Bidge File Number 03400 -1 Bridge Culvert						Brido	e Culve	ert Inspe	ection						
Year Built 1928										CUL1					
Located Over										3					
Located Over	Bridge or Town Name MORLEY						Inspector Name			Garry Roberts					
Located On	Located Over TRIBUTA			TARY TO BOW RIVER, 2.13.54,				·		•					
Marie Body CI./Year				CRS-ST											
Navigabil CL/Vear Legal Land Location SE SEC 25 TWP 25 RGE 8 W5M Data Entry By Cauren Korte Legal Land Location SE SEC 25 TWP 25 RGE 8 W5M Data Entry By Cauren Korte Carpettude, Latitude -114.59.24, 51.99.39 Reviewer Name Deta Entry Date Data Entry Date Data Carpettude			1A:04 C1	1 10.545				Assistant Class							
Data Entry Dys										31-Aug-2012					
Contract Main. Area															
Road Authority			SE SEC	25 TWP 25 R	05 TMD 25 DCE 8 M/5M										
Contract Main. Area CMA28															
Dept. Review Date 11-Oct-2012 Dept. Review Date Dept. Review Date 11-Oct-2012 Dept. Review Date 11-Oct-2012 Dept				Fransportation	(AIT)					1					
AADT/Year 1,710 / 2011 (A) Follow-Up By Fol										Tim Davies					
Road Classification		//Skew								11-Oct-2012					
Detour Length (km) 10 Bridge Culvert Information Number of Culverts 1				` ,				Follow-	Up By						
Number of Culvert Information Number of Culverts				9-110				-							
Number of Culverts		` '													
Pipe # Barrel															
Thickness RECTANGLE				•	D: /	D : \	1_				0 5 (1)	DI /OL I			
MAIN 3050 2740 BP 17 RECTANGLE	Pipe #	Barrel	5	Span	Rise (or I		Туре		Length		Corr. Profile	Pl./Slab Thickness	Shape		
Special Features Special Features Comment Utility Attachments Telephone North & South ditch. Power Municipal Others Posted speed 65 km/hr. Approach Road / Embankment Last Now Explanation of Condition Horizontal Alignment 4 4 Curve to East & West. Limited sight distance. Embankment 4 4 Slopes are steep @ D/S end. Sideslope (1) 1.5 Ditch erosion from NE held back with timber. (Height of Cover(m) : 2.7) Guardrail (Y/N) Yes Guardrail 350mm to center. 3 Broken posts @ NW Guardrail. Approach Road / Embankment General Rating 4 4 United sight distance. Unstream End Unstream End Culver Component Last Now Explanation of Condition North. Collar X X X Wingwalls 5 5 Horizontal cracking & stains at NE & NW. Cracks up to 10mm wide with minor spalling.	1 MAIN 30F			3050	2740		BP		17				RECTANGLE		
Utility Attachments						1				ı					
Utilities (Located at) Utility Attachments Telephone North & South ditch. Gas Municipal Others Problem (Y/N) No Remarks Posted speed 65 km/hr. Approach Road / Embankment Last Now Explanation of Condition Horizontal Alignment 4 4 4 Curve to East & West. Vertical Alignment 4 4 4 Curve to East & West. Vertical Alignment 4 4 4 Slopes are steep @ D/S end. Ditch erosion from NE held back with timber. (Height of Cover(m): 2.7) Guardrail (Y/N) Yes Guardrail 350mm to center. 3 Broken posts @ NW Guardrail. Approach Road / Embankment General Rating 4 4 Upstream End Culver Component Last Now Explanation of Condition North. Culver Last Now Explanation of Condition North. Embankment Concrete, Steel, CONCRETE Others, None) Headwall 5 5 5 Horizontal cracking. Utilities (Located at) Municipal Municipal Curve to East & West. Slopes are steep @ D/S end. Ditch erosion from NE held back with timber. Upstream End Culver Component Last Now Explanation of Condition North.			ment												
Utility Attachments Telephone North & South ditch. Gas Municipal															
Telephone						Ut	ilities (L	ocated	at)						
Nunicipal Problem (Y/N) No															
Others Problem (Y/N) No	Telephone North & South ditch.														
