

# Preliminary & Field Evaluation Form

www.SepticResource.com vers 12.4

Owner Information			
Date	<u>9/28/2021</u>	Sec / Twp / Rng	<u>S-15, T-48, R-25</u>
Parcel ID	<u>08-0-023200</u>	LUG (county, city, township)	<u>Aitkin Co.</u>
Property Owner:	<u>Donald Johnson</u>	Owners address (if different)	
Property Address:	<u>Near Junction of 439th Ln and 308th Pl.</u>	<u>42410 308th Pl</u>	
City / State / Zip:	<u>Palisade MN 56469</u>	<u>Palisade MN 56469</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: 3 Gravity Trenches Keep tank as high as possible.		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	Proposed 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)	<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 checked="" type="checkbox"/> Yes	<input 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	<hr/> <hr/>				

### Soil Information

			Evidence of site:
Original soils	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Cut <span style="float: right;"><input type="checkbox"/> Yes   <input checked="" type="checkbox"/> No</span> Filled <span style="float: right;"><input type="checkbox"/> Yes   <input checked="" type="checkbox"/> No</span> Compacted <span style="float: right;"><input type="checkbox"/> Yes   <input checked="" type="checkbox"/> No</span> Disturbed <span style="float: right;"><input type="checkbox"/> Yes   <input checked="" type="checkbox"/> No</span>
Soil logs completed and attached	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Perk test completed and attached (if applicable) <span style="float: right;"><input type="checkbox"/> Yes   <input checked="" type="checkbox"/> No</span>
Soil loading rate (gpd/ft <sup>2</sup> )	<u>0.78</u>		Percolation rate (if applicable) _____
Depth/elev to SHWT	<u>84"</u>		Flooding or run-on potential (comments) <span style="float: right;"><input type="checkbox"/> Yes   <input checked="" type="checkbox"/> No</span>
Depth to system bottom maximum (or elev minimum)	<u>Max Depth 4 f</u>		Flood elevation (if applicable) <span style="float: right;"><u>NA</u></span>
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>Donald Johnson</u>	Date <u>9/28/2021</u>
Property Address / PID: <u>Near Junction of 439th Ln &amp; 308th PL.</u>	

Soil Survey Information	
<input type="checkbox"/> refer to attached soil survey	
Parent mat'l's:	<input checked="" type="checkbox"/> Till <input 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>204B &amp; 204E</u> slope <u>3</u> %    direction- <u>East</u>

Soil Log #1							
		<input checked="" type="checkbox"/> Boring	<input type="checkbox"/> Pit	Elevation <u>98.2'</u>	Depth to SHWT <u>84"</u>		
Depth (in)	Texture	fragment %	matrix color	redox color	consistence	grade	shape
0 - 4	Topsoil Sandy Loam	<35	10YR3/2		Loose	Loose	Granular
4 - 16	Sandy Loam	<35	10YR4/4		Loose	Loose	Granular
16 - 56	Med Sand	<35	7.5YR4/4		Loose	Loose	Granular
56 - 84	Med Sand	<35	10YR5/4		Loose	Loose	Granular

Comments: Soil Bore 1,2,3 are for proposed new trench system ( Soil Bore 4 & 5 are for Alternate Site to the East )

Near Junction of 439th Ln & 308th PL.

**Soil Log #2**

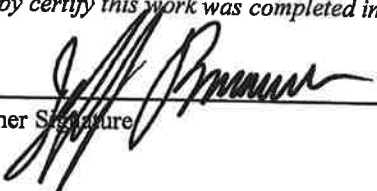
		<input checked="" type="checkbox"/> Boring	<input type="checkbox"/> Pit	Elevation <u>99.5'</u>		Depth to SHWT <u>84"</u>	
Depth (in)	Texture	fragment %	matrix color	redox color	consistence	grade	shape
0 - 4	Topsoil Sandy Loam	<35	10YR3/2		Loose	Loose	Granular
4 - 17	Sandy Loam	<35	10YR4/4		Loose	Loose	Granular
17 - 56	Med Sand	<35	7.5YR4/4		Loose	Loose	Granular
56 - 84	Med Sand	<35	10YR5/4		Loose	Loose	Granular

Near Junction of 439th Ln & 308th PL.

**Soil Log #3**

		<input checked="" type="checkbox"/> Boring	<input type="checkbox"/> Pit	Elevation <u>100.1'</u>		Depth to SHWT <u>84"</u>	
Depth (in)	Texture	fragment %	matrix color	redox color	consistence	grade	shape
0 - 4	Topsoil Sandy Loam	<35	10YR3/2		Loose	Loose	Granular
4 - 16	Sandy Loam	<35	10YR4/4		Loose	Loose	Granular
16 - 53	Med Sand	<35	7.5YR4/4		Loose	Loose	Granular
53 - 84	Med Sand	<35	10YR5/4		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 #

Near Junction of 439th Ln & 308th PL.

