					Brida	e Culve	ert Inspe	ection					
Bridge File Nun	nber	73832 -	·1 Bridge Culve	rt					CULM				
Year Built 1978						Lot No.		4					
Bridge or Town	Name	CARDS	STON					Inspector Name		Jon Davies			
Located Over							Inspector Class		BR CLS B				
Located On			C1 2.152					Assistant Name					
Water Body Cl.	/Year						Assistant Class						
Navigabil. Cl./Year								Inspection Date		12-Oct-2011			
Legal Land Location SE SEC 11 TWP 1 RGE 26 W4M					М		Data Entry By		Anne Roberts				
Longitude, Latitude -113:22:07, 49:00:58							Data Entry Date		24-Nov-2011				
			Transportation	(AIT)			Reviewer Name		Jason Rusu				
Contract Main. Area CMA25			·	,			Review Date		10-Nov-2011				
Clear Roadway			deg. (LHF)					eviewer l	Name	Tim Davies			
AADT/Year		660 / 20						eview Da		25-Nov-2011			
Road Classifica	ition	RAU-2	` '				Follow-						
Detour Length		56						-1 ,					
Bridge Culvert	` '	ation					1			·			
Number of Culv			2										
Pipe #	Barrel		Span	Rise (or	Dia.)	Туре		Length		Corr. Profile	Pl./Slab Thickness	Shape	
1	MAIN		-	5200		SP		50		152X51	3.0,4.0	ROUND	
2	MAIN		-	2130		MP		25.6		75X25	2.8	ROUND	
Special Feature	es												
Special Feature		ment											
•													
					Uti	lities (L	ocated	at)					
Utility Attachme							1		I				
Telephone	West	ditch					Gas						
Power							Municip						
Others	Fibre	optics @	E r/w				Problen	n (Y/N)	No				
Remarks													
				Ap			1	nkment					
Harizantal Align	mont				Last 8			ation of (					
Horizontal Align					6	6	No pas	sight dista sing SB.	ance io	o south.			
Vertical Alignme	eni				6	0							
Roadway Width	n (m)		12.000										
Embankment					7	7	1:1 @ 2	2130 pipe @ U/S and D/S pipe					
Sideslope (	:1)		4.0				2.7m COVER OVER (			CATTLEPASS CSP.			
(Height of Co		3.2)											
Guardrail (Y/N)			Yes										
Approach Roa	d / Eml	oankme	nt General Rat	ing	6	6							
						Upstre	am End						
Culvert Compo	onent				Last	Now		ation of	Condi	tion			
(Pipe # : <b>1, Sp</b>	an Type	e: Prima	ry Span)										
Direction					W		WEST	INVERT -	- south	n pipe			
End Treatment (Concrete, Steel, CONCRETE Others, None)													
Headwall					Х	Х							
Collar					5	5	50mm settlement between collar and shoulder						

			Llmotre	om End		
Culvert Component				eam End Explanation of Condition		
(Pipe # : 1, Span Type: Primary	( Snan)	Lasi	INOW	Explanation of Condition		
Wingwalls	y Spair)	X	X			
(Shape: )						
Cutoff Wall		N	X			
Cuton wan		'N	_ ^			
Bevel End		7	7			
Heaving (mm)	0					
Invert Above/Below Stream Bed	BELOW					
Above/Below (mm)	1000					
Scour Protection		6	6			
(Type: RIP RAP)						
(Avg. Rock Size(mm): 300)						
Scour/Erosion		6	6			
- 0.42 N	I					
Beavers (Y/N)	No					
Upstream End General Rating	I.	5	5			
opensum End General Runnig						
				ılvert Barrel		
Culvert Component			Now	•		
(Pipe # : 1, Primary Span, Loca		an (mm	1):	, Rise (mm): 5200, Type: SP)		
Barrel Last Accessible Date	20-Jan-2010			South pipe. Not accessible due to high water level.		
Special Features				Not accessible due to high water level.		
Special Features Special Feature						
(Type:)						
Special Feature						
(Type:)						
Roof		7	X	(Est - Jan 20/10) Prev. rating 7		
Measured Rise (mm)	5040	,		Viewed from ends. General shape is good.		
