

Preliminary & Field Evaluation Form

www.SepticResource.com vers 12.4

Owner Information			
Date	<u>4/22/2021</u>	Sec / Twp / Rng	<u>S-3, T-51, R-23</u>
Parcel ID	<u>06-0-005100</u>	LUG (county, city, township)	<u>Aitkin Co.</u>
Property Owner:	<u>Randy Carlson</u>	Owners address (if different)	
Property Address:	<u>18187 637th Ln. Jacobson MN 55752</u>		<u>18268 S Diamond Lake Ct.</u>
City / State / Zip:			<u>Dayton MN 55327</u>

Flow Information and Waste Type / Strength			
Estimated Design flow	<u>300</u>	Anticipated Waste strength	<input type="checkbox"/> Hi Strength <input checked="" type="checkbox"/> Domestic
Comments: Existing Privies have a 2019 Compliant inspection report. Owner is responsible for location of easement trial through property Owner is responsible for setback to easement Owner stated that mound location is not near easement 4/22/2021		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	Exsiting deep well	
Easements on lot located (see site map)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Drainfield w/in 100' of residential well	<input checked="" type="checkbox"/> Yes	<input 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 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 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>Narrow road into property</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 ²)	<u>0.60</u>		Percolation rate (if applicable)

Depth/elev to SHWT	<u>22"</u>		Flooding or run-on potential
			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Depth to system bottom maximum (or elev minimum)	<u>(+ 18")</u>		(comments)
Depth/elev to standing water (if applicable)	_____		Flood elevation (if applicable)

Depth/elev to bedrock (if applicable)	_____		Elevation of ordinary high water level (if applicable)

Soil Survey information determined (see attachment)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Floodplain designation and elev - 100 yr/10 yr (if applicable)

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>Randy Carlson</u>	Date <u>4/22/2021</u>
Property Address / PID: <u>18187 637th Ln. Jacobson MN 55752</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 type="checkbox"/> Side slope <input type="checkbox"/> Toe slope
soil survey map units:	<u>504C & 928C</u> slope <u>11</u> % direction- <u>East</u>

Soil Log #1							
		<input checked="" type="checkbox"/> Boring	<input type="checkbox"/> Pit	Elevation <u>98'</u>	Depth to SHWT <u>27"</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	Loam	<35	10YR5/4		Loose	Loose	Granular
16 - 26	Sandy Loam	<35	10YR4/4		Loose	Loose	Granular
26 - 27	Sandy Loam	<35	10YR4/4	7.5YR5/4	Loose	Loose	Granular
27 - 32	Silt Loam	<35	10YR5/4	7.5YR5/4	Friable	Weak	Granular
Comments:							

18187 637th Ln. Jacobson MN 55752

Soil Log #2

<input checked="" type="checkbox"/> Boring <input type="checkbox"/> Pit Elevation <u>97.7'</u> Depth to SHWT <u>22"</u>							
Depth (in)	Texture	fragment %	matrix color	redox color	consistence	grade	shape
0 - 4	Topsoil Sandy Loam	<35	10YR3/2		Loose	Loose	Granular
4 - 20	Sandy Loam	<35	10YR4/6		Loose	Loose	Granular
20 - 22	Sandy Loam	<35	10YR5/4		Loose	Loose	Granular
22 - 24	Sandy Loam	<35	10YR5/4	7.5YR5/4	Loose	Loose	Granular
24 - 29	Silt Loam	<35	10YR5/3	7.5YR5/4	Friable	Weak	Granular

18187 637th Ln. Jacobson MN 55752

Soil Log #3

<input type="checkbox"/> Boring <input type="checkbox"/> 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.



 Designer/Signature

Brummer Septic LLC.

 Company

L-1347

 License #

Mound Design - Aitkin county

Property Owner: Randy Carlson

Date: 4/22/2021

Site Address: 18187 637th Ln. Jacobson MN 55752

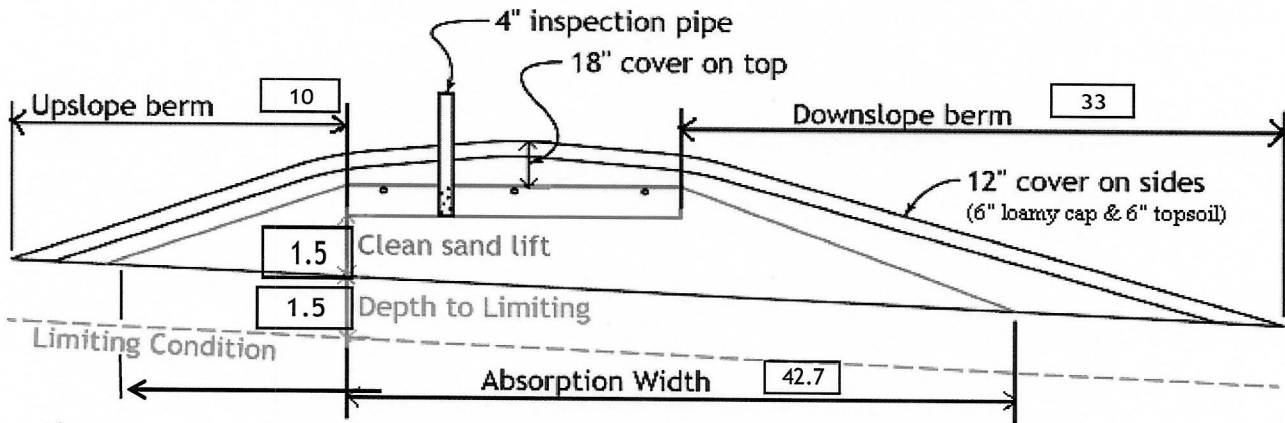
PID: 06-0-005100

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/ft² 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/ft² 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 yd³ 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 = yd³ or *1.4= ton
 plus 20%
- 35) Loamy Cap:
 ft. by ft. 6" deep, plus 20% gives yd³ or *1.4= ton
- 36) Topsoil:
 ft. by ft. 6" deep, plus 20% gives yd³ or *1.4= ton

