

Bridge Culvert Inspection				
Bridge File Number	07631 -1 Bridge Culvert		Form Type	CUL1
Year Built	2008		Lot No.	3
Bridge or Town Name	SEXSMITH		Inspector Name	Brian Pientsch
Located Over	WATERCOURSE, WATERCRS-NI		Inspector Class	BR CLS A
Located On	2:72 R1 11.996		Assistant Name	Brian Cote
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	04-Jul-2011
Legal Land Location	SW SEC 6 TWP 74 RGE 5 W6M		Data Entry By	Lisa Fairhurst
Longitude, Latitude	-118:46:10, 55:22:38		Data Entry Date	12-Aug-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA05		Review Date	13-Jul-2011
Clear Roadway/Skew	69.2 / 28 deg. (RHF)		Dept. Reviewer Name	Steve Pasquan
AADT/Year	4,290 / 2010 (A)		Dept. Review Date	16-Nov-2011
Road Classification	RAD-412.4-120		Follow-Up By	
Detour Length (km)	1			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	-	2000	MP	99	125X26	3.5	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone			Gas	
Power	4 o/h West r/w		Municipal	
Others			Problem (Y/N)	No
Remarks				

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	Hwy 59 and sec. hwy 674 located 500m South. Hwy 2 raised to N.
Vertical Alignment	8	8	
Roadway Width (m)	27.300		
Embankment	8	8	
Sideslope (_ :1)	4.0		
(Height of Cover(m) : 1.8)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	7	7	

Upstream 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	

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)	400			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Upstream End General Rating		8	8	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1 , Primary Span, Location Code: MAIN , Span (mm): , Rise (mm): 2000 , Type: MP)				
Barrel Last Accessible Date	02-Dec-2009			Not accessible due to depth of water
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	N	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	63			Estimated 2 Dec 2009
Percent Sag	3			
Sidewall		7	N	
Measured Span (mm)	1937			centreline of Northbound lane.
Measured At Ring No.	63			Inward deflection.
Deflection (mm)	0			
Percent Deflection	3			
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		7	N	
Separation (mm)	60			
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		4	N	(Trench coat polymer coating. Some trench coat polymer coatings were peeling off and rusting at/near all coupler locations.(photo).. 02 Dec 2009)
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
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): 2000, Type: MP)				
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		7	N	Last rated 7 on Dec 2 2009
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Downstream End General Rating		8	8	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	6	U/S channel parallel to hwy and enter @ 70 degree to the pipe.
Bank Stability		9	9	
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		6	6	

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/re-coat the rusted areas throughout the pipe.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	77.8/55.6	Sufficiency Rating (Last/Now) (%)	84.5/73.7	Est. Repl. Yr	2065	Maint. Req. (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	Brian Pientsch		Previous Assistant's Name	Russel Vanderschaaf			
Next Inspection Date	04-Apr-2013		Previous Inspection Date	02-Dec-2009			
Inspection Cycle (Default) (months)	21						
Comment							