

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	BRIDGE INSPECTION REPORT B06132018-8	
Date: 3/6/2018	Inspected By: Chris Lyver	Category: Eng. - Engineering	
BRIDGE INFORMATION			
Site:	1-105 - SMOOTH COVE BRIDGE		
Route:		Overall Length:	10.2 m
Year Built:	1960	Est: No	Overall Width: 11.8 m
Year Last Rehab.:		Est: No	Roadway Width: 6 m
Region:	AVALON PENINSULA	Sidewalk Width:	0 m
Jurisdiction:	Provincial	Clearance to R.D. or N.W.L.:	1 m
Type of Structure:	04 - Rigid Frame	Max Depth of N.W.L.:	0.3 m
Purpose of Structure:	04 - Over Non-Navigable Waters	Spans:	
Type of Handrail:	02 - Concrete Rail	Span No.:	Length
Roadway Surface:	02 - Asphalt	1	3.7
Alignment Vertical:	01 - Good	2	0
Alignment Horizontal:	02 - Adequate	3	0
Restrictions:	No	6	0
BRIDGE PHOTOS			
			
SUBSTRUCTURE			
Condition:	F1 - Fair	Bearings:	I - Inapplicable
		Bearing Seat:	I - Inapplicable
Comments:	- Inspection restricted due to low clearance and deep water. - Structure has 1 U/S extension and 2 D/S extensions. - Assumed condition of buried/ submerged frame leg footings.		
SUPERSTRUCTURE			
Condition:	F1 - Fair	Expansion Joints:	I - Inapplicable
Comments:	- Horizontal construction joints opening up. - Medium/ wide vert. cracks with light efflor. deposits in frame legs esp. at construction joints with extensions. - Light spalling to faces of U/S wingwalls. - Severe delamin./ spalling/ disintegration along top of SE wingwall under curb. - Narrow alligator/ map cracking with light efflor. deposits to faces of D/S wingwalls.		
DECK			

Condition:	F1 - Fair	Curbs:	P1 - Poor
Hand Rail:	P1 - Poor	Roadway Condition:	P1 - Poor
Approach Rail:	I - Inapplicable		
Comments:	- Handrail, P1 (D/S), F1 (U/S). - Severe delamin./ spalling/ disintegration continues to D/S exterior deck/ curb fascia. - Still no hazard markers at SE/ NE ends of structure. - Medium delamin./ spalling to U/S exterior deck/ curb fascia. - Medium honeycombing and narrow trans. cracks with light efflor. deposits in deck soffit esp. at construction joints with extensions. - Medium/ severe spalling/ disintegration to inter. curb fascia, surfaces, and ends. - Numerous medium horiz./ vert. cracks and severe spalling/ disintegration continues to D/S handrail. - Medium trans./ long. cracks in asphalt on approaches and over top of structure. - Light spalling/ delamin. to U/S handrail.		

HYDROLOGY

Water Velocity:	0.1 m/s	Ice Problem:	N - No Problem
Water Depth:	0.6 m	Scour Problem:	N - No Problem
Waterway:	01 - Adequate	Debris Problem:	P - Possible Problem
Comments:	- Medium shoulder erosion SE/SW ends of structure.		

REPLACEMENT/REHABILITATION

Next Rehab. Date:	2018	Replacement Year:	2030
Antic. Rehab. Cost:	\$80	Replacement Cost:	\$450
Recommendations:	- Repair all concrete defects. - Install new handrails, end blocks, guiderail and rip-rap. - In the interim, install hazard markers at NE/SE ends of structure (maint).		

OBSERVATIONS

Overall Condition:	P1 - Poor	Requires Further Inspection:	No
Additional Observations:	- P1 (D/S deck/ curb fascia, handrail and curb). - F1 (remainder). - Unchanged from 2009 and 2015 inspection.		

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