

Bridge Culvert Inspection				
Bridge File Number	76456 -1 Bridge Culvert		Form Type	CUL1
Year Built	1966		Lot No.	4
Bridge or Town Name	LUNDBRECK		Inspector Name	Garry Roberts
Located Over	TRIBUTARY TO CROWSNEST RIVER, 2.12.37.2, WATERCRS-ST		Inspector Class	BR CLS A
Located On	3:04 C1 14.211		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	29-Nov-2011
Legal Land Location	SW SEC 30 TWP 7 RGE 1 W5M		Data Entry By	Alyssa Boynton
Longitude, Latitude	-114:07:40, 49:35:07		Data Entry Date	09-Jan-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Tom Carey
Contract Main. Area	CMA26		Review Date	08-Dec-2011
Clear Roadway/Skew	13 / 8 deg. (RHF)		Dept. Reviewer Name	Tim Davies
AADT/Year	3,630 / 2010 (A)		Dept. Review Date	10-Jan-2012
Road Classification	RAU-209-110		Follow-Up By	
Detour Length (km)	3			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2027	2241	SPE	76.8	152X51	3.5	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others	Fibre optics @ S R/W	Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	Gradual curve and hill to the east. Passing allowed. W of BF 76457
Vertical Alignment	7	7	
Roadway Width (m)	13.000		
Embankment	7	7	
Sideslope (__:1)	2.5		
(Height of Cover(m) : 11)			
Guardrail (Y/N)	Yes		
Approach Road / Embankment General Rating	7	7	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	S		South end.
End Treatment (Concrete, Steel, Others, None)	NONE		
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		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Upstream End General Rating		7	7	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2027, Rise (mm): 2241, Type: SPE)				
Barrel Last Accessible Date	29-Nov-2011			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	6	Minor damage at roof at u/s end.
Measured Rise (mm)	2166			
Measured At Ring No.	11			
Sag (mm)	75			
Percent Sag	3			
Sidewall		7	7	
Measured Span (mm)	2070			
Measured At Ring No.	11			
Deflection (mm)	43			
Percent Deflection	2			
Floor		6	6	Several large rocks throughout barrel
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		7	7	
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)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		5	5	Minor superficial corrosion on floor. Alkali staining at upper seams of end rings both ends
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): 2027, Rise (mm): 2241, Type: SPE)				
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	5	Has flowed full. See HWM notes.
Icing (Y/N)	No			
Silting (Y/N)	Yes			Up to 400 mm rock @ some areas-cl II.
Drift (Y/N)	No			
Barrel General Rating		6	6	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		North end.
End Treatment (Concrete, Steel, Others, None)		STEEL		
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed		ABOVE		
Above/Below (mm)	300			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 450)				
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		7	7	
Bank Stability		6	6	
HWM (m below Top of Culvert)	2.1			(Pipe has flowed full with 2.1 m head - 920811). No Visible HWM.
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		7	7	

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) (%)	66.7/66.7	Sufficiency Rating (Last/Now) (%)	62.6/62.6	Est. Repl. Yr	2024	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	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	29-Aug-2013		Previous Inspection Date	18-May-2010			
Inspection Cycle (Default) (months)	21						
Comment							