MORRISON COUNTY

Septic As-Built and Inspection Form

This is your Certificate of Compliance

☑ Compliant ☐ Noncompliant

Date of Installation: 11/14/24 Permit #Z- 2024-3971 Parcel # 25-0081-200

Property Owner: Gerald Yancy Property Address: 30451 Dove Rd Cushing

GENERAL

System Type: ☑ I ☐ II ☐ III ☐ IV ☐ V

Design flow: 300

☑ New system ☐ Replacement system

Shoreland ☑ yes ☐ no

Food/Lodging/Commercial ☐ yes ☑ no

TANK(S)

Tank 1 ☑ New ☐ Existing

Make: Infiltrator Size: 1000

Depth: 24" + Insulated ☐ yes ☐ no

Tank 2 ☑ New ☐ Existing

Make: Infiltrator Size: 500

Depth: 24" + Insulated ☐ yes ☐ no

~~**Tank 3** ☐ New ☐ Existing~~

Make: Size:

Depth: Insulated ☐ yes ☐ no

PUMP & ALARM

Brand & Size: 253 Liberty

☑ Demand Dose ☐ Time Dose

Alarm Type: Rhomms outdoor

Event Counter Starting ##: 0

For Office Use Only:

☑ Excel ☑ Attach Docs ☑ Upload

☑ Date on parcel ☑ Deliver

Initials HK Date 11/19/2024

not yet installed

SOIL TREATMENT AREA

~~☐ **Existing soil treatment area**~~

~~☐ **Holding tank only**~~

~~☐ Vac test ☐ Water test by installer~~

☑ **Pressurized System**

~~☐ **Gravity System**~~

☐ Trenches ☐ Chambers ☐ At-Grade

☐ Mound ☑ Bed

Dimensions of rock bed/trenches/chambers:

10 x 25

Laterals: 3 Pipe Diameter: 1.5"

Perf size: 1/4" Perf Spacing: 3

Number of cleanouts: 3

Inspection pipe(s): ☑ Secured ☐ Clear of Rock

↳ not yet installed

Media bottom depth: 6"

Restrictive layer depth: 43"

≥ 3' Separation? ☑ Yes ☐ No

MATERIALS

Total Rock Depth: 9"

Rock Depth Below Pipe: 6"

Rock source: KR

Clean sand depth ("sandlift"): —

Sand source: —

Depth of cover: 18

Seeding by: ☑ Property Owner ☐ Installer

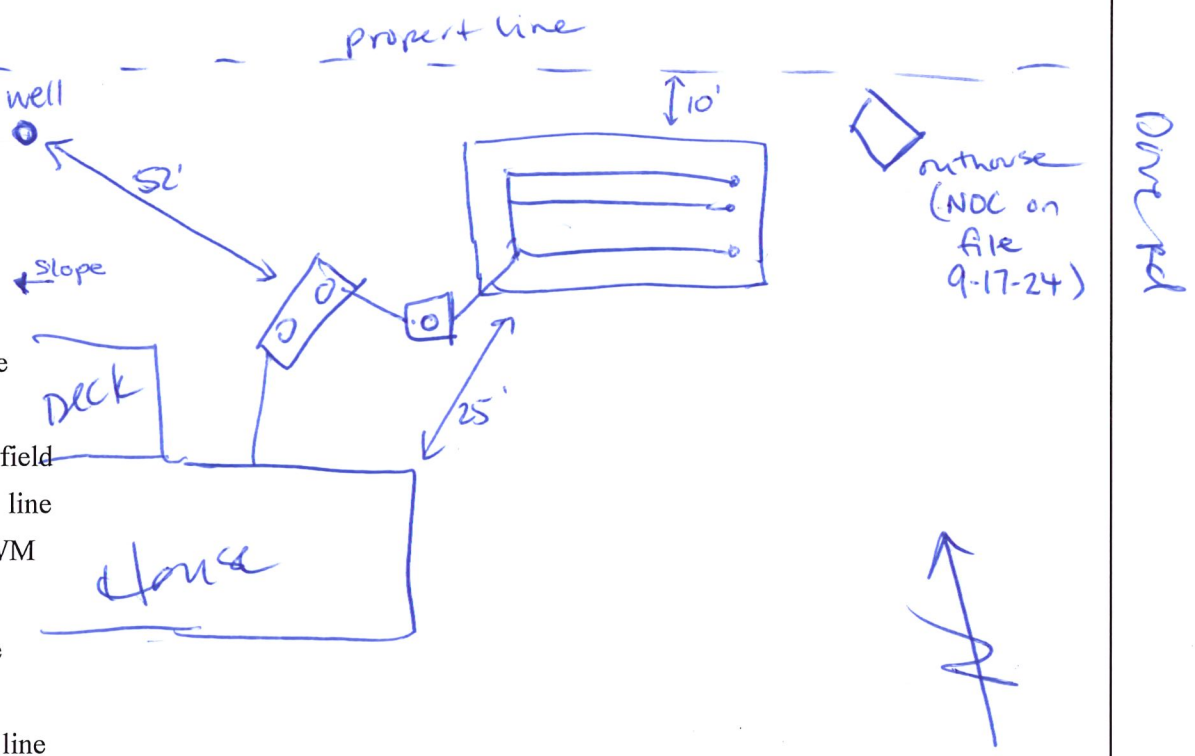
Elevations no laser; verified bed depth 6" on NW corner, slightly deeper at SE corner

