Bridge Culvert Inspection

Bridge File Number	08823 -1 Bridge Culvert	Form Type	CUL1
Year Built	1969	Lot No.	4
Bridge or Town Name	CORONATION	Inspector Name	Jason Saly
Located Over	2ND ORDER TRIBUTARY TO SOUNDING CREEK, 4.4.15.1, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	
Located On	872:02 C1 10.088	Assistant Class	
Water Body Cl./Year		Inspection Date	09-Jun-2011
Navigabil. Cl./Year		Data Entry By	Marcia Chavez
Legal Land Location	SW SEC 25 TWP 33 RGE 11 W4M	Data Entry Date	27-Jun-2011
Longitude, Latitude	-111:26:46, 51:51:26	Reviewer Name	John O'Brien
Road Authority	Alberta Transportation (AIT)	Review Date	17-Jun-2011
Contract Main. Area	CMA21	Dept. Reviewer Name	Chris Black
Clear Roadway/Skew	7.9 /	Dept. Review Date	30-Jun-2011
AADT/Year	100 / 2010 (A)	Follow-Up By	
Road Classification	RCU-208-110		
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	2490	1753	RPP	25.9	152X51	3.0	PIPE ARCH
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	In West ditch.	Gas	
Power	East property line - 1 line OH.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		9	8	HWY586 intersection 500m S.
Vertical Alignment		9	8	
Roadway Width (m)	8.000			
Embankment		8	7	
Sideslope (__:1)	3.0			
(Height of Cover(m) : **1**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**9**	**8**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		
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		N	6	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	60			
Scour Protection		8	7	Well vegetated in with some rocks.
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		8	7	
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): 2490, Rise (mm): 1753, Type: RPP**)				
Barrel Last Accessible Date	09-Jun-2011			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	5	Rise at R2=1719=34mm Rise at R4=1649=104mm=5.9% Rise at R7=1706=47mm
Measured Rise (mm)	1649			
Measured At Ring No.	4			
Sag (mm)	104			
Percent Sag	6			
Sidewall		4	4	Span at R2=2485=5mm Span at R4=2556=66mm=2.7% Span at R7=2493=3mm See long. seams.
Measured Span (mm)	2556			
Measured At Ring No.	4			
Deflection (mm)	66			
Percent Deflection	3			
Floor		N	6	Some abrasion - very minor rust, some area covered by water.
Bulge (mm)	45			
Measured At Ring No.	4			
Abrasion (Y/N)	Yes			
Circumferential Seams		6	6	Rust stains at bolt holes.
Separation (mm)	11			
Longitudinal Seams		4	4	R2,R3,R4 & R5 cracked @ 4 o'clock 8N from top. R2 has worst crack (115 btwn steel) but can still transfer load - no change since previous measurement.
Total No. of Cracked Rings	4			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	115			
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		5	5	Heavy rust stains at bolt holes.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 2490, Rise (mm): 1753, Type: RPP**)				
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		**4**	**4**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		E		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		N	5	Minor bend to bevel.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	90			
Scour Protection		7	7	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		**6**	**5**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		8	8	
Bank Stability		8	8	
HWM (m below Top of Culvert)				No HWM visible.
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		**8**	**8**	

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) (%)**	**61.5/60.8**	Est. Repl. Yr	2024	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	Bryan Wai	Previous Assistant's Name			
Next Inspection Date	09-Sep-2014	Previous Inspection Date	25-Mar-2008		
Inspection Cycle (Default) (months)	39				
Comment					