#### S-3 Tri Co Pecatonica Bridge 72 Replacement

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

Due Date: April 15

Motorized Recreation Grant Application

For: (choose all that apply)

Form 8700-159 (R 02/2024)

Page 1 of 5

⋈ ATV/UTV 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 inform	nation to	request	ers as re	quired by V	Visconsin	's Public Re	ecords la	w {ss. 1	9.31 – 1	9.39, Wis	s. Stats.}.
Instructions: Applications may co	ombine mo	re than	one so	urce of f	unds. The	y may		1	ONR Us	e Only		
be submitted for consideration of traditional ATV, UTV, Snowmobile Stewardship funding. Submit one copy of all forms and attachments necessary attachments. Send applications to your Community Serv				chments	. See Pag	e 2 for	Category				Number	
Section 1: Applicant Information	n								1			
Applicant / Organization Name							ndividual o	ther tha	n autho	rized in	dividual t	o act
Tri County Trail Commission					on behalf	of the ap	plicant.	X Se	elect if the	ne sam	e as app	licant.
Individual Authorized to Act on Bel	nalf of App	licant pe	er Reso	lution	Check Re	cipient	Name (Na	me to A	ppear o	n Ched	:k)	
Max Blackbourn					Max Bla	ckbourn	1					
Title					Title							
Tri County Trail Coordinator					Tri County Trail Coordinator							
Address					Address							
700 Main Street					700 Main Street							
City		State Z	IP Cod	е	City					State	ZIP Cod	ie
Darlington		WI	535	30	Darlington WI 53530				530			
Telephone Number	E	Email Ac	ddress									
(608) 776-4893	t	trails@l	lafayet	tecount	ywi.org							
Section 2: Project Information	Required	for all F	Project	S								
Project Title						Curren	t Funded I	Miles	New M	iles (if	applicabl	e)
Bridge #72 / DNR #33-005 Rep	olacement	t				B						
County	Township	Range	OE	Section	1/4 1/4	1/4	GPS Coo	rdinate 42.7393				
Lafayette	N		$\bigcirc$ W				Long.	-90.336	177			20
Project Description Summary												

Proposed project is the complete replacement of Bridge #72 aka DNR #33-005 on the DNR owned Pecatonica State Trail in the Village of Belmont.

In a routine bridge inspection conducted by DNR, major deficiencies were found in the wood pilings of the bridge. In order to replace degraded pilings the bridge decking would be removed. Due to the deck having a poured concrete cap, this would ruin the decking, so for the most cost-effective method we would propose replacing the entire bridge structure.

Currently propose a 50/50 split with ATV/UTV and Snowmobile grants.

ATV/UTV @ 50% = \$54,500 Snowmobile @ 50% = \$54,500

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

<b>Estimated Cost</b>							
Maintenance	Acquisition	Insurance	Development		Bridge Rehab.	Trail Rehab.	Total Estimated Cost
					\$109,000.00		\$109,000.00
Leave Blank – DNR Use Only							
<b>Applicant Certif</b>	ication						
				Official's Title			
Max Blackbourn			Tri County Trail Coordinator				

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

#### Motorized Recreation Grant Application

Form 8700-159 (R 02/2024)

Page 3 of 5

Appendix A – Required for	Bridge	Renal	o/Repi	ace	, Ne	w, or f	Reroute	e with New B	ridge
⊠ Bridge Rehab/Replace	☐ Ne	w Brid	ge		] Rei	route wi	ith new l	bridge	
County	Township	Range	OE	Sect	ion !	1/4 1/4	1/4	GPS Coordinate	
Lafayette	N		OM					Lat. 42.739 Long90.33	
Water Body Name					Bridg	e Name			County Inventory Number
Bonner Branch					Brid	ge #72	DNR 3	33-005	#72
Funded Trail Name or Number (SN	ARS if app	licable)	)		Has t	this bridg	ge site ev	er received deve	elopment or rehabilitation funds
Pecatonica State Trail					in the	e past?	O Yes	s   No Y	ear:\$
Bridge is located on: O Private	property				Old E	Bridge/C	ulvert Siz	ze 10' X 42'	
<ul><li>Public p</li></ul>	property				New	Bridge/C	Culvert Si	ize 12' X 50'	
Landowner Where Bridge is Locate	d				Telep	hone N	umber	Length of T	rail Use Agreement (5 year
Wisconsin DNR								Perpetual	minimum)
Current maximum load 25	,000	lbs.	Age of	Bridg	ge	Bridge	Materia	I	
Proposed maximum load25	,000	lbs.	50+			Wood	d pilings	& girders	
Sponsoring Club Name				Clu	ıb Co	ntact			Telephone Number
Tri County Trail Commission				Ma	ax B	lackbou	ırn		(608) 776-4893
Do you have your trail bridges post									idges on the system if
	0	Yes (	No	10			is bridge		andla winter maintenance
What is the weight of your puller &	drag/gradir	ng equip	pment?	ear	uipm	ent and	not hea	ivier summer e	nandle winter maintenance quipment used on the rest of
See note>				the	e trai	1	,		1-1
What other recreational trail uses a	re planned	for this	bridge'	?					
Pedestrian, bicycle									
If there are other Recreational uses	planned, l	now mu	ich of th	e bri	dge c	cost will b	oe paid fo	or by non-snowm	nobile or non-ATV users?
None									
○ Yes    ● No Have you contact	ted your lo	cal DN	R Wate	r Mar	nager	ment Sp	ecialist (V	NMS) regarding	a permit?
Yes									
Yes  No Have you contacted your County Zoning Dept. regarding a floodplain determination?									
● Yes	ydrologic a	and hyd	raulic) s	study	be re	equired?			

#### **Bridge Project Detailed Description**

Proposed project is the complete replacement of Bridge #72 aka DNR #33-005 on the DNR owned Pecatonica State Trail within the Village of Belmont.

In a routine bridge inspection conducted by DNR, major deficiencies were found in the wood pilings of the bridge. In order to replace degraded pilings the bridge decking would be removed. Due to the deck having a poured concrete cap, this would ruin the decking, so for the most cost-effective method we would propose replacing the entire bridge structure.

Currently we are looking at proposing a 12' X 50' arched steel truss bridge by Anderson Bridges pending DNR engineering review & approval. The proposed bridge will sit higher over Bonner Branch and the wood pilings would be removed which would improve flow through the natural channel.

A pre-application meeting will be scheduled in the immediate future with DNR WMS for permitting requirements and piling removal requirements. It is assumed that bridge will require an H&H analysis due to FEMA floodplain designation.

# Motorized Recreation Grant Application Form 8700-159 (R 02/2024) Page 4 of 5

## Appendix A (continued)

Summarize Costs in Appropriate Categories	Summarize	Costs in A	ppropriate	Categories
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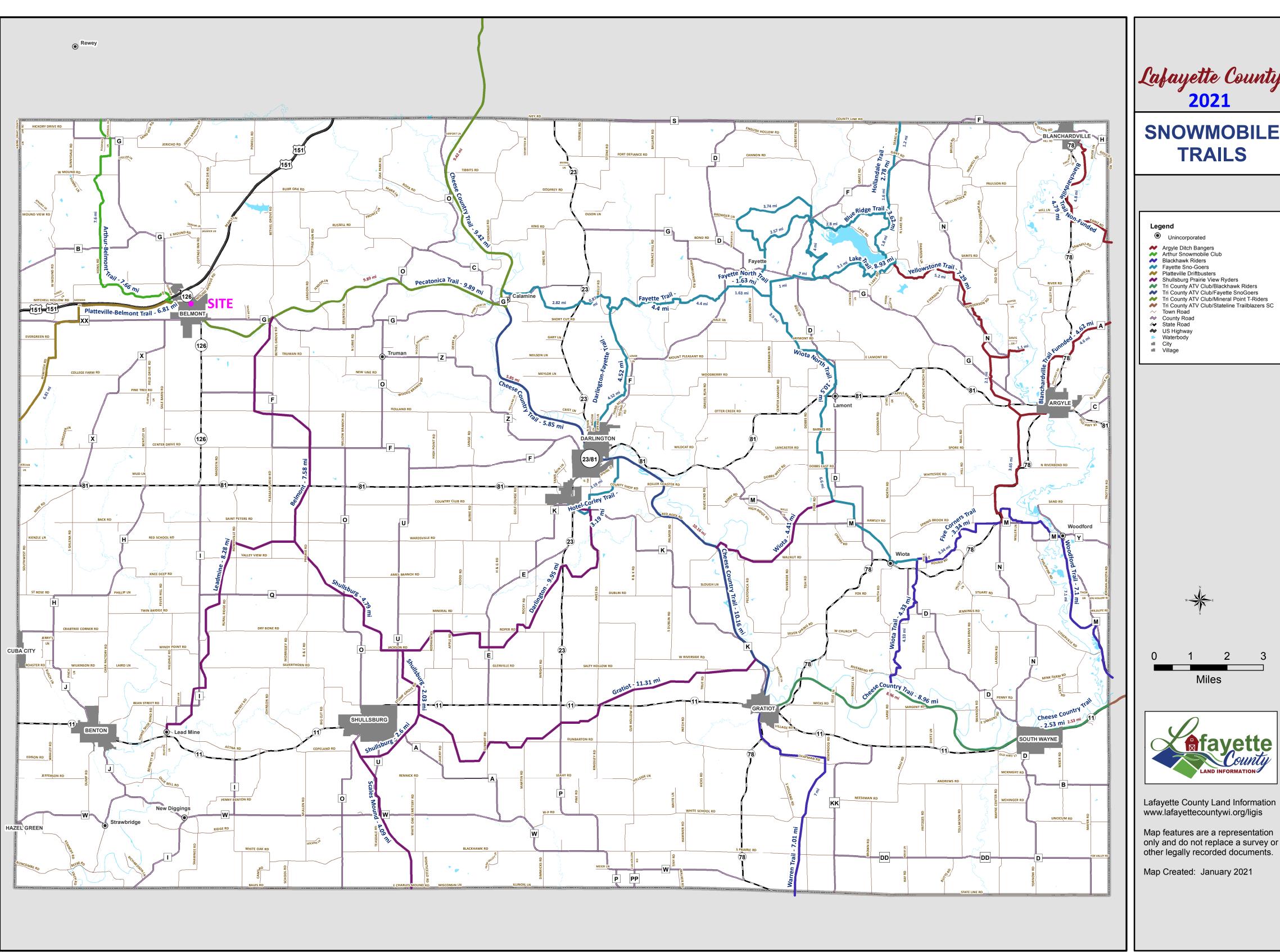
	Bridge Structure	
	Quote 1	Quote 2
	Steel	<ul><li>Steel</li></ul>
Bridge Dimensions:	12' X 50'	12' X 50'
Bridge Manufacturer: Wheeler L	umber LLC	Anderson Bridges
Design Weight Load	25,000 lbs.	
Cost of Structure: 1. Engineering	\$	\$ <u>4,000</u>
2. Structure	\$68,500	\$ <u>43,000</u>
Subtotal	\$ 68,500	\$ 47,000
	Quote 1	Quote 2
•	Contractor or O Sponsor	<ul><li>Contractor or   Sponsor</li></ul>
Installation Costs:	Estimate	Estimate
1. Engineering	\$	\$
2. Site Preparation	\$	\$ <u>20,000</u>
3. Abutments	\$ 9,950	\$ 15,000
4. Pilings/Piers	\$	\$
5. Approaches	\$	\$
6. Riprap	\$	\$ 2,000
7. Labor	\$ 70,000	\$ 10,000
8. Equipment Rental	\$	\$
9. Culverts	\$	\$
10. H & H Study	\$ 20,000	\$ 15,000
11. Wetland Delineation	\$	\$
12. Other	\$	\$
Subtota	I \$ <u>99,950</u>	\$ 62,000
Total Cos	t \$ <u>168,450</u>	\$ 109,000
For the application grant, yo	u must take the lowes	t of the two quotes.
Entire Deck and Railing Projects	<ul><li>Contractor</li></ul>	○ Sponsor ○ Club
Bridge Dimensions:		
Design Weight Load	lbs.	
1. Materials	\$	
2. Labor	\$	
Total	\$	

#### **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	10	10
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	
Permit in hand / Bridge already permitted	3	
3 Funding (maximum points 2) Are other funds already committed?		
50% or greater from other funding source(s)? 50% ATV	2	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 <b>deeded easement</b> on private land or other public land, for all portions of	5	
that trail to the nearest road on each side of the bridge		
3-9 year <b>deeded easement</b> on private land or other public land, for <u>all portions of that</u>	4	
trail to the nearest road on each side of the bridge		
10 or more year <b>deeded easement</b> on private land or other public land, for just the bridge	3	
3-9 <b>deeded easement</b> on private land or other public land, for just the bridge site	2	
10 or more year land use agreement (LUA, not deeded) on private land or other public	1	
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)		
	2 2	
Less than 20 miles	1	1
20 miles or more	3	
No other snowmobile trails connect. Explain:	4	
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		18

Comments/Notes:



# Lafayette County 2021

# **SNOWMOBILE TRAILS**





Miles



Lafayette County Land Information www.lafayettecountywi.org/ligis

Map features are a representation only and do not replace a survey or other legally recorded documents.

Map Created: January 2021

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES

2984 Shawano Avenue Green Bay WI 54313-6727

Tony Evers, Governor Preston D. Cole, Secretary Telephone 608-266-2621 Toll Free 1-888-936-7463 TTY Access via relay - 711



## INSPECTION REPORT FOR

Lafayette County #72 NR-33-005

Pecatonica State Trail over Bonner Branch 2/1/2024



#### **Identification & Location**

Structure No.	NR-33-005	State Division	State Trail
Feature On	Pecatonica State Trail	Location	Just E of Spring St
Feature Under	Bonner Branch	Trail Mile	N/A
Sect/Twn/Rng	14/03N/01E	Latitude	42.73935
Municipality	Belmont	Longitude	90.33596
County	Lafayette	Owner	WIDNR
Year Built	N/A	Maintainer	WIDNR

#### Inspection

Туре	Prior Date	Frequency (mos)
Routine	11/15/2013	
SIA Review		

#### Inspector

Inspector	Number	Date	Completion Time
Matt Roesch	972	5 2/1/20:	24 30 min
Signature Mutt	Posch		
Team Members		_	
Jarrod Schneider			

#### Geometry

Total Width (ft)	10	Clr Deck Width (ft)	10
Total Length (ft)	42	Deck Area (sq ft)	420
Deck Surface Material	Timber		

#### Span(s)

# Spans	Material	Configuration	Length (ft)
3	Timber	Girder	14

Hydraulic

***************************************	
High Water Elevation (f	*******
Q100 (ft <sup>3</sup> /sec)	
Velocity (ft/sec)	**************************************

Capacity

Inventory Rating		Last Rating Date	2.5525						
Operating Rating		Controlling							

Elements	lements Quantity in Condition State								
Element	Defect	Description	UOM	Total	1	2	3	4	Comments
31		Timber Deck	SF	420	17 19 19 19 19 19 19 19 19 19 19 19 19 19	420			
	1150	Checks/Shakes/Cracks/Splits/ Delamination	SF			420			The deck exhibited minor checks.
8514		Concrete Overlay	SF	420		:			Unable to Inspect - Covered in snow
111		Timber Open Girder/Beam	ĹF	84	84				
216		Timber Abutment	LF	20	15		5		
	1140	Decay/Section Loss/Abrasion/Wear	LF				5		There was a gap in the abutment backwall at the northeast corner.
228		Timber Pile	EΑ	20		13	3	4	
	1140	Decay/Section Loss/Abrasion/Wear	EA			13	m		West Abutment: 1 pile CS3 decayed Pler 1W: 1 pile CS3 decayed, 3 piles CS4 decayed Pier 1E: 1 pile CS3 decayed (hollow) East Abutment: 1 pile CS4, Pier Cap not bearing on south pile
235		Timber Pier Cap	Ľ	40	34		6		
	1140	Decay/Section Loss/Abrasion/Wear	LF				6		The pier caps exhibited minor decay. 3' of each end of the Pier cap 1W exhibited moderate decay.
330		Metal Bridge Railing	<b>LF</b>	84	84				

**Assessments** 

Quantity in Condition State

				Quantity in Condition State					
Assessment	Description	UOM	Total	1	2	3	4	Comments	
9001	Drainage - Ends of Structure	EΑ	4	4					
9030	Signs - Object Markers	EA	4	4					
9045	Slope Prot Riprap	EA	2	2					
9250	Crash Walls/Web Walls/Cross Bracing or Struts	EA	2	2					
	Approach Roadway - Concrete (Non- Structural)	EA	2	2					

**NBI Ratings** 

	File	New		
Deck	N/A	7		
Superstructure	N/A	8		
Substructure	N/A	4		
Culvert	N/A	N/A		
Channel	N/A	8		
Waterway	N/A	8		

Culvert	N/A N/A	
Channel	N/A 8	
Vaterway	N/A 8	
Structure Sp	ecific Notes	
Inspection S	pecific Notes	
	<u> </u>	
inspector Si	te-Specific Safety Cons	siderations
		아들이 아마는 그들은 그 아마를 보는 사람은 사람들은 사람들이 되었다. 그는 그는 사람들이 가장 아마는 사람들은 그 나를 받는다.

#### **Maintenance Items History**

Item	Priority	Recommended By	Status Date
Replace decayed piles (7 EA)	High	Matt Roesch	2/1/2024

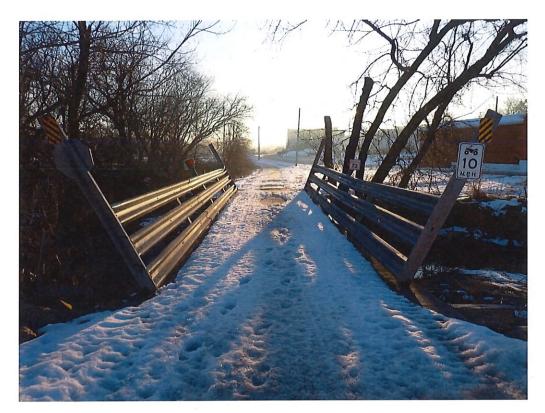
Sketch



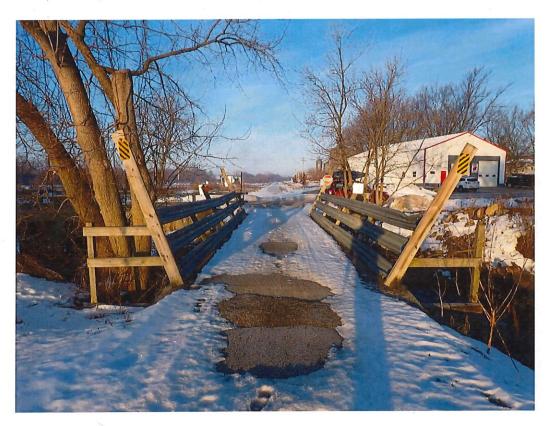
View of north fascia, looking south.



View of south fascia, looking north.



View of west approach, looking east.



View of east approach, looking west.



View of upstream channel, looking south.



View of downstream channel, looking north.



View of west abutment, looking west.



View of east abutment, looking east.



View of typical underdeck, looking east.



View of typical pier, looking east.



View of typical heavily decayed pile, looking west.



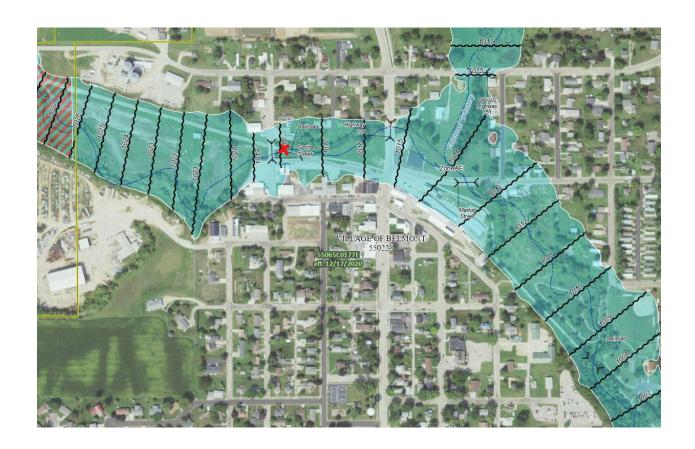
View of gap in east abutment backwall, looking east.



View of pile not bearing on east abutment pier cap, looking east.

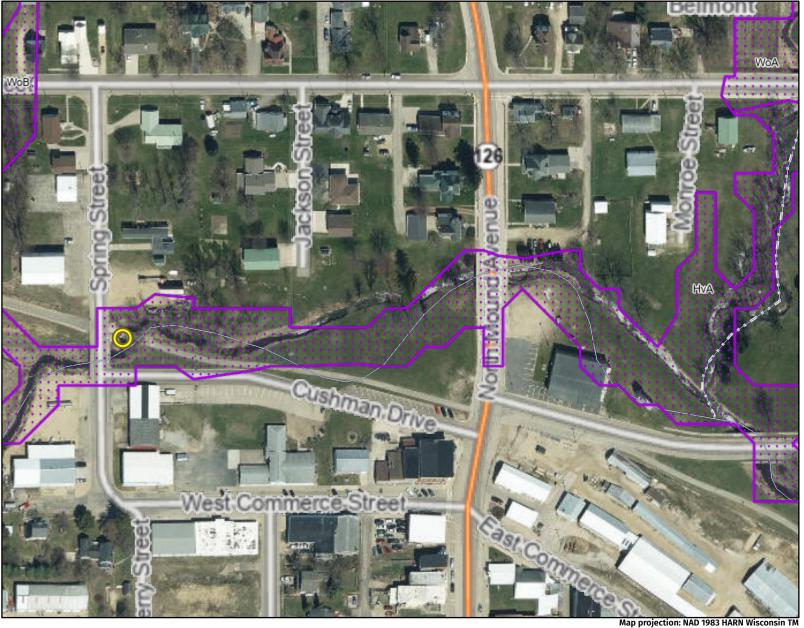


View of pier cap end decay, looking south.





## **Bridge #72/33-005**



Legend: (some map layers may not be displayed)

• • • Wetland Indicators

—— Rivers and Streams

--- Intermittent Streams
24K Intermittent Streams

24K Streams and Rivers

City or Village

County Boundaries

Major Roads

State Highway

**County and Local Roads** 

=== Local Road

Latest Leaf Off Imagery

#### **Notes:**



#### Map: 0 150 300 Feet 0 40 80 Meters

Service Layer Credits:

Latest Leaf Off: , Wetland Indicators & Soils: Surface Water Data Viewer Team, Wisconsin Wetland Inventory NWI (Dynamic): Calvin Lawrence, Dennis Weise, Nina Rihn, Cities, Roads & Boundaries: , Surface Water (Cached): WiDNR, USGS, and other data

#### This map is a product generated by a DNR web mapping applicatio





### RE: Lafayette County Bridge replacement #72 / DNR 33-005

From Jake Silkey <jsilkey@wheeler1892.com>

Date Mon 10/28/2024 3:33 PM

To Max Blackbourn <max.blackbourn@lafayettecountywi.org>

0 1 attachment (264 KB)

T24249 Wheeler Quote 10.28.24.pdf;

Max,

Please find requested budget estimate attached. Please note this is for design and fabrication only. It does not include construction costs, for that see estimate below.

I have assumed a 50' bridge length. Quoted bridge is for a prefabricated steel truss with underhung floor beams to reduce structure depth and increase waterway clearance. This bridge will need to be supported by a legitimate abutment system with piling and rip rap. I have quoted a timber abutment system that will be supported by helical piles, supplied by others.

For total costs I would estimate the following:

Bridge supply: \$68,500 Abutment Supply: \$9,950

Construciton by others (including helical supply): \$70,000

Survey, H&H, Soil Borings: \$20,000

Please let me know if you have any questions.

Sincerely,

Jake Silkey, PE | Sales Engineer – Engineered Products | Wheeler d. 262.229.4068 | jsilkey@wheeler1892.com

PROJECT: Bridge #72 Replacement Pecatonica State

Trail

Prefabricated Steel Truss Bridge

Lafayette, Co. WI



Wheeler Lumber LLC Jake Silkey, PE jsilkey@wheeler1892.com 262.229.4068

**BID DATE:** 

#### **Steel Truss Recreation Bridge**

Bridge Size: 50' x 12' Safety Railing: 42" Horizontal Design Code: AASHTO LRFD **AWS D1.1** Truss Type: Parallel Chord Rail Spacing: **AASHTO** Weld Code: Web: Pratt Rub Rail: Live Load: 90 psf NA NA Vehicle Load: H-12.5 X-Section Underhung Handrail: Shipped as: 1 piece Decking: **Wood Plank** Finish: SP-7

Field Splices: None Species: DFL Coverage: Highly Visible
Lifting Weight: 19,150 lb Preservative: QNAP Bearings: Teflon/Stainless

Item lump sum / ea... \$68,500.00

#### Timber Abutments - 4' Height

Materials include 12"x12" abutment caps, backing planks, support posts, deadman and attaching hardware. Helical pile and attaching hardware to cap to be designed and supplied by 0thers.

#### **Lump Sum Total \$9,950.00**

#### **Additional Notes:**

- Decking shop installed.
- Lifting weight is for fully assembled bridge (decking included).
- Detailed, written instructions in the proper lifting procedures and splicing procedures (if required) will be provided. The method and sequence of erection shall be the responsibility of others.
- Includes a drill and epoxy anchor system (bolts, nuts, washers, and epoxy for normal bearing installation).
- Does not include the cost of unloading, installation, approach railing or substructure design/materials.

Wheeler maintains AISC certification for Intermediate Bridge Fabricator with Fracture Critical Endorsement. The bridge(s) will be fabricated in Wheeler's facility in accordance with our AISC approved Quality Manual. Work will be performed by AWS certified welders, supervised and inspected by Certified Weld Inspectors in accordance with our QC procedures. The Buyer is welcome to visit our facility for shop inspection. Wheeler will notify the Buyer when fabrication is scheduled. Reasonable accommodation will be made to facilitate inspection scheduling, but Wheeler reserves the right to perform work as needed to expedite project backlogs. Any lost production time due to inspection delays not the fault of Wheeler will be billed to the project.



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

## **PROPOSAL**

November 14, 2024

To: Lafayette County Snowmobile Trail Administrator

Re: ATV/Snowmobile Bridge Budget

1 - 50' 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 and/or concrete abutments

• Loads: 85 psf live load - 35 psf wind load - 25,000 lbs. vehicle load

• FOB: Lafayette County, WI

• Engineered Drawings State Seal: Wisconsin

•	Structure (Steel Truss)	\$43,000
•	Engineering	\$4,000
•	Soil Testing	\$0
•	Site Prep	\$5,000
•	Abutments	\$15,000
•	Labor	\$10,000
•	Rip Rap	\$2,000
•	Demolition	\$15,000
•	H&H Study	\$15,000

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

Please call with any questions.

Thank you,

Kory S. Weathers