

City Hall: 218-692-2688  
Planning & Zoning: 218-692-2689  
Fax: 218-692-2687



13888 Daggett Bay Rd  
Crosslake, Minnesota 56442  
[www.cityofcrosslake.org](http://www.cityofcrosslake.org)

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## **CITY OF CROSSLAKE**

### **PLANNING COMMISSION/BOARD OF ADJUSTMENT**

**January 28, 2022**

**9:00 A.M.**

Crosslake City Hall  
13888 Daggett Bay Rd, Crosslake MN 56442  
(218) 692-2689

### **PUBLIC HEARING NOTICE**

**Applicant:** Kathleen A Brewster

**Authorized Agent:** Jarod Brewster

**Site Location:** 33584 Lake Street, Crosslake, MN 56442 on Crosslake-GD

**Variance for:**

- Lake setback of 60 feet where 75 feet is required to proposed dwelling
- Side yard setback of 5 feet where 10 feet is required to proposed drainfield

**To construct:**

- 2,600 square foot dwelling where 470 square feet are within the 75-foot setback
- A new septic system

**Notification:** Pursuant to Minnesota Statutes Chapter 462, and the City of Crosslake Zoning Ordinance, you are hereby notified of a public hearing before the City of Crosslake Planning Commission/Board of Adjustment. Property owners have been notified according to MN State Statute 462 & published in the local newspaper. Please share this notice with any of your neighbors who may not have been notified by mail.

**Information:** Copies of the application and all maps, diagrams or documents are available at Crosslake City Hall or by contacting the Crosslake Planning & Zoning staff at 218-692-2689. Please submit your comments in writing including your name and mailing address to Crosslake City Hall or ([crosslakepz@crosslake.net](mailto:crosslakepz@crosslake.net)).



## STAFF REPORT

Property Owner/Applicant: Kathleen A Brewster

Parcel Number(s): 14310672

Application Submitted: December 9, 2021

Action Deadline: February 6, 2022

City 60 Day Extension Letter sent / Deadline: N/A / N/A

Applicant Extension Received / Request: N/A / N/A

City Council Date: N/A

**Authorized Agent:** Jarod Brewster

**Variance for:**

- Lake setback of 60 feet where 75 feet is required to proposed dwelling
- Side yard setback of 5 feet where 10 feet is required to proposed drainfield

**To construct:**

- 2,600 square foot dwelling where 470 square feet are within the 75-foot setback
- A new septic system

**Current Zoning:** Shoreland District

**Existing Impervious Coverage:**

12.8%

- A stormwater management plan was submitted with the variance application
- Septic design was submitted to Crow Wing County for approval pending variance outcome

**Proposed Impervious Coverage:**

25.0%

**Development Review Team Minutes held on 9-14-2021:**

- Property is located on Crosslake at 33584 Lake Street with a lake setback of 75 feet
- The proposed demo/rebuild 2 story slab on grade, with a patio and no deck planned, to be approximately 65 feet from the OHW of Crosslake
- Bench mark installed by surveyor and supplemental data form required to verify elevation is being met of 1232.5
- All setbacks shall be measured to the vertical side of the structure. No part of the structure, such as eaves, can overhang or reduce such setback by more than three feet (Sec. 26-308)
- If the eaves exceed 36" the setback and the impervious coverage shall be measured from the dripline
- Impervious is currently 12.8% with a maximum of 25% allowed and if impervious exceeds 20% a Shoreline Rapid Assessment Model form will be completed (Sec. 26-518)
- The parcel is located within a plat and/or an organization that may have restrictions, you would need to verify those restrictions and clarify that your request is approved by the organization or allowed in the plat

- Design and implement a stormwater management plan (gutters, berm & rain gardens) or update any existing plan, which is required with all variance applications per Article 8, section 26-222, (2), 1). When a wetland is being used the stormwater must be filtered to drinking standards before it can flow into any wetland
- A septic design if needed or a septic compliance inspection
- Wetland Delineation is a requirement for a variance or a no wetland statement/letter
- A grade and elevation illustration along with a cut and fill calculation is required for a complete variance application
- Discussion on application requirements, procedure, schedule, fee and the requirements/need for a complete application packet by the deadline date; notification methods; variances are limited to 2 years; surveyor to state/provide square foot (sf) of structure not meeting setback vs sf within setback
- A Land Use Permit will be required prior to construction

Property owner was informed that before they could be placed on a public hearing agenda the following information is required:

1. A certificate of survey meeting the requirements outlined in Article 8, Sec. 26-222 of the City Land Use Ordinance
2. Grade and Elevation illustration, along with the Cut and fill calculations
3. Wetland delineation or a no wetland statement/letter
4. A septic design if project requires or a compliance inspection
5. A complete Variance application with the \$500.00 public hearing fee

#### **Parcel History:**

- Bowers' Point established in 1948
- July 1973 – 17x20 Addition to house
- September 1982 – Septic
- September 1984 – 26x14 Deck
- Compliance Inspection or a design will be needed

