

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: 1-26-21 **ONSITE SEWAGE DISPOSAL SYSTEM** P 572934
 APPROVAL DATE: 4/6/21 1ST **PERMIT: CONSTRUCTION** A _____

PROPERTY ADDRESS: 12213 MAYAPPLE DRIVE, SYKESVILLE, MD 21784

SUBDIVISION: WALKER MEADOWS LOT: 25 TAX ID: 03-601583

CONTRACTOR: South Carroll Backhoe EMAIL: Schockhoe@comcast.net

CONTRACTOR ADDRESS: 4410 Salem Bottom Rd Westminster, MD 21157 PHONE: 410-596-3618

CONTRACTOR CERTIFIED FOR BAT INSTALLATION: MDE MANUFACTURER:

PROPERTY OWNER: NVR, INC. EMAIL: janastas@nvrinc.com

OWNER ADDRESS: 9720 PATUXENT WOODS DRIVE, COLUMBIA, MD 21046 PHONE: (410)379-5956

BAT UNIT MODEL: HOOT 600 BNR PUMP SIZE: 0.5 Hp PUMP TANK CAPACITY: 1500

OPERATION & MAINTENANCE AGREEMENT DATE SIGNED: _____ DATE RECORDED: _____

DISTRIBUTION SYSTEM: GRAVITY PRESSURE DOSED BEDROOMS: 5 APPLICATION RATE: 0.8

TRENCHES:	LINEAR FEET REQUIRED: <u>194</u>	INLET DEPTH: <u>2.5</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>5.0</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>3.0</u>

LOCATION: PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND BAT UNIT LOCATION MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.

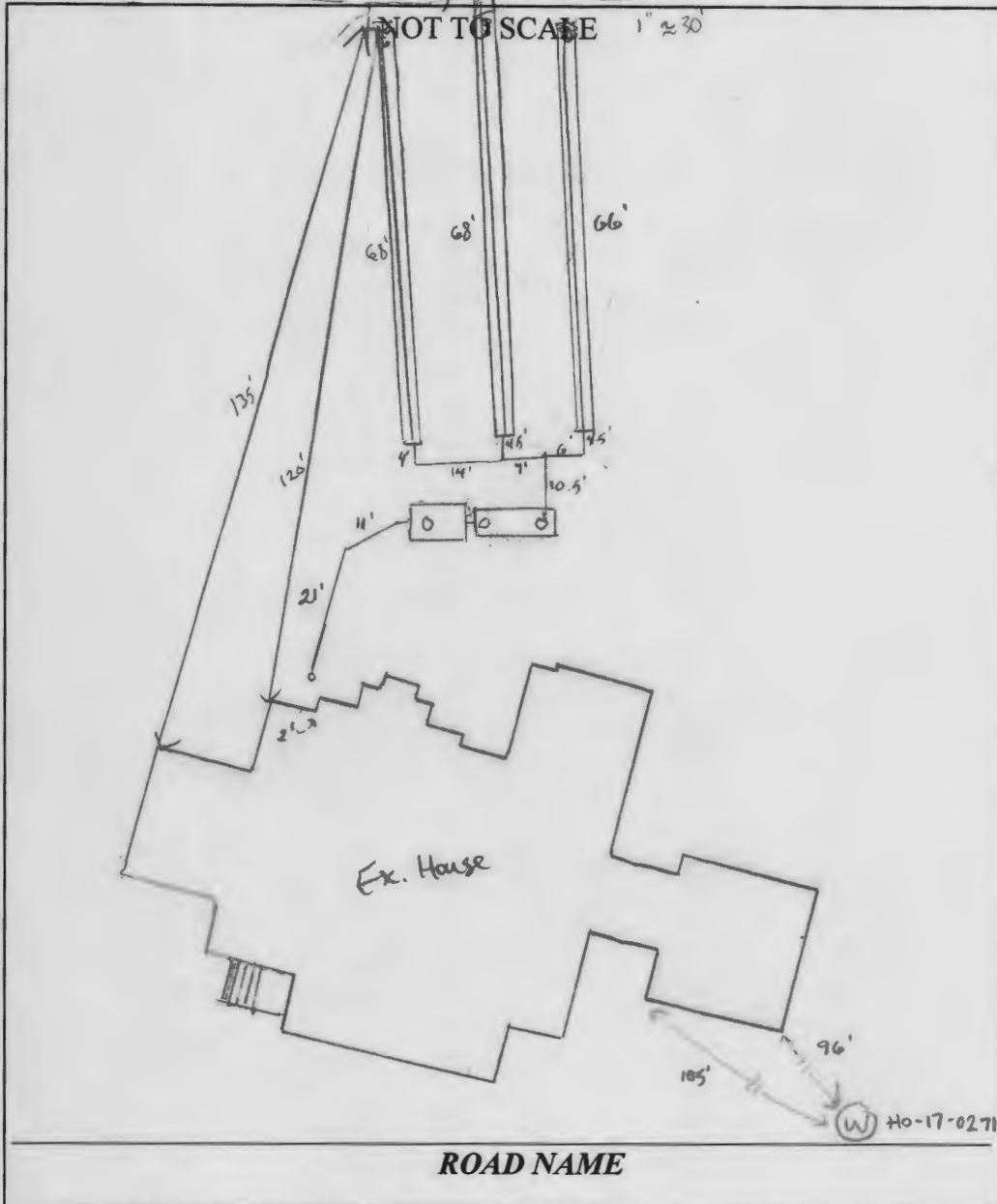
NOTES: INSTALL AT LEAST 1 CLEANOUT IN SHC.
 USE 1/4" PERFORATIONS IN LATERALS.
 RECOMMENDED EFFLUENT PUMP (FOR LPD SYSTEM) IS WE-05H, OR EQUIVALENT.
 SYSTEM MUST PASS A PUMP AND ALARM TEST PRIOR TO ISSUE OF ICOP.

