

Bridge Culvert Inspection				
Bridge File Number	01483 -1 Bridge Culvert		Form Type	CUL1
Year Built	1992		Lot No.	2
Bridge or Town Name	IRVINE		Inspector Name	Tom Carey
Located Over	TRIBUTARY TO MACKAY CREEK, 28.2, WATERCRS-ST		Inspector Class	BR CLS A
Located On	1:22 R1 35.581;1:22 L1 35.575		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	08-Feb-2012
Legal Land Location	SE SEC 26 TWP 11 RGE 2 W4M		Data Entry By	Lauren Korte
Longitude, Latitude	-110:09:53, 49:56:15		Data Entry Date	25-Mar-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA23		Review Date	26-Feb-2012
Clear Roadway/Skew	26 / -16 deg. (LHF)		Dept. Reviewer Name	Tim Davies
AADT/Year	5,160 / 2011 (A)		Dept. Review Date	29-Mar-2012
Road Classification	RFD-412.4-130		Follow-Up By	
Detour Length (km)	1			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	4590	2705	RPE	81.7	152X51	4.0,4.0,4.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	North ditch.		Gas	
Power	1 line crosses road 20m East.		Municipal	
Others	Fibre optics South ROW.		Problem (Y/N)	No
Remarks	1 line - South R/W and NE R/W.			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	In curve, superelevated, Local road. 100 m West.
Vertical Alignment		7	7	
Roadway Width (m)	26.000			
Embankment		8	8	4:1 ROADWAY, 5:1 AT PIPE.
Sideslope (__:1)	4.0			
(Height of Cover(m) : 1.1)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		6	6	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		S		South.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	
Collar		8	8	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 500)				
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): 4590, Rise (mm): 2705, Type: RPE)				
Barrel Last Accessible Date	08-Feb-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	8	Measured.
Measured Rise (mm)	2695			
Measured At Ring No.	6			
Sag (mm)	10			
Percent Sag				
Sidewall		8	8	
Measured Span (mm)	4600			
Measured At Ring No.	6			
Deflection (mm)	10			
Percent Deflection	0			
Floor		N	N	Pit run placed 2m to 3m wide along entire floor. Average 300mm DP.
Bulge (mm)	0			
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)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	No			
Coating		7	7	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
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): 4590, Rise (mm): 2705, Type: RPE)				
Fish Passage Adequacy		5	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	5	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		8	8	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		North.
End Treatment (Concrete, Steel, Others, None)		STEEL		
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	(Asphalt pad at outlet). Covered in pit run.
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed		BELOW		
Above/Below (mm)	300			
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		8	8	Also used as a cattlepass. Guide fencing detached at SW.
Bank Stability		5	5	
HWM (m below Top of Culvert)	-0.5			(From 2010 flood 0.5m above crown)
Drift (Y/N)	Yes			(Approx 1.2m freeboard u/s-940317) Debris on fences both ends.
Channel Bottom Degrading/Aggrading		AGGRADING		
Beavers (Y/N)		No		
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		8	8	

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 SW guide fencing when used at cattle pass.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	88.9/88.9	Sufficiency Rating (Last/Now) (%)	75.7/75.7	Est. Repl. Yr	2042	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	08-Nov-2013		Previous Inspection Date	13-Jul-2010			
Inspection Cycle (Default) (months)	21						
Comment							