

Bridge Culvert Inspection				
Bridge File Number	74524 -1 Bridge Culvert		Form Type	CULM
Year Built	1987		Lot No.	4
Bridge or Town Name	GRANUM		Inspector Name	Garry Roberts
Located Over	LNI - IRRIGATION C, WATERCRS-IC		Inspector Class	BR CLS A
Located On	519:02 C1 13.093		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	21-May-2010
Legal Land Location	SW SEC 3 TWP 11 RGE 25 W4M		Data Entry By	Kelsey Roberts
Longitude, Latitude	-113:20:40, 49:52:25		Data Entry Date	17-Aug-2010
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Ash Morjaria
Contract Main. Area	CMA26		Review Date	29-May-2010
Clear Roadway/Skew	11.3 /		Dept. Reviewer Name	Lorenz Bohnert
AADT/Year	1,940 / 2009 (A)		Dept. Review Date	18-Aug-2010
Road Classification	RCU-209-110		Follow-Up By	
Detour Length (km)	3			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	14000	4000	BP	33.3			RECTANGLE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	S. DITCH		Gas	
Power	2 LINE ALONG N. FENCE		Municipal	
Others	WATER MONITORS?		Problem (Y/N)	No
Remarks	STEEL PIPE W/PLASTIC PIPE AT EACH CORNER (WATER DEVICE)			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		9	7	INTERSECTION OF LOCAL ROAD SOUTH 25 METERS TO EAST
Vertical Alignment		5	6	
Roadway Width (m)	11.000			
Embankment		8	7	Double layer over pipes on steel posts.
Sideslope (__:1)	3.0			
(Height of Cover(m) : 0.5)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		5	6	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	
Collar		X	X	
Wingwalls		8	8	
(Shape :)				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
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): 3500, Rise (mm): 4000, Type: BP, Cell Sequence: 1)				
Barrel Last Accessible Date	21-May-2010			West Cell
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)	4000			
Measured At Ring No.	1			
Sag (mm)	0			
Percent Sag				
Sidewall		7	7	NARROW VERT CRACKS RUNNING THE HEIGHT OF SIDEWALLS 1.40-1.80 M APART
Measured Span (mm)	3500			
Measured At Ring No.	1			
Deflection (mm)	0			
Percent Deflection				
Floor		N	7	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		X	X	
Separation (mm)				
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)				
Longitudinal Stagger (Y/N)				
Coating		X	X	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
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): 3500, Rise (mm): 4000, Type: BP, Cell Sequence: 1)				
Fish Passage Adequacy		X	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	7	
Icing (Y/N)		No		
Siltng (Y/N)		No		
Drift (Y/N)		No		
Barrel General Rating		7	7	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3500, Rise (mm): 4000, Type: BP, Cell Sequence: 2)				
Barrel Last Accessible Date		21-May-2010		2nd from west
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)		4000		
Measured At Ring No.		1		
Sag (mm)		0		
Percent Sag				
Sidewall		7	7	
Measured Span (mm)		3500		
Measured At Ring No.		1		
Deflection (mm)		0		
Percent Deflection				
Floor		N	7	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)		No		
Circumferential Seams		X	X	
Separation (mm)				
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)				
Longitudinal Stagger (Y/N)				
Coating		X	X	
Corrosion By Soil (Y/N)		No		
Corrosion By Water (Y/N)		No		
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): 3500, Rise (mm): 4000, Type: BP, Cell Sequence: 2)				
Fish Passage Adequacy		X	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		7	7	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3500, Rise (mm): 4000, Type: BP, Cell Sequence: 3)				
Barrel Last Accessible Date	21-May-2010			3rd from West
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)	4000			
Measured At Ring No.	1			
Sag (mm)	0			
Percent Sag				
Sidewall		7	7	
Measured Span (mm)	3500			
Measured At Ring No.	1			
Deflection (mm)	0			
Percent Deflection				
Floor		N	7	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		X	X	
Separation (mm)				
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)				
Longitudinal Stagger (Y/N)				
Coating		X	X	
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 # : 1, Primary Span, Location Code: MAIN, Span (mm): 3500, Rise (mm): 4000, Type: BP, Cell Sequence: 3)				
Fish Passage Adequacy		X	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		7	7	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3500, Rise (mm): 4000, Type: BP, Cell Sequence: 4)				
Barrel Last Accessible Date	21-May-2010			east cell
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)	4000			
Measured At Ring No.	1			
Sag (mm)				
Percent Sag				
Sidewall		7	7	
Measured Span (mm)	3500			
Measured At Ring No.	1			
Deflection (mm)	0			
Percent Deflection				
Floor		N	7	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		X	X	
Separation (mm)	0			
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)				
Longitudinal Stagger (Y/N)				
Coating		X	X	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
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): 3500, Rise (mm): 4000, Type: BP, Cell Sequence: 4)				
Fish Passage Adequacy		X	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		7	7	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	
Collar		X	X	
Wingwalls		8	8	
(Shape :)				
Cutoff Wall		N	N	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Downstream End General Rating		8	8	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		9	9	Canal
Bank Stability		8	8	
HWM (m below Top of Culvert)				No visible HWM
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		9	9	

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) (%)	77.8/77.8	Sufficiency Rating (Last/Now) (%)	82.5/79.1	Est. Repl. Yr	2043	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	21-Aug-2013		Previous Inspection Date	27-Feb-2007			
Inspection Cycle (Default) (months)	39						
Comment							