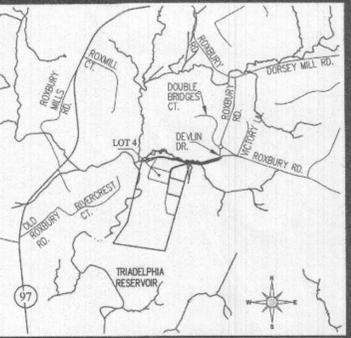
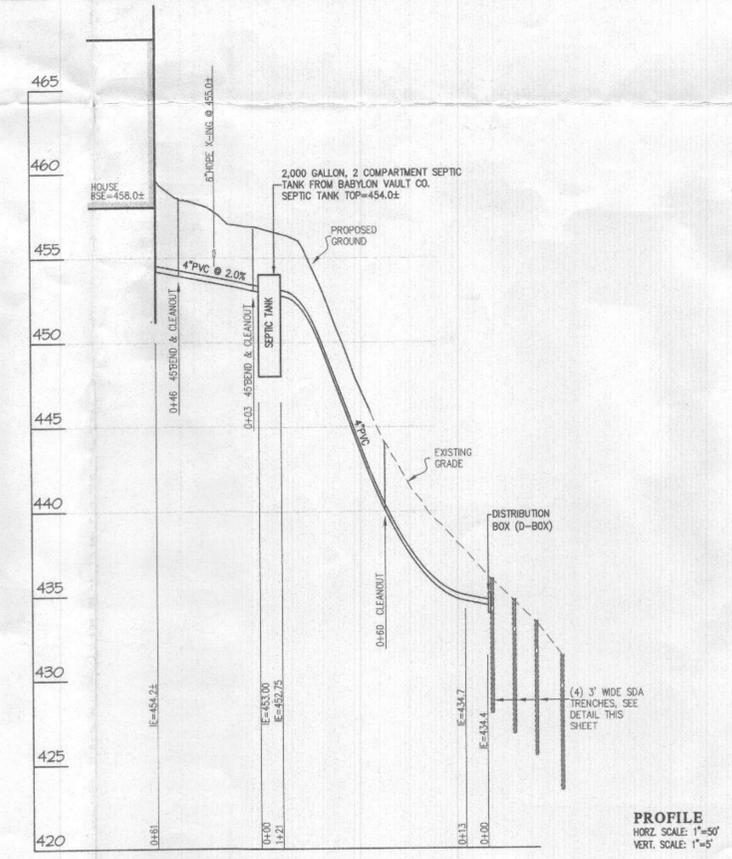


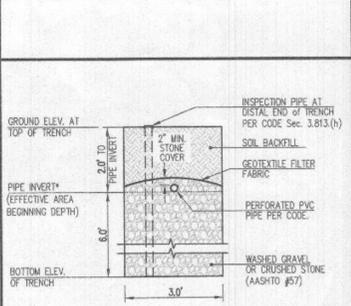
- SEPTIC TANK CONSTRUCTION AND INSTALLATION NOTES:**
- TANK TO BE ASTM C1277-20 AND HOWARD COUNTY CODE COMPLIANT AND INCLUDE A PROPERLY POSITIONED INLET T-SHAFFLE EXTENDED INTO THE TANK AIR SPACE AT LEAST 8-INCHES ABOVE THE LIQUID LEVEL, BUT AT LEAST 1-INCH BELOW THE TOP, CONSTRUCTED OF NOT LESS THAN SCHEDULE 40 PVC. CONCRETE SHALL NOT BE LESS THAN 4-INCHES THICK.
 - PROVIDE ADDITIONAL COATINGS AS MANDATED BY HOWARD COUNTY, MD.
 - SET THE TANKS ON A 6-INCH MINIMUM LEVELING BED OF AASHTO #57 AGGREGATE ON A FIRM SUBGRADE. THE ACCESS COVERS TO BE CHILD PROOF HEAVY DUTY COVERS WITH INTERNAL SAFETY NET OR CATCH AS MANUFACTURED BY SIM TECH OR TUF-TITE. TANK AND RISERS TO BE WATER TIGHT AND PASS MANUFACTURER'S WATER-TIGHTNESS TEST (VACUUM 2-INCHES HG FOR 60 MIN, 5 PSIG WATER FOR 60 MINUTES, 5 PSIG AIR FOR 15 MINUTES) OR MORE STRINGENT AS REQUIRED. THE LBS ARE TO BE GAS TIGHT AND TO EXTEND NOT MORE THAN 4-INCHES ABOVE FINISHED GROUND.

