

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: 8/24/22 **ONSITE SEWAGE DISPOSAL SYSTEM** P S72152

APPROVAL DATE: 12/30/22 **PERMIT: CONSTRUCTION** A _____

PROPERTY ADDRESS: 7013 COLT PLACE, DAYTON, MD 21036

SUBDIVISION: WILLOWSHIRE LOT: 22 TAX ID: 05-603010

CONTRACTOR: CHAVIS ENTERPRISES & SEPTIC SERVICES EMAIL: Ryan@chavisenterprisesllc.com

CONTRACTOR ADDRESS: 23 EAST ELLENDALE, BEL AIR, MD 21014 PHONE: (410)838-3007

PROPERTY OWNER: TOLL MID-ATLANTIC LP COMPANY, INC EMAIL: nbrandenburg@tollbrothers.com

OWNER ADDRESS: 250 GIBRALTER ROAD, HORSHAM, PA 19044 PHONE: (410)872-9165

SEPTIC TANK SIZE (GALLONS): 2000 TANK MANUFACTURER: Back River Pre-Cast, LLC

PUMP MODEL: N.A. PUMP SIZE N.A. PUMP TANK CAPACITY: N.A.

DISTRIBUTION SYSTEM: GRAVITY PRESSURE DOSED BEDROOMS: 7 APPLICATION RATE: 0.8

TRENCHES:	LINEAR FEET REQUIRED: <u>168</u>	INLET DEPTH: <u>3.0</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>7.5</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>12</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>3.0</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 CLEANOUT IN SHC, AS ILLUSTRATED.	

ISSUED BY: R BRICKER ISSUE DATE: 12/12/22 EXPIRATION DATE: 12/12/23

- 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 DOWNGRAIENT 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 N.A.
- 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

TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
<u>3'</u>	<u>3'</u>	<u>7.5'</u>
NUMBER OF TRENCHES <u>3</u>		
TOTAL LENGTH <u>116.8 F</u>		
ABSORPTION AREA <u>504 + its</u>		
DISTRIBUTION BOX LEVEL <u>Speed</u>		
DISTRIBUTION BOX BAFFLE <u>cone</u>		
DISTRIBUTION BOX PORT <u>yes</u>		

side wall

SEPTIC TANK DATA

SEPTIC TANK 1 LEVEL _____

MANUFACTURER Buck river

CAPACITY 2000 GAL

SEAM LOC Top

TANK LID DEPTH 15" x 2'

BAFFLES 4" back & 6" front

BAFFLE FILTER _____

MANHOLE LOC front & back

6" PORT LOC _____

WATERTIGHT TEST _____

SLOTTED yes

DATE ON LID 12/8/22

PUMP/SEPTIC TANK LEVEL

MANUFACTURER _____

CAPACITY _____ GAL

SEAM LOC _____

TANK LID DEPTH _____

BAFFLES _____

BAFFLE FILTER _____

MANHOLE LOC _____

6" PORT LOC _____

WATERTIGHT TEST _____

SLOTTED _____

DATE ON LID _____

ROAD NAME

PRE-CONSTRUCTION:

10/11/2022 CONFIRMED CONTOUR OF STAKES FOR 3x56' TRS. Ⓟ

INSTALLATION: 12/29/22 - Elevation of stic per plan. Pipe makes fall. septic tank good

D-box observed. builder on site, he began trenches while on site. Measured distance to well (RR18)

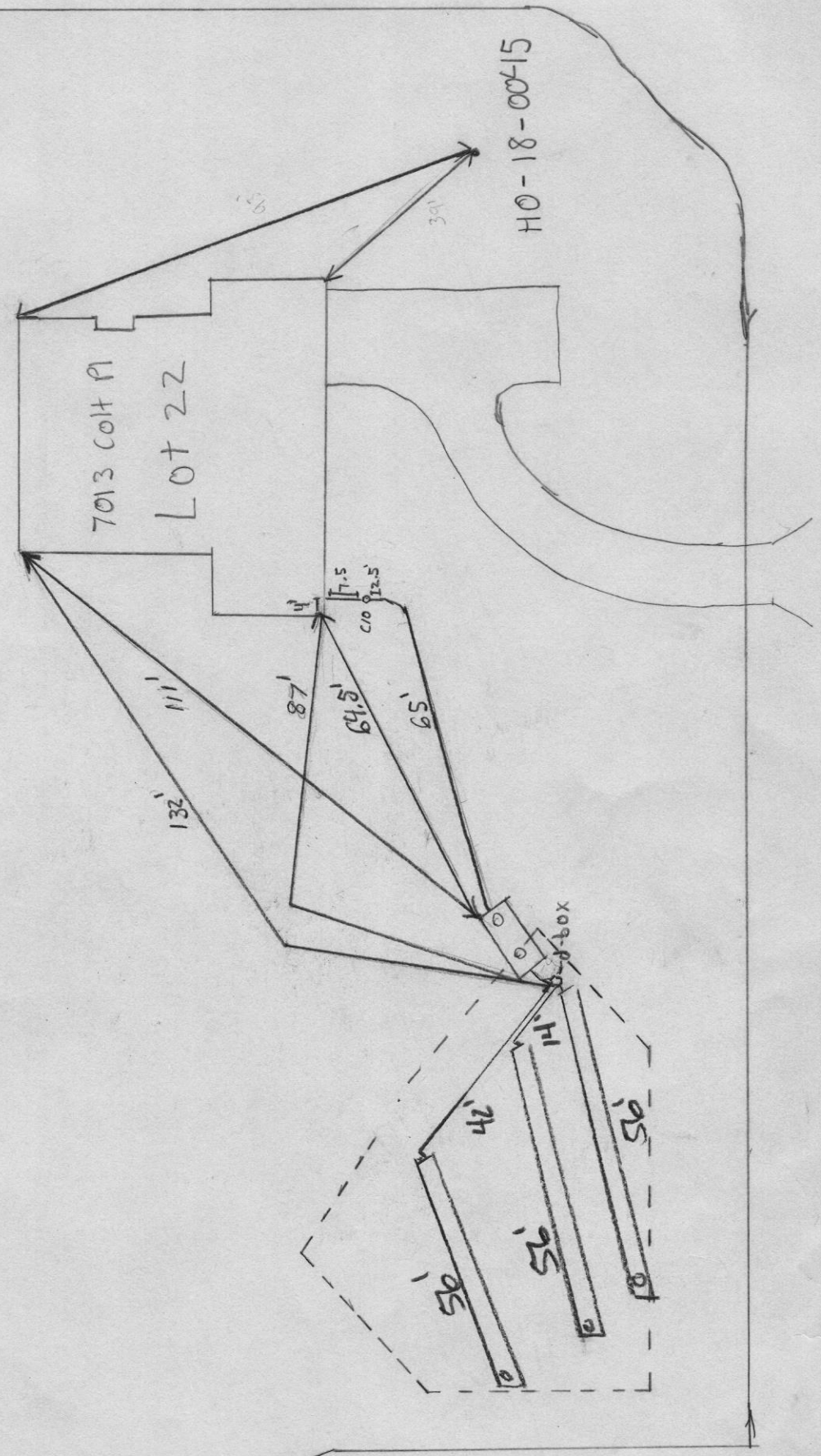
12/30/2022 3x56' trenches complete; leveled D-Box w/ speed level.

FINAL INSPECTOR

DATE OF APPROVAL

12/30/2022

NOT TO SCALE 1" = 30'



COLT PLACE

Ryan Ketner

From: Michael Boyce
Sent: Wednesday, September 28, 2022 3:16 PM
To: Ryan Ketner
Subject: FW: Wall Check_OSDS Plan_7013 Colt Place

WILLOWCREEK LOT 22

Michael Boyce

Regional Director - ESE, Survey

ESE Consultants, Inc.

6731 Columbia Gateway Drive, Suite 120, Columbia, MD 21046

P: 410-381-3058 C: 410-365-4175

www.eseconsultants.com [LinkedIn](#)

From: Oswald, Hank <hoswald@howardcountymd.gov>
Sent: Wednesday, September 28, 2022 3:15 PM
To: Michael Boyce <MBOYCE@eseconsultants.com>
Subject: RE: Wall Check_OSDS Plan_7013 Colt Place

Thanks. It looks like the driveway is within 10 feet of the well box on the OSDS Plan. Can you send in a revision on this as well?

Thanks,

Hank

From: Michael Boyce <MBOYCE@eseconsultants.com>
Sent: Wednesday, September 21, 2022 12:42 PM
To: Oswald, Hank <hoswald@howardcountymd.gov>
Cc: Silvast, Zackary <zsilvast@howardcountymd.gov>; Wolf, Kevin <KWolf@howardcountymd.gov>
Subject: RE: Wall Check_OSDS Plan_7013 Colt Place

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

The seal date is the date I sealed the plans, they have just sat for a while before submission.

First I have heard of the stairwell requirement, been submitting WC's in multiple counties, including Howard for 18 years now.

We will start adding them.

Michael Boyce

Regional Director - ESE, Survey

ESE Consultants, Inc.

6731 Columbia Gateway Drive, Suite 120, Columbia, MD 21046

P: 410-381-3058 C: 410-365-4175

From: Oswald, Hank <hoswald@howardcountymd.gov>
Sent: Wednesday, September 21, 2022 12:18 PM
To: Michael Boyce <MBOYCE@esiconsultants.com>
Cc: Silvast, Zackary <zsilvast@howardcountymd.gov>; Wolf, Kevin <KWolf@howardcountymd.gov>
Subject: RE: Wall Check_OSDS Plan_7013 Colt Place

I've attached the latest copies of the OSDS Plan and wall check. The OSDS Plan was just revised about a week ago, so I am thinking the stamp date should reflect this. The basement stairwell (if present) should be included on the wall check. This has been a requirement for quite a while, but maybe overlooked. Can you send me a copy of the wall check to scale showing the basement stairwell? Also, the T.W. elevations should also match.

