

Bridge Inspection											
Bridge File Number	71315 -1 Bridge					Form Type	TH				
Year Built/Year Supstr	1956/1955					Lot No.	1				
Bridge or Town Name	FORT ASSINIB					Inspector Name	Garry Roberts				
Located Over	ATHABASCA RIVER, 8.11, WATERCRS-ST					Inspector Class	BR CLS A				
Located On	33:08 C1 34.335					Assistant Name	Randy Bredo				
Water Body Cl./Year						Assistant Class	BR CLS A				
Navigabil. Cl./Year						Inspection Date	07-Jun-2011				
Legal Land Location	NE SEC 35 TWP 61 RGE 6 W5M					Data Entry By	Theresa Lacusta				
Longitude, Latitude	-114:47:05, 54:19:14					Data Entry Date	16-Jan-2012				
Road Authority	Alberta Transportation (AIT)					Reviewer Name	Eric Carcoux				
Contract Main. Area	CMA10					Review Date	15-Jan-2012				
Clear Roadway/Skew	7.3 /					Dept. Reviewer Name	Brent Herrick				
AADT/Year	1,470 / 2010 (A)					Dept. Review Date	18-Jan-2012				
Road Classification	RAU-210-110					Follow-Up By					
Detour Length (km)	95										
Allowable Load (t):	Single	H 32 STRINGER			Semi	HS 56 FLOOR BEAM		Train	CS3 73 L2U3		----> On Critical Spans ---->Critical Member
Design Loading:	HS20										----> Primary Span

Posting Information												
Required Vert. Clearance Posting (m)												
Posted Vertical Clearance (Y/N) Yes												
Posted:	Lane	WB	On Bridge (m)	5.8	In Advance (Y/N)	Yes	Lane	EB	On Bridge (m)	5.8	In Advance (Y/N)	Yes
Remarks Actual clearance is 5.925m to 5.960m.												
Required Load Posting (t)												
Posted Loading (t)												
Posted:	Lane	SB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No				
Posted:	Lane	NB	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	SE Marker is not secure.											
Other Sign Types	Information, Curve, Narrow Bridge, 70 km/hr, Danger Overhead Lines (at U/S & D/S channels).											

Utilities (Located at)										
Utility Attachments	TELEPHONE UTILITIES-PHONE LINE									
Telephone	North r/w on bottom chord 2 conduit.				Gas	Crossing 250m East.				
Power	3 lines North r/w 20m from bridge. New power poles installed with 9 lines North r/w.				Municipal					
Others	Utility Conduit on North Bottom Chord has severe corrosion.				Problem (Y/N)	Yes				
Remarks	Conduit corroded & disconnected at a couple of spots.									

Approach Road					
		Last	Now	Explanation of Condition	
Horizontal Alignment		6	6	Reduced speed 70 km/hr, limited visibility around curve at West end.	
Vertical Alignment		7	7		
Roadway Width (m)	10.300			1 missing splice bolt at SE and 1 bolt pulled through at SE. @ NW. Not thrie beam	
Approach Bump		7	6		
Guardrail (Y/N)	Yes				
Guardrail		4	4		
Length (m)	47.000				
Current Standard (Y/N)	No				
Termination Type	Turned Down				
Drainage		6	7		

Approach Road					
			Last	Now	Explanation of Condition
Approach Road General Rating			6	6	
Superstructure					
Bridge Component			Last	Now	Explanation of Condition
(Primary Span : TH, 4 Spans, Lengths(m): 76.2-61-61-61, A-Ident Number: A0241-01;A0241-02;A0241-03;A0241-04)					
Special Features					
Special Feature				X	
(Type :)					
Special Feature				X	
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	Sp1-20m2, Sp2-5m2,Sp3-6m2-Sp4-11m2 All approx areas of concrete surface delams.
Last	0	0	0	5	
Now	0.0	0.0	0.0	10.0	
Wearing Surface/Deck Top			3	3	Chipseal on epoxy on concrete. Local delam/cracking in S4. Transverse cracks reflecting through seal coat. Some cracks have been routed and repaired. 1 post spall with exposed rebar at Sp2-3-4.
(Material Type : CONVENTIONAL CHIP SEAL COAT)					
(Plank Thickness(mm) :)					
(Plank Width(mm) :)					
Deck Rideability			5	4	Localized pot holes.
Deck Joints			3	3	Silicone seals pulled & torn at A1, P2, A2. All floorbeam joints have had sealant placed along them, sealant has cracked. NW curb cover plate is pulled up 100mm. P1-85mm, P2-90mm,P3-75mm.
Temperature (deg. C)		17			
(Expansion Type : GLAND (WABO-MAUER, TRANSFLEX, ETC))					
(Fixed Type :)					
Gap Size (mm)		Gap Location			
85		West abutment - A1			
90		East abutment - A2			
Curbs/Wheel Guards			3	3	Scaling along bottom edges up to 25mm deep. Several curb crack/scalling/spalling @ rail posts with visible rebar.
(Curb Type : Standard)					
(Type : CONCRETE)					
(Curb Height(mm) : 250)					
(Width(mm) : 260)					
Bridge Rail			4	4	Several cracked welds in rail. Concrete base spalled affecting post anchorage at 6 locations. 1 post A/B not fully engaged Sp3 East side. Rust @ stitch welds.
(Type : GALVANIZED STEEL BRIDGE TUBE)					
Bridge Rail Posts/Blocking			3	3	
(Type : POST STEEL;POST STEEL)					
Bridge Rail/Posts Coating			4	4	
(Type : PAINT)					
Sidewalk			X	X	

