

GOVERNMENT OF **NEWFOUNDLAND** AND LABRADOR Department of Transportation and Infrastructure

BRIDGE INSPECTION REPORT B08102021-4

Roadway Width:

11 m

Date: 3/10/2020 Inspected By: Chris Lyver Category: Eng. - Engineering

BRIDGE INFORMATION

Site: 1-136 - PATRICK'S COVE RIVER BRIDGE

Route: **Overall Length:** 32.7 m

1978 Year Built: Est: Yes **Overall Width:** 11.8 m Year Last Rehab.: Est: No

Region: **AVALON PENINSULA** Sidewalk Width: 0.4 m

Clearance to R.D. or Jurisdiction: Provincial 1.8 m N.W.L.:

01 - AASH to Girder 0.2 m Type of Structure: Max Depth of N.W.L.:

04 - Over Non-Navigable Waters Purpose of Structure: Spans:

01 - Aluminum Rail Type of Handrail: Span No.: Length Span No.: Length 02 - Asphalt Roadway Surface: 1 22.4 4 02 - Adequate 2 0 5 0 Alignment Vertical: 3 0 6 0 02 - Adequate Alignment Horizontal:

No Restrictions:

BRIDGE PHOTOS





SUBSTRUCTURE

F2 - Fair F2 - Fair Condition: Bearings:

> F2 - Fair **Bearing Seat:**

- Assumed condition of buried reinforced concrete abutment footing. - Wide alligator cracking with medium Comments:

efflorescent deposits in southwest wingwall (AAR?). Medium delamination in southwest wingwall. - Medium spalling/disintegration along top of southwest wingwalls. - Abutments remain covered in graffiti. - Medium horizontal/vertical cracks with light efflorescence in southeast wingwall. - Narrow medium vertical cracks in

abutment faces.

SUPERSTRUCTURE

Condition: F2 - Fair F2 - Fair **Expansion Joints:**

- No end blocks. - Fair amount of delamination/spalling with medium rusting to exposed reinforcement at girder Comments:

> bottoms near abutments. - Light delamination/spalling with medium rusting to exposed reinforcement on all girders (insufficient cover). - North expansion joint only (paved over on deck) (no sign of leakage). - Wide

longitudinal crack in bottom of east exterior girder (south end).

DECK				
Condition:	F1 - Fair		Curbs:	F1 - Fair
Hand Rail:	F1 - Fair		Roadway Condition	n: F1 - Fair
Approach Rail:	P1 - Poor			
Comments:	- Deck overall condition, F1 west soffit, F2 remainder Narrow transverse/angular cracks with light efflorescence in deck soffit Moderate delamination/spalling with medium rusting to exposed reinforcement continues to edge of west cantilevered deck soffit (caused by deck runoff) Narrow horizontal/vertical/transverse cracks in curb surfaces & fascias Small patched potholes in asphalt with narrow transverse cracks on deck Construction joint on southwest curb fascia repair opening up. 0 Moderate damage, decaying posts, & rail to close to ground at northeast exit Minor scrapes, dents, end caps missing on aluminum hand rails.			
HYDROLOGY				
Water Velocity:	0.4 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:	- Some rip-rap migrating into channel at west ends of structure Deck drains open/clear Chaulking missing from expansion joint gaps on north curb fascias.			
REPLACEMENT/REHAB	ILITATION			
Next Rehab. Date:	2020		Replacement Year:	2030
Antic. Rehab. Cost:	\$80000		Replacement Cost	\$2500000
Recommendations:	- Repair all concrete surface defects Resurface deck Repair/replace northeast exit guiderail & install additional approach/exit guiderail where possible Install hazard markers in the interim (Maintenance) Install additional rip-rap at west end of structure.			
OBSERVATIONS				
Overall Condition:	P1 - Poor		Requires Further Inspection:	No
Additional Observations:	- Structure condition: P1 guiderail, F1 west exterior? deck soffit, F2 remainder River currently not running past either abutment Additional comments unchanged from previous inspections.			
LEGEND: Condition Definitions: 1 - "Good - [discontinued code]. 2 - "Fair - [discontinued code]. 3 - "Poor - [discontinued code]. 4 - "Unsafe - [discontinued code]. G - Good. PHOTO GUIDELINES: Inspection Photos: Please provide photos using guideling and the provide photos using guideling and the provide photos as ball tems noted above as ball	F2 - Fair. F1 - Fair. P3 - Poor. P1 - Poor. P - Poor. ees spould be documented by presence	C - Unsafe (Closed to U - Uninspectable. I - Inapplicable. notograpn	Public). R	roblem Definitions: I - No Problem Possible Problem Known Problem A - Not Applicable. Category Definitions: Maint Maintenance. Eng Engineering. Office - Bridge Office.

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

INSPECTION PHOTOS