

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: 4/24/2016 **ONSITE SEWAGE DISPOSAL SYSTEM** P 558099

APPROVAL DATE: 3/1/17 **PERMIT:** BRF REPAIR A REPAIR

PROPERTY ADDRESS: 1140 Shaffersville Road

SUBDIVISION: _____ LOT: _____ TAX ID: 04-324099

CONTRACTOR: Fogle's Septic Clean Inc. EMAIL: zac@foglesinc.com

CONTRACTOR ADDRESS: 580 Obrecht Road, Sykesville, MD 21784 PHONE: 410-795-5670

CONTRACTOR CERTIFIED FOR BAT INSTALLATION: MDE MANUFACTURER: Hoot

PROPERTY OWNER: Tamer Fisgin EMAIL: tfisgin@gafdb.com

OWNER ADDRESS: _____ PHONE: 410-294-2241

BAT UNIT MODEL: Hoot H600BNR PUMP SIZE: 1/2hp PUMP TANK CAPACITY: Hoot w/750g

OPERATION & MAINTENANCE AGREEMENT DATE SIGNED: 7/21/2016 DATE RECORDED: 7/21/2016

DISTRIBUTION SYSTEM: GRAVITY PRESSURE DOSED BEDROOMS: 3 APPLICATION RATE: _____

TRENCHES:	LINEAR FEET REQUIRED: <u>172</u>	INLET DEPTH: <u>1.5-2.5'</u>
	TRENCH WIDTH: <u>3'</u>	MAXIMUM BOTTOM DEPTH: <u>4.5'-5.5'</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>9'</u>	EFFECTIVE AREA BEGINNING DEPTH: _____

LOCATION: TO BE STAKED BY SANITARIAN DURING PRE-CONSTRUCTION INSPECTION.

NOTES: Install system per design spec's. see design plans attached...
* Haze has no power. Demo to follow. Will need electrical start-up for BAT from Mike Sample and pump start-up from Health Dept.

ISSUED BY: K. Wolf ISSUE DATE: 1/26/17 EXPIRATION DATE: 1/26/18

- 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 DOWNGRADE 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 _____
- 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: 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.

NOT TO SCALE

* See Design
for lateral spac's

see Seperate Sheet
Attached for As-Built

Laterals :

(2/3/17)
Distal Head Δ (inches)

T1 = 1.5" Lateral	= 24" +
T2 = 1.5" Lateral	= 24" +
T3 = 1.5" Lateral	= 40"
T4 = 1.5" Lateral	= 40"

ROAD NAME

TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
3'	1.5'-2.5'	4.5'-5.5'
NUMBER OF TRENCHES		4
TOTAL LENGTH _____		
ABSORPTION AREA _____		
DISTRIBUTION BOX LEVEL _____		
DISTRIBUTION BOX BAFFLE _____		
DISTRIBUTION BOX PORT _____		

Septic Tank DATA

SEPTIC TANK I LEVEL Yes

MANUFACTURER Mayer Bros

CAPACITY H600B/R GAL

SEAM LOC Top

TANK LID DEPTH 2.5'

BAFFLES Front

BAFFLE FILTER no

MANHOLE LOC Front/Rear

6" PORT LOC none

WATERTIGHT TEST none

SLOTTED yes

DATE ON LID n/a

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:

11/4/16 Met. w/ Contractor on-site. Shot elevations, initial area of proposed 1-pd trenches cut loc of prop. BAT unit. Benchmark taken from basement slab/floor.

Area tentatively staked out. Prop. corners and lines staked and verified (KMN)

1/26/17 Re-shot elevations as staked on 11/4/16. Confirmed lateral/

INSTALLATION: trench locations. Contractor to remove cherry tree near upper ST/T2 manifold. OK to use 57" store (clean). Design plan for 1-pd and BAT given in field. OK to make lateral/manifold elevation the same. 12" D. diff between T1/T2 and T3/T4. (KMN)

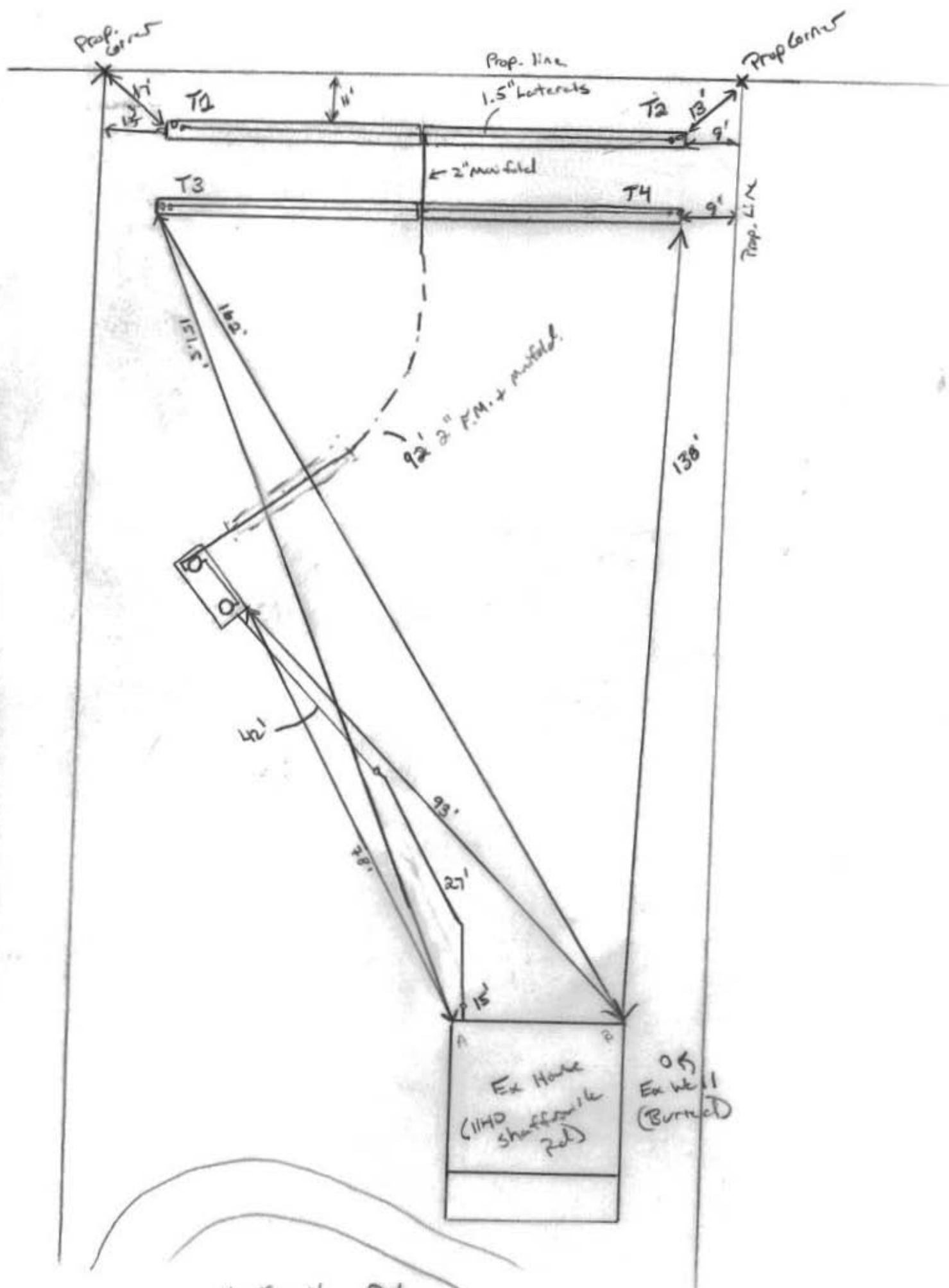
1/30/17 Measured distances of Between clean out of T3 to two points on the house (Ex. ST. and Drywell purged/collapsed)

2/2/2017 Tank set prior to arrival. 13:45 - Contractor off site @

2/3/17 Prop. lateral test completed w/ generator. House has no electric. BAT startup done also w/ generator. Need BAT certificate from manufacturer.

FINAL INSPECTOR K. Half DATE OF APPROVAL 3/1/17

3/1/17 BAT certificate received from manufacturer.



Permit complete.
Need to set
condition in Accella

to review start-up
from HD + BAT rep.
prior to BP issuance.
Demo may require new
well.

N33°30'00"W

108.90'

T1

80'

Aprx 10'

T2

9'ETE
12'CTC

T3

10'

T4

(4) 3' x 40'
Absorption Trunk
(see lateral
Detail)

"Force Main

S56°30'00"W

N56°30'00"E

SHED

HOOT 600 GNR
BAT unit

75' of
4" Gravity sch 40

Electric
to BAT
unit

Benchmark Basement
Floor Elev
= 104"
(Assumed)

4" sch 40
clean out

30.0'
2 STORY
FRAME
#1140
30.0'

Ex
WELL
(Buried)

OPEN PORCH

DRIVEWAY

200.00'

200.00'

1" = 20'

Design: 3 Bedrooms
Flow = 450 gpd

Application Rate = 0.6 gpd/ft²

* All Elevations based on existing field conditions including existing Basement floor elevation (assumed to be 100.00)

* Benchmark Elevation @ Basement Floor (used also for outlet Invert of 4" sch 40) = 88" (7'4")

Pump Tank / CAT unit - Itawt 600 ENR:

- Ground Elevation over Pump tank = 104"
- Bottom Elevation of Pump tank = 200"
- Pump off Elevation = 182" 15.17'

Laterals: (T1) = Highest lateral ground Elevation = 19"
(T2) Lateral Elevation = 43" 3.6'

(T3) = Lowest lateral ground Elevation = 31"
(T4) Lateral Elevation = 55" 4.6'

Hole Diameter = 1/4" (.25")

Manifold: Length = 12'
Diameter = 2"

Force Main: Length = 95'
Diameter = 2"

Friction Head:

@ 40 gpm per 100' of 2" = 2.62

2 x 90° x 2" = 7' x 2 = 14'

2" Gate Valve = 1.3' x 1 = 1.3'

1 x Cross Tee x 2" = 2'

1 Check Valve = 0'

95' of 2" = 95'

