

#3 Oneida Co Stacks Bay Redecking

State of Wisconsin
 Department of Natural Resources
dnr.wi.gov

Motorized Recreation Grant Application

For: (choose all that apply)

Form 8700-159 (R 02/2024)

Page 1 of 5

ATV/UTV Trail Aid

Snowmobile Trail Aid

Due Date: April 15

Notice: Completion of this form is required under Wisconsin Statutes 23.09(26) and 23.33. Failure to complete this form will result in denial of financial assistance. Personally identifiable information found on this form is not intended to be used for any other purpose. The Department of Natural Resources (DNR) may provide this information to requesters as required by Wisconsin's Public Records law (ss. 19.31 – 19.39, Wis. Stats.).

Instructions: Applications may combine more than one source of funds. They may be submitted for consideration of traditional ATV, UTV, Snowmobile and Motorized Stewardship funding. Submit one copy of all forms and attachments. See Page 2 for necessary attachments. Send applications to your [Community Services Specialist](#).

DNR Use Only	
Category	Number

Section 1: Applicant Information

Applicant / Organization Name			Check Recipient: Individual other than authorized individual to act on behalf of the applicant. <input checked="" type="checkbox"/> Select if the same as applicant.		
Oneida County Forestry Department					
Individual Authorized to Act on Behalf of Applicant per Resolution			Check Recipient Name (Name to Appear on Check)		
Eric Rady -			Eric Rady -		
Title			Title		
Assistant Forestry Director			Assistant Forestry Director		
Address			Address		
PO Box 400-Court House, 2nd Floor, Room # B206			PO Box 400-Court House, 2nd Floor, Room # B206		
City	State	ZIP Code	City	State	ZIP Code
Rhinelanders	WI	54501	Rhinelanders	WI	54501
Telephone Number		Email Address			
(715) 369-6234		erady@oneidacountywi.gov			

Section 2: Project Information Required for all Projects

Project Title					Current Funded Miles	New Miles (if applicable)
Redeck Stacks Bay Bridge					431.6	
County	Township	Range	Section	¼ ¼	¼	GPS Coordinates:
Oneida	39 N	7	18	NW	NE	Lat. 45.8755 Long. -89.6616

Project Description Summary

The stacks bay bridge was built in 1988 on NHAL State Forest Lands over the Minocqua Thoroughfare. The wear course on this bridge was replaced back in 2009 and is currently in extremely poor condition and needs another wear course as soon as possible. This 184-foot by 10-foot wide wood bridge is on the main funded Trail 17 Corridor.

The project will consist of the old wear course being removed and hauled to a dump with a new 2" hardwood deck (likely white or red oak) installed to the sub-deck and screwed down with a 4-inch hex lag head.

I certify that all maintenance land use agreements are on file.

Estimated Cost

Maintenance	Acquisition	Insurance	Development	Bridge Rehab.	Trail Rehab.	Total Estimated Cost
				\$19,615.00		\$19,615.00
Leave Blank – DNR Use Only						

Applicant Certification

Printed Name of Authorized Official	Official's Title
Eric Rady	Assistant Forestry Director

As the applicant's authorized official, I certify that, to the best of my knowledge, the information in this application is true and correct.


