

Bridge Culvert Inspection			
Bridge File Number	01425 -1 Bridge Culvert	Form Type	CUL1
Year Built	1984	Lot No.	3
Bridge or Town Name	CROSSFIELD	Inspector Name	Garry Roberts
Located Over	CARSTAIRS CREEK, 3.33.21, WATERCRS-ST	Inspector Class	BR CLS A
Located On	791:06 C1 6.550	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	17-Jul-2012
Legal Land Location	SW SEC 1 TWP 29 RGE 28 W4M	Data Entry By	Kelsey Roberts
Longitude, Latitude	-113:49:33, 51:26:43	Data Entry Date	23-Aug-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Ash Morjaria
Contract Main. Area	CMA29	Review Date	28-Jul-2012
Clear Roadway/Skew	8.8 / -45 deg. (LHF)	Dept. Reviewer Name	Tim Davies
AADT/Year	550 / 2011 (A)	Dept. Review Date	24-Aug-2012
Road Classification	RCU-209-110	Follow-Up By	
Detour Length (km)	6		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	6409	4572	RPA	70.1	152X51	5.0	ARCH
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	West Row	Gas	
Power	East and West, crosses to South	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Intersection at culvert and in sag curve.
Vertical Alignment		6	6	Speed reduced to 80 km/hr at location.
Roadway Width (m)	9.500			Culvert runs diagonal through intersection with local road.
Embankment		7	7	
Sideslope (__:1)	3.0			
(Height of Cover(m) : 2.1)				
Guardrail (Y/N)	Yes			Accident damage 3 sections of guard rail, 4 broken posts at NW corner of intersection, causes entire length of guard rail in SB lane to lean away from road at 45 degrees.
Approach Road / Embankment General Rating		6	6	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		WEST END
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	Minor honeycomb
Collar		8	8	
Wingwalls		X	X	
(Shape :)				

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		N	N	Buried
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 350)				
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): 6409, Rise (mm): 4572, Type: RPA)				
Barrel Last Accessible Date	17-Jul-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	8	Unable to measure sag due to silt- lines are good
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	50			
Percent Sag				
Sidewall		8	8	R9 is center of pipe
Measured Span (mm)	6384			
Measured At Ring No.	9			
Deflection (mm)	25			
Percent Deflection	1			
Floor		N	N	Silt covered
Bulge (mm)	200			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	8	
Separation (mm)	0			
Longitudinal Seams		8	8	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)				No stagger at ¼ piles points 3N stagger at roof and sidewalls
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		6	6	Isolated minor superficial corrosion at lower sidewall seam, Alkalai staining at upper sidewall R13, R14.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 6409, Rise (mm): 4572, Type: RPA)				
Ponding (Y/N)	No			
Fish Passage Adequacy		6	6	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	1.1m of silt in barrel
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		8	8	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		EAST END
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	Minor honeycomb
Collar		7	7	Minor cracking, calcium leaching from cracks.
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	Under water
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 350)				
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)	No			
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	2013	Repair bridge damage to guardrail, 4 posts, 3 sections.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	88.9/88.9	Sufficiency Rating (Last/Now) (%)	81.8/81.6	Est. Repl. Yr	2035	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	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	17-Oct-2015		Previous Inspection Date	17-May-2009			
Inspection Cycle (Default) (months)	39						
Comment							