

## Committee of the Whole (1) Report

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**DATE:** Wednesday, April 07, 2021

**WARD(S):** 4

**TITLE: BLACK CREEK FINANCIAL STRATEGY AND VMC WEST INTERCHANGE SANITARY SEWER AREA SPECIFIC DEVELOPMENT CHARGES UPDATES**

**FROM:**

Michael Coroneos, Deputy City Manager, Corporate Services and Chief Financial Officer

**ACTION:** DECISION

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**Purpose**

To present the Draft Area Specific Development Charges (“ASDC”) Background Studies and By-Laws for the Black Creek Financial Strategy and the VMC West Interchange Sanitary Sewer and to communicate the timing of the statutory public process leading to the approval of the new ASDC by-laws.

**Report Highlights**

- The Black Creek Financial Strategy and associated by-law enacted in July 2016 is being updated based on new information and cost estimates.
- The revised Black Creek Financial Strategy estimates the infrastructure costs to be \$221M.
- Construction of the Interchange Way sanitary trunk sewer, from Highway 7 to Jane Street is now complete. The works North of Highway 7 will be constructed at a future date.
- The revised infrastructure costs for the VMC West Sanitary Sewer works are estimated at approximately \$17.2M
- Revised Draft ASDC Background Studies and By-laws for both ASDCs will be released in accordance with the Development Charges Act, 1997 (DCA)

## **Recommendations**

1. That the Draft ASDC Background Studies for the “Black Creek Financial Strategy” and “VMC West Interchange Sanitary Sewer” be (Attachments 1 & 3) be received and made available to the public sixty (60) days in advance of the passage of the by-law in accordance with the Development Charges Act, 1997;
2. That the Draft ASDC By-law for the “Black Creek Financial Strategy” and “VMC West Interchange Sanitary Sewer” (Attachments 2 & 4) be received and made available to the public at a date to be established by the Chief Financial Officer, but no later than two (2) weeks in advance of the public statutory meeting; and
3. That staff be authorized to advertise the Public Statutory Meeting at least twenty (20) days in advance of the date of the meeting in a method that is consistent with the requirements of the Development Charges Act, 1997.

## **Background**

Although the Black Creek and VMC West Sanitary Sewer ASDCs are separate infrastructure projects, to create efficiencies staff are completing both ASDC background studies and by-law updates in tandem.

### ***A Black Creek Financial Strategy and Area Specific Development Charge By-laws was passed in 2016***

In May 2016, through an extensive consultation process with the development industry, a Black Creek Financial Strategy was approved. This strategy developed a complex funding model for the Black Creek and Edgeley Pond infrastructure works in the VMC and involved the creation of three new ASDCs as well as the identification of costs to be allocated to City-Wide Development Engineering DCs, City-Wide Parks DCs, and the Stormwater reserve.

Section 9(1) of the Development Charges Act, 1997 (DCA) requires that a DC By-law be updated at a minimum of every 5 years. In order to meet legislation staff are required to begin an update of the financial strategy and related ASDC by-law at this time in order to ensure a new by-law is passed no later than July 1, 2021.

### ***The Edgeley Pond and Park design and cost estimates have been completed***

Since the incarnation of the Black Creek Financial Strategy in 2016, significant headway has been made with the Edgeley Pond and Park design and cost estimates. As the design and Class A costing estimates are nearing completion, staff will be incorporating these new estimates of cost into the updated financial strategy.

***The Black Creek Renewal design RFP has been initiated***

The Black Creek corridor defines the westerly edge of the southeast quadrant and provides a unique frontage opportunity for development. With approval of the Black Creek Renewal (BCR) Class Environmental Assessment in 2019, initiation of detailed design for the corridor is being advanced. In September 2020, Infrastructure Development released the RFP for a technical advisor (TA) to assist in the preparation of the Owner’s Statement of Requirements. The TA will also provide technical guidance, subject matter expertise, oversight, and support during the subsequent project phases.

The Technical Advisory assignment has been awarded and the design has been initiated. As these works are still in the early stages, the revised estimates have not been included in this Black Creek Financial Strategy update but will be included in a future update once the works have been completed.

***Communications Strategy***

A kick-off meeting took place with the development industry regarding the Black Creek Financial Strategy on December 4, 2020 and the draft rates were presented on March 19, 2021. Further workshop meetings will be scheduled through April and May to exchange detailed supporting background information, and to discuss the technical aspects of the draft calculations. The workshops will include developers within the benefitting land areas that will be impacted by the updated rates. It is anticipated that ongoing correspondence, meetings, and collaboration will continue until the finalization of the new by-law.

