

Bridge Culvert Inspection				
Bridge File Number	77189 -1 Bridge Culvert		Form Type	CUL1
Year Built	1985		Lot No.	4
Bridge or Town Name	CANMORE		Inspector Name	Garry Roberts
Located Over	CANMORE CK, 2.13.67, WATERCRS-ST		Inspector Class	BR CLS A
Located On	742:02 C1 3.893		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	17-Jan-2013
Legal Land Location	NW SEC 29 TWP 24 RGE 10 W5M		Data Entry By	Lauren Korte
Longitude, Latitude	-115:22:28, 51:04:46		Data Entry Date	06-Feb-2013
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Tom Carey
Contract Main. Area	CMA28		Review Date	22-Jan-2013
Clear Roadway/Skew	11 / -7 deg. (LHF)		Dept. Reviewer Name	Tim Davies
AADT/Year	3,480 / 2011 (A)		Dept. Review Date	21-Feb-2013
Road Classification	ULU-209-60		Follow-Up By	
Detour Length (km)	2			

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	3658	SP	40.2	152X51	4.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)				
Utility Attachments				
Telephone	North- Rummel Drive.		Gas	Under West sidewalk.
Power	4 Wire- crosses road 10m West.		Municipal	Waterline/sewerline CI in road.
Others	Street Lights.		Problem (Y/N)	No
Remarks	6 Wire South RW.			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		5	5	Entrance 20m West. Culvert in town limits residential area corner of Rummel Place & 3 Sister's Dr.
Vertical Alignment		5	5	
Roadway Width (m)		11.000		
Embankment		7	7	
Sideslope (__:1)		2.0		
(Height of Cover(m) : 2.5)				
Guardrail (Y/N)		Yes		Guardrail to guardrail is 22m.
<b>Approach Road / Embankment General Rating</b>		<b>5</b>	<b>5</b>	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction				South.
End Treatment (Concrete, Steel, Others, None)		CONCRETE		
Headwall		6	6	
Collar		7	7	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		N	N	Buried.

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1200			
Scour Protection		7	7	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>350</b> )				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>7</b>	<b>6</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : <b>1</b> , Primary Span, Location Code: <b>MAIN</b> , Span (mm): , Rise (mm): <b>3658</b> , Type: <b>SP</b> )				
Barrel Last Accessible Date	17-Jan-2013			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		7	7	Estimate.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	60			
Percent Sag	2			
Sidewall		7	7	2 Drilled holes in R2 and R8.
Measured Span (mm)	3680			
Measured At Ring No.	6			
Deflection (mm)	22			
Percent Deflection	1			
Floor		N	N	1.5m rock and silt on the floor.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		7	7	50% of seams visible.
Separation (mm)	0			
Longitudinal Seams		7	7	50% of seams visible.
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			1N stagger.
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		5	5	Minor rust on submerged bolts. Superficial corrosion at waterline.
Corrosion By Soil (Y/N)	No			
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): 3658, Type: SP)				
Fish Passage Adequacy		7	7	
Baffle		7	7	Rock baffles, alternating sides.
(Type : <b>LARGE BOULDER</b> )				
Waterway Adequacy		6	6	Avg 1.5m silt.
Icing (Y/N)	No			
Silting (Y/N)	Yes			
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				North.
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		BELOW		
Above/Below (mm)	500			
Scour Protection		7	7	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>350</b> )				
Scour/Erosion		7	7	
Beavers (Y/N)		No		
<b>Downstream End General Rating</b>		<b>7</b>	<b>7</b>	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	6	90 degree turn to the East at U/S and D/S.
Bank Stability		7	7	
HWM (m below Top of Culvert)	2.0			No visible HWM. Minor drift.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading		AGGRADING		At U/S channel.
Beavers (Y/N)		Yes		
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel General Rating</b>		<b>6</b>	<b>6</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							
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>72.7/70.3</b>	Est. Repl. Yr	2028	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	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	17-Apr-2016		Previous Inspection Date	05-Nov-2009			
Inspection Cycle (Default) (months)	39						
Comment							