



Mailing Address
P.O. Box 66
Crystal Bay, MN 55323

Street Address
2750 Kelly Parkway
Orono, MN 55356

Phone: 952-249-4600

Fax: 952-249-4616

Website: www.ci.orono.mn.us

Certificate of Compliance
Inspection Form

New Subsurface Sewage
Treatment Systems (SSTS)

Inspection results based on Minnesota Pollution Control Agency (MPCA) requirements and
attached forms System status on date 05/21/2020:

[X] Compliant - Certificate of Compliance

Valid for 5 years from report date

[] 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:

Property address: 4340 Lakeview Court

Reason for inspection: New instalation

Property owner:

Owner's phone:

or

Owner's representative: Knapp and Sons Septic LLC

Representative phone: (763) 477-8566

Local regulatory authority: City of Orono

Regulatory authority phone: 952-249-4600

Brief system description: 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: Roger Peitso

Certification number: C6683

Business name:

License number:

Inspector signature: [Signature]

Phone number: 952-249-4625

Necessary or Locally Required Attachments

- [X] Soil boring logs
[X] System/As-built drawing
[] Other information (list):

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

Compliance criteria:

System discharges sewage to the ground surface.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
System discharges sewage to drain tile or surface waters.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
System causes sewage backup into dwelling or establishment.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

Comments/Explanation: New installation

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)

2. Tank Integrity – Compliance component #2 of 5

Compliance criteria:

System consists of a seepage pit, cesspool, drywell, or leaching pit. <i>Seepage pits meeting 7080.2550 may be compliant if allowed in local ordinance.</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Sewage tank(s) leak below their designed operating depth. If yes, which sewage tank(s) leaks:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

Comments/Explanation: Inspected installation of new tanks

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)

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:

4. Soil Separation – Compliance component #4 of 5

Date of installation: 05/21/2020 Unknown
(mm/dd/yyyy)

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: Yes No

Drainfield has at least a two-foot vertical separation distance from periodically saturated soil or bedrock.

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: Yes No

Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.*

“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) Yes No

Drainfield meets the designed vertical separation distance from periodically saturated soil or bedrock.

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 (Attach boring logs)
- Not applicable (Holding tank(s), no drainfield)
- Unable to verify (See Comments/Explanation)
- Other (See Comments/Explanation)

Comments/Explanation:

Benchmark 100' NW corner of Rock Bed at grade of primary site

Indicate depths or elevations

A. Bottom of distribution media	101.5
B. Periodically saturated soil/bedrock	98.5
C. System separation	3
D. Required compliance separation*	3

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

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

Any “no” answer indicates Noncompliance.