Measured At Ring No.	3					
Sag (mm)	160			_		
Percent Sag	3					
Sidewall	J	7	N	Prev. rating 7		
Measured Span (mm)	5360		IN	Frev. rating /		
Measured At Ring No.	3					
Deflection (mm)	160					
Percent Deflection	3			_		
Floor	J	N	N	(ice covered) Jan 20/10		
Bulge (mm)		IN	11	(ice covered) Jan 20/10		
Measured At Ring No.						
Abrasion (Y/N)	No					
Circumferential Seams	140	7	N	Prev. rating 7		
Separation (mm)		/	IN	Frev. fating /		
		6	N	(Lower sidewall seams under ice) lon 20/40		
Longitudinal Seams  Total No. of Cracked Pings	0	6	IN	(Lower sidewall seams under ice) Jan 20/10 Prev. rating 6		
Total No. of Cracked Rings	0			-		
Total No. of Rings with Two Cracked Seams	0					
Min. Remaining Steel Between Cracks (mm)	0			1N stagger		
Proper Lap (Y/N)	No					
Longitudinal Stagger (Y/N)	Yes					

		Brid	ige Cul	vert Barrel
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Loca	tion Code: MAIN, Spa	n (mm	):	, Rise (mm): 5200, Type: SP)
Coating		5	N	(SURFACE RUST LOWER SIDEWALL) Jan. 20/10
Corrosion By Soil (Y/N)	No			Prev. rating 5
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		Х	Х	
(Type:)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		7	N	Prev. rating 7
			1	eam End
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary	/ Span)			
Direction	T	Е		EAST - south pipe
End Treatment (Concrete, Steel, Others, None)				
Headwall		Х	X	
Collar		Х	X	
Wingwalls		X	X	
(Shape: )				
Cutoff Wall		Х	X	
Bevel End		7	6	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		5	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm): 300)				
Scour/Erosion		5	5	
Beavers (Y/N)	No			
Downstream End General Ratio	ng	5	5	
			Upstre	am End
Culvert Component		1		Explanation of Condition
(Pipe # : 2, Span Type: Second	ary Span)			
Direction		W		WEST - North Pipe - Cattle pass.
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		Х	X	
Collar		Х	Х	

			Upstre	am End
<b>Culvert Component</b>			Now	Explanation of Condition
(Pipe # : 2, Span Type: Second	lary Span)			
Wingwalls		Х	X	
(Shape: )				
Cutoff Wall		Х	Х	
Bevel End		Х	Х	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	50			
Scour Protection		7	7	
(Type: RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Upstream End General Rating		7	7	
		D <sub>w</sub> t	dae Cr	lvert Barrel
Culvert Component			Now	Explanation of Condition
	cation Code: MAIN 9			, Rise (mm): 2130, Type: MP)
		Jpan (i		North pipe
	10-001-2011			North pipe
		1		
				Cattle pass
		1		
•				
		1		
	1	7	7	Est
	2076			
Measured At Ring No.	3			
Sag (mm)	54			
Percent Sag	2			
Sidewall		7	7	
Measured Span (mm)	2184			
Measured At Ring No.	3			
Deflection (mm)	54			
Percent Deflection	2			
Sag (mm) 54 Percent Sag 2 Sidewall Measured Span (mm) 2184 Measured At Ring No. 3 Deflection (mm) 54 Percent Deflection 2 Floor Bulge (mm) Measured At Ring No.		N	N	Dirt covered
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		5	5	80mm vertical misalignment at R3. At South side roof 100 mm
Separation (mm)	100			horizontal separation at R3.
Longitudinal Seams		Х	Х	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Longitudinal olagger (1/14)	100			

Calvert Component		Bridge Culvert Barrel										
Costing   Soil (Y/N)	Culvert Component		Last	Now	Explanation of Condition							
Corrosion By Soil (YN)	(Pipe # : 2, Secondary Span, Lo	cation Code: MAIN, S	pan (r	nm):	, Rise (mm): 2130, Type: MP)							
Carrosion By Wlater (Y/N)	Coating		5	5	Light corrosion at lower haunch							
Camber POS/ZERO/NEG   ZERO	Corrosion By Soil (Y/N)	No										
Pronding (Y/N)	Corrosion By Water (Y/N)	Yes										
Structure   Structure   Steplanation of Condition   Structure   Structure   Structure   Steplanation of Condition   Structure   Structure   Steplanation of Condition   Structure   Steplanation of Condition   Steplanation of Condition   Steplanation of Condition   Steplanation of Condition   Steplanation   Steplanation	Camber POS/ZERO/NEG	ZERO										
Baffle	Ponding (Y/N)	No										
Waterway Adequacy	Fish Passage Adequacy		Х	Х								
Waterway Adequacy	Baffle		Х	Х								
Icing (Y/N)	(Type:)											
Sitting (Y/N)	Waterway Adequacy		Х	7	Handles minor drainage.							
