Bridge Culvert Inspection

Bridge File Number	76517 -1 Bridge Culvert	Form Type	CUL1
Year Built	1994	Lot No.	4
Bridge or Town Name	VALLEYVIEW	Inspector Name	Russel Vanderschaaf
Located Over	TRIBUTARY TO SWEATHOUSE CREEK, 8.10.58.7.25.1, WATERCRS-ST	Inspector Class	BR CLS B
		Assistant Name	
Located On	665:02 C1 25.784	Assistant Class	
Water Body Cl./Year		Inspection Date	24-Aug-2010
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	SW SEC 13 TWP 69 RGE 20 W5M	Data Entry Date	07-Oct-2010
Longitude, Latitude	-116:54:56, 54:58:01	Reviewer Name	Arnold Assenheimer
Road Authority	Alberta Transportation (AIT)	Review Date	20-Sep-2010
Contract Main. Area	CMA03	Dept. Reviewer Name	Steve Pasquan
Clear Roadway/Skew	9 /	Dept. Review Date	18-Nov-2010
AADT/Year	100 / 2009 (A)	Follow-Up By	
Road Classification	RCU-209-110		
Detour Length (km)	35		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	3670	SP	48.8	152X51	3.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	South side.	Gas	South side.
Power	SINGLE WIRE 15 M N. OF C/L	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	RG RD 450m West, field accesses 200m. East. In a sag curve.
Vertical Alignment		7	7	
Roadway Width (m)	9.000			
Embankment		4	7	
Sideslope (__:1)	3.0			
(Height of Cover(m) :)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		**7**	**7**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	
Collar		6	6	LATERAL CRACKS @ 300 spacing.
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	800			
Scour Protection		8	8	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		8	8	
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): , Rise (mm): 3670, Type: SP**)				
Barrel Last Accessible Date	15-Jan-2004			Water 800mm deep shape looks good.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	N	AT CL-15-Jan-2004
Measured Rise (mm)	3645			
Measured At Ring No.				
Sag (mm)	25			
Percent Sag	1			
Sidewall		8	N	AT CL-15-Jan-2004
Measured Span (mm)	3671			
Measured At Ring No.				
Deflection (mm)	1			
Percent Deflection	1			
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		N	N	
Separation (mm)	0			
Longitudinal Seams		N	N	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		N	N	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3670, Type: SP**)				
Fish Passage Adequacy		8	8	
Baffle		N	N	
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**8**	**N**	GR 8 - 15-Jan-2004.

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		7	7	
Heaving (mm)	300			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	700			
Scour Protection		8	8	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Downstream End General Rating		**7**	**7**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		5	5	SHARP BEND @ D/S, BANKS SLUMPING 3m high not effecting pipe.
Bank Stability		5	5	
HWM (m below Top of Culvert)				NO HWM VISIBLE
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading				stable
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) (%)	**88.9/55.6**	**Sufficiency Rating (Last/Now) (%)**	**83.4/68.4**	Est. Repl. Yr	2034	Maint. Reqd. (Y/N)	No

Special Comments for Next Inspection	Although pipe not accessible for last 2 inspection cycles the shape looks good and a level 2 inspection not recommended.	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	Eric Carcoux	Previous Assistant's Name			
Next Inspection Date	24-Nov-2013	Previous Inspection Date	29-May-2007		
Inspection Cycle (Default) (months)	39				
Comment					