Benchmark Location: _____ Benchmark Elevation: _____

Bottom of media: _____ Restrictive Layer: _____ System Separation: _____

Site Sketch

*Indicate: North, slope direction, benchmark, soil verification location



20' Tank to house
52' Tank to well
5' Tank to pump tank
10' Tank to drainfield
15' Tank to prop. line
500' Tank to OHWM

20' Pump tank to house
60' Pump tank to well
5' Pump tank to drainfield
15' Pump tank to prop. line
500' Pump tank to OHWM

25' Drainfield to house
60' Drainfield to well
10' Drainfield to prop. line
500' Drainfield to OHWM

60' Supply pipe to well

Notes:

Installer: Altrichter _____ _____ 2281
Company Name Signature License #

Inspector: Hannah Kruse _____ _____ 10218
Print Name Signature Cert #

CERTIFIED STATEMENT: The work done on this system has been completed in accordance with the design submitted with this permit and MN Rule 7080 requirements. Morrison County waives all responsibility of future hydraulics because of abuse, water use, or maintenance. System compliance is valid for five years from date of inspection on new system components.

Additional Documentation (attach as applicable)

☑ Tank Sheet(s) ☐ Pressure Test ☐ Abandonment Form ☐ Soil Log ☐ Vac test ☐ Other

INFILTRATOR®
systems Inc.

Infiltrator Systems Inc. Tank Identification

Per 7080.2020

Manufacturer: Infiltrator Systems Inc.

Distributor Name/Location: core and main Waite Park branch 289

Date of Assembly/Manufacture: 10-29-24

Model Information (distributor to check applicable model):

	Model	Working Capacity (gals)	Total Capacity (gals)	MPCA-Approved Usage	Maximum Burial Depth (feet)
	TW-300	251	300	Pump or Septic	4
	TW-500	427	500	Pump or Septic	4
	IM-540	475	540	Pump or Septic	4
✓	IM-1060	1,070	1,287	Pump, Septic, or Holding	4
	TW-1250	1,250	1,448	Pump, Septic, or Holding	4
	TW-1500	1,500	1,762	Pump, Septic or Holding	4
	IM-1530	1,509	1,765	Pump, Septic or Holding	4

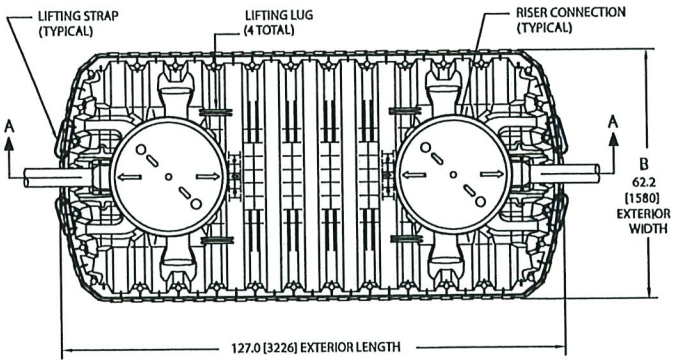
IM-1060 General Specifications and Illustrations

The IM-1060 is an injection molded two piece mid-seam plastic tank. The IM-1060 injection molded plastic design allows for a mid-seam joint that has precise dimensions for accepting an engineered EPDM gasket. Infiltrator's gasket design utilizes technology from the water industry to deliver proven means of maintaining a watertight seal. The two-piece design is permanently fastened using a series of non-corrosive plastic alignment dowels and locking seam clips. The IM-1060 is assembled and sold through a network of certified Infiltrator distributors.

