

GOVERNMENT OF
NEWFOUNDLAND
AND LABRADOR
Department of Transportation and Infrastructure

BRIDGE INSPECTION REPORT B08102021-3

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

BRIDGE INFORMATION

Site: 1-122 - SHIP COVE RIVER BRIDGE

Route:

Year Built: 1978 Est: Yes
Year Last Rehab.: Est: No

Region: AVALON PENINSULA

Jurisdiction: Provincial

Type of Structure: 01 - AASH to Girder

Purpose of Structure: 04 - Over Non-Navigable Waters

Type of Handrail: 01 - Aluminum Rail

Roadway Surface: 02 - Asphalt

Alignment Vertical: 01 - Good

Alignment Horizontal: 01 - Good

Restrictions: No

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Overall Length: 39.5 m

Overall Width: 11.1 m Roadway Width: 10.6 m

Sidewalk Width: 0 m

Clearance to R.D. or

N.W.L.:

Max Depth of N.W.L.: 0.3 m

Spans:

 Span No.:
 Length
 Span No.:
 Length

 1
 26.9
 4
 0

 2
 0
 5
 0

 3
 0
 6
 0

2 m

BRIDGE PHOTOS





SUBSTRUCTURE

Condition: F1 - Fair Bearings: F2 - Fair

Bearing Seat: P3 - Poor

Comments: - Assumed condition of buried reinforced concrete abutment footings. - Medium vertical cracks in faces of

abutments & ballast walls. - Severe spalling/disintegration to exterior northwest bearing seat. - Assumed condition of bearing pads (inaccessible due to height/flow: Styrofoam still in place). - Numerous medium alligator cracking with medium efflorescent deposits in 4 wingwalls (AAR?). - Medium spalling to exterior faces of ballast walls. - P3

Northwest bearings. - F2 remainder of bearings.

SUPERSTRUCTURE

Condition: F1 - Fair **Expansion Joints:** F1 - Fair

Comments: - No end blocks. - Expansion joints paved over on deck (Possible leakage at northwest end). No chaulking in

expansion joint gaps in curb fascias. - Medium delamination/spalling with medium rusting to exposed

reinforcement along bottoms of girders near abutments (especially at northwest end). - Light delamination/spalling with medium rusting to exposed reinforcement on remaining girder areas (insufficient cover).

https://hwdinspections.gov.nl.ca/Bridge/BridgeInspectPrintOut.asp

DECK			
Condition:	P3 - Poor	Curbs:	P1 - Poor
Hand Rail:	F1 - Fair	Roadway Condition	on: P1 - Poor
Approach Rail:	P1 - Poor		
Comments:	- Deck overall condition, P3 west curb fascia, F1 remainder Curbs overall condition, P1 west side, F1 east side Narrow transverse/longitudinal cracks in deck soffit Medium damage with decaying posts on aging approach/exit guiderail Minor scrapes, dents, & end caps missing on aluminum handrails Wide cracking with severe delamination/spalling with medium rusting to exposed reinforcement continues to west curb/deck/fascia/soffit, especially at the northwest expansion joint location Wide longitudinal crack near drip bead along east cantilevered deck soffit.		
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:	- Minor migration of rip-rap into channel at 4 corners of structures Medium slope erosion along northwest wingwall.		
REPLACEMENT/REHAB	ILITATION		
Next Rehab. Date:	2020	Replacement Yea	ar: 2030
Antic. Rehab. Cost:	\$100000	Replacement Cos	st: \$2000000
Recommendations:	- Repair all concrete defects, especially northwest bearing seat & west curb fascia Install new approach/exit guiderail complete with hazard markers Repair/replace damaged aluminum handrails Install extra rip-rap at structure corners In the interim, have maintenance install the hazard markers.		
OBSERVATIONS			
Overall Condition:	P1 - Poor	Requires Further Inspection:	No
Additional Observations:	- P1 northwest bearing seat, west deck fascia and guiderail. F1 & F2 remainder Comments from previous inspections unchanged.		
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 guidelines any item which inspector in a little the many item which inspector in a little many item which is a	F2 - Fair. F1 - Fair. F1 - Fair. P3 - Poor. P1 - Poor. P - Poor. P - Poor. P - 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.
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Department of Transportation and Infrastructure, Government of Newfoundland and Labrador 2021.

INSPECTION PHOTOS