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Meeting Date:	February 27, 2020
File No.:	



To: Chair and Members
Lambton Area Water Supply System Joint Board of Management

From: Clinton Harper
General Manager

Subject: LAWSS Master Plan Update – Demand Projections & Twinning & Grid Reinforcement Class EA Addendum

Recommendation

It is recommended that the LAWSS Joint of Board of Management;

1. **ENDORSE** the growth projections outlined in AECOM's report titled, "Water Demand Projection Analysis" dated February 19, 2020 for development of LAWSS Master Plan Update.
2. **HIRE** AECOM to complete Twinning & Grid Reinforcement Class EA Addendum as per quoted amount of \$61,329.16+taxes as per section 6 under Negotiate Method in the LAWSS Procurement Policy.

Background:

On January 16th the 2020 Master Water Plan Update was awarded to AECOM for \$202,614.33+taxes. The Master, Financial and Asset Management Plan are guidance documents that assist staff in establishing the best direction for capital investment. These three documents continually grow as projects are completed and added. The Master Water Plan update shall examine current regulations and anticipated future trends in regulation involving the water supply industry in Ontario.

Comments:

On January 22, 2020 AECOM Project Management, OCWA Operational Management and LAWSS attended a project kick off meeting to discuss the project. The foundation of the Master Plan update is growth. AECOM has requested that each LAWSS Member Municipality provide feedback to assist in establishing a combination of population and ICI growth that would allow for development for the system over the planning horizon.

The original Demand Projection report prepared by AECOM was focused primarily on population and relied heavily on the accuracy of the population growth projections described in the Lambton County Official Plan. Issues with their methodology were

identified by the LAWSS Technical Team. The key issues the technical team had with the original report were as follows.

- 1) The population growth projections outlined in the County of Lambton Official Plan were considered too low and did not represent actual growth observed.
- 2) The population growth in of itself is not an indication of total growth and in some cases non-residential growth is the primary driving factor with request to water demand.

AECOM was asked to redo the Demand Projection report based on this feedback. The resulting report is based on actual flow data, actual census data, and available development studies. The report indicates an overall level of system growth at LAWSS that equally considers both residential and non-residential growth factors and is based on historic water demand.

Table 1: Overall Growth Summary (2016 – 2031)

	Sarnia	Point Edward	St. Clair	Plympton / Wyoming	Lambton Shores	Watford-Warwick	LAWSS
<i>Residential Growth</i>	3.8%	0.3%	3.2%	5.3%	6.9%	-1.3%	3.6%
<i>ICI Growth</i>	21.2%	9.5%	3.1%	12.6%	29.6%	10.3%	11.5%
<i>Total Growth</i>	11.2%	7.6%	4.7%	8.2%	17.0%	3.2%	9.5%

Note: ICI Growth for Point Edward was adjusted to LAWSS Average; which is 9.5% as opposed to negative growth.

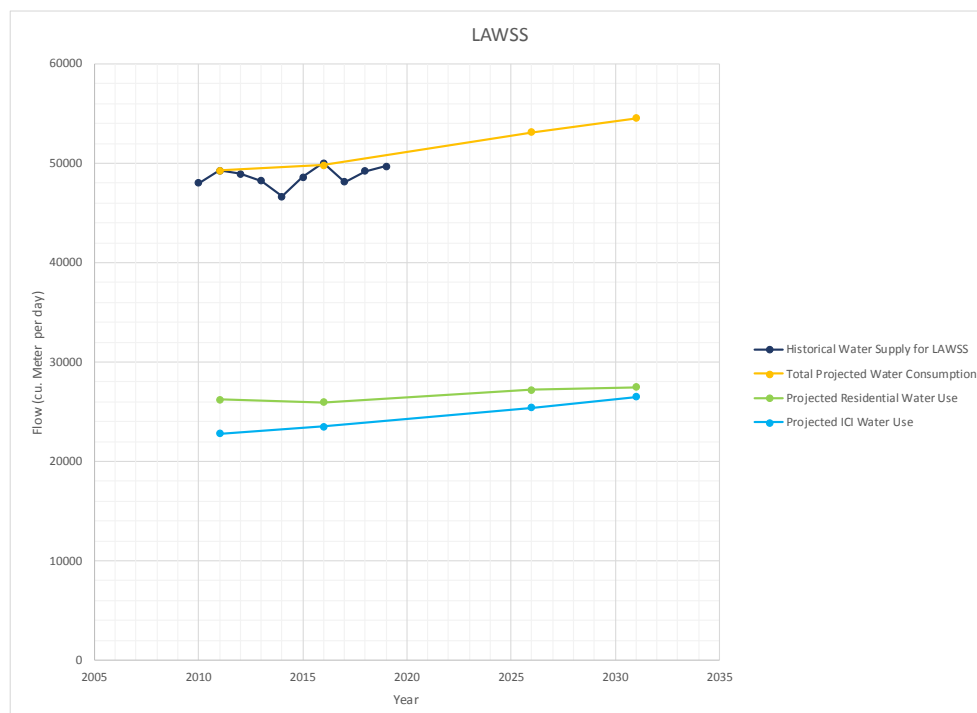


Figure 1: Flow Projections for LAWSS

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In 2012 LAWSS undertook a Class EA to address redundancy and reliability issues in south Sarnia and St. Clair Township. A twinning of the transmission network between LaSalle Line and Courtright Line along Tashmoo Ave. and the grid re-enforcement of the section between Confederation and Lasalle Line along Indian Road and MacGregor, in the City of Sarnia, were identified as the best solution.

In June 2021 the Class EA for this project expires. There have been a number of major changes and additional requirements that have been imposed by the Province since 2012. In the 2020 budget proposal \$105,000 was approved to complete review of the original Class EA. The review, also know as an "Addendum" at this point will allow LAWSS to complete the additional requirements and effectively extend the project start window out an additional ten years.

The kick-off meeting on January 22, 2020 included a discussion around the multiple Municipal Class Environmental Assessments being undertaken, as part of the Master Plan Update, to address the issues identified in the recent modeling project completed in 2019. Based on these conversations I believe it is in the best interest of the LAWSS Board to initiate the "Negotiated Method" with respect to the Twinning & Grid Reinforcement Class EA Addendum and award the project to AECOM to complete as part of the Master Plan Update. In the LAWSS Procurement Policy, the "Negotiated Method" can be used in place of an open competition when the extension or reinstatement of the existing contract would be the most cost effective or beneficial method and is in the best interest of the Board. As both the successful proponent of the Master Plan Update and the original author of the 2012 Twinning & Grid Reinforcement Class EA, AECOM fulfills this requirement.

Consultation:

This report was prepared in consultation with AECOM and the LAWSS Technical Team.

Financial Implications:

The approved 2020 budget the for Twinning & Grid Reinforcement Class EA Addendum is \$105,000. AECOM has provided a quote for \$61,329.16+taxes to complete the work.

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This report was prepared by: Clinton Harper, LAWSS General Manager

Attachment(s): Letter: AECOM Growth and Demand Presentation

Quotation: MCEA Addendum for Grid Reinforcement & Transmission
Main Twinning Sarnia/St. Clair Township Area (2011)