

Bridge Culvert Inspection				
Bridge File Number	77421 -1 Bridge Culvert		Form Type	CULM
Year Built	1971		Lot No.	2
Bridge or Town Name	WESTLOCK		Inspector Name	Todd Warshawski
Located Over	TRIBUTARY TO WABASH CREEK, 8.11.84.17.7, WATERCRS-ST		Inspector Class	BR CLS B
Located On	44:00 C1 62.863		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	16-Apr-2013
Legal Land Location	NW SEC 21 TWP 59 RGE 26 W4M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-113:51:03, 54:07:21		Data Entry Date	22-Apr-2013
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Eric Carcoux
Contract Main. Area	CMA10		Review Date	21-Apr-2013
Clear Roadway/Skew	11.5 /		Dept. Reviewer Name	Brent Herrick
AADT/Year	3,890 / 2012 (A)		Dept. Review Date	23-Apr-2013
Road Classification	RAU-211.8-110		Follow-Up By	
Detour Length (km)	8			

Bridge Culvert Information

Number of Culverts	2							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1600	MP	36.1	125X26	2.8	ROUND
2	MAIN	-	1600	MP	36.1	125X26	2.8	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	East r/w.	Gas	Pipeline West & crossing 20m North.
Power	1 wire West r/w. 1 wire crossing hwy over South pipe. 2 wires crosses hwy 50m North.	Municipal	
Others		Problem (Y/N)	No
Remarks	Tagged on u/s crown of N pipe.		

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	North & South ditch of LR & Hwy 44. Intersection of Hwy 44 & Twp 594.
Vertical Alignment	9	9	
Roadway Width (m)	15.300		15.3m with accel/decel lanes at int. Crack in ACP over South pipe.
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
(Pipe # : 1, Span Type: Primary Span)			
Direction	E		North pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL		
Headwall	X	X	
Collar	X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		8	N	Snow covered
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		8	8	Not much rock, well grassed.
(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): 1600, Type: MP)				
Barrel Last Accessible Date	06-Jul-2011			Unstable ice. Viewed from ends, shape and condition appear ok.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	N	U/S barrel.
Measured Rise (mm)	1522			
Measured At Ring No.				
Sag (mm)	78			
Percent Sag	5			
Sidewall		7	N	U/S barrel.
Measured Span (mm)	1646			
Measured At Ring No.				
Deflection (mm)	46			
Percent Deflection	3			
Floor		7	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	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)				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1600, Type: MP)				
Coating		6	N	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		7	N	GR was 7 from July, 2011
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction		W		North pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		8	N	Snow covered
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Downstream End General Rating		8	8	
Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		E		South pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		8	N	Snow covered
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
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 # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1600, Type: MP)				
Barrel Last Accessible Date	06-Jul-2011			Unstable ice. Viewed from ends, shape and condition appear ok.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	N	near cl
Measured Rise (mm)	1561			
Measured At Ring No.				
Sag (mm)	39			
Percent Sag	2			
Sidewall		8	N	near cl
Measured Span (mm)	1624			
Measured At Ring No.				
Deflection (mm)	24			
Percent Deflection	2			
Floor		7	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	N	Minor tear near c/l.-JUI, 2011
Separation (mm)	50			
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)				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1600, Type: MP)				
Coating		6	N	Superficial rust, 1/3 rise.-July, 2011
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		8	N	GR was "8" from July, 2011
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		W		South pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls (Shape :)		X	X	
Cutoff Wall		X	X	
Bevel End		8	N	Snow covered
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection (Type : RIP RAP)		8	8	
(Avg. Rock Size(mm) : 200)				
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		8	8	
Bank Stability		8	8	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			

Structure Usage				
		Last	Now	Explanation of Condition
Channel Bottom Degrading/Aggrading				stable
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		8	8	

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	2013	Seal crack in ACP over South pipe.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	77.8/55.6	Sufficiency Rating (Last/Now) (%)	81.3/69.3	Est. Repl. Yr	2056	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	Kris Bosters		Previous Assistant's Name				
Next Inspection Date	16-Jan-2015		Previous Inspection Date	06-Jul-2011			
Inspection Cycle (Default) (months)	21						
Comment							