Dridge File No				Bridg	<u>ge Culve</u>	ert Inspecti	ion					
Bridge File Nu	ımber	80529 -	1 Bridge Culve			Form Type		CULM				
Year Built/Line	ed	1983/19	990			Lot No.		1				
Bridge or Tow	n Name	DEWBE	ERRY			Inspector	Name	Jason Saly				
Located Over				MILION RIVER,	6.5.3,	Inspector	Class	BR CLS A				
Located On		WATERCRS-ST 45:12 C1 1.901				Assistant I	Name					
Located On	I /Vaar	45:12 C	1 1.901			Assistant (Class					
Water Body C Navigabil. Cl./						Inspection	Date	21-Jan-2013				
		CVV CE	C 00 TMD 50 I			Data Entry	у Ву	Marcia Chave	z			
Legal Land Lo			C 26 TWP 53 F	KGE 4 VV4IVI		Data Entry	y Date	08-Mar-2013				
Longitude, Lat			:36, 53:35:57	/AIT)		Reviewer	Name	John O'Brien				
Road Authority Contract Main		CMA15	Transportation	(AII)		Review Da		13-Feb-2013				
Clear Roadwa		12.5 / 0				Dept. Rev	iewer Name	Chris Black				
AADT/Year	iy/Skew					Dept. Rev		28-Mar-2013				
	nation	840 / 2011 (A) RAU-212.0-110			Follow-Up By							
Road Classific												
Detour Length Bridge Culver		1										
Number of Cu		iatiOH	3									
Pipe #	Barrel		Span	Rise (or Dia.)	Туре	Length		Corr. Profile	Pl./Slab Thickness	Shape		
1	MAIN			1200	MP	59		65X13	2.8	ROUND		
2		Partially	-	1200	MP	59		65X13	2.8	ROUND		
3	MAIN PARTI LINER	AL	-	900	SSP	47			9.0	ROUND		
Special Featur	res											
Special Featur		ment										
				Ut	ilities (L	_ocated at)						
Utility Attachm	ents				,	<u> </u>						
Telephone						Gas						
Power	2 wire	s 30m N	lorth.			Municipal						
Others						Ducklana (Y/N) No					
Domorko						Problem (1/14) 140					
Remarks						Problem (1714) 140					
Remarks				Approa	ch Road	d / Embank	, ,					
Remarks				Approa Last		d / Embank	, ,	ition				
Horizontal Alig	gnment					d / Embank Explanation	ment					
				Last	Now	d / Embank Explanation	ment on of Condi					
Horizontal Alig	nent		12.500	Last	Now 7	d / Embank Explanation	ment on of Condi					
Horizontal Alig Vertical Alignn	nent		12.500	Last	Now 7	d / Embank Explanation	kment on of Condi		ms.			
Horizontal Alig Vertical Alignn Roadway Wid	nent th (m)		12.500	Last 7	7 7	d / Embank Explanation	kment on of Condi	00m.	ms.			
Horizontal Alig Vertical Alignn Roadway Wid Embankment	nent th (m)	: 5.6)		Last 7	7 7	d / Embank Explanation	kment on of Condi	00m.	ms.			
Horizontal Alig Vertical Alignn Roadway Wid Embankment Sideslope (_	nent th (m) _:1) over(m):	: 5.6)		Last 7	7 7	d / Embank Explanation	kment on of Condi	00m.	ms.			
Horizontal Alig Vertical Alignn Roadway Widt Embankment Sideslope (_ (Height of Co Guardrail (Y/N	nent th (m) _:1) over(m):		2.5	7 7 7	7 7	d / Embank Explanation	kment on of Condi	00m.	ms.			
Horizontal Alig Vertical Alignn Roadway Widi Embankment Sideslope (_ (Height of Co Guardrail (Y/N	nent th (m) _:1) over(m):		2.5 No	7 7 7	Now 7 7 N N 7	d / Embank Explanation	kment on of Condi	00m.	ms.			
Horizontal Alig Vertical Alignn Roadway Widt Embankment Sideslope (_ (Height of Co Guardrail (Y/N	nent th (m) _:1) over(m):		2.5 No	7 7 7	Now 7 7 N N Upstre	Snow cove	kment on of Condi	signs of proble	ms.			
Horizontal Alig Vertical Alignn Roadway Widt Embankment Sideslope (_ (Height of Co Guardrail (Y/N	nent th (m) _:1) over(m): l) ad / Eml	bankme	2.5 No nt General Ra	7 7 7 ting 7	Now 7 7 N N Upstre	Snow cove	kment on of Condi d into farm 50 ered, but no	signs of proble	ms.			
Horizontal Alig Vertical Alignn Roadway Widt Embankment Sideslope (_ (Height of Co Guardrail (Y/N Approach Ro	nent th (m) _:1) over(m): l) ad / Eml	bankme	2.5 No nt General Ra	7 7 7 ting 7	Now 7 7 N N Upstre	Snow cove	ered, but no	signs of proble	ms.			
Horizontal Alig Vertical Alignn Roadway Widt Embankment Sideslope (_ (Height of Co Guardrail (Y/N Approach Ro Culvert Comp (Pipe # : 1, Sp	_:1) over(m): ad / Eml conent pan Type	oankme	2.5 No nt General Ran ary Span)	Last 7 7 7 ting 7 Last	Now 7 7 N N Upstre	Snow cove	ered, but no	signs of proble	ms.			

			Unetro	eam End
Culvert Component				Explanation of Condition
(Pipe # : 1, Span Type: Primary	v Span)	Luot	11011	Explanation of condition
Collar	, , , , , , , , , , , , , , , , , , , ,	Х	Х	
Collar				
Wingwalls		X	X	
(Shape:)			1	
Cutoff Wall		X	X	
Bevel End		6	6	
Heaving (mm)	200	0	0	
Invert Above/Below Stream Bed				
Above/Below (mm)	200			
Scour Protection	200	7	N	Snow covered.
(Type : NATURAL)		, ,	111	Onow covered.
(Avg. Rock Size(mm):)				
Scour/Erosion		7	N	Snow covered.
20041/21031011	_		'`	Onew covered.
Beavers (Y/N)	No			
Upstream End General Rating		6	6	
		Bric	ige Cu	Ivert Barrel
Culvert Component			Now	Explanation of Condition
(Pipe # : 1, Primary Span, Loca	tion Code: MAIN, Sp	oan (mm):	, Rise (mm): 1200, Type: MP)
Barrel Last Accessible Date	25-Mar-2003			East pipe.
On a sigl Factoria				Viewed from S end due to water & confined space.
Special Feature				
Special Feature				
(Type:)				
Special Feature				
(Type:)				
Roof	4000	N	N	Rating could be 2 based on past sag.
Measured Rise (mm)	1000			
Measured At Ring No.	2			
Sag (mm)	200			(16.7%. 25/Mar/2003)
Percent Sag	17		l	
Sidewall	1	N	N	As per previous measurement, unable to get far enough to find 1500mm measurement. Measured R2, 1355 span. Past
Measured Span (mm)	1350			measurement of 1500mm not found since 2003. Should dewater &
Measured At Ring No.	2			measure since 25% deflection is excessive. (Previous measuremnt.)
Deflection (mm)	300			(12.5% found on 16/Aug/2009)
Percent Deflection	25		1	
Floor		N	N	(03/03/25)
Bulge (mm)	50			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	
Separation (mm)	50			
Longitudinal Seams		X	N	Rivetted seams.
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)				

		Brio	lge Cu	Ivert Barrel
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Locat	ion Code: MAIN, Spa	n (mm):	, Rise (mm): 1200, Type: MP)
Coating		3	3	Pitting/scaling on floor. No clear photo due to snow/ice on floor.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			
Fish Passage Adequacy		5	5	
Baffle		Х	Х	
(Type:)				
Waterway Adequacy		5	5	1/2 full @ D/S.
Icing (Y/N)	No			
Silting (Y/N)	Yes			Minor.
Drift (Y/N)	Yes			
Barrel General Rating		2	2	G.R. from 14/Apr/2007 but based on earlier span deflection. G.R. & sidewall could be rated "1".
		D	ownstr	ream End
Culvert Component		Last	Now	Explanation of Condition
(Pipe #: 1, Span Type: Primary	Span)			
Direction		N		East pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		Х	X	
Collar		Х	Х	
Wingwalls		X	X	
(Shape:)				
Cutoff Wall		Х	Х	
Bevel End		5	5	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		7	N	
(Type: NATURAL)				
(Avg. Rock Size(mm):)				
Scour/Erosion		7	N	
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		s		West pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		Х	Х	
Collar		Х	Х	