Thanks,

Hank

From: Michael Boyce <MBOYCE@esiconsultants.com>
Sent: Wednesday, September 21, 2022 10:27 AM
To: Oswald, Hank <hoswald@howardcountymd.gov>
Cc: Silvast, Zackary <zsilvast@howardcountymd.gov>; Wolf, Kevin <KWolf@howardcountymd.gov>
Subject: RE: Wall Check_OSDS Plan_7013 Colt Place

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

Hank,

Looking more into this, the scale is correct, we printed and checked, it is as noted. Perhaps the print you have was printed fit to page instead of to scale.

The 3/18 date appears to be referring to the PP and OSDS plan, not the WC as I first interpreted. These were created back then, but due to the county not allowing revisions to be submitted until the original is permitted, these had to wait before they got put into system.

As noted in last email, the dimension confusion has to do with the porch being included in the over all footprint on the WC.

Finally, regarding the daylight, we have never provided the daylight on WC, never been asked to do so. Going forward, if this is a new requirement we can.

Michael Boyce
Regional Director – ESE, Survey

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6731 Columbia Gateway Drive, Suite 120, Columbia, MD 21046
P: 410-381-3058 C: 410-365-4175
www.esiconsultants.com [LinkedIn](#)

From: Oswald, Hank <hoswald@howardcountymd.gov>
Sent: Wednesday, September 21, 2022 9:21 AM
To: Michael Boyce <MBOYCE@eseconsultants.com>
Cc: Silvast, Zackary <zsilvast@howardcountymd.gov>; Wolf, Kevin <KWolf@howardcountymd.gov>
Subject: Wall Check_OSDS Plan_7013 Colt Place

Hi Mr. Boyce:

I didn't conduct the initial review of the wall check, but the plan is not exactly to scale. It's about 1 ft off, and some of the measurements from the house foundation to the property lines are off by more than a couple of feet. For instance, the measurement to the front property line is 156 feet on my scale (not 159.6). The wall check should also include the basement stairwell as part of the foundation to ensure that it falls outside of the 20 ft setback to the sewage disposal area. The house dimensions on the wall check don't match up with the house dimensions on the revised OSDS. The TW elevations don't match up exactly as well. Is there a reason for this? Also, your stamp date reads 3/28/22.

Thanks,

Hank

Hank Oswald, L.E.H.S.
Howard County Health Department
Well & Septic Program
410.313.1786
hoswald@howardcountymd.gov

Oswald, Hank

From: Oswald, Hank
Sent: Wednesday, September 21, 2022 9:21 AM
To: Michael Boyce
Cc: Silvast, Zackary; Wolf, Kevin
Subject: Wall Check_OSDS Plan_7013 Colt Place

Hi Mr. Boyce:

I didn't conduct the initial review of the wall check, but the plan is not exactly to scale. It's about 1 ft off, and some of the measurements from the house foundation to the property lines are off by more than a couple of feet. For instance, the measurement to the front property line is 156 feet on my scale (not 159.6). The wall check should also include the basement stairwell as part of the foundation to ensure that it falls outside of the 20 ft setback to the sewage disposal area. The house dimensions on the wall check don't match up with the house dimensions on the revised OSDS. The TW elevations don't match up exactly as well. Is there a reason for this? Also, your stamp date reads 3/28/22.

Thanks,

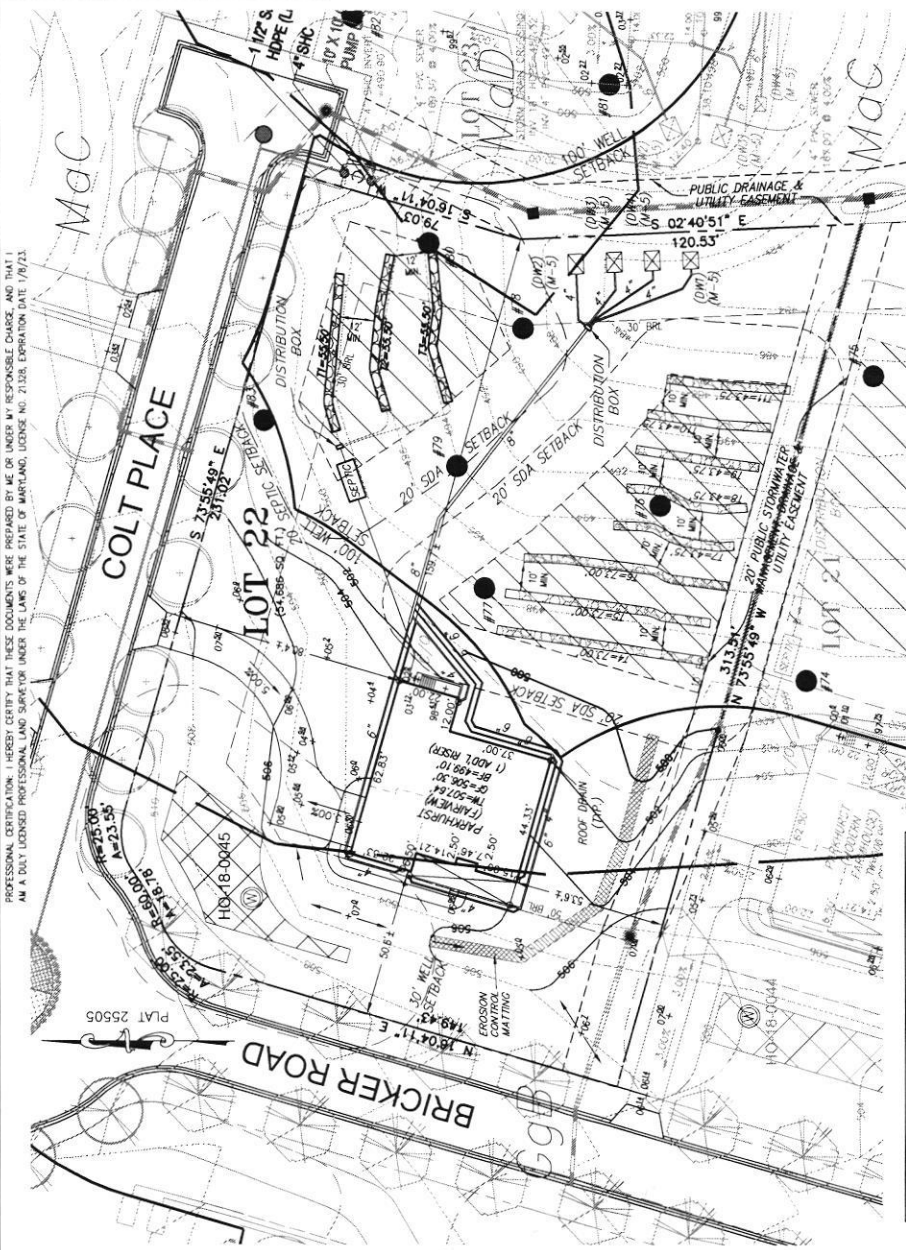
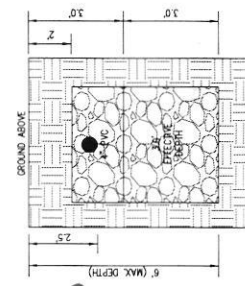
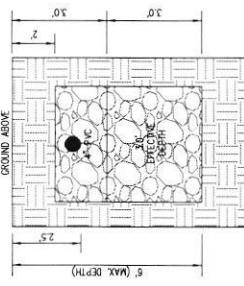
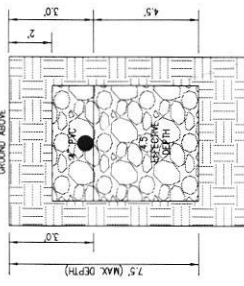
Hank

Hank Oswald, L.E.H.S.
Howard County Health Department
Well & Septic Program
410.313.1786
hoswald@howardcountymd.gov

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE, AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 7158, EXPIRATION DATE 1/8/21.

HOUSE OPTIONS:
 HOUSE TYPE: FARMHOUSE (FAIRVIEW)
 TWO CAR SIDE ENTRY GARAGE
 DAYLIGHT BASEMENT

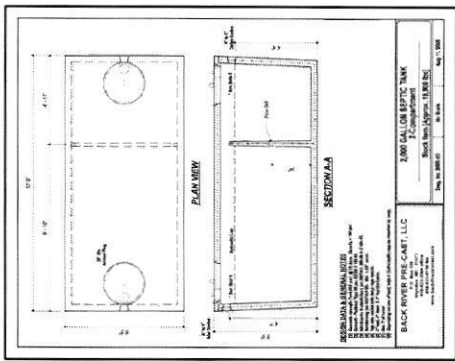
INITIAL TRENCH DATA
 BOTTOM MAX DEPTH (7.5)
 TRENCH 1 (T1): 55.50 LF
 GROUND ABOVE = 498.30'
 INV IN = 495.30'
 BOTTOM TRENCH = 490.80'
 TRENCH 2 (T2): 55.50 LF
 GROUND ABOVE = 498.20'
 INV IN = 493.20'
 BOTTOM TRENCH = 488.70'
 TRENCH 3 (T3): 55.50 LF
 GROUND ABOVE = 493.50'
 INV IN = 490.50'
 BOTTOM TRENCH = 488.10'



VICINITY MAP
 TAX MAP 27, GRID 18
 1" = 2000'

GENERAL NOTES:

1. THESE AREAS DESIGNATE A PRIVATE SEWAGE AREA OF AT LEAST 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL IMPROVEMENTS OF ANY NATURE. THE SEWAGE DISPOSAL SYSTEM SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE MARYLAND SEWAGE SYSTEMS ACT AND THE MARYLAND DEPARTMENT OF THE ENVIRONMENT. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT VARIANCES FOR ENCROACHMENTS INTO THE PRIVATE SEWAGE AREA. RECONSTRUCTION OF A SEWAGE AREA SHALL NOT BE NECESSARY.
2. EXISTING WELLS, SEPTIC SYSTEMS, AND SEWAGE DISPOSAL AREAS WITHIN 100' OF THE PROPERTY AND THOSE WELLS WITHIN 200' DOWN GRADIENT OF EXISTING OR PROPOSED SEPTIC SYSTEMS OR SEWAGE DISPOSAL AREAS HAVE BEEN SHOWN.
3. ANY CHANGES TO A PRIVATE SEWAGE AREA SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
4. BUILDING SETBACKS (B.R.L.) SHOWN HEREON PER SITE DEVELOPMENT PLAN SETBACK DISTANCES SHOWN HEREON AS "3" HAVE AN ACCURACY OF ±0.1' (FOOT).
5. ANY CHANGES TO THE LOCATIONS OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED SITE PLAN MAY BE REQUIRED.
6. THE MAXIMUM EARTH COVER OVER THE TANK IS THREE (3) FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
7. THE LOT SHOWN HEREON COMPLEES WITH THE MINIMUM OWNERSHIP WIDTH, AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
11. THE EXISTING TOPOGRAPHY SHOWN HEREON IS FROM HOWARD COUNTY GIS AND A TOPOGRAPHIC SURVEY PREPARED BY BOILER ENGINEERING ON 06/25/15 AND REVISED ON 09/03/15.



