

Bridge Culvert Inspection			
Bridge File Number	78860 -1 Bridge Culvert	Form Type	CULM
Year Built	1977	Lot No.	4
Bridge or Town Name	WALSH	Inspector Name	Tom Carey
Located Over	MACKAY CREEK, 28, WATERCRS-ST	Inspector Class	BR CLS A
Located On	515:02 C1 23.860	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	12-Mar-2012
Legal Land Location	SE SEC 1 TWP 10 RGE 1 W4M	Data Entry By	Erin Roberts
Longitude, Latitude	-110:00:51, 49:47:26	Data Entry Date	19-Jul-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	CMA23	Review Date	24-Mar-2012
Clear Roadway/Skew	9.1 /	Dept. Reviewer Name	Tim Davies
AADT/Year	80 / 2011 (A)	Dept. Review Date	30-Jul-2012
Road Classification	RCU-208-110	Follow-Up By	
Detour Length (km)	5		

Bridge Culvert Information

Number of Culverts	2							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	4570	SP	30.5	152X51	4.0	ROUND
2	MAIN	-	1600	MP	37	125X26	2.8	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

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

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	6	6	Curve to East. In sag curve.
Vertical Alignment	5	6	
Roadway Width (m)	10.000		
Embankment	N	8	Snow covered
Sideslope (__:1)	3.0		
(Height of Cover(m) : 1)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	5	6	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)			
Direction	S		South New bevel and concrete end treatment.
End Treatment (Concrete, Steel, Others, None)	CONCRETE		
Headwall	5	8	
Collar	N	8	
Wingwalls (Shape :)	X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Cutoff Wall		X	N	
Bevel End		4	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	800			
Scour Protection		N	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 500)				
Scour/Erosion		N	8	
Beavers (Y/N)	No			
Upstream End General Rating		4	8	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 4570, Type: SP)				
Barrel Last Accessible Date	12-Mar-2012			
Special Features				
Special Feature				Went in halfway before ice and water were too deep to go further. Bevels and first and last rings are newer than the rest of the barrel.
(Type :)				
Special Feature				
(Type :)				
Roof		7	N	Got in far enough to measure rise at R3.
Measured Rise (mm)	4570			
Measured At Ring No.	3			
Sag (mm)	0			
Percent Sag	0			
Sidewall		4	N	Got in far enough to measure span at R3.
Measured Span (mm)	4560			
Measured At Ring No.	3			
Deflection (mm)	10			
Percent Deflection	1			
Floor		N	N	Up to 1200mm deep water and ice at D/S half.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		7	N	
Separation (mm)	0			
Longitudinal Seams		4	N	
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)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		6	N	(Surface rust on floor)
Corrosion By Soil (Y/N)	Yes			Alkali on bolts.
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): , Rise (mm): 4570, Type: SP)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	Yes			
Fish Passage Adequacy		9	9	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	9	(500mm of silt on floor.)
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		4	N	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction		N		North
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		6	8	New bevel.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	800			
Scour Protection		N	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 800)				
Scour/Erosion		N	8	
Beavers (Y/N)	No			
Downstream End General Rating		6	8	
Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		S		North
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall			X	
Collar			X	
Wingwalls			X	
(Shape :)				
Cutoff Wall			X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Bevel End			X	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection			8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 500)				
Scour/Erosion			8	
Beavers (Y/N)	No			
Upstream End General Rating			8	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1600, Type: MP)				
Barrel Last Accessible Date				
Special Features				
Special Feature				Up to 1000mm of deep ice and water at D/S end - ice unsafe. Unable to enter, viewed from ends and shape looks good.
(Type :)				
Special Feature				
(Type :)				
Roof			N	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall			N	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor			N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams			N	
Separation (mm)				
Longitudinal Seams			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)				
Coating			N	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1600, Type: MP)				
Ponding (Y/N)	Yes			
Fish Passage Adequacy			X	
Baffle			X	
(Type :)				
Waterway Adequacy			9	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating			N	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		N		
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall			X	
Collar			X	
Wingwalls			X	
(Shape :)				
Cutoff Wall			X	
Bevel End			X	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection			8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 800)				
Scour/Erosion			8	
Beavers (Y/N)	No			
Downstream End General Rating			8	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		8	7	Curve at U/S.
Bank Stability		N	7	
HWM (m below Top of Culvert)				HWM not visible
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				
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) (%)	44.4/55.6	Sufficiency Rating (Last/Now) (%)	62.1/76.2	Est. Repl. Yr	2030	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	Tim Davies		Previous Assistant's Name				
Next Inspection Date	12-Jun-2015		Previous Inspection Date	12-Mar-2009			
Inspection Cycle (Default) (months)	39						
Comment							