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

060059003

Existing Subsurface Sewage Treatment System (SSTS)

Doc Type: Compliance and Enforcement

RECEIVED
For local tracking purposes:
MAY - 5 2020
ZONING

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

System Status

System status on date (mm/dd/yyyy): 4-24-2020

☒ **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: 06005900 3

Property address: 13235 Maple Hill Ln
Reason for Inspection: County
Property owner: Ryan Olson
Owner's phone:
or
Owner's representative:
Representative phone:
Local regulatory authority: Becker County Zoning
Regulatory authority phone:
Brief system description: Concrete Septic tank & Trench type D.F.
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: David Ohm
Certification number: 2228
Business name: Dewey's Septic Service
License number: 2884
Inspector signature:
Phone number: 218-457-1793

Necessary or Locally Required Attachments

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

Property address: _____ Inspector initials/Date: SO 4-24-2020 (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:

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:

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: _____ Inspector initials/Date: JD | 4-24-2020 (mm/dd/yyyy)

4. Soil Separation – Compliance component #4 of 5

Date of installation: _____ (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 *15%
"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:

0-9 Black Clay 10yr 3/3
9-20 Brown Clay 10yr 5/4
20-60 Tan Clay 10yr 6/4
60-75 Tan Clay 10yr 7/4

Indicate depths or elevations

A. Bottom of distribution media	42"
B. Periodically saturated soil/bedrock	75"
C. System separation	33"
D. Required compliance separation*	32" 15%

*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.*

Soil Observation Log

www.SepticResource.com vers 12.4

Owner Information

Property Owner / project: Ryan Olson Date 4-24-2020

Property Address / PID:

Soil Survey Information

☐ refer to attached soil survey

Parent matl's: ☒ Till ☐ Outwash ☐ Lacustrine ☐ Alluvium ☐ Organic ☐ Bedrock

landscape position: ☐ Summit ☐ Shoulder ☐ Side slope ☒ Toe slope

soil survey map units: _____ slope 4 % direction- downhill

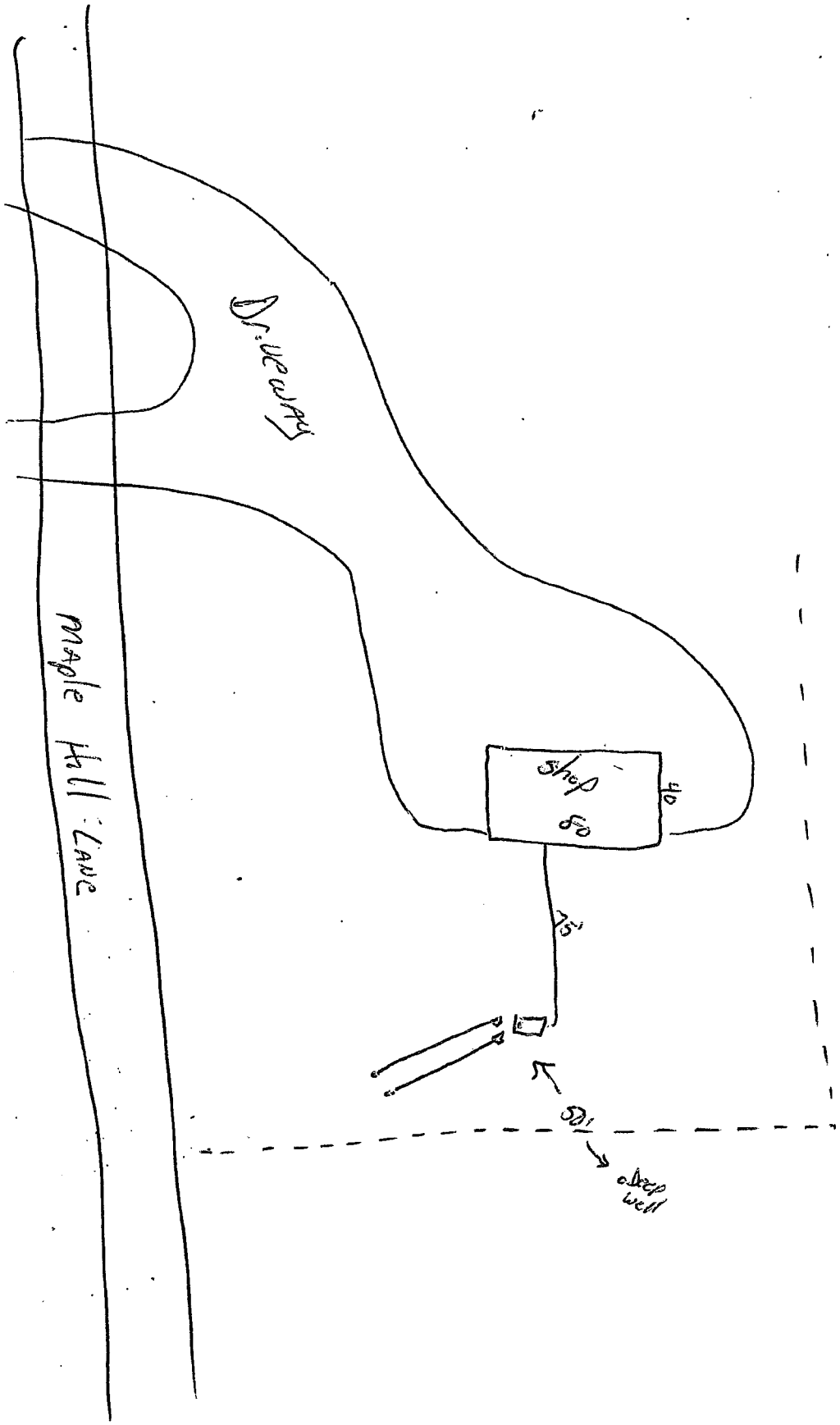
Soil Log #1

☒ Boring ☐ Pit Elevation _____ Depth to SHWT 75"

Depth (in)	Texture	fragment %	matrix color	redox color	consistence	grade	shape
0-9	Black Clay	<35 (circled) / 35 - 50 / >50	10yr 3/3		loose / friable (circled) / firm / rigid	loose / weak / moderate (circled) / strong	single grain / granular / blocky (circled) / prismatic / platy / massive
9-20	Brown Clay	<35 (circled) / 35 - 50 / >50	10yr 3/4		loose / friable (circled) / firm / rigid	loose / weak (circled) / moderate / strong	single grain / granular / blocky (circled) / prismatic / platy / massive
20-60	Tan Clay	<35 (circled) / 35 - 50 / >50	10yr 6/4		loose / friable (circled) / firm / rigid	loose / weak (circled) / moderate / strong	single grain / granular / blocky (circled) / prismatic / platy / massive
60-72	Tan Clay	<35 (circled) / 35 - 50 / >50	10yr 7/4		loose / friable (circled) / firm / rigid	loose / weak (circled) / moderate / strong	single grain / granular / blocky (circled) / prismatic / platy / massive
		<35 / 35 - 50 / >50			loose / friable / firm / rigid	loose / weak / moderate / strong	single grain / granular / blocky / prismatic / platy / massive

Comments:

Olson Shop
By David Ohm
2228
4-24-2020



Becker County Planning & Zoning
835 Lake Ave, P O Box 787
Detroit Lakes, MN 56502-0787
Phone (218)-846-7314; Fax (218)-846-7266

Onsite Septic System Site Evaluation/Design

1. **PROPERTY DATA** (as it appears on the tax statement) •003
Parcel Number(s) of property system will be installed 06.00590.00
(if parcel is a new split and a parcel number has not yet been issued, indicate the main parcel number from which the new parcel has been split from)
Section 4 Township 138 Range 43 Township Name Cormorant

Lake Name _____ Lake Classification _____

Legal Description: SW ¼ of sec 4

Project Address: 13235

2. **PROPERTY OWNER INFORMATION** (as it appears on the tax statement, purchase agreement or deed).

Owner's First Name DANNY Owner's Last Name OLSON

Mailing Address 17705 Cty Hwy 1 City, State, Zip Lake Park, MN 56554

Phone Number 218 238 5202

3. **DESIGNER/INSTALLER INFORMATION**

Designer Name Jim Shaw Company Name Shaw's Excavating License # 1666

Address 1112 Deerview Trail SW Pillager, MN 56473 Phone Number 218-838-8322

Installer Name <Same as above> Company Name _____ License # _____

Address _____ Phone Number _____

4. **SYSTEM DESIGN INFORMATION**

Date of Site Evaluation 7-19-05

EXISTING SYSTEM STATUS – Check One

X No existing system-new structure
_ Cesspool/Seepage
_____ Failing (other than cesspool)
_____ Undersized
_____ Replacement or repair to existing

