

# Preliminary & Field Evaluation Form

www.SepticResource.com vers 12.4

Owner Information			
Date	<u>5/13/2022</u>	Sec / Twp / Rng	<u>S-19, T=46, R-23</u>
Parcel ID	<u>26-0-0303023</u>	LUG (county, city, township)	<u>Aitkin Co.</u>
Property Owner:	<u>Eric Johnson</u>	Owners address (if different)	
Property Address:	<u>21067 310th Ln. McGregor MN 55760</u>		<u>1795 Queens Ave. S</u>
City / State / Zip:			<u>Lakeland MN 55043</u>


Flow Information and Waste Type / Strength			
Estimated Design flow	<u>450</u>	Anticipated Waste strength	<input type="checkbox"/> Hi Strength <input checked="" type="checkbox"/> Domestic
Comments: Replacing failed Existing system Deep Well +150" South of House Owner to plumb house out North basement wall.		Any Non-Domestic Waste	<input type="checkbox"/> Yes (class V) <input checked="" type="checkbox"/> No
		Sewage ejector/grinder pump	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
		Water softener	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
		Garbage Disposal	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
		Daycare / In home business	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Site Information					
Existing & proposed lot improvements located (see site map)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Well casing depth	Existing deep well	
Easements on lot located (see site map)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Drainfield w/in 100' of residential well	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Property lines determined (see site map) By Owner	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Site w/in 200' of transient noncommunity water supply (TNCWS)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Req'd setbacks determined (see site map)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Site w/in an inner wellhead mgmt zone (CWS/NTNCWS)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Utilities located & identified (gopher state one call)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Buried water supply pipe w/in 50' of system	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Access for system maintenance (shown on site map)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Site located in Shoreland (w/in 1000' of lake, 300' of river)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Soil treatment area protected	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Site map prepared with previous items included	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Construction related issues	<u>Owner will Plumb house out North Basement wall.</u>				

### Soil Information

		Evidence of site:	
		Cut	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
		Filled	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
		Compacted	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
		Disturbed	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Original soils	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Soil logs completed and attached	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Perk test completed and attached (if applicable) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Soil loading rate (gpd/ft <sup>2</sup> )	<u>0.78</u>		Percolation rate (if applicable) _____
Depth/elev to SHWT	<u>38"</u>		Flooding or run-on potential (comments) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Depth to system bottom maximum (or elev minimum)	<u>( + 12" )</u>		Flood elevation (if applicable) _____
Depth/elev to standing water (if applicable)	_____		Elevation of ordinary high water level (if applicable) _____
Depth/elev to bedrock (if applicable)	_____		Floodplain designation and elev - 100 yr/10 yr (if applicable) _____
Soil Survey information determined (see attachment)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Differences between soil survey and field evaluation (if applicable)	_____ _____		

*I hereby certify this evaluation was completed in accordance with MN 7080 and any local req's.*

\_\_\_\_\_  
Designer Signature 

\_\_\_\_\_  
Brummer Septic LLC.  
Company

\_\_\_\_\_  
L-1347  
License #

# Soil Observation Log

www.SepticResource.com vers 12.4

Owner Information	
Property Owner / project: <u>Eric Johnson</u>	Date <u>5/13/2022</u>
Property Address / PID: <u>21067 310th Ln. McGregor MN 5576</u>	

Soil Survey Information	
<input type="checkbox"/> refer to attached soil survey	
Parent matl's:	<input checked="" type="checkbox"/> Till <input checked="" type="checkbox"/> Outwash <input type="checkbox"/> Lacustrine <input type="checkbox"/> Alluvium <input type="checkbox"/> Organic <input type="checkbox"/> Bedrock
landscape position:	<input type="checkbox"/> Summit <input type="checkbox"/> Shoulder <input checked="" type="checkbox"/> Side slope <input type="checkbox"/> Toe slope
soil survey map units:	<u>732B</u> slope <u>3</u> %    direction- <u>NW</u>

Soil Log #1							
		<input checked="" type="checkbox"/> Boring <input type="checkbox"/> Pit	Elevation <u>98.7</u>	Depth to SHWT <u>60"</u>			
Depth (in)	Texture	fragment %	matrix color	redox color	consistence	grade	shape
0 - 8	Topsoil Sandy Loam	<35	10YR3/2		Loose	Loose	Granular
8 - 26	Sandy Loam	<35	10YR4/4		Loose	Loose	Granular
26 - 36	Med Sand	<35	10YR4/6		Loose	Loose	Granular
36 - 60	Med Sand	<35	10YR5/4		Loose	Loose	Granular
60 - 66	Med Sand	<35	10YR5/4	7.5YR6.6	Loose	Loose	Granular
Comments:							

21067 310th Ln. McGregor MN 55760 **Soil Log #2**

		<input checked="" type="checkbox"/> Boring	<input type="checkbox"/> Pit	Elevation <u>98.5'</u>		Depth to SHWT <u>38"</u>	
Depth (in)	Texture	fragment %	matrix color	redox color	consistence	grade	shape
0 - 8	Topsoil Sandy Loam	<35	10YR3/2		Loose	Loose	Granular
8 - 28	Sandy Loam	<35	10YR4/4		Loose	Loose	Granular
28 - 38	Med Sand	<35	10YR5/4		Loose	Loose	Granular
38 - 56	Med Sand	<35	10YR5/4	7.5YR6.6 & 10YR6/2	Loose	Loose	Granular
56	Silt Sand	<35	10YR4/4	7.5YR6.6 & 10YR6/2	Friable	Weak	Platy

21067 310th Ln. McGregor MN 55760 **Soil Log #3**

		<input checked="" type="checkbox"/> Boring	<input type="checkbox"/> Pit	Elevation <u>99'</u>		Depth to SHWT <u>48"</u>	
Depth (in)	Texture	fragment %	matrix color	redox color	consistence	grade	shape
0 - 8	Topsoil Sandy Loam	<35	10YR3/2		Loose	Loose	Granular
8 - 30	Sandy Loam	<35	10YR4/4		Loose	Loose	Granular
30 - 48	Med Sand	<35	10YR5/4		Loose	Loose	Granular
48 - 54	Med Sand	<35	10YR5/4	7.5YR6.6	Loose	Loose	Granular

I hereby certify this work was completed in accordance with MN 7080 and any local req's.