SOILS LEGEND

SOIL	NAME	CLASS	REV
GPB	GLEBEHEAD 3% TO 8% BENT SLOPES	B	26
MB	MANNOR LOAM 15 TO 25 PERCENT SLOPES	B	28
MAD	MANNOR LOAM 15 TO 25 PERCENT SLOPES	B	28

- LEGEND:**
- 1. BUILDING RESTRICTION LINE
 - 2. WELL LOCATION
 - 3. TOP OF WALL
 - 4. GARAGE FLOOR
 - 5. PASSED PERC. LOCATION
 - 6. SEWAGE DISPOSAL AREA
 - 7. WELL BOX AREA
 - 8. PROPOSED PIPE
 - 9. SOIL DELINEATION LINE



WELL LOCATION CERTIFICATION:

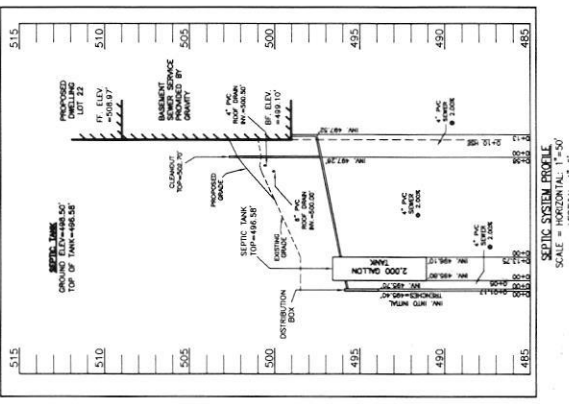
THE EXISTING WELL SHOWN FOR LOT 22 (TAG NO. HD-18-0045) HAS BEEN FIELD LOCATED AND IS ADEQUATELY SHOWN HEREON.

ON-SITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN

LOT 22
WILLOWSHIRE
 LIBER 18479, FOLIO D296
 ELECTION DISTRICT NO. 5
 HOWARD COUNTY, MARYLAND
 ADDRESS: 7013 COLT PLACE
 DAYTON, MARYLAND 21036

STORAGE DISPOSAL SYSTEM DATA (7. BORK)

1. INITIAL TRENCH DESIGN (7. BORK x 150 GPD/BIRM = 1,050 GPD)
 USE 3" WIDE BRANCH WITH 5/8" IRON BELOW PIPE
 1.31250 SF x 3" WIDTH = 4.750 LF x 0.38 (SIDEWALL REDUCTION) = 1.81250 LF
 USE 3" 5550' LONG TRENCHES = 166.50 LF
2. DISTRIBUTION BOX
 EXISTING GRADE OVER TANK: 498.50'
 PROPOSED GRADE OVER TANK: 498.50'
 INVERT IN: 495.10' INVERT OUT: 495.80'
 INVERT IN: 495.70' INVERT OUT: 495.40'
3. 1ST REPLACEMENT TRENCH DESIGN (7. BORK x 150 GPD/BIRM = 1,050 GPD)
 USE 3" WIDE BRANCH WITH 5/8" IRON BELOW PIPE
 1.31250 SF x 3" WIDTH = 4.750 LF x 0.38 (SIDEWALL REDUCTION) = 1.81250 LF
 USE 3" 5550' LONG TRENCHES = 166.50 LF
4. 2ND REPLACEMENT TRENCH DESIGN (7. BORK x 150 GPD/BIRM = 1,050 GPD)
 USE 3" WIDE BRANCH WITH 5/8" IRON BELOW PIPE
 1.31250 SF x 3" WIDTH = 4.750 LF x 0.38 (SIDEWALL REDUCTION) = 1.81250 LF
 USE 3" 5550' LONG TRENCHES = 166.50 LF
5. 3RD REPLACEMENT TRENCH DESIGN (7. BORK x 150 GPD/BIRM = 1,050 GPD)
 USE 3" WIDE BRANCH WITH 5/8" IRON BELOW PIPE
 1.31250 SF x 3" WIDTH = 4.750 LF x 0.38 (SIDEWALL REDUCTION) = 1.81250 LF
 USE 3" 5550' LONG TRENCHES = 166.50 LF



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

ESE CONSULTANTS
 ENGINEERING • PLANNING • SURVEYING • ENVIRONMENTAL
 ESE Consultants, Inc.
 6731 Columbia Gateway Drive • Suite 120 • Columbia, MD 21046
 T: 410-672-9106
 DATE: 04/17/2022 SCALE: 1" = 30'
 JOB NO: 4520 DRAWING: RCK
 CHK'D: MJB

ws-sp-APP 22-00220

HOUSE OPTIONS:

HOUSE TYPE: PARHURST (FAIRVIEW)

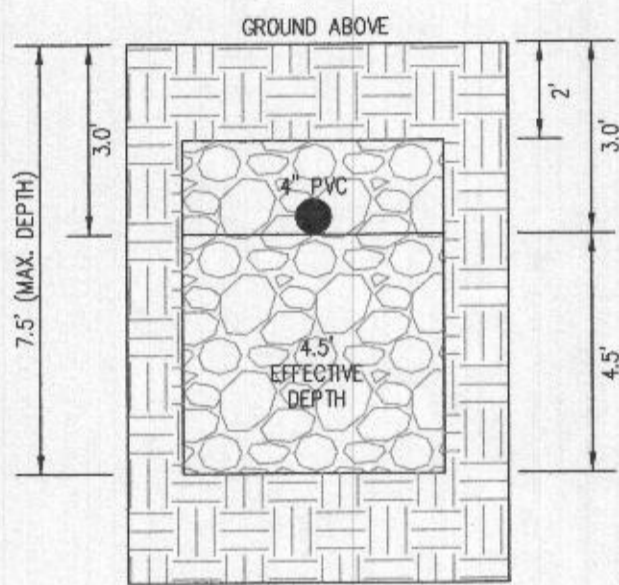
TWO CAR SIDE ENTRY GARAGE
DAYLIGHT BASEMENT

OPTION No. 012
OPTION No. 018

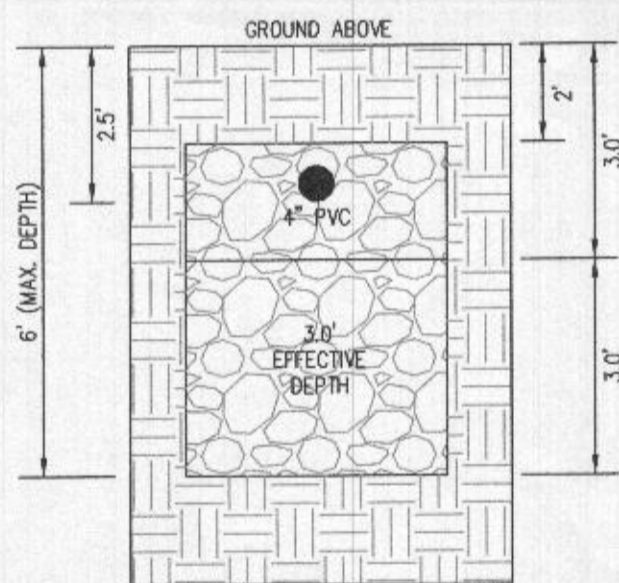
PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE, AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21328, EXPIRATION DATE 1/8/23.