#### **Agencies Notified and Responses Received:**

**County Highway Dept:** N/A

**DNR:** No comments were received as of 1-14-2022

**City Engineer:** 1-3-2022 comment received from Phil Martin

**Lake Association:** N/A

**Township:** N/A

**Crosslake Public Works:** No comments were received as of 1-14-2022

**Crosslake Park, Recreation & Library:** N/A

**Concerned Parties:** 1-12-2022 email comment from Pribyl  
1-13-2022 email comment from Heltemes

#### **POSSIBLE MOTION:**

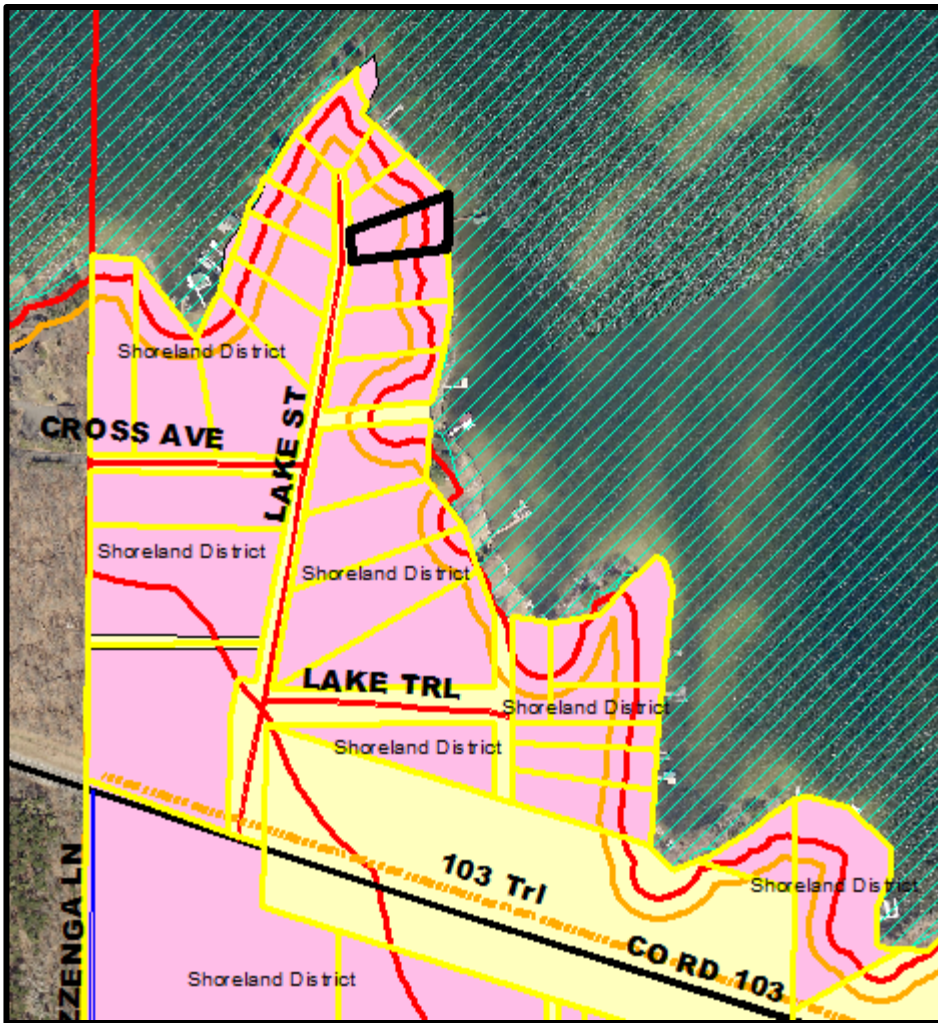
To approve/table/deny the variance to allow:

- Lake setback of 60 feet where 75 feet is required to proposed dwelling
- Side yard setback of 5 feet where 10 feet is required to proposed drainfield

**To construct:**

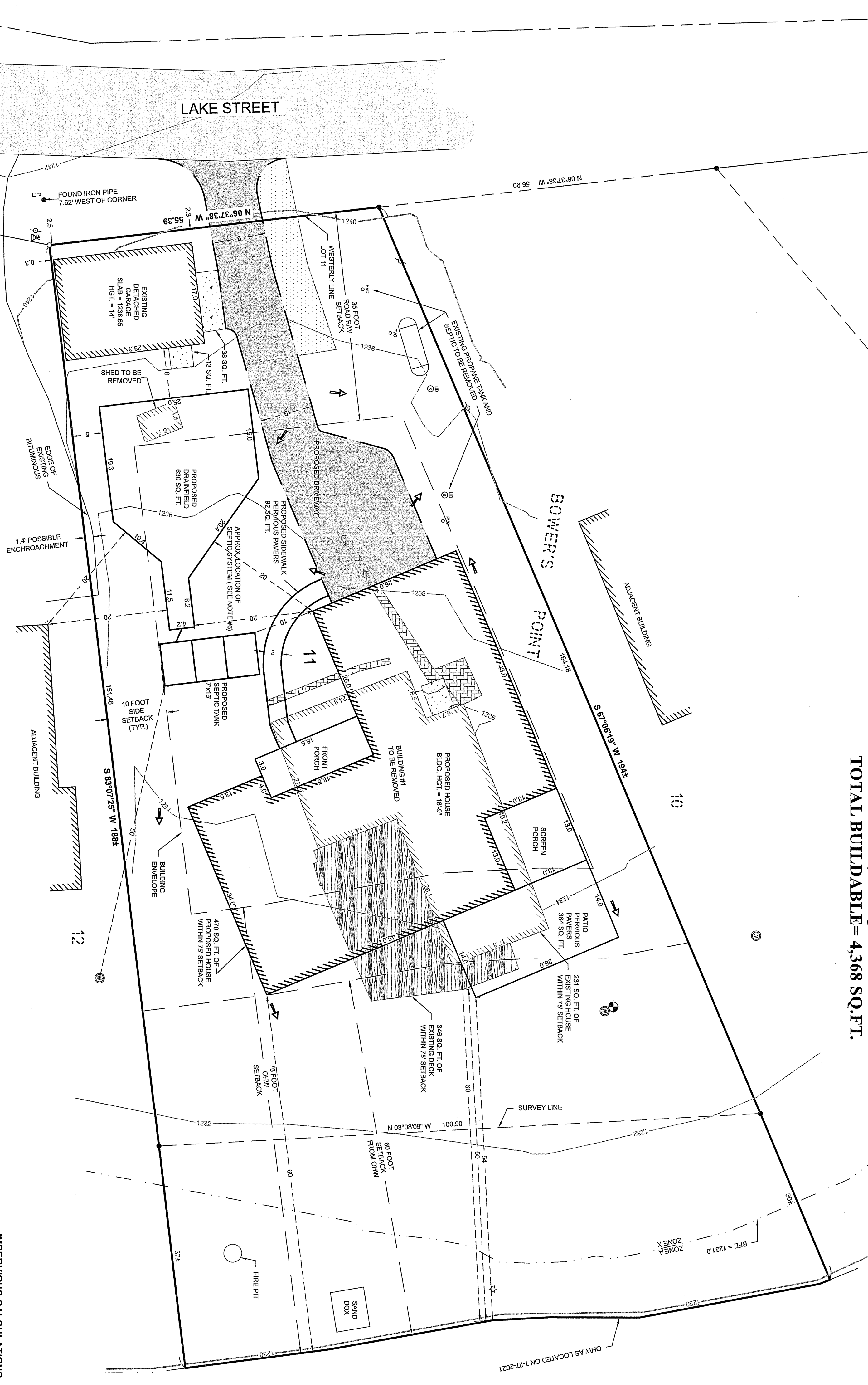
- 2,600 square foot dwelling where 470 square feet are within the 75-foot setback
- A new septic system

As shown on the certificate of survey dated 11-30-2021



# CERTIFICATE OF SURVEY

LOT 11, BOWER'S POINT  
 SECTION 31, TOWNSHIP 137 NORTH, RANGE 27 EAST,  
 CROW WING COUNTY, MINNESOTA  
 TOTAL AREA = 15,493 SQ. FT. ± 0.36 ACRES ±  
 TOTAL BUILDABLE = 4,368 SQ. FT.



### NOTES:

1. Contour interval as shown = 2 feet. Based on NGVD 29 datum. Contours shown have been obtained using standard survey topographic methodologies. Field located on 7-27-2021
2. Zoning for subject tract = Shoreland District
3. Property is in "Zone X" and "Zone A" as per the FRMA, Flood Insurance Rate Map. "Zone A" definition: Areas of 100-year flood base elevations and flood hazard factors not determined. "Zone X" definition: Areas of minimal flooding.
4. Parcel ID of subject parcel: 14310672
5. The E911 address of subject parcel: 33584 Lake Street
6. Approximate location of septic system per sketch prepared by Martin Joyce, Martin Joyce Septic Service, LLC.
7. No wetlands were found on September 22, 2021 at the site per Mich Brinks, Brinks Wetlands Services, Inc. MN Certified Wetland Delineator #1007.

