FIELD EVALUATION SHEET

PRELIMINARY EVALUATION DATE 6-4-16, FIELD EVALUATION DATE SAME
PROPERTY OWNER: Julie Willock PHONE 763-234-8933
ADDRESS: 4906 248th Place CITY,STATE,ZIP: McGregor MN. 55760
LEGAL DESCRIPTION:
PIN# 14-0-045402 SEC 27 T 48 R 24 TWP NAME JEVNE
FIRE# LAKE/RIVER Bass LAKE CLASS RD OHWL FT.

DESCRIPTION OF SOIL TREATMENT AREAS

	AREA #1	AREA #2
DISTURBED AREAS	YES NO X	YES NO
COMPACTED AREAS	YES NO X	YES NO
FLOODING	YES NO X	YES NO
RUN ON POTENTIAL	YES NO X	YES NO
SLOPE %	1-2%	
DIRECTION OF SLOPE	N to S	
LANDSCAPE POSITION	Backyard-Flat	
VEGETATION TYPES	Grass	

REFERENCE BM ELEV. 100 FT.
REFERENCE BM DESCRIPTION
Floor of Attached garage

DEPTH TO STANDING WATER OR MOTTLED SOIL: BORING# 1 Dug Pit 7' deep: Sand - no mottl, 1A, 2, 2A

BOTTOM ELEVATION--FIRST TRENCH OR BOTTOM OF ROCK BED: #1 96.5 FT., #2 FT.

SOIL SIZING FACTOR: SITE # 1 1.27, SITE #2

CONSTRUCTION RELATED ISSUES: Pipe comes out 21' from well - needs to be pressure tested to tank

LIC# 1054 SITE EVALUATOR SIGNATURE: Tom Antonsen

SITE EVALUATOR NAME: Tom Antonsen TELEPHONE# 218-851-7757

LUG REVIEW (KT) 6-13-16 DATE

Comments:

SOIL BORING LOGS ON REVERSE SIDE

APPROVED

___ ONSITE INSPECTION
___ NO ONSITE INSPECTION

Form des 2/20/98

SIGN (KT) DATE 6-13-16

SOILS CHARTS FOR BOTH PROPOSED AND ALTERNATE SITES

1 (PROPOSED) SOILS DATA

DEPTH (INCHES)	TEXTURE	MUNSELL COLOR
3" top soil		
3"-84"		10yr 4/4 to 4/6
	Sand	
dug pit 7' deep		

2 (PROPOSED) SOILS DATA

DEPTH (INCHES)	TEXTURE	MUNSELL COLOR
← SAME		

1 (ALTERNATE) SOILS DATA

DEPTH (INCHES)	TEXTURE	MUNSELL COLOR

2 (ALTERNATE) SOILS DATA

DEPTH (INCHES)	TEXTURE	MUNSELL COLOR

KT 6-13-16

ADDITIONAL SOIL BORINGS MAY BE REQUIRED

TRENCH AND BED WORKSHEET

1. AVERAGE DESIGN FLOW
   A. Estimated 450 gpd *(see figure A-1)*
   or measured ___ x 1.5 *(safety factor)* = ___ gpd
   B. Septic tank capacity _____ gal *(see figure C-1)*

2. SOILS *(Site evaluation data)*
   C. Depth to restricting layer = 7 ft
   D. Max depth of system Item 2C - 3 ft = 7 ft - 3 ft = 4 ft
   E. Texture SAND Percolation rate _____ MPI
   F. Soil Sizing Factor (SSF) 1.27 sqft/gpd *(see figure D-15)*
   G. % Land Slope 1 %

3. TRENCH or BED BOTTOM AREA
   H. For trenches with 6 inches of rock below the pipe:
   A x F = _____gpd x _____sqft/gpd = _____ sqft
   (I.) For trenches with 12 inches of rock below the pipe:
   A x F x 0.8 = 450 gpd x 1.27 sqft/gpd x 0.8 = 457 sqft
   J. For trenches with 18 inches of rock below the pipe:
   A x F x 0.66 = _____gpd x _____sqft/gpd x 0.66 = _____ sqft
   K. For trenches with 24 inches of rock below the pipe:
   A x F x 0.6 = _____gpd x _____sqft/gpd x 0.6 = _____ sqft
   L. For gravity beds with 6 or 12 inches of rock below the pipe;
   1.5 x A x F = 1.5 x ___gpd x ___sqft/gpd = ____ sqft
   For pressure beds with 6 or 12 inches of rock below the pipe;
   A x F = ___gpd x ___sqft/gpd = _____sqft