Designer Signature 

Brummer Septic LLC.  
Company

L-1347  
License #

21067 310th Ln. McGregor MN 55760

## Soil Log #4

 Boring PitElevation 99.3'Depth to SHWT 50"

Depth (in)	Texture	fragment %	matrix color	redox color	consistence	grade	shape
0 - 8	Topsoil Sandy Loam	<35	10YR3/2		Loose	Loose	Granular
8 - 22	Sandy Loam	<35	10YR4/4		Loose	Loose	Granular
22 - 50	Med Sand	<35	10YR5/4		Loose	Loose	Granular
50 - 54	Med Sand	<35	10YR5/4	7.5YR6.6	Loose	Loose	Granular

21067 310th Ln. McGregor MN 55760

## Soil Log #5

 Boring PitElevation 98.7'Depth to SHWT 38"

Depth (in)	Texture	fragment %	matrix color	redox color	consistence	grade	shape
0 - 8	Topsoil Sandy Loam	<35	10YR3/2		Loose	Loose	Granular
8 - 23	Sandy Loam	<35	10YR4/4		Loose	Loose	Granular
23 - 38	Med Sand	<35	10YR5/4		Loose	Loose	Granular
38 - 44	Med Sand	<35	10YR5/4	7.5YR6.6	Loose	Loose	Granular

I hereby certify this work was completed in accordance with MN 7080 and any local req's.

  
 Designer Signature

Brummer Septic LLC.  
 Company

L-1347  
 License #

# Mound Design - Aitkin county

Property Owner: Eric Johnson

Date: 5/13/2022

Site Address: 21067 310th Ln. McGregor MN 55760

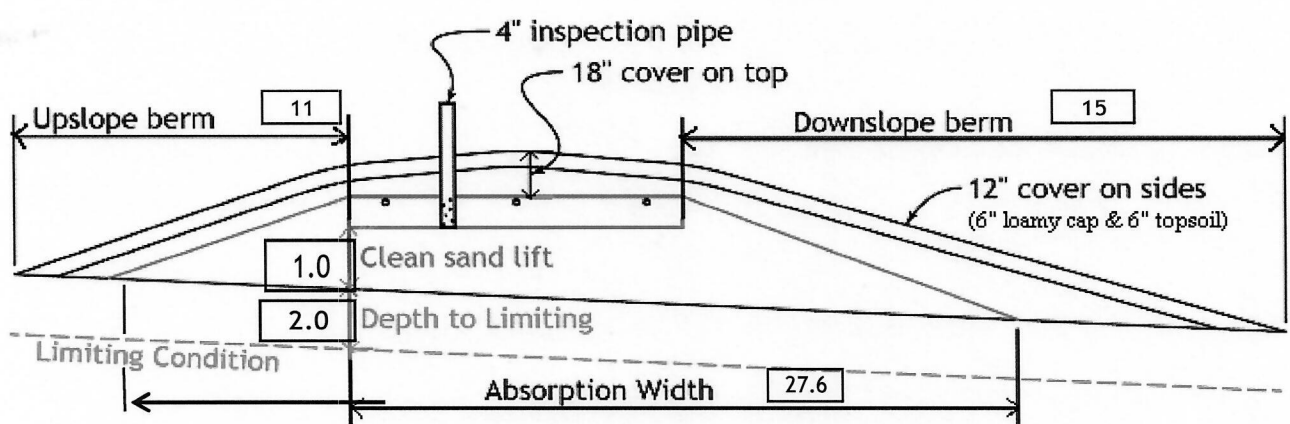
PID: 26-0-0303023

Comments: \_\_\_\_\_

Instructions:  = enter data     = adjust if desired     = computer calculated - DO NOT CHANGE!

- 1)  bedroom    Type  Residential    System
- 2)  GPD design flow
- 3)  Garbage disposal or pumped to septic    Install 1650 Jacobson 2/Compartment Tank
- 4)  Gal Septic tank (code minimum)     Gal Septic tank (design size / LUG req'd)  
Tank options: none
- 5)  GPD/ft<sup>2</sup> mound sand loading rate    contour loading rate of  req's a min     ft. long rockbed
- 6)  ft rockbed width     ft rockbed length
- 7)  ft lateral spacing     ft perforation spacing    (maximum of 3 for both)  
 manifold connection
- 8)  laterals     feet long     perfs / lateral     perfs total  
(1/2 a perf means the first perf starts at the middle feed manifold)
- 9)  inch perfs at  feet residual head    gives  gpm flow rate per perforation  
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)    1.50 5x
- 12)  inch diameter laterals must be used to meet "4x pipe volume" requirement    2.00 3x
- 13)  feet of  inch supply line    leads to  gallons of drainback volume  
(Tip: "top feed" manifold to control the drainback)
- 14)  gallons TOTAL pump out volume (treatment + drainback)
- 15)  feet vertical lift from pump to mound laterals, leads to a:
- 16)  GPM @  feet of head, Pump requirement    (note: >50gpm may require an extra 3-6' of head)
- 17)  gal Dose tank (code minimum)     gal Dose tank (design size / LUG req'd)    at  gpi  
leads to a
- 18)  inch swing on Demand float,    or timed dosing of  min ON    (confirm pump rate with drawdown  
(this delivers Average flow, =70% of Peak design flow)  hrs OFF    test and adjust as necessary)
- 19)  inches from bottom of tank to "Pump OFF" float
- 20)  inches from bottom of tank to "Pump ON" float, or  inches to "Timer ON" float if time dosed
- 21)  inches from bottom of tank to "Hi Level" float, or  inches to "Hi Level" float if time dosed
- 22)  gallons reserve capacity    (after High Level Alarm is activated)

