

Bridge Culvert Inspection			
Bridge File Number	77101 -1 Bridge Culvert	Form Type	CULM
Year Built	1983	Lot No.	4
Bridge or Town Name	IRON SPRINGS	Inspector Name	Garry Roberts
Located Over	LNI - IRRIGATION C, WATERCRS-IC	Inspector Class	BR CLS A
Located On	845:04 C1 23.224	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	21-Mar-2012
Legal Land Location	SW SEC 25 TWP 11 RGE 20 W4M	Data Entry By	Lauren Korte
Longitude, Latitude	-112:37:15, 49:56:08	Data Entry Date	12-Apr-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Tom Carey
Contract Main. Area	CMA25	Review Date	23-Mar-2012
Clear Roadway/Skew	9.8 /	Dept. Reviewer Name	Tim Davies
AADT/Year	1,030 / 2011 (A)	Dept. Review Date	17-Apr-2012
Road Classification		Follow-Up By	
Detour Length (km)	3		

Bridge Culvert Information

Number of Culverts	2							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	-	1400	MP	20			ROUND
2	MAIN	-	1400	MP	20			ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	West ROW.	Gas	
Power	East ROW.	Municipal	
Others		Problem (Y/N)	
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment		9	
Vertical Alignment		7	
Roadway Width (m)	8.200		
Embankment		6	1.0 m average.
Sideslope (__:1)	1.5		
(Height of Cover(m) : 1)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating		7	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)			
Direction	W		West end- South pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL		
Headwall		X	
Collar		X	
Wingwalls (Shape :)		X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Cutoff Wall			X	
Bevel End			6	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection			7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion			7	
Beavers (Y/N)	No			
Upstream End General Rating			6	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1400, Type: MP)				
Barrel Last Accessible Date	21-Mar-2012			
Special Features				
Special Feature				South pipe.
(Type :)				
Special Feature				
(Type :)				
Roof			7	
Measured Rise (mm)	1390			
Measured At Ring No.	3			
Sag (mm)	10			
Percent Sag	1			
Sidewall			6	
Measured Span (mm)	1410			
Measured At Ring No.	3			
Deflection (mm)	10			
Percent Deflection	1			
Floor			5	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams			6	Sealed with oakum.
Separation (mm)	60			
Longitudinal Seams			X	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating			4	Corrosion with pitting on floor and to mid sidewall.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1400, Type: MP)				
Camber POS/ZERO/NEG				
Ponding (Y/N)	No			
Fish Passage Adequacy			5	
Baffle			X	
(Type :)				
Waterway Adequacy			7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating			6	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction		E		East end- South pipe.
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall			X	
Collar			X	
Wingwalls			X	
(Shape :)				
Cutoff Wall			X	
Bevel End			X	
Heaving (mm)				
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection			5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion			5	
Beavers (Y/N)	No			
Downstream End General Rating			5	
Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		W		West end- North pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall			X	
Collar			X	
Wingwalls			X	
(Shape :)				
Cutoff Wall			X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Bevel End			6	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection			7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion			7	
Beavers (Y/N)	No			
Upstream End General Rating			6	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1400, Type: MP)				
Barrel Last Accessible Date	21-Mar-2012			North pipe.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof			7	
Measured Rise (mm)	1485			
Measured At Ring No.	3			
Sag (mm)	15			
Percent Sag	1			
Sidewall			6	
Measured Span (mm)	1420			
Measured At Ring No.	3			
Deflection (mm)	20			
Percent Deflection	1			
Floor			6	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams			5	Sealed with oakum.
Separation (mm)	70			
Longitudinal Seams			X	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating			4	Heavy corrosion with pitting at floor and to mid sidewall.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1400, Type: MP)				
Ponding (Y/N)	No			
Fish Passage Adequacy			5	
Baffle			X	
(Type :)				
Waterway Adequacy			6	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating			6	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		E		East end- North pipe.
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall			X	
Collar			X	
Wingwalls			X	
(Shape :)				
Cutoff Wall			X	
Bevel End			X	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection			5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion			5	
Beavers (Y/N)	No			
Downstream End General Rating			5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment			5	90 degree turn 20m D/S. Irrigation canal. Turnouts both ends.
Bank Stability			7	
HWM (m below Top of Culvert)	0.2			Waterline on bank.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	NONE			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating			5	

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							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	/66.7	Sufficiency Rating (Last/Now) (%)	/64.0	Est. Repl. Yr	2023	Maint. Req. (Y/N)	No
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			Previous Assistant's Name				
Next Inspection Date	21-Jun-2015		Previous Inspection Date				
Inspection Cycle (Default) (months)	39						
Comment							