Bridge Inspection

Bridge File Number	73921 W-1 Bridge	Form Type	PSR
Year Built/Year Supstr	1980/1980	Lot No.	2
		Inspector Name	Brian Pientsch
Bridge or Town Name	FOX CREEK	Inspector Class	BR CLS A
Located Over	IOSEGUN RIVER, 8.10.58.7.32, WATERCRS-ST	Assistant Name	Russel Vanderschaaf
		Assistant Class	BR CLS B
Located On	43:12 L1 17.024	Inspection Date	28-Nov-2012
Water Body Cl./Year		Data Entry By	Theresa Lacusta
Navigabil. Cl./Year		Data Entry Date	08-Jan-2013
Legal Land Location	SE SEC 35 TWP 61 RGE 18 W5M	Reviewer Name	Eric Carcoux
Longitude, Latitude	-116:35:11, 54:18:54	Review Date	19-Dec-2012
Road Authority	Alberta Transportation (AIT)	Dept. Reviewer Name	David Morrison
Contract Main. Area	CMA03	Dept. Review Date	19-Mar-2013
Clear Roadway/Skew	13.1 / -30 deg. (LHF)	Follow-Up By	
AADT/Year	6,290 / 2011 (A)		
Road Classification	RAD-412.4-120		
Detour Length (km)	1		

Allowable Load (t):	Single	CS1 28	Semi	CS2 49	Train	CS3 62	---> On Critical Spans --->Critical Member
Design Loading:		MS230					---> 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)	Yes
Remarks	
Other Sign Types	Curve signs, Iosegon River

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power	200m S. of c/l - 1 line	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road

		Last	Now	Explanation of Condition
Horizontal Alignment		5	5	on curve superelevated in between two. hills
Vertical Alignment		5	5	
Roadway Width (m)	13.000			
Approach Bump		6	6	
Guardrail (Y/N)	Yes			Two posts with blocks knocked off NW of bridge.-photo
Guardrail		7	3	
Length (m)	67.000			
Current Standard (Y/N)	Yes			
Termination Type	TURNED DOWN			
Drainage		7	7	
Approach Road General Rating		**5**	**5**	

Superstructure

Bridge Component		Last	Now	Explanation of Condition
(Primary Span : **RM, 3 Spans, Lengths(m): 12-12-12, A-Ident Number:**)				
Special Features				
Special Feature			X	
(Type :)				
Special Feature			X	
(Type :)				
Wearing Surface/Deck Top Detail Ratings				
	N (%) / 1 (%) / 2 (%) / 3 (%)			Partly snow covered.
Last	20 / 0 / 0 / 0			
Now	70.0			
Wearing Surface		7	7	1 - 1.5m of GBC on deck. (Experiment to reduce deck icing - 930830).
(Material Type : **ACP**)				
(Thickness(mm) : **50**)				
Lateral Connection Problem (Y/N)	No			
Deck Top		N	N	
Deck Rideability		6	6	
Deck Joints		X	X	
Temperature (deg. C)	-16			
(Expansion Type :)				
(Fixed Type :)				
Gap Size (mm) / Gap Location				
Deck Drainage		N	N	Curb covered in fill. Water flows over top and over outside edge of curb. Water draining between S1G 13, 14 + 15 A1.
Drains Clogged (Y/N)	Yes			
Curbs/Median		N	N	1 x 0.3m spall S curb. photo-07-May-2009
(Curb Type : **Standard**)				Snow/fill covered.
Scaling (Percent Area)	2			
Bridge Rail		7	7	Guardrail runs continuously across bridge. Rust stains @ post locations. Tubular handrail on curb.
(Type : **GALVANIZED STEEL BRIDGE TUBE**)				
Bridge Rail Posts		7	7	
(Type : **GALVANIZED POST STEEL;GALVANIZED POST STEEL**)				
Bridge Rail/Posts Coating		7	4	
(Type : **GALVANIZED**)				
Sidewalk		X	X	
Girder Detail Ratings				
	N (count) / 1 (count) / 2 (count) / 3 (count)			Rust staining on G1 & 15 on all spans due to drains. Spall @S1G13 0.5ml x 0.2m W x 0.03m D near P1.
Last	0 / 0 / 0 / 1			
Now	1			
Girders		3	3	S2G2 7.0 long HL diagonal crack with rust stains and efflorescence.- photo. Spall on under-side of NW curb Girder. S3 G14,15,+ 12 insufficient cover on rebar chairs, on S2 G15,13,11,2 + S1G1 & G2.
Cracking (Y/N)	Yes			
Spalling (Percent Area)	1			
(Number Of Girders : **45**)				

Superstructure				
Bridge Component		**Last**	**Now**	**Explanation of Condition**
(Primary Span : **RM, 3 Spans, Lengths(m): 12-12-12, A-Ident Number:**)				
Diaphragms/Cross Frame		X	X	
Bearings		7	7	
Temperature (deg. C)	-16			
(Expansion Type : **NEOPRENE STRIP BEARING**)				
(Fixed Type :)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		4	4	Narrow long crack outside AZ span 2 girder 2 Staining from weep holes
Stains (Percent Area)	1			
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				
Bearing Seats/Caps		7	7	
(Type : **CONCRETE**)				
Backwalls/Breastwalls		X	X	
Wingwalls		N	N	Gap between planks 120mm at NE corner.-07-May-2009 Snow covered.
Piles		N	N	
Paint/Coating		X	X	
Abutment Stability		4	7	150mm void under cap at SE & SW corners. Approx 5m L-repaired.
Scour/Erosion		4	7	150mm void under exp at SE and SW corners approx 5m L. - repaired.
Piers/Bents				
(Type : **PIER-COLUMN**)				Delam cracks on North end of Pier 1.-photo Spalling on corners of pier 1 both sides.-photo
Bearing Seats/Caps		4	4	
(Type : **CONCRETE**)				
(Total Number of Bearing Piles : **8:8**)				
Pier Shaft/Piles		7	7	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		4	4	pigmented sealer grey Primer exposed at lower 1m. Sealer is flaking off caps.
(Colour Description :)				
(Colour Code :)				
Pier Stability		7	7	
Scour		5	5	
Debris (Y/N)	No			
Substructure General Rating		**4**	**4**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel				
(U/S Direction : **S**)				
(D/S Direction : **N**)				
Alignment		6	6	
Bank Stability		5	5	
HWM (m below Top of Curb)				HWM not visible.
Drift (Y/N)	No			
Slope Protection		5	5	
(Type :)				
Guidebank/Spurs		X	X	
Adequacy of Opening		6	6	
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				
Channel General Rating		**5**	**5**	

Maintenance Recommendations

Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #
REPAIR/REPLACE BRIDGE RAIL						
GALVANIZE/PAINT BRIDGE RAIL						
SEAL CURBS	2013	(Patch spalls - carried over 07-Mar-2011)				
PATCH DECK						
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	Repair approach rail.				
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**38.9/38.9**	**Sufficiency Rating (Last/Now) (%)**	**53.8/53.4**	Est. Repl. Yr	2032	Maint. Reqd. (Y/N)	Yes

Special Comments for Next Inspection	Monitor girders.	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	Brian Pientsch	Previous Assistant's Name	Russel Vanderschaaf
Next Inspection Date	28-Aug-2014	Previous Inspection Date	07-Mar-2011
Inspection Cycle (Default) (months)	21		
Comment			