

Bridge Inspection											
Bridge File Number	77471 -1 Bridge				Form Type	PSR PCS					
Year Built/Year Supstr	1975/1975				Lot No.	2					
Bridge or Town Name	SLAVE LAKE				Inspector Name	Wade Nanninga					
Located Over	MARTEN CREEK, 8.11.80.34, WATERCRS-ST				Inspector Class	BR CLS A					
Located On	88:02 C1 33.579				Assistant Name						
Water Body Cl./Year					Assistant Class						
Navigabil. Cl./Year					Inspection Date	27-Mar-2013					
Legal Land Location	NE SEC 29 TWP 75 RGE 6 W5M				Data Entry By	Theresa Lacusta					
Longitude, Latitude	-114:53:34, 55:31:56				Data Entry Date	16-Apr-2013					
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Eric Carcoux					
Contract Main. Area	CMA06				Review Date	11-Apr-2013					
Clear Roadway/Skew	11 /				Dept. Reviewer Name	Brent Herrick					
AADT/Year	2,640 / 2012 (A)				Dept. Review Date	23-Apr-2013					
Road Classification	RAU-211.8-110				Follow-Up By						
Detour Length (km)	15										
Allowable Load (t):	Single	CS1 28			Semi	CS2 49			Train	CS3 62	----> On Critical Spans ---->Critical Member
Design Loading:	HS25									----> Primary Span	

Posting Information									
Required Load Posting (t)			Single		Semi		Truck Train		
Posted Loading (t)			Single		Semi		Truck Train		
Posted:	Lane	NB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No	
Posted:	Lane	SB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No	
Remarks	Not required								
Hazard Marker At Bridge (Y/N)	No								
Remarks	Not required.								
Other Sign Types	"Marten Creek".								

Utilities (Located at)										
Utility Attachments										
Telephone	East r/w.				Gas					
Power					Municipal					
Others					Problem (Y/N)	No				
Remarks										

Approach Road										
			Last	Now	Explanation of Condition					
Horizontal Alignment			7	7	In sag curve with no passing up both hills.					
Vertical Alignment			6	6						
Roadway Width (m)		10.900				Pothole @ SE - 0.1mx0.5m				
Approach Bump			6	4						
Guardrail (Y/N)		Yes				Collision damage SW corner, 2 broken posts & 2 damaged W-beam sections. -photo-26-Jan-2012				
Guardrail			3	N	Insufficient length. Same length all 4 corners.					
Length (m)		26.200								
Current Standard (Y/N)		No								
Termination Type		Turned Down								
Drainage			7	6						
<b>Approach Road General Rating</b>			<b>6</b>	<b>6</b>						

Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
(Primary Span : RD, 3 Spans, Lengths(m): 9.1-24.4-9.1, A-Ident Number: )						
<b>Special Features</b>						
Special Feature			X			
(Type : )						
Special Feature			X			
(Type : )						
<b>Wearing Surface/Deck Top Detail Ratings</b>						
	N (%)	1 (%)	2 (%)	3 (%)		
<b>Last</b>						
<b>Now</b>	10.0					
Wearing Surface			4	4	Chipseal worn bare exposing concrete deck in a few localized areas - photo.  Visible crack in concrete overlay is construction joint at bridge centerline.	
(Material Type : <b>CONCRETE - CONVENTIONAL CHIP SEAL COAT</b> )						
(Thickness(mm) : <b>50</b> )						
Lateral Connection Problem (Y/N)		No				
Deck Top			N	N		
Deck Rideability			7	7		
Deck Joints			7	7		
Temperature (deg. C)		0				
(Expansion Type : <b>GLAND (WABO-MAUER, TRANSFLEX, ETC)</b> )						
(Fixed Type : )						
Gap Size (mm)		Gap Location				
60		North pier				
60		South pier				
Deck Drainage			6	6	No drains.	
Drains Clogged (Y/N)						
Curbs/Median			4	N	Spot rust staining on outside face with delams/spalls at several locations on West side.-photo -26-Jan-2012	
(Curb Type : <b>Standard</b> )						
Scaling (Percent Area)		5				
Bridge Rail			7	7	Insufficient thread extension for nuts on post anchors. (20%) post grout pads rust stained.-26-Jan-2012  Dirty.	
(Type : <b>GALVANIZED STEEL BRIDGE TUBE</b> )						
Bridge Rail Posts			4	N		
(Type : <b>GALVANIZED POST STEEL;GALVANIZED POST STEEL</b> )						
Bridge Rail/Posts Coating			6	6		
(Type : <b>GALVANIZED</b> )						
Sidewalk			X	X		
<b>Girder Detail Ratings</b>						
	N (count)	1 (count)	2 (count)	3 (count)		
<b>Last</b>	0	0	0	5		
<b>Now</b>				5		

