

FIELD EVALUATION SHEET

PRELIMINARY EVALUATION DATE 4/19/2020, FIELD EVALUATION DATE _____
 PROPERTY OWNER: Daryl Keller PHONE 612-247-3104
 ADDRESS: 48225 193rd Ave CITY, STATE, ZIP: McGregor MN 55760
 LEGAL DESCRIPTION: _____
 PIN# 29-1-181800/200 SEC T R TWP NAME _____
 FIRE# _____ LAKE/RIVER _____ LAKE CLASS _____ OHWL _____ FT. _____

DESCRIPTION OF SOIL TREATMENT AREAS

	AREA #1	AREA #2	REFERENCE BM ELEV. <u>100</u> FT.
DISTURBED AREAS	YES <u> </u> NO <u>X</u>	YES <u> </u> NO <u> </u>	REFERENCE BM DESCRIPTION <u>Top of power transformer</u>
COMPACTED AREAS	YES <u> </u> NO <u>X</u>	YES <u> </u> NO <u> </u>	_____
FLOODING	YES <u> </u> NO <u>X</u>	YES <u> </u> NO <u> </u>	_____
RUN ON POTENTIAL	YES <u> </u> NO <u>X</u>	YES <u> </u> NO <u> </u>	_____
SLOPE %	_____	_____	_____
DIRECTION OF SLOPE	_____	_____	_____
LANDSCAPE POSITION	_____	_____	_____
VEGETATION TYPES	_____	_____	_____

DEPTH TO STANDING WATER OR MOTTLED SOIL: BORING# 1 65", 1A _____, 2 65", 2A _____

BOTTOM ELEVATION--FIRST TRENCH OR BOTTOM OF ROCK BED: #1 97.58 FT., #2 _____ FT.

SOIL SIZING FACTOR: SITE #1 76, SITE #2 _____

CONSTRUCTION RELATED ISSUES: Terrain varies frequently

LIC# L552 SITE EVALUATOR SIGNATURE: [Signature]

SITE EVALUATOR NAME: _____ TELEPHONE# 218-424-4285

LUG REVIEW _____ DATE 4/25/2020

Comments: Soil pit was dug to evaluate soil

SOIL BORING LOGS ON REVERSE SIDE

SOILS CHARTS FOR BOTH PROPOSED AND ALTERNATE SITES

1 (PROPOSED) SOILS DATA

DEPTH (INCHES)	TEXTURE	MUNSELL COLOR
0-4"	Topsoil	
4"-28"	Sandy loam	7.5 YR 5/4
28"-44"	Sandy to loamy sand w/35% rock	7.5 YR 6/6
44"-65"	loamy sand less than 35% rock	7.5 YR 5/6

