

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: 2/4/20 **ONSITE SEWAGE DISPOSAL SYSTEM** P 567306

APPROVAL DATE: 2/18/20 **PERMIT: CONSTRUCTION** A _____

PROPERTY ADDRESS: 12233 Hayland Farm Way

SUBDIVISION: Walnut Creek LOT: 83 TAX ID: 05597892

CONTRACTOR: Freedom Septic EMAIL: Beutru.H3@gmail

CONTRACTOR ADDRESS: 2809 Liberty Road PHONE: (410) 795-2947

PROPERTY OWNER: Cairn Custom Homes EMAIL: jasmine@cairncustomhomes.com

OWNER ADDRESS: 10548 Gorman Road PHONE: 410-818-7382

SEPTIC TANK SIZE (GALLONS): 2000 TANK MANUFACTURER: Babylon

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

DISTRIBUTION SYSTEM: GRAVITY PRESSURE DOSED BEDROOMS: 5 APPLICATION RATE: 0.6

TRENCHES:	LINEAR FEET REQUIRED: <u>208</u>	INLET DEPTH: <u>3</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:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND TANK LOCATIONS MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	
NOTES:		

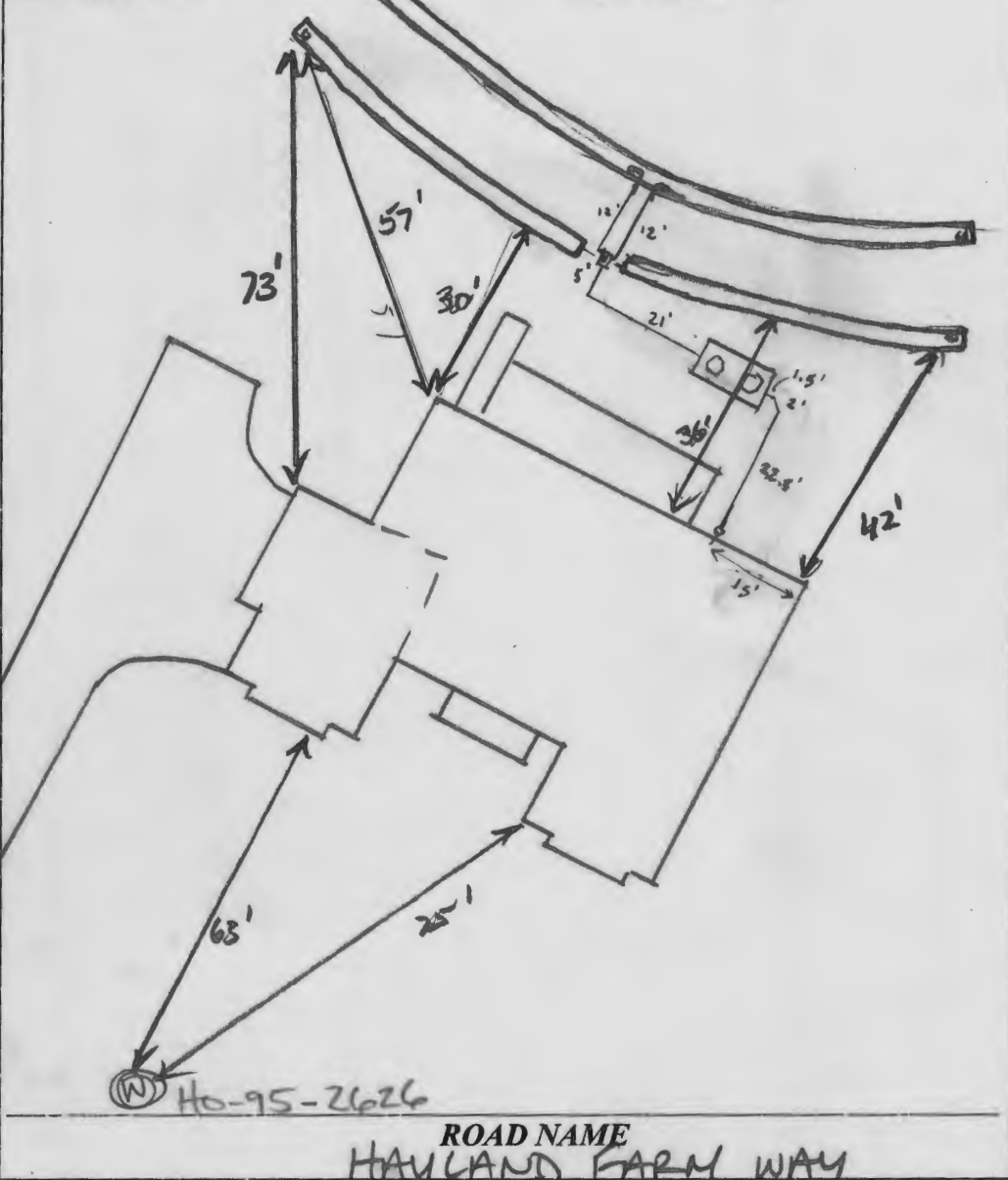
ISSUED BY: Robert Freemon ISSUE DATE: 2/4/2020 EXPIRATION DATE: 2/4/2021

