

# Preliminary & Field Evaluation Form

24-082

www.SepticResource.com vers 12.4

Owner Information			
Date	<u>5/23/2024</u>	Sec / Twp / Rng	<u>S-15, T48, R-25</u>
Parcel ID	<u>08-0-022700</u>	LUG (county, city, township)	<u>Aitkin Co.</u>
Property Owner:	<u>David McMillian</u>	Owners address (if different)	
Property Address:	<u>43841 Nature Ave. Palisade MN 56469</u>		<u>120 Summit St. Apt.- 307</u>
City / State / Zip:			<u>Duluth MN 55803</u>

Flow Information and Waste Type / Strength			
Estimated Design flow	<u>600</u>	Anticipated Waste strength	<input type="checkbox"/> Hi Strength <input checked="" type="checkbox"/> Domestic
Comments: House Elevation not set at time of design Slab on grade house with gravity flow to septic tank, No GD Proposed deep well SE of House ?		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:		
		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>0.60</u>	Percolation rate (if applicable)	_____	
Depth/elev to SHWT	<u>14"</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>( + 24" )</u>	Flood elevation (if applicable)	_____	
Depth/elev to standing water (if applicable)	_____	Elevation of ordinary high water level (if applicable)	<u>NA</u>	
Depth/elev to bedrock (if applicable)	_____	Floodplain designation and elev - 100 yr/10 yr (if applicable)	<u>NA</u>	
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: David McMillian

Date 5/23/2024

Property Address / PID: 43841 Nature Ave. Palisade MN 56469

## Soil Survey Information

refer to attached soil survey

Parent mat'l's:  Till  Outwash  Lacustrine  Alluvium  Organic  Bedrock

landscape position:  Summit  Shoulder  Side slope  Toe slope

soil survey map units: 204B slope 5 % direction- West

## Soil Log #1

Boring  Pit Elevation 97.6' Depth to SHWT 14"

Depth (in)	Texture	fragment %	matrix color	redox color	consistence	grade	shape
0 - 6	Topsoil Loam	<35	10YR3/2		Loose	Loose	Granular
6 - 14	Loam	<35	10YR4/3		Loose	Loose	Granular
14 - 19	Loam	<35	10YR4/3	7.5YR5/6	Loose	Loose	Granular
19 - 26	Loam with Clay Loam Blending	<35	10YR4/3 & 7.5YR4/4	7.5YR5/6	Friable	Weak	Blocky

Comments: The blending layer starts out mostly Loam and loose then steadily gets more Clay loam and blocky

43841 Nature Ave. Palisade MN 56469

**Soil Log #2**

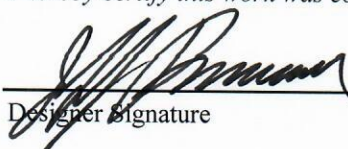
		<input checked="" type="checkbox"/> Boring	<input type="checkbox"/> Pit	Elevation <u>97.8'</u>		Depth to SHWT <u>14"</u>		
Depth (in)	Texture	fragment %	matrix color	redox color	consistence	grade	shape	
0 - 6	Topsoil Loam	<35	10YR3/2		Loose	Loose	Granular	
6 - 14	Loam	<35	10YR4/3		Loose	Loose	Granular	
14 - 19	Loam	<35	10YR4/3	7.5YR5/6	Loose	Loose	Granular	
19 - 26	Loam with Clay Loam Blending	<35	10YR4/3 & 7.5YR4/4	7.5YR5/6	Friable	Weak	Blocky	

43841 Nature Ave. Palisade MN 56469

**Soil Log #3**

		<input checked="" type="checkbox"/> Boring	<input type="checkbox"/> Pit	Elevation <u>97.6'</u>		Depth to SHWT <u>14"</u>		
Depth (in)	Texture	fragment %	matrix color	redox color	consistence	grade	shape	
0 - 6	Topsoil Loam	<35	10YR3/2		Loose	Loose	Granular	
6 - 14	Loam	<35	10YR4/3		Loose	Loose	Granular	
14 - 18	Loam	<35	10YR4/3	7.5YR5/6	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: David McMillian

Date: 5/23/2024

Site Address: 43841 Nature Ave. Palisade MN 56469

PID: 08-0-022700

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

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

- 1) 4 bedroom    Type I    Residential System
- 2) 600 GPD design flow
- 3) No Garbage disposal or pumped to septic    Install 1650 Jacobson 2/Compartment Septic/Pump tank
- 4) 1000 Gal Septic tank (code minimum)    1000 Gal Septic tank (design size / LUG req'd)  
Tank options: none
- 5) 1.2 GPD/ft<sup>2</sup> mound sand loading rate    contour loading rate of 12 req's a min    50 ft. long rockbed
- 6) 10.0 ft rockbed width    50.0 ft rockbed length
- 7) 3.0 ft lateral spacing    3.0 ft perforation spacing    (maximum of 3 for both)  
end feed manifold connection
- 8) 3 laterals    48.0 feet long    17.0 perfs / lateral    51 perfs total  
(1/2 a perf means the first perf starts at the middle feed manifold)
- 9) 7/32 inch perfs at 1 feet residual head    gives 0.56 gpm flow rate per perforation  
for this perf size & spacing, & pipe size on line 12, max perfs/lateral = 19, line #8 must be less --> OK
- 10) 7.0 doses per day    ( 4 minimum)
- 11) 86 gallons per dose    (treatment volume)
- 12) 1.50 inch diameter laterals must be used to meet "4x pipe volume" requirement 1.50 5x
- 13) 35 feet of 2.0 inch supply line    leads to 6 gallons of drainback volume 2.00 3x  
(Tip: "top feed" manifold to control the drainback)
- 14) 92 gallons TOTAL pump out volume (treatment + drainback)
- 15) 15 feet vertical lift from pump to mound laterals, leads to a:
- 16) 29 GPM @ 21 feet of head, Pump requirement    (note: >50gpm may require an extra 3-6' of head)
- 17) 500 gal Dose tank (code minimum)    533 gal Dose tank (design size / LUG req'd)    at 12.69 gpi  
leads to a
- 18) 7.2 inch swing on Demand float,    or timed dosing of 3.2 min ON    (confirm pump rate with drawdown  
(this delivers Average flow, =70% of Peak design flow) 5.1 hrs OFF    test and adjust as necessary)
- 19) 12 inches from bottom of tank to "Pump OFF" float
- 20) 19 inches from bottom of tank to "Pump ON" float, or 12 inches to "Timer ON" float if time dosed
- 21) 22 inches from bottom of tank to "Hi Level" float, or 32 inches to "Hi Level" float if time dosed
- 22) 254 gallons reserve capacity    (after High Level Alarm is activated)

23) 0.60 gpd/ft<sup>2</sup> Absorption area Soil Loading Rate, which gives a mound ratio of 2 (minimum)  
 (this must match the soil boring log) desired mound ratio 2.0

24) 5 percent site slope (0-20% range) 5 (% downslope site slope, if different than upslope)

25) 12 inches, or 1.0 ft. to Redox or other limiting condition (need at least 12" to be a Type I)

26) Treatment zone contains 0 inches of 0% soil credit, and 0 inches of 50% soil credit. Giving a:  
 24 inch, or 2.0 ft. Sand Lift Mound **CRITICAL FOR FUTURE CERTIFICATIONS!!!**

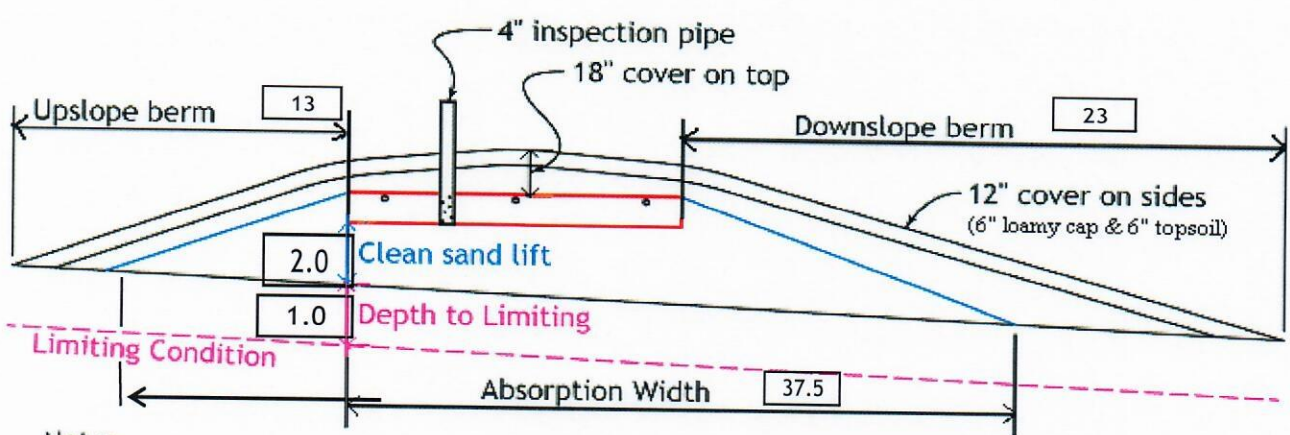
27) 20.0 ft. base absorption width (with sand beyond rockbed as follows):  
 37.5 greater of: absorption width OR sand slope

28) 0.0 ft. upslope and sideslope sand upslope 10.0  
 10.0 ft. Downslope sand down slope 17.5

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

29) 4:1 upslope ratio 13 ft. upslope berm  
 30) 4:1 sideslope 18 ft. sideslope berms  
 31) 4:1 downslope 23 ft. downslope berm

32) Overall Dimensions: 10.0 ft. wide by 50.0 ft. long Rock bed  
 46 ft. wide by 86 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: 10.0 ft. by 50.0 ft. by 9 inches under pipe, plus 20% gives 23 yd<sup>3</sup> or \*1.4= 32 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)  
 43.3 up + 88.5 downslope + 18.1 ends + 41.7 under rock = 230 yd<sup>3</sup> or \*1.4= 322 ton  
 plus 20%

35) Loamy Cap: 42 ft. by 82 ft. 6" deep, plus 20% gives 77 yd<sup>3</sup> or \*1.4= 108 ton

36) Topsoil: 46 ft. by 86 ft. 6" deep, plus 20% gives 88 yd<sup>3</sup> or \*1.4= 123 ton

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#

5/23/2024  
 Date

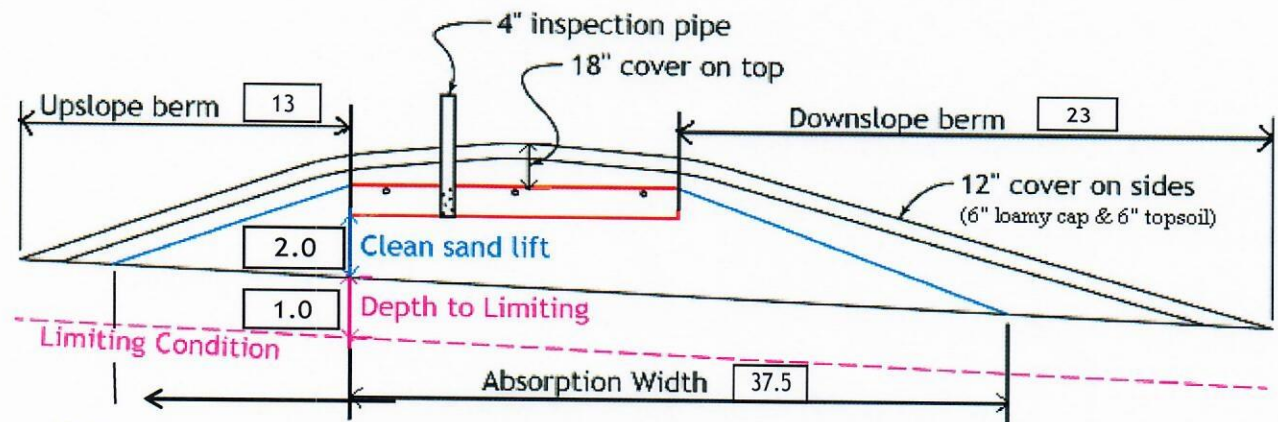
# Installer Summary

1000 gallon Septic tank (minimum) Tank options: none  
 533 gallon Dose tank (minimum) Install 1650 Jacobson 2/Compartment Septic/Pump tank at 12.69 gpi  
 29 GPM @ 21 ft. of head, Pump required  
 7.2 inch swing on Demand float which translates to roughly 4.6 inches of float tether length if time dosing is required --> 3.2 minutes ON time & 5.1 hours OFF time  
 19 inches from bottom of tank to "pump ON" float, or 12 inches to "timer ON" float  
 22 inches from bottom of tank to "Hi Level Alarm" or 32 inches to "Hi level alarm" if time dosed  
 35 ft. of 2.0 inch supply line with end feed manifold connection (Tip: "top feed" manifold to control drainback)  
 24 inch, or 2.0 ft. Sand Lift Mound  
 10.0 ft. wide by 50.0 ft. long Rock bed  
 3 laterals 1.50 inch diameter 48.0 ft. long 3.0 ft. lateral spacing  
 7/32 inch perfs 3.0 ft. perforation spacing  
 No Effluent filter & alarm  
 3 clean out & valve box assemblies

37.5 ft. Total sand ABSORPTION width (minimum)  
 10.0 ft. upslope and sideslope (sand beyond rockbed, minimum)  
 17.5 ft. Downslope (sand beyond rockbed, minimum)

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

4:1 upslope ratio	13 ft. upslope berm
4:1 sideslope	18 ft. sideslope berms
4:1 downslope	23 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:	23.0 yd <sup>3</sup> or *1.4=	32 ton	9 inches under pipe
Mound Sand:	230 yd <sup>3</sup> or *1.4=	322 ton	
Loamy Cap:	77 yd <sup>3</sup> or *1.4=	108 ton	6" deep
Topsoil:	88 yd <sup>3</sup> or *1.4=	123 ton	6" deep

## INSPECTOR CHECKLIST - mound

43841 Nature Ave. Palisade MN 56469

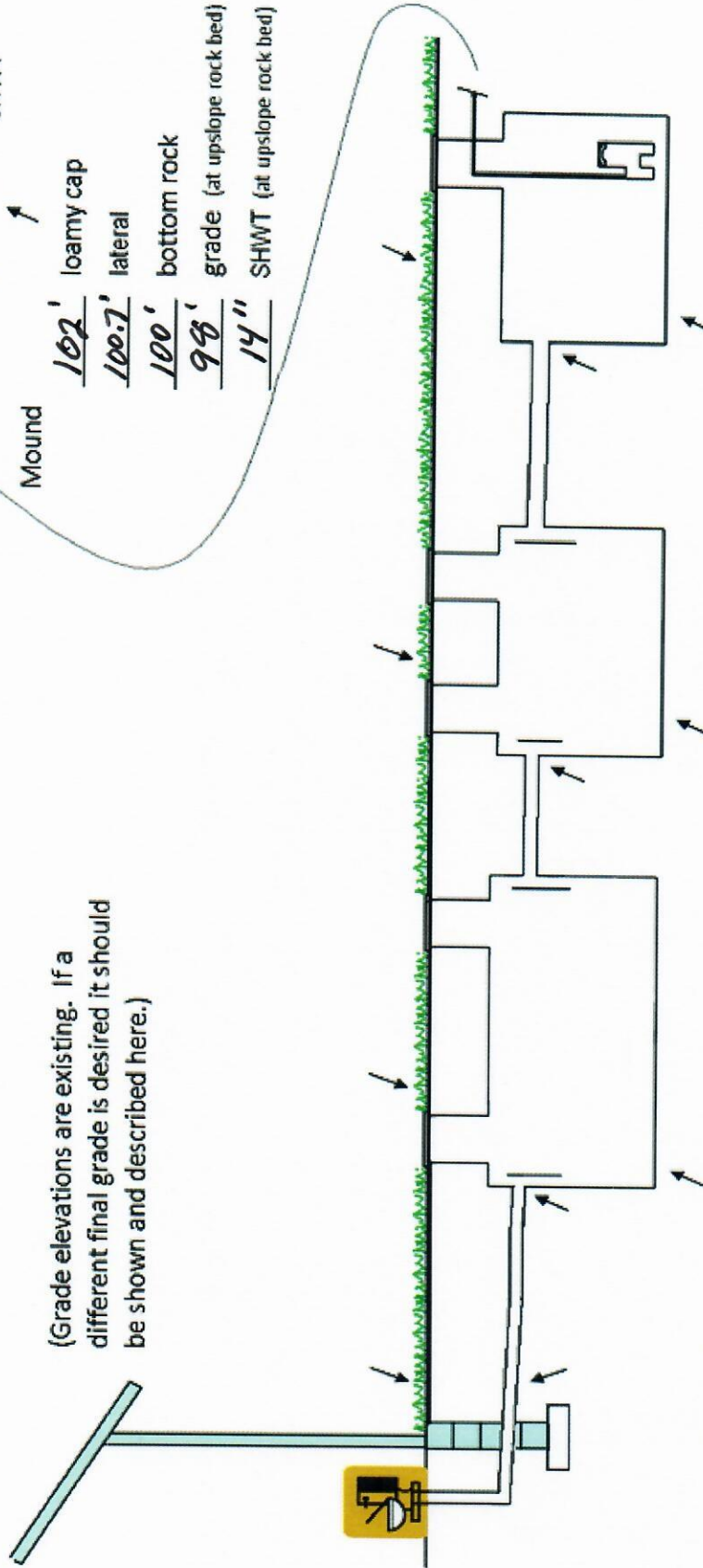
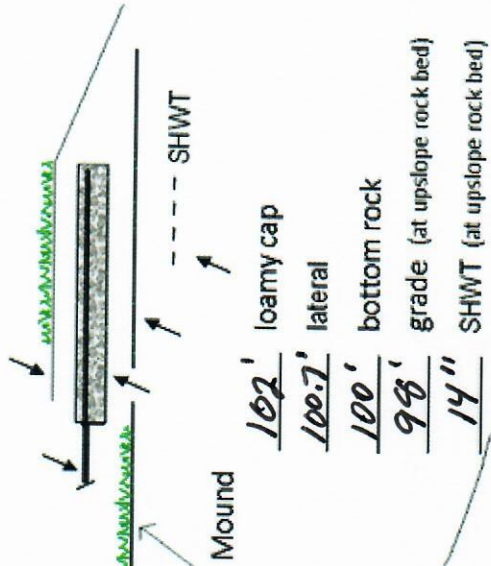
- WELL setbacks: 20' to pressure tested sewer line (5 psi for 15 min)  
50' to everything 100' to dispersal area with shallow well
- PROPERTY LINES setback: 10' to everything
- Road setback: platted: 10' prop line. Metes & bounds: out of road easement, or outer ditch.
- LAKE / BLUFF setback: 20' for 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 \_\_\_\_\_ 29 gpm 21 head VERIFY PUMP CURVE 3.2 min ON 5.1 hr OFF
  
- float setting drop 7.2 inches at 12.7 gpi "DESIGNED" 4.6 inches approx float tether length  
92.0 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 50.0
- Sand lift depth 24 inches. (Jar test : 2" sand leaves < 1/8" silt after 30 min)
  
- Absorption Sand beyond rock 10.0 upslope 17.5 downslope
  
- Bermed topsoil beyond rockbed 13 upslope 18 sideslope 23 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
  
- 7/32 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 Oak Tree NE of Mound.

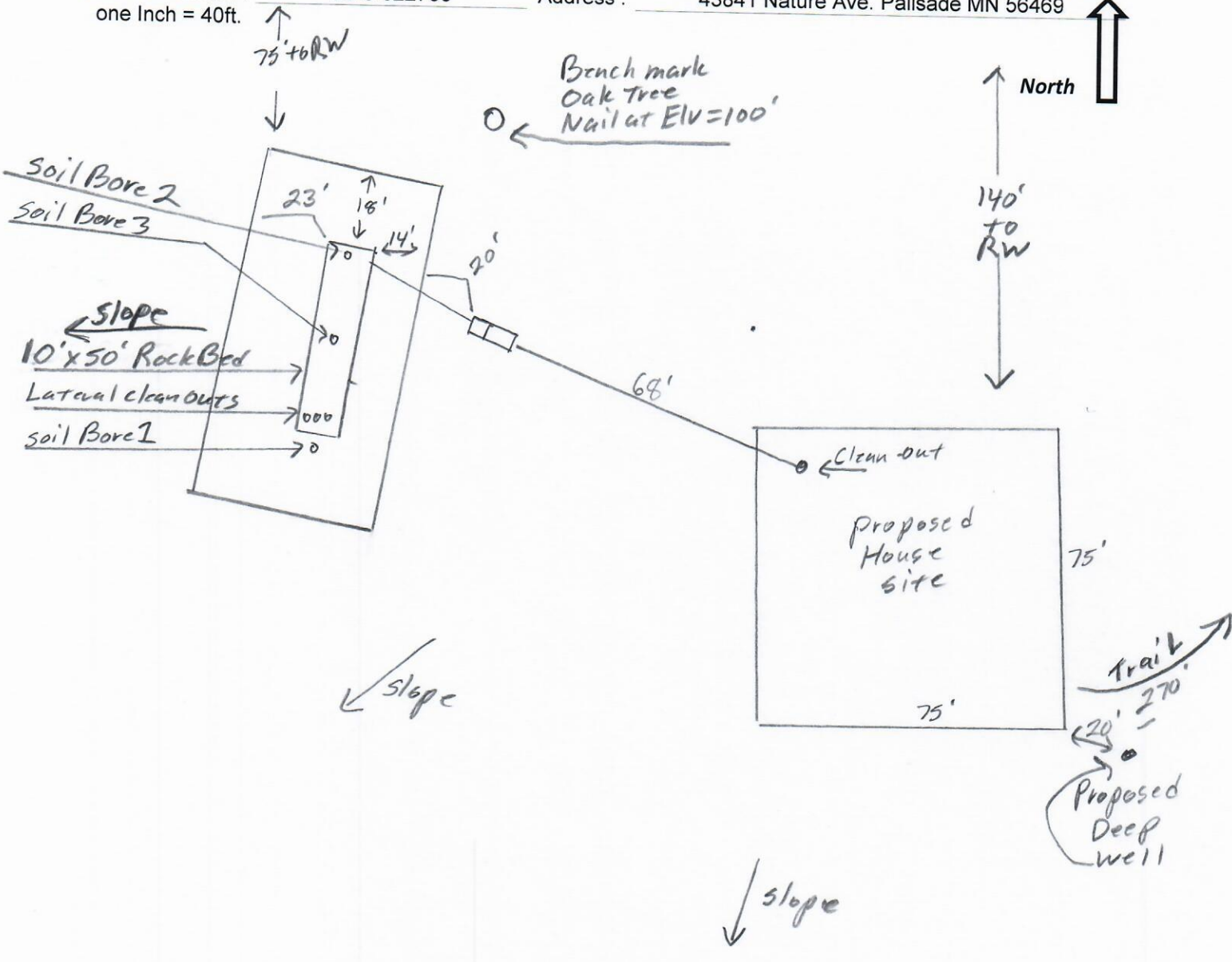
(Grade elevations are existing. If a different final grade is desired it should be shown and described here.)



