

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: _____ **ONSITE SEWAGE DISPOSAL SYSTEM** P _____

APPROVAL DATE: 04/26/2021 **PERMIT:** **REPAIR** A _____

PROPERTY ADDRESS: 4044 Manor Lane

SUBDIVISION: CARROLL MILL FARM LOT: PAP B TAX ID: 03-322173

CONTRACTOR: SOUTH CARROLL BACKHOE EMAIL: SCBACKHOE@COMCAST.NET

CONTRACTOR ADDRESS: 4410 SALEM BOTTOM ROAD, WESTMINSTER, MD 21157 PHONE: 410-596-3618

PROPERTY OWNER: Natalie Ziegler EMAIL: _____

OWNER ADDRESS: 3800 Manor Lane, Ellicott City, MD 21042 PHONE: 410-977-8927

SEPTIC TANK SIZE (GALLONS): 2000 g PUMP CHAMBER CAPACITY (GALLONS): — PUMP SIZE: —

NUMBER OF BEDROOMS: 5 HOUSE SQ. FT. _____ APPLICATION RATE: 0.8

DISTRIBUTION SYSTEM: GRAVITY FED LOW PRESSURE DOSED

TRENCHES:	LINEAR FEET REQUIRED: <u>156'</u>	INLET DEPTH: <u>2'</u>
	TRENCH WIDTH: <u>3'</u>	MAXIMUM BOTTOM DEPTH: <u>8'</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10'</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>5'</u>
LOCATION:	TO BE STAKED BY SANITARIAN DURING PRE-CONSTRUCTION INSPECTION.	
NOTES:		

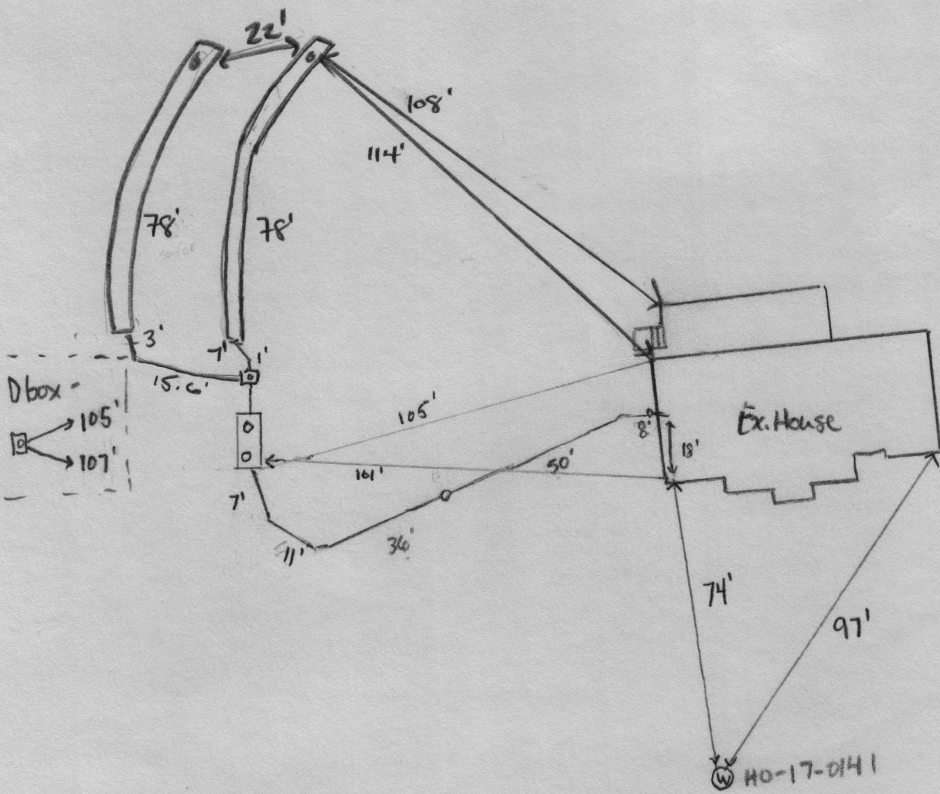
ISSUED BY: SUSAN T ISSUE DATE: 04/07/2021 EXPIRATION DATE: 04/07/2022

- 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 SEPTIC 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 N/A
- NOTE: THE HCHD DOES NOT WARRANT ANY SYSTEM AND CANNOT GUARANTEE THE PERFORMANCE OF THIS SYSTEM AS DESIGNED. BY ACCEPTING THIS PERMIT, THE OWNER AND/OR APPLICANT ACKNOWLEDGE THAT THE SPECIFICATIONS DETAILED IN THIS DESIGN ARE ONE POSSIBLE OPTION AND THAT THE HCHD WILL REVIEW OTHER PROPOSALS. YOU HAVE THE OPTION TO SEEK THE ADVICE OF A QUALIFIED DESIGN CONSULTANT OR PROFESSIONAL ENGINEER FOR FURTHER GUIDANCE.
- 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.

4044 Manor Ln

NOT TO SCALE 1" = 30'



ROAD NAME
Manor Lane

TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
3'	2'	8'
NUMBER OF TRENCHES		2
TOTAL LENGTH		156 F
ABSORPTION AREA		468 SF + SIDE WALL
DISTRIBUTION BOX LEVEL		SPEED
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	3'
BAFFLES	front 6" / back 4"
BAFFLE FILTER	-
MANHOLE LOC	front / back
6" PORT LOC	-
WATERTIGHT TEST	-
SLOTTED	yes
DATE ON LID	3/1/21
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	

PRE-CONSTRUCTION:

4/7/21 SHC is 1' lower than planned. Plans need to be redlined. Contractor was able to layout two trenches in field upper w/ 3.5' inlet and lower w/ 3' inlet. Tank will have 36" of cover if contractor grades it down. (S)

INSTALLATION: 4/21/21 Installed SHC and part of SL, according to new OSDS (4/12/21). (S)
 4/22/21 - tank in place, still too much cover, contractor will shave grade for finished cover of 3', dbox in, and the 1st trench was being installed, 3' wide, 4' inlet, 8' bottom, (2nd trench to be 3' wide, 3' inlet, 8' bottom). Stone did not look good, lots of dust - did not appear to be washed at all, ok to continue. (R)
 04/26/2021 D Box LEVELED w/ SPEED LEVELS. UPPER TRENCH COMPLETED; LOWER TRENCH INSTALLED OK TO BACKFILL. (R)

FINAL INSPECTOR

[Handwritten Signature]