### IMPERVIOUS CALCULATIONS

EXISTING	IMPERVIOUS AREA (sq. ft.)	Net Area (sq. ft.)	Percent Impervious (sq. ft.)
Building #1	1,094	15,493	7.1%
Building #2	395	15,493	2.5%
Shed	31	15,493	0.2%
Concr./Pavement	172	15,493	1.1%
Gravel	297	15,493	1.9%
<b>Total</b>	<b>1,989</b>	<b>15,493</b>	<b>12.8%</b>

### IMPERVIOUS CALCULATIONS

PROPOSED	IMPERVIOUS AREA (sq. ft.)	Net Area (sq. ft.)	Percent Impervious (sq. ft.)
Existing Detached Garage	395	15,493	2.5%
Existing Concrete	51	15,493	0.3%
Proposed House & Porches	2,600	15,493	16.8%
Proposed Driveway	824	15,493	5.3%
<b>Total</b>	<b>3,970</b>	<b>15,493</b>	<b>25.9%</b>

### RUN OFF CALCULATIONS

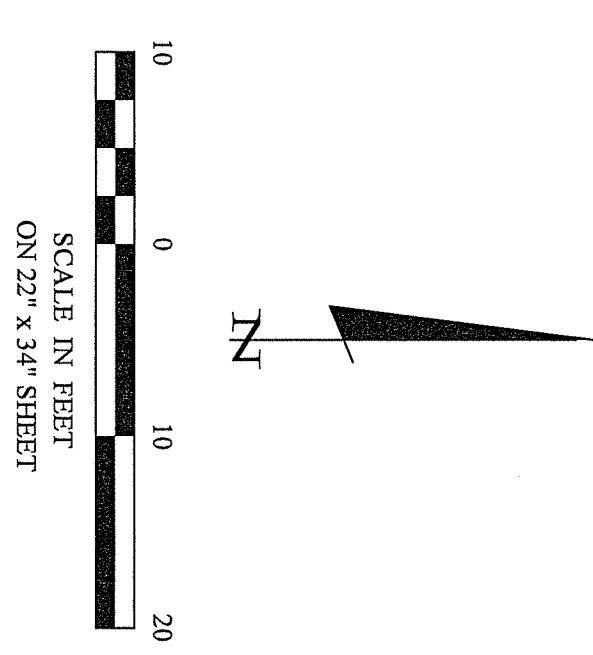
Total Impervious Surface Area	3,570 sq. ft.	0.0833 ft.	1322 cu. ft.
*Client to provide run off areas.			

**CROSS LAKE**  
 GENERAL DEVELOPMENT CLASSIFICATION  
 NORMAL RESERVOIR POOL ELEVATION = 1229.57  
 100 YEAR FLOOD ELEVATION = 1231.00  
 HIGHEST KNOWN ELEVATION = 1234.56  
 INFORMATION OBTAINED FROM CORRS OF ENGINEERS LAKE ELEVATION = 1228.99 ON 7-27-21  
 NGVD 29 DATUM

### LEGEND

- DENOTES EDGE OF EXISTING BUILDINGS
- DENOTES EDGE OF EXISTING GRAVEL
- DENOTES EDGE OF EXISTING CONCRETE
- DENOTES EDGE OF EXISTING PAVING STONES
- DENOTES EDGE OF EXISTING WOODEN DECKING
- DENOTES EXISTING MOUNTED LIGHT
- DENOTES EXISTING UTILITY POLE
- DENOTES EXISTING ELECTRIC METER
- DENOTES EXISTING LP TANK
- DENOTES EXISTING PHONE PEDestal & PHONE BOX
- DENOTES EXISTING WELL
- DENOTES EXISTING SEPTIC VENT SEPTIC CLEANOUT & SEPTIC TANK LID
- DENOTES EXISTING SEPTIC HIGH POINT OF WELL
- DENOTES MONUMENT FOUND
- DENOTES IRON MONUMENT SET MARKED BY LICENSEE No. 1491
- DENOTES MONUMENT FOUND NGVD 29 DATUM ELEV. = 1234.31
- BENCHMARK HIGH POINT OF WELL

ORIENTATION OF THIS BEARING SYSTEM IS BASED ON THE WESTERLY LINE OF LOT 11 TO HAVE AN ASSUMED BEARING OF N 06° 37' 36\"/>





**Stormwater Plan**  
33584 Lake St

Storage Area	Impervious Square Footage					Stormwater Storage			
	New Building	Driveway	Existing Garage	Existing Garage Concrete	Total Impervious	Cubic Feet from 1" rain	Storage Depth	Required Square Footage	Proposed Storage Sq Ft
1	1,197				1,197	100	4 in	299	300
2	341				341	28	4 in	85	200
3	529				529	44	4 in	132	200
4	533				945	79	4 in	236	250
5		412		38	450	38	4 in	113	200
6			198	13	211	18	4 in	53	75
7			198		198	16	4 in	49	55
<b>Total</b>	<b>2,600</b>	<b>824</b>	<b>395</b>	<b>51</b>	<b>3,870</b>	<b>322</b>		<b>967</b>	<b>1,280</b>

Gutters will be used on new building to direct water runoff to storage areas as shown by arrows on survey.

## Cheryl

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**From:** Jarod Brewster <jbrewster12@msn.com>  
**Sent:** Thursday, December 9, 2021 1:04 PM  
**To:** Jon Kolstad  
**Subject:** FW: Cut and Fill

Hi Cheryl – Here's the email from the excavator with the cut/fill amount highlighted. Let me know if you need anything else.

Jarod

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**From:** [westinpropertydev@gmail.com](mailto:westinpropertydev@gmail.com)  
**Sent:** Monday, November 8, 2021 9:12 PM  
**To:** 'Jarod Brewster'  
**Subject:** RE: Cut and Fill

Hey Jarod,

Glad to meet you! I took a look at the site plan and the topography elevations and calculated some estimates. You're probably going to want your grade at that 1237 height. That way you don't have drain back into the garage door. The back slopes to that 1233. I can get approximate numbers for you, but without knowing depth of topsoil, old foundations, stumps it'll be just an estimate. With that 2176 footprint and if you do that big patio in the back, you would be looking at approximately 400 yards fill hauled in. If you did do the patio in the back, you might want to think about retaining wall or maybe just a short deck with footings.

Regards,

Erik  
218-839-3099

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**From:** Jarod Brewster <jbrewster12@msn.com>  
**Sent:** Monday, November 8, 2021 7:50 AM  
**To:** westinpropertydev@gmail.com  
**Subject:** Cut and Fill

Hi Erik - Eric Larson recommended I contact you to get an estimate for cut and fill/yards of dirt for our cabin rebuild in Crosslake that I need for our variance application. I've staked out the new building and septic location at the site and attached our preliminary building design. He said you'll also be doing tear down of the main building (I'll be removing the shed and the existing garage will stay), tree removal, and removing the old septic & digging the new one.

