Bridge Culvert Inspection

Bridge File Number	71703 -1 Bridge Culvert	Form Type	CULE
Year Built	1954	Lot No.	4
Bridge or Town Name	DEWINTON	Inspector Name	Jason Rusu
Located Over	WATERCOURSE, WATERCRS-NI	Inspector Class	BR CLS A
Located On	2A:08 L1 3.970;2A:08 R1 3.601	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	11-Aug-2012
Legal Land Location	SW SEC 1 TWP 22 RGE 1 W5M	Data Entry By	Lauren Korte
Longitude, Latitude	-114:00:53, 50:50:22	Data Entry Date	05-Sep-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	CMA27	Review Date	19-Aug-2012
Clear Roadway/Skew	34.4 /	Dept. Reviewer Name	Tim Davies
AADT/Year	18,550 / 2011 (A)	Dept. Review Date	06-Sep-2012
Road Classification	RFD-616.6-130	Follow-Up By	
Detour Length (km)	1		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	1980	1980	BP	42			RECTANGLE
1	D/S	-	1810	SP	49.4			ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	East & West ditch.	Gas	
Power	North in median/underground. East row.	Municipal	
Others	3 West @ East R/W.	Problem (Y/N)	No
Remarks	Fibre optic West and East of r/w.		

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	
Vertical Alignment		7	7	
Roadway Width (m)	34.400			
Embankment		N	7	4:1 @ West.
Sideslope (__:1)	2.0			
(Height of Cover(m) : **3.4**)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		**7**	**7**	

Upstream End

Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		W		SP West end.
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		N	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		N	7	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		N	7	
Beavers (Y/N)	No			
Upstream End General Rating		**N**	**7**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 1980, Rise (mm): 1980, Type: BP**)				
Barrel Last Accessible Date	11-Aug-2012			East section- concrete box.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	6	8mm crack. 5 Sections from Sp extension.
Measured Rise (mm)	1980			
Measured At Ring No.	1			
Sag (mm)				
Percent Sag				
Sidewall		6	6	8mm crack.
Measured Span (mm)	1980			
Measured At Ring No.	1			
Deflection (mm)				
Percent Deflection				
Floor		5	5	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	X	
Separation (mm)	30			
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		X	X	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
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): 1980, Rise (mm): 1980, Type: BP**)				
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**6**	**6**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: D/S, Span (mm): , Rise (mm): 1810, Type: SP**)				
Barrel Last Accessible Date	11-Aug-2012			West section. SP extension.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)	1800			
Measured At Ring No.	8			
Sag (mm)	10			
Percent Sag	1			
Sidewall		7	7	
Measured Span (mm)	1827			
Measured At Ring No.	8			
Deflection (mm)	17			
Percent Deflection	1			
Floor		5	5	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	
Separation (mm)	0			
Longitudinal Seams		7	7	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		6	6	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
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: D/S, Span (mm): , Rise (mm): 1810, Type: SP**)				
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel Extension General Rating		**7**	**7**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		N		East end.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		N	5	Medium scaling.
Collar		X	X	
Wingwalls		N	6	Minor cracks & light scaling.
(Shape : **FLARE**)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		N	7	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	7	
Beavers (Y/N)	No			
Downstream End General Rating		**N**	**5**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		6	6	
Bank Stability		N	6	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				Unknown.
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				
Channel General Rating		**6**	**6**	

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) (%)	**66.7/66.7**	**Sufficiency Rating (Last/Now) (%)**	**65.3/67.4**	Est. Repl. Yr	2025	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	Jason Rusu	Previous Assistant's Name			
Next Inspection Date	11-May-2014	Previous Inspection Date	10-Jan-2011		
Inspection Cycle (Default) (months)	21				
Comment					