

David Schaeffer Engineering Ltd.

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November 24, 2022 Our File: 22-1324

Tercot Acquisitions Limited 406 - 56 The Esplanade Toronto, ON M5E 1A7

Attention: David Cogliano

Tercot Acquisitions Limited

Dear Mr. Cogliano:

Re: 6431 Bethesda Road, Whitchurch-Stouffville

Conceptual Servicing Strategy

Opening:

DSEL has been retained by Tercot to complete a preliminary review of potential water and wastewater servicing opportunities for the property located at 6431 Bethesda Side Road in Whitchurch-Stouffville, herein referred to as the subject property. The subject property is bound by Bethesda Side Road to the north, the current Stouffville settlement boundary to the south, municipal park to the west, and agricultural and future Lincolnville Major Transit Station Area (MTSA) to the east. The subject property is currently located within the Oak Ridges Moraine (ORM) area and Greenbelt area.

The Town of Whitchurch-Stouffville Draft Official Plan (June 2022) and the adopted Region of York Official plan (date July 2022) supported the settlement boundary expansion into the ORM conditional upon amendments to O.Reg 140/02, and inclusion of the subject property in the settlement boundary.

A Notice of Decision on the Region of York Official Plan was issued by the Province on November 4, 2022 that did not support the ORM designation change and boundary expansion for the subject property and neighbouring properties to the east along Bethesda Side Road.

The Province of Ontario has recently released a proposed amendment to the Greenbelt Plan to remove some lands from the Greenbelt on a strategic basis to support Bill 23, More Homes Built Faster Act. The Province considered properties for removal from the Greenbelt for future and near-term housing development using five criteria. The purpose of this letter is to discuss one of the five criteria in relation to the subject property: *The lands have the potential ability to be serviced in the near-term with local infrastructure upgrades to be entirely funded by proponents.*

Location of Property, and Proximity to Planned Infrastructure:

The location of the subject property is illustrated below.