**Soil Log #4 Alternate Site**


		<input checked="" type="checkbox"/> Boring	<input type="checkbox"/> Pit	Elevation <u>94.6'</u>		Depth to SHWT <u>32"</u>	
Depth (in)	Texture	fragment %	matrix color	redox color	consistence	grade	shape
0 - 4	Topsoil Sandy Loam	<35	10YR3/2		Loose	Loose	Granular
4 - 16	Sandy Loam	<35	10YR4/4		Loose	Loose	Granular
16 - 32	Med Sand	<35	7.5YR4/4		Loose	Loose	Granular
32				Hit a Rock			

Near Junction of 439th Ln & 308th PL.

**Soil Log #5 Alternate Site**

		<input checked="" type="checkbox"/> Boring	<input type="checkbox"/> Pit	Elevation <u>94.8'</u>		Depth to SHWT <u>24"</u>	
Depth (in)	Texture	fragment %	matrix color	redox color	consistence	grade	shape
0 - 4	Topsoil Sandy Loam	<35	10YR3/2		Loose	Loose	Granular
4 - 24	Loam	<35	10YR5/4		Loose	Loose	Granular
24 - 26	Loam	<35	10YR5/4	7.5YR5/6	Loose	Loose	Granular
		<35 35 - 50 >50			loose friable firm rigid	loose weak moderate strong	single grain granular blocky prismatic platy massive
		<35 35 - 50 >50			loose friable firm rigid	loose weak moderate strong	single grain granular blocky prismatic platy massive

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

  
 Design Signature

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 Company

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# Gravity Trenches Design

contact Troy Johnson at  
www.SepticResource.com  
for questions or comments

(includes pump to gravity)

Property Owner: Donald Johnson Date: 9/28/2021

Site Address: Near Jct of 439th Ln & 308th Pl PID: 08-0-023200

Comments: Gravity flow from house to septic tank. No Lift

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/ft<sup>2</sup> Soil Loading Rate  ft<sup>2</sup> area req'd, or  ft<sup>2</sup> LUG minimum / final amt  
(must match soil boring log)  
577sq ft x.8 ( 12" rock under pipe ) = 462 sq ft. / 3 trenches = 51.3 lin ft.
- 6) \*\*\*  desired # of 3' wide trenches, leads to  ft. Long trenches (avg) Use 52 ft of trench  
or  lineal ft (total)
- 7)  inches, or  ft. to Redox or other limiting condition (This must match the soil boring log)
- 8)  inches, or  ft. of vertical separation required  
leads to bottom of rock no more than:
- 9) \*\*\*  inches, or  ft. Below existing grade **CRITICAL FOR FUTURE CERTIFICATIONS!!!**
- 10) \*\*\*  inches of rock below the pipe
- 11) Overall Dimensions:  Trenches  ft. wide by  ft. Long Use 52 ft of trench.  
or  lineal ft (total)
- 12) \*\*\* Rock materials:  ft. by  ft. by  inches total, plus 20% gives  yd<sup>3</sup> or \*1.4=  ton

For pump to gravity systems:

- 13)  doses per day ( 4 minimum)  
14)  gallons per dose (treatment volume)  
15) \*\*\*  feet of  inch supply line leads to  gallons of drainback volume  
("top feed" manifold to control drainback)  
16)  gallons TOTAL pump out volume (treatment + drainback)  
17)  feet vertical lift from pump to highest trench, leads to a  
18) \*\*\*  GPM @  feet of head, Pump requirement  
(10-45 gpm)  
19) \*\*\*  gal Dose tank (minimum) at  gpi  
20) \*\*\*  inch swing on Demand float, or Timed dosing of  min ON (confirm rate with drawdown  
( <100% of design flow requires a larger OFF time)  hrs OFF test and adjust as necessary)  
21)  inches from bottom of tank to "pump OFF" float, and/or to cover pump  
22) \*\*\*  inches from bottom of tank to "pump ON" float, or  inches to "timer ON" float  
23) \*\*\*  inches from bottom of tank to "Hi Level" float (add 5-15 inches if Time Dosed)  
24)  gallons reserve capacity (after High Level Alarm is activated)

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

  
Designer Signature

Brummer Septic LLC.  
Company

L-1347  
License#

9/28/2021  
Date

# Installer Summary

gallon Septic tank (minimum)      none

Trenches     ft. wide    by  ft. Long (avg)  
or  lineal ft (total)

Effluent filter & alarm

Bottom of rock no more than:

inches, or     ft. Below existing grade

inches of rock below the pipe

Rock materials:     yd<sup>3</sup> or \*1.4=     ton

For pump to gravity systems:

gallon Dose tank (minimum)      at approximately  gpi

GPM @     ft. of head, Pump required  
(pump curve CAN NOT exceed 45 gpm at this elevation)

