

Bridge Culvert Inspection			
Bridge File Number	75921 -1 Bridge Culvert	Form Type	CUL1
Year Built	1965	Lot No.	2
Bridge or Town Name	BEZANSON	Inspector Name	Russel Vanderschaaf
Located Over	KLESKUN CREEK, 8.10.58.13, WATERCRS-ST	Inspector Class	BR CLS B
Located On	733:02 C1 14.481	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	03-May-2010
Legal Land Location	SW SEC 34 TWP 73 RGE 3 W6M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-118:23:05, 55:21:40	Data Entry Date	21-Jun-2010
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA05	Review Date	07-Jun-2010
Clear Roadway/Skew	8.6 /	Dept. Reviewer Name	Steve Pasquan
AADT/Year	910 / 2009 (A)	Dept. Review Date	10-Sep-2010
Road Classification	RCU-209-110	Follow-Up By	
Detour Length (km)	3		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	4000	SP	96.3	152X51	4.0,5.0	ROUND
Special Features	SHOTCRETE BEAM							
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	WEST SIDE ALONG EMBANKMENT	Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks	Fibreoptics East r/w.		

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	IN SAG CURVE
Vertical Alignment		6	6	limited site distance both with directions, no passing.
Roadway Width (m)	8.600			
Embankment		8	4	3mWx3mDx9mL scour on NW ditch-photo. (SE ditch scouring near channel-photo -2mWx8mLx0.5D)
Sideslope (__:1)	3.5			
(Height of Cover(m) : 12.3)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		6	6	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		X	X	
Collar		N	5	MINOR CRACKING IN COLLAR & SEPARATION (Photo).
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		7	7	50mm hole @ 3 o'clock
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		N	6	
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	6	
Beavers (Y/N)	No			
Upstream End General Rating		6	4	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 4000, Type: SP)				
Barrel Last Accessible Date	03-May-2010			
Special Features				
Special Feature		7	6	Shotcrete is from R7 to 28.(6.75,12.25 13.25,17.25,30.50,35.50 from u/s end of shotcrete narrow crack from top to bottom.
(Type : SHOTCRETE BEAM)				
Special Feature				
(Type :)				
Roof		6	7	Top of barrel at u/s end bent down 200mm. Upward deflection. Could not measure rise from 7-16 due to rock buildup.
Measured Rise (mm)	4050			
Measured At Ring No.	29			
Sag (mm)	50			
Percent Sag	1			
Sidewall		7	7	(Assume 150mm shotcrete 3840mm). Inward deflection
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	88			
Percent Deflection				
Floor		N	4	(3.6 to 8.2m from d/s end of barrel floor has perforations 50mm and smaller -photo
Bulge (mm)	0			
Measured At Ring No.	10			
Abrasion (Y/N)	Yes			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		7	7	
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		N	4	Scaling rust near downstream & u/s ends.-photo
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
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): , Rise (mm): 4000, Type: SP)				
Fish Passage Adequacy		7	7	
Baffle (Type :)		X	X	
Waterway Adequacy		7	7	
Icing (Y/N)		No		
Siltting (Y/N)		No		
Drift (Y/N)		No		
Barrel General Rating		6	6	
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 (Shape :)		X	X	
Cutoff Wall		N	X	
Bevel End		5	5	Bevels pushing in 200mm per side.
Heaving (mm)		0		
Invert Above/Below Stream Bed		ABOVE		
Above/Below (mm)		450		
Scour Protection (Type : RIP RAP) (Avg. Rock Size(mm) : 400)		N	4	Bevel undermined for 1.5m.-photo
Scour/Erosion		N	4	Bevel undermined for 1.5m.-photo
Beavers (Y/N)		No		
Downstream End General Rating		5	4	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	
Bank Stability		5	5	BANK D/S Vertical slope. Vertical banks 20 m u/s
HWM (m below Top of Culvert)				HWM not visible
Drift (Y/N)		No		
Channel Bottom Degradation/Aggrading		DEGRADING		
Beavers (Y/N)		Yes		
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		5	5	

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	2010	Fix scours in NW and SE ditches with 81m3 and 10m3 of class 1 riprap.					
OTHER ACTION	2010	Repair undermined d/s bevel.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	66.7/66.7	Sufficiency Rating (Last/Now) (%)	67.4/64.5	Est. Repl. Yr	2013	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor cracks in shotcrete and collar. Also perforations in floor d/s end of barrel.		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	Colin Roy		Previous Assistant's Name				
Next Inspection Date	03-Aug-2013		Previous Inspection Date	01-Feb-2007			
Inspection Cycle (Default) (months)	39						
Comment							