

LOT 23 CONCESSION 2-3, SOUTH WALSINGHAM

Site Number 002119

3RD CONCESSION ROAD, SOUTH WALSINGHAM

0.8 km W of County Road 16

Ontario Structure Inspection Manual - Inspection Form

Site Number:

Inventory Data:			
Structure Name <input type="text" value="Lot 23 Concession 2-3 South Walsingham"/>			
Main Hwy/Road # <input type="text" value="3RD CON S WALS"/>	<input checked="" type="checkbox"/> On <input type="checkbox"/> Under	Crossing Type: <input type="checkbox"/> Rail <input type="checkbox"/> Ped. <input type="checkbox"/> Road <input type="checkbox"/> Other <input type="checkbox"/> Navig. Water <input checked="" type="checkbox"/> Non-Navig. Water	
Hwy/Road Name <input type="text" value="3RD CONCESSION ROAD, SOUTH WALSINGHAM"/>			
Structure Location <input type="text" value="0.8 km W of County Road 16"/>			
Latitude <input type="text"/>	Longitude <input type="text"/>		
Owner(s) <input type="text" value="Norfolk County"/>	Heritage Designation: <input checked="" type="checkbox"/> Not Cons. <input type="checkbox"/> Cons./not App.	<input type="checkbox"/> List/not Design. <input type="checkbox"/> Design./not List	<input type="checkbox"/> Desig. & List
MTO Region <input type="text" value="30"/> <input type="text" value="Southwestern"/>	Road Class: <input type="checkbox"/> Freeway <input type="checkbox"/> Arterial <input type="checkbox"/> Collector <input checked="" type="checkbox"/> Local		
MTO District <input type="text" value="31"/> <input type="text" value="London / Stratford"/>	Posted Speed <input type="text" value="80"/>	No. of Lanes <input type="text" value="2"/>	
Old County <input type="text" value="20"/> <input type="text" value="Norfolk"/>	AADT <input type="text" value="181"/>	% Trucks <input type="text"/>	
Geographic Twp. <input type="text" value="585"/> <input type="text" value="South Walsingham"/>	Inspection Route Sequence <input type="text"/>		
Structure Type <input type="text" value="13"/> <input type="text" value="Round Culvert"/>	Interchange Number <input type="text"/>		
Total Deck Length <input type="text" value="3.9"/> (m)	Interchange Structure Number <input type="text"/>		
Overall Str. Width <input type="text" value="20"/> (m)	Min. Vertical Clearance <input type="text" value="2.3"/> (m)		
Total Deck Area <input type="text" value="78"/> (m ²)	Special Route <input type="checkbox"/> Truck <input type="checkbox"/> Emergency <input checked="" type="checkbox"/> School <input type="checkbox"/> Bicycle		
Roadway Width <input type="text" value="11.2"/> (m)	Detour Length Around Bridge <input type="text" value="10"/> (km)		
Skew Angle <input type="text"/> (Degrees)	Direction of Structure <input type="text" value="North / South"/>		
No. of Spans <input type="text" value="1"/>	Fill on Structure <input type="text" value="1"/> (m)		
Span Length <input type="text" value="3.9"/> (m)			

Historical Data:			
Year Built <input type="text" value="1971"/>	Year of Last Major Rehab. <input type="text"/>		
Last OSIM Inspection <input type="text" value="July 2, 2014"/>	Last Evaluation <input type="text"/>		
Last Enhanced OSIM Inspection <input type="text"/>	Current Load Limit <input type="text" value="/ /"/> (tonnes)		
Enhanced Access Equipment (ladder, boat, lift, etc.) <input type="text"/>	Load Limit By-Law # <input type="text"/>		
Last Underwater Inspection <input type="text"/>	By-Law Expiry Date <input type="text"/>		
Last Condition Survey <input type="text"/>			
Rehab History: (Date/description)			

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Field Inspection Information:		
Date of Inspection:	July 19, 2016	Type of Inspection: <input checked="" type="checkbox"/> OSIM <input type="checkbox"/> Enhanced OSIM
Inspector:	Matt Alderson, G. Douglas Vallee Ltd.	
Others in Party:	N/A	
Access Equipment Used:	Hammer, Binoculars, Measuring Tape, Camera, etc.	
Weather:	Sunny	
Temperature:	24 °C	

Additional Investigation Required:	Priority		
	None	Normal	Urgent
Material Condition Survey			
<input checked="" type="checkbox"/> Detailed Deck Condition Survey:		X	
<input checked="" type="checkbox"/> Non-destructive Delamination Survey of Asphalt-Covered Deck:	X		
<input checked="" type="checkbox"/> Concrete Substructure Condition Survey:	X		
<input checked="" type="checkbox"/> Detailed Coating Condition Survey:	X		
<input checked="" type="checkbox"/> Detailed Timber Investigation	X		
<input checked="" type="checkbox"/> Post-Tensioned Strand Investigation	X		
Underwater Investigation:	X		
Fatigue Investigation:	X		
Seismic Investigation:	X		
Structure Evaluation:		X	
Monitoring			
<input checked="" type="checkbox"/> Monitoring of Deformations, Settlements and Movements:		X	
<input checked="" type="checkbox"/> Monitoring Crack Widths:	X		
Investigation Notes: Monitor plate deformation.			

