

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

BRIDGE INSPECTION REPORT B01302020-14

Date: 1/30/2020 Inspected By: Alex Ford Category: Eng. - Engineering

BRIDGE INFORMATION

Site: 2-059 - LAWN BRIDGE WEST (MAIN HWY.)

Route: 220

1974 Year Built: Est: No Est: No Year Last Rehab.:

Region: **CENTRAL EAST**

Jurisdiction: Provincial

Type of Structure: 01 - AASH to Girder

Purpose of Structure: 04 - Over Non-Navigable Waters

02 - Concrete Rail Type of Handrail: 02 - Asphalt Roadway Surface: 01 - Good Alignment Vertical: 01 - Good Alignment Horizontal:

No Restrictions:

Overall Length:

51 **m**

Overall Width:

10.8 m

Roadway Width:

9.4 **m**

Sidewalk Width:

0 **m**

6 m

Clearance to R.D. or N.W.L.:

Max Depth of N.W.L.:

0.5 **m**

Spans:

Span No.:	<u>Length</u>	Span No.:	Length
1	43	4	0
2	0	5	0
3	0	6	0

BRIDGE PHOTOS

























SUBSTRUCTURE

Condition: F2 - Fair **Bearings:** F2 - Fair

Bearing Seat: P3 - Poor

Comments: Concrete abutments and wingwalls. Footing abutment one left side is disintegrated due to deck drain spilling on it.

Abutment corners left side deteriorated due to leakage. Map cracking with efflorescence on wingwalls. Scour under wingwall abutment 2 left, previously repaired but scoured again approx. 0.75m deep. Bearing pads have some squat. Bearing seats have debris and are wet from leakage. Abutment 2 Girder 2 bearing seat is severely

cracked. Abutment 1 left has a washout adjacent to the bridge.

SUPERSTRUCTURE

Condition: F2 - Fair **Expansion Joints:** P3 - Poor

Comments: AASHTO girders, light cracks and some exposed rebar. Diaphragms have significant exposed steel and

delamination/spalls from this. Expansion joints are damaged and leaking, paved over.

DECK

 Condition:
 F2 - Fair
 Curbs:
 F2 - Fair

Hand Rail: F2 - Fair Roadway Condition: F2 - Fair

Approach Rail: G - Good

Comments: Paved concrete deck. Concrete along left side of deck is disintegrated up to approx. 1.0-1.5m from left curb.

Concrete hand rail has some impact damage and light cracks. Approach rail replaced 2019. Curbs left side have light cracking all over, right side has cracking along the wingwall sections. Construction joint between the deck

and the curbs is cracked open (large - 25mm in places) mostly everywhere.

HYDROLOGY

Water Velocity: 0.5 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: Scour along wingwall abutment two left was repaired after Hurricane Igor but has since scoured again. A stream

runs along this wingwall into the river.

REPLACEMENT/REHABILITATION

Next Rehab. Date: Replacement Year:

Antic. Rehab. Cost:	\$0	Replacem	ent Cost: \$0				
Recommendations:	Rehab structure. Latex repairs, deck repairs, new drains, curbs, hand rail, expansion joints, repave deck, scour repairs at wingwall.						
OBSERVATIONS							
Overall Condition:	F2 - Fair	Requires Inspection					
Additional Observations	S :						
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 guide	F2 - Fair. F1 - Fair. F3 - 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.			
Any evidence of known	e provide photos using guidelines below: Any nem wnich inspector rees snould 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.