

Bridge Culvert Inspection			
Bridge File Number	74421 -1 Bridge Culvert	Form Type	CUL1
Year Built	1960	Lot No.	4
Bridge or Town Name	PARKLAND BEA	Inspector Name	Jon Davies
Located Over	TRIBUTARY TO MOSQUITO CREEK, 2.12.12.12.3, WATERCRS-ST	Inspector Class	BR CLS B
Located On	2:10 R1 17.003;2:10 L1 16.951	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	18-Oct-2011
Legal Land Location	SE SEC 36 TWP 15 RGE 28 W4M	Data Entry By	Erin Roberts
Longitude, Latitude	-113:43:08, 50:18:09	Data Entry Date	21-Nov-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	CMA26	Review Date	08-Nov-2011
Clear Roadway/Skew	26 / -30 deg. (LHF)	Dept. Reviewer Name	Tim Davies
AADT/Year	8,630 / 2010 (A)	Dept. Review Date	25-Nov-2011
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	2610	2880	SPE	93.9	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	East r/w.	Gas	
Power		Municipal	
Others	Fibre optics @ West and East r/w	Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	6	6	CURVE 100 m SOUTH
Vertical Alignment	9	8	
Roadway Width (m)	26.000		
Embankment	7	7	At West 4:1 @ ROADWAY 1:1 @ D/S END @ PIPE East old R/R embankment
Sideslope (__:1)	1.0		
(Height of Cover(m) : 5.1)			
Guardrail (Y/N)	Yes		West side only
Approach Road / Embankment General Rating	6	6	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	W		WEST
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		6	5	
Heaving (mm)	200			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		5	5	Avg 300 mm rock settled up to 300 mm below top of bevel. Gabions at SW corner extending up along ditch
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
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): 2610, Rise (mm): 2880, Type: SPE)				
Barrel Last Accessible Date	18-Oct-2011			
Special Features				
Special Feature				Only able to enter pipe to 3/4 l. Due to high water level
(Type :)				
Special Feature				
(Type :)				
Roof		5	5	R20 Rise = 2750mm
Measured Rise (mm)	2727			
Measured At Ring No.	7			
Sag (mm)	153			
Percent Sag	5			
Sidewall		5	5	R20 Span= 2765mm
Measured Span (mm)	2780			
Measured At Ring No.	7			
Deflection (mm)	170			
Percent Deflection	7			
Floor		N	N	(Ice to 1.8 of roof) 26-Jan-2010
Bulge (mm)				High water level P.R. N
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		6	6	Lower seams under water
Total No. of Cracked Rings	0			(ring #7 has improper lap - only.) 26-Jan-2010
Total No. of Rings with Two Cracked Seams	0			ALL RINGS HAVE STAGGER EXCEPT #1 TO #6
Min. Remaining Steel Between Cracks (mm)	0			
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		5	5	Soil staining at upper seams and plates SUPERFICIAL CORROSION @ WATERLINE, AND @ D/S LOWER CIRCUMFERENTIAL SEAMS AND ISOLATED AREAS OF SIDEWALL))
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	Yes			d/s empties into dugout

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2610, Rise (mm): 2880, Type: SPE)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	5	(@ d/s 1/3 ice within 1m of roof) 26-Jan-2010
Icing (Y/N)	Yes			(Ice is within 800mm of roof @ d/s end) 26-Jan-2010
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		5	5	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		East d/s end butts against concrete arch culvert for CPR tracks. Drainage between tracks and NBL through a riser opening
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		5	5	
Collar		X	X	
Wingwalls		5	5	D/S end is now the East end of the CPR arch structure
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			Unable to determine new d/s invert height due to water level
Above/Below (mm)	300			
Scour Protection		5	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		5	5	
Beavers (Y/N)	No			
Downstream End General Rating		5	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	5	Inlet dammed u/s for dugout 30 m u/s. Outlet at CPR structure into dugout Dam and dugout at d/s end.
Bank Stability		5	5	
HWM (m below Top of Culvert)	1.0			(Grass on bolts @ 1:00 position) 26-Jan-2010 No HWM visible
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	AGGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		6	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							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	54.8/54.1	Est. Repl. Yr	2031	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	18-Jul-2013		Previous Inspection Date	26-Jan-2010			
Inspection Cycle (Default) (months)	21						
Comment							