## Aitkin County Holding Tank Design Back XXX

Property Owner: Jessica Hedalen		Date:	5/20/2	2021	Cell:		
Mailing Address: 704 Brooview Ln. SE		Home Phone # :					
City: Isanti	State: M	N :	Zip: 5	5040	-		
Site Address: 32463 435th Ln.			Pare	cel Number:	07-1-	096700	
City: Palisade Mn	State: M	N :		6469		330,00	
Driving Directions if no address issued :			p				
Legal Description: Pt of Gov Lot 2 Tract E							
Sec: 17 Twp.: 48 Range: 25 Twp. N	Name : Flemii	ng					
Lake / River : Gun			Lake / Riv	er Classificati	on:	RD	
				ted Flow in G			
FLOW DATA			Bedroom		Class II	Class III	
Number of Bedrooms: 2			2	300	225	180	
Dwelling Classification:			3	450	300	218	
System Type : II			4	600	375	256	
Gallons per Day ( GPD ): 300			5	750	450	294	
			6	900	525	332	
WELLS			7	1050	600	370	
Deep Well: Existing Deep			8	1200	675	408	
Shallow Well : None	Wells t	o be s	ealed ( if <i>i</i>	Applicable ) ?			
SETBACKS							
Tank(s) to Well : 55' Drainfield to W	/ell : N	A Sewer Line to Well :					
Tank(s) to House : 15' Drainfield to Ho	ouse: N	Ą	Air Test NO				
Tank(s) to Property Line: +50' Drainfield to Property Line: NA							
Additional System Notes and Information:							
Low lot, no Type I soils, Holding tank for a camper, N	Must meet 50	' setha	ock from c	leen well			
OHW is 1214.4' Lake Elv. On 5/20/2021 1214.1' T							
Designer Name : Jeff Brummer			Lice	nse Number :	: L-1	347	
Address: 7450 Burr Ln.	City:	Braine	rd			State : MN	
Zip Code : 56401 Home Phone # :			Cell: 21	8-821-0704	_		
E-Mail Address : brummerseptic@gmail.com							
Designer Signature :					Date: 5,	/20/2021	
			Page: 1	of 8			

# Aitkin County { Design Notes }

Property Owner: Jessica Hedalen Date: 5/20/2021 Designer's Initials: JB 32463 435th Ln. Palisade Mn 56469 Pin: 08-0-027106

Owner wants a holding tank for a Camper hook-up.

Lot has No Type I Soils for a Type I system. Existing deep well will be + 50' from tank.

Install 1500 single compartment Jacobson Holding tank with manual alarm.

Install with gravity flow from camper to 1500 holding tank.

Raise the manhole to at Least ( Can be Higher ) Elv. = 98.9' or 1217'.

Bench Mark Elv. = 100' or 1218.1' is the top of Deep Well Cap.

OHW of Gun Lake is 1214.4' on 5/20/2021 lake Elv. = 1214.1' or 96'

There is no 100 year flood elevation for Gun Lake, lowest floor is Elv. = 1218.0' or 99.9'

Install alarm at 75% of tanks capacity, approx. 32 inches

this will leave approx. 375 gallons of reserve capacity.

Tank will meet 50ft. Setback from well, and will meet 10 ft. setback to all property lines.

Tank will meet 10 ft. setback to buildings. Tanks will meet setback to lake 75'.

Home owner has a pumping agreement with local pumper on file.

