UPATED REPORT FOR PUBLIC CONSULTATION

PREPARED BY HEMSON FOR THE CITY OF VAUGHAN

DEVELOPMENT CHARGES BACKGROUND STUDY FOR THE VMC WEST INTERCHANGE SANITARY SEWER SERVICE AREA

Updated: April 26th 2021

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EXECUTIVE SUMMARY

The following summarizes the finding of the City of Vaughan's Area-Specific Development Charges (ASDC) Background Study for the Vaughan Metropolitan Centre (VMC) West Interchange Service Area. The development charges identified in the study would be applied in addition to the City-wide DCs levied under DC By-law 083-2018.

A. STUDY CONSISTENT WITH DEVELOPMENT CHARGES LEGISLATION

- In May 2018, the Council of the City of Vaughan approved the City-wide and Area-Specific Development Charges Background Study and passed City-wide DC By-law 083-2018 and 12 ASDC By-laws, which all thirteen by-laws came into force on September 21, 2018.

- This ASDC Background Study and associated by-law relates only to By-law 094-2018, which constitutes the VMC West Interchange Sanitary Sewer Area. This study recalculates area-specific development charges in compliance with the provisions of the *Development Charges Act, 1997* (DCA) and its associated regulation (*Ontario Regulation 82/98*) and the recently amended provisions of the legislation.

- During the consultation period prior to approval of the 2018 ASDC By-laws staff acknowledged to affected landowners that the population and costing figures used to develop rates for the "VMC West Interchange Sanitary Sewer" By-law 094-2018 were based on the best information that was available at the time with the expectation that the by-law would likely require an amendment once more information was made available and prior to the existing by-law expiry in September 2023.

- Since the approval of the original ASDC by-law staff have continued working with the affected landowners to better determine the sanitary sewer needs in relation to anticipated development, affected population, revised costs and associated rates. Construction of the Interchange Way sanitary trunk sewer, from Highway 7 to Jane Street is now complete with as built costs available to be included in the revised ASDC background study. The remaining works north of Highway 7 will be front-end constructed at a future date. The costs included in this ASDC are inclusive of the sanitary sewer works both north and south of Highway 7.

- The City needs to implement development charges to fund the capital projects necessary in the Vaughan VMC West service area so that new development pays for its capital requirements to the extent allowed by the DCA and so that new services required by growth are provided in a fiscally responsible manner. Importantly, this study and by-law will be used as the basis to help the City finalize the front-ending agreement with landowners to facilitate development in the immediate future.

- The DCA and Ontario Regulation (O. Reg.) 82/98 require that a development charges background study be prepared in which development charges are determined with reference to:
  - A forecast of the amount, type and location of residential and non-residential development anticipated;
  - A review of future capital projects, including an analysis of gross expenditures, funding sources and net expenditures incurred or to be incurred by the City to provide for the expected development, including the determination of the development and non-development-related components of the capital projects;
  - An examination of the long-term capital and operating costs for the capital infrastructure required for each service to which the development charges by-law relates; and
  - An asset management plan to deal with all assets whose capital costs are proposed to be funded under the DC by-law, and that demonstrates that all assets are financial sustainable over their full life cycle.
- This report identifies the development-related net capital costs attributable to development that is forecast to occur in the VMC West service area. These costs are apportioned to types of development (residential, non-residential) in a manner that reflects the increase in the need for each service.
- The calculated charges are the maximum charges the City may adopt. Lower charges may be approved; however, this will require a reduction in the capital plan and reduced service levels, or financing from other sources, likely property taxes and utility rates.

A. SANITARY SEWER SERVICE WITH AREA-SPECIFIC DEVELOPMENT-RELATED COSTS INCLUDED IN THE ANALYSIS

The capital costs included in this study relate to the provision of sanitary sewer service works necessary to allow development to proceed in VMC West Area.

B. DEVELOPMENT FORECAST

- A forecast of the amount, type and location of residential and non-residential development anticipated in the VMC West area over the 2021-2040 planning period was used in the ASDC calculation.

- The development forecast was prepared by the City's planning, engineering and development finance departments as well as continued consultation with the affected land owners.

- The development forecast for the 2021 to 2040 planning period estimates that the VMC West area will accommodate about 24,700 new dwelling units by 2040. The population in these new dwelling is estimated at 46,000.

- Approximately 491,600 square metres of new, non-residential building space is anticipated between 2021 and 2040. This new non-residential space will accommodate approximately 19,400 jobs.

- The following is a summary of the projected growth for the VMC West service area in the City:

Development Forecast	Growth Over Planning Period 2021 to 2040
Residential	
Total Occupied Dwellings	24,737
Multiples	928
Large Apart. (> 700 sq.ft.)	8,335
Small Apart. (< 700 sq.ft)	15,474
Population in New Dwellings	46,046
Non-Residential	
Employment for DC Study	19,408
Non-Residential Building Space (sq. m.)	491,554

C. DEVELOPMENT-RELATED CAPITAL PROGRAM

- City staff, in collaboration with Hemson Consulting, have prepared a development-related capital program setting out the projects that are required to service anticipated development in the VMC West area to 2040.

- The total cost associated with the area-specific development-related work related to the sanitary sewer improvements amounts to $17.75 million. The costs included in the ASDC are inclusive of the works both north and south of Highway 7.

- The entire $17.75 million in the sanitary sewer capital program will be recovered from development charges over the 2021-2040 planning period.

- No grants, subsidies or other recoveries are anticipated.

The following is a summary of the development-related capital forecast for the sanitary sewer service:

Area-Specific Sanitary Sewer Works (2021 to 2040)		
Project Desciption	**Gross Cost ($000)**	**DC Eligible Cost ($000)**
Phase 1: Construction South of Highway 7	$12,602	$12,602
Phase 2: Construction North of Highway 7	$5,150	$5,150
Total	**$17,752**	**$17,752**

- Appendix B provides details on the calculation for the infrastructure works.

D. DEVELOPMENT CHARGES ARE CALCULATED WITH FULL REFERENCE TO THE DCA

- The fully calculated residential ASDCs are recommended to vary by unit type, reflecting the difference in occupancy patterns expected in various unit types and associated differences in demand placed on municipal services.