 Signature of Authorized Official

4-10-2024
 Date Prepared

Appendix A – Required for Bridge Rehab/Replace, New, or Reroute with New Bridge

Bridge Rehab/Replace New Bridge Reroute with new bridge

County Oneida	Township 39 N	Range 7	<input type="radio"/> E <input type="radio"/> W	Section 18	¼ ¼ NW	¼ NE	GPS Coordinates: Lat. 45.8755 Long. -89.6616
Water Body Name Minocqua Thoroughfare				Bridge Name Stacks Bay Bridge		County Inventory Number	
Funded Trail Name or Number (SNARS if applicable) Corridor 17				Has this bridge site ever received development or rehabilitation funds in the past? <input checked="" type="radio"/> Yes <input type="radio"/> No Year: 2009 \$ 9,000.00			
Bridge is located on: <input type="radio"/> Private property <input checked="" type="radio"/> Public property				Old Bridge/Culvert Size _____		New Bridge/Culvert Size _____	
Landowner Where Bridge is Located State on both sides				Telephone Number (715) 892-0095		Length of Trail Use Agreement (5 year minimum) State - Perpetual	
Current maximum load 20,000 lbs.		Age of Bridge 36		Bridge Material All wood			
Sponsoring Club Name Cross Country Cruisers				Club Contact Jerry Wesner		Telephone Number (608) 698-3054	
Do you have your trail bridges posted as to maximum load? <input type="radio"/> Yes <input checked="" type="radio"/> No				What is the maximum load of the other bridges on the system if groomed with this bridge? Vera creek bridge on Rux Road rated for 25,000lbs			
What is the weight of your puller & drag/grading equipment? 23,700 total							
What other recreational trail uses are planned for this bridge? No other uses besides walking or fishing.							
If there are other Recreational uses planned, how much of the bridge cost will be paid for by non-snowmobile or non-ATV users? -0-							

- Yes No Have you contacted your local [DNR Water Management Specialist \(WMS\)](#) regarding a permit?
- Yes No Is a permit needed? (Please provide any written correspondence from WMS.)
- Yes No Have you contacted your County Zoning Dept. regarding a floodplain determination?
- Yes No Will an H & H (hydrologic and hydraulic) study be required?

Bridge Project Detailed Description

The original bridge was permitted but no permit is needed for this redecking project.

Appendix A (continued)

Summarize Costs in Appropriate Categories:

Bridge Structure

	Quote 1	Quote 2
	<input type="radio"/> Steel <input type="radio"/> Wooden	<input type="radio"/> Steel <input type="radio"/> Wooden
Bridge Dimensions:	_____	_____
Bridge Manufacturer:	_____	_____
Design Weight Load	_____ lbs.	_____ lbs.
Cost of Structure:		
1. Engineering	\$ _____	\$ _____
2. Structure	\$ _____	\$ _____
Subtotal	\$ _____	\$ _____

	Quote 1	Quote 2
	<input type="radio"/> Contractor or <input type="radio"/> Sponsor Estimate	<input type="radio"/> Contractor or <input type="radio"/> Sponsor Estimate
Installation Costs:		
1. Engineering	\$ _____	\$ _____
2. Site Preparation	\$ _____	\$ _____
3. Abutments	\$ _____	\$ _____
4. Pilings/Piers	\$ _____	\$ _____
5. Approaches	\$ _____	\$ _____
6. Riprap	\$ _____	\$ _____
7. Labor	\$ _____	\$ _____
8. Equipment Rental	\$ _____	\$ _____
9. Culverts	\$ _____	\$ _____
10. H & H Study	\$ _____	\$ _____
11. Wetland Delineation	\$ _____	\$ _____
12. Other _____	\$ _____	\$ _____
Subtotal	\$ _____	\$ _____
Total Cost	\$ _____	\$ _____

For the application grant, you must take the lowest of the two quotes.

Entire Deck and Railing Projects Contractor Sponsor Club

Bridge Dimensions:	184' x 10'
Design Weight Load	_____ lbs.
1. Materials	\$ 13,915
2. Labor	\$ 5,700
Total	\$ 19,615

