

Bridge Culvert Inspection				
Bridge File Number	01947 -1 Bridge Culvert		Form Type	CULE
Year Built	1955		Lot No.	4
Bridge or Town Name	STRATHMORE		Inspector Name	Jon Davies
Located Over	TRIBUTARY TO SERVICEBERRY CREEK, 3.33.9.13, WATERCRS-ST		Inspector Class	BR CLS B
Located On	1:12 L1 10.742;1:12 R1 10.743		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	27-Feb-2012
Legal Land Location	NE SEC 11 TWP 24 RGE 26 W4M		Data Entry By	Anne Roberts
Longitude, Latitude	-113:31:35, 51:02:15		Data Entry Date	20-Mar-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA30		Review Date	01-Mar-2012
Clear Roadway/Skew	25.6 / -29 deg. (LHF)		Dept. Reviewer Name	Tim Davies
AADT/Year	14,030 / 2010 (A)		Dept. Review Date	22-Mar-2012
Road Classification	RAD-412.4-120		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	U/S	3000	2400	PCB	44.3			RECTANGLE
1	MAIN	3960	1980	BP	29.8			RECTANGLE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	North R/W		Gas	South ROW
Power	S. R/W 4 Wire		Municipal	
Others	Fibre Optics S R/W and N R/W		Problem (Y/N)	No
Remarks				

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Roadside turnout 100 m west. Crest curve to east.
Vertical Alignment		7	7	
Roadway Width (m)	25.600			
Embankment		7	7	Conc. Med pipe @ SW next to gabion
Sideslope (__:1)	4.0			
(Height of Cover(m) : 1.5)				
Guardrail (Y/N)	Yes			North side only - not on roadside but at culvert end.
Approach Road / Embankment General Rating		7	7	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		S		Precast boxes
End Treatment (Concrete, Steel, Others, None)	OTHERS			
Headwall		X	X	
Collar		7	X	
Wingwalls		X	7	Gabions
(Shape : FLARE)				

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		N	N	Ice covered
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Upstream End General Rating		8	7	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: U/S, Span (mm): 3000, Rise (mm): 2400, Type: PCB)				
Barrel Last Accessible Date	27-Feb-2012			West cell North section of concrete box
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	Minor scaling and spalling at West end approx. 1.3 m x 100 mm wide. Estimate
Measured Rise (mm)	2400			
Measured At Ring No.				
Sag (mm)	0			
Percent Sag	0			
Sidewall		6	8	
Measured Span (mm)	3000			
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection	0			
Floor		6	N	Ice covered
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	8	At construction joint, foam filled.
Separation (mm)	10			
Longitudinal Seams		X	X	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			
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	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: U/S, Span (mm): 3000, Rise (mm): 2400, Type: PCB)				
Ponding (Y/N)	No			
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel Extension General Rating		6	8	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1980, Rise (mm): 1980, Type: BP, Cell Sequence: 1)				
Barrel Last Accessible Date	27-Feb-2012			West cell, concrete box, North main
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	7	Estimate
Measured Rise (mm)	1980			
Measured At Ring No.				
Sag (mm)	0			
Percent Sag	0			
Sidewall		8	6	Medium width with vertical cracks
Measured Span (mm)	1980			
Measured At Ring No.	11			
Deflection (mm)	0			
Percent Deflection	0			
Floor		N	N	Ice covered PR 6 Minor spall at lower west floor
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	6	foam sealed
Separation (mm)	10			
Longitudinal Seams		X	X	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			
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	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1980, Rise (mm): 1980, Type: BP, Cell Sequence: 1)				
Ponding (Y/N)	No			
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		8	6	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1980, Rise (mm): 1980, Type: BP, Cell Sequence: 2)				
Barrel Last Accessible Date	27-Feb-2012			East Cell, Concrete box,North main
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)	1980			Estimate
Measured At Ring No.				
Sag (mm)	0			
Percent Sag	0			
Sidewall		6	6	Medium Vertical cracks
Measured Span (mm)	1980			
Measured At Ring No.	1			
Deflection (mm)	0			
Percent Deflection	0			
Floor		6	N	(Light scaling seen through 50mm of water) 29 July 2010 PR 6 ice covered
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		9	7	
Separation (mm)	30			
Longitudinal Seams		X	X	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			
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	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1980, Rise (mm): 1980, Type: BP, Cell Sequence: 2)				
Ponding (Y/N)	No			
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		6	6	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		X	X	
Collar		X	X	
Wingwalls (Shape : FLARE)		4	4	Wingwalls are anchored NE wingwall separated 200mm & moved 180mm. Separation 100mm NW wingwall moved inwards 270mm
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	200			
Scour Protection		6	6	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
Downstream End General Rating		4	4	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	Channel has sharp bend @ d/s end.
Bank Stability		7	7	
HWM (m below Top of Culvert)				Hwm not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			@ d/s
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) (%)	66.7/66.7	Sufficiency Rating (Last/Now) (%)	70.4/69.3	Est. Repl. Yr	2035	Maint. Req. (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	27-Nov-2013		Previous Inspection Date	29-Jul-2010			
Inspection Cycle (Default) (months)	21						
Comment							