- 23)  gpd/ft<sup>2</sup> Absorption area Soil Loading Rate, which gives a mound ratio of  (minimum)  
 (this must match the soil boring log) desired mound ratio
- 24)  percent site slope (0-20% range)  (% downslope site slope, if different than upslope)
- 25)  inches, or  ft. to Redox or other limiting condition (need at least 12" to be a Type I)  
 Treatment zone contains  inches of 0% soil credit, and  inches of 50% soil credit. Giving a:
- 26)  inch, or  ft. Sand Lift Mound **CRITICAL FOR FUTURE CERTIFICATIONS!!!**
- 27)  ft. base absorption width (with sand beyond rockbed as follows):  
 greater of: absorption width OR sand slope
- 28)  ft. upslope and sideslope sand upslope   
 ft. Downslope sand down slope
- Individual slope ratios give BERM widths (topsoil beyond rockbed) of:
- 29)  upslope ratio  ft. upslope berm
- 30)  sideslope  ft. sideslope berms
- 31)  downslope  ft. downslope berm
- 32) Overall Dimensions:  ft. wide by  ft. long Rock bed  
 ft. wide by  ft. long Mound footprint



**Note:**  
 For 0 to 1% slopes, *Absorption Width* is measured from the *Bed* equally in both directions.  
 For slopes >1%, *Absorption Width* is measured downhill from the upslope edge of the *Bed*.

- 33) Rock Bed:  ft. by  ft. by  inches under pipe, plus 20% gives  yd<sup>3</sup> or \*1.4=  ton
- 34) Mound Sand: (note: volume is based on 3:1/4:1 slope from top of rockbed, Exchange sand for loamy cap if desired)  
 up +  downslope +  ends +  under rock =  yd<sup>3</sup> or \*1.4=  ton  
 plus 20%
- 35) Loamy Cap:  ft. by  ft. 6" deep, plus 20% gives  yd<sup>3</sup> or \*1.4=  ton
- 36) Topsoil:  ft. by  ft. 6" deep, plus 20% gives  yd<sup>3</sup> or \*1.4=  ton

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

*[Signature]* Brummer Septic LLC. L-1347 5/13/2022  
 Designer Signature Company License# Date

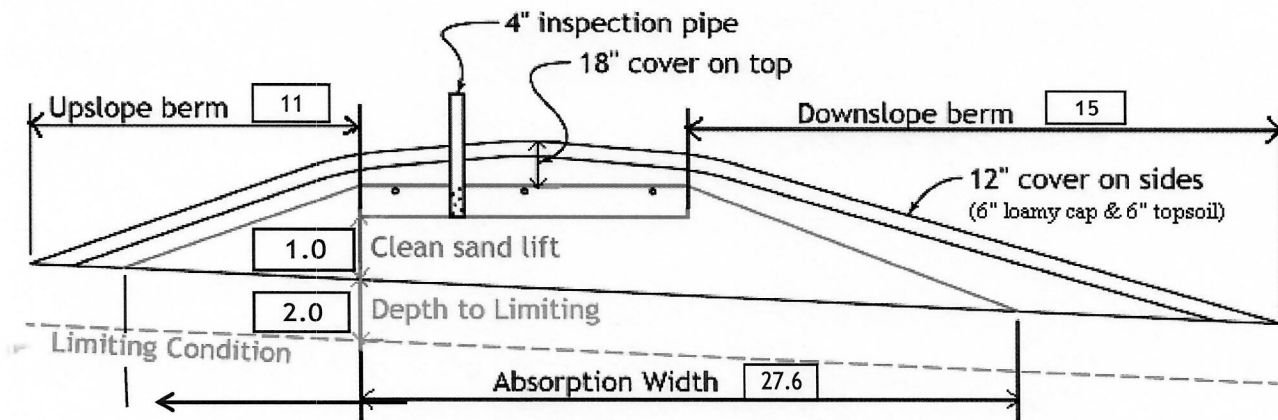
# Installer Summary

- 1000 gallon Septic tank (minimum) Tank options: none  
 Install 1650 Jacobson 2/Compartment Tank  
 533 gallon Dose tank (minimum) at 12.69 gpi
- 27 GPM @ 19 ft. of head, Pump required  
 5.7 inch swing on Demand float which translates to roughly 3.9 inches of float tether length  
 if time dosing is required --> 2.7 minutes ON time & 5.1 hours OFF time
- 18 inches from bottom of tank to "pump ON" float, or 12 inches to "timer ON" float  
 21 inches from bottom of tank to "Hi Level Alarm" or 31 inches to "Hi level alarm" if time dosed
- 45 ft. of 2.0 inch supply line with end feed manifold connection  
 (Tip: "top feed" manifold to control drainback)
- 12 inch, or 1.0 ft. Sand Lift Mound  
 10.0 ft. wide by 37.5 ft. long Rock bed  
 3 laterals 1.50 inch diameter 35.5 ft. long 3.0 ft. lateral spacing  
 1/4" inch perfs 3.0 ft. perforation spacing
- No Effluent filter & alarm  
 3 clean out & valve box assemblies

- 27.6 ft. Total sand ABSORPTION width (minimum)  
 7.1 ft. upslope and sideslope (sand beyond rockbed, minimum)  
 10.4 ft. Downslope (sand beyond rockbed, minimum)

Specific slope ratios give BERM widths (topsoil beyond rockbed) of:

- 4:1 upslope ratio 11 ft. upslope berm  
 4:1 sideslope 13 ft. sideslope berms  
 4:1 downslope 15 ft. downslope berm



**Note:**  
 For 0 to 1% slopes, *Absorption Width* is measured from the *Bed* equally in both directions.  
 For slopes >1%, *Absorption Width* is measured downhill from the upslope edge of the *Bed*.

