Bridge Culvert Inspection

Bridge File Number	74536 -1 Bridge Culvert	Form Type	CUL1
Year Built	2001	Lot No.	4
Bridge or Town Name	TURNER VALLE	Inspector Name	Garry Roberts
Located Over	TRIBUTARY TO THREEPOINT CREEK, 2.13.27.2.9.6, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	
Located On	22:12 C1 32.207	Assistant Class	
Water Body Cl./Year		Inspection Date	06-Jun-2012
Navigabil. Cl./Year		Data Entry By	Kelsey Roberts
Legal Land Location	NE SEC 34 TWP 20 RGE 3 W5M	Data Entry Date	05-Jul-2012
Longitude, Latitude	-114:19:41, 50:44:43	Reviewer Name	Tom Carey
Road Authority	Alberta Transportation (AIT)	Review Date	18-Jun-2012
Contract Main. Area	CMA27	Dept. Reviewer Name	Tim Davies
Clear Roadway/Skew	11.8 / 30 deg. (RHF)	Dept. Review Date	12-Jul-2012
AADT/Year	3,060 / 2011 (A)	Follow-Up By	
Road Classification	RAU-209-110		
Detour Length (km)	10		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	3000	MP	49	125X26	2.8	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	West of culvert.	Gas	
Power	Over W end of culvert 3 wire 20m from c/l.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		5	5	On grade, on curve.
Vertical Alignment		6	6	
Roadway Width (m)	12.000			
Embankment		8	8	6:1 @ East.
Sideslope (__:1)	4.0			
(Height of Cover(m) : **2.2**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**5**	**5**	

Upstream End

Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		W		West end.
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	Tops of bevel pushed in slightly from rock placement
Heaving (mm)	120			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		8	8	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **400**)				
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): , Rise (mm): 3000, Type: MP**)				
Barrel Last Accessible Date	06-Oct-2010			Water too deep to enter, viewed from both ends and shape appears good.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	N	P.R. 8
Measured Rise (mm)	2970			
Measured At Ring No.	3			
Sag (mm)	30			
Percent Sag	1			
Sidewall		8	N	Inward. P.R. 8
Measured Span (mm)	2965			
Measured At Ring No.	3			
Deflection (mm)	35			
Percent Deflection	1			
Floor		8	N	P.R. 8
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	N	(Some seams filled with oakum.) P.R. 8
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		5	N	(Light superficial corrosion on floor) P.R. 8
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): , Rise (mm): 3000, Type: MP**)				
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**8**	**N**	

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)	400			
Scour Protection		8	8	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **500**)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Downstream End General Rating		**8**	**8**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		6	6	
Bank Stability		7	7	
HWM (m below Top of Culvert)	1.1			(Debris in u/s fence 01/08/2007) No visible HWM
Drift (Y/N)	Yes			Drift on riprap at D/S- minor.
Channel Bottom Degrading/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) (%)	**88.9/55.6**	**Sufficiency Rating (Last/Now) (%)**	**80.9/63.0**	Est. Repl. Yr	2050	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	06-Mar-2014	Previous Inspection Date	06-Oct-2010		
Inspection Cycle (Default) (months)	21				
Comment					