

Preferred Wastewater Servicing Scheme

Allocation of Servicing Costs for Wastewater Infrastructure Works

Timing	Project ID	Project Name	Description of Project	Estimated Total Capital Cost (\$million)	Allocation of Capital Costs (\$ million)		
					Existing Development Currently Serviced ⁽¹⁾	Existing Development to be Serviced ⁽²⁾	Development Charge (DC) for New Growth
5 Year Plan (2008 to 2013)	WW-0	SCADA System for Cedarwood and Lakewood Pumping Stations	Installation of SCADA System at existing Cedarwood and Lakewood Pumping Stations	\$0.20	\$0.20	-	-
			1200 mm trunk sanitary sewer from County Road 22 to CP Railway	\$3.01	\$0.30	\$0.15	\$2.56
	WW-1	West Tecumseh Trunk Sewer from CR 22 to CP Railway	1200 mm dia trunk sewer crossing CP Railway	\$0.40	\$0.04	\$0.02	\$0.34
	WW-2	Diversion Sewer south of CP Railway	Flow Monitoring Chamber and controls on West Tecumseh Trunk Sewer Allowance for Permanent Easement across future development lands from County Road 22 to CP Railway	\$0.27	\$0.03	\$0.01	\$0.23
			525 mm diversion sewer in Utility Easement from St. Alphonse Avenue to West Tecumseh Trunk Sewer	\$0.10	\$0.01	\$0.01	\$0.08
	WW-3	East Tecumseh Trunk Sewer	525 mm trunk sanitary sewer in Utility Easement in East Tecumseh Hamlet south of CP Railway	\$0.36	\$0.11	-	\$0.25
	WW-4	Sylvestre Pumping Station Upgrade	525 mm dia trunk sewer crossing CP Railway Upgrade the Sylvestre pumping station with Standby Power	\$0.52	-	-	\$0.52
			Allowance for Property Purchase to house standby-by power and controls	\$0.32	-	-	\$0.32
			600 mm North Talbot Road Trunk Sewer from 8th Concession Road to Old West Avenue in City of Windsor including connection to existing sanitary sewer	\$0.84	\$0.34	-	\$0.50
			Extra over sewer cost for tunneling under Highway 401	\$0.06	\$0.02	-	\$0.04
5 to 10 Year Plan (2013 to 2018)	WW-5	North Talbot Road Trunk Sewer	600 mm Trunk Sewer on Oldcastle Road from North Talbot Road to Piccadilly Avenue	\$2.61	-	\$0.91	\$1.70
	Windsor-1	Purchase Additional Conveyance Capacity in Northeast Windsor Trunk Sewer, Forest Glade to Little River PCP ⁽³⁾	Extra over sewer cost for tunneling under Highway 401 600 mm Trunk Sewer on Oldcastle Road from North Talbot Road to Piccadilly Avenue Flow monitoring station and controls upstream of North Talbot Road Outlet	\$0.67	-	\$0.23	\$0.44
			2100mm Windsor Forest Glade Trunk Sewer from CN Railway Corridor to Little River PCP	\$0.83	-	\$0.29	\$0.54
			Sub Total: 5 Year Plan (2008 to 2013)	\$0.27	-	\$0.09	\$0.18
				\$2.87	\$0.86	\$0.29	\$1.72
				\$13.33	\$1.91	\$2.00	\$9.42
				\$1.41	\$0.14	\$0.07	\$1.20
	WW-6	West Tecumseh Trunk Sewer from CP Railway to CR 42	1200 mm dia trunk sewer from CP Railway to north limit of Odessa Drive	\$0.30	\$0.03	\$0.02	\$0.25
	WW-7	Diversion Sewer on County Road 42	1200 mm dia trunk sewer from north limit of Odessa Drive to County Road 42 Allowance for Permanent Easement across future development lands from CP Railway to north limit of Odessa Drive	\$0.05	\$0.01	\$0.00	\$0.04
	Windsor-2	Purchase Additional Treatment Capacity at Little River PCP ⁽³⁾	450 mm Diversion Sewer on County Road 42 from St. Alphonse Avenue to Odessa Drive Decommission St. Alphonse Pumping Station	\$0.44	\$0.44	-	-
		1.0 MIGD (4.55 MLD) Treatment Capacity Buy-in at Little River PCP	\$0.11	\$0.11	-	\$8.00	
		Sub Total: 5 to 10 Year Plan (2013 to 2018)	\$10.31	\$0.73	\$0.09	\$9.49	