Rock Bed:	17.0 yd <sup>3</sup> or *1.4=	24 ton	9 inches under pipe
Mound Sand:	76 yd <sup>3</sup> or *1.4=	106 ton	
Loamy Cap:	43 yd <sup>3</sup> or *1.4=	60 ton	6" deep
Topsoil:	51 yd <sup>3</sup> or *1.4=	71 ton	6" deep



## INSPECTOR CHECKLIST - mound

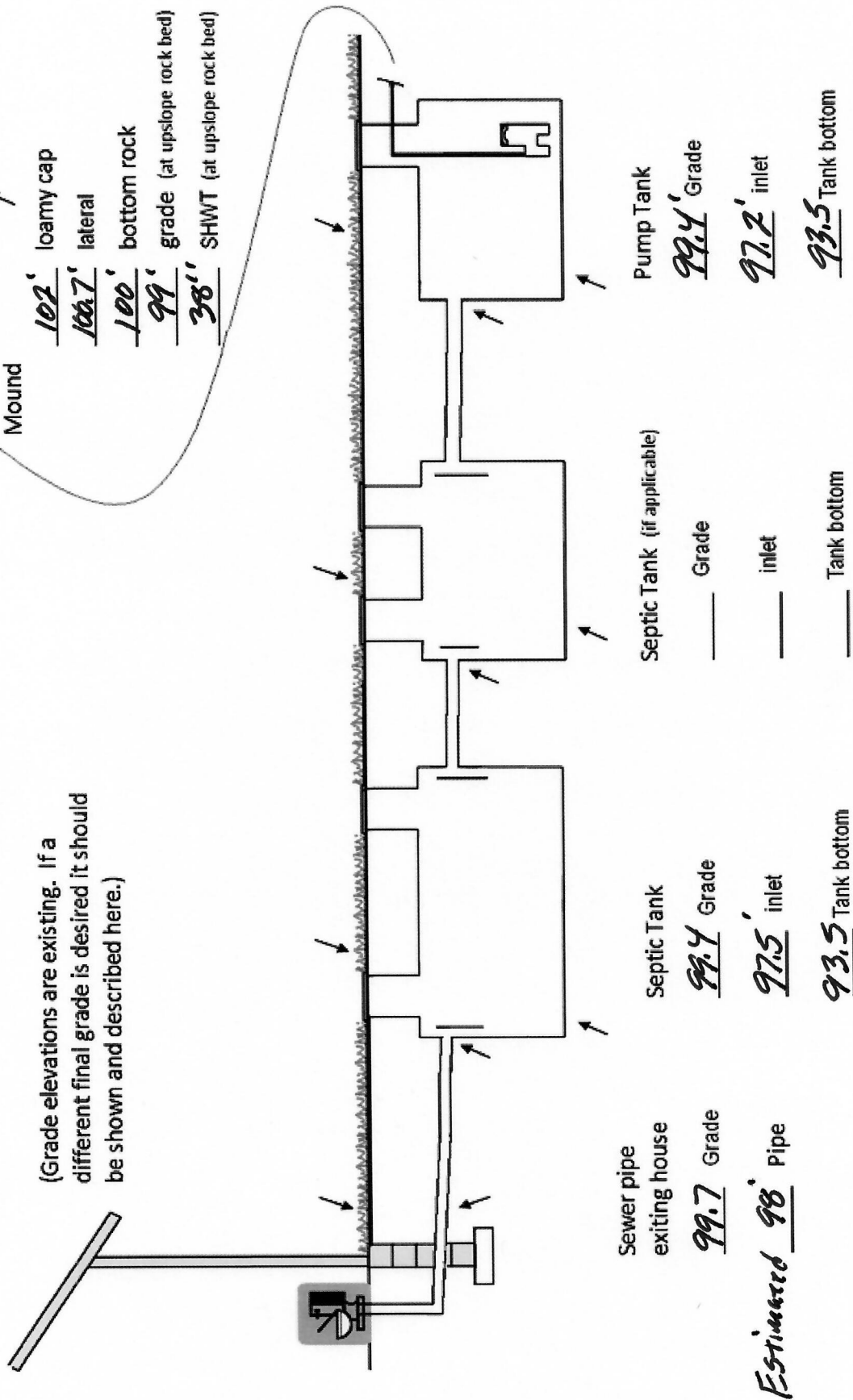
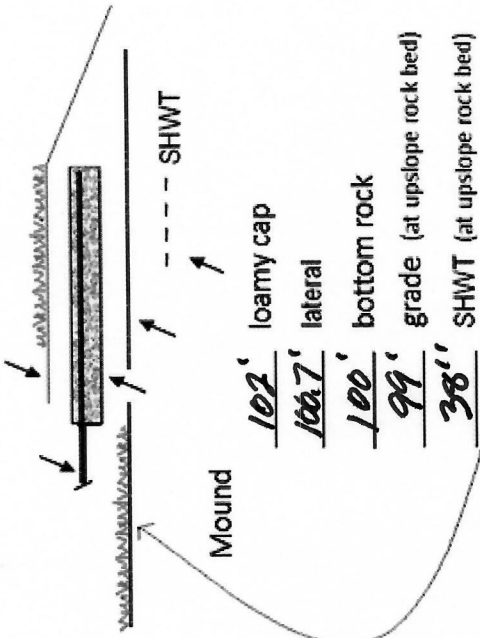
2106/ 310th Ln. McGregor MN 55760

- WELL setbacks: 20' to pressure tested sewer line (5 psi for 15 min)  
50' to everything 100' to dispersal area with shallow well
- PROPERTY LINES setback: 10' to everything
- Road setback: platted: 10' prop line. Metes & bounds: out of road easement, or outer ditch.
- LAKE / BLUFF setback: 20' for bluff. Lakes: GD \_\_\_\_, RD \_\_\_\_, NE \_\_\_\_. Protected wetland \_\_\_\_.
- Building setbacks: 10' for everything, 20' for dispersal area.
- WATER LINE under pressure se 10' to bed, tank & sewer line. (else sewer line > 12" below, else ok w/pvc)
  
