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TO:	**CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON OCTOBER 6, 2015**
FROM:	**JOHN BRAAM, P.ENG. MANAGING DIRECTOR ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER**
SUBJECT:	**DINGMAN CREEK SUBWATERSHED: STORMWATER SERVICING STRATEGY SCHEDULE C MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT**

RECOMMENDATION

That, on the recommendation of the Managing Director Environmental & Engineering Services and City Engineer, the following action **BE TAKEN** with respect to appointment of a consulting engineer for the Dingman Creek Subwatershed: Stormwater Servicing Strategy Schedule C Municipal Class Environmental Assessment:

a) Aquafor Beech Ltd. **BE APPOINTED** to carry out the Dingman Creek Subwatershed: Stormwater Servicing Strategy Municipal Class Environmental Assessment in the total amount of $501,328, including contingency, excluding HST; in accordance with Section 15.2(e) of the Procurement of Goods and Services Policy;

b) The Upper Thames River Conservation Authority (UTRCA) **BE APPOINTED** to carry out the Dingman Creek Subwatershed: Modelling for the Floodplain Update in the total amount of $71,500, including contingency, excluding HST; in accordance with Section 14.4 (h) of the Procurement of Goods and Services Policy;

c) the financing for this work **BE APPROVED** as set out in the Sources of Financing Report attached hereto as Appendix "A";

d) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this work.

e) the approvals given herein **BE CONDITIONAL** upon the Corporation entering into a formal contract with the consultant for the work; and

f) the Mayor and City Clerk **BE AUTHORIZED** to execute any contract or other documents, if required, to give effect to these recommendations.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

Civic Works Committee, February 3, 2013, “Contract Award T13-89 Dingman Creek Stormwater Management Erosion Control Wetland (ES2682).”

Council, November 20, 2012. A by-law to amend the Official Plan for the City of London, 1989 relating to lands located in the southwest quadrant of the City, generally bounded by Southdale Road West, White Oak Road, Exeter Road, Wellington Road South, Green Valley Road, and the Urban Growth Boundary.

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2015-2019 CORPORATE STRATEGIC PLAN ALIGNMENT

The Dingman Creek Subwatershed Environmental Assessment (EA) aligns closely to three of the corporate strategic plan goals. Firstly, the EA will provide the template for a robust system of stormwater infrastructure that is mindful of the initial capital costs in the short term and long term operating and replacement costs (BUILDING A SUSTAINABLE CITY: Robust Infrastructure). Secondly, the EA will provide environmentally focused stormwater servicing to facilitate future growth in southwest and southeast London (BUILDING A SUSTAINABLE CITY: Responsible growth).

Lastly, this project focuses not only on innovation but also on public engagement incorporating an enhanced process that includes a variety of key citizen and industry stakeholders (LEADING IN PUBLIC SERVICE: Innovative and supportive organizational practices). Building on the tenents of the Corporate Strategic Plan, the Dingman Creek EA will provide a balanced and progressive framework for the improvement of one of London's largest and most degraded subwatersheds.

BACKGROUND

Purpose:

To initate and retain consultants for the most important stormwater EA for the next 15 years, the *Dingman Creek Subwatershed: Stormwater Servicing Strategy Municipal Class Environmental Assessment (*Dingman EA). A key principle of the proposed process is "one EA, one stormwater strategy."

The recommendations of the Dingman EA are intended to mitigate the impact of future development on water resources and to remediate the subwatershed, with consideration for current and potential flooding, erosion concerns, as well as wildlife/aquatic habitat and natural corridor enhancement. The focus of the study will be providing stormwater management solutions to facilitate development within the Urban Growth Boundary for the next 20 years. As such, this is the most important stormwater EA to be completed for the foreseeable future in South London.

Context:

The Dingman Creek subwatershed (17,200 hectares) is located in Middlesex County with 74% of the area within the City of London. The first Dingman Creek Subwatershed Study (DCSS) was completed in 1995 by Aquafor Beech. The DCSS recommended the first Subwatershed Plan and Stormwater Management Practices for the Dingman Creek. These criteria were incorporated into the Municipal Class Environmental Assessments completed for the areas undergoing urban development in the early 2000s, including Airport Road South, Forest City Industrial Park, Murray Marr, Old Oak, White Oak, Pincombe Drain and the Wickerson Development Area.

