

		GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure		BRIDGE INSPECTION REPORT B04112024-3	
Date: 4/10/2024		Inspected By: Trevor Upshall		Category: Eng. - Engineering	
BRIDGE INFORMATION					
Site:		1-143 - MANUELS CNR OVERPASS - R2			
SUBSTRUCTURE					
Condition:	P - Poor	Bearings:	F1 - Fair		
		Bearing Seat:	P3 - Poor		
Comments:	Assumed condition of partially exposed reinforced concrete abutment footings. Medium vertical cracks in SE exposed footing. Elastomeric bearings contain cracks/splits, tears, and light deformations. Severe spalling/delamination/deterioration to corners of bearing seat beneath north expansion joint in curb with exposed corroded reinforcement. Medium to wide vertical/horizontal/pattern cracking with light efflorescence in all wingwalls and abutments. Very severe erosion of embankment material undermining sloped paving at all corners of structure. Concrete gutters have collapsed and migrating downhill due to the erosion. Unable to inspect some interior bearings on north bearing seat due to restricted access from embankment erosion. Deteriorated concrete debris accumulating on bearing seat. Medium transverse cracks, settlement, and large holes in south sloped paving.				
SUPERSTRUCTURE					
Condition:	F2 - Fair	Expansion Joints:	P1 - Poor		
Comments:	Narrow angular and vertical cracking in girder ends above bearing seat. Narrow horizontal cracks in bottom flange of east/west exterior girders. Narrow horizontal cracks to top flange of interior girders. Hairline longitudinal/pattern cracking in deck soffit. Medium pattern cracking in end diaphragms. Leaking expansion joints causing erosion/deterioration to girder ends and bearing seat. Formwork left in place between girders ends and ballast wall and SW exterior girder over bearing seat. Light corrosion to exposed steel form ties in girder diaphragms. Girders remain in good condition. Light spalls with exposed corroded reinforcement in SE cantilever soffit. Wide longitudinal crack in cantilever soffit along drip edge. Narrow transverse cracking in cantilever soffit. Unable to properly inspect curbs, expansion joints, and roadway as traffic control was not in place.				
DECK					
Condition:	F1 - Fair	Curbs:	F1 - Fair		
Hand Rail:	F1 - Fair	Roadway Condition:	F1 - Fair		
Approach Rail:	P1 - Poor				
Comments:	Severe spall with wide horizontal/vertical cracks in SW curb fascia over wingwall adjacent to curb expansion joint. Narrow vertical/horizontal/transverse cracks in remaining curb and fascia. Medium vertical/pattern cracks with rust staining surface to all end blocks. Wide vertical cracks in exterior curbs below end blocks Standard guiderail attached to end blocks with one bolt. Light corrosion, medium abrasions, severe splitting and decay to approach/exit guiderail and posts. Medium abrasions, holes, dents, and missing end caps in aluminum handrail. Severe shoulder erosion at SW corner. No hazard markers at NE/SW corners. Graffiti covering abutments, wingwalls, sloped paving and girders ends. Pigeon nests observed on bearing seat.				
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:					

REPLACEMENT/REHABILITATION			
Next Rehab. Date:	2025	Replacement Year:	2040
Antic. Rehab. Cost:	\$0	Replacement Cost:	\$0
Recommendations:	Repair all concrete defects. Repair sloped paving and install new concrete gutters. Install hazard markers. Install new approach/exit guiderail structures on new posts with end shoe attachment to end blocks. Fix embankment erosion implementing slope protection. Replace expansion joint. Remove debris and formwork from bearing seat. Remove graffiti.		
OBSERVATIONS			
Overall Condition:	P - Poor	Requires Further Inspection:	Yes
Additional Observations:	P - Sloped paving and concrete gutters. P1 - Expansion joints and approach/exit rail. P3 – North corners of bearing seat. North for this inspection is Route 60.		

Department of Transportation and Infrastructure, Government of Newfoundland and Labrador 2024.