

BrownPrecast

a division of Brown-Wilbert, Inc.



HootSystems.com

Product Reference Guide

H-Series Treatment System



HOOT SYSTEMS, LLC

H-Series Treatment System



Size: 600 GPD

When to use the H-Series:

- There is high groundwater or shallow bedrock
- There is not enough land available for a traditional septic system
- A higher quality effluent is needed
- Soil conditions are not right for drainfields

System Performance:

- 98% Reduction of CBOD₅ (Carbonaceous Biochemical Oxygen Demand)
- 99% Reduction of TSS (Total Suspended Solids)
- 99% Conversion of Ammonia (NH₃) to Nitrate
- Fecal coliform bacteria < 1,000 cfu/100mL without disinfection
- Fecal coliform bacteria < 200 cfu/100mL with disinfection
- Up to a 20-40% drainfield size reduction
- Treatment Level A with Ultraviolet (UV)
- Treatment Level B without Ultraviolet (UV)

Minnesota Soil Credits:

Level B = 1 Foot of Soil Separation Credit

- From 3 feet to 18 inches
- Without need for disinfection
- 20 to 40% footprint reduction (soil dependent)

Level A = 2 Foot of Soil Separation Credit

- From 17 inches to 12 inches
- Requires UV disinfection
- 20 to 40% footprint reduction (soil dependent)

For more information on drainfield sizing see MN Rules: 7080.2150, 7080.2210, and/or 7080.2350 for a starting reference.

High performance, low cost, and an energy efficient treatment system

The H-Series Treatment System provides high performance at a price comparable to most entry level Aerobic Treatment Units (ATUs). Producing effluent of less than 3 mg/L on CBOD₅ and 2 mg/L on TSS, it far exceeds the secondary standards of 25 mg/L on CBOD₅ and 30 mg/L on TSS. With these results, Minnesota allows reduction in the size of disposal areas in the range of 20-40% based on soil conditions. In addition, our standard system gets a 1-foot drainfield reduction and the Hoot System with UV gets a 2-foot credit lowering and, in some cases, eliminating drainfield mounds.

Simple installation, reliable performance, and a low cost of ownership

This level of performance is enhanced by its simple installation, energy efficient performance and low cost long term maintenance and ownership. The Hoot System is constructed from over 5,000 PSI strength concrete and the components are meticulously assembled at Brown Precast's manufacturing facilities, rather than in the field, to ensure reliable performance with local support.

Energy efficient and environment protection

The H-Series features an energy efficient linear compressor that uses less power than an average light bulb. Its polyethylene clarifier hopper is made out of recycled milk jugs. Choose Hoot, and you make a sensible decision to the protect the environment as you protect our planet's most precious resource, water.

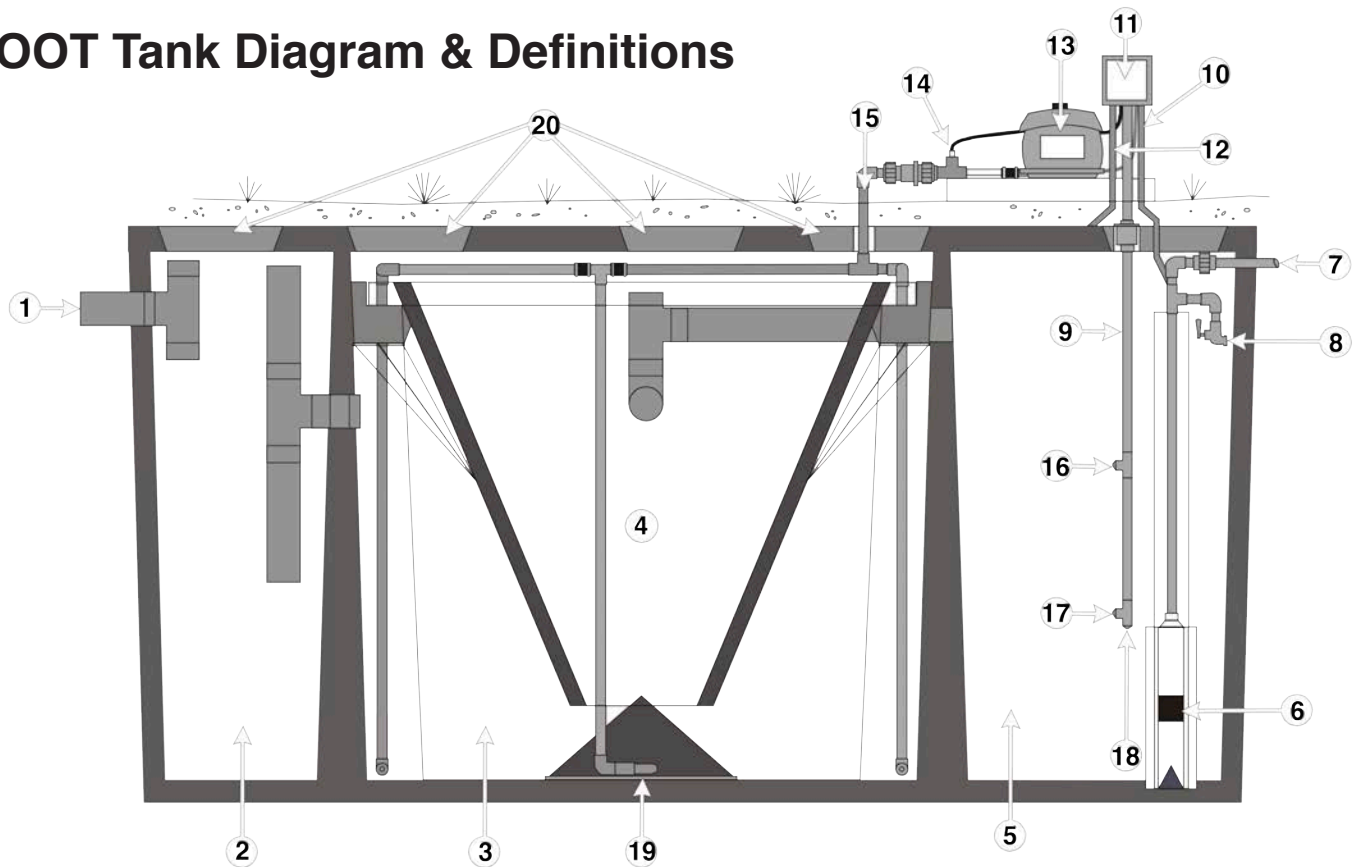
Made for any disposal application

Advanced treatment systems have pumped discharge, and the H-Series allows you to choose your disposal application, from pumped lateral lines, leaching chambers, or other alternative drainfield materials such as drip irrigation.

Make the green choice for wastewater treatment and choose a Hoot System

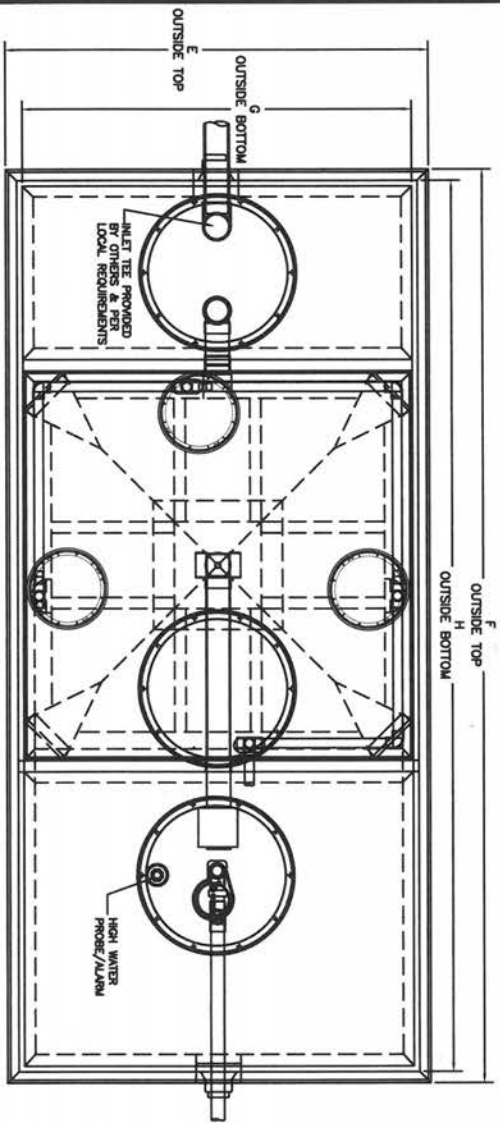
Visit **BrownPrecast.com** for more information.

HOOT Tank Diagram & Definitions

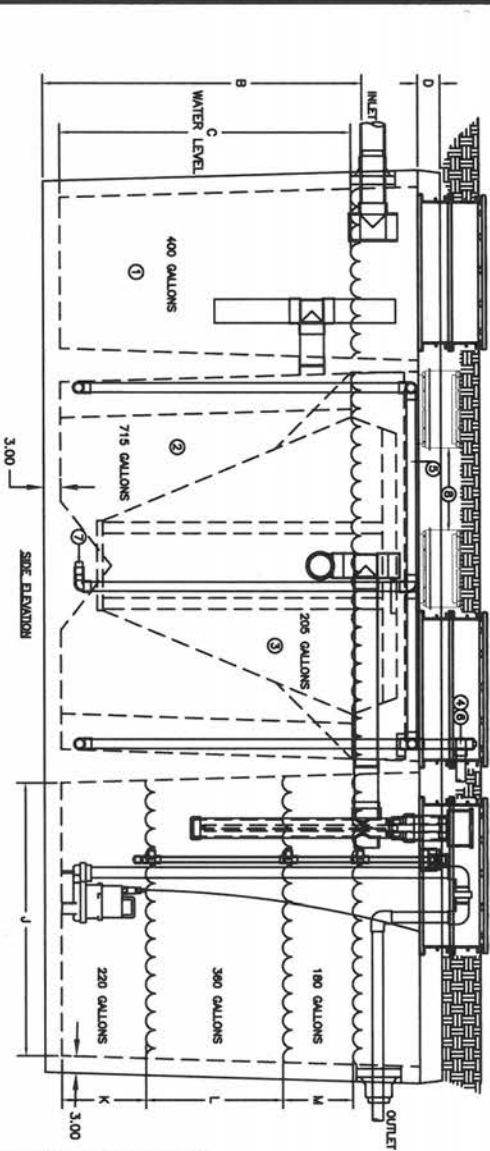


1. **Inlet:** where the wastewater enters the system from the home.
2. **Pretreatment Tank:** where anaerobic digestion occurs and storage for non-biodegradable materials.
3. **Aeration Chamber:** where air is introduced into the sewage for digestion.
4. **Clarifier:** a still chamber where solids settle out and the clear effluent rises.
5. **Pump Tank:** where the treated and disinfected effluent is stored prior to discharge.
6. **Effluent Pump:** how the treated water is discharged from the system.
7. **Discharge Line:** to the disposal method prescribed by law or chosen by installer.
8. **Sampling Port:** used by service personnel to inspect effluent quality.
9. **Probe:** turns the pump on and off based on water level.
10. **Pump Wire:** from pump to the control panel.
11. **HOOT System Controller:** operates and regulates the control of the system.
12. **Power Line (30 Amp):** independent breaker provided by homeowner, builder or qualified electrician, necessary for proper operation of the system.
13. **Troy Air Linear Air Blower:** long life, efficient linear blower which compresses atmospheric air and under pressure delivers it to the tank.
14. **Air Manifold:** delivers the air from the line to the aeration stones for diffusion into the sewage.
15. **Aeration line:** delivers the air from the pump to the manifold.
16. **High Water Probe:** turns the pump on – also an alarm probe if pump fails to come on.
17. **Low Water Probe:** the off switch for the pump.
18. **Probe Ground:** generates the low level signal in the water which is sensed by probes.
19. **Aeration Stone:** air is finely diffused from the stone into the aeration chamber.
20. **15" Covers:** provide access to each component of the system. Are usually brought to grade level to meet local regulations and for serviceability.

Please note: the diagram above may vary slightly from the delivered product(s).



PLAN VIEW

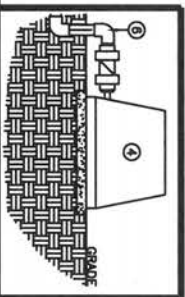


CRITICAL DIMENSIONS	
A	69.00"
B	57.00"
C	52.00"
D	4.00"
E	75.50"
F	161.00"
G	66.50"
H	152.00"
J	48.50"
K	15.00"
L	24.50"
M	12.50"

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) 12" COVERS - PROVIDE ASSEMBLY ACCESS INSIDE OF SYSTEM. (NOT USED FOR REGULAR SERVICE OR BROUGHT TO GRADE)

TROY AIR BLOWER



HOOT SYSTEMS, LLC
www.hootsystems.com

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DESCRIPTION: 600 GPD PUMP DISCHARGE SYSTEM 3" WALL

H-600A w/ 760 GAL. P.T.+ SALCOR UV

PART #

DATE: 06-19-2014

DRAWN BY: AV

CHECK BY: RS

SCALE: N.T.S.

H-600A-760
SALCOR UV