Bridge Culvert Inspection

Bridge File Number	77049 -1 Bridge Culvert	Form Type	CUL1
Year Built	1992	Lot No.	4
Bridge or Town Name	HINTON	Inspector Name	Todd Warshawski
Located Over	COLD CREEK, 8.11.141.2, WATERCRS-ST	Inspector Class	BR CLS B
Located On	40:28 C1 39.563	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	30-Oct-2012
Legal Land Location	SW SEC 15 TWP 50 RGE 25 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-117:34:23, 53:18:32	Data Entry Date	19-Nov-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA13	Review Date	13-Nov-2012
Clear Roadway/Skew	12.8 / 47 deg. (RHF)	Dept. Reviewer Name	Brent Herrick
AADT/Year	490 / 2011 (A)	Dept. Review Date	20-Nov-2012
Road Classification	RAU-211.8-110	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	140.2	152X51	4.0,5.0	ROUND

Special Features	
Special Features Comment	

Utilities (Located at)

Utility Attachments			
Telephone	West r/w and East 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		8	8	Crest to North with reduced site distance.
Vertical Alignment		6	5	
Roadway Width (m)	12.800			
Embankment		N	N	Snow covered.
Sideslope (__:1)	2.0			
(Height of Cover(m) : **16**)				
Guardrail (Y/N)	Yes			Minor strike damage, still functional.
Approach Road / Embankment General Rating		**6**	**5**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	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		8	8	
Heaving (mm)	100			
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	
Beavers (Y/N)	No			
Upstream End General Rating		**7**	**7**	G.R. from 22/Sept/2005 was 7

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			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)	3306			
Measured At Ring No.	13			
Sag (mm)	54			
Percent Sag	2			
Sidewall		7	7	
Measured Span (mm)	3436			
Measured At Ring No.	34			
Deflection (mm)	76			
Percent Deflection	2			
Floor		7	7	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		8	8	
Separation (mm)	0			
Longitudinal Seams		8	8	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				2N
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		6	5	Rust coming through bolt holes throughout. Superficial rust on lower 1/4.
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): 3360, Type: SP**)				
Fish Passage Adequacy		7	7	
Baffle		7	5	Rocks are only Rings 32-37.
(Type :)				
Waterway Adequacy		9	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**7**	**7**	

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		9	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	750			
Scour Protection		N	N	Snow covered.
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **450**)				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
Downstream End General Rating		**8**	**8**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		5	5	Sharp bends U/S & D/S.
Bank Stability		N	N	(Eroded near vertical banks U/S, 1m high. 25/Sept/2005) Snow covered.
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**)				
Channel General Rating		**5**	**5**	

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) (%)	**77.8/77.8**	**Sufficiency Rating (Last/Now) (%)**	**81.7/78.4**	Est. Repl. Yr	2048	Maint. Reqd. (Y/N)	No

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	23-Nov-2010		
Inspection Cycle (Default) (months)	21				
Comment					