TO:	**CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON AUGUST 11, 2020**
FROM:	**KELLY SCHERR, P. ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER**
SUBJECT:	**AWARD OF CONSULTING ENGINEERING SERVICES FOR THE SOUTH AND WEST LONDON WATER SERVICING STUDY RFP 20-36**

RECOMMENDATION

That on the recommendation of the Managing Director, Environmental and Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to the award of consulting engineering services for RFP 20-36 South and West London Servicing Study (EW3313):

(a) The proposal submitted by C3 Water Inc., 350 Woolwich Street South, Breslau, ON N0B 1M0, in the amount of $339,658.16, including $50,000 contingency and $89,713.30 in provisional items, excluding H.S.T., **BE AWARDED** in accordance with Section 15.2 (e) of the City of London's Procurement of Goods and Services Policy;

(b) The financing for this project **BE APPROVED** as set out in the Sources of Financing Report attached, hereto, as Appendix "A";

(c) The Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this project; and

(d) The Mayor and City Clerk **BE AUTHORIZED** to execute any contract or other documents, if required, to effect these recommendations.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

- 2019 Development Charges By-Law and Background Study

2019-2023 STRATEGIC PLAN

This report supports the Strategic Plan in the following areas:

- Building a Sustainable City:
  - Infrastructure is built, maintained and operated to meet the long-term needs of our community; and
  - Growth and development is well planned and sustainable over the long term.
- Leading in Public Service:
  - Trusted, open, and accountable in service of our community;
  - Exceptional and valued customer service; and
  - Leader in public service as an employer, a steward of public funds, and an innovator of service.

BACKGROUND

Purpose

This report recommends that C3 Water Inc. be appointed as the consultant to undertake the South and West London Water Servicing Study (EW3313).

Context

The City of London receives water from the Elgin Area Water Supply System (EAWSS) and Lake Huron Water Supply System (LHWSS). Water from the Elgin Area Water Supply System is pumped into the City of London's distribution system from the south via the Elgin-Middlesex Pumping Station (EMPS) and Southeast Reservoir and Pumping Station (SERPS). Conversely, water from the Lake Huron Water Supply System is pumped into the City's distribution system from the north via the Arva Pumping Station and Reservoirs. The Springbank Reservoirs are fed from both sources. From here, the water is distributed to City of London customers through both the low-level pressure zone system and multiple high-level pressure zones and their respective pumping stations. This study will focus on optimizing the majority of the high-level pressure zones, which are located in south and west London. Optimizing these pressure zones reduces operational costs by using the most appropriate pumps based on water demands, which ultimately increases pump efficiency, lowers electrical costs and extends the assets' useful lives. Optimizing the use of our existing and future assets also allows the City to make efficient use of capital growth funds, ensuring we are making strategic investments to grow our system to meet demands while minimizing capital costs. Finally, the optimization ensures the City is meeting both provincial and municipal regulations and ultimately providing users with high quality and safe water delivered at appropriate pressures.

DISCUSSION

City of London Water Pressure Zones

In order to distribute water to the City of London's customers within the pressures required by both the Ministry of the Environment, Conservation and Parks (MECP) and the City of London Design Standards, multiple high-level pressure zones have been implemented. This study will focus on the following pressure zones:

Southeast Pressure Zones

Southeast Reservoir and Pumping Station transfers water from the Elgin Area Water Supply System into London's low-level distribution system as well as pressurizes the Southeast pressure zone. The Southeast area has substantial industrial land use, both existing and planned, which makes it an important area for the City to retain and attract business. The Southeast pressure zone is currently contained within pressure control valves. New pressure control valves were recently installed in order to expand the Southeast high-level pressure zone and need to be brought into service once the future growth and water demands of the area are confirmed through this study.

Springbank/Westmount/Pond Mills Pressure Zone

The current Springbank, Westmount and Pond Mills high-level water distribution systems are interconnected and function together. At certain times of day, pumps may be turned off at one station, and servicing provided from another. Originally the Westmount Pumping Station was the primary operating station for the west portion of the high-level area of the City. In recent years however, improvements have been made to the Springbank Pumping Station, which have made the Springbank Pumping Station the primary pumping station. It is important to study this area in order to optimize the use of the multiple pump stations to ultimately save on operational costs and extend the lifetime of the assets.

