Bridge Culvert Inspection

Bridge File Number	78511 -1 Bridge Culvert	Form Type	CUL1
Year Built	1979	Lot No.	4
Bridge or Town Name	MORLEY	Inspector Name	Jon Davies
Located Over	TRIBUTARY TO LITTLE JUMPINGPOUND CREEK, 2.13.43.3.2, WATERCRS-ST	Inspector Class	BR CLS B
		Assistant Name	
Located On	68:04 C1 34.808	Assistant Class	
Water Body Cl./Year		Inspection Date	12-Sep-2012
Navigabil. Cl./Year		Data Entry By	Lauren Korte
Legal Land Location	SW SEC 7 TWP 25 RGE 5 W5M	Data Entry Date	10-Oct-2012
Longitude, Latitude	-114:41:57, 51:06:42	Reviewer Name	Garry Roberts
Road Authority	Alberta Transportation (AIT)	Review Date	21-Sep-2012
Contract Main. Area	CMA28	Dept. Reviewer Name	Tim Davies
Clear Roadway/Skew	12.3 / -10 deg. (LHF)	Dept. Review Date	11-Oct-2012
AADT/Year	310 / 2011 (A)	Follow-Up By	
Road Classification	RAU-211.8-110		
Detour Length (km)	16		

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	56.1	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	East ROW.	Gas	
Power	West ROW and crossing 50m South.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Crest curves North and South.
Vertical Alignment		5	5	
Roadway Width (m)	12.300			
Embankment		7	7	
Sideslope (__:1)	3.0			
(Height of Cover(m) : **2.5**)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		**5**	**5**	

Upstream End

Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		W		West.
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		7	7	
Heaving (mm)	100			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		7	7	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		7	7	
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): 2317, Rise (mm): 2561, Type: SPE**)				
Barrel Last Accessible Date	12-Sep-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)	2545			
Measured At Ring No.	8			
Sag (mm)	16			
Percent Sag	1			
Sidewall		7	7	
Measured Span (mm)	2353			
Measured At Ring No.	6			
Deflection (mm)	36			
Percent Deflection	2			
Floor		N	6	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
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			1N stagger.
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		5	6	
Corrosion By Soil (Y/N)	No			Minor corrosion in floor.
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): 2317, Rise (mm): 2561, Type: SPE**)				
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
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		7	7	
Heaving (mm)	100			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	300			
Scour Protection		6	6	3x4m scour hole - armored.
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **400**)				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
Downstream End General Rating		**6**	**6**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		5	5	Curves in channel both ends.
Bank Stability		5	5	
HWM (m below Top of Culvert)	1.7			No visible HWM.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(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						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**77.8/77.8**	**Sufficiency Rating (Last/Now) (%)**	**74.6/74.5**	Est. Repl. Yr	2030	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	12-Jun-2014	Previous Inspection Date	07-Jan-2011
Inspection Cycle (Default) (months)	21		
Comment			