ISSUED BY: R BRICKER ISSUE DATE: 1-26-21 EXPIRATION DATE: 1-26-22

- 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 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 21000571
- NOTE: AN INDIVIDUAL CERTIFIED BY MDE AND THE MANUFACTURER FOR BAT INSTALLATION MUST BE PRESENT AT ALL TIMES DURING BAT INSTALLATION.
- 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.**

12213 Mayapple Drive



TRENCH/DRAINFIELD DATA		
WIDTH	INLET	BOTTOM
3'	2.5'	5'
NUMBER OF TRENCHES	8	
TOTAL LENGTH	202'	
ABSORPTION AREA	606 sq ft + sidewalk	
DISTRIBUTION BOX LEVEL	N/A	
DISTRIBUTION BOX BAFFLE	N/A	
DISTRIBUTION BOX PORT	N/A	

SEPTIC TANK DATA	
SEPTIC TANK 1 LEVEL	
MANUFACTURER	Back River
CAPACITY	1250 GAL
SEAM LOC	top
TANK LID DEPTH	1.5'
BAFFLES	inlet
BAFFLE FILTER	-
MANHOLE LOC	inlet
6" PORT LOC	-
WATERTIGHT TEST	-
SLOTTED	-
DATE ON LID	1-21-21
PUMP/SEPTIC TANK LEVEL	
MANUFACTURER	Back River
CAPACITY	1500 GAL
SEAM LOC	top
TANK LID DEPTH	2.5'
BAFFLES	inlets
BAFFLE FILTER	-
MANHOLE LOC	inlet + outlet
6" PORT LOC	-
WATERTIGHT TEST	-
SLOTTED	-
DATE ON LID	2-05-21

PRE-CONSTRUCTION:

03/01/2021 SDA STAGED CONTOUR CHECKED. STACKPILE MELTED OVER SDA FROM RAINFALL USE LASER LEVEL (P)

INSTALLATION:

3/9/21 SL and tanks set. Two trenches constructed - lateral pipe still need to be drilled. Reinspect for SHC. (S) 3/10/21 Trenches and laterals constructed w/ perforations drilled according to plan. Reinspect for PAT startup and SHC. (S) 03/1/2021 SHC INSPECTED OK TO BACKFILL (P) 4/6/21 P/A + PRESSURE TEST OK.

FINAL INSPECTOR

[Handwritten Signature]

DATE OF APPROVAL

~~3/1/21~~ 4/6/21

NON-BUILDABLE
BULK
PARCEL 'M'

MAYAPPLE DRIVE
PUBLIC ACCESS STREET

50' R/W

S69°01'34"E

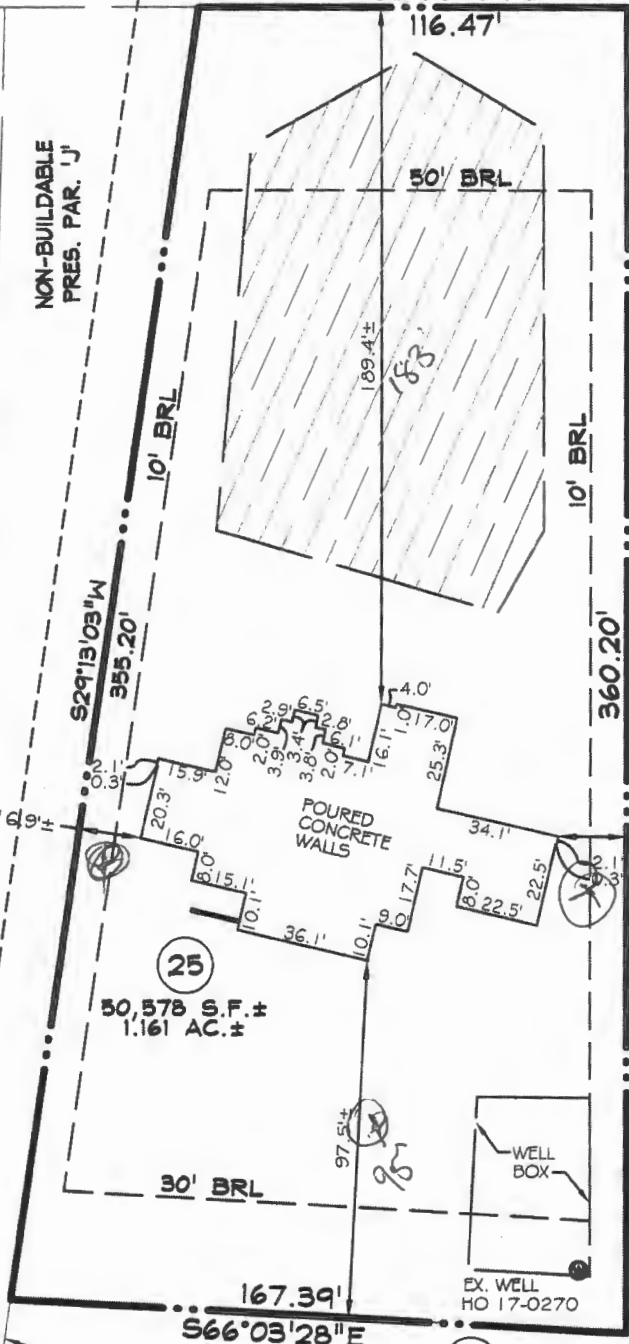
116.47'



NON-BUILDABLE
PRES. PAR. 'J'

26

24



EX. 16.5' PRIVATE R/W TO
KATZ PROP. RECORDED IN
DEED 761/545 FOR
PARCELS 254 & 274

28

APPROVED *[Signature]*
02/08/2021

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT I EITHER PERSONALLY PREPARED OR WAS IN RESPONSIBLE CHARGE OVER THE PREPARATION OF THIS DRAWING AND THE SURVEYING WORK REFLECTED IN IT, AND THAT IT IS IN COMPLIANCE WITH REQUIREMENTS SET FORTH IN REGULATION .12 OF CHAPTER 06, MINIMUM STANDARDS OF PRACTICE. I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE No. 11039, EXPIRATION DATE 09/16/22.

[Signature] 1/12/21

BRL - BUILDING RESTRICTION LINE



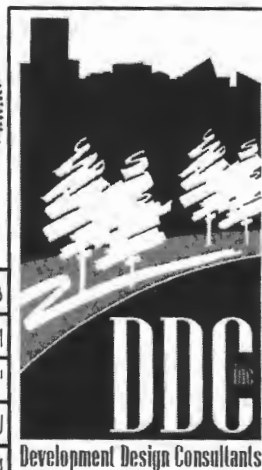
PRIVATE SEWAGE
DISPOSAL AREA



TOP OF WALL = 590.4

WALL CHECK
12213 MAYAPPLE DRIVE
LOT 25
WALKER MEADOWS
PLAT NO. 24978
3rd ELECTION DISTRICT HOWARD COUNTY, MD

DDC JOB#:	12064.3
DATE:	01/13/2021
SCALE:	1"=50'
DRN. BY:	CWJ
CHK. BY:	JLM



Planners
Surveyors
Engineers
Landscape Architects

192 East Main Street
Westminster, MD 21157
410.386.0560
410.386.0564 (Fax)
DDC@DDCinc.us
www.DDCinc.us



Bureau of Environmental Health
8930 Stanford Blvd | Columbia, MD 21045
410.313.2640 - Voice/Relay
410.313.2648 - Fax
1.866.313.6300 - Toll Free

Maura J. Rossman, M.D., Health Officer

OPERATION AND MAINTENANCE AGREEMENT
FOR AN ON-SITE SEWAGE DISPOSAL SYSTEM
HAVING AN ADVANCED PRE-TREATMENT SYSTEM

THIS AGREEMENT is made this 14th day of August 2020, among NVHomes/Venkata Ramani Nemani, hereinafter collectively referred to as "Owner", and the Howard County Health Department hereinafter referred to as the "County".