The Dingman Creek Subwatershed Study Update (Delcan, 2005) incorporated additional environmental information as well as updated the stormwater modelling from the EAs completed between 1996 and 2004. The recommendations of the DCSSU included 80 SWMFs along the tributaries of Dingman Creek as well as two online flood control facilities and one online erosion control facility. Components of the 2005 subwatershed study were updated by the "Water Resources Components and Slope Stability Evaluation for a Dingman Creek Subwatershed Study Update" (Delcan, 2014). This draft report includes relevant modelling and background information to be reviewed and incorporated into the proposed EA study. The proposed Dingman Subwatershed EA will fill in the gaps for lands where EAs have not been completed and will also re-evaluate the findings of previous EAs.

Since the completion of the Southwest Area Plan (SWAP), development plans in South London have increased. The proposed Dingman EA will also evaluate options for a stormwater servicing strategy that would allow for development of lands identified in the SWAP over the next 20 years.

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DISCUSSION

Objectives:

The purpose of the Dingman Creek EA is to consolidate previously completed studies, fill in data gaps, and recommend an innovative stormwater strategy for the Dingman Creek and its tributaries. The EA will follow a comprehensive, environmentally sound planning process with public and stakeholder participation to balance the requirements of stormwater servicing relative to the natural and built environment. The draft Problem Statement to be addressed during the EA process is as follows:

> *The Dingman Creek suffers from poor water quality, a lack of wildlife habitat, loss of trees, erosion, and flooding. Growth in the Dingman Creek Subwatershed is a City of London priority. The City needs a comprehensive plan for the Dingman Creek. This plan must:*
>
> - *Be consistent with the goals and objectives established in the 1995 Dingman Creek Subwatershed Study;*
> - *Meet the targets established in the Environmental Compliance Approval (ECA);*
> - *Create a "complete corridor" that provides "A continuous natural area for the movement of stormwater, wildlife, and people."*
>
> *Note: The Dingman Creek Environmental Assessment will not delay construction of scheduled stormwater infrastructure recommended by previously completed Environmental Assessments.*

The draft Problem Statement includes the concept of a "complete corridor." The three components of the complete corridor could include:

1. Dingman Creek to convey water and aquatic life;
2. Floodplain and banks of Dingman Creek planted with native/riparian vegetation to provide a habitat for terrestrial animals; and,
3. Pedestrian trail system to encourage physical activity within a natural setting including walking, running, and cycling.

As such, the "complete corridor" option will assess the opportunities to convey stormwater, wildlife and people.

MOECC Pilot Project:

The City of London and the UTRCA have partnered with the Ministry of Environment and Climate Change (MOECC) to conduct a Pilot Project for a comprehensive Environment Compliance Approval (ECA) for the entire Dingman Creek Subwatershed. This Pilot Project ECA would consolidate all existing and proposed stormwater infrastructure approvals in Dingman Creek into one approval. The intent of the consolidated ECA is to streamline the Province's approval process for individual projects and to assist the City to be more responsive. This aligns with the need to meet the timing outlined in the City's Just-in-time Stormwater Servicing Design and Construction Process, established during the 2014 Development Charges (DC) Update.

Scope of Work:

The Dingman EA will generally include:

- Development of Alternatives using a combination of stormwater "tools" including ponds and storm sewers, as well as more innovative measures such as Low Impact Development, and stream remediation/enhancement;

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- Use of stormwater modelling software to simulate performance of the alternatives and consider resiliency to Climate Change;
- Environmental Impact Studies (EIS), as required;
- Recreational pathway design; and,
- Enhanced public engagement process

The key deliverable of the Dingman EA process will be a Preferred Recommended Alternative for Stormwater Servicing Report which incorporates all of the items above.

Public Consultation:

The Schedule “C” EA process mandates two public meetings; however, as this is a project of great importance it is suggested that this project include an enhanced engagement process through the creation of a Stakeholder Committee comprised of members from the UTRCA, provincial government agencies, the development community, local community groups, agriculture, a Council member, and an advisory board member. Members will be selected through an application process. The communications strategy will also include a separate website, logo, and user surveys and other social media features.

Consultant Award:

Given the complexity of this project, we followed a two stage Request for Expression of Interest/Request for Qualifications (REOI/RFQUAL) & Request for Proposal (RFP) process in accordance with Section 15.2(e) of the Procurement of Goods and Services Policy. The City received six expressions of interest from which three consultants were shortlisted.