- 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.**

278189278189

NOT TO SCALE



TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
3'	3	8'
NUMBER OF TRENCHES		4
TOTAL LENGTH		208
ABSORPTION AREA		624 + SW
DISTRIBUTION BOX LEVEL		Levelled
DISTRIBUTION BOX BAFFLE		Yes
DISTRIBUTION BOX PORT		Yes

PRE-CONSTRUCTION:

SEPTIC TANK DATA

SEPTIC TANK I LEVEL	Yes
MANUFACTURER	Babylon
CAPACITY	2000 GAL
SEAM LOC	top
TANK LID DEPTH	1.5'
BAFFLES	Yes
BAFFLE FILTER	-
MANHOLE LOC	front + back
6" PORT LOC	-
WATERTIGHT TEST	-
SLOTTED	yes
DATE ON LID	11-26-19

PUMP/SEPTIC TANK LEVEL N/A

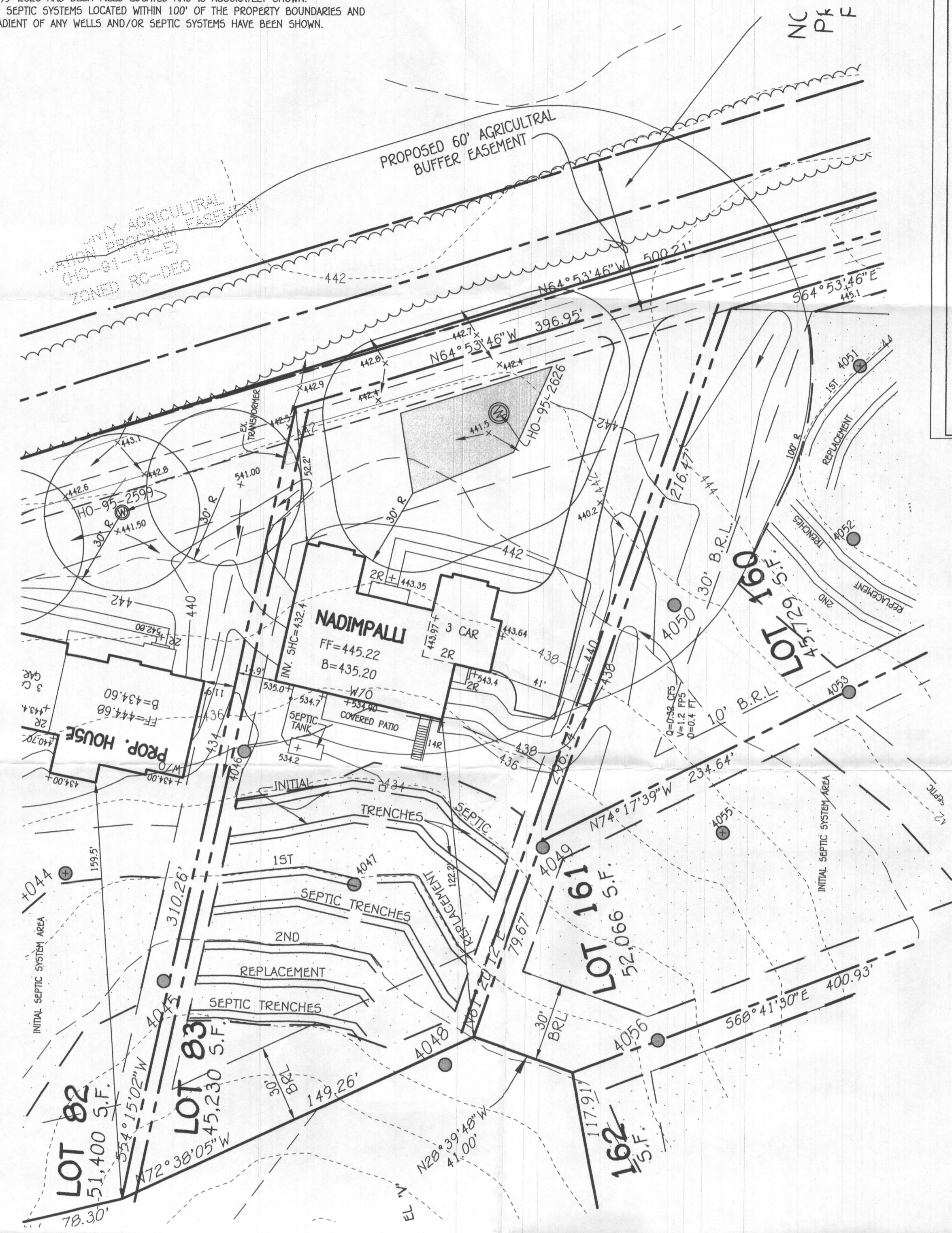
MANUFACTURER	
CAPACITY	GAL
SEAM LOC	
TANK LID DEPTH	
BAFFLES	
BAFFLE FILTER	
MANHOLE LOC	
6" PORT LOC	
WATERTIGHT TEST	
SLOTTED	
DATE ON LID	

