

TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON JUNE 8, 2016
FROM:	JOHN BRAAM, P. Eng. MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER
SUBJECT:	APPOINTMENT OF CONSULTING ENGINEERS INFRASTRUCTURE RENEWAL PROGRAM 2017 - 2018

RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental & Engineering Services & City Engineer, the following actions **BE TAKEN** with respect to the appointment of Consulting Engineers for the 2017-2018 Infrastructure Renewal Program:

- (a) The following Consulting Engineering firms **BE APPOINTED** Consulting Engineers for the pre-design and design of the said projects, at the upset amounts identified below, including contingency and exclusive of HST, in accordance with the estimate on file, based upon the Fee Guideline for Professional Engineering Services, recommended by the Ontario Society of Professional Engineers; and in accordance with Section 15.2 of the City of London's Procurement of Goods and Services Policy; it being noted that these consultants may obtain approval to proceed with subsequent phases of engineering for their projects subject to satisfying all financial, reporting and other conditions contained within this Policy:
- (i) Contract 1: Stantec Consulting Ltd, in the amount of \$216,641.50.
 - (ii) Contract 2: Spriet Associates London Limited, in the amount of \$268,790.50.
 - (iii) Contract 3: Development Engineering (London) Ltd, in the amount of \$253,055.00.
 - (iv) Contract 4: Dillon Consulting Ltd, in the amount of \$203,920.00.
 - (v) Contract 5: Archibald, Gray & McKay Engineering Limited, in the amount of \$246,133.00.
 - (vi) Contract 6: R.V. Anderson Associates Limited, in the amount of \$275,310.00.
 - (vii) Contract 7: Archibald, Gray & McKay Engineering Limited, in the amount of \$150,455.00.
 - (viii) Contract 8: Archibald, Gray & McKay Engineering Limited, in the amount of \$248,820.00.
 - (ix) Contract 9: AECOM Canada Ltd, in the amount of \$276,531.00.
 - (x) Contract A: IBI Group, in the amount of \$544,391.10.
 - (xi) Contract B: Dillon Consulting Ltd, in the amount of \$502,282.00.
 - (xii) Contract C: Spriet Associates London Limited, in the amount of \$372,375.00.
 - (xiii) Contract D: AECOM Canada Ltd, in the amount of \$522,769.50.
- (b) the financing for design of the projects identified in (a), above, **BE APPROVED** in accordance with 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 work;
- (d) the approvals given herein **BE CONDITIONAL** upon the Corporation entering into a formal contract with each Consultant for the respective project; and

- (e) 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

- None

2015-19 STRATEGIC PLAN

The 2015-2019 Strategic Plan identifies this objective under Building a Sustainable City: 1B – Manage and improve our water, wastewater and stormwater infrastructure and services.

BACKGROUND

Purpose:

The Infrastructure Renewal Program (IRP) is an annual program intended to maintain the life of municipal infrastructure at an acceptable performance level. Typically, about ten Capital Works Projects are awarded to consultants every year to work with the City to help deliver the program and meet increasingly challenging infrastructure needs. This report recommends consultants to be appointed for the coming year's IRP.

Discussion:

This report recommends the appointment of Engineering Consultants for thirteen engineering design assignments as identified in Appendix "B". Nine of the projects are scheduled for construction in 2017, four in 2018. The four in 2018 are typically larger and more complex projects and include study and design that will span over two years. Funds have been budgeted in the Transportation, Water and Sewer Capital Budgets to support the engineering design work for these projects as identified in the "Sources of Financing Report" (Appendix "A"). Engineering services during construction and construction contract approval recommendations will follow design and tender of each project.

The projects include watermain and sewer replacement/repairs, as well as restoration of areas disturbed by the construction activity. The scope of each project varies in length and infrastructure components which require rehabilitation or replacement. In some cases, full road reconstruction will be part of the overall project. Location maps are provided in Appendix "C".

The projects support the objectives identified in the Strategic Plan under Building a Sustainable City – Robust Infrastructure, by implementing Water and Wastewater Renewal Plans that address the infrastructure deficit.

The infrastructure design groups within each service area work closely together to coordinate infrastructure repair, rehabilitation and replacement. They prepare a list of the highest priority projects depending on condition assessment, capacity, criticality of the infrastructure link and the safety and social impacts should the link fail. Staff meet regularly throughout the year to coordinate their respective work with the goal to build projects where more than one infrastructure element can be renewed, thereby significantly reducing social disruption and saving on construction costs. Various Divisions within EES take part in this effort: Water Engineering, Wastewater and Drainage Engineering, Stormwater Management Engineering Division, Transportation Planning and Design,

Roadway Lighting and Traffic Control, Transportation Parking and Traffic Signals, Construction Administration, and Geomatics (Surveys and Graphical Information System maintenance). The long term integrity of the City's infrastructure rests on the work done by these core service groups, noting these projects are also coordinated with other City service areas such as, but not limited to; Risk Management, Parks Planning and Design, Planning and Development (Forestry, Heritage etc.), Urban Design, Transportation, Sewer and Water Operations, Solid Waste Management and Pollution Control Operations. In addition, all projects are communicated with external utility groups (Bell, Union Gas, Hydro etc.) well in advance of construction to ensure partnerships are established, budgets are in place, and effective coordination of work takes place early in design and on to construction.

Design work early in the budget cycle allows for a more efficient process with projects on the shelf and ready to go to tender early in the season to realize the most competitive construction pricing.

Other features of the IRP program include: early survey of streets to reduce design lag time; program "block funding" to establish a consistent budget base so that advance planning and coordination can be done well ahead of the annual budget approval stage; and, greater efficiency of City staff and Consultant time so that efforts can be focused on quality and value delivery.

In the past, six to ten projects awarded to consultants annually (representing approximately 20 to 25% of the annual consulting assignments) were undertaken as individual proposals, occupying considerable Committee time and City staff resources. This is the eleventh year where most Infrastructure Renewal Projects have been grouped together. This saves significant administrative time for both the City and the consultants involved and respects the formal City consultant selection process.

Conclusions:

The recommendation of this report is to appoint various Consultants to undertake the design work required for thirteen projects in the 2017-2018 Infrastructure Renewal Program identified in Appendix "B", it being noted that these consultants may obtain the approval to proceed with subsequent phases of engineering for their projects subject to satisfying all financial, reporting and other conditions.