Following the evaluation of the three RFPs, Aquafor Beech Ltd. is recommended to complete this project based on its expertise and innovation on large stormwater master plan projects in Ontario, its previous experience in the area, and for providing the best value for the proposed scope of work. A cost evaluation was completed following Quality Based Selection to ensure competitiveness. This firm’s proposal was ranked the highest and was competitively priced.

Aquafor Beech has also been retained by the MOECC to develop a “Low Impact Development Stormwater Management Guidance Manual” which is expected to be released by the end of 2016. This document is intended to complement the existing stormwater guidelines in the Province. As such, it is an added advantage to this project to retain this consultant as it will ensure fluidity between the latest Provincial guidelines and the City’s 20 year stormwater strategy.

UTRCA Partnership:

The UTRCA is responsible for regulating the floodplain in the City of London. The UTRCA is recommended to be retained to complete the existing conditions floodplain modelling associated with this project to avoid duplicated efforts with the Consultant. As such, the UTRCA is recommended to be retained as a Single Source consultant in accordance with Section 14.4 (h) of the Procurement of Goods and Services Policy. In this case, it is beneficial for the City and UTRCA to cost share this work for our common purposes.

Financial Implications:

The financial objective of the Dingman EA is to optimize pending investments while meeting our environmental and stormwater servicing objectives. There are two primary ways in which to achieve the intended goals in a fiscally responsible way:

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1. **One comprehensive EA:** The Dingman EA is intended to eliminate the need for many separate EAs throughout the subwatershed. There are currently 14 projects that would require EAs in the 20-year Capital Budget Forecast. Using the average price of the most recent EAs completed by the City ($200k each) the total cost to complete the EAs for South London would be $2.8M. Therefore, this consolidated approach is expected to save approximately $2.2M.

2. **One comprehensive servicing solution**: The consolidated EA should ensure that approximately $94.5 million dollars in Development Charges (DC) and City Capital funding reserved for SWM works in this subwatershed will be spent efficiently as it will consider optimizing the functions of the entire system and recommend one comprehensive servicing strategy.

Tentative Schedule:

The intended schedule for the project is two years. The high-level schedule is as follows:

Notice of Initiation:	October 2015
Stakeholder Committee Application process:	November 2015
Stakeholder Meeting #1:	Winter 2015
Public Information Centre 1:	Winter 2016
Public Information Centre 2:	Spring 2017
Study completion by:	December 2017

CONCLUSIONS

Recommendations/Conclusions:

The Dingman EA is the most important stormwater EA that will be completed by the City for the next 15 years. The concept of a complete corridor will be evaluated as part of the EA process to promote the movement of stormwater, wildlife and people. The recommended strategy is intended to be a showcase project for South London as well as a fiscally responsible approach to stormwater management in the subwatershed. The MOECC Pilot Project presents an additional opportunity to streamline stormwater approvals and reduce future study costs.

Following a two stage procurement process, Aquafor Beech is recommended to complete the Dingman EA, and the UTRCA is recommended to conduct the modelling associated with its floodplain update.

The next project steps will include issuing a Notice of Initiation for the Dingman EA and advertising for the Stakeholder Committee.

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This report was prepared by Shawna Chambers, P. Eng. of the Stormwater Engineering Division.

SUBMITTED BY:	REVIEWED AND CONCURRED BY:
SCOTT MATHERS, MPA, P.ENG. DIVISION MANAGER, STORMWATER	JOHN LUCAS, P. ENG. DIRECTOR, WATER AND WASTEWATER

RECOMMENDED BY:
JOHN BRAAM, P. ENG. MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER

September 25, 2015

S:\Capital Budget\Dingman Creek Subwatershed EA (ES3201_2&ES-SWM-NLP7_8)\Commitee Reports\2015-10-06 Appt of Consult Eng for Dingman EA.docx

Attach: Appendix "A" – Sources of Financing
Appendix "B" – Location Map

c.c. Pat Shack – Budget Analyst
John Freeman – Manager, Purchasing and Supply
Aquafor Beech – Dave Maunder

APPENDIX 'A'

#15135

Chair and Members
Civic Works Committee

September 25, 2015
(Appoint Consulting Engineers)

RE: Dingman Creek Subwatershed: Stormwater Servicing Strategy - Schedule C
Municipal Class Environmental Assessment
(Subledger SWM12004)
Capital Project ES3201 - Dingman On-Line Stormwater Management Flood Control - Facility #1
Capital Project ES3202 - Dingman On-Line Stormwater Management Flood Control - Facility #2
Capital Project ESSWM-NLP7 - SWM Facility - North Lambeth No. P7
Capital Project ESSWM-NLP8 - SWM Facility - North Lambeth No. P8
Aquafor Beech Ltd. - $501,328 (excluding H.S.T.)
The Upper Thames River Conservation Authority (UTRCA) - $71,500 (excluding H.S.T.)