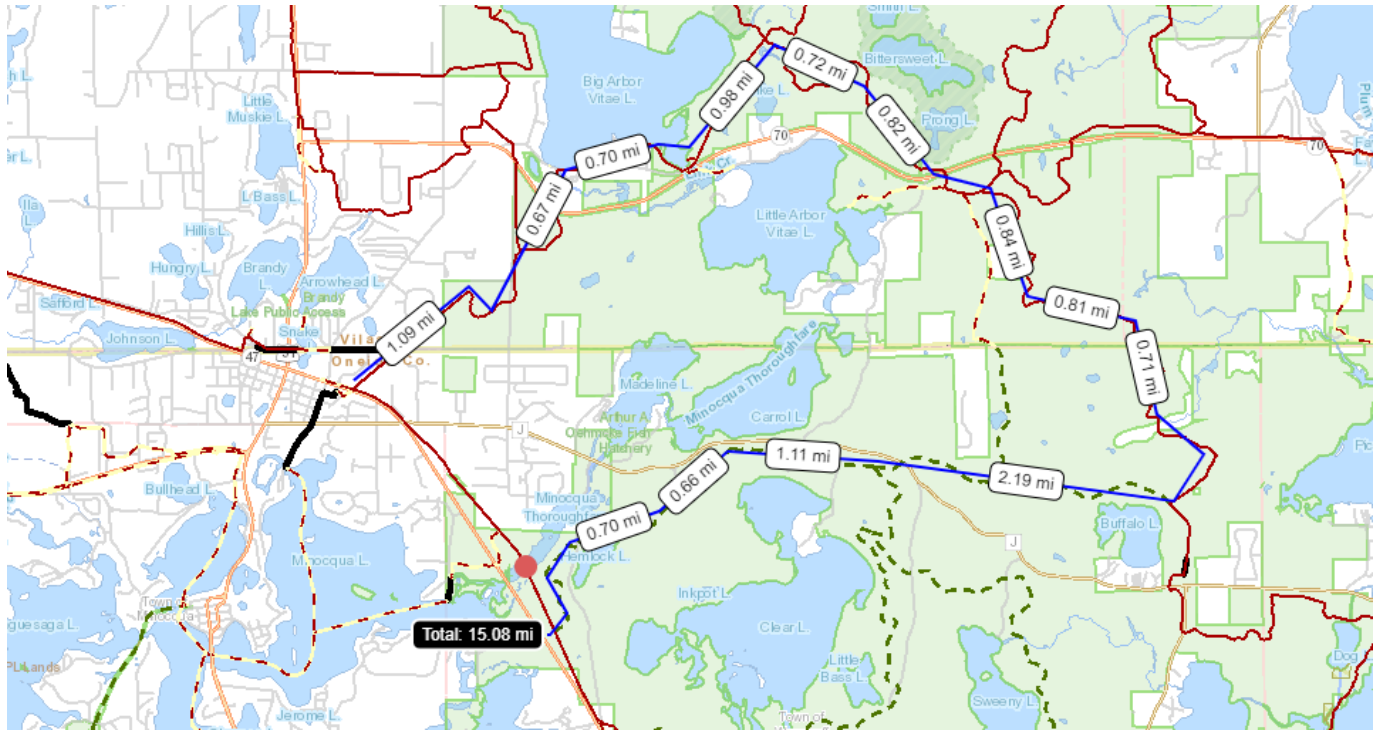
Guidelines for Applicant

Complete this form for each bridge structure you are submitting a grant application for. Provide any additional documents not requested on application checklist to substantiate your points, including actual deeded easements.

Category		Possible Points	Actual Points
1	Condition of the Structure (max of 10 points)		
	Has a certified bridge inspection report that supports the project & demonstrates need (see example, must provide copy of report by August 1 for 2024 only)	10	10
2	Permits (maximum points 4)		
	Consultation with DNR Water Mgmt Specialist has occurred & permit is likely, if needed	1	X0
	Permit in hand / Bridge already permitted	3	3
3	Funding (maximum points 2) Are other funds already committed?		
	50% or greater from other funding source(s)?	2	—
	11% - 49% from other funding source(s)?	1	
4	Length of Written Easements or Land Use Agreement (max points 5)(ch. 23.09(26)(am)1 WI Stats)		
	On public land (County, State, Federal)	5	5
	10 or more year deeded easement on private land or other public land, for <u>all portions of that trail to the nearest road on each side of the bridge</u>	5	
	3-9 year deeded easement on private land or other public land, for <u>all portions of that trail to the nearest road on each side of the bridge</u>	4	
	10 or more year deeded easement on private land or other public land, for <u>just the bridge site</u>	3	
	3-9 deeded easement on private land or other public land, for <u>just the bridge site</u>	2	
	10 or more year land use agreement (LUA, not deeded) on private land or other public land	1	
	3-9 year land use agreement (LUA, not deeded) on private land or other public land	0	
5	Miles Impacted – How many miles will need to rerouted if the structure is not replaced? Measured from nearest intersection on both sides of the bridge. (max 4 points)		
	Less than 20 miles	1	
	20 miles or more	3	3
	No other snowmobile trails connect. Explain: <i>The bridge already exists,</i>	4	X??
DEDUCTIONS			
6	County Active Project Deduction (maximum deduction 1 point) A snowmobile active project is one that has exceeded it's initial grant period.		
	Two or more active projects - deduct 1 point	-1	—
GRAND TOTAL			

