

Bridge Culvert Inspection			
Bridge File Number	80756 -1 Bridge Culvert	Form Type	CULM
Year Built	1985	Lot No.	4
Bridge or Town Name	ELK POINT	Inspector Name	Todd Warshawski
Located Over	TRIBUTARY TO NORTH SASKATCHEWAN RIVER, 6.13, WATERCRS-ST	Inspector Class	BR CLS B
Located On	LOCAL ROAD	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	03-Apr-2013
Legal Land Location	SE SEC 24 TWP 56 RGE 7 W4M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-110:53:56, 53:50:46	Data Entry Date	24-Apr-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA08	Review Date	17-Apr-2013
Clear Roadway/Skew	6.9 /	Dept. Reviewer Name	Brent Herrick
AADT/Year	10 / 2013 (E)	Dept. Review Date	01-May-2013
Road Classification	RLU-207G-60	Follow-Up By	
Detour Length (km)	3		

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	45	68X13	2.8	ROUND
2	MAIN	-	1600	MP	45	68X13	2.8	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments					
Telephone	Plowed in ditch.-not confirmed		Gas		
Power			Municipal		
Others			Problem (Y/N)	No	
Remarks	No BF tags.				

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		5	5	Pipes are approx 30m West of Hwy 41. Perpendicular to Hwy 41 in steep grade section. Drops at 7m from pit gate 100 m to the west, access to pit only. Active pit with lots of truck traffic.-Aug-2008
Vertical Alignment		3	3	
Roadway Width (m)	6.900			
Embankment		5	5	Minor ditch erosion SE, NW and NE.-Aug-2008
Sideslope (:1)	2.0			
(Height of Cover(m) : 4.5)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		3	3	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction		S		South end of east culvert.
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		7	N	Minor dent in roof of bevel, no problem.-Aug-2008 Bevel submerged.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		8	N	Under water/snow
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		8	N	Under snow/water
Beavers (Y/N)	No			
Upstream End General Rating		7	7	GR carried fwd from Aug/2008

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	08-Aug-2008			Pipe is completely iced in.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	N	Est due to silt on floor.-AUg/2008 3.1%
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	50			
Percent Sag	3			
Sidewall		8	N	Measured 1595 near c/l.-Aug/2008 At c/l.
Measured Span (mm)	1595			
Measured At Ring No.				
Deflection (mm)	5			
Percent Deflection	0			
Floor		N	N	Approx 200mm silt.-Aug/2008
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		8	N	
Separation (mm)	30			
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		8	N	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	Yes			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		9	5	Pipes iced in, water ponded in u/s channel.
Icing (Y/N)	Yes			
Siltting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		7	N	GR was 7 from Aug-2008
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction		N		North end of east culvert.
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	Bureid in snow/ice.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		5	N	Rocks settled beside bevel.-Aug/2008 Snow covered
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		5	N	
Beavers (Y/N)	No			
Downstream End General Rating		5	5	GR carried fwd from Aug-2008
Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		S		South end of west culvert.
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	Under ice/snow
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		8	N	Snow covered
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		8	N	Minor erosion channel @ East embankment, no problem yet.-Aug-2008
Beavers (Y/N)	No			
Upstream End General Rating		8	8	GR carried fwd from Aug-2008
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	08-Aug-2008			Pipe is completely iced in
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	N	
Measured Rise (mm)				
Measured At Ring No.				Est due to silt on floor.-Aug-2008
Sag (mm)	50			3.1%
Percent Sag	3			
Sidewall		8	N	
Measured Span (mm)	1600			At c/l.
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection	0			
Floor		N	N	
Bulge (mm)	0			Approx 200mm silt.-Aug-2008
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		8	N	
Separation (mm)	25			
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		8	N	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	Yes			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		9	5	Pipe iced in, water ponded in u/s channel.
Icing (Y/N)	Yes			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		8	N	GR was 8 from Aug-2008

Downstream End					
Culvert Component		Last	Now	Explanation of Condition	
(Pipe # : 2, Span Type: Secondary Span)					
Direction		N		North end of west culvert.	
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		5	N	Snow covered	
(Type : RIP RAP)					
(Avg. Rock Size(mm) : 300)					
Scour/Erosion		5	N	Snow covered	
Beavers (Y/N)	No				
Downstream End General Rating		5	5	GR carried fwd from Aug-2008	

Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		8	8	Degradation occurring at U/S areas. Gabion mats lead to file 13132 & start 60m D/S of these culverts.- Aug-2008
Bank Stability		8	8	

Structure Usage				
		Last	Now	Explanation of Condition
HWM (m below Top of Culvert)				Ice to crown in April-2013
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			
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							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	77.8/55.6	Sufficiency Rating (Last/Now) (%)	71.7/50.0	Est. Repl. Yr	2037	Maint. Req'd. (Y/N)	No
Special Comments for Next Inspection	Monitor ditch erosion. Adjust next inspection for late summer/fall.		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	03-Jan-2018		Previous Inspection Date	08-Aug-2008			
Inspection Cycle (Default) (months)	57						
Comment							