

Bridge Inspection										
Bridge File Number	00747 -1 Bridge				Form Type	PSR PCS				
Year Built/Year Supstr	1964/1964				Lot No.	1				
Bridge or Town Name	SUNNYSLOPE				Inspector Name	Dave Lam				
Located Over	KNEEHILLS CREEK, 3.46, WATERCRS-ST				Inspector Class	BR CLS A				
Located On	582:04 C1 33.896				Assistant Name					
Water Body Cl./Year					Assistant Class					
Navigabil. Cl./Year					Inspection Date	15-Jul-2011				
Legal Land Location	SE SEC 13 TWP 31 RGE 26 W4M				Data Entry By	Marcia Chavez				
Longitude, Latitude	-113:33:32, 51:38:57				Data Entry Date	15-Aug-2011				
Road Authority	Alberta Transportation (AIT)				Reviewer Name	John O'Brien				
Contract Main. Area	CMA29				Review Date	27-Jul-2011				
Clear Roadway/Skew	9.1 /				Dept. Reviewer Name	Chris Black				
AADT/Year	590 / 2010 (A)				Dept. Review Date	30-Aug-2011				
Road Classification	RCU-209-110				Follow-Up By					
Detour Length (km)	6									
Allowable Load (t):	Single		Semi		Train		---> On Critical Spans --->Critical Member			
Design Loading:	HS20						---> Primary Span			
Posting Information										
Required Load Posting (t)	Single				Semi		Truck Train			
Posted Loading (t)	Single				Semi		Truck Train			
Posted:	Lane	EB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No		
Posted:	Lane	WB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No		
Remarks	Not required.									
Hazard Marker At Bridge (Y/N)	Yes									
Remarks	Too low, not to standard. Mounted on timber guardrail post at 4 corners.									
Other Sign Types										
Utilities (Located at)										
Utility Attachments										
Telephone	South of bridge.				Gas					
Power	2 wire 40 m North of c/l.				Municipal					
Others					Problem (Y/N)	No				
Remarks										
Approach Road										
			Last	Now	Explanation of Condition					
Horizontal Alignment			7	7	At bottom of sag curve. No passing in both directions with limited sight distance.					
Vertical Alignment			6	6						
Roadway Width (m)	10.000				Crack through ACP at abuts. Small potholes in WBL, E approach (photo).					
Approach Bump			7	4						
Guardrail (Y/N)	Yes				Insufficient posts/spacing (photo).					
Guardrail			6	6						
Length (m)	15.500									
Current Standard (Y/N)	No									
Termination Type	TURN DOWN									
Drainage			6	6	SE concrete trough cracking (photo). Bridge on slight grade; drains to E end.					
Approach Road General Rating			6	6						

Superstructure							
Bridge Component		Last	Now	Explanation of Condition			
(Primary Span : PM, 3 Spans, Lengths(m): 12.8-15.2-12.8, A-Ident Number:)							
Special Features							
Special Feature			X				
(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				7	7		
(Material Type : ACP - CONVENTIONAL CHIP SEAL COAT)							
(Thickness(mm) : 50)							
Lateral Connection Problem (Y/N)		No					
Deck Top				N	N		
Deck Rideability				7	7		
Deck Joints				N	X		
Temperature (deg. C)		23		Paved over but cracked (photo)-typical. Curb cover plate ato piers removed & replaced with KOCH jnt mat (photo), typical all pier jnts. at curb. Curb portion of jnts rated.			
(Expansion Type :)							
(Fixed Type : WATER STOP)							
Gap Size (mm)		Gap Location					
		W. abut					
		W. pier					
		E. pier					
		E. abut					
Deck Drainage				7	4		
Drains Clogged (Y/N)		No		Drains to E end. One deck drain at S side only, causing hslp erosion.			
Curbs/Median				4	4		
(Curb Type : Standard)							
Scaling (Percent Area)		0		Both curbs small corrosion delam - photo.			
Bridge Rail				7	7		
(Type : GALVANIZED STEEL FLEX BEAM)							
Bridge Rail Posts				7	7		
(Type : GALVANIZED POST STEEL; GALVANIZED POST STEEL)							
Bridge Rail/Posts Coating				7	7		
(Type : GALVANIZED)							
Sidewalk				X	X		
Girder Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
Last							
Now	0	0	0	1			
Girders				7	3		
Cracking (Y/N)		Yes		S2G1 short narrow crack in A2 at P1. S2G1 med. crack with corroding strand near P1 (photo).			
Spalling (Percent Area)		0					
(Number Of Girders : 11)							