FINANCE & CORPORATE SERVICES REPORT ON THE SOURCES OF FINANCING:

Finance & Corporate Services confirms that the cost of this project can be accommodated within the financing available for it in the Capital Works Budget and that, subject to the adoption of the recommendations of the Managing Director, Environmental & Engineering Services & City Engineer, the detailed source of financing for this project is:

SUMMARY OF ESTIMATED EXPENDITURES		Approved Budget	Committed to Date	This Submission		Balance for Future Work
ES3201-Dingman On-Line Strmwtr Mgmt Flood Control - Facility #1						
Engineering		$140,345	$27,984	$80,078		$32,283
Land Purchase		94,138				94,138
Construction		720,517				720,517
		955,000	27,984	80,078		846,938
ES3202-Dingman On-Line Strmwtr Mgmt Flood Control - Facility #2						
Engineering		125,000	27,984	80,078		16,938
Construction		585,000				585,000
		710,000	27,984	80,078		601,938
ESSWM-NLP7 -SWM Facility-North Lambeth No. P7						
Engineering		250,000		211,377		38,623
ESSWM-NLP8 -SWM Facility-North Lambeth No. P8						
Engineering		250,000		211,377		38,623
NET ESTIMATED EXPENDITURES		**$2,165,000**	**$55,968**	**$582,910**	1)	**$1,526,122**
SUMMARY OF FINANCING:						
ES3201-Dingman On-Line Strmwtr Mgmt Flood Control - Facility #1						
Drawdown from Sewage Works Reserve Fund		$863,400	$25,300	$72,397		$765,703
Drawdown from City Services - Mjr SWM Reserve Fund (Development Charges)	3)	91,600	2,684	7,681		81,235
		955,000	27,984	80,078		846,938
ES3202-Dingman On-Line Strmwtr Mgmt Flood Control - Facility #2						
Drawdown from Sewage Works Reserve Fund		604,400	23,822	68,168		512,410
Drawdown from City Services - Mjr SWM Reserve Fund (Development Charges)	3)	105,600	4,162	11,910		89,528
		710,000	27,984	80,078		601,938
ESSWM-NLP7 -SWM Facility-North Lambeth No. P7						
Drawdown from City Services - Mjr SWM Reserve Fund (Development Charges)	3)	250,000		211,377		38,623
ESSWM-NLP8 -SWM Facility-North Lambeth No. P8						
Drawdown from City Services - Mjr SWM Reserve Fund (Development Charges)	3)	250,000		211,377		38,623
TOTAL FINANCING		**$2,165,000**	**$55,968**	**$582,910**		**$1,526,122**

1) **FINANCIAL NOTE: (Charges per Capital Project)**

	ES3201	ES3202	ESSWM-NLP7	ESSWM-NLP8
Contract Price	$78,693	$78,693	$207,721	$207,721
Add: HST @13%	10,230	10,230	27,004	27,004
Total Contract Price Including Taxes	88,923	88,923	234,725	234,725
Less: HST Rebate	8,845	8,845	23,348	23,348
Net Contract Price	$80,078	$80,078	$211,377	$211,377

Financial Note (continued)

	TOTAL
Contract Price	$572,828
Add: HST @13%	74,468
Total Contract Price Including Taxes	647,296
Less: HST Rebate	64,386
Net Contract Price	**$582,910**

2) **FINANCIAL NOTE: (EXCLUDING H.S.T.)**

	ES3201	ES3202	ESSWM-NLP7	ESSWM-NLP8
Aquafor Beech Ltd. - Municipal Class EA	$68,870.74	$68,870.74	$181,793.26	$181,793.26
The Upper Thames River Conservation Authority-Modelling for the Floodplain Update	9,822.43	9,822.43	25,927.57	25,927.57
TOTAL PER CAPITAL PROJECT (EXCLUDING H.S.T.)	**$78,693.17**	**$78,693.17**	**$207,720.83**	**$207,720.83**

FINANCIAL NOTE (continued)

	TOTAL PER CONTRACT Excluding HST	Incl. HST
Aquafor Beech Ltd. - Municipal Class EA	$501,328.00	$510,151.37
The Upper Thames River Conservation Authority-Modelling for the Floodplain Update	71,500.00	72,758.40
TOTAL PER CAPITAL PROJECT (EXCLUDING H.S.T.)	**$572,828.00**	**$582,909.77**

3) Development charges have been utilized in accordance with the underlying legislation and the Development Charges Background Studies completed in 2014.

JG

Alan Dunbar
Manager of Financial Planning & Policy

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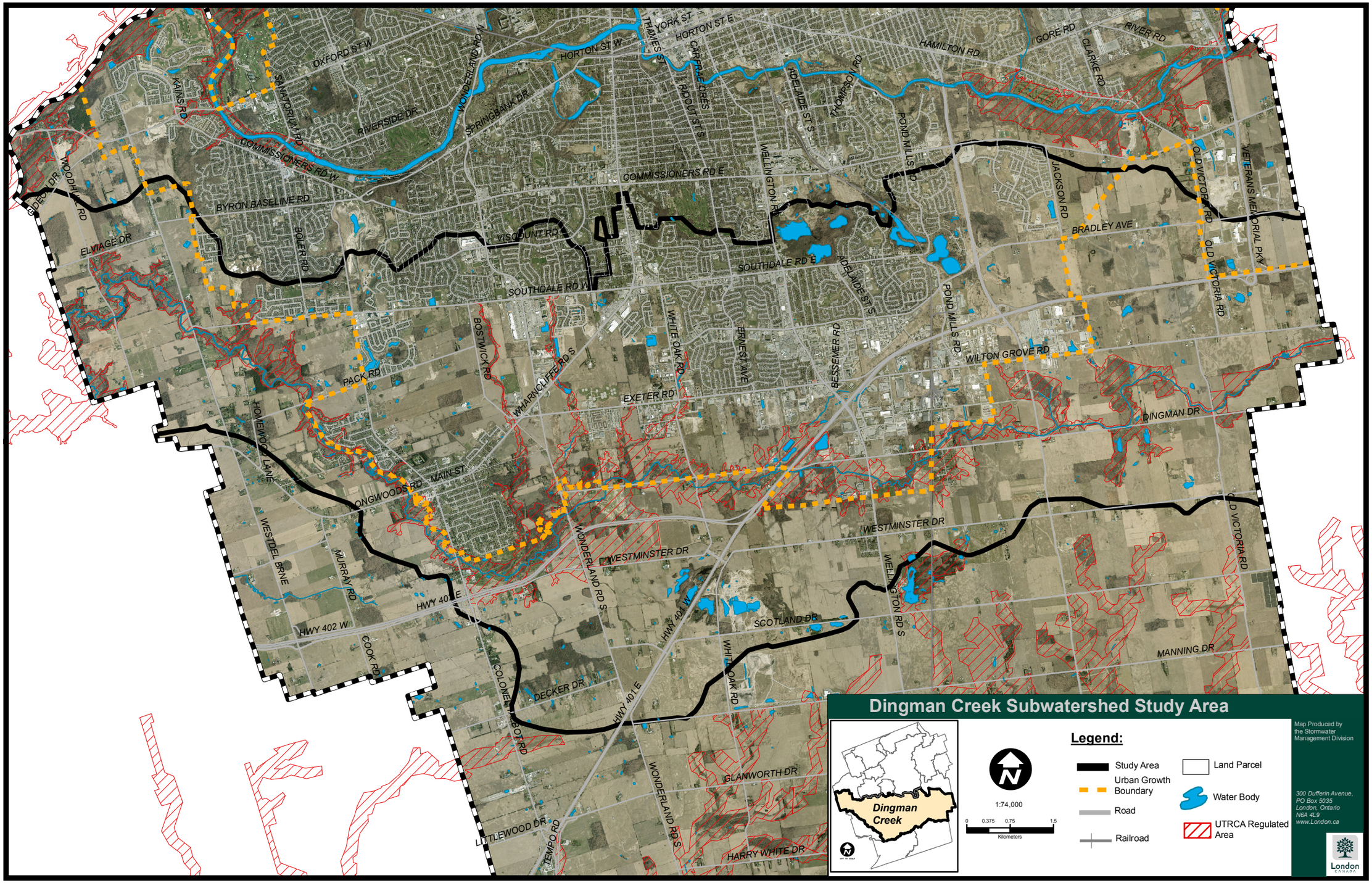
APPENDIX 'B1'



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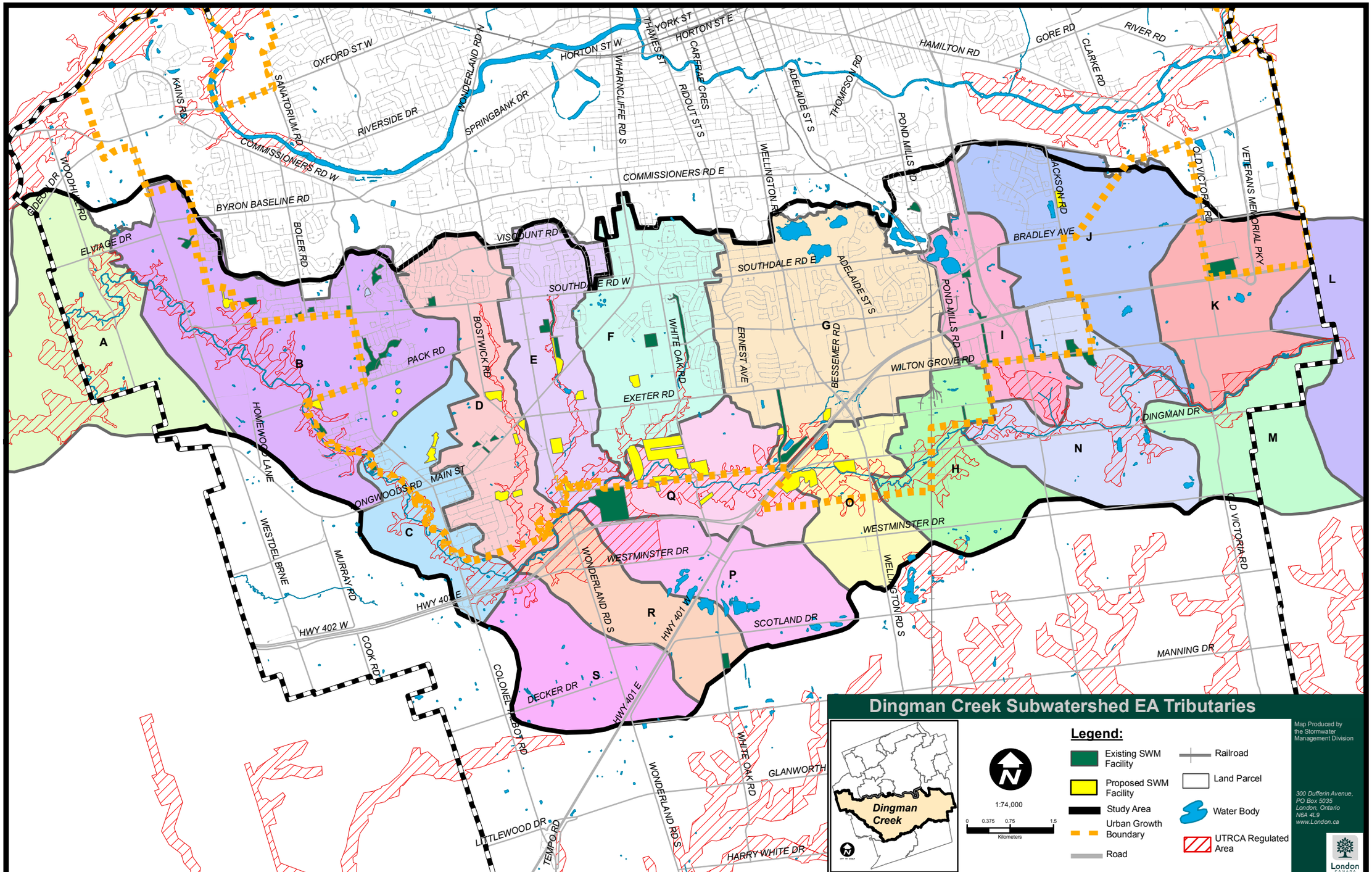
APPENDIX 'B2'



Dingman Creek Subwatershed EA Tributaries

1:74,000

0 0.375 0.75 1.5 Kilometers

Legend:

- Existing SWM Facility
- Proposed SWM Facility
- Study Area
- Urban Growth Boundary
- Road
- Railroad
- Land Parcel
- Water Body
- UTRCA Regulated Area

Map Produced by the Stormwater Management Division

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London CANADA