# Residential Subsurface Wastewater Treatment and Disposal System Proposal

**for**

**Lot 41 – Hidden Valley**
**50 Talbert Drive**
**Holly Springs, Harnett County, NC**

Tax Parcel #0625-33-4823
July 6, 2022

**Prepared for:**

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**Prepared by:**

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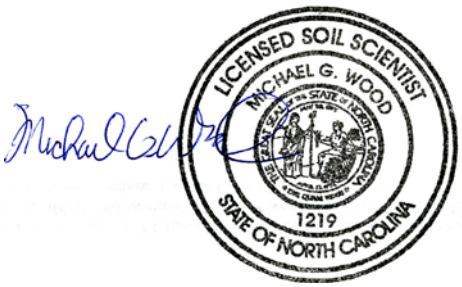



The LSS Evaluation attached to this application is to be used to produce design and construction features for permitting in accordance with SL 2018-114 Section 11.(c).

## Details

Build Atmos has contracted with Michael Wood, LSS to prepare Session Law 2018-114 Section 11 (c) septic proposal for the 4-bedroom single family residence on Lot 41 Hidden Valley located at 50 Talbert Drive, Harnett County, North Carolina.

Based upon the soils investigation by Michael Wood, it has been determined that a sufficient amount of "Suitable" Group IV soils is available for the installation of Pump-to **Accepted System** with a 25% reduction for the initial system at a 0.30 GPD/ft. sq. long term acceptance rate (LTAR). The repair will be a Horizontal – Prefabricated Permeable Block Panel System (H-PPBPS) at a 0.3 LTAR. The property is served by private well.

Build Atmos requests that Harnett County Environmental Health issue the appropriate permits for a subsurface wastewater treatment and disposal system based upon the following proposal and the enclosed Licensed Soil Scientist Evaluation, which is being submitted pursuant to and meets the requirements of SL 2018-114 Section 11. (c).

Location

From Lillington, Main Street north to intersection with W Cornelius Harnett Blvd. Left onto W Cornelius Harnett Blvd (US 401) for 4.4 miles, then left onto Christian Light Road for 4.4 miles, then left onto Cokesbury Road. In 3.6 miles, left on Ball road, left onto Hidden Valley Drive in 1.3 miles, then first right onto Talbert Drive. Lot 41 will be on right in 312 feet.

References

*Laws and Rules for Sewage Treatment and Disposal Systems, 15A NCAC 18A, Section .1900, Department of Environment and Natural Resources, Division of Environmental Health, On-site Wastewater Section,* December 6, 2018.

*Accepted Wastewater System No. AWWS-2005-02-R6; North Carolina Department of Environment and Natural Resources, Division of Environmental Health, On-Site Wastewater Section,* August 21, 2015.

Primary Investigator's Credentials

NC Licensed Soil Scientist No. 1219
SC Professional Soil Classifier No. 114

## Plans and Specifications

A. Septic Tank

1. The septic tank shall be State approved (Section .1953 of 15A NCAC 18A), watertight, structurally sound, and 1,000 gallons in capacity.
2. The septic tank will be fitted with an approved effluent filter and riser for easy access and periodic maintenance.
3. It is the responsibility of the septic contractor to thoroughly inspect the septic tank prior to accepting delivery to assure that the tank has had time to properly cure and is free of cracks or other structural deficiencies.

B. Pump Tank

1. The pump tank shall be State approved, of one-piece construction, watertight, structurally sound and 1,000 gallons capacity. Again, it is the responsibility of the septic tank contractor to thoroughly inspect each pump tank prior to accepting delivery.
2. All pipe penetrations into the tank shall be booted (i.e., C-293 boot with a stainless-steel strap).
3. The pump tank shall have access risers that extend, at a minimum, 6 inches above finished grade and must have less than 36 inches of fill over its top once finished grade has been established (a reinforced concrete tank will be required if finished soil cover is 36 inches or greater in depth).
4. Floats, pump and control circuits, and the control panel shall meet the requirements of Rule .1952(c). Panel and control equipment shall include lightning protection, be protected from unauthorized access, and always remain accessible to the system operator.
5. The pump and alarm controls shall be provided with manual circuit disconnects within a watertight, corrosion resistant, NEMA 4x rated control panel. The control panel must be securely mounted outside, adjacent to the pump tank riser and at a minimum of 12 inches above finished grade. Pump and float control wiring should be long enough to reach from the tank to the control panel without splicing, routed through wire conduit, and sealed at the openings within the pump tank as well as the control panel enclosure. It is paramount that the conduit is properly sealed to prevent the escape of flammable gases from the pump tank. Furthermore, there must be two electrical circuits for the pump tank controls: one for the pump and one for the alarm controls.
6. Float switch tie downs must be made of a corrosion resistant material (per OWPS, all metal in the tanks shall be stainless steel). Floats should be mounted on a separate "float tree" rather than the pump supply line (see pump tank detail).
7. The pump removal system will be via a pump tether made of nylon rope or its equivalent. The tether material should be resistant to mildew and rot.

C. Pipes and Fittings

1. All discharge piping, connectors and supply lines should be made of SCH 40 PVC.

2. All joints must be properly "welded" utilizing the appropriate PVC cement for each application.
3. The supply line from the pump tank to the pressure manifold shall be 2-inch Schedule 40 PVC (supply line is approximately 190 feet).
4. There shall be a threaded PVC union above each pump to facilitate easy removal of the pumps for maintenance or replacement.

D. Distribution Method – Pressure Manifold

1. The system will be fed by a pressure manifold.
2. The pressure manifold shall be contained within an adequately sized box/vault that will allow future repair lines to be installed and is designed to allow for drainage of effluent that may accumulate in it during flushing and head pressure adjustments. The box should be placed upon a gravel base.
3. A gate valve shall be provided at the pressure manifold box to allow for final pressure adjustment (2 foot of head pressure as per design).
4. The pressure manifold shall be constructed of SCH 80 PVC.
5. There shall be 7 taps; (3) 1/2in SCH 80 and (4) 1/2in SCH 40
6. The connecting pipe between the pressure manifold taps and the drainfield shall be constructed of PVC.