4. DISTRIBUTION *(Check all that apply)*
   ____ Bed (< 6% slope) (X) Drop boxes (any slope) ____ Rock
   ____ Trenches ____ Distribution box (< 3%) (X) Chamber
   ____ Pressure ____ Gravity ____ Gravelless

5. SYSTEM WIDTH, LENGTH and VOLUME
   M. Select trench width = _____ ft
   N. If using rock, divide bottom area by width: (H, I, J,K or L) ÷ M =
   _____sqft ÷ ___ ft= _____ lineal feet
   Rock depth below distribution pipe plus 0.5 foot times bottom area:
   Rock depth in feet + 0.5 feet x Area (H,I,J,K, or L)
   (____ft + 0.5 ft) x ____sqft =_____cuft
   Volume in cubic yards = cuft ÷27
   _____cuft ÷ 27 = _____cuyds
   Weight of rock in tons = cubic yds x 1.4
   _____cuyds x 1.4 = _____tons
   O. If using 10" Gravelless Pipe, Flow (A) x Gravelless SSF*(see figure D-9)*
   _____gpd x ____lineal feet/gpd = _____ lineal feet
   (P.) If using Chambers, H,I,J, or K(based on hieght of chamber slats) ÷
   width of chamber in feet(M)
   457 sqft ÷ 3 ft= 152 lineal ft
   USE Infiltrator Rock -Deep - for 12" sizing

6. LAWN AREA
   Q. Select trench spacing, center to center = 8 feet
   R. Multiply trench spacing by lineal feet R x Q = sqft of lawn area
   8 ft x 152 ft = 1216 sqft

7. Include a drawing with scale (one inch = _____ft). Show pertinent boundaries, right of way, easements, location of house, garage, driveway, all other imporvements, existing or proposed soil treatment system, well and dimensions of all elevations, setbacks and separation distances.

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

Tom Gutowski (signature) 1054 (license #) 6-10-16 (date)

(KT) 6-13-16

A-1: Estimated Sewage Flows in Gallons per Day

number of bedrooms	Class I	Class II	Class III	Class IV
2	300	225	180	60%
(3)	450	300	218	of the
4	600	375	256	values
5	750	450	294	in the
6	900	525	332	Class I,
7	1050	600	370	II, or III
8	1200	675	408	columns.

C-1: Septic Tank Capacities (in gallons)

Number of Bedrooms	Minimum Liquid Capacity	Liquid capacity with garbage disposal	Liquid capacity with disposal & lift inside
2 or less	750	1125	1500
3 or 4	1000	1500	2000
5 or 6	1500	2250	3000
7, 8 or 9	2000	3000	4000

D-15: Soil Characteristics and Soil Sizing Factor (SSF) (> 3' separation)

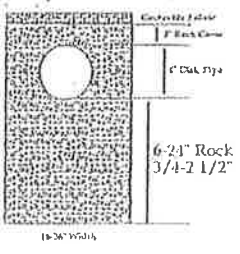
Percolation Rate minutes per inch (mpi)	Soil Texture	Soil Sizing Factor square feet/gallon per day(sqft/gpd)
faster than 0.1*	Coarse sand	0.83
0.1 to 5*	Medium sand Loamy sand	0.83
0.1 to 5**	Fine sand	1.67
6 to 15	Sandy loam	1.27
16 to 30	Loam	1.67
31 to 45	Silt loam Silt	2.00
46 to 60	Clay loam Sandy clay Silty clay	2.20
over 61 to 120***	Clay Sandy clay Silty clay	4.20
slower than 120****		

