

Bridge Culvert Inspection				
Bridge File Number	73536 -1 Bridge Culvert		Form Type	CUL1
Year Built	1974		Lot No.	4
Bridge or Town Name	MAGRATH		Inspector Name	Jon Davies
Located Over	MID - IRRIGATION C, WATERCRS-IC		Inspector Class	BR CLS B
Located On	5:04 C1 35.424		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	04-Oct-2011
Legal Land Location	SW SEC 21 TWP 5 RGE 22 W4M		Data Entry By	Erin Roberts
Longitude, Latitude	-112:55:06, 49:23:45		Data Entry Date	17-Nov-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA25		Review Date	10-Nov-2011
Clear Roadway/Skew	13.5 / -30 deg. (LHF)		Dept. Reviewer Name	Tim Davies
AADT/Year	2,480 / 2010 (A)		Dept. Review Date	21-Nov-2011
Road Classification	RAU-213-130		Follow-Up By	
Detour Length (km)	3			

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	-	1524	MP	34.7	68X13		ROUND
Special Features								
Special Features Comment								

Utilities (Located at)			
Utility Attachments			
Telephone	South ditch		Gas
Power	4 wire North		Municipal
Others	Fibre optics @ South R/W		Problem (Y/N) No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	LRA int 125 m SW.
Vertical Alignment		8	7	Highway ditch drainage crosses channel 5.0 m North of shoulder THRU 800 mm DIA CSP.
Roadway Width (m)	13.500			
Embankment		8	8	
Sideslope (__:1)	4.0			
(Height of Cover(m) : 1.5)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		7	7	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		
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		5	N	Not visible due to high water level PR 5
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			Unable to confirm
Above/Below (mm)	100			
Scour Protection		5	N	PR 5
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		5	N	PR 5
Beavers (Y/N)	No			
Upstream End General Rating		5	5	G.R. carried forward
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1 , Primary Span, Location Code: MAIN , Span (mm): , Rise (mm): 1524 , Type: MP)				
Barrel Last Accessible Date	28-Nov-2009			Not accessible due to high water level
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	N	PR 6
Measured Rise (mm)	1459			
Measured At Ring No.	1			
Sag (mm)	65			
Percent Sag	4			
Sidewall		6	N	PR 6
Measured Span (mm)	1575			
Measured At Ring No.	1			
Deflection (mm)	51			
Percent Deflection	3			
Floor		5	N	PR 5
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		5	N	(Ring # 1) 28-Nov-2009 PR 5
Separation (mm)	30			
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		5	N	PR 5 (SOME PITTED RUST @ LOWER Half) 28-Nov-2009
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			No sight line
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1524, Type: MP)				
Fish Passage Adequacy		X	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		6	6	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		6	N	PR 6
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		North.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		5	N	(Some pitted rust) 28-Nov-2009 Not visible due to high water level
Heaving (mm)	0			
Invert Above/Below Stream Bed				Unable to confirm
Above/Below (mm)	0			
Scour Protection		6	6	Scour protection in grown
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
Downstream End General Rating		5	5	GR carried forward
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	Hwy ditch CSP crosses channel 3m North
Bank Stability		5	5	VERTICAL BANKS D/S) Vegetation grown in
HWM (m below Top of Culvert)				None visible
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			
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) (%)	66.7/55.6	Sufficiency Rating (Last/Now) (%)	62.8/57.9	Est. Repl. Yr	2026	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	Jason Rusu		Previous Assistant's Name				
Next Inspection Date	04-Jul-2013		Previous Inspection Date	28-Nov-2009			
Inspection Cycle (Default) (months)	21						
Comment							