Downstream End   Culvert Component   Last   Now   Explanation of Condition	Icing (Y/N)	No										
Barrel General Rating   7   7	Silting (Y/N)	No										
Downstream End   Last   Now   Explanation of Condition	Drift (Y/N)	No										
Last   Now   Explanation of Condition	Barrel General Rating		7	7								
Last   Now   Explanation of Condition			D	ownetr	com End							
Pipe # : 2, Span Type: Secondary Span	Culvert Component											
Direction		lary Span)	Last	INOW	Explanation of condition							
End Treatment (Concrete, Steel, Others, None)		ary opani	F		EAST END North Pine							
Cotler	Direction		<u> </u>		LAGT LIND. NOTHER IPE							
Collar	Others, None)	INONE										
Wingwalls	Headwall		Х	Х								
(Shape:)         Cutoff Wall         X         X           Bevel End         X         X           Heaving (mm)         Invert Above/Below Stream Bed Above/Below (mm)         BELOW           Above/Below (mm)         50           Scour Protection         6         6           (Avg. Rock Size(mm): 300)         Ingrown and natural.           Scour/Erosion         6         6           Beavers (Y/N)         No         No           Downstream End General Rating         6         6           Structure Usage         Last Now         Explanation of Condition           Channel (U/S and D/S)         Alignment         6         6         MEANDERS THROUGH VALLEY           Bank Stability         5         5           HWM (m below Top of Culvert)         2.0         No visible HWM	Collar		Х	Х								
(Shape:)         Cutoff Wall         X         X           Bevel End         X         X           Heaving (mm)         Invert Above/Below Stream Bed Above/Below (mm)         BELOW           Above/Below (mm)         50           Scour Protection         6         6           (Avg. Rock Size(mm): 300)         Ingrown and natural.           Scour/Erosion         6         6           Beavers (Y/N)         No         No           Downstream End General Rating         6         6           Structure Usage         Last Now         Explanation of Condition           Channel (U/S and D/S)         Alignment         6         6         MEANDERS THROUGH VALLEY           Bank Stability         5         5           HWM (m below Top of Culvert)         2.0         No visible HWM	Wingwalls		Х	Х								
Cutoff Wall			ı									
Heaving (mm)   Invert Above/Below Stream Bed   BELOW   Above/Below (mm)   50			Х	Х								
Heaving (mm)   Invert Above/Below Stream Bed   BELOW   Above/Below (mm)   50	Bevel End		Х	Х								
Invert Above/Below Stream Bed Above/Below (mm) 50  Scour Protection 6 6 6 Ingrown and natural.  (Type: RIP RAP) (Avg. Rock Size(mm): 300) Scour/Erosion 6 6  Beavers (Y/N) No  Downstream End General Rating 6 6  Structure Usage Last Now Explanation of Condition  Channel (U/S and D/S)  Alignment 6 6 MEANDERS THROUGH VALLEY  Bank Stability 5 5  HWM (m below Top of Culvert) 2.0 No visible HWM												
Above/Below (mm)   50		BELOW										
Scour Protection 6 6 6 Ingrown and natural.  (Type: RIP RAP) (Avg. Rock Size(mm): 300)  Scour/Erosion 6 6  Beavers (Y/N) No  Downstream End General Rating 6 6  Structure Usage Last Now Explanation of Condition  Channel (U/S and D/S)  Alignment 6 6 MEANDERS THROUGH VALLEY  Bank Stability 5 5  HWM (m below Top of Culvert) 2.0 No visible HWM	Above/Below (mm)	50										
(Type : RIP RAP) (Avg. Rock Size(mm) : 300)  Scour/Erosion 6 6  Beavers (Y/N) No  Downstream End General Rating 6 6  Structure Usage Last Now Explanation of Condition  Channel (U/S and D/S)  Alignment 6 6 6 MEANDERS THROUGH VALLEY  Bank Stability 5 5  HWM (m below Top of Culvert) 2.0 No visible HWM			6	6	Ingrown and natural.							