02/12/2020 TANK, SDA, TRENCHES STAKED. CONFIRMED CONTOUR AND TRENCH SPECS OK TO START. (ST)

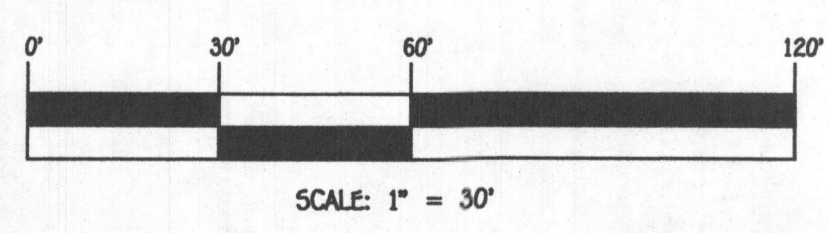
INSTALLATION: 2/14/20 Tank set, d-box set and SHC installed. Re-inspect for baffles on tank. (ST) 2/18/2020 Trenches completed. D box leveled. OK to cover all work (K)

FINAL INSPECTOR K. Vay DATE OF APPROVAL 2/18/2020

1. 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 SITE PLAN MAY BE REQUIRED.
2. THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
3. ELECTRICAL WORK FOR THE INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
4. THE WELL HO-95-2626 HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.
5. ALL WELLS AND SEPTIC SYSTEMS LOCATED WITHIN 100' OF THE PROPERTY BOUNDARIES AND 200' DOWN GRADIENT OF ANY WELLS AND/OR SEPTIC SYSTEMS HAVE BEEN SHOWN.

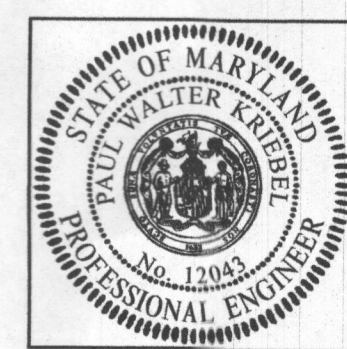


PLAN
SCALE: 1" = 30'