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

J.P. Brummer Brummer Septic LLC. L-1347 4/22/2021
 Designer Signature Company License# Date

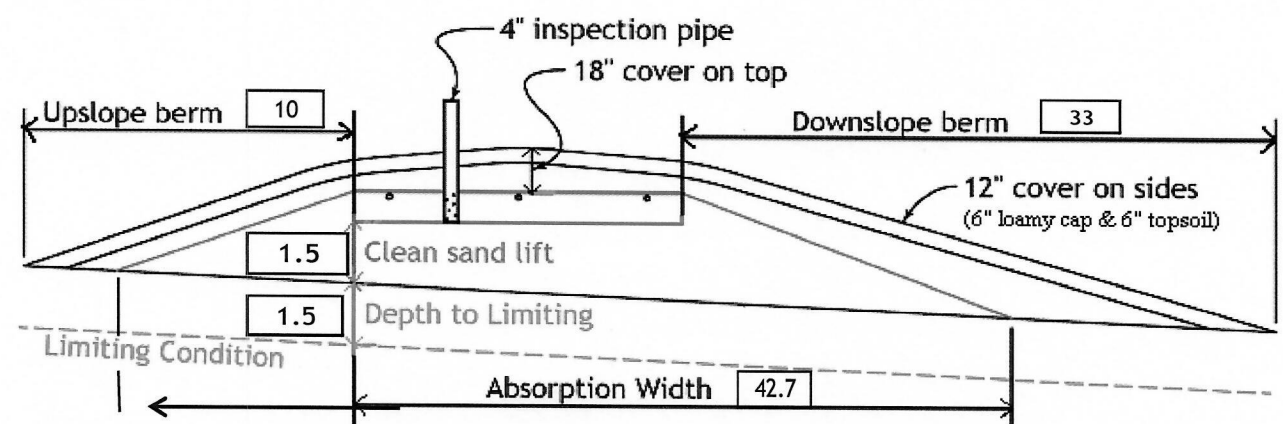
Installer Summary

- 1120 gallon Septic tank (minimum) Tank options: none
- 533 gallon Dose tank (minimum) Install 1650 Jacobson 2/Compartment tank
at 12.69 gpi
- 18 GPM @ 18 ft. of head, Pump required
- 3.9 inch swing on Demand float which translates to roughly 3.0 inches of float tether length
if time dosing is required --> 2.7 minutes ON time & 5.1 hours OFF time
- 16 inches from bottom of tank to "pump ON" float, or 12 inches to "timer ON" float
- 19 inches from bottom of tank to "Hi Level Alarm" or 29 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)
- 18 inch, or 1.5 ft. Sand Lift Mound
- 10.0 ft. wide by 25.0 ft. long Rock bed
- 3 laterals 1.50 inch diameter 23.0 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

- 42.7 ft. Total sand ABSORPTION width (minimum)
- 7.0 ft. upslope and sideslope (sand beyond rockbed, minimum)
- 25.7 ft. Downslope (sand beyond rockbed, minimum)

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

4:1 upslope ratio	10 ft. upslope berm
4:1 sideslope	18 ft. sideslope berms
4:1 downslope	33 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:	12.0 yd ³ or *1.4=	17 ton	9 inches under pipe	
Mound Sand:	175 yd ³ or *1.4=	245 ton	calculation based on 3:1/4:1 slope from top of rockbed	
Loamy Cap:	63 yd ³ or *1.4=	88 ton		6" deep
Topsoil:	72 yd ³ or *1.4=	101 ton		6" deep

INSPECTOR CHECKLIST - mound

1818/ 63/th Ln. Jacobson MN 55/52

- 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 _____ 1120 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 _____ 18 gpm 18 head VERIFY PUMP CURVE 2.7 min ON 5.1 hr OFF

- float setting drop 3.9 inches at 12.7 gpi "DESIGNED" 3.0 inches approx float tether length
49.0 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 25.0
Sand lift depth 18 inches. (Jar test : 2" sand leaves < 1/8" silt after 30 min)

- Absorption Sand beyond rock 7.0 upslope 25.7 downslope

- Bermed topsoil beyond rockbed 10 upslope 18 sideslope 33 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