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

inches from bottom of tank to "pump ON" float, or     inches to "timer ON" float

inches from bottom of tank to "Hi Level Alarm" float

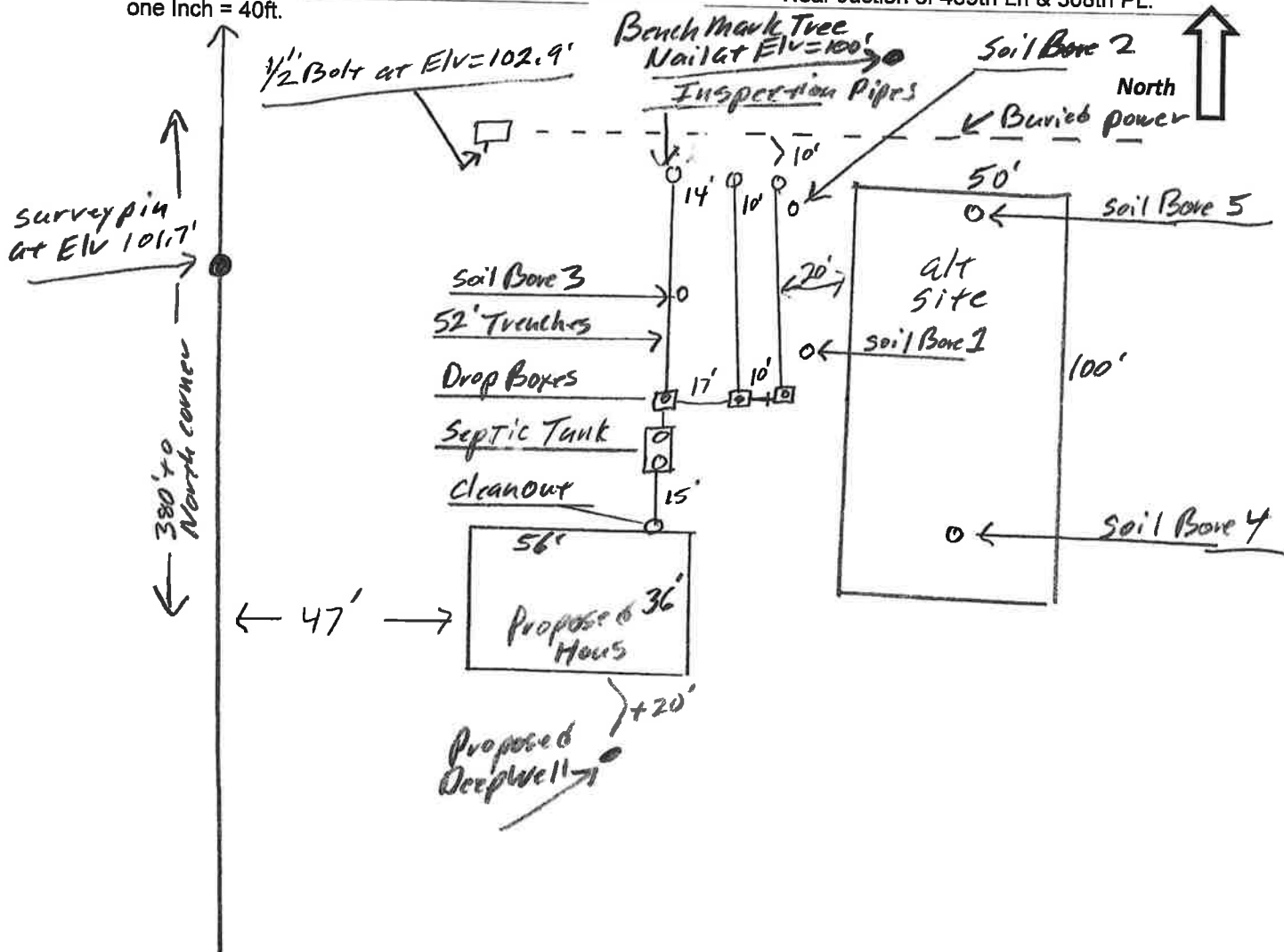
ft. of     inch supply line





# { Design Drawing }

Property Owner: Donald Johnson Date: 9/28/21 Designer's Initials: JB  
 Parcel ID. Number: 08-0-023200 Address: Near Junction of 439th Ln & 308th PL.  
 one Inch = 40ft.



top of Survey Pin SW of Power Transformer Elv. = 101.7'  
 1/2 " bolt on South side of Power transformer Elv. = 102.9'

	Surface/ SHWT	Nail on Tree= Bench Mark 100'		Existing Grade / Bottom of Trench	
Soil Bore 1	98.2' / 84"	Bench Mark	100'	1st S= 99.5' N= 100.5' / bottom 97.5'	
Soil Bore 2	99.5' / 84"	Ground Elv. BM	99.6'	2nd S= 99' N= 100.2' / bottom 97'	
Soil Bore 3	100.1' / 84"	Ground Elv. Tank	99.5'	3rd S= 98.7' N= 99.8' / bottom 96.8'	
	Pad at	Proposed house	102.8	Pad	Try keep inlet above Elv. = 99.5'

Please show all that apply ( Existing )

Wells within 100ft. Of Drain field.

Water lines within 10 ft. of Drain field.