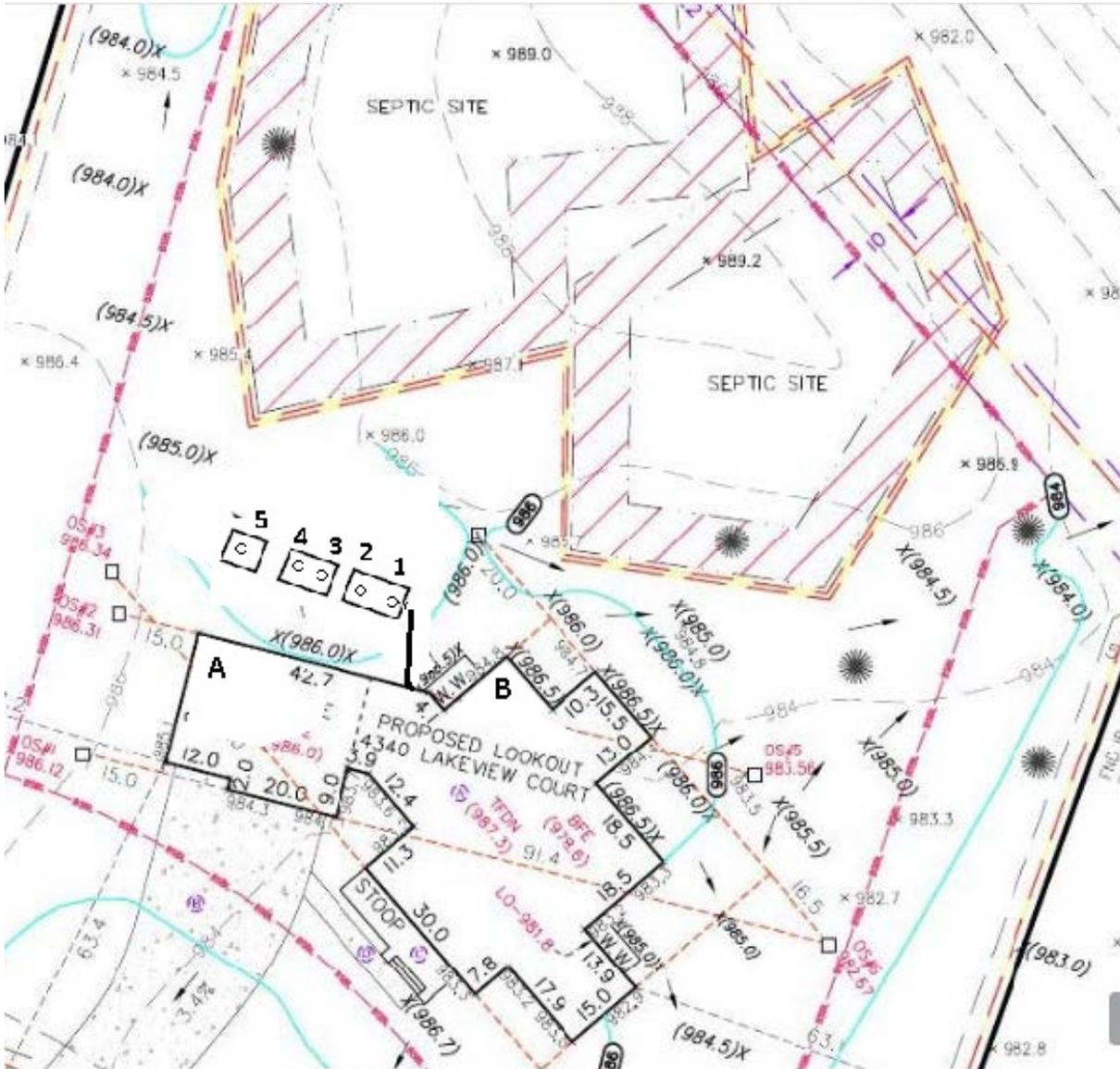
Upgrade Requirements (Minn. Stat. § 115.55) *An imminent threat to public health and safety (ITPHS) must be upgraded, replaced, or its use discontinued within ten months of receipt of this notice. If the system is failing to protect ground water, the system must be upgraded, replaced, or its use discontinued within three years of receipt of this notice. 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. 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.*



City of Orono Septic Asbuilt Form

Address: 4340 Lakeview Court Building Use: SFD
 Installer: Knapp and Sons Setic LLC License # L2930 Date: 8/21/2019
 Septic Tanks: 1-2250 1-1000 Pump Tank: 1-1000 Date Finaled: 5/21/2020 Bedrooms # 5
 System Type: I II III Mound Trenches Pressure Bed Other _____

Draw detailed diagram with measurements indicating distances to tank Risers. Use two(2) points from a permanent structure. Show locations of drop Boxes and length of trenches



	A	B
1	31'	35.5'
2	32'	43'
3	33.5'	48
4	36'	54'
5	42.5	64'
6		
7		
8		
9		
10		
11		
12		

Not to scale



Soil Observation Log

Project ID:

v 04.01.2019

Client: **Dingman Custom Homes** Location / Address: **4340 Lakeview Court, Orono, MN**

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: **Linear, Linear**

Vegetation: **Grass** Soil survey map units: **L40B** Slope %: **6.0** Elevation: **99.75**