Comments/Notes: *A reroute around the bridge would cost much more than the redecking project.* XXXXX 21

Ranking Q #5 - Nearest funded re-route/by-pass trail would be 15 miles around to the NE.



EAST PART WOODRUFF

T.39N.-R.7E.



— = FUNDED TRAIL

X = BRIDGE SITE

Williams Realty

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P.O. Box 128 • Highway 51 North • Minocqua, Wisconsin 54548





Redeck Stacks Bay Bridge

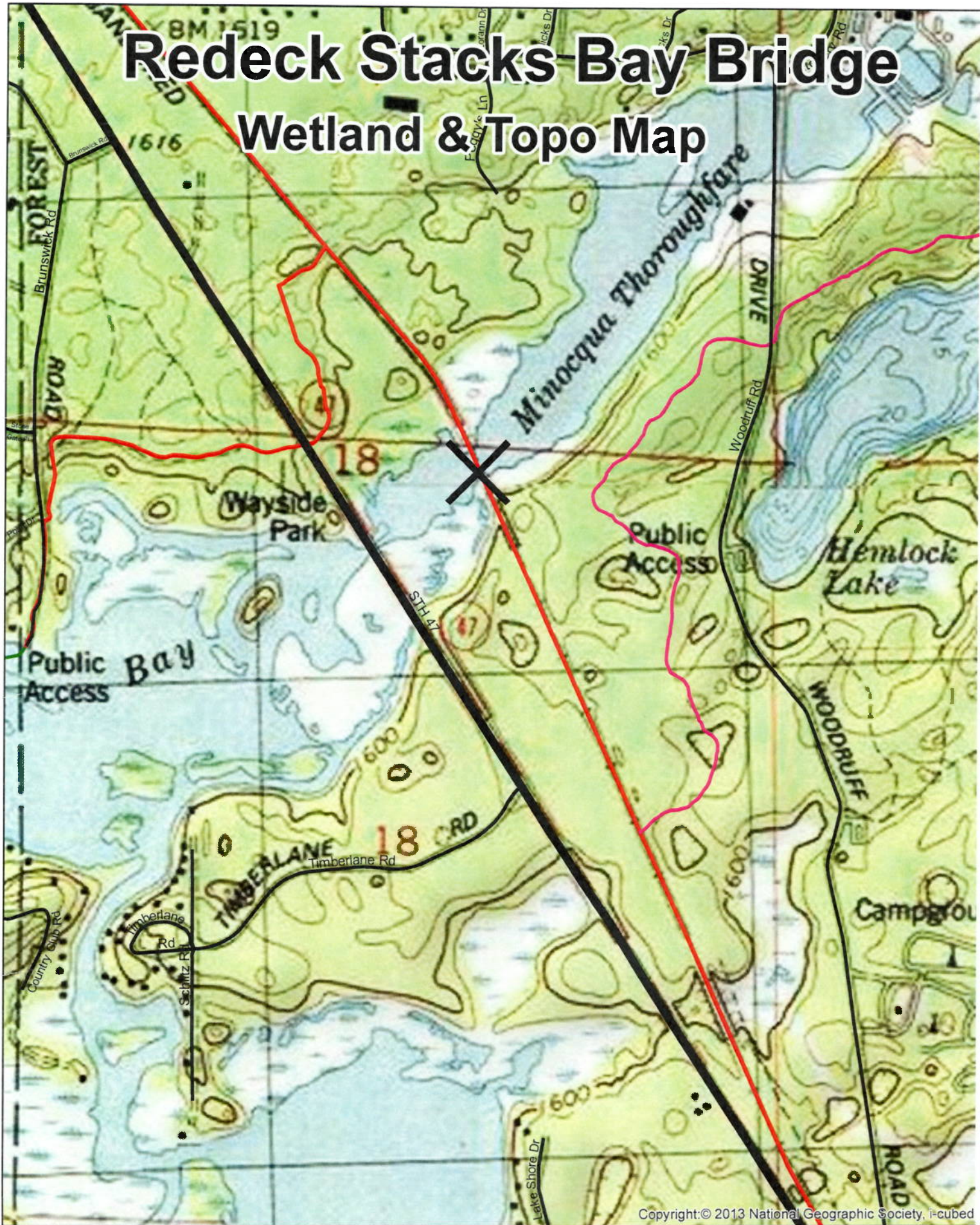
Aerial Photo



X Bridge Site

— Funded Snowmobile Trail

Redeck Stacks Bay Bridge Wetland & Topo Map



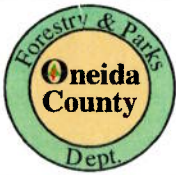
Copyright: © 2013 National Geographic Society, i-cubed