The selection process followed has saved significant administrative time for both the City and the consultant community and fosters a collaborative working relationship that focuses on achieving the lowest life cycle cost or highest service performance for municipal infrastructure to the benefit of water and sewer rate payers and taxpayers in the long term. All the firms selected have shown their competency and expertise with replacement projects of this type and have provided good performance in the past on City projects. The infrastructure renewal program approach better ables the City to control construction costs and achieve a consistent high degree of public satisfaction.

Additional annual operating costs to the EES budget in 2018 and subsequent years associated with completed infrastructure projects are not determined at this time but will be presented at the time of contract award, if required.

Acknowledgements:

This report was prepared by Doug Harron, CET, Senior Technologist, Water Engineering Division and Roland Welker, P.Eng., Division Manager Water Engineering.

SUBMITTED BY:	CONCURRED BY:
JOHN LUCAS, P.ENG. DIRECTOR, WATER AND WASTEWATER	EDWARD SOLDI, P.ENG. DIRECTOR, ROADS AND TRANSPORTATION
RECOMMENDED BY:	
JOHN BRAAM, P.ENG. MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER	

May 30, 2016

RW/dh

Attach: Appendix "A" – Sources of Financing
Appendix "B" - Project Information list, Consultants & Construction Estimates
Appendix "C" – Project Locations Maps

c.c. AECOM Canada Ltd, 410 – 250 York Street, Citi Plaza, N6A 6K2
Dillon Consulting Ltd, 130 Dufferin Avenue, Suite 1400
IBI Group, 350 Oxford Street West, Suite 203, N6H 1T3
Spriet Associates, 155 York Street, N6A 1A8
Archibald, Gray & McKay Engineering, 3514 White Oak Road, N6E 2Z9
R.V. Anderson Associates Ltd, 557 Southdale Road East Suite 200, N6E 1A2
Stantec Consulting Ltd, 800-171 Queens Avenue, London, ON, N6A 5J7
Development Engineering Ltd., 41 Adelaide St N, Unit 71, London ON, N6B 3P4

Appendix "B"

Project Information List, Consultants & Construction Estimates

**2017-18 INFRASTRUCTURE LIFECYCLE RENEWAL PROJECTS
CONSULTANT ASSIGNMENTS**

(updated May 20, 2016: Council Meeting June 14, 2016)

2017 Construction: 2016-2017 Design Engineering								
CONTRACT	STREET	From	To	City Project Manager Source Division	CONSULTANT	LENGTH (~ m)	CONCEPTUAL CONSTRUCTION ESTIMATE	DIVISIONS FUNDING
1	WATERLOO	HILL	HORTON	WATER	STANTEC	420	~ \$1.2 - \$1.4 M	Water WADE Stormwater
2	BRIDPORT ST GEORGE CHEAPSIDE	ST GEORGE CHEAPSIDE ST GEORGE	RICHMOND REGENT RICHMOND	WATER	SPRIET	180 485 180	~ \$3.0 - \$3.2 M	Water WADE CA
3	EAST MILE OBAN GLEN	RIVERSIDE PINE TREE GREEN	OBAN SHERENE OBAN	WATER	DEV ENG	400 490 170	~ \$3.0 - \$3.2 M	Water WADE Stormwater CA
4	TROWBRIDGE	SPRINGBANK	North end	WADE	DILLON	450	~ \$ 1.5 - \$1.8 M	Water WADE
5	TECUMSEH VICTOR BYRON	CATHCART WESTCOTT TERESA	WORTLEY WORTLEY WORTLEY	WATER	AGM	285 200 125	~ \$2.0 - \$2.2M	WADE Water
6	BYRON BASELINE	225m E OF GRIFFITH E	GRAND VIEW	WATER	RVA	1,725	~ \$ 2.7 - \$3.0 M	Water TP&D
7	HYMAN	WELLINGTON	WATERLOO	WADE	AGM	250	~ \$950K	WADE Water
8	BRANT DURHAM BALMORAL	BALMORAL OXFORD OXFORD	ELLIOTT BRANT ST JAMES	WADE	AGM	350 120 240	~ \$2.0 - \$2.2 M	Water WADE
9	BASE LINE BALDERSTONE PERCY SYLVAN	HIGH BASE LINE WELLINGTON BASE LINE	WELLINGTON PERCY West end North end	WADE	AECOM	400 165 250 70	~ \$3.0 - \$3.2M	WADE Water Stormwater
2018 Construction: 2016-2018 Design Engineering								
A	HAMILTON	HIGHBURY	HORTON	(STUDY)	IBI	3,250	~ \$3.5 - \$4.0 M	Water
	HAMILTON SACKVILLE	EGERTON HAMILTON	CHESLEY North end	(CONSTRUCTION) TP & D		350 420		WADE TP&D
B	Old North WILLIAM / HURON AREA STORM OUTLET	WILLIAM/ HURON	THAMES RIVER	WADE	DILLON	660	~ \$ 1.0 - \$1.5 M	WADE Stormwater
C	CAVENDISH CR / CHARLES ST / WEST LIONS PARK	PAUL	THAMES RIVER	WADE	SPRIET	950	~ \$4.0 - \$4.5M	WADE Stormwater
D	WATSON PARK WATSON STREET	CN RAIL WELLINGTON	WELLINGTON East end	WADE	AECOM	1,370	~ \$4.0 - \$4.5M	WADE Stormwater

