



Howard County
Health Department

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: 5/20/21 **ONSITE SEWAGE DISPOSAL SYSTEM**

P 569524

APPROVAL DATE: 9/13/21 **PERMIT: CONSTRUCTION**

A _____

PROPERTY ADDRESS: 18431 Hidden Creek Way

SUBDIVISION: Windsor Forest Knolls

LOT: 11

TAX ID: _____

CONTRACTOR: Farm + Home

EMAIL: _____

CONTRACTOR ADDRESS: _____

PHONE: 410-442-2137

PROPERTY OWNER: Keystone Custom Homes

EMAIL: _____

OWNER ADDRESS: 227 Granite Run Dr.

PHONE: _____

SEPTIC TANK SIZE (GALLONS): 2000

TANK MANUFACTURER: MBI Babylon

PUMP MODEL: _____

PUMP SIZE _____

PUMP TANK CAPACITY: N/A

DISTRIBUTION SYSTEM: ☒ GRAVITY

☐ PRESSURE DOSED

BEDROOMS: 6

APPLICATION RATE: 0.8

TRENCHES:	LINEAR FEET REQUIRED: <u>234</u>	INLET DEPTH: <u>2</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>6</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>4</u>
LOCATION:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND TANK LOCATIONS MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	
NOTES:		

ISSUED BY: H. Oswald

ISSUE DATE: 5/20/21

EXPIRATION DATE: 5/20/22

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 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: 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.

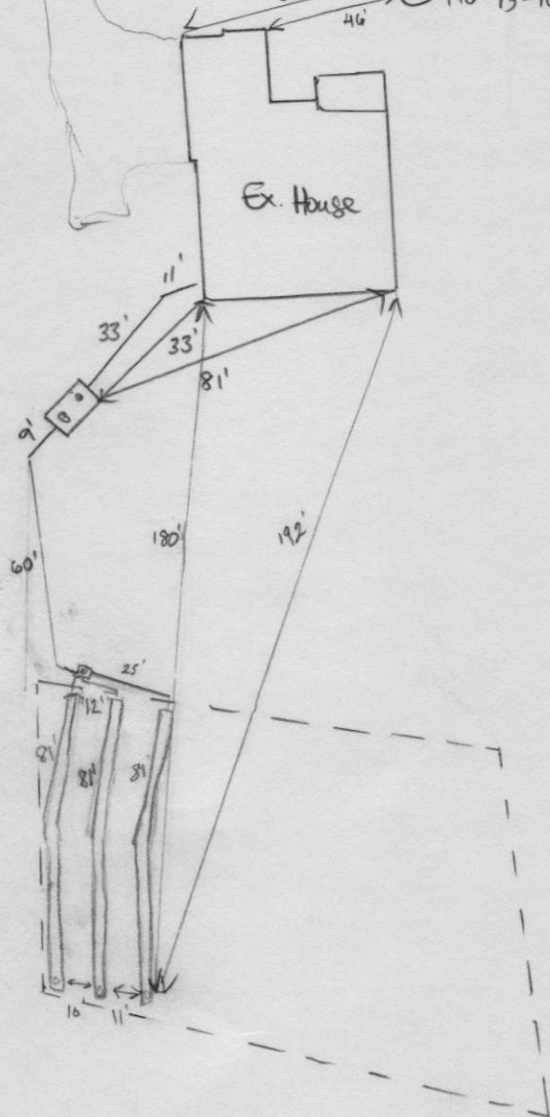
PERMITTEE RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT.

CALL 410-313-1771 TO SCHEDULE INSPECTIONS.

18431 Hidden Creek Way

NOT TO SCALE (1"=50')
H0-95-1038

Ex. House



ROAD NAME

TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
3'	2'	6'
NUMBER OF TRENCHES		3
TOTAL LENGTH		243'
ABSORPTION AREA		729 sq ft + sidewalk
DISTRIBUTION BOX LEVEL		yes
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 1.5'
 BAFFLES inlet + outlet
 BAFFLE FILTER -
 MANHOLE LOC FRONT/BACK
 6" PORT LOC -
 WATERTIGHT TEST -
 SLOTTED YES
 DATE ON LID 07/20/2021

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:

8/26/21 Laid out 3x79' trenches according to plan. Good amount of fall on property. (SD)

INSTALLATION:

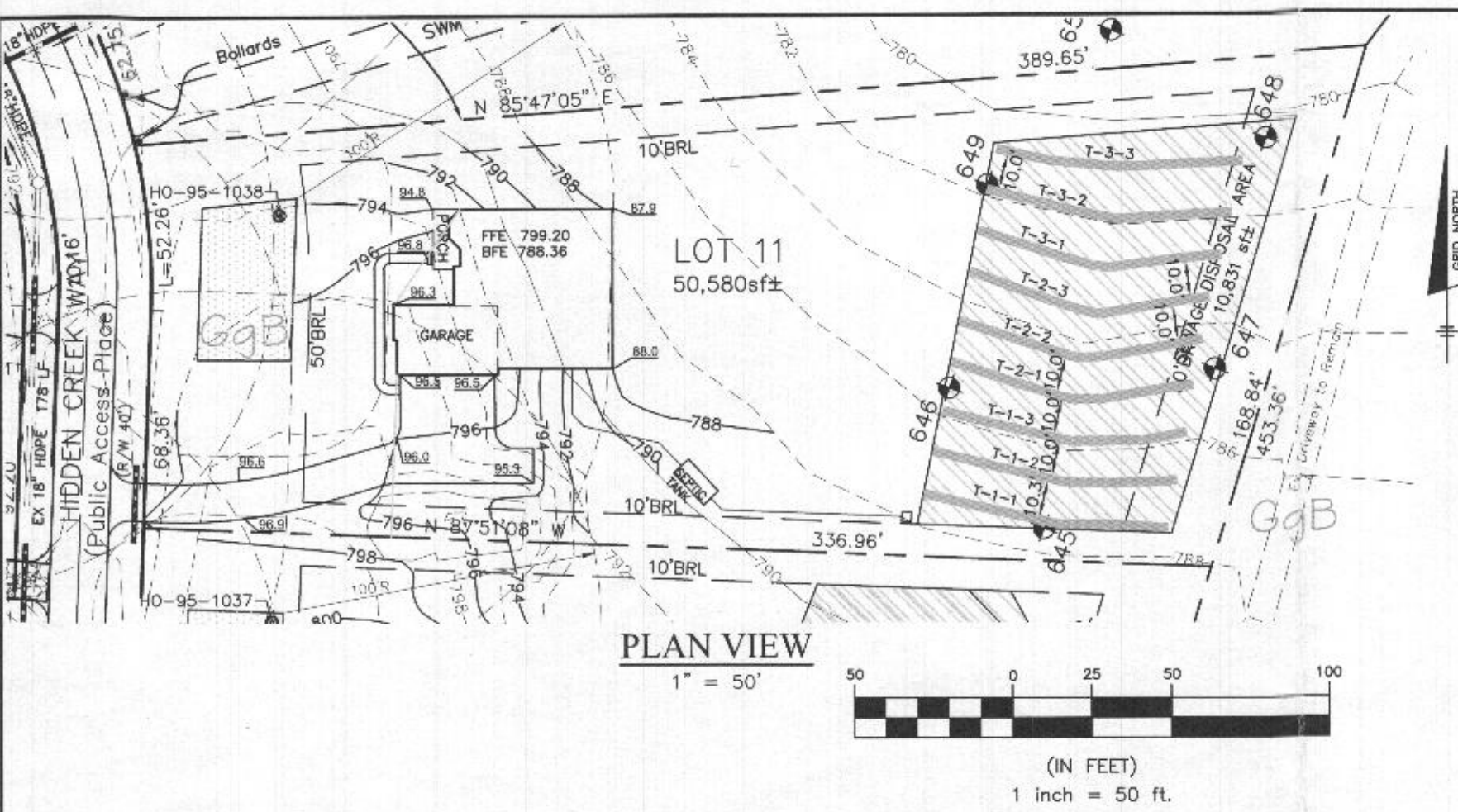
08/27/21 SL + TANK SET. 08/30/21 EFF. LINE INSTALLED TOWARD D BOX. 9/3/21 3x81' trenches constructed. D box leveled. Re-inspect for SHC. (SD) 9/13/21 SHC complete. (SD)

