

Bridge Culvert Inspection				
Bridge File Number	01239 -1 Bridge Culvert		Form Type	CUL1
Year Built	1955		Lot No.	4
Bridge or Town Name	GRANUM		Inspector Name	Garry Roberts
Located Over	ROCKY COULEE, 2.12.24, WATERCRS-ST		Inspector Class	BR CLS A
Located On	519:02 C1 20.702		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	21-May-2010
Legal Land Location	SE SEC 5 TWP 11 RGE 24 W4M		Data Entry By	Kelsey Roberts
Longitude, Latitude	-113:14:19, 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	8.5 / 5 deg. (RHF)		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)	5			

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	1735	1920	SPE	24.4	152X51	2.8,2.8,2.8	ELLIPSE
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	s.ditch	Gas	
Power	2wire n. side	Municipal	
Others		Problem (Y/N)	No
Remarks			

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		9	8	in sag between two hills, sight dist. good, fld ent to south on each side
Vertical Alignment		7	7	
Roadway Width (m)	11.500			Road widen in 2006
Embankment		8	7	
Sideslope (__:1)	4.0			
(Height of Cover(m) : 2.5)				
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)	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		9	8	extend with 1600mm csp
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		8	8	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>300</b> )				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>9</b>	<b>8</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1735, Rise (mm): 1920, Type: SPE)				
Barrel Last Accessible Date	21-May-2010			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		9	9	pipe has been lined with a 1300mm steel pipe and grouted in. 1600mm CSP extended at each end of the pipe.
Measured Rise (mm)	1600			
Measured At Ring No.	1			
Sag (mm)	0			
Percent Sag				
Sidewall		9	9	
Measured Span (mm)	1600			
Measured At Ring No.	1			
Deflection (mm)	0			
Percent Deflection				
Floor		9	9	
Bulge (mm)	0			
Measured At Ring No.	1			
Abrasion (Y/N)	No			
Circumferential Seams		9	9	
Separation (mm)	10			
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)	Yes			
Longitudinal Stagger (Y/N)	No			
Coating		8	8	CSP
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): 1735, Rise (mm): 1920, Type: SPE)				
Fish Passage Adequacy		X	5	
Baffle		X	X	
(Type : )				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>9</b>	<b>9</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		SOUTH
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		9	8	CSP extension
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>9</b>	<b>8</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		7	7	
Bank Stability		9	8	Shallow banks
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)				
<b>Channel General Rating</b>		<b>7</b>	<b>7</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>100.0/100.0</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>91.0/88.8</b>	Est. Repl. Yr	2040	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							