

Bridge Culvert Inspection			
Bridge File Number	76169 -1 Bridge Culvert	Form Type	CUL1
Year Built	1966	Lot No.	3
Bridge or Town Name	NORDEGG	Inspector Name	Owen Salava
Located Over	TRIBUTARY TO NORTH SASKATCHEWAN RIVER, 6.183, WATERCRS-ST	Inspector Class	BR CLS A
Located On	11:02 C1 24.268	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	08-Feb-2012
Legal Land Location	SW SEC 7 TWP 36 RGE 17 W5M	Data Entry By	Marcia Chavez
Longitude, Latitude	-116:25:12, 52:04:42	Data Entry Date	06-Mar-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	CMA18	Review Date	22-Feb-2012
Clear Roadway/Skew	12.2 / 0 deg.	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	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	4267	2946	RP	35	152X51	3.5	PIPE ARCH
Special Features	CONC FLOOR							
Special Features Comment								

Utilities (Located at)

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

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	8	8	Limited sight distance. On a crest curve. No passing.
Vertical Alignment	5	5	
Roadway Width (m)	12.200		
Embankment	4	4	Scour @ U/S going into embankment slightly - photo.
Sideslope (__:1)	3.0		
(Height of Cover(m) : 1)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	4	5	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	W		
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		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed				At streambed.
Above/Below (mm)	0			
Scour Protection		4	N	Snow covered.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		4	N	(Minor erosion both sides of bevel. 05May2010).
Beavers (Y/N)	No			
Upstream End General Rating		4	4	GR carried forward from 05May2010.
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 4267, Rise (mm): 2946, Type: RP)				
Barrel Last Accessible Date	08-Feb-2012			
Special Features				
Special Feature		N	N	Covered with gravel/rock/ice (last 10m at D/S gone - center 2m.)
(Type : CONC FLOOR)				
Special Feature				
(Type :)				
Roof		7	7	Unable to measure.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		7	7	
Measured Span (mm)	4260			
Measured At Ring No.	7			
Deflection (mm)	7			Inwards
Percent Deflection	0			
Floor		N	N	(Concrete abrasion damage last 10m - photo. 21-Dec-2003) Rock covered.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		7	7	Lower seams not visible.
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				1N except at haunch.
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		6	6	Minor superficial rust. Abrasion on bottom plates.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
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): 4267, Rise (mm): 2946, Type: RP)				
Fish Passage Adequacy		3	3	Suspect fish passage not required. Steep.
Baffle (Type : WEIR)		6	N	(Missing baffle 6m from D/S end. 02/04/23) Heavy gravel/rock coverage, could not confirm. Ice covering gravel.
Waterway Adequacy		7	7	Up to 1200mm rocks in barrel.
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		7	7	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)		STEEL		
Headwall		X	X	
Collar		X	X	
Wingwalls (Shape :)		X	X	
Cutoff Wall		X	X	
Bevel End		7	7	Minor superficial rust, abrasion damage.
Heaving (mm)	0			
Invert Above/Below Stream Bed		BELOW		Under rock.
Above/Below (mm)	400			
Scour Protection (Type : RIP RAP) (Avg. Rock Size(mm) : 300)		7	N	Snow covered.
Scour/Erosion		7	N	(Minor scour at sides, ok. 05May2010).
Beavers (Y/N)		No		
Downstream End General Rating		7	7	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		8	8	
Bank Stability		5	5	Some erosion of channel banks U/S.
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)		No		
Channel Bottom Degrading/Aggrading		AGGRADING		
Beavers (Y/N)		No		
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		8	8	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP	2012	At U/S 10m3 Class II.					
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) (%)	55.0/65.4	Est. Repl. Yr	2024	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	08-Nov-2013		Previous Inspection Date	05-May-2010			
Inspection Cycle (Default) (months)	21						
Comment							