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): 4/4/2018

☐ **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:

Property address: 19690 Parkview Ln, Scandia, MN 55073
Reason for inspection: Sale
Property owner: Timothy and Sandra McKie
Owner's phone: 651-755-3470
or
Owner's representative:
Representative phone:
Local regulatory authority: Washington County
Regulatory authority phone: 651-430-6655
Brief system description: 1500 gallon septic tank, gravity rock trench drainfield

Comments or recommendations:
Inspection performed in winter conditions.

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: Benjamin Zierke
Certification number: C9594
Business name: Zierke Soil Testing
License number: L119
Inspector signature:
Phone number: 651-249-1346

Necessary or Locally Required Attachments

☒ Soil boring logs ☒ System/As-built drawing ☐ Forms per local ordinance
☒ Other information (list): Pumping Report

Property address: 19690 Parkview Ln, Scandia, MN 55073 Inspector initials/Date: BZ 4/4/18 (mm/dd/yyyy)

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.

Comments/Explanation:
Sandra did not report any issues with the system.

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. *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.

Comments/Explanation:
Smilies pumped 6/6/2017 with no issues noted. See attached.

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:

Property address: 19690 Parkview Ln, Scandia, MN 55073 Inspector initials/Date: BZ | 4/4/16 (mm/dd/yyyy)

4. Soil Separation – Compliance component #4 of 5

Date of installation: 3/16/1990 (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 (Attach boring logs)
☐ Not applicable *(Holding tank(s), no drainfield)*
☐ Unable to verify *(See Comments/Explanation)*
☐ Other *(See Comments/Explanation)*

Comments/Explanation:

Indicate depths or elevations

A. Bottom of distribution media	97.8'
B. Periodically saturated soil/bedrock	98.3'
C. System separation	-0.5'
D. Required compliance separation*	2.0'

*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.*

Relative Elevations (in feet)

B1: 100.0, redox 98.3
B2: 100.3, redox 96.6

Top of rock: 99.3
Bottom of rock: 97.8

B1 Separation: -0.5
B2 Separation: 1.2

Benchmark: 106.8
(garage floor)

Height of instrument: 107.5

Logs of Soil Borings

Location of Project: 19690 Parkview Ln Scandia, MN 55073

Borings Made by Ben Zierke Date: 4/3/2018

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

Depth, in Inches	Boring Number 1
0----------	----------
0-12"	7.5YR 3/3 loam
12-22"	7.5YR 4/4 silt loam, weak platy structure, moderately saturated, faint 5YR 5/3 redox present at 20"
22-28"	5YR 4/4 massive loamy till

End of boring at 2.3 feet

Standing water table:

Present at feet of depth Hours after boring

Standing water not present in hole [X]

Mottled Soil:

Observed at 1.7 feet of depth

Mottled soil not present in bore hole [ ]

Comments:

Depth, in Inches	Boring Number 2
0----------	----------
0-12"	7.5YR 3/3 loam
12-24"	7.5YR 4/4 sandy loam
24-44"	7.5YR 4/4 loamy fine sand with thin dark bands below 36"
44-48"	5YR 4/4 sandy loam, slightly cemented, redox present at 44"

End of boring at 4 feet

Standing water table:

Present at feet of depth Hours after boring

Standing water not present in hole [X]

Mottled Soil:

Observed at 3.7 feet of depth

Mottled soil not present in bore hole [ ]

Comments:

Depth, in Inches	Boring Number 3
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:

Depth, in Inches	Boring Number 4
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:

