

Bridge Culvert Inspection				
Bridge File Number	76366 -1 Bridge Culvert		Form Type	CULM
Year Built	1967		Lot No.	4
Bridge or Town Name	NORDEGG		Inspector Name	Owen Salava
Located Over	TRIBUTARY TO NORTH SASKATCHEWAN RIVER, 6.176, WATERCRS-ST		Inspector Class	BR CLS A
Located On	11:04 C1 11.295		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	07-Feb-2012
Legal Land Location	SE SEC 7 TWP 38 RGE 17 W5M		Data Entry By	Marcia Chavez
Longitude, Latitude	-116:24:44, 52:15:07		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	13.5 / 8 deg. (RHF)		Dept. Reviewer Name	Andrew Smikles
AADT/Year	840 / 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	1737	1920	SP	50.6	152X51	2.8	ELLIPSE
2	MAIN	-	1200	MP	50.6	68X13		ROUND
Special Features		CONC FLOOR						
Special Features Comment								

Utilities (Located at)

Utility Attachments					
Telephone	North & South side of road.			Gas	
Power				Municipal	
Others				Problem (Y/N)	No
Remarks					

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Campground entrance 50m West. Sag curve to the west limits sight distance. No passing WBL.
Vertical Alignment		6	6	
Roadway Width (m)	13.500			
Embankment		7	7	South side only.
Sideslope (__:1)	2.0			
(Height of Cover(m) : 4.6)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		6	6	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction		N		East pipe.
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			
Above/Below (mm)	1200			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		7	7	
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): 1737, Rise (mm): 1920, Type: SP)				
Barrel Last Accessible Date	07-Feb-2012			
Special Features				
Special Feature		N	6	
(Type : CONC FLOOR)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	58			Estimate.
Percent Sag	3			
Sidewall		4	4	R3 - 130mm stel remaining.
Measured Span (mm)	1795			
Measured At Ring No.	4			
Deflection (mm)	58			
Percent Deflection	3			
Floor		N	N	Concrete covered.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		4	4	R3 East haunch 130mm steel remaining.
Total No. of Cracked Rings	1			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)	130			
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			1N
Coating		7	7	
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): 1737, Rise (mm): 1920, Type: SP)					
Camber POS/ZERO/NEG	ZERO				
Ponding (Y/N)	No				
Fish Passage Adequacy		X	X	Above creek level.	
Baffle		X	X		
(Type :)					
Waterway Adequacy		7	7		
Icing (Y/N)	No				
Silting (Y/N)	No				
Drift (Y/N)	No				
Barrel General Rating		4	4		
Downstream End					
Culvert Component		Last	Now	Explanation of Condition	
(Pipe # : 1, Span Type: Primary Span)					
Direction		S			
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	ABOVE				
Above/Below (mm)	1600				
Scour Protection		7	7	Some Class I.	
(Type : NATURAL)					
(Avg. Rock Size(mm) :)					
Scour/Erosion		7	7		
Beavers (Y/N)	No				
Downstream End General Rating		7	7		
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				
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		6	N	(Floor corrosion. 30/May/2007) - Under ice.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		N	N	(With some Class I. 30/May/2007) Snow/ice covered.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
Upstream End General Rating		6	N	GR was 6 from 04May2010.
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	08-Sep-2005			Full of ice. No obvious problems viewed from ends.
Special Features				
Special Feature		X	X	
(Type : CONC FLOOR)				
Special Feature				
(Type :)				
Roof		N	N	(Concrete floor.)
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	(Concrete covered.)
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)				
Longitudinal Stagger (Y/N)				
Coating		6	N	
Corrosion By Soil (Y/N)				
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		X	X	Perched 1.2m.
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	5	
Icing (Y/N)	Yes			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		5	N	GR was 5 from 08Sep2005.
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		S		West pipe.
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	Iced over.
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	1200			
Scour Protection		4	N	Perched 1.2m deep. Not a problem @ this time.
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		4	N	(Scour hole below pipe. 04May2010).
Beavers (Y/N)	No			
Downstream End General Rating		4	4	GR carried forward from 04May2010.
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		7	7	
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							
Structural Condition Rating (Last/Now) (%)	44.4/44.4	Sufficiency Rating (Last/Now) (%)	47.2/48.3	Est. Repl. Yr	2019	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	Owen Salava		Previous Assistant's Name				
Next Inspection Date	07-Nov-2013		Previous Inspection Date	04-May-2010			
Inspection Cycle (Default) (months)	21						
Comment							