BRIDGE Site No.: B2

Walley Bridge					
Peddlers Drive	Under Structure:		Water Road	Non- Naviga	oble Water Other
Peddlers Drive	On Structure:	Rail	Road 🔀	Pedestrian C	Other
1.65 km West of Graham Road					
46° 14' 33" N	Lor	ngitude		78° 55' 07"	W
Township of Calvin			· ·		List/Not Desig.
	Roa	d Class:	Freeway	Arterial Colle	ctor Local
-	Pos	ted Speed	-	No. of Lanes	1
<u></u>	AA	DT	_	% Trucks	
<u>-</u>	Spe	cial Routes	Transit	Truck Scho	ool Bicycle
Concrete Slab on Steel I-Girder	Det		around	<u>-</u>	(km)
51.8(m	Fill	on Structure		•	(m)
5.6 (m	Ske	w Angle		-	(Degrees)
(m	) Dire	ection of Stru	icture	East/West	
(m	No.	of Spans		3	1
13.1, 26, 12.7 (m					
TORICAL DATA					
		Last OSIN	M Inspection		August 7, 2024
ehab		Last Enha	inced OSIM Ii	spection	an Contract Center
·	(tonnes)	Last Bridg	ge Master Insp	ection	<u>.</u>
-		Last Evaluation			•
		Last Unde	erwater Inspec	tion	
	(m)		lition Survey		
•	Peddlers Drive           1.65 km West of Graham Road           46° 14' 33" N           Township of Calvin           -           -           -           -           -           -           Concrete Slab on Steel I-Girders           51.8         (m)           5.6         (m)           4.5         (m)	Peddlers Drive	Peddlers Drive  Peddlers Drive  1.65 km West of Graham Road  46° 14' 33" N	Peddlers Drive  Peddlers Drive  1.65 km West of Graham Road  46° 14' 33" N  Township of Calvin  Road Class:  Road Class:  Road Class:  Posted Speed  AADT  AADT  Concrete Slab on Steel I-Girders  Detour Length Around Structure  51.8 (m)  5.6 (m)  Skew Angle  290.1 (m²)  Direction of Structure  4.5 (m)  13.1, 26, 12.7 (m)  FIORICAL DATA  Last Enhanced OSIM Inspection Last Enhanced OSIM Inspection Last Enhanced OSIM Inspection Last Bridge Master Inspection of Structure  Last Enhanced OSIM Inspection Last Bridge Master Inspection Last Evaluation	Peddlers Drive   Structure:   Navigable Water   Non-Navigate

BRIDGE Site No.: B2

FIELD I	NSPECTION INFORMATION	
Date of Inspection:	August 9, 2024	Type of Inspection: OSIM Enhanced OSIM
Inspector:	Tashi Dwivedi, P.Eng., HP Engineering	
Others in Party:	Derick Battrick, P.Eng., HP Engineering	
Access Equipment Used:	Measuring Tape, Digital Camera and Hami	mer
Weather:	Overcast	
Temperature:	24 °C	

ADDITIONAL INTEGRACATION DEGLE	TER.		Priority		п.	. 10 .
ADDITIONAL INVESTIGATION REQUIR	ŒD	None	Normal	Urgent	Esti	mated Cost
Rehabilitation/Replacement Study:	X			\$	-	
Material Condition Survey	X			\$	-	
Detailed Deck Condition Survey:			X		\$	10,000.00
Non-destructive Delamination Survey of As	sphalt- Covered Deck:	X			\$	-
Concrete Substructure Condition Survey:		X			\$	-
Detailed Coating Condition Survey:		X			\$	
Detailed Timber Investigation:		X			\$	-
Underwater Investigation:		X			\$	-
Fatigue Investigation:		X			\$	n=
Seismic Investigation:		X			\$	1-
Structure Evaluation:		X			\$	. <del>.</del>
Monitoring		X			\$	-
Monitoring of Deformations, Settlement an	d Movements:	X			\$	-
Monitoring Crack Widths:		X			\$	(-
Load Posting – Estimated Load Limit				Fotal Cost	\$	10,000.00
Load Posting – Estimated Load Limit Investigation Notes: A deck condition survey is recommended due t	o the assumed age of the struct	ure and the available		- 2	Total Cost	

OVERALL STRUCTURAL NOTES:				
Recommended Work on Structure:	None	Minor Rehab.	Major Rehab.	Replace
Timing of Recommended Work:	1 to 5 ye	ears 6 to 10 years	3	
Overall Comments: Approach barrier and at transition rail to deck barrier at all 4 copier bearings appear to have medium to swith exposed corroded reinforcement and horizontal crack at east pier and at south 6	rners of deck. evere bulging horizonal and	Seals at piers exhibit bul throughout. Spall with ex	ging, splits and severe sposed reinforcement	damage at curb edges. Abutment and noted at northeast end of curb. Spall
Date of Next Inspection:	June 2026			

#### 1Suspected Performance Deficiencies

- 01 Load carrying capacity Excessive deformations (deflections & rotation)
- 03 Continuing settlement 04 05 Continuing movements Seized bearings

- Maintenance Needs
  01 Lift and swing bridge maintenance
  02 Bridge cleaning
  03 Bridge handrail maintenance Painting steel bridge structures Bridge deck joint repair 04
- Bridge bearing maintenance

- Bearing not uniformly loaded/unstable
- 07 Jammed expansion joint 08 Pedestrian/vehicular hazard
- 09 Rough riding surface 10 Surface ponding 11 Deck drainage
- 07
- Repair of structural steel 08
- Repair of bridge concrete Repair of bridge timber Bailey bridges maintenance Animal/pest control 09 10 11 Bridge surface repair

- Slippery surfaces
- Flooding/channel blockage 13 Undermining of foundation
- 15 Unstable embankments
- 16 Other
- Erosion control at bridges
- 14 15 Concrete sealing Rout and seal
- 16 Bridge deck drainage
- 17 Scaling (loose Concrete or ACR Steel)
- 18 Other

#### BRIDGE

Site No.: B2

EI	EMENT DATA					
Element Group:	Approaches	li pe i	Length:			V), 29m (SW),
Element Name:	Barrier	57	Width:		- 31III (NE	E), 29m (SE)
Location:	East & West of Structure		Height:		-	
Material:	Steel	100	Count:		4	
Element Type:	Steel Flex Beam on Wood	Posts	Total Quantity:		130 m	
Environment:	Severe		Limited Inspection:			
Protection System	None					
Condition Data:	Units	Excellent	Good	Fair		Poor
Condition Data:	- m	<u> </u>	99	<u> </u>		4
deck.	lition. Transition rail from a	pproach barrier to deck				ll 4 corners of
Performance Deficien	ncies: 01		Maintenance Needs	: 18 – Install mi	ssing posts	
Recommended Work	Rehab.  1-5 Years	Replace 6 – 10 Years	Maintenance Needs: Y	: X Urgent Years	1 Yea	ar 2
					A STATE OF THE STA	
Element Group:	Approaches		Length:		6 m	
Element Name:	Wearing Surface	(A)	Width:		5.25 m	
Location:	East & West Approaches		Height:		-	
Material:	Asphalt		Count: 2			
Element Type: Environment:	Asphalt Wearing Surface		Total Quantity:		63 m <sup>2</sup>	
	Severe		Limited Inspection:			
Protection System	None					
Condition Data:	Units m²	Excellent	Good 56	Fair		Poor
	erved throughout the approa		nd tire rutting on west app			-
Performance Deficien	cies: 00		Maintenance Needs:	00		
Recommended Work	Rehab.  1 – 5 Years	Replace 6 – 10 Years	Maintenance Needs: Y	Urgent	1 Yea	т 2

BRIDGE Site No.: B2

EI	LEMENT DATA			t average er er		
Element Group:	Accessories	Accessories			-	
Element Name:	Signs		Width:		•	
Location:	NE, NW, SE & SW of Str	ucture	Height:		•	
Material:	Steel		Count:		6	
Element Type:	Hazard and One Lane Sign	ns	Total Quantity:		6	
Environment:	Severe	Severe				
Protection System	Hot Dip Galvanizing					
	Units	Excellent	Good	Fair	Poor	
Condition Data:	Each		6	( <b>=</b> 2)		
Performance Deficio	ongias: 00		Maintenance Needs	• 00		
Performance Deficie	encies: 00		Maintenance Needs	: 00		
	1 – 5 Years	6 – 10 Years	,	/ears		
Element Group:	Barriers		Length:		52 m	
Element Name:	Railing Systems		Width:	1	-	
Location:	North & South Sides of S	tructure	Height:	8	-	
Material:	Steel		Count:		2	
Element Type:	Steel Thrie Beam		Total Quantity:		104 m	
Environment:	Severe		Limited Inspection:			
Protection System	None					
	Units	Excellent	Good	Fair	Poor	
Condition Data:	m	-	104	-	-	
curb) has not been rev	dition. Adequacy of deck batiewed by HP Engineering fo	arrier configuration (the	rie beam railing face mount	ed on exterior of e	existing raised concrete	
Performance Defici	encies: 00		Maintenance Needs	: 00		
Recommended Wor	k: Rehab.  1-5 Years	Replace	Maintenance Needs	: Urgent	1 Year 2	

BRIDGE

Site No.: B2

EL	EMENT DATA					
Element Group:	Barriers		Length:		-	
Element Name:	Posts	14	Width:		•	
Location:	North & South Sides of St	ructure	Height:		-	- 12-
Material:	Steel		Count:		56	
Element Type:	HSS Steel Posts		Total Quantity:		56	
Environment:	Severe		Limited Inspection	:		
Protection System	None					
	Units	Excellent	Good	Fair		Poor
Condition Data:	Each	-	56	-		•
Performance Deficie Recommended Work		Replace 6 – 10 Years	Maintenance Need Maintenance Need		1 Y	ear 2
Element Group:	Joints		Length:		5.6 m	
Element Name:	Armouring / Retaining De	evices	Width:		-	
Location:	East & West Ends of Stru	cture	Height:		-	
Material:	Steel		Count:	l comment	2	11.0
Element Type:	Armouring / Retaining De	evices	Total Quantity:	11.2 m		
Environment:	Severe	50	Limited Inspection	:	$  \times  $	
Protection System	None		•			
6 W B	Units	Excellent	Good	Fair		Poor
Condition Data:	m	-	6	5.2		-
Comments: Joints have been paved  Performance Deficie  Recommended Work		Replace 6 – 10 Years	Maintenance Need		1 Y	rear 2

BRIDGE					Site No.: B2	
E	LEMENT DATA					
Element Group:	Joints		Length:		5.6 m	
Element Name:	Seals / Sealants		Width:		#5000000000	
Location:	East & West Ends of Stru	cture & At Diere	Height:			
Aaterial:	Neoprene / Rubber	cture & At 1 lets	Count:	2		
Clement Type:	Strip Seal		Total Quantity:		11.2	
Environment:	Severe		Limited Inspection		11.2	
Protection System	None		Limited Inspection	•		
Totection System	Units	Excellent	Good	Fair	n	
Condition Data:	Each	Excellent	G00a	5.6	Poor	
Comments:	Daon		-	3.0	5.6	
Performance Defici	encies: 00		Maintenance Nace	Is: 00		
Performance Defici	encies: 00		Maintenance Need	ls: 00		
	1 – 5 Years	6 – 10 Years				
Element Group:	Sidewalks / Curbs		Length:	5	52.1 m	
Element Name:	Curbs		Width:		0.56 m	
ocation:	North & South Sides of St	tructure	Height:		0.25 m	
Material:	Concrete		Count:	2	2	
Element Type:	Concrete Curb		Total Quantity:	8	34.4 m <sup>2</sup>	
Environment:	Severe		Limited Inspection	: [		
Protection System	None		-			
7 <b>3</b> 111 <b>7</b>	Units	Excellent	Good	Fair	Poor	
Condition Data:	m²		71.5	11.9	1.0	
Comments: Op surface of curb is emoval equipment no	generally in good condition ted at lower half of the curb	with narrow cracks and face throughout. Spall v	small spalls at ends. Mo	oderate scaling and a ent noted at northeas	brasions from snow t end of curb.	
Performance Deficie	encies: 00		Maintenance Need	ls: 08 – Repair of Br	idge Concrete	
Recommended Wor	k: Rehab.  1 – 5 Years	Replace 6 - 10 Years	Maintenance Need	ls: Urgent Years	1 Year 2	