NORTH LINE

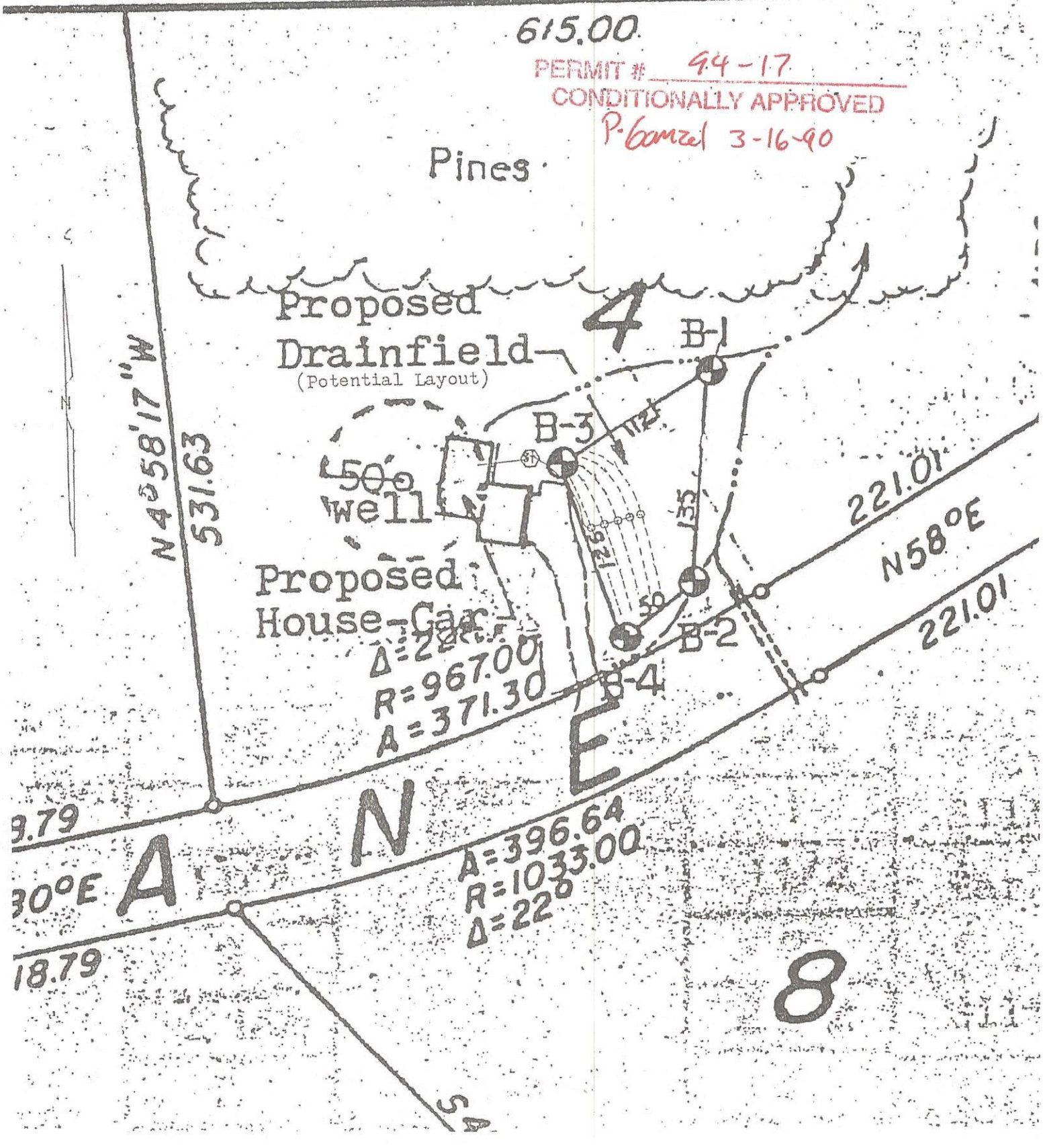
N89°56'30"E

Lot 4 Block 2
"MERRIHILLS"
(New Scandia Twnshp)

615.00

PERMIT # 94-17
CONDITIONALLY APPROVED
P. Gamzel 3-16-90

Pines



SUBJECT TO APPROVAL
OF COUNTY BUILDING OFFICIAL

L-14

PERCOLATION TEST DATA SHEET

Test hole location Lot 4 Block 2 "Merrihills" Pt. of E½ Sec. 05, T30N R20W Hole number P-2

Date test hole was prepared 11/21/89, Depth of hole bottom, 24 inches.

