Bridge Culvert Inspection

Bridge File Number	82004 -1 Bridge Culvert	Form Type	CUL1
Year Built	2001	Lot No.	4
Bridge or Town Name	CALGARY	Inspector Name	Garry Roberts
Located Over	TRAIL-ANIMAL, OVER SP	Inspector Class	BR CLS A
Located On	2:15 L1 5.745;2:15 R1 5.643	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	30-Jan-2013
Legal Land Location	NW SEC 4 TWP 22 RGE 29 W4M	Data Entry By	Erin Roberts
Longitude, Latitude	-113:58:23, 50:50:42	Data Entry Date	19-Feb-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Tom Carey
Contract Main. Area	DEERFOOT/STONEY	Review Date	06-Feb-2013
Clear Roadway/Skew	29.5 / -10 deg. (LHF)	Dept. Reviewer Name	Tim Davies
AADT/Year	33,500 / 2011 (A)	Dept. Review Date	21-Feb-2013
Road Classification	RFD-616.6-130	Follow-Up By	
Detour Length (km)	1		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	7123	4854	RPE	89.6	152X51	4.0	ELLIPSE
Special Features								
Special Features Comment								

Posting Information

Required Vert. Clearance Posting (m)											
Posted Vertical Clearance (Y/N)											
Posted:	Lane	EB	On Bridge (m)		In Advance (Y/N)	No	Lane	WB	On Bridge (m)		In Advance (Y/N)	No
Remarks	Not req.										

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power	West	Municipal	Storm drain at NW
Others	Light standards	Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Rises to the South
Vertical Alignment		6	6	
Roadway Width (m)	34.000			
Embankment		7	7	
Sideslope (__:1)	2.5			
(Height of Cover(m) : **3**)				
Guardrail (Y/N)	Yes			Damage at West shoulder but repairs underway.
Approach Road / Embankment General Rating		**6**	**6**	

Upstream End

Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction				West end
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	
Collar		8	8	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		8	8	Rock placed at concrete collar.
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **150**)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Upstream End General Rating		**8**	**8**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 7123, Rise (mm): 4854, Type: RPE**)				
Barrel Last Accessible Date	30-Jan-2013			
Special Features				
Special Feature				Median drain at midspan
(Type :)				
Special Feature				
(Type :)				
Roof		8	8	From past insp
Measured Rise (mm)	4854			Est
Measured At Ring No.				
Sag (mm)	50			
Percent Sag	1			
Sidewall		8	8	
Measured Span (mm)	7073			
Measured At Ring No.	10			
Deflection (mm)	50			
Percent Deflection	1			
Floor		N	N	Avg 1000mm cover of dirt on floor
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		8	8	
Separation (mm)	0			
Longitudinal Seams		8	8	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			1 lower and upper seam not staggered at each sidewall. All other seams have 3N stagger.
Min. Remaining Steel Between Cracks (mm)	0			
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		7	7	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 7123, Rise (mm): 4854, Type: RPE**)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		X	X	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**8**	**8**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction				East end.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	
Collar		8	8	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		8	8	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **150**)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Downstream End General Rating		**8**	**8**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Grade Separation				
Road Alignment		X	X	
Roadway Surface		7	7	
(Type :)				
Icing (Y/N)	No			
Traffic Safety Features		X	X	
Type				
Lighting		X	X	
Barrel Leakage (Y/N)	No			

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Drainage		6	6	
Structure In Use (Y/N)	Yes			
Grade Separation 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) (%)	**88.9/88.9**	**Sufficiency Rating (Last/Now) (%)**	**89.5/89.5**	Est. Repl. Yr	2058	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	30-Oct-2014	Previous Inspection Date	06-May-2011		
Inspection Cycle (Default) (months)	21				
Comment					