2 (PROPOSED) SOILS DATA

DEPTH (INCHES)	TEXTURE	MUNSELL COLOR

1 (ALTERNATE) SOILS DATA

DEPTH (INCHES)	TEXTURE	MUNSELL COLOR

2 (ALTERNATE) SOILS DATA

DEPTH (INCHES)	TEXTURE	MUNSELL COLOR

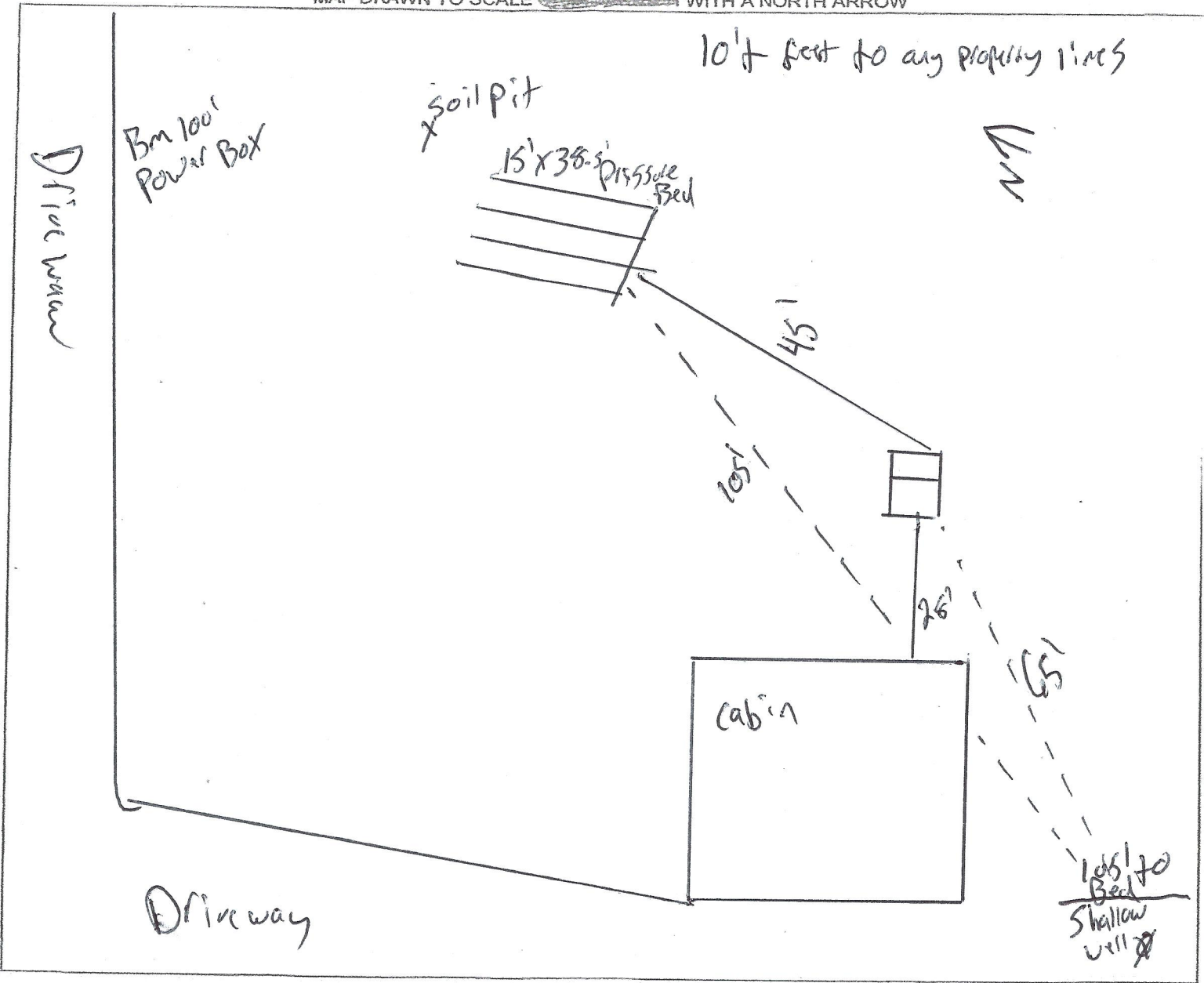
ADDITIONAL SOIL BORINGS MAY BE REQUIRED

SKETCH SHEET

CLIENT: Darryl J. Jelle

DATE: 4/25/2020

MAP DRAWN TO SCALE WITH A NORTH ARROW



CHECK OFF LIST--HAVE ALL OF THE FOLLOWING BEEN DRAWN ON THE MAP??

SHOW EXISTING OR PROPOSED

- WATER WELLS WITHIN 100 FT OF TREATMENT AREAS
- PRESSURE WATER LINES WITHIN 10 FT OF TREATMENT AREAS
- STRUCTURES
- LOT IMPROVEMENTS
- ALL SOIL TREATMENT AREAS
- ALL ISTS COMPONENTS
- HORIZONTAL AND VERTICAL REFERENCE
- POINT OF SOIL BORINGS
- DIRECTION OF SLOPE
- LOT EASEMENTS
- ALL LOT DIMENSIONS
- DISTURBED/ COMPACTED AREAS
- SITE PROTECTION--LATHE AND RIBBON EVERY 15 FT
- ACCESS ROUTE FOR TANK MAINTENANCE

REQUIRED SETBACKS

- STRUCTURES
- PROPERTY LINES
- OHWL

COMMENTS:

INDICATE ELEVATIONS

BENCHMARK	100'
ELEVATION OF SEWER LINE @ HOUSE	99.25
ELEVATION @ TANK INLET	97.08
ELEVATION @ BOTTOM OF ROCK LAYER	97.58
ELEVATION @ BOTTOM OF BORING OR RESTRICTIVE LAYER	92.17
ELEVATION OF PUMP	93.08
ELEVATION OF DISTRIBUTION DEVICE	98.08

DESIGNER SIGNATURE [Signature]
 LICENSE# L 552

DATE 4/25/2020

Pressure Bed Design

Property Owner: Darryl Pepper Date: 4/25/2020

Site Address: 484425 193rd Ave McGregor MN 55760 PID: 29-1-181800

Comments: _____

instructions: = req'd input = input or default = calculated field *** = installer info