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : PM, 3 Spans, Lengths(m): 12.8-15.2-12.8, A-Ident Number:)					
Diaphragms/Cross Frame		X	X		
Bearings		7	7		
Temperature (deg. C)	24				
(Expansion Type : NEOPRENE STRIP BEARING)					
(Fixed Type : NEOPRENE STRIP BEARING)					
Coating Adequate (Y/N)	Yes				
Functioning (Y/N)	Yes				
Deck Underside		7	7		
Stains (Percent Area)	1				
Span Alignment Problems					
Vertical (Y/N)	No				
Horizontal (Y/N)	No				
Superstructure General Rating		7	3		
Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Secondary Span : PE)					
Special Features					
Special Feature			X		
(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		7	7		
(Material Type : ACP - CONVENTIONAL CHIP SEAL COAT)					
(Thickness(mm) : 50)					
Lateral Connection Problem (Y/N)	No				
Deck Top		N	N	Paved over but cracked over abuts/piers - photo.	
Deck Rideability		7	7		
Deck Joints			N	Paved over.	
Bump (Y/N)					
Deck Drainage		7	7	Drains to East end due to grade.	
Drains Clogged (Y/N)	No				
Curbs/Median		7	6		
(Curb Type : Standard)					
Scaling (Percent Area)	0				
Bridge Rail		7	7	Double layer w-flexbeam.	
(Type : GALVANIZED STEEL FLEX BEAM)					
Bridge Rail Posts		7	7		
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)					
Bridge Rail/Posts Coating		7	7	White paint over galvanize failed - no problem.	
(Type : GALVANIZED)					
Sidewalk		X	X		

Superstructure							
Bridge Component					Last	Now	Explanation of Condition
(Secondary Span : PE)							
Girder Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
Last							
Now	0	0	0	0			
Girders				4	4	All girders have typical flexural cracks. S3G1 - leg honeycomb. S3G2 - short med longitudinal crack in one leg outside AZ. S1G1 - short wide longitudinal crack in one leg outside AZ due to deck drain-photo. S1G10 - short med crack in one leg extending into AZ-photo. S1G1-2,10; S3G1-2,10-11 - all have rust spot corrosion in legs. Curb visible only.	
Last Complete Inspection Date		11-Jul-2011					
Cracking (Y/N)		Yes					
Spalling (Percent Area)		0					
Lift or Connector Pocket Grouted (Y/N)		Yes					
(Number Of Girders : 22)							
Span Alignment Problems							
Vertical (Y/N)		No					
Horizontal (Y/N)		No					
Superstructure General Rating				4	4		
Substructure							
Bridge Component					Last	Now	Explanation of Condition
Abutments							
(Extended Backwall Piles (Y/N) : N)							
(Extended Backwall Piles Spacing(mm) :)							
(Total Number of Caps/Corbels : :)							
Bearing Seats/Caps/Corbels Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
Last							
Now	0	0	0	0			
Bearing Seats/Caps/Corbels				5	5	Light scaling @ staining of abut caps.	
(Type : CONCRETE)							
(Depth(mm) :)							
(Width(mm) :)							
Backwalls/Breastwalls				6	6		
Greatest Height (m)		2.00					
Wingwalls				7	7		
(Total Number of Bearing Piles : 0:0)							
Piles Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
Last							
Now	100	0	0	0			
Piles				N	N		
Paint/Coating				X	X		
Abutment Stability				8	8		
Scour/Erosion				4	3	Hslp erosion caused by deck drainage (photo); worst at E hslp.	

Substructure								
Bridge Component				Last	Now	Explanation of Condition		
Piers/Bents								
(Type : PIER-SOLID)				1mm wide vertical cracks. Cracked under G1 & 11 at P1 (photo) with corrosion staining. Cracked & spalled under G1 at P2 (photo).				
(Total Number of Caps/Corbels : :)								
Bearing Seats/Caps/Corbels Detail Ratings								
	N (count)	1 (count)	2 (count)				3 (count)	
Last								
Now	0	0	0				0	
Bearing Seats/Caps/Corbels							6	4
(Type : CONCRETE)								
(Total Number of Bearing Piles : 0:0)								
Piles Detail Ratings								
	N (count)	1 (count)	2 (count)	3 (count)	Too high to measure.			
Last								
Now	100	0	0	0				
Pier Shaft/Piles				6			6	
Greatest Height (m)								
Bracing/Struts/Sheathing				X			X	
Nose Plate				7			7	
Paint/Coating				5			4	
(Colour Description :)				Spot corrosion/pitting. Medium scaling.				
(Colour Code :)								
Pier Stability				8	8			
Scour				N	N			
Debris (Y/N)		No						
Substructure General Rating				4	4			
Structure Usage								
				Last	Now	Explanation of Condition		
Channel								
(U/S Direction : S)				HWM not visible.				
(D/S Direction : N)								
Alignment							7	7
Bank Stability							8	8
HWM (m below Top of Curb)								
Drift (Y/N)		No						
Slope Protection							4	3
(Type : NATURAL; NATURAL)							E hslp with deep erosion gully from deck drain. Concrete sandbags at streamside of P1.	
Guidebank/Spurs							X	X
Adequacy of Opening							9	9
(Fish Compensation Measure 1 : NONE)								
(Fish Compensation Measure 2 : NONE)								
Channel General Rating				4	3			

