Bridge Culvert Inspection

Bridge File Number	79699 -1 Bridge Culvert	Form Type	CUL1
Year Built	1982	Lot No.	3
Bridge or Town Name	SEEBE	Inspector Name	Garry Roberts
Located Over	STONY CK, 2.13.56.1.1, WATERCRS-ST	Inspector Class	BR CLS A
Located On	68:04 C1 3.350	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	28-Aug-2012
Legal Land Location	SW SEC 13 TWP 24 RGE 8 W5M	Data Entry By	Lauren Korte
Longitude, Latitude	-114:59:31, 51:02:21	Data Entry Date	26-Sep-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Tom Carey
Contract Main. Area	CMA28	Review Date	31-Aug-2012
Clear Roadway/Skew	12 / -40 deg. (LHF)	Dept. Reviewer Name	Tim Davies
AADT/Year	310 / 2011 (A)	Dept. Review Date	02-Oct-2012
Road Classification	RAU-211.8-110	Follow-Up By	
Detour Length (km)	16		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2317	2561	SPE	51.2	152X51	4.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks	None visible		

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		4	4	South curve - reduced speed. Grade rising to East. @ North.
Vertical Alignment		5	5	
Roadway Width (m)	12.000			
Embankment		6	6	Average HOC.
Sideslope (__:1)	2.5			
(Height of Cover(m) : **2.5**)				
Guardrail (Y/N)	Yes			Railing detached from post at West end of North guardrail.
Approach Road / Embankment General Rating		**4**	**4**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		N		North.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	
Collar		7	7	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	(bolts missing nuts and nuts loose)

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		5	5	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **400**)				
Scour/Erosion		5	5	
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): 2317, Rise (mm): 2561, Type: SPE**)				
Barrel Last Accessible Date	28-Aug-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	Inward.
Measured Rise (mm)	2546			
Measured At Ring No.	6			
Sag (mm)	15			
Percent Sag	1			
Sidewall		7	7	Construction damage to East sidewall @ R1-minor.
Measured Span (mm)	2315			
Measured At Ring No.	6			
Deflection (mm)	2			
Percent Deflection	0			
Floor		7	7	R9-R13 covered with rock.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		8	8	
Separation (mm)	0			
Longitudinal Seams		7	7	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		6	6	Superficial corrosion on floor.
Corrosion By Soil (Y/N)	No			
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): 2317, Rise (mm): 2561, Type: SPE**)				
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
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		S		South.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	Rock imbedded in concrete.
Collar		7	7	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	Buried.
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		7	7	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **500**)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		**7**	**7**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		5	5	Sharp d/s& u/s bend. Bends in channel.
Bank Stability		6	6	
HWM (m below Top of Culvert)				HWM Not visible.
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		**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	2013	Reattach rail to post.				
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**77.8/77.8**	**Sufficiency Rating (Last/Now) (%)**	**64.2/64.1**	Est. Repl. Yr	2035	Maint. Reqd. (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	Garry Roberts	Previous Assistant's Name	
Next Inspection Date	28-May-2014	Previous Inspection Date	06-Jan-2011
Inspection Cycle (Default) (months)	21		
Comment			