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TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING OF FEBRUARY 2, 2016
FROM:	JOHN BRAAM, MANAGING DIRECTOR, ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER
SUBJECT:	INITIATION REPORT: CORE AREA SERVICING STUDIES

RECOMMENDATION

That on the recommendation of the Managing Director, Environmental and Engineering Services and City Engineer, the following report on the Core Area Servicing Studies **BE RECEIVED** for information.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

- January 28, 2016 “Downtown Infrastructure Planning and Coordination,” Strategic Priorities and Policy Committee
- November 9, 2015 “Shift Rapid Transit Update,” Strategic Priorities and Policy Committee
- June 23, 2014 “Approval of 2014 Development Charges By-law and DC Background Study,” Strategic Priorities and Policy Committee
- August 27, 2012 “Master Servicing and 2014 Development Charge Studies Consultant Appointment,” Strategic Priorities and Policy Committee.
- April 30, 2012 “Initiation Report 2014 Development Charges Background Study and DC By-law Update,” Strategic Priorities and Policy Committee

PURPOSE OF REPORT

This report provides Council with an overview of the Core Area Servicing Studies (CASS). In the coming months, engineering consultants will be engaged to model water, sanitary and stormwater servicing requirements to support residential and non-residential intensification in the Downtown and surrounding areas. The CASS is required to identify new infrastructure projects for future growth as well as to refine the assignment of Development Charges (DC) funding to existing projects identified in the capital budget. A report on the consultant engagement is anticipated to be tabled with the Corporate Services Committee in March, 2016.

2015 – 2019 STRATEGIC PLAN

The 2015 – 2019 Strategic Plan identifies this objective under Building a Sustainable City: 5B – Responsible Growth by building new infrastructure as London grows in accordance with the Growth Management Implementation Strategy.

NEED FOR THE CORE AREA SERVICING STUDIES

The draft London Plan provides for a City Structure and growth framework intending to direct 45% or more of future unit construction to the built area of the City. A large portion of the unit growth is anticipated to occur at the Rapid Transit Villages and along the Rapid

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Transit Corridors. Over time, significant development and re-development of vacant and underutilized sites in these areas will place increased demand on the City’s existing finite capacity of water, sanitary and stormwater infrastructure. Ensuring we meet London’s vision requires a comprehensive approach to future growth infrastructure so that the City is capable of meeting the needs of new development, and providing appropriate funding according to our “growth pays for growth” policies.

Presently, City Staff is tracking over 3500 units proposed for construction in the Downtown and Old East Village areas. This large amount of growth is anticipated to be constructed over a decade or more and is well beyond what the City has experienced in previous years. Since the inception of the Downtown and Old East Village DC exemptions/DC grants in the late 1990s, over 1100 units have been constructed in these areas using “free” capacity within the water, sanitary and stormwater systems. However, continued growth in the Downtown and Old East areas presents servicing challenges.

When the City’s Development Charges (DC) Background Study master plan consultants reviewed growth infrastructure needs for the 20 year period of 2014-2033, the primary focus of their analysis was greenfield growth. In recent years, an increasing number of residential development projects primarily located in the Core Area of the City (see map in Appendix A) has triggered the need to confirm this capacity and to determine whether the reconstruction of major works is required to accommodate future growth.

The City’s Growth Management Implementation Strategy (GMIS) – our plan for growth-related infrastructure investments – presently includes a limited number of projects associated with the Core Area. City Staff intends to use this water, sanitary and stormwater servicing review as an opportunity to proactively identify major infrastructure projects for inclusion in the GMIS in advance of the construction of the significant amount of residential units being proposed for the area.

The Core Area Servicing Studies (CASS) will focus on the servicing needs for the Downtown as well as the Old East Village, the McCormick area, the London Psychiatric Hospital lands, and the South of Horton (SoHo) area. In future years, servicing studies will be completed in tandem with secondary plans prepared to determine the re-development framework for the additional rapid transit villages and corridors identified in the London Plan.

MATTERS TO BE ADDRESSED IN THE CORE AREA SERVICING STUDIES

A limited analysis of built area growth infrastructure needs was performed as part of the 2014 DC Study master plans. Contingency projects were included for the purposes of rate recovery and to serve as a source for DC funding for future infrastructure projects associated with development along the City’s transit nodes and corridors. However, the Study line item was provisional pending further study to identify projects that could be assigned DC funding. Recognizing this need, the 2014 DC Study contained a project for “Infill and Intensification Nodes Servicing Studies (DC14-GS0023); as a result, the CASS will be fully funded from DC sources.

Many of the watermains located in the Core Area are some of the oldest in the City, constructed to service residential homes and small-scale commercial establishments. Given the anticipated intensification of the area as it transforms, a review is required of needed water works based on updated hydraulic modelling. The water study will seek to answer the following:

1. What will the local servicing requirements be in order to service the anticipated intensification?
2. What improvements might be needed in the trunk watermain system that conveys domestic water and fire flow to this area in order to meet the requirements for re-development and future growth?