I'm hoping you can get back to me with the cut and fill amount within the next 2 weeks but let me know when you think you can get me the estimate. Thanks!

Property address: 33584 Lake St

Jarod Brewster  
320-333-0624











# Appendix C: SHORELINE RAPID ASSESSMENT MODEL



The City of Crosslake's Shoreline Rapid Assessment Model (SRAM) is a tool for quickly and objectively determining the degree of natural vegetation along a shoreline and the amount of natural buffer required to meet Ordinance requirements. With this model, the Shore Impact Zones (SIZ-1 & SIZ-2) are evaluated for natural vegetative cover and a cumulative score is tallied. Vegetative restoration that may be necessary must be performed according to Article 19.

## Shoreline:

Condition of Shoreline	Score:
Stable shoreline	0
< 25% of shoreline is eroding or unstable	-1
25-50% of shoreline is eroding or unstable	-2
50-75% of shoreline is eroding or unstable	-3
> 75% of shoreline is eroding or unstable	-4

## Ground cover:

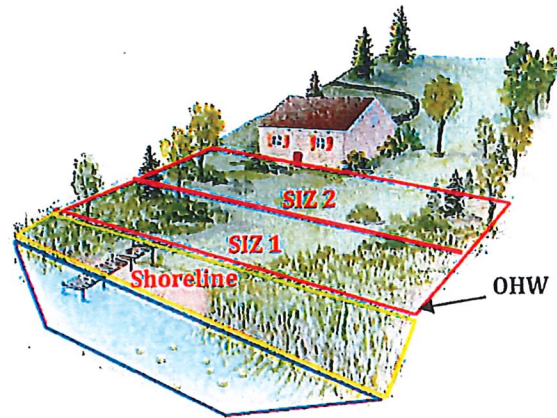
% Naturally Vegetated Cover in SIZ 1	Points:
< 25% natural ground cover	1
25-50% natural vegetative cover	3
50-75% natural vegetated cover	5
> 75% natural vegetated cover	7

% Naturally Vegetated Cover in SIZ 2	Points:
< 25% natural ground cover	1
25-50% natural vegetative cover	2
50-75% natural vegetative cover	3
> 75% natural vegetated cover	4

## Trees / shrubs:

% Naturally Vegetated Cover in SIZ 1	Points:
< 25% of surface is covered by shrubs and trees	1
25-50% of surface is covered by shrubs and trees	3
50-75 % of surface is covered by shrubs and trees	5
> 75% of surface is covered by shrubs and trees	7

% Naturally Vegetated Cover in SIZ 2	Points:
< 25% of surface is covered by shrubs and trees	1
25-50% of surface is covered by shrubs and trees	2
50-75 % of surface is covered by shrubs and trees	3
> 75% of surface is covered by shrubs and trees	4



**If score is 0-5:**

- Leave a 20' No Mow Buffer & possible other mitigation efforts

**If score is 6-10:**

- Leave a 15' No Mow Buffer

**If score is 11-15:**

- Leave a 10' No Mow Buffer

Above buffers shall allow for an access area to lake, per Ordinance requirements

Landowner Brauster Permit or Parcel Number 14310672

Score 13 (Max Score = 22)

Crosslake Planning & Zoning Department Staff [Signature] 10/27/21

33584 Lake St.

A Land Use Permit must be obtained from  
Crow Wing County before installation of  
the septic system

## Crow Wing County Trench/Pressure Bed Design

Property Owner: Kathleen Brewster

Date: 11/2/2021

Mailing Address: 416 Daniels Ct

City: Sauk Rapids

State: MN

Zip: 56379

Home Phone Number: Jarod

Cell: 320-333-0624

Site Address: 33584 Lake St

City: Crosslake

State: MN

Zip: 56442

Driving directions if no address issued:

**APPROVED**

By Greg Kossan at 3:41 pm, Nov 09, 2021

Legal Description: Lot 11 Bowers' Point

Sec: 31

Twp: 137

Range: 27

Twp Name: City of Crosslak

Parcel Number: 14310672

Lake/ River: Cross

Lake/River Classification: GD

### Flow Data

Number of Bedrooms: 5

Dwelling Classification: I

System Type: I

GPD: 750

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: Existing Deep

Shallow Well: None

Wells to be sealed (if applicable)?

### Setbacks

Tank(s) to: Well +50

House 10

Property Line 10

Drainfield to: Well +50

House 20

Property Line 5

Sewer Line to well: +50

Air Test: No

### Additional System Notes and Information: NEW CONSTRUCTION

\* Variance needed for a 5 P/L setback for the septic. Max available area for drainfield.

Designer Name: Martin Joyce

License Number: 2129

Address:

City:

State:

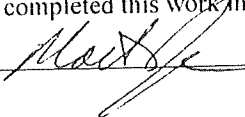
Zip:

Home Phone Number:

Cell: 218-820-2621

E-Mail Address: joycem@brainerd.net

I hereby certify that I have completed this work in accordance with all applicable requirements.

Designer Signature: 

Date: 11/2/2021

# Crow Wing County Trench/Pressure Bed Design

Property Owner: Kathleen Brewster

Date: 11/2/2021

Designer's Initials:

## Tank Sizing

- A. Septic Tank Capacity: 1500 Gallons  
Tank Type: 2 Compartments      Filter: No  
Garbage Disposal/Basement Lift Station: No Disposal or Lift
- B. Pump Tank Capacity: 750 Gallons (7080.2100)
  - a. Alarm Type: Electric

Septic Tank Capacity		
Bedrooms	Minimum	GD/BL
5 or less	1,500	2,250
6 or 7	2,000	3,000
8 or 9	2,500	3,750

## Soils

- C. Depth to Restricting Layer: +.70"
- D. Native SSF: .83  
(Perc. Rate [Optional]      MPI)

\*\*Enter GPD next to the type of system\*\*

## Rock Trenches

- E. 6 in. Trench Depth       $GPD \times D = 0.0sq. ft.$       Cubic Yards of Rock: 0 yds<sup>3</sup>
- F. 12 in. Trench Depth       $GPD \times D \times .8 = 0.0sq. ft.$       Cubic Yards of Rock: 0 yds<sup>3</sup>
- G. 18 in. Trench Depth       $GPD \times D \times .66 = 0.0sq. ft.$       Cubic Yards of Rock: 0 yds<sup>3</sup>
- H. 24 in. Trench Depth       $GPD \times D \times .6 = 0.0sq. ft.$       Cubic Yards of Rock: 0 yds<sup>3</sup>
- I. Divide (E-H) by Trench Width for lineal feet:  $0.0 \div 3 = 0.0$

## Chamber Trenches

- J. Brand:      Dimensions of one chamber (L x W):      ft. x      ft.
- K. 6-11 in. Chamber Depth       $GPD \times D = 0.0sq. ft.$
- L. 12 in. Chamber Depth       $GPD \times D \times .8 = 0.0sq. ft.$
- M. Select from (K-L) if installing Chamber Trenches: 0.0
- N. Divide (M) by Trench Width for lineal feet:  $0.0 \div 0 =$       Lineal Feet
- O. Total Chambers Needed (**Round Up**):      Chambers