Remarks Posted speed 65 km/hr. Approach Road / Embankment Last Now Explanation of Condition															
Approach Road / Embankment Last Now Explanation of Condition		_						Probler	n (Y/N)	No					
Last Now Explanation of Condition	Remarks	Poste	d speed 6	65 km/hr.											
Horizontal Alignment Vertical Alignment Roadway Width (m) 7.300 Embankment Sideslope (:1) (Height of Cover(m) : 2.7) Guardrail (Y/N) Yes Guardrail 350mm to center. 3 Broken posts @ NW Guardrail. Approach Road / Embankment General Rating Upstream End Culvert Component Last Now Explanation of Condition Direction End Treatment (Concrete, Steel, Others, None) Headwall Collar X X Wingwalls (Shape :) Last Vertical Alignment A 4 Curve to East & West. Limited sight distance. Slopes are steep @ D/S end. Ditch erosion from NE held back with timber. Guardrail 350mm to center. 3 Broken posts @ NW Guardrail. Supstream End Explanation of Condition North. End Treatment (Concrete, Steel, CONCRETE) Headwall S S Horizontal cracking. Collar X X Wingwalls (Shape :)					A					Candi	tion				
Vertical Alignment Roadway Width (m) 7.300 Embankment Sideslope (:1) (Height of Cover(m): 2.7) Guardrail (Y/N) Yes Guardrail 350mm to center. 3 Broken posts @ NW Guardrail. Approach Road / Embankment General Rating Upstream End Culvert Component Last Ditch erosion from NE held back with timber. Upstream End Culvert Component Direction End Treatment (Concrete, Steel, CONCRETE Others, None) Headwall Collar X X Wingwalls (Shape:) Last Voint distance. Limited sight distance. Dis end. Distance Sups end. Ditch erosion from NE held back with timber. Sups end. Ditch erosion from NE held back with timber. Sups end. Pos end. Ditch erosion from NE held back with timber. Sups end. Ditch erosion from NE held back with timber. Sups end. Ditch erosion from NE held back with timber. Sups end. Ditch erosion from NE held back with timber. Sups end. Ditch erosion from NE held back with timber. Sups end. Sups end. Sups end. Sups end. Sups end. Ditch erosion from NE held back with timber. Sups end. Sups en	Horizontal Align	nment													
Roadway Width (m) T.300 Embankment Sideslope (_:1) 1.5 (Height of Cover(m): 2.7) Guardrail (Y/N) Yes Guardrail 350mm to center. 3 Broken posts @ NW Guardrail. Approach Road / Embankment General Rating Upstream End Culvert Component Last Now Direction End Treatment (Concrete, Steel, Others, None) Headwall Collar X Wingwalls Slopes are steep @ D/S end. Ditch erosion from NE held back with timber. Guardrail 350mm to center. 3 Broken posts @ NW Guardrail. Supstream End Explanation of Condition North. Explanation of Condition North. Explanation of Condition Supptream End Explanation															
Embankment Sideslope (_:1)				7 200		0	0								
Sideslope (_:1)	Noadway Widti	11 (111)		7.300											
(Height of Cover(m): 2.7) Guardrail (Y/N) Yes Guardrail 350mm to center. 3 Broken posts ® NW Guardrail. Approach Road / Embankment General Rating Upstream End Culvert Component Direction End Treatment (Concrete, Steel, Others, None) Headwall Collar X Wingwalls (Shape:) Approach Road / Embankment General Rating 4 4 4 Guardrail 350mm to center. 3 Broken posts ® NW Guardrail. Now Explanation of Condition North. End Treatment (Concrete, Steel, Others, None) Headwall 5 4 Efflorescence cracking & stains at NE & NW. Cracks up to 10mm wide with minor spalling.	Embankment					4	4	Slopes are steep @ D/S end.							
Guardrail (Y/N) Yes Guardrail 350mm to center. 3 Broken posts @ NW Guardrail. **Distream End** Culvert Component Direction End Treatment (Concrete, Steel, Others, None) Headwall Collar X X Wingwalls (Shape:) Guardrail 350mm to center. 3 Broken posts @ NW Guardrail. Fund Treatment (Condition North. Fund Treatment (Concrete, Steel, Others, None) F	Sideslope (:1)			1.5	1.5				Dilch erosion from NE neid dack with timber.						