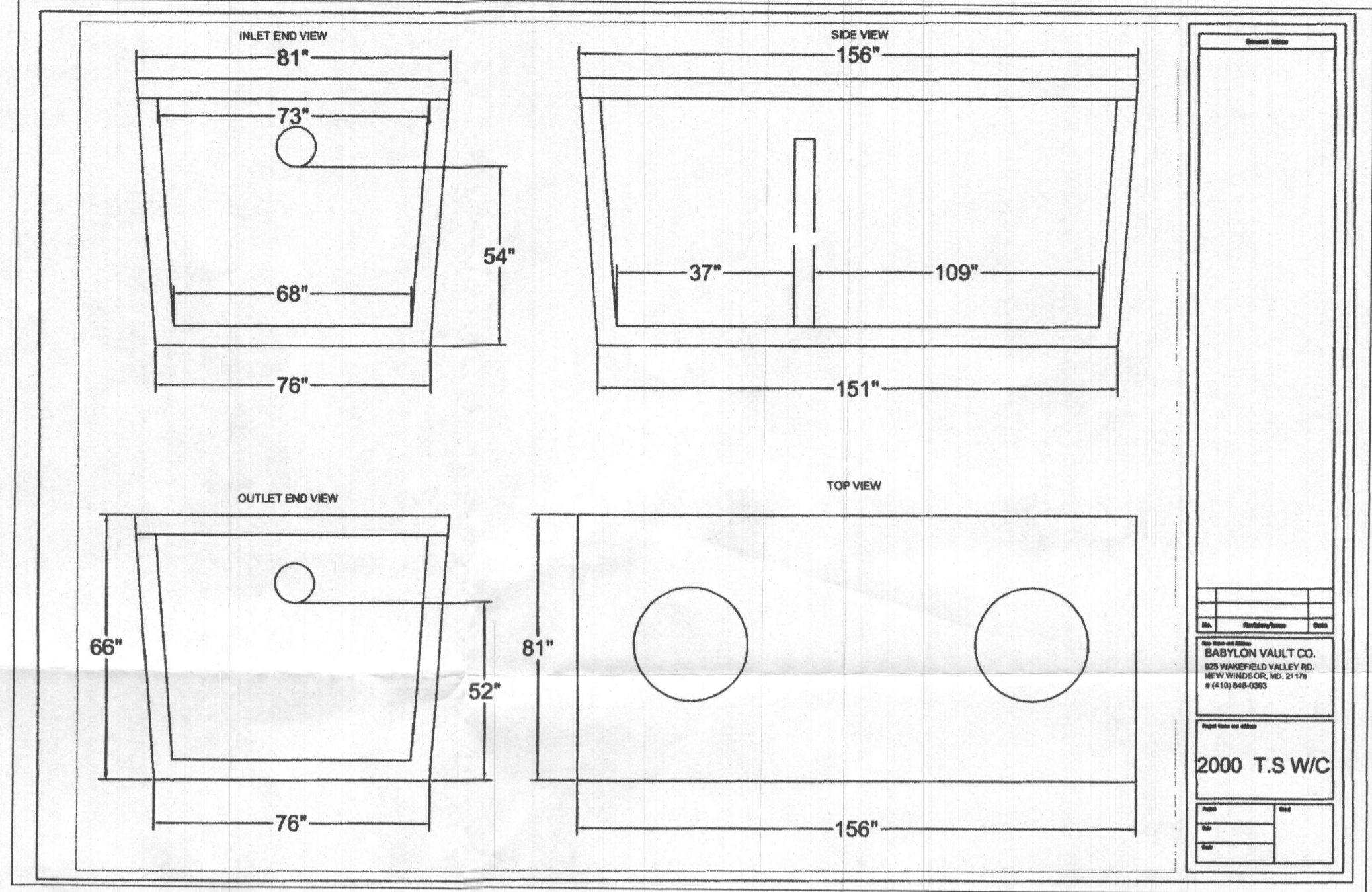
FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SOURCE OFFICE PARK - 10772 BALDORNE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21042
(410) 461 - 2892

