

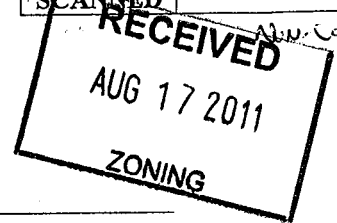


360009000

2011 Onsite Septic System Application

Becker County Planning & Zoning
915 Lake Ave, Detroit Lakes, MN 56501
Phone (218)-846-7314; Fax (218)-846-7266

PARCEL	
APP	SEPTIC
YEAR	2011
SCANNED	

**1. PROPERTY DATA (as it appears on the tax statement, purchase agreement or deed)**Parcel Number(s) of property where the system will be installed: 360009000

Is this a split of an existing property? Yes ☒ No ☐ (If yes and a parcel number has not yet been assigned, indicate the main parcel number from which the new parcel was split.) Section 2 Township 142 Range 41 Township Name White Earth

Legal Description _____

Is the property located within 1000 feet of a lake, 300 feet of a river or 50 ft of a wetland? ☒ Yes ☐ NoIf so, which one: lake river ☒ wetland (circle correct water body) Lake/River Name 1600' unnamed wet landProject Address: 390 ST. Ogema, MN 56569**2. PROPERTY OWNER INFORMATION (as it appears on the tax statement, purchase agreement or deed)**Owner's First Name Kelly Riggle Owner's Last Name Riggle**3. DESIGNER/INSTALLER INFORMATION**Designer's Company Name Dan Schlander SR Designer's Name Dan SchlanderLicense # 410 Address 20393 Oakside TRL DL Phone Number 218-847-6247Installer's Company Name Lunde Bladex-brand Installer's Name Jason LundeLicense # _____ Address 1111 Co. Hwy 3B Flow MN Phone Number 218-367-8578**4. SYSTEM DESIGN INFORMATION U of M worksheets and site plan must accompany this form. Worksheets may be found at: <http://septic.umn.edu/>.**

Size of All Tanks to be installed 1500 gal Septic Tank _____ gal Tank with _____ gal Lift Station (2 compartment tank)
_____ gal Lift Station (separate tank) _____ gal Holding Tank _____ Existing tank to be used
_____ gal Holding Tank with Privy _____ pit privy

Total Number of tanks to be installed in this system 1 (This # will be reported to MPCA at end of year.)If using chamber, Brand & Model of Chamber Q-4 STD. # of chambers to be installed 104

	TANK	SETBACKS DRAINFIELD	This work will:
Distance to Well	<u>No well on site</u>		<input checked="" type="checkbox"/> install a system on a vacant lot (never had structures on the property) (new)
Distance to Building	<u>30'</u>	<u>60'</u>	<input type="checkbox"/> install a system on a lot where the structure has been removed and being rebuilt (replacement)
Distance to Property Line	<u>>100'</u>	<u>>100'</u>	<input type="checkbox"/> install an additional system on the property (new)
Distance to OHW of Lake	<u>N/A</u>	<u>N/A</u>	<input type="checkbox"/> replace/repair existing system (failing)
Distance to Pressure Line	<u>N/A</u>	<u>N/A</u>	<input type="checkbox"/> enlarge existing system (undersized)
Distance to Wetland/Protected Water	<u>600'</u>	<u>600'</u>	

5. DESIGNER'S CERTIFIED STATEMENT

I, Dan Schlander certify that I have completed the preceding design work in accordance with all
(Print Name of Designer)

applicable requirements (including, but not limited to Minnesota Chapter 7080 and the Becker County Individual Sewage Treatment System Ordinance).

Dan Schlander
Signature of Designer

8-15-11
Date

SKETCH OF PROPERTY

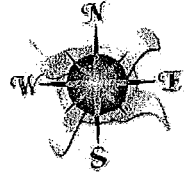
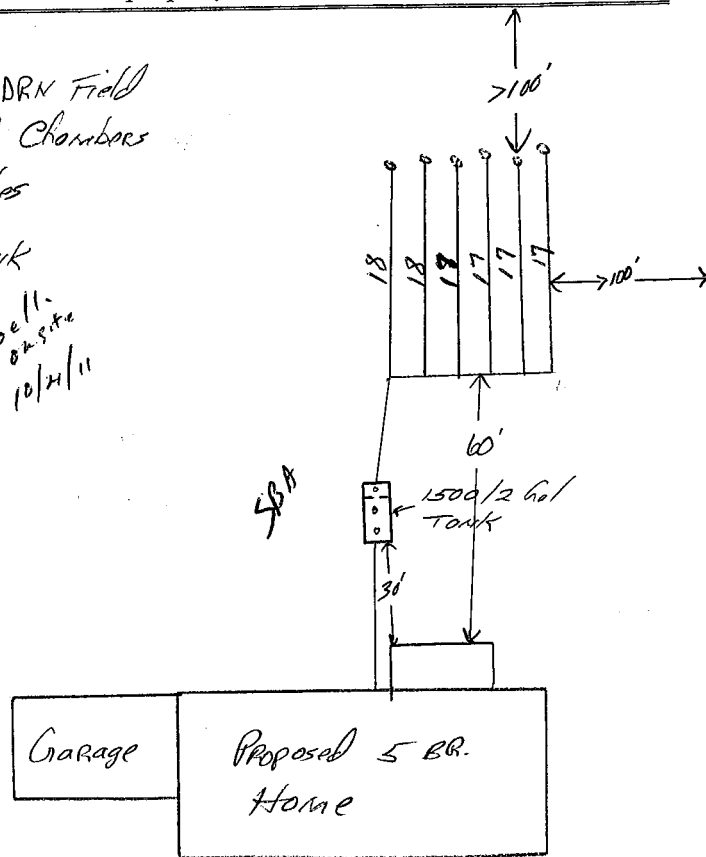
PARCEL	
APP	SITE
YEAR	2011