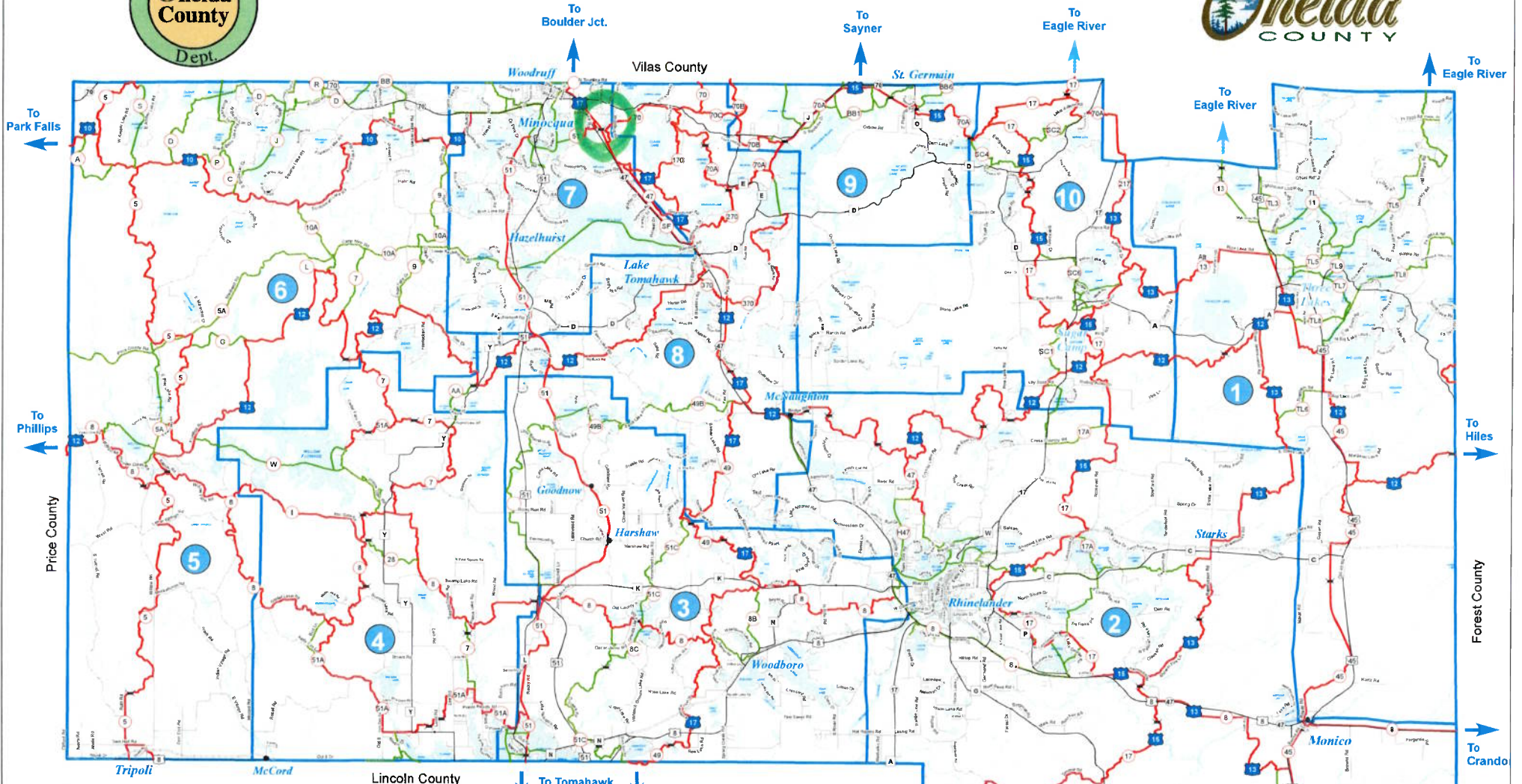
Bridge Site



Funded Snowmobile Trail



ONEIDA COUNTY SNOWMOBILE TRAIL SYSTEM



Legend

Snowmobile Trails

- Funtled Trail
- Club Trail
- State Corridor Trail
- Trail Number
- Water Body
- Public Roads
- Bridges
- Snowmobile Club Boundary
- Railroad
- Federal Highway
- State Highway
- County Highway
- US Forest Service Land

For more detailed snowmobile trail information and/or snowmobile club maps for a specific area, contact the club listed below which corresponds to one of the 10 regions on the map.

