Bridge Culvert Inspection

Bridge File Number	00797 -1 Bridge Culvert	Form Type	CUL1
Year Built	1991	Lot No.	4
Bridge or Town Name	THORSBY	Inspector Name	Todd Warshawski
Located Over	WEED CREEK, 6.110, WATERCRS-ST	Inspector Class	BR CLS B
Located On	39:10 C1 0.629	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	07-Jan-2013
Legal Land Location	NW SEC 26 TWP 49 RGE 28 W4M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-113:59:33, 53:15:54	Data Entry Date	23-Jan-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA11	Review Date	16-Jan-2013
Clear Roadway/Skew	10.6 / 20 deg. (RHF)	Dept. Reviewer Name	Brent Herrick
AADT/Year	4,570 / 2011 (A)	Dept. Review Date	23-Jan-2013
Road Classification	RAU-210-110	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	-	8540	SP	76.2	152X51	6.0	ROUND

Special Features	
Special Features Comment	BF tag on u/s headwall.

Utilities (Located at)

Utility Attachments			
Telephone	South & North r/w.	Gas	
Power	2 wires North r/w.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Farm entrance to east.
Vertical Alignment		6	6	In sag curve, no passing @ crest curve.
Roadway Width (m)	10.600			
Embankment		8	8	
Sideslope (__:1)	3.0			
(Height of Cover(m) : **3.2**)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		**6**	**6**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		5	5	Vertical cracking on headwall up to 4mm wide.
Collar		5	5	Cracks in shoulders up to 2mm every 400mm. Separated from cutoff wall.-photo
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		7	7	Floor not rated.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		N	N	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **700**)				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
Upstream End General Rating		**5**	**5**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 8540, Type: SP**)				
Barrel Last Accessible Date	07-Jan-2013			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	6	Roof appears good.
Measured Rise (mm)				Rise not measured due to ice.
Measured At Ring No.				
Sag (mm)	486			est
Percent Sag	1			
Sidewall		5	5	Rings 16 & 17 are pushing inward on the west side approx 300mm, small localized area. Sidewalls appear to be in good condition.
Measured Span (mm)	8585			
Measured At Ring No.	9			Span not measured due to size.
Deflection (mm)	45			
Percent Deflection	1			
Floor		N	N	Silt/ice on floor.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		7	7	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				2N stagger.
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		5	5	Superficial rust along lower sidewall.
Corrosion By Soil (Y/N)	Yes			
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): , Rise (mm): 8540, Type: SP**)				
Fish Passage Adequacy		9	9	
Baffle		X	X	
(Type :)				
Waterway Adequacy		9	9	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**5**	**5**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		N		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		5	5	Vertical cracking on headwall 5mm wide. Exposed rebar at face.
Collar		5	5	Vertical cracks every 400mm on collar, 4mm wide.
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	
Bevel End		7	7	Floor not rated.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		N	N	Snow covered
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **400**)				
Scour/Erosion		N	N	Settlement of fill along collar.
Beavers (Y/N)	No			
Downstream End General Rating		**5**	**5**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		5	6	
Bank Stability		5	5	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				
Channel General Rating		**5**	**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						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**55.6/55.6**	**Sufficiency Rating (Last/Now) (%)**	**64.9/65.4**	Est. Repl. Yr	2040	Maint. Reqd. (Y/N)	No

Special Comments for Next Inspection	Level 2 completed 07-Nov-2002	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	Wade Nanninga	Previous Assistant's Name			
Next Inspection Date	07-Oct-2014	Previous Inspection Date	26-Jan-2011		
Inspection Cycle (Default) (months)	21				
Comment					