Totals = 112.3' total

112.3 ÷ 100 = 1.123

1.123 x 2.62 = 2.95 ft of friction loss

Static Head: Elevation of upper lateral - Pump off Elevation

182" - 43" = 139" 11.6'



Flow : $\frac{1}{4}$ " holes $Q = 11.82 \times (d)^2 \times \sqrt{h}$

D = Diameter of hole

h = Distal Head

$$= 11.82 (0.25)^2 \times \sqrt{3}$$

$$= 11.82 (.0625) \times \sqrt{3}$$

$$= 11.82 \times .1082531755$$

$$= \underline{1.28}$$

Total Perforations =

$$D = 44" @ .25$$

$$h = 3'$$

$$32 \text{ perforations} \times 1.28 = \boxed{40.96 \text{ gpm}}$$

Dose :

• Length of F.M. + Manifold =

$$[95' + 12' = \underline{107'}] \Rightarrow (107 \text{ ft}) (17.4 \text{ g/100ft}) \div 100$$

• Length of laterals =

$$(37.5 \times 4 = \underline{150'}) \Rightarrow (150') (10.6 \text{ g/100ft}) \div 100$$

$$= \underline{18.6}$$

* Volume of

$$1\frac{1}{2}" / \text{per } 100' = (10.6 \text{ g/100ft})$$

$$(150') (10.6 \text{ g/100ft}) \div 100$$

$$= \underline{15.9}$$

* Volume of 2"

$$2" / \text{per } 100' = (17.4 \text{ g/100ft})$$

$$\boxed{\text{Dose}} = \text{Volume of FM + Manifold} + (5 \times V \text{ of laterals})$$

$$= [18.6 \text{ g} + (5 \times 15.9 \text{ g})]$$

$$= [18.6 \text{ g} + 79.5 \text{ g}] = \boxed{98.1 \text{ g}} \text{ or } 100 \text{ g}$$

$$\frac{1}{6} (\text{Design Flow}) = \frac{1}{6} (450) = 75 \text{ g} < \underline{98.1 \text{ g}} \text{ use } \underline{98.1 \text{ g}}$$

Design Head :

Static Head + Friction Head + Distal Head

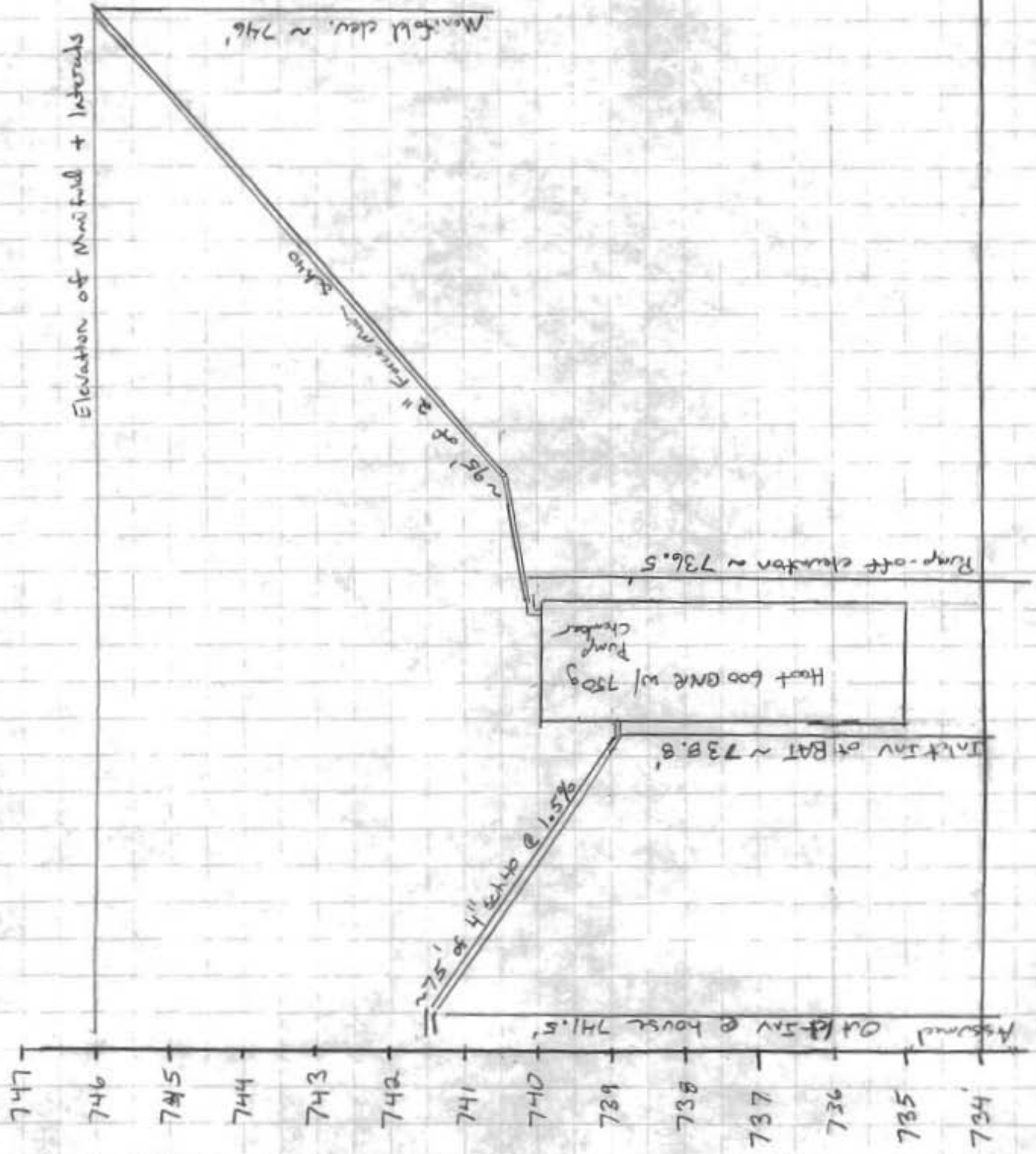
$$\text{Static Head} = 11.6'$$

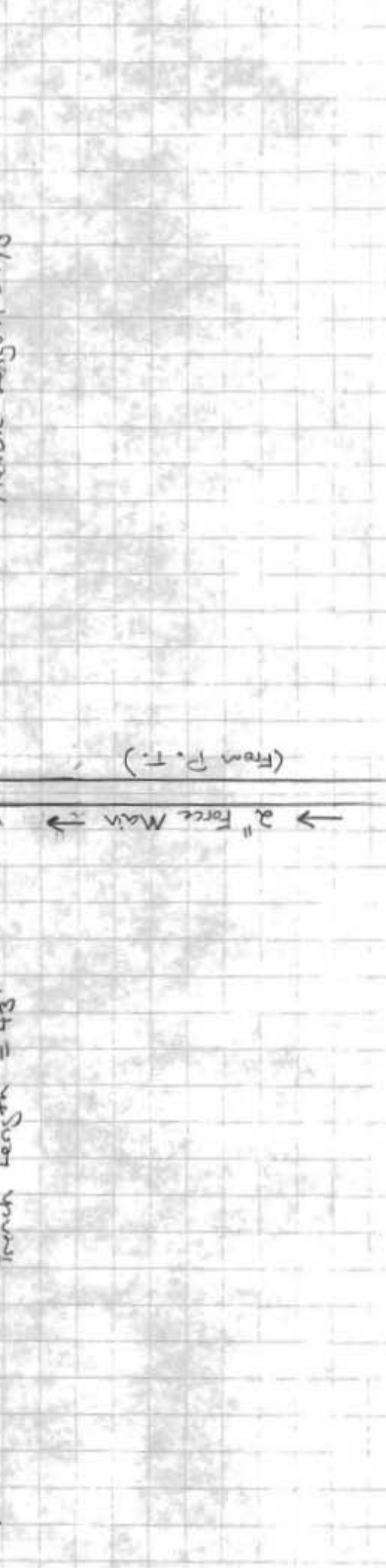
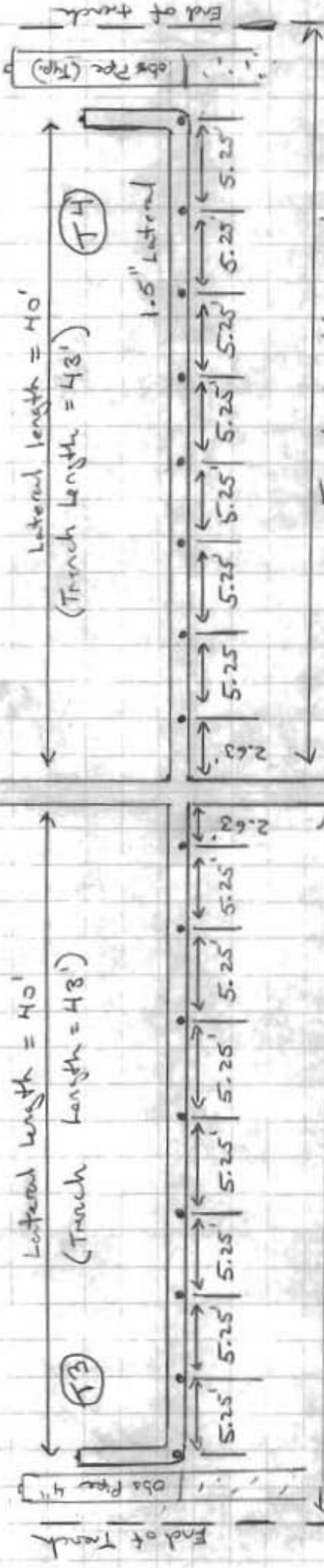
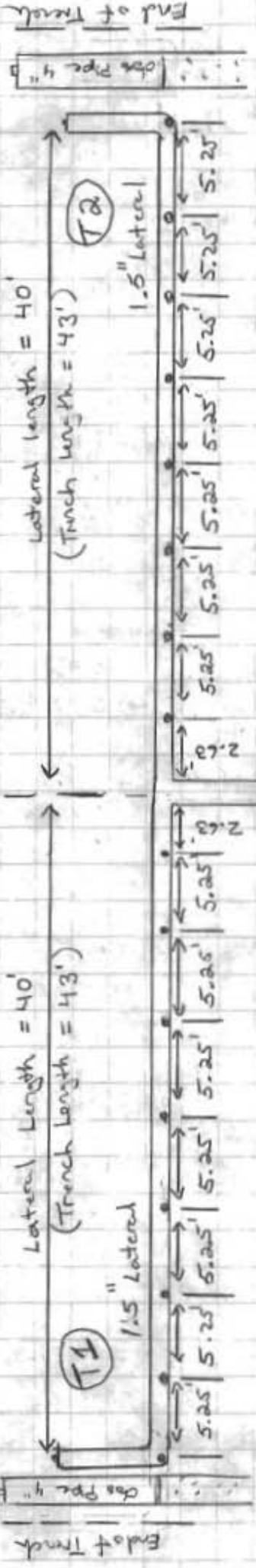
$$\text{Friction Head} = 2.95'$$

$$\text{Distal Head} = 3'$$

$$11.6 + 2.95' + 3' = \boxed{17.6'} \text{ TDH}$$

Profile (Not to Scale)