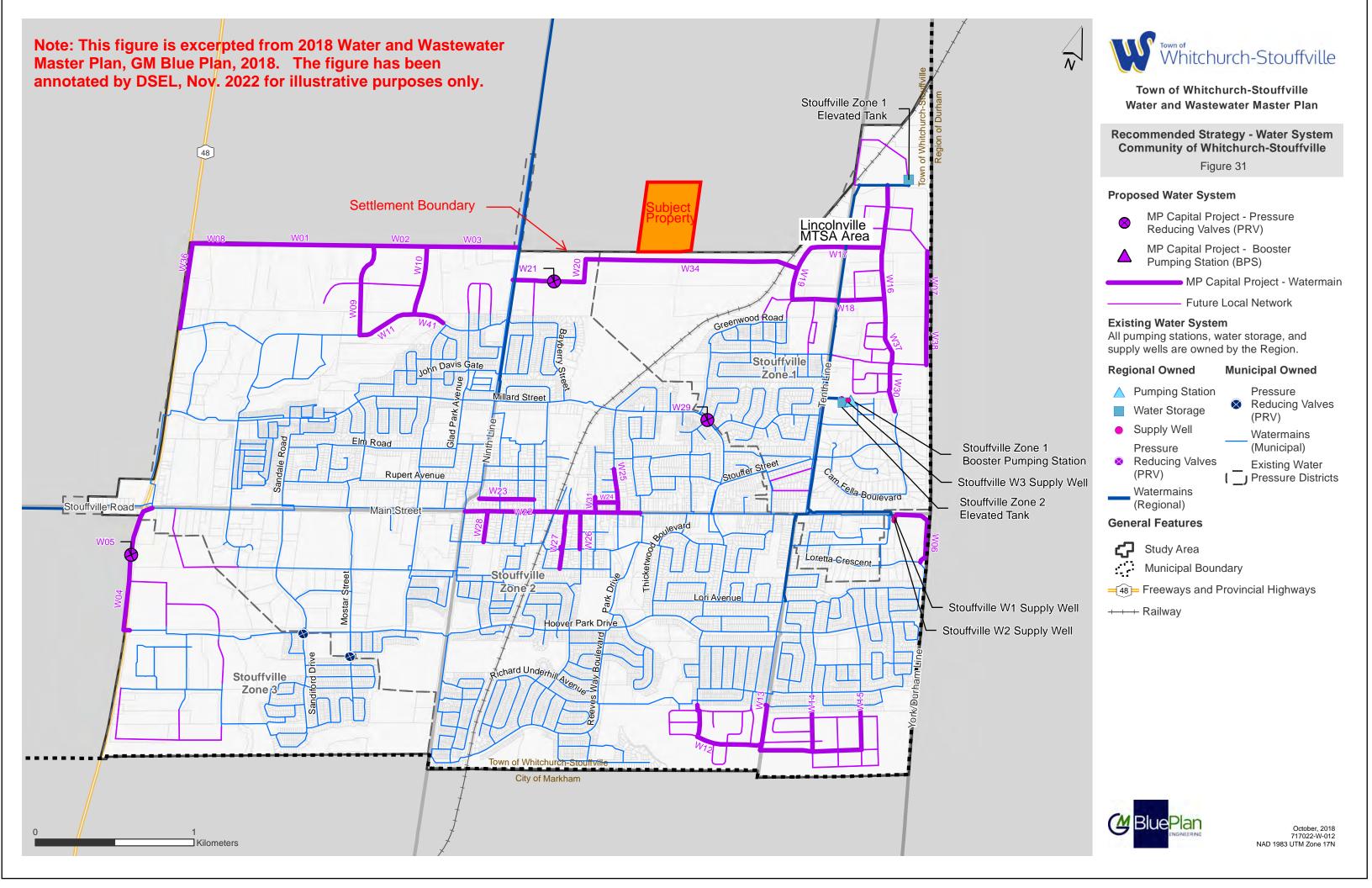


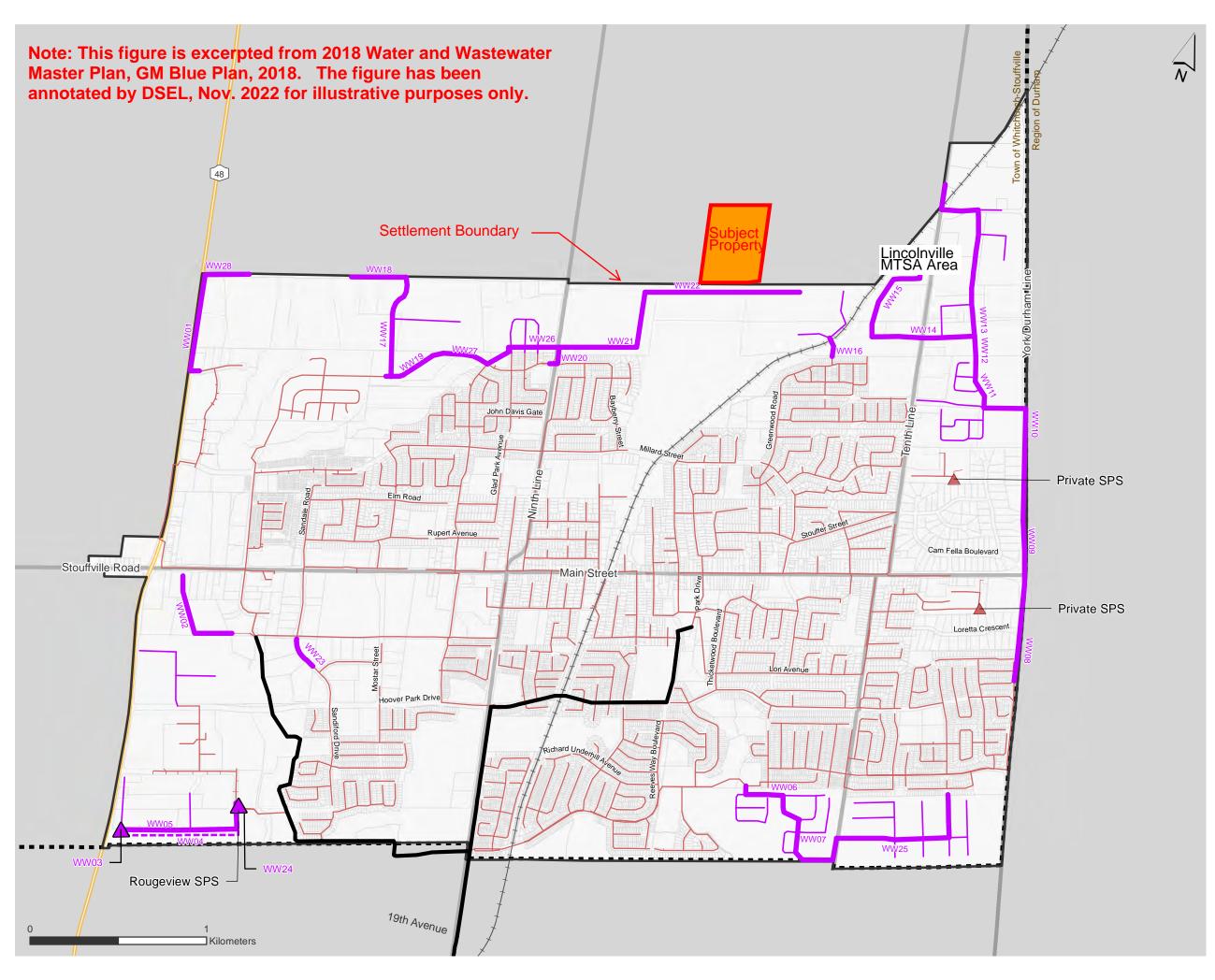
It is important to highlight the location of the subject property relative to the current settlement boundary of Stouffville, and to the future Lincolnville MTSA lands. Both of these external areas are proposed to be serviced with municipal water and wastewater infrastructure. Development within the current settlement boundary area and the proposed Lincolnville MTSA will extend municipal water and wastewater infrastructure to several locations within 100 m to 800 m of the subject property.

The extension of municipal water and wastewater to service the adjacent settlement boundary and Lincolnville MTSA lands is contemplated in the following background studies:

- The current settlement boundary servicing for the lands located immediately south of the subject property were generally outlined in the 2018 Town of Whitchurch-Stouffville Water and Wastewater Master Plan (GM Blue Plan, 2018).
- The proposed Lincolnville MTSA servicing strategy is outlined in stand-alone technical report prepared by GM Blue Plan on behalf of Whitchurch-Stouffville in 2020; in support of the Official Plan amendment for the Lincolnville (now Old Elm) MTSA Lands.

The conceptual water and wastewater servicing for the adjacent settlement boundary area, and the Lincolnville MTSA from the GM Blue Plan work, is excerpted below.