The DCA has mandatory communication requirements around advertising of at least one public statutory meeting and the Clerk is mandated to carry out such advertising at least 20 days in advance of the meeting date. The Public Statutory Meeting will be scheduled for May 12, 2021.

***VMC West Interchange Sanitary Sewer Area Specific Development Charge***

In May 2018, Council approved the City-Wide and Area Specific Development Charges Background Study and By-laws. 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. The original by-law estimated the cost of the works to be \$1.8M. As a result, two appeals were received, both challenging the population forecasts used in the rate calculation.

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 a segment of the Interchange Way sanitary trunk sewer, from Highway 7 to Jane Street has now been completed by front-ending landowner 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 by another landowner at a future date. The costs included in the ASDC are inclusive of the works both north and south of Highway 7.

Although the draft rates were shared with many of the affected landowners on January 14, 2021, this report serves as the notice of public release of the draft background study and by-law for ASDC “VMC West Interchange Sanitary Sewer”. The time between the release of the draft study and the discussion of material in May will allow Council, the general public, and the development industry an opportunity to review the technical data.

## **Previous Reports/Authority**

2018 City-Wide and Area Specific Development Charges Background Study and By-laws Review Highlight Report:

[https://www.vaughan.ca/council/minutes\\_agendas/AgendaItems/Finance\\_0507\\_18\\_2.pdf](https://www.vaughan.ca/council/minutes_agendas/AgendaItems/Finance_0507_18_2.pdf)

2016 Black Creek Financial Strategy and Development Charges Background Study:

[https://www.vaughan.ca/council/minutes\\_agendas/AgendaItems/Finance0404\\_16\\_1.pdf](https://www.vaughan.ca/council/minutes_agendas/AgendaItems/Finance0404_16_1.pdf)  
[https://www.vaughan.ca/council/minutes\\_agendas/AgendaItems/Finance0530\\_16\\_6.pdf](https://www.vaughan.ca/council/minutes_agendas/AgendaItems/Finance0530_16_6.pdf)

## **Analysis and Options**

### ***The Black Creek Financial Strategy was developed through extensive consultation***

The 2016 Black Creek Financial Strategy was developed over several years through extensive consultation with a variety of stakeholders with interests in the Black Creek and Edgeley Pond Renewal. Through this process Fabian Papa & Partners and Hemson Consulting Ltd. produced a methodology that considers the functional benefit of each component line item to each stakeholder in the funding equation. The approach is based on the premise that various groups of landowners derive varying levels of benefit depending on the flood control and urban design relative to their property.

As general consensus on the allocation methodology was achieved in 2016, staff have determined that the existing methodology for the allocation of costs should be maintained with updates only being applied to the cost components by using updated information provided from the more detailed design and costing of the works.

***The updated BCFS will include final EPP cost estimates, land considerations and the Hwy 7 culvert improvements***

Some changes to the study that have had an impact on the overall cost include the update to the cost to acquire land along the Black Creek Channel. Land costs continue to rise in the VMC area and the revised land costs reflect a current estimation of value based on present values being seen in the area. The City now anticipates that a great deal of land will have to be acquired to complete the works in a timely manner.

Another notable change to the strategy is with regards to the cost estimates for the Edgeley Park and Pond. In the original strategy the costs were based on a high-level concept. Now that the Edgeley Pond and Park design has advanced significantly the cost being used in the strategy are much more accurate. This has caused costs to increase in some areas, but it has also resulted in the City's ability to lower the contingencies being applied to the park and pond related components of the infrastructure.

Finally, the Black Creek Optimization study had identified the need to replace the existing culvert under Highway 7. As York Region is responsible for replacement of the existing culvert and had previously informed staff of their decision to defer the works until the culvert approaches its end of life cycle this component was not included in the original Financial Strategy costing. Since that time, City staff have reinitiated discussions with Regional Staff to determine how to advance these works as a part of the broader Black Creek Channel construction. This would further mitigate the added risk of potential flooding in the intersection at Jane Street and Highway 7. As a result, an additional cost for the culvert has been included in the Black Creek Financial Strategy with the assumption that the bulk of the cost would be borne by the Region.

***Phasing of the Black Creek Infrastructure***

The design of the Edgeley Pond and Park (EPP) is being completed in 2021 and the preliminary design for the Black Creek renewal project is anticipated to be completed in Q1 2022. To better align the delivery of both projects, the construction of the EPP will be undertaken in conjunction with the reconstruction of the Black Creek, south of Highway 7. The phasing for the construction of the Black Creek Infrastructure will be subject to the land acquisition strategy that needs to be implemented for Black Creek, south of Highway 7.