80529 -1 Bridge Culvert

			Upstre	am End
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Second	ary Span)			
Wingwalls		X	X	
(Shape:)				
Cutoff Wall		X	X	
Bevel End		6	6	
Heaving (mm)	200			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		7	N	Snow covered.
(Type : NATURAL)				
(Avg. Rock Size(mm):)				
Scour/Erosion		7	N	Snow covered.
Beavers (Y/N)	No			
Upstream End General Rating		6	6	
		Bric	dae Cu	lvert Barrel
Culvert Component			Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Lo	cation Code: MAIN, S			, Rise (mm): 1200, Type: MP)
Barrel Last Accessible Date	25-Mar-2003			Viewed from ends.
Special Features				
Special Feature				
(Type:)				
Special Feature				
(Type:)				
Roof		N	N	(1m S of liner. 25Mar2003).
Measured Rise (mm)	1040			
Measured At Ring No.	2			
Sag (mm)	160			(13.3%. 25Mar2003).
Percent Sag	13			
Sidewall		N	N	(1m South of liner. 16Aug2009).
Measured Span (mm)	1320			
Measured At Ring No.	2			
Deflection (mm)	120			(25Mar2003)
Percent Deflection	10			
Floor		N	N	Dirt/ice covered.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		Х	N	
Separation (mm)				
Longitudinal Seams		Х	N	
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)				

		Brio	dge Cu	lvert Barrel
Culvert Component		Last	Now	Explanation of Condition
(Pipe #: 2, Secondary Span, Lo	cation Code: MAIN, S	pan (n	nm):	, Rise (mm): 1200, Type: MP)
Coating		3	3	(Pitting @ haunches. 25Mar2003) - Rating carried forward.
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	Yes			
Fish Passage Adequacy		5	5	
Baffle		Х	Х	
(Type:)				
Waterway Adequacy		5	5	
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		2	3	Adjusted GR to 3 due to old deflection.
		D	ownstr	ream End
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Second	ary Span)			
Direction		N		West pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		Х	Х	
Collar		Х	Х	
Wingwalls		X	X	
(Shape:)				
Cutoff Wall		Х	X	
Bevel End		5	5	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		7	N	Snow covered.
(Type : NATURAL)				
(Avg. Rock Size(mm):)				
Scour/Erosion		7	N	Snow covered.
Beavers (Y/N)	No			
Downstream End General Ratio	ng	5	5	
			Upstre	eam End
Culvert Component		Last		
(Pipe #: 3, Span Type: Second	ary Span)			
Direction		S		West pipe.
End Treatment (Concrete, Steel, Others, None)	NONE			Liner stops 6m short of original pipe bevel end.
Headwall		Х	Х	
Collar		Х	Х	

			Upstre	am End
Culvert Component		Last	Now	Explanation of Condition
(Pipe #: 3, Span Type: Second	ary Span)			
Wingwalls		X	X	
(Shape:)				
Cutoff Wall		X	X	
Bevel End		Х	Х	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection		X	X	
(Type: NATURAL)				
(Avg. Rock Size(mm):)				
Scour/Erosion		Х	X	
Beavers (Y/N)	No			
Upstream End General Rating		5	5	
		Brid	dae Cu	lvert Barrel
Culvert Component		1	Now	Explanation of Condition
(Pipe # : 3, Secondary Span, Lo	cation Code: MAIN, S			, Rise (mm): 900, Type: SSP)
Barrel Last Accessible Date			,	Not accessible due to size; viewed from both ends, shape appears adequate.
Special Features				
Special Feature				
(Type:)				
Special Feature				
(Type:)				
Roof		N	N	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		N	N	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		Х	N	
Separation (mm)				
Longitudinal Seams		Х	Х	
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)				

		Bric	lge Cu	lvert Barrel
Culvert Component L (Pipe # : 3, Secondary Span, Location Code: MAIN, Span, Span, Location Code: MAIN, Span, Span, Span, Location Code: MAIN, Span, Sp		Last	Now	Explanation of Condition
(Pipe #: 3, Secondary Span, Lo	cation Code: MAIN, S	Span (n	nm):	, Rise (mm): 900, Type: SSP)
Coating		N	N	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	Yes			
Fish Passage Adequacy		5	5	
Baffle		Х	Х	
(Type:)				
Waterway Adequacy		5	5	
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		5	N	GR was 5 from 16Aug2009.
		D	ownstr	eam End
Culvert Component		Last	Now	Explanation of Condition
(Pipe #: 3, Span Type: Second	lary Span)			
Direction		N		West pipe.
End Treatment (Concrete, Steel, Others, None)	NONE			Liner stops 6m short of bevel end.
Headwall		Х	Х	
Collar		Х	Х	
Wingwalls		Х	Х	
(Shape:)				
Cutoff Wall		Х	Х	
Bevel End		Х	Х	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		Х	Х	
(Type: NATURAL)				
(Avg. Rock Size(mm):)				
Scour/Erosion		Х	Х	
Beavers (Y/N)	No			
Downstream End General Ratio	ng	5	5	
		s	tructu	re Usage
			Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Culvert)	0.0			Grass in bush @ top of culvert U/S & D/S. HWM not visible.
Drift (Y/N)	Yes			