RIDGE						Site No.: B2
		-				
El	LEMENT DATA					
Element Group:	Decks		Length:		-	<u> </u>
Element Name:	Drainage System		Width:		-	
Location:	North & South of Deck		Height:		-	
Material:	Steel		Count:		4	
Element Type:	Round Pipe Deck Drains		Total Quantity:		4	
Environment:	Severe		Limited Inspection:	<u> </u>		
Protection System	None					
C 11.1 P	Units	Excellent	Good	Fair		Poor
Condition Data:	Each	-	4	-		-
Recommended Wor	rk: Rehab.  1-5 Years	Replace 6 – 10 Years	Maintenance Need	s: Urgent Years		Year2
Element Group:	Decks		Length:		52 m	
Element Name:	Deck Top		Width:		4.5 m	
Location:	Top of Deck		Height:		-	
Material:	Concrete		Count:		1	
Element Type:	Thin Slab		Total Quantity:		234 m	2
Environment:	Severe		Limited Inspection:			
Protection System	None					
Cliti Data	Units	Excellent	Good	Fair		Poor
Condition Data:	m²	-	227.5	5.5		1
Comments: Exposed deck top is g of deck. Few small sp	generally in good condition w palls at east end along north c	ith light scaling and mi ourb. Few patched spal	nor abrasion throughout a Is near west end along sou	and is partially couth curb and few s	vered in small, ex	asphalt at the end cposed spalls note
Performance Defici	iencies: 00		Maintenance Need	ls: 08 – Repair of	Bridge	Concrete
Recommended Wo	rk: Rehab.	Replace	Maintenance Need	ls: Urgent	1	Year 2

BRIDGE					Site No.: B2	
	1 – 5 Years	6 – 10 Years		Years		
	<del></del>					
	EMENT DATA					
Element Group:	Decks		Length:	2 m		
Element Name:	Soffit – Thin Slab (End)		Width:	5.6 r	n	
Location:	Underside of Deck		Height:			
Material:	Concrete		Count:	6		
Element Type:	Thin Slab		Total Quantity:	67.2	m²	
Environment:	Moderate		Limited Inspection:			
Protection System	None	NOTAL MARKET SALE	1 20 20 1			
Condition Data:	Units	Excellent	Good	Fair	Poor	
	m²	-	67.2	•	-	
Performance Deficie	ncies: 00		Maintenance Need	s: 00		
Recommended Work		Replace 6 – 10 Years	Maintenance Need		1 Year 2	
Element Group:	Decks		Length:	39.8	39.8 m	
Element Name:	Soffit - Thin Slab (Exterio	or)	Width:	1 m		
Location:	Underside of Deck		Height:	-		
Material:	Concrete		Count:	2		
Element Type:	Thin Slab		Total Quantity:	79.6	$m^2$	
Environment:	Moderate		Limited Inspection:			
Protection System	None					
Condition Data:	Units	Excellent	Good	Fair	Poor	
Condition Data.	m²	-	73.6	4	2	
Comments: Generally in good cond	lition with light spalls along	drip groove, narrow c	racks and damp stains note	ed.		
Performance Deficien				s: 08 – Repair of Bridge		

Recommended Wor	Rehab.  1 – 5 Years	Replace 6 – 10 Years	Maintenance Needs	: Urgent Years	1 Year	<u> </u>
E	LEMENT DATA		•			
Element Group:	Decks		Length:		39.8 m	
Element Name:	Soffit – Thin Slab (Inter	ior)	Width:		4.5 m	
Location:	Underside of Deck	,	Height:			
Material:	Concrete		Count:		1	
Element Type:	Thin Slab		Total Quantity:		179.1 m <sup>2</sup>	
Environment:	Benign		Limited Inspection:			
Protection System	None					
1 Tottetion System	Units	Excellent	Good	Fair		Poor
Condition Data:	m <sup>2</sup>		179.1	-		
Performance Defici	rk: Rehab.	Replace	Maintenance Needs	: Urgent	1 Year	2
		Replace 6 – 10 Years	Maintenance Needs		1 Year	2
Recommended Wor	rk: Rehab.		Maintenance Needs	: Urgent	1 Year	2
Recommended Wor	rk: Rehab.  1-5 Years  Beams / MLEs	6 – 10 Years	Maintenance Needs	: Urgent		2
Recommended Wor Element Group: Element Name:	rk: Rehab.  1-5 Years	6 – 10 Years	Maintenance Needs	: Urgent	2 m	2
Recommended Wor Element Group: Element Name: Location:	Rehab.  1 – 5 Years  Beams / MLEs  Girders (End Spans – En	6 – 10 Years	Maintenance Needs Length: Width:	: Urgent	2 m 0.23 m	2
Recommended Wor Element Group: Element Name: Location: Material:	Rehab.  1-5 Years  Beams / MLEs  Girders (End Spans – End Underside of Structure	6 – 10 Years	Maintenance Needs Length: Width: Height:	: Urgent	2 m 0.23 m 0.6 m	2
Recommended Wor Element Group: Element Name: Location: Material: Element Type:	Rehab.  1 – 5 Years  Beams / MLEs  Girders (End Spans – En  Underside of Structure  Steel	6 – 10 Years	Maintenance Needs  Length: Width: Height: Count:	: Urgent	2 m 0.23 m 0.6 m	2
Recommended World Recommended World Recomment Service Element Name: Location: Material: Element Type: Environment:	Rehab.  1 – 5 Years  Beams / MLEs  Girders (End Spans – End Underside of Structure)  Steel  Steel I-Girders	6 – 10 Years	Maintenance Needs  Length: Width: Height: Count: Total Quantity:	: Urgent	2 m 0.23 m 0.6 m	2
Recommended Work Element Group: Element Name: Location: Material: Element Type: Environment: Protection System	Rehab.  1 – 5 Years  Beams / MLEs  Girders (End Spans – End Underside of Structure)  Steel  Steel I-Girders  Moderate	6 – 10 Years	Maintenance Needs  Length: Width: Height: Count: Total Quantity:	: Urgent	2 m 0.23 m 0.6 m	2
Recommended Work Element Group: Element Name: Location: Material: Element Type: Environment: Protection System	Beams / MLEs Girders (End Spans – En Underside of Structure Steel Steel I-Girders Moderate None	6 – 10 Years	Maintenance Needs  Length: Width: Height: Count: Total Quantity: Limited Inspection:	: Urgent	2 m 0.23 m 0.6 m	
Element Group: Element Name: Location: Material: Element Type: Environment: Protection System Condition Data:	Beams / MLEs Girders (End Spans – En Underside of Structure Steel Steel I-Girders Moderate None Units	nd)  Excellent	Length: Width: Height: Count: Total Quantity: Limited Inspection:  Good 59.5	: Urgent Years  Fair	2 m 0.23 m 0.6 m 16 60.5 m <sup>2</sup>	Poor -

BRIDGE						Site No.: B2
Recommended Work	k: Rehab. 1 – 5 Years	Replace 6 – 10 Years	Maintenance Need	s: Urgent Years	1 Year	2
E	LEMENT DATA					1000000 D 20000
Element Group:	Beams / MLEs		Length:	T	17.8 m	
Element Name:	Girders (End Spans – Mid	dle)	Width:		0.23 m	
Location:	Underside of Structure	uic)	Height:		0.6 m	
Material:	Steel		Count:		8	
Element Type:	Steel I-Girders		Total Quantity:		269.1 m <sup>2</sup>	
Environment:	Benign		Limited Inspection:			
Protection System	None		Dimited Inspection.			
Total System	Units	Excellent	Good	Fair		Poor
Condition Data:	m <sup>2</sup>	-	269.1			
Performance Deficie	encies: 00		Maintenance Need	s: 00		
Recommended Wor		Replace 6 – 10 Years	Maintenance Need		1 Year	2
Element Group:	Beams / MLEs		Length:		2 m	
Element Name:	Girders (Middle Span – E	nd)	Width:		0.3 m	
Location:	Underside of Deck		Height:		0.75 m	
Material:	Steel		Count:		8	
Element Type:	Steel I-Girders		Total Quantity:		38.4 m <sup>2</sup>	
Environment:	Moderate		Limited Inspection		X	
Protection System	None					
Condition Data:	Units	Excellent	Good	Fair		Poor
	m <sup>2</sup>	-	38.4	-		: <b>=</b>

BRIDGE					Site No.: B2
Comments:					
Visible portions are ger	enerally in good condition wi	ith light localized corre	osion noted. Rating based	on visible condition	only.
Performance Deficie	ncies: 00		Maintenance Need	<b>is:</b> 00	
Recommended Work	k: Rehab.	Replace	Maintenance Need		1 Year 2
	1-5 Years	6 – 10 Years		Years	
EL	LEMENT DATA				
Element Group:	Beams / MLEs		Length:	7	22 m
Element Name:	Girders (Middle Span – M	ſiddle)	Width:		0.3 m
Location:	Underside of Deck		Height:		0.75 m
Material:	Steel		Count:		4
Element Type:	Steel I-Girders		Total Quantity:		211.2 m <sup>2</sup>
Environment:	Benign	gn Limited Inspection:		$\times$	
Protection System	None	4 4			
Condition Data:	Units	Excellent	Good	Fair	Poor
Condition Data:	m²	-	211.2	-	-
Comments:					
Generally in good cond	dition with light localized co	rrosion observed.			
	<u></u>				
Performance Deficier	ncies: 00		Maintenance Need	ls: 00	
Recommended Work	k: Rehab.	Replace	Maintenance Need	ls: Urgent	1 Year 2
	1-5 Years	6 – 10 Years		Years	
Element Group:	Beams / MLEs		Length:	-	
Element Name:	Diaphragms (End Spans –	- End)	Width:	-	-
Location:	East & West Underside of		Height:	10	•
Material:	Steel		Count:	1	12
Element Type:	Steel I-Beam Diaphragms	i	Total Quantity:	1	12
Environment:	Moderate		Limited Inspection:		
Protection System	None				
5 1111 D.4	Units	Excellent	Good	Fair	Poor
Condition Data:	Each	-	12	-	-

RIDGE					Site No.: B2
Comments:					
Generally in good con	dition.				
Performance Deficie	encies: 00		Maintenance Needs	s: 00	
Recommended Wor	k: Rehab.	Replace	Maintenance Needs	s: Urgent	1 Year 2
Recommended Wor	1 – 5 Years	6 – 10 Years		Years	
		_ 0 - 10 Tears			
E	LEMENT DATA				
Element Group:	Beams / MLEs		Length:		-
Element Name:	Diaphragms (End Spans –	Middle)	Width:		-
Location:	East & West Underside of	Structure	Height:		
Material:	Steel		Count:		6
Element Type:	Steel I-Beam Diaphragms		Total Quantity:		6
Environment:	Benign		Limited Inspection:		X
Protection System	None				
	Units	Excellent	Good	Fair	Poor
Condition Data:	Each	-	6	-	-
Comments:					
Generally in good con	dition.				
, ,					
Performance Defici	angias: 00		Maintenance Need	e: 00	
				700000	
Recommended Wor	·k: Rehab.	Replace	Maintenance Need		1 Year 2
	1 – 5 Years	6 – 10 Years		Years	
Element Group:	Beams / MLEs		Length:		-
Element Name:	Diaphragms (Middle Span	– End)	Width:		-
Location:			AUGUSTANIAN TO TOTAL		
	Underside of Structure		Height:		
Material:	Underside of Structure Steel		Height:		
Material:	Steel		Count:		6
Material: Element Type: Environment:					

