

Bridge Culvert Inspection			
Bridge File Number	79219 -1 Bridge Culvert	Form Type	CUL1
Year Built	1979	Lot No.	1
Bridge or Town Name	VILLENEUVE	Inspector Name	Melanie Johnson
Located Over	2ND ORDER TRIBUTARY TO STURGEON RIVER, 6.65.13.1.1, WATERCRS-ST	Inspector Class	BR CLS B
Located On	37:02 C1 33.823	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	08-Nov-2011
Legal Land Location	SW SEC 2 TWP 55 RGE 26 W4M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-113:45:56, 53:42:59	Data Entry Date	19-Nov-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA09	Review Date	13-Nov-2011
Clear Roadway/Skew	12 / -45 deg. (LHF)	Dept. Reviewer Name	Brent Herrick
AADT/Year	5,060 / 2010 (A)	Dept. Review Date	15-Dec-2011
Road Classification	RAU-211.8-110	Follow-Up By	
Detour Length (km)	6		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2057	1499	FP	29	68X13		ARCH
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	South row	Gas	
Power	5 wire OH North row	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	Farm entrances east & west.
Vertical Alignment	8	8	
Roadway Width (m)	12.000		
Embankment	8	8	
Sideslope (__:1)	5.0		
(Height of Cover(m) : 0.7)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	7	7	

Upstream 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	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		N	6	
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		N	6	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		N	6	
Beavers (Y/N)	No			
Upstream End General Rating		7	6	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2057, Rise (mm): 1499, Type: FP)				
Barrel Last Accessible Date	08-Nov-2011			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	2	
Measured Rise (mm)	1050			Reverse curvature.-Worst @ N 4m from u/s. photo (1330 near c/l, 7.9%. 2003/10/01)
Measured At Ring No.				
Sag (mm)	449			U/S - 1417, D/S approx 250mm silt.-09-May-2008
Percent Sag	30			Ice/silt on floor couldn't measure rise.
Sidewall		N	5	Failed coupler
Measured Span (mm)	2175			
Measured At Ring No.				
Deflection (mm)	118			
Percent Deflection	6			
Floor		N	N	Ice & silt covered floor.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	2	Severe dent is grouted with concrete. 4m U/S & 4m D/S. Reverse curve-photo
Separation (mm)	125			
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		N	4	
Corrosion By Soil (Y/N)	No			
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): 2057, Rise (mm): 1499, Type: FP)				
Fish Passage Adequacy		6	6	
Baffle		X	X	
(Type :)				
Waterway Adequacy		6	6	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		2	2	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		6	6	
Heaving (mm)	50			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	250			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		6	6	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	Sharp bends to ditches, both ends.
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				
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	2011	Repair reverse curvature @ seams.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	22.2/22.2	Sufficiency Rating (Last/Now) (%)	40.1/39.0	Est. Repl. Yr	2025	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Reduce inspection cycle to 12 months until repair is done. LRA sent Nov 14, 2011.		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	Shane Hall		Previous Assistant's Name				
Next Inspection Date	08-Aug-2013		Previous Inspection Date	23-Mar-2010			
Inspection Cycle (Default) (months)	21						
Comment							