		S	Structu	re Usage
		Last	Now	Explanation of Condition
Channel Bottom Degrading/Aggrading	AGGRADING			
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 :	NONE)			
(Fish Compensation Measure 2 :	NONE)			
Channel General Rating		7	7	

			Maintenance Recommendations	ecommenda	tions					
Inspector Recommendations	Year		Inspector Comments		Department Comments	nents	_	Target Year	Est. Cost	Cat #
SHOTCRETE REPAIRS										
PLACE ADDITIONAL RIP RAP										
REMOVE DRIFT ACCUMULATION										
INSTALL CONCRETE/STEEL LINING	G 2013		Full length primary span.							
INSTALL STRUTS										
INSTALL CONCRETE COLLAR/CUTOFF	TOFF									
REPAIR SEAMS										
OTHER ACTION	2013		Inspect @ 12 month cycles.							
OTHER ACTION	2013		Dewater with Lvl 2 inspection.							
OTHER ACTION										
OTHER ACTION										
Structural Condition Rating (Last/Now) (%)		22.2/22.2	Sufficiency Rating (Last/Now)		41.7/36.9	Est. Repl. Yr	2015	Maint. Reqd. (Y/N)		Yes
Special Deflection makes p Comments for Liner in secondary Next Inspection Emailed LRA to AT	prime span ha r span hard to T on 08Mar20	ard to access access. 13 based on	Deflection makes prime span hard to access. Liner in secondary span hard to access. Emailed LRA to AT on 08Mar2013 based on previous measurements.		Department Comments					
Maintenance Reviewed By					Date		Est	Estimated Total	0	
Proposed Long-Term Strategy	CB to inves	tigate: Road	CB to investigate: Road strategy-guardrail may be warranted. Hazard is small. RS	/arranted. Ha:	zard is small. RS					
On 3-Year Program (Y/N)	>									
Proposed Action	Programme	Programmed maintenance in 2008.		D/S and clear	n out bevel, remov	Excavate silt at D/S and clean out bevel, remove dam and investigate liner. CB	gate liner. C	ø,		
Previous Inspector's Name	Jason Saly			Previous A	Previous Assistant's Name					
Next Inspection Date	21-Jan-2014	4		Previous In	Previous Inspection Date	07-Jun-2011				
Inspection Cycle (Modified) (months)	12									
Comment										

Maintenance Recommenda										
Inspector Recommendations	Yea	r Inspect	or Comments		Department Com	ments		Target Year	Est. Cost	Cat #
SHOTCRETE REPAIRS										
PLACE ADDITIONAL RIP RAP										
REMOVE DRIFT ACCUMULATION										
INSTALL CONCRETE/STEEL LINING	G 2013	3 Full len	gth primary span.							
INSTALL STRUTS										
INSTALL CONCRETE COLLAR/CUT	OFF									
REPAIR SEAMS										
OTHER ACTION	3 Inspect	@ 12 month cycles.								
OTHER ACTION 2013 Dewater with Lvl 2 inspection.										
OTHER ACTION										
OTHER ACTION										
Structural Condition Rating (Last/Now) 22.2/22.2 Sufficiency Rating (Last/Now) (%)			(Now)	41.7/36.9	Est. Repl. Yr	2015	Maint. Re	qd. (Y/N)	Yes	
Special Comments for Next Inspection Deflection makes prime span hard to access. Liner in secondary span hard to access. Emailed LRA to AT on 08Mar2013 based on previous measurements.					Department Comments					
Maintenance Reviewed By					Date		E	Estimated Tota	ıl O	
Proposed Long-Term Strategy CB to investigate: Road strategy-guardrail may be warranted.					Hazard is small. R	S				
On 3-Year Program (Y/N)										
Proposed Action Programmed maintenance in 2008. Excavate silt at D/S and					lean out bevel, ren	nove dam and inve	estigate li	ner. CB		
Previous Inspector's Name	Jason Saly			Previous	Assistant's Name					
Next Inspection Date	21-Jan-201	4		Previous	Inspection Date	07-Jun-2011				
Inspection Cycle (Modified) (months)	12									
Comment										