

Bridge Culvert Inspection				
Bridge File Number	74661 -1 Bridge Culvert		Form Type	CUL1
Year Built	1957		Lot No.	1
Bridge or Town Name	EXSHAW		Inspector Name	Garry Roberts
Located Over	SMITH CK, 2.13.61, WATERCRS-ST		Inspector Class	BR CLS A
Located On	1:02 L1 23.421;1:02 R1 23.491		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	08-Feb-2012
Legal Land Location	NW SEC 14 TWP 24 RGE 9 W5M		Data Entry By	Anne Roberts
Longitude, Latitude	-115:09:24, 51:03:04		Data Entry Date	12-Mar-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Tom Carey
Contract Main. Area	CMA28		Review Date	21-Feb-2012
Clear Roadway/Skew	27.2 /		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	PI./Slab Thickness	Shape
1	MAIN	6100	2140	BPR	60.7			RECTANGLE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments							
Telephone	THRU THE CULVERT N & S DITCH			Gas	SOUTH R/W		
Power	3 W MAIN TRANSMISSION LINE			Municipal			
Others	40 M SOUTH OF CENTRELINE			Problem (Y/N)	No		
Remarks	FIBRE OPTICS MAY BE IN MEDIAN.						

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	6	7	Culvert at top of vertical curve.
Vertical Alignment	6	6	
Roadway Width (m)	27.200		
Embankment	7	7	Wrong lap at NW
Sideslope (_ :1)	4.0		
(Height of Cover(m) : 1.3)			
Guardrail (Y/N)	Yes		
Approach Road / Embankment General Rating	6	6	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction			South end.
End Treatment (Concrete, Steel, Others, None)	CONCRETE		
Headwall	7	7	Headwall is vS curb girder
Collar	X	X	
Wingwalls	6	6	
(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				
Above/Below (mm)	0			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Upstream End General Rating		6	6	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 6100, Rise (mm): 2140, Type: BPR)				
Barrel Last Accessible Date	08-Feb-2012			
Special Features				
Special Feature				U/S is 2 "VS" girders with 250 mm of asphalt on them. Also rust stains at cracking of girder bottom, likely from pre-stress strands. Although cracks are on interior girder it still acts as a curb and is outside wheel path (1 point bump to rating)
(Type :)				
Special Feature				
(Type :)				
Roof		6	6	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		5	5	SCALING @ OLD SIDEWALL @ N JOINT & @ W SIDE- minor spalling also
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection				
Floor		X	X	No floor. - ROCK
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		6	6	
Separation (mm)	10			
Longitudinal Seams		X	X	
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)				
Longitudinal Stagger (Y/N)				
Coating		X	X	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
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): 6100, Rise (mm): 2140, Type: BPR)				
Fish Passage Adequacy		5	5	Fish observed at inspection
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		5	3	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction				North end
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		6	6	
Collar		X	X	
Wingwalls		6	6	NE at top 30 mm inward NW at top 28 mm inward -MINOR MOVEMENT
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		6	6	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	Waterfall 30 m upstream.
Bank Stability		7	7	
HWM (m below Top of Culvert)				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	2012	Investigate and repair corrosion cracking at VS girders					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/33.3	Sufficiency Rating (Last/Now) (%)	62.7/52.4	Est. Repl. Yr	2030	Maint. Req. (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	08-Nov-2013		Previous Inspection Date	27-Sep-2010			
Inspection Cycle (Default) (months)	21						
Comment							