Wickerson Pressure Zone

The Wickerson Pumping Station was constructed and brought into service in 2005. An Environmental Assessment was completed in 2019, which led to detailed design which is currently underway, for Southdale Road West / Wickerson Road Improvements. One component of the aforementioned design will ultimately allow for the linking of the Wickerson pressure zone with the Springbank/Westmount/Pond Mills pressure zone. This will allow for further efficiency optimization of the combined pressure zones and multiple high-level pumping stations. The combined pressure zones are beneficial since they allow for the most suitable pumps to operate to meet the water demand as it

fluctuates throughout the day. This ultimately allows the pumps to operate closer to their optimal efficiencies, lowers electrical and operating costs, allows for more pumps to be rotated which extends their useful lives and provides more redundancy when maintenance or replacements are taking place.

Hyde Park Pressure Zone

The Hyde Park high-level pressure zone is located in northwest London. As this area of the City grows, it is important to study the existing system and plan for future growth and demand in order to optimize the operation of the pumping station and minimize operational costs.

Procurement Process

The 2019 DC Study and multi-year budget identifies two major servicing studies to be carried out to cover different areas of the City. Due to the similar nature of these two projects, the engineering consultant selection procedure is utilizing a grouped consultant selection process developed in partnership with the Purchasing and Supply Division, subsequently approved by Council June 12, 2018. This two-stage grouped procurement process is in accordance with Section 15.2(e) of the Procurement of Goods and Services Policy.

In April of 2020, a public request for qualifications was posted for consulting services for both servicing studies. Three firms responded, submitting expressions of interest and qualifications. All three firms met the qualifications to submit proposals. In June 2020, the request for proposal for the South and West London Servicing Study was sent to the three consultants, and three proposals were received at the RFP closing.

The City's evaluation team determined that the proposal provided by C3 Water Inc. provided the best value. C3 Water Inc. has extensive experience with this type of work and a good understanding of how our water system operates. They captured the full project scope in their proposal including all provisional items. C3 Water Inc.'s fees were within the budget for the project. Overall, their proposal met all of the key project requirements and their staff are qualified to undertake the required engineering services.

Scope of Work

The scope of the project is to provide high quality Consulting Engineering Services for undertaking the South and West London Servicing Study.

This project will:

- Confirm/determine growth of study areas based on water demand projections, operational practices and other demand forecasting tools;
- Make recommendations to the timing and need for the Development Charge projects listed in previous reports and Master Plans;
- Implement in field monitoring and analysis to optimize operational strategies;
- Perform a hydraulic model upgrade, update and calibration; and
- Develop operating strategies and work plans to proactively prepare for water system changes.

Future engineering assignments beyond this study may be carried out to address the study results if necessary. Any future assignments will follow appropriate procurement procedures per the City of London's Procurement of Goods and Services Policy.

Project Costs

C3 Water Inc.'s fee submission of $339,658.16, including $50,000 contingency and $89,713.30 in provisional items, excluding H.S.T., is within the budget allocation for this work. The project's evaluation team reviewed C3 Water Inc.'s proposal and found it met all of the key project requirements.

CONCLUSIONS

The proposed consulting team, C3 Water Inc., has extensive experience with similar work and is well qualified to undertake the required engineering services. Based on the review by the evaluation team, it is determined that retaining C3 Water Inc. is in the best financial and technical interests of the City. It is recommended that C3 Water Inc. be awarded this consulting assignment to undertake all tasks related to the South and West London Water Servicing Study.

PREPARED BY:	**REVIEWED & CONCURRED BY:**
AARON ROZENTALS, P. ENG. **DIVISION MANAGER, WATER ENGINEERING**	**SCOTT MATHERS, MPA, P. ENG.** **DIRECTOR, WATER AND WASTEWATER**

RECOMMENDED BY:
KELLY SCHERR, P.ENG., MBA, FEC **MANAGING DIRECTOR, ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER**

July 28, 2020

Attach: Appendix “A” – Sources of Financing

CC. Stephen Romano – Environmental Services Engineer, Water Engineering
John Freeman – Manager, Purchasing & Supply
Chris Ginty – Procurement Officer, Purchasing & Supply
Gary McDonald – Budget Analyst, Finance & Corporate Services
Samuel Ziemann – Vice President, C3 Water Inc.
John Simon – Division Manager, Water Operations
Alan Dunbar - Manager, Financial Planning & Policy
Jason Davies - Manager, Financial Planning & Policy