WADE: City of London Wastewater & Drainage Engineering Division

WATER: City of London Water Engineering Division

TP&D: City of London Transportation Planning & Design

Stormwater: City of London Stormwater Management Engineering Division

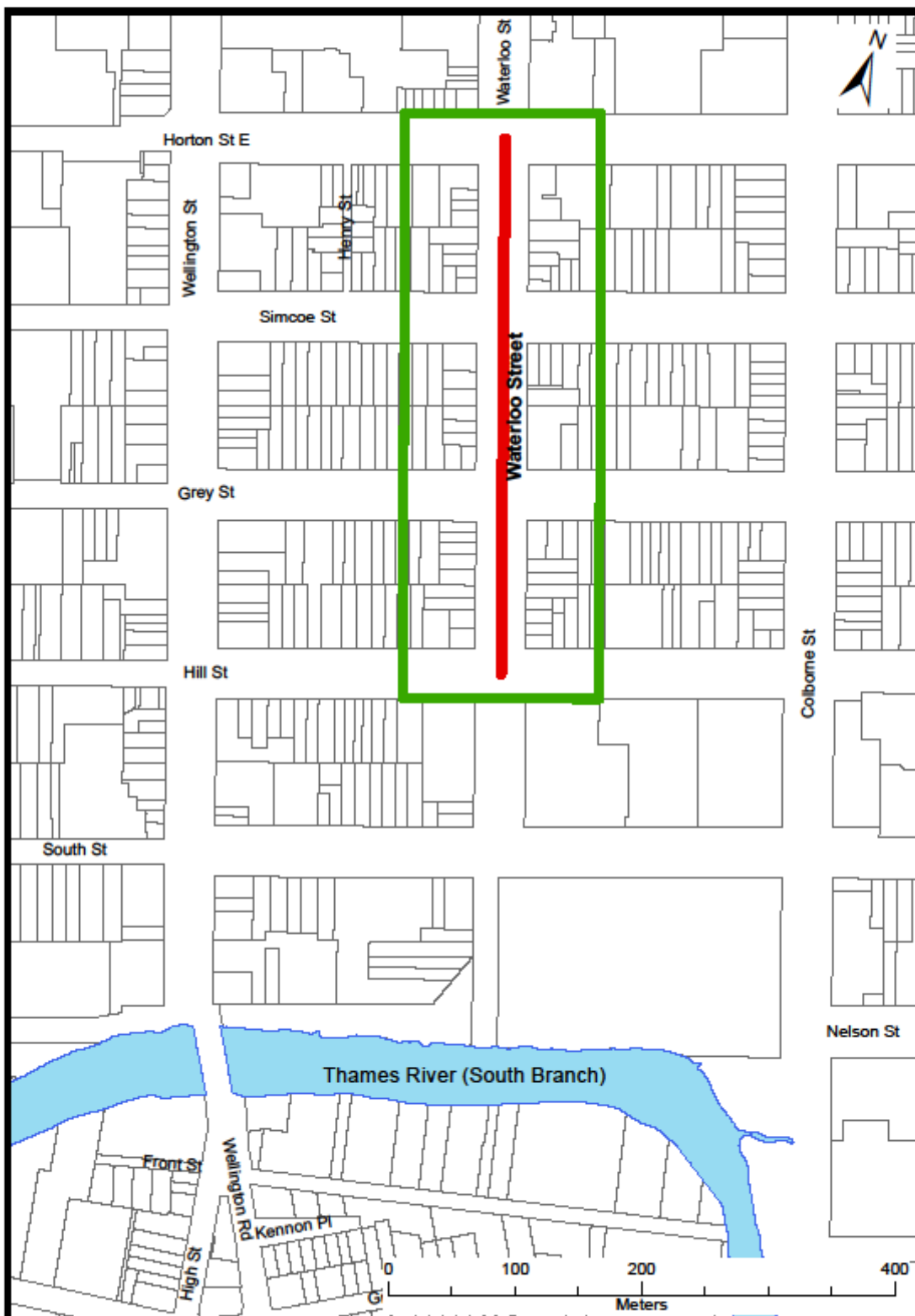
CA: City of London Construction Administration Division