E. Drainfield Installation

1. The drainfield has been previously laid out on-site utilizing metal stemmed flags. The property owner/builder should mark this area and isolate it as much as possible from construction traffic
2. Under no circumstances shall any construction take place within the drainfield area while the soil is in a wet condition.
3. The specified system the shallow placed innovative wastewater system Infiltrator Quick4 Chamber System.
4. The drainfield consists of seven (7) lateral trenches 3-foot wide and 46, 46, 46, 65, 66, 66, and 65' long.
5. The trench depth for this system shall be **19-inches on the low side of trench**.
6. The laterals are to be installed on contour with the land, keeping the individual trench bottoms level from beginning to end.
7. The trenches should be left open for the final inspection by the County.
8. Each trench shall be placed on a minimum of 9-foot on centers.

| Initial System - Lot 41 Hidden Valley | | | | | | |
|---|---|---|---|---|---|---|
| Field Line # | Color | Initial/Repair | Field Length | System Length | Setup #1 | Relative Elevation |
| 1 | Blue | Initial | 53 | 46 | 8.83 | 98.3 |
| 2 | White | Initial | 65 | 65 | 9.91 | 97.2 |
| 3 | Pink | Initial | 46 | 46 | 10.81 | 96.3 |
| 4 | Blue | Initial | 48 | 46 | 12.2 | 94.9 |
| 5 | White | Initial | 79 | 66 | 7.2 | 99.9 |
| 6 | Pink | Initial | 88 | 66 | 8.55 | 98.6 |
| 7 | Blue | Initial | 65 | 65 | 10.37 | 96.7 |
| | | Benchmark = PIN back right corner | | | 7.1 | 100 |
| **Repair System - Lot 41 Hidden Valley** | | | | | | |
| 8 | Blue | Initial | 60 | 46 | 7.77 | 97.8 |
| 9 | White | Initial | 90 | 65 | 9.55 | 96.0 |
| 10 | Pink | Initial | 60 | 46 | 11.1 | 94.4 |
| 11 | Blue | Initial | 60 | 46 | 13 | 92.5 |
| | | Benchmark = PIN front left corner | | | 5.54 | 100 |

F. Final Landscaping

1. Final cover over the drainfield shall be at least 6-inches deep. Additional soil cover may be required to achieve the 6-inch requirement.
2. The drainfield shall be shaped to shed rainwater and be free from low spots.
3. The entire area of the drainfield should be planted with grass as soon as possible to prevent erosion. The soil should be properly tilled, limed (if necessary) and fertilized prior to planting. After applying grass seed, the area should be heavily mulched with straw or other suitable material.

G. Utility/Drive Conflicts

1. The builder and property owner must take special care in planning for utilities (water, power, gas, telephone, cable lines, etc.). All utilities shall be kept clear of the septic system and its proposed repair area. Improper planning for underground utilities can negatively impact the installation and, in some cases, cause irreparable damage and permit revocation. If there are any questions regarding preferred routes, contact the County as soon as possible.
2. Water lines must be kept at least ten (10) feet from any portion of the septic system.
3. Irrigation systems should not be placed in the drain field area.

## Maintenance

H. In General

The designed system does not require ongoing maintenance via a person certified (Certified Subsurface System Operator) by the North Carolina Department of Environment and Natural Resources to operate subsurface wastewater systems (Section .1961 Maintenance of Sewage Systems). However, the following maintenance should be considered by the owner.

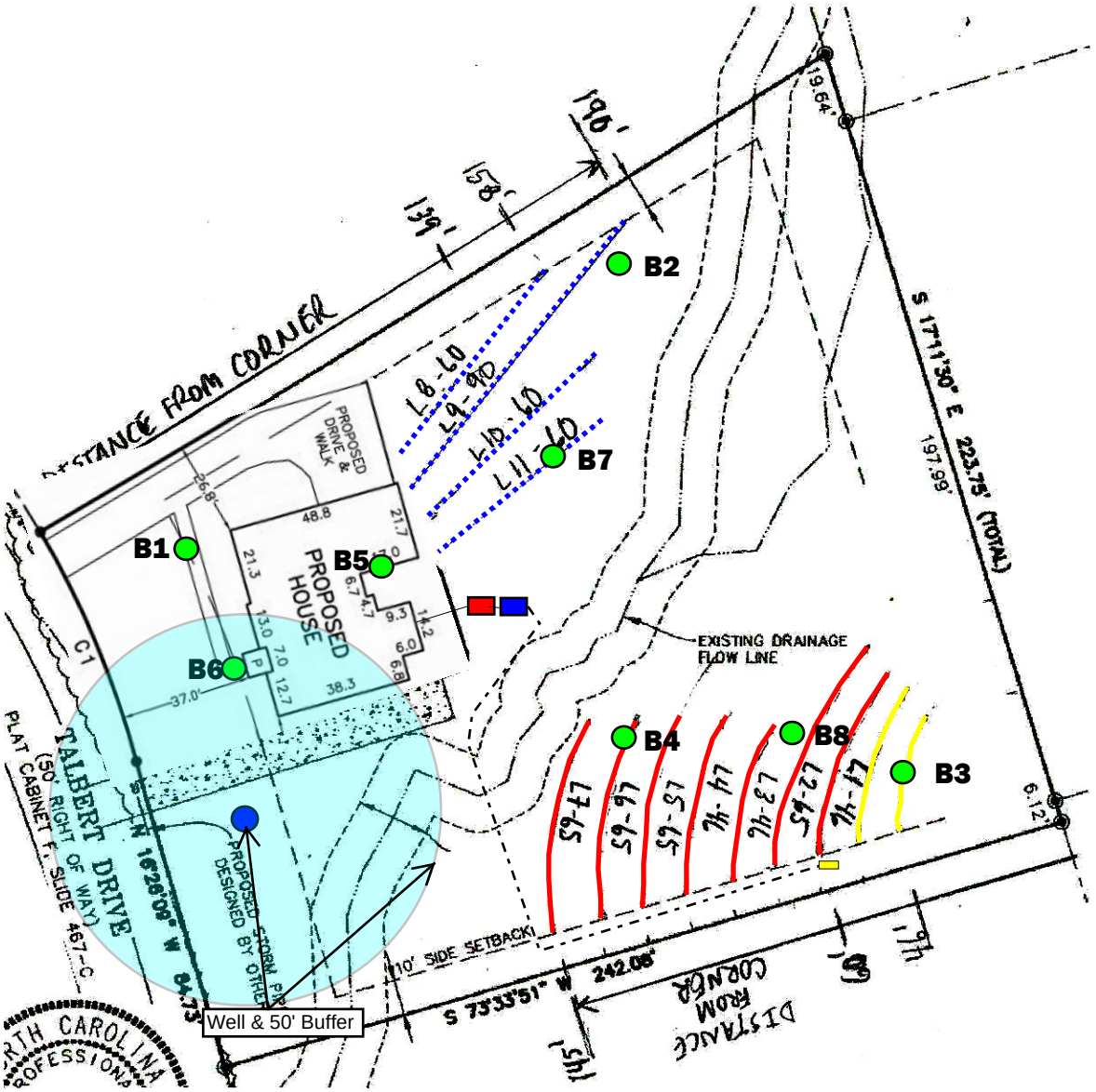
1. The homeowner must maintain the drainfield area through periodic mowing. The drainfield must not be allowed to become overgrown.
2. The septic tank should be pumped every 4 years or when the solids within the septic tank reach an elevation that is equivalent to 25% of the volume of the tank. In some situations, the tanks may need to be pumped more frequently. If you are using a garbage disposal, it is recommended that the septic and pump tanks be cleaned out annually.
3. When it becomes necessary to clean the effluent filters, the filters should be removed, and the accumulated debris washed back into the septic or pump tank – not onto the lawn.
4. Any damp areas, leakages or malfunctions in the drainfield should be addressed immediately.
5. Divert gutter downspouts and surface water runoff away from the drainfield and septic and pump tanks.