- 1) bedroom Type Residential System
- 2) GPD design flow
- 3) Garbage disposal or pumped to septic
- 4) *** Gallon septic tank (minimum) Tank options: none
- 5) GPD/ft² Soil Loading Rate ft² bed req'd, or ft² LUG minimum
(must match soil boring log)
- 6) *** ft desired bed width, leads to a ft bed length
(25' maximum)
- 7) *** ft lateral spacing ft perforation spacing (maximum 3 for both)
 end feed manifold connection
- 8) *** laterals feet long perfs / lateral perfs total
(1/2 perf means the first perf starts at the middle feed manifold)
- 9) *** inch perfs at feet residual head gives gpm flow rate per perforation
(If bed has > 1' of cover, increase residual head for cleanout req's)
for this perf size & spacing, & pipe size on line 12, max perfs/lateral = , line #8 must be less --> OK
- 10) doses per day (4 minimum)
- 11) gallons per dose (treatment volume)
- 12) inch diameter laterals (or smaller) will meet "5x pipe volume"
*** inch diameter laterals (or smaller) must be used to meet "4x pipe volume" requirement
 inch diameter laterals (or smaller) will meet "3x pipe volume"
- 13) *** feet of inch supply line leads to gallons of drainback volume
("top feed" to control the drainback)
- 14) gallons TOTAL pump out volume (treatment + drainback)
- 15) feet vertical lift from pump to dispersal area, leads to a
- 16) *** GPM @ feet of head, Pump requirement
(>50 gpm may require additional 3-6' head allowance for discharge assy)

- 17) *** 1000 gal Dose tank (minimum) at 25.00 gpi
- 18) *** 4.7 inch swing on Demand float, or Timed dosing of 3.2 min ON (confirm pump rate with drawdown test and adjust as necessary)
(<100% of design flow requires a larger OFF time) 5.9 hrs OFF
- 19) 12 inches of from bottom of tank to "pump OFF" float, and/or to cover pump
- 20) *** 17 inches from bottom of tank to "pump ON" float, or 12 inches to "timer ON" float
- 21) *** 20 inches from bottom of tank to "Hi Level" float (add 5-15 inches if Time Dosed)
- 22) 500 gallons reserve capacity (after High Level Alarm is activated)
- 23) 48 inches, or 4.00 ft. to Redox or other limiting condition (This must match the soil boring log)
- 24) 36 inches, or 3.00 ft. of vertical separation required
leads to bottom of rock no more than:
- 25) *** 12 inches, or 1.0 ft. Below existing grade **CRITICAL FOR FUTURE CERTIFICATIONS!!!**
- 26) *** 6 inches of rock below the pipe
2 inches of rock to cover the pipe
- 27) Overall Dimensions: 15.0 ft. wide by 38.5 ft. long Pressure Bed
- 28) *** Rock Bed materials:
15 ft. by 38.5 ft. by 8 inches total, plus 20% gives 18 yd³ or *1.4= 25 ton

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


Designer Signature

Ekelund Excavating Inc.
Company

L552
License#

4/25/2020

Date

Installer Summary

1000 gallon Septic tank (minimum) none

1000 gallon Dose tank (minimum) at 25.00 gpi

37 GPM @ 19 ft. of head, Pump required

4.7 inch swing on Demand float or 3.2 minutes ON time & 5.9 hours OFF time

17 inches from bottom of tank to "pump ON" float, or 12 inches to "timer ON" float
20 inches from bottom of tank to "Hi Level Alarm" float

45 ft. of 1.5 inch supply line with end feed manifold connection

5 laterals 1.50 inch diameter 36.5 feet long 3.0 ft lateral spacing

7/32 inch perfs 3.0 ft perforation spacing

No Effluent filter & alarm
5 clean out & valve box assembly

Pressure Bed:

15.0 ft. wide by 38.5 ft. Long

Bottom of rock no more than:

12 inches, or 1.0 ft. Below existing grade

6 inches of rock below the pipe

Overall Dimensions: 15 ft. wide by 38.5 ft. long Pressure Bed

Rock Bed materials: 18 yd³ or *1.4= 25 ton

Subsurface Sewage Treatment System Management Plan

Property Owner: Darryl Pepper Phone: _____ Date: 4/24/2020
Mailing Address: _____ City: _____ Zip: _____
Site Address: 48425 193rd Ave City: McGregor 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 or maintenance provider.

System Designer: Recommends SSTS check every _____ months.
Local Government: Recommends SSTS check every _____ months.
State Requirement: Requires SSTS check every 36 months.
(State requirements are based on MN Rules Chapter 7080.2450, Subp. 2 & 3)

My System needs to be checked every 12 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 or maintenance 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 N/A)

Licensed septic service provider or maintenance provider (Check all that apply):

- Check to make sure tank is not leaking
- Check and clean the in-tank effluent filter (if exists)
- 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: [Signature] Date: 4/19/20
Designer Signature: [Signature] Date: 4/19/20

See Reverse Side for Management Log