

ZIERKE SOIL TESTING

Andrew and Katie Thomas
14770 197th St N
Marine on St Croix, MN 55047

5/13/2024

Dear Andrew and Katie Thomas,

At your request, I have conducted a septic inspection to determine the compliance status of your septic system pursuant to Minnesota Rules Chapter 7080.1500.

The compliance test set out in 7080.1500 has three main inquiries: 1). Is the system functioning hydraulically (disposing of effluent in a manner that prevents it from coming in contact with people)? 2). Are the septic tanks water tight? 3). Does the system have sufficient vertical separation between the bottom of the septic system and restrictive layers (bedrock, standing water, seasonally wet layers, etc) to provide full treatment of effluent?

Based off of these criteria, your septic system is compliant. A certification of compliance is in effect for three years from the date it is issued. To be clear, this should not be construed as a guarantee of future system function – there are too many factors that influence the lifespan of a septic system for an inspector to predict or even guess how long a septic system will last. A copy of this report will be filed with your local unit of government for their records.

Sincerely,



Benjamin Zierke
MPCA Lic 119, Cert 9594

ADDRESS:
28587 Jeffrey Ave
Chisago City, MN 55013

PHONE 651-249-1346
EMAIL benzierke@gmail.com

Compliance inspection report form

Existing Subsurface Sewage Treatment System (SSTS)

Doc Type: Compliance and Enforcement

Instructions: Inspector must submit completed form to Local Governmental Unit (LGU) and system owner within 15 days of final determination of compliance or noncompliance. Instructions for filling out this form are located on the Minnesota Pollution Control Agency (MPCA) website at <https://www.pca.state.mn.us/sites/default/files/wq-wwists4-31a.pdf>.

Property information

Local tracking number: _____

Parcel ID# or Sec/Twp/Range: 2603220210010 Reason for Inspection Sale

Local regulatory authority info: Washington County

Property address: 14770 197th St Marine on St Croix, MN 55047

Owner/representative: Andrew and Katie Thomas Owner's phone: 612-760-2228

Brief system description: (2) 1000 gallon septic tanks, 1000 gallon lift tank, mound dispersal system

System status

System status on date (mm/dd/yyyy): 5/13/2024

Compliant – Certificate of compliance*

(Valid for 3 years from report date unless evidence of an imminent threat to public health or safety requiring removal and abatement under section 145A.04, subdivision 8 is discovered or a shorter time frame exists in Local Ordinance.)

***Note: Compliance indicates conformance with Minn. R. 7080.1500 as of system status date above and does not guarantee future performance.**

Noncompliant – Notice of noncompliance

Systems failing to protect ground water must be upgraded, replaced, or use discontinued within the time required by local ordinance.

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 or under section 145A.04 subdivision 8.

Reason(s) for noncompliance (check all applicable)

- Impact on public health (Compliance component #1) – *Imminent threat to public health and safety*
- Tank integrity (Compliance component #2) – *Failing to protect groundwater*
- Other Compliance Conditions (Compliance component #3) – *Imminent threat to public health and safety*
- Other Compliance Conditions (Compliance component #3) – *Failing to protect groundwater*
- System not abandoned according to Minn. R. 7080.2500 (Compliance component #3) – *Failing to protect groundwater*
- Soil separation (Compliance component #5) – *Failing to protect groundwater*
- Operating permit/monitoring plan requirements (Compliance component #4) – *Noncompliant - local ordinance applies*

Comments or recommendations

No issues observed with system during site visit 5/9/2024. Homeowner reported no past issues with the system.

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.

By typing my name below, I certify the above statements to be true and correct, to the best of my knowledge, and that this information can be used for the purpose of processing this form.

Business name: Zierke Soil Testing Certification number: 9594

Inspector signature: *Benjamin Zierke* License number: 119

(This document has been electronically signed)

Phone: 651-249-1346

Necessary or locally required supporting documentation (must be attached)

- Soil observation logs
- System/As-Built
- Locally required forms
- Tank Integrity Assessment
- Operating Permit
- 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

Attached supporting documentation:

Other: _____
 Not applicable

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

Describe verification methods and results:

None of the above observed.

