

Bridge Culvert Inspection								
Bridge File Number	77895 -1 Bridge Culvert				Form Type	CULM		
Year Built	1986				Lot No.	3		
Bridge or Town Name	BURDETT				Inspector Name	Jason Rusu		
Located Over	SMR - IRRIGATION C, WATERCRS-IC				Inspector Class	BR CLS A		
Located On	879:04 C1 21.555				Assistant Name			
Water Body Cl./Year					Assistant Class			
Navigabil. Cl./Year					Inspection Date	17-Mar-2012		
Legal Land Location	SW SEC 28 TWP 8 RGE 11 W4M				Data Entry By	Lauren Korte		
Longitude, Latitude	-111:26:59, 49:40:21				Data Entry Date	11-Apr-2012		
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Garry Roberts		
Contract Main. Area	CMA24				Review Date	23-Mar-2012		
Clear Roadway/Skew	8.2 / 45 deg. (RHF)				Dept. Reviewer Name	Tim Davies		
AADT/Year	560 / 2011 (A)				Dept. Review Date	17-Apr-2012		
Road Classification	RCU-208-110				Follow-Up By			
Detour Length (km)	3							
Bridge Culvert Information								
Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	10500	3800	BP	57.6			RECTANGLE
Special Features								
Special Features Comment								
Utilities (Located at)								
Utility Attachments								
Telephone	SE side.				Gas			
Power	3 line crosses U/S & D/S end.				Municipal			
Others					Problem (Y/N)	No		
Remarks								
Approach Road / Embankment								
			Last	Now	Explanation of Condition			
Horizontal Alignment			5	5	BP crosses controlled intersection on skew.			
Vertical Alignment			9	9				
Roadway Width (m)	8.200							
Embankment			8	3	Loss of fill at outlet undermining anchorage of corner guardrail post.			
Sideslope ( _ :1)	10.0							
(Height of Cover(m) : 0.4)								
Guardrail (Y/N)	Yes				57.6m single flex beam-runs along end treatment both sides.			
<b>Approach Road / Embankment General Rating</b>			<b>5</b>	<b>5</b>				
Upstream End								
<b>Culvert Component</b>			Last	Now	Explanation of Condition			
Direction					SW.			
End Treatment (Concrete, Steel, Others, None)	CONCRETE							
Headwall			8	8	Handrail on headwall and wingwall.			
Collar			X	X				
Wingwalls			8	4	40MM gap u/s South side @ wing/barrel. Causing loss of fill approximately 0.25 m3.			
(Shape : )								
Cutoff Wall			N	N				

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		N	7	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>200</b> )				
Scour/Erosion		N	7	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>8</b>	<b>4</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3500, Rise (mm): 3800, Type: BP, Cell Sequence: 1)</b>				
Barrel Last Accessible Date	11-Feb-2009			South cell. 1.5 m deep water in canal. Accessible.
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		8	N	Viewed from ends. No visible defects/ deformation.
Measured Rise (mm)	3800			
Measured At Ring No.	1			
Sag (mm)	0			
Percent Sag	0			
Sidewall		8	N	Hairline vertical crack throughout.
Measured Span (mm)	3500			
Measured At Ring No.	1			
Deflection (mm)	0			
Percent Deflection	0			
Floor		N	N	Ice covered.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		X	N	
Separation (mm)	0			
Longitudinal Seams		X	X	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		X	X	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3500, Rise (mm): 3800, Type: BP, Cell Sequence: 1)				
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type : )				
Waterway Adequacy		8	8	
Icing (Y/N)		No		
Siltting (Y/N)		No		
Drift (Y/N)		No		
Barrel General Rating		8	N	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3500, Rise (mm): 3800, Type: BP, Cell Sequence: 2)				
Barrel Last Accessible Date		11-Feb-2009		Center Cell.
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		8	N	Hairline vertical crack throughout.
Measured Rise (mm)		3800		
Measured At Ring No.		1		
Sag (mm)		0		
Percent Sag		0		
Sidewall		8	N	
Measured Span (mm)		350		
Measured At Ring No.				
Deflection (mm)		0		
Percent Deflection		0		
Floor		N	N	
Bulge (mm)		0		
Measured At Ring No.				
Abrasion (Y/N)		No		
Circumferential Seams		X	N	
Separation (mm)		0		
Longitudinal Seams		X	X	
Total No. of Cracked Rings		0		
Total No. of Rings with Two Cracked Seams		0		
Min. Remaining Steel Between Cracks (mm)		0		
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		X	X	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG		ZERO		
Ponding (Y/N)		No		

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3500, Rise (mm): 3800, Type: BP, Cell Sequence: 2)				
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type : )				
Waterway Adequacy		8	8	
Icing (Y/N)		No		
Siltting (Y/N)		No		
Drift (Y/N)		No		
Barrel General Rating		8	8	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3500, Rise (mm): 3800, Type: BP, Cell Sequence: 3)				
Barrel Last Accessible Date		11-Feb-2009		South cell.
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		8	N	
Measured Rise (mm)		3800		
Measured At Ring No.		1		
Sag (mm)		0		
Percent Sag		0		
Sidewall		8	N	
Measured Span (mm)		3500		
Measured At Ring No.		1		
Deflection (mm)		0		
Percent Deflection		0		
Floor		N	N	
Bulge (mm)		0		
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		X	N	
Separation (mm)		0		
Longitudinal Seams		X	X	
Total No. of Cracked Rings		0		
Total No. of Rings with Two Cracked Seams		0		
Min. Remaining Steel Between Cracks (mm)		0		
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		X	X	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG		ZERO		
Ponding (Y/N)		No		

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3500, Rise (mm): 3800, Type: BP, Cell Sequence: 3)				
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type : )				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>8</b>	<b>N</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction				SE.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	
Collar		X	X	
Wingwalls		8	5	20MM gap @ wingwall/barrel with loss of fill.
(Shape : )				
Cutoff Wall		N	N	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		N	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		N	7	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>8</b>	<b>7</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		8	8	Irrigation turnout-30m u/s South bank. 10m d/s North bank.
Bank Stability		N	7	
HWM (m below Top of Culvert)				None visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	AGGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<b>Channel General Rating</b>		<b>8</b>	<b>8</b>	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS	2012	Fill gaps at all 4 wingwalls.					
OTHER ACTION	2012	Replace lost fill approx. 5m3 pit run. Re establish SW guardrail post.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>88.9/88.9</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>88.1/82.9</b>	Est. Repl. Yr	2045	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	Tim Davies		Previous Assistant's Name				
Next Inspection Date	17-Jun-2015		Previous Inspection Date	11-Feb-2009			
Inspection Cycle (Default) (months)	39						
Comment							