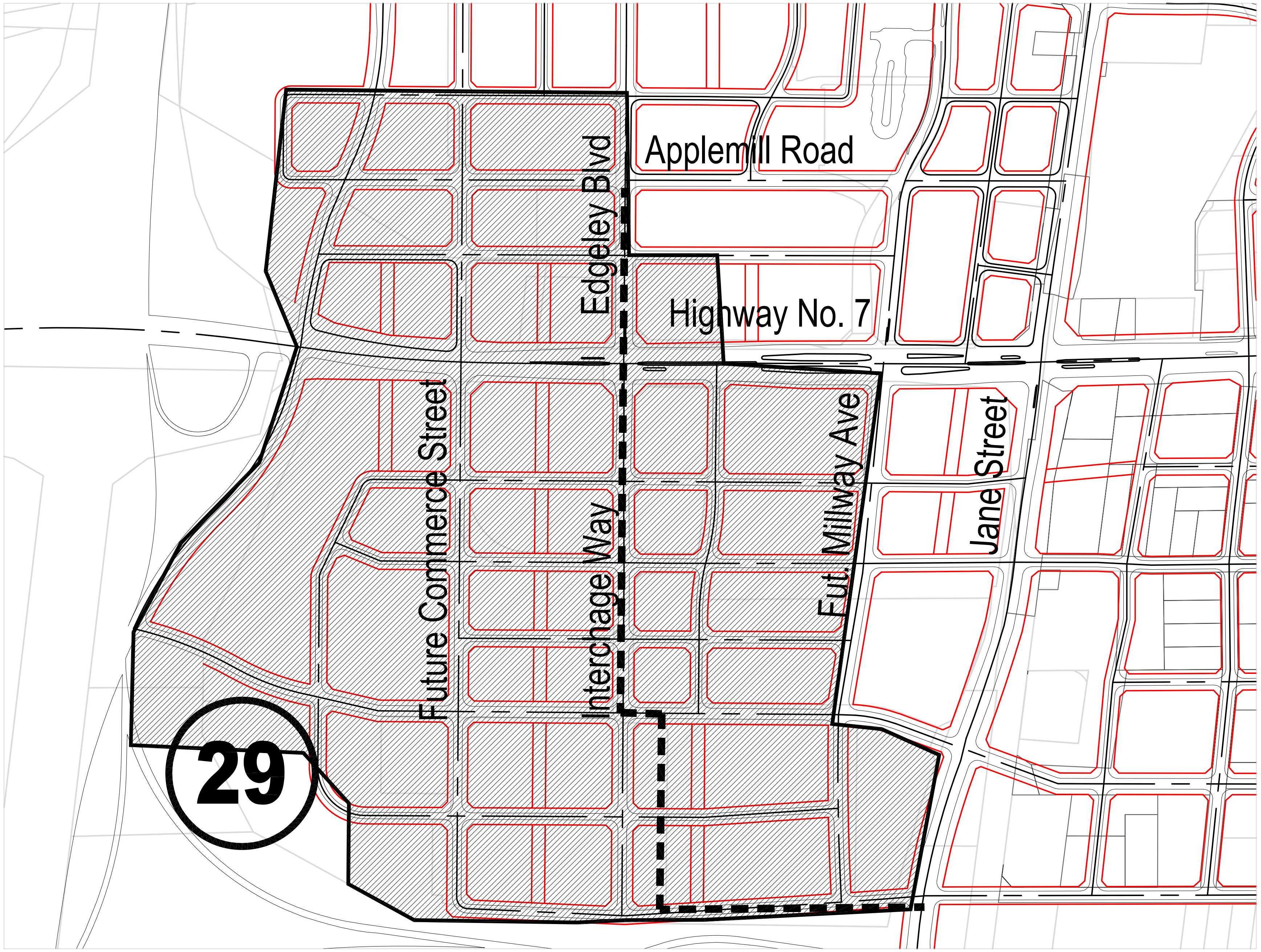
Calculated Residential Area-Specific Development Charges

Service	Unadjusted Charge Per Capita	Residential Charge By Unit Type [1]			
		Singles & Semis	Townhouses & Multiples	Large Apartments (≥ 700 sq.ft.)	Small Apartments (< 700 sq.ft.)
Sanitary Sewer Improvements	$269.87	$982	$810	$599	$432
(1) Based on Persons Per Unit of:		*3.64*	*3.00*	*2.22*	*1.60*

- The calculated non-residential ASDCs are uniform and applicable to all non-residential development.

Calculated Non-Residential Area-Specific Development Charges

Service	Non-Residential Charge per Square Metre
Sanitary Sewer Improvements	$10.83
Charge levied per Square Meter of Gross Floor Area	



SCHEDULE "B"
AREA SPECIFIC
DEVELOPMENT CHARGES

BY-LAW NUMBER: 2021

PASSED THE ____ DAY OF ____________, 2021

SIGNING OFFICERS

MAYOR

CLERK

VMC SW - SANITARY SEWER IMPROVEMENTS

SERVICE AREA

PROPOSED SANITARY SEWER

29 CITY BLOCK NUMBER

NOT TO SCALE

VAUGHAN

Acad File: O:\IPCAM\Engineering and Infrastructure Planning\30-Development Charges\2021

1. INTRODUCTION AND BACKGROUND

This City of Vaughan Area-Specific Development Charges (ASDC) Background Study for the VMC West Interchange Service Area is presented as part of a process to lead to the approval of a new ASDC by-law in compliance with the *Development Charges Act, 1997* (DCA) and its associated *Ontario Regulation 82/98* (O. Reg. 82/98).

In May 2018, the Council of the City of Vaughan approved the City-wide and Area- Specific Development Charges Background Study and passed City-wide DC By-law 083-2018 and twelve (12) ASDC By-laws of which all thirteen (13) DC By-laws came into force on September 21st, 2018.

During the consultation period prior to approval of the 2018 ASDC By-laws staff acknowledged to affected landowners that the population and costing figures used to develop rates for the "VMC West Interchange Sanitary Sewer" By-law 094-2018 were based on the best information that was available at the time but that the by-law would most likely require an adjustment once more information was made available and prior to the existing by-law expiry, which would be in September 2023.

Since the approval of the original ASDC by-law staff have continued working with the affected landowners to better determine the sanitary sewer needs in relation to anticipated development, affected population, revised costs and associated rates. Construction of the Interchange Way sanitary trunk sewer, from Highway 7 to Jane Street is now complete with as built costs available to be included in the revised ASDC background study. The remaining works north of Highway 7 will be front-end constructed at a future date. The costs included in the ASDC are inclusive of the works both north and south of Highway 7.

Therefore, the City wishes to update the existing ASDCs to fund development-related capital projects so that development may be serviced in a fiscally responsible manner. Importantly, this ASDC Study and by-law will be used as the basis to help the City finalize the front-ending agreement with landowners to facilitate development in the immediate future.

The DCA and O. Reg. 82/98 require that a development charges background study be prepared in which development charges are determined with reference to:

- A forecast of the amount, type and location of development anticipated;
- A review of capital works in progress and anticipated future capital projects, including an analysis of gross expenditures, funding sources, and net expenditures incurred or to

be incurred by the City or its local boards to provide for the expected development, including the determination of the development and non-development-related components of the capital projects;

- An examination of the long-term capital and operating costs for the capital infrastructure required for each service to which the development charges by-laws would relate; and

- As asset management plan to deal with all assets whose capital costs are proposed to be funded under the DC by-law, demonstrating that all assets included in the capital program are financially sustainable over their full life cycle.

This study presents the results of the review, which determines the net capital costs attributable to new development that is forecast to occur in the VMC West Interchange Sanitary Sewer Service Area between 2021 and 2040. These development-related net capital costs are apportioned to various types of development (residential; non-residential) in a manner that reflects the increase in the need for each service.

The City of Vaughan currently levies development charges on a city-wide, uniform basis in addition to other area-specific development charges. The city-wide charges recover for development-related costs for the provision of Engineering, Public Works, Community Services, Library, Fire & Rescue, and General Government. These city-wide services as well as the remaining eleven 2018 Area-Specific development Charges by-law are not being reviewed as part of this study.

The DCA provides for a period of public review and comment regarding the proposed development charges. This process includes considering and responding to comments received by members of the public about the calculated charges and methodology used. Following completion of this process, and in accordance with the DCA and Council's review of this study, it is intended that Council will pass new ASDCs for VMC West Interchange Sanitary Sewer Service Area.

The remainder of this study sets out the information and analysis upon which the proposed development charges are based.

Section II designates the services for which the development charges are proposed and the areas within the City to which the development charges will apply. It also briefly reviews the methodology that has been used in this background study.