#### Setbacks are

50 ft. from well

10 ft. from lot line

10 ft. from road easement

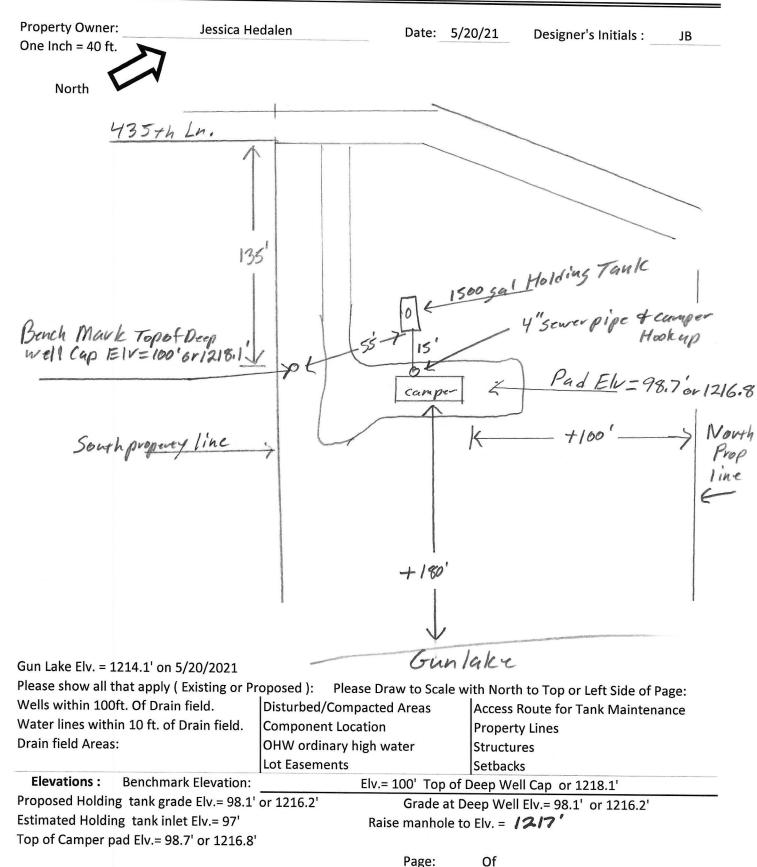
10 ft. from structure.

75 ft Gun Lake setback.

Owner should install protection around tank to keep traffic off tank.

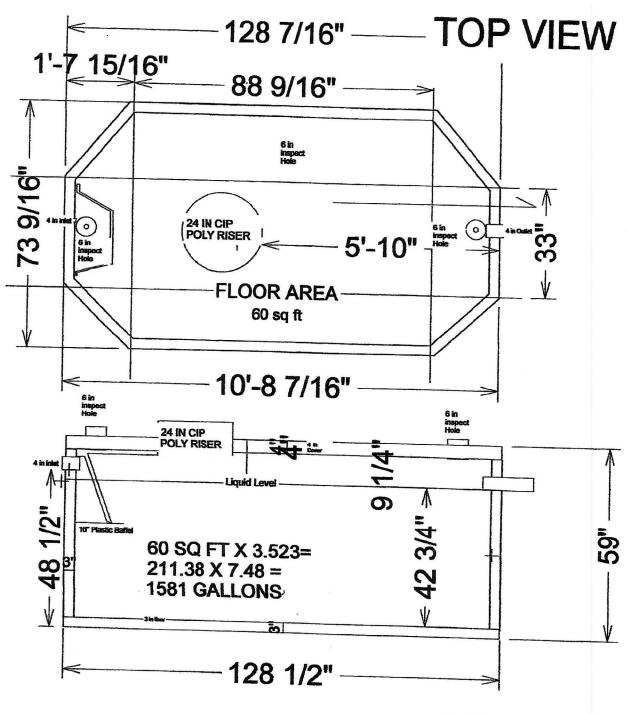
Designer Name: Jeff Brummer		License Number :		L-1347
Address: 7450 Burr Ln.	City : Brainerd			State: MN
Zip Code : 56401 Home Phone # :	Cell:	218-821-0704		
E-Mail Address: brummerseptic@gmail.com				
Designer Signature :			Date:	5/20/2021

