Bridge Culvert Inspection

Bridge File Number	07300 -2 Bridge Culvert	Form Type	CUL1
Year Built	2001	Lot No.	4
Bridge or Town Name	STAND OFF	Inspector Name	Jason Rusu
Located Over	TRIBUTARY TO BELLY RIVER, 2.12.22.10, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	
Located On	2:04 C1 29.864	Assistant Class	
Water Body Cl./Year		Inspection Date	09-Oct-2011
Navigabil. Cl./Year		Data Entry By	Alyssa Boynton
Legal Land Location	SE SEC 16 TWP 6 RGE 25 W4M	Data Entry Date	18-Nov-2011
Longitude, Latitude	-113:18:22, 49:28:02	Reviewer Name	Garry Roberts
Road Authority	Alberta Transportation (AIT)	Review Date	09-Nov-2011
Contract Main. Area	CMA25	Dept. Reviewer Name	Tim Davies
Clear Roadway/Skew	13 /	Dept. Review Date	21-Nov-2011
AADT/Year	2,980 / 2010 (A)	Follow-Up By	
Road Classification	RCU-211-110		
Detour Length (km)	5		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	4860	2365	SCA	17.6	380X140	3.5	ARCH
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	Crosses 100m North
Power	East Row	Municipal	
Others	Light Standards	Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Intersection SH 509 200m N
Vertical Alignment		8	8	
Roadway Width (m)	13.000			
Embankment		7	7	
Sideslope (__:1)	1.0			
(Height of Cover(m) : **0.5**)				
Guardrail (Y/N)	Yes			Double layer over box. Wrong lap at NE
Approach Road / Embankment General Rating		**7**	**7**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	
Collar		7	7	Vertical collar
Wingwalls		6	6	T.T. Wingwalls in place from previous bridge
(Shape :)				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		6	6	Some 400 rock
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **250**)				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
Upstream End General Rating		**6**	**6**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 4860, Rise (mm): 2365, Type: SCA**)				
Barrel Last Accessible Date	09-Oct-2011			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)	2365			
Measured At Ring No.	5			Encased in Concrete
Sag (mm)				est
Percent Sag	1			
Sidewall		8	8	On spread footing
Measured Span (mm)	4860			Too wide to measure.
Measured At Ring No.	5			
Deflection (mm)				Est.
Percent Deflection	1			
Floor		N	N	Natural Stream bed floor
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		8	8	
Separation (mm)				
Longitudinal Seams		8	8	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		5	5	Light 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): 4860, Rise (mm): 2365, Type: SCA**)				
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		**7**	**7**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		W		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	
Collar		7	7	Vertical collar
Wingwalls		7	7	T.T waterline left in place
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		7	7	Some 400 rock
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **250**)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		**7**	**7**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		5	5	Channel follows road for 200m sloughing of banks u/s Turn 90% upstream 500mm CSP from Road Ditdh 6m west of slope
Bank Stability		5	5	
HWM (m below Top of Culvert)	1.2			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) (%)**	**71.9/71.9**	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	09-Jul-2013	Previous Inspection Date	21-Jan-2010
Inspection Cycle (Default) (months)	21		
Comment			