Diameter of hole, 6 inches.

Soil data from test hole:

Depth, inches	Soil texture
0-24	Silt Loam

Method of scratching sidewall Pocket

Depth of pea-sized gravel in bottom of hole, 2 inches.

Date and hour of initial water filling 11/21/89

Depth of initial water filling, 10 inches above hole bottom.

Method used to maintain at least 12 inches of water depth in hole for at least 4 hours Constant Monitoring.

Percolation test readings made by R. Stanford on 11/22/89 (date) starting at 11:01 (A.M.) p.M. Maximum water depth above gravel during test, 6 inches.

Time	Time Interval, Minutes	Measurement, inches	Drop in water level, inches	Remarks
11:01		6		
11:31	30	3 10/16	2 6/16	
11:31		6		
12:01		4 9/16	2 9/16	
12:01		6		
12:31		4 8/16	1 8/16	
12:31		6		
1:01		4 14/16	1 2/16	
1:01		6		
1:31		5 4/16	0 12/16	0 12/16" Drop = 40.0 MPI

SUBJECT TO APPROVAL
OF COUNTY BUILDING OFFICIAL

L-14

PERCOLATION TEST DATA SHEET

Test hole location Lot 4 Block 2 "MERRIHILL" Pt. of E/O Access Road Hole number P-1

Date test hole was prepared 11/21/89, Depth of hole bottom, 24 inches.

Diameter of hole, 6 inches.

Soil data from test hole:

Depth, inches	Soil texture
0-24	Silt Loam

Method of scratching sidewall 4 Prong

Depth of pea-sized gravel in bottom of hole, 0 inches.

Date and hour of initial water filling 11/21/89

Depth of initial water filling, 10 inches above hole bottom.

Method used to maintain at least 12 inches of water depth in hole for at least 4 hours Constant Monitoring

Percolation test readings made by R. Richardson on 11/22/89 (date) starting at 11:00 (a.m.) p.m. Maximum water depth above gravel during test, 6 inches.

Time	Time Interval, Minutes	Measurement, inches	Drop in water level, inches	Remarks
11:00		6		
11:30	30	3 4/16	2 0/16	
11:30		6		
12:00		4 4/16	1 12/16	
12:00		6		
12:30		4 10/16	1 4/16	
12:30		6		
1:00		5 0/16	1 0/16	
1:00		6		
1:30		5 5/16	0 11/16	0 11/16" Perc = 43.6 MPI

SUBJECT TO APPROVAL
OF COUNTY BUILDING OFFICIAL

Lot 4 Block 2

"MERRIHILLS"

Pt. of E½ of Sec. 25, T32N R20W

(New Scandia Twnshp)

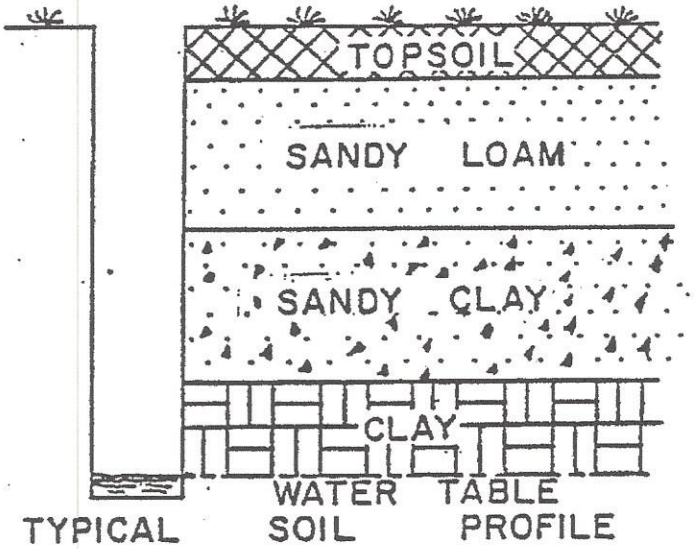
-SOIL BORINGS-

Soil borings are made in order to determine the type and structure of soils at various depths as well as the location of the water table, impervious strata or bedrock.