Section III presents a summary of the forecast residential and non-residential development that is expected to occur within VMC West over the 2021–2040 period.

Section IV summarizes the future development-related capital costs associated with the provision of sanitary sewer services related to development in VMC West Interchange Sanitary Sewer Service Area.

Section V details the calculated ASDC rates by class and type of development.

Section VI provides an examination of the long-term capital and operating cost impacts for the infrastructure included in the ASDC calculation. It also addresses the asset management provisions required to maintain the development-related components of the capital projects included in the analysis.

Section VII provides a discussion of other issues and considerations including by-law administration, rules and policies.

2. Area-Specific Approach is Used to Align Development-Related Costs and Benefits

Several key steps are required when calculating any development charge. However, specific circumstances arise in each municipality that must be reflected in the calculation. Therefore, we have tailored our approach to the unique circumstances in the City of Vaughan and the VMC West Sanitary Sewer Service Area. The approach to the proposed area-specific development charges is focused on providing a reasonable alignment of development-related costs with the development that necessitates them.

A. AREA-SPECIFIC DEVELOPMENT CHARGES ARE CALCULATED

The DCA provides municipalities with flexibility to define services that will be included in the development charge by-laws, provided that the other provisions of the Act and its associated regulations are met. The DCA also requires that the by-laws designate the areas within which the by-laws shall be imposed. The development charges may apply to all lands in the municipality or to other designated development areas as specified in the by-laws.

The City of Vaughan currently levies development charges on both a City-wide and Area-Specific basis.

This ASDC Background Study calculates development charges related to the provision of engineered service related to sanitary sewers within the VMC West Service Area. The area-specific approach is applied to the service to align the capital costs for this service with the particular areas that will be serviced by the required infrastructure. No changes to the City-wide DC by-law or remaining eleven ASDC by-laws are proposed as part of this study or to the DC by-law related to the Edgeley Pond and Black Creek Channel Works.

B. KEY STEPS IN DETERMINING AREA-SPECIFIC DEVELOPMENT CHARGES FOR FUTURE DEVELOPMENT-RELATED PROJECTS

Several key steps are required in calculating development charges for future development-related projects. These are summarized below.

1. Development Forecast

The first step in the methodology requires a development forecast to be prepared for the study period, in this case from 2021 to 2040. The forecast of the future residential and non-residential development used in this study was prepared by the City's planning, engineering and development finance departments as well as continued consultation with the affected land owners. The forecasts are based on the number of known applications anticipated with the planning area as well as land use designations and policies.

When calculating the development charge, the development-related net capital costs are spread over the total population that will occupy new housing units in VMC West Interchange area. This population in new units represents the population from which development charges will be collected.

The non-residential portion of the forecast estimates the Gross Floor Area (GFA) of non-residential building space to be developed in VMC West Interchange area over the planning period.

2. Development-Related Capital Program and DC Eligible Costs to be Recovered Through the ASDCs

A development-related capital program has been prepared by the City based on built costs for the construction of the Interchange Way sanitary trunk sewer, from Highway 7 to Jane Street. The remaining works north of Highway 7 are estimated and will be constructed at a future date. The program identifies development-related projects and their gross and net costs, after allowing for capital grants, subsidies or other contributions as required by the Act (DCA, s. 5. (2)). The capital forecast provides another cornerstone upon which development charges are based. The DCA requires that the increase in the need for service attributable to the anticipated development may include an increase:

> *… only if the council of the municipality has indicated that it intends to ensure that such an increase in need will be met. (s. 5. (1) 3.)*

The development-related capital program prepared for this study ensures that development charges are only imposed to help pay for projects that have been or are intended to be purchased or built in order to accommodate future anticipated development. It is not sufficient in the calculation of development charges merely to have had the service in the past. There must also be a demonstrated commitment to continue to emplace facilities or infrastructure in the future. In this regard, Ontario Regulation 82/98, s. 3 states that:

For the purposes of paragraph 3 of subsection 5 (1) of the Act, the council of a municipality has indicated that it intends to ensure that an increase in the need for service will be met if the increase in service forms part of an Official Plan, capital forecast or similar expression of the intention of the council and the plan, forecast or similar expression of the intention of the council has been approved by the council.

As required by the DCA, s. 5. (1) 6., any portion of projects and their associated net costs that are considered to benefit existing residents are the funding responsibility of the City from non-development charges sources. However, the projects identified in the development-related capital program for the VMC West Interchange Sanitary Sewer service area only relate to servicing new development, therefore, the entire amount will be funded through development charges.

3. Attribution to Types of Development

The next step in the determination of development charges is the allocation of the development-related net capital costs between the residential and non-residential sectors. This is done using apportionments for different services in accordance with the demands placed and the benefits derived.

The apportionment is based on the expected demand for, and use of, the service by sector (e.g. shares of population in new units and employment).

Finally, the residential component of the development charge is applied to different housing types on the basis of average occupancy factors. The non-residential component is applied on the basis of gross building space in square metres.

3. Development Forecast

This section provides the basis for the development forecasts used in calculating the ASDCs, as well as a summary of the forecast results. A more detailed summary is provided in Appendix A.

A. RESIDENTIAL FORECAST

Development charges are levied on residential development as a charge per new unit. Therefore, for the residential forecast, a projection of the population in new housing units is required. This population in new units represents the population from which development charges will be collected.

Table 1 provides a summary of the residential forecast over the planning period from 2021 to 2040.

The VMC West Interchange Sanitary Sewer Service Area is anticipated to see about 24,700 new housing units over the planning period. These units are anticipated to be accommodated within lands designated for residential development within the service area boundary. The forecast of population expected to reside in these new housing units over the 2021 to 2040 period is approximately 46,000 additional persons.

B. NON-RESIDENTIAL FORECAST

Development charges are levied on non-residential development as a charge per square foot of gross floor area (GFA). As with the residential forecast, the non-residential forecast requires a projection of the employment growth associated with new floor space in the City.

The VMC West Interchange Sanitary Sewer Service Area is anticipated to accommodate 19,400 jobs within new non-residential space over the 2021 to 2040 planning period. Approximately 491,600 square metres of new non-residential building space is anticipated.

Table 1 also provides a summary of the non-residential development forecasts used in this analysis.

Table 1 – The City of Vaughan – Vaughan Metropolitan Centre West Interchange Sanitary Sewer Service Area – Summary of Residential and Non-Residential Development Forecast

Development Forecast	Growth Over Planning Period 2021 to 2040
Residential	
Total Occupied Dwellings	24,737
Multiples	928
Large Apart. (> 700 sq.ft.)	8,335
Small Apart. (< 700 sq.ft)	15,474
Population in New Dwellings	46,046
Non-Residential	
Employment for DC Study	19,408
Non-Residential Building Space (sq. m.)	491,554

4. THE DEVELOPMENT-RELATED CAPITAL PROGRAM

The DCA requires the Council of a municipality to express its intent to provide future capital facilities at the average historical service level incorporated in the development charges calculation. As noted above in Section II, Ontario Regulation 82/98, s. 3 states that:

For the purposes of paragraph 3 of subsection 5 (1) of the Act, the council of a municipality has indicated that it intends to ensure that an increase in the need for service will be met if the increase in service forms part of an official plan, capital forecast or similar expression of the intention of the council and the plan, forecast or similar expression of the intention of the council has been approved by the council.