WHEREAS, Owner is the owner or contract owner of a parcel of land located at 12213 Mayapple Dr Marriottsville, MD 21104, in the 3 Election District of Howard County, Maryland, and the deed and subdivision plat of the property is recorded among the Land Records of Howard County, Maryland, Tax Map # 0009, Block #, Parcel # 0066, Deed Reference # 24974-79 and Tax Account # 601583 ("the Property").

WHEREAS, The Property is suitable for the installation of a conventional on-site sewage disposal system with an advanced pre-treatment system, utilizing best available technology to perform nitrogen reduction, in accordance with the Code of Maryland Regulations 26.04.02.07, effective November 24, 2016. The pre-treatment device being installed is Hoot 600.

NOW, THEREFORE, the parties hereto agree as follows:

A. Owner hereby grants to the County the right to enter upon the Property at any reasonable time with prior notice for access to the system to make periodic inspections and the Owner agrees to provide any information and data in Owner's possession reasonably requested and needed by the County.

B. Owner acknowledges and agrees that neither the County nor any of its agents or employees, either officially or individually, underwrites the operation of any system approved by them.

C. The Owner will devote reasonable care and effort to the operation and maintenance of the system in perpetuity or until a public sewer connection is made so that a system malfunction is not the result of poor maintenance, faulty operation, or neglect.

D. The Owner agrees to enter into a contract reasonably acceptable to the Owner and the County with a private entity to operate and maintain on a regularly scheduled basis an approved advanced pre-treatment system. The owner shall supply a copy of the contract to the County when it is renewed or altered.

E. This agreement shall run with the land and upon Owner's taking title to the Property shall bind the Owner, their heirs, successors, and assigns to the provisions of the agreement as long as

PUMP CHAMBER SPECIFICATIONS

Pump chamber volume (available for storage) = 1500 gallons
 Pump chamber type (either "R" for rectangular or "C" for circular)
 Interior tank length/diameter = 55 inches
 Interior tank width/diameter = 55 inches
 A - Cross-sectional area. For "C", 3.142 X (1/2)D². For "R", L X W = 8305 sq. inches
 H - Interior tank height (height to inlet unless otherwise approved) = 47 inches
 V - Actual (usable) tank volume = A X H / 25 (cubic inches per gallon) = 1600.0 gallons
 P.H. - Pump riser height = 6 inches

DOSE INFORMATION/VOLUME CALCULATIONS

Volume in laterals X = 110.5 gallons
 Volume of force main and manifold flow back volume = 0.90 gallons
 Volume of Force Main/Manifold + 6x laterals = 110.50 gallons
 Elevation of inside bottom (floor) of pump chamber = 580.1 feet
 Pump height = 6 inches

FLOAT SETTINGS

Pump off float setting (set so that pump remains submerged) = 22 inches
 Pump on float setting (set to an elevation of 581.93 feet)
 Distance req'd. b/n on and off floats = (Vc X 231 cubic inches per gallon) / A = 3.5 inches
 Pump on float setting = off float setting + distance b/n on and off floats = 25.5 inches
 High water alarm setting = pump on float setting + 6 inches = 31.5 inches

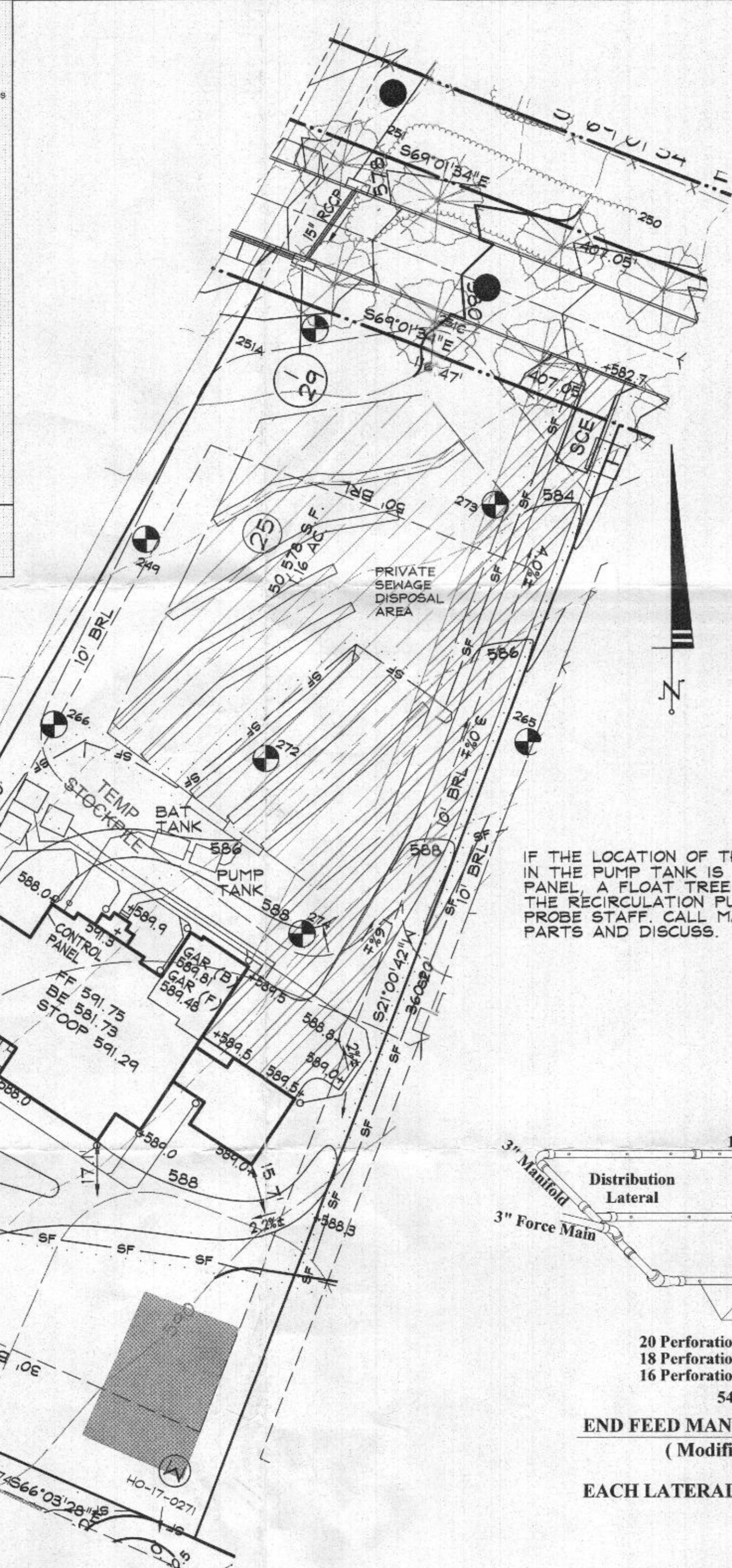
STORAGE/PUMP REQUIREMENTS

Height of storage remaining above high water alarm = H - Ha = 15.5 inches
 Height of storage above high water alarm which equates to 657.3 gallons
 Height of storage above high water alarm required for ONE DAY'S storage = 20.9 inches
 Height of storage above high water alarm required for ONE HALF DAY'S storage = 10.4 inches