Borings are most easily made with a hand auger, however other expedients may be utilized - back hoe, post hole auger, etc.

Soils encountered at various depths should be listed as to appearance, texture and composition.

Depth at which water, bedrock or heavy clay layer is encountered should be recorded.



TYPICAL SOIL PROFILE

Auger Borings: R&J Johnson 11/21/89

LOG OF SOIL BORINGS

BORING NO. 1		BORING NO. 2		BORING NO. 3		BORING NO. 4	
DEPTH IN FEET	SOIL DESCRIPTION	DEPTH IN FEET	SOIL DESCRIPTION	DEPTH IN FEET	SOIL DESCRIPTION	DEPTH IN FEET	SOIL DESCRIPTION
0	Grayish Brown VF Sandy Loam	0	Grayish Brown Fn Sandy Loam	0	Grayish Brown VF Sandy Loam	0	Grayish Brown Loamy Sand
1/2		1/2		1/2		1/2	
1	Grayish Brown VF Sandy Loam	1	Grayish Brown Fn Sandy Loam	1	Brown Silt Loam	1	Brown
1 1/2		1 1/2		1 1/2	Dark Brown	1 1/2	
2	Dark Brown	2	Brown	2		2	Gravelly
2 1/2		2 1/2		2 1/2	Silt Loam	2 1/2	Loamy Sand
3	Sandy Loam	3	Silt Loam	3	Reddish Brown	3	
3 1/2		3 1/2	Reddish Brown	3 1/2	Sandy Loam Till	3 1/2	Reddish Brown
4	Reddish Brown	4	Sandy Loam-Loamy Sand	4		4	
4 1/2	Sandy Loam Till	4 1/2		4 1/2		4 1/2	Sandy Loam Till
5		5	(End)	5	(End)	5	
5 1/2		5 1/2	Mottling Depth: 60"	5 1/2		5 1/2	
6	(End)	6		6		6	(End)
6 1/2		6 1/2		6 1/2		6 1/2	
7		7		7		7	
7 1/2		7 1/2		7 1/2		7 1/2	
8		8		8		8	
8 1/2		8 1/2		8 1/2		8 1/2	
9		9		9		9	

OF COUNTY BUILDING OFFICIAL

0 50 100' 200' 300' 400' 500' 600' 700' 800' 900' 1000'

