



GOVERNMENT OF  
NEWFOUNDLAND  
AND LABRADOR  
Department of Transportation and Infrastructure

**BRIDGE INSPECTION REPORT  
B01302020-18**

Date: 1/30/2020

Inspected By: Alex Ford

Category: Eng. - Engineering

**BRIDGE INFORMATION**

Site:	2-069 - SALMONIER RIVER BRIDGE				
Route:	220	Overall Length:	59.8 m		
Year Built:	1977	Overall Width:	10.4 m		
Year Last Rehab.:		Est: No	Roadway Width:	9.2 m	
Region:	CENTRAL EAST	Est: No	Sidewalk Width:	0 m	
Jurisdiction:	Provincial	Clearance to R.D. or N.W.L.:	5 m		
Type of Structure:	01 - AASH to Girder	Max Depth of N.W.L.:	1.5 m		
Purpose of Structure:	03 - Over Navigable Waters	Spans:			
Type of Handrail:	01 - Aluminum Rail	<u>Span No.:</u>	<u>Length</u>	<u>Span No.:</u>	<u>Length</u>
Roadway Surface:	02 - Asphalt	1	23.6	4	0
Alignment Vertical:	01 - Good	2	23.6	5	0
Alignment Horizontal:	01 - Good	3	0	6	0
Restrictions:	No				

**BRIDGE PHOTOS**





**SUBSTRUCTURE**

<b>Condition:</b>	F2 - Fair	<b>Bearings:</b>	F2 - Fair
		<b>Bearing Seat:</b>	F2 - Fair
<b>Comments:</b>	Concrete abutments, pier and wingwalls. Moderate erosion of abutments in tidal zone. Severe erosion of the centre pier in the tidal zone, especially upstream - 200-300mm deep with exposed rebar. Erosion belt is 1000-1500mm wide. Some spalling/delamination on centre pier due to wood construction material left in concrete.		

**SUPERSTRUCTURE**

<b>Condition:</b>	F2 - Fair	<b>Expansion Joints:</b>	P3 - Poor
<b>Comments:</b>	6 AASHTO girders. Some minor exposed rebar. Joints leaking on to beam seats, armour cracked all three.		

**DECK**

<b>Condition:</b>	F2 - Fair	<b>Curbs:</b>	P3 - Poor
<b>Hand Rail:</b>	P3 - Poor	<b>Roadway Condition:</b>	P3 - Poor
<b>Approach Rail:</b>	P3 - Poor		
<b>Comments:</b>	Exposed concrete deck. Deterioration along centreline, potholes elsewhere, significant surface abrasion and wear from plows. Underside of deck has spalls and exposed steel between girder three - four, span one and between girder two - three and five - six, span two. Three rail aluminum system with no endblocks has several areas of impact damage. Bumps at approaches. Deck was previously paved. Approach rail is too low, rusting, some rotted posts. 14 deck drains per side is excessive. A large amount of sand has accumulated under the approach rail.		

**HYDROLOGY**

<b>Water Velocity:</b>	m/s	<b>Ice Problem:</b>	N - No Problem
<b>Water Depth:</b>	m	<b>Scour Problem:</b>	N - No Problem
<b>Waterway:</b>	01 - Adequate	<b>Debris Problem:</b>	N - No Problem
<b>Comments:</b>	Scour check made 2015, no issues. Tidal. Depth and Velocity vary.		

**REPLACEMENT/REHABILITATION**

<b>Next Rehab. Date:</b>		<b>Replacement Year:</b>	
<b>Antic. Rehab. Cost:</b>	\$0	<b>Replacement Cost:</b>	\$0
<b>Recommendations:</b>	Full rehab - Latex repairs to center pier, deck overlay, new curbs and endblocks, rail replacement, expansion joints, guide rail, pave approaches.		

**OBSERVATIONS**

<b>Overall Condition:</b>	F2 - Fair	<b>Requires Further Inspection:</b>	No
<b>Additional Observations:</b>			

**LEGEND:**

**Condition Definitions:**

1 - \*Good - [discontinued code].  
 2 - \*Fair - [discontinued code].  
 3 - \*Poor - [discontinued code].

F2 - Fair.  
 F1 - Fair.  
 P3 - Poor.

C - Unsafe (Closed to Public).  
 U - Uninspectable.  
 I - Inapplicable.

**Problem Definitions:**

N - No Problem.  
 P - Possible Problem.  
 K - Known Problem.

**Category Definitions:**

Maint. - Maintenance.  
 Eng. - Engineering.  
 Office - Bridge Office.

4 - \*Unsafe - [discontinued code].  
G - Good.

P1 - Poor.  
P - Poor.

NA - Not Applicable.

**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**

Department of Transportation and Infrastructure, Government of Newfoundland and Labrador 2021.