

Bridge Inspection											
Bridge File Number	07622 -1 Bridge				Form Type	PCS					
Year Built/Year Supstr	1965/1965				Lot No.	2					
Bridge or Town Name	DARWELL				Inspector Name	Kris Bosters					
Located Over	STURGEON RIVER, 6.65, WATERCRS-ST				Inspector Class	BR CLS A					
Located On	765:02 C1 11.140				Assistant Name	Brian Cote					
Water Body Cl./Year					Assistant Class						
Navigabil. Cl./Year					Inspection Date	20-Jul-2012					
Legal Land Location	NW SEC 19 TWP 54 RGE 4 W5M				Data Entry By	Theresa Lacusta					
Longitude, Latitude	-114:35:29, 53:41:03				Data Entry Date	13-Aug-2012					
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Eric Carcoux					
Contract Main. Area	CMA12				Review Date	31-Jul-2012					
Clear Roadway/Skew	9.1 /				Dept. Reviewer Name	Brent Herrick					
AADT/Year	540 / 2011 (A)				Dept. Review Date	16-Aug-2012					
Road Classification	RCU-209-110				Follow-Up By						
Detour Length (km)	10										
Allowable Load (t):	Single	CS1 28 GIRDER			Semi	CS2 49 GIRDER			Train	CS3 65 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	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									
Hazard Marker At Bridge (Y/N)		Yes							
Remarks									
Other Sign Types		File tag on NW abutment cap.							

Utilities (Located at)										
Utility Attachments	TELEPHONE UTILITIES-PHONE LINE									
Telephone	In conduit on West outside girder.				Gas					
Power					Municipal					
Others					Problem (Y/N)	Yes				
Remarks	Broken conduit @ SW corner - photo.									

Approach Road									
			Last	Now	Explanation of Condition				
Horizontal Alignment			6	6	Curve 200m North. Looking North.				
Vertical Alignment			7	7					
Roadway Width (m)	9.200								
Approach Bump			7	7					
Guardrail (Y/N)		Yes		Damaged rail at T.D end at SW, still functioning, - photo					
Guardrail			4	5					
Length (m)		15.200							
Current Standard (Y/N)		Yes							
Termination Type		Turn Down							
Drainage			7	7					
Approach Road General Rating			6	6					

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : HC, 3 Spans, Lengths(m): 6.1-8.5-6.1, 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					
Wearing Surface			4	4	Asphalt overlay. Crack in ACP over abutment/pier joints, hole in ACP over P1 NBL - photo. ACP stops 0.4m from curb . Longitudinal cracking in ACP at girder joint between G8, G9, G10 in S2, S3.
(Material Type : ACP)					
(Thickness(mm) : 50)					
Lateral Connection Problem (Y/N)		No			
Deck Top			4	N	
Deck Rideability			7	7	Potholes on deck at 3 spots.- Patched
Deck Joints			N	N	Paved over.
Bump (Y/N)		Yes			
Deck Drainage			6	6	
Drains Clogged (Y/N)		Yes			
Curbs/Median			4	6	New curb girders on S2.
(Curb Type : Standard)					
Scaling (Percent Area)		1			
Bridge Rail			4	6	Double layer. Minor spall around anchor bolts on West curb.
(Type : GALVANIZED STEEL FLEX BEAM)					
Bridge Rail Posts			4	5	
(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)	S1 (G10,G11) S2 (G7,G9,G10) S3 (G6) all have spans or wide cracks in anchor zone but G11 is curb unit.
Last					
Now		11	0	0	
Girders			4	4	Drift pin popout in 4 girder ends North abutment. Span 1 G2,G6,G7, G9 has wide crack in two leg in outside AZ. Insufficient girder bearing at P1. S2 viewed from S1 & S3. Wide crack in AZ one leg G10 S2. Spall outside AZ one leg G10, G7,G1 on S2. S2G7/G9/G10, S3G6 all have spall in AZ 1 leg.- photo #5. In one leg. All sound concrete confirmed.
Last Complete Inspection Date		20-Jul-2012			
Cracking (Y/N)		Yes			
Spalling (Percent Area)		2			
Lift or Connector Pocket Grouted (Y/N)		Yes			
(Number Of Girders : 33)					
Span Alignment Problems					
Vertical (Y/N)		No			(100mm brg @ P1). Drift pins very close to cap edge.
Horizontal (Y/N)		No			
Superstructure General Rating			4	4	

