

Bridge Culvert Inspection				
Bridge File Number	75521 -1 Bridge Culvert		Form Type	CUL1
Year Built	1962		Lot No.	4
Bridge or Town Name	HALKIRK		Inspector Name	Jason Saly
Located Over	SLOUGH CREEK, 5.23.6, WATERCRS-ST		Inspector Class	BR CLS A
Located On	855:06 C1 16.830		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	16-Jun-2010
Legal Land Location	SW SEC 12 TWP 40 RGE 16 W4M		Data Entry By	Jill Potts
Longitude, Latitude	-112:11:17, 52:25:34		Data Entry Date	02-Jul-2010
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA21		Review Date	24-Jun-2010
Clear Roadway/Skew	9.2 /		Dept. Reviewer Name	Chris Black
AADT/Year	490 / 2009 (A)		Dept. Review Date	09-Jul-2010
Road Classification	RCU-209-110		Follow-Up By	
Detour Length (km)	5			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	2134	1549	RPP	24.4	152X51	2.8	PIPE ARCH
Special Features	VERT TIMBER STRUTS							
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	West side hanging on fence.		Gas	
Power	6 wire 16m east of centerline.		Municipal	
Others			Problem (Y/N)	No
Remarks				

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	9	8	90m south of NE 11. Bottom of sag with limited sight distance.
Vertical Alignment	7	7	
Roadway Width (m)	9.200		Wide longitudinal crack in West shoulder in ACP patch. ACP patch for 200m on West shoulder.
Embankment	5	5	
Sideslope (__:1)	3.0		
(Height of Cover(m) : 0.7)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	7	7	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	W		
End Treatment (Concrete, Steel, Others, None)	STEEL		
Headwall	X	X	
Collar	X	X	
Wingwalls	X	X	
(Shape :)			
Cutoff Wall	X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		5	5	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		6	6	Ingrown.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
Upstream End General Rating		6	5	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2134, Rise (mm): 1549, Type: RPP)				
Barrel Last Accessible Date	14-Nov-2003			Extended on west end in 1981. Pipe half full of water. Viewed from both ends.
Special Features				
Special Feature		8	N	150 x 100mm T.T.
(Type : VERT TIMBER STRUTS)				
Special Feature				
(Type :)				
Roof		4	N	(Roof sagging 3rd ring under Southbound lane. 14/Nov/2003)
Measured Rise (mm)	1549			Estimate.
Measured At Ring No.	3			
Sag (mm)	100			6.5%
Percent Sag	7			
Sidewall		5	N	Estimate.
Measured Span (mm)	2184			
Measured At Ring No.	3			
Deflection (mm)	50			2.3%
Percent Deflection	2			
Floor		N	N	(D/S South haunch shows signs of buckling. Rise 1515mm, 3rd ring. 14/11/2003)
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	
Separation (mm)	0			
Longitudinal Seams		N	N	(1 ring is cracked South longitudinal seam. 50% proper lap. 14/11/2003)
Total No. of Cracked Rings	1			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		N	N	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			Negative camber in original barrel.

Bridge Culvert Barrel					
Culvert Component		Last	Now	Explanation of Condition	
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2134, Rise (mm): 1549, Type: RPP)					
Ponding (Y/N)	Yes				
Fish Passage Adequacy		5	5		
Baffle		X	X		
(Type :)					
Waterway Adequacy		6	6	Minor drift caught on struts.	
Icing (Y/N)	No				
Silting (Y/N)	No				
Drift (Y/N)	Yes				
Barrel General Rating		4	4	G.R. carried forward from 14/Nov/2003, based on roof rating.	
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		5	5		
Heaving (mm)	150				
Invert Above/Below Stream Bed	BELOW				
Above/Below (mm)	150				
Scour Protection		5	6	Ingrown.	
(Type : RIP RAP)					
(Avg. Rock Size(mm) : 200)					
Scour/Erosion		5	6		
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	5	Meander.	
Bank Stability		6	6		
HWM (m below Top of Culvert)				HWM not visible.	
Drift (Y/N)	No				
Channel Bottom Degrading/Aggrading	DEGRADING			(00/11/22) Not visible.	
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 #	
OVERLAY DECK							
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) (%)	44.4/44.4	Sufficiency Rating (Last/Now) (%)	54.8/53.7	Est. Repl. Yr	2021	Maint. Req. (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	Tim Davies		Previous Assistant's Name				
Next Inspection Date	16-Sep-2013		Previous Inspection Date	22-Mar-2007			
Inspection Cycle (Default) (months)	39						
Comment							