Proposed Sewer pipe exiting house	Septic Tank	Septic Tank (if applicable)	Pump Tank
Estimated <u>103.5'</u> Grade	<u>99'</u> Grade	Grade	<u>99'</u> Grade
approx. <u>101.5'</u> Pipe	<u>97.5'</u> inlet	inlet	<u>97.2'</u> inlet
	<u>93.5'</u> Tank bottom	Tank bottom	<u>93.5'</u> Tank bottom

# { Design Drawing }

Property Owner: David McMillian Date: 5/23/24 Designer's Initials: JB  
 Parcel ID. Number: 08-0-022700 Address: 43841 Nature Ave. Palisade MN 56469  
 one Inch = 40ft.



Estimated Septic tank Inlet Elv. = 97.5'

Existing Grade at Corners of house site area NE Elv. = 103.3' NW Elv. = 101.9' SE Elv. = 100.8' SW Elv. = 100.7'

	Surface/ SHWT	Nail on Oak Tree = Bench Mark 100'		Existing Grade	
Soil Bore 1	97.6' / 14"	Bench Mark	100'	Upslope Edge of Rockbed Elv. = 98'	
Soil Bore 2	97.8' / 14"	Ground Elv. BM	99.8'	Bottom of Rockbed Elv. = 100'	
Soil Bore 3	97.6' / 14"	Ground Elv. Tank	99'	Top of Washed Sand Elv. = 100'	
Estimated Pad		Proposed house	103.5'	Approx. Sewer pipe at house Elv. = 101.5'	

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 | Access Route for Tank Maintenance |
| Component Location        | Property Lines                    |
| OHW ordinary high water   | Structures                        |
| Lot Easements             | Setbacks                          |

## Mound Design Notes - Aitkin county

Property Owner: David McMillian

Date: 5/23/24

Site Address: 43841 Nature Ave. Palisade MN 56469

PID: 08-0-022700

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

- 1 This is a type I mound for a 4 bedroom House. Proposed deep well location will be SE of House.
- 2 House site is 75 ft square, no elevation at time of design.
- 3 North property line is the Road Right of Way, No property lines within 50 ft of septic system.
  
- 4 Bench Mark Elevation = 100', is a nail on a Oak tree near NE corner of mound area.
- 5 Install Jacobson 1650 Compartment tank for gravity flow from Slab on grade house ( Elv. not set )  
Installer to install extra soil on top of tank area and landscape so surface water will not pond in tank area.
  
- 6 Elevation contour of rock bed upslope edge is 98'.  
The area size of the rock bed is 10' x 50' . Absorption area is 50' x 37.5'.  
Sand absorption area is 10 ft. up slope + 10 ft. rockbed + 17.5 downslope = approx. 37.5 ft. wide sand base.  
Berms are 13ft. Upslope, 23ft. Down slope, 10ft. Rock bed = approx. 46ft. Wide.  
Overall mound size is approx. 46' wide x 86' long and approx. 4' high. End berms are 18 ft. wide.
- 7 The bench mark is the nail on the Oak tree near 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. 92 gallons per dose, 7.2 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.  
Recommend raising manholes 4" above finished grade.
- 10 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 7/32" 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.  
MPCA recommends Installing an Effluent filter and Alarm on septic tank outlet.  
MPCA recommends installing an event counter on all systems with a pump.

Designed to Aitkin Co. and MPCA recommendations and requirements.