Substructure									
Bridge Component		Last	Now	Explanation of Condition					
Abutments									
(Extended Backwall Piles (Y/N) : Y)									
(Extended Backwall Piles Spacing(mm) : 1500)									
(Total Number of Caps/Corbels : 3:3)				Front sheathing installed to below cap.					
Bearing Seats/Caps/Corbels Detail Ratings									
	N (count)	1 (count)	2 (count)				3 (count)		
Last									
Now									
Bearing Seats/Caps/Corbels							6	6	
(Type : TREATED TIMBER)									
(Depth(mm) : 300)									
(Width(mm) : 350)									
Backwalls/Breastwalls			4				4	South abutment breastwall broken, about 5m long, backfill exposed - photo. North abutment breastwall no longer attached to piles.	
Greatest Height (m)		2.30							
Wingwalls			6	6					
(Total Number of Bearing Piles : 7:7)				Could not view all due to sheathing installed in front of piles.					
Piles Detail Ratings									
	N (count)	1 (count)	2 (count)				3 (count)		
Last	100								
Now	10	0	0				0		
Piles							N	7	
Paint/Coating							X	X	
Abutment Stability							7	7	
Scour/Erosion							7	4	Minor gully (0.3m deep) gully forming on N headslope.-photo
Piers/Bents									
(Type : PIER-COLUMN)									
(Total Number of Caps/Corbels : 3:3)				Girder dowel pins close to cap edge. Pier cap/piles are not centered over girders.					
Bearing Seats/Caps/Corbels Detail Ratings									
	N (count)	1 (count)	2 (count)				3 (count)		
Last									
Now									
Bearing Seats/Caps/Corbels							5	5	
(Type : TREATED TIMBER)									
(Depth(mm) : 300)									
(Width(mm) : 350)									
(Total Number of Bearing Piles : 7:7)									
Piles Detail Ratings									
	N (count)	1 (count)	2 (count)	3 (count)					
Last									
Now									
Pier Shaft/Piles				5	5				
Greatest Height (m)		2.50							
Bracing/Struts/Sheathing			4	7					
Nose Plate			X	X					
Paint/Coating			X	X					
(Colour Description :)									
(Colour Code :)									
Pier Stability			5	7	Broken sheathing planks.				

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Scour		7	7	
Debris (Y/N)	No			
Substructure General Rating		5	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : W)				
(D/S Direction : E)				
Alignment		7	7	
Bank Stability		N	7	
HWM (m below Top of Curb)				HWM not visible.
Drift (Y/N)	No			
Slope Protection		N	5	
(Type : NATURAL)				
Guidebank/Spurs		X	X	
Adequacy of Opening		7	7	
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		7	5	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL							
SEAL CURBS							
PATCH DECK							
OVERLAY DECK							
STRAIGHTEN/REPLACE MEMBERS							
WASHING							
SHOTCRETE REPAIRS							
CORE TIMBER CAPS/CORBELS							
REPAIR/REPLACE TIMBER CAPS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
INSTALL STRUTS							
OTHER ACTION	2012	Replace broken backwall plank. 5m long and reattach at abut.					
OTHER ACTION	2012	Inform Telus to repair broken conduit.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	50.0/50.0	Sufficiency Rating (Last/Now) (%)	63.5/63.1	Est. Repl. Yr	2020	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor headslope erosion and 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	Jacob Oresile		Previous Assistant's Name				
Next Inspection Date	20-Oct-2015		Previous Inspection Date	02-Feb-2009			
Inspection Cycle (Default) (months)	39						

Comment	
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