

Aitkin County Holding Tank Design

Property Owner: Ryan Anderson Date: 5/10/2024 Cell: 320-364-0355
 Mailing Address: 38759 390th Ave. Home Phone #: _____
 City: Aitkin State: MN Zip: 56431
 Site Address: 36830 395th St Parcel Number: 31-0-006600
 City: Aitkin State: MN Zip: 56431
 Driving Directions if no address issued : _____

Legal Description : 40 acres
 Sec: 3 Twp.: 47 Range : 26 Twp. Name : Spencer
 Lake / River : _____ Lake / River Classification :

FLOW DATA
 Number of Bedrooms : 2
 Dwelling Classification :
 System Type :
 Gallons per Day (GPD) : 300

Estimated Flow in Gallons per Day (GPD)

Bedrooms	Class I	Class II	Class III
2	300	225	180
3	450	300	218
4	600	375	256
5	750	450	294
6	900	525	332
7	1050	600	370
8	1200	675	408

WELLS
 Deep Well :
 Shallow Well :

Wells to be sealed (if Applicable) ? _____

SETBACKS

Tank(s) to Well : 180' Drainfield to Well : NA Sewer Line to Well : _____
 Tank(s) to House : 35' Drainfield to House : NA Air Test
 Tank(s) to Property Line : + 200' Drainfield to Property Line : NA

Additional System Notes and Information:

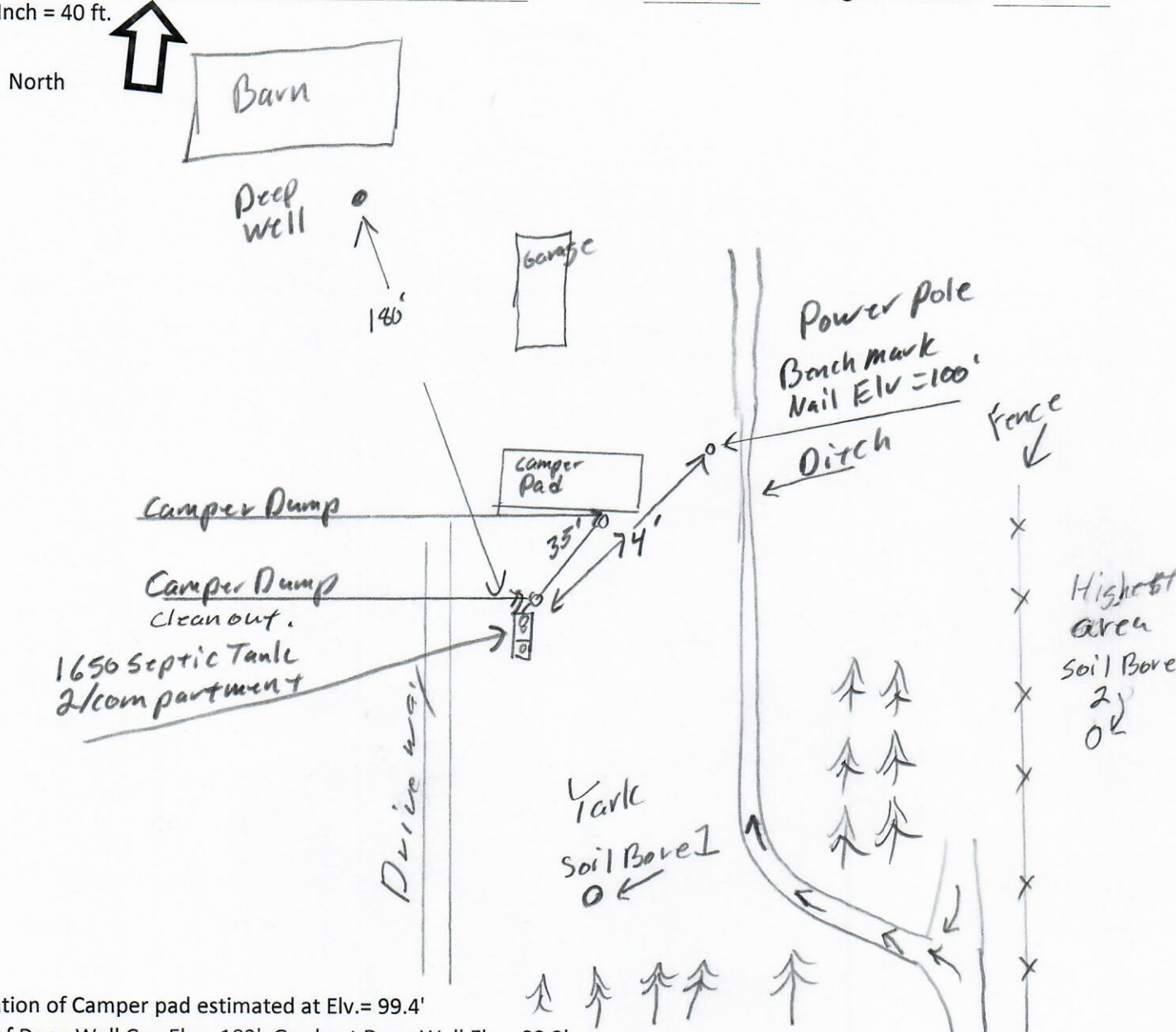
No septic system on site. Owner wants camper hook-up 1st, Future house in 2- 5 years.
Tested soils on the higher ground both are Type III soils.
Owner wants a holding tank for now, might install type III mound in the future.