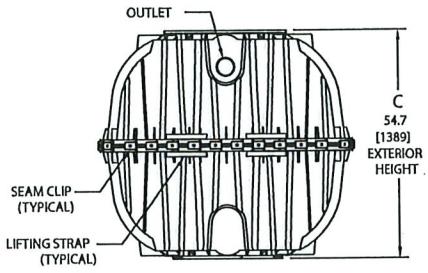
Must be backfilled and installed in accordance with Infiltrator Water Technologies, Infiltrator IM-Series Septic Tank General Installation Instructions and for shallow ground water conditions reference the Infiltrator IM-Series Tank Buoyancy Control Guidance.

Please visit www.infiltratorwater.com/images/pdf/ManualsGuides/TANK01.pdf for the latest information.

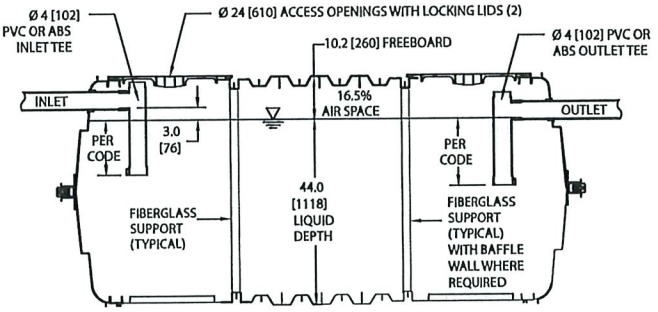
IM-1060	
Working Capacity	1094 gal (4141 L)
Total Capacity	1287 gal (4872 L)
Airspace	16.5%
Length	127" (3226 mm)
Width	62.2" (1580 mm)
Length-to-Width Ratio	2.3 to 1
Height	54.7" (1389 mm)
Liquid Level	44" (1118 mm)
Invert Drop	3" (76 mm)
Fiberglass Supports	2
Compartments	1 or 2
Maximum Burial Depth	48" (1219 mm)
Minimum Burial Depth	6" (152 mm)
Maximum Pipe Diameter	6" (152 mm)
Weight	320 lbs (145 kg)



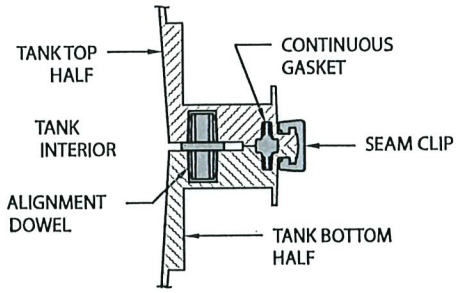
TOP VIEW



END VIEW



SIDE VIEW



MID-HEIGHT SEAM SECTION

INFILTRATOR® water technologies

4 Business Park Road
P.O. Box 768
Old Saybrook, CT 06475
860-577-7000 • Fax 860-577-7001
1-800-221-4436
www.infiltratorswater.com

IM02 1116

INFILTRATOR®
systems Inc.

Infiltrator Systems Inc. Tank Identification

Per 7080.2020

Manufacturer: Infiltrator Systems Inc.

Distributor Name/Location: core and main Waite Park branch 289

Date of Assembly/Manufacture: 10-11-24

Model Information (distributor to check applicable model):

	Model	Working Capacity (gals)	Total Capacity (gals)	MPCA-Approved Usage	Maximum Burial Depth (feet)
	TW-300	251	300	Pump or Septic	4
	TW-500	427	500	Pump or Septic	4
✓	IM-540	475	540	Pump or Septic	4
	IM-1060	1,070	1,287	Pump, Septic, or Holding	4
	TW-1250	1,250	1,448	Pump, Septic, or Holding	4
	TW-1500	1,500	1,762	Pump, Septic or Holding	4
	IM-1530	1,509	1,765	Pump, Septic or Holding	4

