

Bridge Inspection							
Bridge File Number	74954 -1 Bridge			Form Type	PSR		
Year Built/Year Supstr	1959/1959			Lot No.	2		
Bridge or Town Name	SMOKY LAKE			Inspector Name	Kris Bosters		
Located Over	WHITE EARTH CREEK, 6.45, WATERCRS-ST			Inspector Class	BR CLS A		
Located On	28:08 C1 22.829			Assistant Name			
Water Body Cl./Year				Assistant Class			
Navigabil. Cl./Year				Inspection Date	27-Mar-2012		
Legal Land Location	NE SEC 22 TWP 59 RGE 16 W4M			Data Entry By	Theresa Lacusta		
Longitude, Latitude	-112:18:04, 54:06:60			Data Entry Date	04-Apr-2012		
Road Authority	Alberta Transportation (AIT)			Reviewer Name	Eric Carcoux		
Contract Main. Area	CMA07			Review Date	04-Apr-2012		
Clear Roadway/Skew	11 /			Dept. Reviewer Name	Brent Herrick		
AADT/Year	3,140 / 2011 (A)			Dept. Review Date	11-Apr-2012		
Road Classification	RAU-213.4-120			Follow-Up By			
Detour Length (km)	3						
Allowable Load (t):	Single	CS1 40 GIRDER	Semi	CS2 50 GIRDER	Train	CS3 71 GIRDER	----> 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)	No						
Remarks							
Other Sign Types							

Utilities (Located at)			
Utility Attachments			
Telephone	North & South r/w.		Gas
Power	3 wires North r/w.		Municipal
Others	WSC - SE, Fiber North r/w.		Problem (Y/N) No
Remarks			

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	Intersections to East & West.
Vertical Alignment		7	7	Crest curve each way, no passing.
Roadway Width (m)	13.000			Wide cracks in ACP at approaches. ACP at joints is cracked and relling.-photo
Approach Bump		5	4	
Guardrail (Y/N)	Yes			Minor dents. Insufficient length & posts near bridge.
Guardrail		6	4	Missing 7 bolts NE corner, posts leaning.-photo
Length (m)	28.000			
Current Standard (Y/N)	No			Missing 3 bolts SW corner.
Termination Type	Turned Down			Turndown end at NE and SE , set too high.-photo
Drainage		6	6	23/Sept/08 L2 inspection indicated a 24mm dia hole allowing water onto the West abutment.-22-Dec-2008
<b>Approach Road General Rating</b>		<b>6</b>	<b>6</b>	

Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
(Primary Span : PO, 2 Spans, Lengths(m): 18.9-18.9, A-Ident Number: )						
<b>Special Features</b>						
Special Feature			X	Dewidag bars added. Girder strengthening has been installed.		
(Type : )						
Special Feature			X			
(Type : )						
Wearing Surface/Deck Top Detail Ratings						
	N (%)	1 (%)	2 (%)	3 (%)		
<b>Last</b>						
<b>Now</b>						
Wearing Surface			5	5	Chipseal over epoxy over HDOL. Minor loss of seal coat along deck joints.	
(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			6	6		
Deck Joints			5	3	(25mm dia hole on approach side of the West abutment joint allows water onto the abutment.-22-Dec-2008) Pier joint between G1 & 2, East abutment joint between G3 & 4 is leaking causing spalling on backwall and deck underside.-photos	
Temperature (deg. C)		1				
(Expansion Type : <b>GLAND (WABO-MAUER, TRANSFLEX, ETC)</b> )						
(Fixed Type : )						
Gap Size (mm)		Gap Location				
43		West abutment				
40		Pier				
43		East abutment				
Deck Drainage			6	3	Pier and East joints leaking.	
Drains Clogged (Y/N)		No				
Curbs/Median			4	4	Numerous spot rusting on vertical face due to low cover. 25% of curb face and top has heavy spalling/scaling.-photo	
(Curb Type : <b>Standard</b> )						
Scaling (Percent Area)		10				
Bridge Rail			6	5	Double layer. Not spliced correctly, minor tears and dents on both rails.	
(Type : <b>GALVANIZED STEEL FLEX BEAM</b> )						
Bridge Rail Posts			4	4	90% insufficient threads. Some don't come through the nut. Nuts are loose at SW post. -photo	
(Type : <b>GALVANIZED POST STEEL;GALVANIZED POST STEEL</b> )						
Bridge Rail/Posts Coating			5	5		
(Type : <b>GALVANIZED</b> )						
Sidewalk			X	X		
<b>Girder Detail Ratings</b>						
	N (count)	1 (count)	2 (count)	3 (count)		
<b>Last</b>						
<b>Now</b>						
Girders			5	5	Typical girder shoe cracks. Poor patches @ girder ends South side on pier & end of S1G1, West.	
Cracking (Y/N)		Yes				
Spalling (Percent Area)		0				
(Number Of Girders : <b>12</b> )						

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : <b>PO, 2 Spans, Lengths(m): 18.9-18.9, A-Ident Number: )</b>				
Diaphragms/Cross Frame		6	6	25% paint failure.
Bearings		4	4	Abutment bearings are extended past masonry plate worst at East abutment with 10mm past plate.-photo Heavy scaling rust.  Fixed at piers.
Temperature (deg. C)	1			
(Expansion Type : <b>SLIDING PLATE</b> )				
(Fixed Type : <b>PINNED BEARING</b> )				
Coating Adequate (Y/N)	No			
Functioning (Y/N)	Yes			
Deck Underside		6	4	Old forms left in place near West abutment. Narrow transverse cracking with efflorescent staining. Water leaking through cracks at W abutment is causing bearings to rust and salt staining.-photo Spalls & rust staining where water is leaking through joints at pier and East abutment.-photos
Stains (Percent Area)	2			
<b>Span Alignment Problems</b>				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
<b>Superstructure General Rating</b>		<b>4</b>	<b>4</b>	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
<b>Abutments</b>				
Bearing Seats/Caps		5	5	Deteriorated patching at West abutment South end.
(Type : <b>CONCRETE</b> )				
Backwalls/Breastwalls		6	5	Localized medium scaling @ East & West abutment. 1.5mx1.0m spall @ East abutment between G3 & 4.-photo
Wingwalls		5	5	
Piles		N	N	
Paint/Coating		X	X	
Abutment Stability		6	6	
Scour/Erosion		6	6	
<b>Piers/Bents</b>				
(Type : <b>PIER-SOLID</b> )				Narrow cracking on S end of pier cap.
Bearing Seats/Caps		5	5	
(Type : <b>CONCRETE</b> )				
(Total Number of Bearing Piles : <b>0</b> )				Massive concrete pier.
Pier Shaft/Piles		5	5	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		X	X	
(Colour Description : )				
(Colour Code : )				
Pier Stability		7	7	
Scour		7	7	
Debris (Y/N)	No			
<b>Substructure General Rating</b>		<b>5</b>	<b>5</b>	

Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel</b>				
(U/S Direction : <b>N</b> )				Bend on U/S.
(D/S Direction : <b>S</b> )				
Alignment		5	5	
Bank Stability		6	6	
HWM (m below Top of Curb)				HWM not visible. Beaver dam across U/S channel, 60m North.
Drift (Y/N)		Yes		
Slope Protection		5	5	Excess concrete broken from deck remains high on headslope.
(Type : <b>NATURAL</b> )				
Guidebank/Spurs		X	X	
Adequacy of Opening		7	7	
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel General Rating</b>		<b>5</b>	<b>5</b>	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2012	Tighten loose bolts @ SW bridge post.					
GALVANIZE/PAINT BRIDGE RAIL							
SEAL CURBS	2012	Patch and seal curbs.					
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS							
RESET/ PAINT BEARINGS	2018	Reset bearings @ next major rehab.					
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2012	Install hazard markers.					
OTHER ACTION	2012	Replace missing GR bolts(17) and reset leaning posts @ NE.					
OTHER ACTION	2012	Reset approach rail turn doen ends to correct height.					
OTHER ACTION	2012	Patch and seal cracks in ACP.					
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>50.0/50.0</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>55.7/55.5</b>	Est. Repl. Yr	2030	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection			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-2013		Previous Inspection Date	21-Jul-2010			
Inspection Cycle (Default) (months)	21						
Comment							