2. Tank integrity – Compliance component #2 of 5

Compliance criteria:

System consists of a seepage pit, cesspool, drywell, leaching pit, or other pit?	<input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No
Sewage tank(s) leak below their designed operating depth?	<input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No
If yes, which sewage tank(s) leaks:	

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

Attached supporting documentation:

Empty tank(s) viewed by inspector
 Name of maintenance business: Smilies
 License number of maintenance business: 2428
 Date of maintenance: 5/9/2024
 Existing tank integrity assessment (Attach)
 Date of maintenance (mm/dd/yyyy): _____ (must be within three years)
 (See form instructions to ensure assessment complies with Minn. R. 7082.0700 subp. 4 B (1))
 Tank is Noncompliant (pumping not necessary – explain below)
 Other: _____

Describe verification methods and results:

Present for pumping by Smilies Sewer 5/9/2024. Tanks water tight and baffles in place (verified with camera).

3. Other compliance conditions – Compliance component #3 of 5

3a. Maintenance hole covers appear to be structurally unsound (damaged, cracked, etc.), or unsecured?

Yes* No Unknown

3b. Other issues (*electrical hazards, etc.*) to immediately and adversely impact public health or safety? Yes* No Unknown

***Yes to 3a or 3b - System is an imminent threat to public health and safety.**

3c. System is non-protective of ground water for other conditions as determined by inspector?

Yes* No

3d. System not abandoned in accordance with Minn. R. 7080.2500?

Yes* No

***Yes to 3c or 3d - System is failing to protect groundwater.**

Describe verification methods and results:

Attached supporting documentation: Not applicable

4. Operating permit and nitrogen BMP* – Compliance component #4 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 specified in the system design? 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. 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.

Describe verification methods and results:

Attached supporting documentation: Operating permit (Attach)

5. Soil separation – Compliance component #5 of 5

Date of installation 11/20/2003 Unknown
(mm/dd/yyyy)

Shoreland/Wellhead protection/Food beverage lodging? Yes No

Compliance criteria (select one):

5a. 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.

5b. 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.*

5c. "Experimental", "Other", or "Performance" systems built under pre-2008 Rules; Type IV or V systems built under 2008 Rules 7080.2350 or 7080.2400 (Intermediate Inspector License required ≤ 2,500 gallons per day; Advanced Inspector License required > 2,500 gallons per day) Yes No*

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

Attached supporting documentation:

- Soil observation logs completed for the report
- Two previous verifications of required vertical separation
- Not applicable (No soil treatment area)
- _____

Indicate depths or elevations

A. Bottom of distribution media	101.5'
B. Periodically saturated soil/bedrock	98.5'
C. System separation	3.0'
D. Required compliance separation*	3.0'

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

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

Describe verification methods and results:

See attached boring log and elevations.

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.

Logs of Soil Borings

Location of Project: 14770 197th St N Marine on St Croix, MN 55047

Borings Made by Ben Zierke

Date:

5/9/2024

Hand bucket auger used for borings; USDA - SCS Soil Classification used.

Depth, in Inches	Boring Number 1	Depth, in Inches	Boring Number 2
0-----	-----	0-----	-----
0-10"	10YR 3/3 sandy loam		
10-18"	7.5YR 4/3 silt loam		
18-23"	7.5YR 4/4 silt loam, few 7.5YR 5/2 depletions		
23-28"	7.5YR 4/4 sandy loam		

End of boring at 2.3 feet

Standing water table:

Present at _____ feet of depth _____ Hours after boring

Standing water not present in hole

Mottled Soil:

Observed at 1.5 feet of depth

Mottled soil not present in bore hole

Comments:

End of boring at _____ feet

Standing water table:

Present at _____ feet of depth _____ Hours after boring

Standing water not present in hole

Mottled Soil:

Observed at _____ feet of depth

Mottled soil not present in bore hole

Comments:

Depth, in Inches	Boring Number 3	Depth, in Inches	Boring Number 4
0-----	-----	0-----	-----

End of boring at _____ feet

Standing water table:

Present at _____ feet of depth _____ Hours after boring

Standing water not present in hole

Mottled Soil:

Observed at _____ feet of depth

Mottled soil not present in bore hole

Comments:

End of boring at _____ feet

Standing water table:

Present at _____ feet of depth _____ Hours after boring

Standing water not present in hole

Mottled Soil:

Observed at _____ feet of depth

Mottled soil not present in bore hole

Comments:

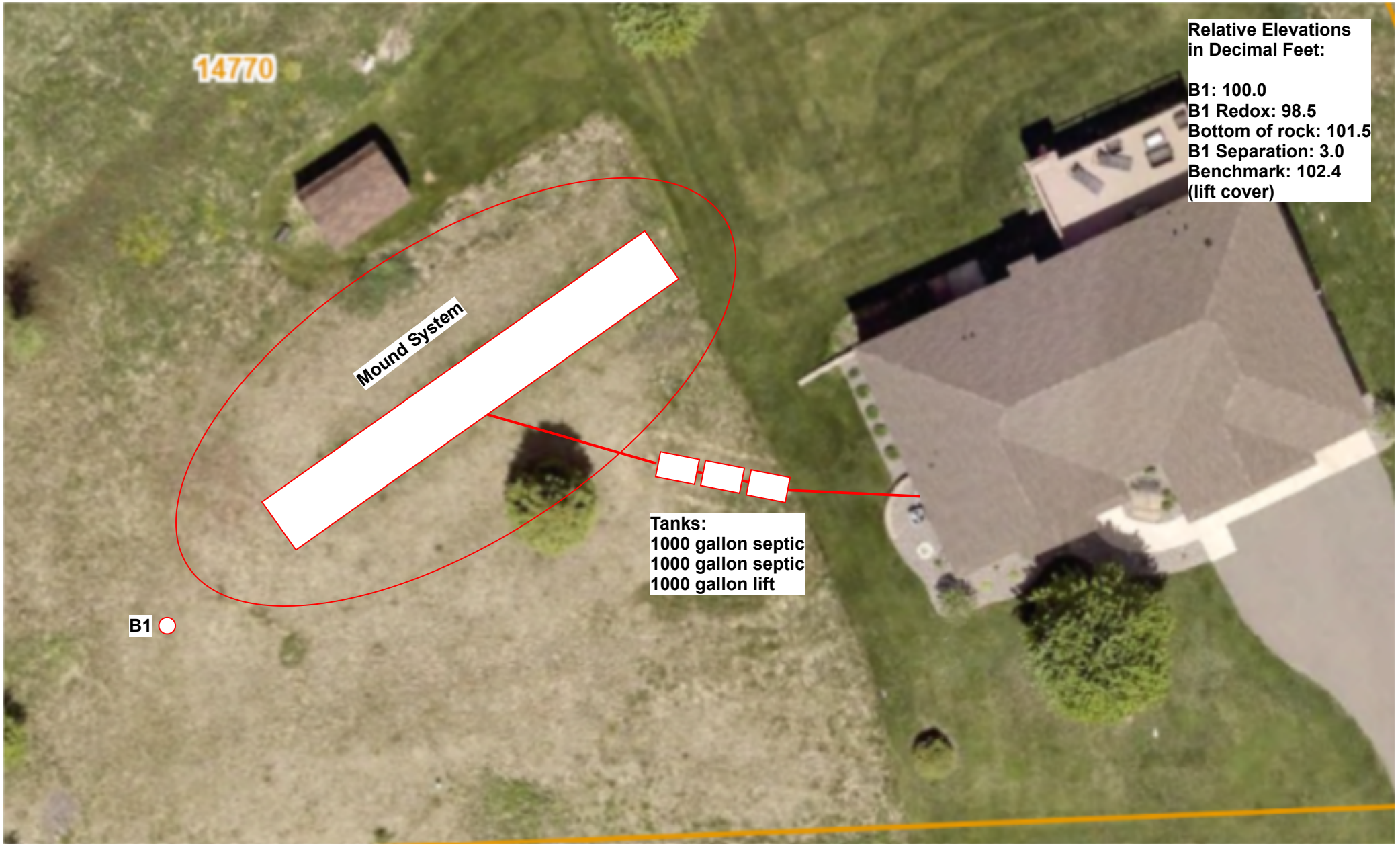
14770

Mound System

B1 ○

Tanks:
1000 gallon septic
1000 gallon septic
1000 gallon lift

Relative Elevations
in Decimal Feet:
B1: 100.0
B1 Redox: 98.5
Bottom of rock: 101.5
B1 Separation: 3.0
Benchmark: 102.4
(lift cover)