| SDA TRENCH SIZE CALCULATIONS | | | |
|---|----------------|------------------------|------------------------|
| Cattail Overlook Lot #4 (15135 Devlin Court) | | | |
| System Input Information | Initial System | Replacem't System No.1 | Replacem't System No.2 |
| Application Rate | 0.8 | 0.8 | 1.2 |
| Effective area beginning depth | 2 | 2 | 2 |
| Effective area maximum bottom depth | 8 | 8 | 8 |
| Number of Bedrooms | 7 | 7 | 7 |
| Design flow at 150 gal./day/bedroom | 1050 | 1050 | 1050 |
| Absorption Trench Calculations | | | |
| Drainfield area required (Design flow/application rate) | 1312.5 | 1312.5 | 875 |
| Effluent pipe depth to invert | 2 | | |
| Effective sidewall depth "D" (Depth between the effective beginning depth or pipe depth (whichever is deeper) and maximum trench bottom.) | 6 | 6 | 6 |
| Trench Width "W" (2 or 3 feet) | 3 | 3 | 2 |
| Sidewall Reduction Percent = (W+2)/(W+1+2D) | 31.25% | 31.25% | 26.67% |
| Linear feet of trench required = (drainfield area x sidewall reduction)/W | 136.72 | 136.72 | 116.67 |
| Trench Layout Information | | | |
| Approximate length available on contour & not exceeding 100-ft | 91 | 91 | 91 |
| Number of trenches to use | 4 | 4 | 3 |
| Min. length (linear feet) | 34.2 | 34.2 | 38.9 |
| Total (linear feet) | 136.8 | 2 | 116.7 |
| Minimum Trench Spacing: | 15 | 15 | 14 |
| For trenches with no sidewall credit the spacing is 6' for a 2' wide trench and 9' for a 3' wide trench (measured edge to edge). All trenches utilizing sidewall reduction credit must be spaced a min. of 10' for effective sidewall not over 3.5'. If >3.5', then spacing formula is 20+W up to a maximum of 18'. | | | |



- LEGEND**
- 430 EXISTING CONTOUR
 - 430 PROPOSED 2-FT CONTOUR
 - EXISTING FOREST CONSERVATION EASEMENT
 - WELL BOX LOCATION
 - PRIVATE SEWAGE DISPOSAL AREA
 - INITIAL SYSTEM 3' WIDE TRENCH
 - FIRST REPLACEMENT SYSTEM 3' WIDE TRENCH
 - SECOND REPLACEMENT SYSTEM 2' WIDE TRENCH
 - PERCOLATION TEST PIT FAILED BY HEALTH DEPARTMENT
 - PERCOLATION TEST PIT PASSED BY HEALTH DEPARTMENT

- NOTES**
- 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 OSDS PLAN MAY BE REQUIRED.
 - THE MAXIMUM EARTH COVER OVER THE TANKS IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
 - ELECTRICAL WORK FOR THE SEPTIC SYSTEM INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
 - EXISTING WELLS, SEPTIC SYSTEMS AND SEWAGE DISPOSAL AREAS WITHIN 100' OF THE PROPOSED IMPROVEMENTS AND THOSE 200' DOWN GRADIENT OF EXISTING OR PROPOSED SEPTIC SYSTEMS OR SEWAGE DISPOSAL AREAS HAVE BEEN SHOWN.
 - THE EXISTING WELLS SHOWN ON THIS PLAN (NO TAG, IDENTIFIED PER COUNTY RECORDS AS #10-14-0106) HAS BEEN FIELD LOCATED BY G.L.W. (PROFESSIONAL LAND SURVEYORS) AND IS ACCURATELY SHOWN ON THIS PLAN.



*NOTE: SEE SDA TRENCH SIZE CALCULATIONS (ABOVE) AS PIPE INVERT & EFFECTIVE AREA BEGINNING DEPTH MAY NOT BE THE SAME FOR ALL SYSTEMS.