Town of Whitchurch-Stouffville Water and Wastewater Master Plan

Recommended Strategy Wastewater System Community of Whitchurch-Stouffville

Figure 43

Proposed Wastewater System

MP Capital Project - Sanitary Pumping Station

---- MP Capital Project - Forcemain

MP Capital Project - Gravity

— Future Local Collection

Existing Wastewater System

▲ Sanitary Pumping Station (SPS)

Gravity Main (Municipal)

Gravity Main (Regional - YDSS)

General Features

47 :

Study Area

Municipal Boundary

=48 = Freeways and Provincial Highways

---- Proposed Roads

+---- Railway



As seen in the water and water servicing figures above, infrastructure will be constructed in close proximity to the subject property. The planned timing of the adjacent water and wastewater infrastructure is 2022 to 2025 per the 2018 Water and Wastewater Master Plan, as excerpted in *Attachment 1*. The timing from the 2018 Water and Wastewater Master Plan is subject to change, and some projects may be added or removed or deferred to later dates. The proposed infrastructure illustrated above is to address planned growth in the settlement boundary, and this letter in no way implies or guarantees the timing of the projects or that they will be completed.

The servicing capacity and depth of the nearby proposed water and wastewater infrastructure will need to be confirmed as this infrastructure has not been designed yet. Confirmation of available capacity to service the subject property is beyond the scope of this letter. Availability of capacity to service the subject property will need to be confirmed by Whitchurch-Stouffville and Region of York. As noted, the Town of Whitchurch-Stouffville is preparing a 2022 Water and Wastewater Master Plan to assess water and wastewater servicing capacity in their network, among other things, which is expected to conclude in 2023.

The detailed design of the proposed servicing for the current settlement area and MTSA area excerpted above have not commenced. As such, there may be opportunities to incorporate additional capacity for the subject property in the infrastructure design, subject to municipal approval.

Additional Wastewater Servicing Context for Subject Property:

- ➤ The Town of Stouffville prepared a Functional Servicing Report (IBI Group, 2013) for Whitchurch-Stouffville that contemplated wastewater servicing for the subject property. A graphic from the report is included as *Attachment 2*.
- ➤ The 2018 Water and Wastewater Master Plan appears to indicate Potential post-period growth outside the urban boundary contributing wastewater flows to the infrastructure in the urban boundary, in the area of the subject property as excerpted in *Attachment 3*.
- ➤ There is a current development application on the settlement area lands located immediately south of the subject property. The Functional Servicing Report from April 2022 for those lands (not yet approved by Whitchurch-Stouffville) has allowance for some wastewater flow from the subject property.

The context above is provided to demonstrate that wastewater servicing of the subject property has historically been considered, to an extent, in several technical documents. This by no means guarantees there is, or will be, servicing/capacity available for the subject property, but demonstrates it has been considered historically given its proximity to the current settlement boundary.

Closing:

➤ The subject property was historically considered in the downstream wastewater servicing dating back to 2013 Functional Servicing Report completed by Town of Stouffville.

- The subject property is located adjacent to the current settlement boundary, and the future Lincolnville MTSA lands, which are both planned to be serviced with municipal water and wastewater infrastructure in the near term.
- ➤ The water and wastewater infrastructure to service these external lands will be located within 100 m to 800 m of the subject property.
- ➤ The Town of Stouffville 2018 Water and Wastewater Master Plan anticipates timing for the external infrastructure is 2022 to 2025. The timing is subject to change.
- ➤ The Town of Whitchurch-Stouffville is currently conducting a 2022 Water and Wastewater Master Plan that will analyze system capacity for the larger community area. This document is an important next step in determining if there is available capacity in the network for additional development areas such as the subject property.
- ➤ The planned infrastructure adjacent to the subject property has not been explicitly designed to include the subject property. Additional analysis is required to confirm if there is sufficient water and wastewater capacity in the downstream system for the subject property, which would need to be reviewed and approved by Town of Whitchurch-Stouffville.
- ➤ The planned infrastructure adjacent to the site has not proceeded to detailed design, and there may be opportunities through detailed design to expand available capacity for the subject property, subject to additional analysis and municipal support. This can be investigated following completion of the 2022 Water and Wastewater Master Plan.

This letter in no way implies or confirms there is available capacity in the downstream system for the subject property. This letter highlights that servicing will be available in the lands immediately adjacent to the subject site that need to be analyzed to confirm if there is available capacity through future reporting. We trust the above letter is satisfactory, and if we can assist you with your review, please do not hesitate to contact our office.

Prepared by

David Schaeffer Engineering Ltd

DRAFT SENT BY E-MAIL

Per: Ryan Kerr, P.Eng.

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ATTACHMENT 1: Water and Wastewater Servicing Strategy Excerpts from 2018 Water and Wastewater Master Plan for Whitchurch-Stouffville, GM Blue Plan, 2018