Lateral Detail:

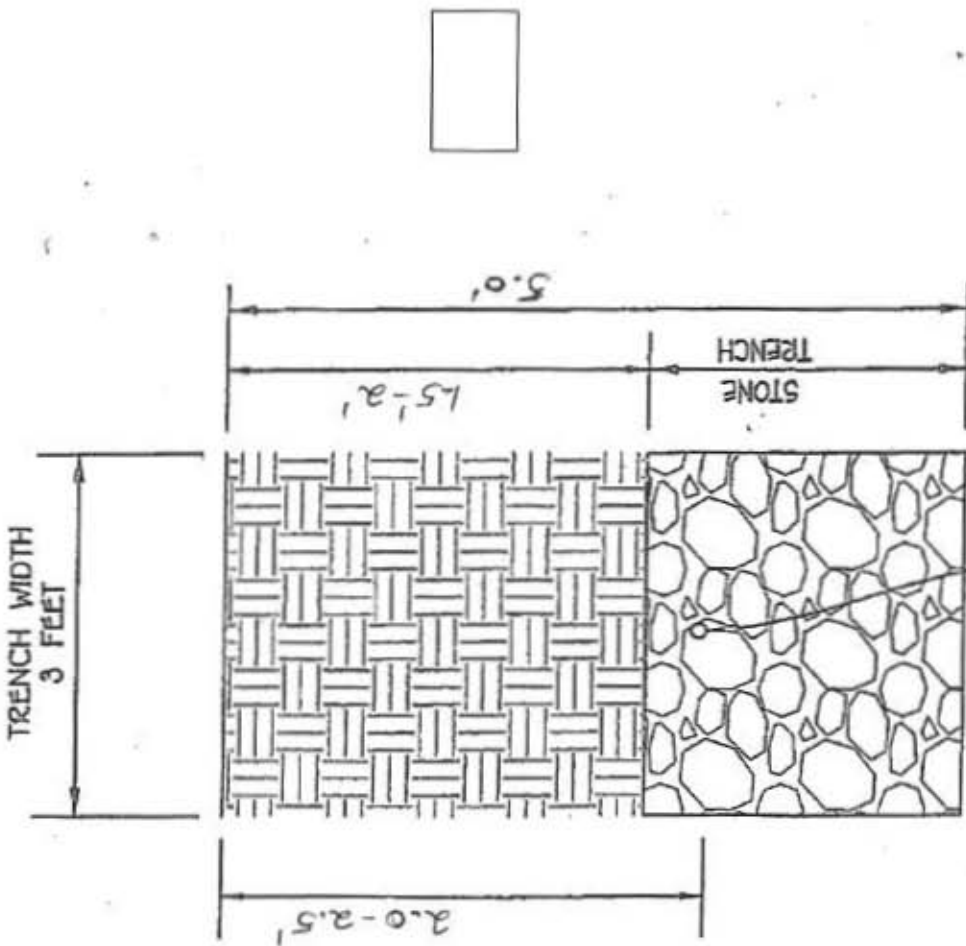
Trench / Low Pressure Dosing System Detail (Relative)

Trench	Ground Elv.	Lateral Inv	Trench Depth	Depth of stone	Eff cov @	Trench width	Trench Spacing ETC	Distal Head	gm Flow per perf	# of perf.	Trench Flow Rate
T1	746'	744'	741'	3'	3.5'	3'	9'	3'	1.28	8	10.24
T2	746'	744'	741'	3'	3.5'	3'	9'	3'	1.28	8	10.24
T3	745'	744'	740'	3'	3.5'	3'	9'	3'	1.28	8	10.24
T4	745'	744'	740'	3'	3.5'	3'	9'	3'	1.28	8	10.24

Total Flow

per system

Discharge = 40.96 gpm



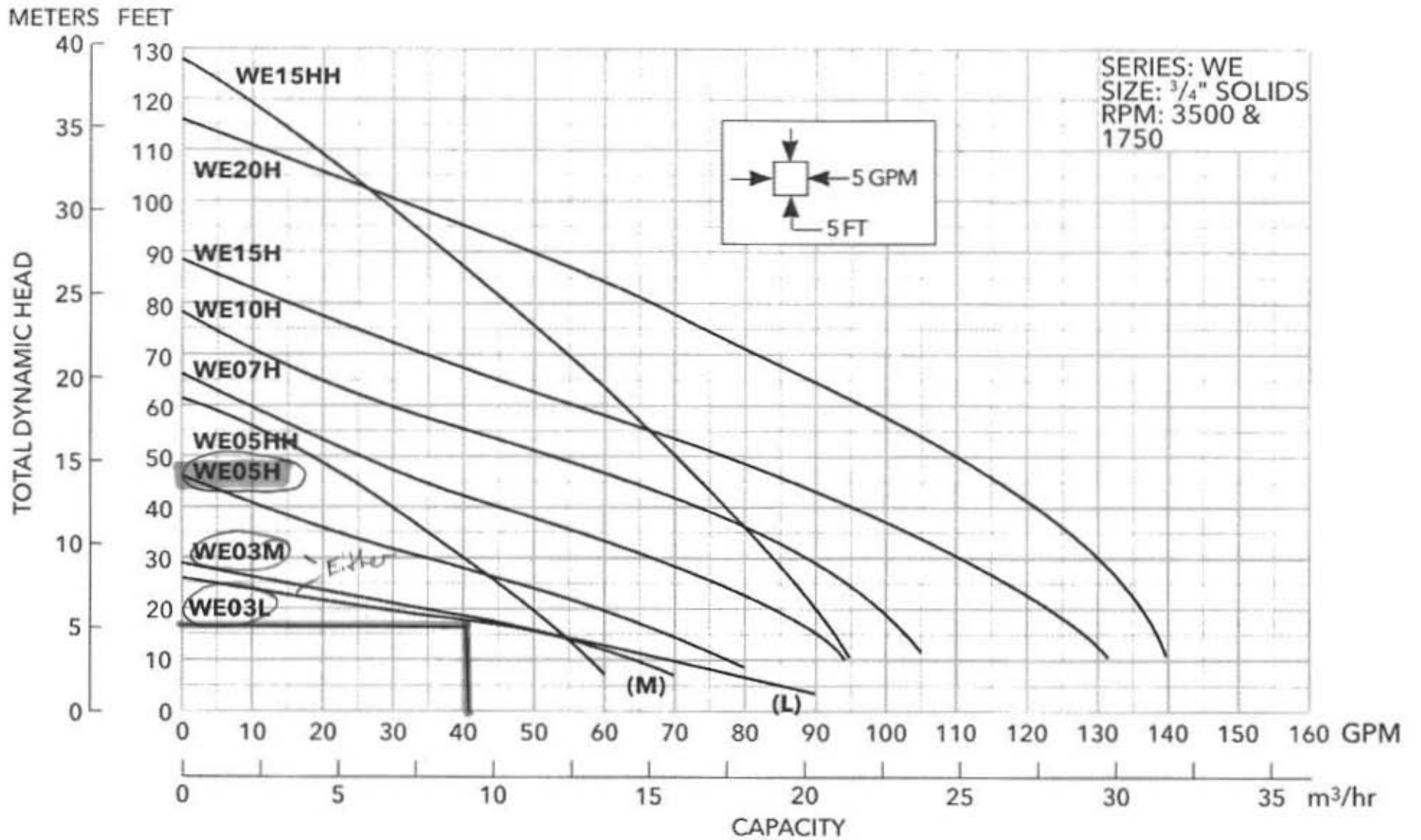
NOTE: PLACE AN OBSERVATION PIPE IN THE GRAVEL BED AT THE DISTAL END OF EACH TRENCH SEGMENT.