FINAL INSPECTOR

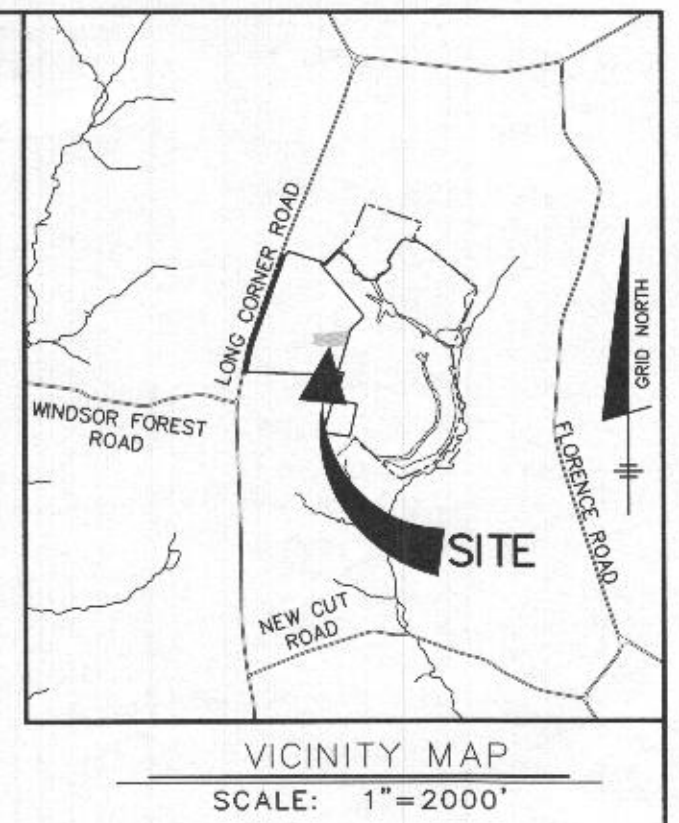
Susan Thomas

DATE OF APPROVAL

9/13/21

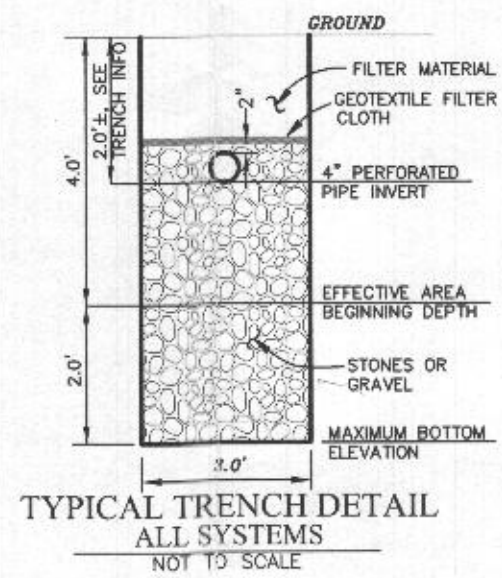


Approved Septic System Plan
Howard County Health Department
Henk Oswald 1/5/2021
Signature Date



GENERAL NOTES

1. THE LOT SHOWN HEREON WAS RECORDED ON THE PLAT FOR WINDSOR FOREST KNOLLS, PLAT NUMBER 19395. REFER TO THE PLAT FOR LOT DIMENSIONS, LOT AREA, ALL EASEMENTS AND CONDITIONS.
2. THE EXISTING WELL SHOWN ON THIS PLAN (HO-95-1038) HAS BEEN FIELD LOCATED BY BENCHMARK ENGINEERING INC. JULY 2020 AND IS ACCURATELY SHOWN.
3. THERE ARE NO EXISTING WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THIS PROJECT'S BOUNDARY EXCEPT AS NOTED.
4. TOPOGRAPHY SHOWN WAS BASED ON FIELD RUN TOPOGRAPHY BY C.B. MILLER & ASSOCIATES IN APRIL, 2002, AND WAS SUPPLEMENTED BY FIELD RUN TOPOGRAPHY BY BENCHMARK ENGINEERING, INC. JULY 2020.
5. SEDIMENT AND EROSION CONTROLS WILL BE SUBMITTED BY HOWARD SOILS CONSERVATION DISTRICT AS A CUSTOM GRADING PLAN.
6. ALL DRAINAGE AND STORMWATER MANAGEMENT FEATURES USED ON THIS SITE MUST COMPLY WITH THE APPROVED BUILDING PERMIT AND CUSTOM GRADING PLANS.
7. ANY CHANGES TO A PRIVATE SEWAGE DISPOSAL AREA OR WELL BOX SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
8. 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.
9. ANY ELECTRICAL WORK FOR THE INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
10. THE SEPTIC TANK WILL BE A 2000 GALLON TWO COMPARTMENT TANK.
11. THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
12. 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.



