

Motorized Recreation Grant Application

For: (choose all that apply)

Form 8700-159 (R 04/22)

Page 1 of 5

Due Date: April 15

- ATV/UTV Trail Aid
 Snowmobile Trail Aid

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 Iron County Forestry Department			Check Recipient: Individual other than authorized individual to act on behalf of the applicant. <input checked="" type="checkbox"/> Select if the same as applicant.		
Individual Authorized to Act on Behalf of Applicant per Resolution Eric Peterson			Check Recipient Name (Name to Appear on Check) Eric Peterson		
Title Forest Administrator			Title Forest Administrator		
Address 607 3rd Ave N Suite 2			Address 607 3rd Ave N Suite 2		
City Hurley	State WI	ZIP Code 54534	City Hurley	State WI	ZIP Code 54534
Telephone Number (715) 561-2697		Email Address icfadmin@ironcountyforest.org			

Section 2: Project Information Required for all Projects

Project Title 4 Mile Creek Bridge Rehab					Current Funded Miles	New Miles (if applicable)
County Iron	Township 42 N	Range 2	Section 4	¼ ¼ NE	¼ SE	GPS Coordinates: Lat. 46.144769 Long. -90.243481

Project Description Summary

The Iron County Forestry Department proposes to use Force Account to replace the current 12' wide x 20' long snowmobile bridge that is over 4 Mile Creek. This bridge is in poor condition and undersized. Decking also broke off on one side during grooming operations late this winter. The replacement 25,000 bridge will be 12' wide x 30' long with steel beams, treated timbers for decking and run surface and treated lumber railings. It will be placed on native material so no abutments are needed. This bridge is on Iron County Forest land. Additional no snow photos will be submitted at a later date.

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


Estimated Cost

Maintenance	Acquisition	Insurance	Development	Bridge Rehab.	Trail Rehab.	Total Estimated Cost
				\$28,030.00		\$28,030.00
Leave Blank – DNR Use Only						

Applicant Certification

Printed Name of Authorized Official Eric J. Peterson	Official's Title Forest Administrator
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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

4/10/2023
 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 Iron	Township 42 N	Range 2	Section 4	¼ ¼ NE	¼ SE	GPS Coordinates: Lat. 46.144769 Long. -90.243481
Water Body Name 4 Mile Creek			Bridge Name 4 Mile Creek Bridge		County Inventory Number Not in inventory	
Funded Trail Name or Number (SNARS if applicable) 12			Has this bridge site ever received development or rehabilitation funds in the past? <input type="radio"/> Yes <input checked="" type="radio"/> No Year: _____ \$ _____			
Bridge is located on: <input type="radio"/> Private property <input checked="" type="radio"/> Public property			Old Bridge/Culvert Size 12' wide x 20' long New Bridge/Culvert Size 12' wide x 30' long			
Landowner Where Bridge is Located Iron County Forest			Telephone Number (715) 561-2697		Length of Trail Use Agreement (5 year minimum) public land	
Current maximum load	12,000 lbs.	Age of Bridge	Bridge Material			
Proposed maximum load	25,000 lbs.	?	wood			
Sponsoring Club Name Iron County Forest			Club Contact Eric Peterson		Telephone Number (715) 561-2697	
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? 25,000 lbs			
What is the weight of your puller & drag/grading equipment? 17,500 lbs						
What other recreational trail uses are planned for this bridge? None						
If there are other Recreational uses planned, how much of the bridge cost will be paid for by non-snowmobile or non-ATV users?						

- 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 Iron County Forestry Department proposes to use Force Account to replace the current 12' wide x 20' long snowmobile bridge that is over 4 Mile Creek. This bridge is in poor condition and undersized. Decking also broke off on one side during grooming operations late this winter. The replacement 25,000 bridge will be 12' wide x 30' long with steel beams, treated timbers for decking and run surface and treated lumber railings. It will be placed on native material so no abutments are needed. This bridge is on Iron County Forest land. Additional no snow photos will be submitted at a later date.

Appendix A (continued)

Summarize Costs in Appropriate Categories:

Bridge Structure

	Quote 1	Quote 2
	<input checked="" type="radio"/> Steel <input type="radio"/> Wooden	<input checked="" type="radio"/> Steel <input type="radio"/> Wooden
Bridge Dimensions:	<u>12' wide x 30' long</u>	<u>12' wide x 30' long</u>
Bridge Manufacturer:	<u>Iron Co Forestry Force Account</u>	<u>Wheeler Lumber</u>
Design Weight Load	<u>25,000 lbs.</u>	<u>25,000 lbs.</u>
Cost of Structure:		
1. Engineering	\$ _____	\$ _____
2. Structure	\$ <u>18,727</u>	\$ <u>47,315</u>
Subtotal	\$ <u>18,727</u>	\$ <u>47,315</u>

	Quote 1	Quote 2
	<input type="radio"/> Contractor or <input checked="" type="radio"/> Sponsor Estimate	<input type="radio"/> Contractor or <input checked="" type="radio"/> Sponsor Estimate
Installation Costs:		
1. Engineering	\$ _____	\$ _____
2. Site Preparation	\$ _____	\$ _____
3. Abutments	\$ _____	\$ _____
4. Pilings/Piers	\$ _____	\$ _____
5. Approaches	\$ _____	\$ _____
6. Riprap	\$ _____	\$ _____
7. Labor	\$ <u>4,683</u>	\$ <u>3,200</u>
8. Equipment Rental	\$ <u>3,420</u>	\$ <u>3,000</u>
9. Culverts	\$ _____	\$ _____
10. H & H Study	\$ _____	\$ _____
11. Wetland Delineation	\$ _____	\$ _____
12. Other <u>Disposal of old bridge</u>	\$ <u>1,200</u>	\$ <u>1,200</u>
Subtotal	\$ <u>9,303</u>	\$ <u>7,400</u>
Total Cost	\$ <u>28,030</u>	\$ <u>54,715</u>

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

Entire Deck and Railing Projects Contractor Sponsor Club

Bridge Dimensions:	_____
Design Weight Load	_____ lbs.
1. Materials	\$ _____
2. Labor	\$ _____
Total	\$ _____

For use with Recreation Grant Application Forms

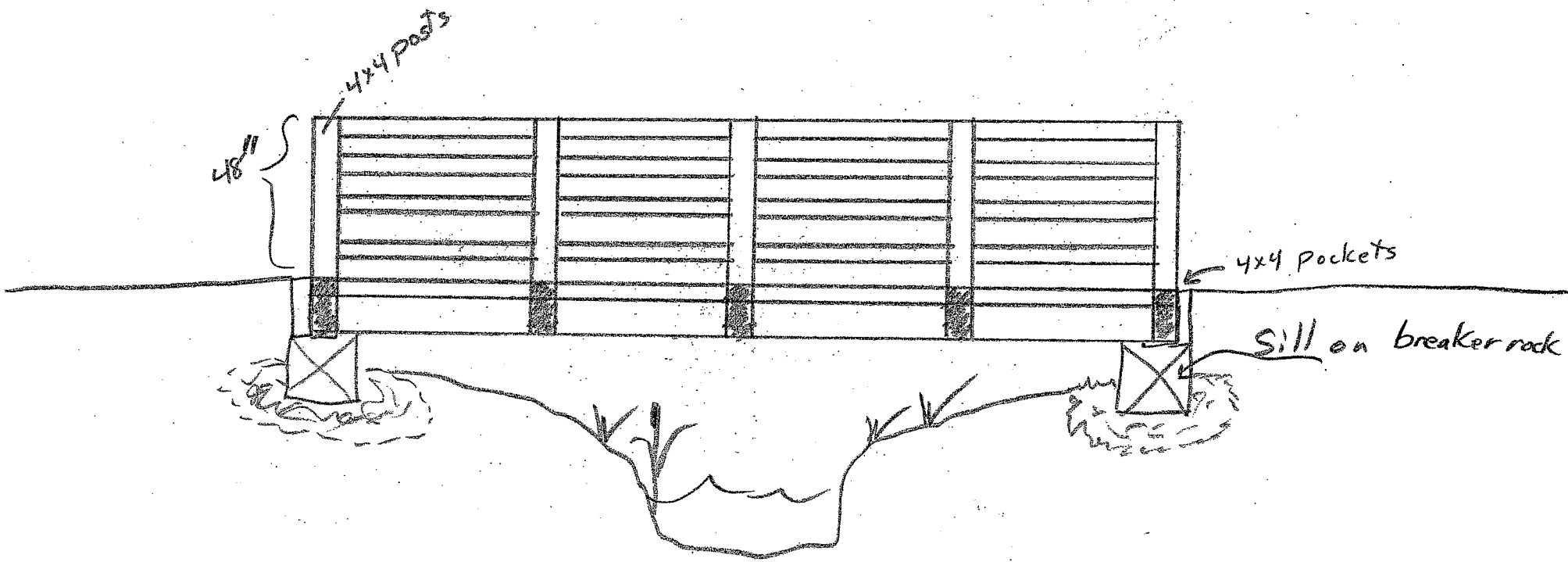
Project Name: 4 Mile Creek Bridge Rehab		Prepared By: Eric Peterson	Date: 04/10/2023
County: Iron	Project Applicant: Iron County Forestry Department	Landowner Name: Iron County Forest	<input checked="" type="radio"/> Public <input type="radio"/> Private

Indicate - (C) Contract , (F) Force Acct., (D) Donated

DEVELOPMENT PROJECT ITEMS <i>List by individual item or break down by Use Areas (See Item List On Back Of This Form)</i>		Quantity	Unit of Measure	Component Costs	Estimated Total Item Cost
(F)	W12x30x30' steel beams	6	ea	\$796.00	\$4,776.00
(F)	W8x18x30' steel beams	2	ea	\$554.50	\$1,109.00
(F)	4"x4"x1/8x20' steel	1	ea	\$208.00	\$208.00
(F)	3/8"x3"x20' steel	5	ea	\$65.80	\$329.00
(F)	3"x12"x12' treated timbers	44	ea	\$140.27	\$6,171.88
(F)	3"x12"x16' treated timbers	7	ea	\$155.52	\$1,088.64
(F)	10"x10x16' treated timbers	4	ea	\$474.00	\$1,896.00
(F)	4"x4"x10' treated lumber	5	ea	\$18.00	\$90.00
(F)	2"x6"x16' treated lumber	22	ea	\$17.00	\$374.00
(F)	nails	1	box	\$85.00	\$85.00
(F)	6" spikes	1	box	\$200.00	\$200.00
(F)	dozer	4	hrs	\$53.00	\$212.00
(F)	labor	180	hrs	\$39.35	\$7,083.00
(F)	welder	20	hrs	\$4.00	\$80.00
(F)	dumptruck	28	hrs	\$60.00	\$1,680.00
(F)	equipment trailer	28	hrs	\$25.00	\$700.00
(F)	excavator	7	hrs	\$52.00	\$364.00
(F)	loader	1	hrs	\$43.00	\$43.00
(F)	pole trailer	2	hrs	\$26.00	\$52.00
(F)	generator/welder	4	hrs	\$18.00	\$72.00
(F)	pickup	7	hrs	\$16.00	\$112.00
(F)	disposal of old bridge	1	ea	\$1,200.00	\$1,200.00
(F)	tracked gator	2	hrs	\$19.00	\$38.00
(F)	ATV trailer	4	hrs	\$15.00	\$60.00
(F)	chainsaw	1	hrs	\$6.50	\$6.50
TOTAL\$					\$28,030.02

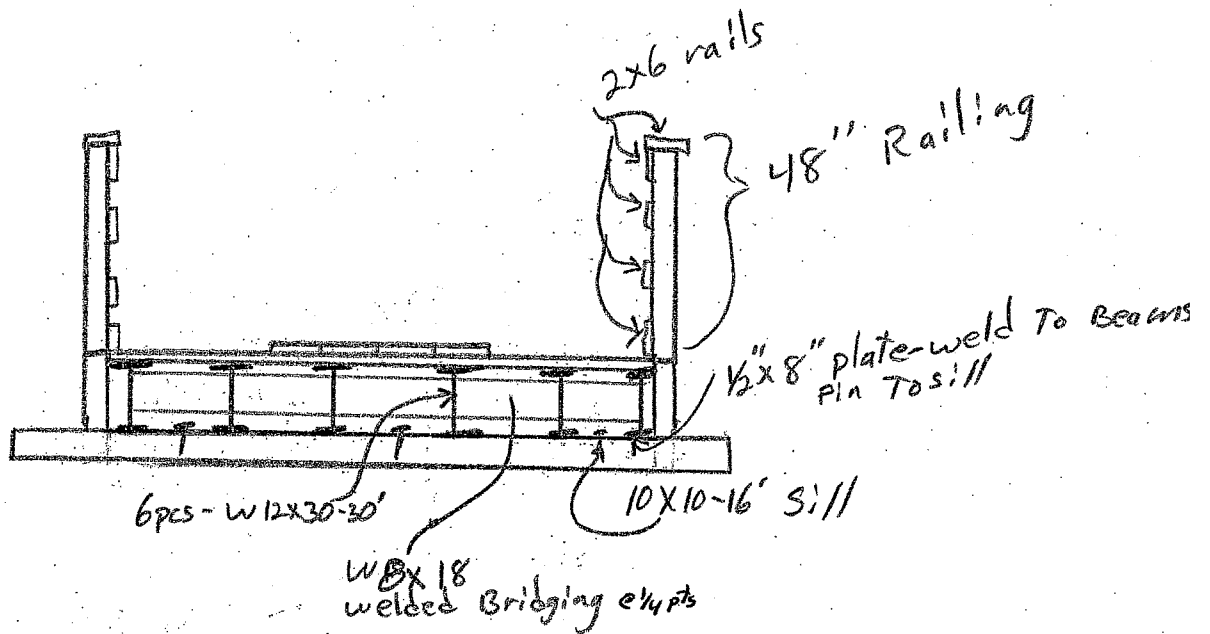
NOTE: For acquisition projects, complete the Acquisition Project Cost Estimate Section

12 x 30' 12 1/2 Ton
4-11-19 TK

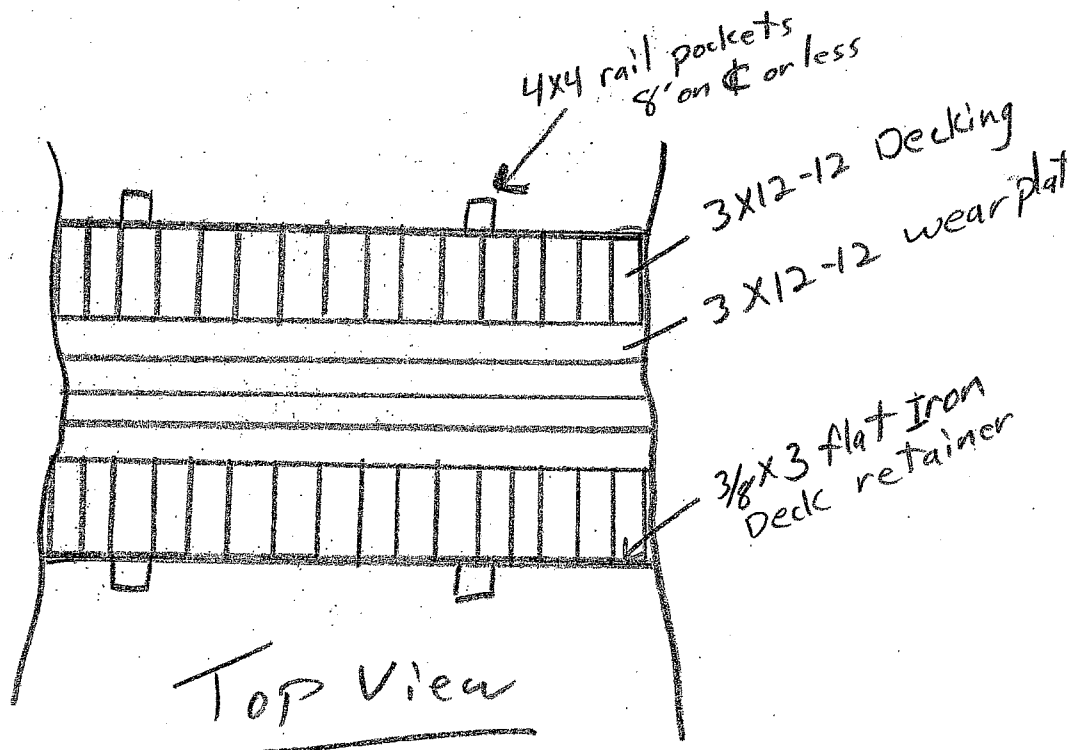


Side View

12' x 30' 12 1/2 Ton
4-11-19 TK



End view



Top view

JOB # 1985

5 BRIDGE DESIGN ALL RECREATIONAL W/ LL @ $12\frac{1}{2}$ TON = 25^k

ALL SIMPLE SPAN 12' WIDE W/ ADEQUATE HANDRAILING WOOD RAIL & WEAIR PLATES.

SIZES RANGE FROM 20' TO 40' (20, 25, 30, 35, 40)

ADEQUATE WOOD IN FIELD BRACING @ $\frac{1}{4}$ POINTS ALONG SPAN BETWEEN EACH OF 6 MEMBERS

APPROX SPACING $\frac{12'}{5 \text{ SPAN}} = 2.4' \approx 29" \pm$

BRIDGING TO BE PIECES OF SAME SIZE BEAM MEMBERS

IMPACT LOADING @ 25% OF ALL WEIGHT LL+DL.

SNOW LOAD @ 60 PSF

BRIDGE DL @ 35 PSF

MAX. LIVE LOAD 25^k (WORST CASE SINGLE AXIAL @ $\frac{1}{2}$) W/ 1.33 INCREASE FWD UNITY 1.0

CALCULATE FULL LOAD MOMENT THEN DIVIDE BETWEEN 5 MEMBERS. $\frac{1}{2}$ OUTSIDE MEMBERS FOR HANDRAIL

@ 20' $M = 12.5^k(10') + \frac{0.095(12)(20')^2}{8} = 182^{k-ft} / 5 = 36.4$

$\frac{6}{5} = 1.2$

@ 25' $M = 12.5^k(12.5') + \frac{1.14(25')^2}{8} = 245.3^{k-ft} / 5 = 49.1$

20% NOT INCLUDED

@ 30' $M = 12.5^k(15.0') + \frac{1.14(30')^2}{8} = 315.75^{k-ft} / 5 = 63.2$

@ 35' $M = 12.5^k(17.5') + \frac{1.14(35')^2}{8} = 393.3^{k-ft} / 5 = 78.7$

@ 40' $M = 12.5^k(20.0') + \frac{1.14(40')^2}{8} = 478^{k-ft} / 5 = 95.6$

$S_x = \frac{36.4(12)}{22} = 19.9 < 21.3$ W 12x19 6@20'

$S_x = \frac{49.1(12)}{22} = 26.8 < 33.4$ W 12x24 6@25'

$S_x = \frac{63.2(12)}{22} = 34.5 < 38.6$ W 12x30 6@30'

$S_x = \frac{78.7(12)}{22} = 42.9 < 45.4$ W 12x35 6@35'

$S_x = \frac{95.6(12)}{22} = 52.1 < 58.1$ W 12x45 or W 16x36 6@40'

56.5

STRESS INCREASE DUE TO L.L. (FULL LENGTH) @ 1.33 ALLOWS 33% IMPACT



PROJECT: Trail 7 & 12 Snowmobile Bridges
Hurley, Wisconsin
Iron County



Wheeler Lumber LLC
Jake Silkey
jsilkey@wheeler1892.com
262.229.4068

BID DATE:

Recreational Timber Panel-Lam Bridge – Trail 7

16' single span x 12' clear roadway.

Superstructure is designed to a 60# pedestrian load and a 25,000 lbs. (H12.5) vehicle loading.

Longitudinal dowel laminated timber deck panels.

42" high horizontal pedestrian railing. Includes 12"x12" timber sills & 3"x12" timber wear course.

Lump Sum Total \$21,995.00

Recreational Timber Panel-Lam Bridge – Trail 12

30' single span x 12' clear roadway.

Superstructure is designed to a 60# pedestrian load and a 25,000 lbs. (H12.5) vehicle loading.

Longitudinal dowel laminated timber deck panels.

42" high horizontal pedestrian railing. Includes 12"x12" timber sills & 3"x12" timber wear course.

Lump Sum Total \$47,315.00

Note:

Price does not include the cost of unloading and installation.

The method and sequence of erection shall be the responsibility of others.

All timber to be Douglas Fir, pressure treated with Copper Naphthenate (QNAP) in Type A Hydrocarbon Solvent in accordance with AWPA P-36 and HSA-14 to meet AWPA UC4B & UC4C.

Includes associated hardware. Hardware to be hot-dipped galvanized or coated to meet ICC AC-257.

Wheeler will include bridge superstructure plans sealed by a Professional Engineer registered in the state of the bridge location. Wheeler will not assume responsibility as Engineer of Record for the project.



111 Willow Street
Colfax, WI 54730
(715) 962-2800
FAX: (715) 962-2801

PROPOSAL

April 4, 2023

To: Iron County Snowmobile Trail Administrator

Re: Snowmobile Bridge Budget

- 1 - **30' x 12' (clear width)** steel truss bridge
 - Design Standards: **AASHTO**
 - Diagonals per Panel: **1**
 - Clear width: **Inside face structural elements at deck level**
 - End Vertical: **Square**
 - Bearings: **Equal Elevations**
 - Steel Grade: **A588/A847 (Unpainted self-weathering)**
 - Deck: **#1 Southern Yellow Pine (.40 MCA)**
 - Safety Rails: **Horizontal (4" opening)**
 - Installation: **Steel piling abutments**
 - Loads: **85 psf live load - 35 psf wind load – 25,000 lbs. vehicle load**
 - FOB: **Iron County, WI**
 - Engineered Drawings State Seal: **Wisconsin**

Price	\$53,000
• Structure (Steel Truss)	\$25,000
• Engineering	\$4,000
• Soil Testing	\$0
• Site Prep	\$5,000
• Abutments	\$12,000
• Labor	\$5,000
• Rip Rap	\$2,000

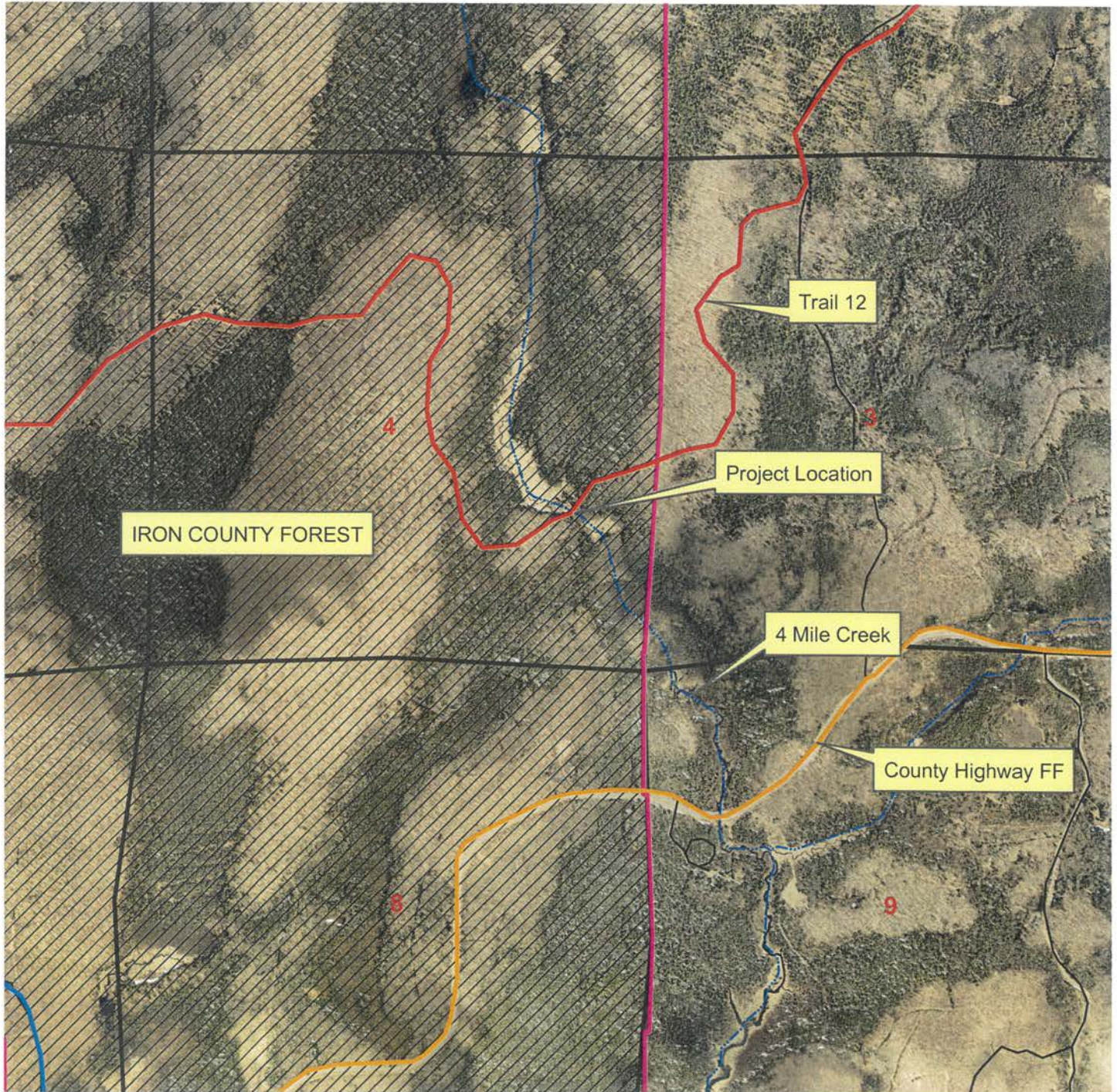
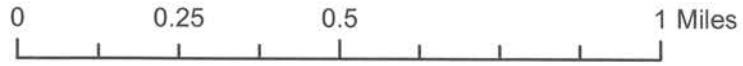
*****This price is for budgetary purposes only*****

Please call with any questions.

Thank you,

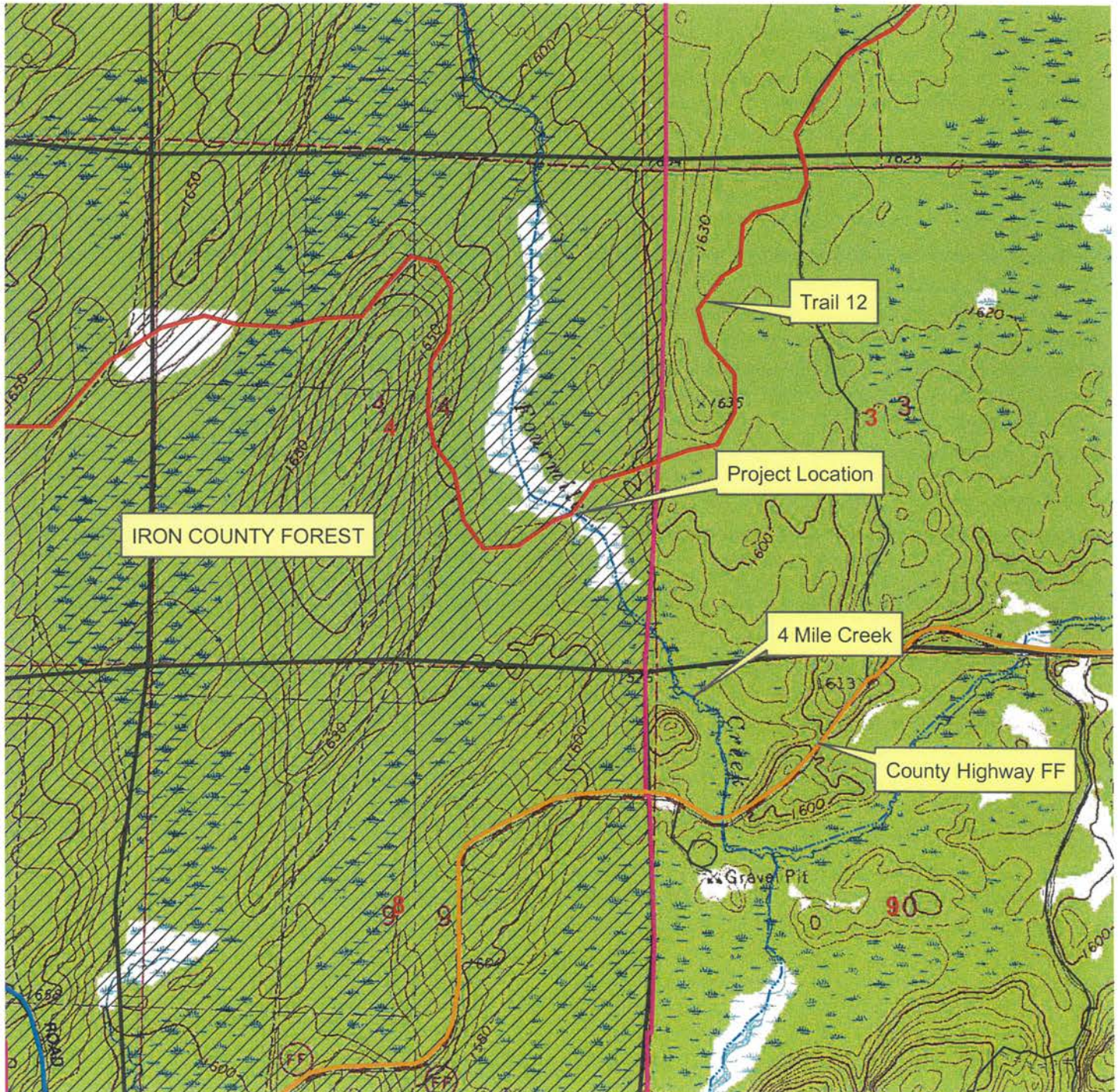
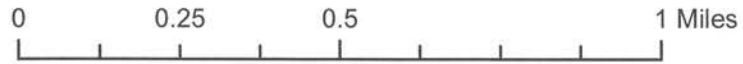
Kory S. Weathers

Iron County Forestry
"Trail 12 4 Mile Creek Bridge"
NE SE, Sec. 4, T42N, R2E
Town of Mercer, Iron County, Wisconsin



Map By: Iron County Forestry

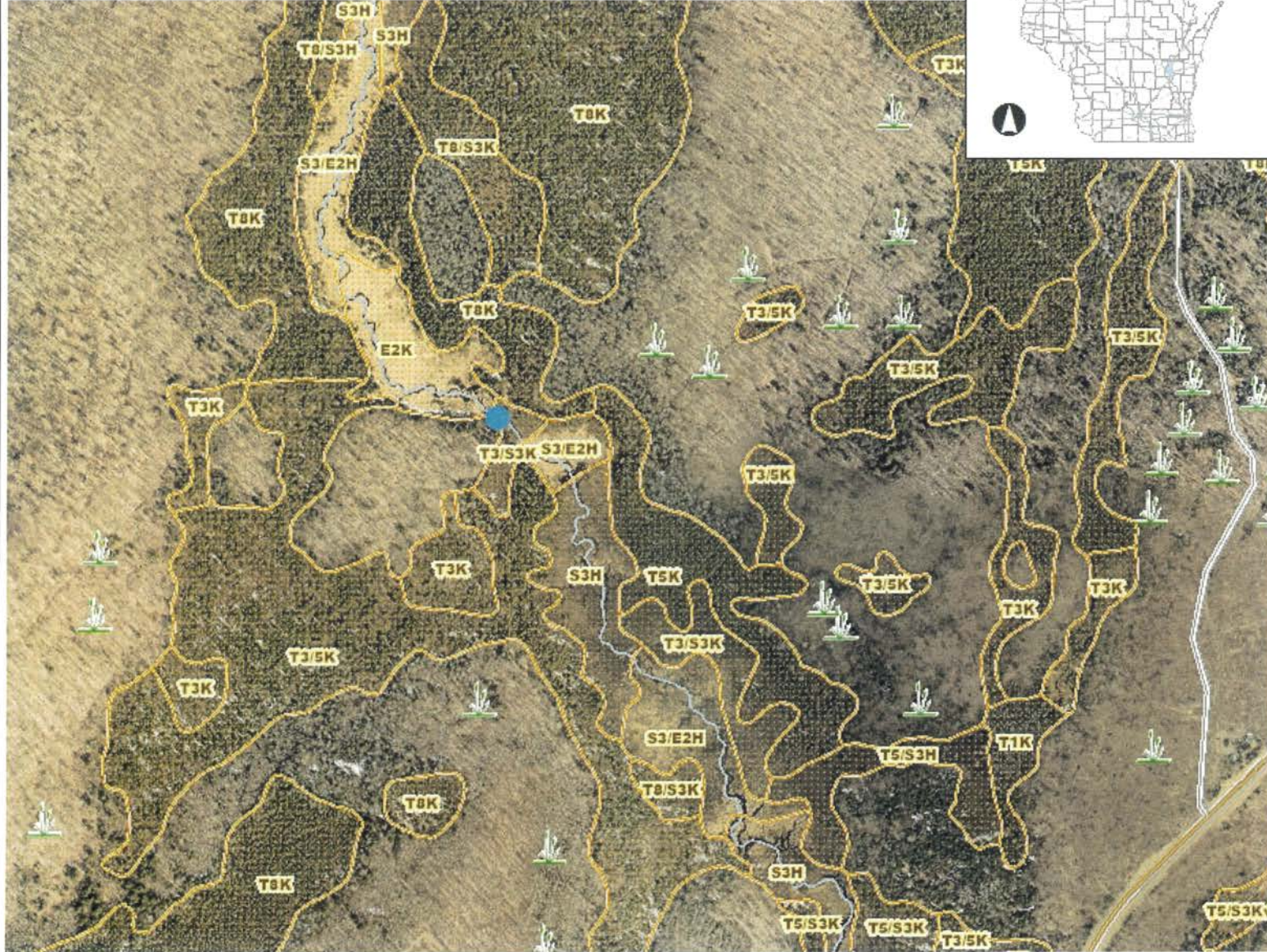
Iron County Forestry
"Trail 12 4 Mile Creek Bridge"
NE SE, Sec. 4, T42N, R2E
Town of Mercer, Iron County, Wisconsin



Map By: Iron County Forestry



Surface Water Data Viewer Map Trail 12 4 Mile Creek Bridge



Legend

- Wetland Class Areas
- Wetland Class Points
 - Dammed pond
 - Excavated pond
 - Filled/draind wetland
 - Wetland too small to delineate
 - Filled excavated pond
- Filled Points
- Wetland Class Areas
- Filled Areas
- Wetland Identifications and Confirmations
- Municipality
- State Boundaries
- County Boundaries
- Major Roads**
 - Interstate Highway
 - State Highway
 - US Highway
- County and Local Roads**
 - County HWY
 - Local Road
- Railroads
- Tribal Lands
- Rivers and Streams**
 - Intermittent Streams
 - Lakes and Open water

0.3 0 0.13 0.3 Miles

NAD_1983_HARN_Wisconsin_TM

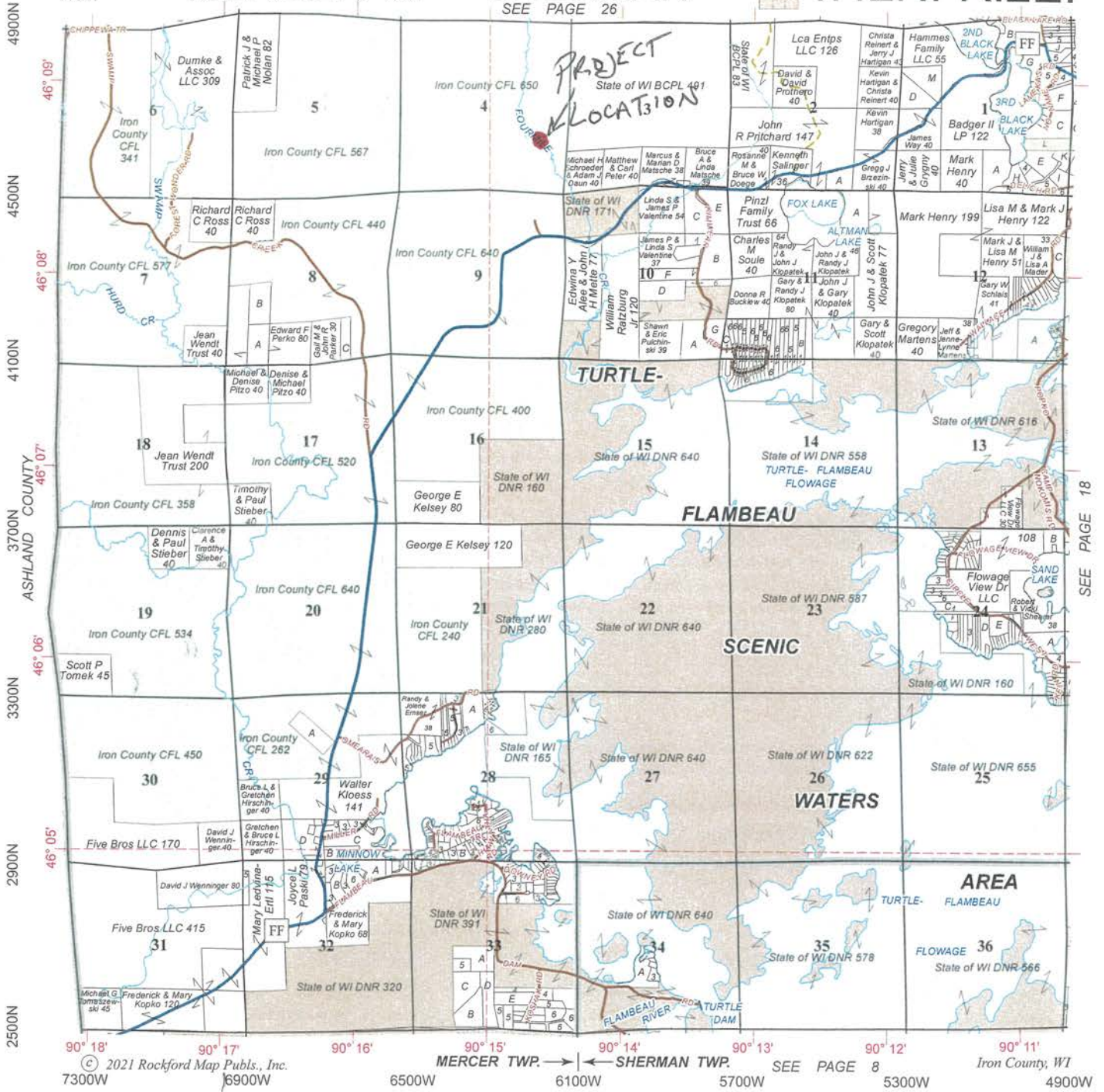
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DISCLAIMER: The information shown on these maps has been obtained from various sources, and are of varying age, reliability and resolution. These maps are not intended to be used for navigation, nor are these maps an authoritative source of information about legal land ownership or public access. No warranty, expressed or implied, is made regarding accuracy, applicability for a particular use, completeness, or legality of the information depicted on this map. For more information, see the DNR Legal Notices web page: <http://dnr.wi.gov/legal/>

Notes

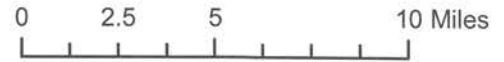
Iron County Forestry

WEST CENTRAL PART MERCER NORTHWEST PART SHERMAN T.42N.-R.2E.
SEE PAGE 26





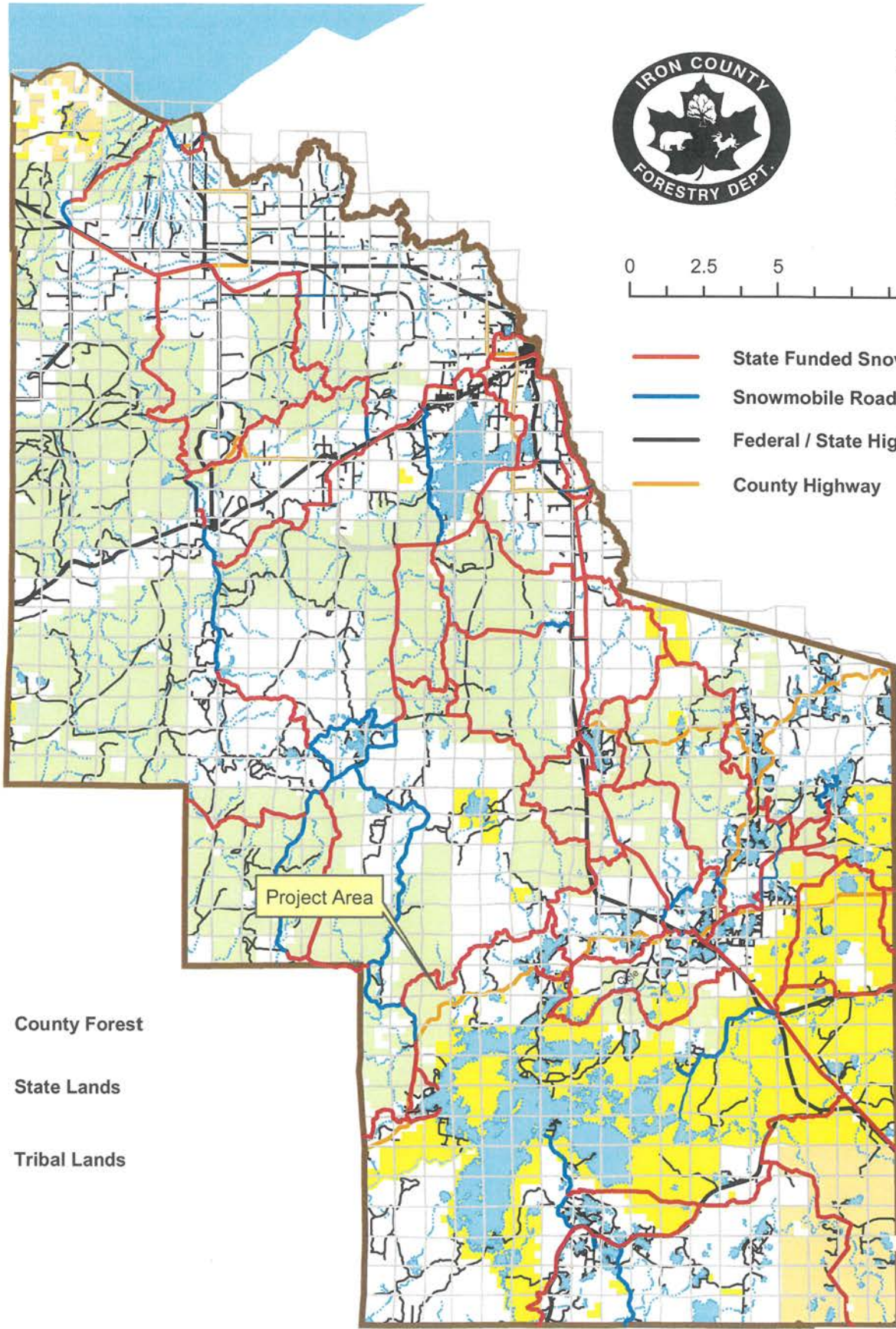
SEE PAGE 18

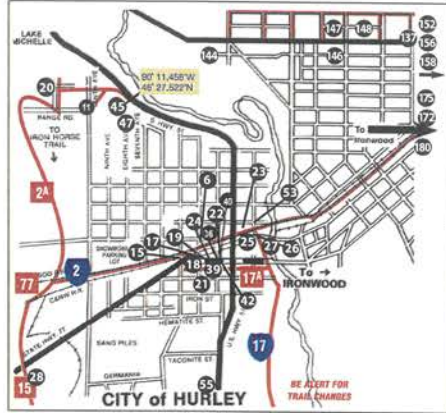
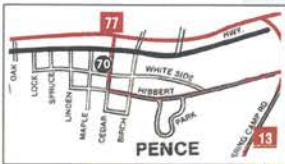
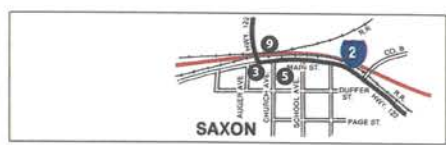
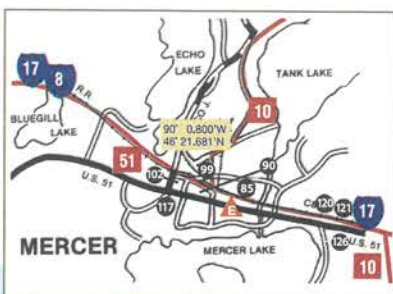
Iron County Forestry "Trail 12 4 Mile Creek Bridge" Iron County Snomobile System



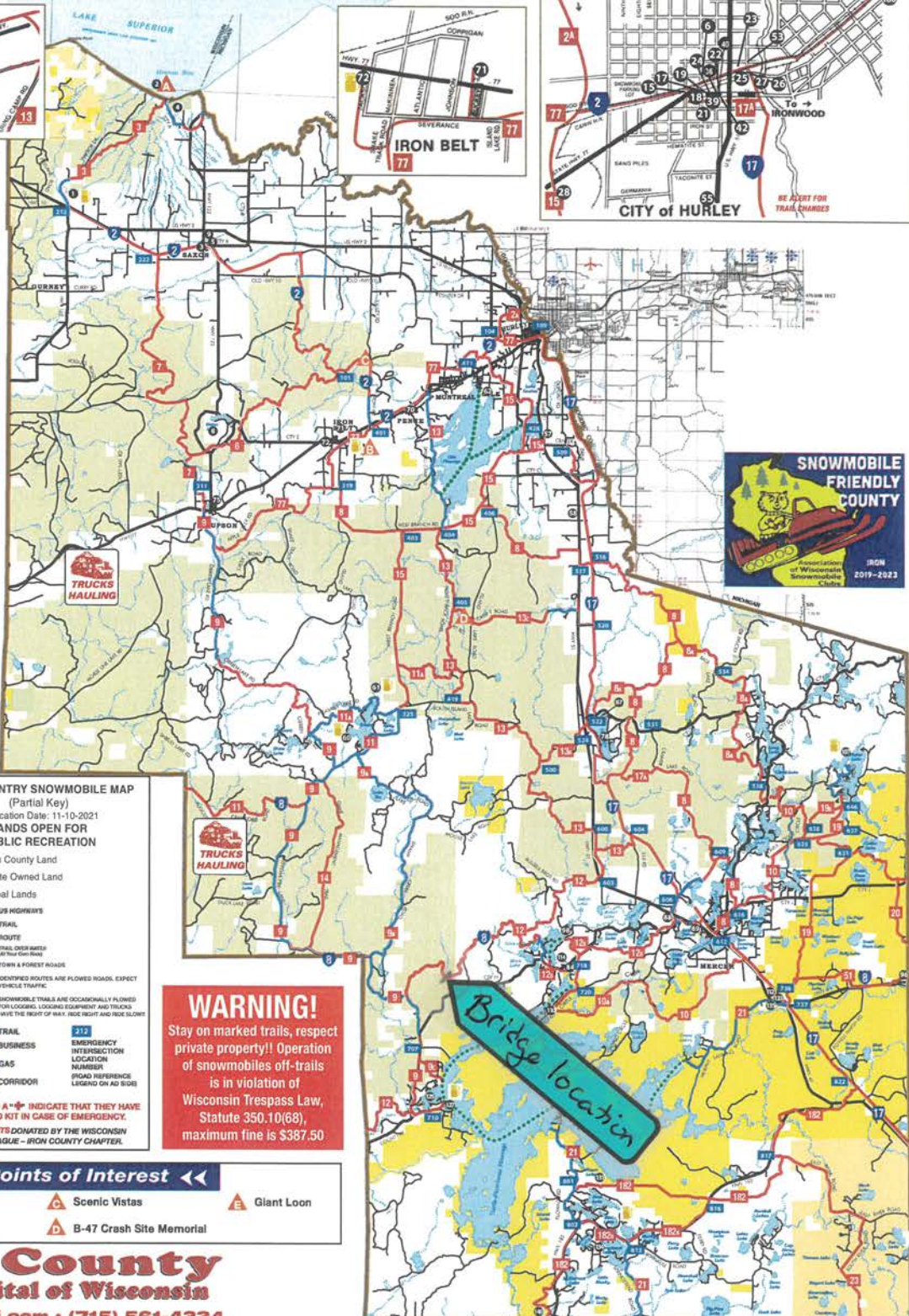
-  State Funded Snowmobile Trail
-  Snowmobile Road Route
-  Federal / State Highway
-  County Highway

-  County Forest
-  State Lands
-  Tribal Lands





EXPECT VEHICLE TRAFFIC ON ALL ROUTES.
Designated trails are occasionally plowed for logging activities, logging equipment and trucks have the Right-of-Way!! Ride right and ride safe on ALL plowed roadways!



IRON COUNTRY SNOWMOBILE MAP
(Partial Key)
Publication Date: 11-10-2021
LANDS OPEN FOR PUBLIC RECREATION

- Iron County Land
- State Owned Land
- Tribal Lands

— US HIGHWAYS
 — TRAIL
 — ROUTE
 - - - TRAIL OVERLAP (See Foot Note)
 — TOWN & FOREST ROADS

* IDENTIFIED ROUTES ARE PLOWED ROADS. EXPECT VEHICLE TRAFFIC!
 * SNOWMOBILE TRAILS ARE OCCASIONALLY PLOWED FOR LOGGING, LOGGING EQUIPMENT AND TRUCKS HAVE THE RIGHT OF WAY. RIDE RIGHT AND RIDE SLOW!

[TRAIL] TRAIL
 [BUSINESS] BUSINESS
 [GAS] GAS
 [CORRIDOR] CORRIDOR

[212] EMERGENCY INTERSECTION LOCATION NUMBER
 [ROAD REFERENCE] LEGEND ON AD SIDE

THE ADS WITH A *+ INDICATE THAT THEY HAVE A FIRST AID KIT IN CASE OF EMERGENCY.
FIRST AID KITS DONATED BY THE WISCONSIN TAVERN LEAGUE - IRON COUNTY CHAPTER.

WARNING!
Stay on marked trails, respect private property!! Operation of snowmobiles off-trails is in violation of Wisconsin Trespass Law, Statute 350.10(68), maximum fine is \$387.50

Bridge location

Scenic Points of Interest

- Saxon Harbor and Lake Superior
- Plummer Mine
- Scenic Vistas
- B-47 Crash Site Memorial
- Giant Loon

Iron County
Snow Capital of Wisconsin
www.hurleywi.com • (715) 561-4334
www.mercercoc.com • (715) 476-2389

WARNING
SNOWMOBILE SPEED LIMIT ON PLOWED TOWN ROADS
25MPH

1. Please respect private property.
2. Use extreme caution on lakes and streams.
3. Carry all waste back and local ordinances.
4. Do not operate snowmobiles on state highways or county roads.
5. Snowmobile routes are routes as designated by local ordinance. Do not use unless posted as a route.
6. Iron County, Iron County Snowmobile Council, White Thunder Riders Snowmobile Club, Mercer Snow-Goers Snowmobile Club, and members and affiliates thereof assume no liability as to trails, machines or individuals.
7. This map is intended as a guide only. The Snowmobile Council assumes no liability relative to accuracy of trail locations and routes.

Non-Resident Snowmobile Stickers Required



Prepared and Distributed by:
IRON COUNTY RECREATIONAL COUNCIL
PO BOX 294 HURLEY, WI 54534
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Map courtesy of Iron County Forestry Department
Printed by Hahn Printing Inc., Eagle River, WI

Downstream



East approach



Existing bridge



Bridge from upstream



Bridge



Upstream



West Approach





TRAIL 12 4 mile Ch
Broken Bridge



TRAIL 12
4 mile Ch Bridge

