Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194

Compliance Inspection Form

Existing Subsurface Sewage Treatment Systems (SSTS)

Doc Type: Compliance and Enforcement

Inspection results based on Minnesota Pollution Control Agency (MPCA) requirements and attached forms – additional local requirements may also apply.

Submit completed form to Local Unit of Government (LUG) and system owner within 15 days

For local tracking purposes:

System Status

System status on date (mm/dd/yyyy): 10/18/2019

☒ **Compliant – Certificate of Compliance**
(Valid for 3 years from report date, unless shorter time frame outlined in Local Ordinance.)

☐ **Noncompliant – Notice of Noncompliance**
(See Upgrade Requirements on page 3.)

Reason(s) for noncompliance *(check all applicable)*

- ☐ Impact on Public Health *(Compliance Component #1) – Imminent threat to public health and safety*
- ☐ Other Compliance Conditions *(Compliance Component #3) – Imminent threat to public health and safety*
- ☐ Tank Integrity *(Compliance Component #2) – Failing to protect groundwater*
- ☐ Other Compliance Conditions *(Compliance Component #3) – Failing to protect groundwater*
- ☐ Soil Separation *(Compliance Component #4) – Failing to protect groundwater*
- ☐ Operating permit/monitoring plan requirements *(Compliance Component #5) – Noncompliant*

Property Information

Parcel ID# or Sec/Twp/Range: 17.030.21.12.0009

Property address: 7735 100th St. North City of Grant
Reason for inspection: Property Transfer

Property owner: Mr. Paul Guehler
Owner's phone: 651-653-7350

or

Owner's representative:
Representative phone:

Local regulatory authority: Washington County
Regulatory authority phone: 651-430-6000

Brief system description: Gravity system to trenches,

Comments or recommendations:

Certification

I hereby certify that all the necessary information has been gathered to determine the compliance status of this system. No determination of future system performance has been nor can be made due to unknown conditions during system construction, possible abuse of the system, inadequate maintenance, or future water usage.

Inspector name: Paul Brandt
Certification number: 5182

Business name: Soil Investigation & Design, Inc.
License number: 3263

Inspector signature:
Phone number: 6512603783

Necessary or Locally Required Attachments

☒ Soil boring logs ☐ System/As-built drawing ☐ Forms per local ordinance

☐ Other information (list):

1. Impact on Public Health – Compliance component #1 of 5

Compliance criteria:	
System discharges sewage to the ground surface.	☐ Yes ☒ No
System discharges sewage to drain tile or surface waters.	☐ Yes ☒ No
System causes sewage backup into dwelling or establishment.	☐ Yes ☒ No

Any "yes" answer above indicates the system is an imminent threat to public health and safety.

Verification method(s):

- ☒ Searched for surface outlet
- ☒ Searched for seeping in yard/backup in home
- ☐ Excessive ponding in soil system/D-boxes
- ☐ Homeowner testimony *(See Comments/Explanation)*
- ☐ "Black soil" above soil dispersal system
- ☐ System requires "emergency" pumping
- ☐ Performed dye test
- ☐ Unable to verify *(See Comments/Explanation)*
- ☐ Other methods not listed *(See Comments/Explanation)*

Comments/Explanation:

2. Tank Integrity – Compliance component #2 of 5

Compliance criteria:	
System consists of a seepage pit, cesspool, drywell, or leaching pit. *Seepage pits meeting 7080.2550 may be compliant if allowed in local ordinance.*	☐ Yes ☒ No
Sewage tank(s) leak below their designed operating depth. If yes, which sewage tank(s) leaks:	☐ Yes ☒ No

Any "yes" answer above indicates the system is failing to protect groundwater.

Verification method(s):

- ☒ Probed tank(s) bottom
- ☐ Examined construction records
- ☐ Examined Tank Integrity Form *(Attach)*
- ☐ Observed liquid level below operating depth
- ☐ Examined empty (pumped) tanks(s)
- ☐ Probed outside tank(s) for "black soil"
- ☐ Unable to verify *(See Comments/Explanation)*
- ☐ Other methods not listed *(See Comments/Explanation)*

Comments/Explanation:

The tank was tested using a recording data logger, water was turned off in the house and lines were allowed to drain. The test was then completed. the recording data logger showed no change in the water lervel in the tank. The results indicate that the tank is water tight.

3. Other Compliance Conditions – Compliance component #3 of 5

a. Maintenance hole covers are damaged, cracked, unsecured, or appear to be structurally unsound. ☐ Yes***** ☒ No ☐ Unknown

b. Other issues *(electrical hazards, etc.)* to immediately and adversely impact public health or safety. ☐ Yes***** ☒ No ☐ Unknown
****System is an imminent threat to public health and safety.***

Explain:

c. System is non-protective of ground water for other conditions as determined by inspector . ☒ Yes* ☐ No
****System is failing to protect groundwater.***

Explain:

Redox within 12 inches of the bottom of the distribution trenches.