INITIAL TRENCH DATA

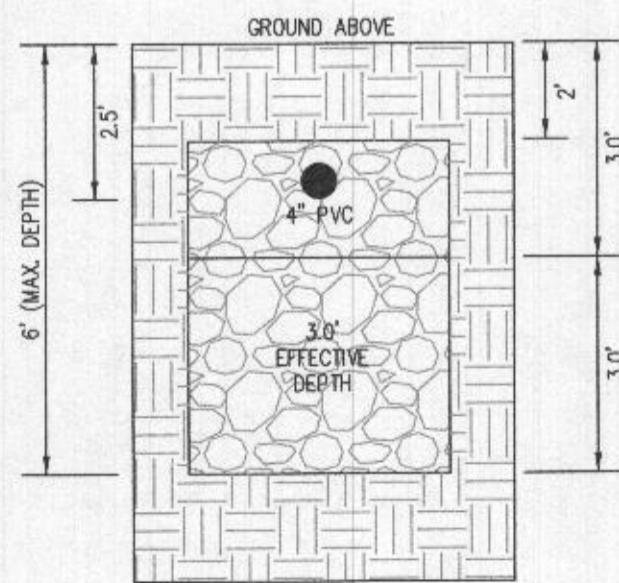
- BOTTOM MAX. DEPTH (7.5')
- TRENCH 1 (T1): 55.50 LF.**
GROUND ABOVE = 498.30'
INV. IN = 495.30'
BOTTOM TRENCH = 490.80'
- TRENCH 2 (T2): 55.50 LF.**
GROUND ABOVE = 496.20'
INV. IN = 493.20'
BOTTOM TRENCH = 488.70'
- TRENCH 3 (T3): 55.50 LF.**
GROUND ABOVE = 493.60'
INV. IN = 490.60'
BOTTOM TRENCH = 486.10'



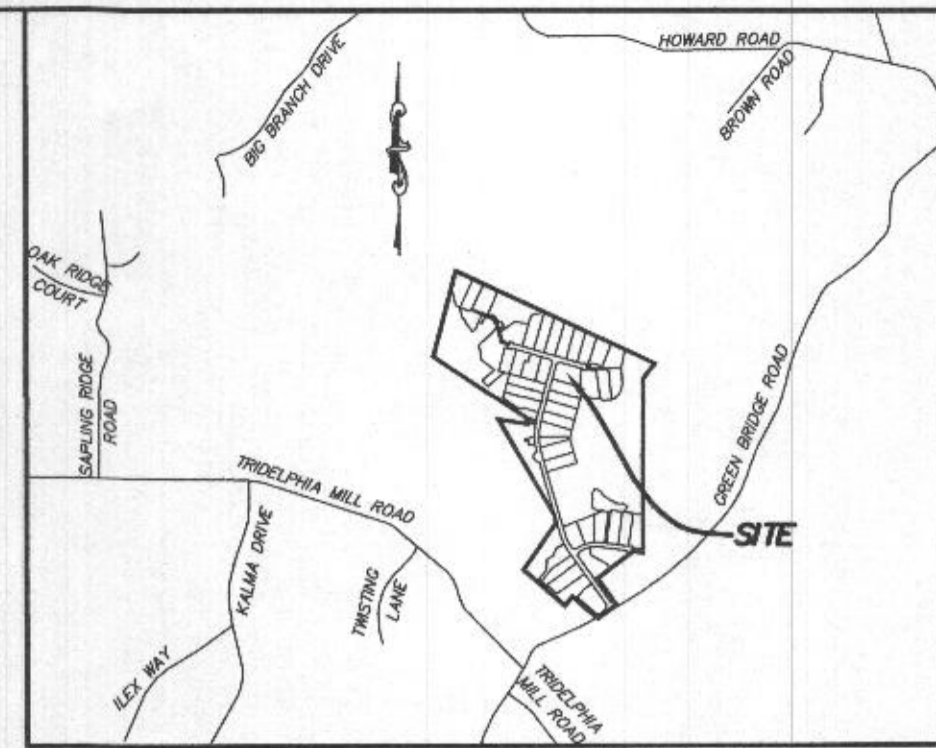
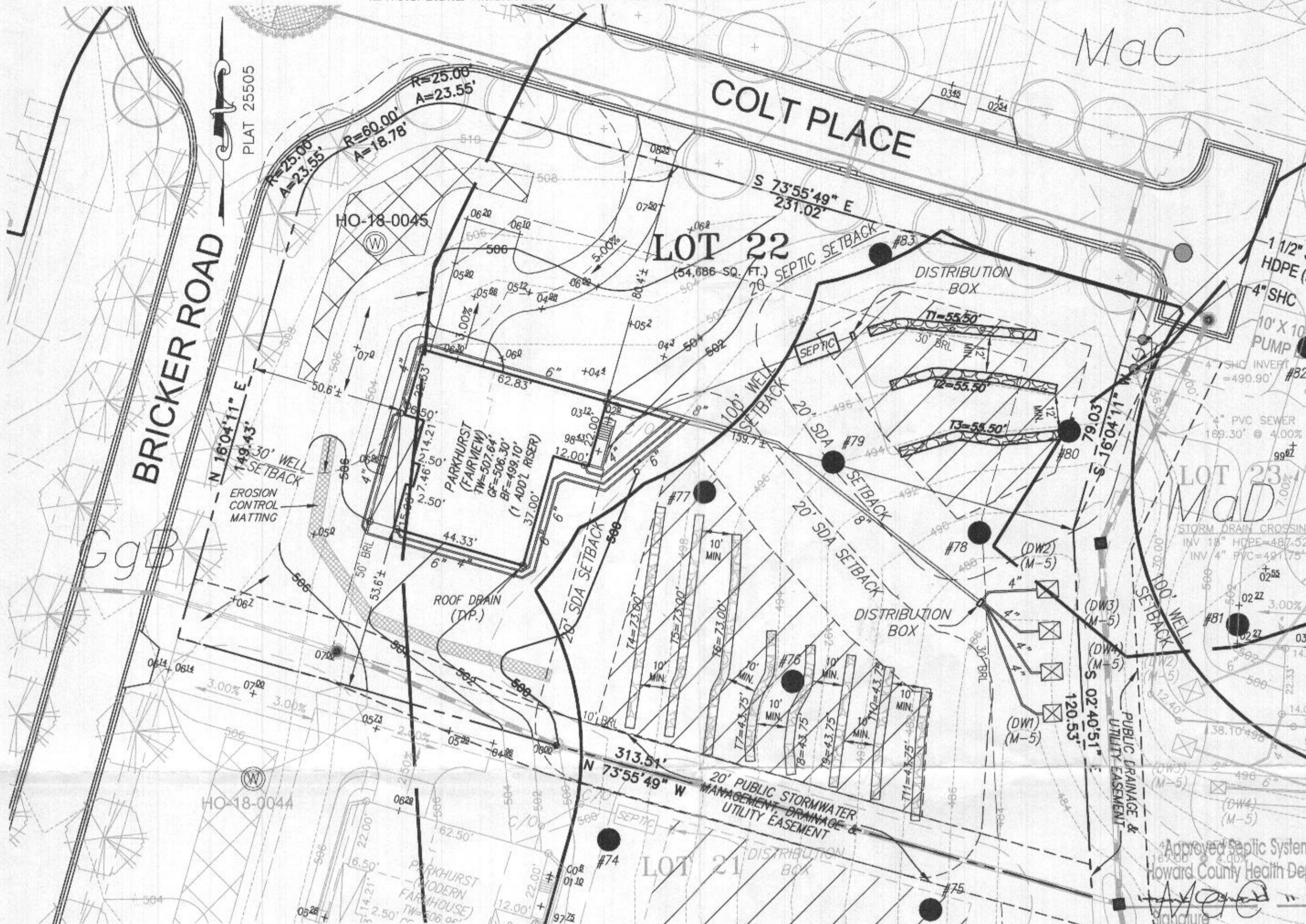
INITIAL SYSTEM
TRENCH DETAIL (T1) THRU (T3)
(NOT TO SCALE)



1ST REPLACEMENT SYSTEM
TRENCH DETAIL (T4 THRU T6)
(NOT TO SCALE)

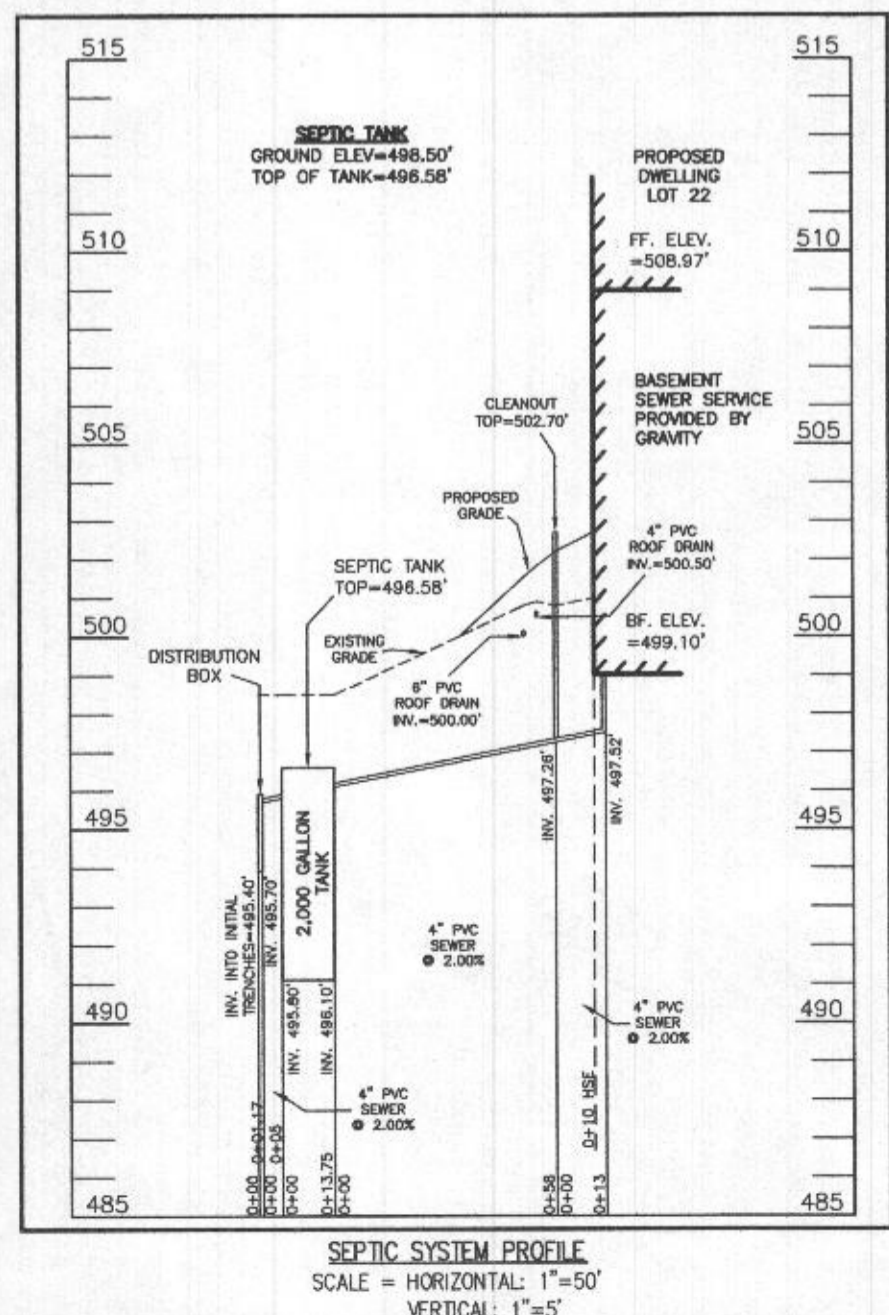


2ND REPLACEMENT SYSTEM
TRENCH DETAIL (T7 THRU T11)
(NOT TO SCALE)