## Seepage/Pressure Beds

- P. Seepage Bed       $GPD \times D \times 1.5 = 0.0sq. ft.$ 
  - a. Bed Dimensions      ft. x      ft.
  - b. Cubic Yards of Rock      Bed Length x Bed Width x Rock Depth      ft.  $\div 27 = 0 yds^3$
- Q. Pressure Bed       $750 GPD \times D = 622.5sq. ft.$ 
  - a. Bed Dimensions      *Variable + 630 sq. ft.*
  - b. Cubic Yards of Rock      Bed Length x Bed Width x Rock Depth | ft.  $\div 27 = 31 yds^3$

## Additional System Notes and Information:

Install a 2250 Trombo S/L. Electric alarm. Insulate with 2" foam.  
Maximizing the drainfield area. This is the only drainfield site available.  
Protect drainfield area during construction.

## Crow Wing County Trench/Pressure Bed Design

Property Owner: Kathleen Brewster  
Date: 11/2/2021

Designer's Initials:

### Determine Pump Capacity

1) Gravity Distribution Pump Capacity Range: 10 - 45 GPM

\*Skip to Pump Head Requirements if pumping to gravity

2) Pressure Distribution:

a) Number of laterals: 5

b) Lateral Size: 2in.

c) Perforation spacing: 4ft.

d) Check Table 4 to see the maximum number of perforations per lateral.

3) Lateral Length (choose):

a) End manifold: rock bed length: 45 - 2 ft. = 43ft.

b) Center manifold: rock bed length /2: - 1 ft. = -1ft.

c) Choose 3a or 3b: 43ft.

4) Total Perforation Determination:

a) (3c): 43ft. ÷ (2c): 4ft. + 1 = 11.75 Perforations / Lateral

b) (4a): 12.50 × (2a): 5 = 62.50 Total Number of Perforations

c) Select perforation discharge from Table 1 = .74 GPM/Perf.

d) (4b): 62.5 × (4c): 0.74 GPM/Perf. = 46.25 GPM

### PUMP HEAD REQUIREMENTS

5) Elevation difference:

a) Elevation difference between pump and point of discharge 8ft.

b) If pumping to a pressure distribution system, (5a) + 5 = 13ft.

c) Choose 5a if pumping to gravity or 5b for pressure: 13ft.

6) Friction loss:

a) Select a value from Table 2: 3.99ft. / 100 ft. of pipe

b) Pipe length to drainfield: 5ft. × 1.25 = 6.25ft.

c) (6a): 3.99 × (6b): 6.25 ÷ 100 = 0.25 Total Friction Loss

7) Drainback:

a) Actual Pipe length 5ft. × .17 gal/ft. (Table 3) = 0.85 gal

8) (5c): 13ft. + (6c): 0.25ft. = 13.25 Total Head Required

9) Minimum Pump Size 46 GPM (4d) & 13ft. of dynamic head (8)

*Will need to get creative on the laterals.*

Ft. of Head	7/32" Perf	1/4" Perf
1.0	0.56	0.74
2.0	0.80	1.04

Use 1.0 for single homes, 2.0 for everything else

Flow (GPM)	1.5"	2"	3"
20	2.47	0.73	0.11
25	3.73	1.11	0.16
30	5.23	1.55	0.23
35	6.96	2.06	0.30
40	8.91	2.64	0.39
45	11.07	3.28	0.48
50	13.46	3.99	0.58
55		4.76	0.70
60		5.60	0.82
65		6.48	0.95
70		7.44	1.09

Pipe Diameter	Gal/Ft.
1.25 in.	0.078
1.5 in.	0.11
2.0 in.	0.17

Perf. Spacing	1.25" Pipe	1.5" Pipe	2" Pipe
2.5 ft.	14	18	28
3 ft.	13	17	26
3.3 ft.	12	16	25
4 ft.	11	15	23
5 ft.	10	14	22



## Crow Wing County Trench/Pressure Bed Design

Property Owner: Kathleen Brewster

Date: 11/2/2021

Designer's Initials:

Please record the depths of all horizons, redoximorphic features, restricting layers, and saturated soils. Include all chroma and hue values.

#1 Proposed Site

Depth (in.)	Texture	Color
0-6	Sandy Loam	10YR 3/2
6-18	Sand	10YR 4/4
18-38	Sand	10YR 5/4-5/6
38-70	Sand	10YR 5/4
70	Hit Rock	

#1 Alternate Site

Depth (in.)	Texture	Color

#2 Proposed Site

Depth (in.)	Texture	Color

#2 Alternate Site

Depth (in.)	Texture	Color

### Soil Sizing Factors/Hydraulic Loading Rates

Perc. Rate	Texture	SSF	HLR	Perc. Rate	Texture	SSF	HLR
<0.1	Coarse Sand			16 to 30	Loam	1.67	0.60
0.1 to 5	Sand	0.83	1.20	31 to 45	Silt Loam	2.00	0.50
0.1 to 5	Fine Sand	1.67	0.60	46 to 60	Clay Loam	2.20	0.45
6 to 15	Sandy Loam	1.27	0.79	> 60	Clay Loam	****	0.24

### Description of Soil Treatment Areas

	Proposed Site		Alternate Site	
	Proposed #1	Proposed #2	Alternate #1	Alternate #2
Disturbed Areas?	No			
Compacted Areas?	No			
Flooding Potential?	No			
Run on Potential?	No			
Limiting Layer Depth	Proposed #1 +70"	Proposed #2	Alternate #1	Alternate #2
Slope % and Direction	1% East			
Landscape Position	Slight Side slope			
Vegetation Types	Pines, Oaks			
Soil Texture	Sand			
Soil Sizing Factor	0.83		Select One	

## Map Unit Description (MN)

Crow Wing County, Minnesota

[Data apply to the entire extent of the map unit within the survey area. Map unit and soil properties for a specific parcel of land may vary somewhat and should be determined by onsite investigation]