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The Core Area includes some of the City’s oldest sanitary sewers, many of which were constructed over 100 years ago. Servicing a residential building up to 20 to 30 storeys is significantly different than what these sewers were originally intended to service. Further, certain areas of the Downtown are challenged for growth as combined sewers for both sanitary and stormwater exist along King Street and York Street. Environmental and Engineering Services is in the process of developing sanitary models that will be able to confirm existing sewer performance and allow growth scenarios to be analysed to facilitate planning for future sanitary infrastructure in the Core Area.

In planning for growth and intensification in the Core Area, the study will seek answers to the following:

1. What available capacity currently exists in the sanitary system?
2. What is the anticipated future population growth?
3. What upgrades to the sanitary system will be needed to support growth?

From a stormwater perspective, there are two components that require investigation to determine the available conveyance capacity for future growth. The two components include the storm sewer system and the overland flow route system. During large storm events, the storm sewer system capacity may be exceeded resulting in the utilization of overland flow routes for conveyance of the excess stormwater. Overland flow routes typically consists of roadways within the Downtown area. The study will document the existing conveyance utilization of the storm sewers and overland flow routes and identify where capacity is available or deficient in respect to future growth.

The CASS consultants will address a number of technical issues related to the assignment of DC funding:

- local service standards for infrastructure supporting re-development;
- review of funding sources for projects presently contained in capital budgets;
- assess existing system capacity and ability of new development to use that capacity (versus the need to construct new infrastructure);
- responsibility for the cost of prematurely retiring assets (e.g., replacing a 20 year old sewer with a larger sewer for growth);
- benefit to existing development (i.e., “growth/non-growth splits”);
- post-period benefit; and,
- updated unit cost tables.

It is possible that the number and cost of projects identified through the CASS will exceed what can be afforded through present DC rates (for the growth share) and water and sewer rates (for the non-growth share). The CASS consultants will make recommendations on the phasing of infrastructure projects, recognizing these constraints, which may result in the need to phase growth opportunities within the Downtown and other areas within the CASS boundary.

Given that significant roads and utilities construction is required for the Core Area in the coming years, the CASS will also address the coordination of growth-related sewers and watermains with the planned construction of other services (e.g., roadworks for rapid transit investments). Staff intends to ensure that, wherever possible, economies of scale can be achieved and disruption to members of the public can be reduced by aligning infrastructure project construction.

The results of CASS will be used for initiatives such as updates to the GMIS, the 2019 DC Study, rapid transit coordination, and the pollution prevention control plan.

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TIMELINE TO COMPLETION

Staff will be releasing a Request for Proposal (RFP) for the CASS in February, 2016. A report to engage the recommended consultant(s) is anticipated to be tabled with the Civic Works Committee on March 8, 2016. Staff will review the consultants' draft recommendations in September 2016, followed by the final reports tabled with the Civic Works Committee in December, 2016. This timeline will ensure that the CASS is completed in advance of the 2018 Growth Management Implementation Strategy (GMIS) Update and prior to the commencement of the 2019 DC Background Study master plans.

Recognizing that there may be public interest in the findings of the CASS, Staff intends to circulate the draft report to the GMIS stakeholders (comprising engineering and planning consultants, taxpayer groups and members of the development community) as well as to community stakeholders such as Downtown London and the Old East Village Business Improvement Area. Feedback received from the stakeholders will be considered by the consultants in their final recommendations.

CONCLUSION

The CASS will identify future water, sanitary and stormwater servicing needs to support intensification emerging from the London Plan. Although Development Charge (DC) rates are currently recovering for intensification-related growth infrastructure, the CASS is required in order to determine specific projects to alleviate potential constraints to allow for continued intensification and to ensure that DC funding can be appropriately assigned to projects.

Completion of the CASS will ensure that "growth pays for growth" and that water and sewer rate payers are not funding infrastructure that should be supported by DC rates.

Once the CASS recommendations are completed and adopted, the Growth Management Implementation Strategy will be updated to include Core Area infrastructure projects required to service demand for the 20 year period ending in 2033.

The results of CASS will be used for initiatives such as updates to the GMIS, the 2019 DC Study, rapid transit coordination, and the pollution prevention control plan.

Acknowledgement:

This report is prepared with the assistance of the Core Area Servicing Studies team, including Pat Lupton from Water Engineering, Erik Veittiaho from Wastewater and Drainage Engineering and Dave Gough from Stormwater Management.

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January 25, 2016

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Attachments:

Appendix A: Map of the Core Area Servicing Studies Study Area

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APPENDIX A: MAP OF THE CORE AREA SERVICING STUDIES STUDY AREA

Core Area Servicing Studies (Water, Sanitary and Stormwater)