OWNER/DEVELOPER
CAIRN CUSTOM HOMES
10549 GORMAN ROAD
LAUREL, MD 20723
410-618-7382

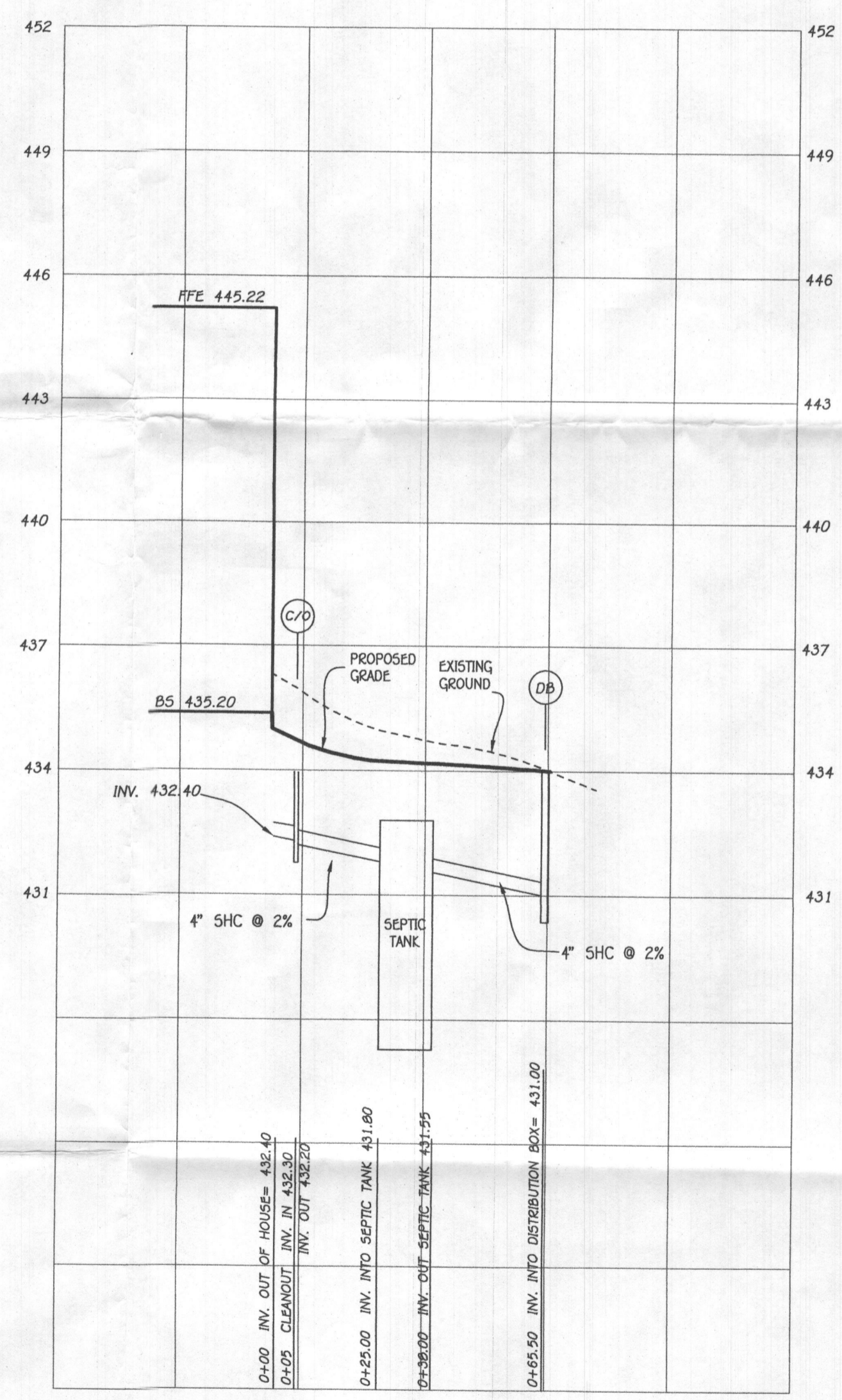


PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 12043, EXPIRATION DATE: 07/16/2020.