### D49B--Graycalm loamy sand, 2 to 8 percent slopes

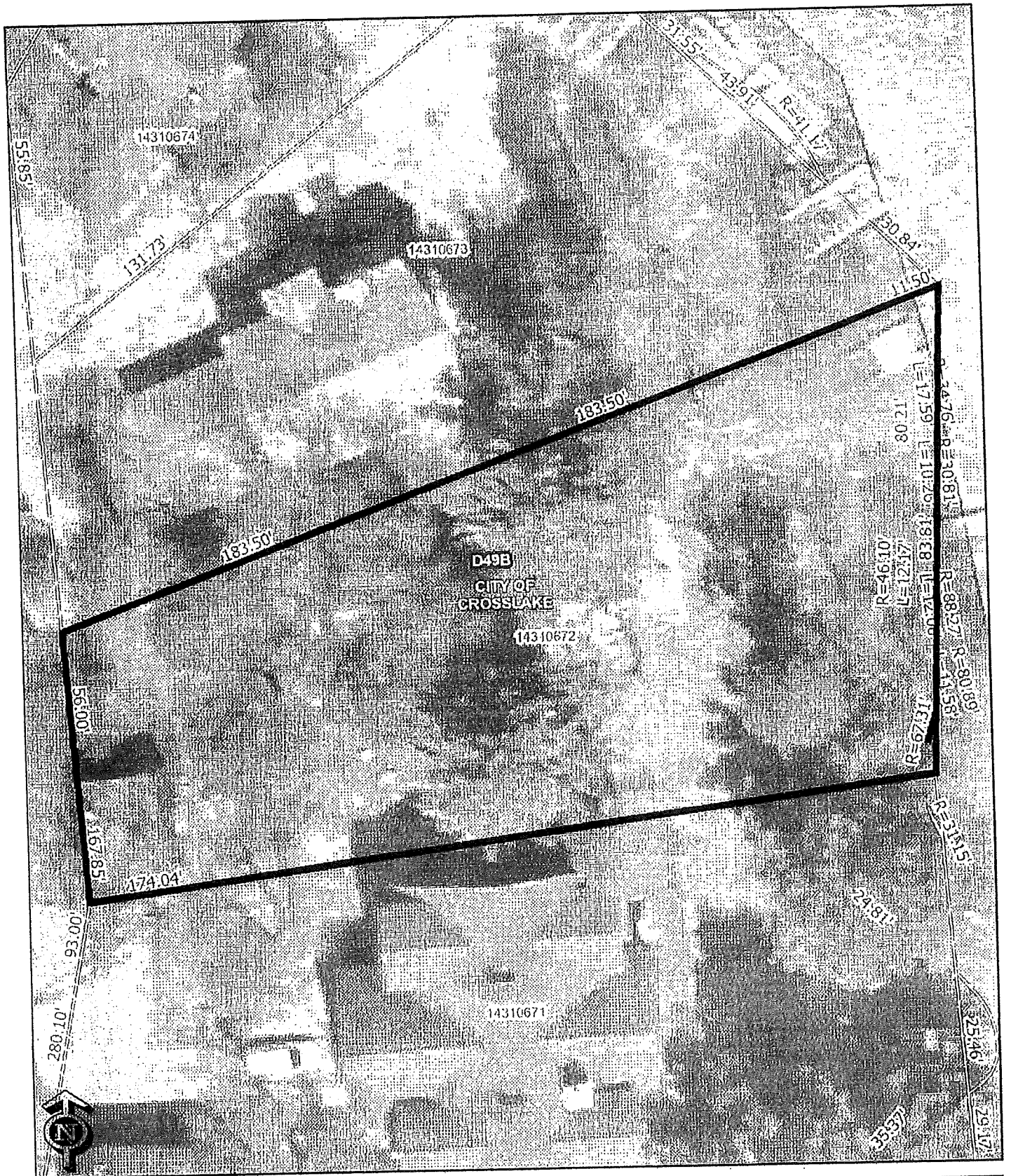
#### Graycalm

*Extent:* 85 to 95 percent of the unit  
*Landform(s):* rises on outwash plains  
*Slope gradient:* 2 to 8 percent  
*Parent material:* outwash  
*Restrictive feature(s):* greater than 60 inches  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* somewhat excessively drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 2  
*Wind erodibility index (WEI):* 134  
*Kw factor (surface layer):* .15  
*Land capability, nonirrigated:* 4s  
*Hydric soil:* no  
*Hydrologic group:* A  
*Potential for frost action:* low

Representative soil profile:	Texture	Permeability	Available water capacity	pH
A -- 0 to 4 in	Loamy sand	rapid	0.35 to 0.43 in	4.5 to 5.5
Bw1 -- 4 to 20 in	Loamy sand	rapid	1.29 to 1.61 in	5.0 to 6.0
Bw2 -- 20 to 31 in	Sand	rapid	0.44 to 0.66 in	5.0 to 6.0
E and Bt -- 31 to 79 in	Sand	rapid	2.38 to 3.81 in	5.5 to 6.5

This report provides a semitabular listing of some soil and site properties and interpretations that are valuable in communicating the concept of a map unit. The report also provides easy access to the commonly used conservation planning information in one place. The major soil components in each map unit are displayed. Minor components may be displayed if they are included in the database and are selected at the time the report is generated.



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.

Date: 11/3/2021 Time: 10:22:58 AM



6048

# Martin Joyce Septic Service, LLC

27604 County Road 3, Merrifield, MN 56465

## Septic System Management Plan

Property Owner: Kathleen Brewster Phone: \_\_\_\_\_ Date: 11/2/2021  
Mailing Address: 416 Daniels Ct City: Sauk Rapids Zip: 56379  
Site Address: 33584 Lake St City: Crosslake Zip: 56442

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 \_\_\_\_\_ months  
Local Government: check every \_\_\_\_\_ months  
State Requirement: check every 36 months

My system needs to be checked  
every 36 months

### Homeowner Management Tasks (performed monthly unless otherwise stated)

- 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 signal when there is a problem: contact Service Provider any time an alarm signals
- Event counter or water meter* - Monitor your average daily water use (if it applies)

### Professional Management Tasks

- Check and clean the in-tank effluent filter
- Check the sludge/scum layer levels in all septic tanks
- Recommend if tank should be pumped
- Pump all compartments of septic tank at least every 36 months
- Check inlet and outlet baffles
- Clean drainfield laterals (if it applies)
- Check the drain field effluent levels in the rock layer
- Check the pump and alarm system functions (if it applies)
- Check wiring for corrosion and function (if it applies)
- Check dissolved oxygen and effluent temperature in tank
- Provide home owner with list of results and any action to be taken

