

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	<b>BRIDGE INSPECTION REPORT</b> <b>B09202024-1</b>	
<b>Date:</b> 9/20/2024	<b>Inspected By:</b> L Christensen	<b>Category:</b> Office - Bridge Office	
<b>BRIDGE INFORMATION</b>			
<b>Site:</b>	1-155 - BROAD COVE BROOK BRIDGE NO. 1		
<b>Route:</b>		<b>Overall Length:</b>	12 m
<b>Year Built:</b>	1965	<b>Est: Yes</b>	<b>Overall Width:</b> 7.9 m
<b>Year Last Rehab.:</b>		<b>Est: No</b>	<b>Roadway Width:</b> 7.3 m
<b>Region:</b>	AVALON PENINSULA	<b>Sidewalk Width:</b>	0 m
<b>Jurisdiction:</b>	Provincial	<b>Clearance to R.D. or N.W.L.:</b>	1.7 m
<b>Type of Structure:</b>	03 - Reinforced Concrete Beam/Slab	<b>Max Depth of N.W.L.:</b>	0.3 m
<b>Purpose of Structure:</b>	04 - Over Non-Navigable Waters	<b>Spans:</b>	
<b>Type of Handrail:</b>	02 - Concrete Rail	<u>Span No.:</u>	<u>Length</u>
<b>Roadway Surface:</b>	02 - Asphalt	1	8
<b>Alignment Vertical:</b>	02 - Adequate	2	0
<b>Alignment Horizontal:</b>	02 - Adequate	3	0
<b>Restrictions:</b>	No	6	0
<b>BRIDGE PHOTOS</b>			
			
<b>SUBSTRUCTURE</b>			
<b>Condition:</b>	P1 - Poor	<b>Bearings:</b>	U - Uninspectable
		<b>Bearing Seat:</b>	U - Uninspectable
<b>Comments:</b>	Similar condition to 2023 inspection. Extreme scour under east abutment. Abutment seems to be resting on bedrock at either side of the deep scour, with a vertical crack in abutment above scour area. Minor scour on east abutment. Exposed bearing seat at ends has minor concrete deterioration. Exterior corners of both abutments and 3/4 wing walls have large areas of scaling exposing river rocks in concrete.		
<b>SUPERSTRUCTURE</b>			
<b>Condition:</b>	P1 - Poor	<b>Expansion Joints:</b>	I - Inapplicable
<b>Comments:</b>	Similar condition to 2023 inspection. Exterior soffit on both sides has severe concrete deterioration exposing reinforcement and hand rail J-bars. Interior deck soffit in F1 condition. Interior beams in F1 condition, exterior beam in P1/P3 condition. Large longitudinal cracking and exposed reinforcement on both exterior beams.		
<b>DECK</b>			

<b>Condition:</b>	P1 - Poor	<b>Curbs:</b>	I - Inapplicable
<b>Hand Rail:</b>	P1 - Poor	<b>Roadway Condition:</b>	P3 - Poor
<b>Approach Rail:</b>	P1 - Poor		
<b>Comments:</b>	Hand rail and approach rails in poor condition and have very limited impact force resistance. Rot in approach rail posts and some custom rail material used between approach rail and hand rail. Two potholes in the road are most likely from erosion undermining of road. Monitoring required for additional erosion undermining. Downstream side of road on west side has severe erosion next to the roadway with a large hole that is undermining the outside of the roadway. This causes a safety concern.		

**HYDROLOGY**

<b>Water Velocity:</b>	0 m/s	<b>Ice Problem:</b>	N - No Problem
<b>Water Depth:</b>	0 m	<b>Scour Problem:</b>	K - Known Problem
<b>Waterway:</b>	02 - InAdequate	<b>Debris Problem:</b>	N - No Problem
<b>Comments:</b>	Extreme scour under east abutment. Flow is not centered under bridge cause increased scour at east abutment.		

**REPLACEMENT/REHABILITATION**

<b>Next Rehab. Date:</b>		<b>Replacement Year:</b>	2025
<b>Antic. Rehab. Cost:</b>	\$0	<b>Replacement Cost:</b>	\$0
<b>Recommendations:</b>			

**OBSERVATIONS**

<b>Overall Condition:</b>	P1 - Poor	<b>Requires Further Inspection:</b>	Yes
<b>Additional Observations:</b>	Replacement required. Monitor extreme scour, soffit facia deterioration and possible road undermining causing potholes.		

**LEGEND:**

**Condition Definitions:**

- 1 - \*Good - [discontinued code].
- 2 - \*Fair - [discontinued code].
- 3 - \*Poor - [discontinued code].
- 4 - \*Unsafe - [discontinued code].
- G - Good.

- F2 - Fair.
- F1 - Fair.
- P3 - Poor.
- P1 - Poor.
- P - Poor.

- C - Unsafe (Closed to Public).
- U - Uninspectable.
- I - Inapplicable.

**Problem Definitions:**

- N - No Problem.
- P - Possible Problem.
- K - Known Problem.
- NA - Not Applicable.

**Category Definitions:**

- Maint. - Maintenance.
- Eng. - Engineering.
- Office - Bridge Office.

**PHOTO GUIDELINES:**

**Inspection Photos:**

- Please provide photos using guidelines below:
- Any item which inspector feels should be documented by photograph
  - All items noted above as being F3, P1, P, or C
  - Any evidence of known ice, scour, debris, waterway problems

**INSPECTION PHOTOS**