Designer Name : Jeff Brummer License Number : L-1347
 Address : 14650 Agate Ridge Road City : Brainerd State : MN
 Zip Code : 56401 Home Phone # : _____ Cell: 218-821-0704
 E-Mail Address : brummerseptic@gmail.com

Designer Signature : _____ Date: 5/10/2024

Aitkin County { Holding Tank Design }

Property Owner: Ryan Anderson Date: 5/10/24 Designer's Initials: JB
 One Inch = 40 ft.



Elevation of Camper pad estimated at Elv.= 99.4'

Top of Deep Well Cap Elv.= 102' Grade at Deep Well Elv.= 99.2'

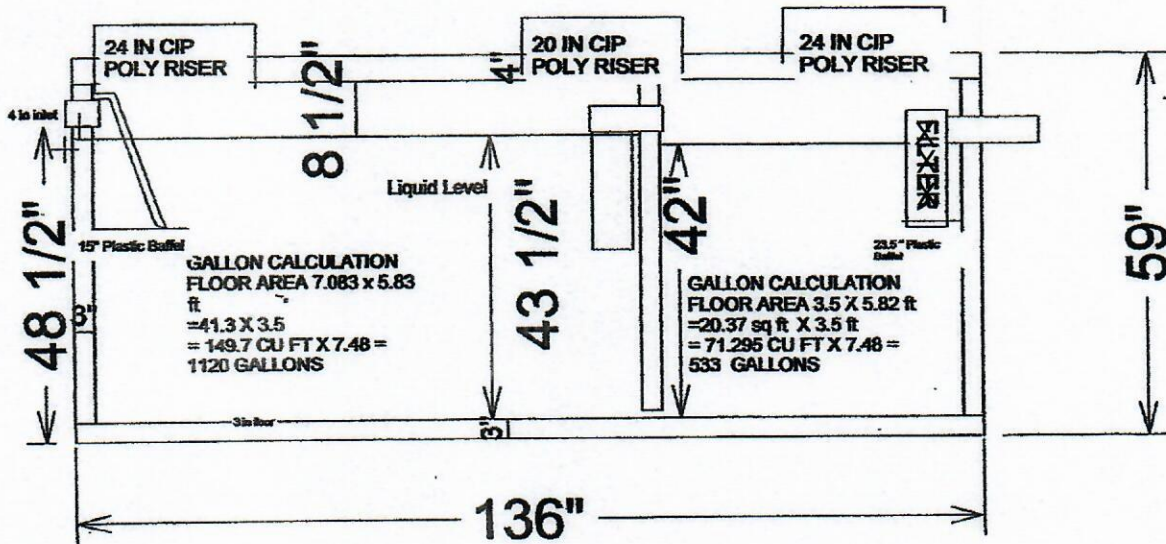
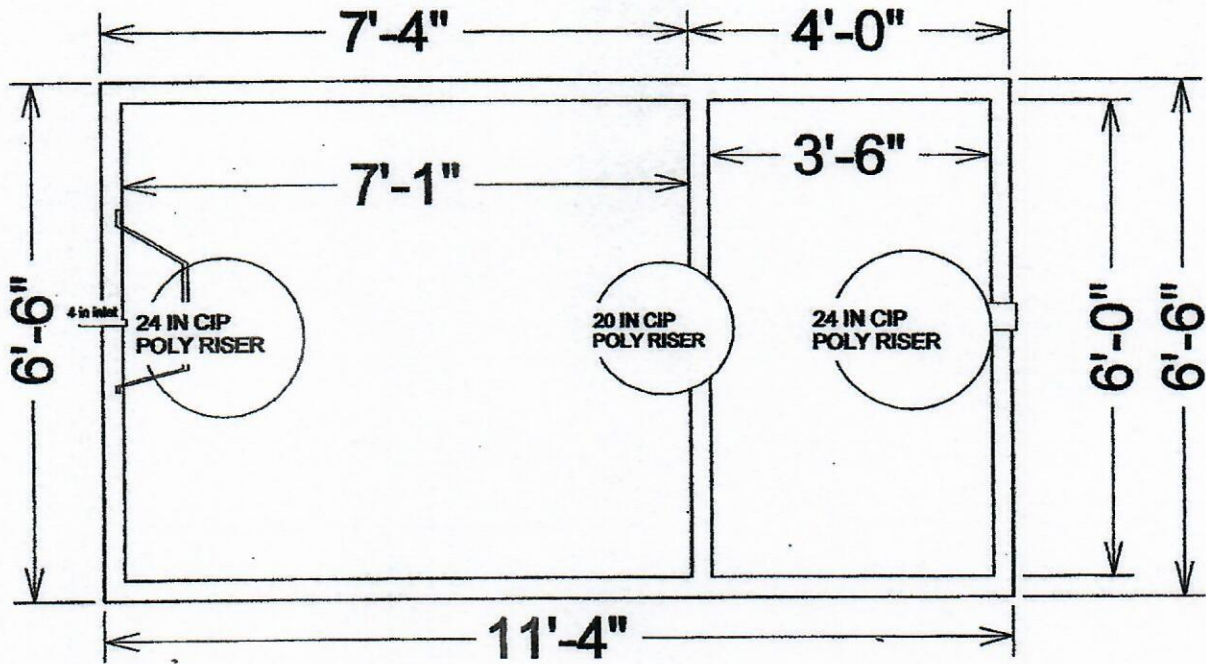
Please show all that apply (Existing or Proposed): Please Draw to Scale with North to Top or Left Side of Page:

Wells within 100ft. Of Drain field.	Disturbed/Compacted Areas	Access Route for Tank Maintenance
Water lines within 10 ft. of Drain field.	Component Location	Property Lines
Drain field Areas:	OHW ordinary high water	Structures
	Lot Easements	Setbacks

Elevations : Benchmark Elevation: Elv.= 100' Nail on Power pole NE of Proposed Camper pad.
 Proposed Holding tank grade Elv.= 99.1' Grade at Power Pole Elv.= 98.1'
 Estimated Holding tank inlet Elv.= 97.4' Estimated sewer pipe at Camper Pad Elv.= 98'
 Existing 1st tank inlet Elv.= 93.4' Bottom of Ditch East of Power pole Elv.= 95.8'

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

HOLDING TANK PUMPING SERVICE AGREEMENT

PID# 31-0-006600

Permit # _____ Address 36830 395th St. Aitkin Mn 56431

THIS AGREEMENT, entered into by and between Aitkin County Registered Septic Tank Pumper, Timber Lakes Septic Service hereinafter referred to as "Contractor", and Ryan Anderson, hereinafter referred to as "Homeowner".

WHEREAS, Homeowner desires and is required to retain individual sewage treatment system holding tank services to protect the environment and to obtain a certificate of compliance from Aitkin County; and

WHEREAS, the Contractor desires to provide sewage treatment system pumping services to Homeowner as necessary and in accordance with the terms and conditions outlined herein.

NOW THEREFORE, in consideration of the mutual promises contained herein, Parties do hereby agree as follows:

1. **TERM.** The term of this Agreement shall be from _____ to final installation of an Aitkin County approved sewage treatment system or connection to a Municipal Sewage Treatment System, unless earlier terminated as provided herein. The parties understand and agree that this Agreement is intended to arrange for the provision of pumping services so that Homeowner may occupy the home pursuant to a certificate of compliance to be issued by the Aitkin County Environmental Services Department upon execution of this Agreement. Homeowner further agrees that at the earliest possible date, Homeowner shall have a permanent sewage treatment system installed in accordance with the Aitkin County Subsurface Sewage Treatment System Ordinance and as approved by the Aitkin County Environmental Services Department or connect to a Municipal Sewage Treatment System. Upon approval by the County of Aitkin of the individual sewage treatment system or connection to a municipal sewer, or approval by Aitkin County Environmental Services of an amended or different contract, this Agreement shall terminate.


2. **FREQUENCY OF PUMPING.** Homeowner agrees that he/she shall not allow the holding tank to overflow or discharge in any manner. Contractor and Homeowner agree that the holding tank shall be pumped in accordance with the following:

- Tank size (gal.) _____ / (number of household occupants multiplied by 75 gallons per day) = frequency of pumping: or
- Within 24 hours of indication by tank alarm of lack of capacity (applicable only if system has a functional alarm):
- Whichever is greater

Contractor agrees to provide pumping services according to the regular pumping schedule or as needed to prevent discharge. Homeowner shall compensate Contractor as agreed by the parties for pumping services rendered.

3. **INSPECTION.** Holding tanks will be inspected by a licensed pumper at the time of servicing for leaks below the operating depth and whether tank tops, riser joints, and connections leak through visual evidence of major defects.

4. **REPORTING.** Grievances of Homeowner or Contractor shall be reported to the Aitkin County Environmental Services Department by Homeowner or Contractor. Homeowner and Contractor understand that failure to have holding tank pumped as herein specified or the discharge of any contents from the holding tank, regardless of fault, may result in the suspension, cancellation or revocation of the certificate of compliance, and the homeowner may be required to vacate the premises.



Contractor

Homeowner

Date 5/10/2024

Date _____

Timber Lakes Septic Service (218) 927-6175

Ryan Anderson

1037 1st St. NW Aitkin MN 56431
PUMP SHARE Forms Pumping Agreement, DCC Pumping Agreement

320-364-0355

Timber Lake Septic Service (218) 927-6175

Soil Observation Log

www.SepticResource.com vers 12.4

Owner Information	
Property Owner / project: <u>Ryan Anderson</u>	Date <u>5/10/2024</u>
Property Address / PID: <u>36830 395th St. Aitkin MN 56431</u>	

Soil Survey Information	
<input type="checkbox"/> refer to attached soil survey	
Parent matl's:	<input type="checkbox"/> Till <input type="checkbox"/> Outwash <input checked="" 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 type="checkbox"/> Side slope <input type="checkbox"/> Toe slope River Bottom Flats
soil survey map units:	<u>672 & B238A</u> slope <u>Flat</u> % direction- <u>West</u>

Soil Log #1 In Yard							
		<input checked="" type="checkbox"/> Boring <input type="checkbox"/> Pit	Elevation <u>98.4'</u>	Depth to SHWT <u>8"</u>			
Depth (in)	Texture	fragment %	matrix color	redox color	consistence	grade	shape
0 - 8	Topsoil Loam	<35	10YR3/2		Loose	Loose	Granular
8 - 16	Silt Loam	<35	2.5YR5/3	7.5YR6/4	Friable	Weak	Blocky
Comments:							

36830 395th St. Aitkin MN 56431 **Soil Log #2 In Pasture to East of yard**

Boring Pit Elevation 98.3' Depth to SHWT 10"

Depth (in)	Texture	fragment %	matrix color	redox color	consistence	grade	shape
0 - 10	Topsoil Loam	<35	10YR3/2		Loose	Loose	Granular
10 - 16	Silt Loam	<35	2.5YR5/3	7.5YR6/4	Friable	Weak	Blocky

36830 395th St. Aitkin MN 56431 **Soil Log #3**

Boring Pit Elevation _____ Depth to SHWT _____

Depth (in)	Texture	fragment %	matrix color	redox color	consistence	grade	shape
		<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
		<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
		<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.

Jeff Brummer
Designer Signature

Brummer Septic LLC.
Company

L-1347
License #

Minnesota Well Index

General Information

Unique Well ID:	861898	Well Name:	BOSENMAN, MARK	County:	Aitkin	Aquifer:	
Well Elevation (msl in feet):		Drilled Depth (ft):	112	Well Completed (ft):	112	Date Drilled:	08/26/2021
Township:	47	Range:	26	Dir:	W	Section:	3
Subsection:	BBD	Use:	domestic	Well Status:	Active	Depth To Bedrock:	
Driller:	Hasskamp Bros. Well Drilling	Entry Date:		Update Date:	04/29/2022		

Related Resources:

[Go to MN Well Index Map](#) [Well Log Report](#) [Scanned Record\(s\)](#) [Stratigraphy Report](#)

More Details Stratigraphy Address Chemical Data Construction Pump Test Static Water Comments Overview Map

Description	From(ft)	To(ft)	Color	Hardness	Lith Primary	Lith Secondary	Interpretation
CLAY	0	7	BROWN	MEDIUM			
CLAY	7	70	GRAY	MEDIUM			
CLAY	70	102	BROWN	MEDIUM			
CLAY/GRAVEL	102	108	BROWN	MEDIUM			
SAND	108	112	BROWN	MEDIUM			



Map may not be valid at this scale. Data was mapped at an accuracy of 1:24000 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.

Anderson

1:2,257 0 0.01 0.02 mi 1 inch = 188 feet

Web AppBuilder for ArcGIS



Date: 5/7/2024



Map may not be valid at this scale. Data was mapped at an accuracy of 1:24000 so any representation of the data at a larger scale is not advised.

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Anderson

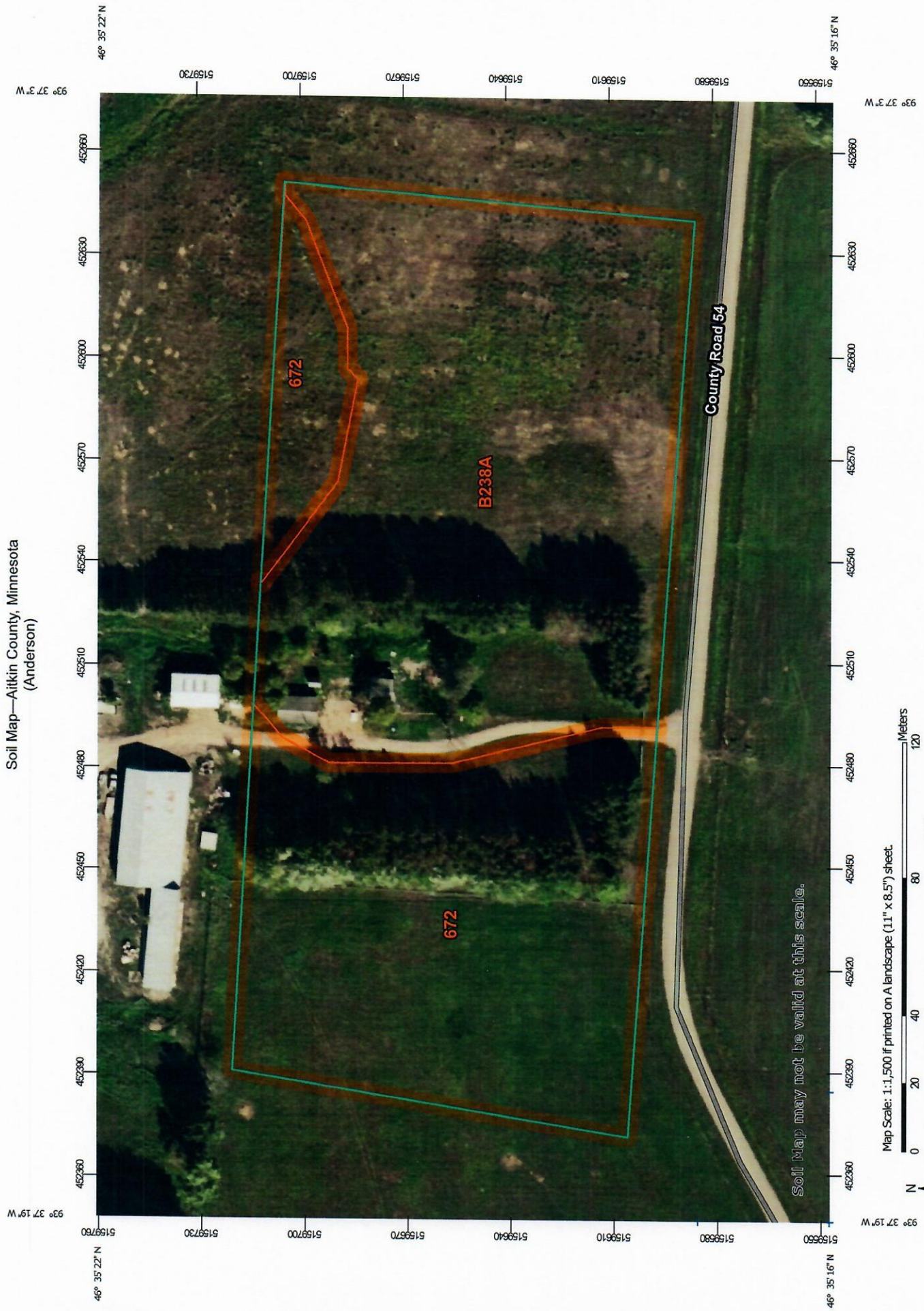


Web AppBuilder for ArcGIS

1:4,514 0 0.0225 0.045 m 1 inch = 376 feet

Date: 5/7/2024

Soil Map—Aitkin County, Minnesota
(Anderson)



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



0 20 40 80 120 Meters
0 50 100 200 300 Feet



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

Aitkin County, Minnesota

B238A—Cowhorn-Omega-Sago, frequently ponded complex, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2z32t
Elevation: 1,020 to 1,710 feet
Mean annual precipitation: 23 to 30 inches
Mean annual air temperature: 36 to 41 degrees F
Frost-free period: 90 to 140 days
Farmland classification: Not prime farmland

Map Unit Composition

Cowhorn and similar soils: 55 percent
Omega and similar soils: 30 percent
Sago, frequently ponded, and similar soils: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cowhorn

Setting

Landform: Dunes
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Eolian sands

Typical profile

A - 0 to 5 inches: very fine sandy loam
Bw - 5 to 51 inches: loamy very fine sand
Cg - 51 to 79 inches: very fine sand

Properties and qualities

Slope: 1 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 6.00 in/hr)
Depth to water table: About 12 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w

Hydrologic Soil Group: A/D
Ecological site: F088XY011MN - Moist Sandy Mixed Forest
Forage suitability group: Level Swale, Low AWC, Acid
(G088XN007MN)
Other vegetative classification: Level Swale, Low AWC, Acid
(G088XN007MN)
Hydric soil rating: No

Description of Onega

Setting

Landform: Interdunes
Landform position (three-dimensional): Talf
Down-slope shape: Concave, linear
Across-slope shape: Linear
Parent material: Eolian sands

Typical profile

A - 0 to 5 inches: mucky very fine sandy loam
Bg1 - 5 to 9 inches: very fine sandy loam
Bg2 - 9 to 32 inches: loamy very fine sand
Bw - 32 to 39 inches: very fine sandy loam
Cg - 39 to 79 inches: loamy very fine sand

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water
(Ksat): Moderately high to high (0.60 to 6.00 in/hr)
Depth to water table: About 0 to 8 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: B/D
Ecological site: F088XY008MN - Wet Mixed Forest
Forage suitability group: Level Swale, Acid (G088XN005MN)
Other vegetative classification: Level Swale, Acid
(G088XN005MN)
Hydric soil rating: Yes

Description of Sago, Frequently Ponded

Setting

Landform: Depressions
Down-slope shape: Concave

Across-slope shape: Concave

Parent material: Herbaceous organic material over eolian sands

Typical profile

Oa - 0 to 13 inches: muck

A - 13 to 15 inches: mucky very fine sandy loam

Bg - 15 to 41 inches: very fine sandy loam

Cg - 41 to 79 inches: loamy very fine sand

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Very poorly drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately high to high (0.60 to 6.00 in/hr)

Depth to water table: About 0 to 6 inches

Frequency of flooding: None

Frequency of ponding: Frequent

Calcium carbonate, maximum content: 10 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water supply, 0 to 60 inches: High (about 12.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6w

Hydrologic Soil Group: B/D

Ecological site: F088XY007MN - Wet Depressional Forest

Forage suitability group: Not Suited (G088XN024MN)

Other vegetative classification: Not Suited (G088XN024MN)

Hydric soil rating: Yes

Data Source Information

Soil Survey Area: Aitkin County, Minnesota

Survey Area Data: Version 24, Sep 9, 2023

Aitkin County, Minnesota

672—Willosippi loam

Map Unit Setting

National map unit symbol: gjjb
Elevation: 980 to 1,310 feet
Mean annual precipitation: 20 to 27 inches
Mean annual air temperature: 37 to 41 degrees F
Frost-free period: 95 to 105 days
Farmland classification: Not prime farmland

Map Unit Composition

Willosippi and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Willosippi

Setting

Landform: Swales on lake plains
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Loamy glaciolacustrine deposits

Typical profile

Ap - 0 to 7 inches: loam
Eg - 7 to 12 inches: fine sandy loam
Btg1-4,Cg1 - 12 to 42 inches: stratified loamy sand to silty clay loam
Cg2,Cg3 - 42 to 60 inches: stratified loamy sand to silty clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly 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 6 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: High (about 10.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: B/D
Ecological site: F088XY008MN - Wet Mixed Forest
Forage suitability group: Level Swale, Acid (G088XN005MN)

Other vegetative classification: Level Swale, Acid
(G088XN005MN)
Hydric soil rating: Yes

Minor Components

Hamre

Percent of map unit: 3 percent
Landform: Depressions
Hydric soil rating: Yes

Sandwick

Percent of map unit: 3 percent
Landform: Flats
Hydric soil rating: Yes

Gravelly soils

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

Aftad

Percent of map unit: 2 percent
Hydric soil rating: No

Data Source Information

Soil Survey Area: Aitkin County, Minnesota
Survey Area Data: Version 24, Sep 9, 2023