Bridge Culvert Inspection

Bridge File Number	71454 -1 Bridge Culvert	Form Type	CUL1
Year Built	1999	Lot No.	4
Bridge or Town Name	MARIE REINE	Inspector Name	Brian Pientsch
Located Over	TRIBUTARY TO HEART RIVER, 8.10.56.2, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	Lisbeth Medina
Located On	744:04 C1 44.862	Assistant Class	
Water Body Cl./Year		Inspection Date	04-Apr-2011
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	NW SEC 7 TWP 82 RGE 21 W5M	Data Entry Date	24-May-2011
Longitude, Latitude	-117:17:23, 56:06:04	Reviewer Name	Arnold Assenheimer
Road Authority	Alberta Transportation (AIT)	Review Date	16-May-2011
Contract Main. Area	CMA04	Dept. Reviewer Name	Steve Pasquan
Clear Roadway/Skew	9.5 / 54 deg. (RHF)	Dept. Review Date	14-Nov-2011
AADT/Year	840 / 2010 (A)	Follow-Up By	
Road Classification	RCU-209-110		
Detour Length (km)	5		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	3050	SP	205.4	152X51	3.0,5.0,4.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	12 M WEST OF C/L (SEE NOTE)	Gas	ROAD CROSSING 25 M N. OF TRACK
Power	15 M E. OF C/L	Municipal	
Others		Problem (Y/N)	No
Remarks	RAILWAY CROSSING SOUTH HILL TELUS STILL TEMP. REROUTED 2004-11-29		

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	Entrances 100m north & south.
Vertical Alignment		5	5	BOTTOM OF SAG CURVE - NO PASSING Limited site distance both directions.
Roadway Width (m)	9.500			
Embankment		9	4	Slide 20m long x 2m wide on West embankment.
Sideslope (__:1)	3.0			
(Height of Cover(m) :)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		**5**	**5**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		N	6	
Collar		N	N	Snow covered.
Wingwalls		X	X	
(Shape :)				

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Cutoff Wall		N	N	
Bevel End		N	N	Snow covered Only 10% visible
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	760			
Scour Protection		N	N	Snow covered.
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	N	Snow covered.
Beavers (Y/N)	No			
Upstream End General Rating		**8**	**6**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3050, Type: SP**)				
Barrel Last Accessible Date	04-Apr-2011			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	8	
Measured Rise (mm)	3016			Measurements couldn't be taken due to ice on floor.
Measured At Ring No.	88			
Sag (mm)	34			
Percent Sag	1			
Sidewall		8	8	
Measured Span (mm)	3064			
Measured At Ring No.	88			
Deflection (mm)	14			
Percent Deflection	1			
Floor		8	N	Under ice.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	8	
Separation (mm)	0			
Longitudinal Seams		8	8	
Total No. of Cracked Rings	0			2N Stagger
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		8	7	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	POS			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3050, Type: SP**)				
Ponding (Y/N)	No			
Fish Passage Adequacy		9	9	
Baffle		X	X	
(Type :)				
Waterway Adequacy		9	9	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**8**	**8**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		E		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		N	7	Rate based on 40% visibility.
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			est
Above/Below (mm)	760			
Scour Protection		N	N	Snow covered. Few rocks were evident through snow.
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **500**)				
Scour/Erosion		N	N	Snow covered.
Beavers (Y/N)	No			
Downstream End General Rating		**8**	**7**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		7	6	
HWM (m below Top of Culvert)				HWM not visible
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			
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						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**88.9/88.9**	**Sufficiency Rating (Last/Now) (%)**	**90.3/87.3**	Est. Repl. Yr	2044	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	Brian Pientsch	Previous Assistant's Name	Tim Miskiman
Next Inspection Date	04-Jul-2014	Previous Inspection Date	29-Jan-2009
Inspection Cycle (Default) (months)	39		
Comment			