Bridge Culvert Inspection

Bridge File Number	79734 -1 Bridge Culvert	Form Type	CUL1
Year Built	1995	Lot No.	4
Bridge or Town Name	BRAGG CREEK	Inspector Name	Garry Roberts
Located Over	PRIDDIS CREEK, 2.13.31.5, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	
Located On	22:14 C1 20.290	Assistant Class	
Water Body Cl./Year		Inspection Date	25-May-2012
Navigabil. Cl./Year		Data Entry By	Kelsey Roberts
Legal Land Location	SE SEC 1 TWP 23 RGE 5 W5M	Data Entry Date	21-Jun-2012
Longitude, Latitude	-114:33:36, 50:55:39	Reviewer Name	Tom Carey
Road Authority	Alberta Transportation (AIT)	Review Date	07-Jun-2012
Contract Main. Area	CMA27	Dept. Reviewer Name	Tim Davies
Clear Roadway/Skew	12.5 / 31 deg. (RHF)	Dept. Review Date	29-Jun-2012
AADT/Year	5,840 / 2011 (A)	Follow-Up By	
Road Classification	RAU-211.8-110		
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	4070	3034	RPE	38.4	152X51	3.0,3.0,3.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	East & West fence.	Gas	25 m South.
Power	3 wire East fence. 1 wire crosses road 30m S. 2 wires cross road 50m N.	Municipal	
		Problem (Y/N)	No
Others			
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Hill to north. Local road intersection 70m south
Vertical Alignment		7	7	
Roadway Width (m)	12.500			
Embankment		7	7	
Sideslope (__:1)	4.0			
(Height of Cover(m) : **1.2**)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		**7**	**7**	

Upstream End

Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		W		West
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	
Collar		7	7	Medium cracks on North collar. Narrow cracks on South collar.
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	Buried

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		7	7	Some minor corrosion @ N
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		8	8	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		8	8	
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): 4070, Rise (mm): 3034, Type: RPE**)				
Barrel Last Accessible Date	25-May-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)	2935			
Measured At Ring No.	6			
Sag (mm)	99			
Percent Sag	3			
Sidewall		7	7	Inward bulge estimate 50mm @ ring #6. North sidewall seam - localized.
Measured Span (mm)	4055			
Measured At Ring No.	6			
Deflection (mm)	15			
Percent Deflection	0			
Floor		7	7	300mm silt at D/S 1/2
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	8	Floor seams covered
Separation (mm)	0			
Longitudinal Seams		8	8	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			Stagger at roof plates only
Min. Remaining Steel Between Cracks (mm)	0			
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	No			
Coating		6	6	White storage stains-minor corrosion isolated areas @ sides of bevels.
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): 4070, Rise (mm): 3034, Type: RPE**)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		6	6	(Ice within 1m of roof.) 00/02/14
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		East
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
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) : **400**)				
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		6	6	Bends to South @ U/S end.
Bank Stability		7	7	
HWM (m below Top of Culvert)				No HWM visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	AGGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				
Channel General Rating		**6**	**6**	

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) (%)**	**70.0/70.0**	Est. Repl. Yr	2038	Maint. Reqd. (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	Garry Roberts	Previous Assistant's Name			
Next Inspection Date	25-Feb-2014	Previous Inspection Date	29-Sep-2010		
Inspection Cycle (Default) (months)	21				
Comment					