- Sewer line & baffle connection (no 90's, 3' between 45's, slope min 1" in 8', max 2" in 8')  
(no depth req's, clean out every 100', Sch 40 pipe)
  
- Septic tank and risers (water tight, insulated, proper depth, existing verified by pumping)  
mfg \_\_\_\_\_ 1000 gallons none \_\_\_\_\_
  
- Riser over outlet, riser over inlet or center, and 6"+ inspection pipe over any remaining baffles.
- No effluent filter & alarm
- Dose tank risers and piping (water tight, insulated, proper depth, drainback)  
mfg \_\_\_\_\_ 533 gallons
  
- dose pump \_\_\_\_\_ 27 gpm 19 head VERIFY PUMP CURVE 2.7 min ON 5.1 hr OFF
  
- float setting drop 5.7 inches at 12.7 gpi "DESIGNED" 3.9 inches approx float tether length  
72.0 gal dose divided by \_\_\_\_\_ gpi "INSTALLED" = \_\_\_\_\_ inches float drop (field corrected)  
LABEL pump requirements and drawdown on riser or panel
  
- Cam lock reachable from grade - 30" max. J-hook weep hole. Supply line access (no hard 90's)  
2.0 inch supply pipe: Sch40, sloped 1/8"+, supported by 4" sch40 sleeve or compacted, and buried 6"+.  
splice box / control panel / electrical connections  
flow measurement: CT, ETM, time dosed, home water meter  
mound absorption area rough up  
mound rock dimensions 10.0 X 37.5  
Sand lift depth 12 inches. (Jar test : 2" sand leaves < 1/8" silt after 30 min)
  
- Absorption Sand beyond rock 7.1 upslope 10.4 downslope
  
- Bermed topsoil beyond rockbed 11 upslope 13 sideslope 15 downslope
  
- cover depth of 12-18"+ VERIFY
- 3 laterals (1-2' from edge of rock)
- 1.50 inch pipe size (Sch40 pipe & fittings)
- 3.0 ft lateral spacing
  
- 1/4" inch perforations
- 3.0 ft perforation spacing
  
- Air inlet at end of laterals, and at top feed manifold if necessary. VERIFY
- clean outs (no hard 90's)
- 4" inspection pipe to bottom of rock, anchored VERIFY
  
- Abandon existing system - if necessary  Re-use existing tank certification
- monitoring plan and type \_\_\_\_\_
- well abandonment form - if necessary

# System Elevations

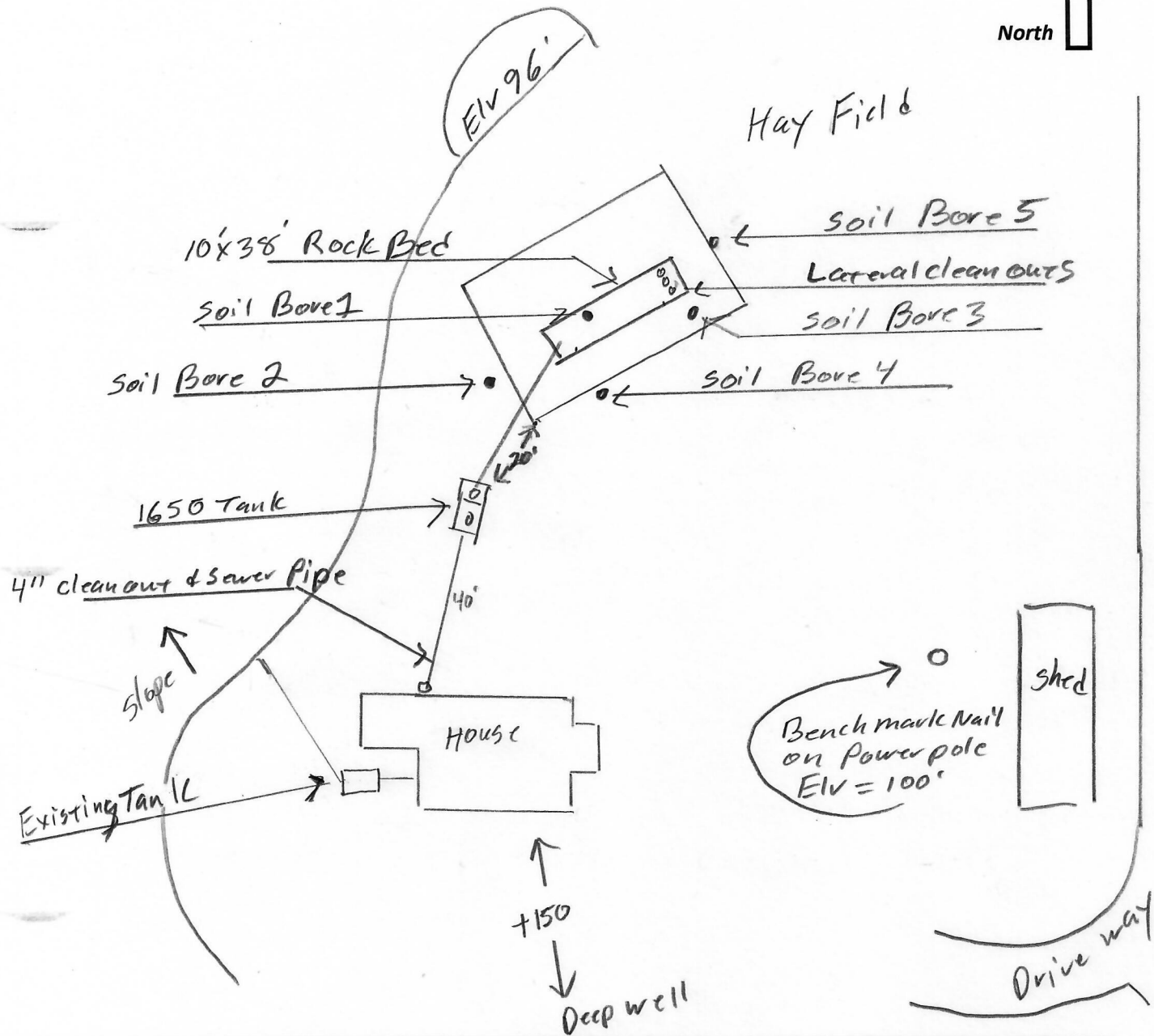
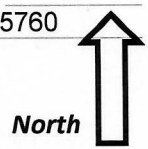
Elv = 100' benchmark Nail on power pole

(Grade elevations are existing. If a different final grade is desired it should be shown and described here.)