1.5" PERFORATED SCHEDULE 40 PVC LATERAL PIPE

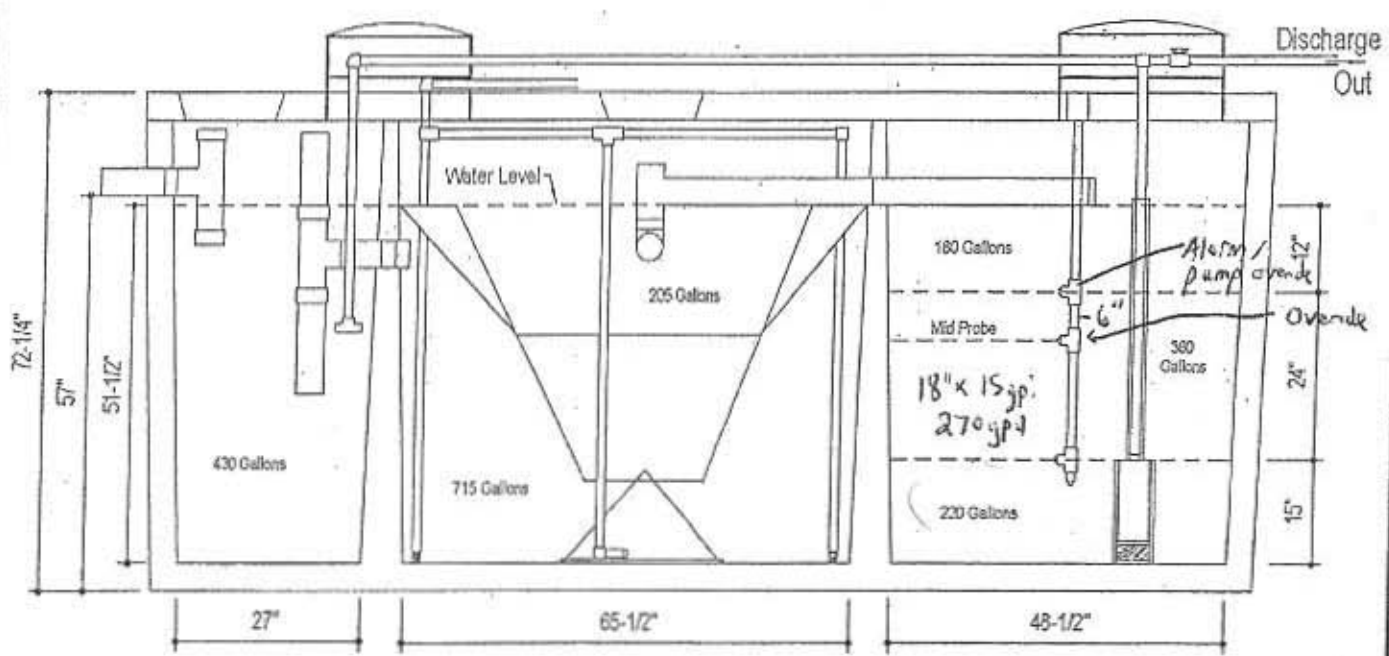
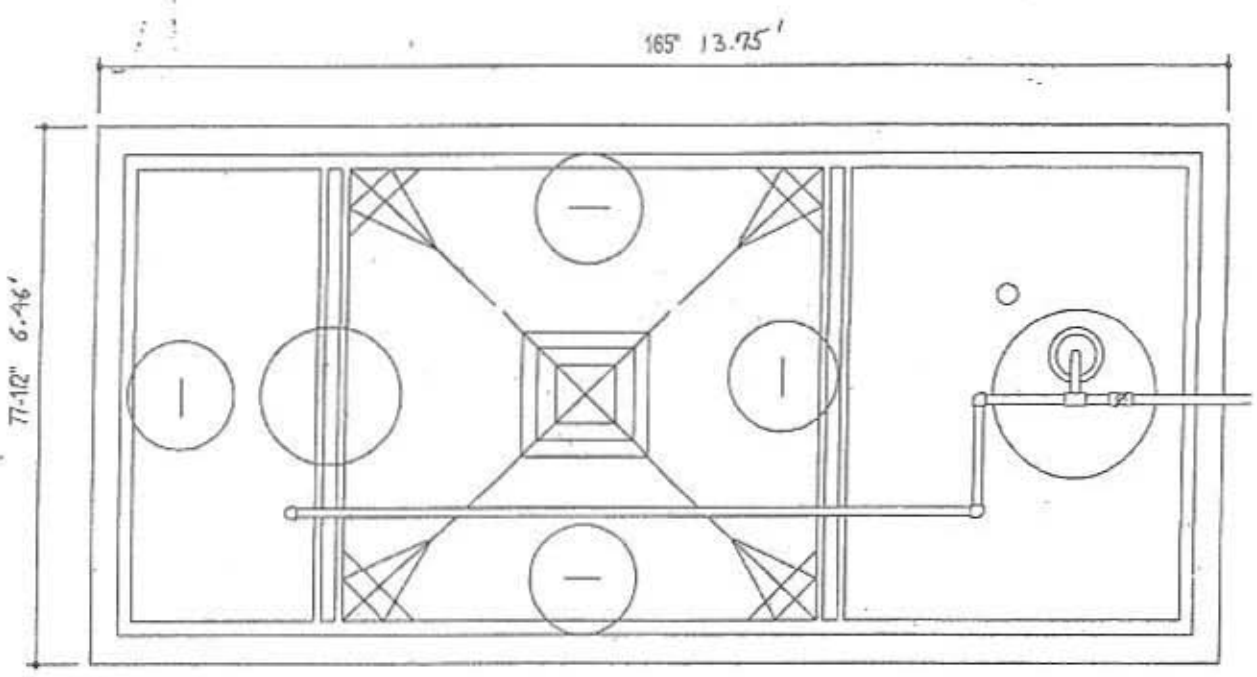
TRENCH DETAIL

Not TO SCALE :

Goulds WE Series



USE WE03M
 1/3 HP Goulds Pump



12, 24, 36 events/day 2 min at 36 gpm
 1-20 min delay BRF
 custom probe → std panel not drip panel
 (not etmd & cc)

DESIGN DATA & GENERAL NOTES

- [1] Concrete strength $f_c=4,000$ p.s.i. @ 28 days. Density = 150 pcf.
- [2] Cement - Portland Type III per ASTM C 150-92.
- [3] Admixtures & plasticizers per ASTM C 260-88 & C 494-92.
- [4] Reinforcing per ASTM A185. Min. 1-1/2" cover.

Mayer Brothers, Inc.

6264 Race Road
 Elkridge, Maryland 21075
 Tel. 410.796.1434
 Fax. 410.796.1438
 www.mayerbrocprecast.com



**600 GPD BNR SYSTEM
 H-600 BNR**

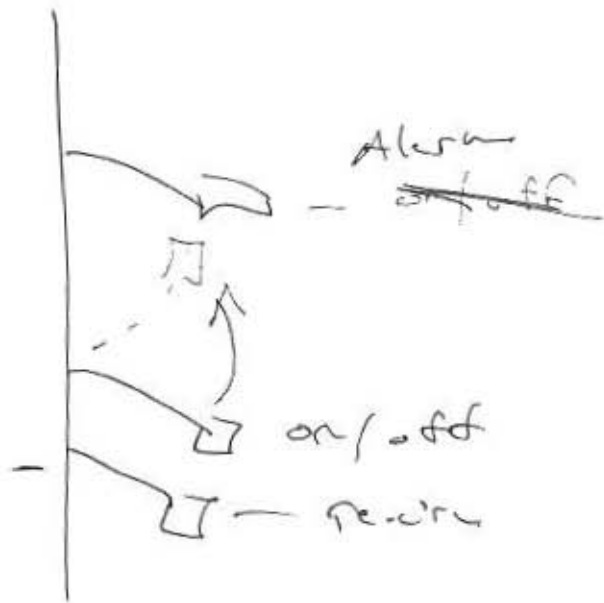
with 750 GALLON PUMP CHAMBER

Dwg. No. Hoot Form #1

No Scale

March 19, 2009

4



1

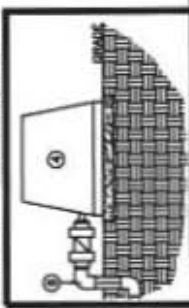
CRITICAL DIMENSIONS

A	71.00"
B	58.00"
C	52.00"
D	4'
E	76.50"
F	162.00"
G	67.50"
H	153.00"
J	48.50"
K	15.00"
L	24.50"
M	12.50"

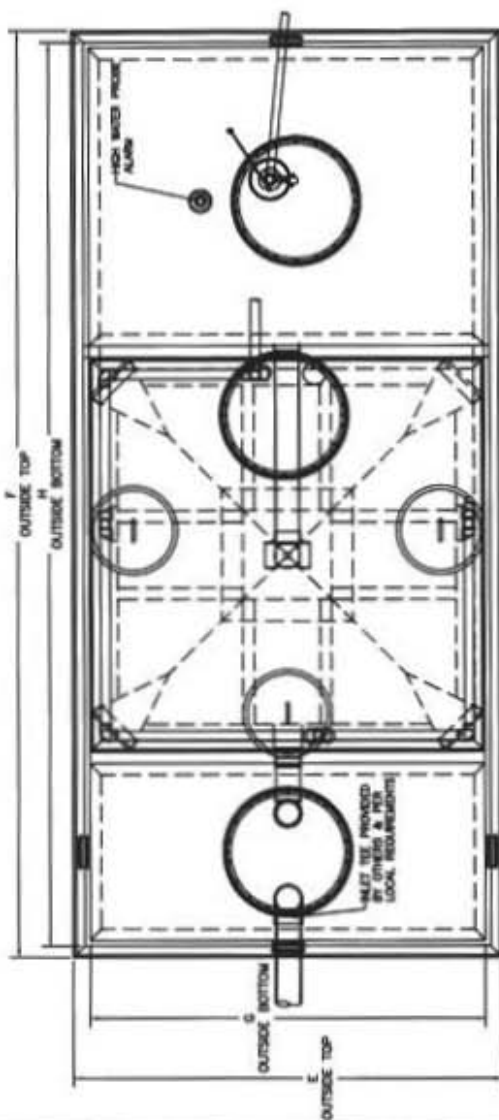
THE H-SERIES HOOT AEROBIC TREATMENT SYSTEM

- 1) PRETREATMENT TANK- WHERE ANAEROBIC DIGESTION OCCURS AND STORAGE FOR NON-BIODEGRADABLE MATERIALS.
- 2) AERATION CHAMBER- WHERE AIR IS INTRODUCED INTO SEWAGE FOR DIGESTION.
- 3) CLARIFIER- A STILL CHAMBER WHERE SOLIDS SETTLE OUT AND THE CLEAR EFFLUENT RISES.
- 4) TROY AIR LINEAR AIR BLOWER- LONG LIFE, EFFICIENT LINEAR BLOWER WHICH COMPRESSED ATMOSPHERIC AIR AND UNDER PRESSURE DELIVERS IT TO THE TANK. MAY BE REMOTELY MOUNTED UP TO 50' FROM SYSTEM. MUST MAINTAIN 1/8" SLOPE TOWARDS TANK FOR DRAINAGE.
- 5) AIR MANIFOLD- DELIVERS THE AIR FROM THE LINE TO THE STONES FOR DIFFUSION INTO THE SEWAGE.
- 6) AERATION LINE- DELIVERS THE AIR FROM THE PUMP TO THE MANIFOLD. CHECK VALVE INCLUDED.
- 7) AERATION STONE- AIR IS FINELY DIFFUSED FROM THE STONE INTO THE AERATION CHAMBER.
- 8) 15" COVERS- PROVIDE ASSEMBLY PORT ACCESS INSIDE OF THE SYSTEM. (NOT REQUIRED FOR REGULAR SERVICE)

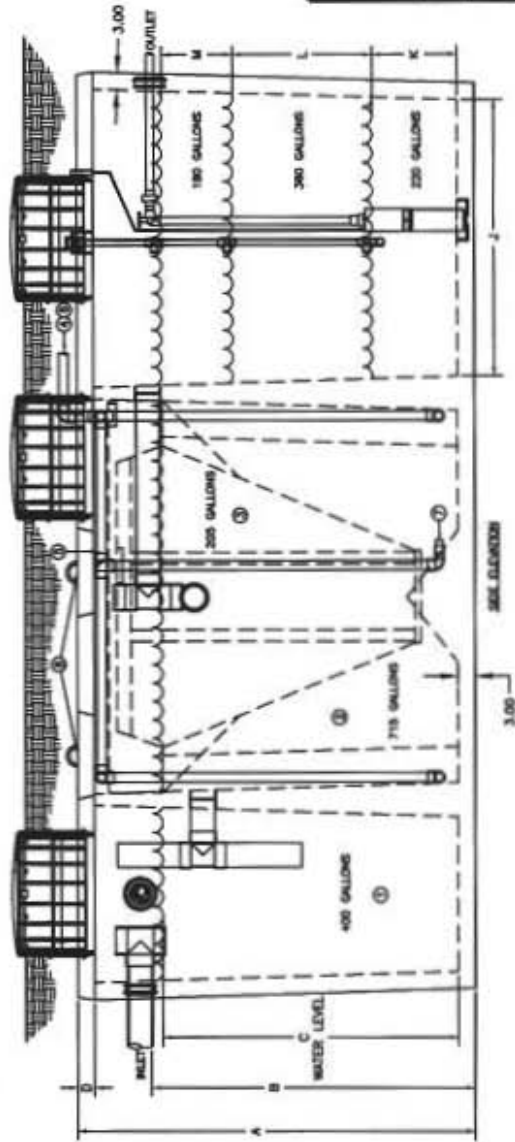
TROY AIR BLOWER



HOOT SYSTEMS, LLC
www.hootsystems.com



PLAN VIEW



SEE ELEVATION

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PAGE #

DESCRIPTION:
500 GPD PUMP DISCHARGE SYSTEM
HOOT SYSTEMS H-600A w/ 760 GAL. P.T.

DATE: 03-17-2014
DRAWN BY: AY
CHECK BY: RS
SCALE: N.T.S.

H-600A_760

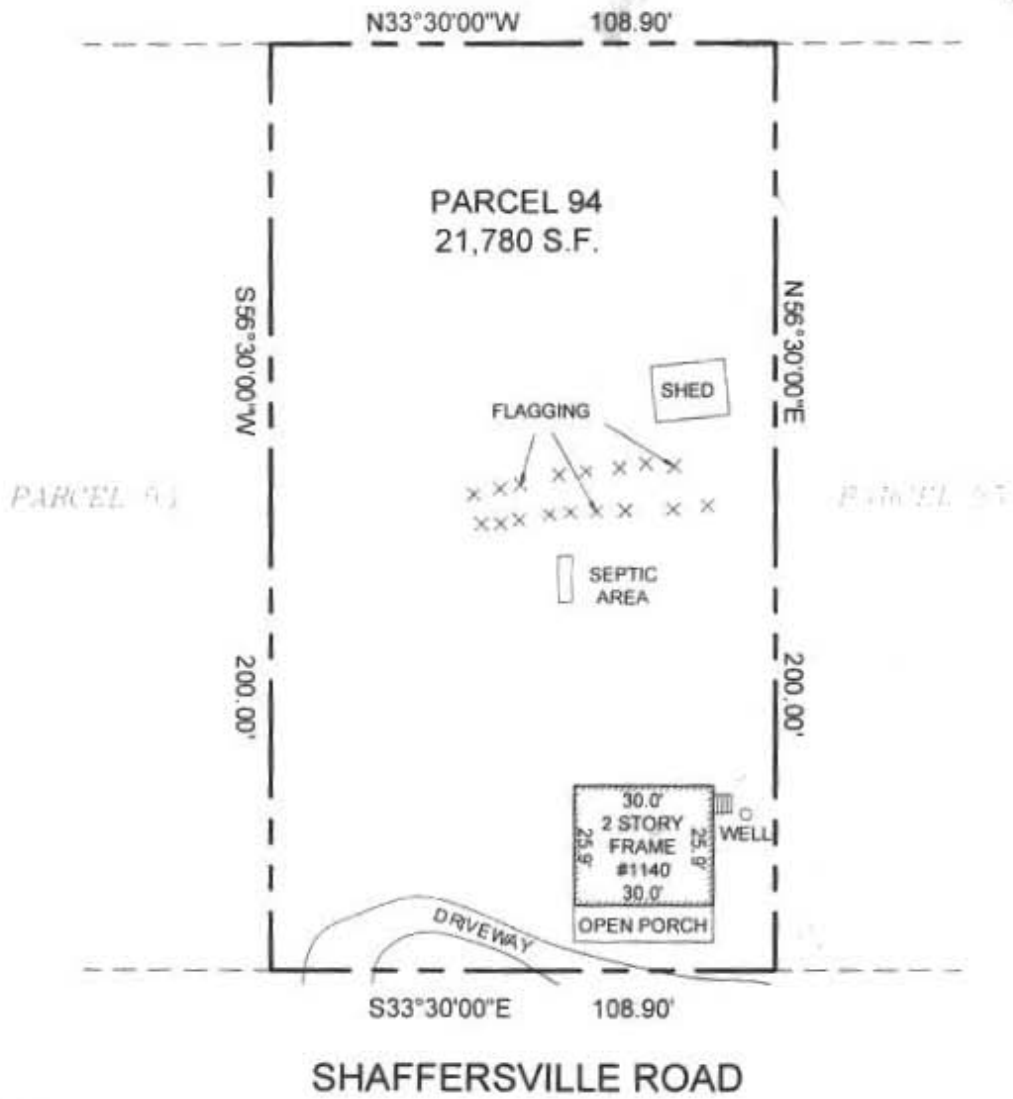
No: 7

MARYLAND

WASHINGTON, D.C.

VIRGINIA

ADDRESS: 1140 SHAFFERSVILLE ROAD
MOUNT AIRY, MD 21771



NOTES:

1. THIS IMPROVEMENT LOCATION DRAWING:
 - A. IS OF BENEFIT TO A CONSUMER ONLY INsofar AS IT IS REQUIRED BY A LENDER OR A TITLE INSURANCE COMPANY OR ITS AGENT IN CONNECTION WITH CONTEMPLATED TRANSFER, FINANCING OR REFINANCING;
 - B. IS NOT TO BE RELIED UPON FOR THE ESTABLISHMENT OR LOCATION OF FENCES, GARAGES, BUILDINGS, OR OTHER EXISTING OR FUTURE IMPROVEMENTS; AND
 - C. DOES NOT PROVIDE FOR THE ACCURATE IDENTIFICATION OF PROPERTY BOUNDARY LINES, BUT SUCH IDENTIFICATION MAY NOT BE REQUIRED FOR THE TRANSFER OF TITLE OR SECURING FINANCING OR REFINANCING.
2. THE LEVEL OF ACCURACY OF APPARENT SETBACK DISTANCES IS ONE FOOT, MORE OR LESS.
3. THIS PLAT WAS PREPARED WITHOUT BENEFIT OF A TITLE REPORT.
4. SUBJECT TO ALL EASEMENTS ON RECORD.
5. A BOUNDARY SURVEY IS RECOMMENDED TO ACCURATELY LOCATE BOUNDARY LINES, HOUSE AND IMPROVEMENTS ON PROPERTY.

DRAWN BY: DS
FILE: #1140HLOC_2016

I HEREBY CERTIFY THAT IMPROVEMENTS ARE LOCATED AS SHOWN HEREON AND TO THE BEST OF MY INFORMATION, PROFESSIONAL KNOWLEDGE AND BELIEF, THERE ARE NO ENCROACHMENTS



FITZROY J. BERTRAND
SURVEYOR

3/30/16
DATE

LOCATION DRAWING
PARCEL 94
LIBER 233 FOLIO 486
HOWARD COUNTY
MARYLAND

SCALE: 1" = 40' DATE: 3/30/16

REAL ESTATE SURVEYORS & DEVELOPERS, LLC

Residential, Commercial, Industrial and Land
WWW.RESDLLC.COM
LAUREL LAKES EXECUTIVE PARK
8325 CHERRY LANE
LAUREL, MARYLAND 20707
TEL: (301)604-3105 FAX: (301)604-3108

ARTICLE 1 ARCHITECT'S RESPONSIBILITIES

The Architect shall provide architectural services for the Project as described in this Agreement in a manner consistent with locally accepted standards for professional skill and care. The Architect shall assist the Owner in determining consulting services required for the Project. The Architect's services include the following consulting services, if any:

None

During the Design Phase, the Architect shall review the Owner's scope of work, budget and schedule and reach an understanding with the Owner of the Project requirements. Based on the approved Project requirements, the Architect shall develop a design. Upon the Owner's approval of the design, the Architect shall prepare Construction Documents indicating requirements for construction of the Project and shall coordinate its services with any consulting services the Owner provides. The Architect shall assist the Owner in filing documents required for the approval of governmental authorities, in obtaining proposals and in awarding contracts for construction.

During the Construction Phase, the Architect shall act as the Owner's representative and provide administration of the Contract between the Owner and Contractor. The extent of the Architect's authority and responsibility during construction is described in AIA Document A105™-2007, Standard Form of Agreement Between Owner and Contractor for a Residential or Small Commercial Project. Generally, the Architect's services during construction include interpreting the Contract Documents, reviewing the Contractor's submittals, visiting the site, reviewing and certifying payments, and rejecting nonconforming Work.

ARTICLE 2 OWNER'S RESPONSIBILITIES

The Owner shall provide full information about the objectives, schedule, constraints and existing conditions of the Project, and shall establish a budget that includes reasonable contingencies and meets the Project requirements. The Owner shall provide decisions and furnish required information as expeditiously as necessary for the orderly progress of the Project. The Architect shall be entitled to rely on the accuracy and completeness of the Owner's information. The Owner shall furnish consulting services not provided by the Architect, but required for the Project, such as surveying, which shall include property boundaries, topography, utilities, and wetlands information; geotechnical engineering; and environmental testing services. The Owner shall employ a Contractor, experienced in the type of Project to be constructed, to perform the construction Work and to provide price information.

ARTICLE 3 USE OF DOCUMENTS

Drawings, specifications and other documents prepared by the Architect are instruments of the Architect's service and are for the Owner's use solely with respect to this Project. The Architect shall retain all common law, statutory and other reserved rights, including the copyright. Upon completion of the Project or termination of this Agreement, the Owner's right to use the instruments of service shall cease. When transmitting copyright-protected information for use on the Project, the transmitting party represents that it is either the copyright owner of the information, or has permission from the copyright owner to transmit the information for its use on the Project.

ARTICLE 4 TERMINATION, SUSPENSION OR ABANDONMENT

In the event of termination, suspension or abandonment of the Project by the Owner, the Architect shall be compensated for services performed. The Owner's failure to make payments in accordance with this Agreement shall be considered substantial nonperformance and sufficient cause for the Architect to suspend or terminate services. Either the Architect or the Owner may terminate this Agreement after giving no less than seven days' written notice if the Project is suspended for more than 90 days, or if the other party substantially fails to perform in accordance with the terms of this Agreement.

ARTICLE 5 MISCELLANEOUS PROVISIONS

This Agreement shall be governed by the law of the place where the Project is located. Terms in this Agreement shall have the same meaning as those in AIA Document A105-2007, Standard Form of Agreement Between Owner and Contractor for a Residential or Small Commercial Project. Neither party to this Agreement shall assign the contract as a whole without written consent of the other.

Nothing contained in this Agreement shall create a contractual relationship with, or a cause of action in favor of, a third party against either the Owner or the Architect.

Init.

(weep hole, usually 1/4", not counted for dose, effluent is repumped during process and not counted for friction, except as fitting headloss)
 TOTAL HEAD LOSS IN EACH LATERAL 0.46 0.00 0.00

MAXIMUM TOTAL LATERAL HEADLOSS IN SYSTEM 0.46
 MANIFOLD HEADLOSS (center-fed unless manifold design) 0.35
 DELIVERY PIPE HEADLOSS 1.86 w/ delivery 2 inch diameter
 FITTING LOSS (headloss * 15) 0.45 add extra head if fittings are more than absolute minimum
 DISTAL PRESSURE HEAD 3.00
 STATIC HEAD (OFF-SWITCH TO HIGH LATERAL MANIFOLD) -11.57
 HEADLOSS PUMP TO WEEPHOLE (assume 3' run) #NUM!
 PUMP MUST BE ABLE TO PASS SOLIDS AT #NUM!
 or #NUM! #NUM! #NUM! #NUM!
 After OTIS (network losses = 1.3' distal head) #NUM! #NUM! #NUM! #NUM!
 G P M G P M FEET OF HEAD FEET OF HEAD



CANAAN VALLEY INSTITUTE

July 19, 2016

Sandesh Gowda
GAF One LLC
11860 Linden Chapel Road
Clarksville, MD 21029

RE: FY 2017 Howard County Bay Restoration Fund OSDS Upgrade Program

Dear Mr. Gowda:

Thank you for your application to participate in the Howard County Bay Restoration Fund OSDS Upgrade Program. The Howard County Health Department has verified that your existing septic system at **1140 Shaffersville Road, Mt. Airy, MD** is falling and in need of repair. Since this property is owned by an LLC, you are eligible to receive funding to cover **50%** of the cost to upgrade your system to one of the MDE approved BAT units listed below. The approved price includes the cost of the unit, installation of the unit, and 5 years of operation and maintenance. The price does not include the cost of permits.

System	Vendor	Contact	Phone
Orenco (Advantex AX20)	Atlantic Solutions, Ltd.	Robert Johnson	877-214-9283
Hoot (BNR)	Mayer Brothers, Inc.	Nancy Mayer	410-796-1434
Norweco (Singular TNT)	Back River Pre-Cast, LLC	Matt Geckle	410-833-3394
Septitech (M400)	Jones Pump Service	Dwayne Jones	410-836-9206
Hydro-Action (AN Series)	Sample Excavating Co. Inc.	Mike Sample	443-807-8639
AquaKlear	BayStar Precast Corp.	Dave Care	410-977-3453

In order to receive your OSDS upgrade, **you MUST follow these steps:**

1. **Sign this letter** on the bottom of page 2 **and return it** in the envelope provided within **2 weeks of the date of this letter.**
2. File a septic repair permit application with the Howard County Health Department **within 2 weeks of the date of this letter.** The permit application fee is \$396.00 (\$165 for tank approval only).
3. Obtain the Agreement and Easement for Installation of Best Available Technology Systems with Bay Restoration Funds from the Howard County Health Department; have it signed by a Howard County Health Department Bureau Director or Designee. Then take it to the Circuit Court and have it recorded in Land Records **within 2 weeks of the date of this letter.**
4. Prepare your property and schedule installation of the system. The system must be installed **within 6 weeks of the date the Agreement and Easement is recorded.**

If assistance is needed in completing any of the steps listed above, you may contact me at 304-940-3443 or kristin.mielcarek@canaanvi.org.

494 RiverStone Road | Davis, WV 26260
Phone: (304) 259.4739 or (800) 922.3601 | Fax: (304) 259.4759
www.canaanvi.org

The system vendor may provide a contractor to install your BAT unit. CVI will provide payment directly to the vendor. The vendor may also require proof of insurance from your contractor.

If your system is not installed within the 8 week timeframe listed in the steps on page 1, the funds may be released and used elsewhere. If you cannot complete installation in within this timeframe, please contact me to request an extension. Please note that failure to request an extension may result in termination of your grant and your system must be installed no later than June 27, 2016 in order to retain your funding.

For more information on septic repair permitting, contact:

Jeff Williams
Program Supervisor, Well and Septic
410-313-1771

Please sign and return this original letter and keep a copy for your records. If you have any questions, please contact me at 304-940-3443 or by email at kristin.mielcarek@canaanvi.org.

Sincerely,

Kristin Mielcarek, Watershed Circuit Rider

Accepted by: Sandesh Gowda, GAF One LLC, Property Owner

I have read and agree to the conditions of this Agreement Letter.

Signature

Date

494 RiverStone Road | Davis, WV 26260
Phone: (304) 259.4739 or (800) 922.3601 | Fax: (304) 259.4759
www.canaanvi.org

Clerk of the Circuit Court for
Howard County
Land Records/Licensing

The Thomas Dorsey Building
9250 Bendix Road
Columbia, MD 21045
410-313-5850

- Agreement Recording Fee
1x 20.00 20.00
Grantor/Grantee Name: GAF Onc LLC
Reference/Control #: 82

- Agreement Surcharge
1x 40.00 40.00

Total: 60.00
Total: 60.00

- Check-BOA 60.00
Number: 5002

21/2016 14:34 CC13-S
78643 /496/109

~ Thank you for visiting us today ~



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

Twitter: HowardCoHealthDep

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

**AGREEMENT AND EASEMENT FOR INSTALLATION
OF BEST AVAILABLE TECHNOLOGY SYSTEMS
WITH BAY RESTORATION FUNDS.**

THIS AGREEMENT is made this 21 day of JULY, among GAF ONE LLC, hereinafter referred to as "Owner," the Howard County Health Department hereinafter collectively referred to as the "County," and the Department of the Environment, hereinafter referred to as the "Department."

WHEREAS, Owner owns a tract of land located on 1140 SHAFERSVILLE RD. MT. AIRY, in the Election District of Howard County, Maryland, and the deed to same is recorded among the Land Records of Howard County, Maryland, in Columbia and in Liber 16645 Folio 00445

WHEREAS, the Bay Restoration Fund (BRF) may provide a grant for the cost attributable to upgrading an onsite sewage disposal system to the Best Available Technology (BAT) for the removal of nitrogen.

WHEREAS, the BRF may also provide a grant for the cost difference between a traditional onsite sewage disposal system and a system that utilizes the BAT for the removal of nitrogen.

WHEREAS, Owner understands that participation in the Bay Restoration Fund is voluntary.

NOW, THEREFORE, the parties hereto agree as follows:


- A. Owner hereby grants to the Department and the County the right to enter upon the property at any reasonable time for access to the system to make periodic inspections and the Owner agrees to provide any information and data requested and needed by the Department to develop accurate and thorough test results.
- B. Owner acknowledges and agrees that a MDE certified and manufacturer-approved installer will install the BAT system.
- C. Owner acknowledges and agrees the manufacturer or manufacturer's authorized service provider will provide for Operation and Maintenance of the BAT for a period of 5 years as a condition of sale of the BAT. After the initial 5 year period an Operation and Maintenance contract with a certified service provider must be maintained in perpetuity by the property owner.
- D. Owner acknowledges and agrees that the manufacturer appointed Operation and Maintenance provider will have access to the BAT system at all times.
- E. Owner acknowledges and agrees that the manufacturer or manufacturer's authorized service provider will have access to sample the effluent of the BAT system. Owner acknowledges and agrees that the proposed installation of a BAT system funded by the BRF is voluntary. Owner agrees that there shall be no liability on the part of the County or Department to Owner if this BAT system fails, and that the County and the Department do not warrant or guarantee that the BAT system will adequately or properly function.
- F. Owner acknowledges and agrees that neither the County nor the Department nor any of its

agents or employees, either officially or individually, underwrites the operation of any system approved by them.