Drain field Areas:

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

Disturbed/Compacted Areas

Component Location

OHW ordinary high water

Lot Easements

Access Route for Tank Maintenance

Property Lines

Structures

Setbacks

# Gravity Trenches Design Notes - Aitkin county

Property Owner: Donald Johnson

Date: 9/28/2021

Site Address: Near Jct of 439th Ln & 308th Pl

PID: 08-0-023200

Comments: Type I Gravity Trenches/ 3 bedroom

- 1 This is a type I Gravity Trenches for a proposed 3 bedroom House.  
Soil separation is at 84" with a East slope of across trench area.  
There is a slight rise in elevation from south ends of trenches to the North ends. Ave 8'
- 2 Proposed deep well ( South side of house) will meet all setbacks to septic system.
- 3 Alternate septic site is East of trench area. ( save for future septic site.)
- 4 Bench Mark ( Elv. = 100' ) is nail on Pine tree NE of trench area.  
The South side of the power transformer has a 1/2" bolt sticking out, that bolt is at Elv. = 102.9'  
The top of the dirt pad for the house is at Elv. = 102.8' House Elevation not set at time of design.  
Install a 1000 gal. Jacobson septic tank ( min ) with gravity flow from house, no lift, no Garbage Disposal.  
Install septic tank as high as possible. House is on a elevated pad, approx. 3ft higher than tank grade.  
Try to install tank with inlet at Elv. = 99.5' or higher . Maybe incorporate the tank into house pad.  
Install Dropboxes with serial distribution to each trench. ( Recommend inspection pipes in each drop box.)
- 5 Install 3 trenches with gravity flow from septic tank. No trench can have bottom deeper than 4 ft.  
Try for a bottom of trench depth at South end of trenches approx. 2 ft deep, approx. 3 ft at north end.  
Install 1st trench bottom at Elv. = 97.5'  
Install 2nd trench bottom at Elv. = 97'  
Install 3rd Trench bottom at Elv. = 96.8'  
Each Trench bottom must be level ( same Elevation. from end to end).  
Cover rock with fabric and 12" to 18" of soil. Install 4" inspection pipe at each trench terminal end.
- 6 Installer to double check bench mark. Installer should confirm bench mark height Elv. with inspector.  
Installer should record bench mark Elv. and bottom of rockbed height on installation inspection form.
- 7 It is important that the soils do not get compacted, and area stays protected.
- 8 Install all manholes, inspection pipes and clean-outs to grade or above, ( recommend 4" above finished grade ).
- 9 Owner is responsible to maintain protection of septic area through construction of house and septic system.

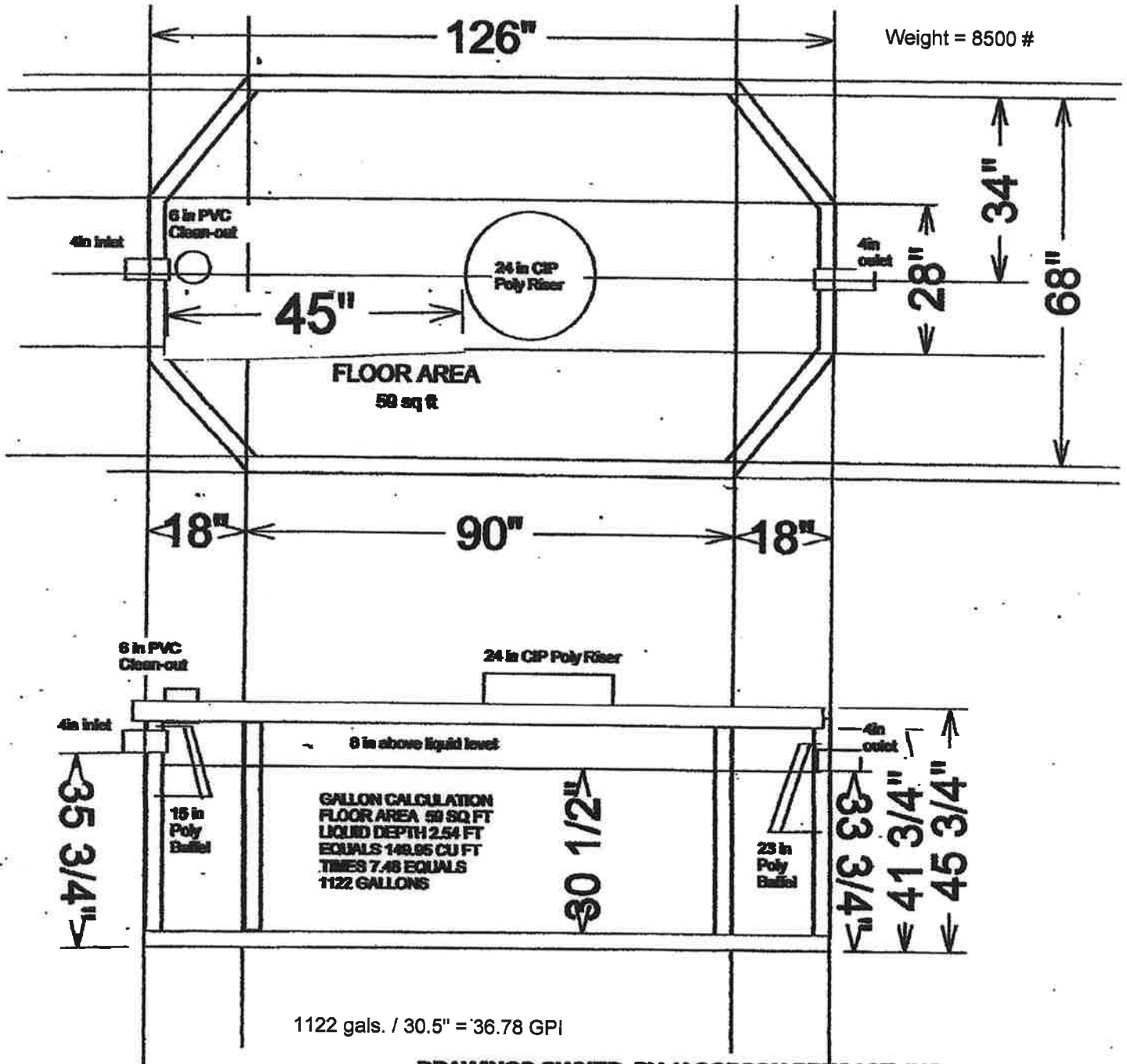
Designed to Aitkin Co. and MPCA recommendations and requirements.

