

Bridge Culvert Inspection			
Bridge File Number	74432 -1 Bridge Culvert	Form Type	CULM
Year Built	1980	Lot No.	4
Bridge or Town Name	GRIMSHAW	Inspector Name	Brian Pientsch
Located Over	2ND ORDER TRIBUTARY TO CARDINAL CK, 8.10.48.3.2.1, WATERCRS-ST	Inspector Class	BR CLS A
Located On	737:02 C1 30.517	Assistant Name	Clem Guenette
Water Body Cl./Year		Assistant Class	BR CLS B
Navigabil. Cl./Year		Inspection Date	25-Mar-2013
Legal Land Location	SW SEC 28 TWP 84 RGE 24 W5M	Data Entry By	Lisa Fairhurst
Longitude, Latitude	-117:43:54, 56:18:21	Data Entry Date	08-Apr-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA04	Review Date	03-Apr-2013
Clear Roadway/Skew	9.6 / 30 deg. (RHF)	Dept. Reviewer Name	
AADT/Year	320 / 2012 (A)	Dept. Review Date	
Road Classification	RCU-208-110	Follow-Up By	
Detour Length (km)	3		

Bridge Culvert Information

Number of Culverts	2							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1800	MP	23	125X26	2.8	ROUND
2	MAIN	-	1800	MP	23	125X26	2.8	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	South r/w	Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	Slight rise east of culverts.
Vertical Alignment		8	8	
Roadway Width (m)	9.600			
Embankment		7	7	
Sideslope (__:1)	4.0			
(Height of Cover(m) : 0.5)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		8	8	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction		N		East culvert.
End Treatment (Concrete, Steel, Others, None)	NONE			
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		X	X	
Bevel End		X	X	
Heaving (mm)	70			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		4	4	Erosion around bevel.
(Type : NONE)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		4	4	(Channel aligned toward W. side of culvert causing erosion besides and under barrel. 3m x 0.5m x 0.5m(lwd) 8 Oct 2009) - Unable to quantify due to snow
Beavers (Y/N)	No			
Upstream End General Rating		4	4	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1800, Type: MP)				
Barrel Last Accessible Date	25-Mar-2013			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	6	Silt on floor - not measured
Measured Rise (mm)	1702			near c/l.
Measured At Ring No.				
Sag (mm)	98			
Percent Sag	5			
Sidewall		7	7	near c/l.
Measured Span (mm)	1812			
Measured At Ring No.				
Deflection (mm)	12			
Percent Deflection	1			
Floor		5	5	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	145			
Longitudinal Seams		X	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)				

Bridge Culvert Barrel					
Culvert Component		Last	Now	Explanation of Condition	
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1800, Type: MP)					
Coating		4	4	Some pitting rust on floor.	
Corrosion By Soil (Y/N)	No				
Corrosion By Water (Y/N)	Yes				
Camber POS/ZERO/NEG	ZERO				
Ponding (Y/N)	No				
Fish Passage Adequacy		7	7		
Baffle		X	X		
(Type :)					
Waterway Adequacy		7	7		
Icing (Y/N)	No				
Silting (Y/N)	No				
Drift (Y/N)	No				
Barrel General Rating		6	6		
Downstream End					
Culvert Component		Last	Now	Explanation of Condition	
(Pipe # : 1, Span Type: Primary Span)					
Direction		S			
End Treatment (Concrete, Steel, Others, None)	STEEL				
Headwall		X	X		
Collar		X	X		
Wingwalls		X	X		
(Shape :)					
Cutoff Wall		X	X		
Bevel End		7	N	Snow covered	
Heaving (mm)	0				
Invert Above/Below Stream Bed	BELOW				
Above/Below (mm)	200				
Scour Protection		7	N	Snow covered	
(Type : NATURAL)					
(Avg. Rock Size(mm) :)					
Scour/Erosion		7	N	Snow covered	
Beavers (Y/N)	No				
Downstream End General Rating		7	7	GR carried forward	
Upstream End					
Culvert Component		Last	Now	Explanation of Condition	
(Pipe # : 2, Span Type: Secondary Span)					
Direction		N		West culvert.	
End Treatment (Concrete, Steel, Others, None)	NONE				
Headwall		X	X		
Collar		X	X		

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	200			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		5	N	Snow covered
(Type : NONE)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		5	N	Snow covered
Beavers (Y/N)	No			
Upstream End General Rating		5	5	GR carried forward

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1800, Type: MP)				
Barrel Last Accessible Date	25-Mar-2013			1368mm ice to crown
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	6	Unable to measure due to ice on floor
Measured Rise (mm)	1698			near cl
Measured At Ring No.				
Sag (mm)	102			
Percent Sag	6			
Sidewall		7	7	c/l
Measured Span (mm)	1857			
Measured At Ring No.				
Deflection (mm)	57			
Percent Deflection	3			
Floor		6	N	Ice covered
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	4	Pipe sections poorly aligned at first joint from u/s end - 50m E. Infiltration @ 2 seams
Separation (mm)	200			
Longitudinal Seams		X	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)				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1800, Type: MP)				
Coating		4	4	Pitting rust on floor.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		6	6	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		S		West
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		7	N	Snow covered
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		7	N	Snow covered
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		7	N	Snow covered
Beavers (Y/N)	No			
Downstream End General Rating		7	7	GR carried forward
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		4	4	Channel aligned to west side of East culvert.
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			

Structure Usage				
		Last	Now	Explanation of Condition
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		4	4	

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) (%)	66.7/66.7	Sufficiency Rating (Last/Now) (%)	67.4/67.6	Est. Repl. Yr	2025	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	Kris Bosters		Previous Assistant's Name				
Next Inspection Date	25-Jun-2016		Previous Inspection Date	08-Oct-2009			
Inspection Cycle (Default) (months)	39						
Comment							