- G. The Owner will devote such care and effort to the maintenance of the BAT system so that any malfunction is not the result of poor maintenance, faulty operation, or neglect.
- H. The Canaan Valley Institute agrees to grant up to \$ 13,165 toward the cost of installation of the BAT system, and financial responsibility is limited to this amount. Operating costs will be at the Owners expense.
- I. The Owner acknowledges that the BRF grant can only be used for that portion of the OSDS attributable to (BAT) for the removal of nitrogen.
- J. Owner acknowledges in the event the total project cost is greater than \$25,000 the proposal will have to be approved by the Maryland State Board of Public Works.
- K. The Owner agrees to contact both the Water Management Administration, On-Site Systems Division of the Wastewater Permits Program and the County at least forty-eight (48) hours prior to system installation, so that the Department has the opportunity to be present at the time of installation or thereafter for inspection.
- L. The Owner must install BAT system according to the manufacturer recommended plans and specifications approved by the Department.
- M. The Owner agrees and acknowledges that if installation deviates substantially from the approved plans or changes such that performance of the system is compromised or reduced, BRF funding will not be provided.
- N. This agreement shall run with the land and binds the Owner, his heirs, successors, assigns. Owner further agrees that he shall inform in writing any purchaser or lessee of the property that the system may require maintenance or other attention. The Owner agrees to record this agreement in the land records of Howard County.
- O. This agreement shall not be construed to limit any authority of the Department to protect the public health, safety or comfort or to issue any other orders to take any other action that is now or may hereafter be within its authority.
- P. This agreement may be voided at the discretion of the Department if the system construction is not completed within six (6) months of the effective date of this agreement.
- Q. This agreement contains the entire agreement and understanding between the County and the Owner and the Department. There are no additional terms other than as contained in this agreement. This agreement may not be modified except in writing signed by each of the parties or by their authorized representatives.
- R. The laws of the State of Maryland govern the provisions of all transactions pursuant to this agreement.

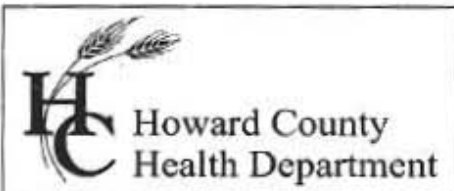
IN WITNESS WHEREOF, the parties have signed and sealed this agreement on the date indicated above.

DATE: 7/21/2016


FOR GAF INC LLC
Owner

DATE: 7/21/16


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: 4/27/16 **ONSITE SEWAGE DISPOSAL SYSTEM** P 558099

APPROVAL DATE: _____ **PERMIT:** **REPAIR** A _____

PROPERTY ADDRESS: 1140 Shaffersville Road

SUBDIVISION: _____ LOT: _____ TAX ID: 04-324099

CONTRACTOR: Fogle's Septic Clean Inc. EMAIL: kevin@foglesinc.com

CONTRACTOR ADDRESS: 580 Obrecht Road, Sykesville, MD 21784 PHONE: 410-795-5670

PROPERTY OWNER: Tamer Fisgin EMAIL: _____

OWNER ADDRESS: 1140 Shaffersville Road, Mount Airy, MD 21771 PHONE: 410-294-2241

SEPTIC TANK SIZE (GALLONS): Host 600 PUMP CHAMBER CAPACITY (GALLONS): _____ PUMP SIZE: _____

NUMBER OF BEDROOMS: 4 HOUSE SQ. FT. _____ APPLICATION RATE: _____

DISTRIBUTION SYSTEM: GRAVITY FED LOW PRESSURE DOSED

TRENCHES:	LINEAR FEET REQUIRED: _____	INLET DEPTH: _____
	TRENCH WIDTH: _____	MAXIMUM BOTTOM DEPTH: _____
	MINIMUM SPACE BETWEEN TRENCHES: _____	EFFECTIVE AREA BEGINNING DEPTH: _____
	LOCATION: TO BE STAKED BY SANITARIAN DURING PRE-CONSTRUCTION INSPECTION.	
NOTES:	<u>5' deep 3' stone 12' wide x 20'</u>	

ISSUED BY: _____ ISSUE DATE: _____ EXPIRATION DATE: _____

- 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 _____
- 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.

NOT TO SCALE

TRENCH/DRAINFIELD DATA

WIDTH _____ INLET _____ BOTTOM _____

NUMBER OF TRENCHES _____

TOTAL LENGTH _____

ABSORPTION AREA _____

DISTRIBUTION BOX LEVEL _____

DISTRIBUTION BOX BAFFLE _____

DISTRIBUTION BOX PORT _____

SEPTIC TANK DATA

SEPTIC TANK 1 LEVEL _____

MANUFACTURER _____

CAPACITY _____ GAL

SEAM LOC _____

TANK LID DEPTH _____

BAFFLES _____

BAFFLE FILTER _____

MANHOLE LOC _____

6" PORT LOC _____

WATERTIGHT TEST _____

SLOTTED _____

DATE ON LID _____

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 _____

ROAD NAME

PRE-CONSTRUCTION:

INSTALLATION:

FINAL INSPECTOR _____, DATE OF APPROVAL _____

Howard County Health Department

Bureau of Environmental Health, Ellicott City, Maryland 410-313-2640

SEWAGE DISPOSAL PERMIT NO. A- _____ P- 558099

PERMITTEE

Fogle's Septic Clean Inc.

LOCATION

1140 Shaffersville Road

Tamer Fisgin

Do Not Cover Work Until Health Department Approval Appears On This Card

POST THIS CARD WHERE IT CAN BE SEEN FROM ROAD

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

WORK IS SATISFACTORY, CONTINUE

Inspector _____

Date _____

Inspector _____

Date _____

FINAL INSPECTION MADE, COVER ALL WORK

Inspector _____

Date _____



MAYER BROS., INC.

Precast Concrete Products

6264 Race Rd. Elkridge, MD 21075

Letter of Satisfaction Hoot System Installation

Address of Property: 1140 Shaffersville Rd.
MT. Airy MD. 21771

Date of Final Inspection: 2/27/17

Installer: Fogles

Hoot Technician/Inspector: Mike Sample

I hereby certify that the Hoot system installed at the property listed above has been installed according to proper Hoot installation practices. I have also verified the startup of the system and it is in proper working order.

Sincerely,

H. Michael Dargatzis

Name of Inspector
Mayer Bros., Inc.