  
Designer Signature

Brummer Septic LLC.  
Design Company

L-1347  
License#

# 1000 GALLON SINGLE COMPARTMENT PUMP TANK



**DRAWINGS OWNED BY JACOBSON PRECAST, INC**  
 36641 Hwy 169, Aitkin, Mn 56431  
 Do not use without permission of the Owner



# Detailed Parcel Report

Parcel Number: 08-0-023200

## General Information

**Township/City:** FLEMING TWP  
**Taxpayer Name:** JOHNSON, DONALD L  
**Taxpayer Address:** 43410 308TH PL  
 PALISADE MN 56469  
**Property Address:**  
**Township:** 48 **Lake Number:** 0  
**Range:** 25 **Lake Name:**  
**Section:** 15 **Acres:** 22.93  
**Green Acres:** No **School District:** 1.00  
**Plat:**  
**Brief Legal Description:** SE NW LESS THE S 718.4 FT OF E 675.5 FT & LESS THE S 270 FT OF W 150 FT &  
 LESS THE S 979.4 FT LYING N & E OF RD EXC THE E 675.5'

## Tax Information

**Class Code 1:** Rural Vacant Land  
**Class Code 2:** Unclassified  
**Class Code 3:** Unclassified  
**Homestead:** Non Homestead  
**Assessment Year:** 2021

Estimated Land Value:	\$31,500.00
Estimated Building Value:	\$0.00
Estimated Total Value:	<u>\$31,500.00</u>
Prior Year Total Taxable Value:	\$32,700.00
Current Year Net Tax (Specials Not Included):	\$210.00
Total Special Assessments:	\$0.00
**Current Year Balance Not Including Penalty:	\$0.00
Delinquent Taxes:	No

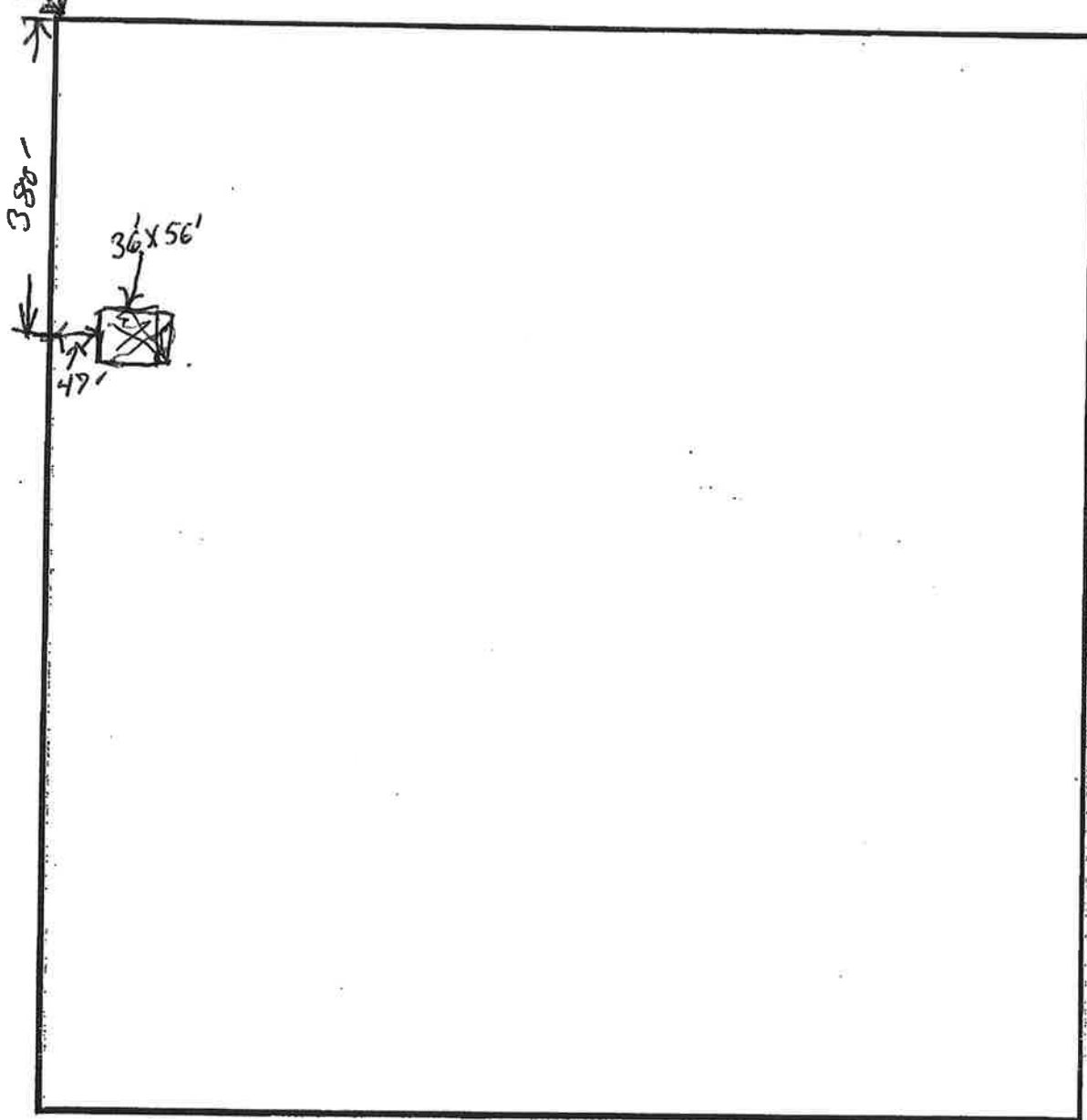
**\* For more information on delinquent taxes, please call the Aitkin County Treasurer's Office at 218-927-7325.**