4. Soil Separation – Compliance component #4 of 5

Date of installation: 6/1/1995 *(mm/dd/yyyy)* ☒ Unknown

Shoreland/Wellhead protection/Food beverage lodging? ☐ Yes ☒ No

Compliance criteria:

For systems built prior to April 1, 1996, and not located in Shoreland or Wellhead Protection Area or not serving a food, beverage or lodging establishment: Drainfield has at least a two-foot vertical separation distance from periodically saturated soil or bedrock.	☒ Yes ☐ No
Non-performance systems built April 1, 1996, or later or for non-performance systems located in Shoreland or Wellhead Protection Areas or serving a food, beverage, or lodging establishment: Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.*	☐ Yes ☒ No
"Experimental", "Other", or "Performance" systems built under pre-2008 Rules; Type IV or V systems built under 2008 Rules (7080. 2350 or 7080.2400 (Advanced Inspector License required) Drainfield meets the designed vertical separation distance from periodically saturated soil or bedrock.	☐ Yes ☐ No

Any "no" answer above indicates the system is failing to protect groundwater.

Verification method(s):

Soil observation does not expire. Previous soil observations by two independent parties are sufficient, unless site conditions have been altered or local requirements differ.

☒ Conducted soil observation(s) *(Attach boring logs)*
☐ Two previous verifications (A*ttach boring logs)*
☐ Not applicable *(Holding tank(s), no drainfield)*
☐ Unable to verify *(See Comments/Explanation)*
☐ Other *(See Comments/Explanation)*

Comments/Explanation:

Surface 990

Indicate depths or elevations

A. Bottom of distribution media	987.5
B. Periodically saturated soil/bedrock	981.5
C. System separation	3 foot
D. Required compliance separation*	2 feet

*May be reduced up to 15 percent if allowed by Local Ordinance.

5. Operating Permit and Nitrogen BMP* – Compliance component #5 of 5 ☒ Not applicable

Is the system operated under an Operating Permit? ☐ Yes ☐ No **If "yes", A below is required**

Is the system required to employ a Nitrogen BMP? ☐ Yes ☐ No **If "yes", B below is required**

BMP = Best Management Practice(s) specified in the system design

If the answer to both questions is "no", this section does not need to be completed.

Compliance criteria

a. Operating Permit number: _____ Have the Operating Permit requirements been met?	☐ Yes ☐ No
b. Is the required nitrogen BMP in place and properly functioning?	☐ Yes ☐ No

Any "no" answer indicates Noncompliance.

Upgrade Requirements *(Minn. Stat. § 115.55) An imminent threat to public health and safety (ITPHS) must be upgraded, replaced, or its use discontinued within ten months of receipt of this notice or within a shorter period if required by local ordinance. If the system is failing to protect ground water, the system must be upgraded, replaced, or its use discontinued within the time required by local ordinance. If an existing system is not failing as defined in law, and has at least two feet of design soil separation, then the system need not be upgraded, repaired, replaced, or its use discontinued, notwithstanding any local ordinance that is more strict. This provision does not apply to systems in shoreland areas, Wellhead Protection Areas, or those used in connection with food, beverage, and lodging establishments as defined in law.*

Figure 1: Site Location Map

Soil Investigation & Design, Inc,
2809 78th Ave. N
Brooklyn Park, Mn 55444
pbrandt@soilinvestigations.us
651-260-3783

