

Bridge Culvert Inspection				
Bridge File Number	01987 -1 Bridge Culvert		Form Type	CUL1
Year Built	1982		Lot No.	4
Bridge or Town Name	IRMA		Inspector Name	Owen Salava
Located Over	GRATTAN CREEK, 5.15, WATERCRS-ST		Inspector Class	BR CLS A
Located On	881:02 C1 27.072		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	08-Aug-2011
Legal Land Location	NW SEC 15 TWP 45 RGE 9 W4M		Data Entry By	Marcia Chavez
Longitude, Latitude	-111:14:15, 52:53:01		Data Entry Date	13-Sep-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA15		Review Date	15-Aug-2011
Clear Roadway/Skew	12.3 / 0 deg.		Dept. Reviewer Name	Andrew Smikles
AADT/Year	1,020 / 2010 (A)		Dept. Review Date	15-Sep-2011
Road Classification	RAU-211.8-110		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	2019	2220	SP	54.9	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	West ditch.	Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	8	8	Culvert in bottom of long sag curve, limited sight distance-both directions. Farm access 300m N; fixed access 100m S.
Vertical Alignment	7	7	
Roadway Width (m)	12.300		
Embankment	8	8	
Sideslope (___:1)	3.0		
(Height of Cover(m) : 5.5)			
Guardrail (Y/N)	Yes		Guardrail over pipe approx 200m in length each side.
Approach Road / Embankment General Rating	7	7	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	W		
End Treatment (Concrete, Steel, Others, None)	STEEL		
Headwall	X	X	
Collar	X	X	
Wingwalls	X	X	
(Shape :)			
Cutoff Wall	X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		5	5	
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		5	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		5	5	
Beavers (Y/N)	Yes			Beaver fence installed around bevel.
Upstream End General Rating		5	5	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2019, Rise (mm): 2220, Type: SP)				
Barrel Last Accessible Date	08-Aug-2011			
Special Features				
Special Feature				Beaver fence - keeping beavers out of barrel at u/s.
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	Unable to measure due to silt.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		7	7	
Measured Span (mm)	2025			
Measured At Ring No.	9			
Deflection (mm)	6			
Percent Deflection	0			
Floor		N	N	Silt + water up to 500mm depth.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	8	
Separation (mm)	0			
Longitudinal Seams		7	7	No cracks in the visible seams.
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		7	7	No corrosion visible.
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): 2019, Rise (mm): 2220, Type: SP)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		7	7	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
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	Beaver fence installed around bevel.
Heaving (mm)	100			in disrepair.
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection		6	6	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
Downstream End General Rating		7	6	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		8	8	
Bank Stability		8	8	
HWM (m below Top of Culvert)				No HWM visible.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading	AGGRADING			Beaver activity at u/s .
Beavers (Y/N)	Yes			
(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							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	77.8/77.8	Sufficiency Rating (Last/Now) (%)	74.6/73.5	Est. Repl. Yr	2029	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	Jason Rusu		Previous Assistant's Name				
Next Inspection Date	08-Nov-2014		Previous Inspection Date	06-Jul-2007			
Inspection Cycle (Default) (months)	39						
Comment							