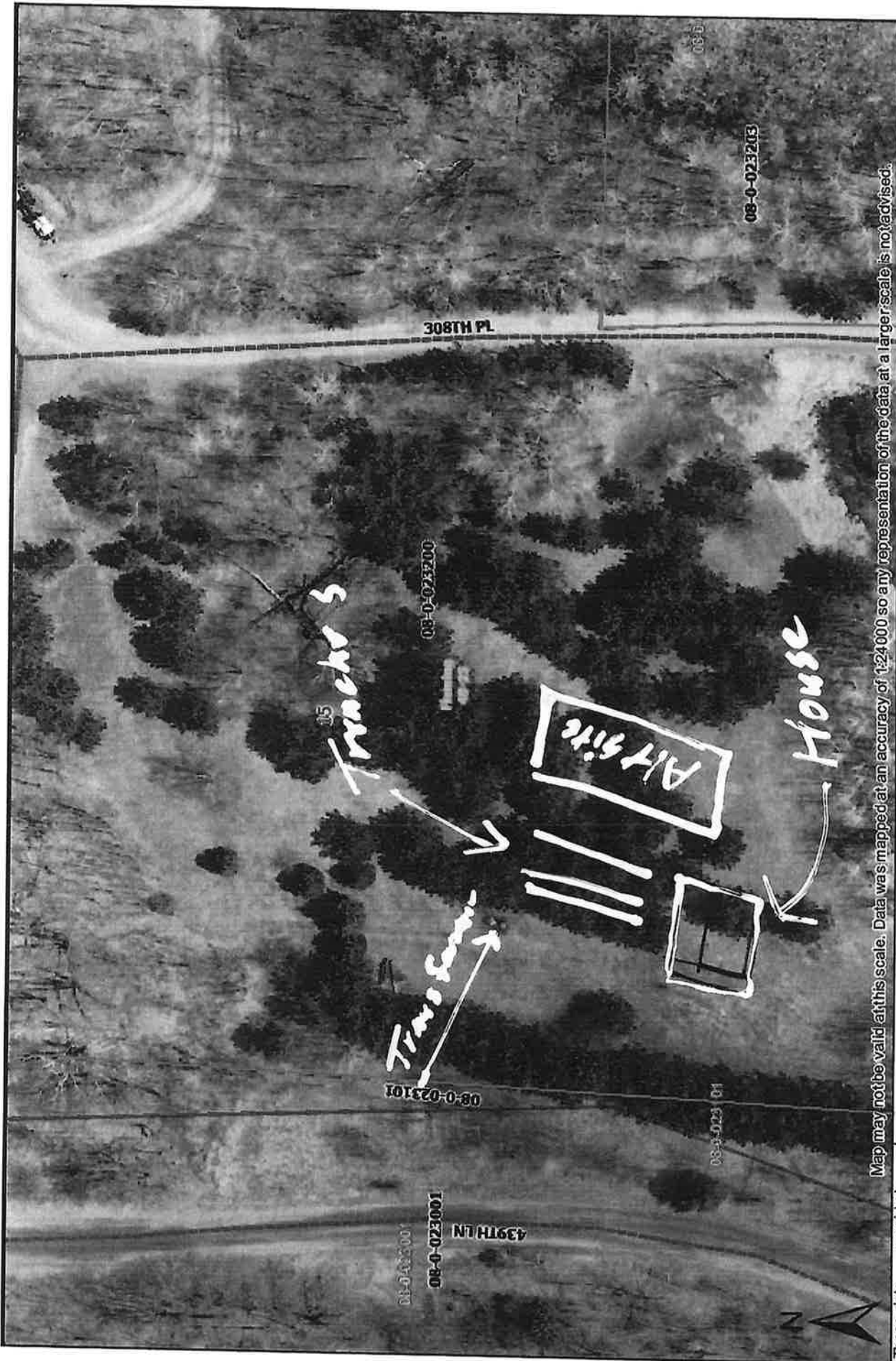
**\*\* Balance Due on a parcel does not include late payment penalties.**