Client: Mr. Paul Guehler
Address: 7735 100th St. N. White Bear Lake, MN

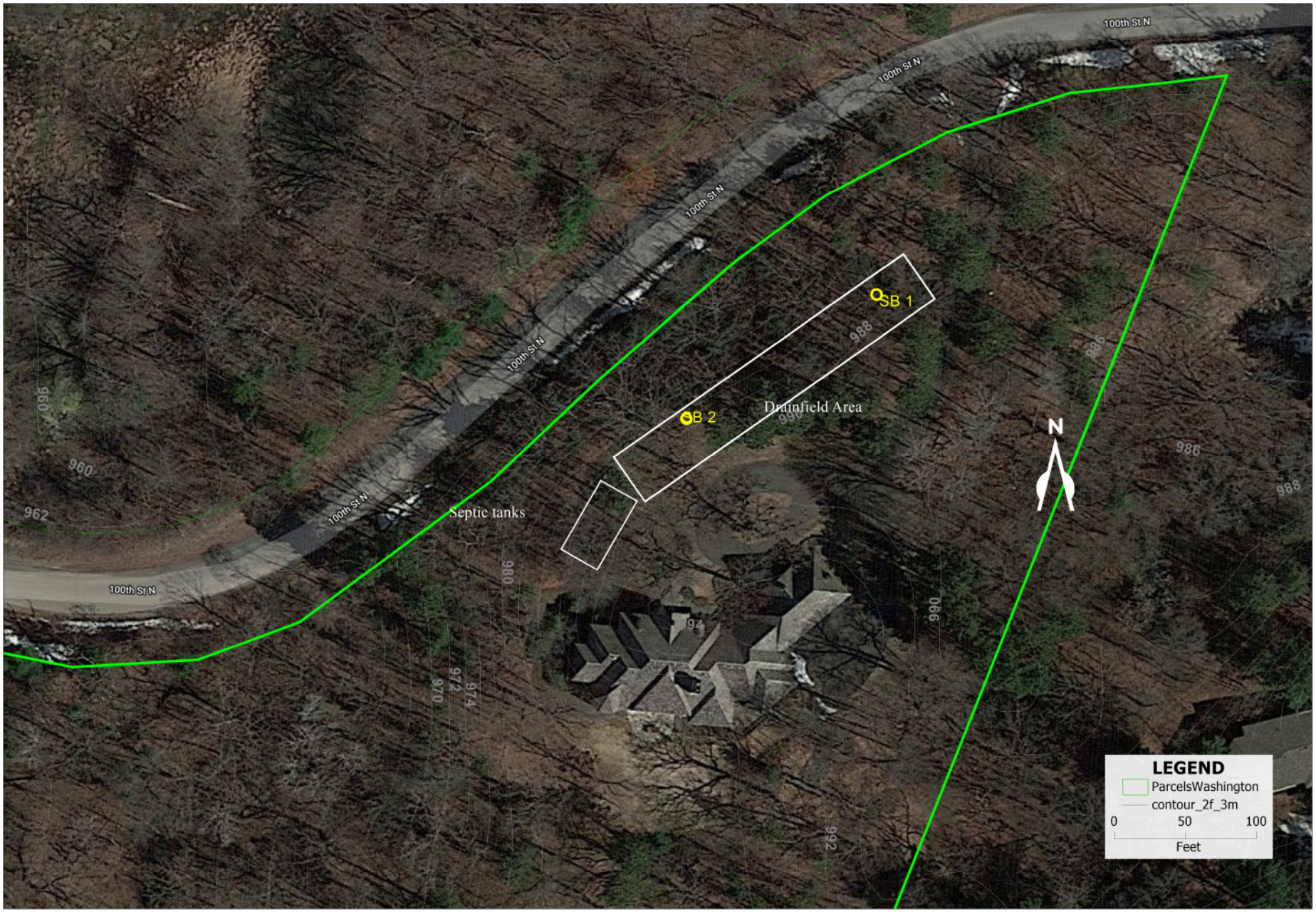

Figure 2: Site Detail Map

Soil Investigation & Design, Inc,
2809 78th Ave. N
Brooklyn Park, Mn 55444
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Client: Mr. Paul Guehler
Address: 7735 100th St. N. White Bear Lake, MN

University of Minnesota Onsite Sewage Treatment Program

Soil Observation Log

Project ID:

v 04.01.2019

Client:	**Mr. Pat Guehler**	Location / Address:	7735 100th St. North City of Grant

Soil parent material(s): (Check all that apply) ☑ Outwash ☐ Lacustrine ☐ Loess ☐ Till ☑ Alluvium ☐ Bedrock ☐ Organic Matter

Landscape Position: (check one) ☐ Summit ☑ Shoulder ☐ Back/Side Slope ☑ Foot Slope ☐ Toe Slope — Slope shape: Convex, Linear

Vegetation:	Grass	Soil survey map units:		Slope %: 7.0	Elevation: 990

Weather Conditions/Time of Day:	Clear Warm, 12:00	Date	10/18/19

Observation #/Location:	SB 1	Observation Type:	Auger

Depth (in)	Texture	Rock Frag. %	Matrix Color(s)	Mottle Color(s)	Redox Kind(s)	Indicator(s)	I-------- Structure----------I		
							Shape	Grade	Consistence
0 tyo 10	Fine Sand	<35%	10YR 3/3				Blocky	Weak	Friable
10 to 15	Fine Sand	<35%	10YR 4/4				Blocky	Weak	Friable
15 to 34	Fine Sand	<35%	10YR 5/6				Blocky	Weak	Friable
34 to 47	Fine Sand	<35%	10YR 6/6				Granular	Weak	Friable
47 to 55	Fine Sand	<35%	10YR 8/3				Granular	Weak	Friable
55 to 72	Fine Sand	<35%	5YR 3/4				Blocky	Weak	Friable

Comments

I hereby certify that I have completed this work in accordance with all applicable ordinances, rules and laws.

