

Bernard, Dana

Confirmation for Testing & Pre-lin Plan

From: keswickyoung@verizon.net
Sent: Wednesday, April 13, 2022 6:34 AM
To: Bernard, Dana
Subject: Re: 1723 Underwood Rd.
Attachments: Underwood Rd Septic Plan.pdf

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

Good morning Dana,

I am checking on the status of septic certification plans which I dropped off about three weeks ago. Attached is another copy.

Thank you,

Dan Deitemyer
Keswick Young Co. Inc.
443-463-8021

-----Original Message-----

From: Bernard, Dana <dbernard@howardcountymd.gov>
To: keswickyoung@verizon.net <keswickyoung@verizon.net>
Sent: Mon, Feb 14, 2022 10:52 am
Subject: RE: 1723 Underwood Rd.

Good Morning,

Yes. I spoke to the assistant director regarding this project. And he is recommending percolation testing because the file is not complete. The soil types for 5 holes is needed along with a percolation certification plan. You have submitted the percolation testing plan application and it must be submitted with a percolation plan. Once we receive this plan it will be reviewed and testing date will be scheduled.

Thanks
Dana

From: keswickyoung@verizon.net <keswickyoung@verizon.net>
Sent: Thursday, February 10, 2022 8:45 AM
To: Bernard, Dana <dbernard@howardcountymd.gov>
Subject: Re: 1723 Underwood Rd.

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

Hi Dana,

My client received an email asking for the property to be perced prior to upgrading the existing system. In my application package I submitted the perc information from 1994 when the existing system was installed and all of the holes tested had passed. Also, the soil types are described on the plan. Is it necessary to re-test the same areas that have already passed the perc test? This is an additional expense for the retired lady for whom I'm building the in-law apartment.

Thank you,

Daniel Deitemyer
Keswick Young Co.
443-463-8021

-----Original Message-----

From: JULIA WAGNER <keswickyoung@verizon.net>

To: dbernard@howardcountymd.gov

Sent: Tue, Feb 8, 2022 8:14 am

Subject: Re: 1723 Underwood Rd.

> Hi Dana,

>

> We had a nice conversation concerning the septic upgrade at 1723 Underwood Rd. a couple of Fridays ago and you were going to run my plans past Mr. Davis.

> I'm just checking in to see if there is any update on the approval of this application.

>

> Thank you,

> Dan Deitemyer

> Keswick Young Co.

> 443-463-8021

>

> Sent from my iPhone

1723 Underwood

7/19/23 - Zoom meeting w/ Robert Sell + Natalia from McCrane.

I explained that the original 10,000 sq ft area was compromised by the house and we had failing holes in 1994 and ~~2022~~ ²⁰²¹ complicating the attempt to revise the area and maintain 10,000. We also have the issue of neighboring well downgrade. They said test hole locations came from surveyor hired by ~~engineer~~ ^{builder}. I told them we need field captured test hole locations shown on plan. Once I have that, we can see what area is available for SDA. We will likely be less than 10,000, but I'm hopeful we can have enough area above failing holes to fit 2 future systems at 5 bedrooms. This area is also close to 300' from neighboring well to avoid BAT unit now. May need note for future BAT.

I also explained why we need topo extending beyond property line and replacement well sites.

McCRONE

ENGINEERS ■ SURVEYORS ■ PLANNERS

June 7, 2023

Dana Bernard, REHS/L.E.H.S.
Environmental Specialist II
Well and Septic Program

Subject: Percolation Certification Revised Plan
1723 Underwood: Tax Map: 9 Parcel 300

Ms. Bernard,

The purpose of this letter is to request variances for the subject property:

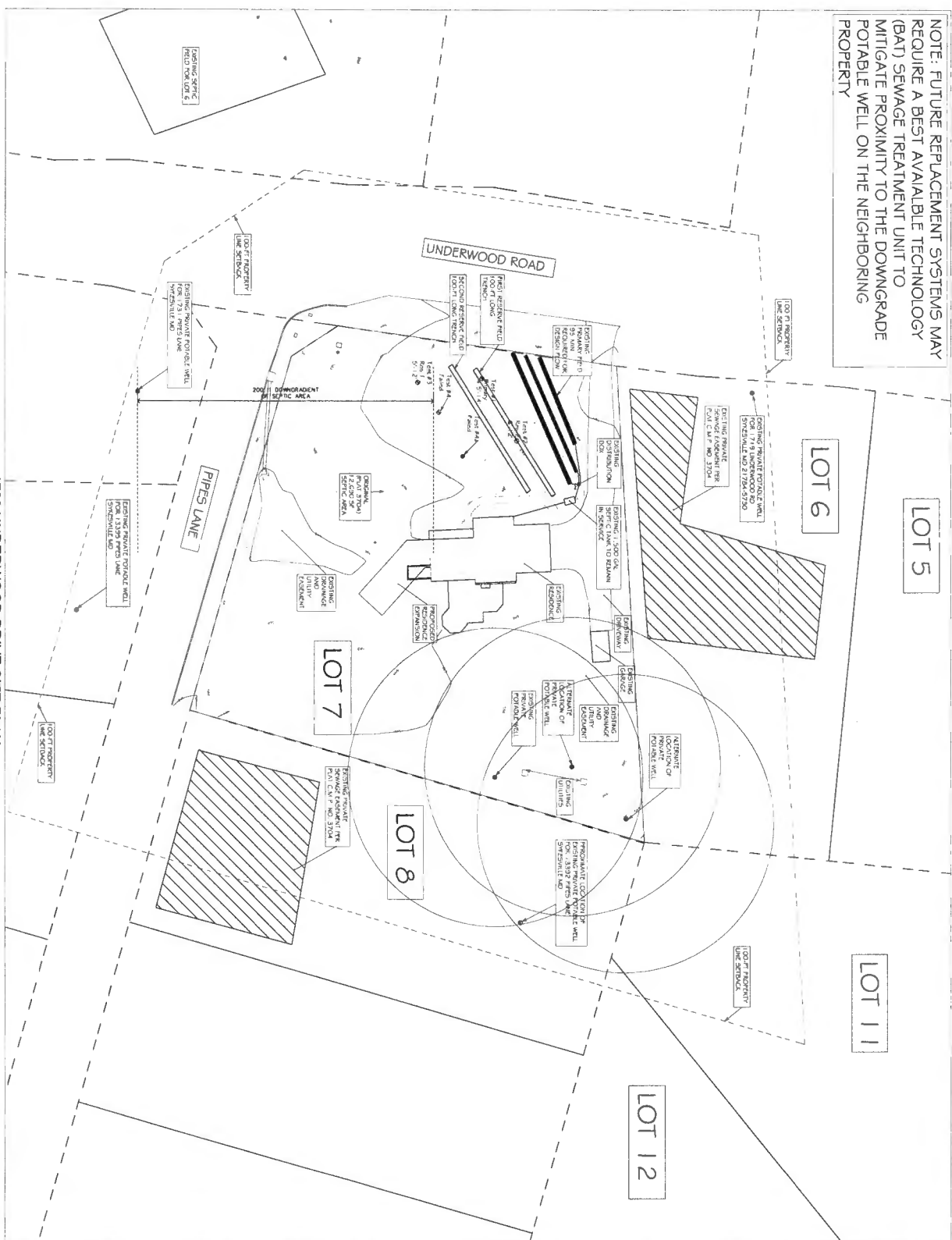
- 1) The subject property has three (3) existing deep trenches that, based on the conversation with the Owners show no evidence of failure. We request that the Owners continue to use these trenches as the primary field. The septic tank is required to be replaced to accommodate the additional bedroom addition.
- 2) It is the County's requirement to provide 10,000 sf septic area, which was shown on the plans. We ask that the septic area is reduced where the percolation tests failed to allow Owners to use this land in the future, if desired. Two reserve fields were shown in the area of passed percolation tests.