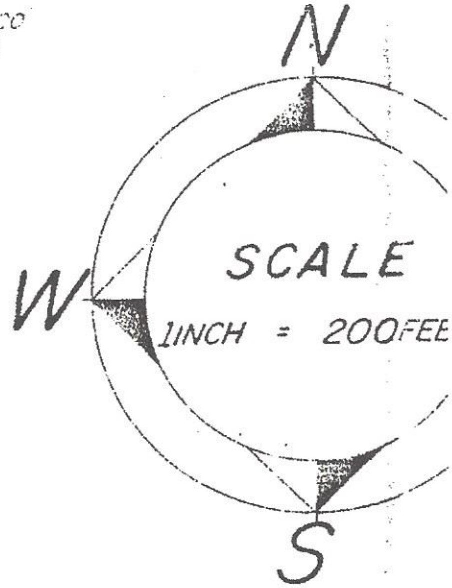
ALL BEARINGS ARE ASSUMED

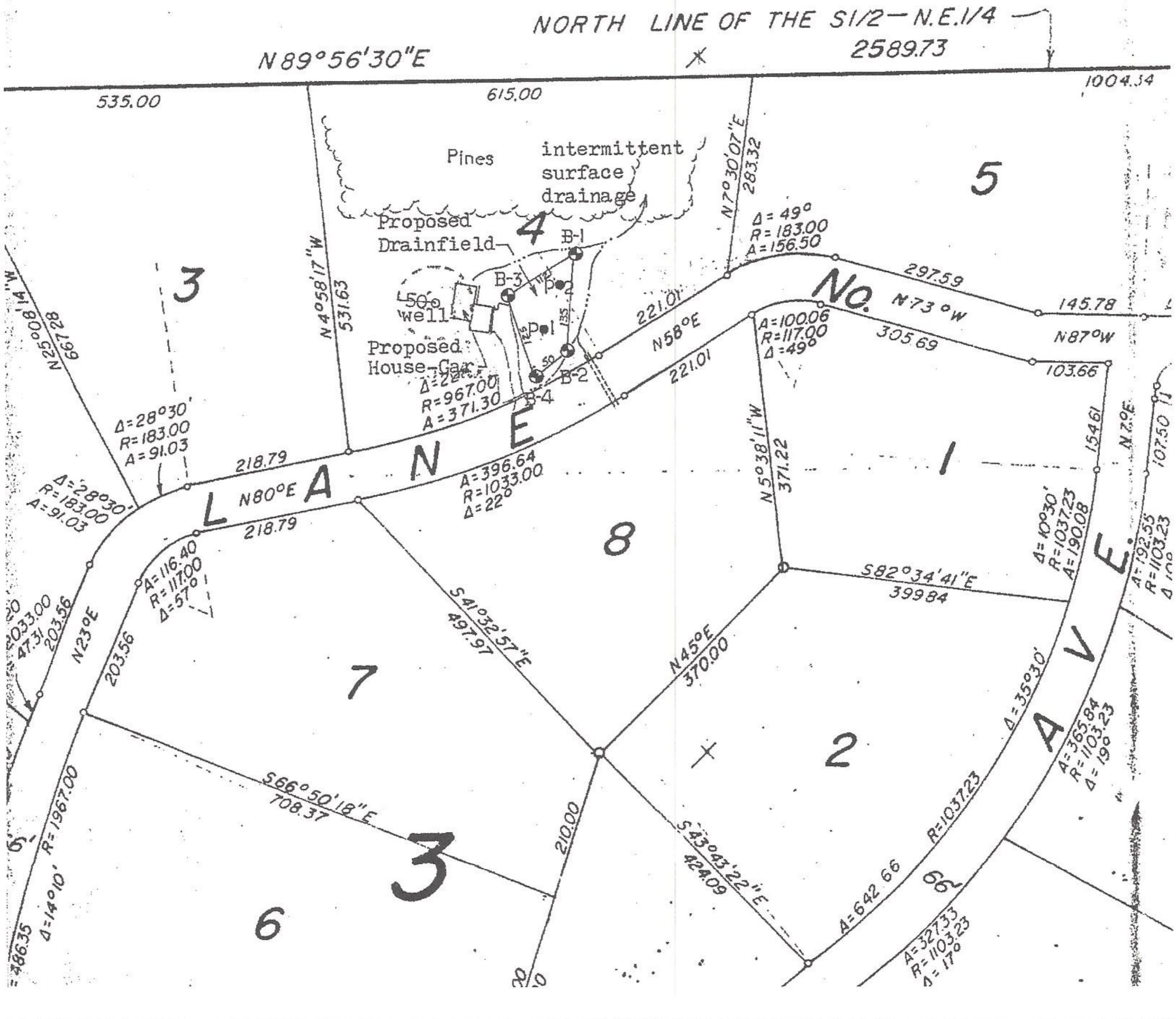
Approx. Scale: 1" = 200'

⊕ Approx. Location of Auger Boring

• Approx. Location of Percolation Test

Note - Existing surface drainage along roadway and from culvert passing under roadway should be diverted around the southeasterly corner and lower edge of proposed drainfield.