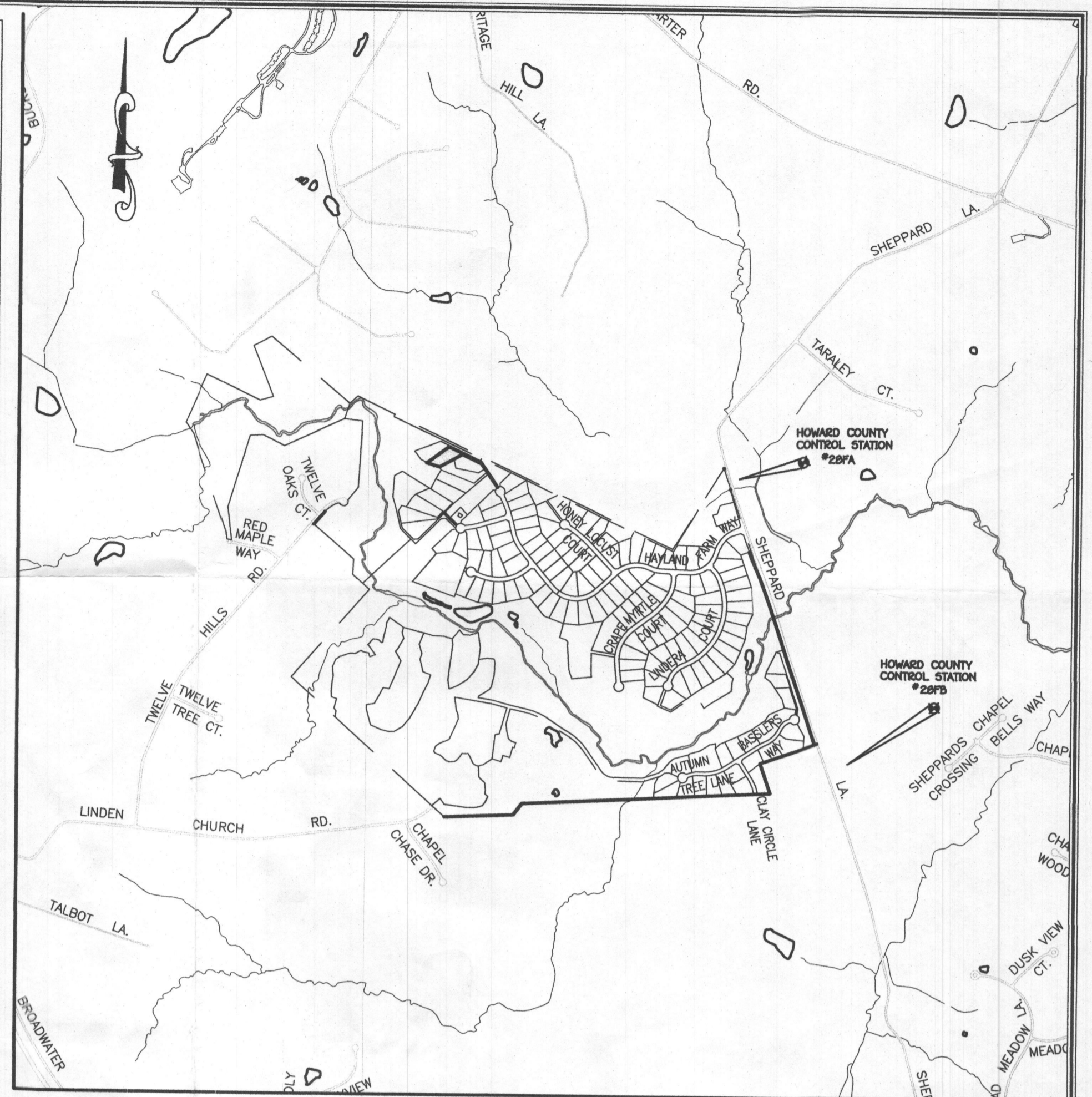
Paul W. Wiedel
Signature of Professional Engineer
08/28/19
DATE



2000 T.S.W.C.



SEPTIC PROFILE
SCALE: 1" = 30'

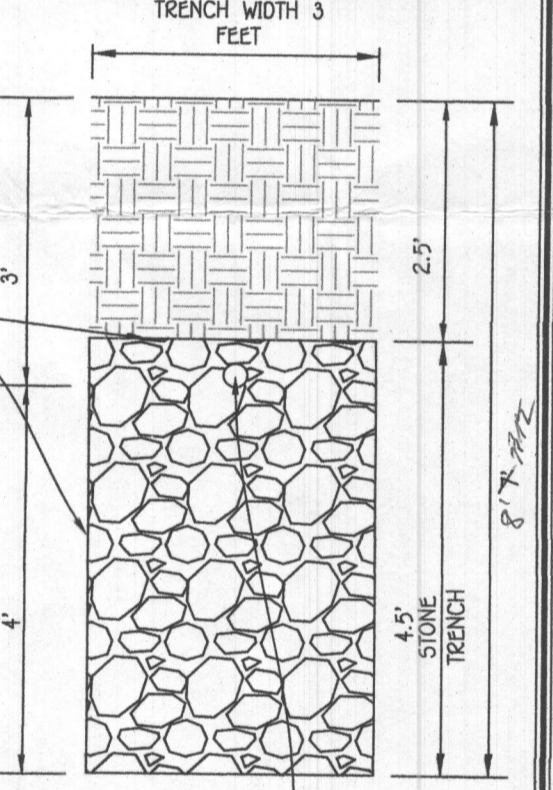


VICINITY MAP
SCALE: 1" = 1200'