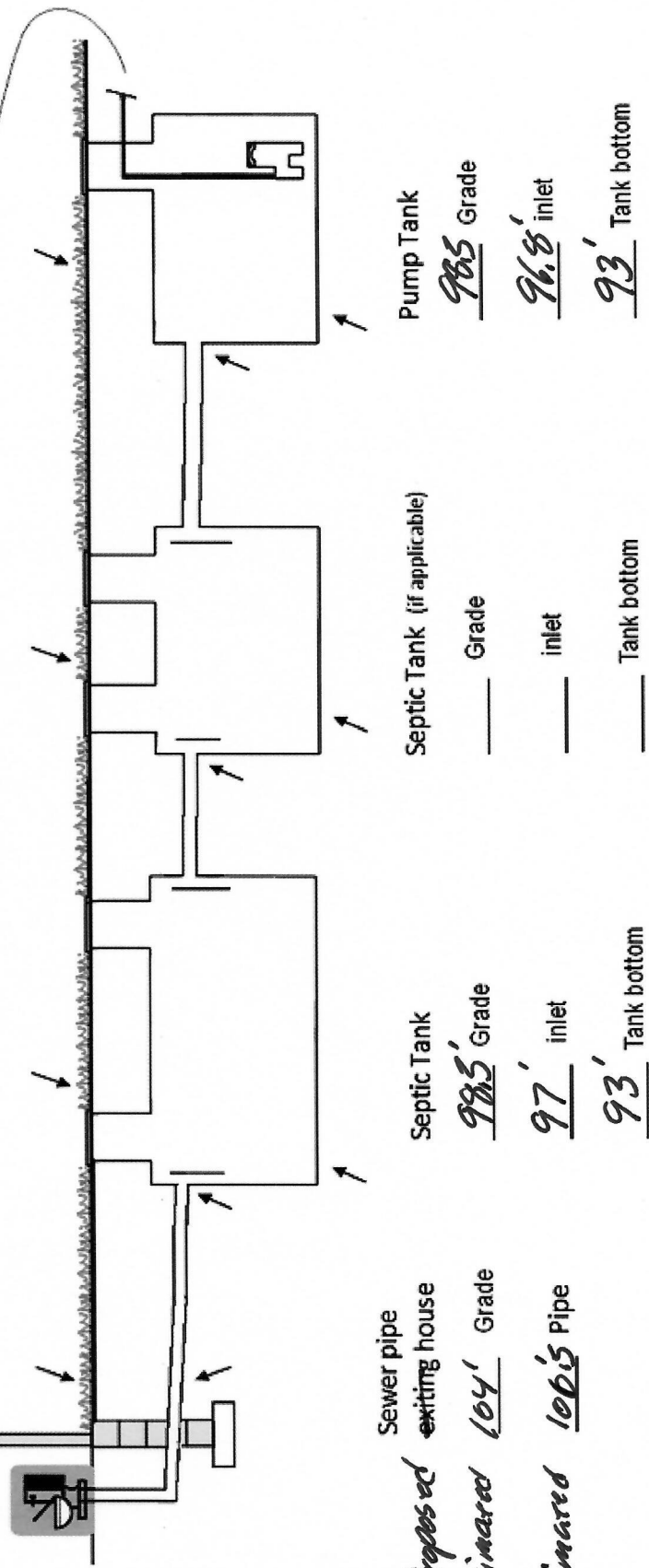
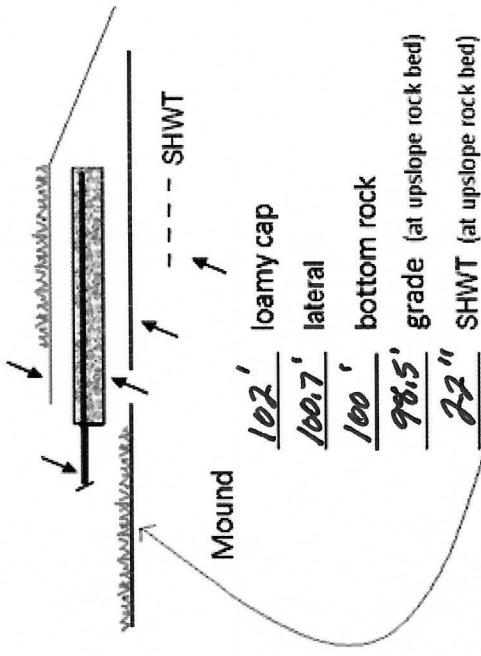
- Air inlet at end of laterals, and at top feed manifold if necessary. VERIFY
- clean outs (no hard 90's)
- 4" inspection pipe to bottom of rock, anchored VERIFY

- 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
Top of Deep Well Cap Elv = 91.7'

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



Proposed 104' Grade
Estimated 101.5' Pipe
97' inlet
93' Tank bottom

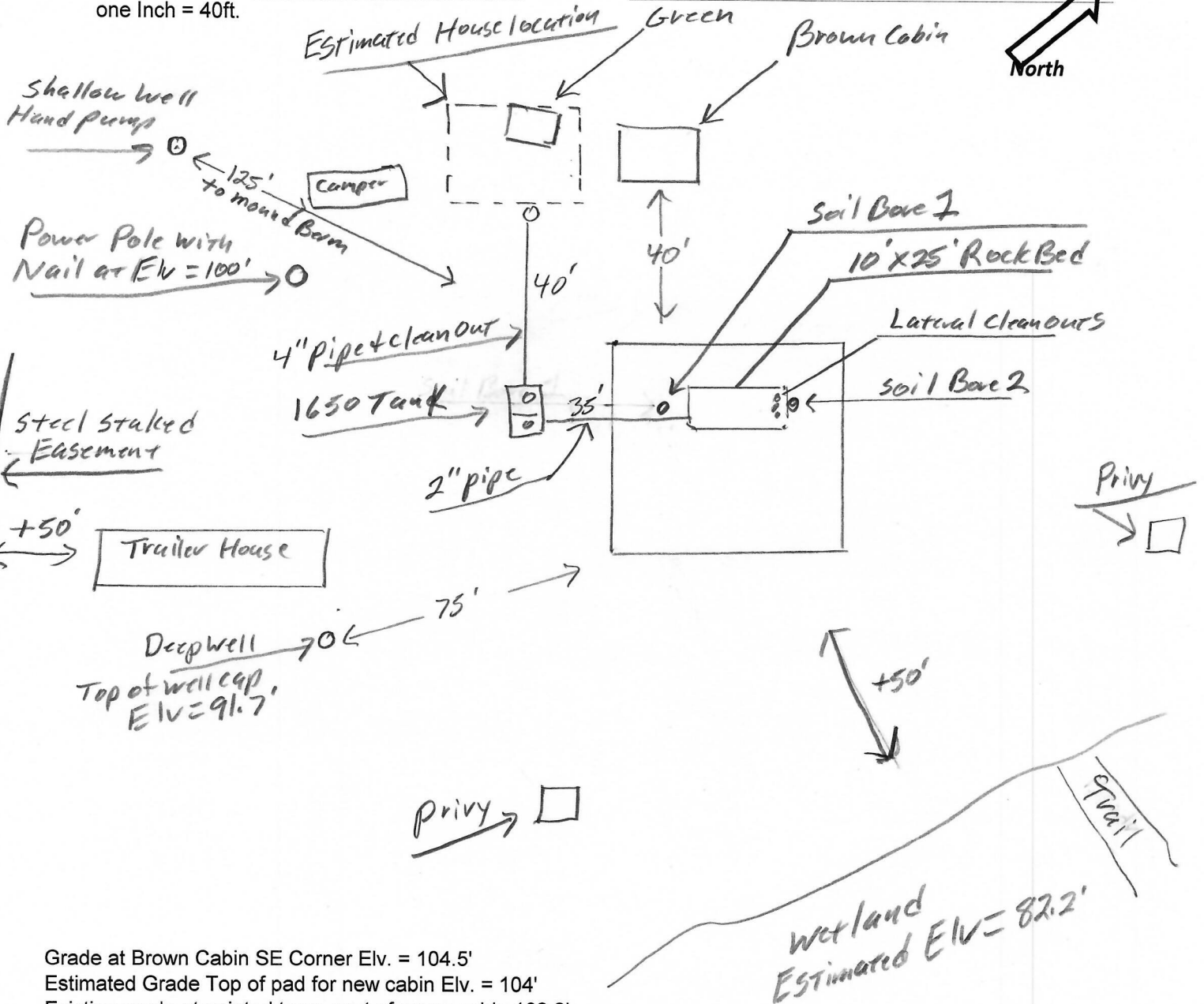
Septic Tank (if applicable)
 _____ Grade
 _____ inlet
 _____ Tank bottom