What will new system serve? Check one

_____ Dwelling
_____ Resort/Commercial
_____ Commercial (non resort)
_____ Other – explain below

Design Flow 300 Gallons Per Day
Number of Bedrooms Work Shop
Garbage Disposal ____ Yes X No
Grinder Pump in House ____ Yes X No
Lift station in House ____ Yes X No

Well Depth No Well
Depth of other wells within 100 ft of system None

Original Soil X Compacted Soil ____
Type of Soil Observation
____ Pit ____ Probe X Boring
Depth to Restricting Layer 84"+
Maximum Depth of System 48"

Size of All Tanks to Be installed
1350 gal Septic Tank
_____ gal Lift Station
_____ gal Holding Tank
_____ gal Other Tanks

Type of Drainfield Medium to be used
X Chamber
X H10 _____ EQ36
_____ Drainfield Rock
_____ Rock Depth
_____ Gravelless
_____ Experimental
_____ No Drainfield

Type of Alarm _____
Size of Lift Pump _____
Size of Lift Line _____

Type of Drainfield to be installed
X Trench
_____ At-grade
_____ Pressure Bed
_____ Seepage Bed
_____ Mound

Size of Drainfield sq ft to be installed
_____ sq ft
_____ sq ft
_____ sq ft
_____ sq ft
_____ sq ft

SETBACKS	TANK	DRAINFIELD
Distance to Well		
Distance to Building	60'	85'+
Distance to Property Line	50'+	50'+
Distance to OHW		
Distance to Pressure Line		

Perc Rate 17 Soil Sizing Factor 1.67 *If SSF other than .83, attach Perc Test Data

Depth	Texture	Color	Structure	Depth	Texture	Color	Structure
0"-8"	Topsoil	10yr5/3	Blocky	0"-8"	Topsoil	10yr5/3	Blocky
8"-84"	Clay/Sand	10yr6/4	Moderate	8"-84"	Clay/Sand	10yr6/4	Moderate
84"	End of Boring	No	Mottles	84"	End of Boring	No	Mottles

5. **DESIGNER'S CERTIFIED STATEMENT**

I, Jim Shaw (Print Name of Designer) certify that I have completed the preceding design work in accordance with all applicable requirements (including, but not limited to Minnesota Chapter 7080 and the Becker County Individual Sewage Treatment System Ordinance).

Signature of Designer _____ Date 7-19-05

********** **FOR OFFICE USE ONLY** **********

Application Approved by: Debi Moltz Date: 9-28-05
Amount Paid 100 Receipt Number 90441-34567 Permit Number _____

****

CERTIFICATE OF COMPLIANCE

( ) Certificate Is Hereby Denied
(X) Certificate is Hereby Granted Based upon the Application, addendum from, plans, specifications and all other supporting data. With property maintenance, this system can be expected to function satisfactory, however, this is not a guarantee.