WASHINGTON COUNTY, MINNESOTA

Department of Public Health

and Environment 651/430-6688

NEW MOUND PERMIT	330.00
SEPTIC APPLICATION/SOIL REVIEW	185.00
Total Fees :	525.00
Total Paid :	525.00
Total Due :	.00

PERMIT NUMBER JORL/HYKALYNN HAHR
 601 15TH AVE N
 SO SAINT PAUL, MN 55078
 Applicant : JORL/HYKALYNN HAHR 457-1830

Scanned 8/14/08 BM

0010-03051

PERMISSION IS HEREBY GRANTED

To execute the work specified in this permit on the following described property upon express condition that said persons and their agents, employees and workmen shall conform in all respects to the provisions of the Building Code, and/or Ordinances. This permit may be revoked at any time upon the violation of any of the provisions of said code and ordinances.

Project Address : 14770 197TH ST N SCANDIA MN 55073
 Legal Description: LOT 008 BLOCK 001 SAND LAKE OVERLOOK (OUTLOT A IS TO BE Dec 26-032-20-21-0010
 Flow Capacity 600 Gal/Day Tank Volume 2000
 Soil Conditions: Depth to Restriction 18 inches Percol Rate 21 Min/Inch

Soil Treatment Type:
 Bottom Area 600 Rock Depth 9

Authorized Work / Special Conditions
 - Install individual sewage treatment system as per approved design in area tented and shown on site plan.

** Permit Expiration Date : Sewage Treatment : 2004-10-02

A CERTIFICATE OF OCCUPANCY MUST BE REQUESTED AND ISSUED PRIOR TO USE OR OCCUPANCY OF WORK PERMITTED BY A BUILDING PERMIT.

** This permit shall expire and be null and void if the work authorized by the Building Permit is not commenced within 90 days of the date of issuance or if work is abandoned or suspended for a period of 120 days. Term of the Building Permit is 12 months from date of issue. Term of sewage treatment permit is 12 months from date of issue.

Penalty for violation of any of the provisions of building code: Fine not to exceed five hundred dollars (\$500.00) or imprisonment for not more than ninety (90) days, or both.

Permit Issue Date 2003-10-02 Code Enforcement Officer P. Cleary

INSPECTION RECORD

BUILDING	DATE	INSP.	COMMENTS
Foundation			
Foundation Wall			
Plumbing (Groundwork)			
Heating (Groundwork)			
Rough Plumbing			
Rough Gas Piping			
Rough Heating and Ventilation			
Framing			
Insulation			
Fireplace			
Chimney			
Wallboard or Lath and Plaster			
Final Electrical			
Final Plumbing			
Final Gas Piping			
Final Heating and Ventilation			
Final Building			

SEWAGE TREATMENT SYSTEM	DATE	INSP.	COMMENTS
Installation	11-20-03	P. Gouard	Tank Size: 2-1000 6000 Treatment Area: 6000 sq
As Built			Installer: Mike Petersen

DRIVEWAY	DATE	INSP.	COMMENTS
Access			
Installation			

NOTES:

11-17-03 Rough up
11-20 Tanks + Backfill

EKLIN SOIL TESTING AND INSPECTIONS, INC.

