

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	BRIDGE INSPECTION REPORT B10072021-4	
Date: 10/3/2021	Inspected By: Mike Button	Category: Office - Bridge Office	
BRIDGE INFORMATION			
Site:	TCH-181 - PORTUGAL COVE OVERPASS EAST		
Route:	1	Overall Length:	64.3 m
Year Built:	1999	Est: No	Overall Width: 17 m
Year Last Rehab.:		Est: No	Roadway Width: 16.1 m
Region:	AVALON PENINSULA	Sidewalk Width:	0 m
Jurisdiction:	Provincial	Clearance to R.D. or N.W.L.:	5.3 m
Type of Structure:	05 - Pre-stressed Concrete Slab	Max Depth of N.W.L.:	0 m
Purpose of Structure:	01 - Highway Grade Separation	Spans:	
Type of Handrail:	05 - Concrete Barrier	<u>Span No.:</u>	<u>Length</u>
Roadway Surface:	02 - Asphalt	1	29.5
Alignment Vertical:	01 - Good	2	25.75
Alignment Horizontal:	01 - Good	3	0
Restrictions:	No	4	0
		5	0
		6	0
BRIDGE PHOTOS			
			
SUBSTRUCTURE			
Condition:	F2 - Fair	Bearings:	F1 - Fair
		Bearing Seat:	F2 - Fair
Comments:	- Both abutment faces and bearing seats in fair condition with mild hairline cracking. Faces painted over to hide graffiti. - Pier columns in good condition. - Bearing plates have severe corrosion and delamination on the bearing seat and plate attached to bottom of deck while the slider/contact plates are in fair condition, mostly corrosion free and appear to be in working order. Assumed same condition of pier bearings, P3. - All wingwalls in fair condition. Southwest concrete paving has mild undermining due to roadway runoff. Material loss adjacent is severe.		
SUPERSTRUCTURE			
Condition:	F2 - Fair	Expansion Joints:	F1 - Fair
Comments:	- Fascia's on both sides have mild vertical hairline cracking throughout. - Bottom of deck in good condition. - Expansion joint embedment anchor tops exposed throughout, no evidence of cracking or leaking below. Joint expansion joint concrete and asphalt joint opening up creating a path for alkaline water to get between the asphalt and deck concrete.		

DECK			
Condition:	F2 - Fair	Curbs:	I - Inapplicable
Hand Rail:	F2 - Fair	Roadway Condition:	I - Inapplicable
Approach Rail:	F2 - Fair		
Comments:	- Asphalt has medium-heavy rutting across both lanes, P3. Asphalt and waterproofing missing directly adjacent to west expansion joint, section is approximately 100mmx1000mm. - Jersey barriers have mild-hairline vertical cracking throughout. - Approach/exit rails in fair condition complete with hazard markers and connected to end blocks. - All chaulking cracked through jersey barriers at expansion joint locations.		
HYDROLOGY			
Water Velocity:	n/a m/s	Ice Problem:	NA - Not Applicable
Water Depth:	n/a m	Scour Problem:	NA - Not Applicable
Waterway:	03 - Not Applicable	Debris Problem:	NA - Not Applicable
Comments:	- Heavy runoff caused erosion along southwest corner of structure. Gravels washed over pedestrian sidewalk below.		
REPLACEMENT/REHABILITATION			
Next Rehab. Date:	2025	Replacement Year:	2070
Antic. Rehab. Cost:	\$100000	Replacement Cost:	\$2000000
Recommendations:	- Install concrete runoff ditch on southwest corner of structure and replace materials + repave structure. (2025), \$100,000. Clean up road gravels in the interim (Maintenance). - Potentially replace bearings and expansion joints within 5-10 years (2030), \$200,000. These tasks will likely have to be done together in order to jack up the bridge.		
OBSERVATIONS			
Overall Condition:	F1 - Fair	Requires Further Inspection:	No
Additional Observations:	- Surface P3 due to asphalt rutting, F2 remainder. Traffic control required for inspection.		
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:			
<ul style="list-style-type: none"> ● 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			