

Level 2 Inspection - Concrete Deck							
Bridge File Number	09943 -1 Bridge			Form Type	CDK		
Year Built/Year Supstr	1964/1964			Lot No.			
Bridge or Town Name	WAYNE			Inspector Name	Jason Saly		
Located Over	ROSEBUD RIVER, 3.33, WATERCRS-ST			Inspector Class	BR CLS A		
Located On	841:02 C1 6.185			Assistant Name			
Water Body Cl./Year				Assistant Class			
Navigabil. Cl./Year				Inspection Date	26-Sep-2012		
Legal Land Location	SW SEC 33 TWP 27 RGE 20 W4M			Data Entry By	Jason Saly		
Longitude, Latitude	-112:45:45, 51:20:38			Data Entry Date	31-Jan-2013		
Road Authority	Alberta Transportation (AIT)			Reviewer Name	Paul Carter		
Contract Main. Area	CMA21			Review Date	30-Jan-2013		
Clear Roadway/Skew	8.2 /			Dept. Reviewer Name	Darron Ahlstedt		
AADT/Year	190 / 2011 (A)			Dept. Review Date	13-Feb-2013		
Road Classification	RCU-208-110			Follow-Up By			
Detour Length (km)	56			Visual Inspection?	Y		
				CSE Testing?	Y		
				Chloride Testing?	N		
Allowable Load (t):	Single	H 57 GIRDER	Semi	HS 67 GIRDER	Train	CS3 87 GIRDER	----> On Critical Spans ---->Critical Member
Design Loading:	HS20						----> Primary Span
(Primary Span : <b>RB</b> , Spans: <b>1,2,3,4,5</b> , Lengths(m): <b>21-25-21-16.8-16.8</b> )							
(Total Length : <b>21-25-21-16.8-16.8 = 100.6</b> )							

**Concrete Deck Inspection**

							Last	Now	Explanation of Condition	
<b>Wearing Surface</b>										
Polymer? (Y/N)							Y			
ACP? (Y/N)							N			
Chip Seal Coat? (Y/N)							Y			
		Type			Year Installed		Avg. Total Thickness (mm)		Area (m²)	
Seal Coat		CONVENTIONAL CHIP SEAL COAT			1995				824.9	
<b>Polymer Rating (% Area)</b>										
		9-7	6/5	4	3	2/1	N/X			
<b>Last</b>										
<b>Now</b>		0	0	0	0	0	100			
<b>ACP Rating (% Area)</b>										
		9-7	6/5	4	3	2/1	N/X			
<b>Last</b>										
<b>Now</b>		0	0	0	0	0	100			
<b>Chip Seal Coat Rating (% Area)</b>										
		9-7	6/5	4	3	2/1	N/X			
<b>Last</b>										
<b>Now</b>		0	90	10	0	0	0			
Polymer Total Debonded /Lost Area (m²)									30	
ACP Total Debonded /Lost Area (m²)									X	
ACP Average Measured Depth (mm)									X	
ACP Crack Frequency (m/m²)									X	
Chip Seal Coat Total Lost Area (m²)									19	
The chip seal coat is wearing smooth. There are areas of lost chips. Transverse cracks are reflecting through the seal coat (~0.2m/m2).										

<b>Concrete Overlay</b>										
Overlay? (Y/N)							N			

<b>Deck</b>										
<b>(Span Type : RB)</b>										
(Span Numbers : <b>1, 2, 3, 4, 5</b> )										
(Deck Type : <b>CONCRETE (CLASS C)</b> )										

Concrete Deck Inspection						
		Last	Now	Explanation of Condition		
(Area(m <sup>2</sup> ) : <b>824.9</b> )						
(Year Constructed : <b>1964</b> )						
(Year Widened : )						
(Thickness(mm) : <b>150</b> )						
(Average Cylinder Strength(MPa) : )						
	Type		Size	Design Cover (mm)	Spacing (mm)	
Long. Reinforcing	REINFORCING STEEL					
Trans. Reinforcing	REINFORCING STEEL					
<b>Deck Top Rating (% Area)</b>						
	9-7	6/5	4	3	2/1	N/X
<b>Last</b>						
<b>Now</b>						100
Total Crack Length - Medium/Wide (m)						N
Total Scaled Area - Light (m <sup>2</sup> )						N
Total Scaled Area - Moderate/Heavy/Severe (m <sup>2</sup> )						N
Delaminated Area (m <sup>2</sup> )						1
Spalled Area (m <sup>2</sup> )						N
Patched Area (m <sup>2</sup> )						N
Average Measured Cover Depth (mm)						86
Standard Deviation of Measured Cover Depth (mm)						10
<b>Deck Underside Rating (% Area)</b>						
	9-7	6/5	4	3	2/1	N/X
<b>Last</b>						
<b>Now</b>	100	0	0	0	0	0
Total Stained Area - Moderate (m <sup>2</sup> )						0
Total Stained Area - Heavy/Severe (m <sup>2</sup> )						0
Total Crack Length - Medium/Wide (m)						40
% of Medium/Wide Cracks Stained						20
<b>Edge Elements</b>						
Curbs? (Y/N)			Y			
Parapets? (Y/N)			N			
Medians? (Y/N)			N			
Sidewalks? (Y/N)			N			
<b>Curbs</b>						
(Type : <b>CONCRETE</b> )						
(Total Length(m) : <b>201.2</b> )						
(Height(mm) : )						
(Width(mm) : )						
(Average Cylinder Strength(MPa) : )						
Reinforcement Type		Size		Design Cover (mm)		Spacing (mm)

Covered by a polymer overlay and a chip seal coat wearing surface.

Concrete Deck Inspection						
		Last	Now	Explanation of Condition		
<b>Curb Rating (% Length)</b>						
	9-7	6/5	4	3	2/1	N/X
<b>Last</b>						
<b>Now</b>	100	0	0	0	0	0
Total Crack Length - Medium/Wide (m)					42	Minor transverse ck'ng
Total Scaled Length - Light (m)					0	
Total Scaled Length - Moderate/Heavy/Severe (m)					0	
Delaminated Length (m)					0	
Spalled Length (m)					0	
Patched Length (m)					1	
Average Measured Cover Depth (mm)					107	
Standard Deviation of Measured Cover Depth (mm)					15	

**Deck Joints**(Type : **ARMoured GLAND (WABO UNDER FINGER OR SLIDING PLATES)**)(Number of Joints : **1**)(Expansion / Fixed? : **FIXED**)(Location : **A2**)

% Inspected		100	South abutment
% Joints Leaks		0	
% Joint Length Leaks		0	
Superstructure Damage Rating		7	
Substructure Damage Rating		6	
Level 1 Joint Rating		6	

(Type : **GLAND (WABO-MAUER, TRANSFLEX, ETC)**)(Number of Joints : **2**)(Expansion / Fixed? : **EXPANSION**)(Location : **A1, P3**)

% Inspected		100	Water is leaking past the cover plates onto the ends of the pier cap.
% Joints Leaks		50	
% Joint Length Leaks		1	
Superstructure Damage Rating		7	
Substructure Damage Rating		5	
Level 1 Joint Rating		4	

**CSE Testing**

Testing Date	28-Jun-2012	Previous Testing Date	21-May-2008
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**Weather Information**

Temperature (°C)	15
Conditions	Sunny

**Equipment Information**

Test Equipment Make and Model	Corexco CDL - 200 EA/512
Electrical Ground Location and Type	1DD, near the south abutment

**Measurement Locations Information**

Origin for Data	SE		
	Number	Length of Each (m)	Length of Last (m)
X Increments (Length)	83	1.219	0.914
Y Increments (Width)	7	1.219	0.914

**CSE Results**

Span Numbers	1,2,3,4,5
Span Type	RB
Wearing Surface	CONVENTIONAL CHIP SEAL COAT, CONCRETE (CLASS C)

CSE Testing									
Testing Year	% Deck Area 0 to -0.1 V	% Deck Area < -0.1 to -0.2 V	% Deck Area < -0.2 to -0.3 V	% Deck Area < -0.3 to -0.4 V	% Deck Area < -0.4 V	Avg. Deck Reading (V)	Std. Dev. Deck Reading	Avg. Curb Reading (V)	Std. Dev. Curb Reading
2012	0.0	30.7	51.8	15.7	1.8	-0.240	0.079	-0.248	0.066
2008	0.0	21.0	52.0	23.0	5.0	-0.266	0.092	-0.257	0.084
2002	13.0	60.0	25.0	2.0	0.0	-0.170	0.074	-0.117	0.051
CSE Prediction Model Optimum 5 year Rehab Start Year			2033						
Comments									

Maintenance Recommendations										
Inspector Recommendations	Year	Inspector Comments	Department Comments				Target Year	Est. Cost	Cat #	
SEAL CURBS										
PATCH DECK										
SEAL DECK										
OVERLAY DECK										
REPAIR/REPLACE DECK JOINTS										
WASHING										
OTHER ACTION										
CRACK REPAIRS/TREATMENT										
PATCH CURBS/PARPETS										
OTHER ACTION										
OTHER ACTION										
OTHER ACTION										
<b>Structural Condition Rating (%)</b>	<b>44.4</b>	<b>Sufficiency Rating (%)</b>	<b>61.1</b>			<b>Est Repl Year</b>	<b>2034</b>			
Level 1 Insp Date	11-May-2011	Next Level 1 Insp Date	11-Aug-2014	Current Level 1 Insp Cycle (Default) (Months)			39			
Special Comments for Next Insp										
Snooper? (Y/N)	No	Lift? (Y/N)	No	Traffic Control? (Y/N)	Yes	Boat? (Y/N)	No	Ladder? (Y/N)	No	
Other Special Requirements Comments										
Previous Level 2 Inspector's Name	Brian Cote			Previous Level 2 Insp Date	21-May-2008					
Next Level 2 Insp Date	26-Sep-2018			Discontinue Level 2 Insp? (Y/N)	No					
Level 2 Insp Previously Completed	4			Level 2 Insp Cycle (Default) (Months)	72					
Detailed Report/Diagram? (Y/N)	Yes									
Level 2 Insp Comments										
Next Level 2 Inspection/Test	Concrete Deck Insp? (Y/N)	Yes	CSE Testing? (Y/N)	Yes	Chloride Testing? (Y/N)	No				
Department Reviewer Comments										