

Bridge Inspection							
Bridge File Number	01225 -1 Bridge			Form Type	PCS		
Year Built/Year Supstr	1974/1974			Lot No.	3		
Bridge or Town Name	MADDEN			Inspector Name	Jason Saly		
Located Over	BEAVERDAM CREEK, 3.89.8.11, WATERCRS-ST			Inspector Class	BR CLS A		
Located On	766:04 C1 12.779			Assistant Name			
Water Body Cl./Year				Assistant Class			
Navigabil. Cl./Year				Inspection Date	14-Feb-2012		
Legal Land Location	NW SEC 25 TWP 29 RGE 3 W5M			Data Entry By	Marcia Chavez		
Longitude, Latitude	-114:18:23, 51:31:00			Data Entry Date	09-Mar-2012		
Road Authority	Alberta Transportation (AIT)			Reviewer Name	John O'Brien		
Contract Main. Area	CMA28			Review Date	29-Feb-2012		
Clear Roadway/Skew	8.2 / -15 deg. (LHF)			Dept. Reviewer Name	Andrew Smikles		
AADT/Year	380 / 2010 (A)			Dept. Review Date	14-Mar-2012		
Road Classification	RCU-208-110			Follow-Up By			
Detour Length (km)	3						
Allowable Load (t):	Single	CS1 30 GIRDER	Semi	CS2 52 GIRDER	Train	CS3 75 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	Not required.						
Hazard Marker At Bridge (Y/N)	Yes						
Remarks	4 corners. Some 1m offline.						
Other Sign Types	Curve sign 25m North of bridge, 100m South.						

Utilities (Located at)				
Utility Attachments				
Telephone	West r/w.		Gas	Crosses road 30m South.
Power	3 wires 20m East.		Municipal	
Others			Problem (Y/N)	No
Remarks				

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		5	5	Field access at NE; farm access at SW.
Vertical Alignment		5	5	Curve 150m N & S. Limited sight distance to N. No passing.
Roadway Width (m)	8.000			
Approach Bump		7	7	
Guardrail (Y/N)	Yes			2 split blocks 40m & 1 missing in W guardrail.
Guardrail		4	4	Most blocks are rotated.
Length (m)	7.600			Length at NE & SW. 100m @ SE & NW.
Current Standard (Y/N)	No			Insufficient length/posts, not thrie beam.
Termination Type	Turn Down			
Drainage		7	7	
Approach Road General Rating		5	5	

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : HC, 3 Spans, Lengths(m): 8.5-8.5-8.5, 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	0.0	0.0	0.0	0.0	
Wearing Surface			5	5	Longitudinal cracks, 6 lines, between girders.
(Material Type : MIX TYPE 1 ACP)					
(Thickness(mm) : 50)					
Lateral Connection Problem (Y/N)	Yes				
Deck Top			N	N	
Deck Rideability			8	8	
Deck Joints			X	X	(Buffer angles. 30Sep2009). ACP cracks.
Bump (Y/N)	No				
Deck Drainage			5	5	
Drains Clogged (Y/N)	No				
Curbs/Median			4	4	Scaling is mostly plow scapes. Local spalls in 3 locations.
(Curb Type : Standard)					
Scaling (Percent Area)	2				
Bridge Rail			8	8	Double layer.
(Type : GALVANIZED STEEL FLEX BEAM)					
Bridge Rail Posts			7	7	
(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)	
Last					
Now	0	0	0	0	
Girders			4	4	Some hairline shear cracks @ S span. Narrow flexural cracks (4) girders S1. S1 2 girders with 1 leg cracked in AZ. S2G2 has 2 legs cracked in AZ. S2G3,8,10 1 leg cracked in AZ. S3G4,6 two legs cracked in AZ. S3G5,7,10 one leg cracked in AZ. S2G6 spall in AZ. 1 girder with spall outside AZ. Spalls @ abuts. S3G1 spall in AZ.
Last Complete Inspection Date	14-Feb-2012				
Cracking (Y/N)	Yes				
Spalling (Percent Area)	5				
Lift or Connector Pocket Grouted (Y/N)					
(Number Of Girders : 30)					
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						
(Extended Backwall Piles (Y/N) : Y)						
(Extended Backwall Piles Spacing(mm) : 1500)						
(Total Number of Caps/Corbels : 3:3)				Including crowned subcap.		
Bearing Seats/Caps/Corbels Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last						
Now	0	0	0	0		
Bearing Seats/Caps/Corbels				6	6	
(Type : TREATED TIMBER)						
(Depth(mm) : 305)						
(Width(mm) : 305)						
Backwalls/Breastwalls				6	6	
Greatest Height (m)		1.50				
Wingwalls				5	5	
(Total Number of Bearing Piles : 7:7)				N abut piles buried, both abuts have front sheathing. Only portion of S abut piles visible. Piles are tied to backwalls by clamps/scabs.		
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last	100					
Now	14	0	0	0		
Piles				N	N	
Paint/Coating				X	X	
Abutment Stability				5	5	
Scour/Erosion				6	6	
Piers/Bents						
(Type : PIER-COLUMN)						
(Total Number of Caps/Corbels : 3:3)						
Bearing Seats/Caps/Corbels Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last						
Now	0	0	0	0		
Bearing Seats/Caps/Corbels				4	4	
(Type : TREATED TIMBER)						
(Depth(mm) : 305)						
(Width(mm) : 356)						
(Total Number of Bearing Piles : 8:8)				Wide check and radial cracking East end of P1 cap.		
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last						
Now	8	0	0	0		
Pier Shaft/Piles				5	5	
Greatest Height (m)		3.05				
Bracing/Struts/Sheathing				5	5	
Sheathing @ East half of piers only. 2 cracked braces @ North pier, minor.						
Nose Plate				7	7	
Paint/Coating				4	4	
Corrosion @ nose plates.						
(Colour Description :)						
(Colour Code :)						

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Pier Stability		7	7	
Scour		5	5	Scour around pier 2, old piles @ North pier.
Debris (Y/N)	Yes			Old abutments and some old piles remain but are not causing any problem.
Substructure General Rating		4	4	
Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : E)				Meanders @ both sides.
(D/S Direction : W)				
Alignment		5	5	
Bank Stability		5	5	Cut bank @ SW. Some erosion on curves U/S & D/S.
HWM (m below Top of Curb)	1.5			(01/Mar/2006)
Drift (Y/N)	No			
Slope Protection		5	5	At piers, natural headslope.
(Type : RIP RAP; NATURAL)				300mm riprap on South bank & under South span. Natural @ North.
Guidebank/Spurs		X	X	
Adequacy of Opening		8	8	
(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							
SEAL CURBS	2012	Patch spalls & 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	Seal ACP cracks over abutment/pier & longit.					
OTHER ACTION	2012	Replace split guardrail blocks (3).					
OTHER ACTION	2012	Reset hazard markers to meet standard.					
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	44.4/44.4	Sufficiency Rating (Last/Now) (%)	65.7/65.5	Est. Repl. Yr	2025	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection			Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy	2006.07.28 Bridge should be okay until 2030.						
On 3-Year Program (Y/N)	Y						
Proposed Action	2006.07.28 Replace caps in about 2010						
Previous Inspector's Name	Dave Lam		Previous Assistant's Name				
Next Inspection Date	14-May-2015		Previous Inspection Date	30-Sep-2009			
Inspection Cycle (Default) (months)	39						
Comment							