

Bridge Culvert Inspection			
Bridge File Number	83019 -1 Bridge Culvert	Form Type	CULM
Year Built	1982	Lot No.	2
Bridge or Town Name	CESSFORD	Inspector Name	Owen Salava
Located Over	ENV - DEADFISH IC, WATERCRS-IC	Inspector Class	BR CLS A
Located On	LOCAL ROAD	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	17-Jul-2012
Legal Land Location	SE SEC 15 TWP 24 RGE 14 W4M	Data Entry By	Marcia Chavez
Longitude, Latitude	-111:52:25, 51:02:16	Data Entry Date	20-Aug-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	UNDEFINED CMA	Review Date	31-Jul-2012
Clear Roadway/Skew	6.8 / 30 deg. (RHF)	Dept. Reviewer Name	Andrew Smikles
AADT/Year		Dept. Review Date	21-Aug-2012
Road Classification	RLU-208G-90	Follow-Up By	
Detour Length (km)	999		

Bridge Culvert Information

Number of Culverts	2							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1600	MP	23	125X26	3.5	ROUND
2	MAIN	-	1600	MP	23	125X26	3.5	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power	3 OH lines to North.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	9	9	
Vertical Alignment	8	8	
Roadway Width (m)	6.800		
Embankment	7	7	
Sideslope (__:1)	3.0		
(Height of Cover(m) :)			
Guardrail (Y/N)	Yes		2 broken posts at N rail.
Approach Road / Embankment General Rating	8	8	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)			
Direction	N		East culvert.
End Treatment (Concrete, Steel, Others, None)	STEEL		
Headwall	N	X	
Collar	N	X	
Wingwalls	N	X	
(Shape :)			

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Cutoff Wall		N	X	
Bevel End		6	6	
Heaving (mm)	50			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	100			
Scour Protection		4	4	
(Type : RIP RAP)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		4	4	Water gets under both pipes due to skew & poor seal - OK though.
Beavers (Y/N)	No			
Upstream End General Rating		4	4	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1600, Type: MP)				
Barrel Last Accessible Date	17-Jul-2012			East culvert.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)	1555			
Measured At Ring No.	2			
Sag (mm)	45			2.8%
Percent Sag	3			
Sidewall		7	7	
Measured Span (mm)	1640			
Measured At Ring No.	2			
Deflection (mm)	60			3.8%
Percent Deflection	4			
Floor		6	6	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	80			
Longitudinal Seams		N	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		4	4	Some scaled rust @ invert. Minor pitting.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1600, Type: MP)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle			X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		6	6	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction		S		East culvert.
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		N	X	Square end.
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	100			
Scour Protection		7	7	Gabion baskets @ side of channel. Gabion spoilers & rock apron drop structure.
(Type : GABION)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
Downstream End General Rating		7	6	
Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		N		West culvert.
End Treatment (Concrete, Steel, Others, None)	NONE			
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	X	U/S projects out further on West pipe due to staggered skew.
Heaving (mm)	100			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	100			
Scour Protection		6	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		5	6	
Beavers (Y/N)	No			
Upstream End General Rating		6	5	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1600, Type: MP)				
Barrel Last Accessible Date	17-Jul-2012			West culvert.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	4.1%
Measured Rise (mm)	1535			
Measured At Ring No.	2			
Sag (mm)	65			
Percent Sag	4			
Sidewall		7	7	2.6%
Measured Span (mm)	1642			
Measured At Ring No.	2			
Deflection (mm)	42			
Percent Deflection	3			
Floor		6	6	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	50			
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	5	Minor scale on invert, some pitting.
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): 1600, Type: MP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle			X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		6	7	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		S		West culvert.
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		N	X	Square cut.
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	100			
Scour Protection		7	7	Gabion baskets @ sides. Gabion spoilers & rock apron drop structure downstream.
(Type : GABION)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
Downstream End General Rating		7	6	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		8	8	
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	2012	Restore clay seals at inlet end, 20m3.					
OTHER ACTION	2012	Replace 2 guardrail posts.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	66.0/66.7	Sufficiency Rating (Last/Now) (%)	59.5/66.4	Est. Repl. Yr	2032	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	John O'Brien		Previous Assistant's Name				
Next Inspection Date	17-Apr-2017		Previous Inspection Date	08-Oct-2004			
Inspection Cycle (Default) (months)	57						
Comment							