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : RD, 3 Spans, Lengths(m): 9.1-24.4-9.1, A-Ident Number: )					
Girders		3	3	S2G2,S2G3 & S2G8 girders have wide longitudinal cracks. Wide spall @ end of S2G10 over South pier, also S2G1 over North pier-photo. All girders have hairline to narrow cracks. Ext. girders with 100mm sag -Level 2 girder inspection and assesment completed in 2012.	
Cracking (Y/N)	Yes				
Spalling (Percent Area)	1				
(Number Of Girders : 10)					
Diaphragms/Cross Frame		X	X		
Bearings		7	7		
Temperature (deg. C)	0				
(Expansion Type : <b>NEOPRENE STRIP BEARING</b> )					
(Fixed Type : )					
Coating Adequate (Y/N)	Yes				
Functioning (Y/N)	Yes				
Deck Underside		6	6	Rust stains from connector pockets. Water staining along cl of road.	
Stains (Percent Area)	5				
<b>Span Alignment Problems</b>					
Vertical (Y/N)	No				
Horizontal (Y/N)	No				
<b>Superstructure General Rating</b>		<b>3</b>	<b>3</b>		
Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Secondary Span : VS)					
<b>Special Features</b>					
Special Feature			X		
(Type : )					
Special Feature			X		
(Type : )					
<b>Wearing Surface/Deck Top Detail Ratings</b>					
	N (%)	1 (%)	2 (%)	3 (%)	
<b>Last</b>					
<b>Now</b>	10.0				
Wearing Surface		4	4	Chipseal on concrete deck. Chipseal worn bare exposing deck, 5% area. Rust staining on girder undersides from connector pockets.	
(Material Type : <b>CONCRETE - CONVENTIONAL CHIP SEAL COAT</b> )					
(Thickness(mm) : <b>50</b> )					
Lateral Connection Problem (Y/N)	No				
Deck Top		N	N		
Deck Rideability		7	7		
Deck Joints		5	5	Piers only, paved over at abutments.	
Bump (Y/N)	No				
Deck Drainage		5	5	No drains.	
Drains Clogged (Y/N)	No				
Curbs/Median		4	4	Wide longitudinal delam crack/spall at outside face of S3G1, due to girders jamming.	
(Curb Type : <b>Standard</b> )					
Scaling (Percent Area)	1				

Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
(Secondary Span : VS)						
Bridge Rail		7	7	Insufficient thread extension for nuts on post anchors. 20% post grout pads rust stained. -26-Jan-2012		
(Type : GALVANIZED STEEL BRIDGE TUBE)						
Bridge Rail Posts		4	N			
(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	0	0	0	1		
Now				1		
Girders		3	3	Rust stains from connector pockets. S1G8 has wide crack @ centerline of girder.(photo) S1G10 has concrete spall on edge of girder 2m from pier. S3G1 has large spall on exterior face of curb.(photo) 15/20 girders have hairline to narrow cracks on underside of girder. Level 2 girder inspection and assessment completed in 2012.		
Last Complete Inspection Date		27-Mar-2013				
Cracking (Y/N)		Yes				
Spalling (Percent Area)		0				
Lift or Connector Pocket Grouted (Y/N)						
(Number Of Girders : 20)						
Span Alignment Problems						
Vertical (Y/N)		No				
Horizontal (Y/N)		No				
Superstructure General Rating		3	3			
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 : 1:1)						
Bearing Seats/Caps/Corbels Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last				Width - 460mm		
Now						
Bearing Seats/Caps/Corbels		6	6			
(Type : CONCRETE)						
(Depth(mm) : )						
(Width(mm) : )						
Backwalls/Breastwalls		X	X			
Greatest Height (m)		1.50				
Wingwalls		4	N	Derlam spalls @ NE wingwall-photo-26-Jan-2012		
(Total Number of Bearing Piles : 0:0)						
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last	1	0	0	0		
Now	1					
Piles		N	N			
Paint/Coating		5	5			
Abutment Stability		7	7			

