

Bridge Culvert Inspection			
Bridge File Number	76946 -1 Bridge Culvert	Form Type	CUL1
Year Built	1996	Lot No.	2
Bridge or Town Name	HINTON	Inspector Name	Todd Warshawski
Located Over	GREGG RIVER, 8.11.107.41, WATERCRS-ST	Inspector Class	BR CLS B
Located On	40:28 C1 12.491	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	30-Oct-2012
Legal Land Location	NE SEC 32 TWP 47 RGE 24 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-117:28:07, 53:05:58	Data Entry Date	21-Nov-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA13	Review Date	12-Nov-2012
Clear Roadway/Skew	9.5 / 15 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	-	5230	SP	62.8	152X51	5.0,5.0,5.0	ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	East shoulder & west shoulder.	Gas	
Power		Municipal	
Others	File tag in place.	Problem (Y/N)	Yes
Remarks	Telus lines exposed over both ends.		

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		5	5	Blind horizontal & steep sag curves. No passing.
Vertical Alignment		6	6	
Roadway Width (m)	9.500			
Embankment		N	N	(Shallow rivulet on sideslopes. 19/Arp/2007) Snow covered.
Sideslope (__:1)	1.5			3:1 East.
(Height of Cover(m) : 9)				CSP ditch drain along SE slope.
Guardrail (Y/N)	Yes			
<b>Approach Road / Embankment General Rating</b>		<b>5</b>	<b>5</b>	

**Upstream End**

Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		9	7	Form bolt holes not patched.
Collar		N	N	Snow covered.
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		8	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			(19/Apr/2007) Snow covered.
Above/Below (mm)	500			
Scour Protection		N	N	(Shale is deteriorating. 19/Apr/2007) Snow covered.
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>600</b> )				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>5</b>	<b>5</b>	'5' rating carried forward since 27/Sept/2005.
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 5230, Type: SP)				
Barrel Last Accessible Date	30-Oct-2012			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		8	8	
Measured Rise (mm)	5257			
Measured At Ring No.	11			
Sag (mm)	4			
Percent Sag	0			
Sidewall		7	7	
Measured Span (mm)	5197			
Measured At Ring No.	10			
Deflection (mm)	133			
Percent Deflection	3			
Floor		N	N	Water/ice covered.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		N	8	
Separation (mm)	0			
Longitudinal Seams		N	8	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				2N
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		6	6	
Corrosion By Soil (Y/N)	Yes			Minor superficial rust. Lower 1/4. Stains at upper seams and bolts.
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): 5230, Type: SP)				
Fish Passage Adequacy		7	7	
Baffle		N	8	Concrete weir with steel buffer angles.
(Type : WEIR)				
Waterway Adequacy		9	8	@ u/s end
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
<b>Barrel General Rating</b>		<b>N</b>	<b>7</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)		CONCRETE		
Headwall		N	6	
Collar		X	X	
Wingwalls (Shape : )		N	6	Medium diagonal cracks from culvert. CIP concrete retaining wall 400mm c 10m x 2.0 ht.
Cutoff Wall		N	N	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed		ABOVE		
Above/Below (mm)	100			
Scour Protection		N	N	(Shale and sandstone. 19/Apr/2007) Snow covered.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 700)				
Scour/Erosion		N	N	
Beavers (Y/N)		No		
<b>Downstream End General Rating</b>		<b>7</b>	<b>6</b>	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	Sharp bend on outlet & inlet.
Bank Stability		5	6	Shear rock face.
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)		Yes		At inlet-photo
Channel Bottom Degrading/Aggrading				Not visible.
Beavers (Y/N)		No		
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<b>Channel General Rating</b>		<b>5</b>	<b>5</b>	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION	2012	Remove debris at inlet.					
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>55.6/77.8</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>68.8/74.6</b>	Est. Repl. Yr	2058	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor riprap deterioration.		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							