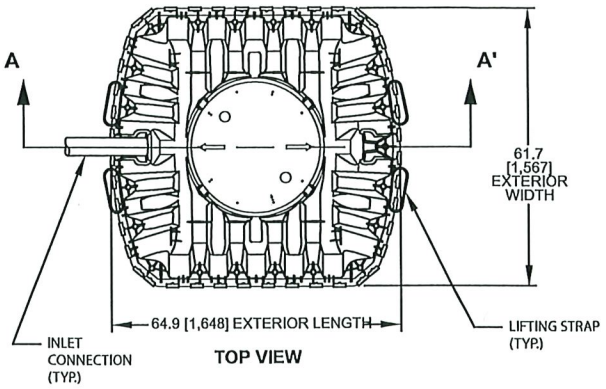
IM-540 General Specifications and Illustrations

The IM-540 is an injection molded two piece mid-seam plastic tank. The IM-540 injection molded plastic design allows for a mid-seam joint that has precise dimensions for accepting an engineered EPDM gasket. Infiltrator's gasket design utilizes technology from the water industry to deliver proven means of maintaining a watertight seal. The two-piece design is permanently fastened using a series of non-corrosive plastic alignment dowels and locking seam clips. The IM-540 is assembled and sold through a network of certified Infiltrator distributors.

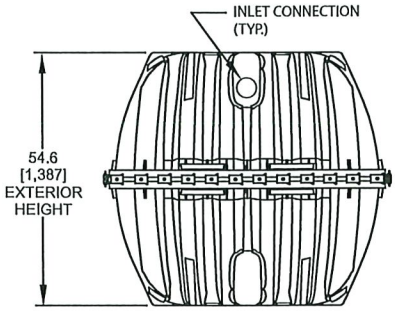
Must be backfilled and installed in accordance with Infiltrator Water Technologies, Infiltrator IM-Series Septic Tank General Installation Instructions and for shallow ground water conditions reference the Infiltrator IM-Series Tank Buoyancy Control Guidance.

Please visit www.infiltratorwater.com/images/pdf/ManualsGuides/TANK01.pdf for the latest information.

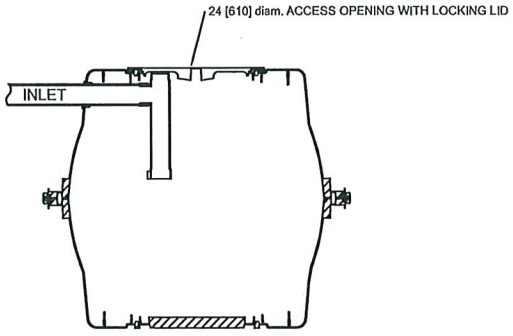
IM-540	
Total Capacity	552 gal (2090 L)
Length	64.9" (1648 mm)
Width	61.7" (1567 mm)
Height	54.6" (1387 mm)
Maximum Burial Depth	48" (1219 mm)
Minimum Burial Depth	6" (152 mm)
Maximum Pipe Diameter	4" (100 mm)
Weight	169 lbs (77 kg)



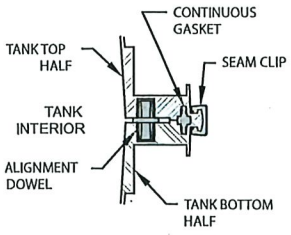
TOP VIEW



END VIEW



SECTION A- A'



MID-HEIGHT SEAM
SECTION DETAIL

INFILTRATOR®
water technologies

4 Business Park Road
P.O. Box 768
Old Saybrook, CT 06475
860-577-7000 • Fax 860-577-7001
1-800-221-4436
www.infiltratorwater.com

IM11 1116

Contact Infiltrator Water Technologies' Technical Services Department for assistance at 1-800-221-4436

UNIVERSITY OF MINNESOTA

Septic System Management Plan for Below Grade Systems

The goal of a septic system is to protect human health and the environment by properly treating wastewater before returning it to the environment. Your septic system is designed to kill harmful organisms and remove pollutants before the water is recycled back into our lakes, streams and groundwater.

This **management plan** will identify the operation and maintenance activities necessary to ensure long-term performance of your septic system. Some of these activities must be performed by you, the homeowner. Other tasks must be performed by a licensed septic maintainer or service provider. However, it is **YOUR** responsibility to make sure all tasks get accomplished in a timely manner.

The University of Minnesota's *Septic System Owner's Guide* contains additional tips and recommendations designed to extend the effective life of your system and save you money over time.

Proper septic system design, installation, operation and maintenance means safe and clean water!

