

APPENDIX K

**EXISTING CONDITION MAJOR AND
MINOR SYSTEM PERFORMANCE
RESULTS**



Table K1 Simulated Minor System Performance (Storm Sewers and Culverts) at Locations of Interest

Conduit ID	Type	Location	Size	5 Year		
				Peak Flow Rate (m ³ /s)	Q _{peak} / Q _{capacity}	Condition
D96-3-P02	Culvert	Culvert crossing Barber Street - Flows West	0.3 m dia.	0.05	53%	Un-Surcharged
D96-3-P03	Sewer	Central Street Sewer - Flows West from Barber Street	0.3 m dia.	0.08	103%	Un-Surcharged
D96-3-P04	Sewer	Central Street Sewer - Flows West from Barber Street	0.3 m dia.	0.08	59%	Un-Surcharged
T-3-97-005	Sewer	Franklin Street Sewer - Flows South from Joseph	0.3 m dia.	0.10	113%	Surcharged to Surface
T-3-97-003	Sewer	Franklin Street Sewer - Flows South from Joseph	0.3 m dia.	0.13	141%	Surcharged to Surface
T-3-97-002	Sewer	Franklin Street Sewer - Flows South from Joseph	0.3 m dia.	0.14	153%	Surcharged to Surface
T-3-97-001	Sewer	Franklin Street Sewer - Flows South from Joseph	0.3 m dia.	0.22	168%	Surcharged < 50% to Surface
D96-3-P05	Sewer	Central Street Sewer - Flows West from Franklin	0.45 m dia.	0.30	115%	Surcharged > 50% to Surface
C228	Culvert	Culvert crossing Barclay Street - Flows West	0.75 m dia.	0.44	57%	Un-Surcharged
D96-3-P06	Sewer	Central Street Sewer - Flows West from Control MH	0.45 m dia.	0.20	79%	Surcharged > 50% to Surface
T-6-98-P01	Sewer	Wixon Street Sewer - Flows South from Lane Street	0.3 m dia.	0.02	28%	Un-Surcharged
T-6-98-P-02	Sewer	Wixon Street Sewer - Flows South from Lane Street	0.375 m dia.	0.06	58%	Surcharged < 50% to Surface
T-6-98-P-03	Sewer	Wixon Street Sewer - Flows	0.375 m dia.	0.07	58%	Surcharged > 50% to Surface

Conduit ID	Type	Location	Size	5 Year		
				Peak Flow Rate (m ³ /s)	Q _{peak} / Q _{capacity}	Condition
		South from Lane Street				
T-6-98-P-04	Sewer	Wixon Street Sewer - Flows South from Joseph Street	0.45 m dia.	0.18	92%	Surcharged > 50% to Surface
T-6-98-P-05	Sewer	Wixon Street Sewer - Flows South from Joseph Street	0.45 m dia.	0.20	99%	Surcharged > 50% to Surface
D96-3-P07	Sewer	Central Street Sewer - Flows West from Wixon Street	0.45 m dia.	0.41	85%	Surcharged to Surface
D96-3-P08	Sewer	Central Street Sewer - Flows West from Wixon Street	0.45 m dia.	0.42	212%	Surcharged to Surface
D96-3-P10	Sewer	Old Brock Rd. Sewer - Flows South toward Central St.	0.375 m dia.	0.07	41%	Surcharged > 50% to Surface
D96-3-P12	Sewer	Central Street Sewer - Flows West from Old Brock Rd.	0.45 m dia.	0.51	118%	Surcharged > 50% to Surface
D96-3-P13	Sewer	Central Street Sewer - Flows West from Dow St.	0.525 m dia.	0.55	91%	Surcharged > 50% to Surface
D96-3-P14	Sewer	Sewer - West - West of Dow Street	0.6 m dia.	0.55	104%	Surcharged > 50% to Surface
D96-3-P15	Sewer	Central Street Sewer - Flows West @ William St.	0.6 m dia.	0.61	79%	Surcharged > 50% to Surface
2-H-5-P01	Sewer	David St. Sewer - Flows West from Old Brock Rd.	0.45 m dia.	0.19	41%	Un-Surcharged
2-H-5-P02	Sewer	Sewer - West - from Old Brock Rd.	0.525 m dia.	0.19	34%	Un-Surcharged
2-H-5-P02	Sewer	David St. Sewer - Flows West from Old Brock Rd.	0.525 m dia.	0.19	34%	Un-Surcharged
2-H-5-P04	Sewer	William St. Sewer - Flows South from David St.	0.6 m dia.	0.24	73%	Un-Surcharged
3-I-5-P02	Sewer	Sewer - South - from Henry St.	0.675 m dia.	0.33	186%	Surcharged > 50% to Surface

Conduit ID	Type	Location	Size	5 Year		
				Peak Flow Rate (m ³ /s)	Q _{peak} / Q _{capacity}	Condition
105-B-17-P01	Sewer	William St. Sewer - Flows South @ Central St. Int.	0.675 m dia.	0.33	41%	Surcharged > 50% to Surface
105-B-17-P02	Sewer	Canso St. Sewer - Flows South from Central St.	0.675 m dia.	0.94	75%	Surcharged > 50% to Surface
105-B-17-P03	Sewer	Canso St. Sewer - Flows South from Central St.	0.675 m dia.	0.96	87%	Surcharged > 50% to Surface
105-B-17-P04	Sewer	Canso St. Sewer - Flows South from Central St.	0.675 m dia.	1.03	156%	Surcharged < 50% to Surface
105-B-17-C09	Sewer	Canso St. Sewer - Flows North toward Outlet	0.3 m dia.	0.05	49%	Un-Surcharged
CANSO002	Sewer	Canso St. Sewer - Outlets to West Drainage Route	0.9 m dia.	1.08	82%	Surcharged > 50% to Surface
C234	Sewer	Canso St. Sewer - Flows South toward Acorn	0.3 m dia.	0.03	23%	Un-Surcharged
C235	Sewer	Acorn St. Sewer - Flows West toward Acorn Outlet	0.3 m dia.	0.08	57%	Un-Surcharged
C236	Sewer	Acorn St. Sewer - Flows West toward Acorn Outlet	0.5 m dia.	0.24	116%	Surcharged < 50% to Surface
C221	Culvert	Culvert crossing Bovingdon Crs. Flows South	1.2 m dia.	1.03	39%	Un-Surcharged
Q-12-2009-P01	Sewer	Victoria St. Sewer - Flows South toward Wellington	0.3 m dia.	0.03	25%	Un-Surcharged
Q-12-2009-P02	Sewer	Wellington St. Sewer - Flows East toward Central Channel	0.3 m dia.	0.05	77%	Un-Surcharged
Q-12-2009-P03	Culvert	Culvert crossing Wellington St. Flows South (Central Channel)	0.75 m dia.	0.62	173%	Un-Surcharged
C237	Culvert	Culvert Crossing Livingston - North of Wellington - Flows West	0.45 m dia.	0.06	23%	Un-Surcharged
W5	Culvert	Culvert Crossing Livingston - South of Wellington - Flows East	0.45 m dia.	0.03	12%	Un-Surcharged

Conduit ID	Type	Location	Size	5 Year		
				Peak Flow Rate (m ³ /s)	Q _{peak} / Q _{capacity}	Condition
Liv_Culv	Culvert	Culvert crossing Livingston - Flows West to Central Channel	0.375 m dia.	0.07	38%	Un-Surcharged
C224	Culvert	Culvert crossing Old Brock Rd. Central Channel Outlet	1.2 m dia.	1.47	52%	Un-Surcharged

Table K2 Simulated Major System Performance (Roadways and Ditches) at Locations of Interest

Conduit ID	Location	Type	5 Year		100 Year	
			Maximum Depth (m)	Condition	Maximum Depth (m)	Condition
C87	Franklin Street - Flow South from Joseph	Urban	0.11	Within ROW	0.20	Beyond ROW < 50% to Home
C3	Franklin Street - Flow South from Joseph @ Remnant Channel	Urban	0.15	Beyond ROW < 50% to Home	0.21	Beyond ROW < 50% to Home
C79	Franklin Street - Flow South from Joseph @ Road Sag	Urban	0.17	Beyond ROW > 50% to Home	0.19	Beyond ROW at Home
C91	Central Street - North Ditch - Flow West from Franklin	Rural - Sewer	0.11	Within ROW	0.56	Within ROW
D96-3-P04-S	Central Street - North Ditch - Flow West from Barber	Rural - Sewer	0.07	Within ROW	0.08	Within ROW
C9	Barber Street - East Ditch - Flow South toward Central	Rural	0.20	Within ROW	0.20	Within ROW
C8	Barber Street - West Ditch - Flow South toward Central	Rural	0.09	Within ROW	0.15	Within ROW
C14	Lorn Street - East Asphalt Swale flows south from Central	Asphalt Swale	0.05	Within ROW	0.06	Within ROW
C15	Lorn Street - South Asphalt Swale flows west toward Livingston	Asphalt Swale	0.05	Within ROW	0.06	Within ROW
C64	Lorn St. North Ditch flows west toward Victoria	Rural	0.08	Within ROW	0.10	Within ROW
C11	Livingston St. East Asphalt Swale flows south from Central St.	Asphalt Swale	0.09	Within ROW	0.10	Within ROW

Conduit ID	Location	Type	5 Year		100 Year	
			Maximum Depth (m)	Condition	Maximum Depth (m)	Condition
C17	Livingston St. West Ditch, flows south from Central St.	Rural	0.11	Within ROW	0.14	Within ROW
C18	Wellington St. North Ditch, flows west from Livingston St.	Rural	0.20	Beyond ROW < 50% to Home	0.21	Beyond ROW < 50% to Home
C40	Barclay St. East Ditch, flows south toward Central St.	Rural - Curbed	0.42	Within ROW	0.50	Beyond ROW < 50% to Home
C41	Central St. North Ditch, flows East toward Control Manhole	Rural - Sewer	0.19	Beyond ROW < 50% to Home	0.27	Beyond ROW < 50% to Home
C23	Victoria St. East Asphalt Swale, flows south toward Wellington	Asphalt Swale	0.03	Within ROW	0.03	Within ROW
C25	Wellington St. South Ditch, flows East toward Central Channel	Rural	0.23	Within ROW	0.31	Within ROW
C24_2	Central Channel, Upstream of Wellington St. Culvert Crossing	Channel/Ditch	0.74	Flow Out of Ditch/Channel	0.88	Flow Out of Ditch/Channel
C31	Livingston St. East Ditch, flows South toward Culvert Crossing	Rural	0.18	Within ROW	0.25	Within ROW
C30	Livingston St. West Ditch, flows South toward Culvert Crossing	Rural	0.13	Within ROW	0.15	Beyond ROW < 50% to Home
C28	Livingston St. Outlet to Central Channel	Channel/Ditch	0.22	Flow Within Ditch/Channel	0.25	Flow Out of Ditch/Channel
C27	Victoria St. / Community Centre, flows East to Central Channel	Channel/Ditch	0.20	Flow Within Ditch/Channel	0.27	Flow Within Ditch/Channel
C19_2	Central Channel, Upstream of Bovington St. Culvert Crossing	Channel/Ditch	0.40	Flow Within Ditch/Channel	0.84	Flow Within Ditch/Channel
C224	Central Channel, within Culvert Crossing (Old Brock Rd).	Culvert	0.64	Flow Within Ditch/Channel	1.11	Flow Within Ditch/Channel
T-6-98-P-02-S	Wixon St, Flow south from Lane St. toward Joseph	Urban	0.04	Within ROW	0.05	Beyond ROW > 50% to Home

Conduit ID	Location	Type	5 Year		100 Year	
			Maximum Depth (m)	Condition	Maximum Depth (m)	Condition
T-6-98-P-05-S	Wixon St, Flow south from Joseph toward Central	Urban	0.05	Beyond ROW at Home	0.08	Beyond ROW at Home
C48	Joseph St, Flow west from Wixon St toward Old Brock Rd.	Asphalt Swale	0.11	Within ROW	0.186	Beyond ROW at Home
2-H-5-P03-S	David St, Flow west from Old Brock Rd. To William St.	Asphalt Swale	0.02	Within ROW	0.065	Within ROW
2-H-5-P04-S	William St, Flow South from David St. To Henry St.	Urban	0.03	Within ROW	0.128	Within ROW
3-I-5-P02-S	William St, Flow South from Henry St. To Central St.	Urban	0.02	Within ROW	0.165	Within ROW
C60	Dow Street, Flow West from Old Brock to William St.	Asphalt Swale	0.03	Within ROW	0.120	Within ROW
D96-3-P10-S	Old Brock Rd, Flow South from Dow to Central St.	Urban	0.06	Within ROW	0.124	Within ROW
W14	Central St. North swale, flows from Wixon St to Old Brock Rd.	Asphalt Swale & Sewer	0.05	Within ROW	0.126	Within ROW
C26	Central St. North Side, between Dow and William	Rural - Sewer	0.23	Within ROW	0.655	Within ROW
D96-3-P14-S	Central St. South Ditch, between Dow and William	Rural - Sewer	0.38	Within ROW	0.450	Within ROW
105-B-17-P02-S	Canso St. flows south from Central St.	Urban	0.02	Within ROW	0.154	Within ROW
105-B-17-P03-S	Canso St. flows south from Central St.	Urban	0.05	Within ROW	0.192	Within ROW
C83	Canso St. flows south toward Acorn Ln.	Urban	0.07	Within ROW	0.191	Within ROW
C95	Acorn Lane, flow south toward Acorn Ln. outlet	Urban	0.05	Within ROW	0.186	Within ROW
C45	Old Brock Rd, East Ditch Flows South between Lane St to Joseph	Urban	0.19	Within ROW	0.298	Beyond ROW > 50% to Home
C47	Lane Street, flow west toward Old Brock Road	Asphalt swale	0.03	Within ROW	0.04	Within ROW