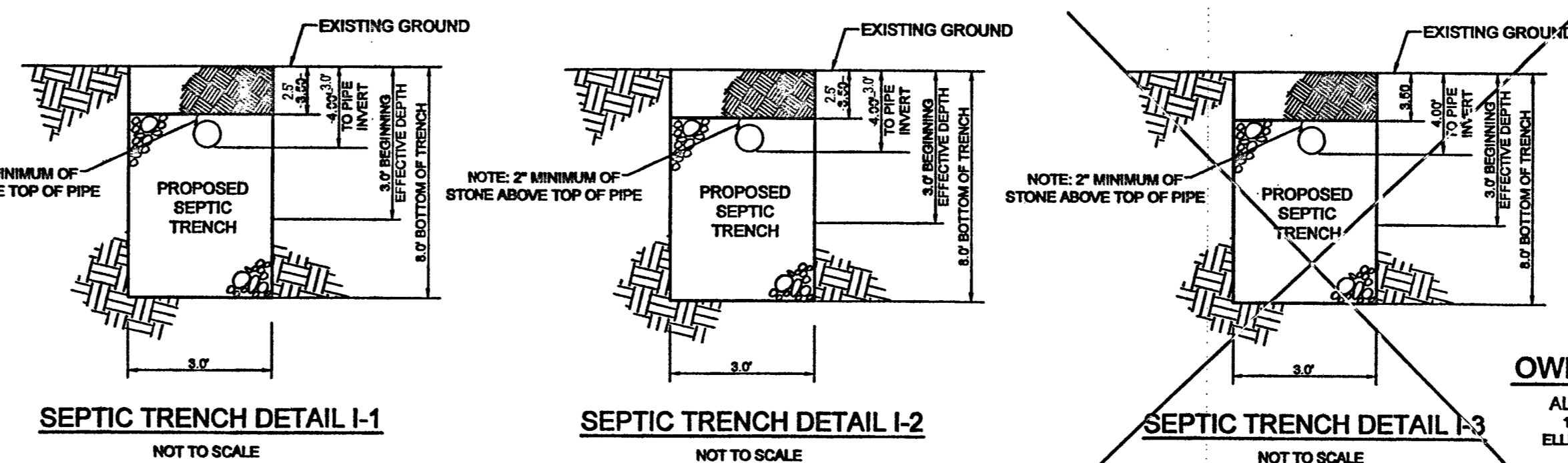
Signature: *[Signature]* Date: 5/5/25

AS-BUILT
 FIRST FLOOR = ELEV. 424.2
 BASEMENT FLOOR = ELEV. 413.2

REVISED - RED LINED PLAN
 BUILDING PERMIT B24000366
 REDLINE REVISIONS BY:
 RTF ASSOCIATES, INC.
 (JOHN LEMMERMAN, MDE #00678)
 142 EAST MAIN STREET
 WESTMINSTER, MARYLAND 21157
 410-848-2040, 410-876-1222

REVISED: COUNTY COMMENTS = 04-29-2025
 REVISED: (2) SEPTIC TANKS = 04-11-2025
 REVISED: COUNTY COMMENTS = 04-07-2025
 REVISED FLOOR ELEVATIONS = 03-19-2025

- INITIAL SYSTEM SYSTEM:**
 - APPLICATION RATE: 1.2
 - EFFECTIVE AREA BEGINNING DEPTH: 3.0'
 - BOTTOM MAXIMUM DEPTH: 8.0'
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 - APPLICATION RATE: 0.8
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 - EXISTING GROUND:
 - TRENCH 1: 403.7 - 404.0
 - INVERT: TRENCH 1: 400.7 - 401.0
 - EXISTING GROUND: TRENCH 1: 402.0 (TRENCH 1) 2
 - INVERT: TRENCH 1: 399.0 (TRENCH 1) 399.0



ONSITE SEWAGE DISPOSAL SYSTEM PLAN
CHANDE PROPERTY
 11813 CHAPEL WOODS COURT
 LOT 2 MALLAN'S PROPERTY

TAX MAP 29 GRID 13
 5TH ELECTION DISTRICT

PARCEL 36 LOT 2
 HOWARD COUNTY, MARYLAND

OWNER/DEVELOPER
 ALHAD & KAREN CHANDE
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SILL ENGINEERING, LLC
 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: ZS
 CHECKED BY: PS
 SCALE: AS SHOWN
 DATE: APRIL 8, 2024
 PROJECT #: 20-087
 SHEET #: 1 of 1

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. 32023, EXPIRATION DATE JUNE 30, 2025