



Any trees that need to be removed for trench installation must be removed in accordance with Health Department requirements. Please contact the local Health Department for more information.

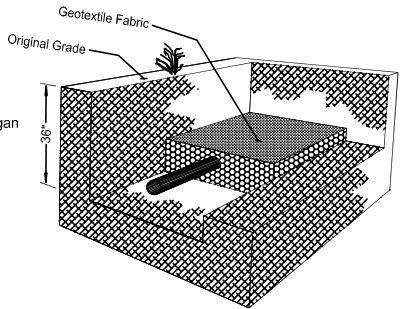
= Elevation Bench Mark 847.25'

= Location of Soil Borings

The beginnings and ends of all trenches are flagged on-site with orange Meade Septic Design Flags.

Cross Sectional View of Trench

Maximum Trench Depth 36"
4" Perforated ASTM-D 2729 Pipe
6" of Washed Stone 5C Indiana, 6C Michigan under the pipe
2" of Washed Stone Under Pipe
Total Trench Depth 12"



Do not install this system unless this version of the plan has been approved by the Health Department.

Note: The area of the proposed absorption field must be protected from compacting, grading, filling or other types of soil disturbances that may adversely effect the soil's structure and drainage properties.

Utilities are not shown on this design and must be located before excavation begins. This is the responsibility of the person doing the digging! Call 811 to have Utilities Located. Excavator must confirm the location of all wells before construction begins. Subject to Right-of-Ways, Easements and Restrictions of Record. This plot plan was created for the purpose of septic design only.

The use of antibacterial products (including soaps) may adversely impact your septic tank.

Glue all pipe to manufacturer's specifications.

This septic system is sized using an estimated daily flow rate as designated by Michigan's Criteria for On-site Wastewater Treatment. Actual flow rates in excess of this daily design rate are likely to cause premature failure of the system. Water from foundation drains (and other clean water discharges) MUST NOT discharge into the septic system or on top of the absorption field. Do not send softener recharge/dischage water to the trash tank. Salt in the ATU can impede the growth of the beneficial aerobic bacteria. Route this water around the trash and ATU tanks.

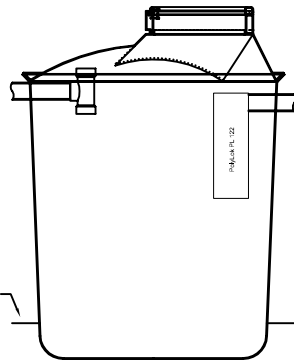
Check with your local Health Department for alternative discharge options.

Effluent Sewers: Effluent sewer pipes shall be stabilized bedded and backfilled without damaging the pipe with debris-free soil material to prevent the movement of effluent along the outside of the pipe.

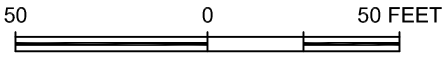
Pumps: "Installed in a manner as to allow for removal without entering or dewatering the the dose tank" Pumps "shall be provided with a suitable means of quick, convenient disconnection from the discharge piping." "Fittings and valves shall be of compatible corrosion resistant material."

Electrical Connections: All electrical connections should be located outside the tank and riser and inside a weather proof junction box. Junction boxes inside the riser "shall be rated as a NEMA 4X, National Electrical Manufacturers Association, NEMA 250-2003. All connectors to the junction box shall form a watertight seal."

Aero-Tech Fiberglass 835 gal. Trash Tank



6" Dia. Anti-Flotation Rings on all Fiberglass Tanks



SCALE: 1" = 50'

General Information:

Number of Bedrooms: 5

Design Based on Soil Report and Michigan's Criteria for On-Site Wastewater Treatment

5 Bedroom House with 750 gpd Estimated Flow

Proposing Secondary Treatment Using Aero-Tech ATU (BOD 5 mg/L, TSS 6mg/L)
750 sq. ft. of Absorption Field
Based on 1.0 Loading Rate Per Michigan Criteria
36 inch Maximum Trench Depth

Aero-Tech's NSF 40 Technology Report and Owner's Manual Available On-Line at <http://www.meadesepoticsupply.com>

Material Key:

- 1 Gravity Sewer:

4" dia.
26 feet
ASTM-D 2665-09 Sch 40
- 2 835 Gallon Fiberglass Trash Tank by Aero-Tech:

Trash Tank Equipped with Effluent Filter on Outlet With Riser to the Ground Surface
- 3 Effluent Sewer:

4" dia.
2 feet
ASTM-D 2665-09 Sch 40
- 4 Fiberglass AT-750 Aerobic Treatment Unit by Aero-Tech:

NSF 40 Certified ATU for 750 gallons per day
AT-750 Liquid Volume = 1165 gal.
- 5 Dosing Tank:

500 gal. polly Dosing Tank by Aero-Tech
- 6 Force Main:

2 inch dia. From Pump to D-box
140 Feet - Pump to D-Box
ASTM-D 1785
Drains back to the dosing tank between doses
- 7 Distribution Box:

6 Outlet Distribution Box by Tuff-Tite
Inlet equipped with sweeping tee that extends within 2" of the bottom of the Box.
- 8 Header Pipes:

4" dia.
ASTM-D 3034-08 SDR 35
All Header Pipes must slope to laterals
- 9 Absorption Field:

Max. Trench Depth: 36 Inches
Number of Trenches: 5
Length of Trenches: 50 Feet
Linear Footage: 250 Feet
Absorption Field sq.ft. 750
Perforated Pipes are 4 inch dia. ASTM-D 2729-03 or ASTM-F 810-07

Elevation Key:

See the drawing for Elevation Bench Mark information

- 1 Gravity Sewer:

Exits House I.E. 845.50
Inlets Trash Tank I.E. 844.83
(8 inches of fall to tank)
- 2 Trash Tank:

Trash Tank Inlet I.E. 844.83
Trash Tank Outlet I.E. 844.58
- 3 Effluent Sewer:

Outlets Trash Tank I.E. 844.58
Inlets ATU I.E. 844.50
(1" of Fall to ATU)
- 4 ATU:

ATU Inlet I.E. 844.50
ATU Outlet I.E. 844.50
- 5 Dosing Tank:

Dosing Tank Inlet I.E. 844.5
Dosing Tank Outlet I.E. 844.25
Tank Floor 839
Pump Off Elevation 840.16
(See Page 2 For More Details)
- 6 Force Main:

Outlets Dosing Tank at I.E. 844.25
Inlets D-box at I.E. 858.51
- 7 Distribution Box:

Inlets D-box at I.E. 858.51
D-box Outlet I.E. 858.43
- 8 Header Pipes:

Header Pipes Outlet D-box at I.E. 858.43
& Connect to Trench Laterals at Their Perspective Inert Elevations.
All Header Pipes must slope to laterals
- 9 Absorption Trenches:

	Beginning	Middle	End	Perf. Pipe I.E.	Trench Btm.
A	859.8	860.57	860.85	859.35	857.85
B	859.92	859.77	860.45	857.95	857.45
C	859.81	859.69	859.99	857.49	856.99
D	859.6	859.37	859.61	857.11	856.61
E	859.57	859.27	859.51	857.07	856.57

- 04-17-13

Various revisions
- 03-12-13

Added three proposed wells (one for each house)
- 03-10-13

Moved tanks & building sewer location
- 03-01-13

Revised well location, separation distance & added reserve areas

DATE	REVISION
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DATE 12/03/12	ISLAND HILLS HOME TWO 1_2629.DWG
SCALE 1" = 50'	PAGE 1 of 2 Job# 2450