*NO Power in House at Start-up
System Started with Generator*

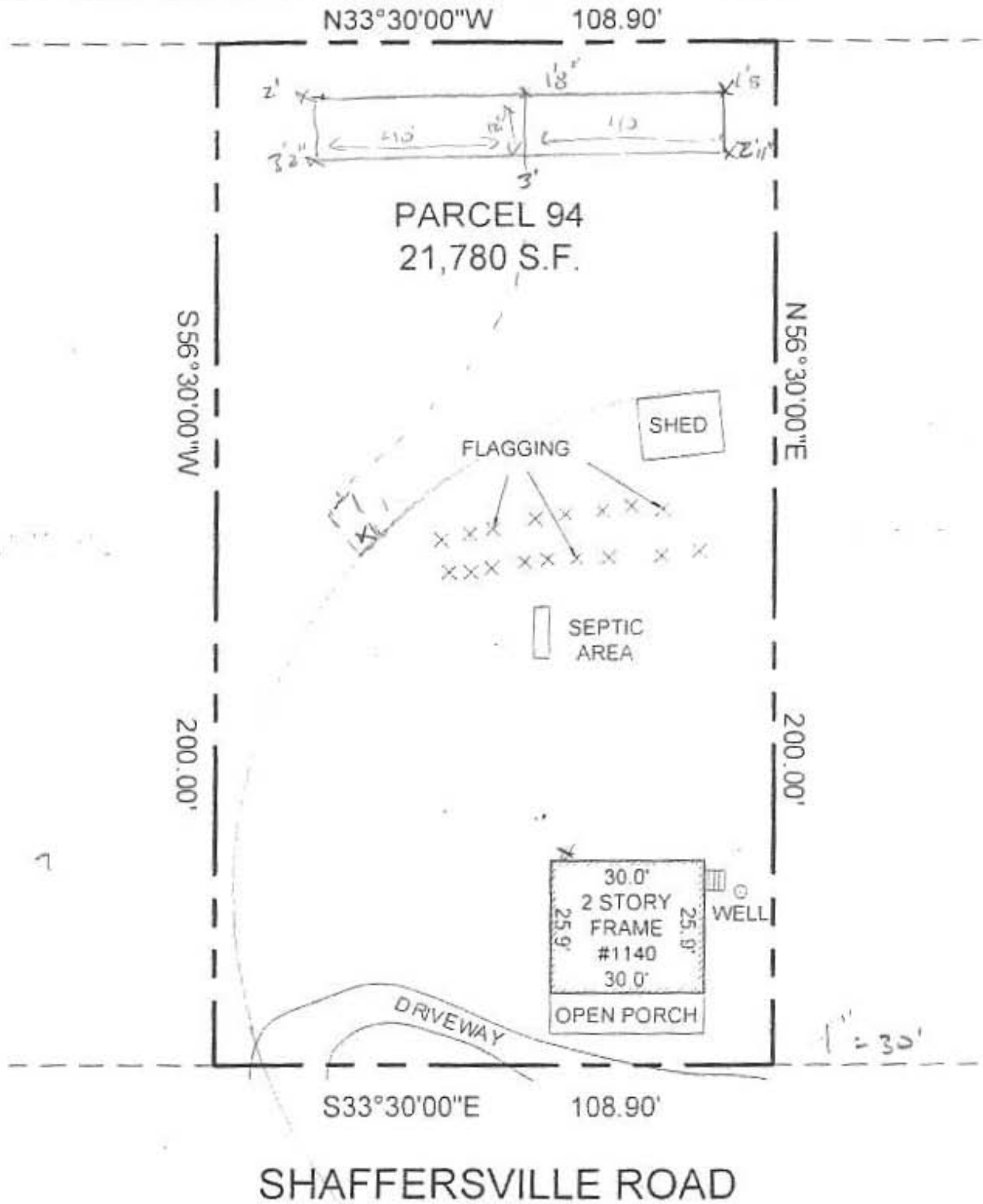
Faxed 3/1/17

PH: 410-796-1434

FX: 410-796-1438

WBE

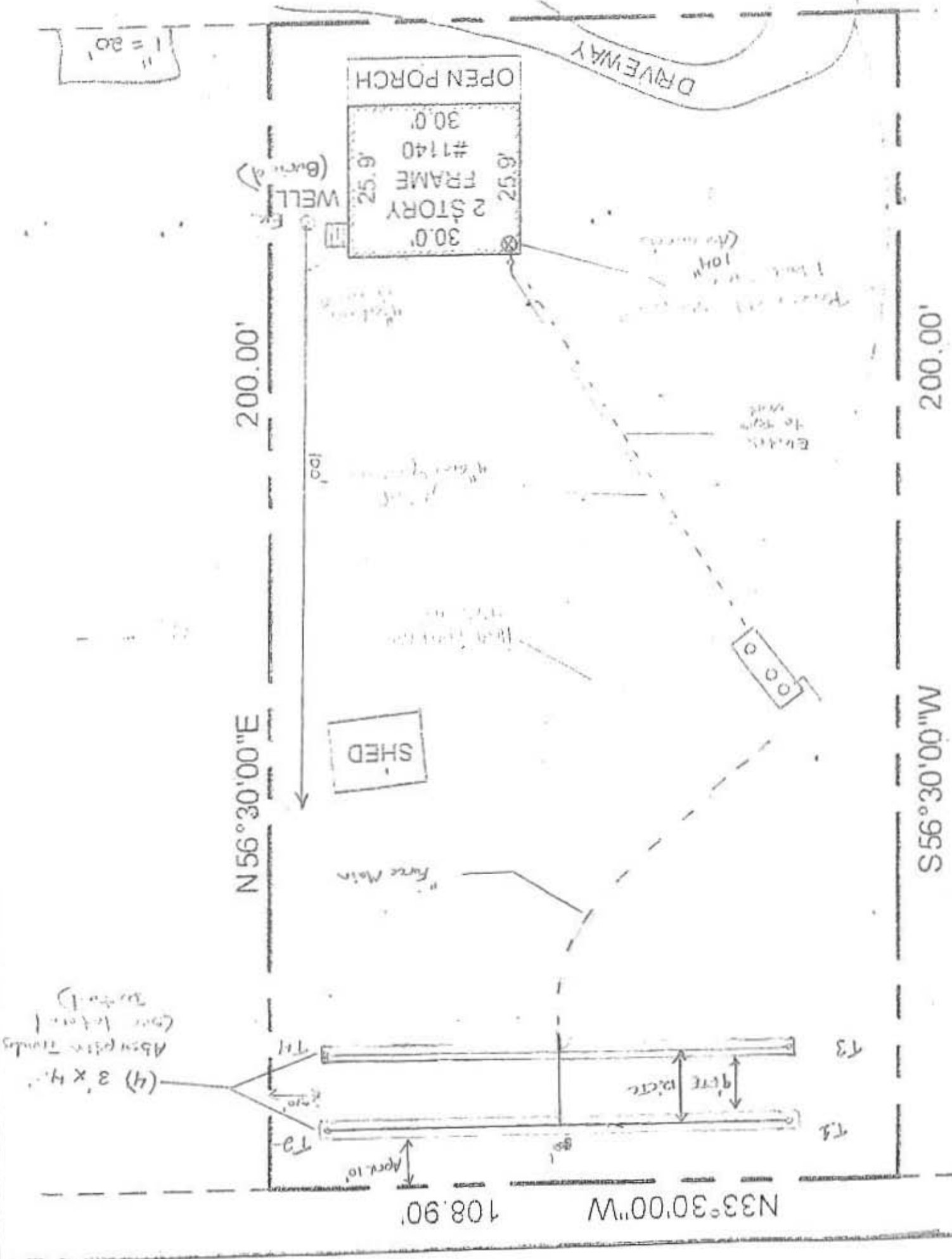
www.mayerbrosprecast.com

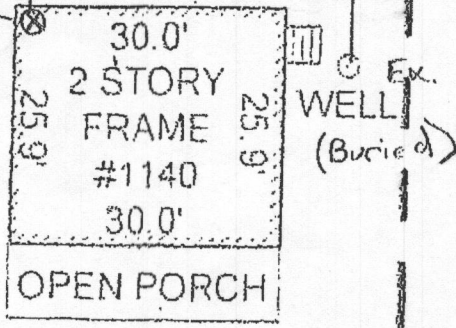
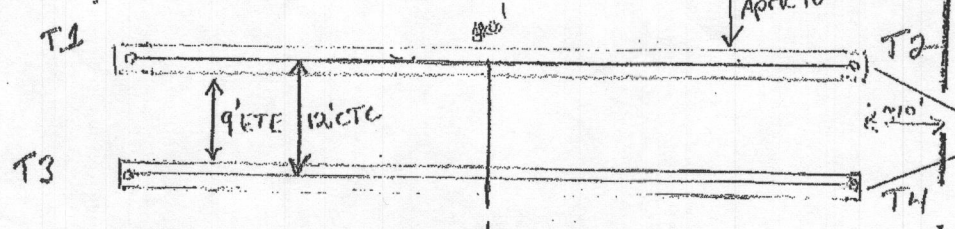
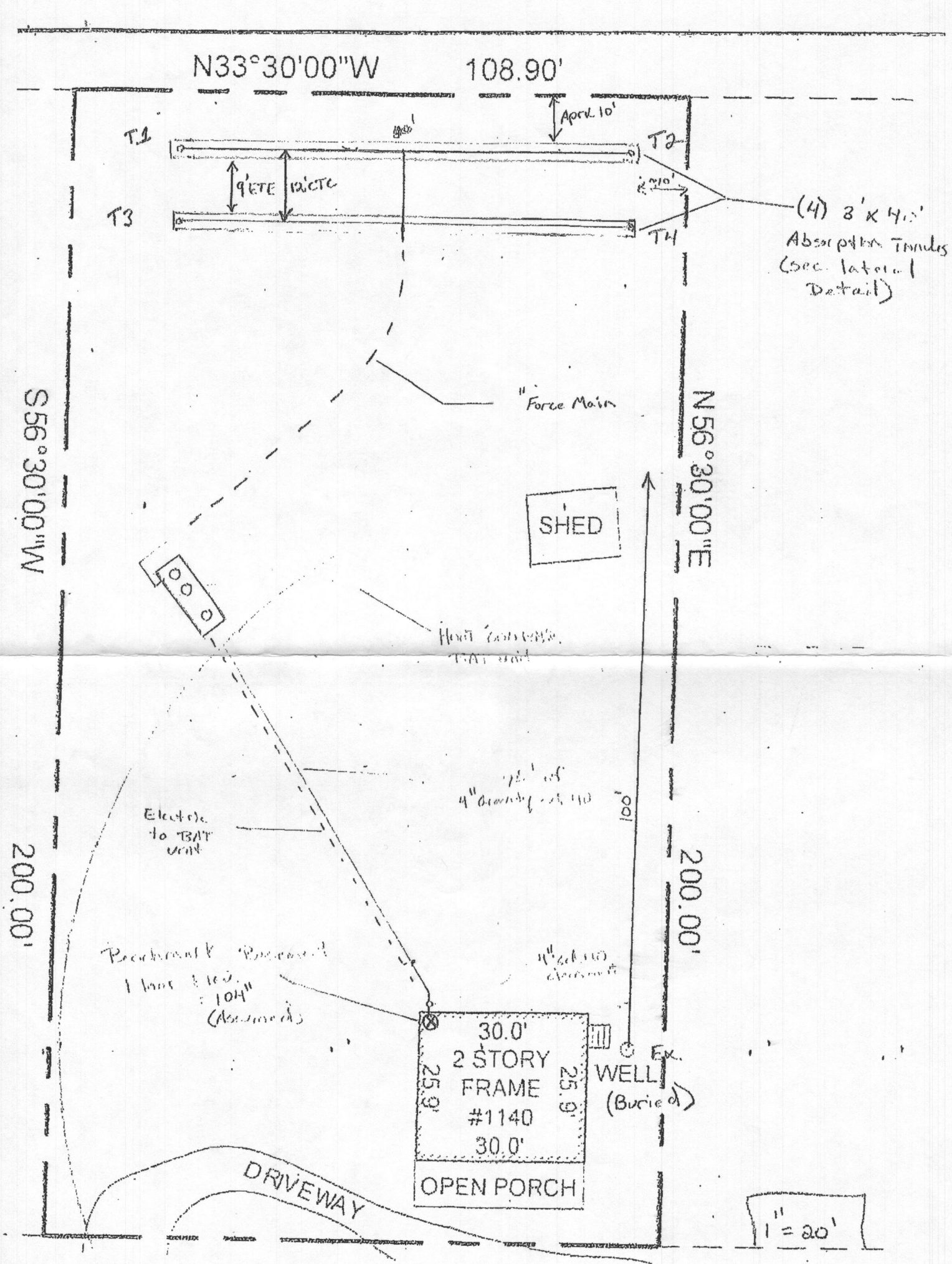


THIS IMPROVEMENT LOCATION DRAWING:
 IS OF BENEFIT TO A CONSUMER ONLY INsofar AS IT IS REQUIRED BY A LENDER OR A TITLE INSURANCE
 AGENT IN CONNECTION WITH CONTEMPLATED TRANSFER, FINANCING OR REFINANCING;
 IS NOT TO BE RELIED UPON FOR THE ESTABLISHMENT OR LOCATION OF FENCES, GARAGES, BUILDINGS, OR
 FUTURE IMPROVEMENTS; AND
 DOES NOT PROVIDE FOR THE ACCURATE IDENTIFICATION OF PROPERTY BOUNDARY LINES, BUT SUCH IDENTIFICATION
 IS REQUIRED FOR THE TRANSFER OF TITLE OR SECURING FINANCING OR REFINANCING.
 THE LEVEL OF ACCURACY OF APPARENT SETBACK DISTANCES IS ONE FOOT, MORE OR LESS.
 THIS PLAT WAS PREPARED WITHOUT BENEFIT OF A TITLE REPORT.
 SUBJECT TO ALL EASEMENTS ON RECORD.
 A BOUNDARY SURVEY IS RECOMMENDED TO ACCURATELY LOCATE BOUNDARY LINES, HOUSE AND IMPROVEMENTS.

HEREBY CERTIFY THAT IMPROVEMENTS ARE
 LOCATED AS SHOWN HEREON AND TO THE BEST
 OF MY INFORMATION, PROFESSIONAL KNOWLEDGE
 AND BELIEF, THERE ARE NO ENCROACHMENTS
 ON THIS PLAT AS SHOWN.

LOCATION DRAWING
PARCEL 94
LIBER 233 FOLIO 486
 HOWARD COUNTY





1" = 20'