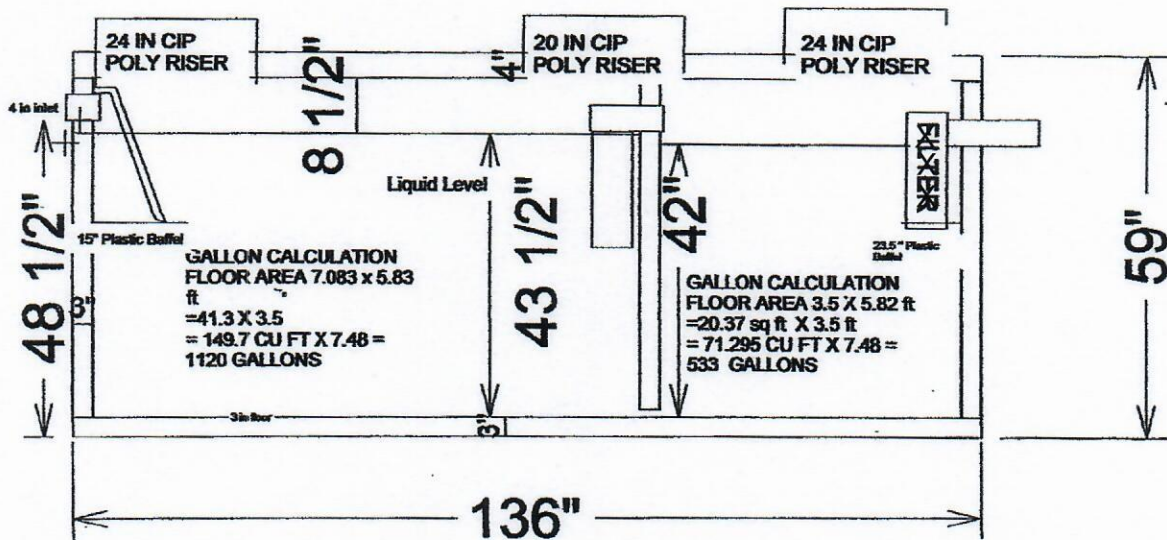
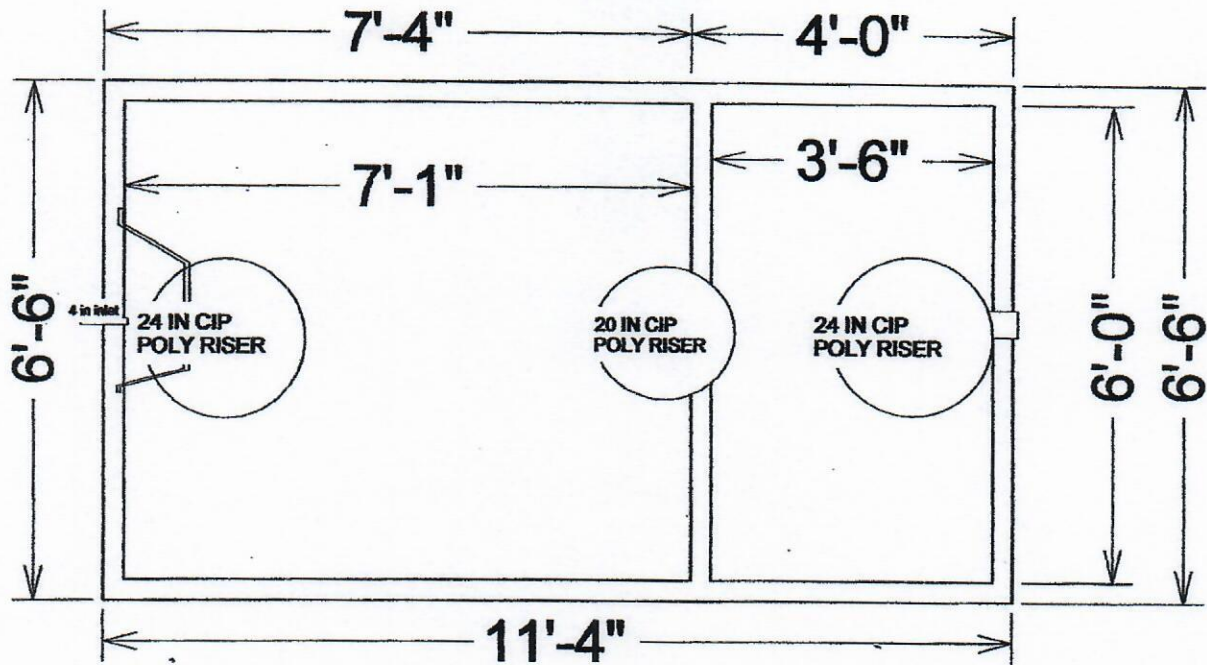
  
Designer Signature

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



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.

McMillian



Web AppBuilder for ArcGIS

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

Date: 5/24/2024



# Detailed Parcel Report

Parcel Number: 08-0-022700

## General Information

**Township/City:** FLEMING TWP  
**Taxpayer Name:** MCMILLAN, DAVID J & CARLEEN  
**Taxpayer Address:** 120 SUMMIT ST APT 307  
 DULUTH MN 55803  
**Property Address:** 43841 NATURE AVE  
**Township:** 48 **Lake Number:** 1010200  
**Range:** 25 **Lake Name:** WILKINS LAKE  
**Section:** 15 **Acres:** 43.90  
**Green Acres:** No **School District:** 1.00  
**Plat:**  
**Brief Legal Description:** (SW OF NE) LOT 3 LESS HY AND W 150 FT LOT 5 LYING S OF HWY AS IN DOC 440317 AND PT LOT 5 IN DOC 452941 (TRACT A)