BRIDGE					Site No.: B2
Condition Data:	Units	Excellent	Good	Fair	Poor
Condition Data.	Each	-	6	<u> </u>	-
Comments: Generally in good con	ıdition.				9.5
Performance Defici	encies: 00		Maintenance Needs	s: 00	
Recommended Wor	rk: Rehab.  1-5 Years	Replace 6 – 10 Years	Maintenance Needs	s: Urgent 1 Years	1 Year 2
E	LEMENT DATA				
Element Group:	Beams / MLEs		Length:		
Element Name:	Diaphragms (Middle Spa	n – Middle)	Width:	-	1
Location:	Underside of Structure		Height:	10	
Material:	Steel		Count:	9	
Element Type:	Steel I-Beam Diaphragms	s	Total Quantity:	9	
Environment:	Moderate		Limited Inspection:		
Protection System	None		120000000000000000000000000000000000000		
	Units	Excellent	Good	Fair	Poor
Condition Data:	Each	-	9	-	-
Comments: Generally in good con Performance Deficion	encies: 00	Replace	Maintenance Needs		1 Year 2
Recommended	1 – 5 Years	6 – 10 Years		Years	I cai 2
Element Group:	Abutments		Length:	2.1 m	1
Element Group: Element Name:	Abutments Wingwalls		Length: Width:	2.1 n	ı
		ucture		2.1 m -	
Element Name:	Wingwalls	ucture	Width:	•	
Element Name: Location:	Wingwalls NE, NW, SE & SW of Str		Width: Height:	0.85	m

RIDGE					Site No.:	
Protection System	None					
Condition Data:	Units	Excellent	Good	Fair	Poor	
Condition Data:	m²	•	7.1	-	-	
Comments: Limited inspection, w	ingwalls at west side are mostly	y buried. Generally is	n good condition			
Performance Deficie	encies: 00		Maintenance Needs:	00		
Recommended Wor	Rehab.  1 – 5 Years	Replace 6 – 10 Years	Maintenance Needs: Y	Urgent [	1 Year 2	
E	LEMENT DATA					
Element Group:	Abutments		Length:		-	
Element Name:	Ballast Walls		Width:		5.62 m	
Location:	East & West Underside of S	Structure	Height:		0.75 m	
Material:	Concrete		Count:		2	
Element Type:	Reinforced Concrete Wall		Total Quantity:		8.4 m <sup>2</sup>	
Environment:	Benign		Limited Inspection:			
Protection System	None					
Condition Data:	Units	Excellent	Good	Fair	Poor	
Condition Data:	m²	-	8.3	0.1	-	
Comments: Generally in good con	dition with honeycombing note					
		ed at West ballast wa	all. Signs of failed joint seal	on east ballast wa	111.	
Performance Deficie		ed at West ballast wa	all. Signs of failed joint seal  Maintenance Needs:		ıll.	
Performance Deficie Recommended Wor	encies: 00	Replace 6 - 10 Years	Maintenance Needs:	00	1 Year 2	
Recommended Wor	encies: 00  k: Rehab. 1 – 5 Years	Replace	Maintenance Needs:  Maintenance Needs:  Y	00 Urgent [	1 Year 2	
Recommended Wor	encies: 00  k: Rehab. 1 – 5 Years  Abutments	Replace	Maintenance Needs: Maintenance Needs: Y	00 Urgent [	1 Year 2	
Recommended Wor Element Group: Element Name:	Abutments Bearings	Replace	Maintenance Needs:  Maintenance Needs:  Y  Length: Width:	00 Urgent [	1 Year 2	
	encies: 00  k: Rehab. 1 – 5 Years  Abutments	Replace	Maintenance Needs: Maintenance Needs: Y	00 Urgent [	1 Year 2	

ELEMENT DATA  Element Group: Abutments	Site No.: B2	S					RIDGE
Condition Data:   Each   Cood   Fair	21 =			Limited Inspection:	E.	Benign	Environment:
Each   -   -   6						None	Protection System
Each   -   -   6	Poor		Fair	Good	Excellent	Units	Condition Date:
Abutment bearings are moderately to severely compressed and bulging. Light to localized moderate corrosion / corrosion scale rearings.  Performance Deficiencies: 00  Recommended Work: Rehab. Replace Years	2		6		-	Each	Jonattion Data:
Recommended Work:	oted at	osion scale note	c corrosion / corro	ht to localized moderate	pressed and bulging. Li	moderately to severely com	Abutment bearings are 1
ELEMENT DATA  Element Group: Abutments			: 00	Maintenance Needs		ncies: 00	Performance Deficien
Element Group: Abutments	r2	1 Year					Recommended Work
Element Name: Abutment Walls Width: 5.62 m  Location: East & West Underside of Structure Height: 0.5 m  Material: Concrete Count: 2  Element Type: Reinforced Concrete Abutment Total Quantity: 5.6 m²  Environment: Benign Limited Inspection: Protection System None  Condition Data: Units Excellent Good Fair  m² - 5.6 - Comments:  Generally in good condition. Water stains noted at east and west abutment walls. Light map cracks noted at east abutment wall.  Performance Deficiencies: 00 Maintenance Needs: Urgent 1 Year						EMENT DATA	ELI
Concation: East & West Underside of Structure   Height:   0.5 m		-		Length:		Abutments	Element Group:
Adaterial:  Concrete  Count:  Reinforced Concrete Abutment  Total Quantity:  Denotetion System  None  Condition Data:  Units  Excellent  Maintenance Needs:  Denote Stair  Performance Deficiencies: 00  Recommended Work:  Rehab.  Replace  Count:  C	i Ljei	5.62 m		Width:		Abutment Walls	
Reinforced Concrete Abutment   Total Quantity:   5.6 m²		0.5 m		Height:	f Structure	East & West Underside of	ocation:
Environment: Benign Limited Inspection:  Protection System None  Units Excellent Good Fair  m² - 5.6 -  Comments:  Generally in good condition. Water stains noted at east and west abutment walls. Light map cracks noted at east abutment wall.  Performance Deficiencies: 00  Recommended Work: Rehab. Replace Maintenance Needs: Urgent 1 Years		t: 2		Count:	Concrete		Aaterial:
Protection System None  Units Excellent Good Fair  m² - 5.6 -  Comments: Generally in good condition. Water stains noted at east and west abutment walls. Light map cracks noted at east abutment wall.  Performance Deficiencies: 00  Recommended Work: Rehab. Replace Maintenance Needs: Urgent 1 Years		5.6 m <sup>2</sup>		Total Quantity:	tment	Reinforced Concrete Abu	Element Type:
Units    Condition Data:   Units   Excellent   Good   Fair	. 1737		11 13 2	Limited Inspection:		Benign	Environment:
Condition Data:  m²  - 5.6  Comments: Generally in good condition. Water stains noted at east and west abutment walls. Light map cracks noted at east abutment wall.  Performance Deficiencies: 00  Recommended Work:  Rehab.  Replace  Maintenance Needs:  Urgent  1 Years	No. 272		¥		11 <sup>8</sup> W1	None	rotection System
m² - 5.6 -  Comments:  Generally in good condition. Water stains noted at east and west abutment walls. Light map cracks noted at east abutment wall.  Performance Deficiencies: 00  Recommended Work: Rehab. Replace Maintenance Needs: Urgent 1 Years	Poor		Fair	Good	Excellent	Units	
Performance Deficiencies: 00  Recommended Work:  Rehab.  Replace  Maintenance Needs:  Urgent  1 Year			1 (*	5.6	- //	m²	Condition Data:
Recommended Work: Rehab. Replace Maintenance Needs: Urgent 1 Years	· · · · · · · · · · · · · · · · · ·	tment wall.			t east and west abutment		Generally in good cond
Vegre		Maintenance Needs: 00				ncies: 00	Performance Deficien
	r 2	1 Year					Recommended Work
Element Group: Piers Length: -				Longth		Diore	Elamont Comm
Element Group: Piers Length: - Element Name: Bearings Width: -	1					31000 0200	
3				was the properties			
Location: On Piers Caps Height: -  Material: Neoprene / Rubber / Steel Count: 16					•		

BRIDGE						Site No.: B2	
Element Type:	Elastomeric Bearing / Ste	el Plate	Total Quantity:		16		
Environment:	Moderate		Limited Inspection:		X		
Protection System	None						
Condition Data:	Units	Excellent	Good	Fair		Poor	
Condition Data:	Each		-	13		3	
Comments: Limited inspection du corrosion scaling note	ne to height. Neoprene compo ed on base plates.	onent of pier bearings ap	ppear to be moderately to	severely compres	ssed and bu	alging. Some	
Performance Defici	iencies: 00		Maintenance Need	ls: 00			
Recommended Wo	rk: Rehab.  1-5 Years	Replace 6 – 10 Years	Maintenance Need	ls: Urgent Years	1 Ye	ear 2	
E	LEMENT DATA						
Element Group:	Piers		Length:		8.12 m		
Element Name:	Caps		Width:	Width: 1		1 m	
Location:	On Piers		Height:		1.3 m		
Material:	Concrete		Count:		2		
Element Type:	Rectangular Pier Caps		Total Quantity:		79.9 m <sup>2</sup>		
Environment:	Moderate		Limited Inspection				
Protection System	None						
Condition Data:	Units	Excellent	Good	Fair		Poor	
Condition Data:	m <sup>2</sup>	-	78.4	1		0.5	
Comments: Generally in good covertical medium to w	ndition with narrow cracks, s ride cracks noted at south of v	some light rust and wate west pier cap. Medium t	er stains. Spall with expos to wide horizontal crack a	ed corroded reinf it east pier and at	Forcement a south end.	ind horizonal an	
Performance Defici	encies: 00		Maintenance Need	ls: 08 – Repair of	Bridge Co	ncrete	
Recommended Wor	rk: Rehab.  1-5 Years	Replace 6 – 10 Years	Maintenance Need	s: Urgent Years	1 Ye	ear 🔀 2	
Element Group:	Piers		Length:		-		
Element Name:	Shafts/Columns/Pile Bent	ts	Width:				

Height:

Location:

Underside of Structure

BRIDGE						Site No.: B2
Material:	Steel		Count:		2	
Element Type:	Pier Column		Total Quantity:		2	
Environment:	Benign	1 =	Limited Inspection:	_		27.6
Protection System	None	- h 11 f				A1
Condition Data:	Units	Excellent	Good	Fair		Poor
Condition Data.	Each	-8	2			-
Comments:  Steel piles covered in ti piles could not be verifi timber crib noted through	imber crib (piles are inacces ĭed due to presence of sheat ghout.	sible). Timber sheathi hing. Timber on west p	ng and steel nosing are go ier appears to be coming	enerally in good c off. Some separa	ondition tion and	n. Exact number of I weathering of
Performance Deficien	icies: 00		Maintenance Need	s: 00		
Recommended Work	Rehab.  1 – 5 Years	Replace 6 – 10 Years	Maintenance Need	s: Urgent Years		Year 2
EL	EMENT DATA					
Element Group:	Foundations		Length:		-	
Element Name:	Foundation (Below Groun	d Level)	Width:			1 2 10
Location:	Below Abutment Walls &	Piers	Height:		-	11,
Material:	Concrete	1 1	Count:		-	1/ = 1
Element Type:	Strip Footing		Total Quantity:		-	1 04 1
Environment:	Benign		Limited Inspection:		X	
Protection System	None					
Condition Data:	Units	Excellent	Good	Fair		Poor
Condition Data:	N/A	<b>-</b> 2	-			
Comments: No visible evidence of f	foundation instability noted	at the time of inspectio	n.			
Performance Deficien	icies: 00		Maintenance Need	s: 00		
Recommended Work	Rehab. 1 – 5 Years	Replace 6 – 10 Years	Maintenance Need	s: Urgent Years	1	Year 2
	e e					