A. A DEVELOPMENT-RELATED CAPITAL FORECAST IS PROVIDED FOR COUNCIL'S APPROVAL

Based on the development forecasts summarized in Section III and detailed in Appendix A, City staff, in collaboration with the consultants have created a development-related capital program setting out those projects that are required to service anticipated growth over the planning period.

One of the recommendations contained in this ASDC Background Study is for Council to adopt the capital programs created for the purposes of this area-specific development charges calculation. It is assumed that future capital budgets and forecasts will continue to bring forward the development-related projects contained herein, that are consistent with the development occurring in the VMC West Interchange Sanitary Sewer Area. It is acknowledged that changes to the forecast presented here may occur through the City's normal capital budget process.

B. THE DEVELOPMENT-RELATED CAPITAL FORECAST FOR SANITARY SEWER SERVICE

Table 2 provides the development-related capital recoveries for the engineered service of sanitary sewers. The area-specific capital program totals $17.75 million and provides servicing for anticipated development over the planning period. It should be noted that the original ASDC approved in 2018 assumed a net capital cost of $1.80 million. The significant cost escalation of the project is due to a more detailed analysis, which determined that some of the works could only be completed through the use of micro tunneling due to the proximity with other existing municipal infrastructure along Interchange Way. The increase in cost can also be attributed to upsizing the sanitary sewer infrastructure required for the anticipated increase in population and employment within the area.

No grants, subsidies and other recoveries have been identified for these projects and thus the net municipal cost remains at $17.75 million. The entire net capital program is associated with the infrastructure requirements for the construction of sanitary sewer works both north and south of Highway 7, therefore, the DC eligible cost included in the calculation remains at $17.75 million.

Table 2 – Summary of Development-Related Capital Program for Area-Specific Services 2021 to 2040

Area-Specific Sanitary Sewer Works (2021 to 2040)		
Project Desciption	**Gross Cost ($000)**	**DC Eligible Cost ($000)**
Phase 1: Construction South of Highway 7	$12,602	$12,602
Phase 2: Construction North of Highway 7	$5,150	$5,150
Total	**$17,752**	**$17,752**

5. Area-Specific Development Charges Are Calculated in Accordance with the DCA

This section summarizes the calculation of ASDCs for each service and the resulting total charges by sector. The calculation of the "unadjusted" per capita (residential) and per square metre (non-residential) charges are reviewed.

For residential development, the adjusted total per capita amount is then converted to a variable charge by housing unit type using various unit occupancy factors. For non-residential development, the charges are based on gross floor area (GFA) of building space.

It is noted that the calculation of the ASDCs does not include any provision for exemptions required under the DCA, such as the exemption from the payment of DCs for industrial buildings. Such legislated exemptions, or other exemptions that Council may choose to provide, will result in loss of DC revenue for the affected types of development. However, any such revenue loss may not be made up by offsetting increases in other portions of the calculated charge.

A. Development Charges Calculation

A summary of the calculated residential and non-residential ASDCs is presented across the following pages. Further details of the calculations are available in Appendix B.

1. Unadjusted Residential and Non-Residential Development Charges

Table 3 displays the calculation of the unadjusted rates for the sanitary sewer services in the VMC West Interchange area.

The total net municipal cost of the sanitary sewer development-related projects, $17.75 million, will be recovered by way of development charges. Table 3 shows the entire amount is related to development within the VMC West Interchange Sanitary Sewer service area over the 2021-2040 planning period and has been included in the area-specific development charge calculation.

Table 3

City of Vaughan - Vaughan Metropolitan Centre West Service Area
Summary of Unadjusted Residential and Non-Residential Development Charges
2021-2040 Area-Specific Capital Program

2021-2040 Year Growth in Population in New Units	46,046
2021-2040 Year Growth in New Building Space (sq.m.)	491,554

Service	Development-Related Capital Program (2021-2040)					Residential Share		Non-Residential Share	
	Net Municipal Cost ($000)	Replacement & Benefit to Existing ($000)	Available DC Reserves ($000)	Post 2040 ($000)	Total DC Eligible Costs for Recovery ($000)	%	($000)	%	($000)
1.0 SANITARY SEWER SERVICES	$17,751.8	$0.0	$0.0	$0.0	$17,751.8	70%	$12,426	30%	$5,326
Unadjusted Development Charge Per Capita									
Unadjusted Development Charge Per Square Metre							$269.87		
									$10.83
TOTAL 2021-2040 SANITARY SEWER SERVICES	**$17,751.8**	**$0.0**	**$0.0**	**$0.0**	**$17,751.8**		**$12,426.2**		**$5,325.5**
Unadjusted Development Charge Per Capita							**$269.87**		
Unadjusted Development Charge Per Square Metre									**$10.83**

The capital program eligible for recovery through development charges is allocated to the residential and non-residential sectors based on future shares of population in new units and employment growth over the planning period. On this basis, the allocation to the residential and non-residential sectors is calculated at 70 per cent and 30 per cent, respectively.

As a result, $12.43 million of the sanitary sewer capital program is deemed to benefit residential development. When this amount is divided by the growth in population in new dwelling units over the planning period (46,046) an unadjusted charge of $269.87 per capita is the result.

The non-residential share totals $5.33 million and, when this amount is divided by the forecast of non-residential space growth (491,554 square metres) an unadjusted charge of $10.83 per square metre is the result.

For residential development the charge per capita amount ($269.87) is then converted to a variable charge by housing unit type using various unit occupancy factors within each dwelling unit form (Table 4). The table indicates the charge for a single-semi detached unit is $982, $810 for a townhouse or other type of multiple unit, and $599 for large apartments (≥ 700 sq. ft.), and $432 for small apartments (≤ 700 sq. ft.). The unadjusted charge of $10.83 per square metre is maintained (Table 5).

Consistent with the City's current administration of Area-Specific Development Charges, the borrowing cost and interest earnings associated with the timing of expenditures and development charge receipt has not been incorporated into the calculations.

TABLE 4

CITY OF VAUGHAN
VAUGHAN METROPOLITAN CENTRE - WEST INTERCHANGE SANITARY SEWER ASDC
RESIDENTIAL DEVELOPMENT CHARGES BY UNIT TYPE

Service	Unadjusted Charge Per Capita	Residential Charge By Unit Type [1]			
		Singles & Semis	Townhouses & Multiples	Large Apartments (≥ 700 sq.ft.)	Small Apartments (< 700 sq.ft.)
Sanitary Sewer Improvements	$269.87	$982	$810	$599	$432
(1) Based on Persons Per Unit of:		*3.64*	*3.00*	*2.22*	*1.60*

TABLE 5

CITY OF VAUGHAN
VAUGHAN METROPOLITAN CENTRE - WEST INTERCHANGE SANITARY SEWER ASDC
NON-RESIDENTIAL DEVELOPMENT CHARGES PER SQUARE METRE

Service	Non-Residential Charge per Square Metre
Sanitary Sewer Improvements	$10.83
Charge levied per Square Meter of Gross Floor Area	

B. COMPARISON OF PROPOSED AND EXISTING DEVELOPMENT CHARGES

Tables 6 and 7 present a comparison of total proposed residential and non-residential ASDC development charges respectively with the City's existing charges (as at January 1 2021).

Table 6 shows that the calculated charge residential units produce an increase of 72% over the present development charges with increases ranging from $411 for a SFD unit to $181 for a small apartment). Non-residential development charges are proposed to increase by $5.32 per square meter (or 97%) from the current rate of $5.51 per square meter (Table 7). The increase is reflective of the significant increase in expenditures realized with the actual construction costs of the Interchange Way sanitary trunk sewer, from Highway 7 to Jane Street relative to the original, by-law which estimated the cost of the works to be $1,803,260. Also of note, the scope of work identified in this study is more robust than what was previously identified – some of the works could only be completed through the use of micro tunneling due to the proximity with other existing municipal infrastructure along Interchange Way. The increase in cost can also be attributed to upsizing the sanitary sewer infrastructure required for the anticipated increase in population and employment in the area.

TABLE 6

CITY OF VAUGHAN
VAUGHAN METROPOLITAN CENTRE - WEST INTERCHANGE SANITARY SEWER ASDC
COMPARISON OF CURRENT AND CALCULATED
RESIDENTIAL DEVELOPMENT CHARGES

Service	Current Residential Charges*	Calculated Residential Charges	Difference in Charge	
Single & Semi Detached	$571	$982	$411	72%
Townhouses & Multiples	$471	$810	$339	72%
Large Apartment	$348	$599	$251	72%
Small Apartment	$251	$432	$181	72%

** Represents rates effective January 1 2021. DC By-law 094-2018 and adjusted for indexing.*

TABLE 7

CITY OF VAUGHAN
VAUGHAN METROPOLITAN CENTRE - WEST INTERCHANGE SANITARY SEWER ASDC
COMPARISON OF CURRENT AND CALCULATED
NON-RESIDENTIAL DEVELOPMENT CHARGES

Service	Non-Residential ($/Square Metre)			
	Current Non-Residential Charge*	Calculated Non-Residential Charge	Difference in Charge	
Sanitary Sewer Improvements	$5.51	$10.83	$5.32	97%

** Represents rates effective January 1 2021. DC By-law 094-2018 and adjusted for indexing.*

Charge levied per Square Meter of Gross Floor Area

6. Long-Term Capital and Operating Costs and Asset Management Provisions

This section provides a brief examination of the long-term capital and operating costs for the area-specific capital facilities and infrastructure to be included in the ASDC by-law. Also addressed is the required asset management provisions that must be considered.

A. NO NET INCREASE IN OPERATING COSTS ARE ANTICIPATED OVER THE FORECAST PERIOD

The DCA requires that a background study estimate the future tax supported operating cost implications of the development-related capital program contained in the study. The capital program contained in this background study relates to the provision of sewer services in VMC West.

Funds required for operating the water and sewer systems are generated through the utility rates. Any additional operating costs as a result of the capital program will be included in the rates. Also of note, as the projects identified in the development-related capital program for the VMC West Interchange service area only relate to servicing new development, the entire amount will be funded through development charges and no component of the program will require funding from non-development charge sources.

B. ANNUAL ASSET MANAGEMENT PLAN PROVISION REQUIREMENTS

The Development Charges Act was amended in late 2015 and, effective January 1st, 2016, municipalities are required to complete an Asset Management Plan before the passing of a development charges by-law. A key function of the Asset Management Plan is to demonstrate that all assets proposed to be funded under the development charges by-law are financially sustainable over their full life cycle.

Table 8 summarizes the annual capital provisions required to replace the capital infrastructure proposed to be funded through ASDCs under the by-law. This estimate is based on useful life assumptions typically used by City staff and the capital cost of acquiring and/or emplacing each asset.

Table 8 illustrates that at build-out, the City will need to fund an additional $288,000 per annum in order to properly fund the full life cycle costs of the new assets supported under this by-law.

The calculated annual funding provision should be considered within the context of the City's projected growth. The VMC West Interchange sanitary sewer service area is projected to grow by approximately 24,700 new households as well as roughly 19,400 new employees. This growth will have the effect of increasing the overall assessment base to offset the capital asset provisions required to replace the infrastructure proposed to be funded through ASDCs under the by-law.

The calculated annual provisions identified are considered financially sustainable as it is expected that the increased capital asset management requirements can be absorbed by the tax and user base over the long-term.

Table 8 – Calculated Annual Provisions by 2040

Service	2021-2040 Capital Program		Calculated AMP Annal Provision by 2040	
	DC Recoverable	Non-DC Funded	DC Related	Non-DC Related
Engineered Services	$17,751,773	$0	$288,021	$0
Total 2040 Provisions	**$17,751,773**	**$0**	**$288,021**	**$0**

7. Other Issues and Consideration

A. DEVELOPMENT CHARGES ADMINISTRATION

No significant changes are recommended to the City's current policies and practices regarding development charge administration. In this regard:

- It is recommended that practices regarding collection of development charges and by-law administration continue to the extent possible.
- As required under the DCA, the City should codify any rules regarding application of the by-laws and exemptions within the development charges by-laws proposed for adoption.
- It is recommended that Council adopt the development-related capital program included in this background study, subject to annual review through the City's normal capital budget process.

Appendix A

Development Forecast

APPENDIX A – DEVELOPMENT FORECAST

This appendix provides details of the development forecast used to prepare the 2021 Area-Specific Development Charges (ASDC) Background Study for VMC West Interchange Sanitary Sewer Service Area in Vaughan. The forecast method and assumptions are discussed herein.

A. FORECAST APPROACH AND KEY ASSUMPTIONS

The Development Charges Act (DCA) requires an estimate of "the anticipated amount, type and location of development" for which development charges may be imposed. The forecast must cover both residential and non-residential development and be specific enough with regards to the quantum, type, location and timing of such development to assist in the preparation of a reasonable development-related capital program. For the purposes of this ASDC Background Study, a development forecast for the planning period of 2021 to 2040 has been considered in this study (2040 is considered to be the build-out horizon).

Forecasts of population, households and employment were prepared by the City's planning, engineering and development finance departments with input and consultation with the affected land owners. The forecast considers a detailed review of the land use designations and policies, active development applications within noted service area. It is noted that assumptions related to persons per unit are generally based on the most recent census data detailing historical occupancy patterns in the City and consistent with those identified in the City-wide DC Background Study.

B. FORECAST METHOD AND RESULTS

Development charges are levied on residential development as a charge per new unit. Therefore, for the residential forecast, a projection of the population in new housing units is required. This population in new units represents the population from which development charges will be collected. For the purposes of this study, the population in new units is also considered the census population growth in this area.

Development charges are levied on non-residential development as a charge per square metre of gross floor area (GFA). As with the residential forecast, the non-residential forecast requires a projection of the employment growth associated with new floor space in the City.

1. Residential Forecast

The residential development forecast incorporates anticipated growth in population and occupied dwelling units by type. The residential development charges calculation is based on a forecast of population growth in new housing units in the VMC West Interchange Sanitary Sewer Service Area. The population in new units considered the overall occupancy assumptions from the most recent census results.

As detailed in Table 1, the VMC West Service Area is anticipated to see nearly 24,700 new housing units over the planning period. These units are anticipated to be accommodated within lands designated for residential development within VMC West Interchange Area. The forecast indicates that nearly all housing units constructed are anticipated to be high density - over 60% (15,474 units) of the total occupied housing units are anticipated to be small apartments with almost 35% (8,335) attributed to large apartments. Less than 5% of anticipated household unit construction is related to multiple dwelling units.

