Bill No. 356 2022	
By-law No. A	

A by-law to authorize and approve an Agreement between The Corporation of the City of London and The University of Waterloo for the use of space at the Adelaide Pollution Control Plant for a research experiment (termed a Mesocosm) and to authorize the Mayor and the City Clerk to execute the Agreement.

WHEREAS section 5(3) of the *Municipal Act, 2001* S.O. 2001, c.25, as amended, provides that a municipal power shall be exercised by by-law;

AND WHEREAS section 9 of the *Municipal Act, 2001* S.O. 2001, c.25 as amended provides that a municipality has the capacity, rights, powers and privileges of a natural person for the purpose of exercising its authority under this or any other Act<sup>1</sup>

AND WHEREAS it is deemed expedient for The Corporation of the City of London to enter into an Agreement with University of Waterloo for the Mesocosm experiment;

AND WHEREAS it is appropriate to authorize the Mayor and the City Clerk to execute the Agreement on behalf of The Corporation of the City of London;

NOW THEREFORE the Municipal Council of The Corporation of the City of London enacts as follows:

- 1. The Agreement <u>attached</u> as Schedule "1" to this by-law, being an Agreement between The Corporation of the City of London and University of Waterloo is hereby authorized and approved.
- 2. The Mayor and the City Clerk are hereby authorized to execute the Agreement authorized and approved under Section 1 of this by-law.
- 3. This by-law shall come into force and effect on the day it is passed.

PASSED in Open Council on September 27, 2022.

Ed Holder Mayor

Michael Schulthess City Clerk

#### **SCHEDULE 1**

## **CONSENT TO ENTER AGREEMENT**

#### **BETWEEN:**

## THE CORPORATION OF THE CITY OF LONDON

(hereinafter called the "City") and

# **UNIVERSITY OF WATERLOO**

(hereinafter called the "University")

**WHEREAS** the City operates the Adelaide Wastewater Treatment Plant located at 1159 Adelaide Street North (the "Facility");

**AND WHEREAS** University of Waterloo has requested permission to use a portion of the Facility for the purpose of **continuing ongoing research that began in 2015**;

**AND WHEREAS** the City has agreed to permit the University to use a portion of the Facility as more particularly described herein for the purpose of conducting research:

**FOR VALUABLE CONSIDERATION,** the receipt and sufficiency of which is hereby acknowledged, the City hereby consents to the entry into the Adelaide Wastewater Treatment Plant pollution control plant by the University and its employees, authorized representatives and consultants with all necessary machinery and equipment, for the purpose of conducting research.

University of Waterloo shall have, during the term of this Agreement, the exclusive right to occupy and use that portion of the Facility as shown in the Schedule B attached (the "Designated Space").

The University's use of the Designated Space shall be for the purposes of the Mesocosm Project as detailed in Schedule A (the "Project"). In connection with the Project, the University shall have the right to:

- a) connect to the electrical system of the Facility;
- b) connect to the water system of the Facility through connection provided. The Agreement shall be effective from **May 1, 2021** to **November 30, 2024**. Any alterations to the Designated Space shall be at the University's expense and approved by the City's Site Manager, who shall also approve any contractors that will make alterations to the Designated Space. University of Waterloo shall prepare a Health and Safety Plan (the "Plan") with respect to the Designated Space for its employees, authorized representatives and consultants. The Plan will be reviewed by the City's Site Manager.

University of Waterloo and its employees, authorized representatives and consultants shall comply with the Facility Fire Safety Plan and other policies and procedures applicable to the Facility provided to the University by the City.

To the best of its knowledge, the University agrees that its activities in the Designated Space and the Facility will not interfere with the ongoing operation by the City of the Facility as a wastewater treatment plant. University of Waterloo shall maintain comprehensive general liability insurance on an occurrence basis for an amount of not less than Five Million (\$5,000,000.00) Dollars and shall include the City as an additional insured with respect to Waterloo's occupancy and use of the Designated Space and the Facility. In addition, the University shall maintain automobile liability insurance for an amount of not less than Two Million (\$2,000,000.00) Dollars on forms meeting statutory requirements covering all owned or leased vehicles. University of Waterloo agrees to provide evidence of continued insurance coverage from insurer(s) licensed to operate in Canada annually to the City at each policy renewal date during the term of this Agreement.

University of Waterloo shall indemnify and save harmless the City and its council members, officers, employees and agents from any and all liability, loss, claims, demands damages and costs caused in whole or in part by the negligent acts, errors or omissions of the University or anyone for whose acts it is responsible in law.

The City shall indemnify and save harmless University of Waterloo and its officers, employees and agents from any and all liability, loss, claims, demands damages and costs caused in whole or in part by the negligent acts, errors or omissions of the City or anyone for whose acts it is responsible in law.

The City reserves the right to enter the Designated Space for the purpose of determining compliance with this Agreement provided the City's Site Manager gives the University reasonable notice of such entry.

The City reserves the right to terminate the right of entry and occupancy hereby granted by giving University of Waterloo thirty (30) days' written notice. Upon receipt of such notice, the University shall immediately vacate the Designated Space and remove all its equipment and material.

Any approvals required by this Agreement may take any form, provided such approval is confirmed in writing as soon as possible.

University of Waterloo shall not assign this Agreement without the consent of the City, which consent may be unreasonably withheld.

This Agreement shall ensure to the benefit of and be binding upon the parties and their respective successors and approved assigns.

<b>DATED</b> at London thisday of	March, 2022.
ТІ	HE CORPORATION OF THE CITY OF LONDON
	Ed Holder, Mayor
	Michael Schulthess, City Clerk

# **UNIVERSITY OF WATERLOO**



Title: Senior Manager

I have the authority to bind the University

# Schedule A Statement of Work:

The goal of the project is to continue the ongoing research started in 2015 to establish thresholds of key indicators of riverine ecological health to nutrient exposure for the Thames River and other Great Lakes tributaries using artificial mesocosm experiments.

The establishment of ecological thresholds will be achieved through a series of exposure experiments over the three year period, beginning on **May 1, 2021** and ending on **November 30, 2024**. There may be opportunities for additional studies in following years), in which case, this Agreement will be amended if agreed to by both parties.

We will use a set of mobile artificial stream mesocosm units (approximately 8) which will be temporarily located at the City of London's Adelaide Pollution Control Plant. Mesocosms consist of a flume with a partial recirculation system supplied by a series of pumps connected to reservoir tanks. Mesocosms will use City of London drinking water with controlled additions of nitrogen and phosphorus forms to generate exposure conditions.

Stream biotic communities will be seeded into the mesocosms through the transfer of gravel substrate from nearby streams.

Experiments will occur over 3 - 4 four week periods throughout the summer months (**June through September**).

During the experiments biological and chemical measurements will be made over daily to weekly intervals. Mesocosm units will be partially dismantled and disconnected from water and electrical connections during the non-operational months (November through April). All units and supporting equipment will be removed from City of London property following the completion of the 2020 experimental season.

# Schedule B Designated Space: at Adelaide Pollution Control Plant

Photo below shows the Designated Space (see red outline) and the location of Mesocosm and related services (see inset photo).

