Bridge Culvert Inspection

Bridge File Number	74770 -1 Bridge Culvert	Form Type	CUL1
Year Built	1987	Lot No.	4
Bridge or Town Name	VAUXHALL	Inspector Name	Jon Davies
Located Over	TRIBUTARY TO EXPANSE COULEE, 2.12.3.1, WATERCRS-ST	Inspector Class	BR CLS B
		Assistant Name	
Located On	36:04 C1 30.239	Assistant Class	
Water Body Cl./Year		Inspection Date	02-Jan-2012
Navigabil. Cl./Year		Data Entry By	Anne Roberts
Legal Land Location	SW SEC 35 TWP 12 RGE 16 W4M	Data Entry Date	24-Feb-2012
Longitude, Latitude	-112:05:44, 50:02:17	Reviewer Name	Garry Roberts
Road Authority	Alberta Transportation (AIT)	Review Date	20-Jan-2012
Contract Main. Area	CMA24	Dept. Reviewer Name	Tim Davies
Clear Roadway/Skew	11 / 20 deg. (RHF)	Dept. Review Date	11-Mar-2012
AADT/Year	2,290 / 2010 (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	-	1500	CP	61			ROUND

Special Features	
Special Features Comment	

Utilities (Located at)

Utility Attachments			
Telephone	West r/w	Gas	
Power	3 wire 25 m west of c.l	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	On a gradual curve with good sight distance, hill to the south.
Vertical Alignment		6	6	
Roadway Width (m)	11.000			
Embankment		5	5	3:1- then 5m flat bench then 3:1 at East side 3:1- then 12m flat bench then 2:1 at Westside Ditch gullying on east especially SE. Rock in bottom. 0.3m wide gully @ NE - grassed in
Sideslope (__:1)	2.0			
(Height of Cover(m) : **4.2**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**6**	**6**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	NONE			
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		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		7	7	In grown
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **400**)				
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): , Rise (mm): 1500, Type: CP**)				
Barrel Last Accessible Date	06-Apr-2001			Unable to enter - viewed from East end Shape is good
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	N	
Measured Rise (mm)	1500			
Measured At Ring No.	1			
Sag (mm)	0			
Percent Sag				
Sidewall		N	N	
Measured Span (mm)	1500			
Measured At Ring No.	1			
Deflection (mm)	0			
Percent Deflection				
Floor		N	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	
Separation (mm)	40			
Longitudinal Seams		X	X	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		X	X	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG	POS			Flat on both ends positive under hwy
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): 1500, Type: CP**)				
Fish Passage Adequacy		X	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		6	6	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**4**	**4**	GR carried forward

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		W		
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection		N	N	Ice covered
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **250**)				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
Downstream End General Rating		**7**	**7**	GR carried forward

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		7	7	Drop structure with 1500mm diameter CSP pipe 8m U/S
Bank Stability		5	5	
HWM (m below Top of Culvert)	0.2			(at D/S end) 23 June 2010. No visible HWM
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	NONE			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				
Channel General Rating		**7**	**7**	

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) (%)	**44.4/44.4**	**Sufficiency Rating (Last/Now) (%)**	**56.8/56.8**	Est. Repl. Yr	2041	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	Tom Carey	Previous Assistant's Name			
Next Inspection Date	02-Oct-2013	Previous Inspection Date	23-Jun-2010		
Inspection Cycle (Default) (months)	21				
Comment					