<p>1 Three Lakes Trails, Inc. www.threelakes Trails.com www.facebook.com/threelakes Trails</p> <p>2 Hodag Sno-Trails www.hodagsnotrails.com www.facebook.com/hodagsno</p> <p>3 Northwoods Passage www.northwoods passage.com www.facebook.com/nepsstomahawk</p> <p>4 Northern Trails Unlimited www.northern trails unlimited.com www.facebook.com/ntrails snowmobile</p> <p>5 Minocqua Forest Riders www.minocqua forest riders.org www.facebook.com/minocqua forest riders snowmobile club-20355549673059 Previously the Willow Region Sportman's Club</p>	<p>6 Minocqua Forest Riders www.minocqua forest riders.org www.facebook.com/minocqua forest riders snowmobile club-20355549673059</p> <p>7 Cross Country Cruisers www.crosscountrycruisers.com www.facebook.com/cccsnowmobileclub</p> <p>8 New-Tom Sno Fleas www.newtom snow fleas.com www.facebook.com/newtom snow fleas inc</p> <p>9 St. Germain Bo-Boen www.booben.com www.facebook.com/booben</p> <p>10 Sugar Camp www.sugarcamp snowmobile club.org www.facebook.com/sugarcamp snow</p>
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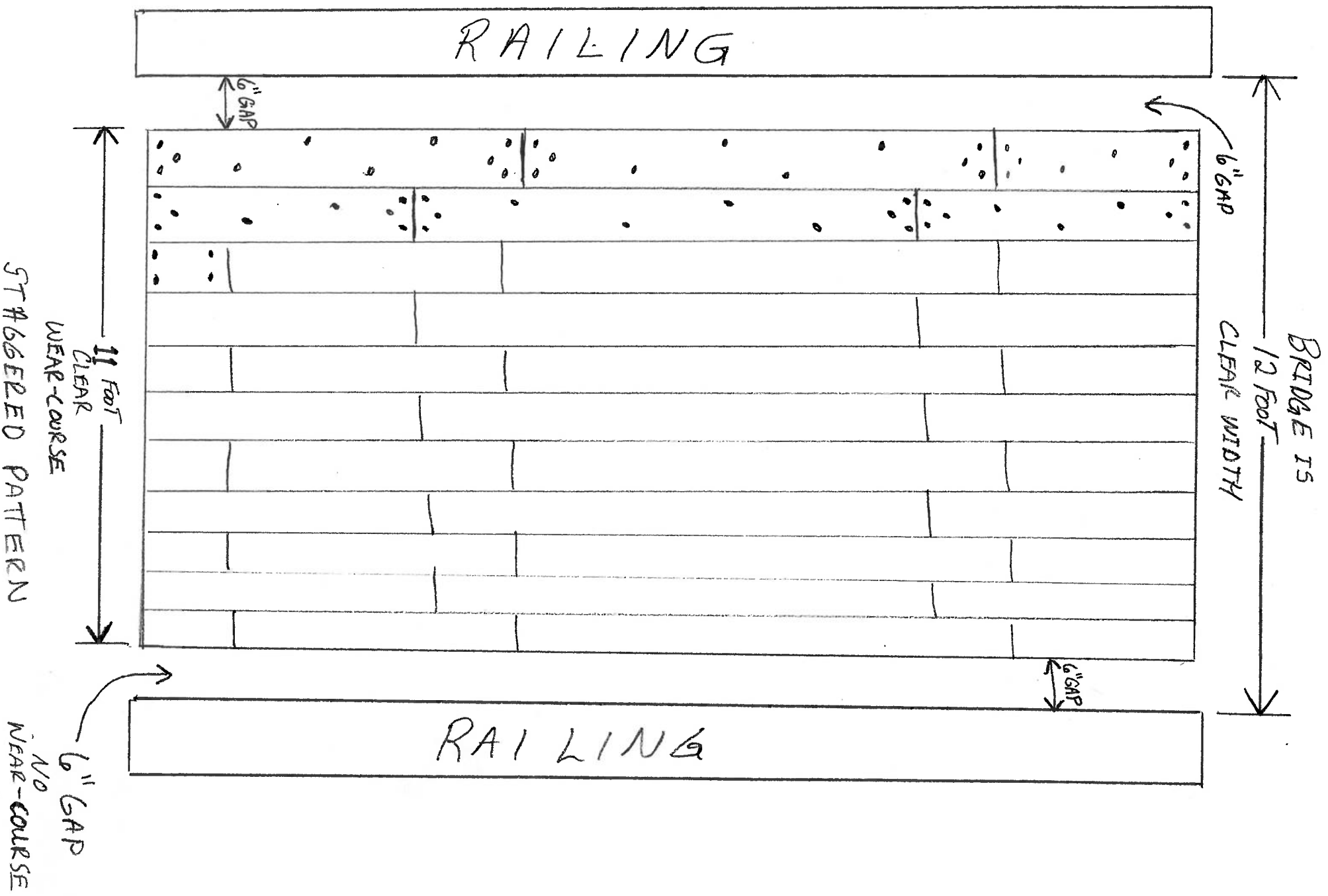
SNOWMOBILE TRAIL MAP DISCLAIMER

The trails depicted on this map traverse a variety of terrain and land ownerships. Due to changes in the physical terrain and land ownership, snowmobile trail locations frequently change. We make an effort to keep these trails up to date; however, we cannot guarantee all changes have been represented on this map. If you discover any discrepancies, please contact:

Oneida County Forestry Department
PO Box 400 - Courthouse
Rhinelander, WI 54501
(715) 968-6140

Updated 1/2022





RAILING

6" GAP

6" GAP

BRIDGE 15
12 FOOT
CLEAR WIDTH

11 FOOT
CLEAR
WEAR COURSE
STAGGERED PATTERN

6" GAP

RAILING

6" GAP
NO
WEAR COURSE



Trail Bridge Inspection

Oneida County

Bridge Name

Stacks Bay

Inspected By:

William S. Knaack Jr, P.E.

William S. Knaack III

Rebecca Knaack

03/30/24

Prepared By

KBIS, LLC



Bridge # Stacks Bay



W7218 Hickory Lane
Phillips, WI 54555
wm.kbis@gmail.com
715.820.0095

Bridge Inspection Report

General Information

The structure in this report was inspected by certified Wisconsin Department of Transportation Bridge Inspectors. Inspectors are Bridge Inspection Team Leaders and NSTM certified inspectors.