### Aitkin County { Holding Tank Design }



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# 1500H Holding Tank



35.08 gallons per. inch

## SIDE VIEW

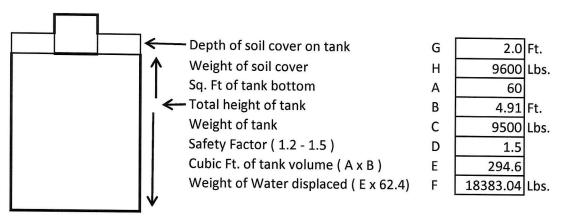
Drawings Owned BY Jacobson Precast, LLC 36641 HWY 169, Aitkin, Mn 56431 Do not copy drawings without permission of the Owner

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#### Jacobson 1500 gallon single compartment.

Force of the water surrounding the empty tank = to the water displaced + safety factor.

Water = Lbs. per. Cubic ft. 62.4 Lbs. Soil = lbs. per cubic ft. 80.0 Lbs.



Total Downward forces on $tank (F + H)$	I	27983.04 Lbs.
Buoyancy forces on tank ( F x D )	J	27574.6 Lbs.

Weight need to be added to tank -408.5 Lbs.

Weight of concrete per cubic ft. 150 Lbs. Weight need to be added

L Lbs. Weight converted to cubic ft. of concrete (L/150) 0.0 Cu.Ft. M Ft of concrete needed to be added to tank. ( M/A ) 0.00 Ft. N Inches of concrete (N x 12") 0 0.0 Inches

Double check weight (AxNX 150) 0 Lbs.

(If there is 6 inches of concrete added to the inside of 1500 gallon tank it will be reduced to approx. 1290 gallons)





DNR RESPONSE TO COVID-19: For details on adjustments to DNR services, <u>visit this webpage</u> (<a href="https://www.dnr.state.mn.us/covid-19.html">https://www.dnr.state.mn.us/covid-19.html</a>). For information on the state's response, visit the <a href="https://mn.gov/covid-19/">Minnesota COVID response webpage (https://mn.gov/covid-19/)</a>).

Gun - 01009900 Aitkin County

Water Level Data

Period of record: 06/21/1978 to 05/15/2021

# of readings: 558

Highest recorded: 1215.18 ft (07/15/2016) Lowest recorded: 1213.06 ft (01/07/1981)

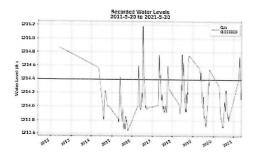
Recorded range: 2.12 ft

Last reading: 1214.12 ft (05/15/2021)

Ordinary High Water Level (OHW) (/waters/surfacewater section/hydrographics/ohw.html) elevation: 1214.4 ft

Datum: NGVD 29 (ft)

Download lake level data as: [dBase (https://files.dnr.state.mn.us/cgi-bin/lk levels dump.cgi?format=dbf&id=01009900)] [ASCII (https://files.dnr.state.mn.us/cgi-bin/lk levels dump.cgi?format=csv&id=01009900)] (If you have trouble try right clicking on the appropriate link and choosing the "Save ... As" option.)



(https://maps1.dnr.state.mn.us/cgi-bin/lakesdb/hydrograph\_cgi\_py?basins=01009900:Gun&startdate=2011-5-20&enddate=2021-5-

#### **Benchmarks**

Elevation: 1217.05 ft Date Set: 05/09/1994

Datum: NGVD 29 (ft) Location: T48R25S9

Description: At lake gauge located at the end of long narrow point on the north side of lake, a 5/16" bolt in the southwest side of

wooden light pole about 150' northwest of readers cabin.

Elevation: 1218.48 ft Date Set: 05/07/2014

Datum: NGVD 29 (ft) Location: T48R25S20

Description: Found 2020. 60d spike, 0.9' above ground in North side of a twin 1.1' diameter ash tree, 50' SW of concrete boat ramp at

edge of gravel turnaround, at Public Access, 32903 427th Ln, off 328th Ave, Palisade. Tied in 7/30/14.

Questions?