Width:

Element Name:

Embankments

					Site No.: B2
NE, NW N, S, SE, & SW	of Structure	Height:			
Native Soil		Count:		6	
Embankment		Total Quantity:		6	
Moderate		Limited Inspection:			
None				Skerry province	
Units	Excellent	Good	Fair		Poor
Each	-	6	-		-
l vegetated with some large r	random rocks and rock	protection in front of abu	ment walls. Old	bridge al	butments to north
encies: 00		Maintenance Need	s: 00		
k: Rehab.  1 – 5 Years	Replace 6 – 10 Years	\$25.00.000 X 0.000 X 0		1 7	Year 2
Embankments and Stream	28	Length:		-	
Slope Protection		Width:		-	
East and West Underside	of Structure	Height:		-	
Rock		Count:		2	
Slope Protection		Total Quantity:		2	
Moderate		Limited Inspection:			
None					
	FU4				
Units	Excellent	Good	Fair		Poor
Units Each	-	Good 2	Fair -		Poor -
	-	2	-	ondition	-
Each	-	2	- Generally in fair c	ondition	-
	Native Soil Embankment  Moderate None  Units Each  vegetated with some large of the solution o	Native Soil  Embankment  Moderate  None  Units Each  Each  I vegetated with some large random rocks and rock  encies: 00  k: Rehab. Replace	Native Soil  Embankment  Total Quantity:  Moderate  Limited Inspection:  None  Units  Each  Each  Cood  Each  Cood  Each  Maintenance Need  Replace  Maintenance Need  LEMENT DATA  Embankments and Streams  Slope Protection  East and West Underside of Structure  Rock  Count:  Slope Protection  Moderate  Limited Inspection:  Total Quantity:  Limited Inspection:	Native Soil  Embankment  Total Quantity:  Limited Inspection:  None  Units Each - 6 -  Vegetated with some large random rocks and rock protection in front of abutment walls. Old  encies: 00  K: Rehab. Replace 1 - 5 Years 6 - 10 Years  Maintenance Needs: Urgent Years  LEMENT DATA  Embankments and Streams Slope Protection Width: East and West Underside of Structure Rock Slope Protection Total Quantity: Moderate  Limited Inspection:	Native Soil Count: 6 Embankment Total Quantity: 6 Moderate Limited Inspection: None    Units   Excellent   Good   Fair

Length:

Element Group:

Embankments and Streams

BRIDGE					Si	te No.: B2
Element Name:	Streams and Waterways		Width:			
Location:	Below Structure		Height:			
Material:	Native		Count:		•	
Element Type:	Streams		Total Quantity:		All	
Environment:	Benign		Limited Inspection	:		
Protection System	None		8			
G Pri Data	Units	Excellent	Good	Fair		Poor
Condition Data:	All	-	All	-		-
Comments: Water flows from south	n to north with moderate vo	lume and flow; there are	no visible flow obstruc	tions.		
Performance Deficie	ncies: 00		Maintenance Need	ls: 00		
Recommended Worl	Rehab.  1-5 Years	Replace 6 – 10 Years	Maintenance Need	<b>ls:</b> Urgent Years	1 Year	2

	REPAIR AND REHABILITATION REQUIRED		Priority			imated Cost
Element	Repair and Rehabilitation Required	6 - 10 Years	1 - 5 Years	< 1 year	Est	imated Cost
Joint	Joint Seal Replacement		х		\$	28,000.00
Bearings	Abutment and Pier Bearing Replacement		Х		\$	98,000.00
					\$	-
					\$	-3
-					\$	-
					\$	-
					\$	
					\$	-
					\$	-
				Total Cost	\$	126,000.00

ASSOCIATED WORK	Comments	Est	timated Cost
Approaches		\$	-
Detours		\$	-
Traffic Control	Traffic control	\$	35,000.00
Utilities		\$	-
Right of Way		\$	-
Environmental Study		\$	( <del>, =</del> ,

BRIDGE		Si	ite No.: B2
Other		\$	Ę
Contingencies		\$	<b>-</b> 17
	Total Cost	\$	35,000.00

JUSTIFICATION		

# Structure Condition Summary Form

Structure Name Crothers Bridge
Structure Number B3
Date of Inspection August 9, 2024
Project No.
Consultant HP Engineering Inc.

HP Engineering Inc.

Maintenance Need	00	00	8	8	8	8	00	00	00	00	02	00
Performance Deficiency	00	00	8	00	8	00	8	8	8	8	00	8
Element Condition Index	72	75	75	73	22	75	75	75	75	75	75	75
Current Element Value (CEV)	32422	8479	0006	10780	445	1650	12750	192255	32895	36282	6853	30
Total Replacement Value (TRV)	44910	11305	12000	14700	619	2200	17000	256340	43860	48376	9138	40
Element Quantity in Poor Condition (0)	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Element Quantity in Fair Condition (0.4)	4.00	00:00	0.00	2.00	3.00	0.00	0.00	00.0	00.00	0.00	00.0	0.00
Element Quantity in Good Condition (0.75)	45.90	32.30	12.00	40.00	97.20	44.00	85.00	1,281.70	365.50	403.13	365.50	40.40
Element Oty. in Excellent Condition (1.00)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Element Quantity	49.90	32.30	12.00	42.00	103.20	44.00	85.00	1,281.70	365.50	403.13	365.50	40.40
Unit Price (MTO)	900.00	350.00	1000.00	350.00	9.00	50.00	200.00	200.00	120.00	120.00	25.00	1.00
Unit (Qty.)	Sq.m	Sq.m	Each	Sq.m	Sq.m	Each	Ε	Sq.m	Sq.m	Sq.m	Sq.m	Ε
Element Group Element Name	Abutment Walls	Ballast Walls	Bearings	Wingwalls	Wearing Surface	Posts - Timber	Railing Systems	Girders	Deck Top - Thin Slab	Soffit - Thin Slab	Wearing Surface	Armouring / Retaining Devices
Element Group			Abutment		Approaches		Barriers			Decks		Joints

	Importance Factor for Traffic
75	0
Bridge Condition Index (BCI)	يد

Importance Factor for Economic Impacts Importance Factor for Bridge Width

Bridge Sufficiency Index (BSI)

Importance Factor for Bridge Profile or Alignment

Page 1 of 1

BRIDGE Site No.: B3

INVENTORY DAT	A:							
Structure Name	Crothers Bridge							
				lavigable	Water	Non- Nav	igable Wate	er 🔀
Main Hwy/Road#	Adams Road	Stı	ructure: R	ail	Road	Pedestri	an	Other
		On		ail	Road X	Pedestrian	Other	
Road Name:	Adams Road	Stı	ructure: R	all	Road 🔼	redestrian	Other	
Structure Location	0.84 km east of Pratt F	.oad						
Latitude	46° 13' 17.	7" N	Longit	ude		78° 55' 1	8.6" W	
Owner(s)	Township of Calvin		Heritaş		Not Cons.	Cons. /Not Ap	p. List	/Not Desig.
			Design	ation	Desig./not Li	ist D	esig. & List	
MTO Region			Road (	Class:	Freeway	Arterial C	ollector	Local
MTO District	<u>-</u>		Posted	Speed		No. of La	nes	2
Old County	=		_ AADT	,		% Trucks		
Geographic Twp.	<u>-</u>		Specia	1 Routes	Transit	Truck	School	Bicycle
Structure Type	Steel Girder Bridge		— Detour	· Length A	Around			
			Structu		nound			_(km)
Total Deck Length	42.5	(m)	Fill on	Structure		-		_(m)
Overall Str. Width	10.1	(m)	Skew A	Angle				_(Degrees)
Total Deck Area	429.3	(m <sup>2</sup> )	Directi	ion of Str	ıcture	East/W	est	-0
Roadway Width	8.6	(m)	No. of	Spans		1		<b>-</b> 8
Span Lengths	42.5	(m)						
н	STORICAL DATA							
Year Built	19	38		Last OSI	M Inspection		June	04, 2022
Year of Last Major F	Rehab	2		Last Enh	anced OSIM Ir	rspection		-
Current Load Limit		:	(tonnes)	Last Brid	ge Master Insp	ection		_
Load Limit By-Law	#	8		Last Eval	uation			-
By-Law Expiry Date		ÿ		Last Und	erwater Inspec	tion		-
Min. Vertical Cleara	nce	2	(m)	Last Con	dition Survey			•
Rehabilitation Histo	ory: (Date / Description	 )						

RRIDGE

BKIDGE												Site No.: B.
FIELD	INSPECTIO	N INF	ORMAT	ION								
Date of Inspection:	August 9,	2024				Тур	e of Inspection:	$\boxtimes$ os	SIM	Enhanc	ed OS	IM
Inspector:	Tashi Dw	ivedi, P	Eng., H	P Eng	ineering			03.00-0				
Others in Party:	Derick Ba	ttrick, l	P.Eng., H	P Eng	gineering							
Access Equipment Used:	Measuring	g Tape,	Digital C	Camer	a and Hamme	r						
Weather:	Partly Clo	udy										
Temperature:	_24 °C											
								Prio	rity			
ADDITIONAL INVESTIG	GATION RE	QUIR	ED				None	Norr		Urgent	Esti	mated Cost
Rehabilitation/Replacement	t Study:				LANCE OF THE PARTICULAR AND ADDRESS	100000000000000000000000000000000000000	X				\$	-
Material Condition Survey							X				\$	
Detailed Deck Condition	n Survey:							X			\$	10,000.00
Non-destructive Delami	nation Surve	of Asj	halt- Co	vered	Deck:		X				\$	-
Concrete Substructure C	Condition Sur	vey:					X				\$	-
<b>Detailed Coating Condit</b>	tion Survey:						X				\$	-
Detailed Timber Investi	gation:						X				\$	-
Underwater Investigation:							X				\$	-
Fatigue Investigation:							X				\$	-
Seismic Investigation:							X				\$	-
Structure Evaluation:							X				\$	-
Monitoring							X				\$	-
Monitoring of Deformat	tions, Settlem	ent and	Moveme	ents:			X				\$	-
Monitoring Crack Width	hs:						X				\$	-
Load Posting – Estimated	Load Limit								T	otal Cost	\$	10,000.00
Investigation Notes: Deck condition survey is red	commended o	lue to th	ne age of	the st	ructure.							
OVERALL STRUCTURAL	L NOTES:											
Recommended Work on Stru	icture:	No	ne	M	inor Rehab.		Major Rehab.		Rep	lace		1770
Timing of Recommended We			o 5 years		6 to 10 ye							
Overall Comments: Overall s medium map cracks observed						issing	sign observed o	on the s	outhea	ast corner.	Narrov	v to
Date of Next Inspection:		June 20	)26						5			
1 Suspected Performance Deficiencies 00 None 01 Load carrying capacity 02 Excessive deformations (deflecti 03 Continuing settlement 04 Continuing movements 05 Seized bearings 05 Maintenance Needs 01 Lift and swing bridge maintenance 02 Bridge cleaning 03 Bridge handrail maintenance	ons & rotation)	0 0 0 0 1 1 1	7 Jamme 8 Pedest 9 Rough 0 Surfac 1 Deck o 7 Repair 8 Repair 9 Repair	ed expa rian/vel riding e pondi drainage of stru of brid	ctural steel lge concrete lge timber	unstable	12 13 14 15 16 16 17	3 Flood 4 Und 5 Uns 6 Othe 3 Eros 4 Cone 5 Rou	erminin table en er sion con crete se t and se	annel blockag g of foundation abankments trol at bridges aling	on	
O4 Painting steel bridge structures O5 Bridge deck joint repair		1	1 Anima	l/pest c			16	7 Scal	ing (loo	drainage se Concrete o	r ACR S	teel)
06 Bridge bearing maintenance		1	2 Bridge	surfac	е гераіг		18	8 Othe	r			