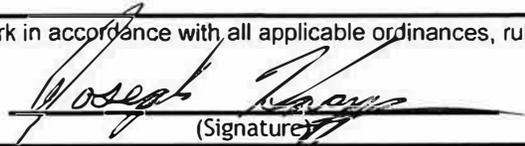
Weather Conditions/Time of Day: **Cloudy/9:40AM** Date: **07/17/19**

Observation #/Location: **SB-1** Observation Type: **Auger**

Depth (in)	Texture	Rock Frag. %	Matrix Color(s)	Mottle Color(s)	Redox Kind(s)	Indicator(s)	Structure		
							Shape	Grade	Consistence
0-8	Loam	<35%	10YR 2/2				Blocky	Moderate	Friable
8-18	Clay Loam	<35%	10YR 3/3				Blocky	Moderate	Firm
18-24	Clay Loam	<35%	10YR 3/3	10YR 6/2	Concentrations	S1	Blocky	Moderate	Firm

Comments: **Mottling seen at 18".**

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

Joseph Knapp (Designer/Inspector)  (Signature) **8187** (License #) **7/17/2019** (Date)

Additional Soil Observation Logs

Project ID:

0



Client: Dingman Custom Homes			Location / Address: 4340 Lakeview Court, Orono, MN						
Soil parent material(s): (Check all that apply)			<input type="checkbox"/> Outwash	<input type="checkbox"/> Lacustrine	<input type="checkbox"/> Loess	<input checked="" type="checkbox"/> Till	<input type="checkbox"/> Alluvium	<input type="checkbox"/> Bedrock	<input type="checkbox"/> Organic Matter
Landscape Position: (check one)			<input type="checkbox"/> Summit	<input type="checkbox"/> Shoulder	<input checked="" type="checkbox"/> Back/Side Slope	<input type="checkbox"/> Foot Slope	<input type="checkbox"/> Toe Slope	Slope shape: Linear, Linear	
Vegetation:	Grass	Soil survey map units:	L40B	Slope %:	6.0	Elevation:	100.7		
Weather Conditions/Time of Day:		Cloudy/9:50AM				Date:	07/17/19		
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
0-10	Loam	<35%	10YR 2/2				Blocky	Moderate	Friable
10-18	Clay Loam	<35%	10YR 3/3				Blocky	Moderate	Firm
18-22	Clay Loam	<35%	10YR 3/3	5YR 3/4	Concentrations	S1	Blocky	Moderate	Firm
				10YR 6/2	Depletion	S1			
Comments		Mottling seen at 18".							



Soil Observation Log

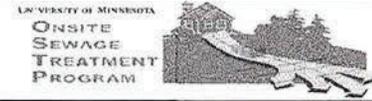
Project ID:

v 04.01.2019

Client: Dingman Custom Homes				Location / Address: 4340 Lakeview Court, Orono, MN					
Soil parent material(s): (Check all that apply) <input type="checkbox"/> Outwash <input type="checkbox"/> Lacustrine <input type="checkbox"/> Loess <input checked="" type="checkbox"/> Till <input type="checkbox"/> Alluvium <input type="checkbox"/> Bedrock <input type="checkbox"/> Organic Matter									
Landscape Position: (check one) <input type="checkbox"/> Summit <input type="checkbox"/> Shoulder <input checked="" type="checkbox"/> Back/Side Slope <input type="checkbox"/> Foot Slope <input type="checkbox"/> Toe Slope						Slope shape Linear, Linear			
Vegetation: Grass		Soil survey map units: L40B		Slope %: 6.0		Elevation (ft): 100.45			
Weather Conditions/Time of Day: Cloudy/10.00AM						Date: 07/17/19			
Observation #/Location: SB-3				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
0-10	Loam	<35%	10YR 2/2				Blocky	Moderate	Friable
10-18	Clay Loam	<35%	10YR 3/3				Blocky	Moderate	Firm
18-20	Clay Loam	<35%	10YR 3/3	10YR 6/2	Depletion	S1	Blocky	Moderate	Firm
Comments Mottling seen at 18".									