**Initial System Design Specifics**

| | |
|---|---|
| Daily Design Flow: | 480 GPD – 3 bedroom house |
| Effluent Loading Rate: | 0.300 GPD per sq. ft. |
| Drainfield Type: | Accepted (25 % Reduction) |
| Maximum Trench Depth: | 19 Inches on low-side |
| Supply Size: | 2 Inch |
| Supply Line Length: | Approximately 190 feet |
| Number of Drainlines: | 5 |
| **Drain Lines: | 3’ Wide x 46, 46, 46, 65, 66, 66, and 65’ long |
| **Drainline Spacing: | 9 Foot on Centers |
| Total Trench Length: | 400 Linear Feet |
| Distribution Method: | Pressure Manifold |
| Number of Taps: | 7 |
| Dosing Volume: | 169 Gallons |
| Pump Run Time: | 3.77 Minutes |
| Pressure Head: | 2 Feet |
| Total Elevation/Friction Head | 20.71 Feet |
| *Pump Requirements: | 44.88 GPM at 20.71 Feet TDH |
| Recommended Pump: | Goulds Pump WE03M or equiv. |

* Total Dynamic Head (TDH) for system is estimated based upon existing elevations, approximate pump off elevation, design pressure head and supply line length. Total Dynamic Head should be reconfirmed by septic contractor at the time of system installation based upon actual tank depth and pressure manifold height.
** See drainfield layout for site locations and more details.

# Figure 1. Lot 41 Hidden Valley




Initial Drainlines
Extra Drainlines
Repair Drainlines
~190' Supply Line
Septic Tank
Pump Tank
Pressure Manifold
Soil Boring
1"=50'

N

LICENSED SOIL SCIENTIST
MICHAEL G. WOOD
1219
STATE OF NORTH CAROLINA

**Repair System Design Specifics**

| | |
|---|---|
| Effluent Loading Rate: | 0.30 GPD per sq. ft. |
| Drainfield Type: | H-PPBPS (50 % Reduction) |
| Installation Trench Depth: | 17 Inches on low-side |
| Number of Drainlines: | 4 |
| **Drain Lines: | 4’ Wide x 60, 90, 60, and 60’ Long |
| **Drainline Spacing: | 9 Foot on Centers |
| Total Trench Length: | 270 Linear Feet |

** See drainfield layout for site locations and more details.

**Michael G. Wood, LSS**
620 Lee Fox Lane
Hillsborough, NC 27278



PROPERTY ID #: 0625-33-4823
COUNTY: HARNETT

LOT 41 HIDDEN VALLEY

**SOIL/SITE EVALUATION**
***for* ON-SITE WASTEWATER SYSTEM**

OWNER: KRISHNAN VAISHNAVI
ADDRESS: 50 TALBERT DR., HOLLY SPRINGS, NC 27540
PROPOSED FACILITY: RES PROPOSED DESIGN FLOW (.1949): 480
LOCATION OF SITE: 50 TALBERT DR., HOLLY SPRINGS, NC
WATER SUPPLY: ☒ Private ☐ Public ☒ Well ☐ Spring ☐ Other
EVALUATION METHOD: ☒ Auger Boring ☐ Pit ☐ Cut

DATE EVALUATED: DEC 2021
PROPERTY SIZE: 1.06
PROPERTY RECORDED:
TYPE OF WASTEWATER: ☒ Sewage ☐ Industrial Process ☐ Mixed

| PROFILE # | .1940 LANDSCAPE POSITION/ SLOPE % | HORIZON DEPTH (IN.) | SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE | SOIL MORPHOLOGY (.1941) .1941 CONSISTENCE/ MINERALOGY | OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR | .1943 SOIL DEPTH | .1956 SAPRO CLASS | .1944 RESTR HORIZ | PROFILE CLASS & LTAR |
|---|---|---|---|---|---|---|---|---|---|
| 1 | LS/9 | 0-12 | GR/VGRSL | VFR/NE | – | 32 | 32 | – | PS 0.3 |
| | | 12-23 | SBK/SC | FI/SE | | | | | |
| | | 23-32 | SBK/SCL | FR/SE | | | | | |
| | | 32+ | M/SCL | FR/SE | | | | | |
| | | | | | | | | | |
| 2 | LS/11 | 0-4 | GR/GRSL | VFR/NE | – | 35 | 35 | – | PS 0.3 |
| | | 4-26 | SBK/C | FI/SE | | | | | |
| | | 29-35 | SBK/SC | FR/SE | | | | | |
| | | 35+ | M/SC | FI/SE | | | | | |
| | | | | | | | | | |
| 3 | LS/6 | 0-10 | GR/GRSL | VFR/NE | – | >36 | – | – | PS 0.3 |
| | | 10-36+ | SBK/C | FI/SE | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| 4 | LS/6 | 0-11 | GR/VGRSL | VFR/NE | | >33 | | 33 AR (ROCK) | PS 0.3 |
| | | 11-33 | SBK/SC | FI/SE | | | | | |
| | | 33+ | AR | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| DESCRIPTION | INITIAL SYSTEM | REPAIR SYSTEM |
|---|---|---|
| Available Space (.1945) | PS | PS |
| System Type(s) | ACCEPTED | H-PPB PS |
| Site LTAR | 0.3 | 0.3 |