Table 26: Water Capital Program

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Master Plan ID	Project Name	Project Description	Year in Service	Municipality	Class EA	Size/Capacity	Length (m)	Class Estimate Type	Project Complexity	Area Condition	Base Construction Cost (\$2018)	Crossings (\$2018)	Additional Costs (\$2018)	Soft Costs (\$2018)	Non-Refundable HST (\$2018)	Total Estimated Cost (\$2018)
W01	Bethesda Side Road #1	New 300 mm diameter watermain along Bethesda Side Road from Ninth Line to W10. Two creek crossings.	2023	Stouffville	A+	300 mm	871	Class 4	High	Rural	586,000	243,000	276,000	639,000	30,000	\$ 1,806,000
W02	Bethesda Side Road #2	New 300 mm diameter watermain along Bethesda Side Road from W10 to W09	2023	Stouffville	A+	300 mm	336	Class 4	Low	Rural	226,000	-	50,000	103,000	7,000	\$ 396,000
W03	Bethesda Side Road #3	New 300 mm diameter watermain along Bethesda Side Road from W09 to W08	2023	Stouffville	A+	300 mm	573	Class 4	Low	Rural	385,000	-	83,000	172,000	11,000	\$ 661,000
W04	Hwy 48 #1	New 300 mm diameter watermain along Hwy 48 from Main Street to Hoover Park Drive. One creek crossing	2021-2026	Stouffville	A+	300 mm	862	Class 4	High	Rural	580,000	206,000	258,000	600,000	28,000	\$ 1,693,000
W05	PRV Hwy 48	New Zone 2/3 PRV along Hwy 48, south of Main Street. Exact location to be determined.	2021-2026	Stouffville	Α+	0 mm	0	Class 4	Low	Rural	50,000	-	-	18,000	1,000	\$ 69,000
W06	York Durham Line #1	New 300 mm diameter watermain along Main Street and York Durham Line, from Stouffville Well 1&2 to Loretta Crescent. Potential issues with groundwater during construction based on historical construction in this area	2019	Stouffville	A+	300 mm	483	Class 4	High	Rural	325,000	-	107,000	249,000	12,000	\$ 703,000
W07	York Durham Line #2	New 200 mm diameter watermain along York Durham Line, between Bethesda Side Road and Main Street	2020-2022	Stouffville	A+	200 mm	446	Class 4	High	Rural	234,000	30,000	87,000	202,000	9,000	\$ 570,000
W08	Bethesda Side Road #4	New 300 mm diameter watermain along Bethesda Side Road from W01 to Hwy 48	2023	Stouffville	A+	300 mm	267	Class 4	Low	Rural	179,000	-	40,000	83,000	5,000	\$ 320,000
W09	Future Road #2	New 300 mm diameter watermain along future road connecting Baker Hill Boulevard to Bethesda Side Road	2019-2021	Stouffville	A+	300 mm	591	Class 4	Low	Rural	397,000	-	86,000	177,000	11,000	\$ 682,000
W10	Future Road #3	New 300 mm diameter watermain along future road connecting Baker Hill Boulevard to Bethesda Side Road	2019-2021	Stouffville	A+	300 mm	437	Class 4	Low	Rural	294,000	-	64,000	133,000	8,000	\$ 510,000
W11	Future Road #4	New 300 mm diameter watermain along Baker Hill Boulevard	2019	Stouffville	A+	300 mm	390	Class 4	High	Rural	262,000	-	87,000	203,000	9,000	\$ 574,000
W12	Future Road #5	New 300 mm diameter watermain along future road in southeast corner of Stouffville, south of Mantle Avenue. Connecting Byers Pond Way and W15. One creek crossing	2019	Stouffville	A+	300 mm	1210	Class 4	Low	Rural	813,000	37,000	183,000	378,000	24,000	\$ 1,458,000
W13	Future Road #6	New 300 mm diameter watermain along future road in southeast corner of Stouffville, south of Mantle Avenue. Extension of existing watermain on Tenth Line	2019	Stouffville	A+	300 mm	286	Class 4	Low	Rural	192,000	-	43,000	88,000	6,000	\$ 339,000
W14	Future Road #7	New 300 mm diameter watermain along future road in southeast corner of Stouffville, south of Mantle Avenue. Extension of existing watermain on Sunnygridge Avenue	2020	Stouffville	A+	300 mm	243	Class 4	Low	Rural	163,000	-	37,000	76,000	5,000	\$ 291,000
W15	Future Road #8	New 300 mm diameter watermain in southeast corner of Stouffville, south of Mantle Avenue	2020	Stouffville	A+	300 mm	245	Class 4	Low	Rural	165,000	-	37,000	76,000	5,000	\$ 294,000
W16	Future Road #9	New 300 mm diameter watermain along future road in northeast corner of Stouffville, connecting W37 to Bethesda Side Road	2020-2022	Stouffville	A+	300 mm	868	Class 4	Med	Rural	584,000	•	158,000	321,000	18,000	\$ 1,090,000
W17	Future Road #10	New 300 mm diameter watermain along future road in northeast corner of Stouffville, connecting W19 to W16	2020-2022	Stouffville	A+	300 mm	455	Class 4	Med	Rural	306,000	•	84,000	171,000	10,000	\$ 582,000
W18	Future Road #11	New 300 mm diameter watermain along future road in northeast corner of Stouffville, connecting W19 to W16	2020-2022	Stouffville	A+	300 mm	580	Class 4	Med	Rural	390,000	-	106,000	216,000	12,000	\$ 735,000
W19	Future Road #12	New 300 mm diameter watermain along future road in northeast corner of Stouffville, connecting W17 and W18	2020-2022	Stouffville	A+	300 mm	349	Class 4	Med	Rural	235,000	-	65,000	133,000	7,000	\$ 451,000
W20	Future Road #13	New 300 mm diameter watermain along future road in northeast corner of Stouffville, connecting W34 to Ninth Line	2019	Stouffville	A+	300 mm	717	Class 4	Med	Rural	482,000	-	131,000	266,000	15,000	\$ 905,000
W21	PRV Future Road	New Zone 1/2 PRV along W20. Exact location to be determined.	2022-2025	Stouffville	A+	0 mm	0	Class 4	Low	Rural	50,000	-	-	18,000	1,000	\$ 69,000
W22	Main Street	300 mm watermain upgrade along Main Street from Ninth Line to Park Drive. One railway and one creek crossing.	2019-2020	Stouffville	A +	300 mm	1105	Class 4	Low	Urban	743,000	126,000	236,000	488,000	31,000	\$ 1,880,000





Table 26: Water Capital Program

Master Plan ID	Project Name	Project Description	Year in Service	Municipality	Class EA	Size/Capacity	Length (m)	Class Estimate Type	Project Complexity	Area Condition	Base Construction Cost (\$2018)	Crossings (\$2018)	Additional Costs (\$2018)	Soft Costs (\$2018)	Non-Refundable HST (\$2018)	Total Estimated Cost (\$2018)
W23	Second Street	200 mm watermain upgrade along Second Street from Ninth Line to Albert Street.	2019-2024	Stouffville	A+	200 mm	345	Class 4	Low	Urban	181,000	-	50,000	104,000	7,000	\$ 399,000
W24	Commercial Street	150 mm watermain upgrade along Commercial Street from Church Street North to Mill Street	2019-2024	Stouffville	A+	150 mm	144	Class 4	Low	Urban	66,000	-	19,000	38,000	2,000	\$ 148,000
W25	Church Street North	200 mm watermain upgrade along Church Street North from Main Street to Warriner Street	2019-2024	Stouffville	A+	200 mm	276	Class 4	Low	Urban	145,000	-	40,000	84,000	5,000	\$ 321,000
W26	O'Brien Avenue	150 mm watermain upgrade along O'Brien Avenue from Main Street to Burkholder Street	2019-2024	Stouffville	A+	150 mm	231	Class 4	Low	Urban	105,000	=	29,000	61,000	4,000	\$ 235,000
W27	Lloyd Street	150 mm watermain upgrade along Lloyd Street from Main Street to Rose Avenue	2019-2024	Stouffville	A+	150 mm	375	Class 4	Low	Urban	171,000	-	47,000	98,000	6,000	\$ 377,000
W28	Orchard Park Boulevard	200 mm watermain upgrade along Orchard Park Boulevard from Main Street to Sunset Boulevard	2019-2024	Stouffville	A+	200 mm	197	Class 4	Low	Urban	103,000	-	29,000	60,000	4,000	\$ 231,000
W29	PRV Millard Street	New Zone 1/2 PRV along Millard Street. Exact location to be determined.	2019	Stouffville	A+	0 mm	0	Class 4	Low	Suburban	50,000	-	-	18,000	1,000	\$ 69,000
W30	Future Road #14	New 200 mm diameter watermain along a future road from W16 to Cam Fella Boulevard	2019	Stouffville	A+	200 mm	309	Class 4	Med	Rural	162,000	30,000	53,000	108,000	6,000	\$ 367,000
W31	Mill Street	200 mm watermain upgrade along Mill Street from Main Street to Freel Lane	2019-2024	Stouffville	A+	200 mm	98	Class 4	Low	Urban	51,000	-	15,000	31,000	2,000	\$ 119,000
W32	HWY 48 BPS	Decommissioning of the Highway 48 Booster Pumping Station. Would occur after extension from Ballantrae is complete (W33)	2019-2024	Ballantrae	A+	0 mm	0	Class 4	Low	Rural	50,000	-	-	18,000	1,000	\$ 69,000
W33	HWY 48 #3	New 250 mm diameter watermain along HWY 48 from Spruceview Place to existing dead end.	2019-2024	Ballantrae	A+	250 mm	1173	Class 4	Low	Rural	704,000	-	149,000	308,000	19,000	\$ 1,184,000
W34	Future Road #15	New 300 mm diameter watermain along future road in northeast corner of Stouffville, connecting W19 to W20. One railway crossing and one creek crossing.	2022-2025	Stouffville	Schedule B/Integrated Planning Approach	300 mm	1218	Class 4	Med	Rural	819,000	295,000	304,000	618,000	34,000	\$ 2,104,000
W35	Lakeshore/Ninth	New 300 mm diameter watermain (twinned) along Ninth Line and Lakeshore Road from Musselman's Lake Elevated Tank to Connor Drive	2019-2024	Ballantrae	В	300 mm	2033	Class 4	Low	Suburban	1,367,000	-	347,000	717,000	45,000	\$ 2,760,000
W36	HWY 48 #2	New 300 mm diameter watermain along Hwy 48	2023	Stouffville	A+	300 mm	540	Class 4	High	Rural	363,000	-	120,000	278,000	13,000	\$ 784,000
W37	Future Road #16	New 300 mm diameter watermain along future road in northeast corner of Stouffville, connecting W30 to W16	2020-2022	Stouffville	A+	300 mm	268	Class 4	Med	Rural	180,000	-	51,000	103,000	6,000	\$ 351,000
W38	York Durham Line #3	New 200 mm diameter watermain along York Durham Line, between Bethesda Side Road and Main Street	2020-2022	Stouffville	A+	200 mm	268	Class 4	High	Rural	140,000	-	46,000	108,000	5,000	\$ 304,000
W39	Gormley Fire Protection	New 300 mm diameter fire protection watermain on Stouffville Road from Union Street west (347m)	2022	Gormley	A+	300 mm	347	Class 4	Low	Suburban	233,000	-	61,000	126,000	8,000	\$ 486,000
W40	Gormley Fire Protection	New 300 mm diameter fire protection watermain on Union Street from Stouffville Street south (453 m)	2022	Gormley	A+	300 mm	453	Class 4	Low	Suburban	305,000	-	79,000	163,000	10,000	\$ 630,000
W41	Future Road #4	New 300 mm diameter watermain along Baker Hill Boulevard - Creek Crossing	2019	Stouffville	A+	300 mm	180	Class 4	High	Rural	-	-	-	193,000	9,000	\$ 544,000
W42	Master Plan	Water Master Plan	2023		A+											\$ 250,000
W43	Future Study	Future Service Areas Study - Water	2019-2021		В											\$ 250,000