10 to 15 Year Plan (2018 to 2023)	WW-8	South Tecumseh Trunk Sewer from CR 42 to Highway 401	1200mm Trunk Sewer on County Road 42 from 11th Concession Road to Odessa Drive 1200mm Trunk Sewer on 11th Concession Road from County Road 42 to Baseline Road	\$1.44	-	\$0.07	\$1.37
	WW-9	South Tecumseh Trunk Sewer from Highway 401 to Maidstone	1200mm Trunk Sewer on Baseline Road from 11th Concession Road to 12th Concession Road Extra over 1200mm sewer cost for Sullivan Creek crossing	\$2.71	-	\$0.14	\$2.57
			900mm Trunk Sewer on 12th Concession Road from south of Highway 401 to Baseline Road Extra over 900mm sewer cost for tunneling under Highway 401	\$1.84	-	\$0.09	\$1.75
			Extra over 900mm sewer cost for Pike Creek crossing	\$0.14	-	\$0.01	\$0.13
			900 mm South Trunk sewer on 12th Concession from County Road 46 to south of Highway 401	\$3.37	-	\$0.17	\$3.20
			600 mm South Trunk sewer on Middle Road from Maiden Road to 12th Concession Road	\$0.80	-	\$0.04	\$0.76
			600 mm Trunk Sewer on Maiden Road from Highway 3 to Middle Road	\$0.12	-	\$0.01	\$0.11
			Extra over 600mm sewer cost for Pike Creek crossing	\$2.69	-	\$0.27	\$2.42
			Sub Total: 10 to 15 Year Plan (2018 to 2023)	\$0.90	-	\$0.18	\$0.72
				\$15.39	\$0.00	\$1.25	\$14.14
15 to 20 Year Plan (2023 to 2028)	Windsor-3	Purchase Additional Conveyance Capacity in Northeast Windsor Trunk Sewer, Banwell Road to 8th Concession Road ⁽³⁾	1650mm Northeast Windsor Trunk Sewer on Banwell Road from CP Railway Corridor to South Service Road (Phase 4A) 1650mm Northeast Windsor Trunk Sewer along CP Railway Corridor from West Limit of Twin Oaks to Banwell Road (Phase 4B) 1650mm Northeast Windsor Trunk Sewer along CP Railway Corridor from Lauzon Parkway to West Limit of Twin Oaks (Phase 4C) 1650mm Northeast Windsor Trunk Sewer along Lauzon Parkway from County Road 42 to CP Railway Corridor (Phase 4D)	\$0.50	-	\$0.15	\$0.35
	Windsor-4	Purchase Additional Treatment Capacity at Little River PCP ⁽³⁾	1350mm Northeast Windsor Trunk Sewer along County Road 42 from Ninth Concession Road to Lauzon Parkway (Phase 5A) 1200mm Northeast Windsor Trunk Sewer along County Road 42 from Eighth Concession Road to Ninth Concession Road (Phase 5B) 975mm Northeast Windsor Trunk Sewer along Eighth Concession Road from Oldcastle Hamlet to County Road 42 (Phase 6)	\$0.41	-	\$0.12	\$0.29
			1.0 MIGD (4.55 MLD) Treatment Capacity Buy-in at Little River PCP	\$0.56	-	\$0.17	\$0.39
			900 mm 8th Concession Road Trunk Sewer from North Talbot Road to Highway 401 Extra over sewer cost for tunneling under Highway 401	\$0.94	-	\$0.28	\$0.66
			600 mm Highway 3/Oldcastle Road Trunk Sewer from Walker Road to Piccadilly Avenue	\$0.61	-	\$0.18	\$0.43
			450 mm Highway 3 Trunk Sewer from Outer Drive to Walker Road Decommission existing Skyway Plaza WWTP including McCord Lane Pumping Station	\$0.76	-	\$0.23	\$0.53
			Flow monitoring station and controls upstream of 8th Concession Road Outlet	\$1.42	-	\$0.43	\$0.99
			Sub Total: 15 to 20 Year Plan (2023 to 2028)	\$5.00	-	-	\$5.00
				\$1.84	\$0.55	\$1.29	\$0.56
				\$0.80	\$0.24	\$0.56	\$0.66
			\$0.94	\$0.28	\$0.66	\$0.92	
			\$1.32	\$0.40	\$0.92	\$0.92	
			\$0.20	\$0.20	-	-	
			\$0.27	\$0.08	\$0.19	\$0.19	
			\$15.57	\$3.11	\$12.26	\$12.26	
TOTAL CAPITAL COST FOR WASTEWATER INFRASTRUCTURE WORKS				\$54.60	\$2.84	\$6.45	\$45.31

Notes:

- (1) Estimated cost related to capacity oversizing for flows diverted from existing service areas south of County Road 22
- (2) Estimated oversizing cost for future flows from existing developments not currently serviced by sewers
- (3) Estimated cost to be paid by Town of Tecumseh to City of Windsor based on 2004 Wastewater Agreement

Preferred Wastewater Servicing Scheme

Capital Cost Distribution over a 10-Year Period for Wastewater Infrastructure Works

Timing	Project ID	Project Name	Description of Project	Estimated Total Capital Cost (\$million)	Capital Cost Distribution (\$ million)										Capital Cost to Tecumseh (\$ million)	
					2008	2009	2010	2011	2012	2013	2014	2015	2016	2017		
5 Year Plan (2008 to 2013)	WW-0	SCADA System for Cedarwood and Lakewood Pumping Stations	Installation of SCADA System at existing Cedarwood and Lakewood Pumping Stations	\$0.20	\$0.10	\$0.10										\$0.20
	WW-1	West Tecumseh Trunk Sewer from CR 22 to CP Railway	1200 mm trunk sanitary sewer from County Road 22 to CP Railway	\$3.01	\$0.60	\$1.51	\$0.90									\$3.01
			1200 mm dia trunk sewer crossing CP Railway	\$0.40	\$0.08	\$0.20	\$0.12									\$0.40
			Flow Monitoring Chamber and controls on West Tecumseh Trunk Sewer	\$0.27	\$0.05	\$0.14	\$0.08									\$0.27
			Allowance for Permanent Easement across future development lands from County Road 22 to CP Railway	\$0.10	\$0.02	\$0.05	\$0.03									\$0.10
	WW-2	Diversion Sewer south of CP Railway	525 mm diversion sewer in Utility Easement from St Alphonse Avenue to West Tecumseh Trunk Sewer	\$0.36	\$0.07	\$0.18	\$0.11									\$0.36
	WW-3	East Tecumseh Trunk Sewer	525 mm trunk sanitary sewer in Utility Easement in East Tecumseh Hamlet south of CP Railway	\$0.52			\$0.26	\$0.26								\$0.52
			525 mm dia trunk sewer crossing CP Railway	\$0.32			\$0.16	\$0.16								\$0.32
	WW-4	Sylvestre Pumping Station Upgrade	Upgrade the Sylvestre pumping station with Standby Power	\$0.84			\$0.42	\$0.42								\$0.84
			Allowance for Property Purchase to house standby-by power and controls	\$0.06			\$0.03	\$0.03								\$0.06
	WW-5	North Talbot Road Trunk Sewer	600 mm North Talbot Road Trunk Sewer from 8th Concession Road to Old West Avenue in City of Windsor including connection to existing sanitary sewer	\$2.61		\$1.31	\$1.30									\$2.61
			Extra over sewer cost for tunneling under Highway 401	\$0.67		\$0.34	\$0.33									\$0.67
			600 mm Trunk Sewer on Oldcastle Road from North Talbot Road to Piccadilly Avenue	\$0.83		\$0.42	\$0.41									\$0.83
			Flow monitoring station and controls upstream of North Talbot Road Outlet	\$0.27		\$0.14	\$0.13									\$0.27
Windsor-1	Purchase Additional Conveyance Capacity in Northeast Windsor Trunk Sewer, Forest Glade to Little River PCP	2100mm Windsor Forest Glade Trunk Sewer from CN Railway Corridor to Little River PCP	\$2.87				\$1.44	\$1.43							\$2.87	
Sub Total: 5 Year Plan (2008 to 2013)				\$13.33	\$0.92	\$4.39	\$4.28	\$2.31	\$1.43						\$13.33	
5 to 10 Year Plan (2013 to 2018)	WW-6	West Tecumseh Trunk Sewer from CP Railway to CR 42	1200 mm dia trunk sewer from CP Railway to north limit of Odessa Drive	\$1.41					\$0.71	\$0.70					\$1.41	
			1200 mm dia trunk sewer from north limit of Odessa Drive to County Road 42	\$0.30					\$0.15	\$0.15					\$0.30	
			Allowance for Permanent Easement across future development lands from CP Railway to north limit of Odessa Drive	\$0.05					\$0.03	\$0.02					\$0.05	
	WW-7	Diversion Sewer on County Road 42	450 mm Diversion Sewer on County Road 42 from St Alphonse Avenue to Odessa Drive	\$0.44						\$0.22	\$0.22				\$0.44	
			Decommission St. Alphonse Pumping Station	\$0.11						\$0.06	\$0.05				\$0.11	
	Windsor-2	Purchase Additional Treatment Capacity at Little River PCP	1.0 MIGD (4.55 MLD) Treatment Capacity Buy-in at Little River PCP	\$8.00									\$4.00	\$4.00	\$8.00	
Sub Total: 5 to 10 Year Plan (2013 to 2018)				\$10.31					\$0.89	\$1.15	\$0.27	\$4.00	\$4.00	\$10.31		
TOTAL CAPITAL COST FOR WASTEWATER INFRASTRUCTURE WORKS - 10 YEAR PLAN				\$23.64	\$0.92	\$4.39	\$4.28	\$2.31	\$1.43	\$0.89	\$1.15	\$0.27	\$4.00	\$4.00	\$23.64	

Preferred Wastewater Servicing Scheme

Capital Cost Distribution over a 10 to 20 Year Period for Wastewater Infrastructure Works

Timing	Project ID	Project Name	Description of Project	Estimated Total Capital Cost (\$million)	Capital Cost Distribution (\$ million)											Capital Cost to Tecumseh (\$ million)	
					2018	2019	2020	2021	2022	2023	2024	2025	2026	2027			
10 to 15 Year Plan (2018 to 2023)	WW-8	South Tecumseh Trunk Sewer from CR 42 to Highway 401	1200mm Trunk Sewer on County Road 42 from 11th Concession Road to Odessa Drive	\$1.44	\$0.72	\$0.72										\$1.44	
			1200mm Trunk Sewer on 11th Concession Road from County Road 42 to Baseline Road	\$2.71	\$1.36	\$1.35											\$2.71
			1200mm Trunk Sewer on Baseline Road from 11th Concession Road to 12th Concession Road	\$1.84	\$0.92	\$0.92											\$1.84
			Extra over 1200mm sewer cost for Sullivan Creek crossing	\$0.14	\$0.07	\$0.07											\$0.14
			900mm Trunk Sewer on 12th Concession Road from south of Highway 401 to Baseline Road	\$3.37	\$1.69	\$1.68											\$3.37
			Extra over 900mm sewer cost for tunneling under Highway 401	\$0.80	\$0.40	\$0.40											\$0.80
			Extra over 900mm sewer cost for Pike Creek crossing	\$0.12	\$0.06	\$0.06											\$0.12
	WW-9	South Tecumseh Trunk Sewer from Highway 401 to Maidstone	900 mm South Trunk sewer on 12th Concession from County Road 46 to south of Highway 401	\$2.69		\$1.35	\$1.34									\$2.69	
			600 mm South Trunk sewer on Middle Road from Malden Road to 12th Concession Road	\$0.90		\$0.45	\$0.45									\$0.90	
	WW-10	Maidstone Hamlet Trunk Sewer	600 mm Trunk Sewer on Malden Road from Highway 3 to Middle Road	\$1.27			\$0.64	\$0.63								\$1.27	
Extra over 600mm sewer cost for Pike Creek crossing			\$0.11			\$0.06	\$0.05								\$0.11		
Sub Total: 10 to 15 Year Plan (2018 to 2023)				\$15.39	\$5.22	\$7.00	\$2.49	\$0.68							\$15.39		
15 to 20 Year Plan (2023 to 2028)	Windsor-3	Purchase Additional Conveyance Capacity in Northeast Windsor Trunk Sewer, Banwell Road to 8th Concession Road	1650mm Northeast Windsor Trunk Sewer on Banwell Road from CP Railway Corridor to South Service Road (Phase 4A)	\$0.50						\$0.25	\$0.25				\$0.50		