Population growth in new units is estimated by applying the following PPUs to the housing unit forecast: 3.64 for single-semi detached units, 3.00 for row units, 2.22 for large apartments (≥ 700 sq. ft.), and 1.60 for small apartments (≤ 700 sq. ft.). These PPU assumptions are generally consistent with the most recent 2016 census information regarding historical occupancy patterns and consistent with the PPU's identified in the City-wide DC Background Study. The forecast of population expected to reside in these new housing units over the 2021 to 2040 period is approximately 46,000 additional persons. This population growth by unit type is shown in Table 1, while specific details on historical occupancy patterns in the City are shown in Table 2.

2. Non-Residential Forecast

Table 3 shows that VMC West Interchange Sanitary Sewer Service Area is anticipated to accommodate nearly 19,400 jobs within new non-residential space over the 2021 to 2040 planning period.

Non-residential development charges are calculated on a per unit of gross floor area (GFA) basis. Therefore, as per the DCA, a forecast of future non-residential building space has been developed. As with the residential forecast, the GFA forecast covers the period from 2021 to 2040. Approximately 491,600 square metres of new non-residential building space is anticipated, most of which, is considered to be office related.

TABLE 1

CITY OF VAUGHAN
VAUGHAN METROPOLITAN CENTRE - WEST INTERCHANGE SANITARY SEWER ASDC
SUMMARY OF RESIDENTIAL DEVELOPMENT FORECAST - POPULATION IN NEW HOUSEHOLDS TO BUILD-OUT

Landowner	Development Timing	Residential Units			Population in New Households
		Multiples	Large Apart. (> 700 sq.ft.)	Small Apart. (< 700 sq.ft)	
Mobilio Developments	0 - 5 Years	397	40	711	2,417
Icono	0 - 5 Years	16	872	761	3,201
2748355 Canada ltd.	11 - 15 Years	-	-	-	-
2748355 Canada ltd.	11 - 15 Years	20	309	494	1,536
2748355 Canada ltd.	0 - 5 Years	-	-	2,470	3,952
2748355 Canada ltd.	6 - 10 Years	-	750	750	2,865
2748355 Canada ltd.	6 - 10 Years	30	221	377	1,184
2748355 Canada ltd.	11 - 15 Years	-	-	-	-
2748355 Canada ltd.	16 - 20 Years	-	-	-	-
2748355 Canada ltd.	11 - 15 Years	-	-	-	-
2748355 Canada ltd.	11 - 15 Years	10	536	819	2,530
2748355 Canada ltd.	0 - 5 Years	200	550	1,125	3,621
2748355 Canada ltd.	11 - 15 Years	20	320	510	1,586
Toromont Industries Ltd.	6 - 10 Years	33	631	996	3,093
Toromont Industries Ltd.	11 - 15 Years	32	611	965	2,996
Toromont Industries Ltd.	11 - 15 Years	-	-	-	-
SmartREIT	11 - 15 Years	18	339	536	1,664
SmartREIT	11 - 15 Years	11	205	324	1,007
SmartREIT	11 - 15 Years	-	302	453	1,395
SmartREIT	6 - 10 Years	19	352	555	1,726
SmartREIT	6 - 10 Years	19	355	561	1,743
SmartREIT	6 - 10 Years	10	184	290	902
SmartREIT	6 - 10 Years	12	225	355	1,104
Optech	11 - 15 Years	20	373	589	1,830
Mircom	11 - 15 Years	10	187	295	917
Ripple Developments	0 - 5 Years	12	227	359	1,114
Mariott	16 - 20 Years	9	177	280	868
Courtyard by Mariott	16 - 20 Years	-	-	-	-
Ikea	16 - 20 Years	30	569	899	2,792
Total Units		**928**	**8,335**	**15,474**	
TOTAL POPULATION IN NEW HOUSEHOLDS					**46,046**

Note: Population in New Households determined using PPUs consistent with those identified in the City of Vaughan 2018 Development Charges Background Study.

Source: Residential unit projections/timing based on those provided by the City of Vaughan and impacted landowners.

TABLE 2
CITY OF VAUGHAN
HISTORICAL HOUSEHOLDS BY PERIOD OF CONSTRUCTION SHOWING HOUSEHOLD SIZE

	Period of Construction										Period of Construction Summaries		
Dwelling Unit Type	**Pre 1945**	**1946-1960**	**1961-1970**	**1971-1980**	**1981-1990**	**1991-1995**	**1996-2000**	**2001-2005**	**2006-2010**	**2011-2016**	**Pre 2006**	**2006-2016**	**Total**
Singles & Semis													
Household Population	1,245	2,180	2,815	12,375	56,450	16,350	40,730	48,370	41,830	19,680	180,515	61,510	242,025
Households	420	765	955	4,020	17,275	4,615	11,305	13,080	11,215	5,385	52,435	16,600	69,035
Household Size	2.96	2.85	2.95	3.08	3.27	3.54	3.60	3.70	3.73	3.65	3.44	3.71	3.51
Rows													
Household Population	65	100	135	400	2,365	2,585	7,005	8,035	6,945	3,955	20,690	10,900	31,590
Households	25	50	45	160	790	860	2,315	2,425	2,165	1,410	6,670	3,575	10,245
Household Size	2.60	2.00	3.00	2.50	2.99	3.01	3.03	3.31	3.21	2.80	3.10	3.05	3.08
Apartments (excl. Duplexes): Bachelor or 1BR													
Household Population	0	0	85	100	215	255	290	720	1,880	2,390	1,180	2,600	3,780
Households	10	0	80	75	155	185	225	490	1,370	1,725	715	1,785	2,500
Household Size	n/a	n/a	1.06	1.33	1.39	1.38	1.29	1.47	1.37	1.39	1.65	1.46	1.51
Apartments (excl. Duplexes): 2BR or more													
Household Population	0	85	0	220	450	1,730	2,130	1,345	2,130	1,760	5,960	3,890	9,850
Households	0	45	0	125	250	945	1,185	705	1,105	980	3,255	2,085	5,340
Household Size	n/a	1.89	n/a	1.76	1.80	1.83	1.80	1.91	1.93	1.80	1.83	1.87	1.84
Apartments (excl. Duplexes) - Total													
Household Population	105	0	300	730	2,420	2,440	2,500	2,535	4,985	4,860	11,030	9,845	20,875
Households	60	20	180	330	1,385	1,385	1,300	1,355	2,885	2,990	6,015	5,875	11,890
Household Size	1.75	n/a	1.67	2.21	1.75	1.76	1.92	1.87	1.73	1.63	1.83	1.68	1.76
Duplexes													
Household Population	60	150	200	1,360	4,225	970	1,390	765	270	195	9,120	465	9,585
Households	20	55	80	485	1,325	315	420	235	85	65	2,935	150	3,085
Household Size	3.00	2.73	2.50	2.80	3.19	3.08	3.31	3.26	3.18	3.00	3.11	3.10	3.11
All Units													
Household Population	1,490	2,460	3,455	14,870	65,460	22,360	51,620	59,700	54,040	28,685	221,415	82,725	304,140
Households	520	890	1,265	5,000	20,775	7,170	15,345	17,090	16,355	9,850	68,055	26,205	94,260
Household Size	2.87	2.76	2.73	2.97	3.15	3.12	3.36	3.49	3.30	2.91	3.25	3.16	3.23

Note: Population and household values in this table are based on National Household Survey response rates and may differ from Census values
Source: Statistics Canada, 2011 National Household Survey Special Run.

