Bridge Culvert Inspection

Bridge File Number	13849 -1 Bridge Culvert	Form Type	CUL1
Year Built	1997	Lot No.	2
Bridge or Town Name	HYTHE	Inspector Name	Brian Pientsch
Located Over	TRIBUTARY TO BEAVERLODGE RIVER, 8.10.58.18.8.1.11, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	Brian Cote
Located On	43:00 C1 36.863	Assistant Class	
Water Body Cl./Year		Inspection Date	05-Jul-2011
Navigabil. Cl./Year		Data Entry By	Lisa Fairhurst
Legal Land Location	NW SEC 6 TWP 73 RGE 10 W6M	Data Entry Date	12-Aug-2011
Longitude, Latitude	-119:32:10, 55:17:59	Reviewer Name	Arnold Assenheimer
Road Authority	Alberta Transportation (AIT)	Review Date	13-Jul-2011
Contract Main. Area	CMA05	Dept. Reviewer Name	Steve Pasquan
Clear Roadway/Skew	13.6 /	Dept. Review Date	18-Nov-2011
AADT/Year	4,970 / 2010 (A)	Follow-Up By	
Road Classification	RAU-213.4-120		
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	5184	2833	RPB	16.5	152X51	3.0	ELLIPSE
Special Features		STORM WATER DRAIN						
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	CURVE 300m N, HILL ON EAST APPROACH. No passing east bound. RAILWAY X-ING 100m D/S
Vertical Alignment		7	7	
Roadway Width (m)	13.600			
Embankment		7	7	
Sideslope (__:1)	4.0			
(Height of Cover(m) : **1**)				
Guardrail (Y/N)	Yes			Rail not continuous. CONCRETE PATCHES @ BASE OF BRIDGERAIL POSTS ARE CRACKING.
Approach Road / Embankment General Rating		**7**	**7**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		N		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		5	5	CONCRETE SPALLING ON HEADWALL
Collar		6	X	
Wingwalls		6	6	(ENDS OF WINGWALL PLANKS DAMAGED NE CORNER & 2 BROKEN AT BOTTOM IN NW CORNER.Jun8,2006)
(Shape :)				

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Cutoff Wall		N	N	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		N	N	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **200**)				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
Upstream End General Rating		**5**	**5**	G.R. carried fowd.

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 5184, Rise (mm): 2833, Type: RPB**)				
Barrel Last Accessible Date	11-Feb-2009			Not accessible
Special Features				
Special Feature		4	4	Drain pipe extensions missing NE corner.
(Type : **STORM WATER DRAIN**)				
Special Feature				
(Type :)				
Roof		7	N	(Couldn't measure due to ice.
Measured Rise (mm)				
Measured At Ring No.				@ c/l
Sag (mm)	34			Estimated upward deflection. - Feb 29 2009)
Percent Sag	1			
Sidewall		7	9	
Measured Span (mm)	5102			
Measured At Ring No.				(7.3m from inlet
Deflection (mm)	62			
Percent Deflection	1			Inward deflection - Feb 29 2009)
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		7	N	
Separation (mm)				
Longitudinal Seams		7	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)	No			
Coating		8	N	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 5184, Rise (mm): 2833, Type: RPB**)				
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		N	N	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**7**	**N**	GR 7 - 11 Feb 2009

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		S		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		5	4	HEAVY SCALING ON HEADWALL.
Collar		6	6	
Wingwalls		6	X	
(Shape :)				
Cutoff Wall		N	N	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		N	N	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **200**)				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
Downstream End General Rating		**5**	**4**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	NONE			
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	2011	Repair drain extension on NE corner. and extend others				
OTHER ACTION	2011	Patch scaling on headwall to drain away from headwall				
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**77.8/55.6**	**Sufficiency Rating (Last/Now) (%)**	**70.0/57.0**	Est. Repl. Yr	2032	Maint. Reqd. (Y/N)	Yes

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	Laurie McCarron	Previous Assistant's Name	Russel Vanderschaaf		
Next Inspection Date	05-Apr-2013	Previous Inspection Date	11-Feb-2009		
Inspection Cycle (Default) (months)	21				
Comment					