

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	<b>BRIDGE INSPECTION REPORT</b> <b>B05312019-1</b>	
<b>Date:</b> 5/31/2019	<b>Inspected By:</b> Pickett R	<b>Category:</b> Eng. - Engineering	
<b>BRIDGE INFORMATION</b>			
<b>Site:</b>	1-110 - DANIEL'S BROOK BRIDGE EXTENSION		
<b>Route:</b>	90	<b>Overall Length:</b>	20.8 m
<b>Year Built:</b>	1960	<b>Est: Yes</b>	<b>Overall Width:</b> 10.5 m
<b>Year Last Rehab.:</b>	1973	<b>Est: No</b>	<b>Roadway Width:</b> 9.2 m
<b>Region:</b>	AVALON PENINSULA	<b>Sidewalk Width:</b>	0.65 m
<b>Jurisdiction:</b>	Provincial	<b>Clearance to R.D. or N.W.L.:</b>	1.5 m
<b>Type of Structure:</b>	02 - Double Tee	<b>Max Depth of N.W.L.:</b>	0.4 m
<b>Purpose of Structure:</b>	04 - Over Non-Navigable Waters		
<b>Type of Handrail:</b>	02 - Concrete Rail		
<b>Roadway Surface:</b>	02 - Asphalt	<b>Spans:</b>	
<b>Alignment Vertical:</b>	01 - Good	<u>Span No.:</u>	<u>Length</u>
<b>Alignment Horizontal:</b>	01 - Good	1	6.7
<b>Restrictions:</b>	No	2	6.7
		3	0
		4	0
		5	0
		6	0
<b>BRIDGE PHOTOS</b>			
			
<b>SUBSTRUCTURE</b>			
<b>Condition:</b>	P3 - Poor	<b>Bearings:</b>	P3 - Poor
		<b>Bearing Seat:</b>	P3 - Poor
<b>Comments:</b>	Original structure extended approximately 2m upstream and 3m downstream. Wide vertical horizontal cracks in original pier. Narrow medium cracks in faces of abutments/pier extensions and wing walls. Concrete disintegration with corrosion to exposed rebar on pier retaining block. Spalling to bearing seats on original pier sever erosion to upstream pier footing extension joints to new exciting abud are opened up.		
<b>SUPERSTRUCTURE</b>			
<b>Condition:</b>	P1 - Poor	<b>Expansion Joints:</b>	F1 - Fair
<b>Comments:</b>	Extension double ties have light spalling due to insufficient cover. Light corrosion on exposed rebar . Spalling /narrow cracks at drainage locations reinforced beam on original structure has wide cracks, delamination and spalling rebar exposed and corroded.		
<b>DECK</b>			

<b>Condition:</b>	P3 - Poor	<b>Curbs:</b>	P3 - Poor
<b>Hand Rail:</b>	P3 - Poor	<b>Roadway Condition:</b>	P3 - Poor
<b>Approach Rail:</b>	G - Good		
<b>Comments:</b>	Severe spalling to downstream deck/curb fascia. Medium narrow cracks, medium/ light spalling on remainder deck/ curb fascia. Effloresce deposits cracks on deck soffit on original section. Section of concrete hand rail spalled off. Remainder narrow cracks and light spalling including the end blocks.		

**HYDROLOGY**

<b>Water Velocity:</b>	0.2 m/s	<b>Ice Problem:</b>	N - No Problem
<b>Water Depth:</b>	0.4 m	<b>Scour Problem:</b>	K - Known Problem
<b>Waterway:</b>	01 - Adequate	<b>Debris Problem:</b>	N - No Problem
<b>Comments:</b>	Severe erosion along bottom of abutments at North East and South West ends.		

**REPLACEMENT/REHABILITATION**

<b>Next Rehab. Date:</b>	2019	<b>Replacement Year:</b>	2023
<b>Antic. Rehab. Cost:</b>	\$0	<b>Replacement Cost:</b>	\$1000
<b>Recommendations:</b>	Beam should be inspected.		

**OBSERVATIONS**

<b>Overall Condition:</b>	P3 - Poor	<b>Requires Further Inspection:</b>	Yes
<b>Additional Observations:</b>	New approach railing and hazard markers installed 2018, deck paved over 2018.		

**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**