TABLE 3

CITY OF VAUGHAN
VAUGHAN METROPOLITAN CENTRE - WEST INTERCHANGE SANITARY SEWER ASDC
SUMMARY OF NON-RESIDENTIAL DEVELOPMENT FORECAST - GROSS FLOOR AREA (m^2) TO BUILD-OUT

Landowner	Development Timing	Office	Population Related	Institution	GFA (m^2)
Mobilio Developments	0 - 5 Years	-	112	-	112
Icono	0 - 5 Years	-	20,347	-	20,347
2748355 Canada ltd.	11 - 15 Years	-	-	-	-
2748355 Canada ltd.	11 - 15 Years	-	1,383	-	1,383
2748355 Canada ltd.	0 - 5 Years	-	5,766	-	5,766
2748355 Canada ltd.	6 - 10 Years	-	2,523	-	2,523
2748355 Canada ltd.	6 - 10 Years	-	-	-	-
2748355 Canada ltd.	11 - 15 Years	87,913	-	-	87,913
2748355 Canada ltd.	16 - 20 Years	87,913	3,588	-	91,501
2748355 Canada ltd.	11 - 15 Years	-	3,478	-	3,478
2748355 Canada ltd.	11 - 15 Years	-	-	-	-
2748355 Canada ltd.	0 - 5 Years	-	-	7,432	7,432
2748355 Canada ltd.	11 - 15 Years	23,349	-	-	23,349
Toromont Industries Ltd.	6 - 10 Years	25,013	5,003	-	30,016
Toromont Industries Ltd.	11 - 15 Years	-	4,096	-	4,096
Toromont Industries Ltd.	11 - 15 Years	-	-	-	-
SmartREIT	11 - 15 Years	26,273	5,255	-	31,528
SmartREIT	11 - 15 Years	15,870	3,174	-	19,044
SmartREIT	11 - 15 Years	22,223	4,445	-	26,668
SmartREIT	6 - 10 Years	27,213	5,443	-	32,656
SmartREIT	6 - 10 Years	27,508	5,502	-	33,010
SmartREIT	6 - 10 Years	14,234	2,847	-	17,081
SmartREIT	6 - 10 Years	14,709	3,482	-	18,191
Optech	11 - 15 Years	-	2,500	-	2,500
Mircom	11 - 15 Years	-	828	-	828
Ripple Developments	0 - 5 Years	17,599	3,520	-	21,119
Mariott	16 - 20 Years	-	-	-	-
Courtyard by Mariott	16 - 20 Years	3,581	-	-	3,581
Ikea	16 - 20 Years	-	-	7,432	7,432
TOTAL GROSS FLOOR AREA (m^2)					**491,554**
TOTAL PROJECTED EMPLOYMENT					**19,408**

Source: Gross Floor Area projections/timing based on those provided by the City of Vaughan and impacted landowners.

Appendix B

Area-Specific Sanitary Sewer Services Technical Appendix

APPENDIX B – AREA SPECIFIC SANITARY SEWER SERVICE

This appendix provides the detailed analysis undertaken to establish the area-specific development charge rates for the VMC West Interchange Sanitary Sewer Service Area for the provision of Sanitary Sewers.

The development-related capital program is based on as built costs for works north of Highway 7 as construction of the Interchange Way sanitary trunk sewer, from Highway 7 to Jane Street is now complete. The remaining works north of Highway 7 will be front-end constructed at a future date. The costs included in the ASDC are inclusive of the works both north and south of Highway 7. A map outlining the VMC West Interchange service area is illustrated below. The projects identified in the capital program are required to service the demands of the anticipated development in the VMC West Service Area to occur over the planning period of 2021 to 2040.

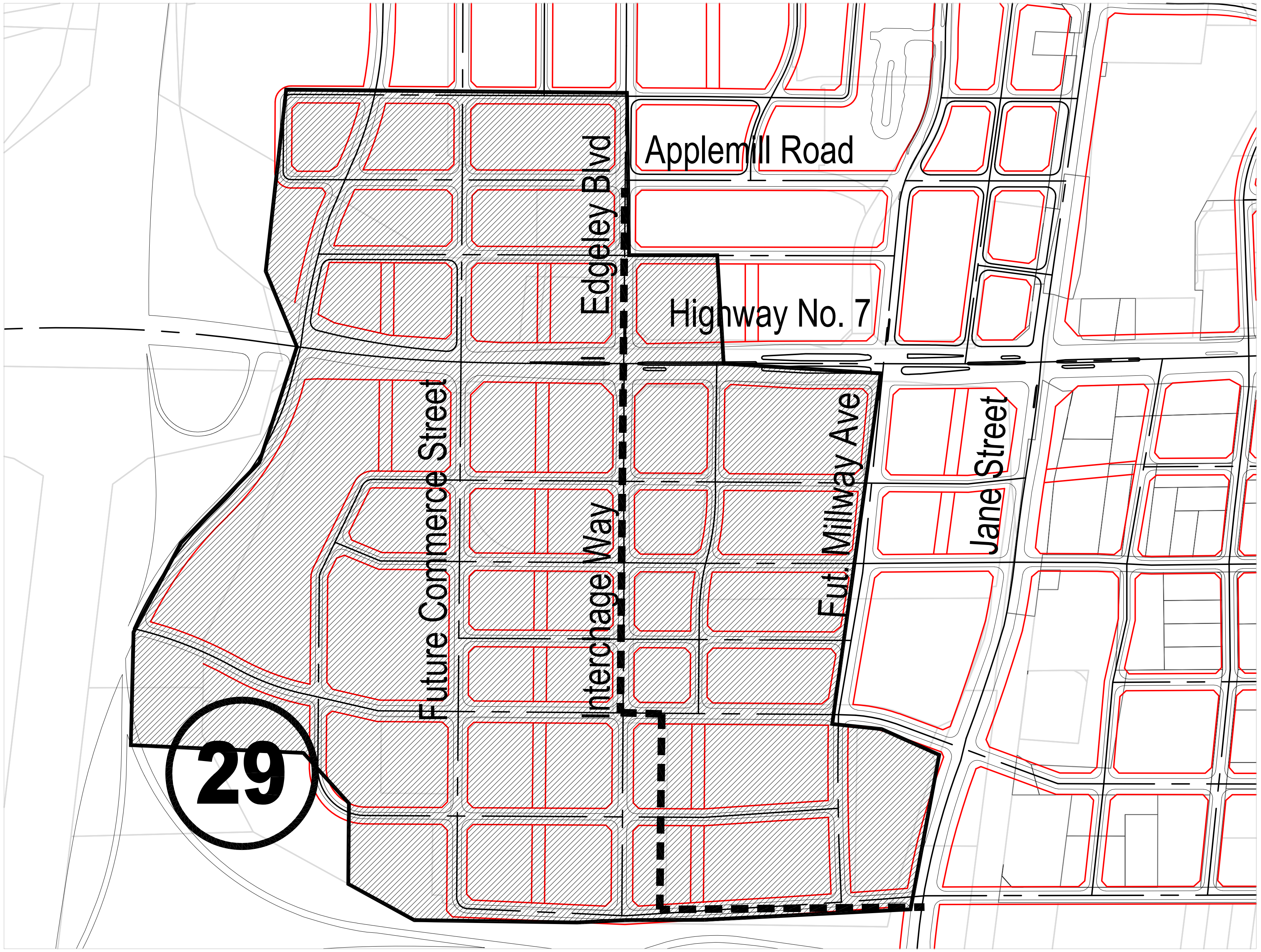
Table 1 provide details of the projects included in the area-specific infrastructure development charges calculations as well as the calculation of the Unadjusted Development Charges.

