

Bridge Culvert Inspection			
Bridge File Number	76085 -1 Bridge Culvert	Form Type	CULM
Year Built	1965	Lot No.	4
Bridge or Town Name	NORDEGG	Inspector Name	Owen Salava
Located Over	TRIBUTARY TO NORTH SASKATCHEWAN RIVER, 6.188, WATERCRS-ST	Inspector Class	BR CLS A
Located On	11:02 C1 13.038	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	08-Feb-2012
Legal Land Location	SE SEC 15 TWP 35 RGE 18 W5M	Data Entry By	Marcia Chavez
Longitude, Latitude	-116:29:12, 52:00:10	Data Entry Date	02-Mar-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	CMA18	Review Date	22-Feb-2012
Clear Roadway/Skew	13 /	Dept. Reviewer Name	Andrew Smikles
AADT/Year	360 / 2010 (A)	Dept. Review Date	09-Mar-2012
Road Classification	RAU-213.4-120	Follow-Up By	
Detour Length (km)	300		

**Bridge Culvert Information**

Number of Culverts	2							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	1700	1950	MPE	32.2	68X13		ELLIPSE
2	MAIN	-	1200	MP	40.7	68X13		ROUND
Special Features								
Special Features Comment	1200 CSP is primary.							

**Utilities (Located at)**

Utility Attachments				
Telephone	South r/w.		Gas	
Power			Municipal	
Others			Problem (Y/N)	No
Remarks				

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	Curves west and east. Hill West & East. Limited sight distance East, no passing EBL. Service road 5m West. Signed "Wild Horse Creek".6
Vertical Alignment		6	6	
Roadway Width (m)	13.000			
Embankment		7	7	
Sideslope ( __:1)	3.0			
(Height of Cover(m) : 1.8)				
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		N		East pipe. Used as overflow.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Cutoff Wall		X	X	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			1.0m above 1200 dia invert.
Above/Below (mm)	1000			
Scour Protection		7	N	Some Class I rocks. Snow covered.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		7	N	
Beavers (Y/N)	No			
Upstream End General Rating		7	7	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1700, Rise (mm): 1950, Type: MPE)				
Barrel Last Accessible Date	08-Feb-2012			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		7	7	
Measured Rise (mm)	1950			
Measured At Ring No.	2			
Sag (mm)	0			
Percent Sag	0			
Sidewall		7	7	
Measured Span (mm)	1700			
Measured At Ring No.	2			
Deflection (mm)	0			
Percent Deflection	0			
Floor		6	6	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	20			
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		6	6	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1700, Rise (mm): 1950, Type: MPE)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		4	4	Stream too steep to accommodate fish.
Baffle		X	X	
(Type : )				
Waterway Adequacy		7	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
(Pipe # : 1, Span Type: Primary Span)				
Direction		S		East pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		6	6	Minor damage to bevel edge.
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			Same elevation as 1200 dia at outlet. Steep streambed.
Above/Below (mm)	100			
Scour Protection		7	N	Snow covered.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		7	N	
Beavers (Y/N)	No			
Downstream End General Rating		6	6	
Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		N		West pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL			Not visible due to ice/snow.
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Bevel End		5	N	(Top edge torn off, functional. 05May2010).
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		7	N	(Some Class I rocks. 05May2010). Snow/ice covered.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		7	N	
Beavers (Y/N)	No			
Upstream End General Rating		7	N	GR would be 5 based on bevel from 05May2010.
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1200, Type: MP)				
Barrel Last Accessible Date	05-May-2010			Pipe not visible due to snow/ice.
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		4	N	(Unable to measure due to ice. 05May2010).
Measured Rise (mm)	1110			
Measured At Ring No.	3			
Sag (mm)	90			
Percent Sag	7			
Sidewall		6	N	
Measured Span (mm)	1250			
Measured At Ring No.	3			
Deflection (mm)	50			
Percent Deflection	4			
Floor		N	N	(Minor. 29/May/2007)
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		6	N	
Separation (mm)	20			
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	(Floor rusting. 1/3 wall height superficial. 05May2010).
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1200, Type: MP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		4	4	Steep grade @ D/S streambed.
Baffle		X	X	
(Type : )				
Waterway Adequacy		7	5	
Icing (Y/N)	Yes			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		4	4	GR carried forward from 05May2010.
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		S		West pipe. Covered by snow/ice.
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	(Torn @ roof line. 05May2010).
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			Steep streambed.
Above/Below (mm)	100			
Scour Protection		9	N	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		9	N	
Beavers (Y/N)	No			
Downstream End General Rating		5	N	GR was 5 from 05May2010.
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		5	5	Cut banks U/S.
HWM (m below Top of Culvert)				HWM not 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							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>44.4/44.4</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>50.5/44.6</b>	Est. Repl. Yr	2020	Maint. Reqd. (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	Owen Salava		Previous Assistant's Name				
Next Inspection Date	08-Nov-2013		Previous Inspection Date	05-May-2010			
Inspection Cycle (Default) (months)	21						
Comment							