Call 651-296-6157 or 888-MINNDNR (646-6367)

Email us: info.dnr@state.mn.us

Sign up for email updates

Email address



## **Detailed Parcel Report**

Parcel Number: 08-0-027106

#### **General Information**

Township/City: FLEMING TWP

Taxpayer Name:BENSON, RANDY & JESSICATaxpayer Address:704 BROOKVIEW LN SE

ISANTI MN 55040

Property Address: 32463 435th Ln

Township:48Lake Number:1009900Range:25Lake Name:GUN LAKE

Section:17Acres:1.30Green Acres:NoSchool District:1.00

Plat:

**Brief Legal Description:** PT GOVT LOT 2 (TRACT E)

#### **Tax Information**

Class Code 1: Non-Comm Seasonal Residential Recreational

Class Code 2: Unclassified
Class Code 3: Unclassified
Homestead: Non Homestead

Assessment Year: 2021

Estimated Land Value:\$36,700.00Estimated Building Value:\$2,200.00Estimated Total Value:\$38,900.00

Prior Year Total Taxable Value: \$36,700.00

Current Year Net Tax (Specials Not Included): \$264.00

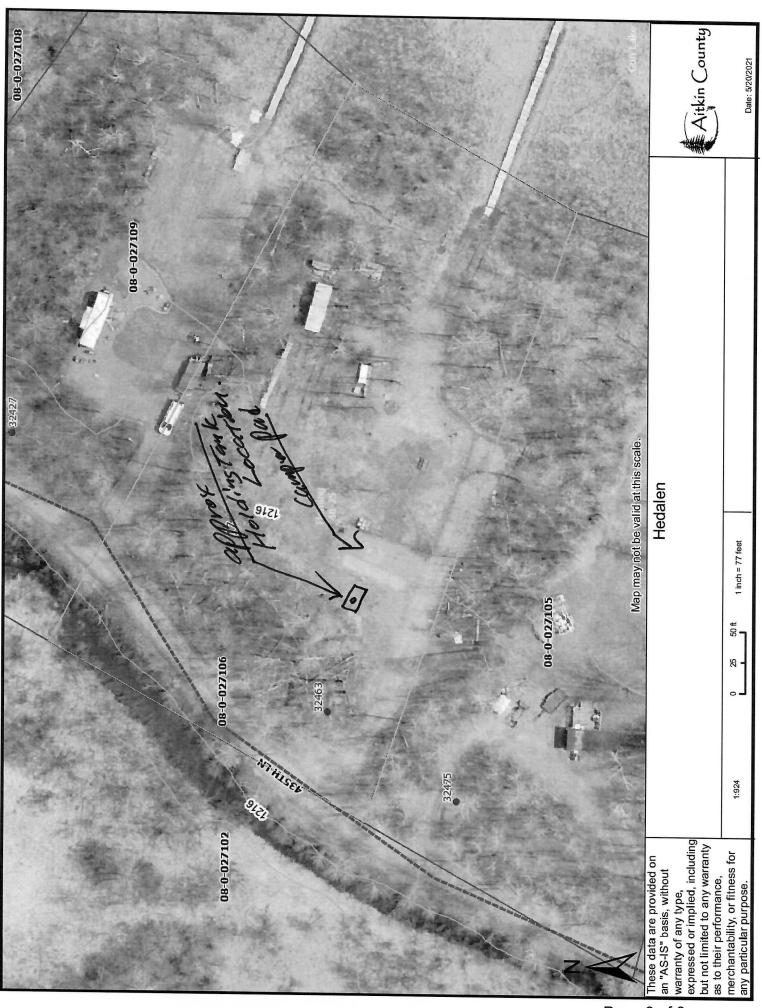
Total Special Assessments: \$0.00

\*\*Current Year Balance Not Including Penalty: \$0.00

Delinquent Taxes: No

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

<sup>\*\*</sup> Balance Due on a parcel does not include late payment penalties.



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