Appendix "C"
Project Location Maps



2017 Infrastructure Renewal Program

Contract 1 - Location Map
Waterloo Street from Hill Street to Horton Street





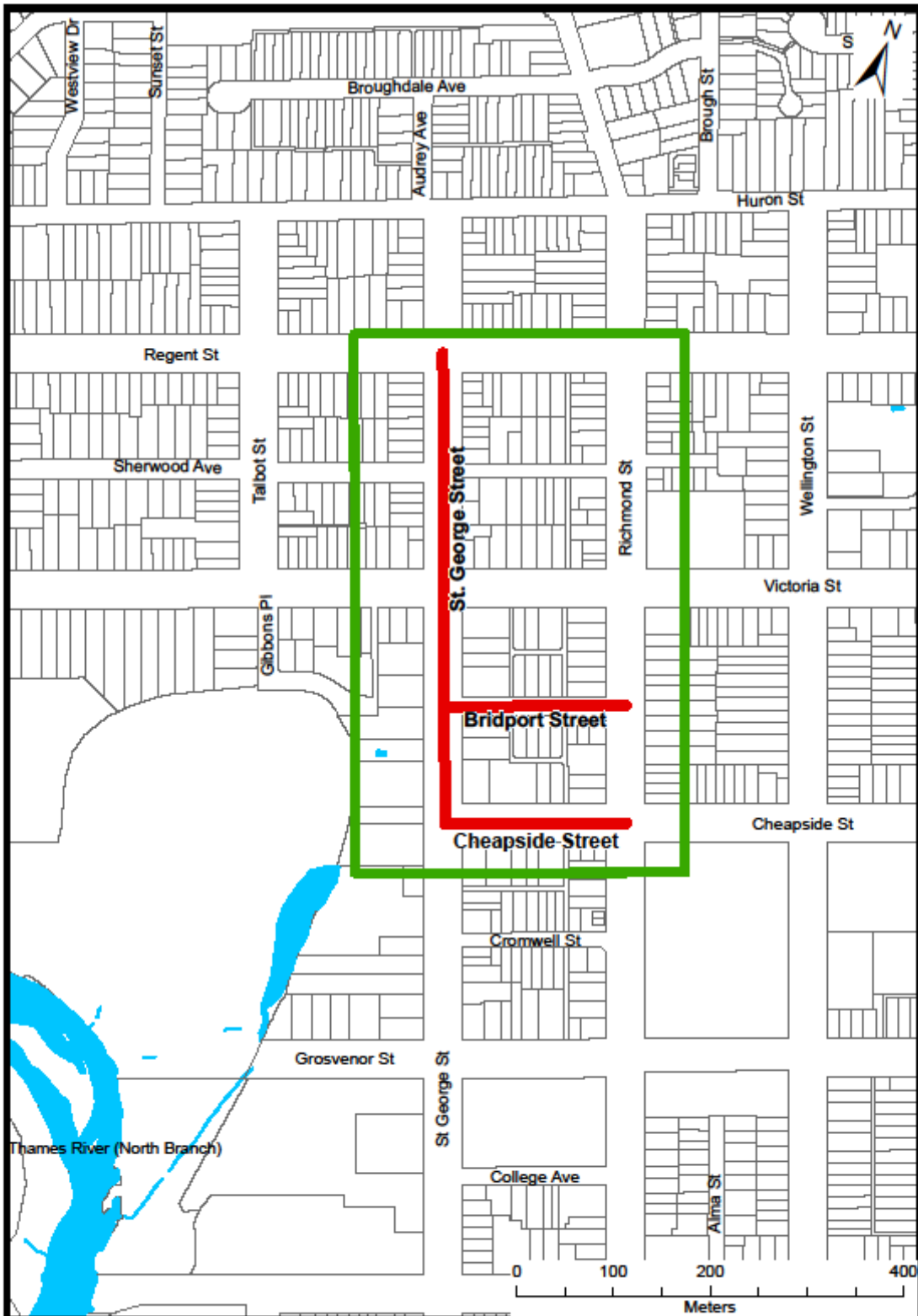
2017 Infrastructure Renewal Program

Contract 2 - Location Map

St. George Street from Cheapside Street to Regent Street

Cheapside Street from St. George Street to Richmond Street

Bridport Street from St. George Street to Richmond Street





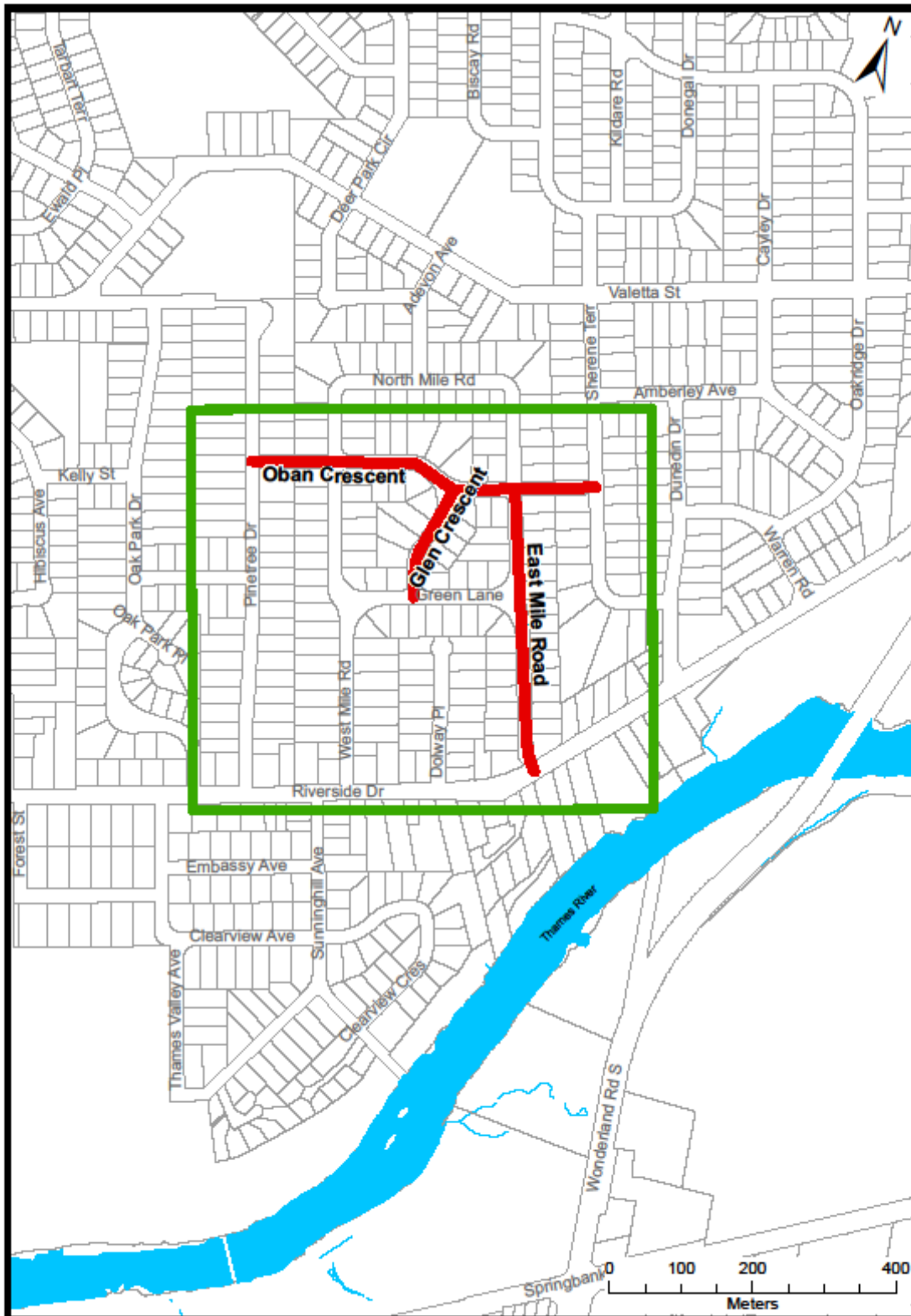
2017 Infrastructure Renewal Program

Contract 3 - Location Map

East Mile Road from Riverside Drive to Oban Crescent

Oban Crescent from Pinetree Drive to Sherene Terrace

Glen Crescent from Green Lane to Oban Crescent

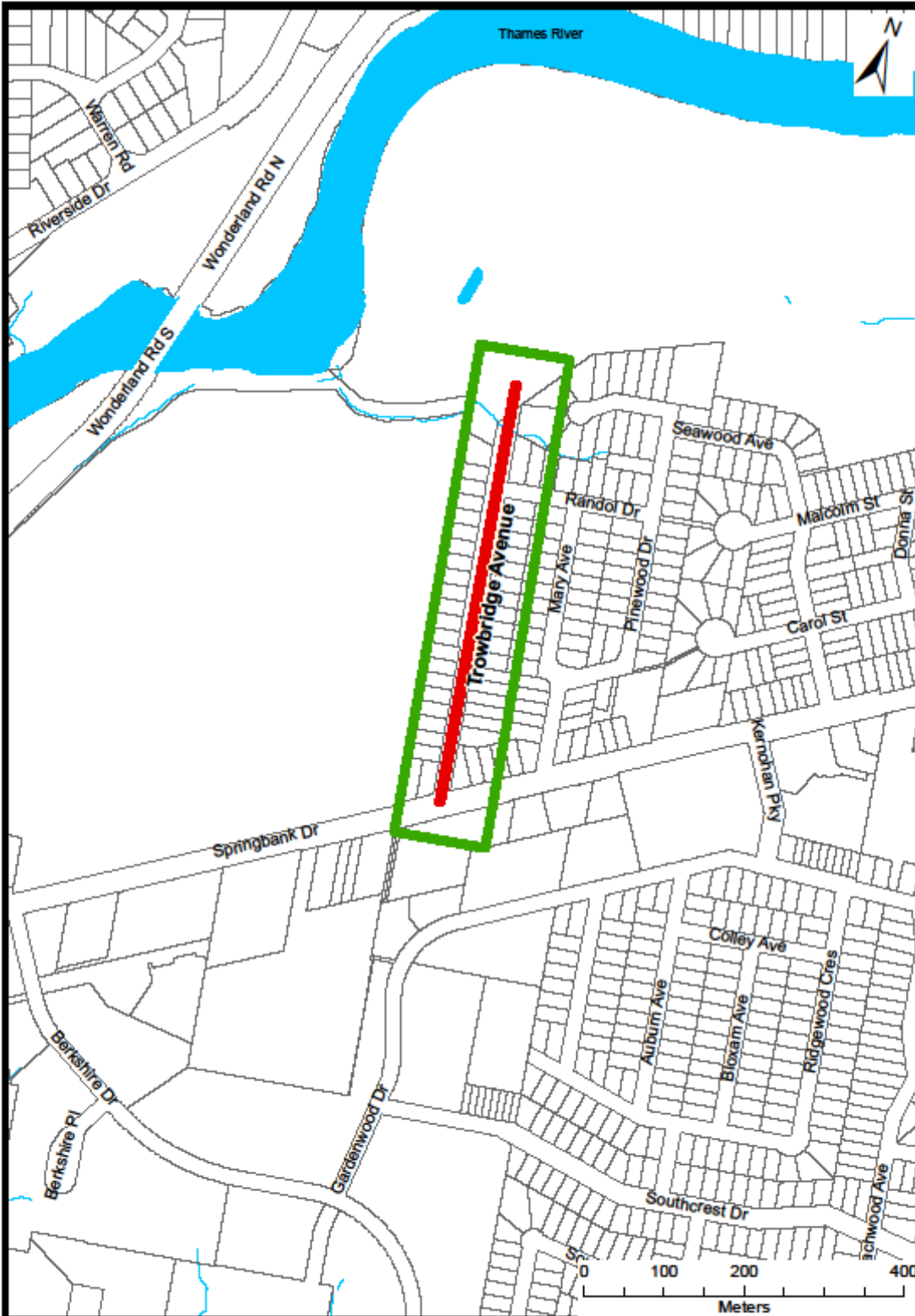




2017 Infrastructure Renewal Program

Contract 4 - Location Map

Trowbridge Avenue from Springbank Drive to north limit





