

Bridge Culvert Inspection			
Bridge File Number	75213 -1 Bridge Culvert	Form Type	CUL1
Year Built/Lined	1960/1994	Lot No.	4
Bridge or Town Name	DUCHESS	Inspector Name	Tom Carey
Located Over	EID - IRRIGATION C, WATERCRS-IC	Inspector Class	BR CLS A
Located On	36:08 C1 18.275	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	22-Jun-2010
Legal Land Location	SW SEC 19 TWP 21 RGE 14 W4M	Data Entry By	Erin Roberts
Longitude, Latitude	-111:56:11, 50:47:50	Data Entry Date	23-Jul-2010
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	CMA23	Review Date	20-Jul-2010
Clear Roadway/Skew	11 /	Dept. Reviewer Name	Lorenz Bohnert
AADT/Year	1,440 / 2009 (A)	Dept. Review Date	18-Aug-2010
Road Classification	RAU-211.8-110	Follow-Up By	
Detour Length (km)	10		

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
2	MAIN FULL LINER	-	1600	MP	34	125X26	2.8	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)			
Utility Attachments			
Telephone		Gas	
Power	3 line W r/w - HV E. r/w 30m W	Municipal	
Others	Fibre optics E RW	Problem (Y/N)	No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	Grade to N
Vertical Alignment		7	7	
Roadway Width (m)	10.300			
Embankment		7	7	
Sideslope (__:1)	6.0			
(Height of Cover(m) : 1.4)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		7	7	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction				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	N	[Minor superficial corrosion on the floor]
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		8	N	End filled in 300mm above crown of pipe to 15m U/S
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		8	N	
Beavers (Y/N)				
Upstream End General Rating		6	6	GR carried forward
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2 , Secondary Span, Location Code: MAIN , Span (mm): , Rise (mm): 1600 , Type: MP)				
Barrel Last Accessible Date	23-May-2006			Silted in
Special Features				
Special Feature				300mm of crown of pipe exposed at 1.2m holes at both ends of pipe.
(Type :)				
Special Feature				
(Type :)				
Roof		N	N	Pipe filled up to 300mm of roof
Measured Rise (mm)	1600			
Measured At Ring No.	3			
Sag (mm)				
Percent Sag				
Sidewall		N	N	
Measured Span (mm)	1600			
Measured At Ring No.	3			
Deflection (mm)				
Percent Deflection				
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	
Separation (mm)				
Longitudinal Seams		X	N	(Within couplers but all N side wide ga so that pipe bends)
Total No. of Cracked Rings				[NO problem]
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		N	N	(Minor superficial corrosion on the lower half)
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1600, Type: MP)				
Fish Passage Adequacy		X	X	
Baffle (Type :)		X	X	
Waterway Adequacy		8	X	Filled in to 300mm of crown in pipe and 300mm above pipe at both ends to 15m beyond end of pipe
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		N	N	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction				East end.
End Treatment (Concrete, Steel, Others, None)		STEEL		
Headwall		X	X	
Collar		X	X	
Wingwalls (Shape :)		X	X	
Cutoff Wall		X	X	Minor superficial corrosion the floor
Bevel End		6	N	
Heaving (mm)				
Invert Above/Below Stream Bed		BELOW		
Above/Below (mm)		100		
Scour Protection (Type : RIP RAP) (Avg. Rock Size(mm) : 300)		8	N	End filled in to 300mm above crown of pipe to 15m D/S
Scour/Erosion		8	N	
Beavers (Y/N)				
Downstream End General Rating		6	6	GR carried forward
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Culvert)		0.7		[May 28/08]
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) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	64.9/68.4	Est. Repl. Yr	2051	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	A.T. is investigating with the EID if the pipe can be abandoned and grouted in. Is filled in at both ends. The pipe no longer in service		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-Mar-2012		Previous Inspection Date	28-May-2008			
Inspection Cycle (Default) (months)	21						
Comment							