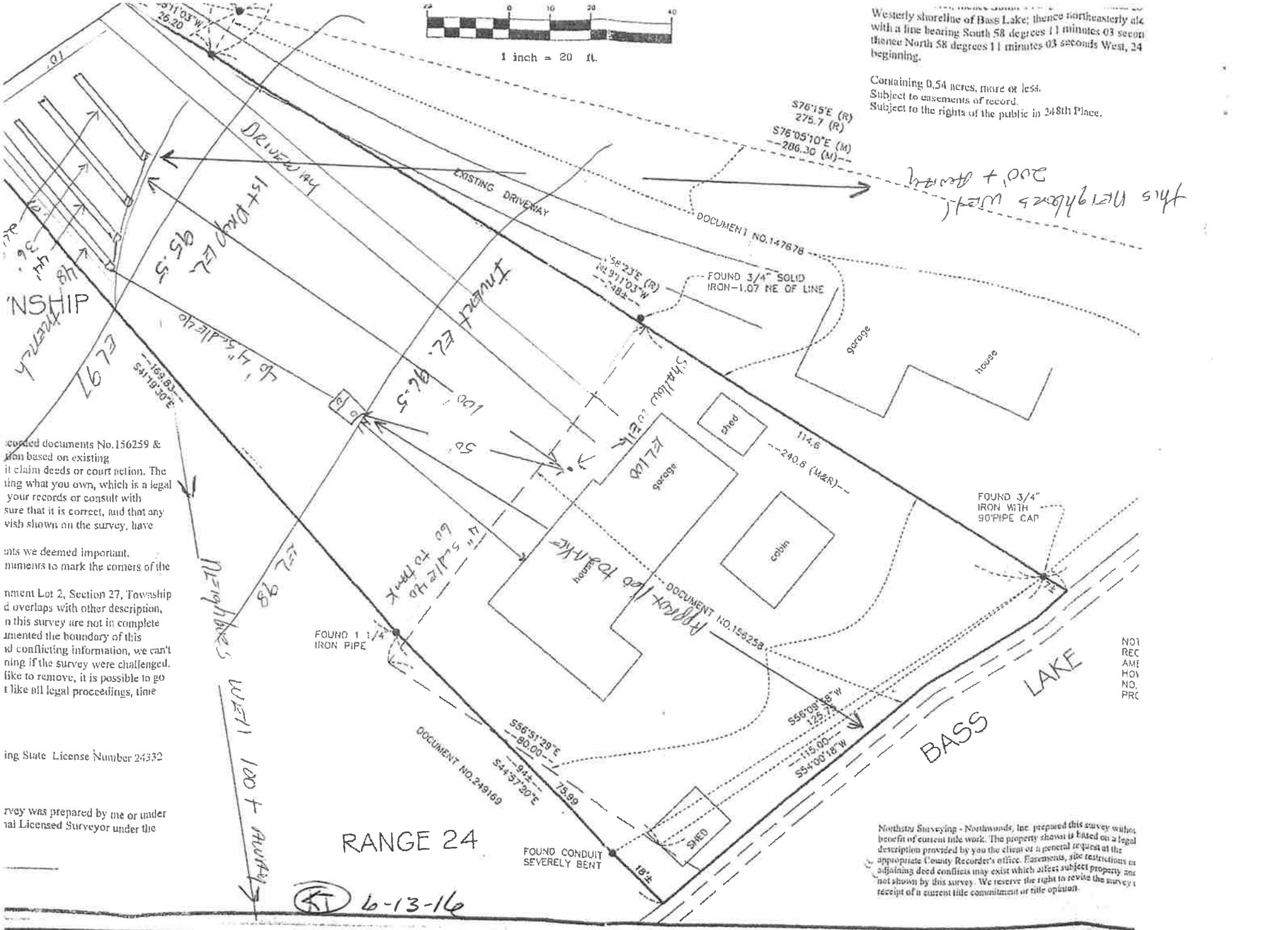
*Use systems for rapidly permeable soils: pressure distribution or serial distribution with no trench >25% of the total system.
**Soil having 50% or more fine sand plus very fine sand
***A mound must be used.
****An other or performance system must be used

D-9: Soil Characteristics and Soil sizing factors (SSF) for Gravelless Pipe

percolation rate (minutes/inch)	soil texture	lineal feet/ gallon/day
Faster than 0.1*	Coarse Sand	---
0.1 to 5	Medium Sand Loamy Sand	0.28
0.1 to 5	Fine Sand**	0.6
6 to 15	Sandy Loam	0.42
16 to 30	Loam	0.56
31 to 45	Silt Loam Silt	0.67
46 to 60	Clay Loam (CL) Sandy CL Silty CL	0.74
slower than 60***	Clay Sandy Clay Silty Clay	---

*Soil too coarse for sewage treatment. Use systems for rapidly permeable soils.
**Soil having 50% or more fine sand + very fine sand.
***Soil with too high a percentage of clay for installation of a standard inground system.