Table 1: Development-Related Capital Program

The 2021-2040 sanitary sewer capital program totals $17.75 million and includes for the sanitary sewer improvements on Highway 7. The details, timing, and cost breakdown of each project are shown on Table 1.

a) Phase 1: Construction South of Highway 7

b) Phase 2: Construction North of Highway 7



SCHEDULE "B"
AREA SPECIFIC
DEVELOPMENT CHARGES

BY-LAW NUMBER: 2021

PASSED THE ____ DAY OF ____________, 2021

SIGNING OFFICERS

MAYOR

CLERK

VMC SW - SANITARY SEWER IMPROVEMENTS

SERVICE AREA

PROPOSED SANITARY SEWER

29 CITY BLOCK NUMBER

NOT TO SCALE

VAUGHAN

Acad File: O:\PCAM\Engineering and Infrastructure Planning\30-Development Charges\2021

The 2021-2040 development-related costs included in the capital program are entirely recovered through future development charges. As the linear sanitary sewer infrastructure is anticipated to be entirely related to servicing new development, no benefit to existing share has been applied.

The entire $17.75 million is identified as the net development-related share eligible for funding through development charges over the 2021 to 2040 planning period. Table 1 summarizes the Sanitary Services program and calculation of the unadjusted residential and non-residential development charges. The DC eligible share of $17.75 million has been allocated 70 per cent to new residential development and 30 per cent to non-residential development. The allocation of costs is based on the future shares of population in new units and employment growth in new space. The residential share of the capital program totals $12.43 million and, when divided by the forecast growth in population in new units (46,046), an unadjusted charge of $269.87 per capita is the result.

The non-residential share is applied against the forecast increase in square metres of non-residential floor space by type of development. The $5.33 million divided by the increase in square metres of non-residential building space (491,554), yields an unadjusted charge of $10.83 per square metre.

Operating Cost Implications

The DCA requires that a background study estimate the future tax supported operating cost implications of the development-related capital program contained in the study. The capital program contained in this background study relates to the provision of sewer services in VMC West.

Funds required for operating the water and sewer systems are generated through the utility rates. Any additional operating costs as a result of the capital program will be included in the rates.

TABLE 1

CITY OF VAUGHAN
VAUGHAN METROPOLITAN CENTRE - WEST INTERCHANGE SANITARY SEWER ASDC
REVISED: DEVELOPMENT-RELATED CAPITAL PROGRAM

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs Replacement & BTE Shares	Total DC Eligible Costs	Available DC Reserves	2021-2040	Post 2040
1.0 Sanitary Sewer Improvements									
1.0.1 Phase 1: Construction South of Highway 7	2021	$ 12,601,773	$ -	$ 12,601,773	$ -	$ 12,601,773	$ -	$ 12,601,773	$ -
1.0.2 Phase 2: Construction North of Highway 7	2022	$ 5,150,000	$ -	$ 5,150,000	$ -	$ 5,150,000	$ -	$ 5,150,000	$ -
Subtotal Sanitary Sewer Improvements		**$ 17,751,773**	**$ -**	**$ 17,751,773**	**$ -**	**$ 17,751,773**	**$ -**	**$ 17,751,773**	**$ -**
TOTAL Sanitary Sewer Improvements		**$ 17,751,773**	**$ -**	**$ 17,751,773**	**$ -**	**$ 17,751,773**	**$ -**	**$ 17,751,773**	**$ -**

Residential Development Charge Calculation		
Residential Share of 2021 - 2040 DC Eligible Costs	70%	$12,426,241
20-Year Growth in Population in New Units		46,046
Unadjusted Development Charge Per Capita		**$269.87**
Non-Residential Development Charge Calculation		
Non-Residential Share of 2021 - 2040 DC Eligible Costs	30%	$5,325,532
20-Year Growth in Square Metres		491,554
Unadjusted Development Charge Per Square Metre		**$10.83**

Appendix C

Asset Management Plan

APPENDIX C – ASSET MANAGEMENT PLAN

The Development Charges Act now requires that municipalities complete an Asset Management Plan before passing a development charges by-law. A key function of the Asset Management Plan is to demonstrate that all assets proposed to be funded under the development charges by-law are financially sustainable over their full life cycle.

Asset Types

A summary of the future municipal-owned assets and estimated useful life assumptions for eligible DC services considered as part of the study are outlined in Table 1. The useful life assumptions were informed by the City of Vaughan Asset Management Plan

Table 1 – Summary of Municipal Assets Considered

Capital Projects	Estimated Useful Life
Engineered Infrastructure	
- Sanitary Sewers	60 years

Annual Provision

When assets require rehabilitation or are due for replacement, the source of funds is limited to reserves or contributions from operating. Capital expenditures to carry out the rehabilitation and replacement of aging infrastructure are not development-related and are therefore not eligible for funding through development charge revenues or other developer contributions.

Based on information obtained from City staff on the useful life, capital cost of acquiring and/or emplacing each asset, a provision for infrastructure replacement has been calculated for sanitary sewer service considered within the ASDC Background Study. Provisions for infrastructure replacement are initially calculated for each asset based on their useful life and the anticipated cost of replacement. The aggregate of all individual provisions form the required annual capital provision. In calculating the annual provisions, a number of assumptions are made to account for inflation (2.0 per cent) and interest (3.5 per cent).

Consistent with the requirements of the *Development Charge Act*, assets that are proposed to be funded under the development charges by-law have been included in the analysis.

Table 2 provides the calculated annual asset management contribution for both the gross capital expenditures and the share related to the 2021-2040 DC recoverable portion. As shown in Table 2, by 2041, the City will need to fund an additional $288,000 per annum in order to properly fund the full life cycle costs of the new assets related to all servicing costs supported under the development charges by-law for the VMC West Interchange Sanitary Sewer Area.

Table 2 – Calculated Annual Provision by 2040

Service	2021-2040 Capital Program		Calculated AMP Annal Provision by 2040	
	DC Recoverable	Non-DC Funded	DC Related	Non-DC Related
Engineered Services	$17,751,773	$0	$288,021	$0
Total 2040 Provisions	**$17,751,773**	**$0**	**$288,021**	**$0**

Financial Sustainability of the Program

Future Revenue Growth

The calculated annual funding provision should be considered within the context of the City's projected growth. By 2040, the VMC West area is projected to increase by approximately 24,700 households. In addition, the VMC West area is expected to add 19,400 new employees that will result in approximately 491,600 square metres of additional non-residential building space.

This growth will have the effect of increasing the overall assessment base and additional user fee and charges revenues to offset the capital asset provisions required to replace the infrastructure proposed to be funded under the development charges by-law. The collection of these funds is intended to be allocated to the City's reserves for the future replacement of these assets.

Annual Budgetary Reviews

In order to maintain, protect and manage the City's infrastructure and assets, staff monitor current levels of service and life cycle trends. These assessments are used to schedule appropriate activities, such as the relining of linear infrastructure.

The Program is Deemed Financially Sustainable

The calculated annual provisions identified in Table 2 are considered financially sustainable as it is expected that the increased capital asset management requirements can be absorbed by the tax and user base over the long-term. Importantly, the City's annual operating budget review will allow staff to continue to monitor and implement mitigating measures should the program become less sustainable.