

Bridge Culvert Inspection			
Bridge File Number	71249 -2 Bridge Culvert	Form Type	CULM
Year Built	2005	Lot No.	6
Bridge or Town Name	WINFIELD	Inspector Name	Paul Carrier
Located Over	TRIBUTARY TO MUSKRAT CREEK, 6.132.2.12.1, WATERCRS-ST	Inspector Class	BR CLS A
Located On	761:10 C1 0.552	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	19-Oct-2010
Legal Land Location	SE SEC 18 TWP 46 RGE 5 W5M	Data Entry By	Marcia Chavez
Longitude, Latitude	-114:42:19, 52:57:37	Data Entry Date	29-Nov-2010
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	CMA17	Review Date	04-Nov-2010
Clear Roadway/Skew	7.3 / 0 deg.	Dept. Reviewer Name	Chris Black
AADT/Year	320 / 2009 (A)	Dept. Review Date	08-Dec-2010
Road Classification	RCU-208G-90	Follow-Up By	
Detour Length (km)			

Bridge Culvert Information

Number of Culverts	2							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1200	MP	18.3	68X13	2.8	ROUND
2	MAIN	-	1200	MP	17.3	68X13	2.8	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	Plowed in S ditch.	Gas	
Power	2 wires OH 11.0m North.	Municipal	
Others		Problem (Y/N)	No
Remarks	Old previous phone cable exposed along S shoulder at culvert 1 (photo).		

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	5	5	Curve in road 200m E near Jct Hwy13.
Vertical Alignment	6	6	Minor crest curve into horiz. curve 300m W.
Roadway Width (m)	9.000		Road is slightly wider at culverts.
Embankment	6	6	
Sideslope (__:1)	2.0		
(Height of Cover(m) : 0.4)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	5	5	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
(Pipe # : 1, Span Type:)			
Direction	N		
End Treatment (Concrete, Steel, Others, None)	NONE		
Headwall	X	X	
Collar	X	X	
Wingwalls	X	X	W culvert; N ditch (photo).
(Shape :)			

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type:)				
Cutoff Wall		X	X	
Bevel End		X	X	No bevelled end - cut square.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	250			
Scour Protection		5	6	Well grassed-in.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 150)				
Scour/Erosion		5	6	Ditch to NW retaining water (photo).
Beavers (Y/N)	No			Beavers located safely u/s near trees.
Upstream End General Rating		5	6	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1200, Type: MP)				
Barrel Last Accessible Date	15-Aug-2005			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		5	N	Dent near midspan, probably from construction.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		7	N	
Measured Span (mm)	1210			
Measured At Ring No.				
Deflection (mm)	10			
Percent Deflection	1			
Floor		N	N	Covered with water/silt.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		5	N	
Separation (mm)	10			
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		5	5	Carried forward.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1200, Type: MP)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		6	6	Minor silt accumulation over floor, typical.
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		5	N	

Bridge Culvert Barrel					
Culvert Component		Last	Now	Explanation of Condition	
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1200, Type: MP)					
Barrel Last Accessible Date				This culvert is likely older then primary span.	
Special Features					
Special Feature					
(Type :)					
Special Feature					
(Type :)					
Roof			N		
Measured Rise (mm)					
Measured At Ring No.					
Sag (mm)					
Percent Sag					
Sidewall			N		
Measured Span (mm)					
Measured At Ring No.					
Deflection (mm)					
Percent Deflection					
Floor			N		
Bulge (mm)					
Measured At Ring No.					
Abrasion (Y/N)					
Circumferential Seams			N		
Separation (mm)					
Longitudinal Seams			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			5		
Corrosion By Soil (Y/N)	Yes				
Corrosion By Water (Y/N)	Yes				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1200, Type: MP)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy			X	
Baffle			X	
(Type :)				
Waterway Adequacy			6	
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating			N	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type:)				
Direction		S		E culvert.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall			X	
Collar			X	
Wingwalls			X	
(Shape :)				
Cutoff Wall			X	
Bevel End			6	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	250			
Scour Protection			6	Heavy willow/grass growth near end of culvert.
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion			6	
Beavers (Y/N)	No			Evidence of beavers further d/s.
Downstream End General Rating			6	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	Adequate for slow meandering watercourse.
Bank Stability		6	6	
HWM (m below Top of Culvert)				No HWM visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				Bottom appears stable. Heavy grasses and many willow trees (photo). Beavers 100m u/s.
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : None)				
(Fish Compensation Measure 2 : None)				

Structure Usage				
		Last	Now	Explanation of Condition
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							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	55.4/59.1	Est. Repl. Yr	2040	Maint. Req. (Y/N)	No
Special Comments for Next Inspection	Inspect barrels of both culverts on ice to verify condition.		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	19-Jan-2014		Previous Inspection Date	15-Sep-2005			
Inspection Cycle (Default) (months)	39						
Comment							