NORTH LINE OF THE S1/2 — N.E.1/4
N89°56'30"E
2589.73
535.00
615.00
1004.34
Pines
intermittent surface drainage
Proposed Drainfield
Proposed House-Gar.
50' well
B-1
B-2
B-3
B-4
P-1
P-2
N4°58'17"W
531.63
N7°30'07"E
283.32
Δ=49°
R=183.00
A=156.50
297.59
N73°W
145.78
305.69
N87°W
103.66
221.01
N58°E
Δ=100.06
R=117.00
Δ=49°
N5°38'11"W
371.22
Δ=22°
R=967.00
A=371.30
Δ=28°30'
R=183.00
A=91.03
218.79
N80°E
L A N E
No.
A=396.64
R=1033.00
Δ=22°
N25°08'14"W
667.28
A=116.40
R=117.00
Δ=57°
N23°E
203.56
S41°32'57"E
497.97
S82°34'41"E
399.84
N45°E
370.00
Δ=10°30'
R=1037.23
A=190.08
154.61
N7°E
107.50
A=192.55
R=1103.23
A V E.
Δ=35°30'
A=365.84
R=1103.23
Δ=19°
S66°50'18"E
708.37
210.00
S43°43'22"E
424.09
R=1037.23
A=642.66
66
A=327.33
R=1103.23
Δ=17°
R=1967.00
Δ=14°10'
486.35
1
2
3
4
5
6
7
8

NEW SCANDIA

T.32N. - R.20-19W.

SUBJECT TO APPROVAL OF COUNTY BUILDING OFFICIAL

RECEIVED NOV 30 1989

APPLICATION FOR PERMIT TO INSTALL SEWAGE TREATMENT SYSTEM

Application Fee - $75.00 Paid
Permit Fee - $75.00
Additional Reviews - $25.00/hr. (1 hr. min.)

Washington County Planning Dept.
14900 - 61st Street North
Stillwater, MN 55082

1	Legal Description and Parcel Identification Number Lot 4 Block 2 "MERRIHILLS", Pt. of E½ of Sec. 25, T32N R20W (New Scandia Twnshp)				
2	Applicant	Mailing Address	City	Zip	Phone
	Timothy Jay McKie	2576 8th Street	White Bear Lake	55110	429-8613
3	Owner (if different from Applicant)	Mailing Address	City	Zip	Phone
4	Use of Building: Single Family Residence Number of Bedrooms or Gallons Per Day 4 Check the following fixtures which are or will be installed: Garbage Disposal No Recreational Bathing Facility (Jacuzzi, hot tub, etc.) 1				
5	Type of Work: ____ New ____ Alteration ____ Repair X Approval Only				
6	Has site previously been reviewed by Washington County? ____ No ____ Yes (If previously approved, attach letter of approval) ____ Approved ____ Denied				

The following exhibits are required as part of this application and shall be attached hereto: Percolation Test Logs; 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; 2 Copies of the System Design; and 1 copy of the Final Building Plan. The house and the drainfield areas must be staked. Improper or inadequate test or 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 the Washington County Building Official or his agent, 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 the Building Official or his agent 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 Building Official that the installation is ready for inspection.

