

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	<b>BRIDGE INSPECTION REPORT</b> <b>B04282021-9</b>	
<b>Date:</b> 4/21/2021	<b>Inspected By:</b> Butler	<b>Category:</b> Eng. - Engineering	
<b>BRIDGE INFORMATION</b>			
<b>Site:</b>	2-090 - TERRA NOVA RIVER BRIDGE		
<b>Route:</b>	310	<b>Overall Length:</b>	74 m
<b>Year Built:</b>	1965	<b>Est:</b> No	<b>Overall Width:</b> 11.7 m
<b>Year Last Rehab.:</b>		<b>Est:</b> No	<b>Roadway Width:</b> 8.3 m
<b>Region:</b>	CENTRAL EAST	<b>Sidewalk Width:</b>	1.6 m
<b>Jurisdiction:</b>	Provincial	<b>Clearance to R.D. or N.W.L.:</b>	4 m
<b>Type of Structure:</b>	01 - AASH to Girder	<b>Max Depth of N.W.L.:</b>	2.5 m
<b>Purpose of Structure:</b>	03 - Over Navigable Waters	<b>Spans:</b>	
<b>Type of Handrail:</b>	01 - Aluminum Rail	<b>Span No.:</b>	<b>Length</b>
<b>Roadway Surface:</b>	02 - Asphalt	1	30
<b>Alignment Vertical:</b>	01 - Good	2	30
<b>Alignment Horizontal:</b>	01 - Good	3	0
<b>Restrictions:</b>	No	6	0
<b>BRIDGE PHOTOS</b>			
			
<b>SUBSTRUCTURE</b>			
<b>Condition:</b>	F2 - Fair	<b>Bearings:</b>	F2 - Fair
		<b>Bearing Seat:</b>	F2 - Fair
<b>Comments:</b>	Concrete abutments, center pier and wing walls. Medium cracking of abutments and wing walls with efflorescence, some large cracks and spalling on abutment one left side. Staining of abutment walls from previously leaking joints. Erosion at waterline of center pier with a horizontal crack at the waterline. Elastomeric bearing pad are compressed and bulged. Abutment 2 Joint appears to be leaking. the top of center pier has a spall between Girders 5 and 6. There appears to be freshly spalled concrete beneath center pier icebreaker.		
<b>SUPERSTRUCTURE</b>			
<b>Condition:</b>	F2 - Fair	<b>Expansion Joints:</b>	F2 - Fair
<b>Comments:</b>	6 AASHTO girders. Some light cracking. Three expansion joints with some minor abrasion damage. Medium cracking and efflorescence of soffit on span 1 between girder three and four. Exposed rebar on some soffit. Girder 1 has longitudinal cracking and spalling on the lower flange. Pavement work is required adjacent to expansion joints to prevent further potholing.		

<b>DECK</b>			
<b>Condition:</b>	P3 - Poor	<b>Curbs:</b>	F2 - Fair
<b>Hand Rail:</b>	F2 - Fair	<b>Roadway Condition:</b>	F2 - Fair
<b>Approach Rail:</b>	P3 - Poor		
<b>Comments:</b>	Exposed concrete deck. Abrasion throughout, some light delamination near curbs. Aluminum bridge rail with concrete endblocks. Light cracking in curbs and sidewalks with some pop-outs from repairs. Asphalt approaches have cracking and pothole patching. Rail on right side of departure requires fasteners. The center of span 1 between girders 3 and 4 has signs of leakage through a web shape crack, efflorescence visible from beneath and a 30mm wide by 100mm long crack along the centerline is present on the driving surface. The concrete in the left side gutter is showing signs of concrete erosion.		
<b>HYDROLOGY</b>			
<b>Water Velocity:</b>	+/-0.5 m/s	<b>Ice Problem:</b>	N - No Problem
<b>Water Depth:</b>	1-2.5 m	<b>Scour Problem:</b>	P - Possible Problem
<b>Waterway:</b>	01 - Adequate	<b>Debris Problem:</b>	N - No Problem
<b>Comments:</b>	Centre pier appears good from shoreline, but cannot be verified. Located on tidal area.		
<b>REPLACEMENT/REHABILITATION</b>			
<b>Next Rehab. Date:</b>		<b>Replacement Year:</b>	
<b>Antic. Rehab. Cost:</b>	\$0	<b>Replacement Cost:</b>	\$0
<b>Recommendations:</b>	Check center pier for possible scour. The hole in the deck should be addressed immediately. Due to its location it could deteriorate quickly. Replace bolts in guiderail. Clean deck and repair pier concrete.		
<b>OBSERVATIONS</b>			
<b>Overall Condition:</b>	F2 - Fair	<b>Requires Further Inspection:</b>	No
<b>Additional Observations:</b>	Waterline attached to left side soffit.		
<b>LEGEND:</b>			
<b>Condition Definitions:</b>		<b>Problem Definitions:</b>	
1 - *Good - [discontinued code].	F2 - Fair.	C - Unsafe (Closed to Public).	N - No Problem.
2 - *Fair - [discontinued code].	F1 - Fair.	U - Uninspectable.	P - Possible Problem.
3 - *Poor - [discontinued code].	P3 - Poor.	I - Inapplicable.	K - Known Problem.
4 - *Unsafe - [discontinued code].	P1 - Poor.		NA - Not Applicable.
G - Good.	P - Poor.		
<b>Category Definitions:</b>			
Maint. - Maintenance.			
Eng. - Engineering.			
Office - Bridge Office.			
<b>PHOTO GUIDELINES:</b>			
<b>Inspection Photos:</b>			
Please provide photos using guidelines below:			
<ul style="list-style-type: none"> <li>● Any item which inspector feels should be documented by photograph</li> <li>● All items noted above as being P3, P1, P, or C</li> <li>● Any evidence of known ice, scour, debris, waterway problems</li> </ul>			
<b>INSPECTION PHOTOS</b>			