Additional Soil Observation Logs

Project ID:



Client: **Dingman Custom Homes**

Location / Address: **4340 Lakeview Court, Orono, MN**

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 **Linear, Linear**

Vegetation: **Grass** Soil survey map units: **L40B** Slope %: **6.0** Elevation (ft): **98.6**

Weather Conditions/Time of Day: **Cloudy/10:15AM** Date: **07/17/19**

Observation #/Location: **SB-4** 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
0-14	Loam	<35%	10YR 2/2				Blocky	Moderate	Friable
14-15	Clay Loam	<35%	10YR 3/3				Blocky	Moderate	Firm
15-20	Clay Loam	<35%	10YR 3/3	7.5YR 5/8	Concentration	S1	Blocky	Moderate	Firm

Comments Mottling seen at 15".



Soil Observation Log

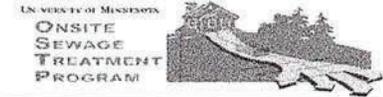
Project ID:

v 04.01.2019

Client: Dingman Custom Homes			Location / Address: 4340 Lakeview Court, Orono, MN						
Soil parent material(s): (Check all that apply) <input type="checkbox"/> Outwash <input type="checkbox"/> Lacustrine <input type="checkbox"/> Loess <input checked="" type="checkbox"/> Till <input type="checkbox"/> Alluvium <input type="checkbox"/> Bedrock <input type="checkbox"/> Organic Matter									
Landscape Position: (check one) <input type="checkbox"/> Summit <input type="checkbox"/> Shoulder <input checked="" type="checkbox"/> Back/Side Slope <input type="checkbox"/> Foot Slope <input type="checkbox"/> Toe Slope						Slope shape: Linear, Linear			
Vegetation: Grass		Soil survey map units: L40B			Slope %: 6.0		Elevation (ft): 100.1		
Weather Conditions/Time of Day: Cloudy/10:30AM					Date: 07/17/19				
Observation #/Location:		SB-5				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
0-11	Loam	<35%	10YR 2/2				Blocky	Moderate	Friable
11-13	Clay Loam	<35%	10YR 3/3				Blocky	Moderate	Firm
13-18	Clay Loam	<35%	10YR 3/3	10YR 7/2	Depletion	S1	Blocky	Moderate	Firm
Comments Mottling seen at 13".									

Additional Soil Observation Logs

Project ID:



Client: Dingman Custom Homes			Location / Address: 4340 Lakeview Court, Orono, MN						
Soil parent material(s): (Check all that apply) <input type="checkbox"/> Outwash <input type="checkbox"/> Lacustrine <input type="checkbox"/> Loess <input checked="" type="checkbox"/> Till <input type="checkbox"/> Alluvium <input type="checkbox"/> Bedrock <input type="checkbox"/> Organic Matter									
Landscape Position: (check one) <input type="checkbox"/> Summit <input type="checkbox"/> Shoulder <input checked="" type="checkbox"/> Back/Side Slope <input type="checkbox"/> Foot Slope <input type="checkbox"/> Toe Slope						Slope shape: Linear, Linear			
Vegetation: Grass		Soil survey map units: L40B		Slope %: 6.0		Elevation (ft): 101.1			
Weather Conditions/Time of Day: Cloudy/11:00AM						Date: 07/17/19			
Observation #/Location: SB-6					Observation Type: Auger				
Depth (in)	Texture	Rock Frag. %	Matrix Color(s)	Mottle Color(s)	Redox Kind(s)	Indicator(s)	----- Structure-----		
							Shape	Grade	Consistence
0-8	Loam	<35%	10YR 2/1				Blocky	Moderate	Friable
8-14	Clay Loam	<35%	10YR 3/3				Blocky	Moderate	Firm
14-20	Clay Loam	<35%	10YR 3/3	10YR 6/2	Concentration	S1	Blocky	Moderate	Firm
Comments Mottling seen at 14".									