Approach Road / Embankment General Rating Upstream End Culvert Component Last Now Explanation of Condition Direction End Treatment (Concrete, Steel, Others, None) Headwall Collar X Wingwalls (Shape:) Sproken posts @ NW Guardrail. A 4 Efflorescence cracking & stains at NE & NW. Cracks up to 10mm wide with minor spalling.	(Height of Co	ver(m)	2.7)												
Approach Road / Embankment General Rating Upstream End Culvert Component Last Now Explanation of Condition Direction End Treatment (Concrete, Steel, CONCRETE Others, None) Headwall 5 5 Horizontal cracking. Collar X X Wingwalls (Shape:) Upstream End End End Explanation of Condition North. Explanation o	Guardrail (Y/N) Yes														
Upstream End Culvert Component Last Now Explanation of Condition Direction North. End Treatment (Concrete, Steel, CONCRETE Others, None) Headwall 5 5 Horizontal cracking. Collar X X Wingwalls 5 4 Efflorescence cracking & stains at NE & NW. Cracks up to 10mm wide with minor spalling.	Approach Bood / Embankment Coneral Bating			•			אסום פו וואיז Guardiali.								
Culvert Component Last Now Explanation of Condition Direction North. End Treatment (Concrete, Steel, Others, None) CONCRETE Headwall 5 5 Horizontal cracking. Collar X X Wingwalls 5 4 Efflorescence cracking & stains at NE & NW. Cracks up to 10mm wide with minor spalling.	Approach Roa	ia / Emi	oankmen	t General Rat	ing	4	4								
Direction End Treatment (Concrete, Steel, Others, None) Headwall Collar X Wingwalls (Shape:) North. North. North. North. Horizontal cracking. Efflorescence cracking & stains at NE & NW. Cracks up to 10mm wide with minor spalling.							Upstre	am End							
End Treatment (Concrete, Steel, Others, None) Headwall Collar X Wingwalls (Shape:) CONCRETE 4 Efflorescence cracking & stains at NE & NW. Cracks up to 10mm wide with minor spalling.	Culvert Comp	onent				Last	Now	Explan	ation of	Condi	tion				
Others, None) Headwall 5 5 Horizontal cracking. Collar X X Wingwalls (Shape:) Efflorescence cracking & stains at NE & NW. Cracks up to 10mm wide with minor spalling.	Direction							North.							
Collar X X Wingwalls 5 4 Efflorescence cracking & stains at NE & NW. Cracks up to 10mm wide with minor spalling.	End Treatment Others, None)	(Concre	ete, Steel,	CONCRETE	<u> </u>										
Wingwalls 5 4 Efflorescence cracking & stains at NE & NW. Cracks up to 10mm wide with minor spalling.	Headwall			5	5	Horizontal cracking.									
(Shape:) wide with minor spalling.	Collar					X	X								
(Snape:)	Wingwalls					5	4					s up to 10mm			
Cutoff Wall X X	(Shape:)							wide wi	th minor	spallin	g.				
	Cutoff Wall					X	X								

09400 -1 Bridge Culvert

			Upstre	am End
Culvert Component		Last	Now	Explanation of Condition
Bevel End		Х	Х	Tree across u/s end.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		4	4	Banks eroded to natural bedrock.
(Type : NATURAL)				
(Avg. Rock Size(mm):)				
Scour/Erosion		4	4	3 m3 scour behind NE wing.
Beavers (Y/N)	No			
Upstream End General Rating		4	4	
		Brid	dae Cu	lvert Barrel
Culvert Component			Now	Explanation of Condition
(Pipe # : 1, Primary Span, Loca	tion Code: MAIN, Spa			· · ·
Barrel Last Accessible Date	31-Aug-2012			
Special Features				
Special Feature				
(Type:)		-		
Special Feature				
(Type:)		'		
Roof		5	5	1 minor spall at each end of roof.
Measured Rise (mm)				·
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		5	5	Minor spalls at NW from shallow cover.
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection				
Floor		N	N	Rock covered.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		7	7	Minor leakage.