VICINITY MAP
1" = 2000'
TAX MAP 27, GRID 18

- GENERAL NOTES:**
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 - EXISTING WELLS, SEPTIC SYSTEMS, AND SEWAGE DISPOSAL AREAS WITHIN 100' OF THE PROPERTY AND THOSE WELLS WITHIN 200' DOWN GRADIENT OF EXISTING OR PROPOSED SEPTIC SYSTEMS OR SEWAGE DISPOSAL AREAS HAVE BEEN SHOWN.
 - ANY CHANGES TO A PRIVATE SEWAGE AREA SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
 - BUILDING SETBACKS (B.R.L.'s) SHOWN HEREON PER SITE DEVELOPMENT PLAN SETBACK DISTANCES SHOWN HEREON AS "±" HAVE AN ACCURACY OF ±0.1' FOOT.
 - ANY CHANGES TO THE LOCATIONS OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED SITE PLAN MAY BE REQUIRED.
 - THE MAXIMUM EARTH COVER OVER THE TANK IS THREE (3) FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
 - THE LOT SHOWN HEREON COMPLIES WITH THE MINIMUM OWNERSHIP, WIDTH, AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
 - THE EXISTING TOPOGRAPHY SHOWN HEREON IS FROM HOWARD COUNTY GIS AND A TOPOGRAPHIC SURVEY PREPARED BY BOHLER ENGINEERING ON 08/25/15 AND REVISED ON 09/03/15.



SEPTIC SYSTEM PROFILE
SCALE = HORIZONTAL: 1"=50'
VERTICAL: 1"=5'

SOILS LEGEND

SOIL	NAME	CLASS	Kw
GgB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	B	.28
MaC	MANOR LOAM, 8 TO 15 PERCENT SLOPES	B	.28
MaD	MANOR LOAM, 15 TO 25 PERCENT SLOPES	B	.28

SEWAGE DISPOSAL SYSTEM DATA (7 BDRM)

- PROPOSED INVERT AT FOUNDATION WALL: 497.52'
- EX. GRADE OVER TANK: 498.50'
PROPOSED GRADE OVER TANK: 498.50'
INVERT IN: 496.10' INVERT OUT: 495.80'
 - DISTRIBUTION BOX
EXISTING GRADE OVER TANK: 498.50'
PROPOSED GRADE OVER TANK: 498.50'
INVERT IN: 495.70' INVERT OUT: 495.40'
 - INITIAL TRENCH DESIGN (7 BDRM x 150 GPD/BDRM = 1,050 GPD)
1,050 GPD ÷ 0.8 APP. RATE = 1,312.50 SF
USE 3' WIDE TRENCH WITH 54" GRAVEL BELOW PIPE
12' MIN. SPACING BETWEEN TRENCH EDGES
1,312.50 SF ÷ 3' WIDTH = 437.50 LF x 0.38 (SIDEWALL REDUCTION) = 166.25 LF MIN.
USE 3 55.50' LONG TRENCHES = 166.50 LF
 - 1ST REPLACEMENT TRENCH DESIGN (7 BDRM x 150 GPD/BDRM = 1,050 GPD)
1,050 GPD ÷ 0.8 APP. RATE = 1,312.50 SF
USE 3' WIDE TRENCH WITH 42" GRAVEL BELOW PIPE
10' MIN. SPACING BETWEEN TRENCH EDGES
1,312.50 SF ÷ 3' WIDTH = 437.50 LF x 0.50 (SIDEWALL REDUCTION) = 218.75 LF MIN.
USE 3 73.00' LONG TRENCHES = 219.00 LF
 - 2ND REPLACEMENT TRENCH DESIGN (7 BDRM x 150 GPD/BDRM = 1,050 GPD)
1,050 GPD ÷ 0.8 APP. RATE = 1,312.50 SF
USE 3' WIDE TRENCH WITH 42" GRAVEL BELOW PIPE
10' MIN. SPACING BETWEEN TRENCH EDGES
1,312.50 SF ÷ 3' WIDTH = 437.50 LF x 0.50 (SIDEWALL REDUCTION) = 218.75 LF MIN.
USE 5 43.75' LONG TRENCHES = 218.75 LF

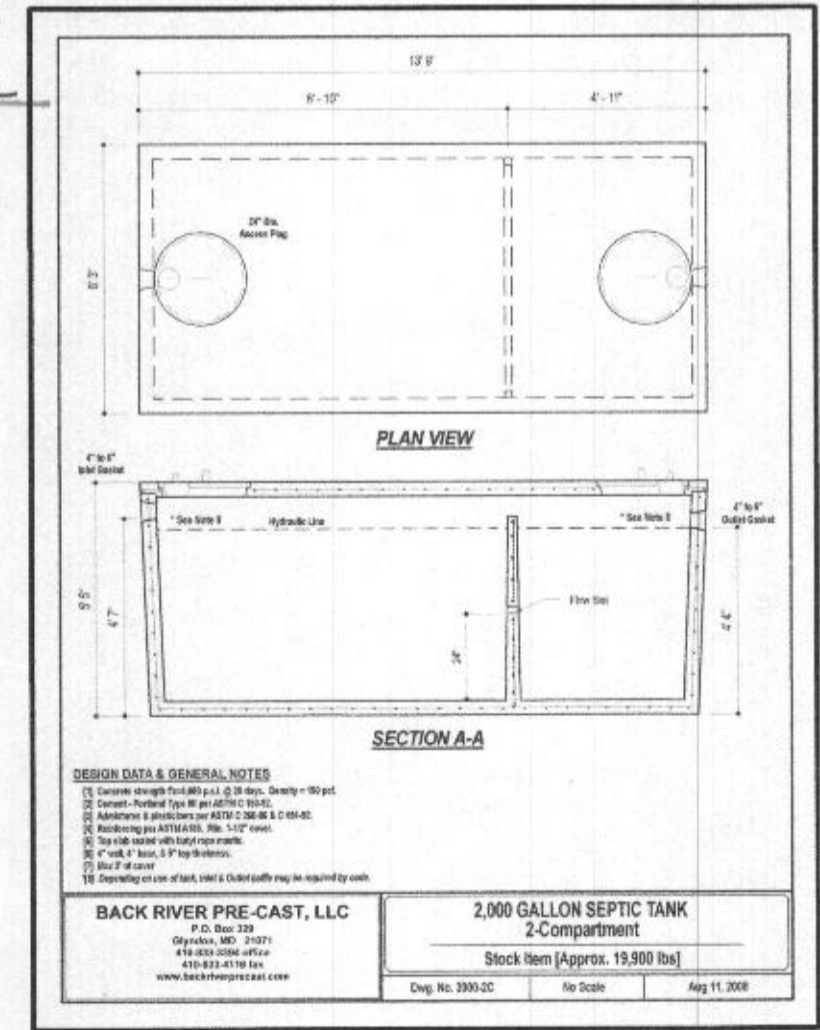


- LEGEND:**
- BRL BUILDING RESTRICTION LINE
 - WELL LOCATION
 - T.W. TOP OF WALL
 - G.F. GARAGE FLOOR
 - B.F. BASEMENT FLOOR
 - PASSED PERC LOCATION
 - SEWAGE DISPOSAL AREA
 - WELL BOX AREA
 - PROPOSED TREE
 - PROPOSED TREE
 - SOIL DELINEATION LINE

WELL LOCATION CERTIFICATION:

THE EXISTING WELL SHOWN FOR LOT 22 (TAG NO. HO-18-0045) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN HEREON.

ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN
**LOT 22
WILLOWSHIRE**
LIBER 18479, FOLIO 296
PLAT NO. 25505
ELECTION DISTRICT NO. 5
HOWARD COUNTY, MARYLAND
ADDRESS: 7013 COLT PLACE
DAYTON, MARYLAND 21036



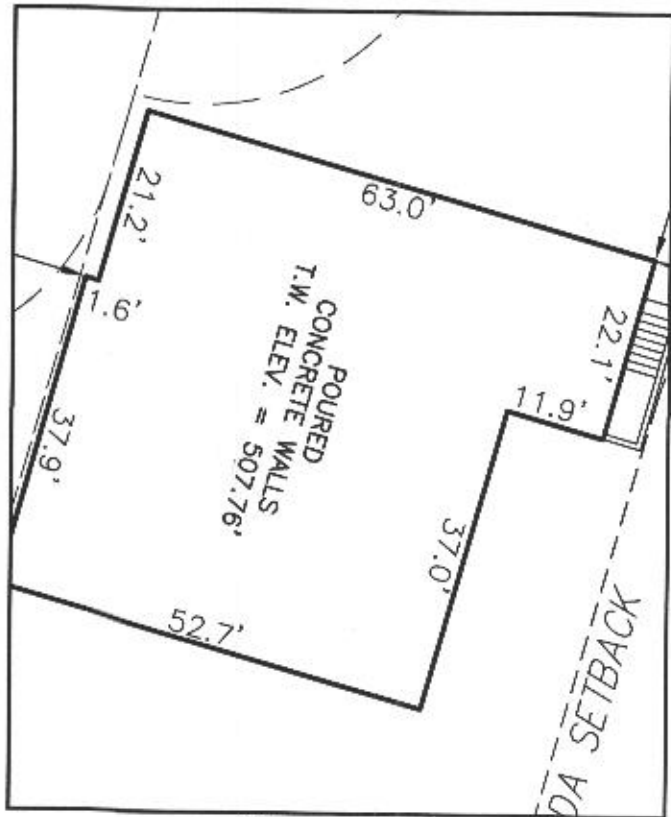
BACK RIVER PRE-CAST, LLC
2,000 GALLON SEPTIC TANK
2-Compartment
Stock Item (Approx. 19,900 lbs)
Dup. No. 2000-2C No Scale Aug 11, 2008

ESE CONSULTANTS
ENGINEERING • PLANNING • SURVEYING • ENVIRONMENTAL
ESE Consultants, Inc.
6731 Columbia Gateway Drive • Suite 120 • Columbia, MD 21046
T: 410-872-9105

DATE: 03/17/2022 SCALE: 1" = 30' FILE: OSDS LOT 22_rev1
CHK'D: M.J.B. JOB NO: 4520 DRAWN: R.C.K.