- Please sketch all structures on the property; include setbacks
And wells within 100 feet of the property.

1250 50 FT DRN Field
104 Q-4 STD. Chambers
6- 70' TRENCHES
1500/2 Gal TANK

no well
on site
10/24/11

6 104
6 44



Remember EROSION CONTROL!

Please use best management practices and/or silt fence to control erosion on all projects.

Application Approved by: Jason A. Stoll Date: 8/18/11
 Amount Paid: 100 Receipt Number: 259153-483279 Permit Number: 811711
 NOTES: mailed c/c to homeowner
11/2/11

INSPECTION REPORT

Home Information

Does the structure contain any of the following elements?

Garbage disposer Yes No Dishwasher Yes No
 Grinder pump Yes No Lift pump in basement Yes No
 Effluent screen installed? Yes No Effluent screen manufacturer _____
 Alarm required? Yes No Alarm Type _____ Alarm manufacturer _____

Lift pump in system? Yes No Pump manufacturer _____

Number of bedrooms 5

Component Information

Tank size 1500 2/c Tank manufacturer SMA Fergus Falls
 Drainfield size 1250 sq. ft.
 Drainfield medium _____ Medium manufacturer 104 Q45
 Drainfield medium size/depth _____

Soil Verification

Vertical separation verified for Boring #1 on _____ Depth +36" Good Separation
 Vertical separation verified for Boring #2 on _____ Depth _____
 Vertical separation verified for Boring #3 on _____ Depth _____

Setback Verification

	TANK	DRAINFIELD
Distance to Well	<u>no well on site</u>	<u>10/21/11</u>
Distance to Building	<u>+10'</u>	<u>+20'</u>
Distance to Property Line	<u>+10'</u>	<u>+10'</u>
Distance to OHW of Lake	<u>N/A</u>	<u>N/A</u>
Distance to Pressure Line	<u>N/A</u>	<u>N/A</u>
Distance to Wetland/Protected Water	<u>N/A</u>	<u>N/A</u>

Date System Installed 10/21/11 Installer Jason Lundberg Inspector Jason A. Stoll

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.

Signature: Jason A. Stoll Title: ITS inspection Date: 10/21/11

(Certificate of Compliance is not valid unless signed by a Registered Qualified Employee)

University of Minnesota Site Evaluation Form 5/16/2005



Property Owner(s) Kelly Riggle Phone Number 218-930-9200
 Address 33809 E. Rd 109 Ogema, MN 56569
 P.I.D. _____ Section 2 Township 142 N Range 41
 Date 8-15-11 Time 8 AM Weather conditions Cloudy

Location Information _____ shoreland ☒ dwelling _____ replacement system
 (check all that apply) _____ protection area _____ other establishment ☒ new home construction

Homeowner Information

No. of bedrooms (if applicable) 5 bedrooms (includes possible additions)
 No. of residents in home 2 adults _____ children
 Estimated flow 750 gpd
 Well casing depth No well on site feet
 Water using devices (check) _____ Garbage disposal _____ Water softener _____
 _____ Dishwasher _____ Sump pump _____
 _____ Large bathtub _____ High eff. furnace _____
 _____ Laundry/large tub on 2nd floor _____ Jacuzzi/hottub _____
 Water use concerns (check) _____ Toilet/faucet leaks _____ Max load laundry/day _____ Long term prescription medications
 _____ Home business _____ Lint screen _____ Antibact. soap _____ Frequent parties or out of town guests

Soil Data

Soil texture classification: Loam
 Unnatural soil (check) _____ Yes ☒ No
 Type of observation (check) _____ Probe _____ Pit ☒ Boring
 Parent material (check) _____ Till ☒ Outwash _____ Loess _____ Bedrock _____ Alluvium
 Vegetation type (check) _____ Wet ☒ Dry _____ Unknown
 Slope form (check) _____ Summit _____ Shoulder _____ Back _____ Foot _____ Toe
 Drainage (check) ☒ Good _____ Fair _____ Poor _____ Ponding _____ Flooding
 Located in floodplain (check) _____ Yes ☒ No

Site Summary Data

Standing water: _____ inches
 Bedrock: _____ inches
 Saturated soil: _____ inches
 Maximum depth of system: 24 inches
 Max elevation at system bottom: _____ feet
 Soil sizing factor (SSF): 1.67 gpd/ft²
 Linear loading rate (LLR): .60 gpd/ft
 Was a perc test done? ☒ Yes 28.2 mpi
 _____ No

