

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	BRIDGE INSPECTION REPORT B12132021-6	
Date: 10/30/2021	Inspected By: Mike Button	Category: Office - Bridge Office	
BRIDGE INFORMATION			
Site:	5-049 - VALLEY RIVER BRIDGE		
Route:	500	Overall Length:	31.7 m
Year Built:	1991	Est: No	Overall Width: 0 m
Year Last Rehab.:		Est: No	Roadway Width: 10.8 m
Region:	LABRADOR	Sidewalk Width:	0 m
Jurisdiction:	Provincial	Clearance to R.D. or N.W.L.:	4.1 m
Type of Structure:	08 - Steel Bridge	Max Depth of N.W.L.:	0.6 m
Purpose of Structure:	04 - Over Non-Navigable Waters	Spans:	
Type of Handrail:	01 - Aluminum Rail	Span No.:	Length
Roadway Surface:	01 - Concrete	1	17
Alignment Vertical:	01 - Good	2	0
Alignment Horizontal:	01 - Good	3	0
Restrictions:	No	Span No.:	Length
		4	0
		5	0
		6	0
BRIDGE PHOTOS			
			
SUBSTRUCTURE			
Condition:	G - Good	Bearings:	G - Good
		Bearing Seat:	G - Good
Comments:	- Wingwalls, bearings and bearing seats in good condition. - West abutment has vertical hairline to medium wide cracks at the mid-point. Abutments generally in good condition.		

SUPERSTRUCTURE			
Condition:	G - Good	Expansion Joints:	F1 - Fair
Comments:	- Expansion joints in fair condition, mild rust staining to roadway surface concrete. Concrete around them needs some minor work. Concrete around the joints has light cracking in the southeast deck and curb expansion joint concrete, medium to wide cracking with efflorescence on the northwest fascia around the expansion joint, mild honeycombs in the northeast bottom of deck expansion joint concrete, wide cracking and embedded backer foam (garbage) on the southwest bottom of deck expansion joint concrete. Recommend patching areas before chlorides penetrate. Southeast exterior curb expansion area has cracked chaulking. - Bottom of deck concrete in good condition. - Visible cold joint on south fascia. - Six girders and their braces have light to moderate surface corrosion, G.		
DECK			
Condition:	G - Good	Curbs:	F2 - Fair
Hand Rail:	P3 - Poor	Roadway Condition:	P3 - Poor
Approach Rail:	P3 - Poor		
Comments:	- Approach/exit rails have some damaged rail sections with several damaged/split/demolished posts, connected to end blocks, complete with hazard markers, and has collision dampening posts prior to end blocks. - End blocks have mild map cracking. - Asphalt in fair condition on the approach to the structure, wide transverse cracks in asphalt ~1m on either side of each approach slab. Joints from asphalt to approach slabs opening. - Deck and approach slab concrete in good condition with some exposed aggregates. See notes on concrete around expansion joints in the superstructure section. - Roadway curb in fair condition. - Structure handrail has a moderate dent on the northeast corner, remainder in good condition.		
HYDROLOGY			
Water Velocity:	2 m/s	Ice Problem:	N - No Problem
Water Depth:	Deep m	Scour Problem:	N - No Problem
Waterway:	02 - InAdequate	Debris Problem:	N - No Problem
Comments:	- Structure has good rip-rap positioning on both footings. Bridge looks too narrow for the water flow.		
REPLACEMENT/REHABILITATION			
Next Rehab. Date:	2024	Replacement Year:	2060
Antic. Rehab. Cost:	\$20,000	Replacement Cost:	\$1,800,000
Recommendations:	- 2022 - Seal asphalt cracks and joints to approach slabs. - 2024 - Replace northeast top handrail. Replace guiderail posts as required. Chip and patch west bottom of deck expansion joint concrete. Replace southeast curb chaulking.		
OBSERVATIONS			
Overall Condition:	G - Good	Requires Further Inspection:	No
Additional Observations:	- Hazards mild traffic, slopes and traversing rip-rap.		
LEGEND:			
Condition Definitions:		Problem Definitions:	
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.		Category Definitions:
			Maint. - Maintenance.
			Eng. - Engineering.
			Office - Bridge Office.
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			