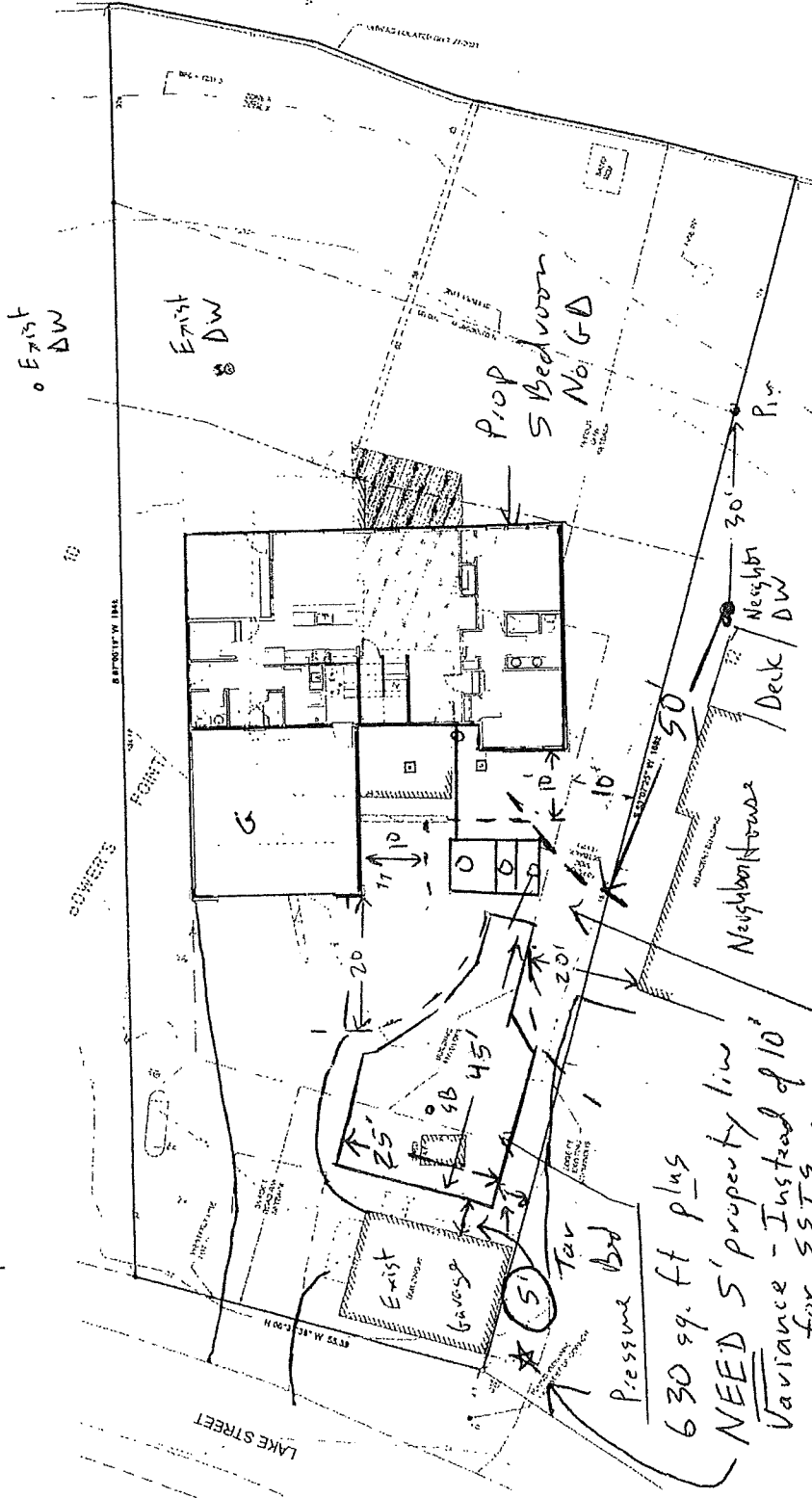
Replacement system for this residence, a secondary site has not been identified.

" 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 this 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: \_\_\_\_\_ Date: \_\_\_\_\_  
Designer Signature: Martin Joyce Date: \_\_\_\_\_  
Permitting Authority Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Brewster  
33584 Lake St  
14310672

North



**CROSS LAKE**  
GENERAL DEVELOPMENT PLAN  
100' SETBACK FROM PROPERTY LINE  
PROPERTY LINE RELATIONSHIP - 100' (100')  
PROPERTY LINE RELATIONSHIP - 100' (100')  
PROPERTY LINE RELATIONSHIP - 100' (100')  
PROPERTY LINE RELATIONSHIP - 100' (100')

**LEGEND**

- 1. EXISTING DRIVEWAY
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Septic/Lift  
2250 Trumbo  
7'x16' Footprint  
Insulate

630 sq. ft plus  
NEED 5' property line  
Variance - Instead of 10'  
for SST's  
- Gutter garage roof  
water away,  
- Divert driveway  
surface water away.

Mark Jay 11/7/21  
12129

**From:** [Phil Martin](#)  
**To:** [Cheryl](#); [Ted Strand](#)  
**Subject:** RE: PC/BOA 1-28-2022  
**Date:** Monday, January 3, 2022 11:30:18 AM

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Hi Cheryl

My comments:

Brewster – The stormwater plan needs more grading and computation detail to show the plan is feasible. I'd request stormwater area grading/contour detail that shows adequate stormwater volume will be provided.

Note that the normal reservoir pool elevation is 1229.57. That means no stormwater area can have a bottom elevation lower than 1232.57 to provide 3' separation to assumed groundwater elevation for storage/infiltration area. If applicant has soil boring that shows groundwater elevation is lower than normal pool, we would consider that for setting storage area bottom limits.

Based on contour information provided, Stormwater areas 1, 2, and 3 locations seem to be unacceptable to provide 3' separation required for an infiltration area.

Stormwater areas 5 and 6 are adjacent to proposed pressure bed. Pressure bed system designer notes direct that roof water and driveway water should be diverted away from the pressure bed. We recommend they remove those areas and divert water away to stormwater storage area 4 and the north side of driveway.

The new pressure bed will occupy the only drainfield space and no secondary site has been identified according to the designer's notes.

Hwy 103 – Stormwater computations appear to have been prepared by Widseth. We'd recommend a signed certification page be provided by the Widseth staff person doing the work for confirmation of their involvement.

Thanks

Phil Martin  
218-821-7265

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**From:** Cheryl <cstuckmayer@crosslake.net>  
**Sent:** Wednesday, December 29, 2021 11:54 AM  
**To:** Dani McNeil <danielle.mcneil@state.mn.us>; Ted Strand <publicwk@crosslake.net>; Mark Melby <mark.melby@crowwing.us>; Phil Martin <Phillip.Martin@bolton-menk.com>; Brad Person <brad@breenandperson.com>  
**Subject:** PC/BOA 1-28-2022

**From:** [Jarod Brewster](#)  
**To:** [Cher Crosslake](#)  
**Subject:** RE: PC/BOA 1-28-2022  
**Date:** Wednesday, January 12, 2022 9:29:54 AM

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Hi Cheryl – Please include this response to Phil’s comments with the variance packet. I wasn’t able to fully resolve the issues in only a week and due to the ground being frozen, but want to include this for the PC/BOA to consider. Thank you!

In response to the comment about stormwater storage not allowing 3’ of separation from the groundwater elevation: We plan for the slab-on-grade foundation to be at a height of around 1237’ and gently descending towards the parcel’s current elevation at the SIZ1 boundary. Additionally if needed, we will shrink the portion of the stormwater storage areas nearest the lake and increase their depth near the building to maintain the same volume. These changes will ensure the 3’ of separation that’s required.

In response to the comment about stormwater storage being adjacent to the septic drainfield: If the final placement of the septic does not allow for storage in those areas, we will plan to slope the driveway and use gutters on the existing garage to divert water to the north of the driveway as suggested.

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**From:** [Jarod Brewster](#)  
**Sent:** Wednesday, January 5, 2022 9:41 AM  
**To:** [Cher Crosslake](#)  
**Subject:** RE: PC/BOA 1-28-2022

Thank you, I will plan to have a response to you by the 12<sup>th</sup>!

