SCHEDULE A

SPONSORED RESEARCH AGREEMENT SRA# 059300

Water, Energy, and Affordability: Key Drivers in the Financially Sustainable Management of Urban Water Infrastructure

Between

University of Waterloo

Office of Research Contracts Research and Industrial Grants 200 University Avenue West Waterloo, Ontario N2L 3G1 (hereinafter referred to as the "University")

and

The Corporation of the City of London 300 Dufferin Avenue London, ON N6B 1Z2 (hereinafter referred to as the "Client")

WHEREAS the University and the Client wish to enter into this agreement to have the University perform the research as set forth in Schedule "A" in accordance with the terms and conditions of this agreement;

NOW THEREFORE in consideration of the premises and the mutual covenants, terms, conditions and agreements contained herein, and other good and valuable consideration, the sufficiency of which is hereby acknowledged, the parties hereto agree as follows:

ARTICLE 1 – DEFINITIONS

- 1.1 "Agreement" means this Sponsored Research Agreement including all attached schedules, as the same may be supplemented, amended, restated or replaced in writing from time to time;
- 1.2 "Background Intellectual Property" means proprietary or Confidential Information of the University, Creator(s), or the Client which is disclosed to the other for the purpose of the Research Plan;
- 1.3 "Confidential Information" means the specific terms and conditions set forth in this Agreement, and any information, which is disclosed by one party to the other party for the purpose of the Research Plan provided that tangible materials are clearly marked as "Confidential" and any information provided orally or visually is identified as confidential at the time of disclosure, and confirmed as confidential in writing within fifteen (15) days of such disclosure, but shall not include information that:
 - (a) is or becomes generally available to the public other than as a result of any act by a receiving party to this Agreement;
 - (b) is rightfully received from a third party without similar restriction or without breach of this Agreement;
 - (c) a receiving party is able to demonstrate, in writing, was known to it on a non-confidential basis; or
 - (d) was independently developed by a receiving party without the use of any of the Confidential Information.
- 1.4 "Controlled Item" has the meaning set forth in Section 2.6;
- 1.5 "Creators" means collectively, the Principal Investigator(s) and any University Research Participants;

- 1.6 "Effective Date" means the date shown in Section 13.1 of this Agreement;
- 1.7 **"Principal Investigator"** has the meaning set forth in Section 2.3;
- 1.8 "Research Participant Agreement" has the meaning set forth in Section 2.4;
- 1.9 "**Research Plan**" has the meaning set forth in Section 2.2.
- 1.10 "**Research Results**" means the technical information, know-how, copyrights, models, specifications, prototypes or inventions, whether patentable or unpatentable, developed in performance of the Research Plan;
- 1.11 "University Research Participants" means University researchers, including, but not limited to, students, post doctoral fellows, research associates, who participate in the Research Plan;

ARTICLE 2 - OBJECTIVES

- 2.1 The Effective Date of this Agreement is as provided in Section 13.1.
- 2.2 The University shall perform, or procure the performance of, the research plan as set forth in Schedule "A" (the "Research Plan") upon the terms and conditions hereinafter set forth.
- 2.3 The Principal Investigator(s) of the Research Plan shall be Andre Unger of the University's Department of Earth and Environmental Sciences, and he/she shall be responsible for the technical content of the Research Plan. The Client Project Lead is Roland Welker, Manager, Water Engineering Division.
- 2.4 Each University Research Participant shall sign a Research Participant Agreement as set forth in Schedule "B".
- 2.5 Notwithstanding Section 2.2 hereof, the Client and the University agree that until such time as all regulatory requirements have been obtained, including all necessary approvals of any regulatory or research ethics board concerned, no work requiring such regulatory or ethics approvals shall commence (excepting any preliminary preparations which are not restricted by such requirements). For greater certainty, any delay in obtaining such approvals shall not be considered a default or breach by either the Client or the University.
- 2.6 The Client and the University acknowledge that some research, particularly that in the natural sciences and engineering, may be subject to export control laws and regulations of Canada or the United States of America (U.S.). For example, transmitting the results of, or information about, certain research may require first obtaining an export permit or other authorization. Certain research may also be subject to regulation by the Controlled Goods Directorate (CGD) of Public Works and Government Services Canada (PWGSC), in accordance with the *Defence Production Act* (DPA) and the Controlled Goods Regulations (CGR). Information may be obtained from the CGD Website at: http://ssiiss.tpsgc-pwgsc.gc.ca/dmc-cgd/index-eng.html
- 2.7 The Client shall use reasonable efforts to determine whether or not the Research Plan contains or may result in, items subject to these laws and regulations (a "Controlled Item"). In the event that a Controlled Item is identified in the Research Plan, then the Client and the University shall comply with all applicable Canadian and U.S. export control laws and regulations. In the event that the Client wishes to include a Controlled Item into the Research Plan at any time during the term of this Agreement, then the Client and the University agree as follows:
 - (a) the Client shall promptly notify the University of the Controlled Item's classification prior to any shipment or transmission to the University;
 - (b) the University may, at the University's sole discretion, accept or reject the delivery of the Controlled Item; and

in the event that the University rejects the delivery of the Controlled Item, such rejection by the University shall not constitute a breach of this Agreement.

ARTICLE 3 - FEES

- 3.1 In consideration of the University carrying out the Research Plan, the Client shall pay the University a cash contribution of CDN \$25,000 per year over 3 years, which amount is inclusive of overhead expenses. In addition the parties agree that the Client will provide a further CDN \$19,231 per year over 3 years of in-kind support.
- 3.2 The sum stipulated in Section 3.1 shall be paid by the Client electronically or by cheque made payable to the University of Waterloo (Attn: Finance Department, ECH, 200 University Avenue West, Waterloo, Ontario N2L 3G1) within thirty (30) days of receipt of invoice(s) according to the following schedule:
 - (a) \$25,000 upon signing of this Agreement.
 - (b) \$25,000 one year after the date of last signature of this Agreement.
 - (c) \$25,000 two years after the date of last signature of this Agreement.

Invoices to the Client shall be emailed to:

The Corporation of the City of London 300 Dufferin Avenue London, ON N6B 1Z2

ATTN: Roland Welker

phone: (519) 661-2500 ext. 5593 email: rwelker@london.ca

- 3.3 Interest on overdue accounts will be charged at current bank rates on amounts not paid within thirty (30) days of submission of invoice.
- 3.4 The University shall not be obliged to perform any work beyond the Research Plan which would cause the aggregate costs to exceed the amount set forth in Section 3.1.

ARTICLE 4 – RESEARCH RESULTS

- 4.1 The University, through the Principal Investigator, will provide the Client with progress reports in accordance with the terms set forth in Schedule "A".
- 4.2 On or within ninety (90) days following the completion of the Research Plan, the University, through the Principal Investigator, will provide the Client with a final report of the Research Results.

ARTICLE 5 - EQUIPMENT

Unless otherwise agreed upon by the Client and the University in writing, or specifically provided for pursuant to the terms of this Agreement, all equipment and materials purchased by or provided to the University for the carrying out of the Research Plan, shall be, and remain, the property of the University.

ARTICLE 6 - CONFIDENTIALITY

- 6.1 All Confidential Information will remain the property of its owner or the party that furnished it as the case may be.
- 6.2 For a period of five (5) years from the date of disclosure of Confidential Information, the receiving party agrees to maintain in confidence all Confidential Information disclosed to it with the same degree of care as the receiving party normally takes to preserve its own confidential information of similar grade, but in any event, no less than a reasonable degree of care.
- 6.3 The receiving party may only disclose Confidential Information to persons with a "need to know" who shall be made aware of, and be required to observe and comply with the

- covenants and obligations contained herein, and the Confidential Information shall only be used for the purpose of the Research Plan.
- A receiving party may disclose Confidential Information pursuant to the requirements of a government agency or pursuant to a court order, provided that the receiving party gives the disclosing party sufficient notice to enable it to seek an order limiting or precluding such disclosure.

ARTICLE 7 - INTELLECTUAL PROPERTY

- 7.1 All aspects and parts of the Background Intellectual Property shall be exclusively owned by its owner and nothing herein shall serve to, or should be construed to transfer any ownership rights whatsoever in the Background Intellectual Property. Such Background Intellectual Property may be used for the purpose of the Research Plan upon terms and conditions to be agreed upon in writing between the parties.
- 7.2 All Research Results shall be owned by the Creator(s). The Creator(s) are required to promptly disclose the Research Results to the University and to the Client.
- 7.3 The parties agree the University will specifically retain the right to use the Research Results for continued research and educational purposes without charge, fee, or royalties notwithstanding any agreement on commercial rights as referenced in Section 7.3.

ARTICLE 8 - PUBLICATION

- 8.1 The Client and the University agree that it is part of the University's function and policies to disseminate information and to make it available for the purpose of scholarship.
- 8.2 At any time during the term of this Agreement, the University will provide the Client with a draft copy of any proposed publication or disclosure of Research Results for its review at least sixty (60) days before submission for publication or disclosure. Upon the Client's written request, which shall be received by the University within the same sixty (60) day period, the University will:
 - (a) delete any Confidential Information of the Client from the proposed publication or disclosure; or
 - (b) delay publication, subject to Section 8.3, up to a maximum of sixty (60) additional days for the purposes of filing for intellectual property protection on terms and conditions to be negotiated and agreed upon by the Client, the Creator(s) and the University.
- 8.3 Notwithstanding Subsection 8.2(b), the University retains the right to have any thesis reviewed and defended without delay for the sole purpose of academic evaluation in accordance with the University's established procedures. The University will, in consultation with the student and the Client, determine if such a publication delay as set forth in Subsection 8.2(b) will be provided. The Client may request that a thesis defense be held in camera and that the members of the thesis examination board, including the external examiner(s), be required to sign a non-disclosure agreement. The University shall determine in its sole discretion if such request shall be granted.

ARTICLE 9 - INDEMNITY

- 9.1 The Client agrees to indemnify and save harmless the University, its affiliates, directors, officers, employees, agents, students and representatives from and against all claims, demands, loss, costs, damages, actions, suits, or other proceedings (individually a "Claim" and collectively the "Claims") by any third party based upon, occasioned by, or attributed to actions, errors, omissions, or negligence of the Client its directors, officers, employees, agents or representatives during the performance of this Agreement, except to the extent such Claim(s) are attributable to the gross negligence or wilful misconduct of the University.
- 9.2 The University agrees to indemnify and save harmless the Client, its affiliates, directors, officers, employees, agents and representatives from and against all Claims by any third party based upon, occasioned by, or attributed to actions, errors, omissions, or negligence

- of the University its directors, officers, employees, agents or representatives during the performance of this Agreement, except to the extent such Claim(s) are attributable to the gross negligence or wilful misconduct of the Client.
- 9.3 The indemnity in this Article 9 shall not affect or prejudice a party from exercising any other rights it may have under the law.

ARTICLE 10 – REPRESENTATIONS AND WARRANTIES AND LIMITATION OF LIABILITY

- 10.1 Each party represents and warrants to the other party that it is duly organized, validly existing and in good standing, and it has the right and authority to enter this Agreement and do all acts and things as required or contemplated to be done, observed and performed by it hereunder.
- 10.2 The University makes no warranty, express or implied, concerning the Research Results under this Agreement, which are all provided "as is". THE UNIVERSITY MAKES NO REPRESENTATIONS AND EXTENDS NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED. THERE ARE NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR THAT THE USE OF THE RESEARCH RESULTS WILL NOT INFRINGE ANY PATENT, COPYRIGHT, TRADEMARK OR OTHER PROPRIETARY RIGHT OF ANY THIRD PARTY.
- 10.3 NEITHER THE CLIENT NOR THE UNIVERSITY WILL BE LIABLE TO THE OTHER FOR ANY CONSEQUENTIAL DAMAGES, LOST PROFITS, LOST SAVINGS, LOSS OF ANTICIPATED REVENUE OR ANY EXEMPLARY, PUNITIVE, SPECIAL OR INDIRECT DAMAGES, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

ARTICLE 11 - INSURANCE

- 11.1 Client shall obtain and maintain comprehensive general liability insurance and any other insurance that a prudent person would deem necessary, in the minimum amount of \$5,000,000 with respect to its operations. Such insurance shall name the University as an additional insured and shall contain provisions for cross-liability and severability of interest, and the Client shall provide a certificate of insurance as evidence of such coverage if requested by University.
- 11.2 University shall obtain and maintain comprehensive general liability insurance and any other insurance, for example but not limited to, pollution liability insurance as circumstances warrant, that a prudent person would deem necessary, in the minimum amount of \$5,000,000 with respect to its operations. Such insurance shall contain provisions for cross-liability and severability of interest, and the University shall provide a certificate of insurance as evidence of such coverage if requested by the Client.

ARTICLE 12 – PERMITS, LICENSES & SUBCONTRACTS

- 12.1 For work to be carried out off the University's premises, the Client shall identify any permits, licenses or other required by any governing authority in relation to any of the work to be performed and agrees to obtain or to assist the University to obtain such permits, licenses or other.
- 12.2 Subject to Section 14.9 below, in the event that any portion of the Research Plan will be performed by a subcontractor, the University and the Client acknowledge and agree that:
 - (a) such subcontractor shall be legally bound to a work-for-hire agreement, in writing, which agreement shall not be less favorable with respect to any term or condition of this Agreement. For greater certainty, the University and the Client represent and warrant that all relevant conditions of this Agreement will be described to and accepted by the subcontractor;
 - (b) such subcontractor shall carry and maintain in full force and effect comprehensive general liability insurance (and/or any other insurance as circumstances warrant

- and that a prudent person would deem necessary) which insurance policy will name the University and the Client as an additional insured;
- such subcontractor will have the necessary skills and experience to carry out the (c) subcontract; and
- (d) the subcontractor will have the necessary permits and licenses prior to commencing the subcontract.

ARTICLE 13 – TERM & TERMINATION

- 13.1 This Agreement shall come into effect upon the Effective Date October 1, 2014 and unless earlier terminated in accordance with the terms hereof, shall terminate September 30, 2017. In the event that this Agreement is funded in part by the Natural Sciences and Engineering Research Council ("NSERC"), the term of this Agreement shall, at a minimum, be equal in duration to the period of the NSERC award.
- 13.2 This Agreement may be terminated by the Client upon sixty (60) days written notice to the University.
- 13.3 This Agreement may be immediately terminated by the University upon sixty (60) days written notice to the Client if circumstances beyond the University's control preclude continuation of the Research Plan.
- Upon termination of this Agreement by either the Client or the University, the University 13.4 will be reimbursed by the Client for all costs and non-cancellable commitments incurred by the University in the performance of the Research Plan, such reimbursement not to exceed the total estimated expenses set forth in Section 3.1.
- 13.5 Termination as set forth in this Article 13 shall not relieve any of the parties of any obligations accrued under this Agreement prior to the date of termination. Each of Articles 5 (Equipment), 6 (Confidentiality), 7 (Intellectual Property), 8 (Publication), 9 (Indemnity), 14 (General Provisions), Sections 10.2 (Disclaimer), 10.3 (Limitation of Liability) and 13.4 (Reimbursement for expenses), 13.5 (Survival) shall survive termination of this Agreement.

ARTICLE 14 – GENERAL PROVISIONS

- The Client shall not use the name, or any variation, adaptation, abbreviation, trademark 14.1 or other, of the University, nor the name of any member of the University's staff or governors, in any publicity without the prior written approval of an authorized representative of the University. Subject to Section 14.2, the University will not use the name of the Client, or any variation, adaptation, abbreviation, trademark or other, nor the name of any employee of the Client, in any publicity without the prior written approval of the Client.
- The University may at its own discretion provide a brief listing of this Research Plan as 14.2 part of any public compendium disclosing research taking place at the University. Such disclosure may include, but is not limited to, the title of the Research Plan and the name of the Client.
- 14.3 The parties are independent parties and nothing in this Agreement shall constitute either party as the employer, principal or partner of or joint venturer with the other party. Neither party has any authority to assume or create any obligation or liability, either express or implied, on behalf of the other.

14.4 University of Waterloo Contact Names

Administrative Contact:	Financial Contact:	Intellectual Property Contact:	
Thiam Phouthonephackdy	Doreen White	Scott Inwood	
Senior Manager	Senior Manager	Director Commercialization	
Research Partnerships	Research Finance	WatCo	

14.5 Notices under this Agreement shall be sent to the addresses as shown below unless changed by written notice.

University:

Thiam Phouthonephackdy, Senior Manager Contracts Research and Industrial Grants University of Waterloo Office of Research 200 University Avenue West Waterloo, Ontario N2L 3G1

Phone: 519-888-4567 Ext. 38536

Fax: 519-746-7151

E-mail: tphoutho@uwaterloo.ca

Client:

The Corporation of the City of London 300 Dufferin Avenue London, ON N6B 1Z2

ATTN: Roland Welker

phone: (519) 661-2500 ext. 5593 email: rwelker@london.ca

- 14.6 For this Agreement, neither the Client nor the University shall be liable to the other for any failure or delay in performance by circumstances beyond its control, including but not limited to, acts of God, fire, labour difficulties or governmental action.
- 14.7 Unless otherwise specified in this Agreement, this Agreement shall supersede all documents or agreements, whether written or oral, in respect of the subject matter thereof. For greater clarity, no direct or indirect separate arrangement, whether oral or written, with the Principal Investigator or other person, involving any component of the work to be performed, is permitted unless prior agreement, in writing, is given by the authorized signing authorities of the Client and the University. The Client acknowledges and agrees that the University provides no insurance coverage whatsoever to faculty members or other university persons who may provide direct or independent services relating to this Agreement.
- 14.8 The terms herein stipulated may not be modified in any way without the mutual consent of the Client and the University in writing given by their authorized signing authorities.
- 14.9 This Agreement shall not be assigned by either the Client or the University without the prior written consent of the other party, such consent not to be unreasonably withheld. The University and the Client shall not subcontract any work to be performed under this Agreement without the prior written consent of the other party (such consent not to be unreasonably withheld) except as specifically set forth in the Research Plan and in accordance with Section 12.2 of this Agreement.
- 14.10 In the event that a translation of this Agreement is prepared and signed by the Client and the University for the convenience of the Client, this English language version shall be the official version and shall govern if there is a conflict between the two.
- 14.11 This Agreement shall be governed by and construed in accordance with the laws of the Province of Ontario and the laws of Canada applicable therein.
- 14.12 The Parties agree that an electronically submitted signature-whether by fax, email or the like shall be treated as if it were an original signature and neither Party shall contest the validity of this Agreement based upon the use of electronically transmitted signatures.
- 14.13 The following appendices are attached to and form part of this Agreement:

Schedule A – Research Plan

Schedule B – Research Participant Agreement

IN WITNESS WHEREOF the Client and the University hereto have executed this Agreement in a legally binding manner.

)	UNIV	ERSITY OF WATERLOO
))	Per:	
)		Name:
)		Title:
)		I/We have the authority to bind the corporation
)		Date
)	The C	Corporation of the City of London:
)	Per:	
,)		Name:
)		Title:
)		I/We have the authority to bind the corporation
		Date
Acknowledgment and Consent of Principal Inve	stigator	
I, having read this Agreement, hereby agree to contained herein and further agree to ensure that involved in the Research Plan are informed of t Agreement and have acknowledged and consen Agreement (Schedule B).	all Unive heir obli	ersity Research Participants who are gations under the provisions of this
Date	e:	
Andre Unger, PhD	-	

SCHEDULE A

RESEARCH PLAN

The Research Plan is outlined in the NSERC CRD application submitted by the Principal Investigator titled "Water, Energy, and Affordability: Key Drivers in the Financially Sustainable Management of Urban Water Infrastructure", NSERC-CRDPJ: 472212-14.

If the NSERC Grant is not awarded the research team including the Principal Investigator and the Project Lead will modify the Research Plan to address the reduced scope of work.

SCHEDULE B

RESEARCH PARTICIPANT AGREEMENT

WHEREAS the University of Waterloo	and	the C	Client	are parties	to a Spons	ored Resear	ch
Agreement number #	to	which	h this	Research	Participant	Agreement	is
appended; and							

WHEREAS the undersigned is associated with the University of Waterloo and will be involved in the Research Plan defined by the Sponsored Research Agreement;

NOW THEREFORE, in consideration of information and facilities made available to me in connection with my work in relation to the Research Plan and other valuable consideration, I agree that:

- 1. **Defined Terms.** All terms denoted with initial capital letters herein shall have the meanings ascribed to them in the Sponsored Research Agreement.
- 2. **Reasonable Efforts.** I will use all reasonable efforts to achieve the objectives and deliverables defined in the Article 2 of the Sponsored Research Agreement for those activities in which I am involved.
- 3. **Research Results** I will co-operate fully and in good faith in discussion and agreement with all conditions regarding Research Results as set forth in Article 7 of the Sponsored Research Agreement.
- 4. **Confidential Information.** In accordance with Article 6 of the Sponsored Research Agreement, I will keep confidential all of the Confidential Information that I may receive.
- 5. **Publications.** I will comply with all publication conditions that are set out in Article 8 of the Sponsored Research Agreement.
- 6. **Ownership**. I understand that ownership of any Research Results shall be determined in accordance with Article 7 of the Sponsored Research Agreement and the *University of Waterloo Policy #73 (Intellectual Property Rights)*.
- 7. **Invention Disclosure.** I shall keep the Principal Investigator fully and promptly informed on an on-going basis of the development of Research Results and shall not take any steps with respect to filing intellectual property protection for any Research Results without prior consultation with the Principal Investigator.
- 8. **Cooperation in Patent Matters.** I will cooperate fully in the signing of documents and taking such other steps as may be reasonably requested to obtain and maintain patent and other intellectual property protection for the Research Results relating to the Sponsored Research Agreement and in connection with any infringement action in any way relating to said Research Results, and I will sign all documents and do all things necessary or proper to give effect to this Research Participant Agreement and any rights granted by the University under the Sponsored Research Agreement.
- 9. **Commercialization Revenue.** I agree that allocation of the revenue from sales, royalties, licence fees or other sources received as a result of the commercialization of Research Results relating to the Sponsored Research Agreement to which I contribute as an inventor shall be made in a manner consistent with the University of Waterloo Policy #73 (Intellectual Property Rights).
- 10. **Acknowledgement.** I have obtained or have been afforded the opportunity to obtain independent legal advice with respect to this Research Participant Agreement and all documents and transactions related thereto and I fully understand the nature and consequences of this Research Participant Agreement and all documents and transactions related thereto.

By signing below, I indicate my acceptance of these terms.

Research Participant's Signature	Witness' Signature
Print Name	Print Name
Date	Date
Research Participant's Signature	Witness' Signature
Print Name	Print Name
Date	Date
Research Participant's Signature	Witness' Signature
Print Name	Print Name
Date	Date
Research Participant's Signature	Witness' Signature
Print Name	Print Name
Date	Date
Research Participant's Signature	Witness' Signature
Print Name	Print Name
Date	Date
Research Participant's Signature	Witness' Signature
Print Name	Print Name
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