

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

## BRIDGE INSPECTION REPORT

Date: 10/6/2021 Inspected By: Mike Button Category: Office - Bridge Office

**BRIDGE INFORMATION** 

Site: 2-163 - CHAPEL ARM BRIDGE NO.2

201-10 Route:

1960 Year Built: Est: No Year Last Rehab.: Est: No

Region: **CENTRAL EAST** 

Jurisdiction: Provincial

03 - Reinforced Concrete Beam/Slab Type of Structure:

Purpose of Structure: 04 - Over Non-Navigable Waters

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

02 - Adequate Alignment Horizontal:

No Restrictions:

B10132021-8

**Overall Length:** 6.7 m

**Overall Width:** 9.5 m Roadway Width: 6 m

Sidewalk Width: 0 m

Clearance to R.D. or

1.5 m N.W.L.:

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

Spans:

Span No.: Length Span No.: Length 1 3.8 4 2 0 5 0 3 0 6 0

## **BRIDGE PHOTOS**





## **SUBSTRUCTURE**

P3 - Poor I - Inapplicable Condition: Bearings:

> I - Inapplicable **Bearing Seat:**

- North frame leg exterior faces have severe disintegration, large (>300mm aggregated exposed). Northeast Comments:

corner has severe disintegration and a void extending back to sloped earth fill materials, P3. - South frame leg exterior faces in fair condition. Half the southwest wingwall (no rebar) has cracked off and is in the river below. Surrounding soils left unprotected, P3. - East frame leg face (under structure) has medium cracking throughout. Northeast section of frame leg as severe effloresce leaking from the slab/top of wall joint and building up on the face, P1. - West frame leg face (under structure) has medium horizontal cracking across the bottom 1m with medium efflorescence. Northwest section has severe effloresce leaking from the slab/top of wall joint and building

up on the face, P1.

**SUPERSTRUCTURE** 

Condition: P3 - Poor **Expansion Joints:** I - Inapplicable

- Both fascia's in fair condition. - Bottom of deck is heavily cracked with severe efflorescence on the north half of

Comments:	the structure (P3), map cracking covers the south half (P3). Bottom of deck on the north side also has a medium sized spall to extremely corroded reinforcing steel, P3.		
DECK			
Condition:	P3 - Poor	Curbs:	I - Inapplicable
Hand Rail:	P3 - Poor	Roadway Condition:	F1 - Fair
Approach Rail:	I - Inapplicable		
Comments:	- Asphalt in fair condition No approach/exit rail due to surrounding properties/homes. Hazard markers mostly missing. No end blocks South handrail in poor condition and too low, P3. South roadway edge to south handrail grown over with grass North structure guiderail in fair condition, some posts are getting old/worn, F1 Deck concrete cracked and leaking below, P3.		
HYDROLOGY			
Water Velocity:	0.3 <b>m/s</b>	Ice Problem:	N - No Problem
Water Depth:	0.3 <b>m</b>	Scour Problem:	N - No Problem
Waterway:	01 - Adequate	Debris Problem:	N - No Problem
Comments:	- Erosion of roadway gravels on both north corners of the structure.		
REPLACEMENT/REHAB	ILITATION		
Next Rehab. Date:		Replacement Year:	2024
Antic. Rehab. Cost:	\$	Replacement Cost:	\$500,000
Recommendations:	- Recommend replacing structure with a culvert within 3 years.		
OBSERVATIONS			
Overall Condition:	P3 - Poor	Requires Further Inspection:	No
Additional Observations:	- Hazards, mild slopes, slippery rocks and structure located on a sharp turn Rubber boots for inspection.		
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 any trem which inspector any trem which inspector any definition of the providence of known ice	F2 - Fair. C - Unsafe (Closed to F1 - Fair. U - Uninspectable. P3 - Poor. I - Inapplicable. P1 - Poor. P - Poor. P - Poor.  nes below: eers snouin pe documented by pnotograpn eing P3, P1, P1, or C , scour, debris, waterway problems	Public). N - No Pro	le Problem. Eng Engineering. Problem. Office - Bridge Office.
INSPECTION PHOTOS			

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