1986 Ridgewood Avenue
White Bear Lake, MN 55110
1-651-429-1090

Owner's Name	JOEL HAUER
Job Site Address	LOT 8 BLOCK 1 SAND LAKE OVERLOOK
City or Township	SCANDIA 199TH STREET
Use of Building	HOME - 4 BEDROOMS

Design Flow Rate	600 GALS PER DAY	Perc Rate	21.34 MPI	Land Slope	7	Percent
Two Required Tank Sizes	1000 Gallons	1000 Gallons	Lift Station Tank Size	1000	Gallons	
Rock Bed Width	10 FT	Rock Bed Length	60 FT			
Required Absorption Width	20	Feet	Depth of Clean Sand Fill at Upslope Edge of Rock Layer	18"	Feet	
Minimum Downslope Dike Width After Accounting for the Absorption Area				25	Feet	
Minimum Upslope Dike	BLEND	10	Feet ±	Minimum Length of Dike	100	Feet
Any Other Special Conditions	TANK LOCATIONS CAN VARY — FENCE OFF THE TEST SITE BEFORE GRADING —					

PART OF THE TEST SITE HAS BEEN GRADED —
MOUND ROCK BED IS STAKED —
THE TEST SITE HAS BEEN RESTAKED

This system has been designed by a Pollution Control Agency (PCA) Certified Professional.

Designer Name	DALE EKLIN	PCA Certification #	695
Address	1986 RIDGEWOOD AVE WHITE BEAR LAKE	Phone #	651-429-1090
Signature	<i>[Signature]</i> MN 55110	Date	7-19-2003



SITE REVIEW AND/OR SEPTIC PERMIT APPLICATION

Washington County Public Health & Environment

14949 62nd Street N, PO Box 6, Stillwater, MN 55082-0006

651/430-6688 FAX 651/430-6730

Paid \$ 525⁰⁰

Receipt # 1816/45859

[Handwritten Signature]

Make checks payable to WASHINGTON COUNTY

- \$205 - Drainfield System Permit
- \$830 - Mound System Permit
- \$330 - Alternative/Experimental System
- \$100 - Additional Review Fee (1 hour minimum)

- \$195 - Individual Lot
- \$135 - Subdivision Soil/Site Review - Base fee Plus \$60/lot
- \$100 - Renewal of an Expired Permit

0010-03051

Legal Description and Parcel Identification Number (especially if this is for a NEW SUBDIVISION OR MINOR SUBDIVISION) **LOT 8 BUKI SAND LAKE OUBRLOOK SCANDIA** *SEC 26 TW 32N RA 20W*

Applicant **JOEL HAUER** Address **504 15TH AVE. N.** City **SO. ST. PAUL, MN** State **MN** Zip **55075** Phone **651-457-1836**

Owner (if different from applicant) Address City State Zip Phone

New Home Existing Home New Business Existing Business Number Of Bedrooms: **4** Gallons Per Day: **600**

Check the following fixture(s) which are or will be installed: Garbage Disposal Recreational Bathing Facility: (jacuzzi, hot tub, etc.)

New Home Drainfield System Mound System Alternate/Experimental System Existing Permit/Renewal

Existing Home Replacement System Drainfield System Mound System Tank Replacement Only

Site Approval Only If this site has been previously approved, attach copy of approval letter Additional Soil Test Data for Previously Approved Site

The following exhibits are required as part of this application and shall be attached hereto: Percolation Test Reports; Soil Boring Logs; Site Plan drawn to scale showing location of buildings, lot lines, percolation test holes, soil boring holes, proposed location of system and well; one (1) copy of the System Design; and one (1) copy of the Final Building Plan. The house and the drainfield areas must be staked. Inaccurate or incomplete information will result in delays in processing.

AGREEMENT: The undersigned hereby makes Application for Permit to Install or Extend Sewage Treatment System herein specified, agreeing that all such work shall be done in strict accordance with ordinances and regulations of the County of Washington, Minnesota. Applicant agrees that the Site Plan, Sketches and Design submitted herewith, and which are reviewed by Washington County, together with any requirement and/or restriction made necessary by conditions peculiar to a particular location, shall become a part of the permit. Applicant further agrees to provide access, at reasonable times, to Washington County for the purpose of performing inspections required and that no part of the system shall be covered until it has been inspected and accepted. APPLICATION IS FOR AN INSTALLATION AT A SPECIFIC LOCATION; ANY DEVIATION FROM THE APPROVED LOCATION WILL VOID THE PERMIT. It shall be the responsibility of the applicant for the permit to notify the Office of the Washington County Dept. of Public Health & Environment that the installation is ready for inspection.

