

Bridge Culvert Inspection			
Bridge File Number	75185 -1 Bridge Culvert	Form Type	CULM
Year Built	2000	Lot No.	3
Bridge or Town Name	RAINIER	Inspector Name	Jon Davies
Located Over	EID - IRRIGATION C, WATERCRS-IC	Inspector Class	BR CLS B
Located On	873:02 C1 5.973	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	22-Mar-2012
Legal Land Location	NE SEC 20 TWP 16 RGE 15 W4M	Data Entry By	Anne Roberts
Longitude, Latitude	-112:01:46, 50:22:03	Data Entry Date	16-Apr-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	CMA23	Review Date	24-Mar-2012
Clear Roadway/Skew	10.5 /	Dept. Reviewer Name	Tim Davies
AADT/Year	400 / 2011 (A)	Dept. Review Date	17-Apr-2012
Road Classification	RCU-209-110	Follow-Up By	
Detour Length (km)	20		

Bridge Culvert Information

Number of Culverts	2							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	3300	MP	24	125X26	2.8	ROUND
2	MAIN	-	3300	MP	24	125X26	2.8	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	South ditch	Gas	Crossing 30 m East
Power	3 wire 150m W	Municipal	
Others	Fibre optic cable on South ROW	Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	5	6	Located in middle of back to back curves
Vertical Alignment	6	7	
Roadway Width (m)	9.600		
Embankment	8	7	Collision damage at NE guardrail
Sideslope (__:1)	3.0		
(Height of Cover(m) : 0.6)			
Guardrail (Y/N)	Yes		
Approach Road / Embankment General Rating	5	6	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)			
Direction			SW
End Treatment (Concrete, Steel, Others, None)	CONCRETE		
Headwall	8	8	
Collar	8	8	
Wingwalls	X	X	
(Shape :)			

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Cutoff Wall		X	N	
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Upstream End General Rating		8	8	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3300, Type: MP)				
Barrel Last Accessible Date	28-Apr-2000			West pipe
Special Features				
Special Feature				1200mm of water in barrel - not accessible Viewed from ends - shape looks good
(Type :)				
Special Feature				
(Type :)				
Roof		N	N	
Measured Rise (mm)	3290			
Measured At Ring No.				
Sag (mm)	0			
Percent Sag	0			
Sidewall		N	N	
Measured Span (mm)	3316			
Measured At Ring No.				
Deflection (mm)	10			
Percent Deflection	0			
Floor		N	N	Inward deflection
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	
Separation (mm)	25			
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)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		7	7	Sidewall roof seen
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3300, Type: MP)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		9	9	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		N	N	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction				NW
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	
Collar		8	7	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	N	
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		8	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		8	7	
Beavers (Y/N)	No			
Downstream End General Rating		8	7	
Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction				SE
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	
Collar		8	8	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Upstream End General Rating		8	8	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3300, Type: MP)				
Barrel Last Accessible Date	28-Apr-2000			East pipe
Special Features				
Special Feature				1200mm of water in barrel - not accessible Viewed form ends - shape looks good
(Type :)				
Special Feature				
(Type :)				
Roof		N	N	
Measured Rise (mm)	3278			
Measured At Ring No.				
Sag (mm)	0			
Percent Sag	0			
Sidewall		N	N	Inward deflection
Measured Span (mm)	3324			
Measured At Ring No.				
Deflection (mm)	22			
Percent Deflection				
Floor		N	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	
Separation (mm)	25			
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)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		7	7	sidewall & Roof seen
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3300, Type: MP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		X	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		9	9	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		N	N	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction				NE
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	
Collar		8	7	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	N	
Bevel End		8	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		8	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		8	7	
Beavers (Y/N)	No			
Downstream End General Rating		8	7	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	Curves d/s
Bank Stability		7	7	
HWM (m below Top of Culvert)	0.5			20090417 No HWM visible
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	NONE			
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	Repair NE corner of guardrail-1 new post & 1 new 3m radius piece and rest 2 posts					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	74.0/73.2	Est. Repl. Yr	2055	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	Tim Davies		Previous Assistant's Name				
Next Inspection Date	22-Jun-2015		Previous Inspection Date	17-Apr-2009			
Inspection Cycle (Default) (months)	39						
Comment							