

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	BRIDGE INSPECTION REPORT B01152018-5	
Date: 1/12/2018	Inspected By: Rodger Hussey	Category: Eng. - Engineering	
BRIDGE INFORMATION			
Site:	1-197 - BROWNSDALE BROOK BRIDGE		
Route:		Overall Length:	7.5 m
Year Built:	1960	Est: No	Overall Width: 10.9 m
Year Last Rehab.:		Est: No	Roadway Width: 7.3 m
Region:	AVALON PENINSULA	Sidewalk Width:	0.3 m
Jurisdiction:	Provincial	Clearance to R.D. or N.W.L.:	1.8 m
Type of Structure:	04 - Rigid Frame	Max Depth of N.W.L.:	0.5 m
Purpose of Structure:	04 - Over Non-Navigable Waters		
Type of Handrail:	02 - Concrete Rail	Spans:	
Roadway Surface:	02 - Asphalt	<u>Span No.:</u>	<u>Length</u>
Alignment Vertical:	02 - Adequate	1	6.3
Alignment Horizontal:	02 - Adequate	2	0
Restrictions:	No	3	0
		<u>Span No.:</u>	<u>Length</u>
		4	0
		5	0
		6	0
BRIDGE PHOTOS			
			
SUBSTRUCTURE			
Condition:	I - Inapplicable	Bearings:	I - Inapplicable
		Bearing Seat:	I - Inapplicable
Comments:	No footings, frame legs poured directly onto doweled bedrock. Original structure extended approximately 5m downstream. Original deck (badly deteriorated) still in place approx. 0.8m below new deck.		
SUPERSTRUCTURE			
Condition:	P1 - Poor	Expansion Joints:	I - Inapplicable
Comments:	P1 : Original structure, F1: Extension. Numerous wide horizontal/vertical cracks with heavy efflorescence deposits in faces of original frame legs. Severe spalling to NE corner of original north frame leg. Very severe spalling/disintegration to SE corner of original south frame leg. Wide vertical crack in face of NW wingwall under shifted concrete handrail post. Construction joints between wingwalls & frame legs opening up.		
DECK			

Condition:	P1 - Poor	Curbs:	P3 - Poor
Hand Rail:	P1 - Poor	Roadway Condition:	P3 - Poor
Approach Rail:	F2 - Fair		
Comments:	P1 : Extension deck fascia, F1: remainder. Narrow transverse cracks with light efflorescence deposits in new deck soffit. Widening, honeycombing, light stains, & leakage to longitudinal construction in deck soffit. Very severe spalling/disintegration with medium corrosion to exposed reinforcement to deck/curb fascia at NW corner. Medium spalling & wide transverse cracks in curb surfaces. Light/medium scour/erosion under frame legs/wingwalls. Medium/severe slope erosion at 4 corners of structure. Concrete handrails cracked & post missing at NW end of concrete handrails (opening covered with 2x4's & delineators). Wide horizontal/vertical cracks with medium/severe spalling to remaining concrete handrails. Some rip-rap at D/S end of structure migrating into river.		

HYDROLOGY

Water Velocity:	0.6 m/s	Ice Problem:	N - No Problem
Water Depth:	0.5 m	Scour Problem:	K - Known Problem
Waterway:	01 - Adequate	Debris Problem:	P - Possible Problem
Comments:	Original deck may facilitate the buildup of debris and cause reduced hydrologic capacity.		

REPLACEMENT/REHABILITATION

Next Rehab. Date:	2018	Replacement Year:	2021
Antic. Rehab. Cost:	\$0	Replacement Cost:	\$600000
Recommendations:	Rehab structure. In the interim repair concrete handrails on North side. Possibly place jersey barriers along the Northside.		

OBSERVATIONS

Overall Condition:	P1 - Poor	Requires Further Inspection:	No
Additional Observations:	P1: Original frame legs, extension deck, fascia, & handrails. F1: Remainder		

LEGEND:

Condition Definitions:			Problem Definitions:	Category Definitions:
1 - *Good - [discontinued code].	F2 - Fair.	C - Unsafe (Closed to Public).	N - No Problem.	Maint. - Maintenance.
2 - *Fair - [discontinued code].	F1 - Fair.	U - Uninspectable.	P - Possible Problem.	Eng. - Engineering.
3 - *Poor - [discontinued code].	P3 - Poor.	I - Inapplicable.	K - Known Problem.	Office - Bridge Office.
4 - *Unsafe - [discontinued code].	P1 - Poor.		NA - Not Applicable.	
G - Good.	P - Poor.			

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