Page 2

BRIDGE Site No.: B3

EI	EMENT DATA				
Element Group:	Approaches		Length:		E 37.5m, NW 33.3m, E 38.4, SW 33.9m
Element Name:	Barrier		Width:		
Location:	NE, NW, SE & SW of Str	ucture	Height:	-	
Material:	Steel		Count:	4	9
Element Type:	Steel Flex Beam on steel I	Posts	Total Quantity:	1-	44 m
Environment:	Severe		Limited Inspection:		
Protection System	None				
C. IIII D.	Units	Excellent	Good	Fair	Poor
Condition Data:	m	-	144	1-	-
Performance Deficie	encies: 00		Maintenance Needs:	02	
	1 – 5 Years	6 – 10 Years		ears	
Element Group:	Approaches		Length:		m
Element Name:	Wearing Surface		Width:	8	5.6 m
Location:	East & West of Structure		Height:	-	8
Material:	Gravel / Surface Treatmen	nt	Count:	2	
Element Type:	Gravel / Surface Treatmen	nt Wearing Surface	Total Quantity:	1	03.2 m <sup>2</sup>
Environment:	Severe		Limited Inspection:		
<b>Protection System</b>	None				
Condition Data:	Units	Excellent	Good	Fair	Poor
Condition Data.	m <sup>2</sup>	-	97.2	3	3
water run-off from rea		to channel and cause n	Maintenance Needs	es of the roadway.	proaches
Recommended Wor	k: Rehab. 1 – 5 Years	Replace 6 – 10 Years	Maintenance Needs:	Urgent ears	1 Year 🔀 2

	EMENT DATA					
	LEMENT DATA		Length:		_	
Element Group: Element Name:	Accessories		Width:		-	
	Signs	unatura.	Height:			II
Location:	NE, NW, SE & SW of Str	ucture	Count:		4	
Material:	Plastic					
Element Type:	Snow Plow Markers		Total Quantity:		4	
Environment:	Severe		Limited Inspection:			
Protection System	None		T			
Condition Data:	Units	Excellent	Good	Fair		Poor
	Each	•	3	•		1
Performance Deficio	encies: 00		Maintenance Needs	s: 18- Install haza	ard sign	
Recommended Wor		Replace	Maintenance Needs		1 Ye	ar 2
1	1-5 Years	6 – 10 Years		Years		
TI	n :		Tonath		42.5 m	
Element Group:	Barriers	1.05	Length: Width:		42.3 III	
Element Name:	Railing Systems	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0.000.000.0000			
Location:	North & South Sides of S	ructure	Height:		-	
					1 2	111111
Material:	Steel		Count:		2	
Element Type:	Steel Flex Beam		Total Quantity:		2 85 m	
Element Type:	Steel Flex Beam Severe None		Total Quantity: Limited Inspection:			
Element Type: Environment: Protection System	Steel Flex Beam Severe	Excellent	Total Quantity: Limited Inspection:  Good	Fair		Poor
Element Type: Environment:	Steel Flex Beam Severe None	Excellent -	Total Quantity: Limited Inspection:			Poor -

BRIDGE Site No.: B3

EI	LEMENT DATA				
Element Group:	Barriers		Length:		-
Element Name:	Posts		Width:		•
Location:	North & South of Structur	e	Height:		-
Material:	Steel		Count:		44
Element Type:	Steel Post		Total Quantity:		44
Environment:	Severe		Limited Inspection:		
Protection System	None				
C I'' D	Units	Excellent	Good	Fair	Poor
Condition Data:	Each	-	44		
Barrier posts are gener	ally in good condition.				
Performance Deficie	encies: 00		Maintenance Need	s: 00	
Recommended Wor	k: Rehab.  1-5 Years	Replace 6 – 10 Years	Maintenance Need	s: Urgent Years	1 Year 2
Element Group:	Joints		Length:		10.1 m
Element Name:	Armouring / Retaining De		Width:		•
Location:	East & West Ends of Stru	cture	Height:		-
Material:	Steel		Count:		4
Element Type:	Steel Armouring		Total Quantity:		40.4 m
Environment:	Severe		Limited Inspection:		
Protection System	None				
Condition Data:	Units	Excellent	Good	Fair	Poor
	m	-	40.4	-	-
Comments: Joint armouring covere exposed ballast wall.	ed by gravel wearing surface	at time of inspection.	Condition assumed based	on previous inspe	ection and condition of
Performance Deficie	encies: 00		Maintenance Need	ls: 00	

BRIDGE						Site No.: B3
EI	LEMENT DATA					
Element Group:	Joints		Length:		10.1 m	
Element Name:	Seals / Sealants	H. H	Width:		•	
Location:	East & West Ends of Stru	cture	Height:		. •	4 14 11 11
Material:	Neoprene / Rubber		Count:		2	11 8 8
Element Type:	Strip Seal		Total Quantity:	U	2	19 , 1 1
Environment:	Severe	ja	Limited Inspection:	:	X	
Protection System	None					
Condition Data:	Units	Excellent	Good	Fair		Poor
Condition Data.	Each	Life -	2	->		-
	te time of inspection. Appear	r generally in good cond	lition with no evidence o	f leakage.		
Performance Deficie	ncies: 00		Maintenance Need	s: 02 – Bridge Cl	eaning	
Recommended Worl	k: Rehab.  1-5 Years	Replace 6 – 10 Years	Maintenance Need	ls: Urgent Years	<u>    1 Y</u>	ear2
Element Group:	Decks		Length:		42.5 m	
Element Name:	Wearing Surface	1 -	Width:	1,3	8.6 m	21 21 21
Location:	Top of Deck	20	Height:	- n	-	
Material:	Gravel		Count:	1,24	1	
Element Type:	Gravel Wearing Surface		Total Quantity:		365.5 m	2
Environment:	Severe		Limited Inspection:			n e
Protection System	None		•			
	Units	Excellent	Good	Fair		Poor
Condition Data:	m <sup>2</sup>	-	365.5	-		-
Comments: Generally in good cond	lition. Dirt buildup observed	along edges of deck. Lo				a trigo
Performance Deficie	ncies: 00	1 = 1 = 1 = 1	Maintenance Need	s: 02 - Bridge Cle	aning	
Recommended Work	Rehab. 1 – 5 Years	Replace 6 – 10 Years	Maintenance Need	s: Urgent Years	1 Ye	ear 2

SKIDGE FI	LEMENT DATA	paging canadigues product				Site No.: B
Element Group:	Decks		Length:		42.5 m	
Element Name:	Deck Top (Covered)		Width:		8.6 m	
Location:	Top of Deck		Height:		-	
Material:	Concrete		Count:		1	
Element Type:	Thin Slab		Total Quantity:		365.5 m <sup>2</sup>	
Environment:	Severe		Limited Inspection:		303.3 III	
			Limited Inspection:			
Protection System	Gravel Wearing Surface	F114	Cont	To the		
Condition Data:	Units m <sup>2</sup>	Excellent -	Good 365.5	Fair -		Poor
Deck top is covered by surface and the unders	y wearing surface and only e: ide of deck.	xposed at edges of dec	k. Assumed to be in good	condition based	on condition	n of wearing
Performance Deficie	encies: 00		Maintenance Need	s: 00		
Recommended Wor	Rehab.  1 – 5 Years	Replace 6 – 10 Years	Maintenance Need	s: Urgent Years	1 Yes	ar 2
Element Group:	Decks		Length:		2 m	
Element Name:	Soffit - Thin Slab (End)		Width:		10.1 m	
Location:	East & West Underside of	f Deck	Height:		0.25 m	
Material:	Concrete		Count:		-	
Element Type:	Thin Slab		Total Quantity:		20.1 m <sup>2</sup>	
Environment:	Moderate		Limited Inspection:			
Protection System	None					
	Units	Excellent	Good	Fair		Poor
Condition Data:	m²	-	20.1	-		•
Comments: Generally in good con Performance Deficie			Maintenance Need	ls: 00		
Recommended Wor	Rehab. [ 1 – 5 Years [	Replace 6 – 10 Years	Maintenance Need	s: Urgent Years	1 Ye	ar 2

BRIDGE						Site No.: B3
	EMENT DATA					
Element Group:	Decks		Length:		38.5 n	5,100
Element Name:	Soffit - Thin Slab (Exterio		Width:		0.4 m	
Location:	North & South Sides of D	eck	Height:		0.25 n	n
Material:	Concrete		Count:		2	
Element Type:	Thin Slab		Total Quantity:		25.03	m <sup>2</sup>
Environment:	Moderate		Limited Inspection	:		
Protection System	None					
Condition Data:	Units	Excellent	Good	Fair		Poor
Condition Data.	m²	-	25.03	-		-
Generally in good cond						4
Performance Deficien	ncies: 00		Maintenance Need	s: 00		
Recommended Work	Rehab.  1-5 Years	Replace 6 – 10 Years	Maintenance Need	s: Urgent Years	1	Year 2
Element Cusum	D.d.		T (T.)		20.5	
Element Group:	Decks	-X	Length:		38.5 n	
Element Name:	Soffit - Thin Slab (Interio	r)	Width:		9.3 m	
Location:	Underside of Deck		Height:		0.25 n	n
Material:	Concrete		Count:		1	•
Element Type:	Thin Slab		Total Quantity:		358 m	12
Environment:	Benign		Limited Inspection:			H T
Protection System	None		T			
Condition Data:	Units	Excellent	Good	Fair		Poor
	m²	8 <b>=</b>	358	-		-
Comments: Generally in good cond	lition.					
Performance Deficies	ncies: 00		Maintenance Need	s: 00		
Recommended Work	Rehab. 1 – 5 Years	Replace 6 – 10 Years	Maintenance Need	s: Urgent Years	1	Year 2