***Repeal and Replace By-law 094-2018 "VMC West Interchange Sanitary Sewer"***

In order for development to continue to progress in the West Quadrants of the VMC new sanitary sewer works are required to be completed. As a part of the advancement of the VMC West Landowners Spine Agreement and the Mobilio Site Plan Application, the affected landowners have hired IBI Group to determine the sanitary sewer needs which will be front ended by the developers. The affected landowners were presented with the revised costing and rates by IBI Group on September 26, 2019.

Since that time construction of the Interchange Way sanitary trunk sewer, from Highway 7 to Jane Street is has been complete with as built costs available to be included in the revised ASDC background study. The remaining works north of Highway 7 will most likely be front-end constructed in 2022. This ASDC by-law update will allow for development charge reimbursements to the front-end developers for the cost of these works.

The original ASDC approved in 2018 assumed a net capital cost of \$1.8M. The revised project cost is estimated to be \$17.2M. The cost escalation of the project is due to additional sanitary sewer infrastructure required to accommodate the revised growth projections in the VMC beyond what was initially planned in the Secondary Plan at the time of the 2018 By-law. In addition, it was determined through the detailed design that some of the works could only be completed through the use of micro tunneling due to the proximity to other existing municipal infrastructure along Interchange Way.

Although there have been significant cost escalations on the sanitary sewer works these quadrants of the VMC is also experiencing growth that exceeds that which was contemplated in the VMC Secondary Plan. Discussions over time have occurred with the impacted landowners to determine a more accurate forecast for population in the benefitting area. As a result, the revised ASDC Background Study utilizes more detailed assumptions regarding the population. As this ASDC rate is calculated based on a rate per unit, these revised population assumption have the effect of spreading the rate across a higher population thereby decreasing the rate slightly compared to the population that would have been assumed in the previous study.

***Public consultation sessions will be arranged as part of the process to update both by-laws***

The anticipated milestone dates leading up to the new by-law enactment are as follows:

Continued consultation with Development Industry	March – May 2021
Advertise for Public Statutory Meeting	Mid April 2021
Public Statutory Meeting	May 12, 2021

**Financial Impact**

***The Black Creek works cost were updated with the most up to date cost estimates***

The 2016 ASDC by-law contained an infrastructure cost of \$96.6 million, whereas the revised estimate of cost is \$221M. This represents an increase in cost of 128.8%. As discussed above, these cost escalations are predominantly related to an increase of land costs, the inclusion of the Highway 7 culvert works, and finalized Edgeley Pond and Park costings.

***Given the complex nature of the project, appropriate contingencies have been included***

The cost of the infrastructure has been provided for through collaboration between DTAH and staff. As with any highly complex and non-standard infrastructure project, the costs are subject to change based on several factors including cost escalation of materials/labour, changes in land value, sequencing of works, design, and alignment changes. Specifically, the Black Creek Channel Works which are only in the beginning stages of detailed design higher contingencies have been applied in the estimates to ensure the cost escalation risk is mitigated. With regards to the Edgeley Pond and Parks Works the contingencies have been reduced to reflect the reduction in risk due to the more accurate and detailed design work that has been completed.

***Greater costing detail is available to stakeholders in the consultant report***

At a summary level, the broad cost categories and their associated magnitude are included in the following table.

<b>Infrastructure</b>	<b>\$(M)</b>	<b>% of Total</b>
Channelization	59.5	26.9%
Land	80.4	36.4%
Edgeley Pond	56.7	25.7%
SE Stormwater Pond/Tank	18.2	8.2%
Other	6.3	2.9%
<b>Total</b>	<b>221</b>	<b>100%</b>

The broad categories shown above have numerous sub-categories and line items which are included in Attachment 1. These details are included to ensure transparency on the project costs and to allow for more detailed discussion to occur around the technical aspects of the draft calculations as a part of the public consultation.

***Estimated costs will likely change over time, but the ASDC by-law can also be updated***

As with all DC by-laws, the proposed ASDC by-law is required to be updated five (5) years after its initial enactment. This means that if cost increases or decreases do occur, then these fluctuations will be accounted for in the next iteration of the by-law through an adjustment to the rate. Due to the complexity and non-routine nature of this project, City staff will review the costs included in the ASDC By-law upon the completion of the detailed design of the Black Creek Channel works. If staff identify a significant variance in infrastructure cost that justifies the reopening of the ASDC By-law, a report may be brought forward to Council recommending that

the By-law be reopened to adjust the costs, but not the allocation methodology of the ASDC Background Study.