Septic Tank
98.5' Grade
97' inlet
93' Tank bottom

Pump Tank
98.5' Grade
96.8' inlet
93' Tank bottom

{ Design Drawing }

Property Owner: Randy Carlson Date: 4/22/21 Designer's Initials: JB
 Parcel ID. Number: 06-0-005100 Address: 18187 637th Ln. Jacobson MN 55752
 one Inch = 40ft.



Grade at Brown Cabin SE Corner Elv. = 104.5'
 Estimated Grade Top of pad for new cabin Elv. = 104'
 Existing grade at painted trees east of green cabin 102.2'
 Top of Deep well cap Elv. = 91.7' Grade at Deep well Elv. = 89.6'

	Surface/ SHWT	Nail on Tele Ped = Bench Mark 100'		Existing Grade
Soil Bore 1	98' / 27"	Bench Mark	100'	Upslope Edge of Rockbed Elv. = 98.5'
Soil Bore 2	97.7' / 22"	Ground Elv. BM	100'	Bottom of Rockbed Elv. = 100'
Soil Bore 3		Ground Elv. Tank	98.5'	Top of Washed Sand Elv. = 100'
	Ground at	Proposed house	102'	Estimated Sewer pipe at Cabin Elv. = 100.5'

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: Randy Carlson

Date: 4/22/21

Site Address: 18187 637th Ln. Jacobson MN 55752

PID: 06-0-005100

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

- 1 This is a type I mound for a 2 bedroom House. Existing deep well location is +50 ft to any part of septic system.
- 2 Existing Shallow well is + 125 ft to the mound berm and + 75 ft to the tank.
- 3 There is an easement that meanders through the property and is marked with steel posts.
The proposed new house will replace the old green shed, at top of grade. House will be slab on grade.
Sewage will gravity flow from house to septic tank, no lift no garbage disposal.
- 4 Bench Mark Elevation =100' is a nail on the power pole West of the mound area.
- 5 Install Jacobson 1650 Compartment tank for gravity flow from Slab on grade house (Elv. not set)
- 6 Elevation contour of rock bed upslope edge is 98.5'.
The area size of the rock bed is 10' x 25' . Absorption area is 25' x 42.7'.
Sand absorption area is 7 ft. up slope + 10 ft. rockbed + 25.7 downslope = approx. 42.7 ft. wide sand base.
Berms are 10ft. Upslope, 33ft. Down slope, 10ft. Rock bed = approx. 53ft. Wide.
Overall mound size is approx. 53' wide x 61' long and approx. 3.5' high. End berms are 18 ft wide.
- 7 The bench mark Elv. = 100' is the power pole West of the 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. 49 gallons per dose, 3.9 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 installing manholes 4" above finished grade.
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.