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948): PROV. SUBS
EVALUATED BY: M WOOD
OTHER(S) PRESENT: E. WOOD

LICENSED SOIL SCIENTIST MICHAEL G. WOOD 1219 STATE OF NORTH CAROLINA

COMMENTS:

# SOIL/SITE EVALUATION

*(Continuation Sheet-Complete all field in full)*



DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC HEALTH
ENVIRONMENTAL HEALTH SECTION
ON-SITE WATER PROTECTION BRANCH

LOT 41 HIDDEN VALLEY

PROPERTY ID #: 0625-33-4823
DATE OF EVALUATION: DEC. 2021
COUNTY: HARNETT

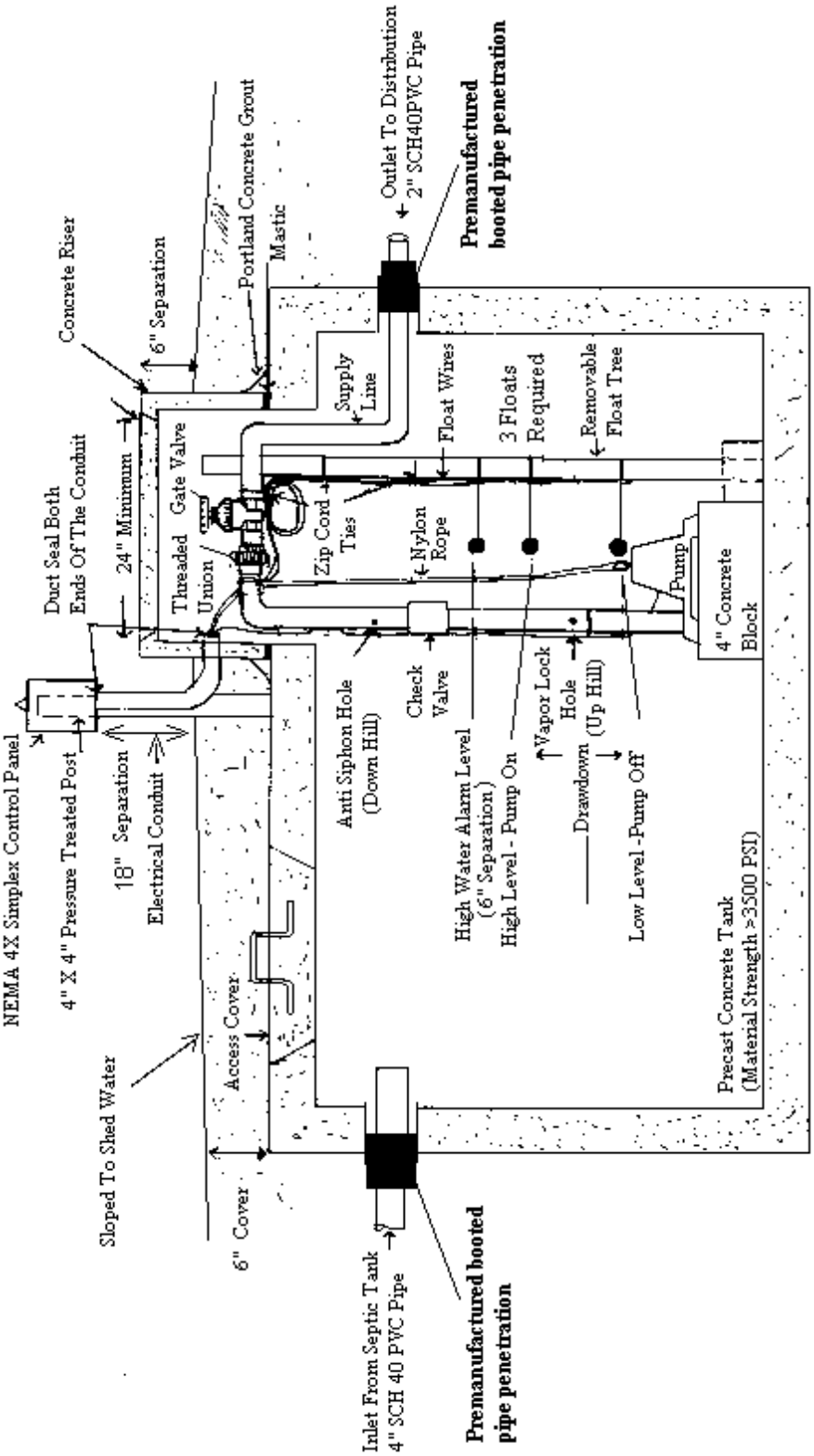
| PROFILE # | .1940 LANDSCAPE POSITION/ SLOPE % | HORIZON DEPTH (IN.) | SOIL MORPHOLOGY (.1941) STRUCTURE/ TEXTURE | SOIL MORPHOLOGY (.1941) CONSISTENCE/ MINERALOGY | OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR | .1943 SOIL DEPTH | .1956 SAPRO CLASS | .1944 RESTR HORIZ | PROFILE CLASS & LTAR |
|---|---|---|---|---|---|---|---|---|---|
| 5 | LS/9 | 0-12 | GR/VGR SL | VFR/NE | — | >29 | — | 29 AR (LOCK) | PS 0.3 |
| | | 12-29 | SBK/C | FI/SE | | | | | |
| | | 29+ | AR | | | | | | |
| 6 | LS/9 | 0-13 | GR/VGR SL | VFR/NE | — | >37 | — | — | PS 0.3 |
| | | 13-28 | SBK/SC | FI/SE | | | | | |
| | | 29-37+ | SBK/SCL | FR/SE | | | | | |
| 7 | LS/5 | 0-11 | GR/fSL | FR/NE | 10YR 6/2 31" | - | - | - | PS 0.35 |
| | | 11-15 | SBK/VGR SL | VFR/NE | | | | | |
| | | 15-33+ | SBK/SCL | FR/SE | | | | | |
| 8 | LS/7 | 0-9 | GR/GR SL | VFR/NE | — | >36 | — | - | PS 0.3 |
| | | 9-36+ | SBK/C | FI/SE | | | | | |
| | | | | | | | | | |

