Bridge Culvert Inspection

Bridge File Number	78454 -1 Bridge Culvert	Form Type	CULE
Year Built	1981	Lot No.	4
Bridge or Town Name	CHAMPION	Inspector Name	Ash Morjaria
Located Over	TRAIL-ANIMAL, OVER SP	Inspector Class	BR CLS A
Located On	529:04 C1 21.112	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	26-Aug-2012
Legal Land Location	SE SEC 18 TWP 15 RGE 21 W4M	Data Entry By	Alyssa Boynton
Longitude, Latitude	-112:52:14, 50:15:15	Data Entry Date	24-Oct-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	CMA25	Review Date	13-Sep-2012
Clear Roadway/Skew	11 / 0 deg.	Dept. Reviewer Name	Tim Davies
AADT/Year	200 / 2011 (A)	Dept. Review Date	25-Oct-2012
Road Classification	RCU-209-110	Follow-Up By	
Detour Length (km)	22		

Bridge Culvert Information

Number of Culverts	1

Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	U/S	-	2200	MP	14	125X26	2.8	ROUND
1	MAIN	-	2100	MP	21	68X13	4.2	ROUND
1	D/S	-	2200	MP	12	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	s.ditch	Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		5	6	On gentle curve, 100 kmh speed limit
Vertical Alignment		6	7	improved grade
Roadway Width (m)	11.000			
Embankment		4	8	4:1 slope- new construction
Sideslope (__:1)	4.0			
(Height of Cover(m) : **3**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**5**	**6**	

Upstream End

Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		N		North
End Treatment (Concrete, Steel, Others, None)	STEEL			

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		7	9	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection		X	X	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		X	X	
Beavers (Y/N)	No			
Upstream End General Rating		**7**	**9**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: U/S, Span (mm): , Rise (mm): 2200, Type: MP**)				
Barrel Last Accessible Date	26-Aug-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof			6	Upward
Measured Rise (mm)	2180			
Measured At Ring No.	1			
Sag (mm)	80			
Percent Sag	4			
Sidewall			6	
Measured Span (mm)	2060			
Measured At Ring No.	1			
Deflection (mm)	40			
Percent Deflection	2			
Floor			N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams			6	
Separation (mm)	0			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: U/S, Span (mm): , Rise (mm): 2200, Type: MP**)				
Longitudinal Seams			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			6	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy			X	
Baffle			X	
(Type :)				
Waterway Adequacy			X	Cattle underpass
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel Extension General Rating			**6**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2100, Type: MP**)				
Barrel Last Accessible Date	26-Aug-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		5	9	
Measured Rise (mm)	2200			
Measured At Ring No.	1			
Sag (mm)	0			
Percent Sag	0			
Sidewall		5	9	
Measured Span (mm)	2200			
Measured At Ring No.	1			
Deflection (mm)	0			
Percent Deflection	0			
Floor		N	N	Dirt covered
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		5	X	
Separation (mm)				

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2100, Type: MP**)				
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		7	9	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		X	X	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**5**	**9**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		S		South
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		7	9	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection		X	X	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		X	X	
Beavers (Y/N)	No			
Downstream End General Rating		**7**	**9**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Grade Separation				
Road Alignment		X	X	
Roadway Surface		7	9	
(Type :)				
Icing (Y/N)	No			
Traffic Safety Features		X	X	
Type				
Lighting		X	X	
Barrel Leakage (Y/N)				
Drainage		7	9	
Structure In Use (Y/N)	Yes			
Grade Separation General Rating		**5**	**9**	

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) (%)	**55.6/66.7**	**Sufficiency Rating (Last/Now) (%)**	**71.7/83.2**	Est. Repl. Yr	2047	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	Jason Rusu	Previous Assistant's Name	
Next Inspection Date	26-Nov-2015	Previous Inspection Date	06-Mar-2010
Inspection Cycle (Default) (months)	39		
Comment			