## Tax Information

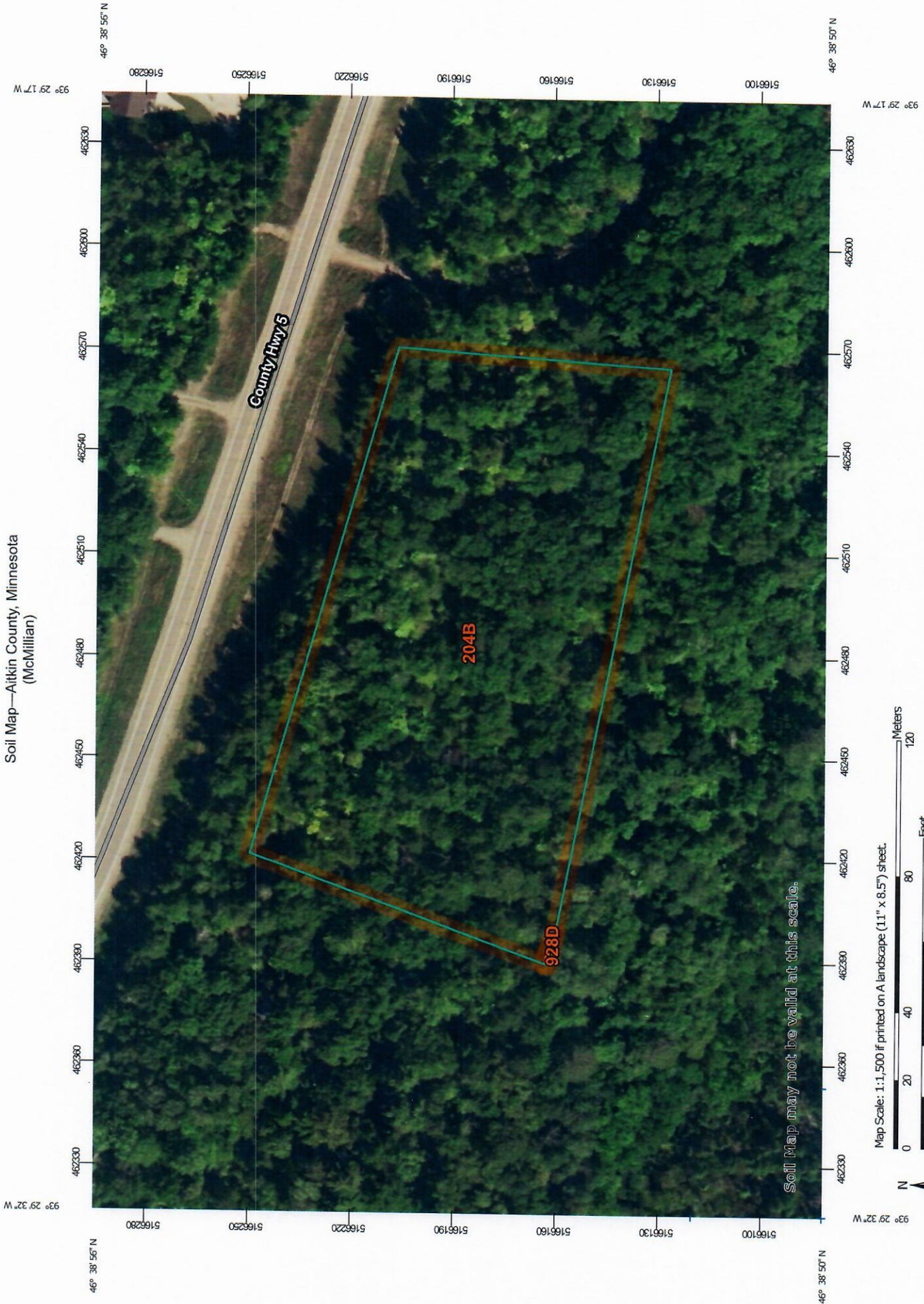
**Class Code 1:** Non-Comm Seasonal Residential Recreational  
**Class Code 2:** Rural Vacant Land  
**Class Code 3:** Unclassified  
**Homestead:** Non Homestead  
**Assessment Year:** 2024

Estimated Land Value:	\$493,700.00
Estimated Building Value:	\$45,500.00
Estimated Total Value:	<u>\$539,200.00</u>
Prior Year Total Taxable Value:	\$468,200.00
Current Year Net Tax (Specials Not Included):	\$2,532.00
Total Special Assessments:	\$0.00
**Current Year Balance Not Including Penalty:	\$1,266.00
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.

Soil Map—Aitkin County, Minnesota  
(McMillian)



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

## 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  
*Ecological site:* F090AY015WI - Loamy Upland with Carbonates



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

### Minor Components

#### **Alstad**

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

#### **Cromwell**

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

#### **Cutaway**

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

#### **Hamre**

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

#### **Seelyeville**

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

#### **Talmoon**

*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 24, Sep 9, 2023