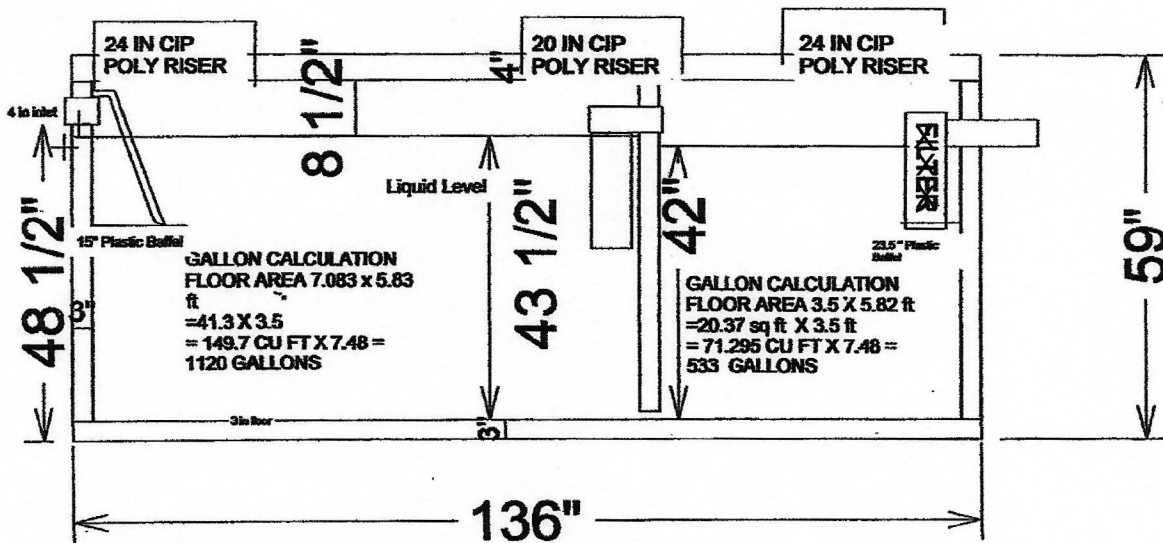
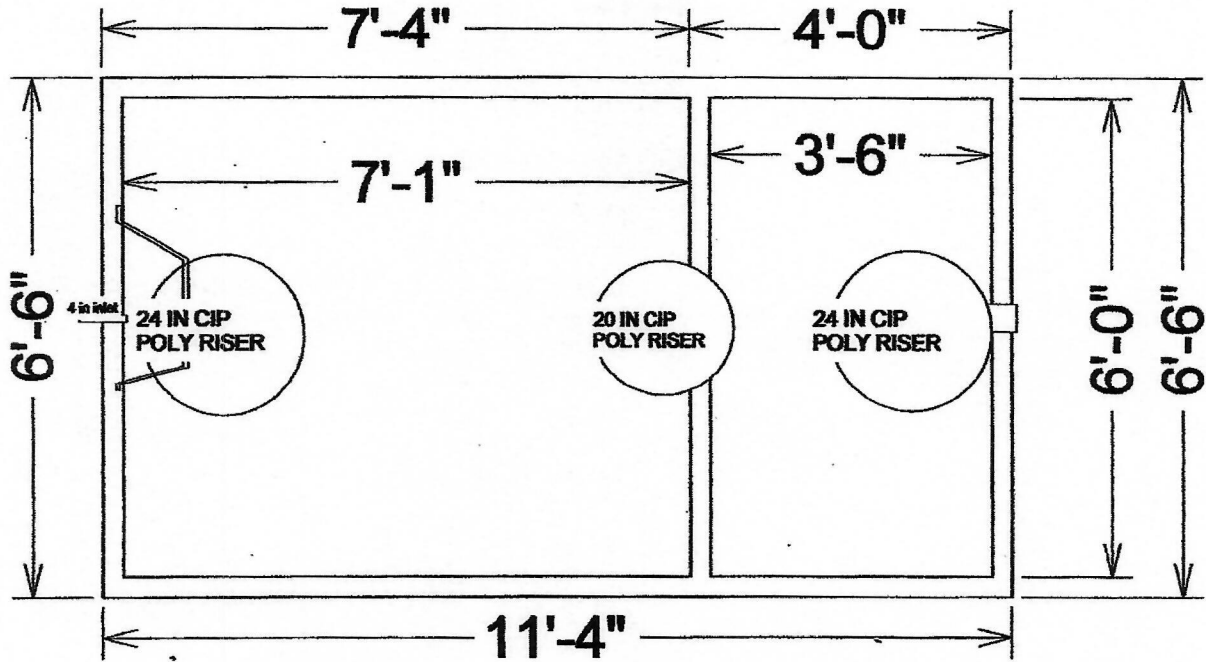
Designer Signature

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



Minnesota Well Index

General Information

Unique Well ID:	802837	Well Name:	ZINK, ALFRED	County:	Aitkin	Aquifer:	Quat. buried artes. aquifer
Well Elevation (msl in feet):	1311	Drilled Depth (ft):	60	Well Completed (ft):	60	Date Drilled:	08/13/2014
Township:	51	Range:	23	Dir:	W	Section:	3
Subsection:	DACDBA	Use:	domestic	Well Status:	Active	Depth To Bedrock:	
Driller:	Benes Well Drilling, Inc.	Entry Date:	01/12/2015	Update Date:	11/01/2017		

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](#)

[Location Changes](#)

Overview Map

Description	From(ft)	To(ft)	Color	Hardness	Lith Primary	Lith Secondary	Interpretation
TOP SOIL	0	1	BLACK	SOFT	SOIL		Recent deposit-black
CLAY SAND	1	7	BROWN	SOFT	CLAY		clay+sand-brown
CLAY GRAVEL	7	42	BLUE	HARD	CLAY		pebbly sand/silt/clay-gray
CLAY SAND	42	52	BLUE	SOFT	CLAY		clay+sand-gray
SAND	52	60	BLUE	SOFT	SAND		sand-gray



Detailed Parcel Report

Parcel Number: 06-0-005100

General Information

Township/City:	CORNISH TWP		
Taxpayer Name:	CARLSON, RANDY & JAMIE		
Taxpayer Address:	18268 S DIAMOND LAKE CT DAYTON MN 55327		
Property Address:	18187 637th Ln		
Township:	51	Lake Number:	1004500
Range:	23	Lake Name:	BLACKFACE LAKE <i>NE - 150'</i>
Section:	3	Acres:	40.00
Green Acres:	No	School District:	4.00
Plat:			
Brief Legal Description:	NE SE		

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:	2021

Estimated Land Value:	\$76,000.00
Estimated Building Value:	\$16,100.00
Estimated Total Value:	<u>\$92,100.00</u>
Prior Year Total Taxable Value:	\$97,800.00
Current Year Net Tax (Specials Not Included):	\$660.00
Total Special Assessments:	\$0.00
**Current Year Balance Not Including Penalty:	\$660.00
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.

