

Bridge Culvert Inspection			
Bridge File Number	78433 -1 Bridge Culvert	Form Type	CUL1
Year Built	1980	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	544:02 C1 2.747	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	15-Feb-2010
Legal Land Location	SE SEC 18 TWP 20 RGE 14 W4M	Data Entry By	Kelsey Roberts
Longitude, Latitude	-111:55:55, 50:41:18	Data Entry Date	03-Mar-2010
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	CMA23	Review Date	23-Feb-2010
Clear Roadway/Skew	9.8 /	Dept. Reviewer Name	Lorenz Bohnert
AADT/Year	400 / 2008 (A)	Dept. Review Date	08-Mar-2010
Road Classification	RCU-209-110	Follow-Up By	
Detour Length (km)	6		

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	1829	1118	FP	22.6	68X13		ARCH
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	South ditch	Gas	40m north
Power	1 wire x's 20 m W.	Municipal	
Others	2 wire N. side.	Problem (Y/N)	No
Remarks			

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	Farm ent 30m W
Vertical Alignment		7	7	Hill 200m east- slight
Roadway Width (m)	9.800			
Embankment		N	N	Snow
Sideslope (___:1)	3.0			
(Height of Cover (m) : 1.3)				
Guardrail (Y/N)	No			
<b>Approach Road / Embankment General Rating</b>		<b>7</b>	<b>7</b>	

**Upstream End**

Culvert Component		Last	Now	Explanation of Condition
Direction		N		NORTH
End Treatment (Concrete, Steel, Others, None)	NONE			
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		X	X	(Water above top of pipe)
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			(990120)
Above/Below (mm)	200			
Scour Protection		N	N	Snow covered (Some 450mm rock)
(Type : )				
(Avg. Rock Size (mm) : )				
Scour/Erosion		N	N	snow covered
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>7</b>	<b>N</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1829, Rise (mm): 1118, Type: FP)</b>				
Barrel Last Accessible Date	20-Jan-1999			
<b>Special Features</b>				
Special Feature				Ends completley snowed in
(Type : )				
Special Feature				
(Type : )				
Roof		N	N	Snow
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	30			
Percent Sag				
Sidewall		N	N	(990120) Snow
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	60			
Percent Deflection				
Floor		N	N	(ICE AND GRAVEL COVERED).
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	(990120)
Separation (mm)	50			
Longitudinal Seams		X	X	
Total No. of Cracked Rings				
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 CORROSION) 990120 (990120)
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)	Yes			
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): 1829, Rise (mm): 1118, Type: FP)				
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type : )				
Waterway Adequacy		N	N	(Water above top of pipe Due to check structure not high flow) Feb. 21/07
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>N</b>	<b>N</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		SOUTH
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			(990120)
Above/Below (mm)	110			
Scour Protection		N	N	Snow
(Type : )				
(Avg. Rock Size (mm) : )				
Scour/Erosion		N	N	(Some 650 rock)
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>7</b>	<b>N</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		9	9	
Bank Stability		8	N	Snow
HWM (m below Top of Culvert)				
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel General Rating</b>		<b>8</b>	<b>8</b>	

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							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>55.6/55.6</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>73.8/70.1</b>	Est. Repl. Yr	2020	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	Tim Davies		Previous Assistant's Name				
Next Inspection Date	15-May-2013		Previous Inspection Date	21-Feb-2007			
Inspection Cycle (Default) (months)	39						
Comment							