I hereby certify the above to be true and correct. In connection with your request for a soil review/septic permit, I hereby give Washington County Department of Public Health and Environment permission to enter upon my property during normal business hours for the purpose of determining the suitability of the location, design, and construction, which may include minor excavation or soil borings by the Department.

Signature of Applicant (Owner or Contractor) _____ Date _____

THE AREA BELOW IS FOR COUNTY USE ONLY

SITE EVALUATION: BY INSPECTOR *[Signature]* DATE: **9-21-03**

SETBACKS:

	REQUIRED (CIRCLE APPROPRIATE ITEM(S))				ACTUAL
Well (including adjacent property)	30'	75'	100'	150'	
Wetland, Pond, Lake, Stream, River, or Bluffline	20'	40'	75'	100'	

CONCLUSIONS: Site Suitable: Site Unsuitable: Additional Tests Required: Verify Use: _____ Bedrooms

NOTES: Lot Size _____ Year Built _____

14770 197th St N

26032 2021 0010

BORING LOG

SOIL VERY DRY -
DIFFICULT TO READ

DATE 8-31-01

BOREHOLE DIAMETER 4"-3 1/2" HAND AUGER

DEPTH FEET	HOLE #1	HOLE #2	HOLE #3	HOLE #4	HOLE #5	HOLE #6
1	TOP SOIL - LOAM	TOP SOIL	TOP SOIL	TOP SOIL	TOP SOIL	TOP SOIL
2	BROWN LOAM - MOTTLED SOIL	REDDISH BROWN LOAM	BROWN LOAM	REDDISH BROWN SANDY LOAM	REDDISH BROWN LOAM	LIGHT BROWN, MEDIUM SAND HEAVY ROCKS
3	REDDISH BROWN LOAM	MOTTLED SOIL - REDDISH BROWN LOAM	REDDISH BROWN LOAM	REDDISH BROWN SANDY LOAM	LIGHT BROWN, MEDIUM SAND	ROCKS CARVING STOP
4	STOP	STOP	MOTTLED SOIL - REDDISH BROWN, SANDY LOAM	BROWN, COARSE SAND	MOTTLED SOIL - REDDISH BROWN, SANDY LOAM	
5			STOP			
6	MOTTLE 18"	MOTTLE 26"	STOP		STOP	
7	LOW BORING DOWNSLOPE	LOW BORING DOWNSLOPE	MOTTLE 36"	STOP		
8			LOW BORING DOWNSLOPE	OKAY 6'	MOTTLE 42"	
9						
10						

DATE 8-31-01

BOREHOLE DIAMETER 4"-3 1/2" HAND AUGER

DEPTH FEET	HOLE # 31	HOLE #	SOIL CLASSIFICATION	HOLE #	HOLE #	HOLE #
1	TOP SOIL BROWN, COARSE SAND - Rocks		BROWN SAND 7.5YR 4/4 REDDISH BROWN SAND 2.5YR 5/4			
2			BROWN LOAM 7.5YR 4/4			
3	REDDISH BROWN, SANDY LOAM - Rocks -		LIGHT BROWN SAND 7.5YR 6/3			
4	OBSTRUCTION STOP					
5						
6						
7						
8						
9						
10						

JOB LOT 8 B/LK 1
SAND LAKE OVERLOOK
SCANDIA

BORING LOG

EXTENDED TEST SITE
9-20-01

DATE 9-20-01

BOREHOLE DIAMETER 4" HAND AUGER
BORINGS 9-16-2003 VERIFY SOILS

DEPTH FEET	HOLE # 7	HOLE # 8	HOLE #	HOLE # 7	HOLE # 10	HOLE #
1	TOP SOIL - LOAM	TOP SOIL		TOP SOIL LOAM	TOP SOIL LOAM	
2	REDDISH BROWN LOAM -	REDDISH BROWN SANDY LOAM		BROWN LOAM	BROWN LOAM	
3	MOTTLED SOIL			MOTTLED SOIL REDDISH BROWN LOAM	MOTTLED SOIL REDDISH BROWN LOAM	
4	STOP			STOP	STOP	
5	MOTTLE 20"			MOTTLED " SOIL 22"	MOTTLED " SOIL 20"	
6		STOP				
7		OKAY 6'				
8						
9						
10						