COMMENTS:

Michael Wood, LSS
620 Lee Fox Lane
Hillsborough, NC 27278

Lot 41 Hidden Valley

Recommended Pump Tank Design



## PRESSURE MANIFOLD DESIGN - Initial System

**Name:** Michael Wood **Address:** Hidden Valley - Lot 41

**Daily Flow:** 480 **gal/day** **L.T.A.R.:** 0.300 **gal/day/sq.ft**

**Septic Tank:** 1000 **gals** **Pump Tank:** 1000 **gals** **Sq. Foot:** 1200

**Number of Taps:** 7 **Length of Trenches:** 400 **ft(See Tap Chart for Details)**

**Depth of Trenches:** 23 **in** **Manifold Length:** 60 **in**

**Manifold Diameter:** 4in sch 80pvc **Tap Configuration: 6 in spacing** 1 **side(s) of manifold**

**Supply Line: length:** 190 **ft** **Diameter:** 2 **in sch 40pvc**

**Friction Loss + Fitting Loss:** 11.44 **ft(supply line length + 70' for fittings in pump tank)**

**Design Head:** 2 **ft** **Elevation Head:** 7.27 **ft**

**Total Head:** 20.71 **ft** **Pump to Deliver:** 44.88 **gals/min at** 20.71 **ft head**

**Dosing Volume:** 169 **gals,**

**Drawdown:** 169 **gals divided by** 20 **gals/in =** 8.5 **inches**

## TAP CHART

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Bench Mark** | 7.1 | is = 100.00 | Pump Tank location | | | | **Design Head:** | 2 | |
| **Pump tank elev.** | | | 97.00 | **Pump elev.** | 92.00 | | **Manifold elev.** | 99.27 | |
| **line** | **color** | **rod read** | **Elevation** | **length** | **hole size** | **flow/tap** | **gal/day** | **trench area** | **LINE LTAR** |
| 1 | Blue | 8.83 | 98.27 | 46 | 1/2in SCH 80 | 5.48 | 58.61 | 138 | 0.425 |
| 2 | White | 9.91 | 97.19 | 65 | 1/2in SCH 40 | 7.11 | 76.04 | 195 | 0.390 |
| 3 | Pink | 10.81 | 96.29 | 46 | 1/2in SCH 80 | 5.48 | 58.61 | 138 | 0.425 |
| 4 | Blue | 12.2 | 94.90 | 46 | 1/2in SCH 80 | 5.48 | 58.61 | 138 | 0.425 |
| 5 | White | 7.2 | 99.90 | 66 | 1/2in SCH 40 | 7.11 | 76.04 | 198 | 0.384 |
| 6 | Pink | 8.55 | 98.55 | 66 | 1/2in SCH 40 | 7.11 | 76.04 | 198 | 0.384 |
| 7 | Blue | 10.37 | 96.73 | 65 | 1/2in SCH 40 | 7.11 | 76.04 | 195 | 0.390 |
| | | **total** | **feet =** | **400** | **gal/min =** | **44.88** | | **LTAR =** | **0.300** |
| **% of Dose Vol.** | | 65 | | **Des. Flow** | 480 | | | **(ltar + 5%)** | 0.315 |
| **Dose Volume** | | 169 | | **Pump Run=** | 10.70 | | | **(ltar W/ INOV)** | 0.400 |
| **Dose Pump Time** | | 3.77 | | **Tank Gal/IN** | 20 | | | **(ltar + 5%)** | 0.420 |
| **Drawdown in Inches** | | 8.5 | | **Elev. Head** | 7.27 | | | | |
| **Supply Line Length** | | 100 | | | | | | | |

**Comments:**

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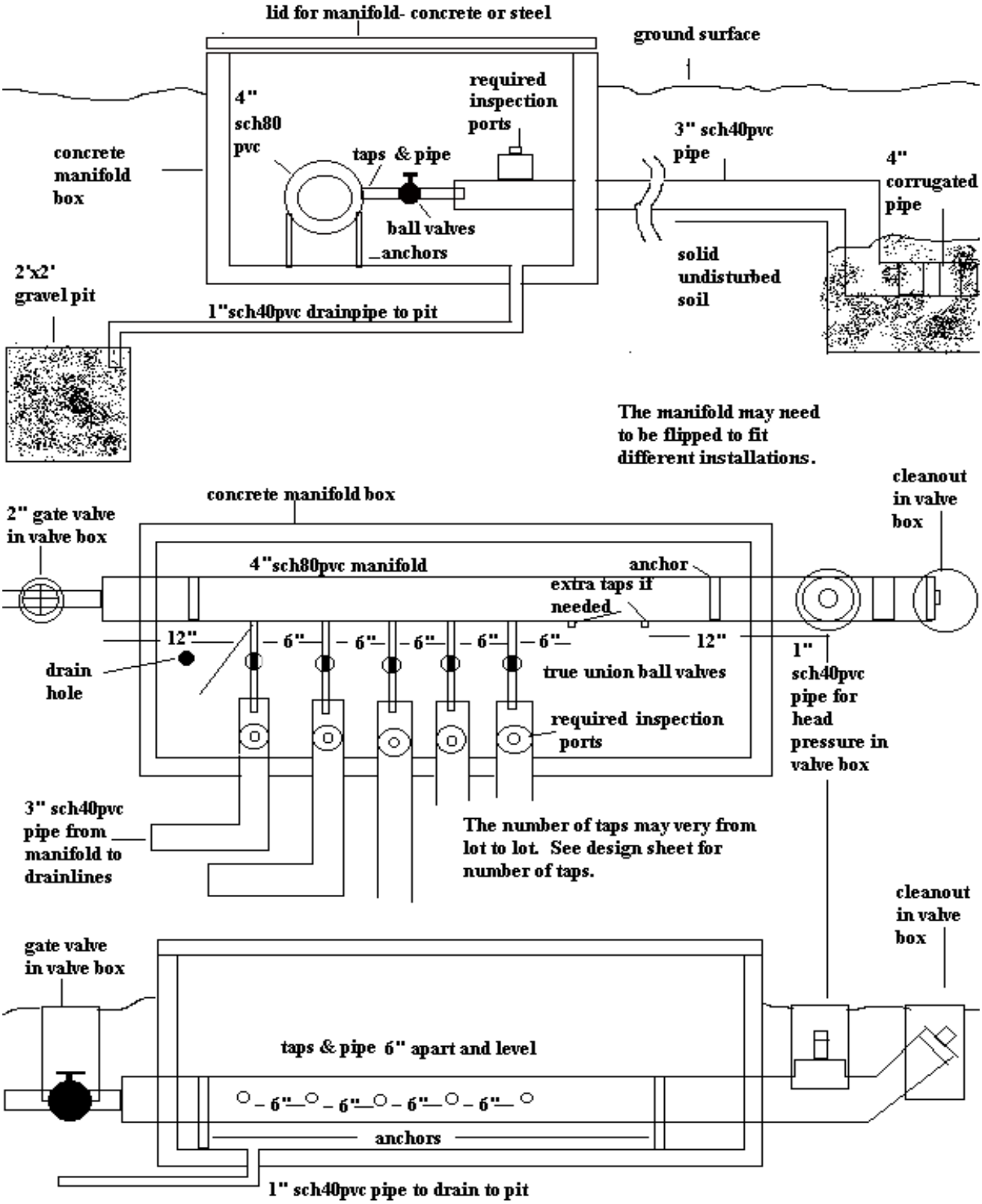
Lot 41 Hidden Valley