Overall Structure Notes:			
Recommended Work on Structure:	<input type="checkbox"/> None <input type="checkbox"/> Maintenance	<input checked="" type="checkbox"/> Minor Rehab. <input type="checkbox"/> Major Rehab.	<input type="checkbox"/> Replace
Timing of Recommended Work:	<input type="checkbox"/> 1 to 5 years	<input checked="" type="checkbox"/> 6 to 10 years	
Overall Comments:	Investigate culvert liner.		
Date of next Inspection:	July 19, 2018		

Suspected Performance Deficiencies

- | | | |
|---|--|------------------------------|
| 01 Load carrying capacity | 07 Bearing not uniformly loaded/unstable | 12 Slippery surfaces |
| 02 Excessive deformations (deflections & rotations) | 08 Jammed expansion joint | 13 Flooding/channel blockage |
| 03 Continuing settlement | 09 Pedestrian/vehicular hazard | 14 Undermining of foundation |
| 04 Continuing movements | 10 Rough riding surface | 15 Unstable embankments |
| 05 Seized bearings | 11 Deck drainage | 16 Other |

Maintenance Needs

- | | | |
|--------------------------------------|---------------------------------|--|
| 01 Lift and swing bridge maintenance | 07 Repair to structural steel | 13 Erosion control at bridges |
| 02 Bridge cleaning | 08 Repair of bridge concrete | 14 Concrete sealing |
| 03 Bridge handrail maintenance | 09 Repair of bridge timber | 15 Rout and seal |
| 04 Painting steel bridge structures | 10 Bailey bridges - maintenance | 16 Bridge deck drainage |
| 05 Bridge deck joint repair | 11 Animal/pest control | 17 Scaling (Loose concrete or ACR steel) |
| 06 Bridge bearing maintenance | 12 Bridge surface repair | 18 Other |

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Element Data

Element Group:		1600 Approaches				Length:	
Element Name:		1601 Wearing Surface (Approaches)				Width:	
Location:		Top of Fill				Height:	
Material:						Count:	1
Element Type:						Total Quantity:	1 All
Environment:		Severe				Limited Inspection:	
Protection System:		Unknown				Perform. Deficiencies	
Condition	Units	Exc.	Good	Fair	Poor		
Data:	All	0	0	1	0		
Comments:							
Fill slopes stable. Need hazard markers. Map cracking and rutting on approaches.							
Recommended Work:					Maintenance Needs:		
Rehab <input checked="" type="checkbox"/> Replace <input type="checkbox"/>					<input type="checkbox"/> Urgent <input type="checkbox"/> 1 year <input type="checkbox"/> 2 year		
Timing: Urgent <input type="checkbox"/> < 1yr <input type="checkbox"/> 1 - 5 yr <input type="checkbox"/> 6 - 10 yr <input checked="" type="checkbox"/>							

Element Group:		1200 Culverts				Length:	20
Element Name:		1203 Barrels				Width:	3.9
Location:		Inside Barrel				Height:	3.14
Material:						Count:	1
Element Type:		Pipe Arch				Total Quantity:	244.9 sq.m
Environment:		Severe				Limited Inspection:	
Protection System:		Unknown				Perform. Deficiencies	
Condition	Units	Exc.	Good	Fair	Poor		
Data:	sq.m	0	0	244.9	0		
Comments:							
Several plates are deforming and plate joints buckling. Should be monitored. Surface corrosion at water level and significant corrosion on SE wingwall.							
Recommended Work:					Maintenance Needs:		
Rehab <input checked="" type="checkbox"/> Replace <input type="checkbox"/>					<input type="checkbox"/> Urgent <input type="checkbox"/> 1 year <input type="checkbox"/> 2 year		
Timing: Urgent <input type="checkbox"/> < 1yr <input type="checkbox"/> 1 - 5 yr <input type="checkbox"/> 6 - 10 yr <input checked="" type="checkbox"/>							

Element Group:		1200 Culverts				Length:	
Element Name:		1201 Inlet Components				Width:	
Location:		North End				Height:	
Material:						Count:	1
Element Type:						Total Quantity:	1 Each
Environment:						Limited Inspection:	
Protection System:		Unknown				Perform. Deficiencies	
Condition	Units	Exc.	Good	Fair	Poor		
Data:	Each	0	0	1	0		
Comments:							
Corrosion on SE wingwall. Overgrown. Impact damage to top flange at inlet.							
Recommended Work:					Maintenance Needs:		
Rehab <input checked="" type="checkbox"/> Replace <input type="checkbox"/>					<input type="checkbox"/> Urgent <input type="checkbox"/> 1 year <input type="checkbox"/> 2 year		
Timing: Urgent <input type="checkbox"/> < 1yr <input type="checkbox"/> 1 - 5 yr <input type="checkbox"/> 6 - 10 yr <input checked="" type="checkbox"/>							