Carlson

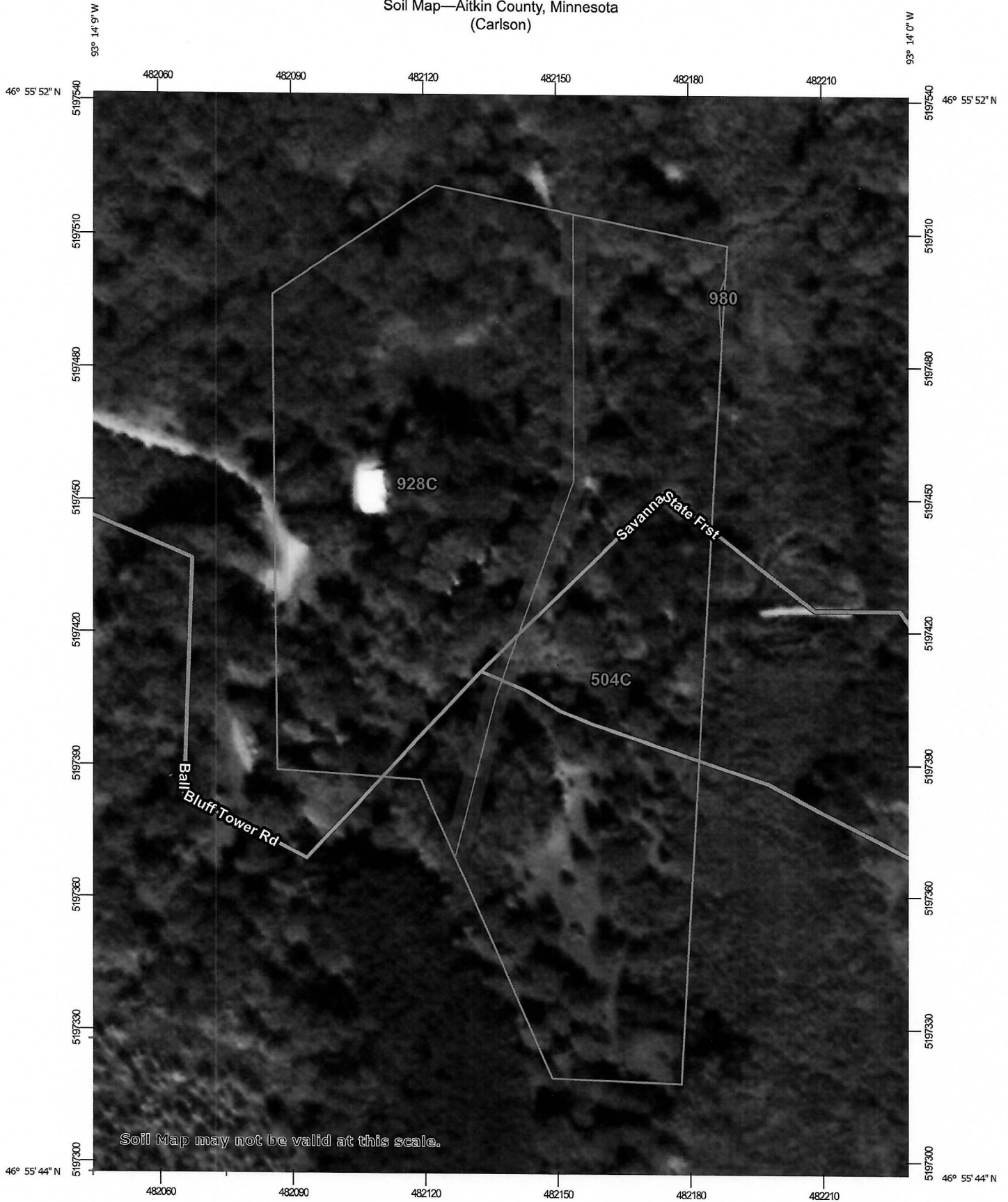


Date: 3/27/2021

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.

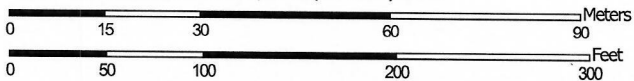
1:1,847
0 55 110 ft 1 inch = 154 feet

Soil Map—Aitkin County, Minnesota
(Carlson)



Soil Map may not be valid at this scale.

Map Scale: 1:1,190 if printed on A portrait (8.5" x 11") 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

Aitkin County, Minnesota

504C—Duluth fine sandy loam, 6 to 12 percent slopes

Map Unit Setting

National map unit symbol: gjh8
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

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

Description of Duluth

Setting

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

Typical profile

A - 0 to 3 inches: fine sandy loam
E,Bw,2BE,2Bt - 3 to 49 inches: clay loam
2C - 49 to 60 inches: loam

Properties and qualities

Slope: 6 to 12 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 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: 5 percent
Available water capacity: High (about 10.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Forage suitability group: Sloping Upland, Acid (G090AN006MN)
Other vegetative classification: Sloping Upland, Acid (G090AN006MN)
Hydric soil rating: No