GOULDS PUMPS

# Submersible Effluent Pump

**MODEL 3885**

# WE Series

**PROSURANCE AVAILABLE FOR RESIDENTIAL APPLICATIONS.**


## APPLICATIONS

Specifically designed for the following uses:

- Homes
- Farms
- Trailer courts
- Motels
- Schools
- Hospitals
- Industry
- Effluent systems

## SPECIFICATIONS

**Pump**

- Solids handling capabilities: ¾" maximum.
- Discharge size: 2" NPT.
- Capacities: up to 140 GPM.
- Total heads: up to 128 feet TDH.
- Temperature: 104°F (40°C) continuous 140°F (60°C) intermittent.
- See order numbers on reverse side for specific HP, voltage, phase and RPM's available.

## FEATURES

■ **Impeller:** Cast iron, semi-open, non-clog with pump-out vanes for mechanical seal protection. Balanced for smooth operation. Silicon bronze impeller available as an option.

■ **Casing:** Cast iron volute type for maximum efficiency. 2" NPT discharge.

■ **Mechanical Seal: SILICON CARBIDE VS. SILICON CARBIDE** sealing faces. Stainless steel metal parts, BUNA-N elastomers.

■ **Shaft:** Corrosion-resistant, stainless steel. Threaded design. Locknut on all models to guard against component damage on accidental reverse rotation.

■ **Fasteners:** 300 series stainless steel.

■ Capable of running dry without damage to components.

■ Designed for continuous operation when fully submerged.

## MOTORS

■ Fully submerged in high-grade turbine oil for lubrication and efficient heat transfer.

■ Class B insulation on ⅓-1½ HP models.

■ Class F insulation on 2 HP models.

**Single phase (60 Hz):**

- Capacitor start motors for maximum starting torque.
- Built-in overload with automatic reset.
- SJTOW or STOW severe duty oil and water resistant power cords.
- ⅓ and ½ HP models have NEMA three prong grounding plugs.
- ¾ HP and larger units have bare lead cord ends.

**Three phase (60 Hz):**

- Class 10 overload protection must be provided in separately ordered starter 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.

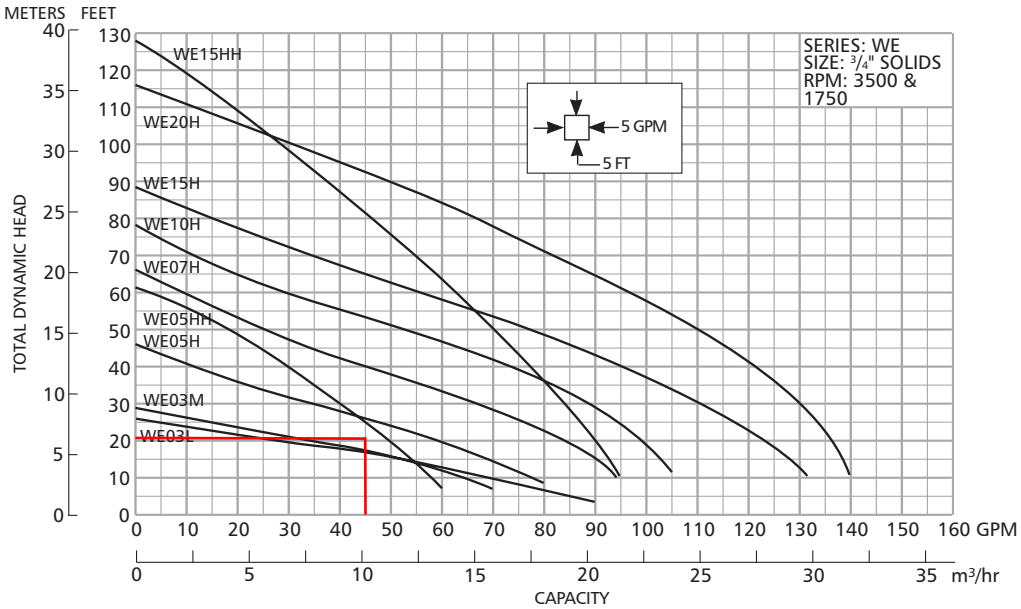
■ **Power Cable:** Severe duty rated, oil and water resistant. Epoxy seal on motor end provides secondary moisture barrier in case of outer jacket damage and to prevent oil wicking. Standard cord is 20'. Optional lengths are available.

■ **O-ring:** Assures positive sealing against contaminants and oil leakage.