(Avg. Rock Size(mm) : 300)  Scour/Erosion 6 6  Beavers (Y/N) No  Downstream End General Rating 6 6  Structure Usage  Last Now Explanation of Condition  Channel (U/S and D/S)  Alignment 6 6 MEANDERS THROUGH VALLEY  Bank Stability 5 5  HWM (m below Top of Culvert) 2.0 No visible HWM												
Scour/Erosion 6 6 6  Beavers (Y/N) No  Downstream End General Rating 6 6  Structure Usage Last Now Explanation of Condition  Channel (U/S and D/S)  Alignment 6 6 6 MEANDERS THROUGH VALLEY  Bank Stability 5 5  HWM (m below Top of Culvert) 2.0 No visible HWM												
Downstream End General Rating  Structure Usage  Last Now Explanation of Condition  Channel (U/S and D/S)  Alignment  6 6 6 MEANDERS THROUGH VALLEY  Bank Stability  5 5  HWM (m below Top of Culvert) 2.0 No visible HWM			6	6								
Structure Usage  Last Now Explanation of Condition  Channel (U/S and D/S)  Alignment 6 6 MEANDERS THROUGH VALLEY  Bank Stability 5 5  HWM (m below Top of Culvert) 2.0 No visible HWM	Beavers (Y/N)	No										
Channel (U/S and D/S)       Alignment     6     6     MEANDERS THROUGH VALLEY       Bank Stability     5     5       HWM (m below Top of Culvert)     2.0     No visible HWM	Downstream End General Ratio	ng	6	6								
Channel (U/S and D/S)       Alignment     6     6     MEANDERS THROUGH VALLEY       Bank Stability     5     5       HWM (m below Top of Culvert)     2.0     No visible HWM			\$	tr <u>uctu</u>	re Usage							
Channel (U/S and D/S)  Alignment 6 6 MEANDERS THROUGH VALLEY  Bank Stability 5 5  HWM (m below Top of Culvert) 2.0 No visible HWM				1								
Alignment 6 6 MEANDERS THROUGH VALLEY  Bank Stability 5 5  HWM (m below Top of Culvert) 2.0 No visible HWM	Channel (U/S and D/S)											
HWM (m below Top of Culvert) 2.0 No visible HWM	Alignment		6	6	MEANDERS THROUGH VALLEY							
	Bank Stability		5	5								
	HWM (m below Top of Culvert)	2.0			No visible HWM							
	Drift (Y/N)	No			1.5 T.S.S.O TITTIN							

Structure Usage									
Last Now Explanation of Condition									
Channel Bottom Degrading/Aggrading	DEGRADING								
Beavers (Y/N) No									
(Fish Compensation Measure 1 :	NONE)								
(Fish Compensation Measure 2 :	NONE)								
Channel General Rating			6						

		Maintenanc	e Recommenda	ntions					
Inspector Recommendations	Year	Inspector Comments		Department Com	ments		Target Year	Est. Cost	Cat #
SHOTCRETE REPAIRS		·		<u>'</u>					
PLACE ADDITIONAL RIP RAP									
REMOVE DRIFT ACCUMULATION									
INSTALL CONCRETE/STEEL LINING	i								
INSTALL STRUTS									
INSTALL CONCRETE COLLAR/CUTO	OFF								
REPAIR SEAMS									
OTHER ACTION									
OTHER ACTION									
OTHER ACTION									
OTHER ACTION									
Structural Condition Rating (Last/No. (%)	ow) 77.8/77	.8 Sufficiency Rating (L (%)	ast/Now) 69	9.3/70.1	Est. Repl. Yr	2030	Maint. Re	qd. (Y/N)	No
Special Comments for Next Inspection				Department Comments					
Maintenance Reviewed By				Date		E	Estimated Tota	1 0	
Proposed Long-Term Strategy									
On 3-Year Program (Y/N)									
Proposed Action									
Previous Inspector's Name	Garry Roberts		Previous A	ssistant's Name					
Next Inspection Date	12-Jul-2013		Previous In	spection Date	20-Jan-2010				
Inspection Cycle (Default) (months)	21								
Comment									