Minor Components

Blackhoof and similar soils

Percent of map unit: 3 percent

Landform: Depressions

Hydric soil rating: Yes

Mahtowa and similar soils

Percent of map unit: 3 percent

Landform: Depressions

Hydric soil rating: Yes

Rifle and similar soils

Percent of map unit: 3 percent

Landform: Bogs

Hydric soil rating: Yes

Cutaway and similar soils

Percent of map unit: 2 percent

Hydric soil rating: No

Cromwell and similar soils

Percent of map unit: 2 percent

Hydric soil rating: No

Dusler and similar soils

Percent of map unit: 2 percent

Hydric soil rating: No

Data Source Information

Soil Survey Area: Aitkin County, Minnesota

Survey Area Data: Version 21, Jun 4, 2020

Aitkin County, Minnesota

928C—Cushing-Mahtomedi complex, 2 to 10 percent slopes

Map Unit Setting

National map unit symbol: gjk4
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: 50 percent
Mahtomedi and similar soils: 35 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): Backslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy till

Typical profile

E - 0 to 16 inches: very fine sandy loam
B/E - 16 to 19 inches: loam
Bt - 19 to 44 inches: loam
C - 44 to 60 inches: loam

Properties and qualities

Slope: 2 to 10 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 capacity: High (about 9.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: B
Forage suitability group: Sloping Upland, Acid (G090AN006MN)

Other vegetative classification: Sloping Upland, Acid
(G090AN006MN)
Hydric soil rating: No

Description of Mahtomedi

Setting

Landform: Moraines
Landform position (two-dimensional): Backslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy and gravelly outwash

Typical profile

A - 0 to 4 inches: loamy sand
E - 4 to 15 inches: coarse sand
Bw - 15 to 26 inches: gravelly coarse sand
C - 26 to 60 inches: gravelly sand

Properties and qualities

Slope: 2 to 10 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water capacity: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: A
Forage suitability group: Sandy (G090AN022MN)
Other vegetative classification: Sandy (G090AN022MN)
Hydric soil rating: No

Minor Components

Sandwich and similar soils

Percent of map unit: 4 percent
Landform: Flats
Hydric soil rating: Yes

Meehan and similar soils

Percent of map unit: 4 percent
Hydric soil rating: No

Cathro and similar soils

Percent of map unit: 4 percent
Landform: Bogs
Hydric soil rating: Yes

Alstad and similar soils

Percent of map unit: 3 percent

Hydric soil rating: No

Data Source Information

Soil Survey Area: Aitkin County, Minnesota

Survey Area Data: Version 21, Jun 4, 2020

190827

FILED OCT 25 1976 AT 9A M.

BRYCE E. KELSEY, County Recorder

This Indenture, Made this 2nd day of September, 1976 between Donald Onasch and Mary M. Onasch, Husband and Wife

of the County of Dakota and State of Minnesota part 1es of the first part, and James Bruce

of the County of Ramsey and State of Minnesota part Y of the second part,

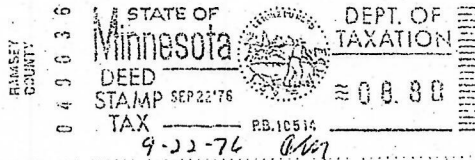
Witnesseth, That the said parties of the first part, in consideration of the sum of One Dollar (\$1.00) and other good, valuable and sufficient consideration xxxxxxxx, to him in hand paid by the said part of the second part, the receipt whereof is hereby acknowledged, do es hereby Grant, Bargain, Sell, and Convey unto the said party of the second part, his heirs and assigns, Forever, all the tract or parcel of land lying and being in the County of Aitkin and State of Minnesota, described as follows, to-wit:

The Northeast Quarter of the Southeast Quarter (NE 1/4 of SE 1/4), Section Three (3), Township Fifty-one (51), Range Twenty-three (23)

Subject, however, to an easement reserved in party of the first part, his heirs, executors, administrators, agents or assigns for right of way over the above described property, which easement is specifically described as follows, to-wit: Ten (10) feet either side of a line described as follows: Beginning where the center line of Ball Bluff access road intersects with the Westerly edge of the property above described, and then proceeding due South a distance of One Hundred Seventy (170) feet to a point, then proceeding from said point to the Southeast corner of the property described above, and there terminating.

Party of the second part, his heirs and assigns, has no obligation of maintaining, improving or repairing said easement; said easement to be used by party of the first part, his heirs, administrators and assigns to gain access to that property owned by parties of the first part located to the North of the above described property and is further limited to travel by passenger vehicles. At such time as another access to the property of first parties is developed this easement shall terminate.

State Deed Tax due hereon 8.80



To Have and to Hold the Same, Together with all the hereditaments and appurtenances thereunto belonging or in anywise appertaining, to the said part Y of the second part, his heirs and assigns, Forever. And the said Donald Onasch and Mary M. Onasch

parties of the first part, for their heirs, executors and administrators, do covenant with the said part Y of the second part, his heirs and assigns, that they are well seized in fee of the lands and premises aforesaid, and have good right to sell and convey the same in manner and form aforesaid, and that the same are free from all incumbrances,

And the above bargained and granted lands and premises, in the quiet and peaceable possession of the said part Y of the second part, his heirs and assigns, against all persons lawfully claiming or to claim the whole or any part thereof, subject to incumbrances, if any, hereinbefore mentioned, the said part of the first part will Warrant and Defend.

In Testimony Whereof, The said parties of the first part have hereunto set their hand the day and year first above written.

