

Bridge Culvert Inspection				
Bridge File Number	76082 -1 Bridge Culvert		Form Type	CUL1
Year Built	1982		Lot No.	2
Bridge or Town Name	BELLIS		Inspector Name	Kris Bosters
Located Over	REDCLAY CREEK, 6.42, WATERCRS-ST		Inspector Class	BR CLS A
Located On	857:06 C1 28.070		Assistant Name	Brian Cote
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	11-Dec-2012
Legal Land Location	NE SEC 2 TWP 59 RGE 15 W4M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-112:07:38, 54:04:37		Data Entry Date	15-Jan-2013
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Eric Carcoux
Contract Main. Area	CMA07		Review Date	11-Dec-2012
Clear Roadway/Skew	9 / -45 deg. (LHF)		Dept. Reviewer Name	Paul Catt
AADT/Year	600 / 2011 (A)		Dept. Review Date	18-Jan-2013
Road Classification	RCU-209-110		Follow-Up By	
Detour Length (km)	30			

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2314	SP	76.2	152X51	3.0	ROUND
Special Features		VERT STEEL STRUTS						
Special Features Comment								

Utilities (Located at)			
Utility Attachments			
Telephone	In West ditch.		Gas
Power	3 wires 0/H 16.0m East of c/l.		Municipal
Others			Problem (Y/N) No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	Curve to North - no passing. Crest curve both directions.
Vertical Alignment		6	6	
Roadway Width (m)	9.500			
Embankment		7	7	
Sideslope (_ :1)	3.0			
(Height of Cover(m) : 6.5)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		6	6	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		2m high beaver dam, 10m from inlet, creates a pond.
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		N	N	Dam inside inlet, upto within 150mm of crown.
Heaving (mm)	200			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection		7	N	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		7	N	
Beavers (Y/N)	Yes			
Upstream End General Rating		7	7	Carried over.
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1 , Primary Span, Location Code: MAIN , Span (mm): , Rise (mm): 2314 , Type: SP)				
Barrel Last Accessible Date	28-Nov-1999			Water backed up from beavers. Water high, no access. Viewed from East end. Shape looks fair.
Special Features				
Special Feature		N	N	Steel HSS struts.
(Type : VERT STEEL STRUTS)				
Special Feature				
(Type :)				
Roof		N	N	(Estimated. 99/11/28)
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	100			
Percent Sag				
Sidewall		N	N	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	100			
Percent Deflection				
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	
Separation (mm)	0			
Longitudinal Seams		N	N	(Min. 80mm steel remains between cracks. 99/11/28)
Total No. of Cracked Rings	5			
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		N	N	(Minor superficial on lower 1/2. 26/May/2006)
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG	NEG			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2314, Type: SP)				
Ponding (Y/N)	Yes			
Fish Passage Adequacy		7	7	
Baffle		N	N	
(Type :)				
Waterway Adequacy		6	6	
Icing (Y/N)	Yes			
Silting (Y/N)	Yes			
Drift (Y/N)	Yes			
Barrel General Rating		N	N	G.R. was "6" from 28/Nov/1999 inspection.
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 dam @ end of bevel.
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection		7	N	Snow covered.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		7	N	
Beavers (Y/N)	Yes			
Downstream End General Rating		7	7	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		6	6	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		6	7	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION	2013	Beaver dams in inlet.					
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2013	De-water and inspect.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	61.1/61.0	Est. Repl. Yr	2018	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Measure longitudinal seam cracks for movement.		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	Melanie Johnson		Previous Assistant's Name				
Next Inspection Date	11-Mar-2016		Previous Inspection Date	02-Sep-2009			
Inspection Cycle (Default) (months)	39						
Comment							