

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	<b>BRIDGE INSPECTION REPORT</b> <b>B06192024-1</b>	
<b>Date:</b> 6/19/2024	<b>Inspected By:</b> Damien Burns	<b>Category:</b> Eng. - Engineering	
<b>BRIDGE INFORMATION</b>			
<b>Site:</b>	TCH-021 - SOUTHWEST RIVER BRIDGE		
<b>Route:</b>	1	<b>Overall Length:</b>	69.3 m
<b>Year Built:</b>	1964	<b>Est:</b> No	<b>Overall Width:</b> 10 m
<b>Year Last Rehab.:</b>	2014	<b>Est:</b> No	<b>Roadway Width:</b> 8.6 m
<b>Region:</b>	CENTRAL EAST	<b>Sidewalk Width:</b>	0 m
<b>Jurisdiction:</b>	Provincial	<b>Clearance to R.D. or N.W.L.:</b>	7 m
<b>Type of Structure:</b>	01 - AASH to Girder	<b>Max Depth of N.W.L.:</b>	1 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	30.5
<b>Alignment Vertical:</b>	02 - Adequate	2	30.5
<b>Alignment Horizontal:</b>	02 - Adequate	3	0
<b>Restrictions:</b>	No	4	0
		5	0
		6	0
<b>BRIDGE PHOTOS</b>			
			
<b>SUBSTRUCTURE</b>			
<b>Condition:</b>	F2 - Fair	<b>Bearings:</b>	U - Uninspectable
		<b>Bearing Seat:</b>	U - Uninspectable
<b>Comments:</b>	Previous inspection #1 - Concrete abutments, wing walls and center pier. Abutments and wingwalls have scaling, cracking, delamination and disintegration in several areas. Centre pier has some disintegration of the upper sections with some sections of the upstream side repaired in 2014 and some erosion in the flow zone. Abutment 2 upstream has lose of concrete over icebreaker. Icebreaker missing from center pier, and now is on the shoreline downstream. Previous inspection #2 - continued concrete deterioration including at Abut. # 1 right and upper pier right/creep block. New inspection (DB) - Heavy build up of sand under rail, causing abutment #1 left to erode. Some visible chipping in center pier		
<b>SUPERSTRUCTURE</b>			
<b>Condition:</b>	F2 - Fair	<b>Expansion Joints:</b>	F2 - Fair
<b>Comments:</b>	Previous inspection #1 - Five AASHTO girders. Some light cracking of all girders. Span two girder five has		

exposed rebar due to cover issues. Delamination, disintegration and exposed rebar girder five, span one, near abutment one and girder one span two. Some staining of all girders due to cover issues. Expansion joints (three) replaced in 2014. Previous inspection #2 - continued girder concrete deterioration including horizontal cracking along bottom. New Inspection (DB) - Visible leaking of expansion joints.

**DECK**

<b>Condition:</b>	F2 - Fair	<b>Curbs:</b>	F2 - Fair
<b>Hand Rail:</b>	F2 - Fair	<b>Roadway Condition:</b>	F2 - Fair
<b>Approach Rail:</b>	P1 - Poor		

**Comments:** Previous inspection #1 - Full concrete deck rehab and new asphalt wearing surface installed in 2014, good condition. Curb faces and top rehab in 2007 with several sections of the left soffit and fascia repaired in 2014, some minor cracking and disintegration remains on the fascia of both curbs. Four rail aluminum bridge rail with concrete end blocks repaired in 2014, good condition. Approach rail is too short at all corners to cover hazards. Approach #2 information sign requires replacement. Approach #2 right has a damaged rail post. There is a large settlement on Approach #1 right causing a hazard to traffic. Approach 2 potholed and there are old core holes from previously installed detour signs placed during re-hab. Deck Pavement is potholed. Facia on Abutment 1 left near the expansion joint is spalling. Previous inspection #2 - larger void in abut. #1 approach asphalt at expansion joint dam & missing asphalt at middle exp. joint dam. More curb deterioration along fascia. Missing hazard markers at abut. #1 left & right - Abut #2 right. Damaged guiderail at approach #2 right. New inspection (DB) - Missing all hazard markers. Post rail is cracked on Approach #1 right. Back of concrete curb is missing(around 3.75m in length). Some exposed rebar on left side bridge deck.

**HYDROLOGY**

<b>Water Velocity:</b>	1 m/s	<b>Ice Problem:</b>	N - No Problem
<b>Water Depth:</b>	1 m	<b>Scour Problem:</b>	N - No Problem
<b>Waterway:</b>	01 - Adequate	<b>Debris Problem:</b>	K - Known Problem
<b>Comments:</b>	Previous inspection - Significant ice build-up at the bridge location during most spring run offs, potential for girder damage in heavy ice years. Center pier checked for scour 2017		

**REPLACEMENT/REHABILITATION**

<b>Next Rehab. Date:</b>	2024	<b>Replacement Year:</b>	
<b>Antic. Rehab. Cost:</b>	\$0	<b>Replacement Cost:</b>	\$0
<b>Recommendations:</b>	Repair settlement on approach #1. Repair post on approach #2 right. Replace information sign. Place on Rehab schedule for substructure. Repair potholes, replace hazard markers, clean old bridge debris from river, repair facia, repair pavement on approach and fill in old core holes. Repair approach guiderail.		

**OBSERVATIONS**

<b>Overall Condition:</b>	F2 - Fair	<b>Requires Further Inspection:</b>	Yes
<b>Additional Observations:</b>	Previous inspection - Old concrete rail and old icebreaker is littering the River.		