

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	<b>BRIDGE INSPECTION REPORT</b> <b>B12102021-3</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>	5-023 - EDWARD'S BROOK BRIDGE		
<b>Route:</b>	500	<b>Overall Length:</b>	40 m
<b>Year Built:</b>	1986	<b>Est:</b> No	<b>Overall Width:</b> 12.3 m
<b>Year Last Rehab.:</b>		<b>Est:</b> No	<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>	4.6 m
<b>Type of Structure:</b>	01 - AASH to Girder	<b>Max Depth of N.W.L.:</b>	0.6 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	24
<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>	G - Good
<b>Comments:</b>	- Abutments, and wingwalls in good condition overall. Some mild efflorescence on east diaphragms over the abutment likely caused from a leaking expansion joint. Bearing seat exterior edges in good condition, interior surface hidden by diaphragms and too high for inspection. Bearing 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 seals are covered in gravel and appear torn in places, curb plates/studs are exposed/bent, and there are various voids under the roadway plates, P3. No or damaged chaulking on curb exteriors. - Girders, bottom of deck, soffit and fascia in good condition.		
<b>DECK</b>			

<b>Condition:</b>	F2 - Fair	<b>Curbs:</b>	F1 - Fair
<b>Hand Rail:</b>	F2 - Fair	<b>Roadway Condition:</b>	P3 - Poor
<b>Approach Rail:</b>	F1 - Fair		
<b>Comments:</b>	- Approach/exit rails have some damage rail sections with several damaged/cracked off posts, all bolts missing (never drilled) to connect rails to end blocks, complete with hazard markers and have collision dampening posts. - End blocks in fair condition. - Curbs have some small spalls around the expansion joint areas, F1. Curb is good condition otherwise. Chaulking torn and out of place on exterior curb. - Handrails have minor dents/scrapes throughout. Rail bolt pulled through on southwest corner. - Deck not paved. Small pothole in concrete surface. - Approach asphalt is heavily patched and deteriorated at the tie in to the expansion joints. Asphalt has large transverse cracks over the approach slabs. - No deck drains.		

**HYDROLOGY**

<b>Water Velocity:</b>	0.3 m/s	<b>Ice Problem:</b>	N - No Problem
<b>Water Depth:</b>	0.3 m	<b>Scour Problem:</b>	N - No Problem
<b>Waterway:</b>	01 - Adequate	<b>Debris Problem:</b>	N - No Problem
<b>Comments:</b>	- Rip-rap has good positioning, no scour.		

**REPLACEMENT/REHABILITATION**

<b>Next Rehab. Date:</b>	2025	<b>Replacement Year:</b>	2050
<b>Antic. Rehab. Cost:</b>	\$35,000	<b>Replacement Cost:</b>	\$1,800,000
<b>Recommendations:</b>	- Replace guiderail and posts as required. Connect guide rail to end blocks. Rail has been extended and end block has the blackout to accommodate but was never secured in place. Secure structure handrail on the southwest corner. Replace expansion joints, patch curbs and reseal/chaulk exterior curb. Seal asphalt approach slabs cracks.		

**OBSERVATIONS**

<b>Overall Condition:</b>	F2 - Fair	<b>Requires Further Inspection:</b>	No
<b>Additional Observations:</b>	- Hazards small slopes, and light traffic.		

**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 1, 2, 3, P1, P2, or C
- Any evidence of known ice, scour, debris, waterway problems

**INSPECTION PHOTOS**