# AITKIN COUNTY BUILDING PERMIT SITE PLAN

Please indicate the location of: Wells, well setback to system components, buildings, septic system components, reserved septic system area, property lines, waterways, and buried lines. Include size, length, and appropriate distances from fixed reference points. Provide a North directional arrow!

*FLEMING TWP*  
NW CORNER OF 22.93 ACRES SE 15 TWP 48 R 9 25 1/4 PM 200 FEET





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

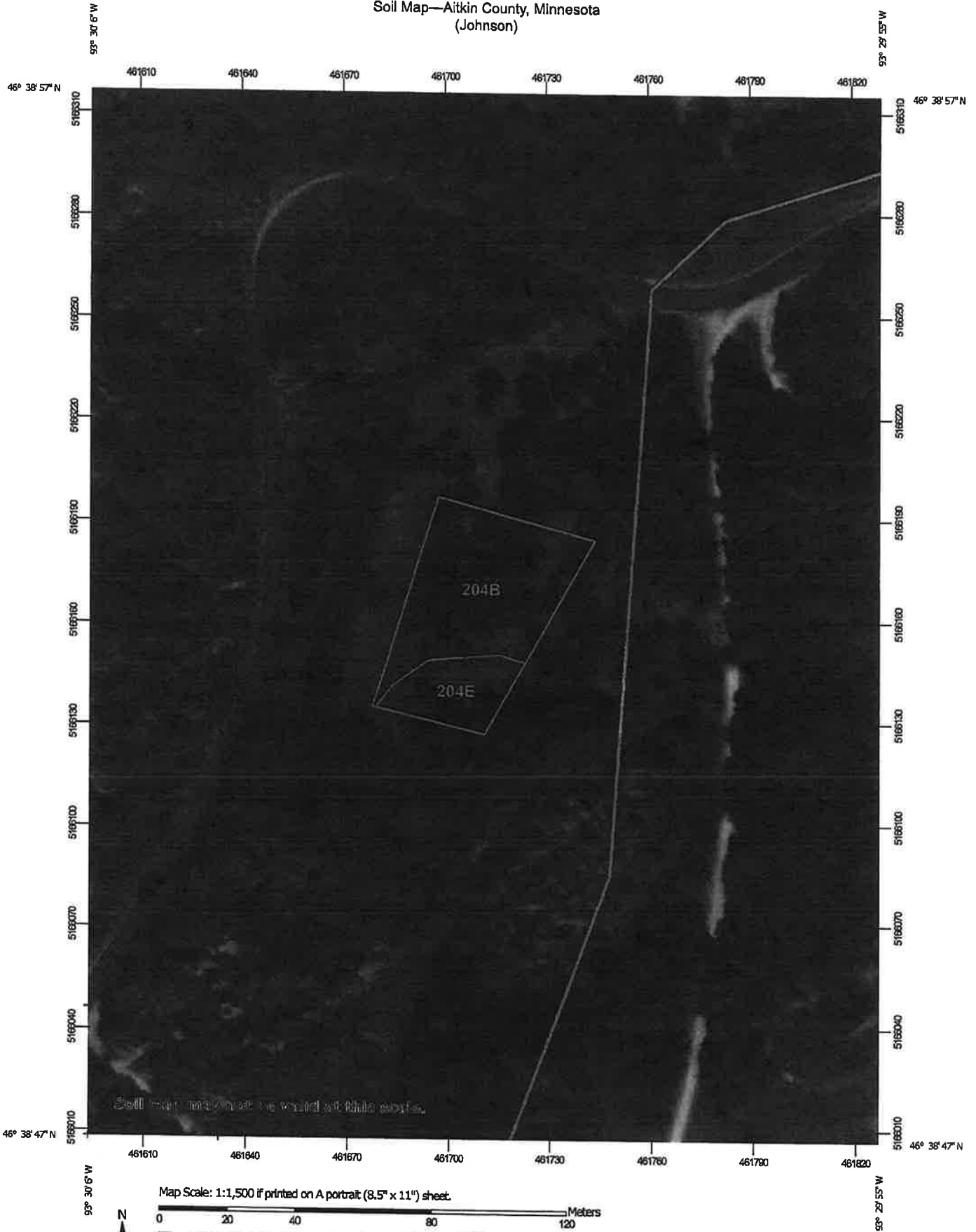


Date: 9/29/2021

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

Web AppBuilder for ArcGIS

Soil Map—Aitkin County, Minnesota  
(Johnson)



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



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





## Aitkin County, Minnesota

### 204B—Branstad loam, 2 to 6 percent slopes

#### Map Unit Setting

*National map unit symbol:* gjfx  
*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:* All areas are prime farmland

#### Map Unit Composition

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

#### Description of Branstad

##### Setting

*Landform:* Moraines  
*Landform position (two-dimensional):* Backslope, summit  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Parent material:* Loamy till

##### Typical profile

*A - 0 to 2 inches:* loam  
*E,Bw,E',E/B - 2 to 17 inches:* fine sandy loam  
*Bt1,Bt2 - 17 to 36 inches:* loam  
*Bt3 - 36 to 43 inches:* loam  
*C - 43 to 60 inches:* loam

##### Properties and qualities

*Slope:* 2 to 6 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Moderately well drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.20 to 2.00 in/hr)  
*Depth to water table:* About 30 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 10 percent  
*Available water supply, 0 to 60 inches:* Moderate (about 8.5 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 2e  
*Hydrologic Soil Group:* C  
*Forage suitability group:* Sloping Upland, Neutral (G090AN002MN)



*Other vegetative classification:* Sloping Upland, Neutral  
(G090AN002MN)  
*Hydric soil rating:* No

**Minor Components**

**Alstad and similar soils**

*Percent of map unit:* 3 percent  
*Hydric soil rating:* No

**Cutaway and similar soils**

*Percent of map unit:* 3 percent  
*Hydric soil rating:* No

**Cromwell and similar soils**

*Percent of map unit:* 3 percent  
*Hydric soil rating:* No

**Hamre and similar soils**

*Percent of map unit:* 2 percent  
*Landform:* Depressions  
*Hydric soil rating:* Yes

**Seelyeville and similar soils**

*Percent of map unit:* 2 percent  
*Landform:* Bogs  
*Hydric soil rating:* Yes

**Talmoon and similar soils**

*Percent of map unit:* 2 percent  
*Landform:* Swales  
*Hydric soil rating:* Yes

**Data Source Information**

Soil Survey Area: Aitkin County, Minnesota  
Survey Area Data: Version 21, Jun 4, 2020



## Aitkin County, Minnesota

### 204E—Cushing loam, 12 to 25 percent slopes

#### Map Unit Setting

*National map unit symbol:* gjg0  
*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:* Not prime farmland

#### Map Unit Composition

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

#### Description of Cushing

##### Setting

*Landform:* Moraines  
*Landform position (two-dimensional):* Shoulder, backslope  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Loamy till

##### Typical profile

*E - 0 to 5 inches:* loam  
*B/E - 5 to 15 inches:* loam  
*Bt1,Bt2 - 15 to 29 inches:* loam  
*C - 29 to 60 inches:* loam

##### Properties and qualities

*Slope:* 12 to 25 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.60 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 10 percent  
*Available water supply, 0 to 60 inches:* High (about 9.0 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* C  
*Forage suitability group:* Steep; Fine Texture (G090AN017MN)  
*Other vegetative classification:* Steep; Fine Texture (G090AN017MN)



*Hydric soil rating:* No

**Minor Components**

**Cromwell and similar soils**

*Percent of map unit:* 4 percent

*Hydric soil rating:* No

**Cutaway and similar soils**

*Percent of map unit:* 4 percent

*Hydric soil rating:* No

**Alstad and similar soils**

*Percent of map unit:* 4 percent

*Hydric soil rating:* No

**Seelyeville and similar soils**

*Percent of map unit:* 3 percent

*Landform:* Bogs

*Hydric soil rating:* Yes

**Data Source Information**

Soil Survey Area: Aitkin County, Minnesota

Survey Area Data: Version 21, Jun 4, 2020



# Subsurface Sewage Treatment System Management Plan

Property Owner: Donald Johnson Phone: 218-392-0103 Date: 9/28/2021  
Mailing Address: 43410 308th PI City: Palisade MN Zip: 56469  
Site Address: Near Jct of 439th Ln. & 308th PL City: Palisade Mn 56469 Zip: \_\_\_\_\_

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 36 months.  
Local Government: check every 36 months.  
State Requirement: check every 36 months.

**My System needs to be checked every 36 months.**

(State requirements are based on MN Rules Chapter 7080.2450, Subp. 2 & 3)

### 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: Donald Johnson Date: 9-28-2021  
Designer Signature: Jeff Brummer Date: 9/28/2021

See Reverse Side for Management Log

## Maintenance Log

Activity	Date Accomplished
<b><i>Check frequently:</i></b>	
Leaks: check for plumbing leaks	
Soil treatment area check for surfacing	
Lint filter: check, clean if needed	
Effluent screen: if owner-maintained	
Water usage rate (monitor frequency _____)	
<b><i>Check annually:</i></b>	
Caps: inspect, replace if needed	
Sludge & Scum/Pump	
Inlet & Outlet baffles	
Drainfield effluent leaks	
Pump, alarm, wiring	
Flush & clean laterals if cleanouts exists	
Other: _____	
Other: _____	

**Notes:** Pump tank at least once every three years

Mow Drainfield Area at least once a year to keep brush and trees from growing

No Traffic on drainfield area, No Snowmobiles, No ATV's, No Parking

Mitigation/corrective action plan: \_\_\_\_\_