Bridge Culvert Inspection

Bridge File Number	76033 S-1 Bridge Culvert	Form Type	CUL1
Year Built	1987	Lot No.	4
Bridge or Town Name	WANDERING RI	Inspector Name	Wade Nanninga
Located Over	TRIBUTARY TO HOUSE RIVER, 8.11.47.3, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	
Located On	63:06 C1 12.763	Assistant Class	
Water Body Cl./Year		Inspection Date	14-Nov-2011
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	NW SEC 12 TWP 78 RGE 15 W4M	Data Entry Date	23-Nov-2011
Longitude, Latitude	-112:12:16, 55:44:56	Reviewer Name	Eric Carcoux
Road Authority	Alberta Transportation (AIT)	Review Date	23-Nov-2011
Contract Main. Area	CMA07	Dept. Reviewer Name	Brent Herrick
Clear Roadway/Skew	13.4 /	Dept. Review Date	15-Dec-2011
AADT/Year	3,650 / 2010 (A)	Follow-Up By	
Road Classification	RAU-213.4-120		
Detour Length (km)	250		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	6295	3191	RPA	23.2	152X51	5.0	ARCH
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Intersection 20m North. Crest to North. Horizontal curve, approximately 500m South.
Vertical Alignment		7	7	
Roadway Width (m)	13.400			
Embankment		8	8	
Sideslope (__:1)	4.0			
(Height of Cover(m) : **0.3**)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		**7**	**7**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		5	5	Moderate scaling with cracks.
Collar		6	6	
Wingwalls		6	6	Spot corrosion due to low rebar cover.
(Shape :)				

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Cutoff Wall		N	N	
Bevel End		6	6	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	750			
Scour Protection		5	5	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **500**)				
Scour/Erosion		5	5	
Beavers (Y/N)	No			
Upstream End General Rating		**5**	**5**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 6295, Rise (mm): 3191, Type: RPA**)				
Barrel Last Accessible Date	07-Dec-2004			Water 1.0m deep. Not accessible. Viewed from ends. Appears to have good shape.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		6	6	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection				
Floor		N	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		7	7	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		5	5	Superficial rusting at waterline.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 6295, Rise (mm): 3191, Type: RPA**)				
Ponding (Y/N)	No			
Fish Passage Adequacy		8	8	
Baffle		N	N	
(Type :)				
Waterway Adequacy		6	9	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**6**	**N**	GR 6 carried fwd from Dec 2004

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		W		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	
Collar		7	7	
Wingwalls		7	7	
(Shape :)				
Cutoff Wall		N	N	
Bevel End		6	6	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	850			
Scour Protection		7	7	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **500**)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		**6**	**6**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		7	7	Turns South 25m D/S.
Bank Stability		7	7	
HWM (m below Top of Culvert)	1.0			(Below top of crown. 16/Aug/2006)
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				
Channel General Rating		**7**	**7**	

Structure Usage				
		Last	Now	Explanation of Condition

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) (%)	**66.7/55.6**	**Sufficiency Rating (Last/Now) (%)**	**61.4/66.6**	Est. Repl. Yr	2035	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	Wade Nanninga	Previous Assistant's Name	
Next Inspection Date	14-Aug-2013	Previous Inspection Date	10-Mar-2010
Inspection Cycle (Default) (months)	21		
Comment			