Approved Septic System Plan
Howard County Health Department
Hank Oswald 4/22/25
Signature Date

GLW
PLANNING | ENGINEERING | SURVEYING

3909 NATIONAL DRIVE | SUITE 250 | BURTONSVILLE, MD 20886 | GLWPA.COM
PHONE: 301-421-4024 | BAL T: 410-880-1820 | DC/VA: 301-989-2524 | FAX: 301-421-4186

| DESIGNED BY | DRAWN BY | CHECKED BY | DATE | REVISION | BY | APPR. |
|-------------|----------|------------|------|----------|----|-------|
| ktp | ktp | dds | | | | |

PREPARED FOR:
OWNER: Adam & Sarah Tajalli
42438 Black Tolan Ct.
Leesburg, VA 20176
410-688-8107
atom@tjall.com
540-441-5242
sengel918@gmail.com

BUILDER:
MUELLER HOMES
7520 MAIN ST., SUITE 201
SPRINGVILLE, MD 21784
410-549-4444
PAUL MUELLER JR.
paulj@muellehomes.com

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS 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. 54290
EXPIRATION DATE: MAY 14, 2027

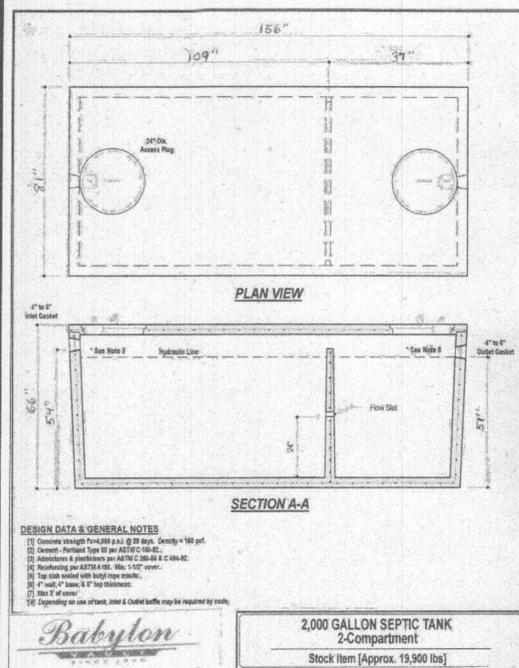
DANIEL D. SHERRETT
PROFESSIONAL ENGINEER

ON-SITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN

CATTAIL OVERLOOK LOT 4 (15135 DEVLIN DRIVE)
PLAT No. 23314-23317

ELECTION DISTRICT No. 4
HOWARD COUNTY, MARYLAND

| SCALE | ZONING | G. L. W. FILE No. |
|-----------|----------------|-------------------|
| 1" = 30' | RC-DEO | 23041 |
| DATE | TAX MAP - GRID | SHEET |
| APR. 2025 | 21-20 | 1 OF 1 |



- DESIGN DATA & GENERAL NOTES**
- Concrete strength 3000 p.s.i., 28 days. Density = 150 pcf.
 - Concrete - Portland Type III per ASTM C 150-02.
 - Reinforcement & placement per ASTM C 309-01 & C 318-02.
 - Insulation per ASTM E 155 - Min. 1-1/2\"/>
- SEPTIC TANK CONSTRUCTION AND INSTALLATION NOTES**
- TANK TO BE ASTM C1277-20 AND HOWARD COUNTY CODE COMPLIANT AND INCLUDE A PROPERLY POSITIONED INLET T-BAR/BAFFLE EXTENDED INTO THE TANK AIR SPACE AT LEAST 8-INCHES ABOVE THE LIQUID LEVEL, BUT AT LEAST 1-INCH BELOW THE TOP. CONSTRUCTED OF NOT LESS THAN SCHEDULE 40 PVC.
 - CONCRETE SHALL NOT BE LESS THAN 4-INCHES THICK.
 - PROVIDE ADDITIONAL COATINGS AS MANDATED BY HOWARD COUNTY, MD.
 - SET THE TANKS ON A 6-INCH MINIMUM LEVELING BED OF AASHTO #57 AGGREGATE ON A FIRM SUBGRADE. THE ACCESS COVERS TO BE CHILD PROOF HEAVY DUTY COVERS WITH INTERNAL SAFETY NET OR CATCH AS MANUFACTURED BY SIM TECH OR TUF-TITE. TANK AND RISERS TO BE WATER TIGHT AND PASS MANUFACTURERS WATER-TIGHTNESS TEST (VACUUM 2-INCHES HG FOR 60 MIN, 5 PSIG WATER FOR 60 MINUTES, 5 PSIG AIR FOR 15 MINUTES) OR MORE STRINGENT AS REQUIRED. THE LIDS ARE TO BE GAS TIGHT AND TO EXTEND NOT MORE THAN 4-INCHES ABOVE FINISHED GROUND.