Debi Moltz Supervisor of Inspectors 9/30/05
Signature Title Date

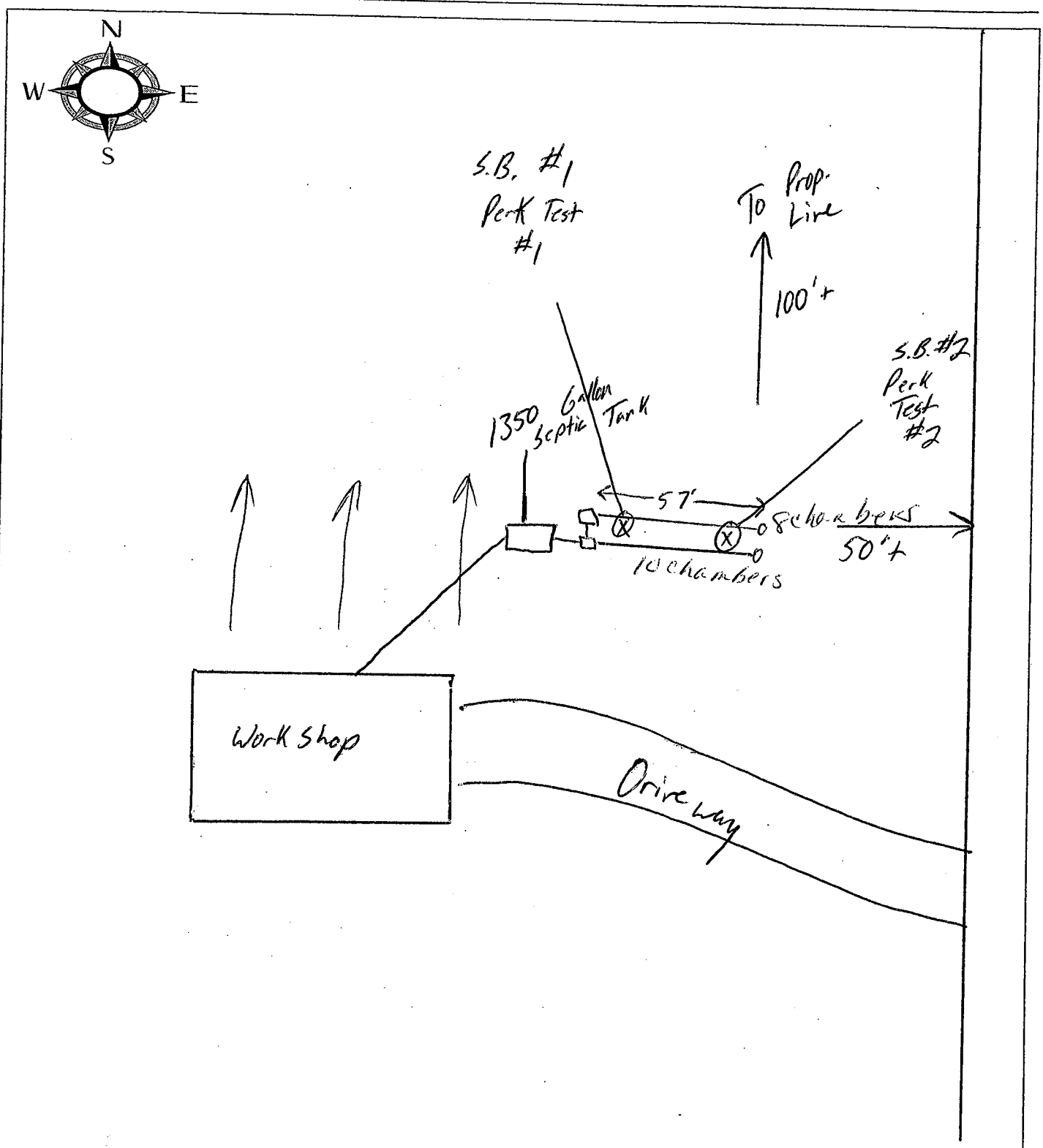
(Certificate of Compliance is not valid unless signed by a Registered Qualified Employee)
Date System Installed 9-29-05 Inspected by Debi Moltz

SITE PLAN

I hereby agree to have flags, lathes, or ribbons in place for inspection by date: 7-19-05

I understand that Becker County will not issue the permit until staking has been approved.