Superstructure							
Bridge Component		Last	Now	Explanation of Condition			
(Primary Span : TH, 4 Spans, Lengths(m): 76.2-61-61-61, A-Ident Number: A0241-01;A0241-02;A0241-03;A0241-04)							
Wide Load Damage (Y/N)	Yes			No new high load damage. Minor nicks,notches, slivers and delamination documented on UT report. Some rough holes. See UT 2011 for details. Both hanger bolts broken at bottom laterals of Sp1-bay1 and Sp4-bay11 and 12. S2U1U1-10x350 dent @ top and bottom flange. S3U1U1-20x500mm dent to bottom flange. Both end gussets with 2 open holes.			
High Load Damage (Y/N)	Yes						
Top Chord		7	7				
Batter Posts		5	5				
Sway Bracings		7	4				
Diagonals		6	5				
Verticals		7	5				
Portals		5	5				
Connections		5	4				
Floor Beams		5	5				
Bottom Chord		5	5				
(No. of Stringers : 240;Null;Null;Null)							
Stringer Detail Ratings							
	N (count)	1 (count)	2 (count)			3 (count)	
Last							
Now							
Stringers			5	5			
(Type : STEEL)							
(Width(mm) : 140)							
(Depth(mm) : 420)							
(Spacing(mm) : 1447)							
Paint Condition		4	3	Protected & splash zone painted in 1994. Floor system corroding under joints and at floor beams. Green. (2 shades) Heavy corrosion at top flanges of floor beams and bottom flange of exterior stringers.			
(Colour Description :)							
(Colour Code :)							
Touchup Required (Y/N)	No						
Bearings		5	5	Several roller nests twisted between 10 to 25mm. S4L12W broken shoulder plate. Exp. at piers.			
Temperature (deg. C)	17						
(Expansion Type : DISC & DOME BEARING;ROLLER NEST BEARING)							
(Fixed Type : DISC & DOME BEARING)							
Functioning (Y/N)	Yes						
Sub Deck/Deck Underside		4	4	Dark staining throughout deck, transverse cracking & spalls at various locations. Salt damage at floor beams, exposed rebar and fallen concrete. Floor beam locations and propagating to mid decks.			
(Material Type : CONCRETE)							
(Plank Thickness(mm) : 150)							
(Plank Width(mm) :)							
Defects (Percent Area)	20						
Span Alignment Problems							
Vertical (Y/N)	No						
Horizontal (Y/N)	No						
Superstructure General Rating		3	4	Bridge rail posts with anchorage loss governing.			
Substructure							
Bridge Component		Last	Now	Explanation of Condition			
Abutments							
(Extended Backwall Piles (Y/N) : N)				Cast in concrete.			
(Extended Backwall Piles Spacing(mm) :)							

