

CK-2270

STAVE RIVER 23.6km

2016 Inspection



CBR iPad Offline Ver 0.23 SNT

CBR Data

Latitude	Longitude		
49°33'52.2"	-122°20'30"		
Crossing Name	Side Creek		
FSR #	8013	Branch #	1
Road Name	STAVE RIVER		
User km	23.6		
Current Load Rating (tonnes)	41		
Structure Class	Temporary Bridge		
Portable	N		
Superstructure	Steel I-beam		
Deck Type	Timber - Untreated		
Abutment Left	Crib, Log or Untreated Timber		
Abutment Right	Crib, Log or Untreated Timber		
Spans	1		
Total Length (m)	18.3		
Deck Width (m)	4.9		

Updated Data

Latitude	Longitude		
49°33'52.47"	-122°20'30.12"		
HD Diff. (m)	8.7	Accuracy (m)	10
22.2			

Inspection

Date of Inspection 2016-07-26 7:31:22 PM

Inspector Name Jamie Rupar Gilliatt

Inspection Company SNT Engineering

Inspector Comments

Steel girder and timber deck structure placed on top of old stringer bridge with log crib abutments. Deck is deteriorating with 2 holes, rotten plank, and heavy wear in places. Pockets of rot noted in ties adjacent to guardrail where debris accumulates. Replace entire deck system & remove old log stringers during works. Bridge currently load rated for 41 tonnes based on deck condition, but no load posting sign in place. Updated user km to 22.2 based on road km markings.

P.Eng Comments

The steel girders bear directly over top the old log crib on the upstream left and downstream right banks. The old log stringers underneath are in poor condition. The deck planks are rotting and holes are showing. Pockets of rot have been detected in the ties. Based on the condition of both structures I recommend a complete replacement. In the meantime replace the heavily worn deck planks; place fenders at all 4 corners; post bridge ahead signs; grade and brush approaches; and replace the missing delineator. Limit loading to L45 or 41 tonnes until the structure has been replaced. Post load rating signs.



14/03/2017

P.Eng Seal

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Approach

Alignment Fair

Vertical curve.

Bridge Ahead Signs
Missing
☐ 0 ☐ 1 ☒ 2

Brushing Required Y

Vegetation starting to obscure bridge.

Delineator Missing
Left
☐ 0 ☒ 1 ☐ 2

Downstream corner.

Delineator Missing
Right
☒ 0 ☐ 1 ☐ 2

Fender Condition Poor

No fenders.

Posted Load Rating

No load posting sign in place.

Road Surface Poor

Pothole in approach has resulted in heavy wear to deck.

Abutment

Log/Timber Cribs Fair

Old log crib supports stringers and steel girders. Up to 25 mm sap rot. Some minor end rot. No crushing or distress noted.

Tie Backs Fair

Minor sap rot in places. Some minor end rot and end splits. No crushing or distress noted.

Bin Wall N/A

Concrete N/A

Caps or Sills N/A

Piles or Posts N/A

Ballast Wall Good

Limited access. Visible sections look OK.

Wing Wall N/A

Bracing N/A

Hardware Fair

Fill Fair

Riprap Poor

None in front of right abutment.

Bearings Unrated

No access.

Corrosion Protection N/A

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Deck

Running Surface	Poor	Pothole in approach has resulted in heavy wear to deck.
Running Planks	Poor	2 large holes in planks. Moderate wear in wheel tracks, heavy wear in some locations.
Sub Deck	N/A	
Ties	Fair	Sample probed ties. 27 with pockets of rot adjacent to deck. Drill 8 locations over girders, limited amount of rot found, in some places up to 20 mm, one location 90 mm.
Nails	Fair	Starting to protrude.
Deck to Girder Bolts	Unrated	No access.
Concrete Deck	N/A	
Grout Pockets	N/A	
Deck Joints	N/A	
Steel Deck Plate	N/A	
Gravel Surface	N/A	
Curb Rail/Blocks/Posts	Fair	1 damaged riser. Small amount of rot found in 2 risers. Impact damage R/B D/S corner. Grader damage in places. Some moss growth.
Hand Rails/Walkouts	N/A	
Hardware	Fair	Loose lashing.
Overall Deck Condition	Fair	
Gravel Depth (mm)		

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Steel/Concrete

Serial/ID Plate No ID Tag. Kiewitt L75 18.288 m 2008.

Girders Unrated No access under girder for inspection.

Diaphragms Unrated No access.

Bracing Unrated No access.

Under Trussing N/A

Hardware Unrated No access.

Welded/grouted
shear connectors N/A**Log**

Log Curbs N/A

Needle Beam N/A

Needle Lashing/
Shimming N/A

Needle Beam to Crib (m)

Needle Diameter (mm)

Stringer
Number

Species

Peeled

Diameter
(mm)Rot Depth
(mm)

Condition

Comment

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Hazards

Estimated Present Water Level Depth (m)	0.3	High Water	☐	Debris	☐
Estimated Present Water Level Width (m)	8	Aggradation	☐	Scour	☐
Estimated High Water Level Clearance (m)	1.5	Ice	☐		

Comments

Repairs and Monitoring

Repair

Item	Priority	Repair Description
1	High	Replace running planks, ties, and guardrail. Requires materials for 4.3 m wide 18.3 m long deck. 250x200 ties @ 400 c/c, 100 mm thick running planks. Install load posting sign until repairs are performed.
2	Medium	Post bridge ahead signs. Regrade approaches.
3	Medium	Install fenders at all corners.

Item	Monitor Description	Frequency
1	Monitor log crib abutments.	Anually
2		
3		

Sketch
(Select Signature)



Right Approach Facing Bridge



Hole in Deck at Right Abutment



Left Approach Facing Away From Bridge



Deck

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Wear in Deck



Looking Downstream



Looking Upstream



Left Approach Facing Away From Bridge



Left Approach Facing Bridge



Locations with Pockets of Rot Noted in Ties Adjacent to Riser



Rotten Deck Plank & Pothole in Approach Producing Heavy Wear in Deck Plank



Structure Details



Downstream Elevation



Stringers



Left Bank Abutment



Upstream Elevation

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Right Bank Abutment



Typical Tie Back Condition