Signature _____

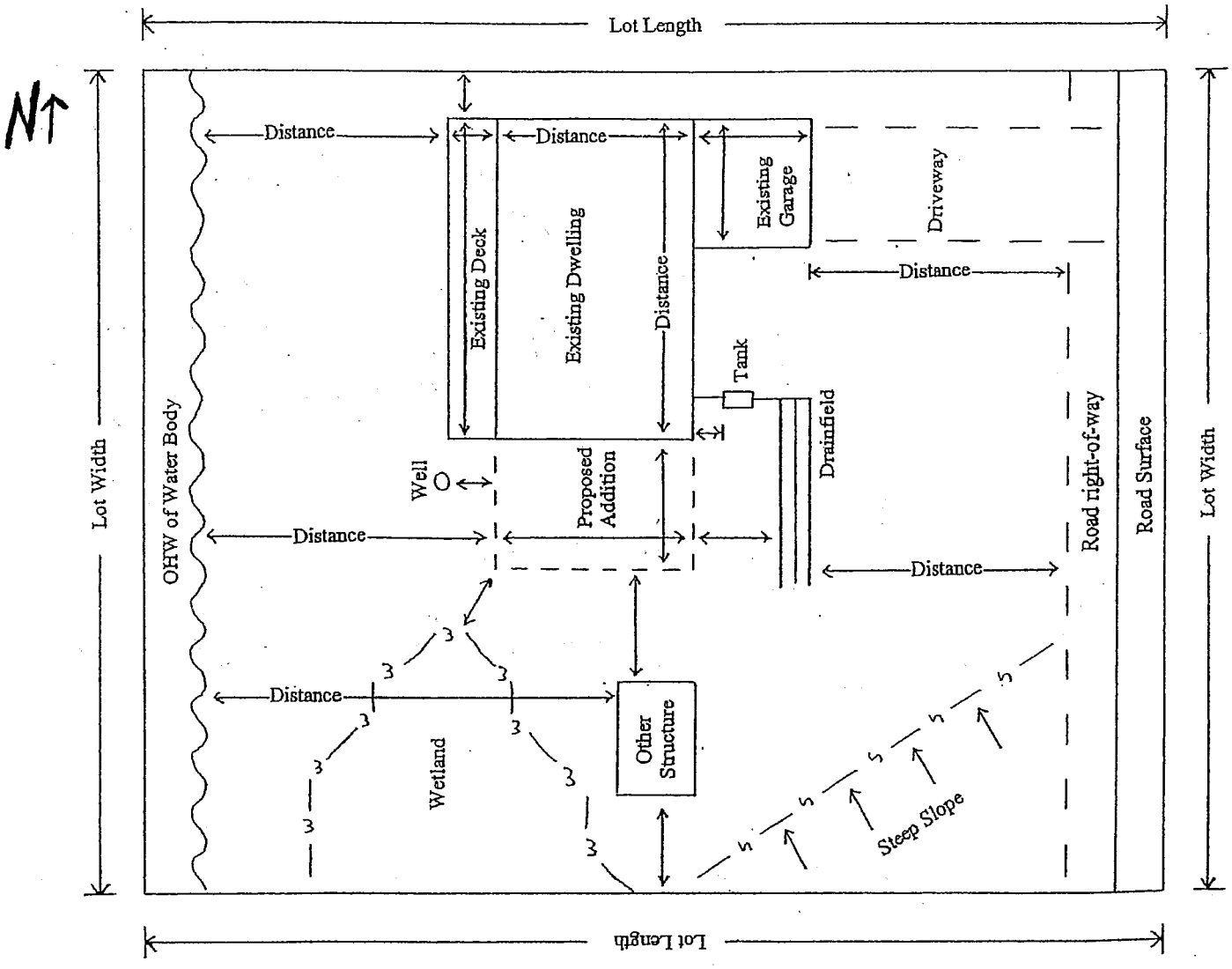


I hereby certify and agree that the above sketch accurately represents the work to be done in conjunction with this permit.

_____ Date 7-19-05

Applicant or Agent

SITE PLAN EXAMPLE



PERCOLATION TEST DATA

-TWO TESTS ARE REQUIRED-

	Perc test #1	Perc test #2
Diameter of hole (Circle one)	6" 7" (8")	6" 7" (8")
Depth to bottom of hole	15"	15"
Did the hole require presoaking?	Yes	Yes

PERC TEST #1

Time	Interval (minutes)	Water Depth	Water Drop	Perc Rate
10:56	START	17.5"	2.3"	30 . 2.3" . 13
11:26	30 Min	15.2"		TIME DROP PERC
11:26	START	15.2"	2.1"	30 . 2.1" . 14
11:56	30 Min	13.1"		TIME DROP PERC
11:56	START	13.1"	3.3"	45 . 3.3" . 14
12:41	45 Min	9.8"		TIME DROP PERC
12:41	START	9.8"	7.6"	115 . 7.5 . 15
2:36	115 Min	2.2"		TIME DROP PERC
2:36	START	10.5"	7.4"	103 . 7.4" . 14
4:19	103 Min	3.1		TIME DROP PERC
	START			. .
				TIME DROP PERC
	START			. .
				TIME DROP PERC
	START			. .
				TIME DROP PERC

PERCOLATION RATE 14 SSF 1.27

PERC TEST #2

Time	Interval (minutes)	Water Depth	Water Drop	Perc Rate
10:56	START	21.75	2.5"	30 . 2.5" . 12
11:26	30 Min	19.25		TIME DROP PERC
11:26	START	19.25	2.25"	30 . 2.25" . 13
11:56	30 Min	17.00		TIME DROP PERC
11:56	START	17.00	3.5"	45 . 3.5" . 13
12:41	45 Min	13.50		TIME DROP PERC
12:41	START	13.50	7.9"	115 . 7.9" . 14.5
2:36	115 Min	5.60		TIME DROP PERC
2:36	START	9.8"	7"	103 . 7" . 14.7
4:19	103 Min	2.8"		TIME DROP PERC
	START			. .
				TIME DROP PERC
	START			. .
				TIME DROP PERC
	START			. .
				TIME DROP PERC

PERCOLATION RATE 13.5 SSF 1.27

Anticipated construction related concerns: _____

Other information:

Both Perk Tests indicated the use of 1.27 ft.²/Gal./Day.

I calculated the design at a 1.67 ft.²/Gal./Day