LEGEND

[Line with elevation 400]	PROPOSED CONTOURS
[Line with elevation 398]	EXISTING CONTOURS
[Hatched box]	EXISTING PRIVATE SEWAGE DISPOSAL AREA
[Diagonal hatched box]	ADDITIONAL SEWAGE DISPOSAL AREA
[Box with 'MaC']	EXISTING WELL BOX
[Symbol]	SOILS MAP SYMBOL
[Symbol]	PERC TEST PASSED

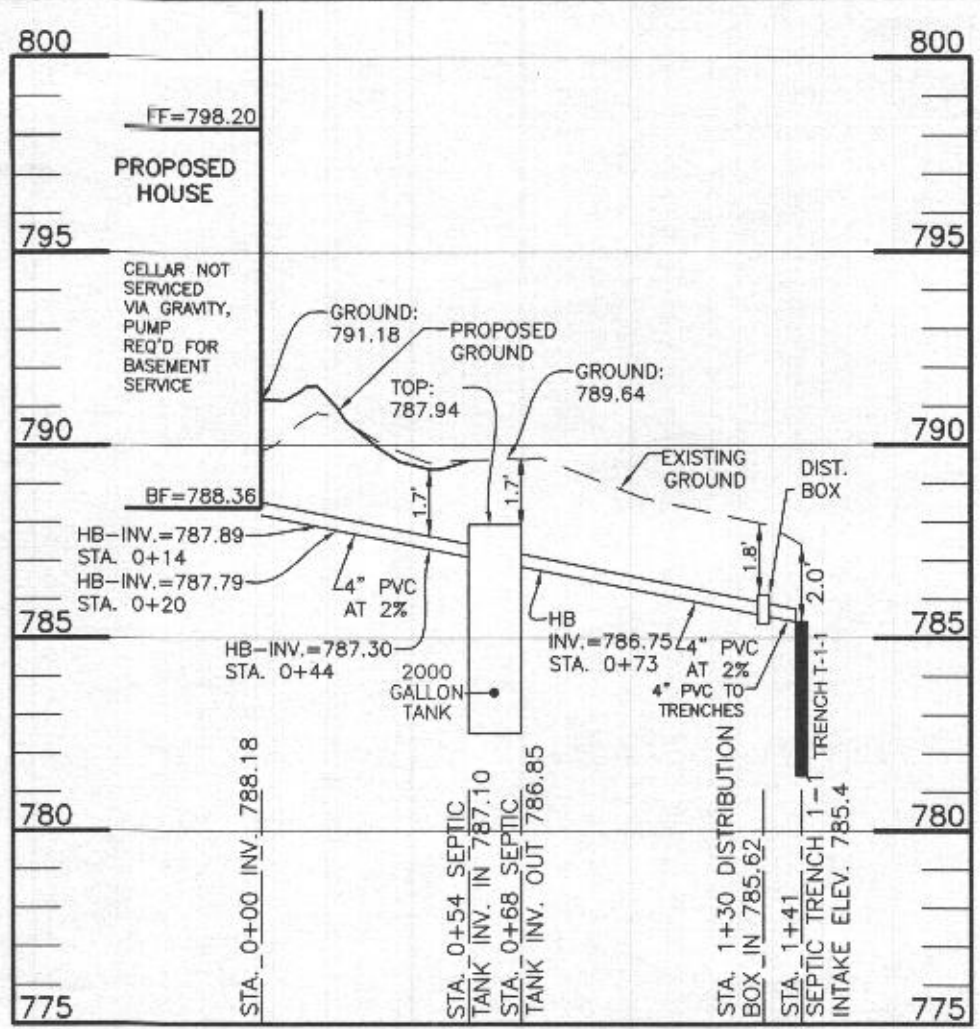
Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 28376, Expiration Date: 01-01-2021.