11/16/89
Date

Timothy Jay McKie
Signature of Applicant

FOR OFFICE USE ONLY:
Reviews: Planner: _____ Inspector _____ Date: _____
Site Evaluation:
Soil Boring Evaluation: Depth of Water Table, Seasonal Water Table (Mottled Soil), Impervious Layer or Bedrock:

Soils Map Data: _____ Percolation Test Evaluation: _____

Setbacks:	Required (circle)					Actual
Well (including adjacent property)	50'	75'	100'	150'		
Wetland, Pond, Lake, Stream, River, or Bluffline	20'	40'	75'	100'	150'	

Conclusions:
Site Suitable: ☐ Site Unsuitable: ☐ Additional Tests Required: ☐ Verify Use: ☐

NOTES:

RECEIVED MAR 9. 1990

INDIVIDUAL SEWAGE TREATMENT SYSTEM MINIMUM SPECIFICATIONS SHEET

NAME: Timothy Jay McKie 5498 E. Bald Eagle Blvd., White Bear Lake, MN 55110

ADDRESS AND/OR LEGAL DESCRIPTION: Lot 4 Block 2 "MERRIHILLS"
Pt. of E½ Sec. 25, T32N R20W (New Scandia)

Type I, 4 Bedroom Home, No Garbage Disposal, 1 Hot Tub

WASTEWATER FLOW
Estimated 750 gal/day, or
Measured _____ gal/day

SEPTIC TANK
Volume 1500 gal

LIFT STATION (Gravity as per owner's contractor)
Volume _____ gal
Pump:
delivery rate _____ gal/min
total head _____ ft
discharge per pumping event _____ gal
Inside diameter of pressure line from pump to treatment area _____ inches

SOIL
Depth to restricting layer 5'
Percolation rate:
_____ min/in at 12 inch depth
43.6 min/in at 24 inch depth
_____ min/in at _____ inch depth
Land Slope 4-10 (E-NE)

DRAINFIELD TRENCHES
Minimum depth of trench 12 inch
Maximum depth of trench 24 inch
Bottom area for trenches having 12 inch of rock below the distribution pipe
1500 sq ft
Trench width 3 ft
Total trench length 500 ft
Number of trenches 5 perforated lines @ 100' installed on the contour
Spacing of trenches 7½ ft oc
Distribution (check one):
X drop box
_____ pressurized laterals - complete PRESSURE DISTRIBUTION SYSTEM section below

BED
Minimum depth of bed _____ inch
Maximum depth of bed _____ inch
Bottom area for bed having 12 inch of rock below the distribution pipe
_____ sq ft
Bed Width _____ ft
Bed Length _____ ft

MOUND
Bottom area for bed having 9 inch of rock below the distribution pipe _____ sq ft
Bed Width _____ ft
Bed Length _____ ft
Upslope sand base depth _____ ft
Upslope dike width _____ ft
Downslope sand base depth _____ ft
Downslope dike width _____ ft

PRESSURE DISTRIBUTION SYSTEM
Inside diameter of manifold pipe _____ in
Perforated lateral
inside diameter _____ in
length _____ ft
number _____
spacing _____ in oc
Perforation:
diameter _____ in
spacing _____ in oc

LAYOUT (Site Plan)
1. Use an appropriate scale and indicate direction by use of a north arrow.
2. Show pertinent property boundaries, rights-of-way, easements, etc.
3. Show location of house, garage, driveway and all other improvements existing or proposed.
4. Show location and layout of sewage treatment system including tanks, trenches, etc.
5. Show location of water supply well.

Specifications and layout have been designed by RS Johnson Date 1/90

Minnesota Pollution Control Agency Certification No. 709 Exp. Date 12/31/91

Approx. Scale: 1" = 84'

SUBJECT TO ... GE COUNTY BUILDING CODE

NORTH LINE C

N89°56'30"E

Lot 4 Block 2
"MERRIHILLS"
(New Scandia Twnshp)

615.00

PERMIT # 94-17
CONDITIONALLY APPROVED
P. Gomzal 3-16-90

Pines

Proposed
Drainfield
(Potential Layout)

4

B-1

B-3

112

50'
well

135

125

Proposed
House-Gar.

B-2

B-4

30

221.01

N58°E

221.01

Δ=22°
R=967.00
A=371.30

N4°58'17"W

531.63

8.79

80°E

A

N

E

A=396.64
R=1033.00
Δ=22°

18.79

8

SD