

		GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure		BRIDGE INSPECTION REPORT B02252025-3	
Date: 2/19/2025		Inspected By: T Upshall / M Button		Category: Eng. - Engineering	
BRIDGE INFORMATION					
Site:		1-019 - SMELT RIVER BRIDGE - R91			
SUBSTRUCTURE					
Condition:	P - Poor	Bearings:	U - Uninspectable		
		Bearing Seat:	F1 - Fair		
Comments:	- All wingwalls and abutment exterior corners have moderate cracking with light to moderate efflorescent leachate, F1 to P3. Some cracks near the abutment corners injected, majority of wide cracks injected on the abutment faces in 2023. - Bearing seat exterior corners and ballast wall joints have small areas of disintegration, F1 to P3. Interior bearing seat perimeter free of spalls and efflorescent leachate, F1 to F2. - Bearing too high for inspection. - Severe scour to downstream half of both abutment footings, P. - Overall, abutment/wingwall concrete F1 to P3. Scour P.				
SUPERSTRUCTURE					
Condition:	P3 - Poor	Expansion Joints:	F1 - Fair		
Comments:	- Expansion gaps not poured monolithically with curb repairs. Repairs did not crack. No visible leachate on bearing seat perimeter, F1. - South curb beam has moderate width cracks with moderate efflorescent leachate, P1 to P3. - North curb beam has moderate width cracks with light to moderate efflorescent leachate, P3. - Deck soffit has local delaminations, moderate longitudinal cracks and hairline map cracks throughout, P3 to F1.				
DECK					
Condition:	P3 - Poor	Curbs:	F1 - Fair		
Hand Rail:	G - Good	Roadway Condition:	G - Good		
Approach Rail:	G - Good				
Comments:	*Assumed condition of deck top (covered in asphalt) based on condition of deck soffit below. - Curb top covered in snow and not inspectable. - Exterior vertical faces of the curbs have hairline cracks with moderate efflorescent leachate. Southwest corner has a small delaminated area, F1. - Structure rail replaced in 2023. No observed significant defects, G. - Approach rail/guiderail replaced in 2023. No observed significant defects, G. - Bridge deck and approaches resurfaced in 2023, G. - Hazard markers all in place.				
HYDROLOGY					
Water Velocity:	< 0.5 m/s	Ice Problem:	N - No Problem		
Water Depth:	~1 m	Scour Problem:	K - Known Problem		
Waterway:	01 - Adequate	Debris Problem:	N - No Problem		
Comments:	- Severe scour to downstream half of both abutment footings.				
REPLACEMENT/REHABILITATION					
Next Rehab. Date:	2025	Replacement Year:	2035		
Antic. Rehab. Cost:	\$100,000	Replacement Cost:	\$3,000,000		
Recommendations:	- Repair scour - Monitor 2035 for replacement year on future inspections.				
OBSERVATIONS					
Overall Condition:	P3 - Poor	Requires Further Inspection:	No		
Additional Observations:	- Structure rehabilitated in 2023. Repair scour.				