# { Design Drawing }

Property Owner: Eric Johnson Date: 5/13/22 Designer's Initials: JB  
 Parcel ID. Number: 26-0-0303023 Address: 21067 310th Ln. McGregor MN 55760  
 one Inch = 40ft.



	Surface/ SHWT	Nail on Power Pole = Bench Mark 100'		Existing Grade
Soil Bore 1	98.7' / 60"	Bench Mark	100'	Upslope Edge of Rockbed Elv. = 99'
Soil Bore 2	98.5' / 38"	Ground Elv. BM	99.8'	Bottom of Rockbed Elv. = 100'
Soil Bore 3	99 / 48"	Ground Elv. Tank	99.4'	Top of Washed Sand Elv. = 100'
	Ground at	Existing house	99.7'	North side
				Estimated Sewer pipe at House Elv. = 98'

Please show all that apply ( Existing )

Please Draw to Scale with North to Top or Left Side of Page:

- Wells within 100ft. Of Drain field.
- Water lines within 10 ft. of Drain field.
- Drain field Areas:

- Disturbed/Compacted Areas
- Component Location
- OHW ordinary high water
- Lot Easements

- Access Route for Tank Maintenance
- Property Lines
- Structures
- Setbacks

## Mound Design Notes - Aitkin county

Property Owner: Eric Johnson

Date: 5/13/22

Site Address: 21067 310th Ln. McGregor MN 55760

PID: 26-0-0303023

Comments: **Mound design may not follow Aitkin co. Auto fill form for mound design.**

- 1 This is a type I mound for a 3 bedroom House. Existing deep well location is +150' South of House.
- 2 Existing Tank to be pumped, collapsed, filled or removed. Abandon existing Drainfield
- 3 All property line are + 250 ft from new septic system.  
Owner will plumb house our North Basement wall, gravity flow from house.
- 4 Bench Mark Elevation is a nail on a Power Pole S E corner of mound area, East of House.
- 5 Install Jacobson 1650 Compartment tank for gravity flow from North side of house, Estimated pipe Elv. = 98'
- 6 Elevation contour of rock bed upslope edge is 99'.  
The area size of the rock bed is 10' x 38' . Absorption area is 38' x 27.6'.  
Sand absorption area is 7.1 ft. up slope + 10 ft. rockbed + 10.4 downslope = approx. 27.6 ft. wide sand base.  
Berms are 11ft. Upslope, 15ft. Down slope, 10ft. Rock bed = approx. 36ft. Wide.  
Overall mound size is approx. 36' wide x 64' long and approx. 3' high. End Berms are 13Ft wide.
- 7 The bench mark is the nail on a Power Pole SE of mound area, BM = Elv. 100'.  
Installer to double check bench mark. Installer should confirm bench mark and sand height Elv. with inspector.  
Installer should record bench mark Elv. and sand height on installation inspection form.
- 8 The top of the washed sand and bottom of rock bed is Elv. 100'.  
It is important that the soils do not get compacted, and that clean washed sand is used.
- 9 The Jacobson 1650 compartment tank will be gravity flow from dwelling. Install the pump for 7 demand doses per day. approx. 72 gallons per dose, 5.7 inches of tank level. Install alarm at 3 inches from pump on level.  
Install all manholes, inspection pipes and clean-outs to grade or above, insulate top of tank.
- 10 **Recommend the Installation of an Effluent filter on septic tank outlet, install electric alarm on filter.**  
Install a 2" supply pipe from tank to end manifold in rock bed, install so pipe drains back to tank.  
Install 1.5" laterals with 9" of rock under them. ( Install Lateral clean-outs at far end of laterals. Recommended )
- 11 **Drill 1/4" holes for Perf sizing, 36" on centers.**  
Install 4" inspection pipe to bottom of rock bed, secure in rock bed and raise to above final grade.

Designed to Aitkin Co. and MPCA recommendations and requirements.

