

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	BRIDGE INSPECTION REPORT B07272021-4	
Date: 7/23/2021	Inspected By: Michael Button	Category: Office - Bridge Office	
BRIDGE INFORMATION			
Site:	1-039 - SALMONIER RIVER BRIDGE, ST. CATHRNE		
Route:	90	Overall Length:	41.9 m
Year Built:	1971	Est: No	Overall Width: 10 m
Year Last Rehab.:		Est: No	Roadway Width: 8.5 m
Region:	AVALON PENINSULA	Sidewalk Width:	0.8 m
Jurisdiction:	Provincial	Clearance to R.D. or N.W.L.:	4 m
Type of Structure:	01 - AASH to Girder	Max Depth of N.W.L.:	0.6 m
Purpose of Structure:	04 - Over Non-Navigable Waters	Spans:	
Type of Handrail:	02 - Concrete Rail	Span No.:	Length
Roadway Surface:	02 - Asphalt	1	30
Alignment Vertical:	01 - Good	2	0
Alignment Horizontal:	01 - Good	3	0
Restrictions:	No	Span No.:	Length
		4	0
		5	0
		6	0
BRIDGE PHOTOS			
			
SUBSTRUCTURE			
Condition:	P3 - Poor	Bearings:	F1 - Fair
		Bearing Seat:	F1 - Fair
Comments:	- North abutment d/s, has moderate to severe cracking, and mild cracking on river face. D/s most bearing has visible deformation. rest uninspectable. Spalls seen adjacent to one girders bearing area. - South abutment u/s side, evidence of scour can be seen from standing on rip-rap. Good inspection not possible without proper means. Bearing pads were not installed on u/s most girder, rest uninspectable. Both abutments showed evidence of water erosion along their river faces. - South abutment cannot be inspected closely for cracks and spalls.		
SUPERSTRUCTURE			
Condition:	F1 - Fair	Expansion Joints:	F1 - Fair
Comments:	- Upstream girder has rebar showing in several locations. Just starting to become evident. Expansion joints in good condition, no evidence of leaking.		
DECK			

Condition:	P1 - Poor	Curbs:	F1 - Fair
Hand Rail:	F2 - Fair	Roadway Condition:	F1 - Fair
Approach Rail:	F2 - Fair		
Comments:	- Curbs have cracking with efflorescence near north abutment d/s side. - Asphalt in very poor condition, resurface asap. Deck concrete showing below asphalt & visibly deteriorating. - Deck drains filling with debris but still operational.		

HYDROLOGY

Water Velocity:	Fast m/s	Ice Problem:	N - No Problem
Water Depth:	Deep m	Scour Problem:	K - Known Problem
Waterway:	01 - Adequate	Debris Problem:	N - No Problem
Comments:	- South abutment, u/s side scour is visible from rip rap but good inspection not possible without proper means. Repairs on next rehab.		

REPLACEMENT/REHABILITATION

Next Rehab. Date:	2022	Replacement Year:	2060
Antic. Rehab. Cost:	\$100000	Replacement Cost:	\$5000000
Recommendations:	- 2022 paving only. 2026 for structure rehab (fix scour, abutment cracks etc) Fix scour on south abutment. - Scheduled salmon river. - Consider adding rip-rap to front of abutments to prevent scour and extend structures life. - Add concrete runoff ditch near south downstream end block. Water is causing a lot of unnecessary erosion damage along structure. Extend ditch 50m south along the road shoulder as well if possible.		

OBSERVATIONS

Overall Condition:	F1 - Fair	Requires Further Inspection:	No
Additional Observations:	Hazards: traffic, high bridge, fast water, slipping/falling. can get completely under bridge from north side, can only see from upstream side on south side.		

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