

Bridge Culvert Inspection				
Bridge File Number	77494 -1 Bridge Culvert		Form Type	CULM
Year Built	1980		Lot No.	1
Bridge or Town Name	LONGVIEW		Inspector Name	Garry Roberts
Located Over	MIST CREEK, 2.13.27.41, WATERCRS-ST		Inspector Class	BR CLS A
Located On	40:10 C1 20.931		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	24-Jun-2011
Legal Land Location	SW SEC 13 TWP 18 RGE 7 W5M		Data Entry By	Alyssa Boynton
Longitude, Latitude	-114:50:20, 50:31:05		Data Entry Date	13-Jul-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Tom Carey
Contract Main. Area	CMA28		Review Date	28-Jun-2011
Clear Roadway/Skew	11 / 15 deg. (RHF)		Dept. Reviewer Name	Tim Davies
AADT/Year	440 / 2010 (A)		Dept. Review Date	15-Jul-2011
Road Classification	RAU-209-110		Follow-Up By	
Detour Length (km)	50			

Bridge Culvert Information								
Number of Culverts		2						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	6123	4142	RPE	43.3	152X51	5.0	ELLIPSE
2	MAIN	1660	1090	FP	43.3			ARCH
Special Features								
Special Features Comment								

Utilities (Located at)			
Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others		Problem (Y/N)	
Remarks	Mist Creek.		

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	Curve at both ends.
Vertical Alignment		7	7	
Roadway Width (m)	11.000			
Embankment		7	7	
Sideslope ( __:1)	4.0			
(Height of Cover(m) : 2.2)				
Guardrail (Y/N)	No			
<b>Approach Road / Embankment General Rating</b>		<b>6</b>	<b>6</b>	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction		E		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	2 transverse cracks
Collar		7	7	Many narrow cracks
Wingwalls		X	X	
(Shape : )				

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Span Type: Primary Span)</b>				
Cutoff Wall		N	N	Buried
Bevel End		7	7	
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1200			
Scour Protection		8	8	Class 3 along SE bank and toe of NE bank.
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>800</b> )				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>7</b>	<b>7</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 6123, Rise (mm): 4142, Type: RPE)</b>				
Barrel Last Accessible Date	04-Oct-2009			Not accessible - water to fast and deep.
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		5	N	(Roof has flatness when viewed from both ends. ROOF ESTIMATE Unable to obtain rise rock on entire floor.) Oct. 2009 P.R. 5
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	200			
Percent Sag	4			
Sidewall		3	N	Due to cracks.
Measured Span (mm)	6480			P.R. 3
Measured At Ring No.	6			
Deflection (mm)	357			
Percent Deflection	5			
Floor		N	N	Rock covered
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		6	N	P.R. 6
Separation (mm)	0			
Longitudinal Seams		3	N	Cracks in S longit. sidewall seam.
Total No. of Cracked Rings	8			Ring 1: 7 bolts, 105mm rem. steel Ring 2:24 bolts, 82mm rem. steel Ring 3-105mm rem. steel
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)	65			Ring 4:24 bolts, 77mm rem. steel, Ring 5:24 bolts, 82mm rem. steel Ring 6:24 bolts, 65mm rem. steel - photo
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			Ring 7:24 bolts, 90mm rem. steel, Ring 8:7 bolts, 95mm remaining steel 100mm sag at roof, longit seams, gap of 3mm between plates

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 6123, Rise (mm): 4142, Type: RPE)</b>				
Coating		6	N	Minor Abrasion and superficial corrosion.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			
Fish Passage Adequacy		6	6	
Baffle		X	X	
(Type : )				
Waterway Adequacy		7	6	Up to 1500mm dp rock @ U/S half.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>3</b>	<b>3</b>	Carried forward.
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Span Type: Primary Span)</b>				
Direction		W		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1200			
Scour Protection		8	8	Avg. 400mm rock @ SW 1000mm rock @ NW
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>800</b> )				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>8</b>	<b>7</b>	
Upstream End				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 2, Span Type: Secondary Span)</b>				
Direction		E		
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 2, Span Type: Secondary Span)</b>				
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		X	X	Entire end covered in 800mm riprap
Heaving (mm)				
Invert Above/Below Stream Bed				
Above/Below (mm)				
Scour Protection		8	8	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>800</b> )				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>8</b>	<b>8</b>	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): 1660, Rise (mm): 1090, Type: FP)</b>				
Barrel Last Accessible Date	22-Jan-2004			Unable to enter - entire pipe silted in
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		N	N	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		N	N	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	
Separation (mm)	0			
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)	No			
Longitudinal Stagger (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): 1660, Rise (mm): 1090, Type: FP)</b>				
Coating		N	N	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		5	4	
Baffle		X	X	
<b>(Type : )</b>				
Waterway Adequacy		5	4	
Icing (Y/N)	No			Full.
Siltting (Y/N)	Yes			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>N</b>	<b>4</b>	

Downstream End					
Culvert Component		Last	Now	Explanation of Condition	
<b>(Pipe # : 2, Span Type: Secondary Span)</b>					
Direction		W			
End Treatment (Concrete, Steel, Others, None)	NONE				
Headwall		X	X		
Collar		X	X		
Wingwalls		X	X		
<b>(Shape : )</b>					
Cutoff Wall		X	X		
Bevel End		X	X		
Heaving (mm)					
Invert Above/Below Stream Bed					
Above/Below (mm)					
Scour Protection		8	8	Entire end covered by 1000mm riprap.	
<b>(Type : RIP RAP)</b>					
<b>(Avg. Rock Size(mm) : 800)</b>					
Scour/Erosion		8	8		
Beavers (Y/N)	No				
<b>Downstream End General Rating</b>		<b>8</b>	<b>8</b>		

Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		6	6	Curves @ both ends
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			

Structure Usage				
		Last	Now	Explanation of Condition
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>6</b>	<b>6</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	2015	Shotcrete repair along entire south sidewall seam.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>33.3/33.3</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>48.4/37.4</b>	Est. Repl. Yr	2020	Maint. Req. (Y/N)	Yes
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	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	24-Mar-2013		Previous Inspection Date	04-Oct-2009			
Inspection Cycle (Default) (months)	21						
Comment							