

Bridge Culvert Inspection				
Bridge File Number	08533 -1 Bridge Culvert		Form Type	CUL1
Year Built	1971		Lot No.	1
Bridge or Town Name	RIMBEY		Inspector Name	Owen Salava
Located Over	POTTER CK, 3.78.13.1, WATERCRS-ST		Inspector Class	BR CLS A
Located On	53:04 C1 40.777		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	27-Nov-2012
Legal Land Location	SE SEC 25 TWP 42 RGE 3 W5M		Data Entry By	Marcia Chavez
Longitude, Latitude	-114:17:48, 52:38:23		Data Entry Date	13-Dec-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA18		Review Date	04-Dec-2012
Clear Roadway/Skew	8.2 /		Dept. Reviewer Name	Andrew Smikles
AADT/Year	2,370 / 2011 (A)		Dept. Review Date	17-Dec-2012
Road Classification	RAU-209-110		Follow-Up By	
Detour Length (km)	6			

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	2489	1753	RPP	21.3	152X51	3.0	PIPE ARCH
Special Features								
Special Features Comment								

Utilities (Located at)				
Utility Attachments				
Telephone	In r/w to South.		Gas	Crossing 40m West.
Power	3 wire 15m North of c/l.		Municipal	
Others	No ID tag.		Problem (Y/N)	No
Remarks				

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Farm access 75m SW & NW. Bottom of gradual sag curve.
Vertical Alignment		7	7	
Roadway Width (m)	8.200			
Embankment		7	3	Wide transverse crack in ACP West side of pipe, previously sealed. 3:1 then 2:1 at culvert. Bank failure around outlet; vertical bank face 3m from painted shoulder.
Sideslope (__:1)	3.0			
(Height of Cover(m) : 1.7)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		7	3	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		
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	6	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection		7	4	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		7	4	Erosion at both shoulders, 0.5m back.
Beavers (Y/N)	No			
Upstream End General Rating		7	4	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2489, Rise (mm): 1753, Type: RPP)				
Barrel Last Accessible Date	27-Nov-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	4	Roof seam goes right down the middle. Gap in plates, approx 3mm. Unable to measure due to ice; rated on previous measurement.
Measured Rise (mm)	1620			
Measured At Ring No.	3			(8.9%. 24Aug2009).
Sag (mm)	133			
Percent Sag	9			
Sidewall		N	2	Cracked at 3 o'clock (photo).
Measured Span (mm)	2530			
Measured At Ring No.	3			
Deflection (mm)	41			1.6%.
Percent Deflection	2			
Floor		N	N	Ice
Bulge (mm)	50			
Measured At Ring No.	3			
Abrasion (Y/N)	No			
Circumferential Seams		N	5	
Separation (mm)	0			
Longitudinal Seams		N	2	(Growth cracks from 2001. Remaining metal was 57mm from 18/Oct/2006. 24Aug2009).
Total No. of Cracked Rings	4			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	46			
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		N	N	(Minor superficial rust below waterline. 24Aug2009).
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	POS			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2489, Rise (mm): 1753, Type: RPP)				
Fish Passage Adequacy		3	3	250mm outfall at outlet.
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	5	Icing from flow over ice.
Icing (Y/N)	Yes			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		2	2	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		5	4	Bevel is unsupported for 1.0m.
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	900			
Scour Protection		4	3	(Existing rock has washed 10m D/S from end of culvert because rock was too small. Cantilever into a ripraped pond. 11Apr2011). Roadway bank slough around outlet.
(Type : NONE)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		4	3	(Scour hole 1.0m deep. 24Aug2009). Major outlet scour causing embankment failure.
Beavers (Y/N)	No			
Downstream End General Rating		4	3	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		6	5	Vertical banks d/s.
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading	DEGRADING			D/S only.
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		7	7	

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	2013	Replace pipe.		2013						
OTHER ACTION										
OTHER ACTION										
OTHER ACTION										
Structural Condition Rating (Last/Now) (%)	22.2/22.2	Sufficiency Rating (Last/Now) (%)	32.3/17.1	Est. Repl. Yr	2013	Maint. Req. (Y/N)	Yes			
Special Comments for Next Inspection	LRA emailed to Donald Suanders on 03Dec2012.									
Maintenance Reviewed By								Estimated Total	0	
Proposed Long-Term Strategy										
On 3-Year Program (Y/N)										
Proposed Action										
Previous Inspector's Name	Owen Salava	Previous Assistant's Name								
Next Inspection Date	27-Aug-2014	Previous Inspection Date	11-Apr-2011							
Inspection Cycle (Default) (months)	21									
Comment										

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	2013	Replace pipe.	Programmed	2014		
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
Structural Condition Rating (Last/Now) (%)	22.2/22.2	Sufficiency Rating (Last/Now) (%)	32.3/17.1	Est. Repl. Yr	2013	Maint. Req. (Y/N) Yes
Special Comments for Next Inspection	LRA emailed to Donald Suanders on 03Dec2012.		Department Comments	Currently in PMA for replacement in 2014. DA		
Maintenance Reviewed By	Darron Ahlstedt		Date	04-Mar-2013	Estimated Total	0
Proposed Long-Term Strategy						
On 3-Year Program (Y/N)						
Proposed Action						
Previous Inspector's Name	Owen Salava		Previous Assistant's Name			
Next Inspection Date	27-Aug-2014		Previous Inspection Date	11-Apr-2011		
Inspection Cycle (Default) (months)	21					
Comment						