FFE 445.22
BSE 435.20
INV. OUT OF HOUSE = 432.40
PROP. GROUND AT CLEANOUT #1 = 534.8
INV. INTO CLEANOUT = 432.30
INV. OUT OF CLEANOUT = 432.20
EX. GROUND AT SEPTIC TANK = 534.20
PROP. GRADE ABOVE SEPTIC TANK = 434.90
TOP OF SEPTIC TANK = 432.80
INV. INTO SEPTIC TANK = 431.80
INV. OUT OF SEPTIC TANK = 431.55
EX. GROUND AT DISTRIBUTION BOX = 433.90
INV. INTO DISTRIBUTION BOX = 431.00
INV. OUT OF DISTRIBUTION BOX = 430.90

Approved Septic System Plan
Howard County Health Department
9/11/2019
Signature Date

TRENCH DATA:
TRENCH 1 AND 2:
EX. GROUND ABOVE = 433.90
INV. IN = 430.9
BOTTOM TRENCH = 425.9
TRENCH 3 AND 4:
EX. GROUND ABOVE = 433.00
INV. IN = 430.0
BOTTOM TRENCH = 425.0



INITIAL TRENCH DETAIL
SCALE: 1" = 2'

INITIAL SYSTEM
SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 5 BEDROOMS (PERMIT FOR 4 BEDROOMS)
LOADING RATE = 5 BEDROOMS X 150 GPD/BEDROOM = 750 GPD
APPLICATION RATE = 0.6
EFFECTIVE SIDEWALL BEGINS AT 5 FEET
TRENCH DEPTH = 8 FEET
TRENCH WIDTH (W) = 3 FEET
EFFECTIVE DEPTH (D) = 3 FEET
SF OF DRAINFIELD = 750 GPD / 0.6 = 1250 SF
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = (W+2)/(W+1+2D) = (3+2)/(3+1+(2x3)) = .50
TRENCH LENGTH = 416.67 SF x .5 = 208.33 FEET (4 TRENCHES AT 52.08)TRENCH SPACING = 2D+W = ((3+4) + 3) = 10' USE 10'

1ST REPLACEMENT SYSTEM
SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 5 BEDROOMS (PERMIT FOR 4 BEDROOMS)
LOADING RATE = 5 BEDROOMS X 150 GPD/BEDROOM = 750 GPD
APPLICATION RATE = 0.6
EFFECTIVE SIDEWALL BEGINS AT 5 FEET
TRENCH DEPTH = 8 FEET
TRENCH WIDTH (W) = 3 FEET
EFFECTIVE DEPTH (D) = 3 FEET
SF OF DRAINFIELD = 750 GPD / 0.6 = 1250 SF
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = (W+2)/(W+1+2D) = (3+2)/(3+1+(2x3)) = .50
TRENCH LENGTH = 416.67 SF x .5 = 208.33 FEET (4 TRENCHES AT 52.08)
TRENCH SPACING = 2D+W = ((3+4) + 3) = 10' USE 10'

2ND REPLACEMENT SYSTEM
SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 5 BEDROOMS (PERMIT FOR 4 BEDROOMS)
LOADING RATE = 5 BEDROOMS X 150 GPD/BEDROOM = 750 GPD
APPLICATION RATE = 0.6
EFFECTIVE SIDEWALL BEGINS AT 5 FEET
TRENCH DEPTH = 8 FEET
TRENCH WIDTH (W) = 3 FEET
EFFECTIVE DEPTH (D) = 3 FEET
SF OF DRAINFIELD = 750 GPD / 0.6 = 1250 SF
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = (W+2)/(W+1+2D) = (3+2)/(3+1+(2x3)) = .50
TRENCH LENGTH = 416.67 SF x .5 = 208.33 FEET (4 TRENCHES AT 52.08)
TRENCH SPACING = 2D+W = ((3+4) + 3) = 10' USE 10'

SEPTIC SYSTEM INSTALLATION SITE PLAN
LOT 83
12233 HAYLAND FARM WAY
WALNUT CREEK
PHASE THREE
ZONED: RC-DEO
TAX MAP NO.: 28 GRID NO.: 17 & 18 PARCEL NO.: 49
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: 1" = 30' DATE: AUG, 12, 2019
SHEET 1 OF 1

ADDRESS CHART	
LOT NUMBER	STREET ADDRESS
83	12233 HAYLAND FARM WAY