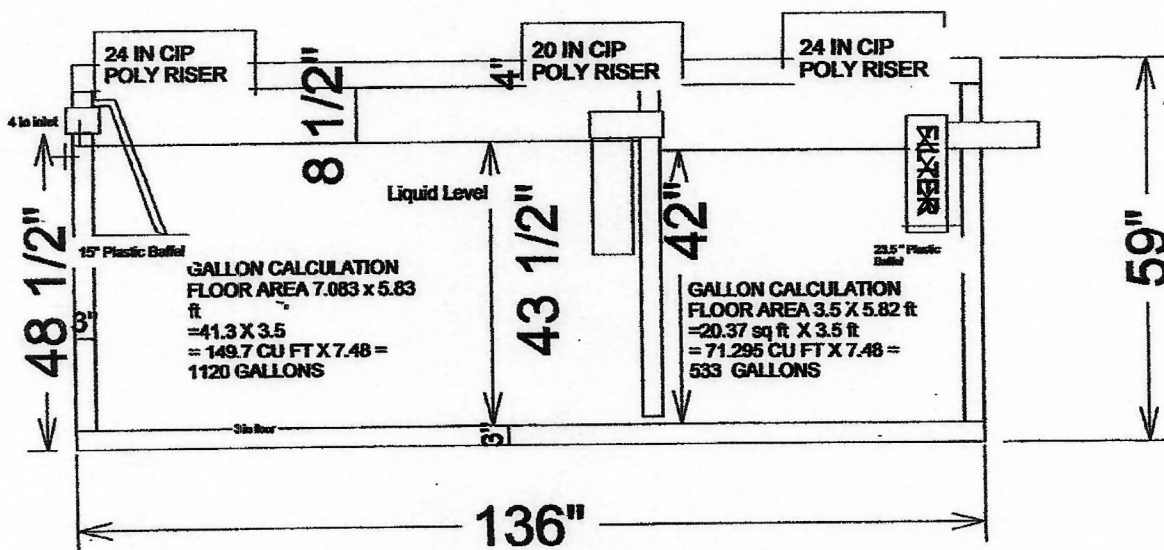
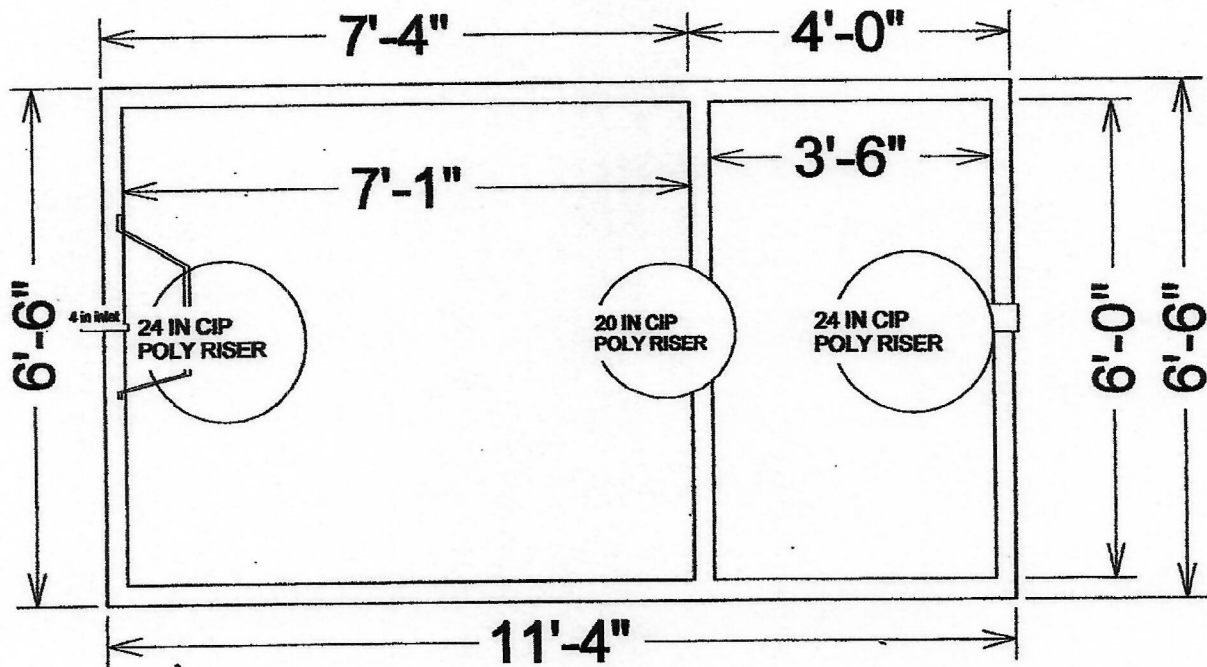
  
\_\_\_\_\_  
Designer Signature

Brummer Septic LLC.  
Design Company

L-1347  
License#

# 1650 Gallon 2 Compartment Septic Tank

## TOP VIEW



$533 / 42" = 12.69 \text{ GPI}$

## SIDE VIEW

Drawings Owned BY Jacobson Precast, Inc.  
36641 HWY 169, Aitkin, Mn 56431



# Detailed Parcel Report

Parcel Number: 26-0-030302

## General Information

Township/City: RICE RIVER TWP  
Taxpayer Name: JOHNSON, ERIC M & SHERRY B  
Taxpayer Address: 1795 QUEENS AVE S  
LAKELAND MN 55043  
Property Address: 21067 310th Ln  
Township: 46 Lake Number: 0  
Range: 23 Lake Name:  
Section: 19 Acres: 40.00  
Green Acres: No School District: 4.00  
Plat:  
Brief Legal Description: NE NE

## Tax Information

Class Code 1: Non-Homestead Qualifying Single Res Unit  
Class Code 2: Non-Homestead Agricultural Land  
Class Code 3: Non-Homestead Agricultural Land  
Homestead: Non Homestead  
Assessment Year: 2021

Estimated Land Value:	\$70,600.00
Estimated Building Value:	\$72,000.00
Estimated Total Value:	<u>\$142,600.00</u>
Prior Year Total Taxable Value:	\$131,500.00
Current Year Net Tax (Specials Not Included):	\$1,114.00
Total Special Assessments:	\$0.00
**Current Year Balance Not Including Penalty:	\$0.00
Delinquent Taxes:	No

\* For more information on delinquent taxes, please call the Aitkin County Treasurer's Office at 218-927-7325.

\*\* Balance Due on a parcel does not include late payment penalties.



Map may not be valid at this scale. Data was mapped at an accuracy of 1:24,000 so any representation of the data at a larger scale is not advised.

These data are provided on an "AS-IS" basis, without warranty of any type, expressed or implied, including but not limited to any warranty as to their performance, merchantability, or fitness for any particular purpose.

