

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	<b>BRIDGE INSPECTION REPORT</b> <b>B06032019-1</b>	
<b>Date:</b> 6/3/2019	<b>Inspected By:</b> Hunt R	<b>Category:</b> Eng. - Engineering	
<b>BRIDGE INFORMATION</b>			
<b>Site:</b>	1-282 - NORTH ARM RIVER BRIDGE		
<b>Route:</b>	90	<b>Overall Length:</b>	20.8 m
<b>Year Built:</b>	1973	<b>Est: No</b>	<b>Overall Width:</b> 10.5 m
<b>Year Last Rehab.:</b>		<b>Est: No</b>	<b>Roadway Width:</b> 9.3 m
<b>Region:</b>	AVALON PENINSULA	<b>Sidewalk Width:</b>	0.65 m
<b>Jurisdiction:</b>	Provincial	<b>Clearance to R.D. or N.W.L.:</b>	1.3 m
<b>Type of Structure:</b>	02 - Double Tee	<b>Max Depth of N.W.L.:</b>	0.4 m
<b>Purpose of Structure:</b>	04 - Over Non-Navigable Waters	<b>Spans:</b>	
<b>Type of Handrail:</b>	02 - Concrete Rail	<b>Span No.:</b>	<b>Length</b>
<b>Roadway Surface:</b>	02 - Asphalt	<b>Span No.:</b>	<b>Length</b>
<b>Alignment Vertical:</b>	01 - Good	1	6.7
<b>Alignment Horizontal:</b>	02 - Adequate	2	6.7
<b>Restrictions:</b>	No	3	0
		4	0
		5	0
		6	0
<b>BRIDGE PHOTOS</b>			
			
<b>SUBSTRUCTURE</b>			
<b>Condition:</b>	P3 - Poor	<b>Bearings:</b>	P3 - Poor
		<b>Bearing Seat:</b>	P3 - Poor
<b>Comments:</b>	Original structure extended by 3m upstream and downstream. Assumed condition of buried/submerged reinforced concrete abut and pier footings. Medium spacing to pear bearing seats. Medium concrete disintegration to upstream extension bearing seat. Numerous narrow wide horizontal vertical cracks to original abutment and piers. Narrow vertical horizontal cracks with light spacing to all four wingwalls. Medium-severe honeycomb/spalling to faces of abutments and pier extension.		
<b>SUPERSTRUCTURE</b>			
<b>Condition:</b>	P1 - Poor	<b>Expansion Joints:</b>	F1 - Fair
<b>Comments:</b>	Very severe delamination/spalling with medium-severe corrosion to exposed re-enforcements to bottom of original beams in north and south spans medium horizontal cracks in original beams. Construction joint between original structure and extension opening up with concrete spalling light decay/spalling with medium corrosion to exposed reinforcement on double tee extensions. Appears to be leakage in expansion joint onto pier.		

<b>DECK</b>			
<b>Condition:</b>	F1 - Fair	<b>Curbs:</b>	F2 - Fair
<b>Hand Rail:</b>	F1 - Fair	<b>Roadway Condition:</b>	F2 - Fair
<b>Approach Rail:</b>	G - Good		
<b>Comments:</b>	Structure was resurfaced with asphalt in 2018 along with new approach and exit rail C/W hazard markers. Narrow vertical horizontal cracks with medium spacing to concrete handrails and end blocks. Some small sections of concrete. Handrail missing showing exposed re-enforcements. Narrow horizontal cracks in curb tops and facials. Construction joints between top of deck facials and bottom of extension curb facials are opening up.		
<b>HYDROLOGY</b>			
<b>Water Velocity:</b>	0.4 m/s	<b>Ice Problem:</b>	N - No Problem
<b>Water Depth:</b>	0.5 m	<b>Scour Problem:</b>	K - Known Problem
<b>Waterway:</b>	01 - Adequate	<b>Debris Problem:</b>	N - No Problem
<b>Comments:</b>	Assumed medium scouring continuing under upstream end of pier (submerged). Assumed medium erosion continuing at base of abutments and pier (submerged). Some minor erosion at all four corners of structure (wingwalls).		
<b>REPLACEMENT/REHABILITATION</b>			
<b>Next Rehab. Date:</b>	2019	<b>Replacement Year:</b>	2023
<b>Antic. Rehab. Cost:</b>	\$0	<b>Replacement Cost:</b>	\$1000
<b>Recommendations:</b>	Bridge office should reinspect original beams and construction joints as well as scour and pier.		
<b>OBSERVATIONS</b>			
<b>Overall Condition:</b>	P3 - Poor	<b>Requires Further Inspection:</b>	Yes
<b>Additional Observations:</b>	New approach and exit rail C/W hazard markers installed in 2018 and bridge deck resurfaced in 2018.		
<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>			