

Bridge Culvert Inspection				
Bridge File Number	76945 -1 Bridge Culvert		Form Type	CUL1
Year Built	1996		Lot No.	2
Bridge or Town Name	HINTON		Inspector Name	Todd Warshawski
Located Over	BERRYS CREEK, 8.11.107.41.5, WATERCRS-ST		Inspector Class	BR CLS B
Located On	40:28 C1 10.965		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	30-Oct-2012
Legal Land Location	SE SEC 33 TWP 47 RGE 24 W5M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-117:26:49, 53:05:48		Data Entry Date	21-Nov-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Eric Carcoux
Contract Main. Area	CMA13		Review Date	13-Nov-2012
Clear Roadway/Skew	9.5 / 40 deg. (RHF)		Dept. Reviewer Name	Brent Herrick
AADT/Year	490 / 2011 (A)		Dept. Review Date	22-Nov-2012
Road Classification	RAU-213.4-110		Follow-Up By	
Detour Length (km)	20			

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	3360	SP	84.7	152X51	3.0	ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments				
Telephone	West r/w.		Gas	
Power			Municipal	
Others			Problem (Y/N)	No
Remarks	File tag in place.			

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	Superelevated, S curve.
Vertical Alignment		7	7	
Roadway Width (m)	9.500			Segregation at cold joint along cl.
Embankment		N	N	Snow covered. No problem evident.
Sideslope ( __:1)	3.0			
(Height of Cover(m) : 5.7)				
Guardrail (Y/N)	Yes			Minor strike damage. 1 broken post at NW.
<b>Approach Road / Embankment General Rating</b>		<b>7</b>	<b>6</b>	

**Upstream End**

Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		9	8	
Collar		N	N	Snow covered.
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		N	8	
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			(19/Apr/2007)
Above/Below (mm)	1500			
Scour Protection		N	N	(Sandstone and shale. 27/Sept/2005)Snow covered.
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>800</b> )				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>8</b>	<b>8</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3360, Type: SP)				
Barrel Last Accessible Date	30-Oct-2012			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		7	7	
Measured Rise (mm)	3298			
Measured At Ring No.	13			
Sag (mm)	62			
Percent Sag	2			
Sidewall		7	7	
Measured Span (mm)	3428			
Measured At Ring No.	13			
Deflection (mm)	68			
Percent Deflection	2			
Floor		N	N	Rock along floor.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		9	8	
Separation (mm)	0			
Longitudinal Seams		9	8	
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		7	7	Superficial rust on lower 1/2.
Corrosion By Soil (Y/N)				
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): , Rise (mm): 3360, Type: SP)				
Fish Passage Adequacy		7	7	
Baffle		7	7	Concrete weir with center opening c/w steel buffer angles.
(Type : WEIR)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>7</b>	<b>7</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)		STEEL		
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		N	6	
Heaving (mm)	0			Pushed inward by riprap placement.
Invert Above/Below Stream Bed	BELOW			(19/Apr/2007)
Above/Below (mm)	600			
Scour Protection		N	N	(Sandstone and shale. 27/Sept/2005) Snow covered.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 800)				
Scour/Erosion		N	N	
Beavers (Y/N)		No		
<b>Downstream End General Rating</b>		<b>8</b>	<b>6</b>	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)		No		
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)		No		
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<b>Channel General Rating</b>		<b>7</b>	<b>7</b>	

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	Repair guardrail and 1 post.					
OTHER ACTION	2013	Seal cracks in ACP					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>77.8/77.8</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>81.9/78.7</b>	Est. Repl. Yr	2048	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	Shane Hall		Previous Assistant's Name				
Next Inspection Date	30-Jul-2014		Previous Inspection Date	22-Nov-2010			
Inspection Cycle (Default) (months)	21						
Comment							