Performance Deficiencies: 00  Recommended Work: Rehab. Replace	
Vears	1 D-1-1 D-1 M-2 N-3- IV 1V 2
Element Group: Beams / MLEs Length: 38.5 m Element Name: Girders (Middle) Width: 0.65 m	
Location: Underside of Structure Height: 1.46 m	
	Girders (Middle) Width: 0.65 m
Material: Concrete Count: 6	Girders (Middle)  Width:  Underside of Structure  Height:  1.46 m
	Girders (Middle)         Width:         0.65 m           Underside of Structure         Height:         1.46 m           Concrete         Count:         6
Element Type: Concrete I-Girders Total Quantity: 1125 m <sup>2</sup>	Girders (Middle)  Width:  Underside of Structure  Height:  Concrete  Count:  Concrete I-Girders  Total Quantity:  1.46 m  1.46 m  1.25 m <sup>2</sup>
Element Type: Concrete I-Girders Total Quantity: 1125 m <sup>2</sup> Environment: Benign Limited Inspection:	Girders (Middle)  Width:  Underside of Structure  Height:  Concrete  Count:  Concrete I-Girders  Total Quantity:  Benign  Limited Inspection:
Element Type: Concrete I-Girders Total Quantity: 1125 m²  Environment: Benign Limited Inspection:   Protection System None	Girders (Middle)  Underside of Structure  Height:  Concrete  Count:  Concrete I-Girders  Total Quantity:  Benign  Limited Inspection:  None
Element Type: Concrete I-Girders Total Quantity: 1125 m²  Environment: Benign Limited Inspection:   Protection System None	Girders (Middle)  Width:  Underside of Structure  Height:  Concrete  Count:  Concrete I-Girders  Benign  Limited Inspection:  None  Units  Excellent  Good  Fair  Poor

BRIDGE Site No.: B3 **ELEMENT DATA** 1.5 m Element Group: Beams / MLEs Length: Width: 0.25 m **Element Name:** Diaphragms (End) East & West Underside of Structure Height: 1.2 m Location: 10 Count: Material: Concrete 39.8 m<sup>2</sup> **Total Quantity:** Element Type: Rectangular Concrete Diaphragms **Environment:** Limited Inspection: Moderate **Protection System** None Good Fair Poor Units Excellent **Condition Data:**  $m^2$ 39.8 Comments: End diaphragms are generally in good condition. Maintenance Needs: 00 Performance Deficiencies: 00 2 Urgent 1 Year Recommended Work: Rehab. Replace Maintenance Needs: Years 1-5 Years 6 - 10 Years Beams / MLEs Length: 1.5 m **Element Group: Element Name:** Diaphragms (Intermediate) Width: 0.25 m 1.2 m Height: Location: Underside of Structure 5 Count: Material: Concrete  $19.9 \text{ m}^2$ Rectangular Concrete Diaphragms **Total Quantity:** Element Type: **Limited Inspection: Environment:** Benign **Protection System** None Poor Units Excellent Good Fair **Condition Data:**  $m^2$ 19.9 -Comments: Diaphragms are generally in good condition. Maintenance Needs: 00 Performance Deficiencies: 00 2 1 Year Urgent Recommended Work: Rehab. Replace Maintenance Needs: Years 1-5 Years 6 - 10 Years

BRIDGE	LEMENT DATA				Site No.: B3	
Element Group:	Abutments		Length:		7 m	
Element Group:	Wingwalls		Width:		- m	
Location:	NE, NW, SE & SW of Str	ucture	Height:		1.5 m	
Material:	Concrete	ucture	Count:		4	
		11			42 m <sup>2</sup>	
Element Type:	Reinforced Concrete Wing	zwan	Total Quantity:		42 In	
Environment:	Moderate		Limited Inspection:			
Protection System	None	- n	~ .	T		
Condition Data:	Units	Excellent	Good	Fair	Poor	
	m²	-	40	2		
Performance Deficie	encies: 00		Maintenance Need	le: 00		
I eriormance Dener	incles. 00		Maintenance Need	5.00		
FI (0	Т.,					
Element Group:	Abutments		Length:		10.1	
Element Name:	Ballast Walls	~~~	Width:		10.1 m	
Location:	East & West Underside of	Structure	Height:		1.6 m	
Material:	Concrete		Count:		2	
Element Type:	Reinforced Concrete Balla	ast	Total Quantity:		32.3 m <sup>2</sup>	
Environment:	Benign		Limited Inspection:		X	
Protection System	None		~ ,			
Condition Data:	Units	Excellent	Good	Fair	Poor	
	m <sup>2</sup>	-	32.3	-	-	
Comments: Limited inspection due walls.	e to end diaphragms. General	lly in good condition wi	th narrow vertical crack	on visible sections	of East and West ballast	
Performance Deficie	encies: 00		Maintenance Need	ls: 00		
Recommended Wor	Rehab. [ 1 – 5 Years	Replace 6 – 10 Years	Maintenance Need	ls: Urgent Years	1 Year 2	

BRIDGE						Site No.: B3	
	LEMENT DATA						
Element Group:	Abutments		Length:		-		
Element Name:	Bearings		Width:		•		
Location:	East & West (On Abutme	ent Walls)	Height:		•		
Material:	Neoprene / Rubber		Count:	= 1	12		
Element Type:	Elastomeric Bearing	1 11	Total Quantity:	Total Quantity:		12	
Environment:	Benign		Limited Inspection:				
Protection System	None			9.			
Condition Data:	Units	Excellent	Good	Fair		Poor	
Condition Data:	Each	-	12		19.	-	
Performance Deficie	encies: 00		Maintenance Needs	• 00			
	1-5 Years	6 – 10 Years		Years			
Element Group:	Abutments		Length:	V. 19.	-		
Element Name:	Abutment Walls	To see	Width:	SE SE	10.1 m	Burn Jak	
Location:	East & West Underside of	f Structure	Height:		2.47 m		
Material:	Concrete		Count:	112	2		
Element Type:	Reinforced Concrete Abu	tment	Total Quantity:		49.9 m <sup>2</sup>		
Environment:	Benign	1   8	Limited Inspection:			One care	
Protection System	None			IN V. LI. V.		age main	
Condition Data:	Units	Excellent	Good	Fair		Poor	
	m²	-	45.9	4			
		middle of both abutme	Maintenance Needs	: 00	abutment v		
Recommended Wor	1 – 5 Years	6 – 10 Years		: Urgent Years	1 Ye	ar 2	

RIDGE EL	EMENT DATA				Site No.: B3
Element Group:	Foundations		Length:	T.	
Element Name:	Foundation (Below Groun	d Level)	Width:		
Location:	Below Abutment Walls	25555300 https://www.	Height:		•
Material:	Concrete		Count:		•
Element Type:	Strip Footing		Total Quantity:		
Environment:	Benign		Limited Inspection:		$\times$
Protection System	None		Control Control (Control Control Contr		
	Units	Excellent	Good	Fair	Poor
Condition Data:	N/A		-	-	-
Performance Deficie	encies: 00		Maintenance Needs:	00	
Recommended Wor	k: Rehab.  1-5 Years	Replace 6 – 10 Years	Maintenance Needs: Y	urgent ears	1 Year 2
Element Group:	Embankments and Stream	s	Length:		
Element Name:	Embankments		Width:		-
Location:	NE, NW, E, SE, SW & W	of Structure	Height:		
Material:	Native Soil		Count:		6
Element Type:	Embankment		Total Quantity:		6
Environment:	Moderate		Limited Inspection:		
Protection System	Stone used against abutme	ent			
	Units	Excellent	Good	Fair	Poor
Condition Data:	Each	-	6	8-	-
Comments: NE, NW, SE & SW er abutment walls. All en	nbankments are well vegetat nbankments are generally in	ed and appear to be sta good condition.	able. Slope protection preser	nt on E and W em	bankments in front of
Performance Deficie	encies: 00		Maintenance Needs:	00	

BRIDGE						Site No.: B3
	EMENT DATA					
Element Group:	Embankments and Streams		Length:		•	
Element Name:	Slope Protection		Width:		-	
Location:	East & West Underside of	f Structure	Height:		•	
Material:	Rock		Count:		2	
Element Type:	Slope Protection		Total Quantity:		2	
Environment:	Moderate		Limited Inspection	Limited Inspection:		
Protection System	None					
Condition Data:	Units	Excellent	Good	Fair	r Poor	
Condition Data.	Each	-	2	-		-
Performance Deficie	embankments in front of Eas	it and West abutments;	Maintenance Need			
Recommended Work		Replace 6 – 10 Years	Maintenance Need		1 Y	vear 2
			_			
Element Group:	Embankments and Stream	S	Length:		•	
Element Name:	Streams and Waterways		Width:			
Location:	Below Structure		Height:		-	
Material:	Native		Count:		-	
Element Type:	Streams		Total Quantity:		All	
Environment:	Benign		Limited Inspection			
Protection System	None					
Condition Data:	Units	Excellent	Good	Fair		Poor
Condition Data.	All	-	All	-		-
Comments: High volume and fast f	low from south to north wit	h no visible flow obstr	uctions noted in the stream	n at the time of in	spection.	
Performance Deficie	ncies: 00		Maintenance Need	s: 00		
Recommended Work	Rehab.  1 – 5 Years	Replace 6 – 10 Years	Maintenance Need	s: Urgent Years	1 Y	rear 2

RIDGE  REPAIR AND REHABILITATION REQUIRED  Priority				Site No.: B3	
Element	Repair and Rehabilitation Required	6 - 10 Years	1 - 5 Years	< 1 year	Estimated Cost
				Total Cost	\$

ASSOCIATED WORK	Comments	Estimated Cost
Approaches		
Detours		
Traffic Control		
Utilities		
Right of Way		
Environmental Study		
Other		
Contingencies		
	Total Cost	\$ -

