

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	<b>BRIDGE INSPECTION REPORT</b> <b>B12102021-1</b>	
<b>Date:</b> 10/30/2021	<b>Inspected By:</b> Mike Button	<b>Category:</b> Office - Bridge Office	
<b>BRIDGE INFORMATION</b>			
<b>Site:</b>	5-024 - LOWER BROOK BRIDGE		
<b>Route:</b>	500	<b>Overall Length:</b>	43 m
<b>Year Built:</b>	1993	<b>Est: No</b>	<b>Overall Width:</b> 12.3 m
<b>Year Last Rehab.:</b>		<b>Est: No</b>	<b>Roadway Width:</b> 10.5 m
<b>Region:</b>	LABRADOR	<b>Sidewalk Width:</b>	0 m
<b>Jurisdiction:</b>	Provincial	<b>Clearance to R.D. or N.W.L.:</b>	7.8 m
<b>Type of Structure:</b>	01 - AASH to Girder	<b>Max Depth of N.W.L.:</b>	1.5 m
<b>Purpose of Structure:</b>	04 - Over Non-Navigable Waters		
<b>Type of Handrail:</b>	01 - Aluminum Rail	<b>Spans:</b>	
<b>Roadway Surface:</b>	01 - Concrete	<u>Span No.:</u>	<u>Length</u>
<b>Alignment Vertical:</b>	01 - Good	1	27
<b>Alignment Horizontal:</b>	01 - Good	2	0
<b>Restrictions:</b>	No	3	0
		<u>Span No.:</u>	<u>Length</u>
		4	0
		5	0
		6	0
<b>BRIDGE PHOTOS</b>			
			
<b>SUBSTRUCTURE</b>			
<b>Condition:</b>	G - Good	<b>Bearings:</b>	F2 - Fair
		<b>Bearing Seat:</b>	F2 - Fair
<b>Comments:</b>	- Abutments, and wingwalls in good condition. Bearings and bearing seats too high for inspection but assumed to be in fair condition.		
<b>SUPERSTRUCTURE</b>			
<b>Condition:</b>	G - Good	<b>Expansion Joints:</b>	P3 - Poor
<b>Comments:</b>	- Expansion joints full of road sand and seals are pushed through the gap. - Girders, bottom of deck, soffit and fascia in good condition.		
<b>DECK</b>			
<b>Condition:</b>	P3 - Poor	<b>Curbs:</b>	F2 - Fair

<b>Hand Rail:</b>	F1 - Fair	<b>Roadway Condition:</b>	F2 - Fair
<b>Approach Rail:</b>	F1 - Fair		
<b>Comments:</b>	- Approach/exit rails have some damage rail sections with several damaged/heavily spilt posts, are connected to end blocks, have collision dampening posts in each approach lane only and the northwest hazard marker is missing with the remaining in place. - End blocks in have mild map cracking throughout and have various erosion holes going from them along the wingwalls. - Curb has a small spall on the northwest corner. Curb chaulking cracked or not in place. - Handrails have minor bends/dents throughout with one twisted post. - Deck not paved. Transverse rebar exposed on the western half of the deck in numerous bar width spalls, P3. F2 remainder. - Approach asphalt in good condition. - No deck drains.		

**HYDROLOGY**

<b>Water Velocity:</b>	0.3 m/s	<b>Ice Problem:</b>	N - No Problem
<b>Water Depth:</b>	0.5 m	<b>Scour Problem:</b>	N - No Problem
<b>Waterway:</b>	01 - Adequate	<b>Debris Problem:</b>	N - No Problem
<b>Comments:</b>	- Abutments have good rip-rap placement.		

**REPLACEMENT/REHABILITATION**

<b>Next Rehab. Date:</b>	2024	<b>Replacement Year:</b>	2060
<b>Antic. Rehab. Cost:</b>	\$25,000	<b>Replacement Cost:</b>	\$1,800,000
<b>Recommendations:</b>	- Patch/pour back western half of the deck. Replace expansion joint seals. Fill erosion holes and control runoff. Replace curb chaulking.		

**OBSERVATIONS**

<b>Overall Condition:</b>	G - Good	<b>Requires Further Inspection:</b>	No
<b>Additional Observations:</b>	- Hazards steep slopes, light traffic and bridge is on steep/shard vertical and horizontal alignment.		

**LEGEND:**

<b>Condition Definitions:</b>			<b>Problem Definitions:</b>	<b>Category Definitions:</b>
1 - *Good - [discontinued code].	F2 - Fair.	C - Unsafe (Closed to Public).	N - No Problem.	Maint. - Maintenance.
2 - *Fair - [discontinued code].	F1 - Fair.	U - Uninspectable.	P - Possible Problem.	Eng. - Engineering.
3 - *Poor - [discontinued code].	P3 - Poor.	I - Inapplicable.	K - Known Problem.	Office - Bridge Office.
4 - *Unsafe - [discontinued code].	P1 - Poor.		NA - Not Applicable.	
G - Good.	P - Poor.			

**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 P3, P1, P, or C
- Any evidence of known ice, scour, debris, waterway problems

**INSPECTION PHOTOS**