***The Strategy uses quantitative methods to allocate cost to multiple funding sources and benefiting stakeholders***

In 2016, Fabian Papa & Partners and Hemson Consulting Ltd. produced methodology that considers the functional benefit of each component line item to each stakeholder in the funding equation. The approach is based on the premise that various groups of landowners derive varying levels of benefit depending on the flood control and urban design relative to their property. This same approach was used in this update to the Financial Strategy. The table below shows these sources along with their relevant allocation of the \$221 million:

<b>Funding Source</b>	<b>% of Total</b>
ASDC	34.4%
City-Wide - DC Engineering	25.9%
City-Wide - DC Community Services	6.1%
Site Specific Contributions	4.1%
Region/TRCA	1.8%
Non-Growth	27.7%
<b>Total</b>	<b>100%</b>

***The effect on the ASDC rate payers is considered reasonable***

The ASDC by-law, in conjunction with site specific contributions, will contribute an estimated 38.5% to the overall cost of infrastructure. The level of impact is dependent on the geographic location of the lands within the Secondary Plan area. Those landowners who are immediately affected by and adjacent to the Black Creek channel are allocated a higher degree of cost due to both the hydraulic and economic benefits accruing to them. The next highest allocation is given to those landowners draining into Edgeley Pond and the lowest allocation goes to the remaining landowners in the Black Creek water shed.

The following table illustrates the current ASDC rates compared to the proposed rates as currently calculated. The benefiting land area maps related to the ASDC bylaw are located in Attachments 1 and 2.

<b>Benefiting Land Area</b>	<b>ASDC Rate (\$/Hectare)</b>		<b># of Hectares included (2021)</b>
	<b>Current Rate</b>	<b>2021 Proposal</b>	
Immediately Affected Land Owners	\$ 2,972,699	\$ 9,467,470	5.78
VMC Landowners Draining into Edgeley Pond	\$ 98,656	\$ 465,823	20.06
Undeveloped Lands in Black Creek Drainage Shed	\$ 26,695	\$ 96,260	144.58



***The effect on City Wide DCs will be moderate in the overall scheme of the Strategy***

In keeping with the notion that growth should pay for growth, a certain apportionment of the costs have been made to city wide DCs. This is consistent with the City's previous ASDC by-law and gives recognition to the fact that the VMC will be the new downtown of the City of Vaughan. As such, growth occurring across the City should provide a level of contribution towards the required infrastructure. This is especially justifiable for elements that belong to the city-wide transportation network, parks development and urban design components. Overall, city wide Development Charges ("DCs") will contribute approximately 32% to funding the costs of the infrastructure.

The majority of the city wide DCs required for this project will be collected under, and drawn from, the City's Engineering DC reserve. About half of the anticipated required DCs from the City's Engineering DC reserve are already being collected for under the 2018 City Wide DC by-law. The other half will have to be added in during the next DC by-law update. The remaining city wide DCs will be from the Community Services DC reserve for the public realm elements identified in the Strategy. These costs will also be included as a part of the next DC by-law update.

***The non-growth component will need to be reviewed as a part of future budget planning***

As a part of the allocation across funding sources acknowledgement was made that certain elements of the project would provide benefits to existing development and should be funded using other internal City resources. As growth is the impetus for these works, allocations are made to growth first with residual amounts being considered to be a benefit to existing development. Attachment 1 details the methodology used to apportion this share of cost which represents approximately 27.7% of the total cost of the project. A funding amount from the stormwater utility rate was identified in 2016 to fund this non-growth component. The initial cash outflow will likely require debt financing as this reserve is not sufficiently funded to absorb the cost in the short term. Unlike a DC reserve, which is generally timed with a development horizon, the payback on this amount would be dictated by the stormwater rate collections. Although the Black Creek works were incorporated into the stormwater model in 2016, due to the significant increase in cost (estimated at \$61.2M) identified to be funded by stormwater rates, staff will need to reevaluate the stormwater rates and other potential funding options corporately as part of future budget planning to determine if stormwater rates can be adjusted to absorb this cost or to determine the most suitable approach to funding this share of the cost.

***Property tax impacts for maintenance and life cycle cost will be realized in future***

The Strategy focuses predominantly on the capital aspect of costs and funding. There will be operating impacts from emplacing the infrastructure for maintenance and life cycle costs. In all likelihood these will be funded by future property taxes and will be determined through future budget cycles. A more fulsome discussion of these types of impacts are included in Attachment #1.

