

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	BRIDGE INSPECTION REPORT B12072021-4	
Date: 10/28/2021	Inspected By: Mike Button	Category: Office - Bridge Office	
BRIDGE INFORMATION			
Site:	5-070 - SOUTHWEST BROOK BRIDGE		
Route:	510	Overall Length:	36 m
Year Built:	2002	Est: No	Overall Width: 12 m
Year Last Rehab.:		Est: No	Roadway Width: 11.1 m
Region:	LABRADOR		Sidewalk Width: 0 m
Jurisdiction:	Provincial		Clearance to R.D. or N.W.L.: 3.3 m
Type of Structure:	05 - Pre-stressed Concrete Slab		Max Depth of N.W.L.: 1.5 m
Purpose of Structure:	04 - Over Non-Navigable Waters		Spans:
Type of Handrail:	01 - Aluminum Rail		Span No.: <u>Length</u> Span No.: <u>Length</u>
Roadway Surface:	01 - Concrete	1	21 4 0
Alignment Vertical:	01 - Good	2	0 5 0
Alignment Horizontal:	01 - Good	3	0 6 0
Restrictions:	No		
BRIDGE PHOTOS			
			
SUBSTRUCTURE			
Condition:	F2 - Fair	Bearings:	G - Good
		Bearing Seat:	G - Good
Comments:	- Wingwalls, bearings and bearing seats in good condition. Abutments have light erosion to waterline concrete.		
SUPERSTRUCTURE			
Condition:	G - Good	Expansion Joints:	F2 - Fair
Comments:	- Expansion joint seals full of gravel, no water seen on bearing seats. Embedded steel starting to show through surface concrete. Recommend replacing rubber seals with asphaltic plug joints as structure is on a gravel road. - Six girders have moderate corrosion to all surfaces. All interior braces are painted with moderate corrosion to bolts. Girders over abutments and have light paint chipped likely caused from installation. Bottom of deck concrete in excellent condition. Superstructure G.		
DECK			

Condition:	G - Good	Curbs:	G - Good
Hand Rail:	F2 - Fair	Roadway Condition:	G - Good
Approach Rail:	F2 - Fair		
Comments:	- Approach/exit rails in fair condition and are beginning to be overgrown by vegetation, connected to end blocks, complete with hazard markers and do not have collision dampening posts prior to end blocks. - Approach/exits are gravel road and in good condition (Dynamic) road was just graded. - No asphalt, concrete deck in good condition. Water/ice buildup along the south curb. No deck drains. - Curbs in good condition. - Handrails in have minor dents/scrapes from the flyer.		

HYDROLOGY

Water Velocity:	0.6 m/s	Ice Problem:	N - No Problem
Water Depth:	0.5 m	Scour Problem:	N - No Problem
Waterway:	01 - Adequate	Debris Problem:	N - No Problem
Comments:	- Recommend the replacement of rip-rap on riverside abutment faces.		

REPLACEMENT/REHABILITATION

Next Rehab. Date:	2026	Replacement Year:	2070
Antic. Rehab. Cost:	\$35,000	Replacement Cost:	\$1,800,000
Recommendations:	- Recommend replacing rubber seals with asphaltic plug joints as structure is on a gravel road. Recommend the installation of deck drains. Brush clear approach rails. Replace rip-rap on riverside abutment faces. Clean expansion joint seals (2022).		

OBSERVATIONS

Overall Condition:	G - Good	Requires Further Inspection:	No
Additional Observations:	- Hazards steep slopes, and mild traffic.		

LEGEND:

Condition Definitions:			Problem Definitions:	Category Definitions:
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