1 inch = 20 ft.
Westerly shoreline of Bass Lake; thence northeasterly alo
with a line bearing South 58 degrees 11 minutes 03 secon
thence North 58 degrees 11 minutes 03 seconds West, 24
beginning.
Containing 0.54 acres, more or less.
Subject to easements of record.
Subject to the rights of the public in 248th Place.
S76°15'E (R)
275.7 (R)
S76°05'10"E (M)
286.30 (M)
EXISTING DRIVEWAY
DOCUMENT NO.147678
FOUND 3/4" SOLID
IRON-1.07 NE OF LINE
garage
house
shed
114.6
240.6 (M&R)
FOUND 3/4"
IRON WITH
90°PIPE CAP
cabin
DOCUMENT NO.156258
FOUND 1 1/
IRON PIPE
S56°51'29"E
80.00
S44°37'30"E
DOCUMENT NO.249169
75.99
S56°09'18"W
125.7
115.00
S54°00'18"W
SHED
18±
BASS LAKE
RANGE 24
FOUND CONDUIT
SEVERELY BENT
6-13-16
corded documents No.156259 &
tion based on existing
it claim deeds or court action. The
ting what you own, which is a legal
your records or consult with
sure that it is correct, and that any
vish shown on the survey, have
nts we deemed important.
numents to mark the corners of the
nment Lot 2, Section 27, Township
d overlaps with other description,
n this survey are not in complete
mented the boundary of this
d conflicting information, we can't
ning if the survey were challenged.
like to remove, it is possible to go
t like all legal proceedings, time
ing State License Number 24332
rvey was prepared by me or under
al Licensed Surveyor under the
Northstar Surveying - Northwoods, Inc. prepared this survey witho
benefit of current title work. The property shown is based on a legal
description provided by you the client or a general request at the
appropriate County Recorder's office. Easements, title restrictions a
adjoining deed conflicts may exist which affect subject property tha
not shown by this survey. We reserve the right to revise the survey
receipt of a current title commitment or title opinion.

Subsurface Sewage Treatment System Management Plan

Property Owner: Julie Willock Phone: 763-234-8933 Date: 6-10-16

Mailing Address: _____ City: _____ Zip: _____

Site Address: 41906 248th Place City: Mc Gregor MN Zip: 55760

This management plan will identify the operation and maintenance activities necessary to ensure long-term performance of your septic system. Some of these activities must be performed by you, the homeowner. Other tasks must be performed by a licensed septic service provider.

System Designer: check every _____ months.
Local Government: check every _____ months.
State Requirement: check every 36 months.

My System needs to be checked every _____ months.

Homeowner Management Tasks

Leaks – Check (look, listen) for leaks in toilets and dripping faucets. Repair leaks promptly.

Surfacing sewage – Regularly check for wet or spongy soil around your soil treatment area.

Effluent filter – Inspect and clean twice a year or more.

Alarms – Alarm signals when there is a problem. Contact a service provider any time an alarm signals.

Event counter or water meter – Record your water use.

-recommend meter readings be conducted (*circle one:* DAILY WEEKLY MONTHLY)

Professional Management Tasks

- ☐ Check to make sure tank is not leaking
- ☐ Check and clean the in-tank effluent filter
- ☐ Check the sludge/scum layer levels in all septic tanks
- ☐ Recommend if tank should be pumped
- ☐ Check inlet and outlet baffles
- ☐ Check the drainfield effluent levels in the rock layer
- ☐ Check the pump and alarm system functions
- ☐ Check wiring for corrosion and function
- ☐ Check dissolved oxygen and effluent temperature in tank
- ☐ Provide homeowner with list of results and any action to be taken
- ☐ Flush and clean laterals if cleanouts exist

"I understand it is my responsibility to properly operate and maintain the sewage treatment system on this property, utilizing the Management Plan. If requirements in the Management Plan are not met, I will promptly notify the permitting authority and take necessary corrective actions. If I have a new system, I agree to adequately protect the reserve area for future use as a soil treatment system."

Property Owner Signature: _____ Date: _____

Designer Signature: Tony Antonson Date: 6-10-16

See Reverse Side for Management Log