Substructure					
Bridge Component		Last	Now	Explanation of Condition	
(Total Number of Caps/Corbels : 1:1)					
Bearing Seats/Caps/Corbels Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last	0	0	0	0	
Now					
Bearing Seats/Caps/Corbels			5	5	
(Type : CONCRETE)					
(Depth(mm) :)					
(Width(mm) :)					
Backwalls/Breastwalls			6	6	
Greatest Height (m)		1.60			
Wingwalls			4	5	
Spalling on roadway sides, both ends.					
(Total Number of Bearing Piles : 0:0)					
Piles Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last	100	0	0	0	
Now	1	0	0	0	
Piles			N	N	
Paint/Coating			X	X	
Abutment Stability			7	7	
Scour/Erosion			6	6	
Minor gullies at West headslope.					
Piers/Bents					
(Type : PIER-SOLID)					
Piers have scaling at the top and delam cracks.					
(Total Number of Caps/Corbels : 1:1:1)					
Bearing Seats/Caps/Corbels Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last		0	0	0	
Now				1	
Bearing Seats/Caps/Corbels			4	3	
(Type : CONCRETE)					
(Total Number of Bearing Piles : 0:0:0)					
Piles Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last	100	0	0	0	
Now					
Pier Shaft/Piles			5	5	
Greatest Height (m)					
Bracing/Struts/Sheathing			X	X	
Nose Plate			6	6	
Paint/Coating			X	4	
Tight corrosion at nose plates.					
(Colour Description :)					
(Colour Code :)					
Pier Stability			7	7	
Scour			N	N	
Deep water					
Debris (Y/N)		Yes			
Drift pile along East bank and below span 3.					

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Substructure General Rating		4	3	(AIT NC Region contacted June 4/07. Agreed to increase monitoring of P2W pedestal. 01/June/2007)
Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : W)				Flows along West bank.
(D/S Direction : E)				
Alignment		7	7	
Bank Stability		4	6	Sloughing along West bank downstream.
HWM (m below Top of Curb)				Water to deck 9.70m-14-June-2006
Drift (Y/N)	Yes			
Slope Protection (Type : RIP RAP; RIP RAP)		7	6	Rock along North bank only.
Guidebank/Spurs		7	7	
Adequacy of Opening		7	8	
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		7	6	

Maintenance Recommendations						
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #
REPAIR/REPLACE BRIDGE RAIL	2013	Replace bridgerails with PL3 double tube on new CIP concrete curbs.				
RETROFIT BRIDGE RAIL						
SEAL CURBS	2013	Patch spalls/cracks. Post anchors.				
PATCH DECK	2012	Patch deck top potholes/delams.-approx 40m2				
SEAL DECK						
OVERLAY DECK	2013	New deck or thick overlay with neoprene waterstop & caulking above each floor beam. At next major rehab.				
REPLACE STRIP DECK						
REPLACE SUB DECK	2013	New deck or thick overlay at next major rehab.				
RESET/ PAINT BEARINGS	2013	Replace bearings with next major rehab with teflon/ss/neoprene and pull spans back to correct position.				
REPAINT SUPERSTRUCTURE	2013	Floor system.				
STRAIGHTEN/REPLACE MEMBERS	2013	Heat straighten 6 members, repair others. Replace 2 hanger bolts and add sideplates @ S4-LOU1E. Replace top clips @ S1U2L2E and S4U2L2E. See UT 2007 report for details.				
WASHING						
SHOTCRETE REPAIRS						
CORE TIMBER CAPS/CORBELS						
REPAIR/REPLACE TIMBER CAPS						
REPAIR ABUTMENT SCOUR/EROSION						
PLACE ADDITIONAL RIP RAP						
REMOVE DRIFT ACCUMULATION						
OTHER ACTION	2013	Repair pier 2W bearing pedestal with additional CIP concrete block.				
OTHER ACTION	2013	Install missing splice bolts in NW guardrail (8); upgrade guardrails to meet standard. Remove windrows.				
OTHER ACTION	2012	Advise Telus to replace corroded conduits.				
OTHER ACTION	2013	Replace type 1 strip seals with neoprene and replace missing coverplate bolts.				
OTHER ACTION	2013	Replace joint sealant, replace joints at next major rehab.				
OTHER ACTION	2013	Replace hanger bolts Sp1-bay 1 and Span 4.				
OTHER ACTION						
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Maintenance Recommendations							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	38.9/38.9	Sufficiency Rating (Last/Now) (%)	40.0/38.1	Est. Repl. Yr	2020	Maint. Req'd. (Y/N)	Yes
Special Comments for Next Inspection	Confirmed with At that bridge is currently schedule fro replacement in 2015. onsider only necessary repairs rahter than extensive repairs.(G.Roberts-07-Jun-2011)			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	Ed Kowal		Previous Assistant's Name				
Next Inspection Date	07-Mar-2013		Previous Inspection Date		21-May-2011		
Inspection Cycle (Default) (months)	21						
Comment							