

Bridge Culvert Inspection				
Bridge File Number	78967 -1 Bridge Culvert		Form Type	CUL1
Year Built	1980		Lot No.	3
Bridge or Town Name	CANMORE		Inspector Name	Garry Roberts
Located Over	TRIBUTARY TO STORM CK, 2.13.27.42.4, WATERCRS-ST		Inspector Class	BR CLS A
Located On	40:10 C1 36.109		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	24-Jun-2011
Legal Land Location	SE SEC 12 TWP 19 RGE 8 W5M		Data Entry By	Alyssa Boynton
Longitude, Latitude	-114:58:27, 50:35:16		Data Entry Date	13-Jul-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Tom Carey
Contract Main. Area	CMA28		Review Date	28-Jun-2011
Clear Roadway/Skew	11 / 22 deg. (RHF)		Dept. Reviewer Name	Tim Davies
AADT/Year	440 / 2010 (A)		Dept. Review Date	15-Jul-2011
Road Classification	RAU-209-110		Follow-Up By	
Detour Length (km)	50			

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2317	2561	SPE	62	152X51	4.0	ELLIPSE
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others		Problem (Y/N)	
Remarks	None visible		

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		5	5	Winding 7% grade.
Vertical Alignment		5	5	
Roadway Width (m)	11.000			
Embankment		6	6	4:1 @ EAST
Sideslope (__:1)	2.5			
(Height of Cover(m) : 4.9)				
Guardrail (Y/N)	Yes			Broken GR post @ NE Turndown
<b>Approach Road / Embankment General Rating</b>		<b>5</b>	<b>5</b>	

**Upstream End**

Culvert Component		Last	Now	Explanation of Condition
Direction		E		East end.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		7	7	Top visible
Bevel End		5	5	END OF BEVEL BENT UP 150 mm.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		7	7	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>1000</b> )				
Scour/Erosion		7	7	SOME 1200 ROCK @ TOE OF BANKS
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>5</b>	<b>5</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2317, Rise (mm): 2561, Type: SPE)				
Barrel Last Accessible Date	24-Jun-2011			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		7	7	Inward
Measured Rise (mm)	2595			
Measured At Ring No.	8			
Sag (mm)	34			
Percent Sag	1			
Sidewall		7	7	INWARD
Measured Span (mm)	2270			
Measured At Ring No.	8			
Deflection (mm)	47			
Percent Deflection	2			
Floor		6	6	Minor
Bulge (mm)	0			
Measured At Ring No.				
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	0			
Min. Remaining Steel Between Cracks (mm)	0			
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			1N stagger
Coating		5	5	Coating has worn off below waterline. Superficial corrosion on floor.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2317, Rise (mm): 2561, Type: SPE)				
Ponding (Y/N)	No			
Fish Passage Adequacy		6	6	
Baffle		5	5	5 locations with only one baffle, all others have two
(Type : )				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>7</b>	<b>7</b>	
Downstream 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	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	100			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 800)				
Scour/Erosion		7	7	Small rock lined scour hole.
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>7</b>	<b>7</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		7	7	
Bank Stability		7	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)				
<b>Channel General Rating</b>		<b>7</b>	<b>7</b>	

<b>Structure Usage</b>				
		<b>Last</b>	<b>Now</b>	<b>Explanation of Condition</b>

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	2011	Replace 1 post at approach rail. (6x8x5')					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>77.8/77.8</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>73.2/73.1</b>	Est. Repl. Yr	2031	Maint. Req. (Y/N)	Yes
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	24-Mar-2013		Previous Inspection Date	05-Oct-2009			
Inspection Cycle (Default) (months)	21						
Comment							