

Bridge Culvert Inspection				
Bridge File Number	77203 -1 Bridge Culvert		Form Type	CUL1
Year Built	1990		Lot No.	2
Bridge or Town Name	VERMILION		Inspector Name	Owen Salava
Located Over	TRAIL-ANIMAL, OVER SP		Inspector Class	BR CLS A
Located On	16:30 L1 14.367;16:30 R1 14.368		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	18-Dec-2012
Legal Land Location	NE SEC 27 TWP 50 RGE 5 W4M		Data Entry By	Marcia Chavez
Longitude, Latitude	-110:38:45, 53:20:56		Data Entry Date	07-Jan-2013
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA15		Review Date	20-Dec-2012
Clear Roadway/Skew	26 /		Dept. Reviewer Name	Andrew Smikles
AADT/Year	7,400 / 2011 (A)		Dept. Review Date	08-Jan-2013
Road Classification	RFD-412.4-130		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	-	2400	MP	66	125X26	2.8	ROUND
Special Features								
Special Features Comment								

Posting Information

Required Vert. Clearance Posting (m)											
Posted Vertical Clearance (Y/N)	No										
Posted:	Lane	NB	On Bridge (m)		In Advance (Y/N)		Lane	SB	On Bridge (m)		In Advance (Y/N)
Remarks	Not required.										

Utilities (Located at)

Utility Attachments											
Telephone	Plowed in South ditch.					Gas					
Power						Municipal					
Others						Problem (Y/N)	No				
Remarks											

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	Near bottom of gradual sag curve.
Vertical Alignment		7	7	
Roadway Width (m)	26.000			
Embankment		7	7	Transition from 5:1 slope to 3:1 at ends of culverts very short.
Sideslope (___:1)	3.0			
(Height of Cover(m) : 2.3)				
Guardrail (Y/N)	Yes			Offset from shoulder.
Approach Road / Embankment General Rating		7	7	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Wingwalls (Shape :)		X	X	
Cutoff Wall		X	X	
Bevel End		X	X	Square end.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection (Type : NATURAL) (Avg. Rock Size(mm) :)		7	N	Snow covered.
Scour/Erosion		7	X	
Beavers (Y/N)	No			
Upstream End General Rating		7	8	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2400, Type: MP)				
Barrel Last Accessible Date	18-Dec-2012			
Special Features				
Special Feature (Type :)				
Special Feature (Type :)				
Roof		6	6	Rise estimated; could not measure rise due to dirt on floor. 1 dent in roof, minor.
Measured Rise (mm)	2392			
Measured At Ring No.				
Sag (mm)	8			
Percent Sag	1			
Sidewall		6	6	1 dent in sidewall from installation, minor. 1 hole in side 1.7m South from 2nd seam from NE side. @42m Span at S end=2367=37mm=1.5% inward Span at midpipe=2412=12mm Span at N end=2389=11mm
Measured Span (mm)	2367			
Measured At Ring No.	4			
Deflection (mm)	37			
Percent Deflection	2			
Floor		N	N	Concrete floor, dirt covered.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		4	4	Eight seams in total - separation varies from 15 mm to 50 mm. Infiltration on 3 seams but all are minor and have stopped.
Separation (mm)	50			
Longitudinal Seams		X	X	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
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): , Rise (mm): 2400, Type: MP)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	Yes			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	X	Handles ditch drainage.
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)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	Straight cut.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		7	N	Snow covered.
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		7	X	
Beavers (Y/N)	No			
Downstream End General Rating		7	7	

Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		8	8	Also handles ditch drainage.
Roadway Surface		7	8	
(Type : CONCRETE)				
Icing (Y/N)	No			100 mm to 150 mm thick.
Traffic Safety Features		X	X	
Type	None			
Lighting		X	X	
Barrel Leakage (Y/N)	No			

Structure Usage				
		Last	Now	Explanation of Condition
Drainage		7	7	
Structure In Use (Y/N)	No			No fence to ends.
Grade Separation 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	Fill seam with expanding foam or monitor.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	66.7/66.7	Sufficiency Rating (Last/Now) (%)	74.2/78.6	Est. Repl. Yr	2044	Maint. Req. (Y/N)	No
Special Comments for Next Inspection	Monitor seam infiltration.		Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy	2008.01.03 Remove from Cattlepass listings and designate it as a culvert. Brownlee & Associates						
On 3-Year Program (Y/N)							
Proposed Action							
Previous Inspector's Name	Jason Saly		Previous Assistant's Name				
Next Inspection Date	18-Sep-2014		Previous Inspection Date	18-Jul-2012			
Inspection Cycle (Default) (months)	21						
Comment							