LEGEND:

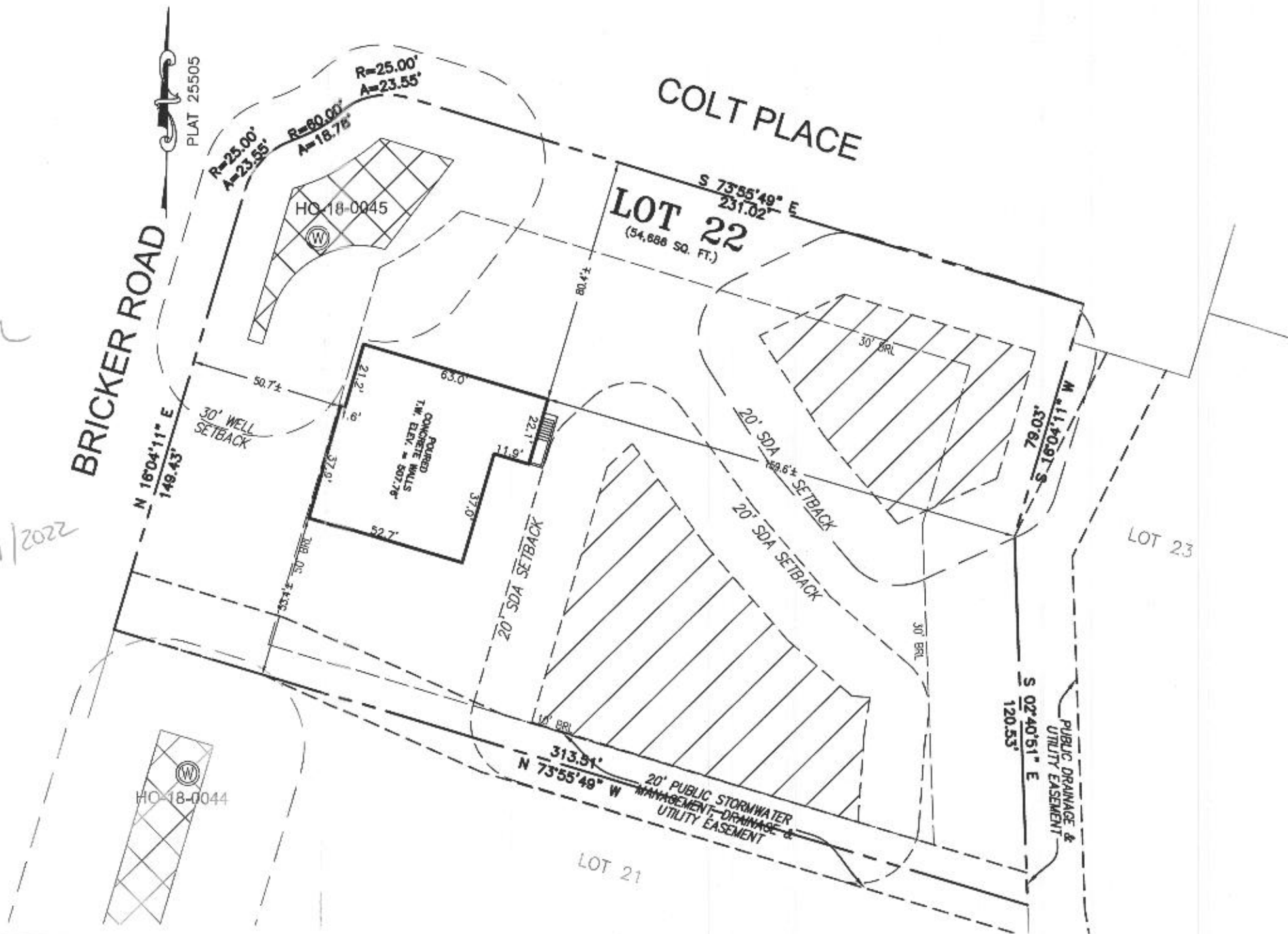
- BRL BUILDING RESTRICTION LINE
- WELL LOCATION
- T.W. TOP OF WALL
- SEWAGE DISPOSAL AREA
- WELL BOX AREA



HOUSE ENLARGEMENT
NOT TO SCALE

WELL NUMBER: HO-18-0045
 ADDRESS: 7013 COLT PLACE
 DAYTON, MD 21036
 PERMIT No.: B21002777

*Well Check
 OK
 Approved
 RJE 12/9/2022*



SURVEYOR'S CERTIFICATE

THIS WALLCHECK WAS PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE REPORT. THIS PROPERTY IS SUBJECT TO ANY AND ALL EASEMENTS, RIGHT-OF-WAYS, COVENANTS, AND RESTRICTIONS, ETC. OF RECORD, SOME OR ALL OF WHICH MAY OR MAY NOT BE SHOWN AND/OR REFERENCED HEREON. BEARINGS AND DISTANCES OF THE PROPERTY BOUNDARY LINES SHOWN HEREON ARE PER AVAILABLE RECORDS AND HAVE NOT BEEN FIELD VERIFIED. THIS IS NOT A "LOCATION DRAWING" AND IS NOT TO BE USED FOR SETTLEMENT PURPOSES.

Michael Joe Boyce 21328 9/23/22
 SIGNATURE: MICHAEL JOE BOYCE MD. LIC NO. DATE

WALLCHECK
 LOT 22
WILLOSHIRE
 LIBER 18479, FOLIO 296
 PLAT NO. 25505
 5th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

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ESE Consultants, Inc.
 6731 Columbia Gateway Drive • Suite 120 • Columbia, MD 21046
 T: 410-872-9105

DATE: 09/23/2022 SCALE: 1" = 40' FILE: WC LOT 22 rev 1
 CHK'D: M.J.B. JOB NO: 4520 DRAWN: V.X.P



HOUSE OPTIONS:

HOUSE TYPE: PARKHURST (FAIRVIEW)

TWO CAR SIDE ENTRY GARAGE
DAYLIGHT BASEMENT

OPTION No. 012
OPTION No. 018

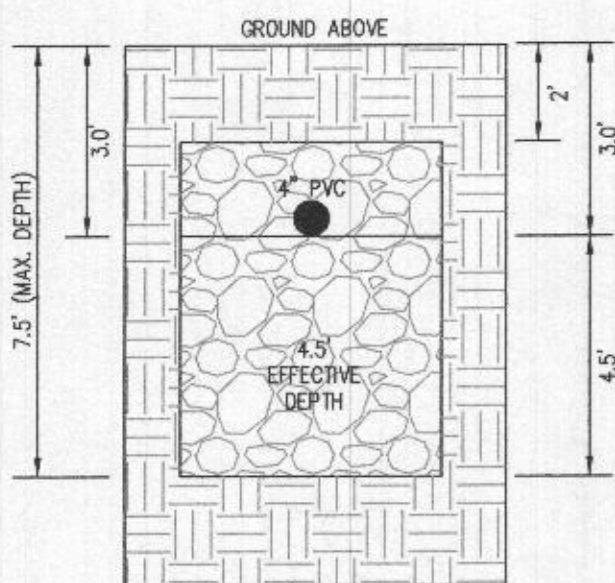
INITIAL TRENCH DATA:

BOTTOM MAX. DEPTH (7.5')

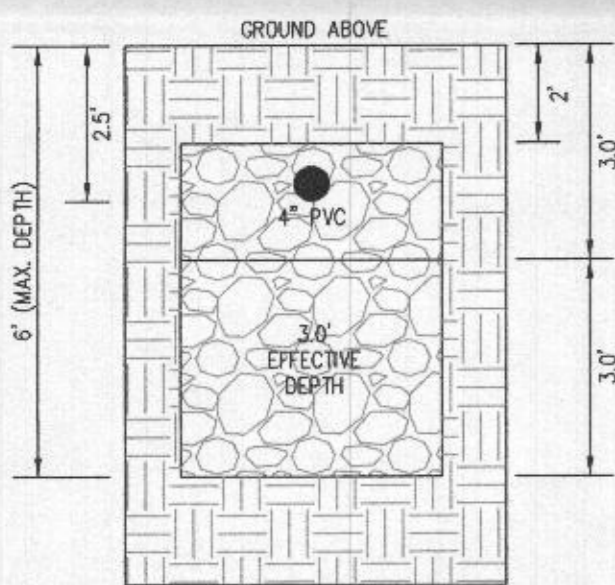
TRENCH 1 (T1): 55.50 L.F.
GROUND ABOVE = 498.30'
INV. IN = 495.30'
BOTTOM TRENCH = 490.80'

TRENCH 2 (T2): 55.50 L.F.
GROUND ABOVE = 496.20'
INV. IN = 493.20'
BOTTOM TRENCH = 488.70'