Table 32: Wastewater Capital Program

Master Plan ID	Project Name	Project Description	Year in Service	Class EA	Size/Capacity	Length (m)	Class Estimate Type	Project Complexity	Area Condition	Base Construction Cost (\$2018)	Crossings (\$2018)	Additional Costs (\$2018)	Soft Costs (\$2018)	Non-Refundable HST (\$2018)	Total Estimated Cost (\$2018)
WW01	Subtrunk 13 Extension	200mm sewer on Highway 48 from Norman Jones Place to Bethesda Road	2023-2026	A+	200 mm	600	Class 4	High	Rural	340,000	-	109,000	252,000	12,000	\$ 713,000
WW02	Subtrunk 11 Extension	250/300mm sewer on future road south of Main Street to YDSS West Trunk Sewer	2022-2026	Schedule B/Integrated Planning Approach	300 mm	545	Class 4	High	Rural	343,000	470,000	260,000	603,000	28,000	\$ 1,704,000
WW03	New SW Sanitary Pumping Station	40 L/s New SPS south of Sam's Way to existing Rougeview SPS forcemain	2022-2026	Schedule B/Integrated Planning Approach	40 L/s		Class 4	Med	Rural	920,000		244,000	495,000	28,000	\$ 1,687,000
WW04	New SW Forcemain	250mm forcemain from New SPS south of Sam's Way to existing Rougeview SPS forcemain	2022-2026	Schedule B/Integrated Planning Approach	250 mm	800	Class 4	Low	Rural	480,000	-	101,000	209,000	13,000	\$ 803,000
WW05	Subtrunk 9 Extension	375mm sewer on future road from the existing Rougeview SPS to the new SPS south of Sam's Way	2022-2026	A+	375 mm	800	Class 4	Low	Rural	537,000	-	113,000	233,000	15,000	\$ 896,000
WW06	Subtrunk 2 (Part 1 of 2)	450mm sewer of future road (Subtrunk 2)	2019	Schedule B/Integrated Planning Approach	450 mm	525	Class 4	Low	Rural	383,000	392,000	163,000	336,000	21,000	\$ 1,294,000
ww07	Subtrunk 2 (Part 2 of 2)	375mm sewer of future road (Subtrunk 2) up to Tenth Line	2019	A+	375 mm	350	Class 4	Low	Rural	235,000	-	49,000	102,000	6,000	\$ 392,000
WW08	Subtrunk 1 Extension (Part 1 of 6)	600mm sewer on York/Durham Line from the existing subtrunk 1 sewer north of Hoover Park Drive to Main Street	2019	Schedule B Completed	600 mm	700	Class 4	High	Suburban	2,345,000	-	750,000	1,741,000	81,000	\$ 4,917,000
WW09	Subtrunk 1 Extension (Part 2 of 6)	450mm sewer on York/Durham Line from Main Street to the norht limit of CamFella development	2019	Schedule B Completed	450 mm	720	Class 4	High	Suburban	1,394,000	-	446,000	1,035,000	48,000	\$ 2,923,000
WW10	Subtrunk 1 Extension (Part 3 of 6)	450mm sewer on York/Durham Line from the norht limit of CamFella development to Forsyth Farm Drive	2018-2021	Schedule B Completed	450 mm	205	Class 4	High	Suburban	397,000	-	152,000	354,000	16,000	\$ 1,000,000
WW11	Subtrunk 1 Extension (Part 4 of 6)	450mm sewer on Forsyth Farm Drive from York/Durham Line to Keeler Avenue	2018-2021	Schedule B Completed	450 mm	510	Class 4	High	Rural	1,432,000	196,000	521,000	1,209,000	56,000	\$ 3,414,000
WW12	Subtrunk 1 Extension (Part 5 of 6)	450mm sewer on Keeler Avenue from Forsyth Farm Drive to the connection to subtrunk 15 on future road to the north	2019-2021	Schedule B Completed	450 mm	150	Class 4	Med	Rural	421,000	-	112,000	227,000	13,000	\$ 773,000
WW13	Subtrunk 1 Extension (Part 6 of 6)	375mm sewer on future road east of Tenth Line from the connection to subtrunk 15 to Bethesda Road	2020-2022	Schedule B Completed	375 mm	1110	Class 4	Med	Rural	745,000	418,000	308,000	627,000	35,000	\$ 2,133,000
WW14	Subtrunk 15 (Part 1 of 2)	300mm on future road from the connection to subtrunk 1 to the west crossing Tenth Line	2020-2022	A+	300 mm	580	Class 4	Med	Rural	365,000	118,000	128,000	261,000	15,000	\$ 886,000
WW15	Subtrunk 15 (Part 2 of 2)	300mm on future road west of Tenth Line and south of the Go Transit Railway	2020-2022	A+	300 mm	610	Class 4	Med	Rural	384,000	-	102,000	207,000	12,000	\$ 703,000
WW16	Subtrunk 3 Extension	300mm sewer from the existing subtrunk 3 sewer north of Greenwood Road to the north side of the Go Transit Railway	2020-2022	Schedule B/Integrated Planning Approach	250 mm	160	Class 4	High	Rural	411,000	118,000	169,000	393,000	18,000	\$ 1,109,000
WW17	Subtrunk 18	300mm sewer on future road from Baker Hill Boulevard to Bethesda Road (Subtrunk 18)	2019-2021	A+	300 mm	590	Class 4	Low	Rural	371,000	-	78,000	161,000	10,000	\$ 620,000
WW18	Subtrunk 18	300mm sewer on Bethesda Road from future sewer to the west of the creek (Subtrunk 18)	2023	A+	200 mm	310	Class 4	Low	Rural	176,000	235,000	86,000	178,000	11,000	\$ 686,000
WW19	Subtrunk 10 Extension	450mm sewer onm Baker Hill Road from the existing subtrunk 10 sewer on Baker Hill Road to West Lawn Crescent	2019	A+	450 mm	430	Class 4	Med	Rural	313,000	-	83,000	169,000	9,000	\$ 576,000