Soil Survey Data	Soil #1	Soil #2
Map unit sym & name		
Landscape position		
Flooding		
Slope	<u>1%</u>	<u>1%</u>
Watertable depth		
Bedrock depth		
Possible system depth	<u>2'</u>	<u>2'</u>
Texture at depth	<u>Loam</u>	<u>Loam</u>
Permeability (P)		
Perc(MPI) = 60 / P		
NRCS onsite suitability		

Soil Boring Data

Boring	Elevation	Location		
Soil Horizons Depth (inches)	Texture	Color	Structure	Consistence
<u>0-12</u>	<u>Sandy Loam</u>	<u>TOP Soil</u>		
<u>12-40</u>	<u>Loam</u>	<u>10YR 5/4</u>	<u>Blocky</u>	
<u>40-60</u>	<u>Loam</u>	<u>10YR 5/6</u>	<u>Blocky</u>	

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- PERCOLATION TEST SHEET -

Test hole location DRN Field Hole # H2 Date test hole was prepared: 9-15-11
 Depth of hole bottom: 26 inches Diameter of hole: 5 inches
 Method of scratching sidewall: BBW/nails Depth of pea size gravel in bottom of hole: _____ inches
 Date and hour of initial water filling: 9-15-7AM Depth of initial water filling: 12 above hole bottom
 Method used to maintain 12" of water depth in hole for 4 hours: Manual
 Percolation test conducted by: Jan Schlauderer Percolation test started at 11 (am) pm.
 Maximum water depth above hole bottom during test: 12 inches

TIME	INTERVAL (MINUTES)	WATER DEPTH	WATER DROP (fraction)	WATER DROP (decimal)	PERC RATE CALCULATION
---	START <u>30</u>	<u>12</u> <u>10 7/8</u>	<u>1 1/8</u>	<u>1.13</u>	$\frac{30}{\text{TIME}} \div \frac{1.13}{\text{DROP}} = \frac{26.5}{\text{PERC}} \text{ A}$ (Decimal)
---	REFILL <u>20</u>	<u>12</u> <u>11 1/4</u>	<u>3/4</u>	<u>.75</u>	$\frac{20}{\text{TIME}} \div \frac{.75}{\text{DROP}} = \frac{26.6}{\text{PERC}} \text{ B}$ (Decimal)
---	REFILL <u>20</u>	<u>12</u> <u>11 1/4</u>	<u>3/4</u>	<u>.75</u>	$\frac{20}{\text{TIME}} \div \frac{.75}{\text{DROP}} = \frac{26.6}{\text{PERC}} \text{ C}$ (Decimal)
---	REFILL	---	---	---	$\frac{\text{TIME}}{\text{DROP}} = \frac{\text{PERC}}{\text{PERC}} \text{ D}$ (Decimal)
---	REFILL <u>25</u>	<u>0</u> <u>7 1/2</u>	<u>7/8</u>	<u>.88</u>	$\frac{25}{\text{TIME}} \div \frac{.88}{\text{DROP}} = \frac{28.4}{\text{PERC}} \text{ E}$ (Decimal)
---	REFILL <u>30</u>	<u>0</u> <u>7</u>	<u>1</u>	<u>1</u>	$\frac{30}{\text{TIME}} \div \frac{1}{\text{DROP}} = \frac{30}{\text{PERC}} \text{ F}$ (Decimal)
---	REFILL <u>29</u>	<u>0</u> <u>7 1/8</u>	<u>1 7/8</u>	<u>.94</u>	$\frac{29}{\text{TIME}} \div \frac{.94}{\text{DROP}} = \frac{30.8}{\text{PERC}} \text{ G}$ (Decimal)
---	REFILL	---	---	---	$\frac{\text{TIME}}{\text{DROP}} = \frac{\text{PERC}}{\text{PERC}} \text{ H}$ (Decimal)

conversions

1/16 = .06
 1/8 = .13
 3/16 = .19
 1/4 = .25
 5/16 = .31
 3/8 = .38
 7/16 = .44
 1/2 = .5
 9/16 = .56
 5/8 = .63
 11/16 = .69
 3/4 = .75
 13/16 = .81
 7/8 = .88
 15/16 = .94

20.2

SOIL BORING LOG

DEPTH (INCHES)	TEXTURE	COLOR & MUNSELL NO.	STRUCTURE	DEPTH (INCHES)	TEXTURE	COLOR & MUNSELL NO.	STRUCTURE
			BLOCKY PLATY PRISMATIC NONE				BLOCKY PLATY PRISMATIC NONE
			BLOCKY PLATY PRISMATIC NONE				BLOCKY PLATY PRISMATIC NONE
			BLOCKY PLATY PRISMATIC NONE				BLOCKY PLATY PRISMATIC NONE
			BLOCKY PLATY PRISMATIC NONE				BLOCKY PLATY PRISMATIC NONE

Type of alarm
 Device on lift
 Station or
 Holding tank

Attach perc test
 Information if
 Required