			1650mm Northeast Windsor Trunk Sewer along CP Railway Corridor from West Limit of Twin Oaks to Banwell Road (Phase 4B)	\$0.41						\$0.21	\$0.20				\$0.41		
			1650mm Northeast Windsor Trunk Sewer along CP Railway Corridor from Lauzon Parkway to West Limit of Twin Oaks (Phase 4C)	\$0.56							\$0.28	\$0.28				\$0.56	
			1650mm Northeast Windsor Trunk Sewer along Lauzon Parkway from County Road 42 to CP Railway Corridor (Phase 4D)	\$0.94							\$0.47	\$0.47				\$0.94	
			1350mm Northeast Windsor Trunk Sewer along County Road 42 from Ninth Concession Road to Lauzon Parkway (Phase 5A)	\$0.61							\$0.31	\$0.30				\$0.61	
			1200mm Northeast Windsor Trunk Sewer along County Road 42 from Eighth Concession Road to Ninth Concession Road (Phase 5B)	\$0.76							\$0.38	\$0.38				\$0.76	
			975mm Northeast Windsor Trunk Sewer along Eighth Concession Road from Oldcastle Hamlet to County Road 42 (Phase 6)	\$1.42							\$0.71	\$0.71				\$1.42	
	Windsor-4	Purchase Additional Treatment Capacity at Little River PCP	1.0 MIGD (4.55 MLD) Treatment Capacity Buy-in at Little River PCP	\$5.00								\$2.50	\$2.50		\$5.00		
	WW-11	Southwest Tecumseh Trunk Sewer	900 mm 8th Concession Road Trunk Sewer from North Talbot Road to Highway 401	\$1.84							\$0.92	\$0.92			\$1.84		
			Extra over sewer cost for tunneling under Highway 401	\$0.80							\$0.40	\$0.40			\$0.80		
			600 mm Highway 3/Oldcastle Road Trunk Sewer from Walker Road to Piccadilly Avenue	\$0.94							\$0.47	\$0.47			\$0.94		
			450 mm Highway 3 Trunk Sewer from Outer Drive to Walker Road	\$1.32							\$0.66	\$0.66			\$1.32		
			Decommission existing Skyway Plaza WWTP including McCord Lane Pumping Station	\$0.20							\$0.10	\$0.10			\$0.20		
			Flow monitoring station and controls upstream of 8th Concession Road Outlet	\$0.27						\$0.14	\$0.13			\$0.27			
	Sub Total: 15 to 20 Year Plan (2023 to 2028)				\$15.57						\$2.61	\$5.28	\$5.18	\$2.50	\$15.57		
TOTAL CAPITAL COST FOR WASTEWATER INFRASTRUCTURE WORKS - 10 to 20 YEAR PLAN				\$30.96	\$5.22	\$7.00	\$2.49	\$0.68		\$2.61	\$5.28	\$5.18	\$2.50	\$30.96			