

Bridge Inspection											
Bridge File Number	77556 E-1 Bridge				Form Type	PSR					
Year Built/Year Supstr	1975/1975				Lot No.	2					
Bridge or Town Name	EDMONTON				Inspector Name	Kris Bosters					
Located Over	216:04 R1 3.454;216:04 L1 3.438				Inspector Class	BR CLS A					
Located On	25105:02 R1 1.009				Assistant Name						
Water Body Cl./Year					Assistant Class						
Navigabil. Cl./Year					Inspection Date	05-Apr-2011					
Legal Land Location	NW SEC 33 TWP 52 RGE 23 W4M				Data Entry By	Theresa Lacusta					
Longitude, Latitude	-113:20:33, 53:32:27				Data Entry Date	18-Apr-2011					
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Arnold Assenheimer					
Contract Main. Area	CMA09				Review Date	11-Apr-2011					
Clear Roadway/Skew	13.7 / -6 deg. (LHF)				Dept. Reviewer Name	Brent Herrick					
AADT/Year	19,920 / 1993 (E)				Dept. Review Date	19-Apr-2011					
Road Classification	RAU-213.4-120				Follow-Up By						
Detour Length (km)	1										
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 Vert. Clearance Posting (m)			UNDER: 216 L1 5.2m, 216 R1 5.2m									
Posted Vertical Clearance (Y/N)			Yes									
Posted:	Lane	NB	On Bridge (m)	5.3	In Advance (Y/N)	Yes	Lane	SB	On Bridge (m)	5.2	In Advance (Y/N)	Yes
Remarks		SB posted on North bridge.										
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)		In Advance (Y/N)		At Bridge (Y/N)					
Remarks		Not required.										
Hazard Marker At Bridge (Y/N)		No										
Remarks		Not required.										
Other Sign Types												

Utilities (Located at)												
Utility Attachments												
Telephone						Gas						
Power	Light standard on bridge & ramps.					Municipal						
Others						Problem (Y/N)	No					
Remarks												

Approach Road												
			Last	Now	Explanation of Condition							
Horizontal Alignment			7	7	Off ramp. Intersection with turning to West.							
Vertical Alignment			8	8								
Roadway Width (m)		11.300				ACP & paving lip deterioration @ W. joint.(photo) ACP deterioration @ E. joint.						
Approach Bump				5	4							
Guardrail (Y/N)		Yes				Not attached to bridge.(photo)						
Guardrail				4	4	1 broken post in N. approach rail.(photo) 1 broken post in S. approach rail(photo). Insufficient number of posts @ 5W approach(photo).						
Length (m)		53.000										
Current Standard (Y/N)		No										
Termination Type		Turn Down										
Drainage			3	N	Hole in ACP/approach slab allowing water to drain beside wingwall and under approach slabs(24-Jun-2009). Too much gravel to confirm.							

Approach Road					
		Last	Now	Explanation of Condition	
Approach Road General Rating		7	7		
Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : VF, 2 Spans, Lengths(m): 38.1-38.1, A-Ident Number:)					
Special Features					
Special Feature		7	7		
(Type : EXT LATER POST TENS)					
Special Feature			X		
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	Gravel/ice along curbs.
Last	0	0	0	0	
Now	15.0	0.0	0.0	10.0	
Wearing Surface		5	3	ACP has alligator cracking on 30% of area. 200mm dia. potholes in wheel paths S lane.-photo	
(Material Type : ACP)					
(Thickness(mm) : 50)					
Lateral Connection Problem (Y/N)	No				
Deck Top		N	N		
Deck Rideability		7	4	Potholes S lane	
Deck Joints		3	3	Missing 6 snow plow deflectors West abutment.-photo Missing 4 snow plow deflectors pier 1.-photo Missing 3 snow plow deflectors @ East abut.-photo Paving lips at all joints are breaking up.-photo Measured @ S. shoulder. *Pier joint is acting as expansion.	
Temperature (deg. C)		5			
(Expansion Type : GLAND (WABO-MAUER, TRANSFLEX, ETC))					
(Fixed Type : GLAND (WABO-MAUER, TRANSFLEX, ETC))					
Gap Size (mm)		Gap Location			
50	West abutment, exp.				
43	Pier, fixed				
35	East abutment, exp.				
Deck Drainage		3	N	(Bird bath between 7th and 8th post from SE. 94/08/11) No drains. Hole in acp/approach slab @ SE corner allowing water to drain below appr. slab.-24-June-2009	
Drains Clogged (Y/N)					
Curbs/Median		4	4	Small popouts & spalls at approach curbs. 3 spalls on outside face around 3 bridge posts on N. side - rebar not exposed. SW joint coverplate is damaged.-photo 500mm long spalls SE & NE approach curb.-photos	
(Curb Type : Standard)					
Scaling (Percent Area)		1			
Bridge Rail		8	8	Bridgerail post base grout pads are cracked spalled.	
(Type : GALVANIZED STEEL BRIDGE TUBE)					
Bridge Rail Posts		5	5		
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)					
Bridge Rail/Posts Coating		8	8		
(Type : GALVANIZED)					
Sidewalk		X	X		
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last	0	0	0	0	
Now					