2017 Infrastructure Renewal Program

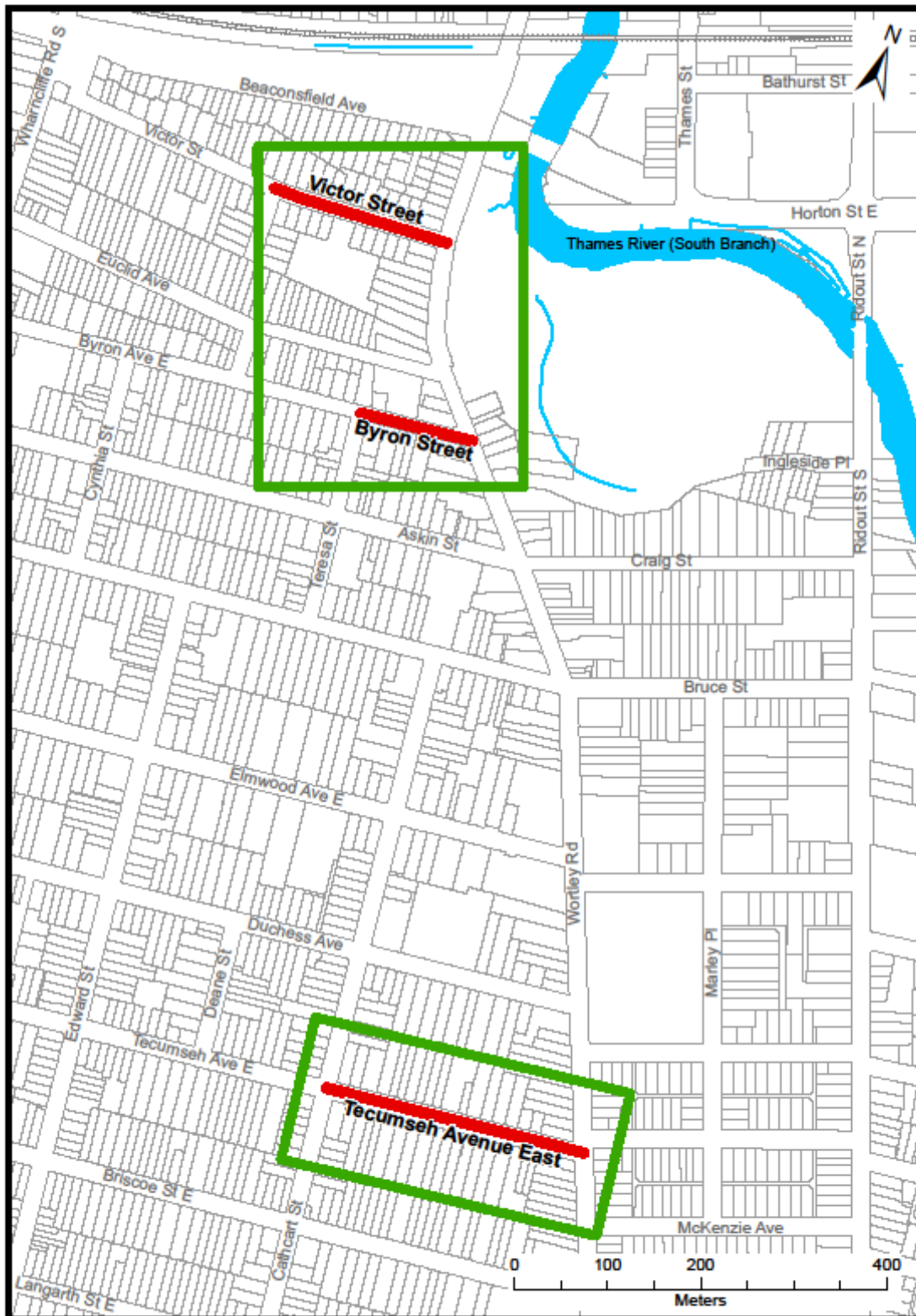
Contract 5 - Location Map

Old South Single Block Replacement

Victor Street from Westcott Street to Wortley Road

Byron Street from Teresa Street to Wortley Road

Tecumseh Avenue from Cathcart Street to Wortley Road

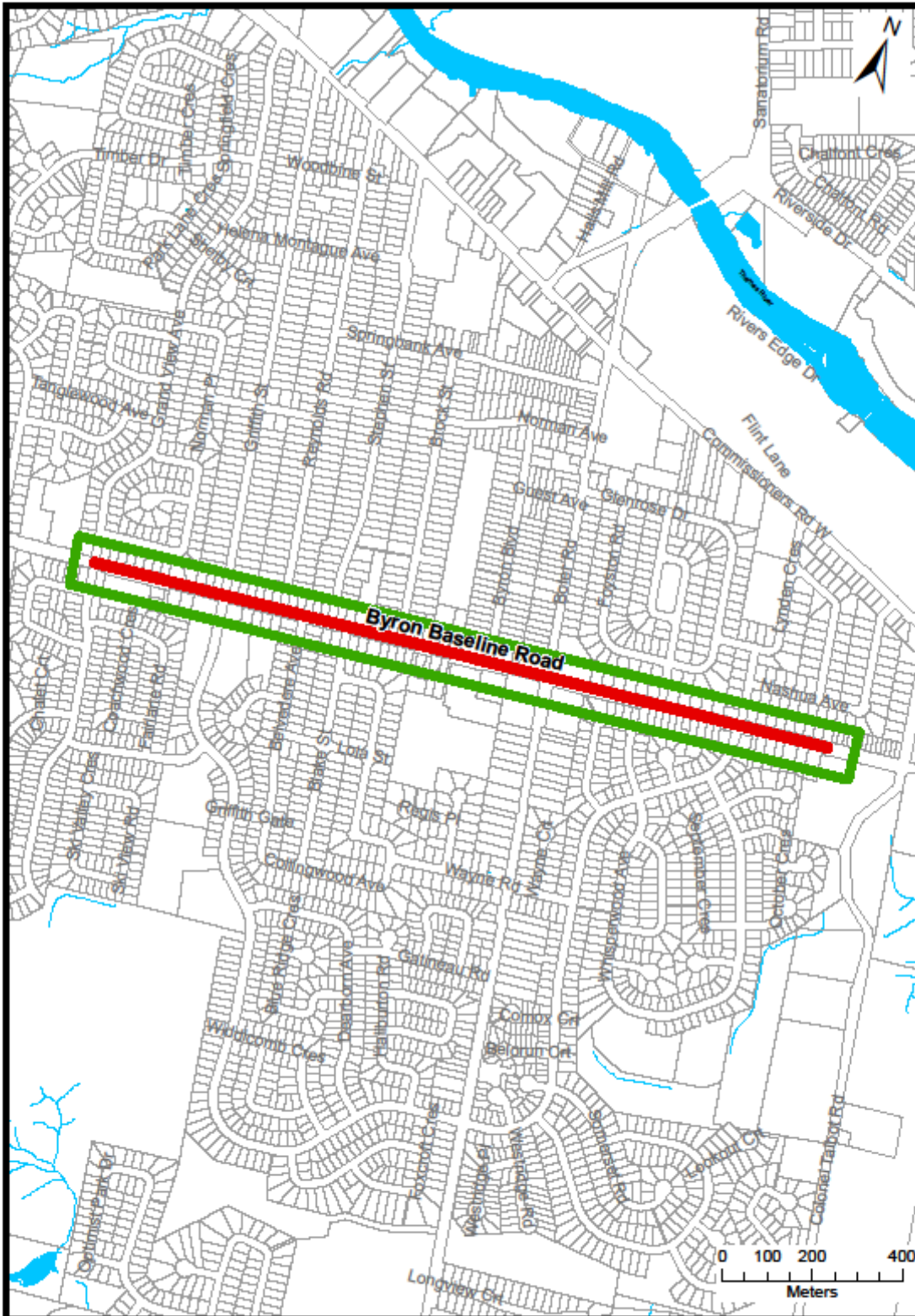




2017 Infrastructure Renewal Program

Contract 6 - Location Map

