

Bridge Culvert Inspection				
Bridge File Number	74662 -1 Bridge Culvert		Form Type	CUL1
Year Built	1968		Lot No.	4
Bridge or Town Name	EXSHAW		Inspector Name	Garry Roberts
Located Over	TRIBUTARY TO BOW RIVER, 2.13.62, WATERCRS-ST		Inspector Class	BR CLS A
Located On	1:02 L1 17.996;1:02 R1 18.093		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	07-Feb-2012
Legal Land Location	NW SEC 17 TWP 24 RGE 9 W5M		Data Entry By	Lauren Korte
Longitude, Latitude	-115:13:29, 51:02:48		Data Entry Date	16-Mar-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Tom Carey
Contract Main. Area	CMA28		Review Date	22-Feb-2012
Clear Roadway/Skew	26 /		Dept. Reviewer Name	Tim Davies
AADT/Year	16,520 / 2010 (A)		Dept. Review Date	22-Mar-2012
Road Classification	RAD-412.4-120		Follow-Up By	
Detour Length (km)	1			

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	61	152X51	2.8	ELLIPSE
Special Features		BEAVR CTRL DEV, SHOTCRETE BEAM						
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	North ditch.		Gas	3 m NORTH OF D/S END.
Power	3 West main 40 m North of cl.		Municipal	
Others	Fibre Optics in median.		Problem (Y/N)	No
Remarks				

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	
Vertical Alignment		7	7	
Roadway Width (m)	26.000			
Embankment		7	7	Rock mat at shoulders and median.
Sideslope (__:1)	4.0			
(Height of Cover(m) : 1.2)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		7	7	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction				South end.
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		7	7	
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		7	7	Bevel end wired over.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		7	7	Well ingrown.
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	07-Feb-2012			
Special Features				
Special Feature		7	7	Ring 8 only
(Type : BEAVR CTRL DEV)				
Special Feature		7	7	
(Type : SHOTCRETE BEAM)				
Roof		6	6	150 mm roof bent @ ring #8.
Measured Rise (mm)	2230			
Measured At Ring No.	8			
Sag (mm)	11			
Percent Sag				
Sidewall		6	6	Minor sidewall damage East wall @ ring #7.
Measured Span (mm)	2005			
Measured At Ring No.	8			
Deflection (mm)	22			
Percent Deflection	1			
Floor		6	6	FLOOR SILT COVERED 400 mm DP @ D/S 1/3. U/S 3/4 of floor seen-has abrasion & scaling.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		6	6	
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		4	4	Heavy scaling and pitting on floor @ U/S end. Minor soil corrosion at upper seams.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
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		6	6	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	6	400mm silt at D/S 1/3.
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		6	6	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction				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)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		8	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		8	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	Wide low banks @ D/S.
Bank Stability		7	7	
HWM (m below Top of Culvert)	1.5			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) (%)	70.2/66.8	Est. Repl. Yr	2025	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	07-Nov-2013		Previous Inspection Date	27-Sep-2010			
Inspection Cycle (Default) (months)	21						
Comment							