JUSTIFICATION	

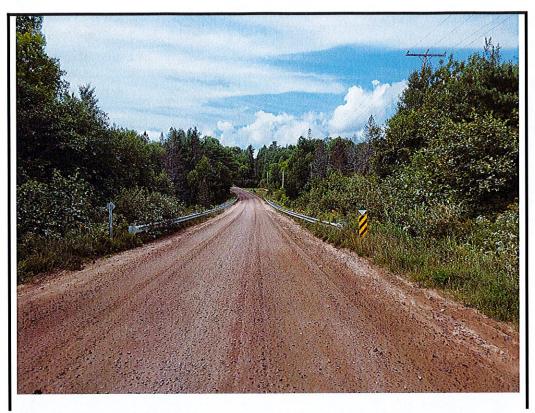


Photo 1 Structure from east approach

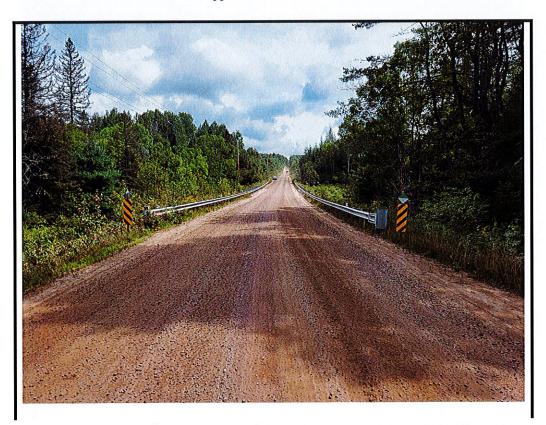


Photo 2 Structure from west approach

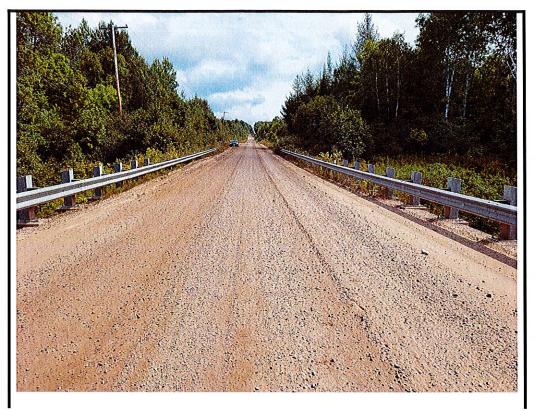


Photo 3 East approach from center of structure



Photo 4 West approach from center of structure



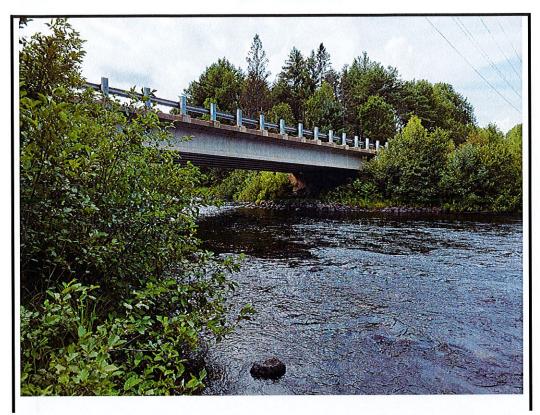


Photo 5 North elevation

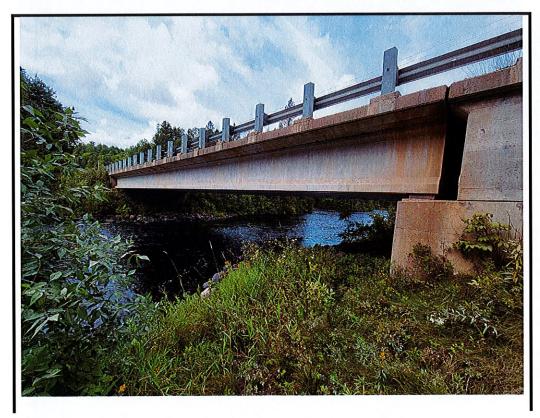


Photo 6 South elevation

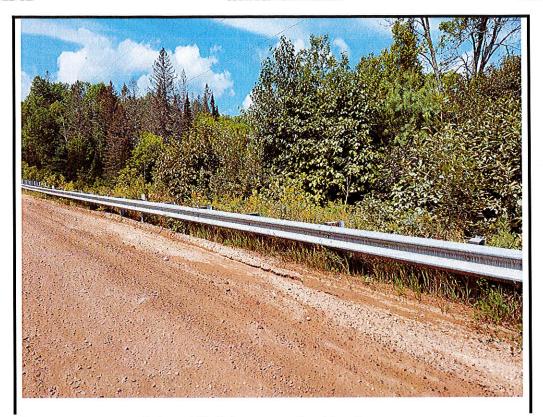


Photo 7 Accumulation of dirt below approach guide rail

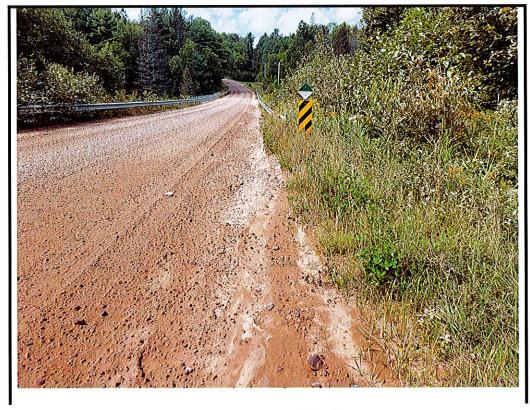


Photo 8 Vegetation overgrowing approach guide rail



Photo 9 Light corrosion of anchor bolts on deck post base-plates



Photo 10 Narrow vertical crack on east ballast wall

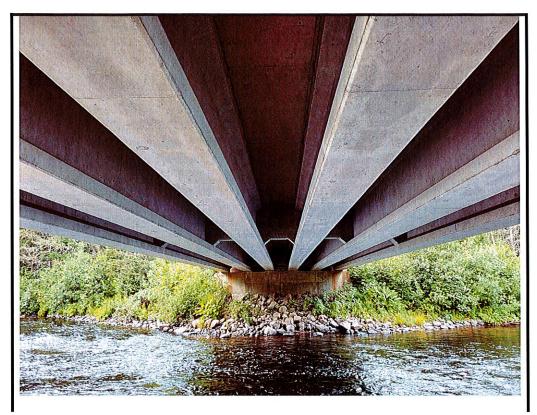


Photo 11 General view of girders and soffit



Photo 12 Isolated small spalls and rust staining on exterior soffit

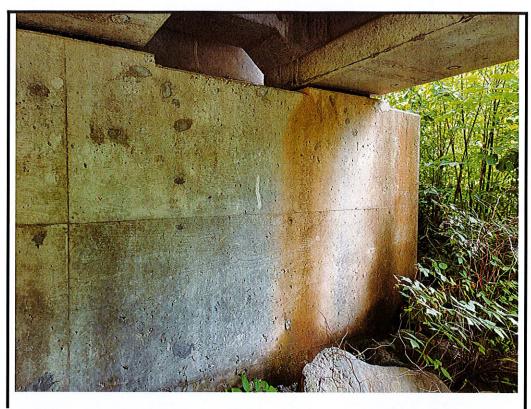


Photo 13 Damp staining and rust staining on east abutment wall



Photo 14 Narrow vertical crack on abutment wall

# Structure Condition Summary Form

Structure Name Stewarts Bridge
Structure Number 84
Date of Inspection August 9, 2024
Project No.
Consultant HP Engineering Inc.

Element Group Element Name	Unit (Qty.)	Unit Price (MTO)	Total Element Quantity	Element Otty. in Excellent Condition (1.00)	Element Quantity in Good Condition (0.75)	Element Quantity in Fair Condition (0.4)	Element Quantity in Poor F Condition (0)	Total Replacement Value (TRV)	Current Element Value (CEV)	Element Condition Index	Performance Deficiency	Maintenance Need
Abutment Walls	Sq.m	900.00	10.60	0.00	9.50	1.10	0.00	5000	6089	71	00	00
Ballast Walls		350.00	3.18	0.00	2.83	0.25	0.10	1113	778	2	00	80
Wingwalls		350.00	6.30	0.00	5.70	09.0	0.00		1580	72	00	13
Wearing Surface		9.00	57.00	0.00	0.00	55.00	2.00		132	33	60	12
Girders - Timber		50.00	36.26	0.00	20.00	16.26	0.00	1813	1075	23	8	00
Deck - Timber	m.pS	50.00	61.74	0.00	38.44	22.00	1.30	3087	1882	61	8	09,02
Curbs	Sq.m	40.00	3.92	0.00	1.46	1.96	0.50	157	75	48	8	60

	Importance Factor for Traffic	Importance Factor for Economic Impacts	Importance Factor for Bridge Width	Importance Factor for Bridge Profile or Alignment
89	0	0	0	0
Bridge Condition Index (BCI)	<u>.</u>	ي	_3	_a

	Stewarts Bridge						
Main Hwy/Road#	Stewart Road		Under Structure:	Navigable Rail	Water Road	Non- Naviga Pedestrian	ble Water Other
			On				
Road Name:	Stewart Road		Structure:	Rail	Road Pe	destrian O	ther
Structure Location	0.98 km south of Home	stead Road	i		21 m) ii	"	
Latitude	46° 13' 45.5	" N	Long	gitude		78° 51' 8.8"	W
Owner(s)	Township of Calvin		Heri Desi	tage gnation	Not Cons. Desig./not List	Cons. /Not App. Desig	List/Not Desig.
MTO Region	-		Road	l Class:		rterial Collec	
MTO District	-		Poste	ed Speed		No. of Lanes	Î -
Old County	_		AAD	T	-	% Trucks	<u> </u>
Geographic Twp.	24		Spec	ial Routes	Transit	Truck Scho	ool Bicycle
Structure Type	Timber Girder Bridge		Deto Struc	ur Length A	round		(km)
Total Deck Length	4.9	(m)		on Structure	_		(m)
Overall Str. Width	5.3	(m)		Angle			(Degrees)
Total Deck Area	25.97	(m <sup>2</sup> )		ction of Stru		North/South	
Roadway Width	4.75	(m)		of Spans		1	- 11 100 MHz
Span Lengths	4.9	(m)	110. 0	л оринз		e i f lips - Ba	
HIS	STORICAL DATA						
Year Built	-		_	Last OSIN	A Inspection		May 30, 2022
Year of Last Major R	ehab			Last Enha	nced OSIM Insp	ection	-
Current Load Limit	18		_(tonnes)	Last Bridg	ge Master Inspec	tion	-
Load Limit By-Law #	·			Last Evalu	uation	2 16 2	•
				Last Unde	rwater Inspectio	n	-
By-Law Expiry Date					lition Survey		

	NSPECTIO		MATION				N	. — .		
Date of Inspection:	August 9,	. NO-2019 O 1786 978 745 E.		-	Type of l	Inspection	: X osii	M Enhar	iced OS	SIM
Inspector:			g., HP Engineerin							
Others in Party:			ng., HP Engineerin							
Access Equipment Used:	Measuring	g Tape, Dig	ital Camera and I	Hammer						
Weather:	Sun and C	Cloud								
Temperature:	24 °C									
							Priority			
ADDITIONAL INVESTIG	GATION RE	QUIRED				None	Normal	Urgent	Esti	mated Cost
Rehabilitation/Replacement	Study:						Х		\$	5,000.00
Material Condition Survey						X			\$	
Detailed Deck Condition	n Survey:					X			\$	
Non-destructive Delami		y of Aspha	It- Covered Deck:			X			\$	,
Concrete Substructure (				·		X			\$	
Detailed Coating Condi		•				X			\$	
Detailed Timber Investi						X			\$	
Underwater Investigation:	8					X			\$	
Fatigue Investigation:						X			\$	
Seismic Investigation:						X			\$	
Structure Evaluation:						X			\$	
Monitoring						X			\$	
Monitoring of Deforma	tions, Settlem	ent and Mo	ovements:			X			\$	
Monitoring Crack Widt			3.00 (1.00 (			X			\$	
Load Posting – Estimated	VII.O.							Total Cost	s	5,000.0
Investigation Notes: Rehabilitation/replacement  OVERALL STRUCTURA		raffic barrie	er only.							
Recommended Work on Stra		None	Minor R	ahah	Moi	or Rehab.		Replace		
Timing of Recommended W	Senson (1995)				-	of Kenab.	F	серіасе		
Overall Comments: Structur approach barrier and install and rot noted on the timber of	e is generally code complia	nt deck bar	dition. No barrier riers. Some minor	r scaling o	esent at the abu	tment and	foundatio	n footing. Sp		
Date of Next Inspection:		June 2026								
Suspected Performance Deficiencies	ions & rotation)	06 07 08 09 10 11	Bearing not uniformly Jammed expansion jo Pedestrian/vehicular I Rough riding surface Surface ponding Deck drainage Repair of structural st Repair of bridge conc	oint hazard teel	table		Floodir Undern Unstab Other	y surfaces g/channel blocks nining of foundat e embankments control at bridge te sealing	ion	
3 Bridge handrail maintenance		09	Repair of bridge timb	oer		13	5 Rout ar	d seal		
Painting steel bridge structures Bridge deck joint repair		10 11	Bailey bridges mainte Animal/pest control	enance				deck drainage (loose Concrete	or ACR	Steel)
Of Bridge bearing maintenance		12	Bridge surface repair				8 Other			

E	LEMENT DATA				
Element Group:	Approaches		Length:	-	
Element Name:	Barrier		Width:	-	
Location:	NE, NW, SE & SW of St	tructure	Height:	-	
Material:	-		Count:	-	
Element Type:	-		Total Quantity:	-	
Environment:	-		Limited Inspection:		
Protection System	-			1	,
	Units	Excellent	Good	Fair	Poor
Condition Data:	N/A	-		•	-
Performance Deficion	encies: 08		Maintenance Needs	: 00	
Recommended Wor	rk: Rehab.  1 – 5 Years	Replace 6 – 10 Years	Maintenance Needs	: Urgent Urgent	1 Year 2
Element Group:	Approaches		Length:	6 m	2
Element Name:	Wearing Surface	11	Width:	4.75	
Location:	North & South of Structu	ıre	Height:	-	
Material:	Gravel		Count:	2	
Element Type:	Gravel Wearing Surface	Gravel Wearing Surface Total Quantity: 57		n²	
Environment:	Severe		Limited Inspection:		
Protection System	None		•		
	Units	Excellent	Good	Fair	Poor
Condition Data:	m <sup>2</sup>	-	-	55	
Comments: Gravel road (not winter	m <sup>2</sup> er maintained) is generally ir rs on the bridge deck. Loose			proaches. Rough transi	tion from the
Performance Deficie	encies: 09		Maintenance Needs	: 12	
				: Urgent	1 Year 2

