

Bridge Culvert Inspection				
Bridge File Number	79030 -1 Bridge Culvert		Form Type	CULM
Year Built	1983		Lot No.	4
Bridge or Town Name	LONGVIEW		Inspector Name	Garry Roberts
Located Over	LANTERN CK, 2.13.27.38, WATERCRS-ST		Inspector Class	BR CLS A
Located On	40:10 C1 17.275		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	22-Jun-2011
Legal Land Location	NE SEC 6 TWP 18 RGE 6 W5M		Data Entry By	Alyssa Boynton
Longitude, Latitude	-114:48:25, 50:29:35		Data Entry Date	13-Jul-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Tom Carey
Contract Main. Area	CMA28		Review Date	28-Jun-2011
Clear Roadway/Skew	11 / 30 deg. (RHF)		Dept. Reviewer Name	Tim Davies
AADT/Year	440 / 2010 (A)		Dept. Review Date	15-Jul-2011
Road Classification	RAU-209-110		Follow-Up By	
Detour Length (km)	50			

Bridge Culvert Information

Number of Culverts	2							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2590	1880	RPP	37.2	152X51	4.0	PIPE ARCH
2	MAIN	2590	1880	RPP	37.2	152X51	4.0	PIPE ARCH
Special Features	VERT TIMBER STRUTS							
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others		Problem (Y/N)	
Remarks	Lantern Creek.		

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	Gradual curves and sags, good visibility. Parking entrance 50m S
Vertical Alignment		6	6	
Roadway Width (m)	11.000			
Embankment		7	7	
Sideslope (_ :1)	4.0			
(Height of Cover(m) : 1.3)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		6	6	

Upstream End

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

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Cutoff Wall		7	7	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Upstream End General Rating		7	7	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2590, Rise (mm): 1880, Type: RPP)				
Barrel Last Accessible Date	22-Jun-2011			South barrel.
Special Features				
Special Feature		6	6	South pipe-struts slightly crooked Abrasion on 1st struts
(Type : VERT TIMBER STRUTS)				
Special Feature				
(Type :)				
Roof		6	6	
Measured Rise (mm)	1800			
Measured At Ring No.	6			
Sag (mm)	80			
Percent Sag	4			
Sidewall		3	3	Rating due to cracked seams.
Measured Span (mm)	2645			
Measured At Ring No.	4			
Deflection (mm)	55			
Percent Deflection	2			
Floor		6	6	50% of floor is visible
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		3	3	Ring # Remaining Steel # Bolts
Total No. of Cracked Rings	6			2 120 16
Total No. of Rings with Two Cracked Seams	0			3 116 16
Min. Remaining Steel Between Cracks (mm)	78			4 98 12
Proper Lap (Y/N)	No			5 95 12
Longitudinal Stagger (Y/N)	No			6 83 16
				7 78 20
				No change this inspection.
Coating		6	5	Superficial rust on floor
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): 2590, Rise (mm): 1880, Type: RPP)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		6	6	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	6	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		4	4	Increase for struts
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction		N		South pipe, west end.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 500)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		7	7	
Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		S		North pipe, east end.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		7	7	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Bevel End		7	7	
Heaving (mm)	50			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Upstream End General Rating		7	7	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): 2590, Rise (mm): 1880, Type: RPP)				
Barrel Last Accessible Date	22-Jun-2011			
Special Features				
Special Feature		6	7	North pipe.
(Type : VERT TIMBER STRUTS)				
Special Feature				
(Type :)				
Roof		5	5	
Measured Rise (mm)	1745			
Measured At Ring No.	6			
Sag (mm)	135			
Percent Sag	7			
Sidewall		3	3	Rating due to crackes.
Measured Span (mm)	2680			
Measured At Ring No.	5			
Deflection (mm)	90			
Percent Deflection	3			
Floor		5	5	50% of floor is visible
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		3	3	Ring # Remaining Steel # Bolts
Total No. of Cracked Rings	7			1 125 5
Total No. of Rings with Two Cracked Seams	0			2 83 5
Min. Remaining Steel Between Cracks (mm)	64			3 90 20
Proper Lap (Y/N)	No			4 90 24
Longitudinal Stagger (Y/N)	No			5 64 24 - photo
				6 85 20
				7 95 19
				8 118 18
				No change this inspection.
Coating		6	6	Superficial corossion on floor
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): 2590, Rise (mm): 1880, Type: RPP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		6	6	
Baffle		X	X	
(Type :)				
Waterway Adequacy		6	6	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		4	4	Increase for struts
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		N		West end. North pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 500)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		7	7	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Culvert)				NO HWM VISIBLE
Drift (Y/N)	Yes			Minor drift.
Channel Bottom Degrading/Aggrading	NONE			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		7	7	

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) (%)	44.4/44.4	Sufficiency Rating (Last/Now) (%)	56.2/55.5	Est. Repl. Yr	2020	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	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	22-Mar-2013		Previous Inspection Date	05-Oct-2009			
Inspection Cycle (Default) (months)	21						
Comment							