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : VF, 2 Spans, Lengths(m): 38.1-38.1, A-Ident Number:)				
Girders		4	4	High load damage with strand exposed G1, S1 mid span - photo. Typical chamfer cracks. Spall on leg of G10 under W bearing.-photo
Cracking (Y/N)	Yes			
Spalling (Percent Area)	1			
(Number Of Girders : 20)				
Diaphragms/Cross Frame		7	7	
Bearings		5	5	Pier & abutment bearings inspected with binoculars. (Some pads are slightly deformed. The anchor pins start bending as you go from North to South on the pier only bearing and pad alignment get worse as one goes South as well.
Temperature (deg. C)	5			
(Expansion Type : REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL)				
(Fixed Type : REINFORCED PAD BEARING)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		4	4	Open weep tubes are stained around about 200 mm circle. Large spall 600mm x 500mm @ G10/S2 - photo.
Stains (Percent Area)	1			
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		4	4	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps		6	6	
(Type : CONCRETE)				
Backwalls/Breastwalls		6	6	
Wingwalls		6	5	Random narrow map cracking. Wide cracks with rust stains SW.
Piles		N	N	
Paint/Coating		5	5	
Abutment Stability		6	6	
Scour/Erosion		X	X	
Piers/Bents				
(Type : PIER-SOLID)				Patch @ South end.
Bearing Seats/Caps		6	6	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 0)				
Pier Shaft/Piles		7	7	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		6	6	Silane sealer
(Colour Description :)				
(Colour Code :)				
Pier Stability		7	7	
Scour		X	X	

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Debris (Y/N)	No			
Substructure General Rating		6	6	
Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		7	7	Light on pier is not working.-photo
Traffic Safety Features		7	4	2 sections rail and 2 posts damaged on SBL-photo 4 sections rail and 2 posts damage on NBL.
Type	Guardrail / Lighting			
Slope Protection		5	5	Wide crack on East slope. Wide cracks on West slope. Heaved up to 75mm along cracks.
(Type : CONCRETE; CONCRETE)				
Bank Stability		6	6	
Drainage		6	6	
Grade Separation General Rating		6	4	

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							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS	2011	Repair w. paving lip.					
RESET/ PAINT BEARINGS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2011	Patch G1, S1 high load damage.					
OTHER ACTION	2011	Replace joint plow deflectors.					
OTHER ACTION	2011	Repair hole in approach slab @ SE corner, if not already done.					
OTHER ACTION	2011	Replace broken G.R. posts.					
OTHER ACTION	2011	Fill acp potholes @ joints.					
OTHER ACTION	2011	Repair lighting.					
OTHER ACTION	2011	Upgrade BR to GR transition.					
OTHER ACTION	2011	Replace missing curb coverplate.					
OTHER ACTION	2011	Patch spalls on approach curbs.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	55.7/47.3	Est. Repl. Yr	2029	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	Arnold Assenheimer	Previous Assistant's Name	Shane Hall
Next Inspection Date	05-Jan-2013	Previous Inspection Date	24-Jun-2009
Inspection Cycle (Default) (months)	21		
Comment			