Separation (mm)	30			
Longitudinal Seams		Х	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		Х	X	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			

Culvert Component (Pipe # 1.) Fultrary Span Location Code: MAIN, Span (mm): 3050, Rise (mm): 2740, Type: BP) Fish Passage Adequacy 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 9 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9			Brid	lge Cu	Ivert Barrel
Fish Passage Adequacy	-		Last	Now	Explanation of Condition
Materiary Adequacy	(Pipe #: 1, Primary Span, Loca	tion Code: MAIN, Spa	an (mm): 3050	, Rise (mm): 2740, Type: BP)
Type : Waterway Adequacy	Fish Passage Adequacy		7	7	
Waterway Adequacy 7 7 leing (YN) No 1 Silling (YN) No 1 Drift (YN) No 1 Salling (YN) No Downstream Rating So South Culvert Component Last Now Explanation of Condition Culvert Component (Concrete, Steel, Concrete, Steel, Steel, Concrete, Steel, Co	Baffle		Х	Х	
Waterway Adequacy 7 7 leing (YN) No 1 Silling (YN) No 1 Drift (YN) No 1 Salling (YN) No Downstream Rating So South Culvert Component Last Now Explanation of Condition Culvert Component (Concrete, Steel, Concrete, Steel, Steel, Concrete, Steel, Co	(Type:)				
Silting (Y/N) No			7	7	
Silting (Y/N)		No			
Delite (Y/N)					
Same Culvert Component Culvert Component Concrete, Steel	-				
Culvert Component			5	5	
Culvert Component Last Now Explanation of Condition Direction South. End Treatment (Concrete, Steel, Steel, Steel, Steel, Steel, Steel, Steel, Steel, Steel Steel, Stee	Darror Comorai Mannig				
Direction			D		
End Treatment (Concrete, Steel) Others, None) CONCRETE Others, None) Feed and Male Headwall X X Collar X X Wingwalls 5 4 SW wingwall cracked - up to 10mm wide with minor spalling. (Shape:) Cutoff Wall X X Bevel End X X X Heaving (mm) 0 ————————————————————————————————————	-		Last	Now	
Others, None)					South.
Collar	Others, None)	CONCRETE			
Mingwalls	Headwall		6	6	
Cutoff Wall	Collar		X	X	
Cutoff Wall X X X Bevel End X X X Heaving (mm) 0 ————————————————————————————————————	Wingwalls		5	4	SW wingwall cracked - up to 10mm wide with minor spalling.
No No No No No No No No	-				
Heaving (mm) 0	Cutoff Wall		Х	Х	
Invert Above/Below Stream Bed BELOW Above/Below (mm) 200 Scour Protection 5 5 5	Bevel End		Х	Х	
Above/Below (mm) 200 Scour Protection 5 5 5 SW eroded to bedrock. (Type : RIP RAP) (Avg. Rock Size(mm) : 250) 5 5 Scour/Erosion 5 5 Beavers (Y/N) No Structure Usage Beavers (W/S and D/S) Last Now Explanation of Condition Channel (U/S and D/S) 5 5 Splanation of Condition Bank Stability 5 5 HWM (m below Top of Culvert) 1.5 No visible HWM. Fallen trees U/S & D/S. No visible HWM. Fallen trees U/S & D/S. Pallen trees U/S & D/S.	Heaving (mm)	0			
Scour Protection 5 5 5 5 6 7 7 8 9 8 9 8 9	Invert Above/Below Stream Bed	BELOW			
(Type : RIP RAP) (Avg. Rock Size(mm) : 250) 5 5 Scour/Erosion 5 5 Beavers (Y/N) No Structure Usage Downstream End General Rating 5 4 Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) Alignment 5 5 Bank Stability 5 5 Bank Stability 1.5 5 HWM (m below Top of Culvert) 1.5 No visible HWM. Fallen trees U/S & D/S. Fallen trees U/S & D/S. Channel Bottom Degrading/Aggrading DEGRADING Fallen trees U/S & D/S. Beavers (Y/N) No No (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	Above/Below (mm)	200			
CAVG. Rock Size(mm) : 250 Scour/Erosion	Scour Protection		5	5	SW eroded to bedrock.
