

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	BRIDGE INSPECTION REPORT B05022011-9	
Date: 3/10/2011	Inspected By: Chris Lyver	Category: Eng. - Engineering	
BRIDGE INFORMATION			
Site:	1-080 - SIR AMBROSE SHEA LIFT BRIDGE		
Route:	100	Overall Length:	98 m
Year Built:	1961	Overall Width:	11.65 m
Year Last Rehab.:		Roadway Width:	7.35 m
Region:	AVALON PENINSULA	Sidewalk Width:	2.15 m
Jurisdiction:	Provincial	Clearance to R.D. or N.W.L.:	0 m
Type of Structure:	07 - Lift Bridge	Max Depth of N.W.L.:	0 m
Purpose of Structure:	03 - Over Navigable Waters	Spans:	
Type of Handrail:	04 - Steel Rail	Span No.:	Length
Roadway Surface:	04 - Steel	1	30
Alignment Vertical:	01 - Good	2	30
Alignment Horizontal:	01 - Good	3	30
Restrictions:	No	Span No.:	Length
		4	0
		5	0
		6	0
BRIDGE PHOTOS			
			
SUBSTRUCTURE			
Condition:	P1 - Poor	Bearings:	F1 - Fair
		Bearing Seat:	F1 - Fair
Comments:	- P-1, piers. - F-1, remainder. - Assumed condition of buried and submerged reinforcement concrete abutment and pier footings. - Numerous wide horizontal/vertical cracks in abutments, pier caps, bearing pedestals and wingwalls (medium efflorescence deposits). - Medium erosion and spalling with medium corrosion to exposed reinforcement to face and corners of N abutment. - Medium erosion/spalling to face of south abutment. - Medium spalling below SW end block. - Medium corrosion and paintscaling on steel bearings. - Very severe corrosion to sheet pile ice walls surrounding piers. - Very severe disintergration to ends of both piers. - Top of south abutment footing repaired since last inspected.		
SUPERSTRUCTURE			
Condition:	F1 - Fair	Expansion Joints:	P3 - Poor
Comments:	- Medium corrosion to 6 exterior plate girders, transverse deck steel. - Abutment expansion joints leaking (staining on abutments). - Joints paved over on deck. - Grey marine coating continues to scale off in many areas. - Wide		

horizontal/vertical cracks and medium spalling at ends of both concrete counterweights.

DECK

Condition:	F1 - Fair	Curbs:	F1 - Fair
Hand Rail:	F1 - Fair	Roadway Condition:	F1 - Fair
Approach Rail:	P1 - Poor		
Comments:	- Medium transverse/longitudinal cracks with light efflorescence deposits in north span deck soffit. - South span deck soffit inaccessible (water depth and flow) (assume unchanged from '09 inspection). - Numerous repaired areas in steel grid decking on center span. - Wide horizontal/vertical cracks and medium spalling to exterior curb fascias at expansion joint locations. - Guide rails continues to age with medium damage and some decaying posts. - Severe rutting and numerous asphalt patches on paved approaches (rough ride). - No hazard markers. - Medium corrosion to steel safety rails. - Narrow horizontal/vertical cracks with light reinforcement corrosion stains in 4 end blocks.		

HYDROLOGY

Water Velocity:	Tidal m/s	Ice Problem:	P - Possible Problem
Water Depth:	Tidal m	Scour Problem:	P - Possible Problem
Waterway:	01 - Adequate	Debris Problem:	N - No Problem
Comments:			

REPLACEMENT/REHABILITATION

Next Rehab. Date:		Replacement Year:	2011
Antic. Rehab. Cost:	\$0	Replacement Cost:	\$10000000
Recommendations:	- unchanged from '09 recommendations. - install hazard markers (maintenance).		

OBSERVATIONS

Overall Condition:	F1 - Fair	Requires Further Inspection:	No
Additional Observations:	- unchanged from '04,'07 inspections. - delete '09 note and add, structure tentatively scheduled to be replaced in 2011.		

LEGEND:

Condition Definitions:

- 1 - *Good - [discontinued code].
- 2 - *Fair - [discontinued code].
- 3 - *Poor - [discontinued code].
- 4 - *Unsafe - [discontinued code].
- G - Good.

- F2 - Fair.
- F1 - Fair.
- P3 - Poor.
- P1 - Poor.
- P - Poor.

- C - Unsafe (Closed to Public).
- U - Uninspectable.
- I - Inapplicable.

Problem Definitions:

- N - No Problem.
- P - Possible Problem.
- K - Known Problem.
- NA - Not Applicable.

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