Jarod

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**From:** [Cher Crosslake](#)  
**Sent:** Wednesday, January 5, 2022 9:37 AM  
**To:** '[Jarod Brewster](#)'  
**Subject:** RE: PC/BOA 1-28-2022

If you are able to put together a correspondence addressing Phil’s concerns and how/who will take care of it. So that they know you understand what is needed (or will hire someone) and you will address it when the weather conditions permit it. You could agree/suggest a condition be placed on the approval if you want. We understand that when a new structure is built that the stormwater plan may alter due to grading after construction.

If you could have it to me no later than the 12<sup>th</sup>, then I could put it with Phil’s comments in the packet.

---

**From:** [John.Pribyl](mailto:John.Pribyl)  
**To:** [crosslakez@crosslake.net](mailto:crosslakez@crosslake.net)  
**Subject:** Brewster variance  
**Date:** Wednesday, January 12, 2022 11:05:51 AM

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Barb and I offer our full support to the Brewster's to get their variance for this project.. It will be great for them to finally upgrade their property..

John Pribyl, Retired  
33557 Lake St  
Crosslake, MN 56442  
612.508.0220  
[john.pribyl@crosslake.net](mailto:john.pribyl@crosslake.net)



**From:** [Gary Heltemes](#)  
**To:** [crosslakez@crosslake.net](mailto:crosslakez@crosslake.net)  
**Subject:** Comments regarding 33584 Lake ST, Crosslake, MN 56442  
**Date:** Thursday, January 13, 2022 2:23:48 PM

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To Whom it may concern:

Hi,

We are: Judy and Gary Heltemes  
33569 Lake Street  
Crosslake, MN 56442

We are in full agreement with the request for variances that the Brewsters are requesting and are looking forward to their new home on Lake Street. It will be a benefit to our neighborhood.

Gary and Judy Heltemes



**Variance Application**  
 Planning and Zoning Department  
 13888 Daggett Bay Road, Crosslake, MN 56442  
 218.692.2689 (Phone) 218.692.2687 (Fax) [www.cityofcrosslake.org](http://www.cityofcrosslake.org)

Receipt Number: 969813 *Jan 28th, 2022* Permit Number: 210281V

Property Owner(s): Kathleen Brewster

Mailing Address: 416 Daniels Ct Sauk Rapids MN 56379

Site Address: 33584 Lake St Crosslake MN 56442

Phone Number: 320-761-8819

E-Mail Address: katie.brewster4@gmail.com

Parcel Number(s): 14310672

Legal Description: Lot 11, Bowers' Point

Sec 31 Twp 137 Rge 26  27  28

Lake/River Name: Cross Lake

Do you own land adjacent to this parcel(s)?  Yes  No

If yes list Parcel Number(s) \_\_\_\_\_

Authorized Agent: Jarod Brewster

Agent Address: 3536 Sawgrass Trl W Eagan MN 55123

Agent Phone Number: 320-333-0624

**Variations**  
(Check applicable requests)

Lake/River Setback  
*60' where 75' is required to structure*

Road Right-of-Way Setback

Bluff Setback

Side Yard Setback  
*Drainfield only*

Wetland Setback

Septic Tank Setback

Septic Drainfield Setback  
*5' sideyard where 10' is required*

Impervious Coverage

Accessory Structure

Building Height

Patio Size

\_\_\_\_\_

\_\_\_\_\_

Signature of Property Owner(s) Kathleen Brewster Date 11-25-21

Signature of Authorized Agent(s) Jarod Brewster Date 11-25-21

- All applications must be accompanied by a signed Certificate of Survey
- Fee \$500 for Residential and Commercial Payable to "City of Crosslake" *\$500 + \$2.00 copies*
- No decisions were made on an applicant's request at the DRT meeting. Submittal of an application after DRT does not constitute approval. Approval or denial of applications is determined by the Planning Commission/Board of Adjustment at a public meeting as per Minnesota Statute 462 and the City of Crosslake Land Use Ordinance.

**For Office Use:**  
 Application accepted by CS Date 12-9-2021 Land Use District 50

Lake Class GD Septic: Compliance N/A SSTS Design 11-2-2021 Installation after Variance  
*submitted dated*



## Practical Difficulty Statement

Pursuant to City of Crosslake Ordinance Article 8 – Variances may be granted when it is found that strict enforcement of the Land Use Ordinance will result in a “practical difficulty”.

Please answer the following questions regarding the “practical difficulty” for your variance request.

1. Is the Variance request in harmony with the purposed and intent of the Ordinance?

Yes  No

Why:

**Defer to the Planning Commission/Board of Adjustment**

2. Is the Variance consistent with the Comprehensive Plan?

Yes  No

Why:

**Defer to the Planning Commission/Board of Adjustment**

3. Is the property owner proposing to use the property in a reasonable manner not permitted by the Land Use Ordinance?

Yes  No

Why:

The parcels on Bower's Point were drawn in the 1940s before the current setback regulations were in effect. It would be near impossible to construct a new building on the parcel without a variance. We've been diligent to ensure we are in compliance with all of the the Land Use ordinances besides the 2 variances we're requesting.

4. Will the issuance of a Variance maintain the essential character of the locality?

Yes  No

Why:

Most of the surrounding properties do not meet current setback regulations due to the size of the parcels. Our proposed building is very similar to other surrounding buildings that have been built in the last 25 years.

5. Is the need for a Variance due to circumstances unique to the property and not created by the property owner?

Yes  No

Why:

The existing building is also 60' from OHW so we are not building any closer to the lake than the structure already is. In fact, only a very small portion of the proposed building is 60' from OHW and it has less square footage within the 75' setback than the existing building & deck.

6. Does the need for a Variance involve more than economic considerations?

Yes  No

Why:

Economic considerations did not play into our need for a variance, but rather the desire to use the parcel in a similar way as the existing structure & neighbors.



City of Crosslake Planning Commission/Board of Adjustment

FINDINGS OF FACT

SUPPORTING / DENYING A VARIANCE REQUEST

*A Variance may be granted by the Planning Commission/Board of Adjustment when it is found that strict enforcement of the Land Use Ordinance will result in a “practical difficulty” according to Minnesota Statute Chapter 462. The Planning Commission/Board of Adjustment should weigh each of the following questions to determine if the applicant has established that there are “practical difficulties” in complying with regulations and standards set forth in the Land Use Ordinance.*

1. Is the Variance request in harmony with the purposes and intent of the Ordinance?

Yes                      No

Why:

2. Is the Variance consistent with the Comprehensive Plan?

Yes                      No

Why:

3. Is the property owner proposing to use the property in a reasonable manner not permitted by the Land Use Ordinance?

Yes                      No

Why:

4. Will the issuance of a Variance maintain the essential character of the locality?

Yes          No

Why:

5. Is the need for a Variance due to circumstances unique to the property and not created by the property owner?

Yes          No

Why?

6. Does the need for a Variance involve more than economic considerations?

Yes          No

Why: