

Trail Bridge UW Inspection Report

To: Jefferson County Inspector: Josh Makela (9669) Inspection Date: 05/06/2022 Structure Number: Trail Bridge Feature On: Trail Bridge Location: Trail Bridge over the Rock River. 0.6 Miles East of CTH F Latitude: 43.12622 Longitude: -88.58077

Eau Claire Office 1802 Warden Street Eau Claire, WI 54703 608.828.1011 P 715.514.5445 F

Condition Ratings:

Very Good Condition – No problems noted. Good Condition – Some minor problems. Satisfactory Condition -Structure elements show some minor deterioration. Fair Condition: Elements are sound but may have minor section loss, cracking, or spalling. Poor Condition: Advance section loss, deterioration, or spalling.

Reinforced Concrete Elements:

West Abutment: Has cracking throughout with efflorescence. No undermining observed. Abutment in fair condition.

East Abutment: Cracking throughout with efflorescence. Areas of spalls and deterioration at ends. No undermining observed. Abutment in fair condition.

Wingwalls: Cracking through with areas of spalling. Wingwalls in fair condition.

Pier: Has map cracking throughout with efflorescence. Footing with vertical exposure of up to 2.5 feet. No undermining observed. Footing does have minor spalling throughout. Pier is in fair condition.

Recommendations:

-Recommend placing heavy riprap at abutments and pier to prevent scour or undermining.

-Confirm piles were used in construction of substructure units.

UNDERWATER BRIDGE INSPECTION - DIVE LOG

DT2013 1/2004 s.84.17 Wis. Stats. This form may be used as a supplement to form DT2007 for Underwater Bridge Inspections

Structure Number Trail Bridge

Inspection Date	Weather Condition	Waterline Elevation	
05/06/2022	Cloudy, 63 degrees	92.6 ft	
Safety Concern	Water Temperature	Total Days on Site	
Current, Low Visibility	50 degrees	1	
Current	Visibility	Total Inspection Time (hrs)	
1.5 ft/sec	Zero	1.5	
Elevation Marker Description		· · · · · · · · · · · · · · · · · · ·	
Top of Pier, Downstream Side			

General Site Conditions

Scour at Bridge Site	Pier footing exposed with up to 2.5 feet of vertical face exposure.			
Embankment Erosion/Conditions	Mostly covered with vegetation.			
Substructure Unit(s)	West Abutment	East Abutment	Pier	
Level of Inspection	Level I	Level I	Level I	
Abutment/Pier Type	Reinforced Concrete	Reinforced Concrete	Reinforced Concrete	

Dive Log

Maximum Water Depth, at Unit	5.8	5.1	9.4
Channel Bottom Material, at Unit	Silt	Silt	Silt
Scour at Unit	None Observed	None Observed	Footing Exposed
Marine Growth/Cleaning Performed?	N/N	N/N	N/N
Debris / Clearing Performed?	N/N	N/N	N/N
Mode: Wade, Scuba, Surface Supplied Air?	SCUBA	SCUBA	SCUBA
Inspection Comments	Concrete is sound. Condition mirrors that of above water.	Concrete is sound. Conditiong mirrors that of above water.	Entire footing exposed with a typical veritical face exposure of 2.5 feet. Concrete is sound and mirrors condition of above water. No undermining observed.

Dive Platform: Shore Boat Other

Location of Boat Access: None

Conclusions

Abutments and pier are in fair condition with map cracking throughout with efflorescence. UW condition mirrors that of above water. The pier footing is exposed, with typical veritical face exposure fo 2.5 feet. Foundation layout of abutments and pier unknown because plansets are not available.

Recommendations

-Place heavy riprap around piers and abutments to prevent scour or undermining. -Confirm piles were used when originally built.





West Abutment



East Abutment



West Face of Pier



East Face of Pier



Typical Map Cracking with Efflorescence at Pier



Upstream Nose of Pier Vertical Cracks





West Abutment South Wingwall Deterioration



Map Cracking/Spalling at East Abutment



East Abutment South Wingwall Deterioration



East Abutment South End Spalling

STREAMBED PROFILE REPORT

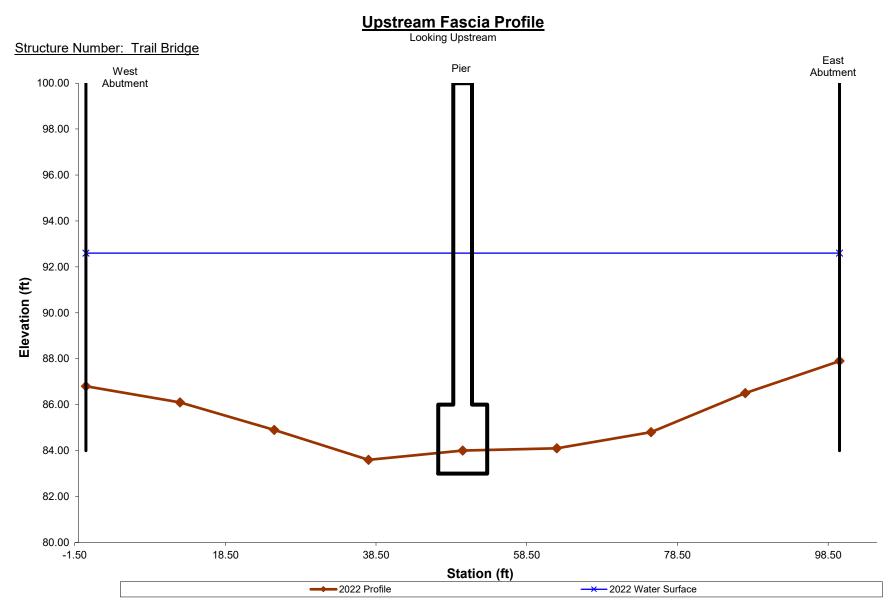
Wisconsin Department of Transportation 2022 Streambed Report

Structure Number:	Trail Bridge		Date:	5/6/2022	
Bench Mark Description:	Top of Pier	, Downstream End			
Bench Mark Elevation:	100.0	ft			
Reading at Bench Mark:	7.4	ft	Instrument Height:	-	ft
Reading at Water Surface:	-	ft	Water Surface Elevation:	92.6	ft
Station Origin:	West Abut	ment	_		_

Upstream Fascia - North Description Station (ft) Reading (W. Abutment 0.0 5.8 Span 1, 1/4 pt 12.5 6.5 Span 1, 1/2 pt 25.0 7.7 Span 1, 3/4 pt 37.5 9.0 Pier 50.0 8.6 Span 1, 1/2 pt 62.5 8.5 Span 1, 1/2 pt 75.0 7.8 Span 1, 3/4 pt 87.5 6.1 E. Abutment 100.0 4.7	
Span 1, 1/4 pt 12.5 6.5 Span 1, 1/2 pt 25.0 7.7 Span 1, 3/4 pt 37.5 9.0 Pier 50.0 8.6 Span 1, 1/4 pt 62.5 8.5 Span 1, 1/2 pt 75.0 7.8 Span 1, 3/4 pt 87.5 6.1	86.1 84.9 83.6 84.0 84.1 84.8 86.5
Span 1, 1/2 pt 25.0 7.7 Span 1, 3/4 pt 37.5 9.0 Pier 50.0 8.6 Span 1, 1/4 pt 62.5 8.5 Span 1, 1/2 pt 75.0 7.8 Span 1, 3/4 pt 87.5 6.1	84.9 83.6 84.0 84.1 84.8 86.5
Span 1, 3/4 pt 37.5 9.0 Pier 50.0 8.6 Span 1, 1/4 pt 62.5 8.5 Span 1, 1/2 pt 75.0 7.8 Span 1, 3/4 pt 87.5 6.1	83.6 84.0 84.1 84.8 86.5
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Span 1, 1/2 pt 75.0 7.8 Span 1, 3/4 pt 87.5 6.1	84.8 86.5
Span 1, 3/4 pt 87.5 6.1	86.5
E. Abutment 100.0 4.7	87.9
Span 1, 2 50.0	
Notes:	
Benchmark elevation assumed with no bridge	plans available.
All readings are taken top of waterline to strea	ambed.

Downstream Fascia				
Description	Station (ft)	Reading (ft)	Elevation (ft)	
W. Abutment	0.0	3.3	89.3	
Span 1, 1/4 pt	12.5	6.0	86.6	
Span 1, 1/2 pt	25.0	8.9	83.7	
Span 1, 3/4 pt	37.5	8.8	83.8	
Pier	50.0	7.5	85.1	
Span 1, 1/4 pt	62.5	8.4	84.2	
Span 1, 1/2 pt	75.0	8.1	84.5	
Span 1, 3/4 pt	87.5	6.5	86.1	
E. Abutment	100.0	4.6	88.0	
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Wisconsin Department of Transportation STREAMBED PROFILE REPORT



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