

Bridge Culvert Inspection				
Bridge File Number	75209 -1 Bridge Culvert		Form Type	CUL1
Year Built/Lined	1960/1994		Lot No.	4
Bridge or Town Name	DUCHESS		Inspector Name	Jon Davies
Located Over	EID - IRRIGATION C, WATERCRS-IC		Inspector Class	BR CLS B
Located On	36:08 C1 4.736		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	11-Jan-2012
Legal Land Location	SE SEC 11 TWP 20 RGE 15 W4M		Data Entry By	Anne Roberts
Longitude, Latitude	-111:58:28, 50:40:43		Data Entry Date	25-Feb-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA23		Review Date	20-Jan-2012
Clear Roadway/Skew	12 / -12 deg. (LHF)		Dept. Reviewer Name	Tim Davies
AADT/Year	1,850 / 2010 (A)		Dept. Review Date	11-Mar-2012
Road Classification	RAU-211.8-110		Follow-Up By	
Detour Length (km)	3			

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	-	2200	MP	36	125X26	2.8	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)			
Utility Attachments			
Telephone		Gas	40 m W
Power	High volt 40m E of CL&1W 30m W		Municipal
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		8	7	Entrances north and south. Rises to south. No passing SB. @ pipe - 4:1 at slopes past pipe. 8:1 over pipe ends Delineator posts
Vertical Alignment		6	6	
Roadway Width (m)	11.000			
Embankment		7	6	
Sideslope (___:1)	4.0			
(Height of Cover(m) : 1)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		6	6	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction				W
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Wingwalls (Shape :)		X	X	
Cutoff Wall		X	X	
Bevel End		8	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection (Type : RIP RAP) (Avg. Rock Size(mm) : 250)		8	7	
Scour/Erosion		8	7	
Beavers (Y/N)	No			
Upstream End General Rating		8	7	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2 , Primary Span, Location Code: MAIN , Span (mm): , Rise (mm): 2200 , Type: MP)				
Barrel Last Accessible Date	11-Jan-2012			
Special Features				
Special Feature (Type :)				
Special Feature (Type :)				
Roof		N	7	
Measured Rise (mm)	2173			Estimate
Measured At Ring No.	1			
Sag (mm)	27			
Percent Sag	1			
Sidewall		N	7	
Measured Span (mm)	2225			
Measured At Ring No.	2			
Deflection (mm)	25			
Percent Deflection	1			
Floor		N	N	Ice covered
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	4	Vertical gap with minor soil infiltration @ u & d/s bevel joints, 175 mm u/s, 110 mm d/s
Separation (mm)	175			
Longitudinal Seams		X	X	50mm longit separation Doesn't appear soil is actively coming through seam
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	5	Minor superficial corrosion on the lower half
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2200, Type: MP)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		N	7	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction				East
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		8	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
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	Control gate 60 m u/s.
Bank Stability		7	6	
HWM (m below Top of Culvert)	1.0			No visible HWM
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		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) (%)	55.6/77.8	Sufficiency Rating (Last/Now) (%)	70.6/79.1	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	Tom Carey		Previous Assistant's Name				
Next Inspection Date	11-Oct-2013		Previous Inspection Date	22-Jun-2010			
Inspection Cycle (Default) (months)	21						
Comment							