Byron Baseline Road from 225 m east of Griffith Street East to Grand View Avenue

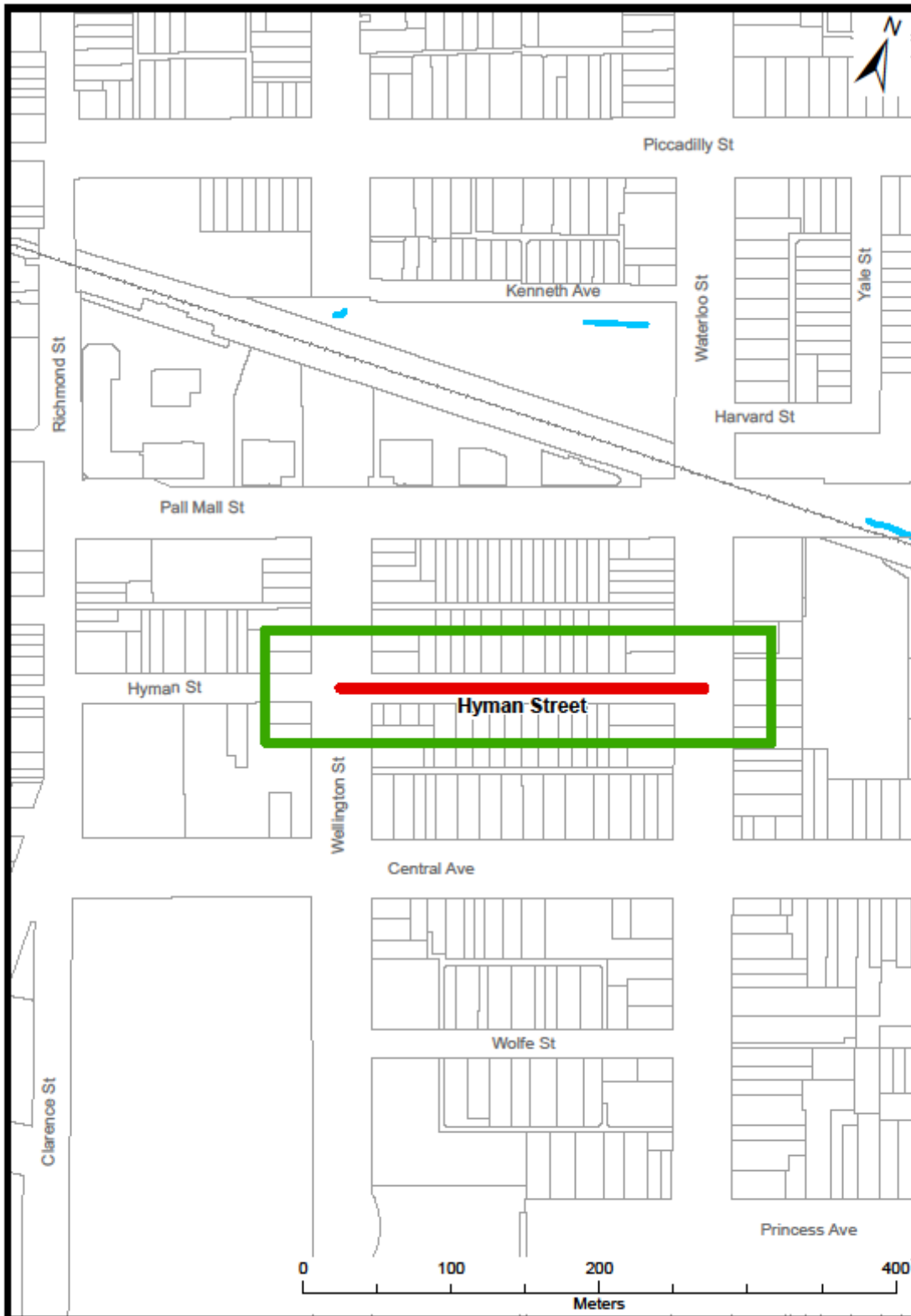




2017 Infrastructure Renewal Program

Contract 7 - Location Map

Hyman Street from Wellington Street to Waterloo Street





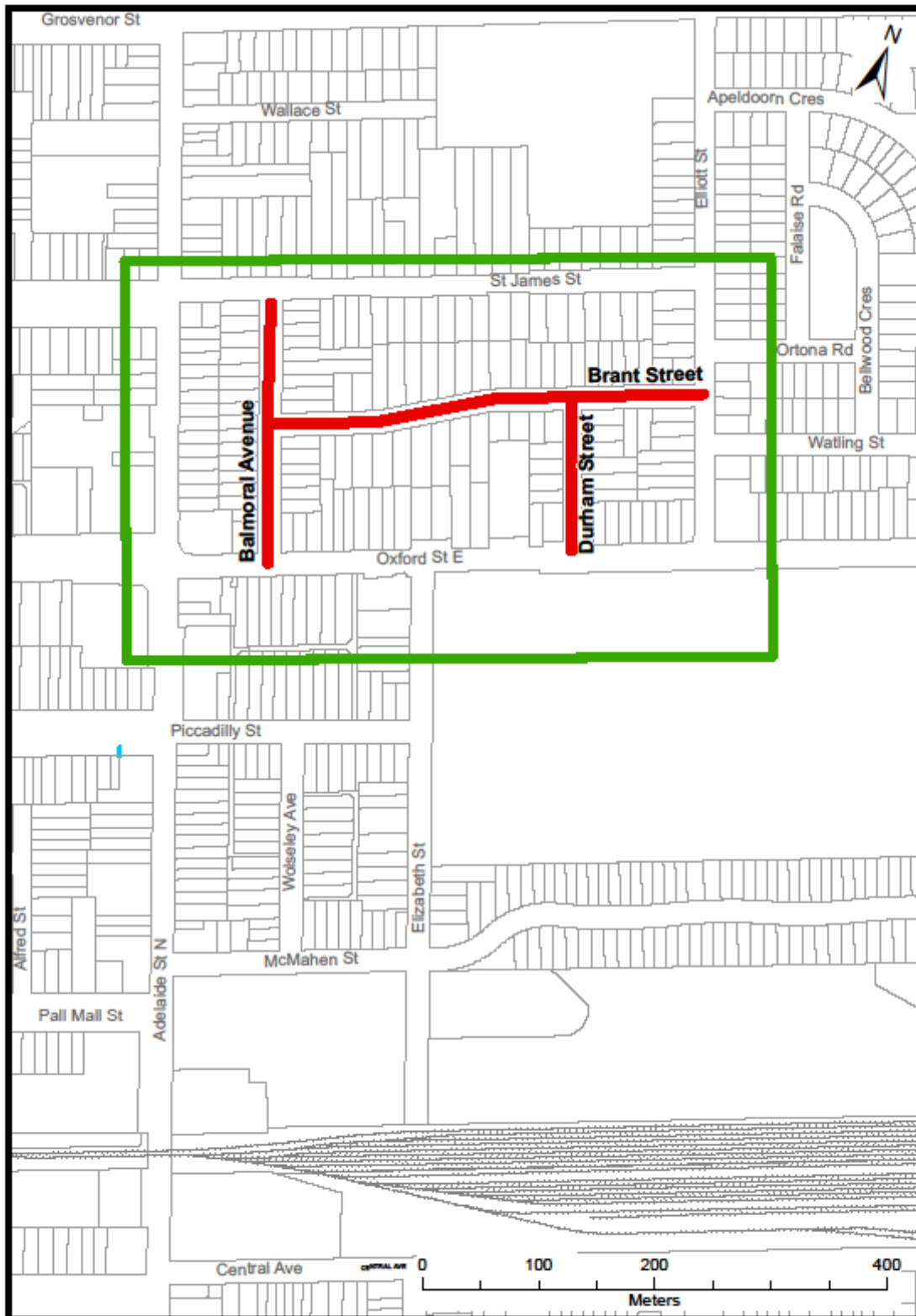
2017 Infrastructure Renewal Program

Contract 8 - Location Map

Balmoral Avenue from St. James Street to Oxford Street East