Property Owner	GERALD & NANCY YANCY	Email	kevin@knbuildersinc.com
Property Address	30481 DOVE ROAD	Property ID	25001000
System Designer	LOGAN'S EXCAVATING	Contact Info	6124231922
System Installer	Altrichter Excavating	Contact Info	2185752124
Service Provider/Maintainer	Gerald & Nancy Yancy	Contact Info	7633504433
Permitting Authority	MORRISON COUNTY	Contact Info	
Permit #		Date Inspected	

Keep this Management Plan with your Septic System Owner's Guide. The Septic System Owner's Guide includes a folder to hold maintenance records including pumping, inspection and evaluation reports. Ask your septic professional to also:

- Attach permit information, designer drawings and as-built of your system, if they are available.
- Keep copies of all pumping records and other maintenance and repair invoices with this document.
- Review this document with your maintenance professional at each visit; discuss any changes in product use, activities, or water-use appliances.

For a copy of the *Septic System Owner's Guide*, visit www.bookstores.umn.edu and search for the word "septic" or call 800-322-8642.

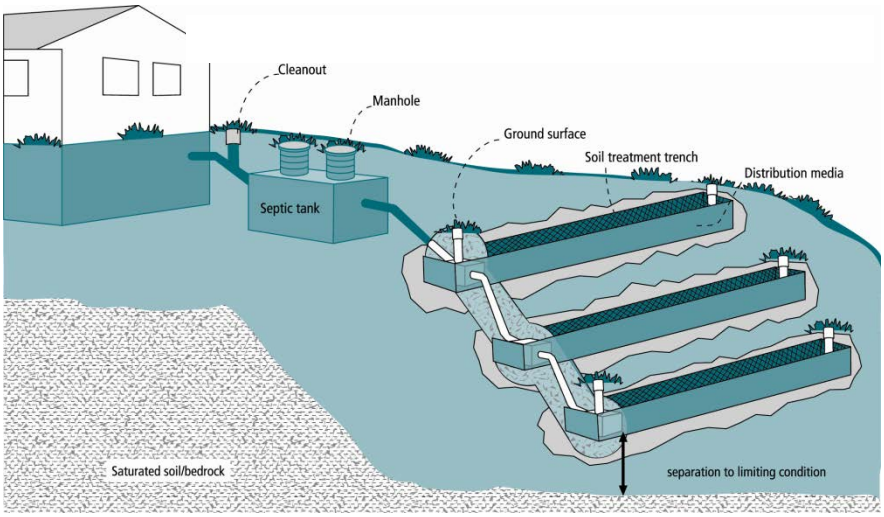
For more information see http://septic.umn.edu

Version: August 2015

UNIVERSITY OF MINNESOTA

Septic System Management Plan for Below Grade Systems

Your Septic System



Septic System Specifics

System Type: (•) I ( ) II ( ) III ( ) IV* ( ) V*

(*Based on MN Rules Chapter 7080.2200 – 2400)*

**Additional Management Plan required*

☐ System is subject to operating permit*

☐ System uses UV disinfection unit*

Type of advanced treatment unit _____

Dwelling Type

Number of bedrooms: 2

System capacity/ design flow (gpd): 300

Average daily flow (gpd): _____

Comments_____

Business? ( ) Y (•) N What type? _____

Well Construction

Well depth (ft): N/A

- ❑ Cased well Casing depth: _____
- ❑ Other (specify): _____

Distance from septic (ft): _____

Is the well on the design drawing? ( ) Y (•) N

Septic Tank

- ❑ First tank *Tank volume:* 1000 *gallons*

  Does tank have two compartments? ( ) Y ( ) N
- ❑ Second tank *Tank volume:* _____ *gallons*
- ❑ Tank is constructed of CONCRETE
- ❑ Effluent screen: ( ) Y (•) N Alarm (•) Y ( ) N
- ❑ Pump tank *(if one)* 500 *gallons*
- ❑ Effluent pump *make/model*: GOULDS PE41

  Pump capacity _____ GPM

  TDH _____ Feet of head
- ❑ Alarm (•) Y ( ) N Location _____

Soil Treatment Area (STA)

Trenches: _____ total lineal feet

Number of trenches: _____ at _____ feet each

STA size (width x length): 10 ft x 25 ft

Location of additional STA: EAST

Type of distribution media: ROCK

☐ Gravity distribution ☑ Pressure distribution

☑ Inspection ports ☑ Cleanouts

☐ Additional STA not available

☐ Surface water diversions

Homeowner Management Tasks

These op*eration and maintenance ac*tivities are your responsibility. *Chart on page 6 can help track your activities.*

Your toilet is not a garbage can. Do not flush anything besides human waste and toilet paper. No wet wipes, cigarette butts, disposal diapers, used medicine, feminine products or other trash!

