

Bridge Inspection									
Bridge File Number	82405 E2-16 Bridge				Form Type	PSR			
Year Built/Year Supstr	2011/2011				Lot No.	2			
Bridge or Town Name	CROWCHILD INTERCHANGE				Inspector Name	Dave Lam			
Located Over	RAMP 2692-2 F				Inspector Class	BR CLS A			
Located On	1A:07 R1 2.686				Assistant Name				
Water Body Cl./Year					Assistant Class				
Navigabil. Cl./Year					Inspection Date	23-Nov-2011			
Legal Land Location	SW SEC 16 TWP 25 RGE 2 W5M				Data Entry By	Garry Roberts			
Longitude, Latitude	-114:13:32, 51:07:49				Data Entry Date	09-Jan-2012			
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Garry Roberts			
Contract Main. Area	UNDEFINED CMA				Review Date	07-Dec-2011			
Clear Roadway/Skew	16.6 / 12 deg. (RHF)				Dept. Reviewer Name	Tim Davies			
AADT/Year					Dept. Review Date	12-Jan-2012			
Road Classification					Follow-Up By				
Detour Length (km)	1								
Allowable Load (t):	Single	CS1 28	Semi	CS2 49	Train	CS3 62	----> On Critical Spans ---->Critical Member		
Design Loading:	CL800				----> Primary Span				

Posting Information										
Required Vert. Clearance Posting (m)										
Posted Vertical Clearance (Y/N)		Yes								
Posted:	Lane	NB	On Bridge (m)	5.5	In Advance (Y/N)	Yes	Lane	SB	On Bridge (m)	In Advance (Y/N)
Remarks		5.99 m measured clearance at lowest point (SE corner) on roadway								
Required Load Posting (t)		Single			Semi			Truck Train		
Posted Loading (t)		Single			Semi			Truck Train		
Posted:	Lane	WB	At Junction (Y/N)		In Advance (Y/N)			At Bridge (Y/N)		
Posted:	Lane	EB	At Junction (Y/N)		In Advance (Y/N)			At Bridge (Y/N)		
Remarks		Not required								
Hazard Marker At Bridge (Y/N)		No								
Remarks		Not required								
Other Sign Types										

Utilities (Located at)									
Utility Attachments									
Telephone					Gas				
Power					Municipal				
Others	Light standards				Problem (Y/N)	No			
Remarks									

Approach Road									
			Last	Now	Explanation of Condition				
Horizontal Alignment				8					
Vertical Alignment				7					
Roadway Width (m)		16.600			Wide crack at end of West approach slab.				
Approach Bump				5					
Guardrail (Y/N)		Yes			Fill and ACP settlement around posts at SW.				
Guardrail				4	99.0 m at SW; 15.2 m at SE. NE and NW has continuous thriebeam and concrete barriers. Continuous radius at SW end only.				
Length (m)		99.000							
Current Standard (Y/N)		Yes							
Termination Type		Terminal							
Drainage				8					
Approach Road General Rating				7					

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : NU, 1 Spans, Lengths(m): 35, A-Ident Number:)					
Special Features					
Special Feature			X	LRT bridge between E/B and W/B structures.	
(Type :)					
Special Feature			X		
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
Last					
Now	0.0	0.0	0.0	0.0	
Wearing Surface			9		
(Material Type : ACP)					
(Thickness(mm) : 90)					
Lateral Connection Problem (Y/N)		No			
Deck Top			N		
Deck Rideability			9		
Deck Joints			9	Type 1 at both abuts. (semi integral).	
Temperature (deg. C)					
(Expansion Type :)					
(Fixed Type :)					
Gap Size (mm)		Gap Location			
Deck Drainage			7	No deck drains except at SE corner under ACP. PVC drain should be extended to slope protection swale.	
Drains Clogged (Y/N)		No			
Curbs/Median			9		
(Curb Type : SINGLE SLOPE CONCRETE BARRIER)					
Scaling (Percent Area)		0			
Bridge Rail			X	Pigmented sealer at exterior, clear sealer at inside face.	
(Type :)					
Bridge Rail Posts			X		
(Type :)					
Bridge Rail/Posts Coating			X		
(Type :)					
Sidewalk			X		
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last					
Now	0	0	0	0	
Girders			5	Small spall at inside face of G7 near west abut. 1st diaphragm.	
Cracking (Y/N)		No			
Spalling (Percent Area)		0			
(Number Of Girders : 7)					
Diaphragms/Cross Frame			9		

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : NU, 1 Spans, Lengths(m): 35, A-Ident Number:)				
Bearings			5	Integral abut structure; bearings used primarily to erect girders. Some girder sole plates are bearing on A/B steel sleeves with no gap between top of sleeve and sole plate. Similar to structure #17 - refer to photos.
Temperature (deg. C)	-2			
(Expansion Type : REINFORCED PAD BEARING)				
(Fixed Type :)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside			8	
Stains (Percent Area)	0			
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating			5	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps			9	
(Type : CONCRETE)				
Backwalls/Breastwalls			5	Some efflorescence staining present (photo). Local honeycomb and poor joint consolidation (photo).
Wingwalls			9	
Piles			N	
Paint/Coating			9	Pigmented sealer
Abutment Stability			9	
Scour/Erosion			9	
Piers/Bents				
(Type :)				
Bearing Seats/Caps			X	
(Type :)				
(Total Number of Bearing Piles :)				
Pier Shaft/Piles			X	
Bracing/Struts/Sheathing			X	
Nose Plate			X	
Paint/Coating			X	
(Colour Description :)				
(Colour Code :)				
Pier Stability			X	
Scour			X	
Debris (Y/N)	No			
Substructure General Rating			9	

Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment			4	"Ramp 30 kph" sign posted in advance
Traffic Safety Features			N	Unable to confirm if lighting is working at this time - daylight.
Type	Lighting			
Slope Protection			9	
(Type : CONCRETE; CONCRETE)				
Bank Stability			9	
Drainage			6	No swale at west shoulder - designer advised "as-built" is adequate. Minor ponding at existing gutter at toe of slope protection transition (photo).
Grade Separation General Rating			4	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2012	Repair settlement around SW approach rail posts.					
GALVANIZE/PAINT BRIDGE RAIL							
SEAL CURBS							
PATCH DECK							
SEAL DECK	2012	Seal crack at end of east approach slab/acp.					
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS							
RESET/ PAINT BEARINGS							
WASHING	2012						
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION	2012	Top up fill at top edge of SW slope protection to prevent future erosion and undermining.					
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2012	Remove small pile of dirt at SW slope protection					
OTHER ACTION	2012	Extend deck drain at SE corner onto slope protection trough.					
OTHER ACTION	2012	Patch honeycomb and poor cold joint consolidation at west backwall.					
OTHER ACTION	2012	Patch spall in G7 inside face near west abut.					
OTHER ACTION	2012	Secure loose screen at SE corner of slope protection for abut drain.					
OTHER ACTION	2012	Repair failed acp at SW. Complete deficiencies previously identified under Contract 7835/09					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	/77.8	Sufficiency Rating (Last/Now) (%)	/66.6	Est. Repl. Yr	2086	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	All proposed repairs and deficiencies should be completed prior to Contract warranty expiration date under Contract 7835/09.		Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy							
On 3-Year Program (Y/N)							

Proposed Action			
Previous Inspector's Name		Previous Assistant's Name	
Next Inspection Date	23-Aug-2013	Previous Inspection Date	
Inspection Cycle (Default) (months)	21		
Comment			