Donald Onasch
Mary M. Onasch

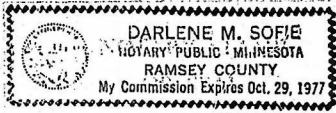
State of Minnesota,

County of Ramsey

The foregoing instrument was acknowledged before me

this 2nd day of September, 1976

Donald J. Onasch and Mary M. Onasch, Husband and Wife



10-29-77

by Darlene M. Sofie (NAME OF PERSON ACKNOWLEDGED)

(SIGNATURE OF PERSON TAKING ACKNOWLEDGMENT)

THIS INSTRUMENT WAS DRAFTED BY

FRANKE, RYCH & FRANKE (Name)
2233 North Hamline Avenue (Address)
Saint Paul, Minnesota 55113

(TITLE OR RANK)

Tax statements should be sent to: James E. Bruce, 139 Skyline Drive, White Bear Lake, Mn. 55110

Copy to C of M St Paul

Minnesota Form No. 1-M

WARRANTY DEED

Doc. No. Individual to Individual
RECORDED
TRACT-INDEX
GRANTOR TO
GRANTEE
COMPIRED

Office of County Recorder
State of Minnesota
COUNTY RECORDER
WATKIN COUNTY, MINNESOTA
I hereby certify that the within Deed was filed in this office for record on the 2nd day of September, 1976 at 2:57 o'clock P.M. and was duly recorded in Book of Deeds E. 177, Page 190827 and duly recorded as instrument No. 190827

County Recorder, Deputy.
No Delinquent Taxes and Transfer entered this 25 day of October 1976
Franklin O. Duggan, County Auditor

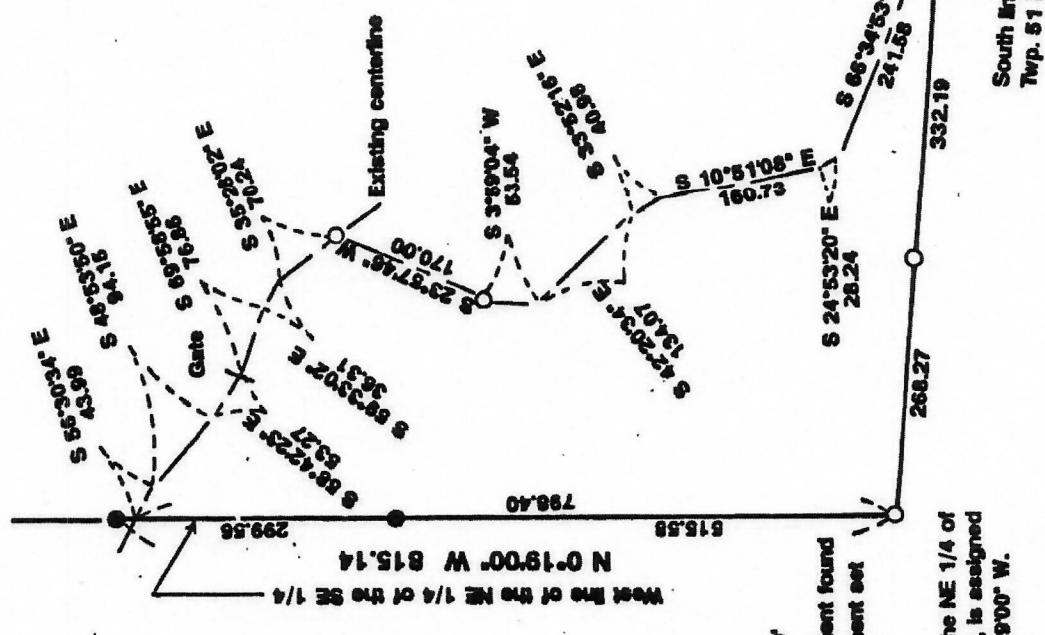
By: Alice Duggan, Deputy.
Tax statements for the real property described in this instrument should be sent to:
Title Insurance Company of Minn.
St. Paul Abstract & Title Division
57 Paul Englewood Dr. Minn.
150 E. Kellogg

TD 78770

LH238

Certificate of Survey for: DENNIS TENNISON

Description
An Easement, 20 feet in width, for the purpose of over, under and across that part of the Northeast Quarter of the Southeast Quarter, Section 3, Township 51 North, Range 23 West, described as follows: Commencing at the southwest corner of said Northeast Quarter of the Southeast Quarter; thence North 0 degrees 19 minutes 00 seconds West, bearing assigned, on the west line thereof, 798.40 feet to intersect the centerline of the existing road and the point of beginning of the centerline to be described; thence South 56 degrees 30 minutes 34 seconds East 43.99 feet; thence South 48 degrees 53 minutes 50 seconds East 94.15 feet; thence South 58 degrees 42 minutes 23 seconds East 53.27 feet; thence South 69 degrees 58 minutes 55 seconds East 76.86 feet; thence South 59 degrees 33 minutes 02 seconds East 36.31 feet; thence South 35 degrees 28 minutes 02 seconds East 70.24 feet; thence South 23 degrees 57 minutes 04 seconds West 170.00 feet; thence South 3 degrees 42 minutes 20 minutes 34 seconds East 134.07 feet; thence South 33 degrees 52 minutes 16 seconds East 40.96 feet; thence South 10 degrees 51 minutes 06 seconds East 160.73 feet; thence South 24 degrees 53 minutes 20 seconds East 28.24 feet; thence South 66 degrees 34 minutes 53 seconds East 241.58 feet to intersect a line 10.00 feet north of the south line of said Northeast Quarter of the Southeast Quarter; thence South 85 degrees 19 minutes 58 seconds East, parallel to said south line, 725 feet, more or less, to intersect the east line of said Northeast Quarter of the Southeast Quarter and there terminate.



SCALE: 1" = 200'

- denotes monument found
- denotes monument set

The West line of the NE 1/4 of the SE 1/4, Sec. 3, is assigned a bearing of N 0°19'00" W.

KOVANEN SURVEYING, INC.
1205 NW 4th Street
Grand Rapids, MN 55744
(218) 326-5325



I hereby certify that this survey, plan, or report was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the State of Minnesota.

Robert L. Kovanen Date 5/26/97
Robert L. Kovanen, MN PLS 16459