Detailed design has not commenced for these projects as of writing of this memo. These projects will not be in service by the planned date noted in this table

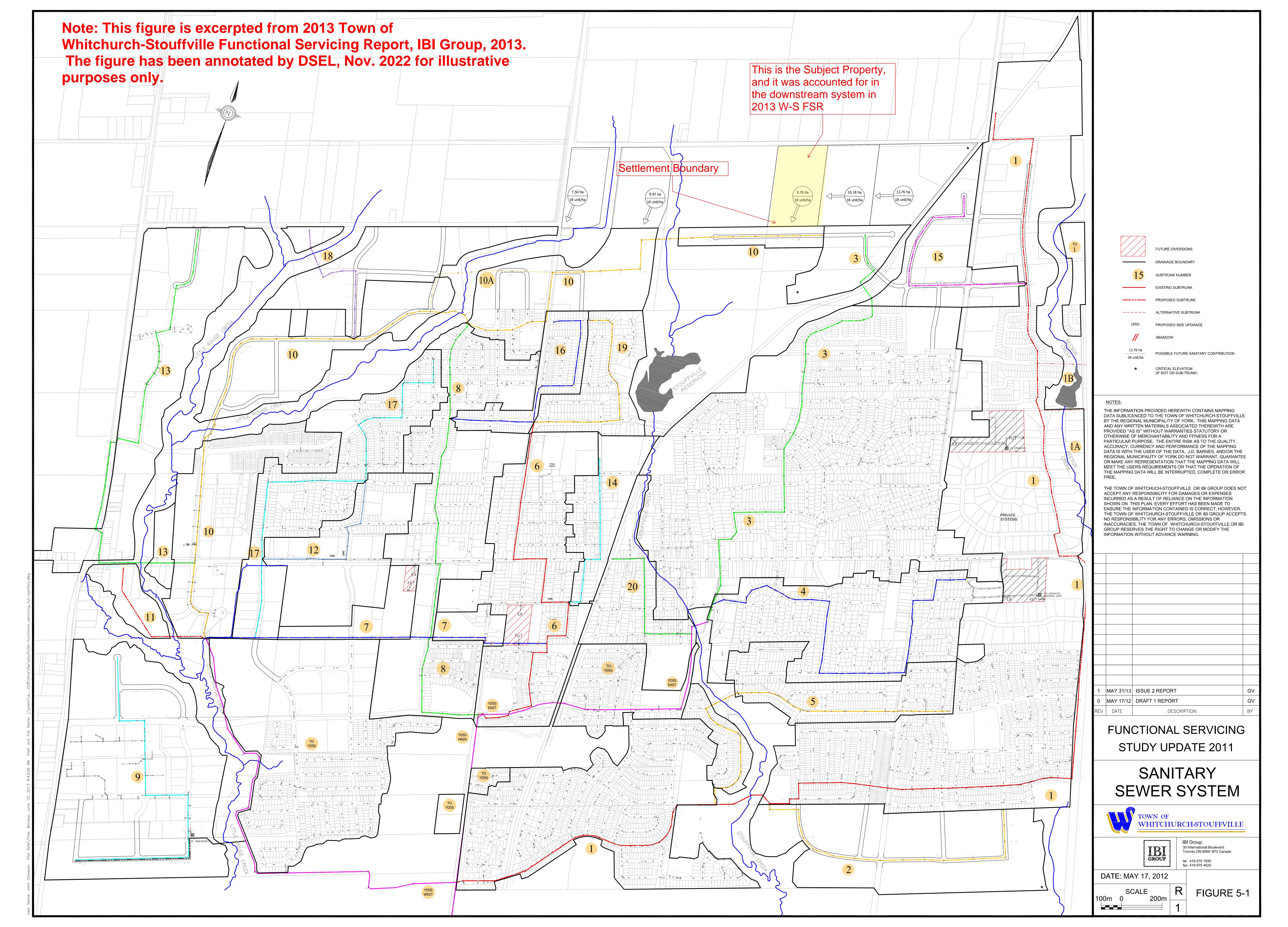


Table 32: Wastewater Capital Program



Master Plan ID	Project Name	Project Description	Year in Service	Class EA	Size/Capacity	Length (m)	Class Estimate Type	Project Complexity	Area Condition	Base Construction Cost (\$2018)	Crossings (\$2018)	Additional Costs (\$2018)	Soft Costs (\$2018)	Non-Refundable HST (\$2018)	Total Estimated Cost (\$2018)
WW20	Subtrunk 10 Extension	450mm sewer on Ninth Line from Baker Hill Road to future road south of Bethesda Road	2019	A+	450 mm	140	Class 4	High	Suburban	102,000	896,000	326,000	756,000	35,000	\$ 2,135,000
WW21	Subtrunk 10 Extension	450mm sewer on future road south of Bethesda Road east of Ninth Line	2019	A+	450 mm	750	Class 4	Med	Rural	547,000	-	145,000	295,000	16,000	\$ 1,004,000
WW22	Subtrunk 10 Extension	375mm sewer on future road south of Bethesda Road east of Ninth Line	2022-2025	Schedule B/Integrated Planning Approach	375 mm	980	Class 4	Med	Rural	657,000	985,000	435,000	886,000	49,000	\$ 3,013,000
WW23	Sandiford Drive Sewer	200mm sewer on Sandiford Drive from	2019	A+	200 mm	190	Class 4	Low	Suburban	108,000	-	27,000	56,000	4,000	\$ 215,000
WW24	Rougeview SPS Decommission	Rougeview Sanitary Pumping Station Decommission	2022-2026	A+		0	Class 4	Med	Rural	-	-	-	-	-	\$ 50,000
WW25	Subtrunk 2 (Part 2 of 2)	300mm sewer of future road (Subtrunk 2) up to Tenth Line	2019	A+	300 mm	970	Class 4	Low	Rural	610,000	118,000	153,000	316,000	20,000	\$ 1,217,000
WW26	Baker Hill Boulevard By- Pass	300mm sewer of future road from Ninth Line to the connection to Subtrunk 10 on Baker Hill Boulevard	2019	A+	300 mm	455	Class 4	Med	Rural	286,000	-	76,000	154,000	9,000	\$ 525,000
WW27	Subtrunk 10 Extension	450mm sewer on Baker Hill Road - Creek Crossing	2019	A+	450 mm	200	Class 4	Med	Rural	146,000	-	39,000	172,000	10,000	\$ 587,000
WW28	Subtrunk 13 Extension	200mm sewer on Bethesda Road to Highway 48	2023-2026	A+	200 mm	255	Class 4	High	Rural	144,000	-	46,000	108,000	5,000	\$ 304,000
WW29	Master Plan	Wastewater Master Plan	2023	A+											\$ 250,000
ww30	Future Study	Future Service Areas Study - Wastewater	2019-2021	В											\$ 250,000
