

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	<b>BRIDGE INSPECTION REPORT</b> <b>B09142021-8</b>	
<b>Date:</b> 2/25/2020	<b>Inspected By:</b> Chris Lyver	<b>Category:</b> Eng. - Engineering	
<b>BRIDGE INFORMATION</b>			
<b>Site:</b>	1-161 - MALL BAY BRIDGE		
<b>Route:</b>		<b>Overall Length:</b>	25.9 m
<b>Year Built:</b>	1985	<b>Est: Yes</b>	<b>Overall Width:</b> 0 m
<b>Year Last Rehab.:</b>		<b>Est: No</b>	<b>Roadway Width:</b> 0 m
<b>Region:</b>	AVALON PENINSULA	<b>Sidewalk Width:</b>	0 m
<b>Jurisdiction:</b>	Provincial	<b>Clearance to R.D. or N.W.L.:</b>	0 m
<b>Type of Structure:</b>	04 - Rigid Frame	<b>Max Depth of N.W.L.:</b>	0 m
<b>Purpose of Structure:</b>	04 - Over Non-Navigable Waters		
<b>Type of Handrail:</b>	06 - None	<b>Spans:</b>	
<b>Roadway Surface:</b>	01 - Concrete	<u>Span No.:</u>	<u>Length</u>
<b>Alignment Vertical:</b>	01 - Good	1	12.7
<b>Alignment Horizontal:</b>	02 - Adequate	2	0
<b>Restrictions:</b>	No	3	0
		<u>Span No.:</u>	<u>Length</u>
		4	0
		5	0
		6	0
<b>BRIDGE PHOTOS</b>			
			
<b>SUBSTRUCTURE</b>			
<b>Condition:</b>	F2 - Fair	<b>Bearings:</b>	I - Inapplicable
		<b>Bearing Seat:</b>	I - Inapplicable
<b>Comments:</b>	- Assumed condition of buried/ submerged reinforced concrete frame leg footings. - Medium erosion along bottom faces of frame leg footings (visible through water).		
<b>SUPERSTRUCTURE</b>			
<b>Condition:</b>	F1 - Fair	<b>Expansion Joints:</b>	I - Inapplicable
<b>Comments:</b>	- Numerous medium vertical/angular cracks with heavy efflor./stalactite deposits in faces of frame. Cracks extend across haunch into deck - Severe small/medium spall with medium corrosion to exposed reinf. at base of east frame leg (middle at const. joint) - Narrow map cracking with med efflor. deposits in 4 wingwalls - Light /med delamin./spalling at corners of frame legs		
<b>DECK</b>			

<b>Condition:</b>	F1 - Fair	<b>Curbs:</b>	I - Inapplicable
<b>Hand Rail:</b>	I - Inapplicable	<b>Roadway Condition:</b>	I - Inapplicable
<b>Approach Rail:</b>	P3 - Poor		
<b>Comments:</b>	- Numerous medium long./angular cracks with heavy efflor./stalactite deposits in deck soffit - Med./wide horiz. cracks opening up along const. joints in deck fascia's - Guiderail continues to age with dents, scrapes; decaying posts		

**HYDROLOGY**

<b>Water Velocity:</b>	tidal m/s	<b>Ice Problem:</b>	N - No Problem
<b>Water Depth:</b>	tidal m	<b>Scour Problem:</b>	N - No Problem
<b>Waterway:</b>	01 - Adequate	<b>Debris Problem:</b>	N - No Problem
<b>Comments:</b>	- Severe slope erosion continues at NW corner of structure, erosion extends under NW wingwall (rip-rap has migrated into channel) Minor rip-rap migration at remaining 3 corners		

**REPLACEMENT/REHABILITATION**

<b>Next Rehab. Date:</b>	2020	<b>Replacement Year:</b>	2049
<b>Antic. Rehab. Cost:</b>	\$80	<b>Replacement Cost:</b>	\$750
<b>Recommendations:</b>	- Repair all conc. defects - Repair slope erosion at NW end - Replace aging guiderail - Install new rip-rap as required at corners		

**OBSERVATIONS**

<b>Overall Condition:</b>	F1 - Fair	<b>Requires Further Inspection:</b>	No
<b>Additional Observations:</b>	- Unchanged from 2015 inspection		

**LEGEND:**

<b>Condition Definitions:</b>			<b>Problem Definitions:</b>	<b>Category Definitions:</b>
1 - *Good - [discontinued code].	F2 - Fair.	C - Unsafe (Closed to Public).	N - No Problem.	Maint. - Maintenance.
2 - *Fair - [discontinued code].	F1 - Fair.	U - Uninspectable.	P - Possible Problem.	Eng. - Engineering.
3 - *Poor - [discontinued code].	P3 - Poor.	I - Inapplicable.	K - Known Problem.	Office - Bridge Office.
4 - *Unsafe - [discontinued code].	P1 - Poor.		NA - Not Applicable.	
G - Good.	P - Poor.			

**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**