

Bridge Culvert Inspection				
Bridge File Number	07878 -1 Bridge Culvert		Form Type	CUL1
Year Built	1987		Lot No.	3
Bridge or Town Name	ECKVILLE		Inspector Name	Jason Saly
Located Over	TRIBUTARY TO MEDICINE RIVER, 3.88.6, WATERCRS-ST		Inspector Class	BR CLS A
Located On	766:10 C1 16.617		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	15-Feb-2012
Legal Land Location	SW SEC 4 TWP 38 RGE 3 W5M		Data Entry By	Marcia Chavez
Longitude, Latitude	-114:22:57, 52:14:08		Data Entry Date	09-Mar-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA18		Review Date	29-Feb-2012
Clear Roadway/Skew	11 / 5 deg. (RHF)		Dept. Reviewer Name	Andrew Smikles
AADT/Year	670 / 2010 (A)		Dept. Review Date	14-Mar-2012
Road Classification	RCU-209-110		Follow-Up By	
Detour Length (km)	3			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	4791	3834	RPE	34.7	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments							
Telephone	West ditch.			Gas	100m South Diamond Valley Gas Coop.		
Power	3 wires (22m) East ditch.			Municipal			
Others				Problem (Y/N)	No		
Remarks							

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	Field approaches North of culvert on both sides.
Vertical Alignment		8	8	
Roadway Width (m)	11.000			
Embankment		7	7	E end measured.
Sideslope (__:1)	4.0			
(Height of Cover(m) : 2.6)				
Guardrail (Y/N)	Yes			2 split post at NW corner.
Approach Road / Embankment General Rating		8	8	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		West
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	
Collar		6	6	Cracking in various areas.
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)	300			
Scour Protection		8	N	Some rocks.
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		8	N	(Some erosion 25m U/S. 14Sep2005).
Beavers (Y/N)	No			Drift caught up on bevel.
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): 4791, Rise (mm): 3834, Type: RPE)				
Barrel Last Accessible Date	15-Feb-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	7	One dent with paint flaked off. Could not measure rise due to ice.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	25			Est. 0.7%
Percent Sag	1			
Sidewall		N	7	Span at R2=4809=18mm Span at R4=4828=37mm=0.8% Span at R6=4804=13mm
Measured Span (mm)	4828			
Measured At Ring No.	4			
Deflection (mm)	37			0.8%
Percent Deflection	1			
Floor		N	N	Ice
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	7	
Separation (mm)	0			
Longitudinal Seams		N	7	Some bolts may not be tight, can see holes. All bolt heads on top 1/2; nuts on bottom 1/2 with 4 rows of connectors in line at radius change points.
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	6	White stains, little rust.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	POS			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 4791, Rise (mm): 3834, Type: RPE)				
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			(Upstream end. 14Sep2005).
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		7	7	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	Little cracks.
Collar		8	7	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		6	N	(SE ditch erosion is vegetated - photo. 14Sep2005) - Snow covered.
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		6	N	
Beavers (Y/N)	No			
Downstream End General Rating		6	6	Based on scour from 14Sep2005.
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	6	Erosion should be fixed.
Bank Stability		5	5	
HWM (m below Top of Culvert)				HWM unknown.
Drift (Y/N)	Yes			Minor.
Channel Bottom Degrading/Aggrading				Unknown.
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	2012	Fix erosion with riprap, SE ditch, if not yet done.					
OTHER ACTION	2012	Replace split NW guardrail posts.					
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	77.8/77.8	Sufficiency Rating (Last/Now) (%)	79.2/79.2	Est. Repl. Yr	2040	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	Dave Lam		Previous Assistant's Name				
Next Inspection Date	15-May-2015		Previous Inspection Date	14-Sep-2005			
Inspection Cycle (Default) (months)	39						
Comment							