The bridge was inspected with trail use in mind, using normal vehicle bridge standards to determine the condition of the structure.

All recommendations made in the report are also considering the use of the trail. Trail bridges in general should have a load rating considering all the possible uses of the structure. Even though the bridges may be just for snowmobiles, several types of vehicles may use the structure. A load rating is provided in conjunction with this report.

Location information/General Description:

Located just South Woodruff adjacent to STH 47. Access is approx. 1/2 mile South of bridge on STH 47. North of Timberlane Rd.
45.875501, -89.661718

Bridge Condition

Condition State (CS) 1-Good, CS2-Fair, CS3-Poor, CS4-Critical

Pilings have CS2 minor decay at waterline, some brooming of the exterior growth, minor checks throughout. Each pier has one set of 2 boards or cross bracing. The very south pier has split plank on the South side of the pier. The timber has minor CS2 decay.

All the object markers are CS3 damage.

Railings all have CS3 section loss on top rail from weathering. 2 sections have either broken plank or poor repair.

Wearing surface was covered with snow, the deck has a longitudinal plank sacrificial surface with transverse actual 3inch x 12 inch planks, Western Species. **The wearing surface is 100% past its useful service life.** The transverse planks appeared to have CS2, to early CS3 decay when sounding them. There was lots of moisture in the top and the sounding was a soft thud. The transverse planks on the bottom appear to be solid and in good shape. There also appears to be no transverse planks lifting or shifting.

Outside girders have CS2 section loss from weathering. Girders are actual 4in x 12in solid sawn.

There was a tag on the pile cap that showed 1985 as a date for the preservative.

Pile Caps and Abutments were good. The South abutment has fill coming out from under the backing boards. I fully recommend grouting the bottom of both abutments to hold the fill and prevent further problems.

There is a set of steps and fishing pier on the SW corner of the bridge.



W7218 Hickory Lane
Phillips, WI 54555
wm.kbis@gmail.com
715.820.0095

The bridge ahead signs were in good shape.
Slope protection and drainage were good.

Length 184 ft, Width 10.0, 12.0 ft, and 10 plus feet clearance on stream.

8 Piers (3 piles per bent, SP), 9 Spans, Timber Girder (5 Girders, 28 inches C-C) 10 ft outside to outside,
Western Species.

Most spans are 20+/- ft center of bearing to center of bearing. Each pile cap is 14 inches wide. 1 span is 24.0 ft.
Inside of curb to inside of curb is 10.0ft.



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715.820.0095

Bridge Inspection Report

Report Summary

NBI Ratings: 9-7 Good, 6-5 Fair, 4-3 Poor, 2-1 Critical, 0-Closed

Deck	# 6
Superstructure	# 6
Substructure	# 6
Channel	# 8

Overall Condition Fair

Recommendations/Maintenance Items:

Recommend doing a load rating if this structure has anything other than groomer crossing it. Checking the groomer load would not hurt either, as machines are getting bigger and the bridges are not.

Cut the brush around the entire structure at the stumps. Bridges are like houses, they need to breathe.

Grout the bottom of the South abutment, and evaluate the North abutment at the same time as the backing boards did not extend properly into the ground.

Replace the South cross bracing plank with same size, #1 or better grade, with proper treatment.

Fix the conduit on the ends as the cable is exposed, and replace the clamps on the conduit.

Plan replacement of the longitudinal deck planks. My experience says the transverse planks are good for another cycle of the longitudinal planks. When the longitudinal planks are removed, it will be necessary to inspect the transverse planks at that time and replace with same size, properly treated materials. Safe bet is redo the entire deck with proper size, material grade, and treatment, and be good for 20-30 years when the sacrificial longitudinal planks need to be replaced.

Replace all the Object Markers.

Signed By:

Digitally signed by
William S. Knaack Jr., P.E.
Date: 2024.03.31
09:55:18 -05'00'

William S. Knaack Jr., P.E.

Bridge Inspection Report

Photo Observations



Looking East