## AGENCY LISTINGS

**Tested to UL 778 and CSA 22.2 108 Standards By Canadian Standards Association File #LR38549**

**Goulds Pumps is ISO 9001 Registered.**




Goulds Pumps

ITT Industries


Effective July, 2003
B3885

GOULDS PUMPS

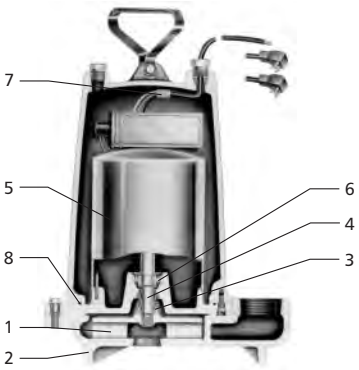
# Submersible Effluent Pump

**MODEL 3885**

# WE Series

## COMPONENTS

| Item No. | Description |
|---|---|
| 1 | Impeller |
| 2 | Casing |
| 3 | Mechanical Seal |
| 4 | Motor Shaft |
| 5 | Motor |
| 6 | Ball Bearings |
| 7 | Power Cable |
| 8 | Casing O-Ring |




## MODELS

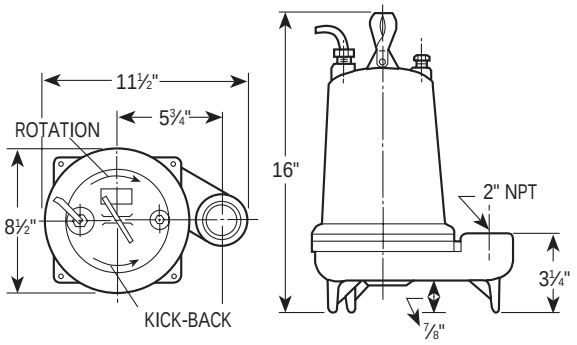
| Order No. | HP | Volts | Phase | Max. Amp. | RPM | Solids | Wt. (lbs.) |
|---|---|---|---|---|---|---|---|
| WE0311L | ⅓ | 115 | 1 | 10.7 | 1750 | ¾" | 56 |
| WE0318L | | 208 | | 6.8 | | | |
| WE0312L | | 230 | | 4.9 | | | |
| WE0311M | | 115 | | 10.7 | | | |
| WE0318M | | 208 | | 6.8 | | | |
| WE0312M | | 230 | | 4.9 | | | |
| WE0511H | ½ | 115 | 1 | 14.5 | 3500 | | 60 |
| WE0518H | | 208 | | 8.1 | | | |
| WE0512H | | 230 | | 7.3 | | | |
| WE0538H | | 200 | 3 | 4.9 | | | |
| WE0532H | | 230 | | 3.3 | | | |
| WE0534H | | 460 | | 1.7 | | | |
| WE0537H | | 575 | | 1.4 | | | |
| WE0511HH | | 115 | 1 | 14.5 | | | |
| WE0518HH | | 208 | | 8.1 | | | |
| WE0512HH | | 230 | | 7.3 | | | |
| WE0538HH | | 200 | 3 | 4.9 | | | |
| WE0532HH | | 230 | | 3.6 | | | |
| WE0534HH | | 460 | | 1.8 | | | |
| WE0537HH | | 575 | | 1.5 | | | |
| WE0718H | ¾ | 208 | 1 | 11.0 | | | 70 |
| WE0712H | | 230 | | 10.0 | | | |
| WE0738H | | 200 | 3 | 6.2 | | | |
| WE0732H | | 230 | | 5.4 | | | |
| WE0734H | | 460 | | 2.7 | | | |
| WE0737H | | 575 | | 2.2 | | | |
| WE1018H | 1 | 208 | 1 | 14.0 | | | |
| WE1012H | | 230 | | 12.5 | | | |
| WE1038H | | 200 | 3 | 8.1 | | | |
| WE1032H | | 230 | | 7.0 | | | |
| WE1034H | | 460 | | 3.5 | | | |
| WE1037H | | 575 | | 2.8 | | | |
| WE1518H | 1½ | 208 | 1 | 17.5 | | | 80 |
| WE1512H | | 230 | | 15.7 | | | |
| WE1538H | | 200 | 3 | 10.6 | | | |
| WE1532H | | 230 | | 9.2 | | | |
| WE1534H | | 460 | | 4.6 | | | |
| WE1537H | | 575 | | 3.7 | | | |
| WE1518HH | | 208 | 1 | 17.5 | | | |
| WE1512HH | | 230 | | 15.7 | | | |
| WE1538HH | | 200 | 3 | 10.6 | | | |
| WE1532HH | | 230 | | 9.2 | | | |
| WE1534HH | | 460 | | 4.6 | | | |
| WE1537HH | | 575 | | 3.7 | | | |
| WE2012H | 2 | 230 | 1 | 18.0 | | | 83 |
| WE2038H | | 200 | 3 | 12.0 | | | |
| WE2032H | | 230 | | 11.6 | | | |
| WE2034H | | 460 | | 5.8 | | | |
| WE2037H | | 575 | | 4.7 | | | |

## PERFORMANCE RATINGS (gallons per minute)

| Order No. | | WE03L | WE03M | WE05H | WE07H | WE10H | WE15H | WE05HH | WE15HH | WE20H |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Head Feet of Water | HP | ⅓ | ⅓ | ½ | ¾ | 1 | 1½ | ½ | 1½ | 2 |
| | RPM | 1750 | 1750 | 3500 | 3500 | 3500 | 3500 | 3500 | 3500 | 3500 |
| | 5 | 86 | – | – | – | – | – | – | – | – |
| | 10 | 70 | 63 | 78 | – | – | – | 58 | – | – |
| | 15 | 52 | 50 | 70 | 90 | – | – | 53 | – | – |
| | 20 | 27 | 35 | 60 | 83 | 98 | 123 | 49 | 90 | 136 |
| | 25 | – | – | 48 | 76 | 94 | 117 | 45 | 87 | 133 |
| | 30 | – | – | 35 | 67 | 88 | 110 | 40 | 83 | 130 |
| | 35 | – | – | 20 | 57 | 82 | 103 | 35 | 80 | 126 |
| | 40 | – | – | – | 45 | 74 | 95 | 30 | 77 | 121 |
| | 45 | – | – | – | 35 | 64 | 86 | 25 | 74 | 116 |
| | 50 | – | – | – | 25 | 53 | 77 | – | 70 | 110 |
| | 55 | – | – | – | – | 40 | 67 | – | 66 | 103 |
| | 60 | – | – | – | – | 30 | 56 | – | 63 | 96 |
| | 65 | – | – | – | – | 20 | 45 | – | 58 | 89 |
| | 70 | – | – | – | – | – | 35 | – | 55 | 81 |
| | 75 | – | – | – | – | – | 25 | – | 51 | 74 |
| | 80 | – | – | – | – | – | – | – | 47 | 66 |
| | 90 | – | – | – | – | – | – | – | 37 | 49 |
| | 100 | – | – | – | – | – | – | – | 28 | 30 |

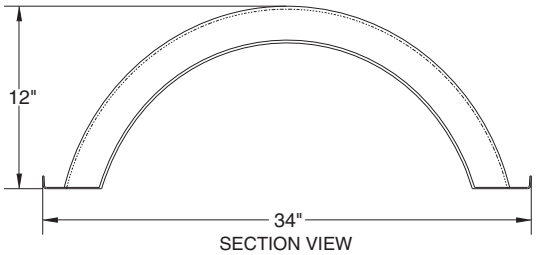
## DIMENSIONS

(All dimensions are in inches. Do not use for construction purposes.)

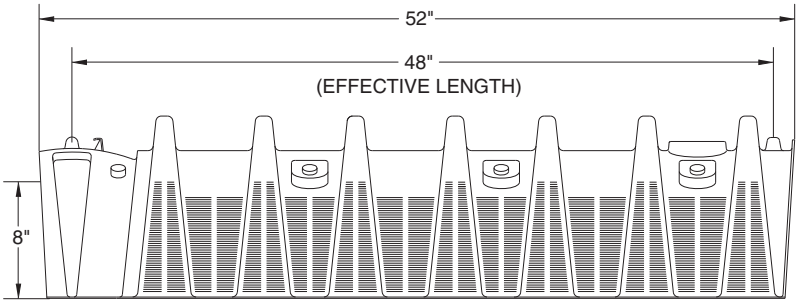


# Quick4™
STANDARD CHAMBER

## Quick4 Standard Chamber

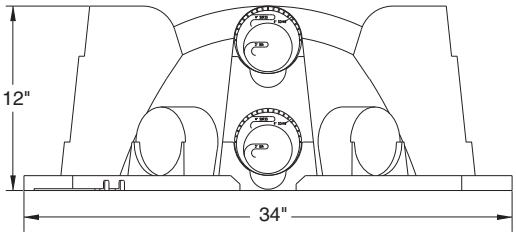


SECTION VIEW

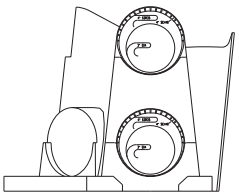


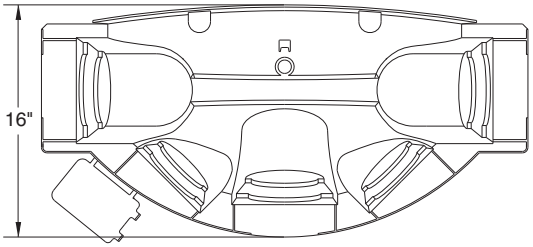
SIDE VIEW

## MultiPort End Cap



FRONT VIEW


SIDE VIEW



TOP VIEW

### Quick4 Standard Chamber Nominal Specifications

| | |
|---|---|
| Size (W x L x H) | 34" x 52" x 12" |
| Effective Length | 48" |
| Invert Height | 8" |

### MultiPort End Cap Nominal Specifications

| | |
|---|---|
| Size (W x L x H) | 34" x 16" x 12" |
| Invert Height | 8" or 1.25" |

## INFILTRATOR SYSTEMS, INC. STANDARD LIMITED WARRANTY

(a) The structural integrity of each chamber, end plate, wedge and other accessory manufactured by Infiltrator ( "Units"), when installed and operated in a leachfield of an onsite septic system in accordance with Infiltrator's instructions, is warranted to the original purchaser ("Holder") against defective materials and workmanship for one year from the date that the septic permit is issued for the septic system containing the Units; provided, however, that if a septic permit is not required by applicable law, the warranty period will begin upon the date that installation of the septic system commences. To exercise its warranty rights, Holder must notify Infiltrator in writing at its Corporate Headquarters in Old Saybrook, Connecticut within fifteen (15) days of the alleged defect. Infiltrator will supply replacement Units for Units determined by Infiltrator to be covered by this Limited Warranty. Infiltrator's liability specifically excludes the cost of removal and/or installation of the Units.

(b) THE LIMITED WARRANTY AND REMEDIES IN SUBPARAGRAPH (a) ARE EXCLUSIVE. THERE ARE NO OTHER WARRANTIES WITH RESPECT TO THE UNITS, INCLUDING NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

(c) This Limited Warranty shall be void if any part of the chamber system is manufactured by anyone other than Infiltrator. The Limited Warranty does not extend to incidental, consequential, special or indirect damages. Infiltrator shall not be liable for penalties or liquidated damages, including loss of production and profits, labor and materials, overhead costs, or other losses or expenses incurred by the Holder or any third party. Specifically excluded from Limited Warranty coverage are damage to the Units due to ordinary wear and tear, alteration, accident, misuse, abuse or neglect of the Units; the Units being subjected to vehicle traffic or other conditions which are not permitted by the installation instructions; failure to maintain the minimum ground covers set forth in the installation instructions; the placement of improper materials into the system containing the Units; failure of the Units or the septic system due to improper siting or improper sizing, excessive water usage, improper grease disposal, or improper operation; or any other event not caused by Infiltrator. This Limited Warranty shall be void if the Holder fails to comply with all of the terms set forth in this Limited Warranty.

Further, in no event shall Infiltrator be responsible for any loss or damage to the Holder, the Units, or any third party resulting from installation or shipment, or from any product liability claims of Holder or any third party. For this Limited Warranty to apply, the Units must be installed in accordance with all site conditions required by state and local codes; all other applicable laws; and Infiltrator's installation instructions.

(d) No representative of Infiltrator has the authority to change or extend this Limited Warranty. No warranty applies to any party other than the original Holder.

* * * * * * *

The above represents the Standard Limited Warranty offered by Infiltrator. A limited number of states and counties have different warranty requirements. Any purchaser of Units should contact Infiltrator's Corporate Headquarters in Old Saybrook, Connecticut, prior to such purchase, to obtain a copy of the applicable warranty, and should carefully read that warranty prior to the purchase of Units.


INFILTRATOR® SYSTEMS INC
*Environmental Onsite Wastewater Solutions℠*

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**800-221-4436**



U.S. Patents: 4,759,661; 5,017,041; 5,156,488; 5,336,017; 5,401,116; 5,401,459; 5,511,903; 5,716,163; 5,588,778; 5,839,844
Canadian Patents: 1,329,959; 2,004,564 Other patents pending.