DATE OF APPROVAL 04/26/2021

Howard County Health Department

Bureau of Environmental Health, Columbia, MD 21045 - 410-313-1771

SEWAGE DISPOSAL PERMIT NO. A- _____ P- _____

RESIDENTIAL PERMIT COMMERCIAL PERMIT

(NUMBER OF BEDROOMS: _____) (DESIGN FLOW: _____ GPD)

PERMITEE: South Carroll Beckhoe
LOCATION: 4644 Manor Lane

****POST THIS CARD WHERE IT CAN BE SEEN FROM ROAD****

STOP ALL CONSTRUCTION ON SEWAGE DISPOSAL SYSTEM AND CONTACT HEALTH DEPARTMENT BEFORE CONTINUING

Inspector _____ Date _____

WORK IS SATISFACTORY, OK TO CONTINUE

Inspector _____ Date _____

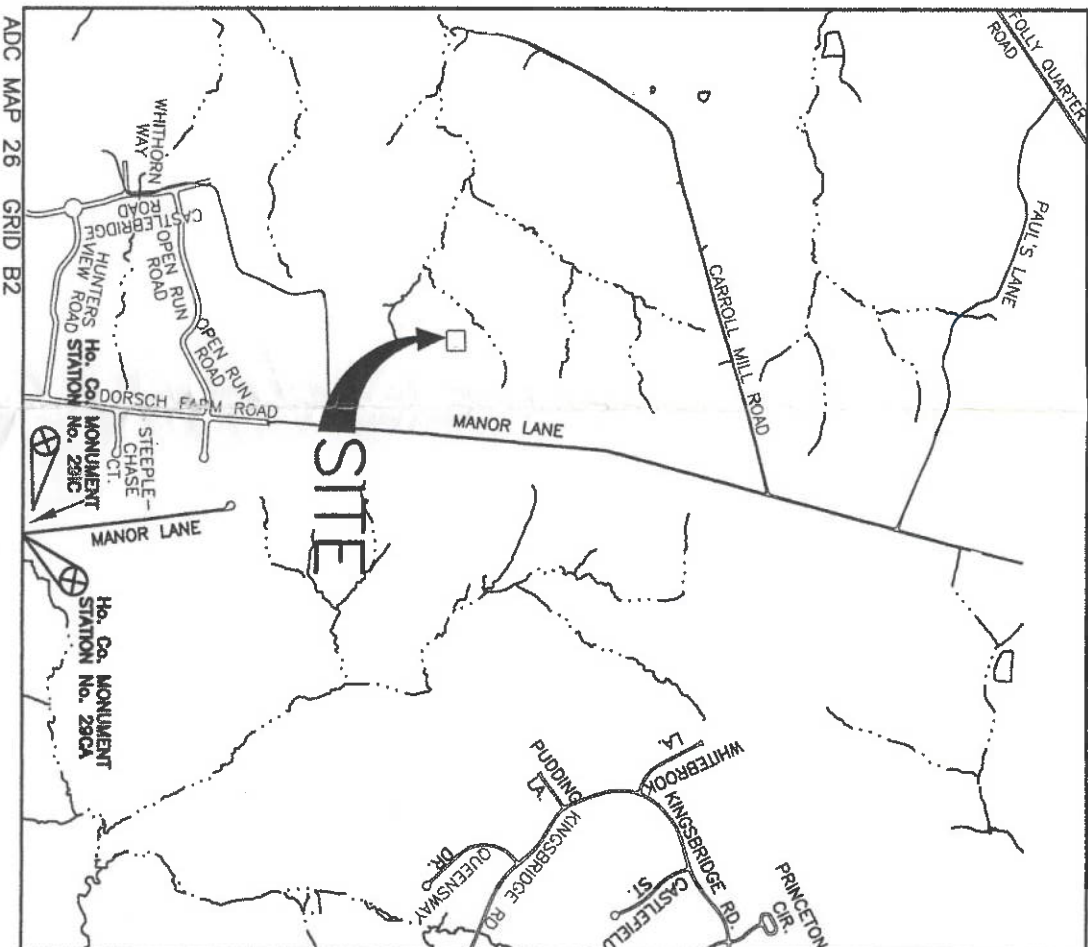
COMMENTS:

FINAL INSPECTION MADE, OK TO COVER ALL WORK

Inspector _____ Date _____

GENERAL NOTES

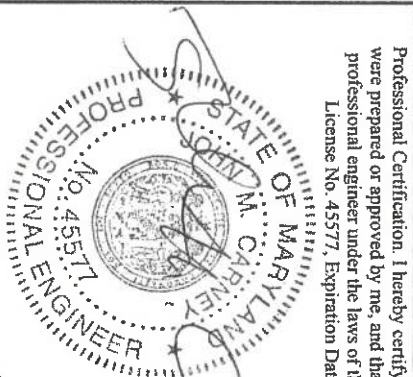
1. THE LOT SHOWN HEREON WAS RECORDED ON THE PLAT FOR CARROLL MILL FARM PROPERTY, PLAT NUMBER 12425. REFER TO THE PLAT FOR LOT DIMENSIONS, LOT AREA, ALL EASEMENTS AND CONDITIONS.
2. THE EXISTING WELL SHOWN ON THIS PLAN (HO-17-0141) HAS BEEN FIELD LOCATED BY BENCHMARK ENGINEERING, INC. AND IS SHOWN IN ACCORDANCE WITH THEIR SURVEY.
3. TOPOGRAPHY SHOWN HEREON IS TAKEN FROM A FIELD RUN TOPOGRAPHIC SURVEY BY BENCHMARK ENGINEERING, INC., ON OR ABOUT JANUARY, 2017.
4. SEDIMENT AND EROSION CONTROLS WILL BE DONE AS A STANDARD PLAN SINCE THE PARCEL IS GREATER THAN 2 ACRES. THE LIMIT OF DISTURBANCE IS LESS THAN 30,000 SF. CUT AND FILLS ARE LESS THAN 1000 CY AND 10 VERTICAL FEET, AND LOD IS OUTSIDE ENVIRONMENTAL FEATURES BY MORE THAN THE REQUIRED DISTANCES.
5. ALL DRAINAGE AND STORMWATER MANAGEMENT FEATURES USED ON THIS SITE MUST COMPLY WITH THE APPROVED BUILDING PERMIT AND SIMPLIFIED ENVIRONMENTAL CONCEPT PLAN.
6. ANY CHANGES TO A PRIVATE SEWAGE DISPOSAL AREA OR WELL BOX SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
7. 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.
8. ANY ELECTRICAL WORK FOR THE INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
9. THE SEPTIC TANK WILL BE A 2000 GALLON TWO COMPARTMENT TANK.
10. THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
11. ALL WELLS AND SEPTIC SYSTEMS LOCATED WITHIN 100' OF THE PROPERTY BOUNDARIES AND 200' DOWN GRADIENT OF ANY WELLS/OR SEPTIC SYSTEM HAVE BEEN SHOWN.



VICINITY MAP
SCALE: 1" = 2000'

BENCH MARKS MAD '83	
HO. CO. 0072	ELEV. 426.131
STAMPED DISC ON CONCRETE MONUMENT.	
LIME KILN ROAD EASET OF BROWN RIDGE ROAD	
N 540.070.961	E 1,327.702.794
HO. CO. 401D	ELEV. 357.004
STAMPED DISC ON CONCRETE MONUMENT.	
BY #12639 LIME KILN ROAD	
N 541.312.556	E 1,325.896.282

Professional Engineer
 Date: 6/2/20
 Health Department
 Planning Department



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. 45577, Expiration Date: 06-08-2020.

OWNER:

NATALIE ZIEGLER AND
 JESSICA ZIEGLER (SUCCESSOR
 TRUSTEE) OF THE ZIEGLER FAMILY
 IRREVOCABLE TRUST FOR THE
 BENEFIT OF ALEXANDRA N. ZIRSCHKY
 AND J. CHRISTIAN ZIRSCHKY
 4044 MANOR LANE
 ELLICOTT CITY, MD 21042
 410-740-6880

PROJECT:

CARROLL MILL FARM
 PARCEL 'B'

LOCATION:

TAX MAP: 23, GRID: 10, PARCEL: P/O 130
 ZONED: RC-DEO
 ELECTION DISTRICT NO. 3 - HOWARD COUNTY, MARYLAND

TITLE:

ON-SITE SEWAGE DISPOSAL PERMIT PLAN

HOUSE TYPE:

ZIEGLER-ZIRSCHKY RESIDENCE

DATE:

JUNE, 2020

SCALE:

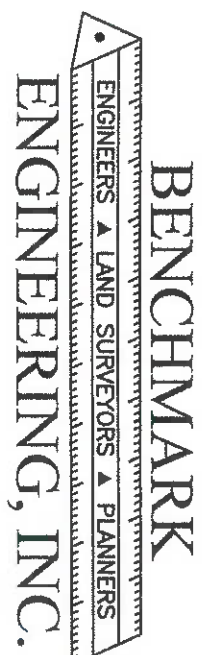
AS SHOWN

DESIGN:

JC DRAFT: LD

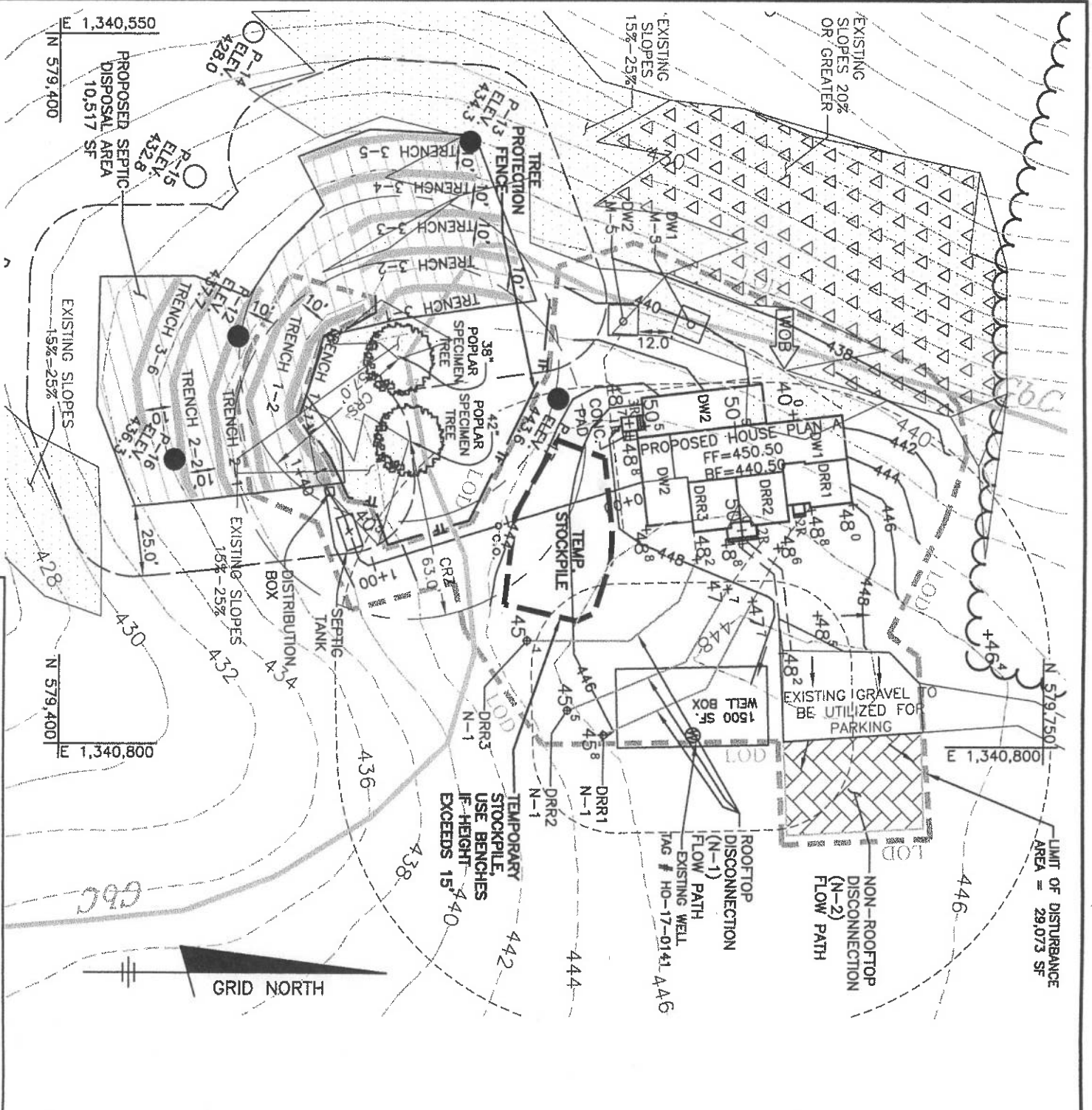
SCALE:

DRAWING 1 OF 3

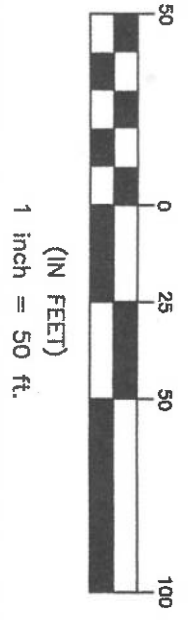


**BENCHMARK
 ENGINEERING, INC.**

8480 BALTIMORE NATIONAL PIKE ▲ SUITE 315
 ELLICOTT CITY, MARYLAND 21043
 PHONE: 410-465-6105 ▲ FAX: 410-465-6644
 BE@BEI-CIVILENGINEERING.COM

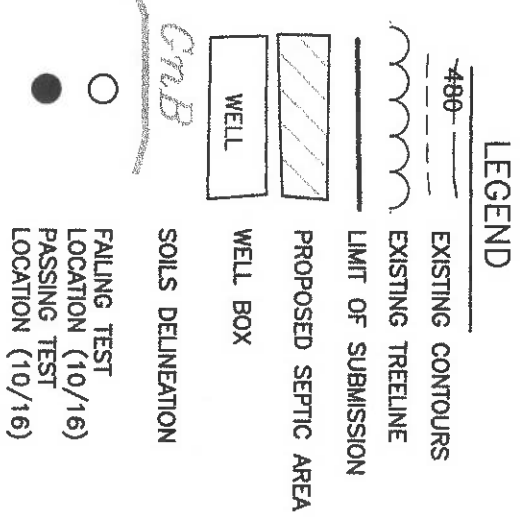
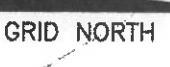


PLAN VIEW
1" = 50'



BENCHMARK ENGINEERING, INC.
ENGINEERS ▴ LAND SURVEYORS ▴ PLANNERS

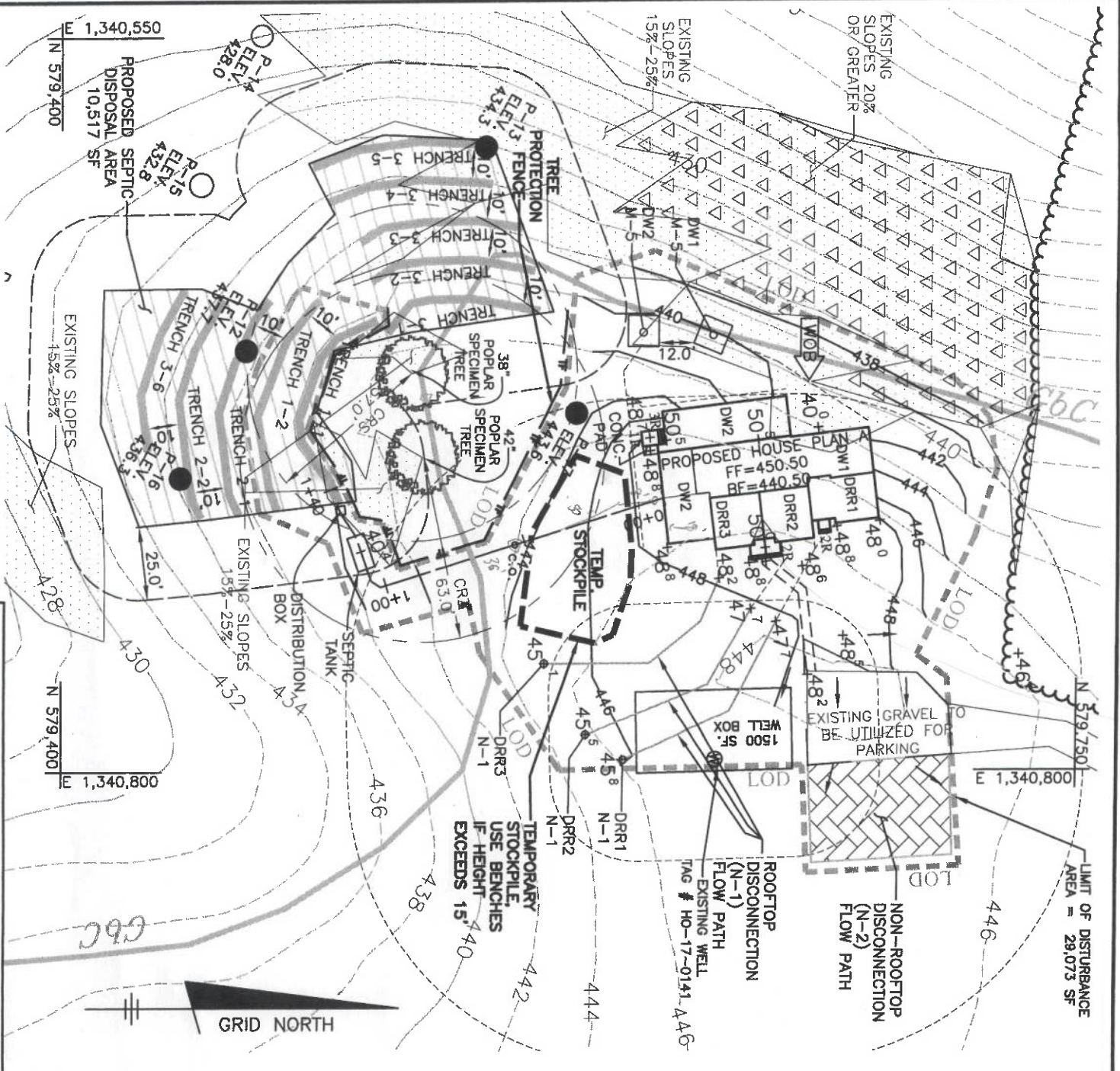
8480 BALTIMORE NATIONAL PIKE ▴ SUITE 315
ELLCOTT CITY, MARYLAND 21043
PHONE: 410-465-6105 ▴ FAX: 410-465-6644
BEI@BEI-CIVILENGINEERING.COM



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. 45577, Expiration Date: 06-08-2020.

6/2/20

OWNER:		NATALIE ZIEGLER AND JESSICA ZIEGLER (SUCCESSOR TRUSTEE) OF THE ZIEGLER FAMILY IRREVOCABLE TRUST FOR THE BENEFIT OF ALEXANDRA N. ZIRSCHKY AND J. CHRISTIAN ZIRSCHKY 4044 MANOR LANE ELLCOTT CITY, MD 21042 410-740-6880	
PROJECT:		CARROLL MILL FARM PARCEL 'B'	
LOCATION:		TAX MAP: 23, GRID: 10, PARCEL: P/O 130 ZONED: RC-DEO ELECTION DISTRICT NO. 3 - HOWARD COUNTY, MARYLAND	
TITLE:		ON-SITE SEWAGE DISPOSAL PERMIT PLAN	
HOUSE TYPE:		ZIEGLER-ZIRSCHKY RESIDENCE	
DATE:	JUNE, 2020	PROJECT NO.	2799
SCALE:	1" = 50'	DRAWING	2 OF 3
DESIGN:	JC	DRAFT:	LD



PLAN VIEW
1" = 50'



BENCHMARK ENGINEERING, INC.
ENGINEERS ▲ LAND SURVEYORS ▲ PLANNERS

8480 BALTIMORE NATIONAL PIKE ▲ SUITE 315
ELLCOTT CITY, MARYLAND 21043
PHONE: 410-465-6105 ▲ FAX: 410-465-6644
BEOBEI-CIVILENGINEERING.COM

OWNER:	NATALIE ZIEGLER AND JESSICA ZIEGLER (SUCCESSOR TRUSTEE) OF THE ZIEGLER FAMILY IRREVOCABLE TRUST FOR THE BENEFIT OF ALEXANDRA N. ZIRSCHKY AND J. CHRISTIAN ZIRSCHKY 4044 MANOR LANE ELLCOTT CITY, MD 21042 410-740-6880	
DESIGN:	JC	DRAFT: JC

PROJECT:	CARROLL MILL FARM PARCEL 'B'	
LOCATION:	TAX MAP: 23, GRID: 10, PARCEL: P/0 130 ZONED: RC-DEO ELECTION DISTRICT NO. 3 - HOWARD COUNTY, MARYLAND	
TITLE:	REVISED ON-SITE SEWAGE DISPOSAL PERMIT PLAN	
HOUSE TYPE:	ZIEGLER-ZIRSCHKY RESIDENCE	
DATE:	JUNE, 2020	PROJECT NO. 2799
SCALE:	1" = 50'	DRAWING 2 OF 3

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. 45577, Expiration Date: 06-08-2022.

[Signature]
4/8/21

LEGEND

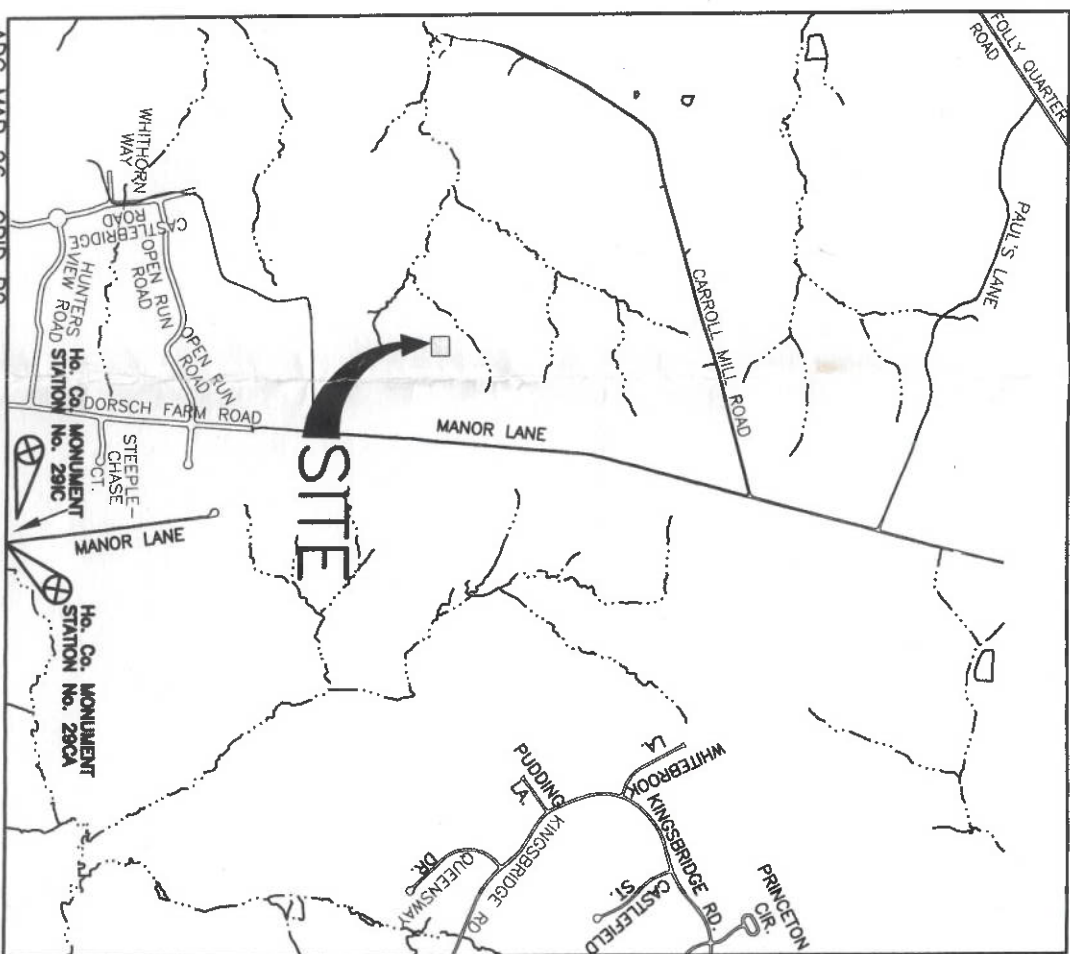
- EXISTING CONTOURS
- EXISTING TRELINE
- LIMIT OF SUBMISSION
- PROPOSED SEPTIC AREA
- WELL BOX
- SOILS DELINEATION
- FALLING TEST LOCATION (10/16)
- PASSING TEST LOCATION (10/16)

Approved Sep. PASSING TEST LOCATION (10/16)
Howard County Health Department

[Signature] Signature
[Date] Date

GENERAL NOTES

1. THE LOT SHOWN HEREON WAS RECORDED ON THE PLAT FOR CARROLL MILL FARM PROPERTY, PLAT NUMBER 12425. REFER TO THE PLAT FOR LOT DIMENSIONS, LOT AREA, ALL EASEMENTS AND CONDITIONS.
2. THE EXISTING WELL SHOWN ON THIS PLAN (HO-17-0141) HAS BEEN FIELD LOCATED BY BENCHMARK ENGINEERING, INC. AND IS SHOWN IN ACCORDANCE WITH THEIR SURVEY.
3. TOPOGRAPHY SHOWN HEREON IS TAKEN FROM A FIELD RUN TOPOGRAPHIC SURVEY BY BENCHMARK ENGINEERING, INC., ON OR ABOUT JANUARY, 2017.
4. SEDIMENT AND EROSION CONTROLS WILL BE DONE AS A STANDARD PLAN SINCE THE PARCEL IS GREATER THAN 2 ACRES, THE LIMIT OF DISTURBANCE IS LESS THAN 30,000 SF. CUT AND FILLS ARE LESS THAN 1000 CY AND 10 VERTICAL FEET, AND LOD IS OUTSIDE ENVIRONMENTAL FEATURES BY MORE THAN THE REQUIRED DISTANCES.
5. ALL DRAINAGE AND STORMWATER MANAGEMENT FEATURES USED ON THIS SITE MUST COMPLY WITH THE APPROVED BUILDING PERMIT AND SIMPLIFIED ENVIRONMENTAL CONCEPT PLAN.
6. ANY CHANGES TO A PRIVATE SEWAGE DISPOSAL AREA OR WELL BOX SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
7. 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.
8. ANY ELECTRICAL WORK FOR THE INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
9. THE SEPTIC TANK WILL BE A 2000 GALLON TWO COMPARTMENT TANK.
10. THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
11. ALL WELLS AND SEPTIC SYSTEMS LOCATED WITHIN 100' OF THE PROPERTY BOUNDARIES AND 200' DOWN GRADIENT OF ANY WELLS/OR SEPTIC SYSTEM HAVE BEEN SHOWN.
12. THIS REVISED OSDS PERMIT PLAN IS TO ADJUST THE ELEVATIONS OF THE SEWER LINE FROM THE HOUSE TO THE TRENCHES. IT ADJUSTS THE SEPTIC TANK ELEVATION.



VICINITY MAP
SCALE: 1" = 2000'

BENCHMARK
ENGINEERS ▲ LAND SURVEYORS ▲ PLANNERS

ENGINEERING, INC.

8480 BALTIMORE NATIONAL PIKE ▲ SUITE 315
ELLCOTT CITY, MARYLAND 21043
PHONE: 410-465-6105 ▲ FAX: 410-465-6644
BEI@BEI-CIVILENGINEERING.COM

OWNER:
NATALIE ZIEGLER AND
JESSICA ZIEGLER (SUCCESSOR
TRUSTEE) OF THE ZIEGLER FAMILY
IRREVOCABLE TRUST FOR THE
BENEFIT OF ALEXANDRA N. ZIRSCHKY
AND J. CHRISTIAN ZIRSCHKY
4044 MANOR LANE
ELLCOTT CITY, MD 21042
410-740-6880

DESIGN: JC **DRAFT:** JC

PROJECT:
CARROLL MILL FARM
PARCEL 'B'

LOCATION:
TAX MAP: 23, GRID: 10, PARCEL: P/0 130
ZONED: RC-DEO
ELECTION DISTRICT NO. 3 - HOWARD COUNTY, MARYLAND

TITLE:
REVISED
ON-SITE SEWAGE DISPOSAL PERMIT PLAN

HOUSE TYPE: ZIEGLER-ZIRSCHKY RESIDENCE

DATE: JUNE, 2020 PROJECT NO. 2799
APRIL, 2021

SCALE: AS SHOWN DRAWING 1 OF 3

BENCH MARKS MAD '83	
HO. CO. 0079	ELEV. 426.131
STAMPED DISC ON CONCRETE MONUMENT.	
LIME KILN ROAD EASET OF BROWN RIDGE ROAD	E 1,327,702.794
N 540.070.961	E 1,327,702.794
HO. CO. 401D	ELEV. 367.004
STAMPED DISC ON CONCRETE MONUMENT.	
BY #12639 LIME KILN ROAD	E 1,325,896.282
N 541,312.556	E 1,325,896.282

Approved Septic System Plan
Howard County Health Department

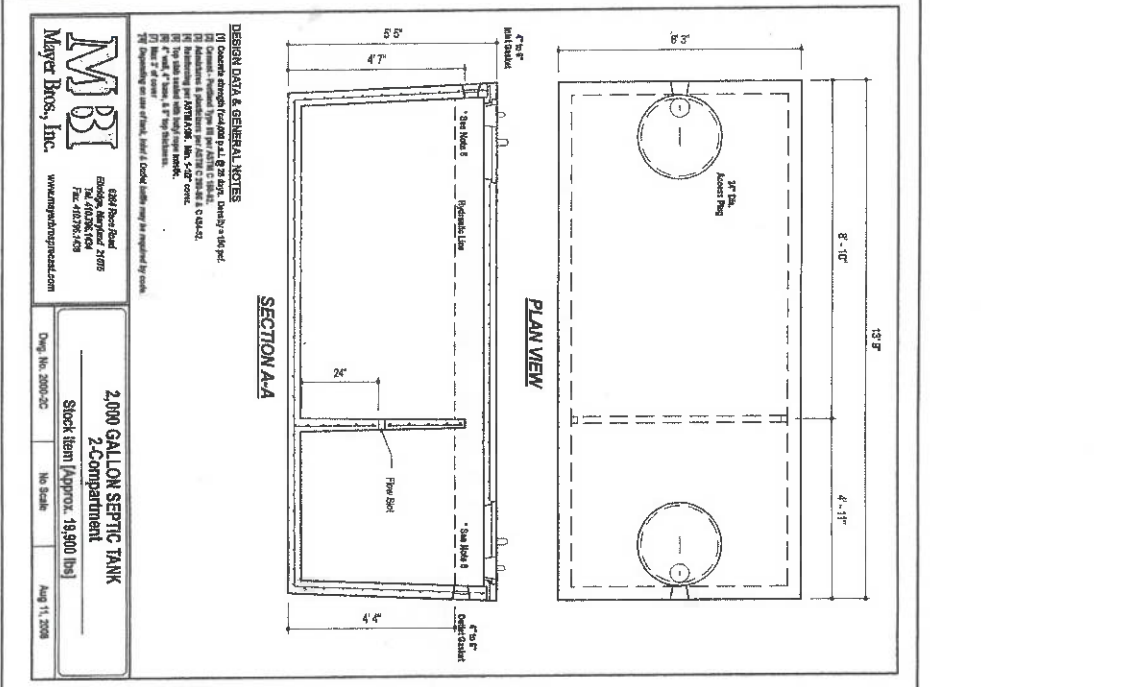
Signature: *[Signature]* Date: 4/8/21

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. 45577, Expiration Date: 06-08-2022.

STATE OF MARYLAND
M. CARNEY
PROFESSIONAL ENGINEER
No. 45577

4/8/21

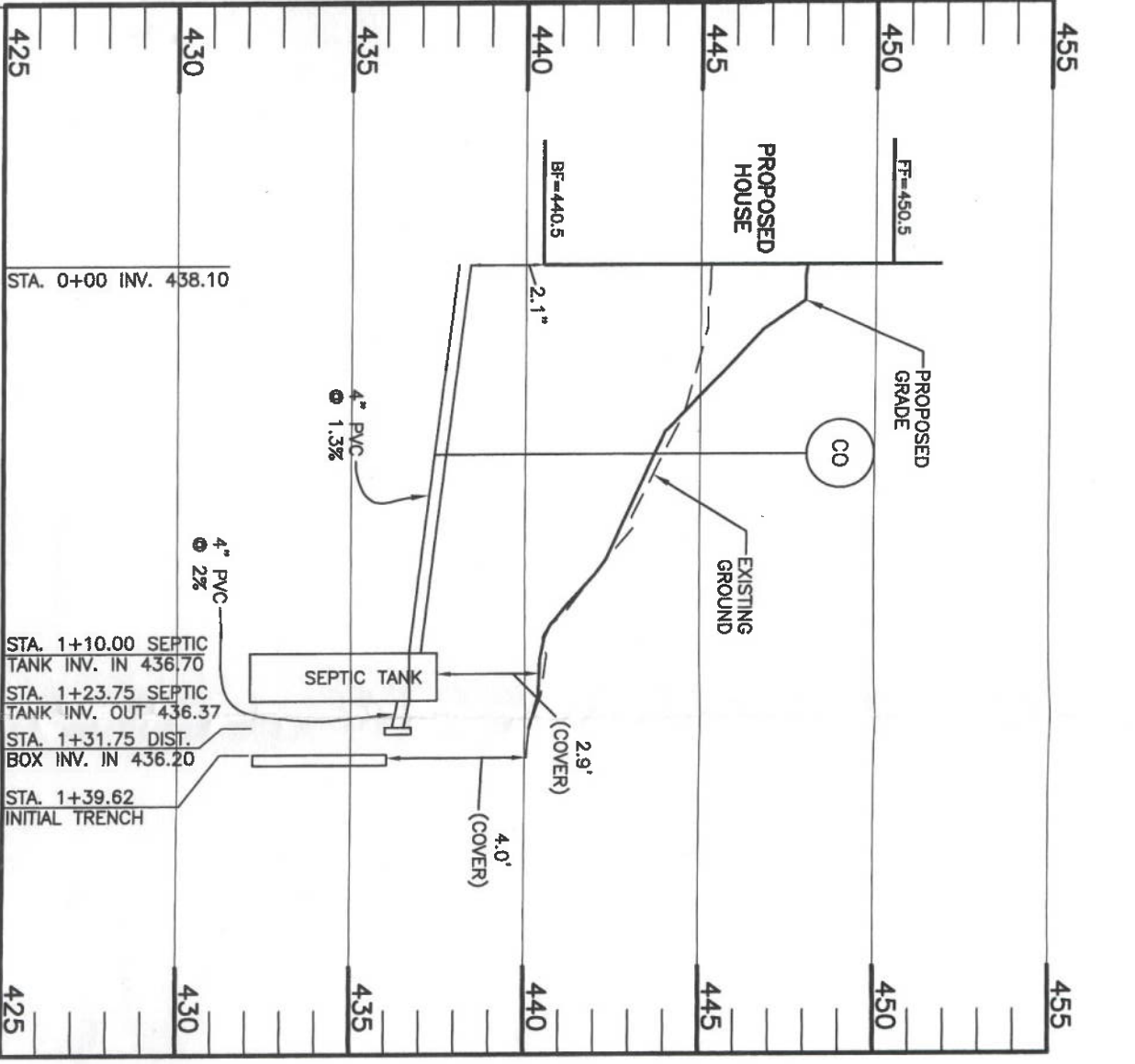
HEALTH DEPARTMENT SPEC SHEET INFORMATION			
System	Application Rate	Effective Depth	Bottom Depth
Initial	0.8	5.0	8.0
1st Replacement	0.8	5.0	8.0
2nd Replacement	0.6	7.0	8.0



SEPTIC INVERT CHART	
INV @ HOUSE	438.1
GROUND @ HOUSE	448.8
INV IN TANK	436.7
INV OUT TANK	436.4
TOP OF TANK	437.5
GROUND OVER TANK	440.4
INV IN DIST BOX	436.2
INV OUT DIST BOX	436.1
GROUND AT DIST BOX	440.3

THIS PLAN IS FOR SEPTIC DESIGN ONLY

SEE MANUFACTURERS SPECIFICATIONS FOR DETAILS.
 WWW.MAYERPRECAST.COM
 EQUIVALENT FROM OTHER MANUFACTURERS CAN BE SUBSTITUTED.



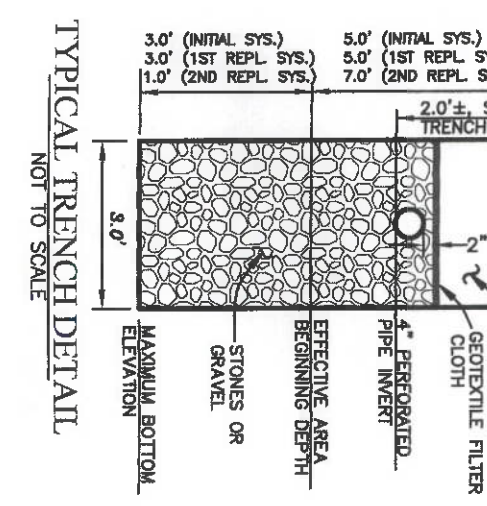
OSDS
 SCALE: 1"=50' HORIZ., 1"=5' VERT.

BENCHMARK ENGINEERS & LAND SURVEYORS & PLANNERS ENGINEERING, INC.
 8480 BALTIMORE NATIONAL PIKE & SUITE 315
 ELLICOTT CITY, MARYLAND 21043
 PHONE: 410-465-6105 FAX: 410-465-6644
 BEI@BEI-CIVILENGINEERING.COM

OWNER:
 NATALIE ZIEGLER AND JESSICA ZIEGLER (SUCCESSOR TRUSTEE) OF THE ZIEGLER FAMILY IRREVOCABLE TRUST FOR THE BENEFIT OF ALEXANDRA N. ZIRSCHKY AND J. CHRISTIAN ZIRSCHKY
 4044 MANOR LANE
 ELLICOTT CITY, MD 21042
 410-740-6880

PROJECT: CARROLL MILL FARM PARCEL 'B'
LOCATION: TAX MAP: 23, GRID: 10, PARCEL: P/O 130
 ELECTION DISTRICT NO. 3 - HOWARD COUNTY, MARYLAND
TITLE: REVISED ON-SITE SEWAGE DISPOSAL PERMIT PLAN
HOUSE TYPE: ZIEGLER-ZIRSCHKY RESIDENCE
DATE: JUNE, 2020 PROJECT NO. 2799
SCALE: (H) 1"=50' (V) 1"=5'
DESIGN: JC **DRAFT:** JC **DRAWING** 3 OF 3

TRENCH DATA - LOT 22			INITIAL SYSTEM			SECOND REPLACEMENT			INITIAL SYSTEM		
T-1-1	T-2-1	T-3-1	T-1-1	T-2-1	T-3-1	T-1-1	T-2-1	T-3-1	T-1-1	T-2-1	T-3-1
LENGTH	78.2 ft	78.2 ft	LENGTH	78.2 ft	78.2 ft	LENGTH	78.2 ft	78.2 ft	LENGTH	78.2 ft	78.2 ft
GROUND ELEVATION	440.2	437.6	GROUND ELEVATION	437.6	435.6	GROUND ELEVATION	437.6	435.6	GROUND ELEVATION	437.6	435.6
INVERT ELEVATION	436.2	435.6	INVERT ELEVATION	435.6	434.5	INVERT ELEVATION	435.6	434.5	INVERT ELEVATION	435.6	434.5
MAX BOTTOM ELEVATION	432.2	429.6	MAX BOTTOM ELEVATION	429.6	428.5	MAX BOTTOM ELEVATION	429.6	428.5	MAX BOTTOM ELEVATION	429.6	428.5
MAX BOTTOM ELEVATION	430.7	428.5	MAX BOTTOM ELEVATION	428.5	431.5	MAX BOTTOM ELEVATION	428.5	431.5	MAX BOTTOM ELEVATION	428.5	431.5
LENGTH	57.9 ft	57.9 ft	LENGTH	57.9 ft	57.9 ft	LENGTH	57.9 ft	57.9 ft	LENGTH	57.9 ft	57.9 ft
GROUND ELEVATION	438.1	434.3	GROUND ELEVATION	434.3	433.3	GROUND ELEVATION	434.3	433.3	GROUND ELEVATION	434.3	433.3
INVERT ELEVATION	430.1	428.3	INVERT ELEVATION	428.3	427.3	INVERT ELEVATION	428.3	427.3	INVERT ELEVATION	428.3	427.3
MAX BOTTOM ELEVATION	430.1	428.3	MAX BOTTOM ELEVATION	428.3	427.3	MAX BOTTOM ELEVATION	428.3	427.3	MAX BOTTOM ELEVATION	428.3	427.3
MAX BOTTOM ELEVATION	430.1	428.3	MAX BOTTOM ELEVATION	428.3	427.3	MAX BOTTOM ELEVATION	428.3	427.3	MAX BOTTOM ELEVATION	428.3	427.3
Number of Bedrooms	5	5	Number of Bedrooms	5	5	Number of Bedrooms	5	5	Number of Bedrooms	5	5
Application Rate	0.8	0.8	Application Rate	0.8	0.8	Application Rate	0.8	0.8	Application Rate	0.8	0.8
Effective Area Beginning Depth	5.0	5.0	Effective Area Beginning Depth	5.0	5.0	Effective Area Beginning Depth	5.0	5.0	Effective Area Beginning Depth	5.0	5.0
Bottom Max Depth	8.0	8.0	Bottom Max Depth	8.0	8.0	Bottom Max Depth	8.0	8.0	Bottom Max Depth	8.0	8.0
Design Flow	750	750	Design Flow	750	750	Design Flow	750	750	Design Flow	750	750
Drainage Field square footage	937.5	937.5	Drainage Field square footage	937.5	937.5	Drainage Field square footage	937.5	937.5	Drainage Field square footage	937.5	937.5
Sidewall Reduction Credit	0.50	0.50	Sidewall Reduction Credit	0.50	0.50	Sidewall Reduction Credit	0.50	0.50	Sidewall Reduction Credit	0.50	0.50
Trench width	3	3	Trench width	3	3	Trench width	3	3	Trench width	3	3
Effective Area Depth	3	3	Effective Area Depth	3	3	Effective Area Depth	3	3	Effective Area Depth	3	3
Trench Spacing	10	10	Trench Spacing	10	10	Trench Spacing	10	10	Trench Spacing	10	10
Linear length of trench required	156	156	Linear length of trench required	156	156	Linear length of trench required	156	156	Linear length of trench required	156	156
Number of Bedrooms	5	5	Number of Bedrooms	5	5	Number of Bedrooms	5	5	Number of Bedrooms	5	5
Application Rate	0.6	0.6	Application Rate	0.6	0.6	Application Rate	0.6	0.6	Application Rate	0.6	0.6
Effective Area Beginning Depth	7.0	7.0	Effective Area Beginning Depth	7.0	7.0	Effective Area Beginning Depth	7.0	7.0	Effective Area Beginning Depth	7.0	7.0
Bottom Max Depth	8.0	8.0	Bottom Max Depth	8.0	8.0	Bottom Max Depth	8.0	8.0	Bottom Max Depth	8.0	8.0
Design Flow	750	750	Design Flow	750	750	Design Flow	750	750	Design Flow	750	750
Drainage Field square footage	1250	1250	Drainage Field square footage	1250	1250	Drainage Field square footage	1250	1250	Drainage Field square footage	1250	1250
Sidewall Reduction Credit	0.83	0.83	Sidewall Reduction Credit	0.83	0.83	Sidewall Reduction Credit	0.83	0.83	Sidewall Reduction Credit	0.83	0.83
Trench width	3	3	Trench width	3	3	Trench width	3	3	Trench width	3	3
Effective Area Depth	1	1	Effective Area Depth	1	1	Effective Area Depth	1	1	Effective Area Depth	1	1
Trench Spacing	10	10	Trench Spacing	10	10	Trench Spacing	10	10	Trench Spacing	10	10
Linear length of trench required	347	347	Linear length of trench required	347	347	Linear length of trench required	347	347	Linear length of trench required	347	347



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. 45577, Expiration Date: 06-08-2022.

[Signature]
 STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 No. 45577
 d/e/c