***Minor Regional and TRCA contributions are subject to further discussion***

The “Region/TRCA” funding source noted in the table above is in relation to a potential grant (approximately \$488K) that the City may apply for through the Region’s Municipal Streetscape Partnership Program for Streetscaping works associated with this infrastructure (Urban Plaza at the NE corner of Jane/7). Additionally, there is funding in the amount of approximately \$2.9M identified as the proportionate share of cost the Region will fund for the Highway 7 culvert works. The TRCA funding (approximately \$695K) is from a potential reserve fund that through discussions with TRCA staff may be available to be earmarked against some upstream erosion improvement works included with this infrastructure renewal.

***The effect on the City’s reserves and debt levels is expected to be manageable***

With respect to the Black Creek infrastructure, it is anticipated that the bulk of the required works will be front ended by the City and the City will in turn collect back (whether through growth or non-growth revenue sources) over time. Debt will most likely be incurred for this project. Matching revenues to expenditures will become exceedingly difficult as development proceeds over the next several years and therefore it is fully anticipated that the ASDC reserve will initially be in a deficit position and then may fluctuate from positive to negative balances, ending in a breakeven point at the end of the development horizon. Future iterations of the ASDC by-law will continuously adjust for the expected breakeven point, inclusive of increased/decreased cost and increased/decreased expected revenue. This is similar to how the City’s current city-wide Engineering DC reserve works.

***The VMC West Sanitary Sewer Rates are based on more detailed costing with updated population figures***

As mentioned above, the VMC West Sanitary Sewer works were originally estimated in 2018 at \$1.8M. Since that time a more detailed analysis has been undertaken of both the anticipated population and estimated cost of the works. The revised estimates show an increase in cost of approximately \$15.4M with the total project cost estimated at \$17.2M.

Although the costs estimates have increase, the population estimates have also increased based on the total number of units that are estimated to be constructed in the benefitting area. This will have the effect of spreading the cost over more population which will in turn reduce the proportionate share per unit.

The ASDC rates are calculated on a per unit basis and are estimated as follows:

<b>Residential Charge by Unit Type</b>	<b>Current ASDC Rate</b>	<b>2021 Proposed ASDC Rate</b>	<b>Difference in Charge</b>
Singles & Semis	\$571	\$954	\$383
Townhouses & Multiples	\$471	\$786	\$315
Large Apartments (>700 sq. ft.)	\$348	\$582	\$234
Small Apartments (<700 sq. ft.)	\$251	\$419	\$168
Non-Residential (per M <sup>2</sup> )	\$5.51	\$10.46	\$4.95

### **Broader Regional Impacts/Considerations**

The Region of York continues to be involved in discussions regarding the Black Creek and Edgeley Pond Infrastructure. The City intends to apply to the Region's Municipal Streetscape Partnership Program for Streetscaping works associated with this infrastructure (Urban Plaza at the NE corner of Jane Street and Highway 7). Regional lands required for the infrastructure are a large component of the overall cost of the project and as such City staff have initiated discussions with Regional staff regarding the acquisition of the required lands.

In addition, the Black Creek Optimization study identified the need to replace the existing culvert under Highway 7. Discussions are underway with the Region to determine how the costs for this infrastructure will be shared and to determine the scope of work and timing of construction. Staff will report back to Council regarding this specific infrastructure once discussions with the Region have progressed.

### **Conclusion**

Completion of the Black Creek and VMC West Sanitary Sewer works are vital steps towards flood relief and the development of the VMC as Vaughan's new downtown. The updated costings as outlined in this report and detailed in the attachments ensures equitable cost allocation, sound methodology and a financial plan are in place for the long-term development of this infrastructure. One component of this work is the enactment of ASDC By-laws and therefore a statutory process must be followed. Staff will report back to Council after the public consultation and statutory meeting are complete in order to summarize the feedback received on the Draft Background Studies and associated By-laws and to obtain approval for the ASDC By-law enactment.

**For more information**, please contact: Brianne Clace, Project Manager Development Finance or Nelson Pereira, Manager Development Finance

### **Attachments**

1. Draft Development Charges Background Study for the Edgeley Pond and Park and Black Creek Channel Works, Prepared by Hemson Consulting Ltd.

2. Draft Black Creek Financial Strategy ASDC By-Law
3. Draft Development Charges Background Study for the VMC West Interchange Sanitary Sewer Service Area
4. Draft VMC West Interchange Sanitary Sewer ASDC By-law

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