					Bridg	e Culve	ert Insp	ection						
Bridge File Num	ber	86234	-1 Bridge Culve	rt			Form 7	Гуре		CUL1				
Year Built		1981					Lot No	ot No.						
Bridge or Town	Name		RCOURSE CUL				Inspec	tor Name		Brian Pientsch				
Lacated Over			NCIAL HWY 88			KIH	Inspec	tor Class		BR CLS A				
Located Over Located On			RCOURSE, WA	IERCRS	-INI		Assista	ant Name		Clem Guenette	<u>e</u>			
	Voor	00.00	C1 28.966				Assista	ant Class						
Water Body Cl./							Inspec	Inspection Date 11-Jun-2012						
		NE SE	C 11 TWP 87 R	GE 0 W5	N /			ntry By		Theresa Lacusta				
			3:22, 56:32:11	GL 9 WO	IVI			Data Entry Date 16-Oct-2012						
	ide		· · · · · · · · · · · · · · · · · · ·	(AIT)				ver Name		Eric Carcoux				
				(/ (1 /)						08-Oct-2012				
						Reviewer		David Morrison	n					
Longitude, Latitude Road Authority Contract Main. Area Clear Roadway/Skew AADT/Year Road Classification Detour Length (km) Bridge Culvert Informatio Number of Culverts Pipe # Barrel MAIN Special Features Special Features Comment Utility Attachments Telephone E. row Power E. row - 3			2011 (A)					Review Da	ate	18-Dec-2012				
	ion		NU-210-110				Follow	-Up By						
Detour Length (km)													
		ation												
			1											
Pipe #	Barrel		Span	Rise (or [Туре		Length		Corr. Profile	PI./Slab Thickness	Shape		
1 [MAIN		-	1200		MP		30		68X13		ROUND		
Special Features Comment Wire mesh functioning.														
					17									
Litility Attachmen	oto				Uti	lities (L	ocated	at)						
							Gas							
		w - 3 line OH power					Munici	nal						
·		ower in V	V row			m (Y/N)	No							
						<u>'</u>	1.100.0	(. , ,	1.10					
				A	pproac	ch Road	d / Emb	ankment						
	Last	Now	Explar	nation of	Condi	tion								
Horizontal Aligni	ment				7	7	-							
Vertical Alignme	nt				7	7								
Roadway Width	(m)		9.800			_								
Embankment					3	3	Vertica	l near inle	et at u.	s end - 8m from	ı road shoulder	r. photo		
Embankment Sideslope (:1)		3.5				1:1 at d.s end6m fron crown in embankment.								
(Height of Cover(m) : 2.6)						2.5m u	.s end, 2.	6m d.s	s end					
Guardrail (Y/N)			No											
Approach Road	d / Emb	oankme	nt General Rat	ing	3	3								
						Upstre	am End							
Culvert Compo	nent				Last	Now	Explar	nation of	Condi	tion				
Direction					E									
End Treatment (Others, None)	Concre	ete, Stee	el, NONE											
Headwall					Х	Х								
Collar					Х	Х								
Wingwalls					Х	Х								
(Shape:)														
Cutoff Wall					Х	Х								

			Upstre	am End
Culvert Component		Last	Now	Explanation of Condition
Bevel End	<u> </u>	N	X	Explanation of Condition
Heaving (mm)		14		
Invert Above/Below Stream Bed				
				-
Above/Below (mm)		3	2	No accur protection (photo)
Scour Protection		<u> </u>	3	No scour protection.(photo)
(Type:)				
(Avg. Rock Size(mm):)				0 110 00 00 1 111
Scour/Erosion		4	4	Scour hole 3mX2mX0.3m deep at inlet.
Beavers (Y/N)	Yes			Significant issue.
Upstream End General Rating		3	3	
		Bri	dae Cu	lvert Barrel
Culvert Component			Now	Explanation of Condition
(Pipe # : 1, Primary Span, Loca	tion Code: MAIN S			, Rise (mm): 1200, Type: MP)
Barrel Last Accessible Date	11-Jun-2012	pan (min	. <u>/·</u>	
Dailei Lasi Accessible Dale	11-3011-2012			
Special Features				
Special Feature		X	Х	
(Type : BEAVR CTRL DEV)			1	taken out
Special Feature				
(Type:)				
Roof		5	5	
Measured Rise (mm)	1120		1 0	at c.l
Measured At Ring No.	1120			
Sag (mm)	80			
Percent Sag	7			-
	1			
Sidewall	1000	5	4	
Measured Span (mm)	1320			at c.l
Measured At Ring No.				
Deflection (mm)	120			
Percent Deflection	10			
Floor	1	2	2	Due to corrosion, perforations throughout.(photo)
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		2	2	Circumferential seam at d.s Completely rusted out at lowert 50%
Separation (mm)	120			
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		2	2	Coating scarficed on bottom 50%. Holes throughout floor.
Corrosion By Soil (Y/N)	No		-	1
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			Slight negative camber.
Ponding (Y/N)	No			

Cautort Component Last Now Explanation of Condition (Pipe #: 1. Primary Span, Location Code: MAIN, Span (mm): Rise (mm): 1200, Type: MP)			Brid	dge Cu	lvert Barrel
Fish Passage Adequacy	Culvert Component		Last	Now	Explanation of Condition
Baffle	(Pipe #: 1, Primary Span, Loca	tion Code: MAIN, Spa	ın (mm	ı):	, Rise (mm): 1200, Type: MP)
Type : Waterway Adequacy	Fish Passage Adequacy		4	4	
Waterway Adequacy	Baffle		Х	Х	
Icing (Y/N)	(Type:)				
Sitting (Y/N)	Waterway Adequacy		4	4	
Drift (Y/N)	Icing (Y/N)	No			
Downstream End Last Now Explanation of Condition	Silting (Y/N)	No			
Culvert Component Last Now Explanation of Condition	Drift (Y/N)	No			
Culvert Component	Barrel General Rating		2	2	
Direction End Treatment (Concrete, Steel, Others, None) Headwall X X X Collar X X X Wingwalls (Shape:) Cutoff Wall Evel End 100 Heaving (mm) Heaving (mm) Inoured Above/Below Stream Bed ABOVE Above/Below (mm) Scour Protection 3 3 3 (Type: RIP RAP) (Avg. Rock Size(mm): 150) Scour/Frosion Beavers (Y/N) Pes Downstream End General Rating 3 3 Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) Alignment 5 5 Bank Stability 4 4 4 Bank erosion upstream and downstream. HWM (m below Top of Culvert) Degrading/Aggrading Beavers (Y/N) Pes Degrading/Aggrading Perforations in floor, end torm.(photo) Perforations in f			D	ownst	ream End
End Treatment (Concrete, Steel, Others, None) Headwall X X X Wingwalls (Shape:) Cutoff Wall X X X Bevel End 3 3 3 Perforations in floor, end torn.(photo) Heaving (mm) 100 Invert Above/Below Stream Bed ABOVE Above/Below (mm) 50 Scour Protection 3 3 3 (Type: RIP RAP) (Avg. Rock Size(mm): 150) Scour/Erosion Beavers (Y/N) Yes Downstream End General Rating 3 3 Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) Alignment 5 5 Bank Stability 4 4 Bank erosion upstream and downstream. HWM (m below Top of Culvert) O.3 DEGRADING DEGRADING Degrading/Aggrading Beavers (Y/N) Pes Defrosion DeGrading/Aggrading DeGrading/Aggrading Beavers (Y/N) Pes Difft and debris on banks. Likely caused by blockage due to beaver dams. Difft and debris on banks. Likely caused by blockage due to beaver dams. Difft and debris on banks. Likely caused by blockage due to beaver dams. Difft and debris on banks. Likely caused by blockage due to beaver dams.	Culvert Component		Last	Now	Explanation of Condition
Collar	Direction		W		
Collar X X Wingwalls (Shape:) Cutoff Wall Bevel End Heaving (mm) Invert Above/Below Stream Bed ABOVE Above/Below (mm) 50 Scour Protection (Type: RIP RAP) (Avg. Rock Size(mm): 150) Scour/Erosion Beavers (Y/N) Yes Downstream End General Rating 3 3 Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) Alignment 5 5 Bank Stability 4 4 Bank erosion upstream and downstream. HWM (m below Top of Culvert) O:Channel Bottom Degrading/Aggrading Beavers (Y/N) DEGRADING DEGRADING DEGRADING Degrading/Aggrading Beavers (Y/N) DEGRADING	End Treatment (Concrete, Steel, Others, None)	STEEL			
Vingwalls	Headwall		X	X	
Cutoff Wall	Collar		Х	Х	
Cutoff Wall X X Bevel End 3 3 3 Heaving (mm) 100 Invert Above/Below Stream Bed ABOVE Above/Below (mm) 50 Scour Protection 3 3 3 (Type : RIP RAP) (Avg. Rock Size(mm) : 150) Scour/Frosion 3 3 Scour hole 10mX6mX0.6m deep(photo) Erosion around bevel found.(photo) Beavers (Y/N) Yes Downstream End General Rating 3 3 Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) Alignment 5 5 Bank Stability 4 4 Bank erosion upstream and downstream. HWM (m below Top of Culvert) 0.3 Drift (Y/N) Yes Channel Bottom DEGRADING Degrading/Aggrading Beavers (Y/N) (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	Wingwalls		Х	Х	
Beveil End	(Shape:)				
Heaving (mm) 100 Invert Above/Below Stream Bed ABOVE Above/Below (mm) 50 Scour Protection 3 3 3 (Type : RIP RAP) (Avg. Rock Size(mm) : 150) Scour/Erosion 3 3 3 Scour hole 10mX6mX0.6m deep(photo) Erosion around bevel found.(photo) Beavers (Y/N) Yes Downstream End General Rating 3 3 Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) Alignment 5 5 Bank Stability 4 4 Bank erosion upstream and downstream. HWM (m below Top of Culvert) 0.3 Drift (Y/N) Yes Channel Bottom Degrading/Aggrading Beavers (Y/N) (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	Cutoff Wall			Х	
Invert Above/Below Stream Bed ABOVE Above/Below (mm) 50 Scour Protection 3 3 3 (Type : RIP RAP) (Avg. Rock Size(mm) : 150) Scour/Erosion 3 3 3 Scour hole 10mX6mX0.6m deep(photo) Erosion around bevel found.(photo) Beavers (Y/N) Yes Downstream End General Rating 3 3 Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) Alignment 5 5 Bank Stability 4 4 Bank erosion upstream and downstream. HWM (m below Top of Culvert) 0.3 Drift and debris on banks. Likely caused by blockage due to beaver dams. Channel Bottom Degrading/Aggrading Beavers (Y/N) (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	Bevel End			3	Perforations in floor, end torn.(photo)
Above/Below (mm) 50 Scour Protection 3 3 3 (Type : RIP RAP) (Avg. Rock Size(mm) : 150) Scour/Erosion 3 3 Scour hole 10mX6mX0.6m deep(photo) Erosion around bevel found.(photo) Beavers (Y/N) Yes Downstream End General Rating 3 3 Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) Alignment 5 5 Bank Stability 4 4 Bank erosion upstream and downstream. HWM (m below Top of Culvert) 0.3 Drift and debris on banks. Likely caused by blockage due to beaver dams. Channel Bottom Degrading/Aggrading Beavers (Y/N) (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	Heaving (mm)	100			
Scour Protection 3 3 3 (Type: RIP RAP) (Avg. Rock Size(mm): 150) Scour/Erosion 3 3 3 Scour hole 10mX6mX0.6m deep(photo) Erosion around bevel found.(photo) Beavers (Y/N) Yes Downstream End General Rating 3 3 Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) Alignment 5 5 Bank Stability 4 4 Bank erosion upstream and downstream. HWM (m below Top of Culvert) 0.3 Drift (Y/N) Yes Channel Bottom Degrading/Aggrading Beavers (Y/N) (Fish Compensation Measure 1: NONE) (Fish Compensation Measure 2: NONE)	Invert Above/Below Stream Bed	ABOVE			
(Type : RIP RAP) (Avg. Rock Size(mm) : 150) Scour/Erosion 3 3 Scour hole 10mX6mX0.6m deep(photo) Erosion around bevel found.(photo) Beavers (Y/N) Yes Downstream End General Rating 3 3 Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) Alignment 5 5 Bank Stability 4 4 Bank erosion upstream and downstream. HWM (m below Top of Culvert) 0.3 Drift and debris on banks. Likely caused by blockage due to beaver dams. HWM (m below Top of Culvert) DEGRADING Degrading/Aggrading Beavers (Y/N) (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	Above/Below (mm)	50			
(Avg. Rock Size(mm): 150) Scour/Erosion 3 3 Scour hole 10mX6mX0.6m deep(photo) Erosion around bevel found.(photo) Beavers (Y/N) Yes Downstream End General Rating 3 3 Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) Alignment 5 5 Bank Stability 4 4 Bank erosion upstream and downstream. HWM (m below Top of Culvert) 0.3 Drift and debris on banks. Likely caused by blockage due to beaver dams. HWM (m below Top of Culvert) DEGRADING Degrading/Aggrading Beavers (Y/N) (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	Scour Protection			3	
Scour/Erosion Beavers (Y/N) Yes Downstream End General Rating 3 3 Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) Alignment 5 5 Bank Stability 4 4 Bank erosion upstream and downstream. HWM (m below Top of Culvert) Drift (Y/N) Yes Channel Bottom Degrading/Aggrading Beavers (Y/N) (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	(Type : RIP RAP)				
Beavers (Y/N) Yes Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) Alignment 5 5 Bank Stability 4 4 Bank erosion upstream and downstream. HWM (m below Top of Culvert) 0.3 Drift (Y/N) Yes Channel Bottom Degrading/Aggrading Beavers (Y/N) (Fish Compensation Measure 1 : NONE) [Fish Compensation Measure 2 : NONE]	(Avg. Rock Size(mm) : 150)				
Downstream End General Rating Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) Alignment 5 5 Bank Stability 4 4 Bank erosion upstream and downstream. HWM (m below Top of Culvert) 0.3 Drift and debris on banks. Likely caused by blockage due to beaver dams. Channel Bottom Degrading/Aggrading Beavers (Y/N) (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	Scour/Erosion		3	3	Scour hole 10mX6mX0.6m deep(photo) Erosion around bevel found.(photo)
Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) Alignment 5 5 Bank Stability 4 4 Bank erosion upstream and downstream. HWM (m below Top of Culvert) 0.3 Drift and debris on banks. Likely caused by blockage due to beaver dams. Channel Bottom Degrading/Aggrading Beavers (Y/N) (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	Beavers (Y/N)	Yes			
Channel (U/S and D/S) Alignment 5 5 Bank Stability 4 4 Bank erosion upstream and downstream. HWM (m below Top of Culvert) 0.3 Drift (Y/N) Yes Channel Bottom Degrading/Aggrading Beavers (Y/N) (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	Downstream End General Ratio	ng	3	3	
Channel (U/S and D/S) Alignment 5 5 Bank Stability 4 4 Bank erosion upstream and downstream. HWM (m below Top of Culvert) 0.3 Drift (Y/N) Yes Channel Bottom Degrading/Aggrading Beavers (Y/N) (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)			S	Structu	re Usage
Alignment 5 5 5 Bank Stability 4 4 Bank erosion upstream and downstream. HWM (m below Top of Culvert) 0.3 Drift and debris on banks. Likely caused by blockage due to beaver dams. Channel Bottom Degrading/Aggrading Beavers (Y/N) (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)					
Bank Stability 4 4 Bank erosion upstream and downstream. HWM (m below Top of Culvert) 0.3 Drift and debris on banks. Likely caused by blockage due to beaver dams. Channel Bottom Degrading/Aggrading Beavers (Y/N) (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	Channel (U/S and D/S)				
HWM (m below Top of Culvert) Drift (Y/N) Yes Channel Bottom Degrading/Aggrading Beavers (Y/N) (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)				5	
Drift (Y/N) Yes dams. Channel Bottom Degrading/Aggrading Beavers (Y/N) (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	Bank Stability			4	Bank erosion upstream and downstream.
Channel Bottom Degrading/Aggrading Beavers (Y/N) (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	HWM (m below Top of Culvert)	0.3			Drift and debris on banks. Likely caused by blockage due to beaver
Degrading/Aggrading Beavers (Y/N) (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	Drift (Y/N)	Yes			dans.
(Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	Degrading/Aggrading	DEGRADING			
(Fish Compensation Measure 2 : NONE)	Beavers (Y/N)				
	(Fish Compensation Measure 1 :	NONE)			
Channel General Rating 5 4	(Fish Compensation Measure 2 :	NONE)			
	Channel General Rating		5	4	

				Maintenance R	ecommend	dations					
Inspector Recommendations		Year	Inspec	tor Comments		Department Com	nments		Target Year	Est. Cost	Cat #
SHOTCRETE REPAIRS											
PLACE ADDITIONAL RIP RAP											
REMOVE DRIFT ACCUMULATION											
INSTALL CONCRETE/STEEL LINING		i									
INSTALL STRUTS											
INSTALL CONCRETE COLLAR/CUTOFF		OFF									
REPAIR SEAMS		2013	replace	e culvert.							
OTHER ACTION											
OTHER ACTION											
OTHER ACTION											
OTHER ACTION											
Structural Condition Rating (Last/Now) (%)		ow) 22.2/	22.2/22.2 Sufficiency Ratin		/Now)	14.4/13.5	Est. Repl. Yr	2012	Maint. Re	qd. (Y/N)	Yes
Special Comments for Next Inspection	Requires replacement Notified Shahid Gill floor. Reduce inspection	& David Mori	ison on Jur	ne 20, 2012 regarding "2" Ra	ting on	Department Comments					
Maintenance Reviewed By						Date		E	stimated Tota	I 0	
Proposed Long-T	•										
On 3-Year Progra	am (Y/N)										
Proposed Action						ous Assistant's Name					
Proposed Action Previous Inspector	or's Name	Shane Hall			Previous	Assistant's Name					
		Shane Hall	ļ			Assistant's Name Inspection Date	11-Nov-2008				
Previous Inspecton Inspection Ins							11-Nov-2008				