Thank you. Please let us know if you have any questions.

Sincerely,
McCrone

A handwritten signature in black ink, appearing to read 'R. Sell', is written over a faint circular stamp or seal.

Robert M. Sell, P.E.
Principal
Water/Wastewater Division Manager
McCrone
20 Ridgely Avenue, Suite 201
Annapolis, MD 21401
410.267.6947 ext. 1003
www.mccrone-engineering.com



SEPTIC FIELD LAYOUT

1723 UNDERWOOD ROAD
SEPTIC SYSTEM

Sykesville, MD 21784
Howard County

| | |
|-------------------|-----------|
| DATE: | JUNE 2023 |
| JOB NUMBER: | C1150000 |
| SCALE: | As Shown |
| DRAWN BY: | CAD |
| DESIGNED BY: | MCCORMIE |
| APPROVED BY: | RAM |
| FOLDER REFERENCE: | |

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ANAPOLIS • CENTREVILLE • ELKTON • SALISBURY • DELAWARE

| REVISIONS | | |
|-----------|------|-------------|
| REV. # | DATE | DESCRIPTION |
| | | |
| | | |
| | | |

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE APPROVED BY ME, AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF MA.

NO. 17237 EXPIRATION DATE: 05



OWNERS: JEFFREY D. AND TRISSIE F. MANWILLER
1723 UNDERWOOD ROAD
SYKESVILLE, MD. 21784

TAX MAP-
PURPOSE- SEPTIC CERTIFICATION
DATE: MARCH 3, 2022
SCALE 1" = 50' 25'

PREPARER: DANIEL DEITEMYER, PRESIDENT
KESWICK YOUNG CO. INC.
MHIC #47166
443-463-8021

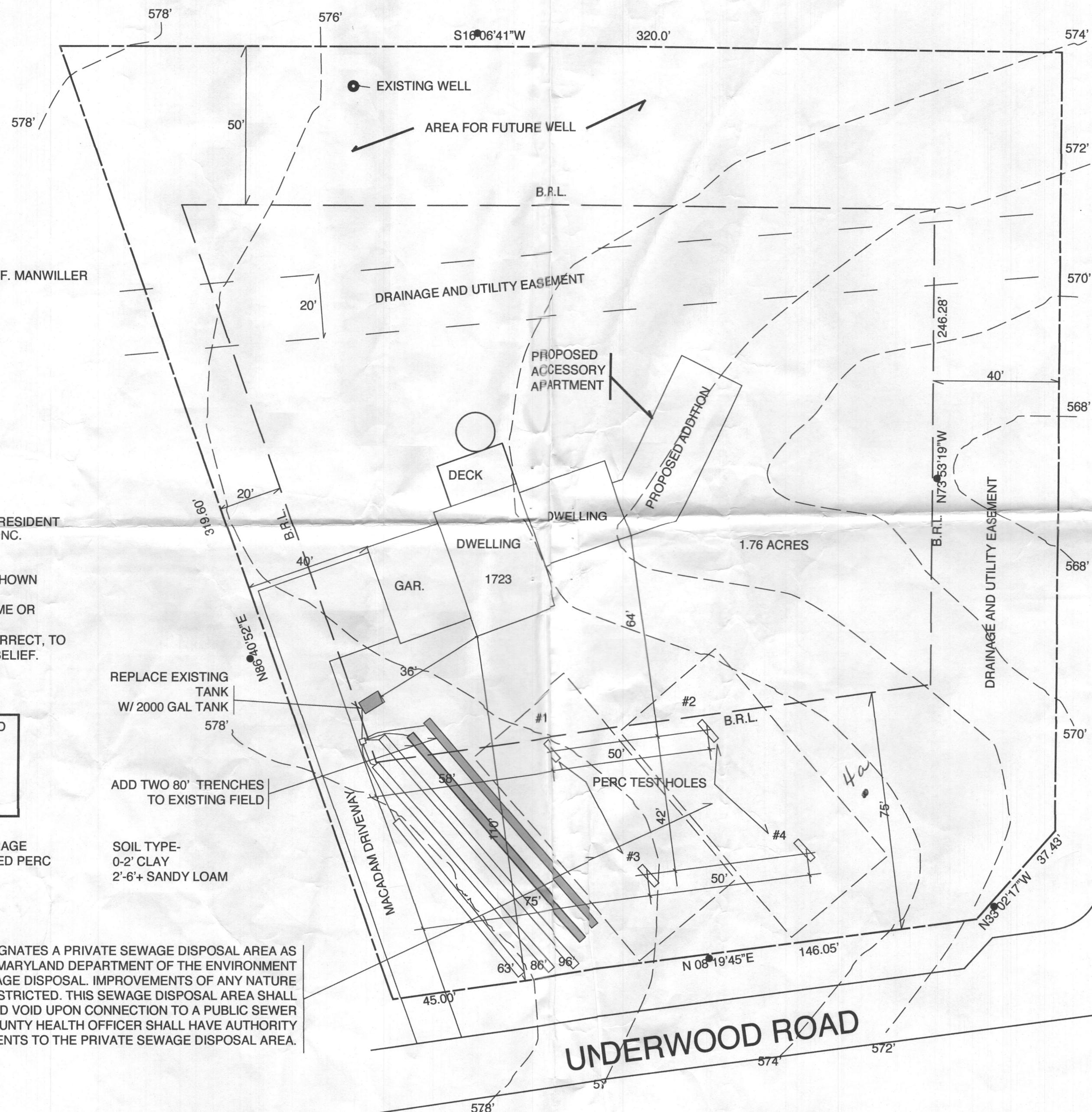
I CERTIFY THAT THE INFORMATION SHOWN
HERON
IS BASED ON FIELD WORK DONE BY ME OR
UNDER
MY DIRECT SUPERVISION, AND IS CORRECT, TO
THE BEST OF MY KNOWLEDGE AND BELIEF.

APPROVED FOR PRIVATE WATER AND
SEWERAGE SYSTEMS

HOWARD COUNTY HEALTH OFFICER

ANY CHANGES TO A PRIVATE SEWERAGE
EASEMENT SHALL REQUIRE A REVISED PERC
CERTIFICATION PLAN.

NOTE- THIS AREA DESIGNATES A PRIVATE SEWAGE DISPOSAL AREA AS
REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT
FOR INDIVIDUAL SEWAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE
IN THIS AREA ARE RESTRICTED. THIS SEWAGE DISPOSAL AREA SHALL
BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWER
SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE AUTHORITY
TO GRANT ADJUSTMENTS TO THE PRIVATE SEWAGE DISPOSAL AREA.



PLOTTED: Jun 30, 2023 - 4:51pm Q:\1230009 - Deltemyer, 1723 Underwood Rd\03. Design\09. Drawings\01. AutoCAD\02. Civil\1723 Underwood Rd_sewer layout.dwg.....Tab:S-2

SEWER CONSTRUCTION NOTES

- PROPERTY OWNER :
TRISSIE F. AND JEFFREY D. MANWILLER
- SITE ADDRESS: 1723 UNDERWOOD ROAD, SYKESVILLE, MD 21784
- TAX MAP 9, GRID 21, PARCEL 300
- EXISTING TOPOGRAPHY, EXISTING UTILITIES, FEATURES OF THE SITE, AND SURROUNDING PROPERTIES AND ROADS WERE TAKEN FROM DRAWINGS PREPARED BY OTHERS.
- THE SITE IS NOT LOCATED WITHIN THE CHESAPEAKE BAY CRITICAL AREA.
- SITE UTILITIES ARE AS FOLLOWS :
 - WATER - PRIVATE WELL
 - SANITARY SEWER - PRIVATE SYSTEM
 - STORM DRAINAGE - PRIVATE SYSTEM
- ALL EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR TO HIS/HER OWN SATISFACTION BEFORE CONSTRUCTION.
- TAKE NECESSARY PRECAUTIONS TO PROTECT EXISTING SERVICES AND MAINS. ANY DAMAGE TO THEM SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- NOTIFY LOCAL UTILITY COMPANIES THAT PROVIDE SERVICES TO THE SITE MINIMUM FIVE (5) WORKING DAYS BEFORE STARTING WORK ON THESE DRAWINGS OR EARLIER AS REQUIRED BY LOCAL UTILITY PROVIDERS. THE CONTRACTOR IS TO VERIFY FOR TELEVISION CABLE. IF EITHER UTILITY SERVICE PROVIDERS OR HOWARD COUNTY DETERMINE THAT EXISTING POLES ADJACENT TO THE EXCAVATION NEED TO BE BRACED, BRACING SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.
- PRIOR TO SUBMITTING BID/PROPOSAL, THE CONTRACTOR SHALL WALK THE ENTIRE SITE AND BECOME THOROUGHLY FAMILIAR WITH THE EXISTING CONDITIONS IN THE AREA OF NEW CONSTRUCTION WORK.
- REPAIR AND REPLACE ANY EXISTING FENCES, DRIVEWAYS, ETC., DAMAGED OR REMOVED DURING CONSTRUCTION UNLESS OTHERWISE NOTED BY THE CONTRACT DRAWINGS AND SPECIFICATION OR BY THE OWNER/OWNER'S REPRESENTATIVE.
- IT SHALL BE DISTINCTLY UNDERSTOOD THAT FAILURE TO MENTION SPECIFICALLY ANY WORK WHICH WOULD NORMALLY BE REQUIRED TO COMPLETE THE PROJECT SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO PERFORM SUCH WORK.
- NOTIFY THE OWNER/OWNER'S REPRESENTATIVE OF ANY DEVIATION FROM THIS PLAN PRIOR TO ANY CHANGE BEING MADE. ANY CHANGE TO THIS PLAN WITHOUT WRITTEN AUTHORIZATION FOR SAID CHANGE FROM THE OWNER/OWNER'S REPRESENTATIVE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR SUBCONTRACTOR.
- THESE DRAWINGS DO NOT INCLUDE ALL THE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. CONSTRUCTION TO BE DONE IN COMPLIANCE WITH THE MOST RECENT VERSION OF OSHA STANDARDS AND REQUIREMENTS.
- WHERE UTILITY PIPES ARE TO BE PLACED ON COMPACTED FILL, THE FOLLOWING SHALL APPLY :
 A. PRIOR TO PLACEMENT OF COMPACTED FILL, ANY SOFT OR OTHERWISE UNSUITABLE SOILS ENCOUNTERED AT OR BELOW THE PIPE INVERT SHALL BE UNDERCUT AND REMOVED FROM THE CONSTRUCTION AREA.
 B. ACCEPTABLE COMPACTED FILL SHALL BE PLACED IN SIX INCH THICK LOOSE LIFTS AND COMPACTED TO THE MINIMUM DENSITY IN ACCORDANCE WITH A.A.S.H.T.O., DESIGNATION T-180, METHOD C, AND THE APPLICABLE HOWARD COUNTY SPECIFICATION. COMPACTION TEST RESULTS CONDUCTED BY AN INDEPENDENT TESTING LAB AND SEALED BY A REGISTERED ENGINEER ARE TO BE SUBMITTED TO THE OWNER/OWNER'S REPRESENTATIVE PRIOR TO PIPE INSTALLATION.
 C. THE COMPACTED FILL SHALL BE BENCHED INTO THE EXISTING VIRGIN SLOPES WITH EACH LIFT PLACED TO ALLOW A SMOOTH TRANSITION FROM VIRGIN TO FILL SOILS.
 D. CONTRACTOR SHALL FOLLOW THE SEPTIC TANK INSTALLATION AND BACKFILL REQUIREMENTS PROVIDED IN MANUFACTURER'S INSTALLATION REQUIREMENTS. ANY NON-APPROVED DEVIATION FROM THESE INSTRUCTIONS AND CAUSED DAMAGE WILL BE A DIRECT RESPONSIBILITY OF THE GENERAL CONTRACTOR, AND SHALL BE REPAIRED AT NO EXTRA COST TO THE OWNER. LIQUIDATION DAMAGES WILL APPLY AT DISCRETION OF THE OWNER.
- THESE DRAWINGS ARE TO BE USED FOR CONSTRUCTION OF THE SEPTIC TANK AND SUBSURFACE DISPOSAL SYSTEM OF WASTEWATER.
- ALL TEES, PLUGS, CAPS AND BENDS SHALL BE RESTRAINED AGAINST MOVEMENT PER SECTION 8-6.1 NFPA 24.

SEWER CONSTRUCTION NOTES (CONT'D)

- TRENCH BACKFILL SHALL BE COMPACTED TO THE MINIMUM DENSITY IN ACCORDANCE WITH A.A.S.H.T.O., DESIGNATION T-180, METHOD C.
- HOWARD COUNTY INSTALLATION PERMIT IS EFFECTIVE DURING TWO (2) YEAR AFTER THE ISSUANCE DATE. IF ANY INSTALLATION IS NOT COMPLETE AT THE END OF THE 2-YEAR CONSTRUCTION PERIOD, THE OWNER/CONTRACTOR IS RESPONSIBLE TO RE-APPLY FOR THE INSTALLATION PERMIT.
- PRE-CONSTRUCTION MEETING IS REQUIRED WITH AN INSPECTOR FROM THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO ANY EXCAVATIONS FOR THE SEPTIC SYSTEM. PRIOR TO THE MEETING THE SEPTIC TRENCHES AND TANK LOCATIONS MUST BE STAKED BY A LICENSED SURVEYOR.
- PVC PIPE FOR GRAVITY SEWER SHALL BE MANUFACTURED IN ACCORDANCE WITH ASTM D-3034, SDR 26 SPECIFICATION FOR TYPE PSM POLY VINYL CHLORIDE (PVC) SEWER PIPE AND FITTINGS, UTILIZING A RUBBER RING JOINT TO PROVIDE FOR EXPANSION AND CONTRACTION. JOINTS FOR BOTH PIPE AND FITTINGS SHALL BE OF THE INTEGRAL BELL TYPE, CONSISTING OF AN INTEGRAL WALL SECTION WITH A SOLID CROSS-SECTION RUBBER RING, FACTORY ASSEMBLED AND SECURELY LOCKED IN PLACE TO PREVENT DISPLACEMENT. RUBBER GASKETS SHALL COMPLY IN ALL RESPECTS WITH THE PHYSICAL REQUIREMENTS SPECIFIED IN ASTM F-477 AND THE LUBRICANT USED FOR JOINT ASSEMBLY SHALL HAVE NO DETRIMENTAL EFFECT ON THE RING OR PIPE. PIPE CONNECTIONS AT MANHOLES SHALL BE ACCOMPLISHED BY MEANS OF AN ELASTOMERIC GASKET TO PROVIDE FLEXIBILITY AND ADEQUATE JOINT TIGHTNESS.
- FOLLOW CONSTRUCTION SAFETY REQUIREMENTS AS REQUIRED BY OSHA STANDARDS AND REGULATIONS.

DESIGN BACKGROUND

100% MAXIMUM DESIGN FLOW = 5 BEDROOMS * 150 GPD/bedroom = 750 GPD

100% STANDARD TRENCH AREA = 100% DESIGN FLOW / STANDARD APPLICATION RATE = 750 GPD / 1.2 GPD/SF = 625 SF

PRIMARY (PERC TEST #1): TRENCH DESIGN LENGTH = 625 SF * 0.455 / 3 FT WIDE TRENCH = 95 FT (100 %) SIDEWALL REDUCTION CREDIT: (W+2) / (W+1+2D) = (3+2) / (3+1+2*3.5 FT) = 0.455

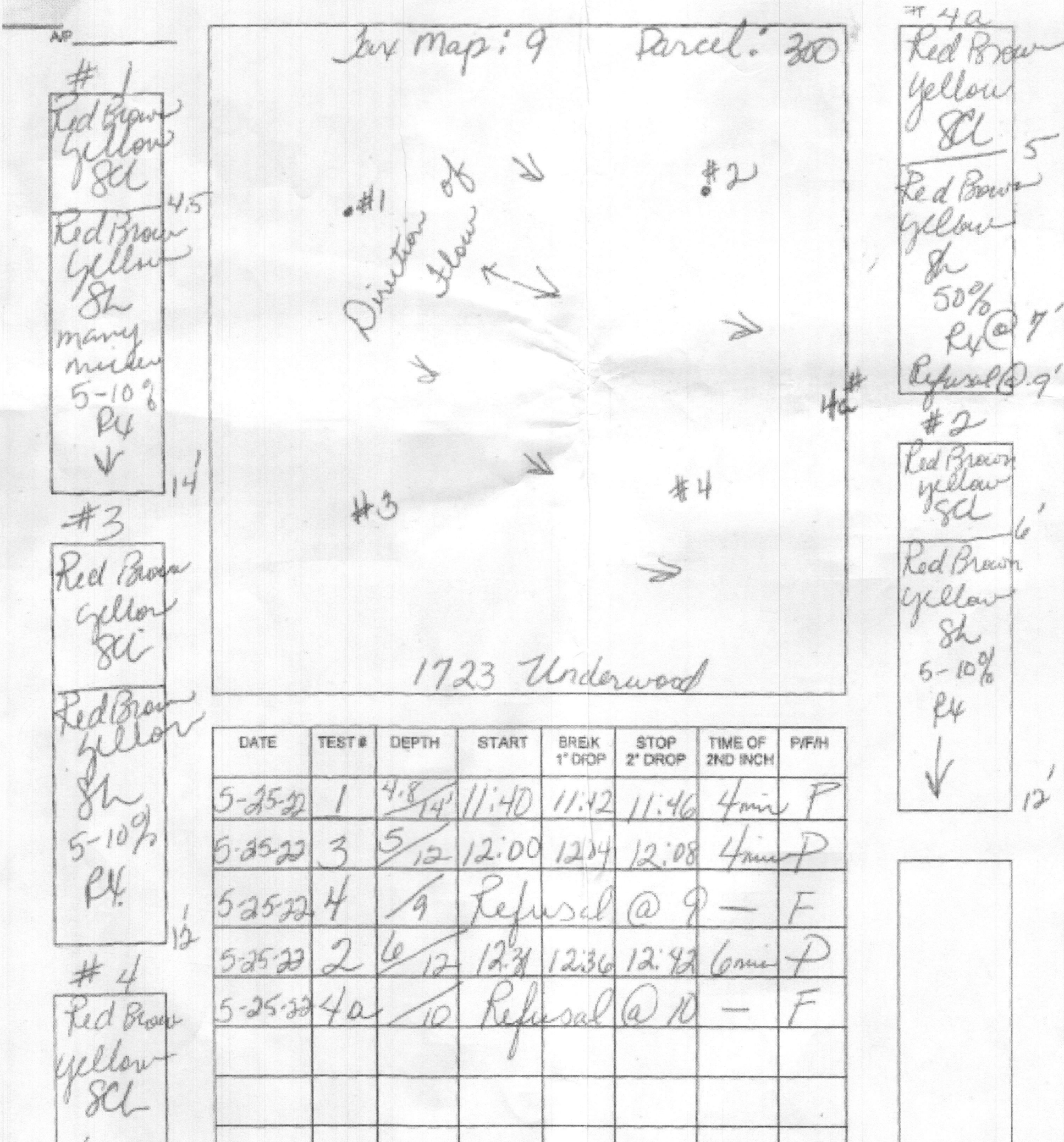
1ST RESERVE (PERC TEST #3): TRENCH DESIGN LENGTH = 625 SF * 0.5 / 3 FT WIDE TRENCH = 104 FT (100 %) SIDEWALL REDUCTION CREDIT: (W+2) / (W+1+2D) = (3+2) / (3+1+2*3.0 FT) = 0.5

2ND RESERVE (PERC TEST #2): TRENCH DESIGN LENGTH = 625 SF * 0.625 / 3 FT WIDE TRENCH = 130 FT (100 %) SIDEWALL REDUCTION CREDIT: (W+2) / (W+1+2D) = (3+2) / (3+1+2*2.0 FT) = 0.625

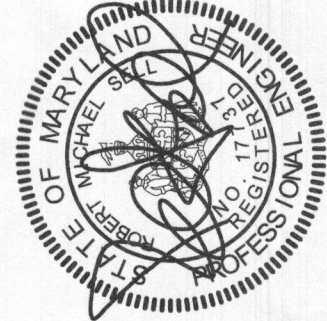
MINIMUM TRENCH SPACING IS 10 FT.

| | Test #1 | Test #3 | Test #2 |
|-------------------------|---------|-----------|-----------|
| Deep Trench Length | Primary | Reserve 1 | Reserve 2 |
| Width = | 3.00 | 3.00 | 3.00 |
| Trench Bottom = | 8.00 | 8.00 | 8.00 |
| Effective Depth Start = | 4.50 | 5.00 | 6.00 |
| Effective Depth = | 3.50 | 3.00 | 2.00 |
| (w+2)/(w+1+2d) = | 0.455 | 0.500 | 0.625 |
| Design Length = | 95 | 104 | 130 |

| | | | |
|--|---|----|--------------------------------------|
| Number of Primary Trenches (Test #1) = | 1 | 95 | foot long trenches - EXISTING TRENCH |
| Number of Reserve 1 Trenches (Test #3) = | 2 | 52 | foot long trenches |
| Number of Reserve 2 Trenches (Test #2) = | 2 | 65 | foot long trenches |



| DATE | TEST # | DEPTH | START | BREK 1' DROP | STOP 2' DROP | TIME OF 2ND INCH | P/F/H |
|---------|--------|-------|---------|--------------|--------------|------------------|-------|
| 5-25-22 | 1 | 4.8 | 11:40 | 11:42 | 11:46 | 4min | P |
| 5-25-22 | 3 | 5.12 | 12:00 | 12:04 | 12:08 | 4min | P |
| 5-25-22 | 4 | 9 | Refusal | @ 9 | - | F | |
| 5-25-22 | 2 | 6.12 | 12:34 | 12:36 | 12:42 | 6min | P |
| 5-25-22 | 4a | 10 | Refusal | @ 10 | - | F | |



| REV # | DATE | DESCRIPTION |
|-------|------|-------------|
| | | |
| | | |
| | | |

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| | |
|-------------------|-----------|
| DATE: | JUNE 2023 |
| JOB NUMBER: | CT150000 |
| SCALE: | As Shown |
| DRAWN BY: | CAD |
| DESIGNED BY: | McCRONE |
| APPROVED BY: | RMS |
| FOLDER REFERENCE: | N/A |

SEPTIC FIELD LAYOUT

1723 UNDERWOOD ROAD
SEPTIC SYSTEM
 Sykesville, MD 21784
 Howard County

| | |
|------------|------------------------------------|
| SHEET NO.: | S-2 |
| DWG. NO.: | 1723 Underwood Rd_sewer layout.dwg |