The system and septic tanks needs to be checked every 36 months

Your service provider or pumper/maintainer should evaluate if your tank needs to be pumped more or less often.

Seasonally or several times per year

- *Leaks.* Check (listen, look) for leaks in toilets and dripping faucets. Repair leaks promptly.
- *Soil treatment area.* Regularly check for wet or spongy soil around your soil treatment area. If surfaced sewage or strong odors are not corrected by pumping the tank or fixing broken caps and leaks, call your service professional. *Untreated sewage may make humans and animals sick.* Keep bikes, snowmobiles and other traffic off and control borrowing animals.
- *Alarms.* Alarms signal when there is a problem; contact your service professional any time the alarm signals.
- *Lint filter.* If you have a lint filter, check for lint buildup and clean when necessary. If you do not have one, consider adding one after washing machine.
- *Effluent screen.* If you do not have one, consider having one installed the next time the tank is cleaned along with an alarm.

Annually

- *Water usage rate.* A water meter or another device can be used to monitor your average daily water use. Compare your water usage rate to the design flow of your system (listed on the next page). Contact your septic professional if your average daily flow over the course of a month exceeds 70% of the design flow for your system.
- *Caps.* Make sure that all caps and lids are intact and in place. Inspect for damaged caps at least every fall. Fix or replace damaged caps before winter to help prevent freezing issues.
- *Water conditioning devices.* See Page 5 for a list of devices. When possible, program the recharge frequency based on *water demand (gallons)* rather than *time (days).* Recharging too frequently may negatively impact your septic system. Consider updating to demand operation if your system currently uses time,
- *Review your water usage rate.* Review the Water Use Appliance chart on Page 5. Discuss any major changes with your service provider or pumper/maintainer.

During each visit by a service provider or pumper/maintainer

- Make sure that your service professional services the tank through the manhole. (NOT though a 4” or 6” diameter inspection port.)
- Ask how full your tank was with sludge and scum to determine if your service interval is appropriate.
- Ask your pumper/maintainer to accomplish the tasks listed on the Professional Tasks on Page 4.

Professional Management Tasks

These are the operation and maintenance activities that a pumper/maintainer performs to help ensure long-term performance of your system. At each visit a written report/record must be provided to homeowner.

Plumbing/Source of Wastewater

- Review the Water Use Appliance Chart on Page 5 with homeowner.
  Discuss any changes in water use and the impact those changes may have on the septic system.
- Review water usage rates (if available) with homeowner.

Septic Tank/Pump Tanks

- *Manhole lid*. A riser is recommended if the lid is not accessible from the ground surface. Insulate the riser cover for frost protection.
- *Liquid level*. Check to make sure the tank is not leaking. The liquid level should be level with the bottom of the outlet pipe. (If the water level is below the bottom of the outlet pipe, the tank may not be watertight. If the water level is higher than the bottom of the outlet pipe of the tank, the effluent screen may need cleaning, or there may be ponding in the soil treatment area.)
- *Inspection pipes*. Replace damaged or missing pipes and caps.
- *Baffles*. Check to make sure they are in place and attached, and that inlet/outlet baffles are clear of buildup or obstructions.
- *Effluent screen*. Check to make sure it is in place; clean per manufacturer recommendation. Recommend retrofitted installation if one is not present.
- *Alarm*. Verify that the alarm works.
- *Scum and sludge*. Measure scum and sludge in each compartment of each septic and pump tank, pump if needed.