Maintenance Recommendations									
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #			
REPAIR/REPLACE BRIDGE RAIL									
GALVANIZE/PAINT BRIDGE RAIL									
SEAL CURBS	2011	Patch small delam in both curbs, center span, seal all curbs.							
PATCH DECK									
SEAL DECK									
OVERLAY DECK									
REPAIR/REPLACE DECK JOINTS	2011	Seal crack over jnts. Consider new jnts to protect girders.							
RESET/ PAINT BEARINGS									
WASHING	2011								
SHOTCRETE REPAIRS									
REPAIR ABUTMENT SCOUR/EROSION	2011	Repair headslope erosion channels by installing Class I rock as required.							
PLACE ADDITIONAL RIP RAP	2011	3m3/Class I.							
REMOVE DRIFT ACCUMULATION									
OTHER ACTION	2011	Reinstall all HMs to meet std.							
OTHER ACTION	2011	Upgrade guardrail to meet std.							
OTHER ACTION	2011	Extend deck drains to keep from leaking onto legs.							
OTHER ACTION	2011	Patch SE concrete trough where cracked.							
OTHER ACTION	2011	Lvl 2/assessment at PM girder (S2G1) to determine severity of corrosion/cracking & repair procedure - repair as necessary.							
OTHER ACTION	2011	Patch E approach potholes in WBL.							
OTHER ACTION	2011	Patch cracked/spalled pier seat under bearings; seal caps.							
Structural Condition Rating (Last/Now) (%)	44.4/38.9	Sufficiency Rating (Last/Now) (%)	65.5/54.7	Est. Repl. Yr	2020	Maint. Req. (Y/N)	Yes		
Special Comments for Next Inspection	Monitor PE girder cracking.		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	Dave Lam		Previous Assistant's Name						
Next Inspection Date	15-Oct-2014		Previous Inspection Date	18-Mar-2005					
Inspection Cycle (Default) (months)	39								

Comment	
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Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL							
GALVANIZE/PAINT BRIDGE RAIL							
SEAL CURBS	2011	Patch small delam in both curbs, center span, seal all curbs.	Defer until rehab				
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS	2011	Seal crack over jnts. Consider new jnts to protect girders.	Defer until rehab				
RESET/ PAINT BEARINGS							
WASHING	2011						
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION	2011	Repair headslope erosion channels by installing Class I rock as required.	Defer until rehab				
PLACE ADDITIONAL RIP RAP	2011	3m3/Class I.	Defer until rehab				
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2011	Reinstall all HMs to meet std.	To operations				
OTHER ACTION	2011	Upgrade guardrail to meet std.	To operations				
OTHER ACTION	2011	Extend deck drains to keep from leaking onto legs.	Defer until rehab				
OTHER ACTION	2011	Patch SE concrete trough where cracked.	Defer until rehab				
OTHER ACTION	2011	Lvl 2/assessment at PM girder (S2G1) to determine severity of corrosion/cracking & repair procedure - repair as necessary.	Defer				
OTHER ACTION	2011	Patch E approach potholes in WBL.	Defer until rehab				
OTHER ACTION	2011	Patch cracked/spalled pier seat under bearings; seal caps.	Defer until rehab				
Structural Condition Rating (Last/Now) (%)	44.4/38.9	Sufficiency Rating (Last/Now) (%)	65.5/54.7	Est. Repl. Yr	2020	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor PE girder cracking.		Department Comments	Rehab tentatively programmed for 2016. AS			
Maintenance Reviewed By	Andrew Smikles		Date	22-Aug-2012	Estimated Total	0	
Proposed Long-Term Strategy							

On 3-Year Program (Y/N)			
Proposed Action			
Previous Inspector's Name	Dave Lam	Previous Assistant's Name	
Next Inspection Date	15-Oct-2014	Previous Inspection Date	18-Mar-2005
Inspection Cycle (Default) (months)	39		
Comment			