

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	BRIDGE INSPECTION REPORT B12032021-1	
Date: 10/27/2021	Inspected By: Mike Button	Category: Office - Bridge Office	
BRIDGE INFORMATION			
Site:	5-054 - BLACK WATER BROOK BRIDGE		
Route:	510-10	Overall Length:	11.2 m
Year Built:	2021	Est: No	Overall Width: 8 m
Year Last Rehab.:		Est: No	Roadway Width: 7 m
Region:	LABRADOR	Sidewalk Width:	0 m
Jurisdiction:	Provincial	Clearance to R.D. or N.W.L.:	0 m
Type of Structure:	03 - Reinforced Concrete Beam/Slab	Max Depth of N.W.L.:	0 m
Purpose of Structure:	04 - Over Non-Navigable Waters	Spans:	
Type of Handrail:	01 - Aluminum Rail	<u>Span No.:</u>	<u>Length</u>
Roadway Surface:	01 - Concrete	1	10.6
Alignment Vertical:	01 - Good	2	0
Alignment Horizontal:	02 - Adequate	3	0
Restrictions:	No	6	0
BRIDGE PHOTOS			
SUBSTRUCTURE			
Condition:	F2 - Fair	Bearings:	F2 - Fair
		Bearing Seat:	F2 - Fair
Comments:	- South abutment on good condition but covered in graffiti. Footing has mild scour throughout. - North abutment footing has mild erosion to the concrete face, exposing aggregates. Face is in good condition but is covered in graffiti. All wingwalls in good condition. - No spalls to bearing seat corners and edges. Bearing seat too high for inspection but assumed to be in good condition.		
SUPERSTRUCTURE			
Condition:	F2 - Fair	Expansion Joints:	P3 - Poor
Comments:	- Expansion joints full of gravels/sand. On the north side, expansion joint steel plates embedded through the curb are severely bent and in poor condition. South side joints in much better condition but all seals are cracked/broken in the curb. - Steel girders, braces and bolts have mild corrosion through the paint in numerous locations but in good condition. Bottom of deck concrete in good condition.		
DECK			
Condition:	F2 - Fair	Curbs:	F1 - Fair
Hand Rail:	F2 - Fair	Roadway Condition:	F2 - Fair
Approach Rail:	P1 - Poor		
Comments:	- Approach/exit guiderail has lost corrugation in most sections, many posts are spilt and damaged, all rails are too low, replace, P1. Guiderail has all hazard markers. No end blocks. - Structure guiderails in fair condition overall, small spall exposing embedded anchors on one post. - No asphalt, gravel approaches in good condition (dynamic) the day of inspection. - Curbs have moderate disintegration around expansion joints, and in fair		

condition otherwise - Top of concrete deck in fair condition with some gravel buildup against the curbs.

HYDROLOGY

Water Velocity:	0.5 m/s	Ice Problem:	N - No Problem
Water Depth:	0.5 m	Scour Problem:	K - Known Problem
Waterway:	01 - Adequate	Debris Problem:	N - No Problem
Comments:	- Rip-rap migrating into the channel from the upstream corners. Scour on south footing.		

REPLACEMENT/REHABILITATION

Next Rehab. Date:	2024	Replacement Year:	2050
Antic. Rehab. Cost:	\$50,000	Replacement Cost:	\$1,200,00
Recommendations:	- Replace all guiderail complete with hazard markers and collision dampening posts prior to structure. - Replace both expansion joints with asphaltic plug joints that will hold up to gravel. Reposition riprap and fix scour. Patch spill around handrail post.		

OBSERVATIONS

Overall Condition:	F2 - Fair	Requires Further Inspection:	No
Additional Observations:	- Hazards, light traffic, moderate slopes, negotiating rip-rap and working near water.		

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

INSPECTION PHOTOS