2,000 GALLON SEPTIC TANK
2-Compartment
Stock Item (Approx. 19,900 lbs)

Babylon

SEPTIC TANK CONSTRUCTION AND INSTALLATION NOTES

1. TANK TO BE ASTM C1277-20 AND HOWARD COUNTY CODE COMPLIANT AND INCLUDE A PROPERLY POSITIONED INLET T-BAR/BAFFLE EXTENDED INTO THE TANK AIR SPACE AT LEAST 8-INCHES ABOVE THE LIQUID LEVEL, BUT AT LEAST 1-INCH BELOW THE TOP. CONSTRUCTED OF NOT LESS THAN SCHEDULE 40 PVC.

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3. PROVIDE ADDITIONAL COATINGS AS MANDATED BY HOWARD COUNTY, MD.

4. SET THE TANKS ON A 6-INCH MINIMUM LEVELING BED OF AASHTO #57 AGGREGATE ON A FIRM SUBGRADE. THE ACCESS COVERS TO BE CHILD PROOF HEAVY DUTY COVERS WITH INTERNAL SAFETY NET OR CATCH AS MANUFACTURED BY SIM TECH OR TUF-TITE. TANK AND RISERS TO BE WATER TIGHT AND PASS MANUFACTURERS WATER-TIGHTNESS TEST (VACUUM 2-INCHES HG FOR 60 MIN, 5 PSIG WATER FOR 60 MINUTES, 5 PSIG AIR FOR 15 MINUTES) OR MORE STRINGENT AS REQUIRED. THE LIDS ARE TO BE GAS TIGHT AND TO EXTEND NOT MORE THAN 4-INCHES ABOVE FINISHED GROUND.

5. THE EXISTING WELLS SHOWN ON THIS PLAN (NO TAG, IDENTIFIED PER COUNTY RECORDS AS #40-14-0106) HAS BEEN FIELD LOCATED BY G.L.W. (PROFESSIONAL LAND SURVEYORS) AND IS ACCURATELY SHOWN ON THIS PLAN.

6. 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 ODDS PLAN MAY BE REQUIRED.

7. THE MAXIMUM EARTH COVER OVER THE TANKS IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.

8. ELECTRICAL WORK FOR THE SEPTIC SYSTEM INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.

9. EXISTING WELLS, SEPTIC SYSTEMS AND SEWAGE DISPOSAL AREAS WITHIN 100' OF THE PROPOSED IMPROVEMENTS AND THOSE 200' DOWN GRADIENT OF EXISTING OR PROPOSED SEPTIC SYSTEMS OR SEWAGE DISPOSAL AREAS HAVE BEEN SHOWN.

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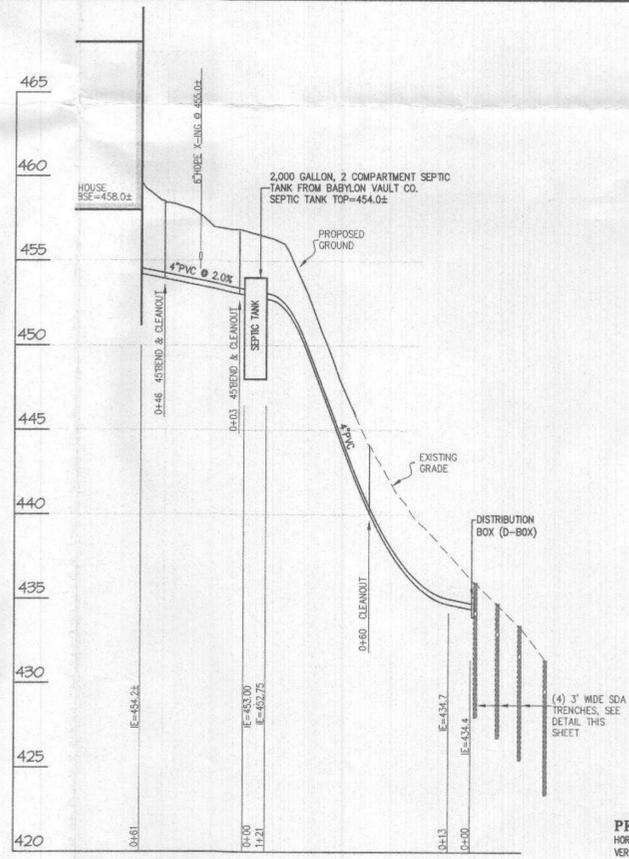
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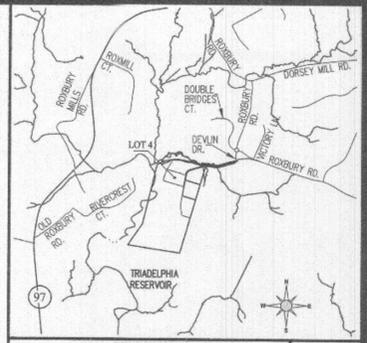
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| SDA TRENCH SIZE CALCULATIONS | | | |
|---|----------------|------------------------|------------------------|
| Cattail Overlook Lot #4 (15135 Devlin Court) | | | |
| System Input Information | Initial System | Replacem't System No.1 | Replacem't System No.2 |
| Application Rate | 0.8 | 0.8 | 1.2 |
| Effective area beginning depth | 2 | 2 | 2 |
| Effective area maximum bottom depth | 8 | 8 | 8 |
| Number of Bedrooms | 7 | 7 | 7 |
| Design flow at 150 gal./day/bedroom | 1050 | 1050 | 1050 |
| Absorption Trench Calculations | | | |
| Drainfield area required (Design flow/application rate) | 1312.5 | 1312.5 | 875 |
| Effluent pipe depth to invert | 2 | | |
| Effective sidewall depth "D" (Depth between the effective beginning depth or pipe depth (which ever is deeper) and maximum trench bottom.) | 6 | 6 | 6 |
| Trench Width "W" (2 or 3 feet) | 3 | 3 | 2 |
| Sidewall Reduction Percent = (W+2)/(W+1+2D) | 31.25% | 31.25% | 26.67% |
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| Trench Layout Information | | | |
| Approximate length available on contour & not exceeding 100-ft | 91 | 91 | 91 |
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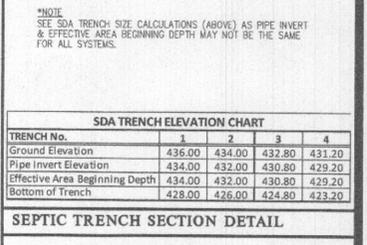
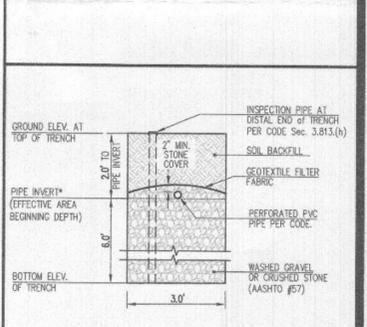
PROFILE
HORZ. SCALE: 1"=50'
VERT. SCALE: 1"=5'



LEGEND

- 430 - EXISTING CONTOUR
- 430 - PROPOSED 2-FT CONTOUR
- FCR - EXISTING FOREST CONSERVATION EASEMENT
- WB - WELL BOX LOCATION
- SDA - PRIVATE SEWAGE DISPOSAL AREA
- INITIAL SYSTEM 3' WIDE TRENCH
- FIRST REPLACEMENT SYSTEM 3' WIDE TRENCH
- SECOND REPLACEMENT SYSTEM 2' WIDE TRENCH
- PERCOLATION TEST PIT FAILED BY HEALTH DEPARTMENT
- PERCOLATION TEST PIT PASSED BY HEALTH DEPARTMENT

- NOTES**
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SDA TRENCH ELEVATION CHART

SEPTIC TRENCH SECTION DETAIL

Approved Septic System Plan
Howard County Health Department
Hank Oswald 4/22/25
Signature Date

GLW
PLANNING | ENGINEERING | SURVEYING

3909 NATIONAL DRIVE | SUITE 250 | BURTONSVILLE, MD 20866 | GLWPA.COM
PHONE: 301-421-4024 | BALT: 410-880-1820 | DCVA: 301-989-2524 | FAX: 301-421-4186

DESIGNED BY: **kjp**

DRAWN BY: **kjp**

CHECKED BY: **dds**

DATE: _____

REVISION: _____

BY: _____

APPR: _____

PREPARED FOR:

OWNER:
Adam & Sarah Tajalli
42438 Brook Tides Ct.
Leesburg, VA 20176

BUILDER:
MUELLER HOMES
7520 MAIN ST., SUITE 201
SYKEVILLE, MD 21784
410-549-4444
adam@tajalli.com
540-441-9242
sej@muellerhomes.com

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS 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. 54380

EXPIRATION DATE: MAY 14, 2027

PAUL MUELLER JR.
PROFESSIONAL ENGINEER

ON-SITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN

CATTAIL OVERLOOK LOT 4 (15135 DEVLIN DRIVE)
PLAT No. 23314-23317

ELECTION DISTRICT No. 4

SCALE: 1" = 30'

ZONING: RC-DEO

G. L. W. FILE No. 23041

DATE: APR. 2025

TAX MAP - GRID: 21-20

SHEET: 1 OF 1

HOWARD COUNTY, MARYLAND