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Element Data

Element Group:		1200 Culverts				Length:		
Element Name:		1202 Outlet Components				Width:		
Location:		South End				Height:		
Material:						Count:		1
Element Type:						Total Quantity:		1 Each
Environment:						Limited Inspection:		
Protection System:		Unknown				Perform. Deficiencies		
Condition Data:	Units	Exc.	Good	Fair	Poor			
	Each	0	0	1	0			
Comments:								
Recommended Work:				Rehab <input type="checkbox"/>		Replace <input type="checkbox"/>		
Timing:				Urgent <input type="checkbox"/>		< 1yr <input type="checkbox"/>		
				1 - 5 yr <input type="checkbox"/>		6 - 10 yr <input type="checkbox"/>		
				Maintenance Needs:		<input type="checkbox"/> Urgent <input type="checkbox"/> 1 year <input type="checkbox"/> 2 year		

Element Group:		1400 Embankments & Streams				Length:		
Element Name:		1402 Embankments				Width:		
Location:						Height:		
Material:						Count:		1
Element Type:						Total Quantity:		1 Each
Environment:						Limited Inspection:		
Protection System:		Unknown				Perform. Deficiencies		
Condition Data:	Units	Exc.	Good	Fair	Poor			
	Each	0	0.75	0.25	0			
Comments:								
Minor erosion at wingwalls.								
Recommended Work:				Rehab <input type="checkbox"/>		Replace <input type="checkbox"/>		
Timing:				Urgent <input type="checkbox"/>		< 1yr <input type="checkbox"/>		
				1 - 5 yr <input type="checkbox"/>		6 - 10 yr <input type="checkbox"/>		
				Maintenance Needs:		<input type="checkbox"/> Urgent <input type="checkbox"/> 1 year <input type="checkbox"/> 2 year		



Figure 1 East Approach



Figure 2 West Approach



Figure 3 North Profile, Inlet



Figure 4 South Profile, Outlet



Figure 5 Upstream



Figure 6 Downstream



Figure 7 Barrel, Looking North

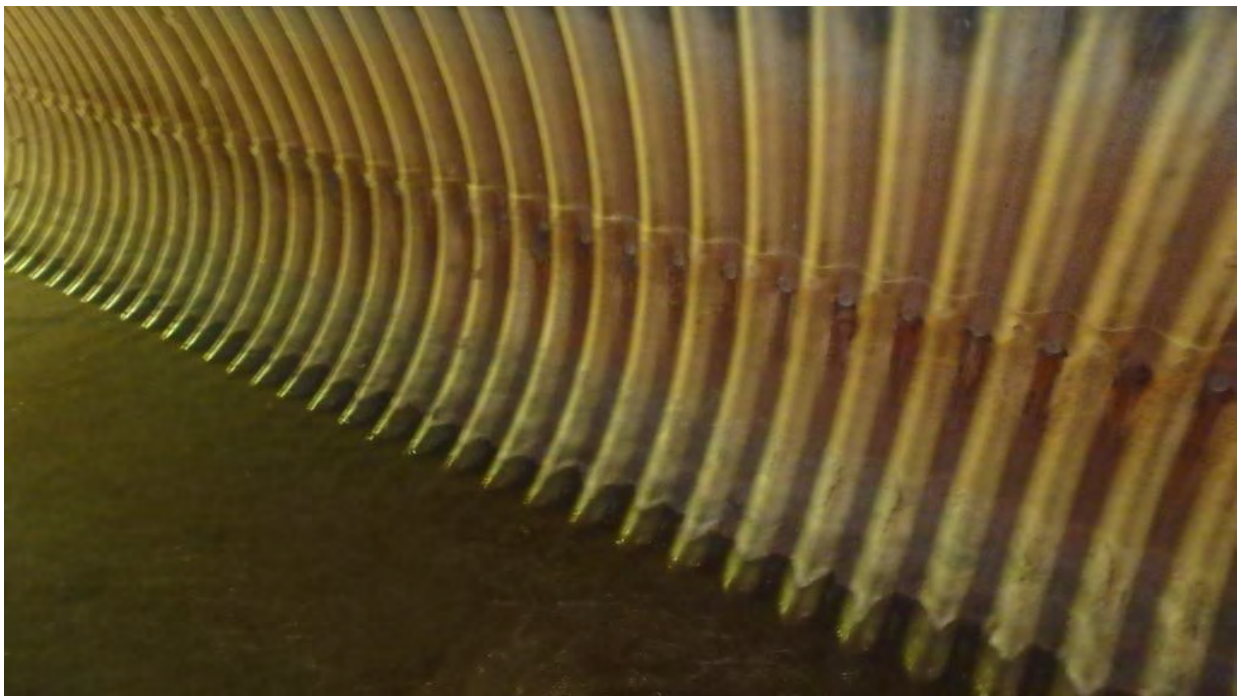


Figure 8 Corrosion at Waterline



Figure 9 Deflection at Joint



Figure 10 Deflection in Multiplate Joint



Figure 11 Deflections in Multiplate Joints at North End



Figure 12 Erosion at North Quadrants



Figure 13 Wearing Surface