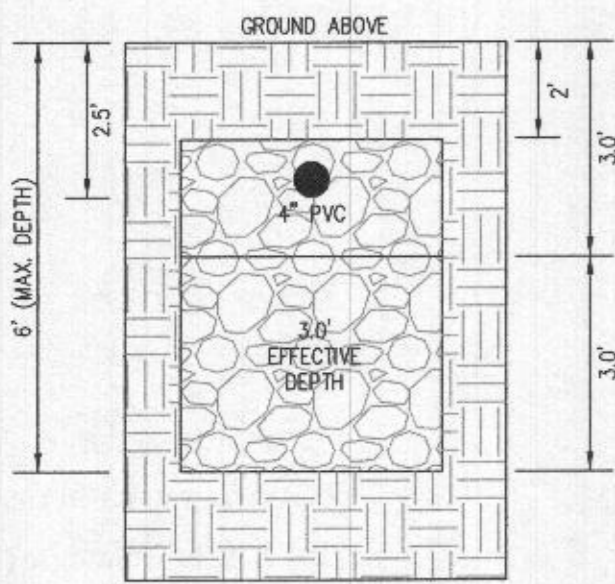
TRENCH 3 (T3): 55.50 L.F.
GROUND ABOVE = 493.60'
INV. IN = 490.60'
BOTTOM TRENCH = 486.10'



INITIAL SYSTEM
TRENCH DETAIL (T1) THRU (T3)
(NOT TO SCALE)

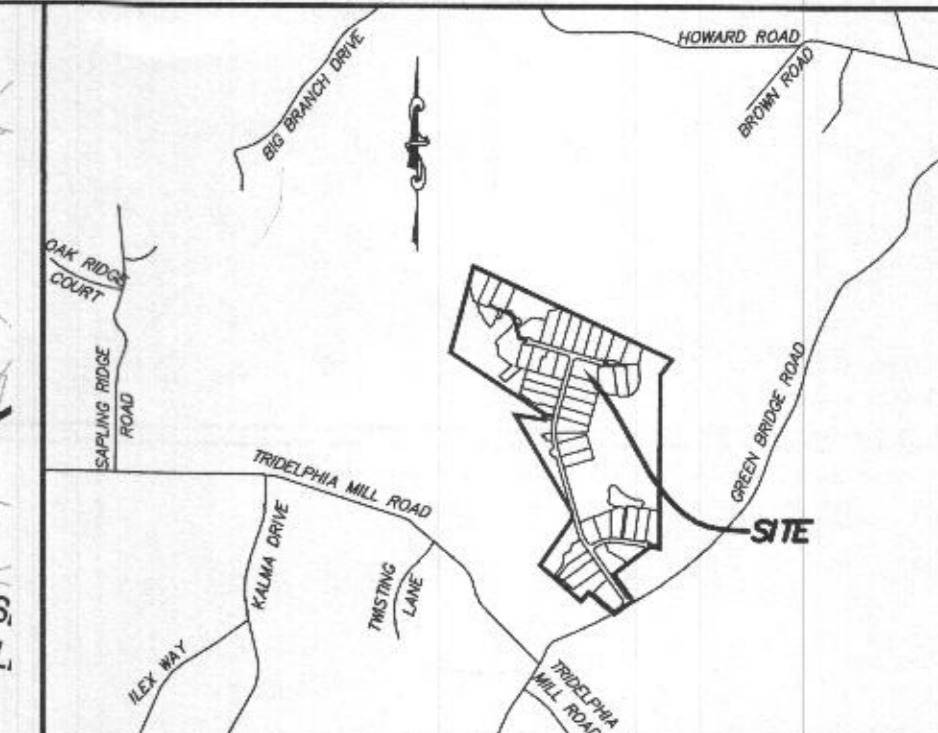
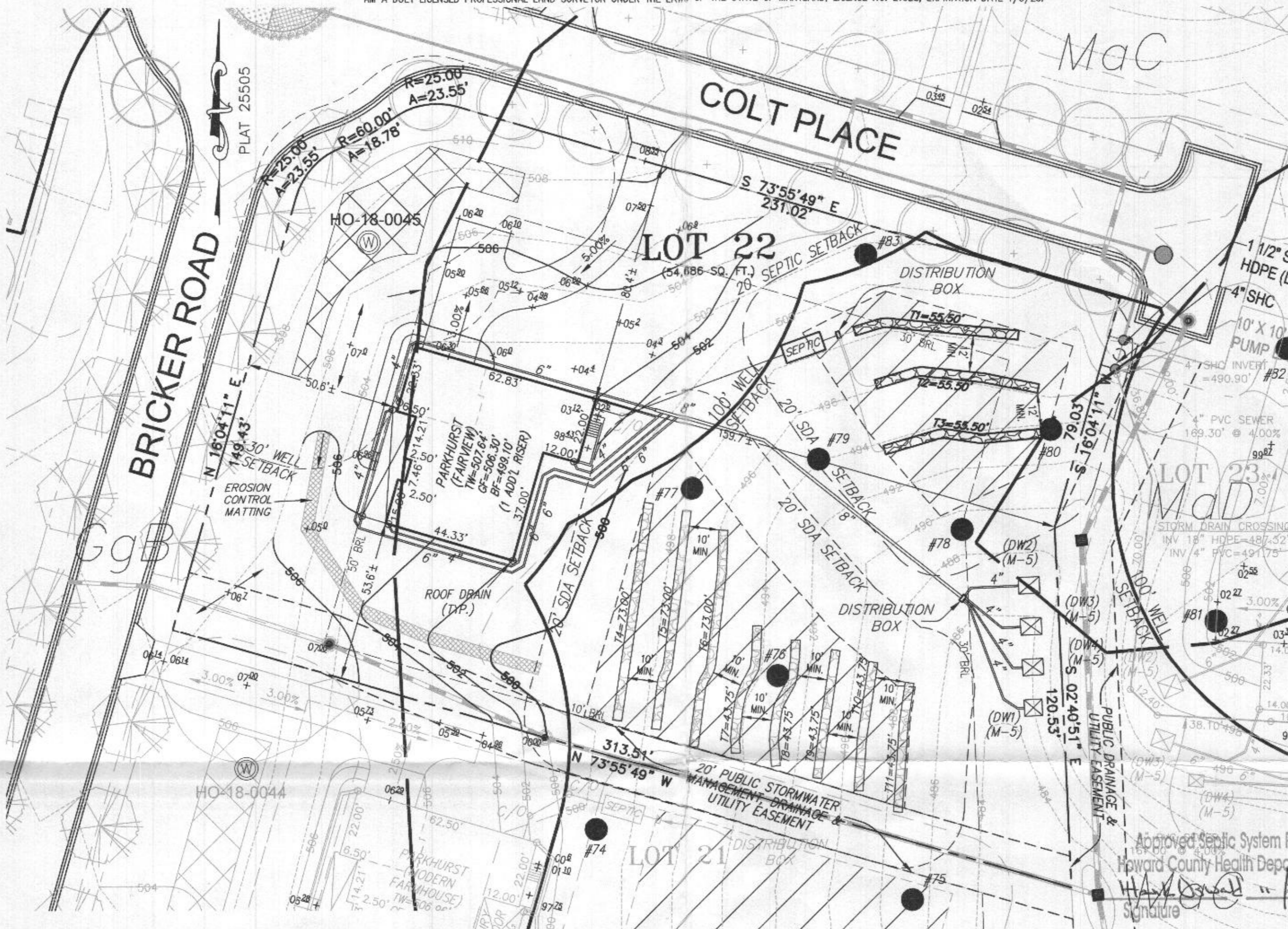


1ST REPLACEMENT SYSTEM
TRENCH DETAIL (T4 THRU T6)
(NOT TO SCALE)



2ND REPLACEMENT SYSTEM
TRENCH DETAIL (T7 THRU T11)
(NOT TO SCALE)

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE, AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21328, EXPIRATION DATE 1/8/23.