EL	EMENT DATA					
Element Group:	Accessories		Length:		-	
Element Name:	Signs		Width:		(B.	
Location:	NE, NW, SE & SW of Str	ucture	Height:		-	
Material:	Steel		Count:		8	
Element Type:	Hazard, Single-Lane, & L	oad Posting Signs	Total Quantity:		8	
Environment:	Severe		Limited Inspection:			
Protection System	Hot Dip Galvanizing					
G 1111 B	Units	Excellent	Good	Fair		Poor
Condition Data:	Each	-	2	3		2
condition. Northeast sin	rners of structure, two single agle-lane sign is leaning awa to be present on the south appropriate the second sec	ay from roadway. Haza		on with peeling p	paint and crack	king. A load
Recommended Work	Rehab. [ 1 – 5 Years [	Replace 6 – 10 Years	Maintenance Needs	:: \times Urgent Years	1 Year	2
Element Group:	Sidewalks/Curbs		Length:		4.9 m	
Element Name:	Curbs		Width:		0.2 m	
Location:	East & West of Structure		Height:		0.2 m	
Material:	Timber		Count:		2	
Element Type:	Timber Curb		Total Quantity:		3.92 m <sup>2</sup>	
Environment:	Severe		Limited Inspection:			
Protection System	Creosote Treated					
Condition Data:	Units	Excellent	Good	Fair		Poor
Condition Data.	m <sup>2</sup>	=	1.46	1.96		0.5
Comments: Splits, shakes, checks, existing barrier should the low volume road.	splinters and minor to medit be reviewed. The existing la	um rot noted along expo yout of the curb is 8"xt	osed edge. Some damage t " timber curb resting on a	o west timber cu	rb at ends. A	dequacy of drainage on
Performance Deficie	ncies: 00		Maintenance Needs	:: 00		
Recommended Work	Rehab. 1 – 5 Years	Replace 6 – 10 Years	Maintenance Needs	: Urgent Years	1 Year	2

BRIDGE

E	LEMENT DATA				
Element Group:	Decks		Length:		4.9 m
Element Name:	Deck Top (Exposed)		Width:		500 Carrier (1970)
Location:	Top of Deck		Height:		1 m
Material:	Timber		Count:		-
Element Type:	Timber Wearing Surface	(I ongitudinal)			2
Environment:	Severe	(Longitudinar)	Total Quantity:		9.8 m <sup>2</sup>
Protection System	Pressure Treated		Limited Inspection:		X
1 Totection System		T			
<b>Condition Data:</b>	Units m <sup>2</sup>	Excellent	Good	Fair	Poor
Comments:	Ш	-	4.5	5.3	-
noted on the surface.					· · · · · · · · · · · · · · · · · · ·
Performance Deficie	ncies: 00		Maintenance Need	s: 02 - Bridge Clear	ning
	1 – 5 Years	6 – 10 Years		Years	-
Element Group:	Decks		Length:		5.3 m
Element Name:	Deck Top (Exposed)		Width:		l.9 m
Location:	Top of Deck		Height:	-	
Material:	Timber		Count:	1	NOTE:
Element Type:	Timber Wearing Surface	(Transverse)	Total Quantity:	2	5.97 m <sup>2</sup>
Environment:	Severe		Limited Inspection:		X
Protection System	Creosote Treated		The second state of the se		
C 122 D. 4	Units	Excellent	Good	Fair	Poor
Condition Data:	m²	-	12.97	11.7	1.3
Comments: Limited inspection due some local minor rot at	to debris accumulation. Tra ends of deck.	insverse timber planks a	are not exposed below rum	ning boards. Genera	ally weathered with
Performance Deficier	icies: 00		Maintenance Needs	: 09 / 02	
Recommended Work	: Rehab. 1 – 5 Years	Replace 6 – 10 Years	Maintenance Needs		1 Year 2

Length:

BRIDGE

Element Group:

ELEMENT DATA

Decks

Site No.: B4

4.9 m

Element Name:	Soffit		Width:		5.3 m	
Location:	Underside of Deck		Height:		•	
Material:	Timber		Count:		1	
Element Type:	Timber Soffit		Total Quantity:		25.97 1	m²
Environment:	Benign		Limited Inspection:			
Protection System	Creosote Treated					
G. Para Data	Units	Excellent	Good	Fair		Poor
Condition Data:	m <sup>2</sup>	-	20.97	5		-
Comments: Timber soffit is weather	ered but generally in good co	ndition.				
Performance Deficie	encies: 00		Maintenance Need	ls: 00		
Recommended Wor	k: Rehab.  1-5 Years	Replace 6 – 10 Years	Maintenance Need	ls: Urgent Years	1	Year 2
TI	Decree /MI Fe		Length:		4.9 m	
Element Group:	Beams / MLEs Girders		Width:		500000000000000000000000000000000000000	4), 0.25 (2), 0.3 (3)
Element Name:  Location:	Underside of Structure		Height:		0.3 m	
Material:	Timber		Count:		9	
Element Type:	Timber Beams		Total Quantity:		36.26	m <sup>2</sup>
Environment:	Benign		Limited Inspection	:		
Protection System	Creosote Treated					
	Units	Excellent	Good	Fair		Poor
Condition Data:	m <sup>2</sup>	<b>*</b>	20	16.26		
Comments: Timber girders are sea		ent wall and are general Replace 6 – 10 Years	Maintenance Nee	ds: 00		Year 2

El	LEMENT DATA				e fe y	1000
Element Group:	Abutments		Length:		1.77 m	
Element Name:	Wingwalls		Width:		-	11 2
Location:	NE, NW, SE & SW of Str	ructure	Height:		0.89 m	
Material:	Concrete	8	Count:		4	
Element Type:	Reinforced Concrete Win	gwall	Total Quantity:		6.30 m <sup>2</sup>	
Environment:	Moderate		Limited Inspection:			
Protection System	None	F - 1 - 9				7
Condition Data:	Units	Excellent	Good	Fair		Poor
Condition Data:	m <sup>2</sup>	•	5.70	0.6		-
Performance Deficion	encies: 00		Maintenance Needs	: 13		
Recommended Wor	Rehab.  1 – 5 Years	Replace 6 – 10 Years	Maintenance Needs	: Urgent	X 1 Ye	ar2
Element Group:	Abutments		Length:		-	
Element Name:	Ballast Walls		Width:		5.3 m	
Location:	North & South Underside	of Structure	Height:		0.3 m	
Material:	Concrete	7	Count:	11 1	2	
Element Type:	Reinforced Concrete	Reinforced Concrete			3.18 m <sup>2</sup>	
Environment:	Benign	20.0	Limited Inspection:	1 17		
Protection System	None					
Condition Data:	Units	Excellent	Good	Fair		Poor
Condition Data.	m²	-	2.83	0.25		0.1
Comments:			ithwest corners of abutment	walls Honeyco	mhing at n	
Water leakage through	h ballast wall noted at northe rack at south ballast wall.	east, northwest, and sot		wans. Froncy co		orth ballast w
Water leakage through	rack at south ballast wall.	east, northwest, and soi	Maintenance Needs			orth ballast w

BRIDGE

EL	EMENT DATA					
Element Group:	Abutments		Length:		-	
Element Name:	Abutment Walls		Width:		5.3 m	
Location:	North & South Underside	of Structure	Height:		1 m	
Material:	Concrete		Count:		2	
Element Type:	Reinforced Concrete Abut	ment	Total Quantity:		10.6 m <sup>2</sup>	
Environment:	Benign		Limited Inspection:			
Protection System	None					
	Units	Excellent	Good	Fair	Poor	
Condition Data:	m²	-	9.5	1.1	-	
	lition with some popouts nerosed concrete strip footing.  ncies: 00	ar the bearing seat. Mod	Maintenance Needs		on abutments. Moderate	
Recommended Worl	Rehab.  1-5 Years	Replace 6 – 10 Years	Maintenance Needs	:: Urgent Years	1 Year 2	
Element Group:	Foundations		Length:		T-	
Element Name:	Foundation (Below Groun	nd Level)	Width:			
Location:	Below Abutment Walls		Height:			
Location: Material:	Below Abutment Walls Unknown		Height: Count:		-	
Material:			Count:			
	Unknown Unknown		Count: Total Quantity:		-	
Material: Element Type: Environment:	Unknown		Count:		-	
Material: Element Type: Environment: Protection System	Unknown Unknown Benign	Excellent	Count: Total Quantity:	Fair	-	
Material: Element Type: Environment:	Unknown Unknown Benign None	Excellent -	Count: Total Quantity: Limited Inspection:	Fair -	-	
Material: Element Type: Environment: Protection System Condition Data: Comments:	Unknown Unknown Benign None Units N/A foundation instability noted	•	Count: Total Quantity: Limited Inspection:  Good -  n.  Maintenance Needs	s: 00	Poor	

BRIDGE

EL	EMENT DATA				
Element Group:	Embankments and Stream	S	Length:		-
Element Name:	Embankments		Width:		•
Location:	NE, NW, SE & SW of Str	ucture	Height:		
Material:	Native Soil		Count:		4
Element Type:	Embankment		Total Quantity:		4
Environment:	Moderate		Limited Inspection:		
Protection System	None		- +		
G 122 B 4	Units	Excellent	Good	Fair	Poor
Condition Data:	Each	•	4	1-	-
	eankment, well vegetated wi	th some loose rock. Er			dition.
Performance Deficie	ncies: 00		Maintenance Needs:	: 00	
Recommended Work	Rehab.  1 – 5 Years	Replace 6 – 10 Years	Maintenance Needs: Y	Urgent Years	1 Year2
Element Group:	Embankments and Stream	s	Length:		-
Element Name:	Streams and Waterways		Width:		-
Location:	Under Structure		Height:		•
Material:	Native		Count:		
Element Type:	Streams		Total Quantity:		All
Environment:	Benign		Limited Inspection:	X	
Protection System	None				
G III D	Units	Excellent	Good	Fair	Poor
Condition Data:	All		All	-	-
Comments:  Moderate volume and the second se	flow from west to east with n	no visible flow obstruct	ions at time of inspection.  Maintenance Needs:	: 00	
Recommended Worl	Rehab.			Urgent	1 Year 2

# BRIDGE

RI	EPAIR AND REHABILITATION REQUIRED		Priority		F-4	
Element	Repair and Rehabilitation Required	6 - 10 Years	1 - 5 Years	< 1 year	Esti	imated Cost
Barrier	Install approved traffic barrier			Х	\$	21,500.00
Approach Barrier	Install code compliant approach barrier and end treatments			Х	\$	60,000.00
					\$	=
					\$	-
					\$	=
					\$	-
					\$	-
					\$	-
					\$	-
	•			Total Cost	s	81,500.00

ASSOCIATED WORK	Comments	Estimated C	ost
Approaches			
Detours			
Traffic Control			
Utilities			
Right of Way			
Environmental Study			
Other			
Contingencies			
1	Total Cost	\$	-

JUSTIFICATION		