Scour/Erosion No 5 5 Beavers (Y/N) No	(Type : RIP RAP)				
Scour/Erosion No 5 5 Beavers (Y/N) No	(Avg. Rock Size(mm) : 250)				
Downstream End General Rating 5 4 Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) Alignment 5 5 Bank Stability 5 5 HWM (m below Top of Culvert) Drift (Y/N) Yes Channel Bottom Degrading/Aggrading Beavers (Y/N) No (Fish Compensation Measure 2 : NONE) Now Visible HWM. Fallen trees U/S & D/S.			5	5	
Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) Alignment 5 5 Bank Stability 5 5 HWM (m below Top of Culvert) 1.5 Drift (Y/N) Yes No visible HWM. Fallen trees U/S & D/S. Channel Bottom Degrading/Aggrading Beavers (Y/N) No (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	Beavers (Y/N)	No			
Last Now Explanation of Condition Channel (U/S and D/S) Alignment 5 5 Bank Stability 5 5 HWM (m below Top of Culvert) 1.5 No visible HWM. Fallen trees U/S & D/S. Channel Bottom Degrading/Aggrading Beavers (Y/N) DEGRADING Image: Company of Culverty	Downstream End General Ratio	ng	5	4	
Last Now Explanation of Condition Channel (U/S and D/S) Alignment 5 5 Bank Stability 5 5 HWM (m below Top of Culvert) 1.5 No visible HWM. Fallen trees U/S & D/S. Channel Bottom Degrading/Aggrading Beavers (Y/N) DEGRADING Image: Company of Culverty			S	tructu	re Usage
Channel (U/S and D/S) Alignment 5 5 5 Bank Stability 5 5 5 HWM (m below Top of Culvert) 1.5 No visible HWM. Fallen trees U/S & D/S. Channel Bottom Degrading/Aggrading Beavers (Y/N) No No (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)				1	
Alignment 5 5 5 Bank Stability 5 5 5 HWM (m below Top of Culvert) 1.5 Drift (Y/N) Yes No visible HWM. Fallen trees U/S & D/S. Channel Bottom Degrading/Aggrading Beavers (Y/N) No (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	Channel (U/S and D/S)		1 - 3.0.2	1-1-0-1-	
HWM (m below Top of Culvert) Drift (Y/N) Yes Channel Bottom Degrading/Aggrading Beavers (Y/N) No (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)			5	5	
Drift (Y/N) Yes Fallen trees U/S & D/S. Channel Bottom Degrading/Aggrading Beavers (Y/N) No (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	Bank Stability		5	5	
Channel Bottom Degrading/Aggrading Beavers (Y/N) No (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	HWM (m below Top of Culvert) 1.5				No visible HWM.
Degrading/Aggrading Beavers (Y/N) No (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)					railett tiees U/S & D/S.
(Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)		DEGRADING			
(Fish Compensation Measure 2 : NONE)	Beavers (Y/N)	No			
	(Fish Compensation Measure 1 :	NONE)			
Channel General Rating 5 5	(Fish Compensation Measure 2 :	NONE)			
	Channel General Rating		5	5	

		Maintenand	e Recommend	lations					
Inspector Recommendations	Year	Inspector Comments		Department Comm	nents		Target Year	Est. Cost	Cat #
SHOTCRETE REPAIRS									
PLACE ADDITIONAL RIP RAP	2013	5 m3 Class II @ NE - behind wi	ngwall.						
REMOVE DRIFT ACCUMULATION									
INSTALL CONCRETE/STEEL LINING	3								
INSTALL STRUTS									
INSTALL CONCRETE COLLAR/CUT	OFF								
REPAIR SEAMS	2013								
OTHER ACTION	2013	Repair NW guardrail posts.							
OTHER ACTION	2013	Remove trees from D/S & U/S	ends & in box						
OTHER ACTION									
OTHER ACTION									
Structural Condition Rating (Last/N (%)	low) 55.6/5	ow) 55.6/55.6 Sufficiency Rating (Last/N (%)		48.0/47.2	Est. Repl. Yr	2025	Maint. Re	qd. (Y/N)	Yes
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	Assistant's Name					
Next Inspection Date	31-May-2014		Previous	Inspection Date	07-Dec-2010				
Inspection Cycle (Default) (months)	21								
Comment									