Substructure						
Bridge Component		Last	Now	Explanation of Condition		
Scour/Erosion		6	6			
<b>Piers/Bents</b>						
(Type : <b>PIER-COLUMN</b> )		Popout @ North pier, North face East side.				
(Total Number of Caps/Corbels : <b>1:1</b> )		Delam cracks on bearing seat, North pier, East end.				
Bearing Seats/Caps/Corbels Detail Ratings		West end N. pier wide cracks on end @ bottom.				
Bearing Seats/Caps/Corbels Detail Ratings		West end South face of N pier has 300mmx400mm delam.				
	N (count)	1 (count)	2 (count)	3 (count)		
<b>Last</b>						
<b>Now</b>						
Bearing Seats/Caps/Corbels		4	4			
(Type : <b>CONCRETE</b> )						
(Total Number of Bearing Piles : <b>9:9</b> )						
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
<b>Last</b>						
<b>Now</b>						
Pier Shaft/Piles		7	7			
Greatest Height (m)		2.70				
Bracing/Struts/Sheathing		X	X			
Nose Plate		X	X			
Paint/Coating		7	7			
(Colour Description : <b>GREEN</b> )						
(Colour Code : <b>14090</b> )						
Pier Stability		7	7			
Scour		5	N			
Debris (Y/N)		Yes		Couple pieces of drift.		
<b>Substructure General Rating</b>		<b>4</b>	<b>4</b>			
Structure Usage						
		Last	Now	Explanation of Condition		
<b>Channel</b>						
(U/S Direction : <b>E</b> )						
(D/S Direction : <b>W</b> )						
Alignment		4	4	Gabions north side only.		
Bank Stability		4	4	River has eroded south bank and makes a couple sharp curves before entering bridge. NE vertical cut bank.		
HWM (m below Top of Curb)				(HWM 1.6m below deck underside South span. 00/10/12)		
Drift (Y/N)		Yes		Large logs in channel.		
Slope Protection		4	N	Section of gabion @ NE undermined & slide down over 15m length. - photo		
(Type : <b>NATURAL; GABION</b> )		Gabion mesh near waterline is corroded and coming apart for full length of protected area.(photo)-26-Jan-2012				
Guidebank/Spurs		4	N	Guide banks at NE corner covered by gabions and rock riprap-gabions sliding down slope.-photo-26-Jan-2012		

Structure Usage				
		Last	Now	Explanation of Condition
Adequacy of Opening		6	6	
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel General Rating</b>		<b>4</b>	<b>4</b>	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL							
GALVANIZE/PAINT BRIDGE RAIL							
SEAL CURBS							
PATCH DECK	2013	Patch chipseal.					
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS							
RESET/ PAINT BEARINGS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2013	Epoxy inject cracked girders.					
OTHER ACTION	2013	Repair guardrail, if not done.					
OTHER ACTION	2013	Patch curb and wingwall spalls, if not done.					
OTHER ACTION	2013	Repair gabions on headslope/guidebank, if not done.					
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>38.9/38.9</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>43.5/43.3</b>	Est. Repl. Yr	2032	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor girder spalls and longitudinal cracking of girders until replacement. Assessment of bridge vurrently underway.		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	Shane Hall		Previous Assistant's Name				
Next Inspection Date	27-Dec-2014		Previous Inspection Date	26-Jan-2012			
Inspection Cycle (Default) (months)	21						
Comment							