**Johnson**

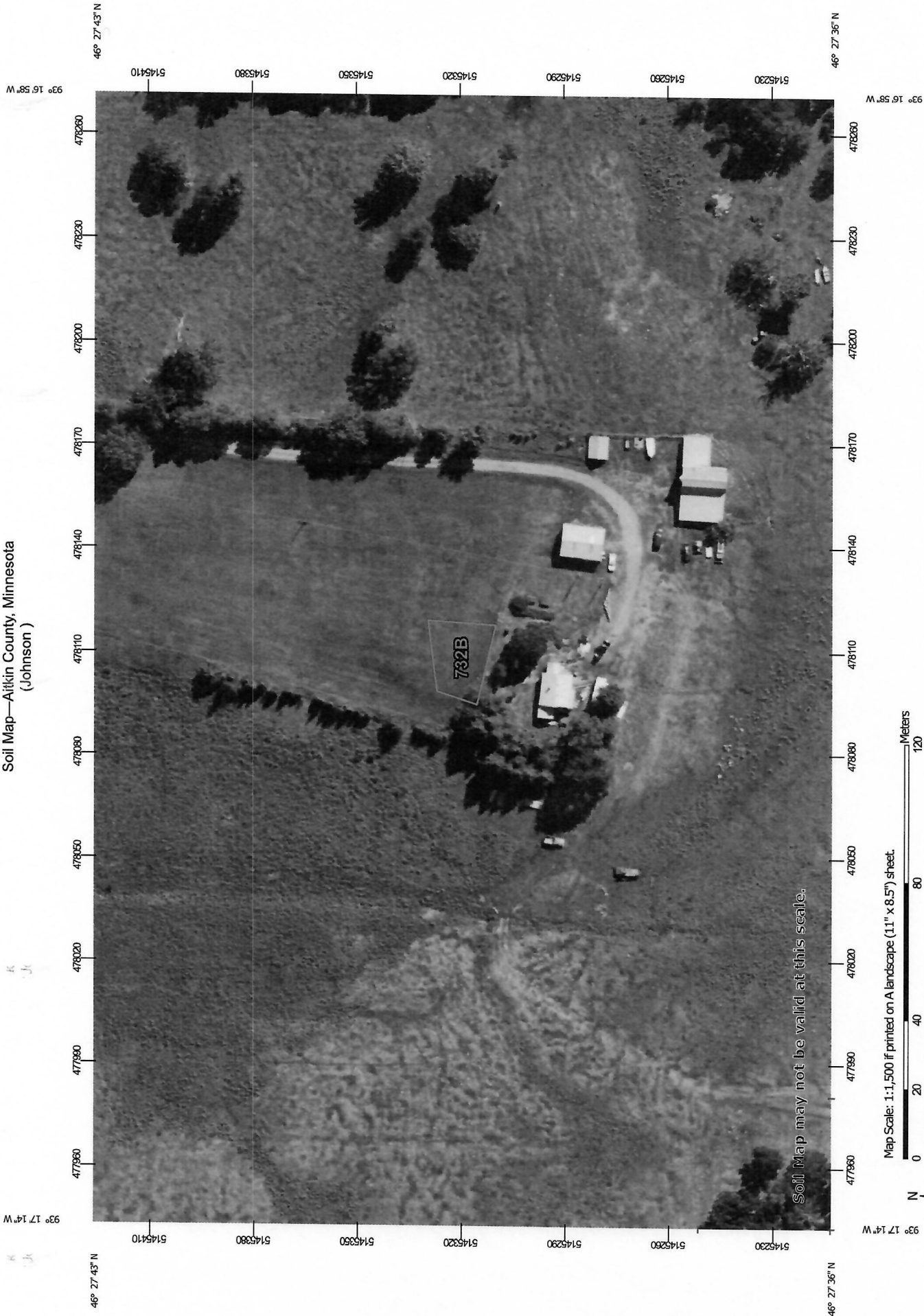


Web AppBuilder for ArcGIS

1:1,128      0   0.005   0.01 mi      1 inch = 94 feet

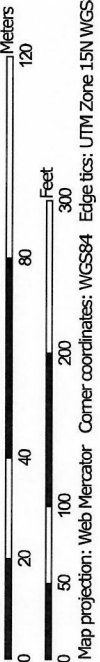
Date: 1/14/2022

Soil Map—Aitkin County, Minnesota  
(Johnson)



Soil Map may not be valid at this scale.

Map Scale: 1:1,500 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84



Natural Resources  
Conservation Service

Web Soil Survey  
National Cooperative Soil Survey

5/15/2022  
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## Aitkin County, Minnesota

### 732B—Bushville loamy fine sand, 1 to 6 percent slopes

#### Map Unit Setting

*National map unit symbol:* gjjh  
*Elevation:* 980 to 1,640 feet  
*Mean annual precipitation:* 25 to 30 inches  
*Mean annual air temperature:* 39 to 45 degrees F  
*Frost-free period:* 120 to 140 days  
*Farmland classification:* Farmland of statewide importance

#### Map Unit Composition

*Bushville and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Bushville

##### Setting

*Landform:* Moraines  
*Landform position (two-dimensional):* Summit, backslope  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Parent material:* Sandy outwash over loamy till

##### Typical profile

*A - 0 to 2 inches:* loamy fine sand  
*E,Bw,BE, - 2 to 26 inches:* loamy sand  
*2Bt - 26 to 31 inches:* sandy loam  
*2BC - 31 to 50 inches:* sandy loam  
*2Cd - 50 to 60 inches:* sandy loam

##### Properties and qualities

*Slope:* 1 to 6 percent  
*Depth to restrictive feature:* 40 to 60 inches to densic material  
*Drainage class:* Somewhat poorly drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)  
*Depth to water table:* About 18 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Low (about 3.9 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3s  
*Hydrologic Soil Group:* C/D  
*Forage suitability group:* Sloping Upland, Low AWC, Acid (G090AN008MN)

*Other vegetative classification:* Sloping Upland, Low AWC, Acid  
(G090AN008MN)  
*Hydric soil rating:* No

#### **Minor Components**

##### **Leafriver and similar soils**

*Percent of map unit:* 5 percent  
*Landform:* Depressions  
*Hydric soil rating:* Yes

##### **Pomroy and similar soils**

*Percent of map unit:* 5 percent  
*Hydric soil rating:* No

##### **Watab and similar soils**

*Percent of map unit:* 5 percent  
*Landform:* Swales  
*Hydric soil rating:* Yes

### **Data Source Information**

Soil Survey Area: Aitkin County, Minnesota  
Survey Area Data: Version 22, Sep 10, 2021