WW31	Flow Monitoring	Flow Monitoring Program (5 years)	2019-2023												\$ 500,000
Total	Program - 20	041													\$37,279,000

ATTACHMENT 2: Excerpts from 2013 Functional Servicing Report for Whitchurch-Stouffville, IGI Group, 2013



ATTACHMENT 3: Potential post-Period Growth Flow Excerpts from 2018 Water and Wastewater Master Plan for Whitchurch-Stouffville, GM Blue Plan,2018



Town of Whitchurch-Stouffville Water and Wastewater Master Plan November 2018

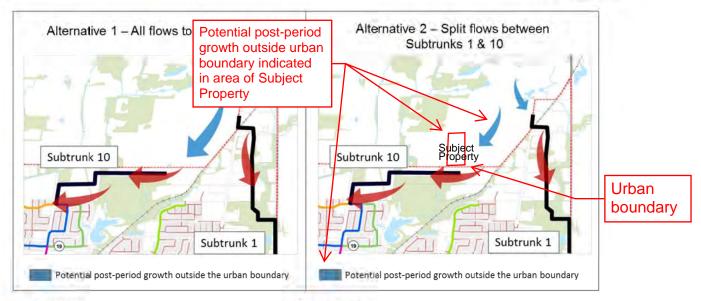


Figure 41: Northeast Growth (Part A) Wastewater Servicing Alternatives

Alternative 2 provides the best balance of flows and minimize the amount of infrastructure that could potentially require upsizing; therefore, Alternative 2 was carried forward.

3.6.1.5 Northeast Growth - Part B

The northeast growth area encompasses designated Greenfield Areas that are part of the Phase 3 developable areas in the Community of Stouffville. This area is projected to be mainly residential with some allocation for employment growth. Currently there is no wastewater service in this area and new infrastructure will be required to provide service for future growth.

This section outlines alternative servicing strategies to service growth in a small northeast area west of the GO Transit railway that lies within the existing urban boundary of the Community of Stouffville. This area is bounded by significant environmental features to the west and the Go Transit railway to the east and south. Additionally, the natural topography of the area drains southwest away from the existing and proposed infrastructure in the vicinity. As part of the Master Plan, the following alternatives to service the area were considered:

Alternative 1 – Gravity solution to subtrunk 3

Pros	Cons					
Gravity solution avoids needs for new SPS and forcemain. Less operation and maintenance costs. Gravity solution does not require use of energy and	Requires environmental features (disruption to the environment) and railway crossings that are not on future road alignment.					
production of Green House Gas Emissions by SPS.	Some sections >5m depth. Sewers will most likely not be on a future road					
	alignment. Project will need a separate Schedule B					