Pump

- *Pump and controls*. Check to make sure the pump and controls are operating correctly.
- *Pump vault*. Check to make sure it is in place; clean per manufacturer recommendations.
- *Alarm*. Verify that the alarm works.
- *Drainback*. Check to make sure it is draining properly.
- *Event counter or elapsed time meter*. Check to see if there is an event counter or elapsed time meter for the pump. If there is one or both, calculate the water usage rate and compare to the anticipated use listed on Design and Page 2. Dose Volume: _____ gallons: Pump run time: _____ Minutes

Soil Treatment Area

- *Inspection pipes*. Check to make sure they are properly capped. Replace caps and pipes that are damaged.
- *Surfacing of effluent*. Check for surfacing effluent or other signs of problems.
- *Gravity trenches and beds*. Check the number of gravity trenches with effluent ponded in distribution media. Identify the percentage of the system in use. Determine if action is needed.
- *Pressure trenches and beds - Lateral flushing*. Check lateral distribution; if cleanouts exist, flush and clean at recommended frequency.
- *Vegetation* - Check to see that a good growth of vegetation is covering the system.

All other components – evaluate as listed here:

Water-Use Appliances and Equipment in the Home

Appliance	Impacts on System	Management Tips
Garbage disposal	• Uses additional water. • Adds solids to the tank. • Finely-ground solids may not settle. Unsettled solids can exit the tank and enter the soil treatment area.	• Use of a garbage disposal is not recommended. • Minimize garbage disposal use. Compost instead. • To prevent solids from exiting the tank, have your tank pumped more frequently. • Add an effluent screen to your tank.
Washing machine	• Washing several loads on one day uses a lot of water and may overload your system. • Overloading your system may prevent solids from settling out in the tank. Unsettled solids can exit the tank and enter the soil treatment area.	• Choose a front-loader or water-saving top-loader, these units use less water than older models. • Limit the addition of extra solids to your tank by using liquid or easily biodegradable detergents. Limit use of bleach-based detergents and fabric softeners. • Install a lint filter after the washer and an effluent screen to your tank • Wash only full loads and think even – spread your laundry loads throughout the week.
Dishwasher	• Powdered and/or high-phosphorus detergents can negatively impact the performance of your tank and soil treatment area. • New models promote “no scraping”. They have a garbage disposal inside.	• Use gel detergents. Powdered detergents may add solids to the tank. • Use detergents that are low or no-phosphorus. • Wash only full loads. • Scrape your dishes anyways to keep undigested solids out of your septic system.
Grinder pump (in home)	• Finely-ground solids may not settle. Unsettled solids can exit the tank and enter the soil treatment area.	• Expand septic tank capacity by a factor of 1.5. • Include pump monitoring in your maintenance schedule to ensure that it is working properly. • Add an effluent screen.
Large bathtub (whirlpool)	• Large volume of water may overload your system. • Heavy use of bath oils and soaps can impact biological activity in your tank and soil treatment area.	• Avoid using other water-use appliances at the same time. For example, don’t wash clothes and take a bath at the same time. • Use oils, soaps, and cleaners in the bath or shower sparingly.
Clean Water Uses	**Impacts on System**	**Management Tips**
High-efficiency furnace	• Drip may result in frozen pipes during cold weather.	• Re-route water directly out of the house. Do not route furnace recharge to your septic system.
Water softener Iron filter Reverse osmosis	• Salt in recharge water may affect system performance. • Recharge water may hydraulically overload the system.	• These sources produce water that is not sewage and should not go into your septic system. • Reroute water from these sources to another outlet, such as a dry well, draintile or old drainfield. • When replacing, consider using a demand-based recharge vs. a time-based recharge. • Check valves to ensure proper operation; have unit serviced per manufacturer directions
Surface drainage Footing drains	• Water from these sources will overload the system and is prohibited from entering septic system.	

Homeowner Maintenance Log

Track maintenance activities here for easy reference. See list of management tasks on pages 3and 4.

Activity	Date accomplished									
Check frequently:										
Leaks: check for plumbing leaks *										
Soil treatment area check for surfacing **										
Lint filter: check, clean if needed *										
Alarms **										
Check annually:										
Water usage rate (max gpd:_____)										
Caps: inspect, replace if needed										
Water use appliances – review use										
Other:										

*Monthly

** Quarterly

*** Bi-Annually

Notes:

"As the owner of this SSTS, I understand it is my responsibility to properly operate and maintain the sewage treatment system on this property, utilizing the Management Plan. If requirements in this Management Plan are not met, I will promptly notify the permitting authority and take necessary corrective actions. If I have a new system, I agree to adequately protect the reserve area for future use as a soil treatment system."

Property Owner Signature: Date 9/10/2024

Management Plan Prepared By: DILLON HAYES Certification # 9658

Permitting Authority: