

#69 Sauk Co Wisconsin River Bridge

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

Motorized Recreation Grant Application

For: (choose all that apply)

Form 8700-159 (R 04/22)

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 Sauk County			Check Recipient: Individual other than authorized individual to act on behalf of the applicant. <input type="checkbox"/> Select if the same as applicant.		
Individual Authorized to Act on Behalf of Applicant per Resolution Jekka Alt			Check Recipient Name (Name to Appear on Check) Sauk County		
Title Parks Operations Coordinator			Title		
Address S7995 White Mound Drive			Address S7995 White Mound Drive		
City Hillpoint	State WI	ZIP Code 53937	City Hillpoint	State WI	ZIP Code 53937
Telephone Number (608) 355-4800		Email Address jekka.alt@saukcountywi.gov			

Section 2: Project Information Required for all Projects

Project Title Great Sauk State Trail & Walking Iron Trail -Wisconsin River Bridge					Current Funded Miles 215.5	New Miles (if applicable)
County Sauk	Township 09 N	Range 6	Section 12	¼ ¼ SW	¼ SE	GPS Coordinates: Lat. 43.265339 Long. -89.727394

Project Description Summary

Sauk County is requesting \$1,000,000 to help fund a snowmobile and pedestrian bridge over the Wisconsin River to connect Dane County's snowmobile and pedestrian trails to Sauk County's snowmobile and pedestrian trails. This bridge would connect the Great Sauk State Trail and Walking Iron Trail, but also connect snowmobile trails from Sauk, Dane, Columbia and Iowa counties.

The current trail, Corridor 21/34, is approximately 0.89 miles in length and travels on a full road route in the Village of Prairie du Sac on County Highway PF/Prairie Street. As a result of being a County Highway, this route/road is plowed every snowfall. It also has street parking and sidewalks on a majority of length of the trail. This trail eventually crosses the Highway 60 bridge to connect with the Columbia County snowmobile trails, through nine city blocks and two busy intersections. As part of this application, approximately 1.55 miles of trail is requested for maintenance funding. The proposed new trail location will allow users to access the bridge, but also access to lodging, food and fuel.

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

Estimated Cost

Maintenance \$465.00	Acquisition	Insurance	Development	Bridge Rehab. \$1,000,000.00	Trail Rehab.	Total Estimated Cost \$1,000,465.00
Leave Blank – DNR Use Only						

Applicant Certification

Printed Name of Authorized Official Jekka Alt	Official's Title Parks Operations Coordinator
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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

04/12/2023
 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 Sauk	Township 09 N	Range 6	Section 12	¼ ¼ SW	¼ SE	GPS Coordinates: Lat. 43.265339 Long. -89.727994
Water Body Name Wisconsin River			Bridge Name N/A		County Inventory Number N/A	
Funded Trail Name or Number (SNARS if applicable) H3			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 _____ New Bridge/Culvert Size 502' x 16'			
Landowner Where Bridge is Located Wisconsin Department of Transportation			Telephone Number (608) 264-7268		Length of Trail Use Agreement (5 year minimum) 10 years	
Current maximum load 0 lbs.		Age of Bridge N/A		Bridge Material Weathering steel		
Proposed maximum load 25,000 lbs.						
Sponsoring Club Name Honey Creek Snowmobile Club			Club Contact Greg Sprecher		Telephone Number (608) 393-2504	
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? The Sauk 26 bridge holds 25,000 lbs.			
What is the weight of your puller & drag/grading equipment? Approximately 22,500 lbs.						
What other recreational trail uses are planned for this bridge? Pedestrian and bicycle						
If there are other Recreational uses planned, how much of the bridge cost will be paid for by non-snowmobile or non-ATV users? Approximately 90%, or \$9,000,000						
<input checked="" type="radio"/> Yes <input type="radio"/> No Have you contacted your local DNR Water Management Specialist (WMS) regarding a permit? <input checked="" type="radio"/> Yes <input type="radio"/> No Is a permit needed? (Please provide any written correspondence from WMS.) <input checked="" type="radio"/> Yes <input type="radio"/> No Have you contacted your County Zoning Dept. regarding a floodplain determination? <input checked="" type="radio"/> Yes <input type="radio"/> No Will an H & H (hydrologic and hydraulic) study be required?						

Bridge Project Detailed Description

If kept in the same location, the current trail may need to be lengthened due to housing or business expansion in the future, however, it is the desire of the Village of Prairie du Sac to relocate this snowmobile trail due to complaints. Although the Village is fully aware and supportive of this bridge project, if they were to remove snowmobile access from the current route, and this bridge project would not occur, snowmobile users would have to travel approximately 40 miles to cross the Wisconsin River in Spring Green. Regarding easements, snowmobiles will travel along road right-of-way for less than two village blocks before having to travel on private property. The subsequent landowner has granted a 10-year land use agreement for snowmobile use. This is a mandatory reroute of Corridor 21, connecting Dane and Sauk counties over the Wisconsin River. Both counties are on board with this project and have agreed that Sauk County will be the sole Motorized Recreation Grant applicant for this bridge project. According to Sam Landes, on the Dane County side, there is a Rails to Trails application in progress, as well as 5 smaller sub structures that will need rehabilitation. It is the assumption that Dane County would apply for funding for a portion of the decking and railing, as well as 0.5 miles for a new mileage request. The current estimated cost for the design, engineering, structure and construction is estimated at \$9,739,335. Sauk County is requesting approximately 10% of the project cost, as snowmobiles are estimated to participate in approximately 10% of the use of the bridge as a normal average. Due to the magnitude of this project, only one estimate has been calculated from the engineer. In conclusion, this bridge will create a significantly safer crossing for snowmobile traffic and connect multiple counties together.

Appendix A (continued)

Summarize Costs in Appropriate Categories:

Bridge Structure

	Quote 1	Quote 2
	<input checked="" type="radio"/> Steel <input type="radio"/> Wooden	<input type="radio"/> Steel <input type="radio"/> Wooden
Bridge Dimensions:	504' x 16'	_____
Bridge Manufacturer:	To be determined via public bid	
Design Weight Load	25,000 lbs.	_____ lbs.
Cost of Structure:	1. Engineering	\$ 1,234,525
	2. Structure	\$ _____
	Subtotal	\$ 1,234,525

	Quote 1	Quote 2
	<input checked="" 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	\$ 1,261,250	\$ _____
3. Abutments	\$ 1,734,610	\$ _____
4. Pilings/Piers	\$ 2,433,425	\$ _____
5. Approaches	\$ _____	\$ _____
6. Riprap	\$ 75,040	\$ _____
7. Labor	\$ _____	\$ _____
8. Equipment Rental	\$ _____	\$ _____
9. Culverts	\$ _____	\$ _____
10. H & H Study	\$ _____	\$ _____
11. Wetland Delineation	\$ _____	\$ _____
12. Other Super structure + deck	\$ 3,000,485	\$ _____
	Subtotal \$ 8,504,810	\$ _____
	Total Cost \$ 9,739,335	\$ _____

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 \$ _____

Guidelines for Applicant

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

Category		Possible Points	Actual Points
1	Permits (maximum points 10)		
	Consultation with DNR Water Mgmt Specialist has occurred and permit is likely	5	5
2	Project Location (maximum points 10)		
	Project is located on public land	10	10
	Project is located on private land	5	
3	Funding (maximum points 5) Are other funds already committed?		
	50% or greater from other funding source(s)?	5	5
	11% - 49% from other funding source(s)?	3	
4	Length of Written Easements (max points 17)(ch. 23.09(26)(am)1 WI Stats)		
	On public land (County, State, Federal) (with a written agreement)	17	17
	20 years or more on private land or other public land	15	
	10-19 years on private land or other public land	12	
	6-9 years on private land or other public land	10	
	3-5 years on private land or other public land	5	
5	Type of Trail (maximum points – 10)		
	Corridor trail	10	10
	Non-corridor trail	8	
6	Miles Impacted – How many miles will need to be rerouted if the structure is not replaced? (maximum points – 20)		
	1-5 miles	5	5
	6-10 miles	10	
	Over 10 miles	15	
	Unable to Reroute. Explain:	20	
7	Long term Cost of Structure (maximum points - 25) Calculate total application cost / number of miles impacted = cost per mile.		
	\$1,000 - \$2,500/mile	25	
	\$2,501 - \$5,000/mile	20	
	\$5,001 - \$10,000/mile	15	
	\$10,001 - \$20,000/mile	10	
	\$20,000 and over	5	5
	DEDUCTIONS		
8	County Active Project Deduction (maximum deductions 10 points) A snowmobile active project is one that has exceeded it's initial grant period.		
	One active project - deduct 5 points	-5	
	More than one active project - deduct 10 points	-10	
9	Incomplete Application Deduction (Identified by CSS)	-10	
	Optional Additional Points		
10	County Coordinator Priority Points (10 pts per County)	10	10
GRAND TOTAL			67



Old rail bridge



Old rail bridge



UTION
AND DEEP DROP-OFFS
NOT ADVISED

Old rail bridge



Old rail bridge, with proposed snowmobile route (in red)



Old rail bridge

Current +
Funded Route
21



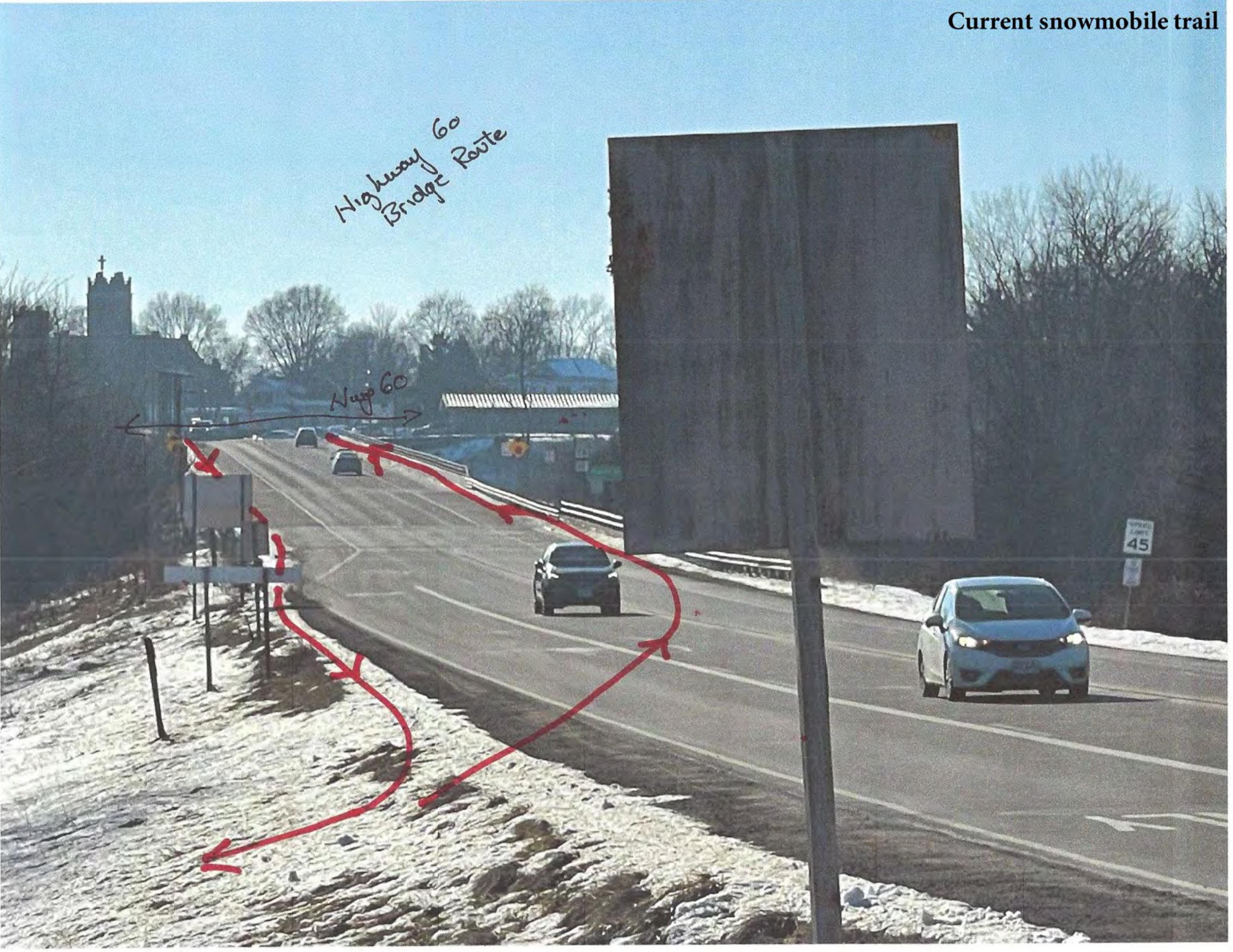
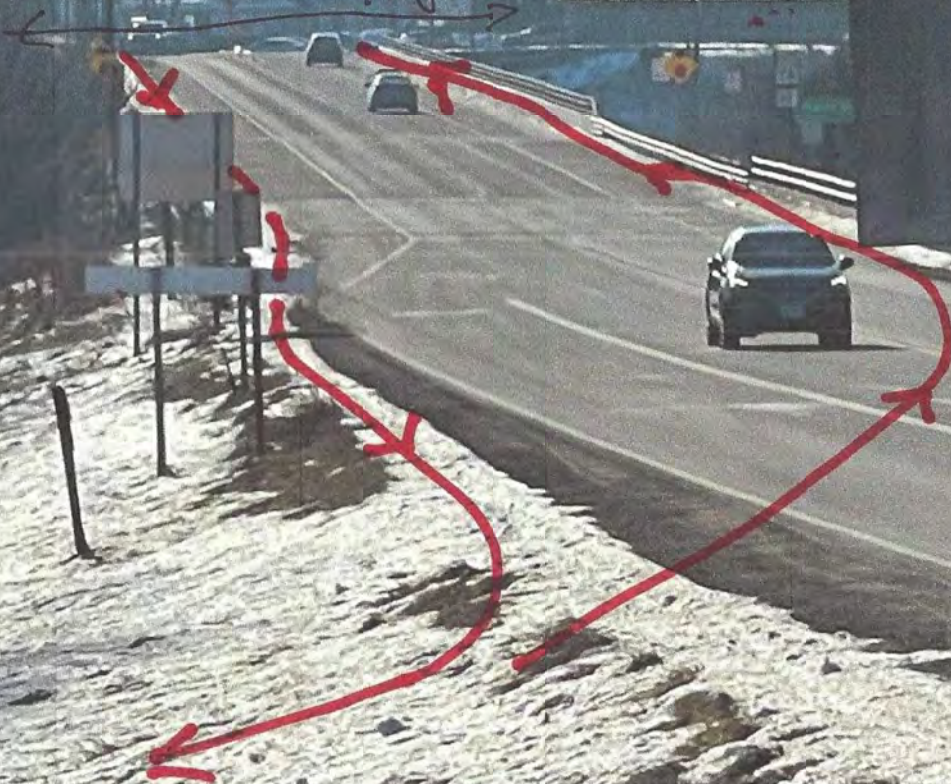
East Side of Bridge Dane Columbia
co Side

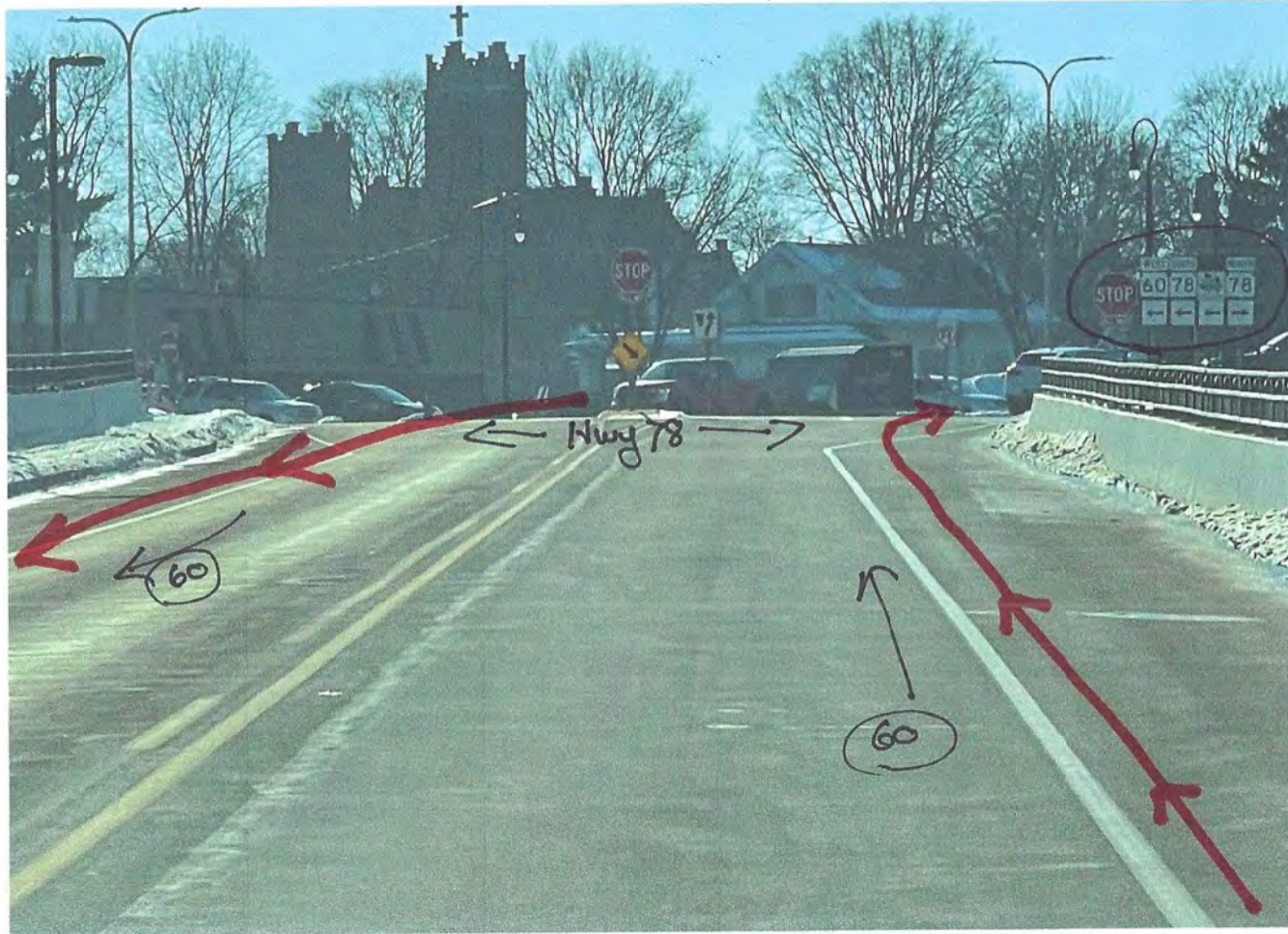


East Side of Bridge

Highway 60
Bridge Route

Highway 60







Snowmobiles Required To Stay off
OF the Sidewalk - Front Lawns



County PF
9 Blocks
Long





13th Crossing

Cross

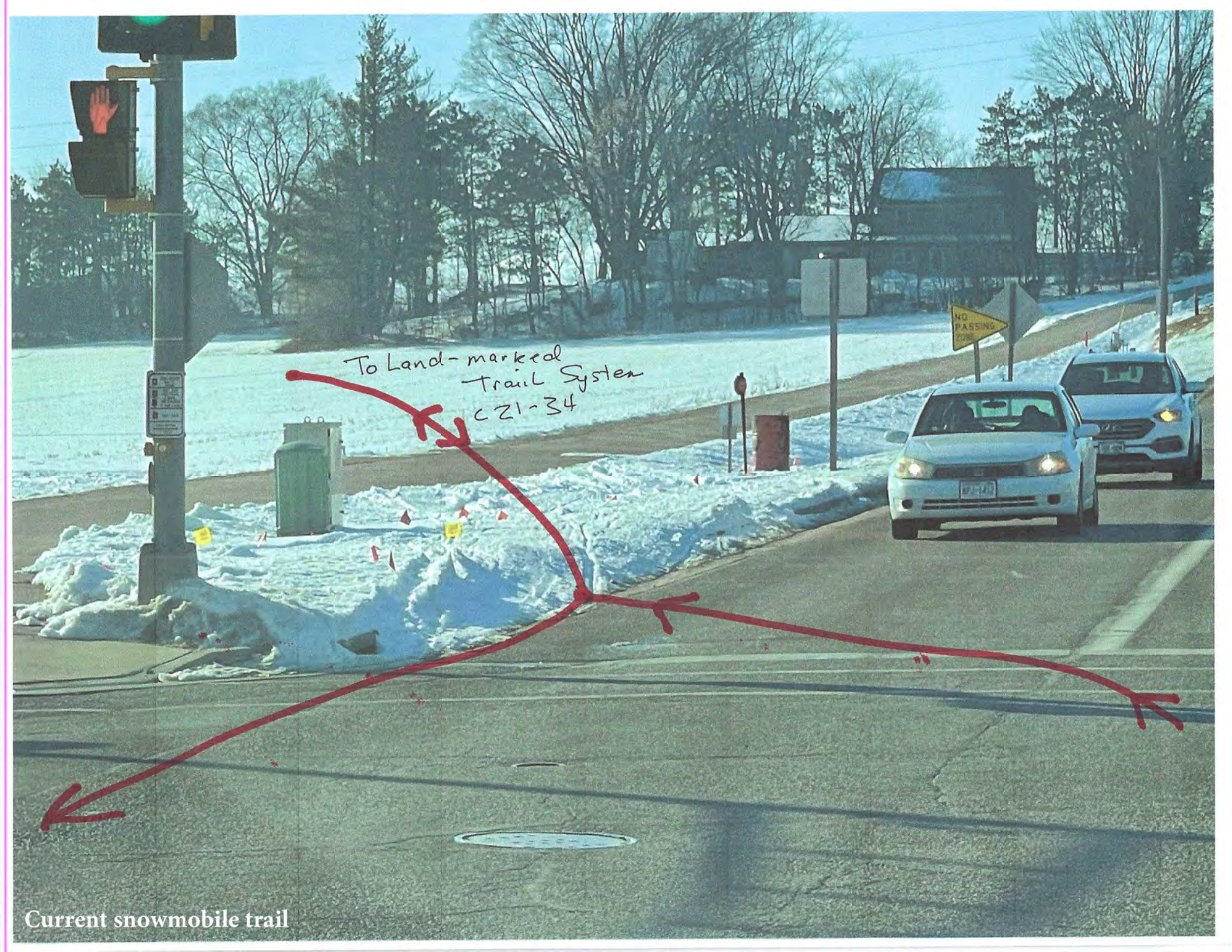
Current snowmobile trail

Current snowmobile trail



Current snowmobile trail

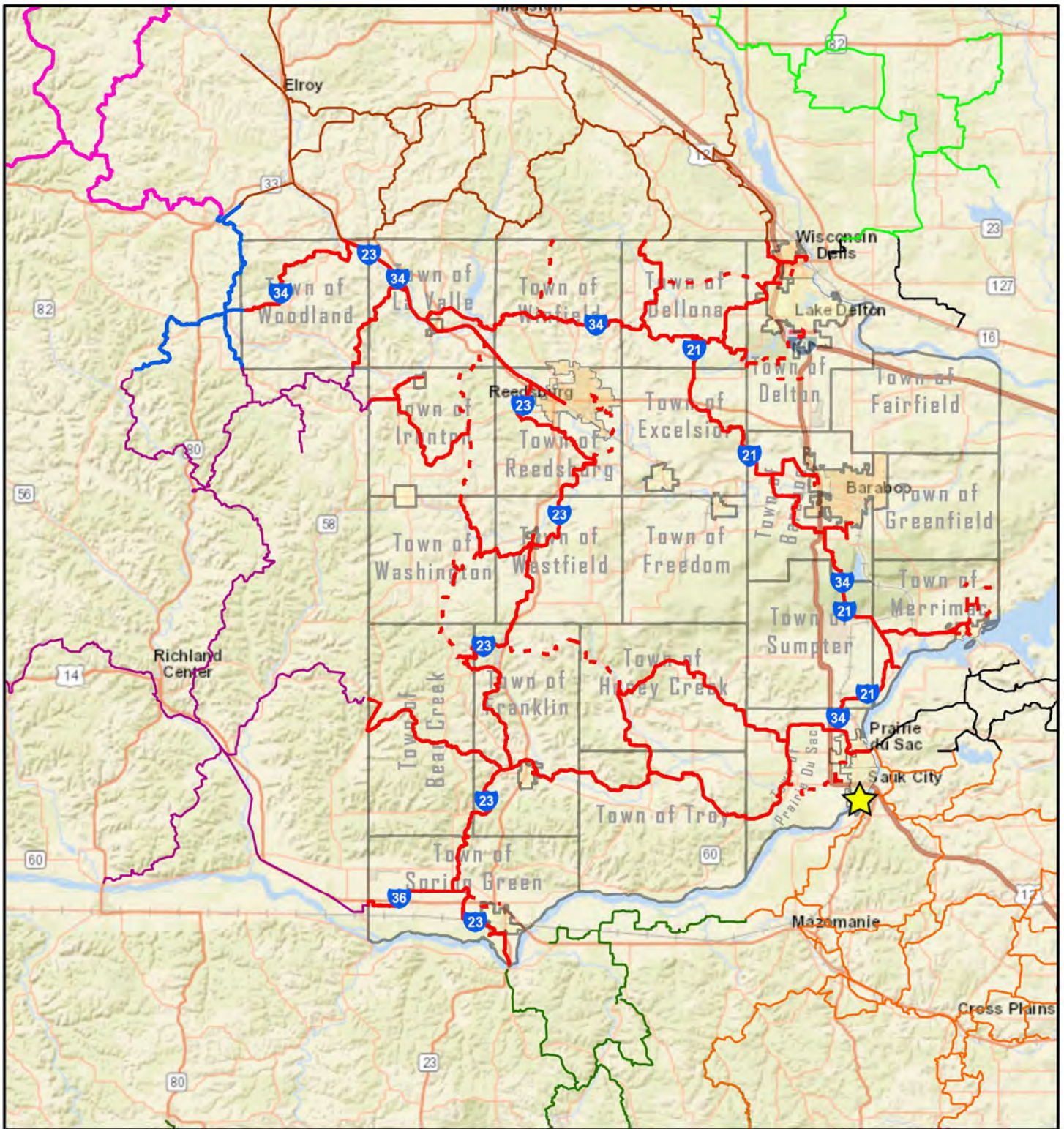




To Land-marked
Trail System
C21-34

Current snowmobile trail

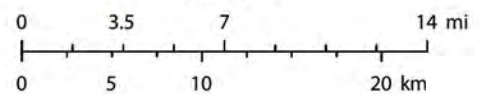
Sauk County Snowmobile Trail Map



★ Bridge location

- Sauk County funded snowmobile trails
- - - Sauk County nonfunded snowmobile trails
- Dane County snowmobile trails
- Iowa County snowmobile trails
- Richland County snowmobile trails
- Vernon County snowmobile trails
- Monroe County snowmobile trails
- Juneau County snowmobile trails
- Adams County snowmobile trails
- Columbia County snowmobile trails

1:577,791



Sauk County Land Information/GIS, Esri, HERE, Garmin, NGA, USGS, NPS

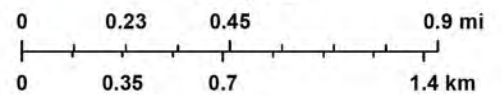
Aerial Map - Sauk County Snowmobile Trail Bridge



Bridge location

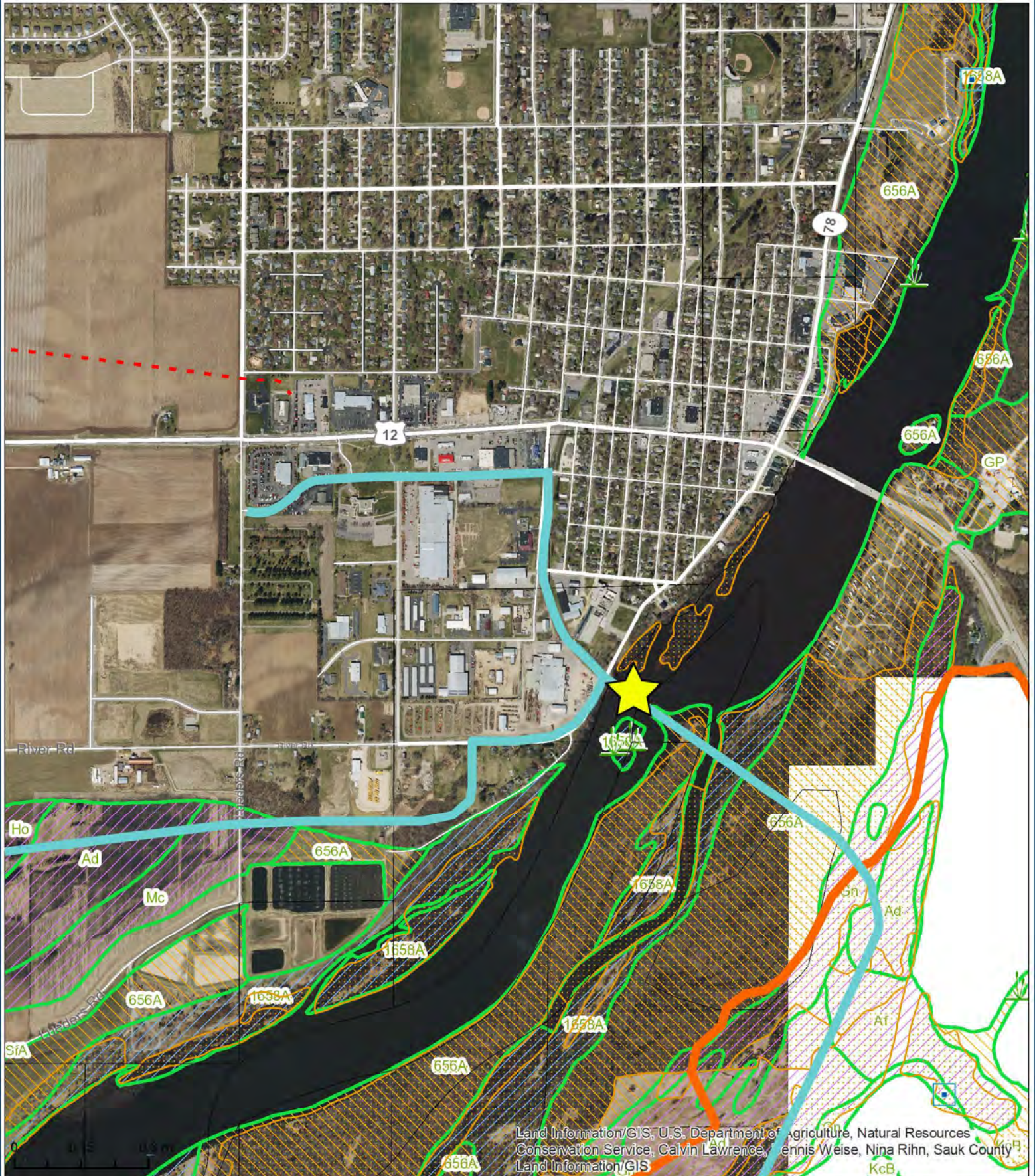
- Sauk County funded snowmobile trails
- - - Sauk County nonfunded snowmobile trails (tentatively awarded)
- Dane County snowmobile trails
- Proposed snowmobile trails
- Village

1:36,112



Land Information/GIS, Sauk County Land Information/GIS

Wetland Map - Sauk County Snowmobile Trail Bridge



Land Information/GIS, U.S. Department of Agriculture, Natural Resources Conservation Service, Calvin Lawrence, Dennis Weise, Nina Rihn, Sauk County Land Information/GIS

- Wetland class area
- DNR Wetland Filled Area
- NRCS Hydric Soil
- NRCS Predominantly Hydric
- NRCS Partially Hydric
- NRCS Predominantly Non-Hydric

Bridge location

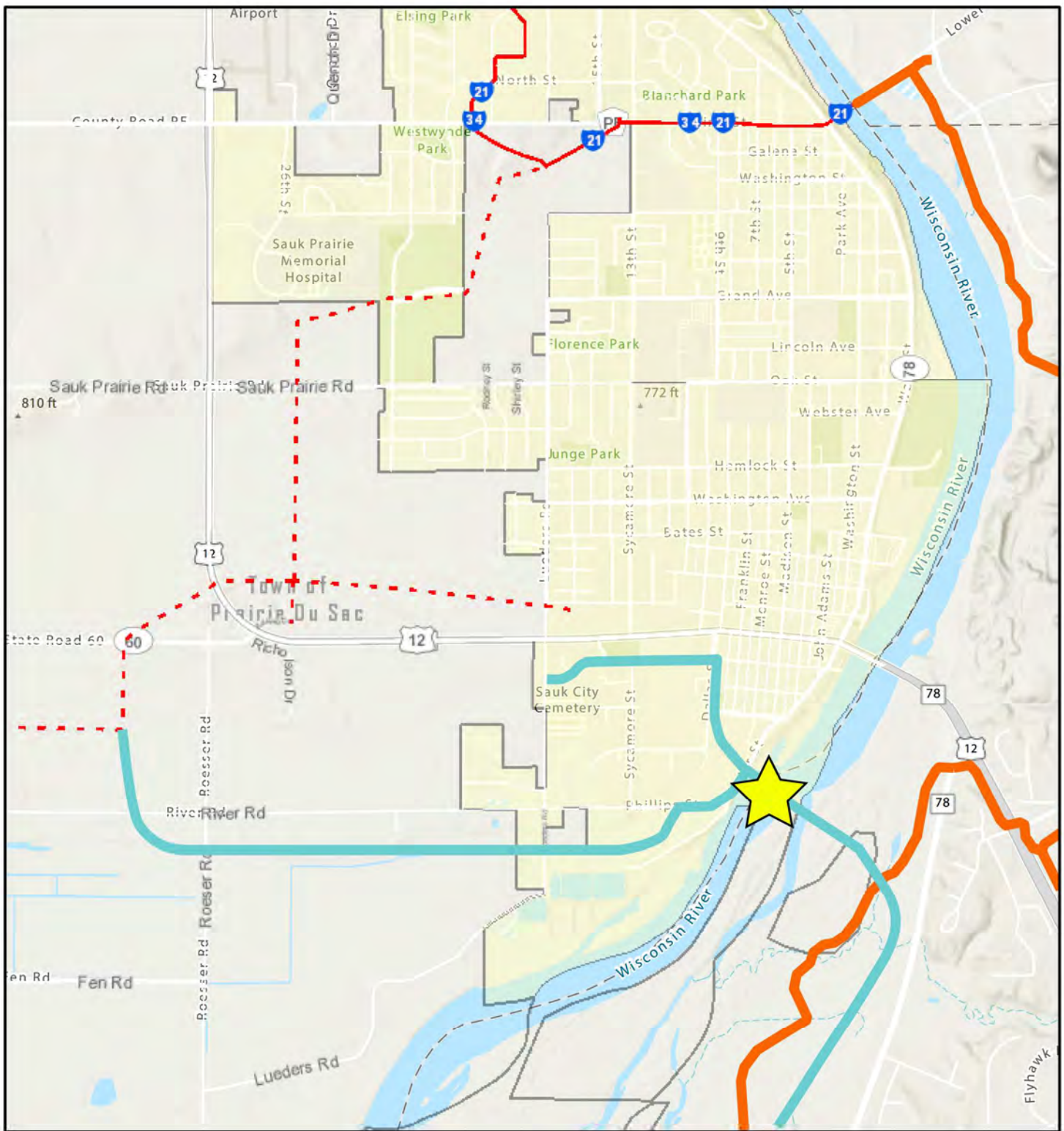
- Sauk County nonfunded snowmobile trails (tentatively awarded)
- Dane County snowmobile trails
- Proposed snowmobile trails



Sauk County Land Information/GIS

FOR INFORMATIONAL PURPOSES ONLY Sauk County does not attest to the accuracy of the data contained herein and makes no warranty with respect to its correctness or validity. Data contained in this map is limited by the method and accuracy of its collection.

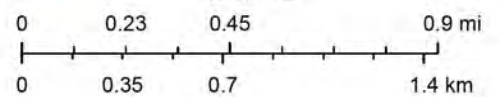
Topographic Map - Sauk County Snowmobile Trail Bridge



Bridge location

- Sauk County funded snowmobile trails
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- Dane County snowmobile trails
- Proposed snowmobile trails
- Village

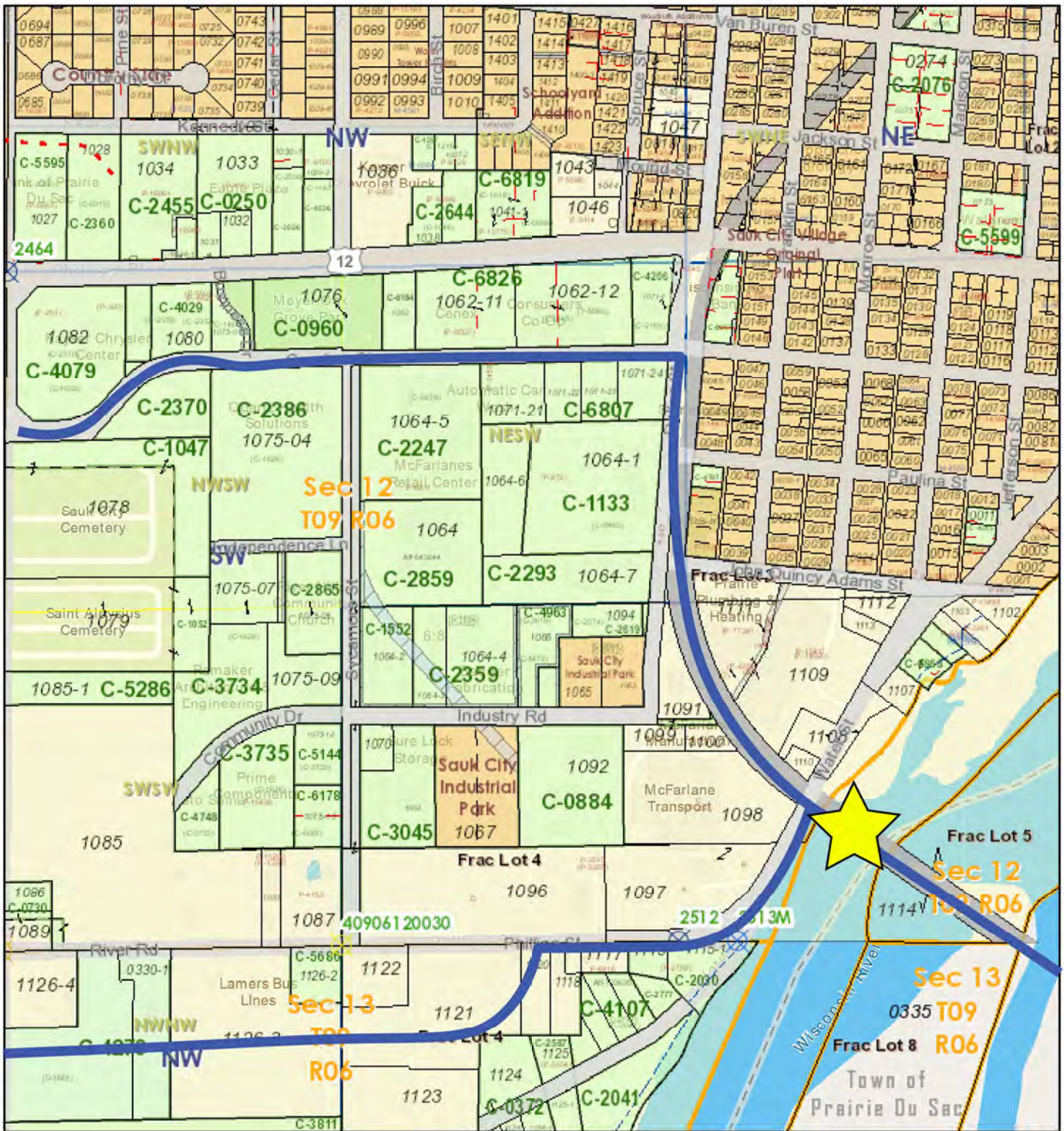
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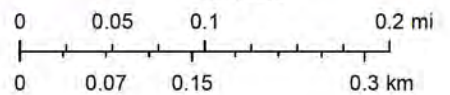
Esri, NASA, NGA, USGS, FEMA, County of Dane, County of Sauk, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, Sauk County Land Information/GIS

Land Information/GIS
2021

Plat Map - Sauk County Snowmobile Trail Bridge



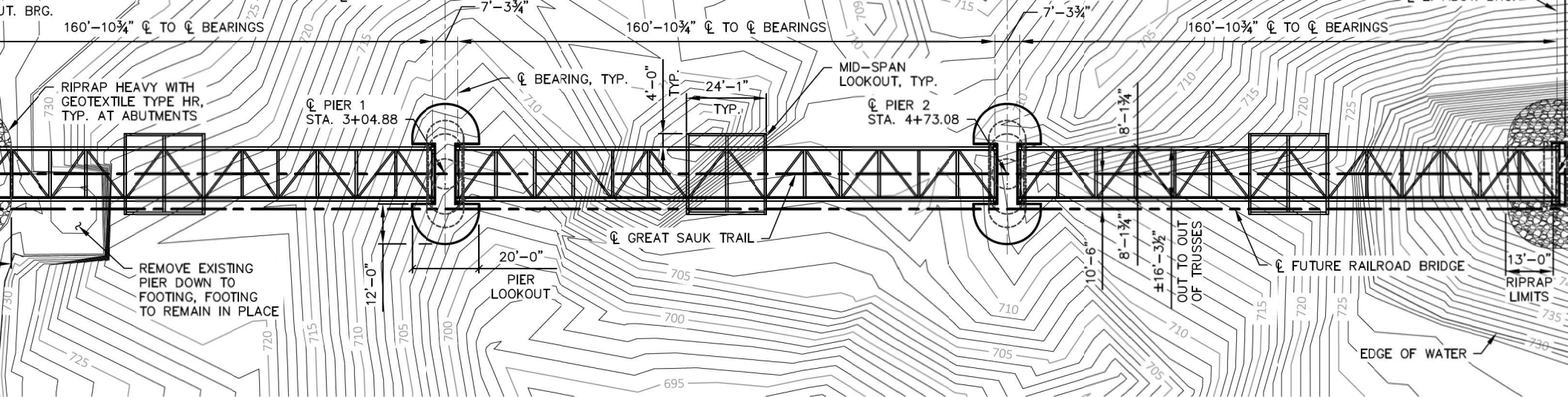
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Bridge location

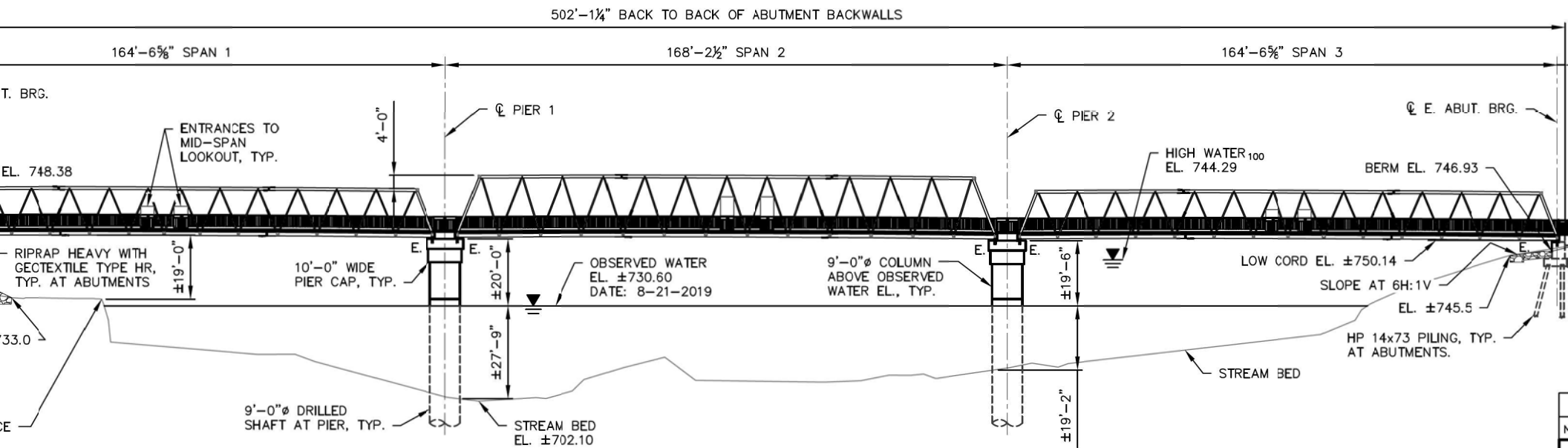


Proposed snowmobile trails



PLAN VIEW

(THREE SPAN PREFABRICATED WARREN STEEL TRUSS BRIDGE)



ELEVATION VIEW

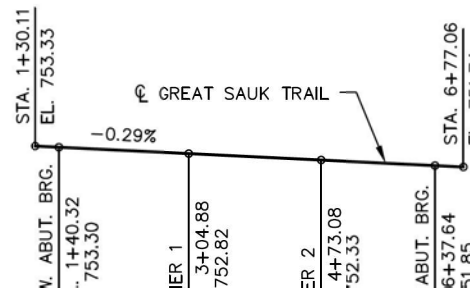
FOUNDATION DATA:

ABUTMENTS TO BE SUPPORTED ON HP 14x73 PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 250 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATE 115 FT. PILE LENGTHS AT THE WEST ABUTMENT AND 115 FT. PILE LENGTHS AT THE EAST ABUTMENT.

THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

PIERS TO BE SUPPORTED ON 9'-0" DIA. DRILLED SHAFTS WITH A

$f_c = 4,000$ P.S.I.
 $f_c = 3,500$ P.S.I.
 $f_y = 60,000$ P.S.I.



LIST OF DRAWINGS

1. GENERAL PLAN
2. GENERAL NOTES & QUANTITIES
3. TYPICAL SECTIONS
4. TYPICAL SECTIONS (TIMBER DECK ALT.)
5. TYPICAL SECTION AT MID-SPAN
6. ABUTMENT DETAILS
7. PIER LOOKOUT DETAILS #1
8. PIER LOOKOUT DETAILS #2
9. RAILROAD AND PEDESTRIAN ABUT. DETAILS
10. RAILROAD AND PEDESTRIAN PIER DETAILS

REINFORCEMENTS FOR HIGHWAY AND
GOVERN.

REINFORCEMENTS ARE IN ENGLISH. ALL
DIMENSIONS IN FEET.

REINFORCEMENTS TO BE EMBEDDED 2" CLEAR UNLESS
OTHERWISE NOTED.

THE BAR MARK SIGNIFIES THE
GRADE OF REINFORCEMENT.

REINFORCEMENTS SHALL BE COVERED WITH
CONCRETE TO THE EXTENT SHOWN ON
DRAWINGS.

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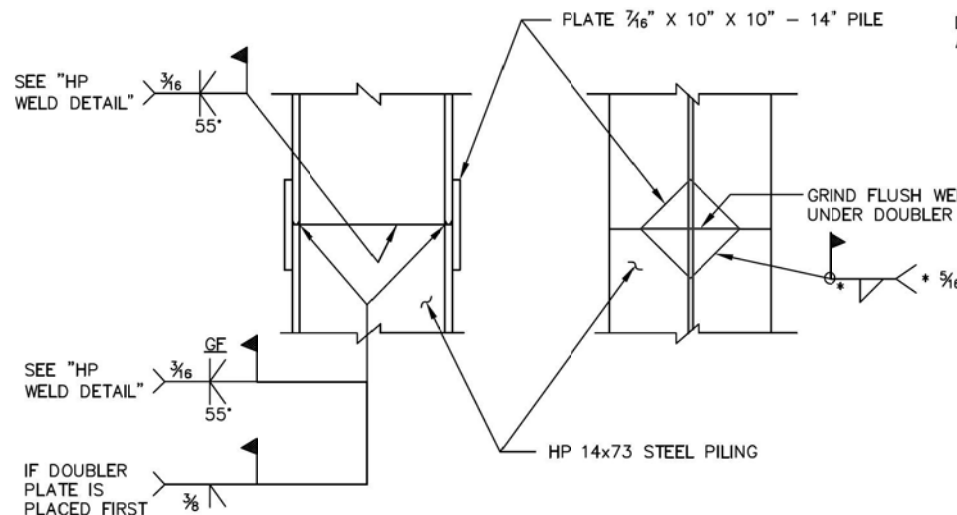
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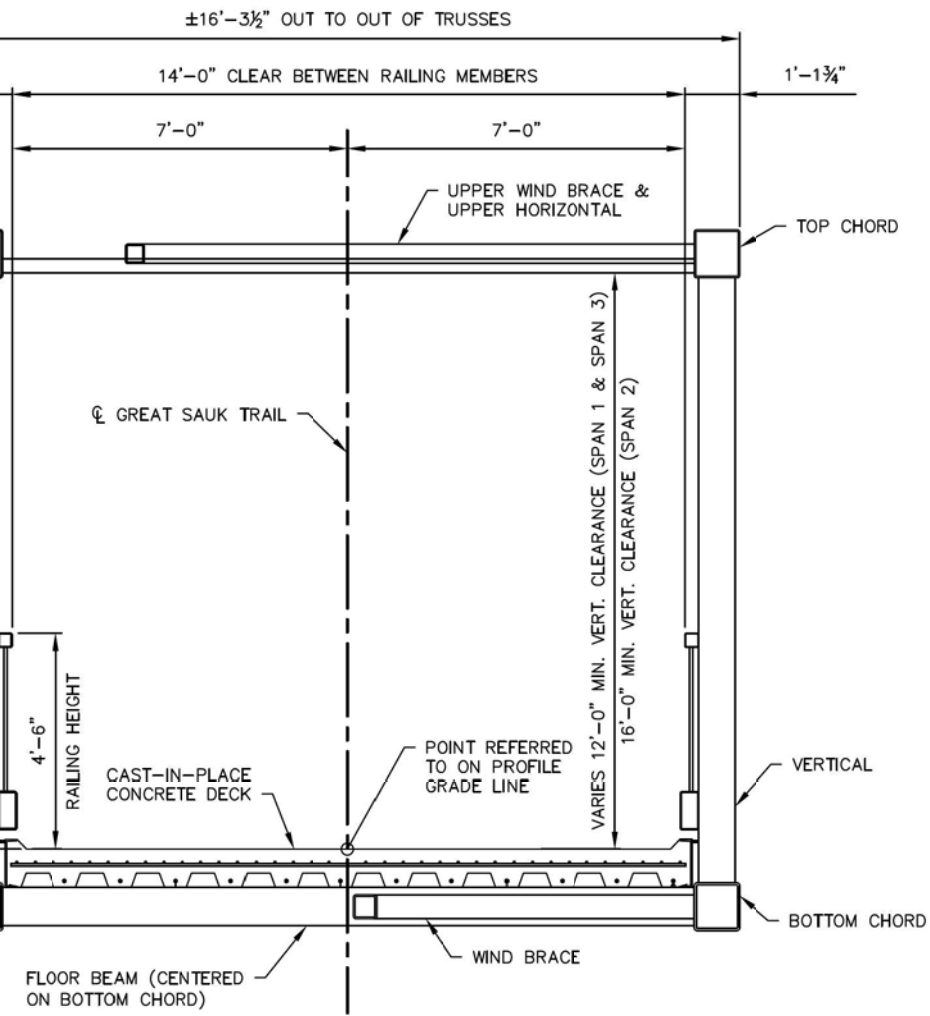
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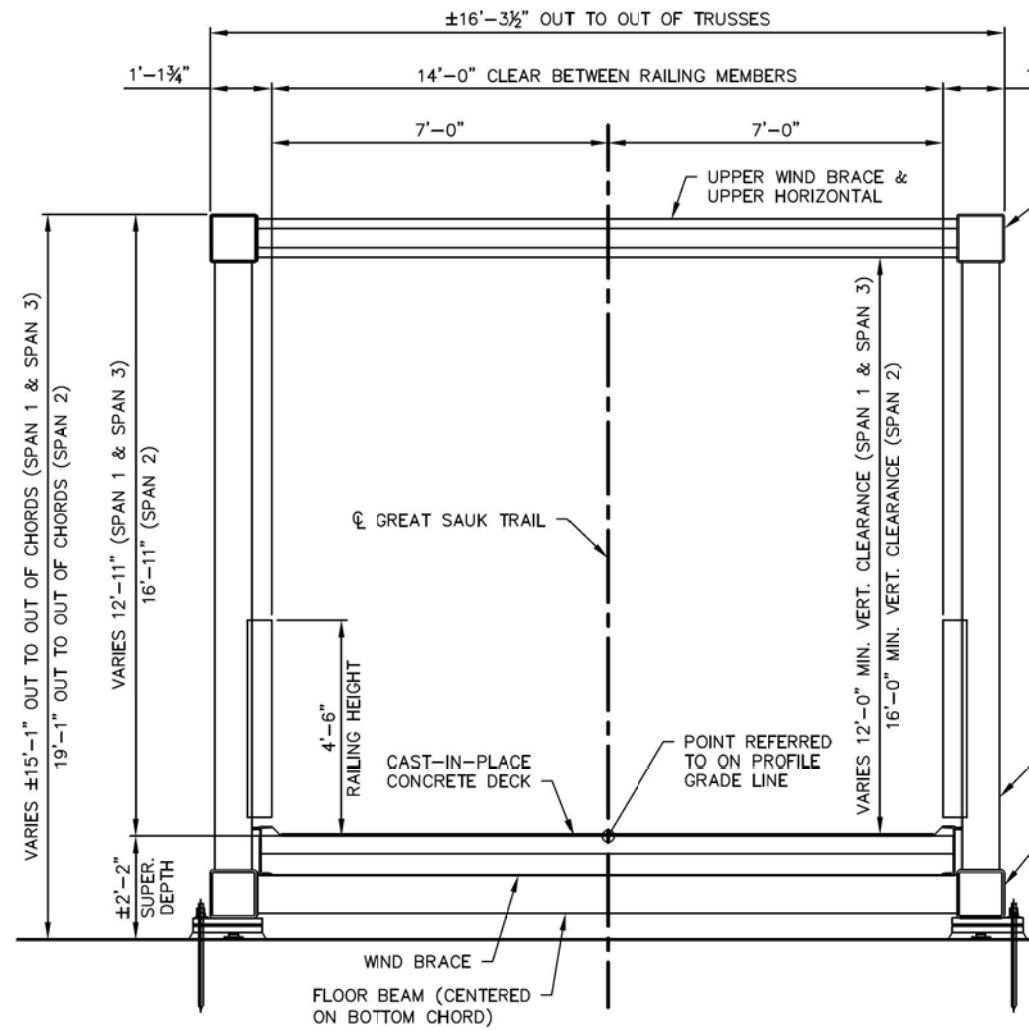
PILE SPLICE DETAILS

QUANTITIES

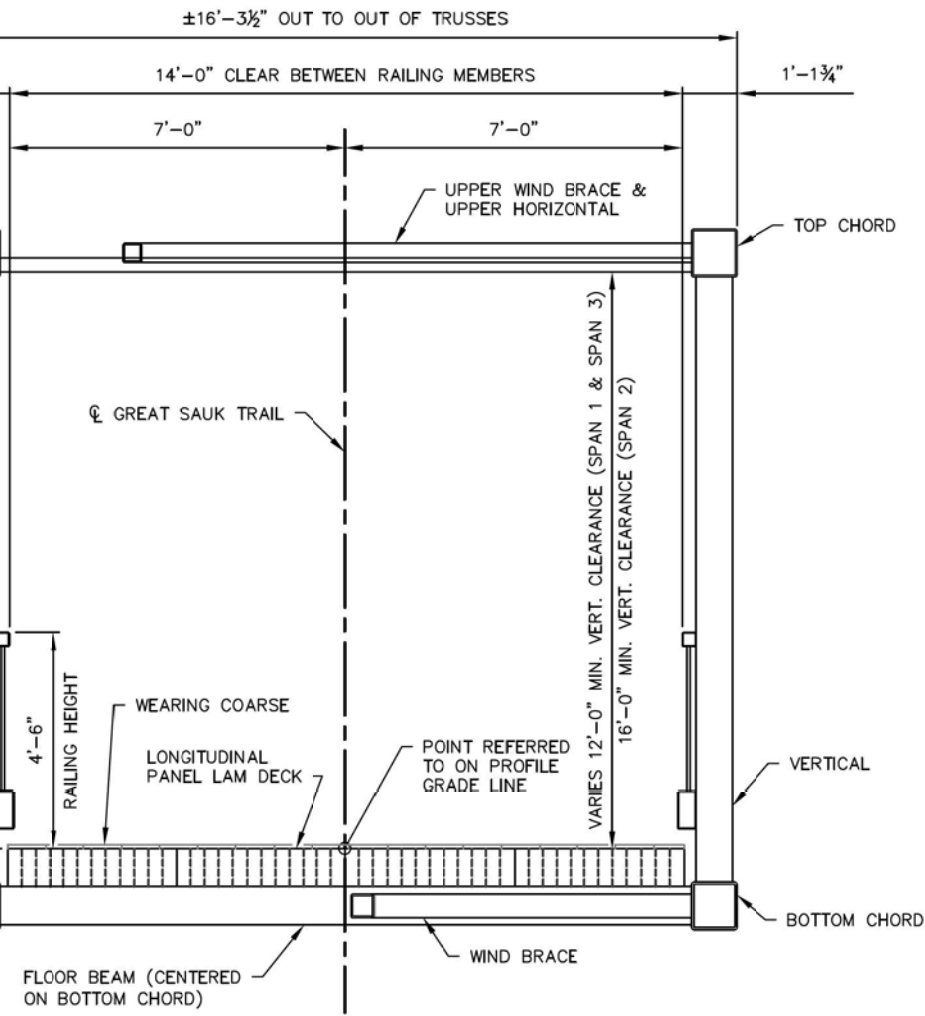
BID ITEMS	UNIT	W. ABUT.	PIER 1	PIER 2	E. ABUT.	SUPER.	TOTALS
REMOVE EXISTING OLD STRUCTURE OVER WATERWAY WITH MINIMAL REINFORCEMENT	LS	---	---	---	---	---	1
INSTALLATION FOR STRUCTURES BRIDGES	LS	---	---	---	---	---	1
CONCRETE STRUCTURE TYPE A	TON	60	---	---	90	---	150
MASONRY BRIDGES	CY	50	128	128	64	178	548
PROTECTIVE SURFACE TREATMENT	SY	---	---	---	---	744	744
REINFORCEMENT HS STRUCTURES	LB	4,300	60,000	60,000	5,500	25,000	154,800
TUBULAR SCREENING	LF	---	---	---	---	298	298
FLY ASH MEMBRANE WATERPROOFING	SY	7	---	---	7	---	14
STAINING	SF	388	998	998	661	---	3,045
PROTECTIVE SURFACE TREATMENT	SF	333	---	---	658	---	991
ANCHOR BOLTS	EACH	8	---	---	6	---	14
STEEL HP 14-INCH X 73 LB	LF	920	---	---	680	---	1,600
GRAVEL	CY	146	---	---	126	---	272
PERFORATED DRAIN WRAPPED 6-INCH	LF	50	---	---	100	---	150
REINFORCEMENT TYPE DF SCHEDULE A	SY	31	---	---	14	---	45
REINFORCEMENT TYPE HR	SY	174	---	---	151	---	325
CONCRETE MASONRY	CY	---	271	271	---	---	542
INSTALLATION OF DRILLED SHAFT	EACH	---	1	1	---	---	2
ANCHOR BOLTS	EACH	---	---	---	---	---	2
CONCRETE MASONRY	LF	---	115	115	---	---	230
INSTALLATION OF STEEL TRUSS BRIDGE	LS	---	---	---	---	---	1



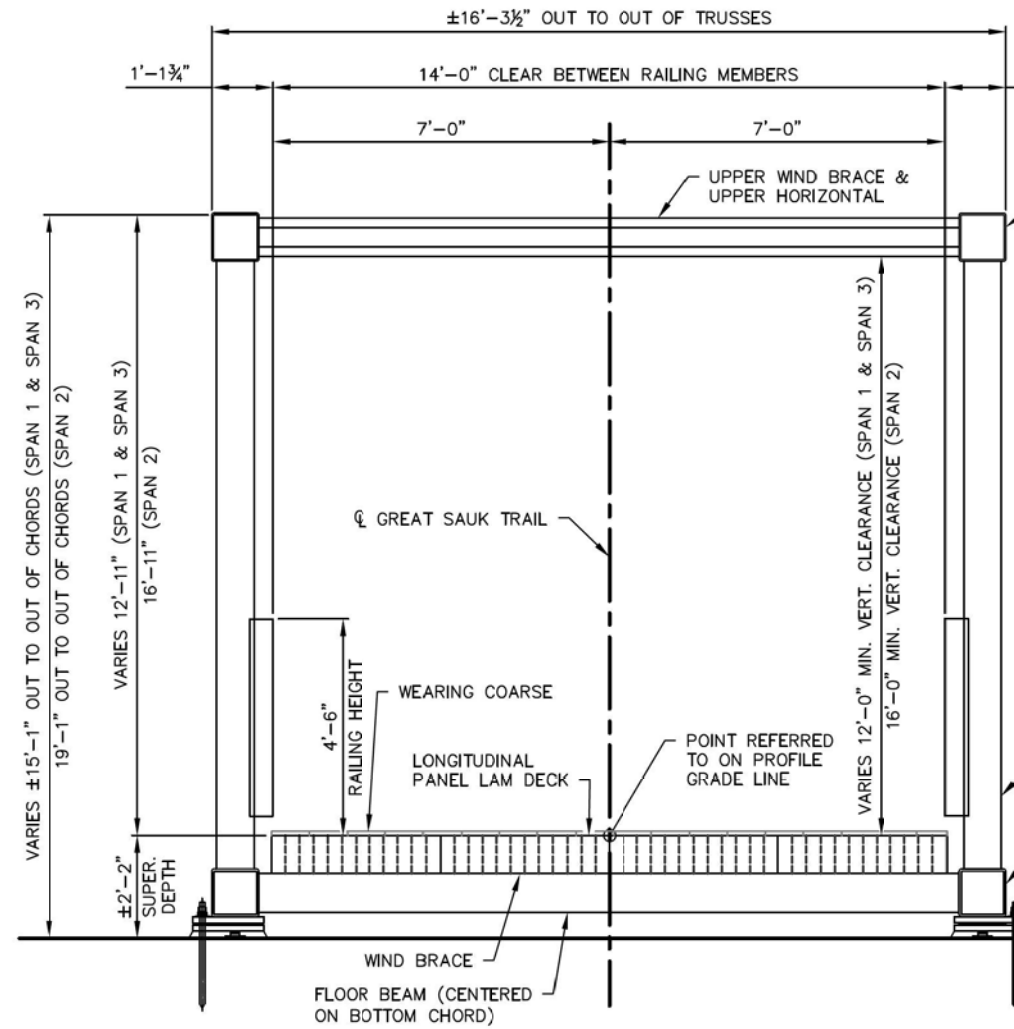
TYPICAL SECTION IN SPAN



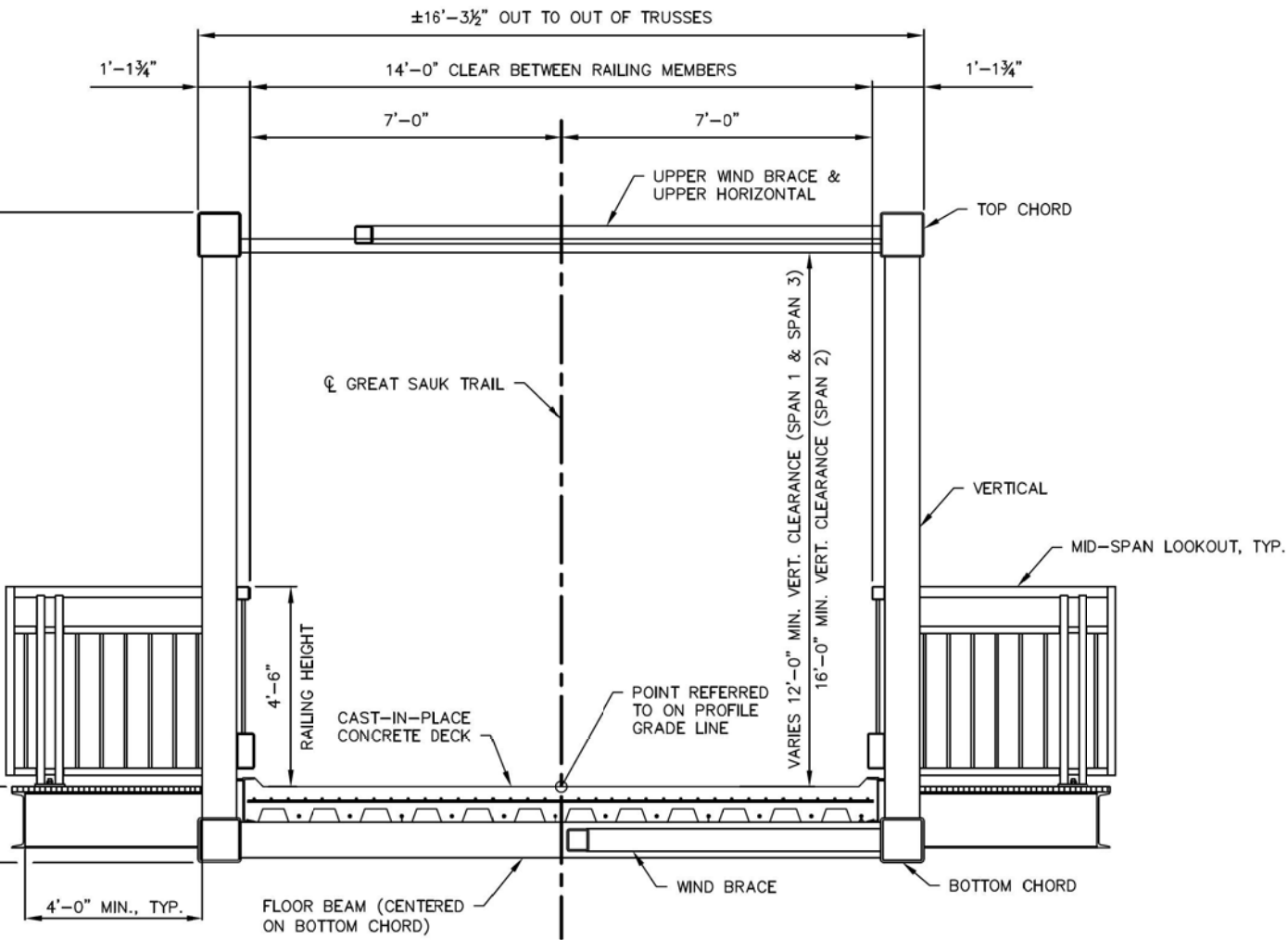
TYPICAL SECTION AT ABUTMENTS AND PIERS



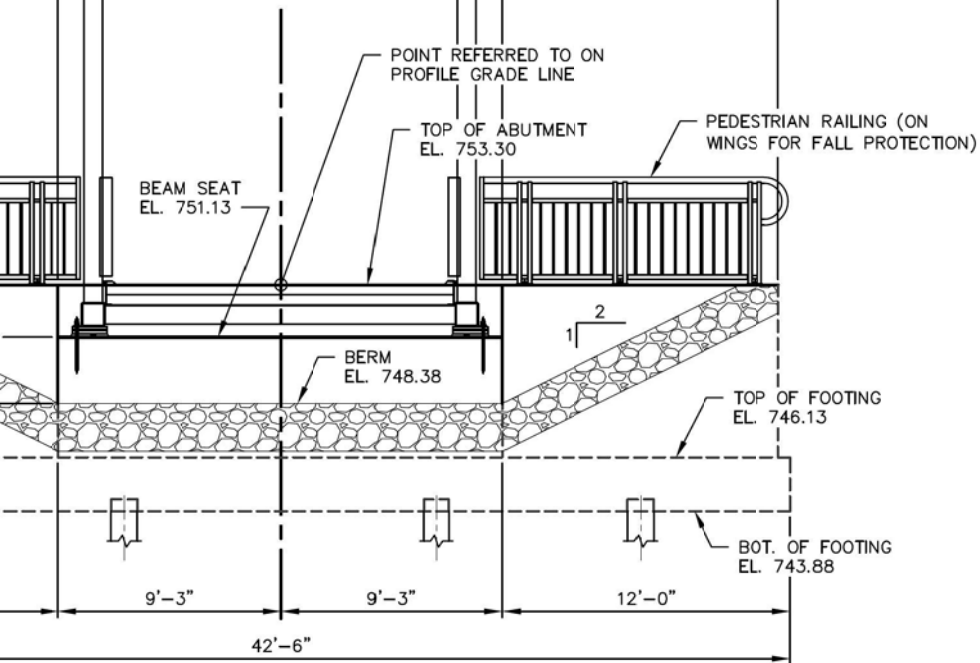
TYPICAL SECTION IN SPAN
(TIMBER DECK ALTERNATIVE)



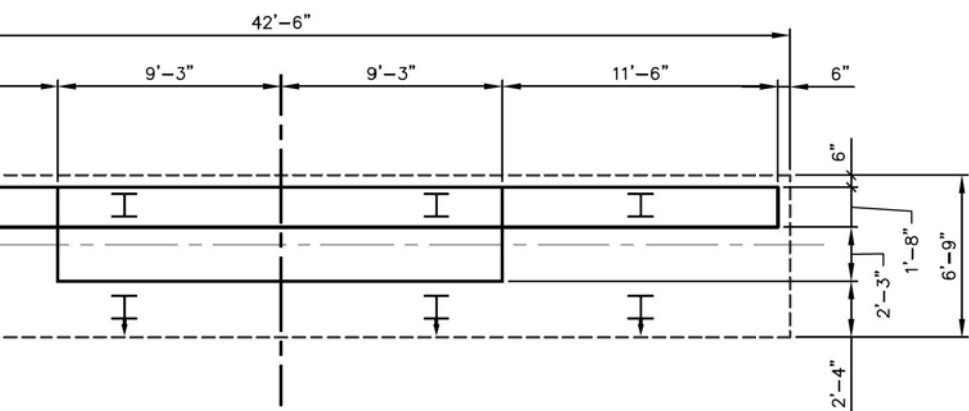
TYPICAL SECTION IN ABUTMENTS AND PIERS
(TIMBER DECK ALTERNATIVE)



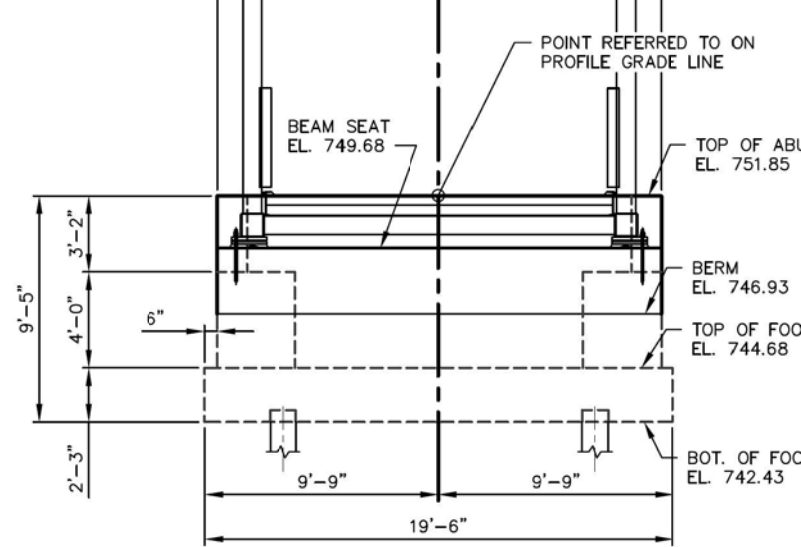
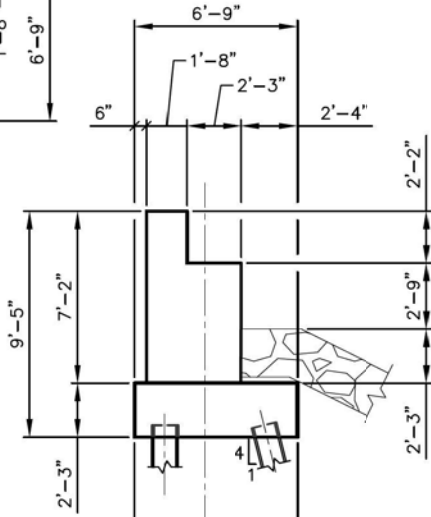
**TYPICAL SECTION IN SPAN
AT MID-SPAN LOOKOUT**



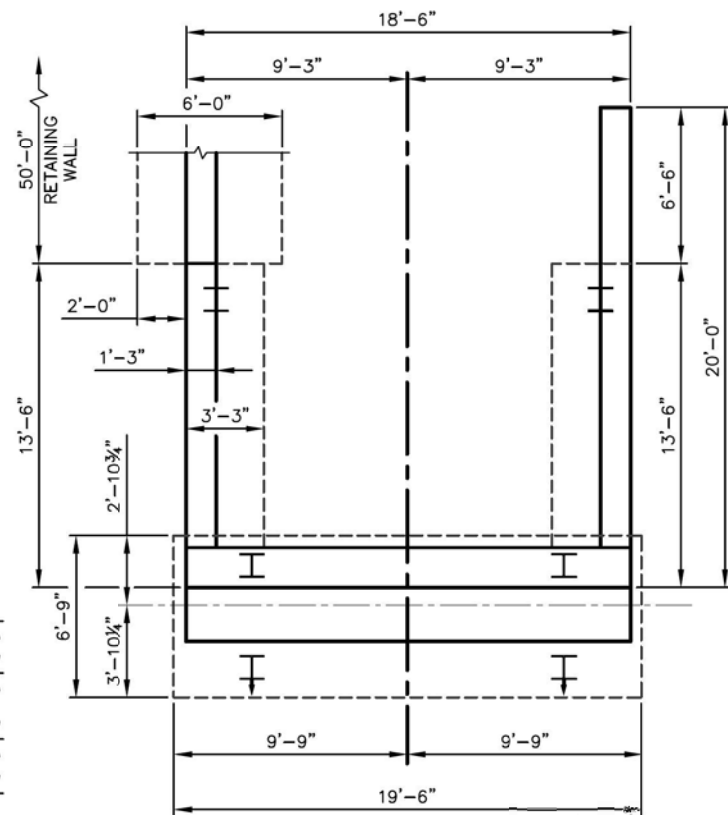
FRONT FACE ELEVATION (WEST ABUTMENT)



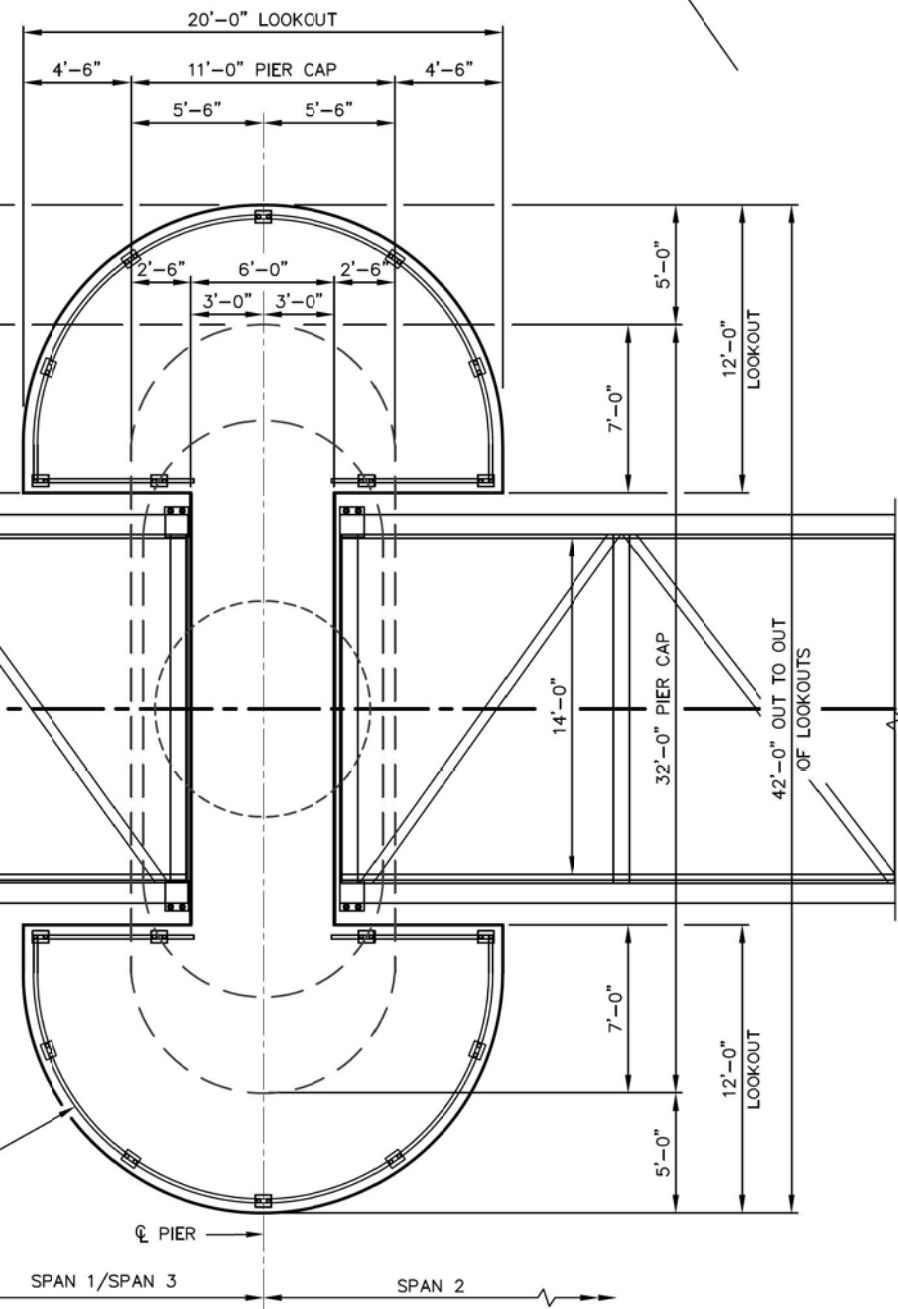
PLAN VIEW (WEST ABUTMENT)



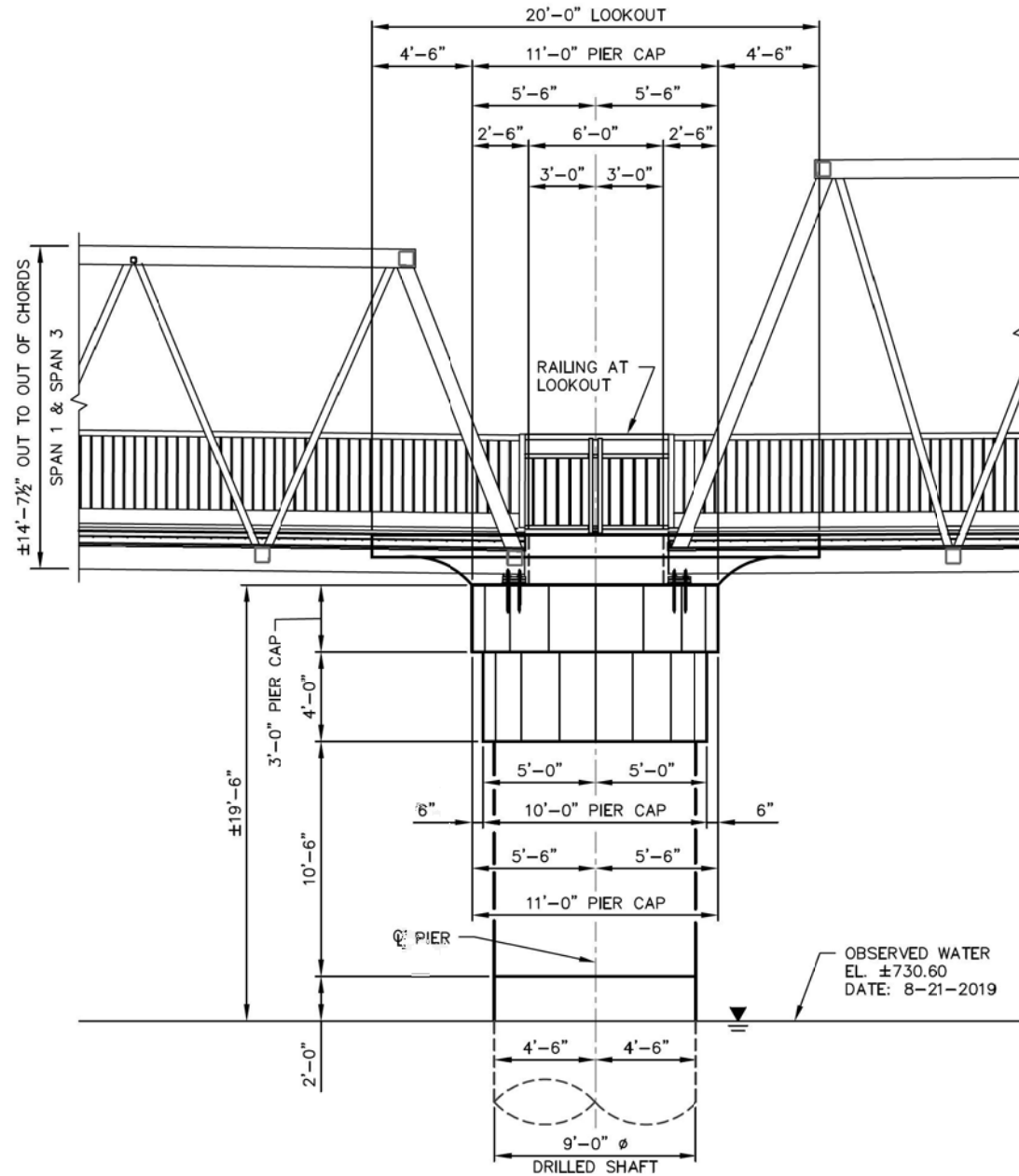
FRONT FACE ELEVATION (EAST ABUTMENT)



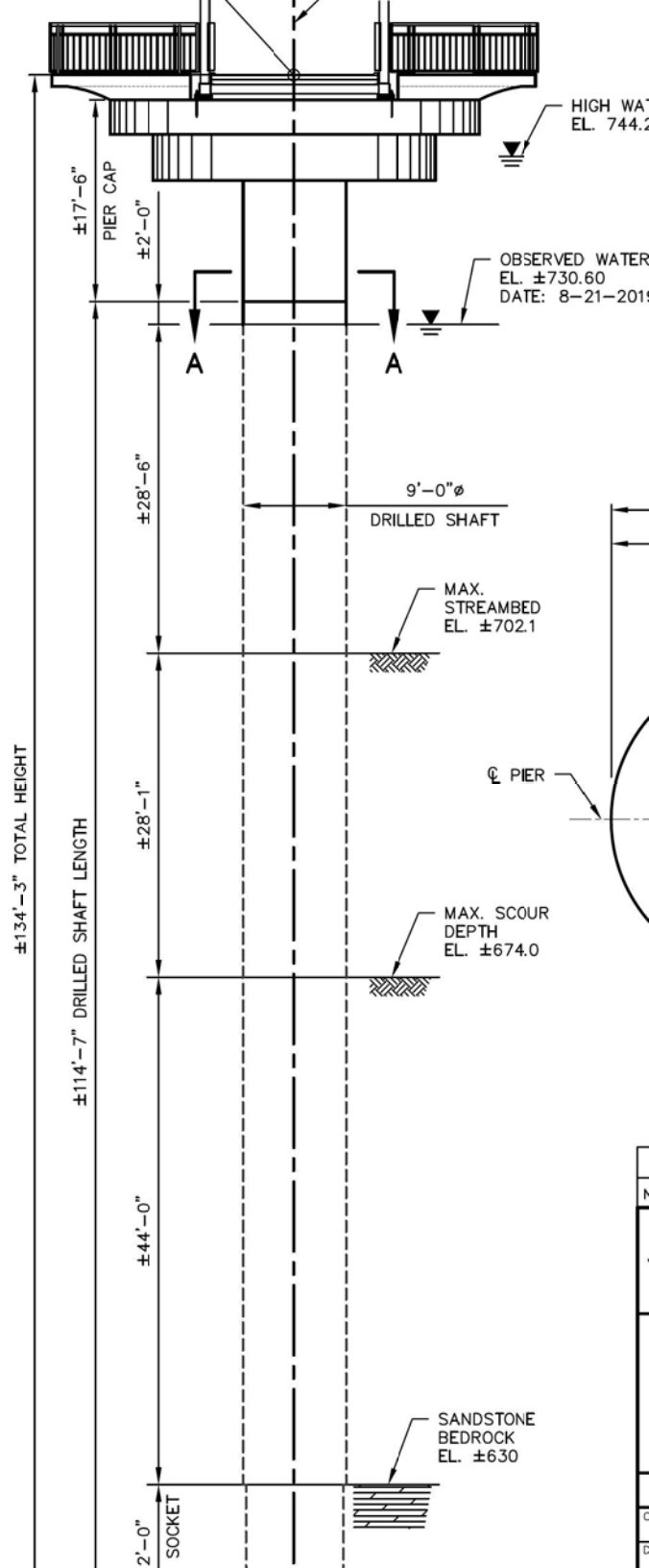
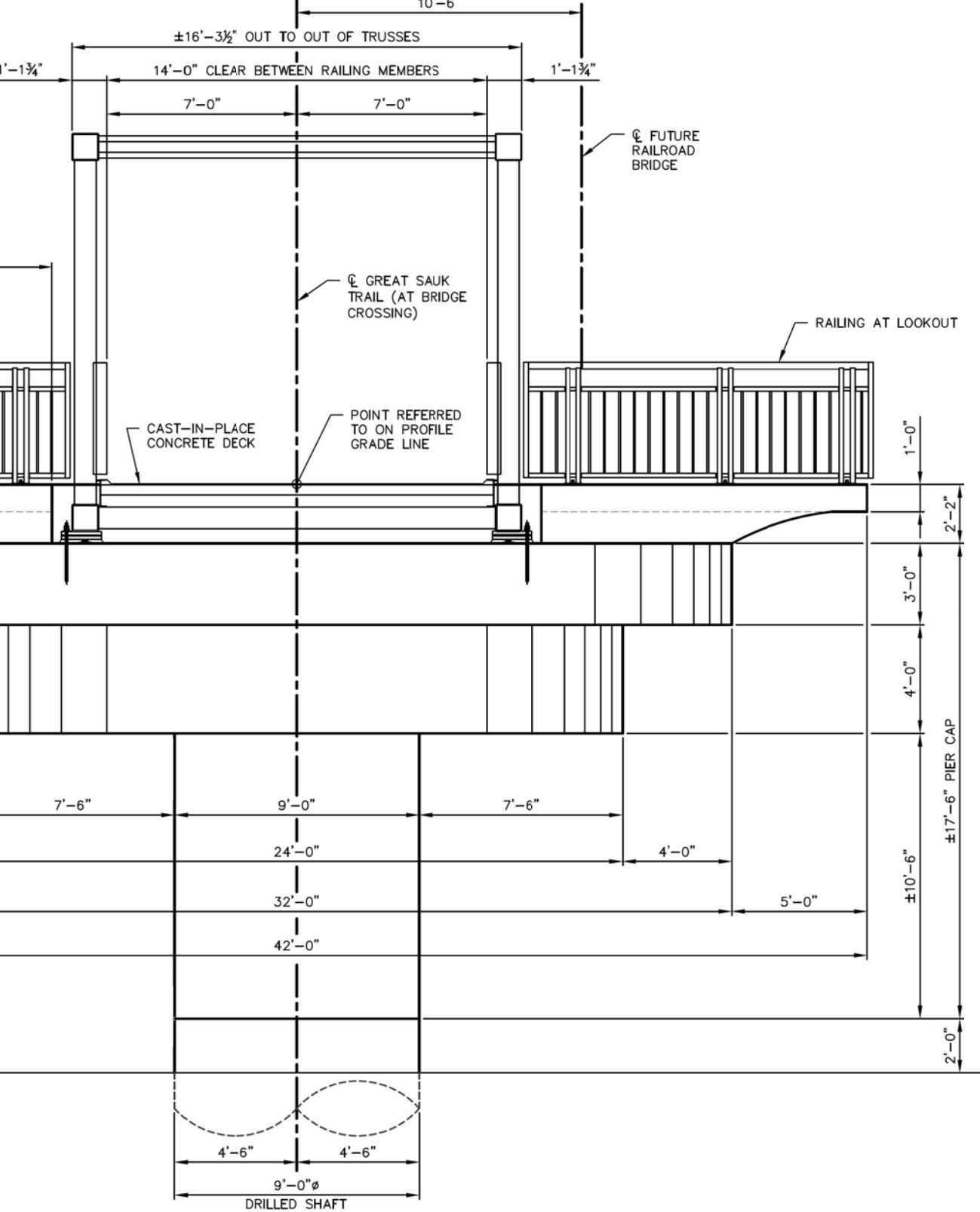
PLAN VIEW (EAST ABUTMENT)

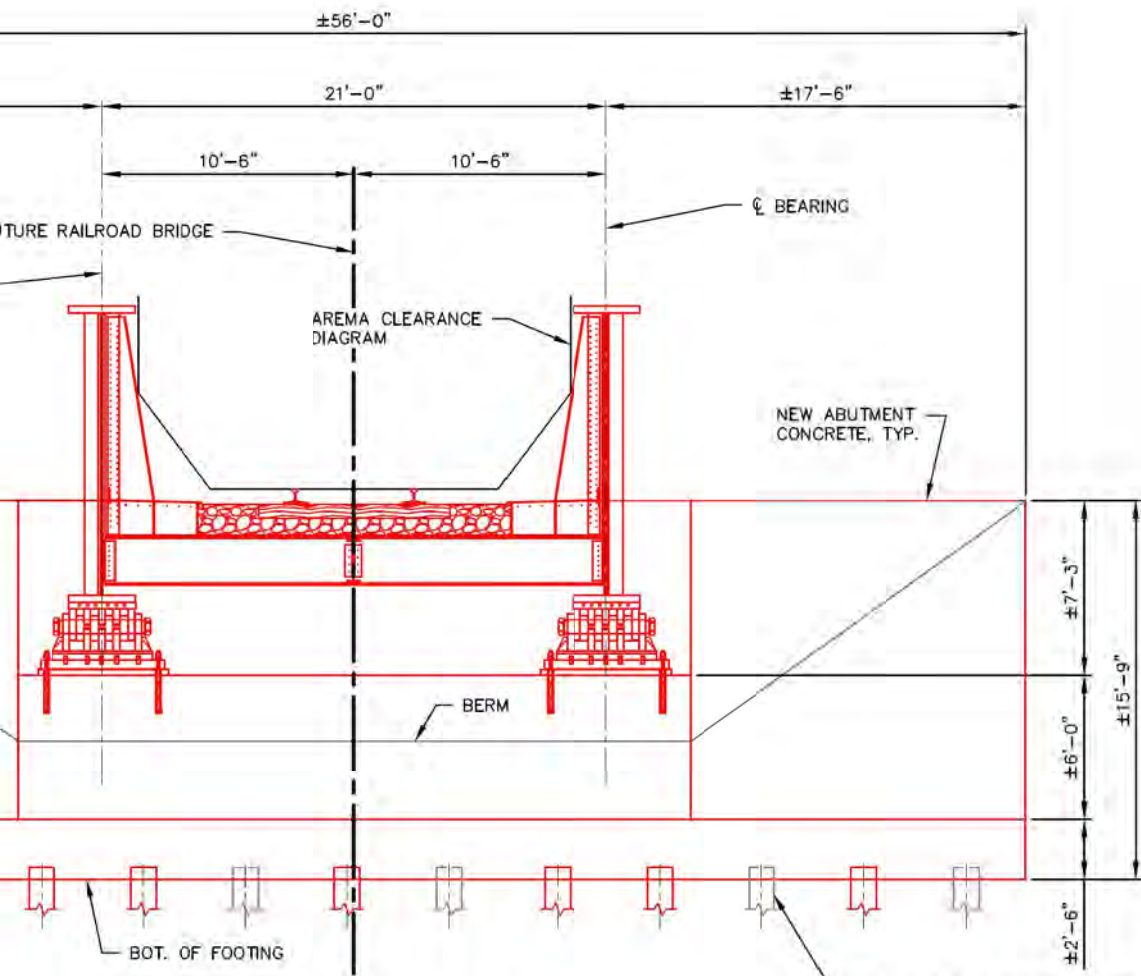


PIER LOOKOUT (OPTION A) PLAN VIEW



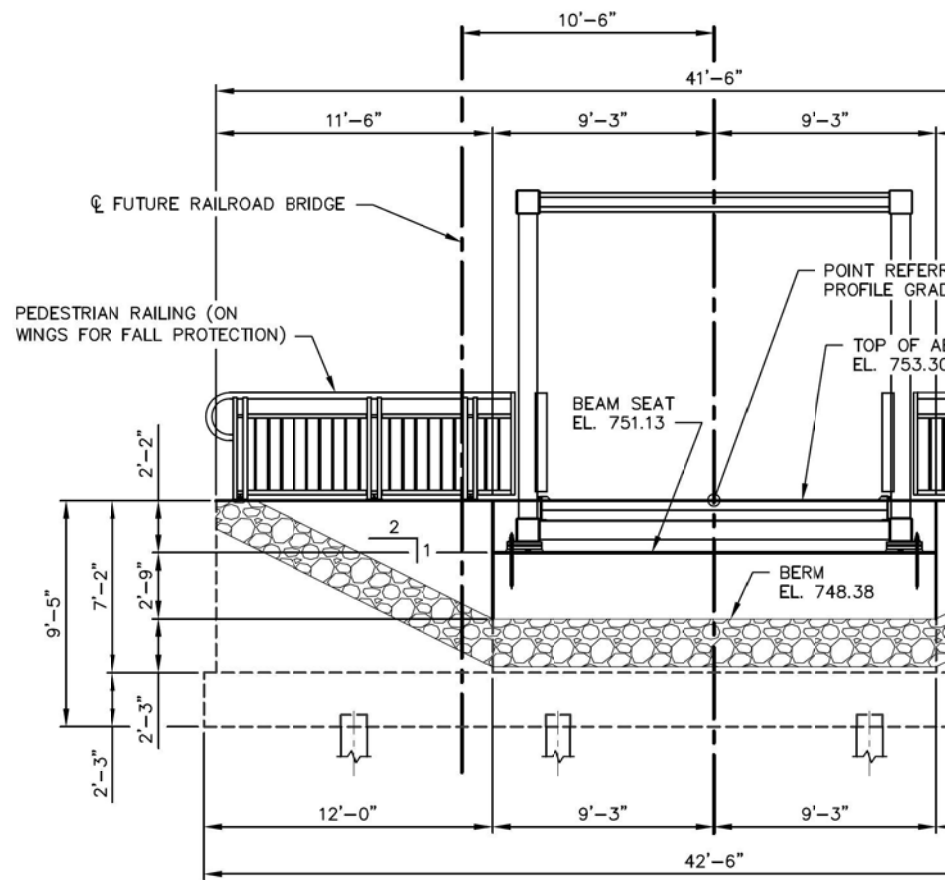
**PIER LOOKOUT (OPTION A) ELEVATION VIEW
(LOOKING NORTH)**



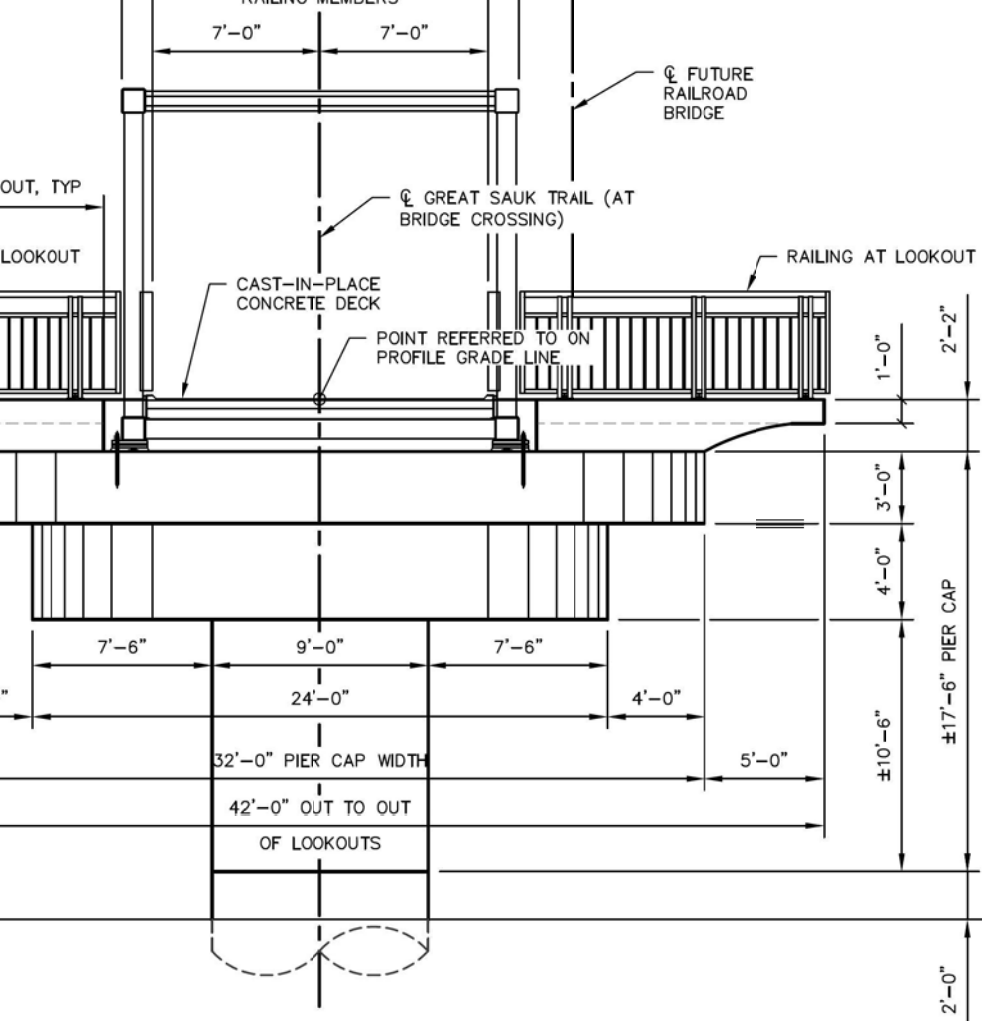


FUTURE RAILROAD BRIDGE TYPICAL SECTION AT WEST ABUTMENT
(LOOKING WEST)

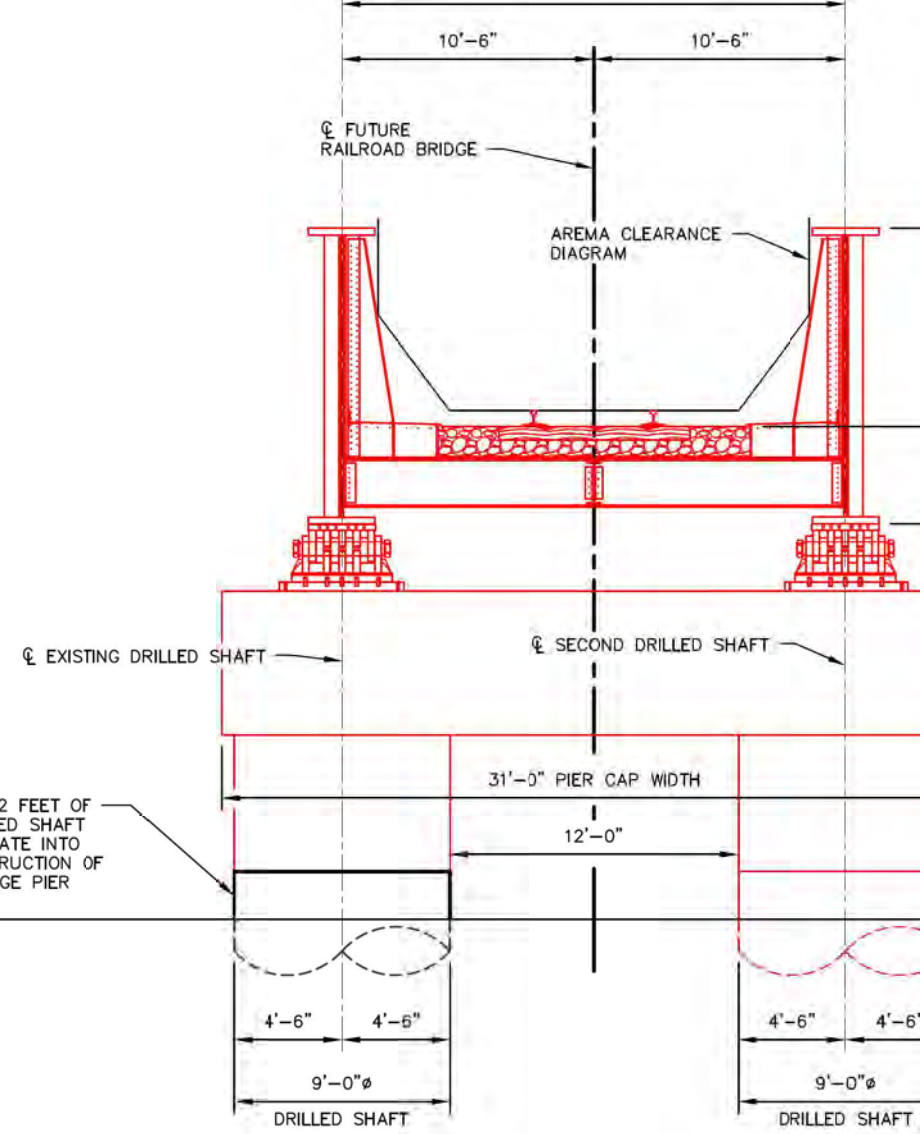
SALVAGE EXISTING PILING AND INCORPORATE INTO NEW ABUTMENT FOOTING, TYP.



GREAT SAUK TRAIL BRIDGE TYPICAL SECTION AT WEST ABUTMENT
(LOOKING WEST)



GREAT SAUK TRAIL BRIDGE
TYPICAL SECTION AT PIER
 (LOOKING EAST)



FUTURE RAILROAD BRIDGE TYPICAL SECTION AT PIER
 (LOOKING EAST)

View 1 - Sauk County Snowmobile Trail Bridge



View 2 - Sauk County Snowmobile Trail Bridge



View 3 - Sauk County Snowmobile Trail Bridge



Pier Lookout - Sauk County Snowmobile Trail Bridge



Mid-Span Lookout - Sauk County Snowmobile Trail Bridge



Gateway - Sauk County Snowmobile Trail Bridge