STATE OF MARYLAND
ALICE A. MILLER
PROFESSIONAL ENGINEER
No. 28376

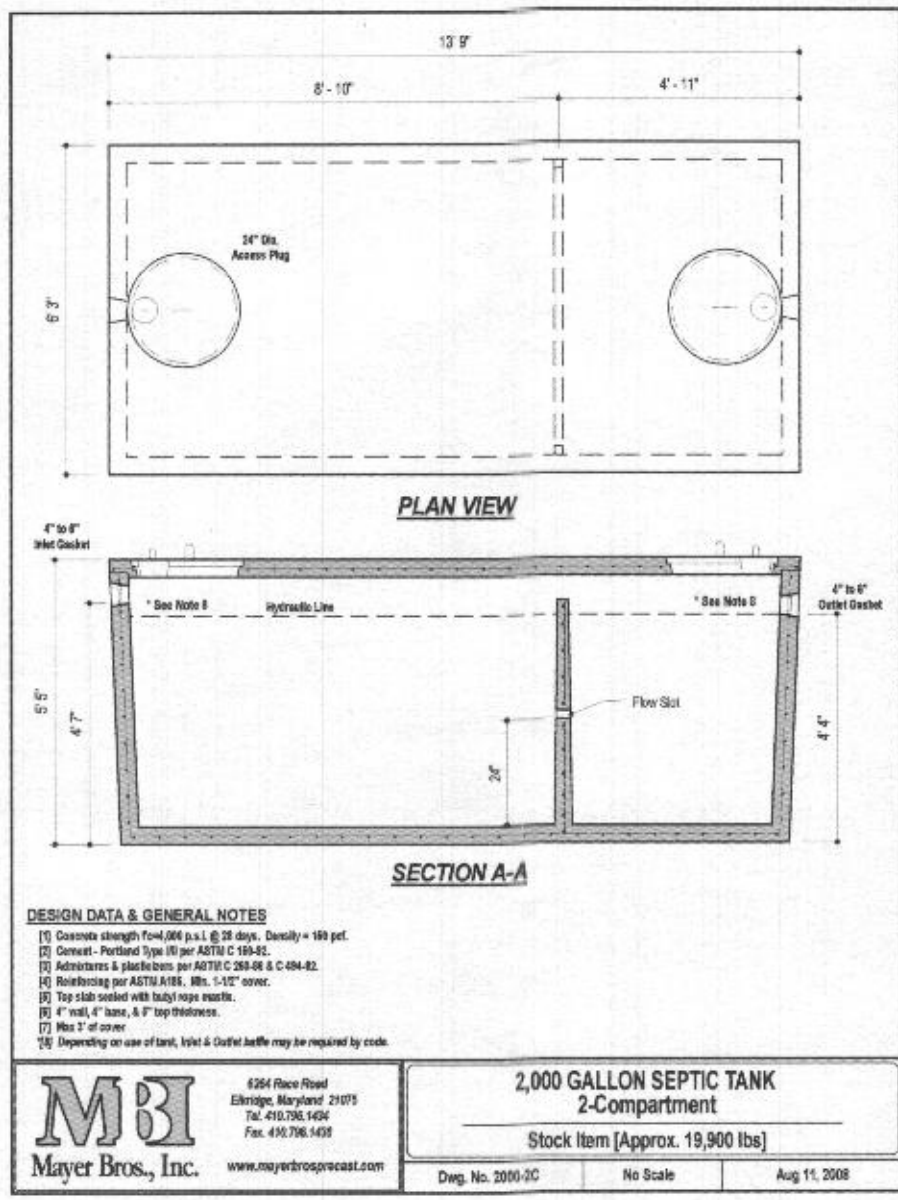
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OWNER/BUILDER: KEYSTONE CUSTOM HOMES, INC. 227 GRANITE RUN DR. SUITE 100 LANCASTER, PA 17601 717-464-9060	BENCHMARK ENGINEERS & LAND SURVEYORS & PLANNERS ENGINEERING, INC. 8480 BALTIMORE NATIONAL PIKE SUITE 315 ELLICOTT CITY, MARYLAND 21043 (P) 410-465-6105 (F) 410-465-6644 WWW.BEI-CIVILENGINEERING.COM
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PROJECT: WINDSOR FOREST KNOLLS LOT 11	
LOCATION: TAX MAP: 6 - GRID: 16 - PARCEL: 57 18431 HIDDEN CREEK WAY - TAX ID # 04-373286 ELECTION DISTRICT NO. 4 - HOWARD COUNTY, MARYLAND	
TITLE: ONSITE SEWAGE DISPOSAL PLAN	
HOUSE TYPE: CUSTOM - KEYSTONE HOMES	
DATE: NOVEMBER, 2020	PROJECT NO. 2986
SCALE: AS SHOWN	DRAWING 1 OF 2



LOT 11 SEPTIC PROFILE
SCALE: 1"=50' HORIZ., 1"=5' VERT.



DESIGN DATA & GENERAL NOTES

- (1) Concrete strength Form/28 days, Density = 140 pcf.
- (2) Cement - Portland Type (II) per ASTM C 150-82.
- (3) Admixtures & plasticizers per ASTM C 266-06 & C 494-02.
- (4) Reinforcing per ASTM A108, Min. 1-1/2" cover.
- (5) Top slab sealed with butyl rope sealant.
- (6) 4" wall, 4" base, & 8" top thickness.
- (7) Min 2" of cover.
- (8) Depending on use of tank, Inlet & Outlet baffle may be required by code.

Mayer Bros., Inc.
 6254 Race Road
 Elkridge, Maryland 21075
 Tel. 410.796.1404
 Fax. 410.796.1405
 www.mayerbrosprecast.com

2,000 GALLON SEPTIC TANK
2-Compartment
 Stock Item [Approx. 19,900 lbs]
 Dwg. No. 2000-2C No Scale Aug 11, 2008

INITIAL SYSTEM		
Number of Bedrooms	6	
Application Rate	0.8	gpd/sf
Effective Area Beginning Depth	4.0	ft
Bottom Max Depth	6.0	ft
Design Flow	900	gpd
Drainage Field square footage	1125	sf
Sidewall Reduction Credit	0.63	
Trench width	3	ft
Effective Area Depth	2	ft
Trench Spacing	10	ft
Trench Length Required	234	lf

1ST REPLACEMENT SYSTEM		
Number of Bedrooms	6	
Application Rate	0.8	gpd/sf
Effective Area Beginning Depth	4.0	ft
Bottom Max Depth	6.0	ft
Design Flow	900	gpd
Drainage Field square footage	1125	sf
Sidewall Reduction Credit	0.63	
Trench width	3	ft
Effective Area Depth	2	ft
Trench Spacing	10	ft
Trench Length Required	234	lf

2ND REPLACEMENT SYSTEM		
Number of Bedrooms	6	
Application Rate	0.8	gpd/sf
Effective Area Beginning Depth	4.0	ft
Bottom Max Depth	6.0	ft
Design Flow	900	gpd
Drainage Field square footage	1125	sf
Sidewall Reduction Credit	0.63	
Trench width	3	ft
Effective Area Depth	2	ft
Trench Spacing	10	ft
Trench Length Required	234	lf

SEPTIC INVERT CHART - LOT 11	
INV @ HOUSE	788.2
GROUND @ HOUSE	791.2
INV IN SEPTIC TANK	787.1
INV OUT SEPTIC TANK	786.9
TOP OF SEPTIC TANK	787.9
GROUND OVER SEPTIC TANK	789.6
INV IN DIST BOX	785.6
INV OUT DIST BOX	785.5
GROUND AT DIST BOX	788.0

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. 28376, Expiration Date: 01-01-2021.



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TRENCH DESIGN - LOT 11					
INITIAL SYSTEM					
T-1-1	LENGTH	78.2 ft	T-1-2	LENGTH	78.2 ft
	GROUND ELEVATION	787.4		GROUND ELEVATION	786.6
	INVERT ELEVATION	785.4		INVERT ELEVATION	783.8
	MAX BOTTOM ELEVATION	781.4		MAX BOTTOM ELEVATION	779.8
1ST REPLACEMENT SYSTEM					
T-2-1	LENGTH	78.2 ft	T-2-2	LENGTH	78.2 ft
	GROUND ELEVATION	785.0		GROUND ELEVATION	784.3
	INVERT ELEVATION	783.0		INVERT ELEVATION	781.5
	MAX BOTTOM ELEVATION	779.0		MAX BOTTOM ELEVATION	777.5
2ND REPLACEMENT SYSTEM					
T-3-1	LENGTH	78.2 ft	T-3-2	LENGTH	78.2 ft
	GROUND ELEVATION	782.7		GROUND ELEVATION	781.9
	INVERT ELEVATION	780.7		INVERT ELEVATION	778.9
	MAX BOTTOM ELEVATION	776.7		MAX BOTTOM ELEVATION	774.9

HEALTH DEPARTMENT SPEC SHEET INFORMATION - LOT 11			
System	Application Rate	Effective Depth	Bottom Depth
1st System	0.8	4.0	6.0
2nd system	0.8	4.0	6.0
3rd System	0.8	4.0	6.0

OWNER/BUILDER:
 KEYSTONE CUSTOM HOMES, INC.
 227 GRANITE RUN DR.
 SUITE 100
 LANCASTER, PA 17601
 717-464-9060

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HOUSE TYPE:	CUSTOM - KEYSTONE HOMES		
DATE:	NOVEMBER, 2020	PROJECT NO.	2986
SCALE:	AS SHOWN	DRAWING	2 OF 2