Paul Brandt	Paul Brandt PSS	**5182**	**10/18/2019**
(Designer/Inspector)	(Signature)	(License #)	(Date)

Additional Soil Observation Logs

Project ID: 0

University of Minnesota Onsite Sewage Treatment Program

Client:	**Mr. Pat Guehler**			Location / Address:	7735 100th St. North City of Grant		
Soil parent material(s): (Check all that apply)	☐ Outwash	☑ Lacustrine	☐ Loess	☐ Till	☐ Alluvium	☐ Bedrock	☐ Organic Matter
Landscape Position: (check one)	☐ Summit	☐ Shoulder	☐ Back/Side Slope	☑ Foot Slope	☐ Toe Slope	Slope shape	Convex, Linear
Vegetation:	Grass	Soil survey map units:		Slope %:	10.0	Elevation:	986
Weather Conditions/Time of Day:	Clear Warm 13:00				Date:	06/26/19	
Observation #/Location:	SB 2				Observation Type:	Auger	

Depth (in)	Texture	Rock Frag. %	Matrix Color(s)	Mottle Color(s)	Redox Kind(s)	Indicator(s)	I-------- Structure----------I		
							Shape	Grade	Consistence
0 to 6	Fine Sand	<35%	10YR 3/3				Blocky	Weak	Friable
6 to 13	Fine Sand	<35%	10YR 4/4				Blocky	Weak	Friable
13 to 24	Fine Sand	<35%	10YR 5/6				Blocky	Weak	Friable
24 to 48	Fine Sand	<35%	10YR 6/6				Granular	Weak	Friable

Comments

Textures:

c-clay
sic-silty clay
sc-sandy clay
cl-clay loam
sicl-silty clay loam
scl-sandy clay loam
si-silt
sil-silt loam
l-loam
sl-sandy loam*
ls-loamy sand*
s-sand*

Subsoil Indicator(s) of Saturation:

S1. Depleted matrix (value >/=4 and chroma </=2)
S2. Distinct gray or red redox features
S3. 5Y chroma </= 3
S4. 7.5 YR or redder faint redox concentrations or redox depletio

If yes to one of the above indicators then:

Topsoil Indicator(s) of Saturation:

T1. Wetland Vegetation
T2. Depressional Landscape
T3. Organic texture or organic modifiers
T4. N 2.5/ 0 color
T5. Redox features in topsoil
T6. Hydric Soil

***Sand Modifiers**

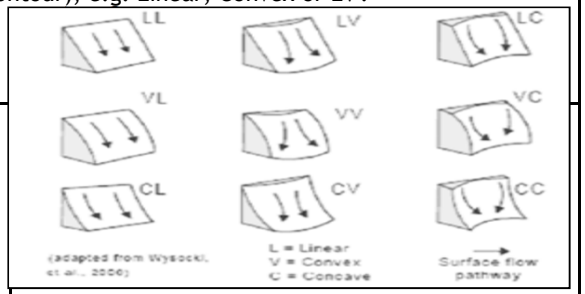
co-coarse
m-medium
f-fine
vf-very fine

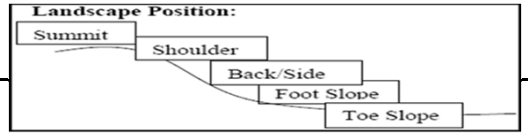
Consistence:

Loose-	Intact specimen not available
Friable-	Slight force between fingers
Firm-	Moderate force between fingers
Extremely firm-	Moderate force between hands or slight foot pressure
Rigid-	Foot pressure

Slope Shape:

Slope shape is described in two directions: up and down slope (perpendicular to the contour), and across slope (along the horizontal contour); e.g. Linear, Convex or LV'.





Soil Structure Grade:

Massive-	No observable aggregates, or no orderly arrangement of natural lines of weakness
Weak-	Poorly formed, indistinct peds, barely observable in place
Moderate-	Well formed, distinct peds, moderately durable and evident, but not distinct in undisturbed
Strong-	Durable peds that are quite evident in un-displaced soil, adhere weakly to one another, withstand displacement, and become separated when soil is disturbed
Loose-	No peds, sandy soil

Soil Structure Shape:

Granular-	The peds are approximately spherical or polyhedral and are commonly found in topsoil. These are the small, rounded peds that hang onto roots
Platy-	The peds are flat and plate like. They are oriented horizontally and are usually overlapping. Platy structure is commonly found in forested areas
Blocky-	The peds are block-like or polyhedral, and are bounded by flat or slightly rounded surface that are casting of the faces of surrounding peds.
Prismatic-	Flat or slightly rounded vertical faces bound the individual peds. Peds are distinctly longer vertically, and faces are typically cast or molds of
Single Grain-	The structure found in a sandy soil. The individual particles are not held together.