[X] Configuration is acceptable with a single pump
 [] Configuration is acceptable with duplex pumps
 [] Pump chamber does not provide adequate storage

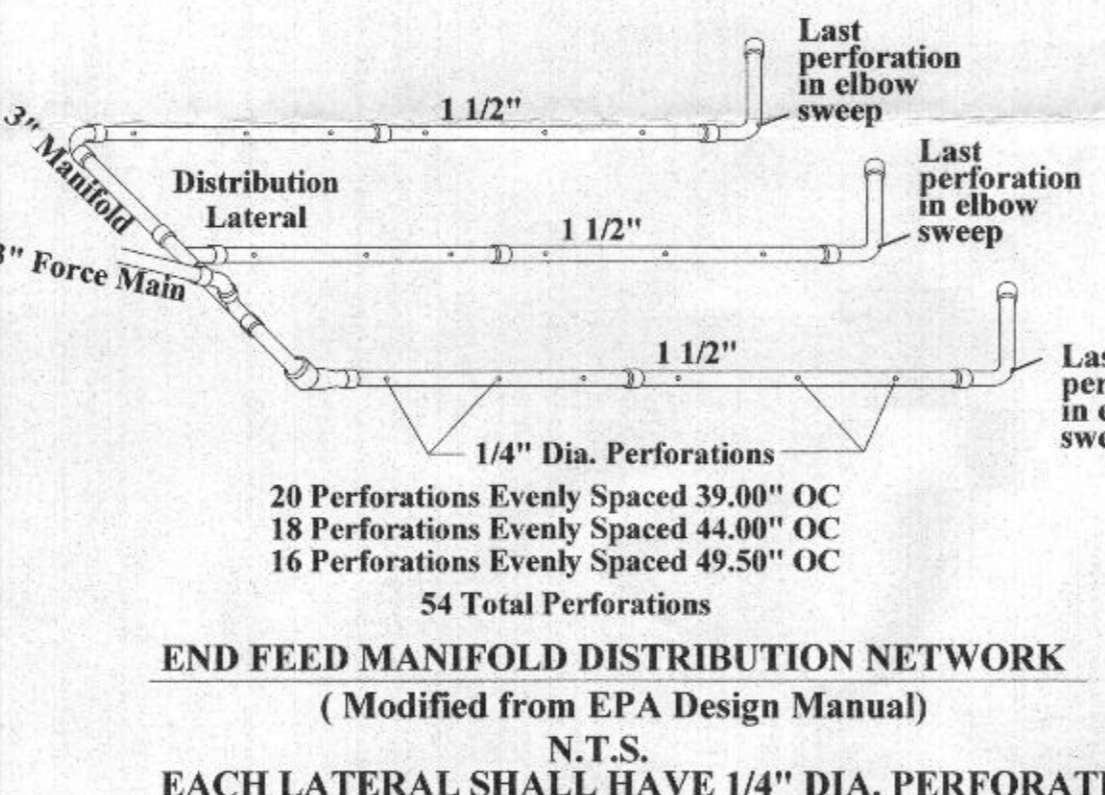
SUMMARY

Pump riser height = 6 inches
 Pump off float setting = 22 inches
 Pump on float setting = 25.5 inches
 High water alarm setting = 31.5 inches



IF THE LOCATION OF THE OF THE STANDARD PROBE STAFF IN THE PUMP TANK IS MORE THAN 50' FROM THE CONTROL PANEL, A FLOAT TREE MUST BE INSTALLED TO CONTROL THE RECIRCULATION PUMP INSTEAD OF THE STANDARD PROBE STAFF. CALL MAYER BROS. IN ADVANCE TO ORDER PARTS AND DISCUSS.

IF LATERAL TURN-UPS ARE CUT OFF BELOW THE SOIL SURFACE, THEY ARE NOT TO BE CUT OFF BEFORE A PRESSURE TEST IS CONDUCTED. CUT OFF TURN-UPS ARE TO BE PROTECTED BY A TURF BOX WHICH IS SUPPORTED BY BRICKS RESTING ON GRAVEL.



HEAD CALCULATIONS

Relative elevation of manifold = 583.0 feet
 Relative elevation of pump-off float = 581.93 feet
 He - Static head = relative elevation of manifold - relative elevation of pump-off float = 2.0 feet
 Hf - Friction head = due to friction in the pipe between the pump chamber and the laterals = 0.8 feet
 **Friction head is calculated below
 Hd - Head required at dist. end of laterals = 3.0 feet
 Htd - Total dynamic head = He + Hf + Hd + lateral friction = operating head = 7.4 feet

Friction loss

Force main	Material	Actual inside diameter in inches	Type of pipe	Length in feet (actual or equivalent)	Velocity of flow in feet per second	Friction loss per 100 ft.	Friction loss in feet	Volume in Pipes C
Force main	Sch. 40	3.068	Sch. 40	10.6	3.3			
Force main fittings	NA	NA	Sch. 40	27				
Combined length				47.6		1.3	0.6	
Manifold	Sch. 40	3.068	Sch. 40	24.8	5.3	1.3	0.3	0

Friction loss/100 feet = 0.002292 X 100 X (1000 Hazen-Williams factor)^{1.49} X (Cp)^{1.852} / D^{4.8655}
 *This formula assumes a Hazen-Williams friction factor for PVC pipe of 150

END MANIFOLD SPECIFICATIONS

Pipe Diameter = 3 inches
 Distance between manifold and end of branch = 4 feet
 Number of laterals = 3 laterals
 Distance between laterals = 10 feet

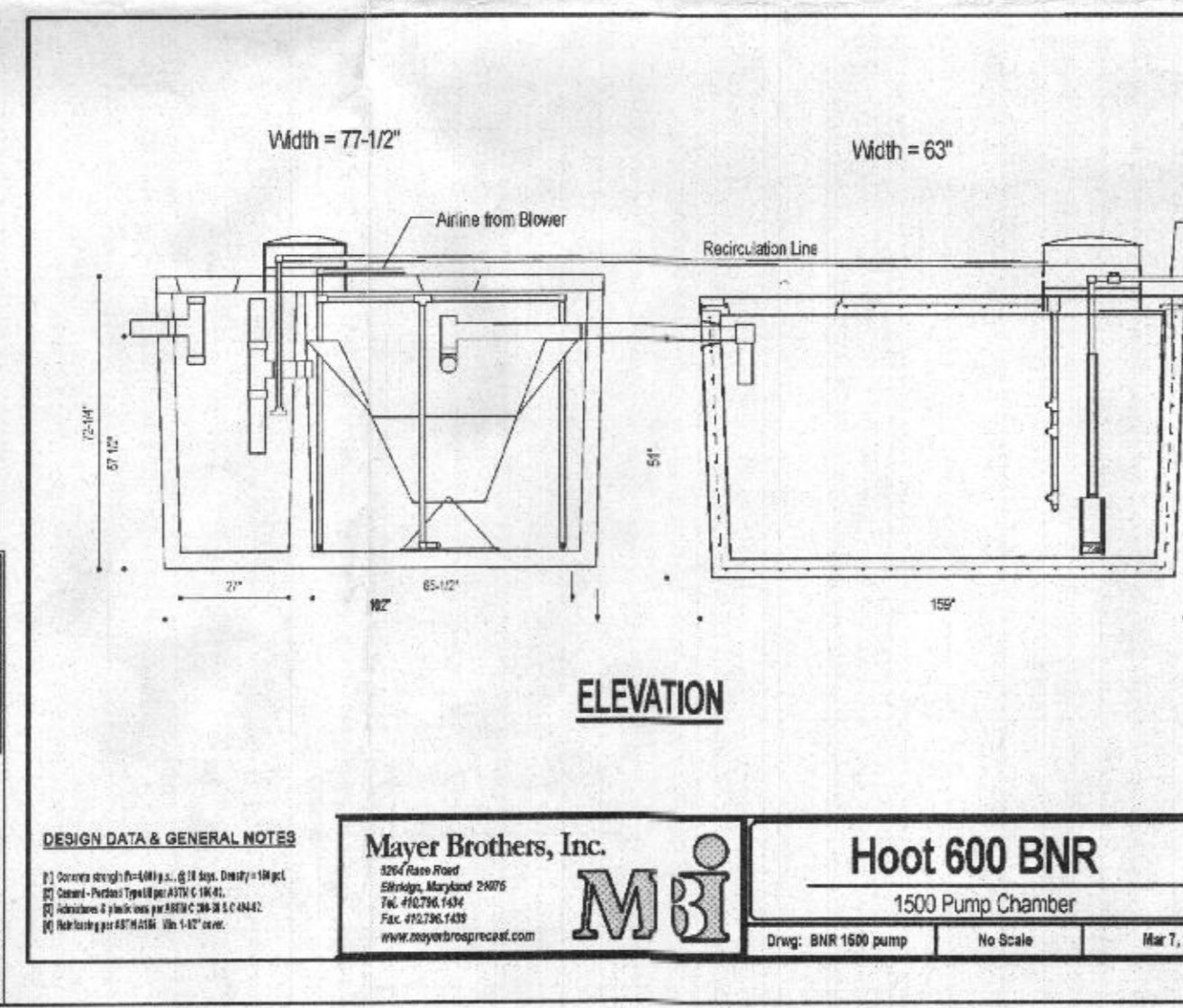
Pipe sizes and diameters

Laterals (actual diameters from chart)	Pipe constant (see chart)	Type of pipe	Material	Actual inside diameter in inches	Volume per 100 feet in gallons	Length of new which is to be installed in feet	Volume in gallons	Volume of force main multiplied by 5 =	Volume of force main plus manifold plus manifold which will flow back between pump cycles =	Volume of laterals multiplied by 5 plus flow back =	Minimum Dose (at least 1/6 of design flow)
Force main	1	Sch. 40	3	3.068	38.4	10.6	0	110.5	0	110.5	0
Manifold	1	Sch. 40	3	3.068	38.4	25.0	0	110.5	0	110.5	0

Check valve to be installed downstream from disconnect (Y or N) - generally not advised: N

Volume to be pumped per pump cycle based on pipe volume

Volume of laterals multiplied by 5 = 110.5 gallons
 Volume of force main plus manifold plus manifold which will flow back between pump cycles = 0 gallons
 Volume of laterals multiplied by 5 plus flow back = 110.5 gallons
 Minimum Dose (at least 1/6 of design flow) = 18.4 gallons



Wastewater

Applications
 Specially designed for the following uses:
 • Homes, Farms, Trailer Courts, Mobiles, Schools, Hospitals, Industry, SBAware Systems

Specifications
 • Solids handling capabilities: 3" maximum
 • Discharge size: 2" NPT
 • Capacity up to 140 GPD
 • Total heads up to 150 feet TDH
 • Temperature:
 104°F (40°C) continuous, 149°F (60°C) intermittent
 • See order numbers on reverse side for specific HP, voltage, phase and RPM's available.

Motors
 • Fully submerged in high-grade turbine oil for lubrication and efficient heat transfer.
 • Class B insulation on 1/2 - 1/4 HP models.
 • Class F insulation on 2 HP models.

Single phase (60 Hz):
 • Capacitor start motor for maximum starting torque
 • Built-in overload with automatic reset.

Three phase (60 Hz):
 • Class II overload protection must be provided in separate ordered motor unit.
 • STOW power cords all have bare lead cord ends.
 • Designed for Continuous Operation: Pump ratings are within the motor manufacturer's recommended working limits, can be operated continuously without damage when fully submerged.
 • Bearings: Upper and lower heavy duty ball bearing construction.
 • Rotor: Cable: Severe duty rated, oil and water resistant. Epoxy seal on motor and provides secondary moisture barrier in case of outer jacket damage and to prevent oil leaking. Standard coil is 20'. Optional lengths are available.
 • O-ring: assures positive sealing against contaminants and oil leakage.

AGENCY LISTINGS
 • 1174 and 1175 and 1176 and 1177 are available by license (license application fee \$100)

Wastewater Technology

Applications
 • SLOW or STOW series duty oil and water resistant power cords.
 • 1/2 - 1 HP models have NEMA three prong grounding plugs.
 • 1 1/2 HP and larger units have bare lead cord ends.

Three phase (60 Hz):
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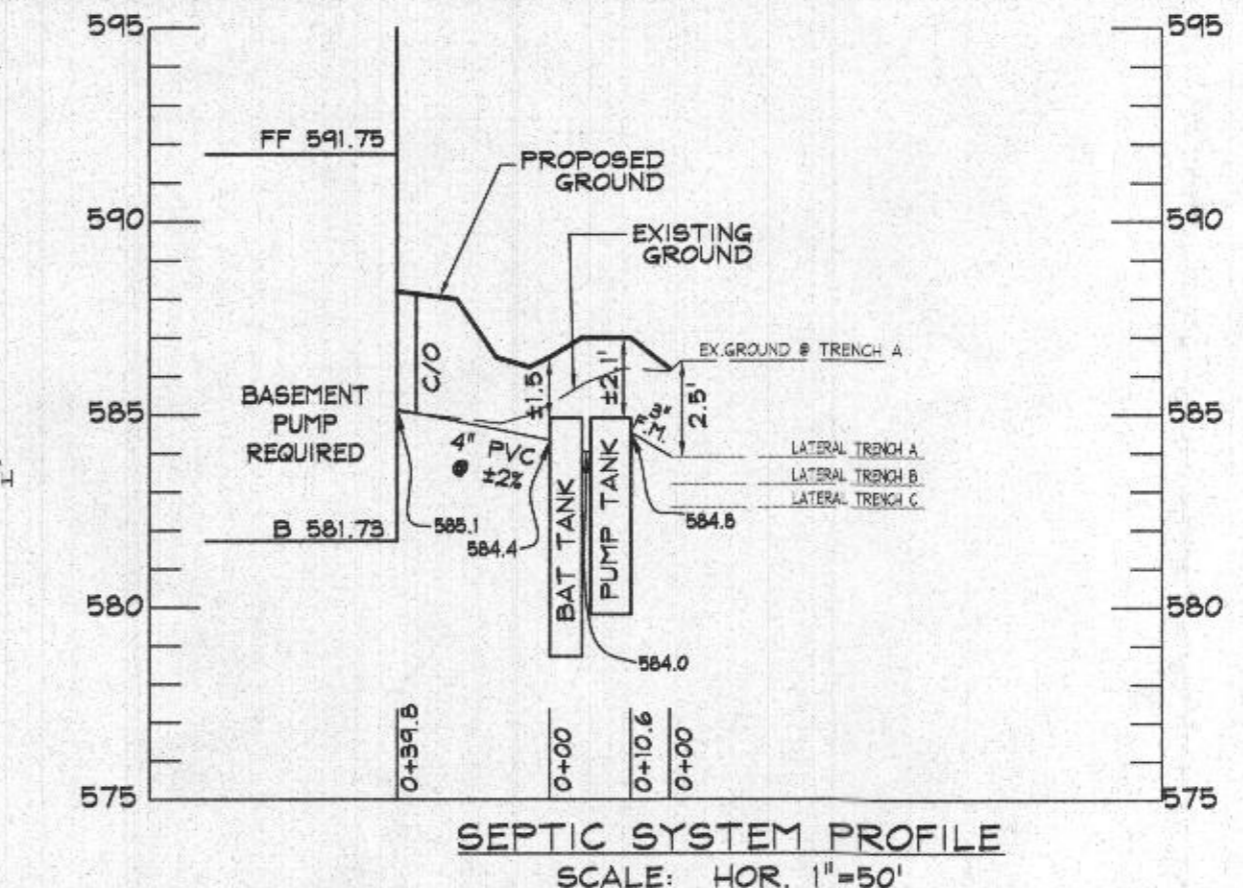
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LOT 25 - RELATIVE DEPTHS

PIPE INVERT	EFFECTIVE AREA BEGINNING	MAXIMUM TRENCH BOTTOM
INITIAL SYSTEM	2.5'	3'
1ST REPLACEMENT	2'	2'
2ND REPLACEMENT	2'	1.5'

LOT 25 - APPROXIMATE ELEVATIONS

INITIAL SYSTEM (A)	INITIAL SYSTEM (B)	INITIAL SYSTEM (C)	1ST REPLACEMENT (A)	1ST REPLACEMENT (B)	2ND REPLACEMENT (A)	2ND REPLACEMENT (B)
586.4	585.7	585.1	584.4	583.7	583.0	582.0

LOT 25 - INITIAL SYSTEM LATERALS

LATERAL	ELEV	VARIABLE HEAD	PERF. FLOW RATE	# PERF.	PERF. DIAMETER	LATERAL FLOW RATE	PERF. SPACING	LATERAL LENGTH	TRENCH LENGTH	1/2 PERF. SPACING	DIST FROM MANIFOLD TO 1ST PERF.	
A	583.9	3.0	1.28	20	1/4	25.60	39.00'	66.6'	65'	19.5'	49.5'	
B	583.2	3.7	1.42	18	1/4	25.56	44.00'	69.8'	66'	22'	46'	
C	582.6	4.3	1.52	16	1/4	24.32	49.50'	70.1'	66'	24.75'	46.75'	
							75.46					

SEWAGE DISPOSAL SYSTEM DATA (5 BEDROOM):

- INVERT FOUNDATION WALL: 585.1 (BASEMENT PUMP REQUIRED)
- HOOT 600 BNR SYSTEM W/ 1,500 GALLON PUMP CHAMBER EX. GRADE OVER BAT TANK: 585.4 PROP. GRADE OVER BAT TANK: 586.4 INVERT: 584.4
- TRENCH DESIGN (5 BDRM X 150 GPD/BDRM = 750 GPD)

PUMP TANK
 EX. GRADE OVER PUMP TANK: 586.0
 PROP. GRADE OVER PUMP TANK: 587.0
 INVERT: 584.0

INITIAL SYSTEM
 750 GPD / 0.8 GPD/SF (APP. RATE) = 937.5 SF
 USE 3' WIDE TRENCH W/ 24" OF EFFECTIVE DEPTH
 937.5 SF / 3' WIDTH = 312.5 LF X 0.62 = 194 LF MIN. TRENCH

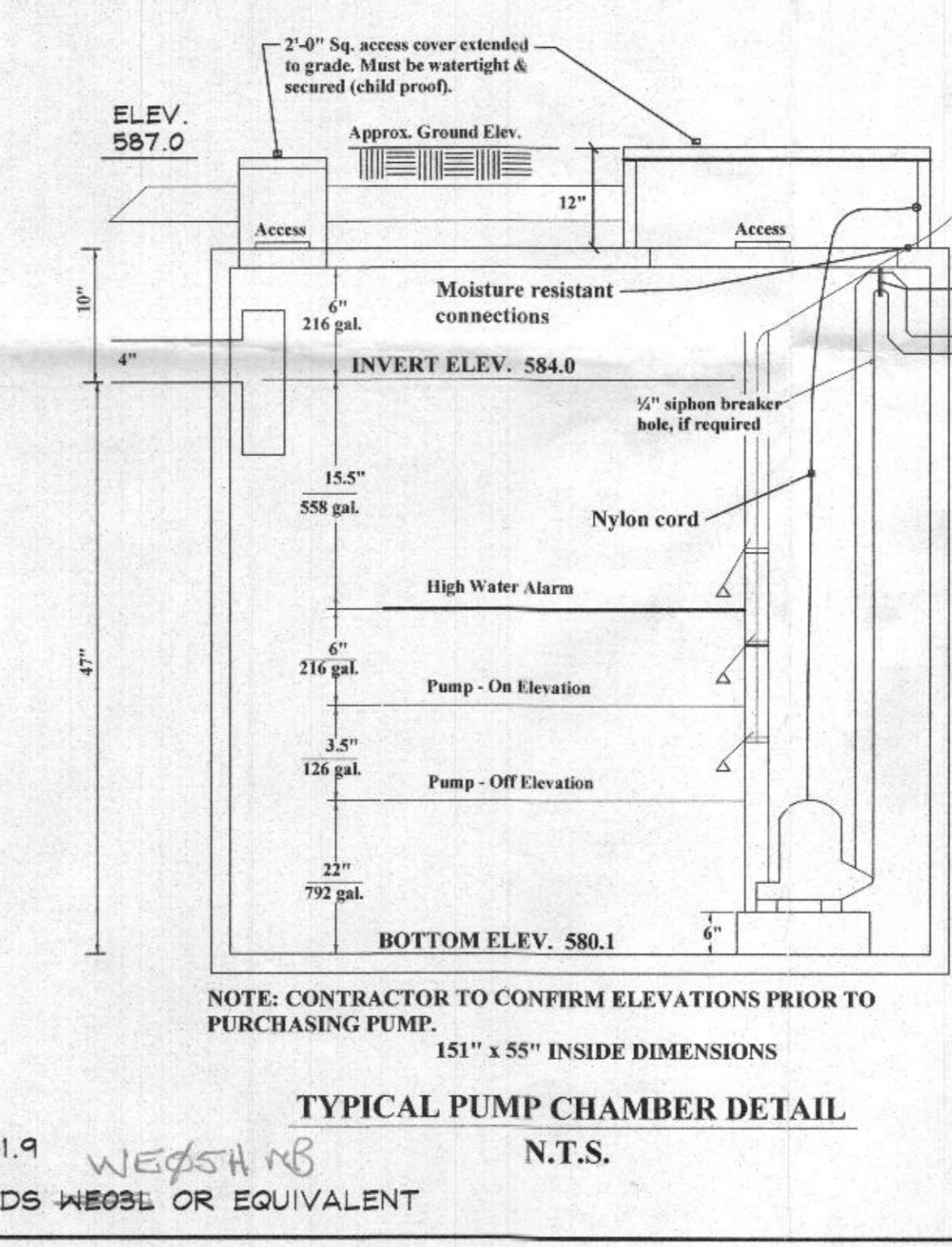
1ST REPLACEMENT SYSTEM
 750 GPD / 0.8 GPD/SF (APP. RATE) = 937.5 SF
 USE 3' WIDE TRENCH W/ 36" OF EFFECTIVE DEPTH
 937.5 SF / 3' WIDTH = 312.5 LF X 0.50 = 156 LF MIN. TRENCH

2ND REPLACEMENT SYSTEM
 750 GPD / 0.8 GPD/SF (APP. RATE) = 937.5 SF
 USE 3' WIDE TRENCH W/ 42" OF EFFECTIVE DEPTH (36" BELOW PIPE)
 937.5 SF / 3' WIDTH = 312.5 LF X 0.50 = 156 LF MIN. TRENCH

10' MIN SPACING BETWEEN TRENCH EDGES
 USE 3 - 65' LONG TRENCHES FOR INITIAL SYSTEM
 USE 2 - 78' LONG TRENCHES FOR FIRST REPLACEMENT SYSTEM
 USE 2 - 78' LONG TRENCHES FOR SECOND REPLACEMENT SYSTEM

SEPTIC SYSTEM/BEST AVAILABLE TECHNOLOGY (BAT) 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 SITE PLAN MAY BE REQUIRED.
- THE MAXIMUM DEPTH OF THE BAT PER THE MANUFACTURER'S SPECIFICATION IS 3 FEET.
- THE BLOWER MAY NOT BE LOCATED MORE THAN 10 FEET FROM THE TANK BASED ON THE MANUFACTURER'S SPECIFICATIONS.
- THE BAT SYSTEM SHALL BE MAINTAINED AND OPERATED FOR THE LIFE OF THE SYSTEM.
- THE BAT SHALL BE OPERATED BY AND MAINTAINED BY A CERTIFIED SERVICE PROVIDER.
- WITHIN ONE MONTH OF INSTALLATION, A PERSON INSTALLING THE BAT SYSTEM SHALL REPORT TO THE MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) IN A MANNER ACCEPTABLE TO MDE, THE ADDRESS AND DATE OF COMPLETION OF THE BAT INSTALLATION AND THE TYPE OF BAT INSTALLED.
- ELECTRICAL WORK FOR THE BAT INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
- AN AGREEMENT AND EASEMENT MUST BE COMPLETED AND SIGNED BY ALL APPLICABLE PARTIES, AND RECORDED IN LAND RECORDS OF HOWARD COUNTY.
- THE HEALTH DEPARTMENT REQUIRES DOCUMENTATION FOR THE START-UP CERTIFICATION FROM THE MANUFACTURER PRIOR TO FINAL APPROVAL OF THE INSTALLATION.
- THE WELL (TAG #HO-17-0271) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.
- 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.



APPROVED SEPTIC SYSTEM PLAN

Howard County Health Department
 4001 LEO BNR W/ 1500 GALLON PUMP CHAMBER
 5 BEDROOM W/ 5-BEDROOM W/ SFD
 11/7/2020
 Signature
 Date
 low-pressure distribution

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. 21998 EXPIRATION DATE: 6/6/22

11/2/20
 DATE

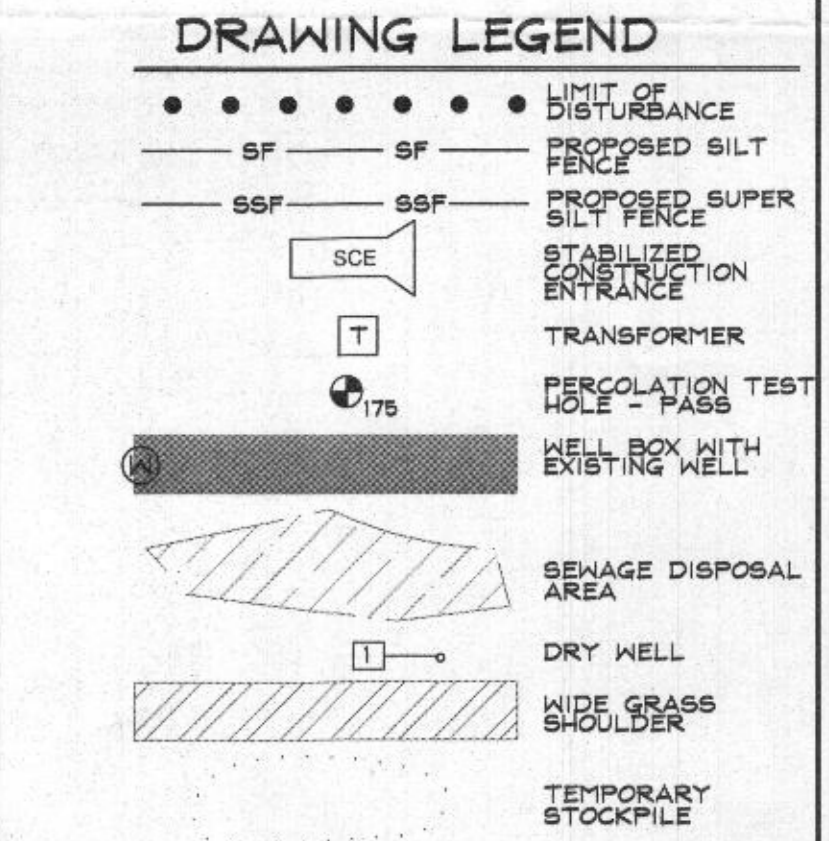
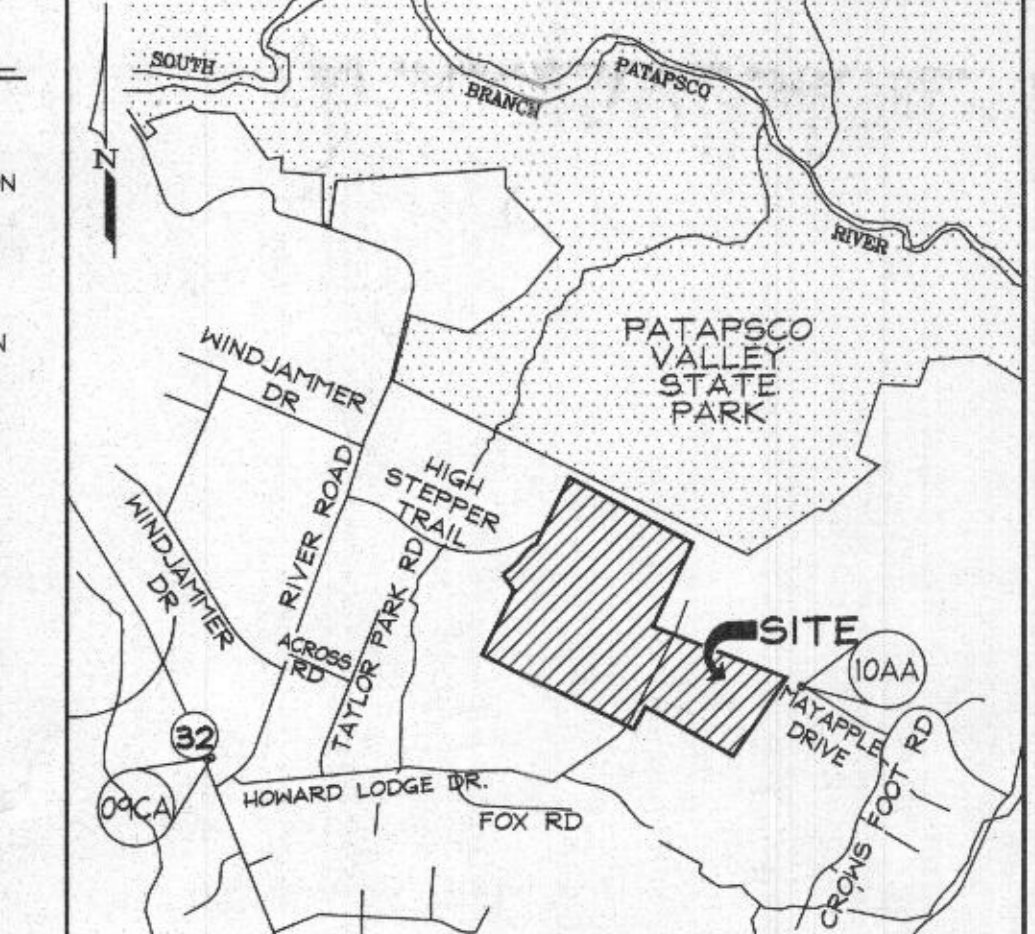
WILLIAM R. DEMARCO
 PROFESSIONAL ENGINEER NO. 21998

BENCHMARK

BENCHMARK 09CA
 N. 604029.596
 E. 1302501.809
 B.M. 09CA - CONC MON
 ELEV. N. 549.030

BENCHMARK 10AA
 N. 604753.341
 E. 1301668.810
 B.M. 10AA - CONC MON
 ELEV. 549.084

ADC MAP COORDINATES
 MAP 5 GRID E4
 N 34°20'00", E 76°57'30"



DATA SOURCES:

EX. BOUNDARY SHOWN PER BOUNDARY SURVEY BY SHANBERGER AND LANE DATED JUNE, 2014. TOPOGRAPHY SHOWN PER AERIAL PHOTOGRAMMETRY AND FIELD RUN TOPOGRAPHY DATED 8/20/14. ADJACENT WELL AND SEPTIC INFORMATION APPROXIMATED FROM ADJACENT PLATS. HEALTH DEPARTMENT RECORDS AND FIELD OBSERVATION ON JUNE 25, 2012. EX. ENVIRONMENTAL INFORMATION SHOWN PER FIELD INVESTIGATION BY ECO-SCIENCE SOLUTIONS CONDUCTED ON OR ABOUT JUNE, 2014.

DDC Development Design Consultants

Planners
 Surveyors
 Engineers
 Landscape Architects

192 East Main Street
 Westminster, MD 21157
 410.386.0560
 410.386.0564 (fax)
 DDC@DDCinc.us
 www.DDCinc.us

LOT 25 SITE PLAN FOR BAT INSTALLATION

5TH COUNCIL DISTRICT
 3RD ELECTION DISTRICT
 HOWARD COUNTY, MD

REVISIONS

NO.	DESCRIPTION OF CHANGES	DRN.	REV.	DATE
CO. FILE #	F-17-045	DES. BY:	LJC	
TAX ACC. #	03-601577	DRN. BY:	LJC	
TAX MAP:	9	CHK. BY:	WRD	
BLOCK / GRID:	6	DATE:	11/2/20	
PARCEL #:	66	DDC JOB#:	12064.3	
ZONE / USE:	RR-DEO	SHEET NUMBER:		
DWG. SCALE:	1" = 30'			1 of 1