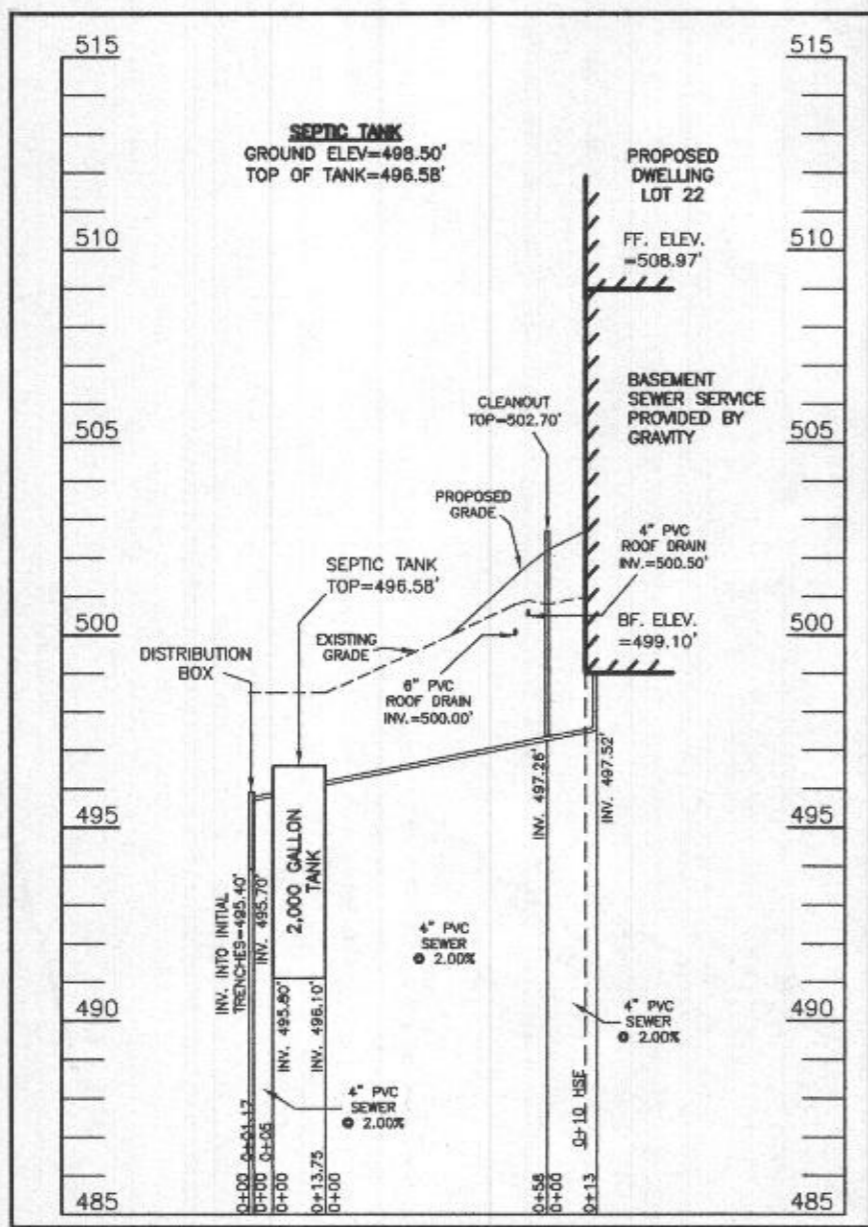


VICINITY MAP

1" = 2000'
TAX MAP 27, GRID 18

GENERAL NOTES:

- THESE AREAS DESIGNATE A PRIVATE SEWAGE AREA OF AT LEAST 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWAGE IS AVAILABLE. THESE AREAS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT VARIANCES FOR ENCROACHMENTS INTO THE PRIVATE SEWAGE AREA. RECORDATION OF A MODIFIED SEWAGE AREA SHALL NOT BE NECESSARY.
- EXISTING WELLS, SEPTIC SYSTEMS, AND SEWAGE DISPOSAL AREAS WITHIN 100' OF THE PROPERTY AND THOSE WELLS WITHIN 200' DOWN GRADIENT OF EXISTING OR PROPOSED SEPTIC SYSTEMS OR SEWAGE DISPOSAL AREAS HAVE BEEN SHOWN.
- ANY CHANGES TO A PRIVATE SEWAGE AREA SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
- BUILDING SETBACKS (B.R.L.'S) SHOWN HEREON PER SITE DEVELOPMENT PLAN SETBACK DISTANCES SHOWN HEREON AS "±" HAVE AN ACCURACY OF ±0.1' FOOT.
- ANY CHANGES TO THE LOCATIONS OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED SITE PLAN MAY BE REQUIRED.
- THE MAXIMUM EARTH COVER OVER THE TANK IS THREE (3) FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
- THE LOT SHOWN HEREON COMPLIES WITH THE MINIMUM OWNERSHIP, WIDTH, AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
- THE EXISTING TOPOGRAPHY SHOWN HEREON IS FROM HOWARD COUNTY GIS AND A TOPOGRAPHIC SURVEY PREPARED BY BOHLER ENGINEERING ON 08/25/15 AND REVISED ON 09/03/15.



SEPTIC SYSTEM PROFILE
SCALE = HORIZONTAL: 1"=50'
VERTICAL: 1"=5'

SEWAGE DISPOSAL SYSTEM DATA (7 BDRM)

- PROPOSED INVERT AT FOUNDATION WALL: 497.52'
- EX. GRADE OVER TANK: 498.50'
PROPOSED GRADE OVER TANK: 498.50'
INVERT IN: 496.10' INVERT OUT: 495.80'
 - DISTRIBUTION BOX
EXISTING GRADE OVER TANK: 498.50'
PROPOSED GRADE OVER TANK: 498.50'
INVERT IN: 495.70' INVERT OUT: 495.40'
 - INITIAL TRENCH DESIGN (7 BDRM x 150 GPD/BDRM = 1,050 GPD)
1,050 GPD ± 0.8 APP. RATE = 1,312.50 SF
USE 3' WIDE TRENCH WITH 54" GRAVEL BELOW PIPE
12' MIN. SPACING BETWEEN TRENCH EDGES
1,312.50 SF ± 3' WIDTH = 437.50 LF x 0.38 (SIDEWALL REDUCTION) = 166.25 LF MIN.
USE 3 55.50' LONG TRENCHES = 166.50 LF
 - 1ST REPLACEMENT TRENCH DESIGN (7 BDRM x 150 GPD/BDRM = 1,050 GPD)
1,050 GPD ± 0.8 APP. RATE = 1,312.50 SF
USE 3' WIDE TRENCH WITH 42" GRAVEL BELOW PIPE
10' MIN. SPACING BETWEEN TRENCH EDGES
1,312.50 SF ± 3' WIDTH = 437.50 LF x 0.50 (SIDEWALL REDUCTION) = 218.75 LF MIN.
USE 3 73.00' LONG TRENCHES = 219.00 LF
 - 2ND REPLACEMENT TRENCH DESIGN (7 BDRM x 150 GPD/BDRM = 1,050 GPD)
1,050 GPD ± 0.8 APP. RATE = 1,312.50 SF
USE 3' WIDE TRENCH WITH 42" GRAVEL BELOW PIPE
10' MIN. SPACING BETWEEN TRENCH EDGES
1,312.50 SF ± 3' WIDTH = 437.50 LF x 0.50 (SIDEWALL REDUCTION) = 218.75 LF MIN.
USE 5 43.75' LONG TRENCHES = 218.75 LF

SOILS LEGEND

SOIL	NAME	CLASS	Kw
GgB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	B	.28
MaC	MANOR LOAM, 8 TO 15 PERCENT SLOPES	B	.28
MaD	MANOR LOAM, 15 TO 25 PERCENT SLOPES	B	.28

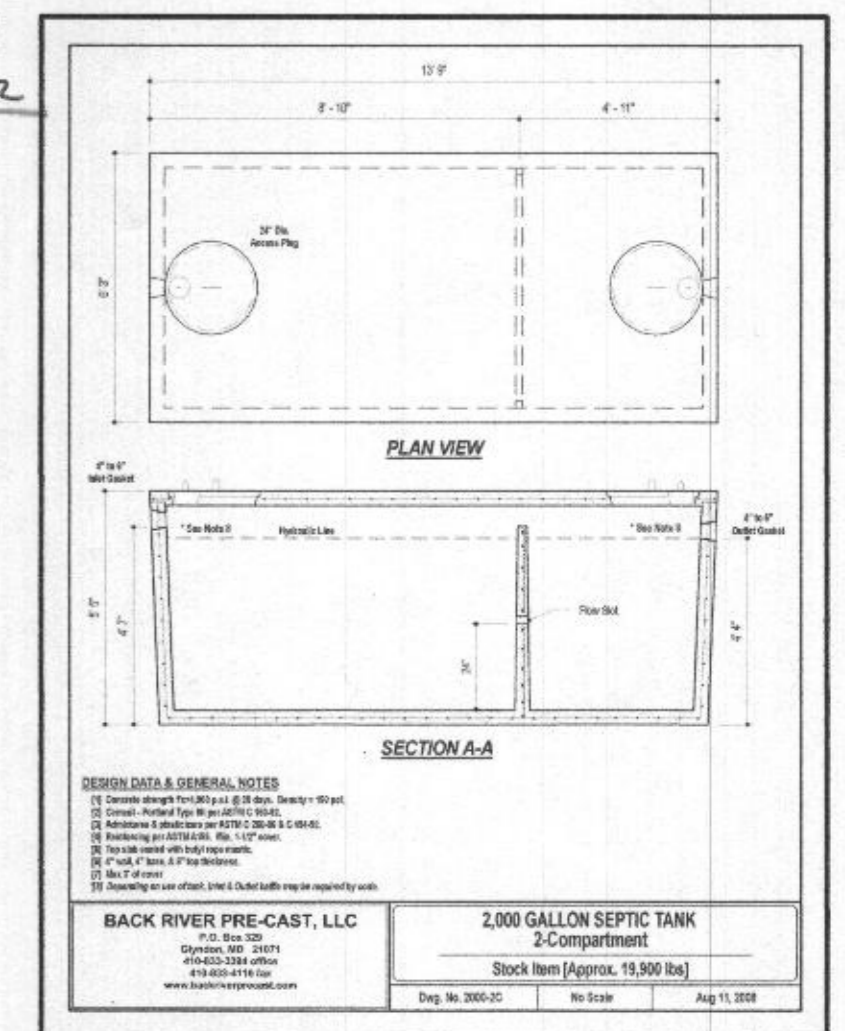


- LEGEND:**
- BRL BUILDING RESTRICTION LINE
 - WELL LOCATION
 - T.W. TOP OF WALL
 - G.F. GARAGE FLOOR
 - B.F. BASEMENT FLOOR
 - PPASD PASSED PERC LOCATION
 - SEWAGE DISPOSAL AREA
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LOT 22 WILLOWSHIRE
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HOWARD COUNTY, MARYLAND
ADDRESS: 7013 COLT PLACE
DAYTON, MARYLAND 21036



DESIGN DATA & GENERAL NOTES:

- Capacity strength for 200 gpd, 20' dia. tank, 10' dia. riser.
- Concrete material per ASTM C 1500.
- Addressed to manufacturer per ASTM C 1500 & C 1505.
- Installation per manufacturer's instructions.
- 24" dia. riser, 12' high.
- Use only approved materials.
- 24" dia. riser, 12' high.
- Use only approved materials.

BACK RIVER PRE-CAST, LLC
2,000 GALLON SEPTIC TANK
2-Compartment
Stock Item (Approx. 15,500 lbs)
Dwg. No. 2000-02 No. Scale Aug 11, 2008

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