Brant Street from Balmoral Avenue to Elliott Street

Durham Street from Brant Street to Oxford Street East





2017 Infrastructure Renewal Program

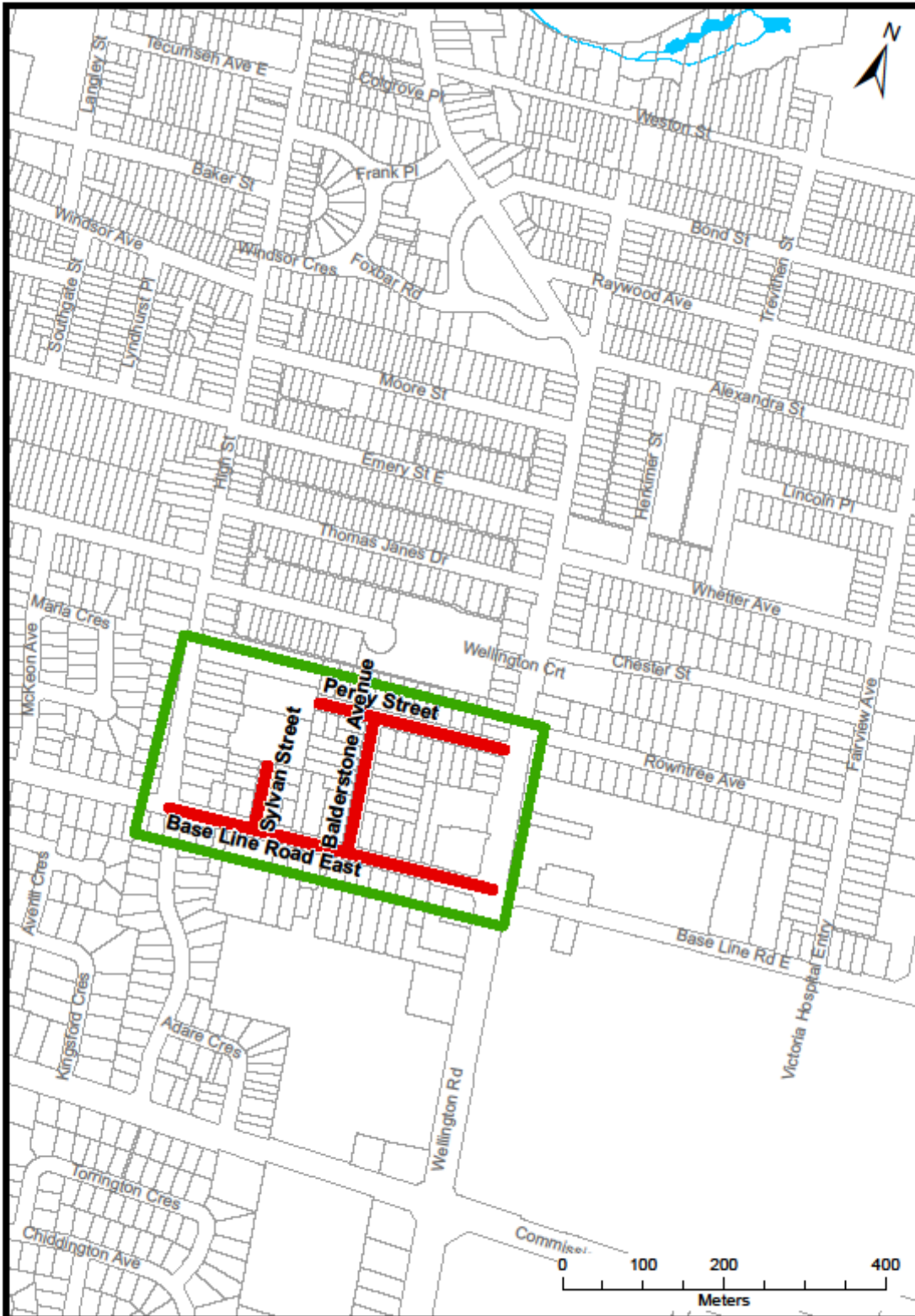
Contract 9 - Location Map

Base Line Road East from High Street to Wellington Road

Sylvan Street (all)

Balderstone Street (all)

Percy Street (all)





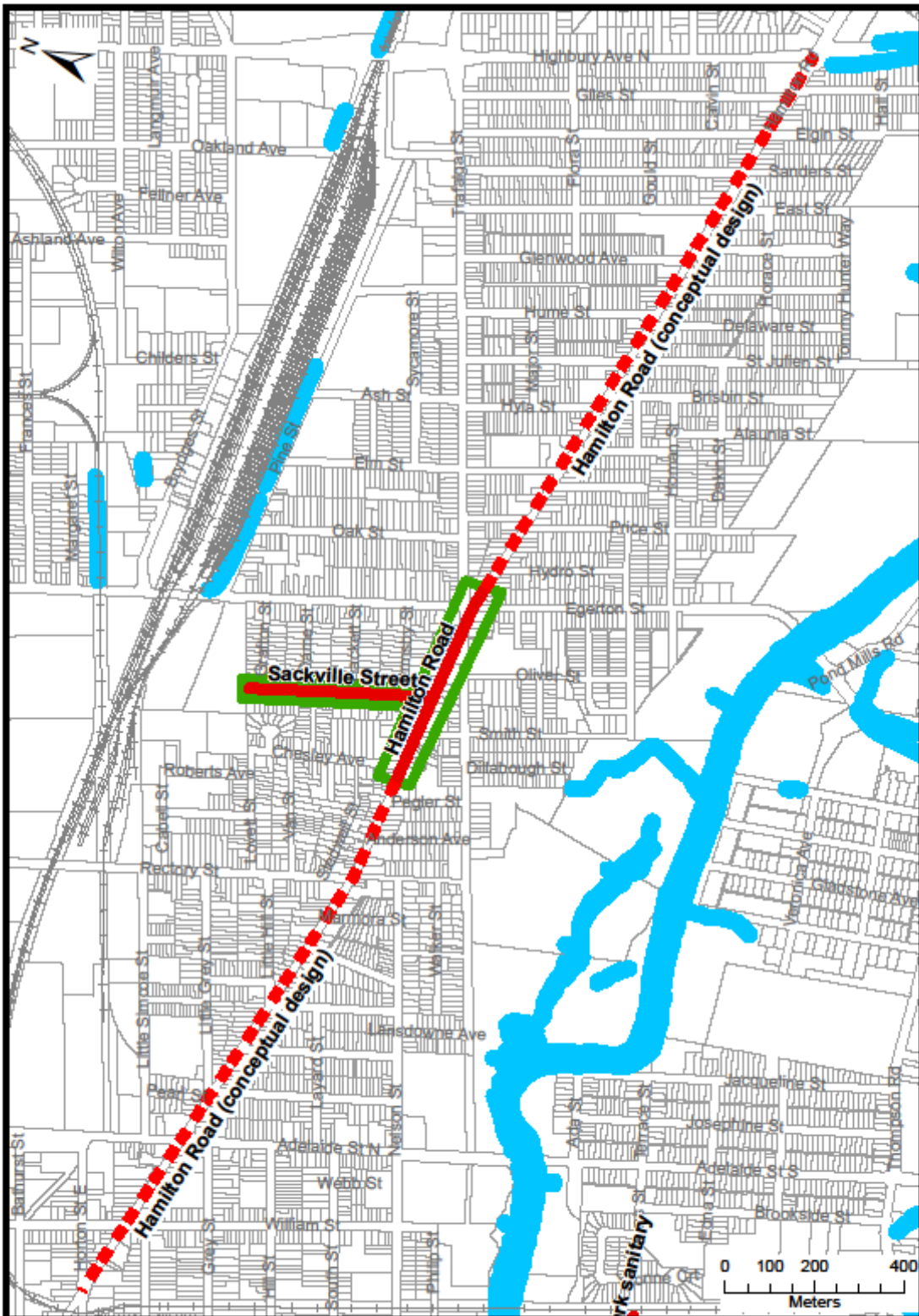
2017 Infrastructure Renewal Program

Contract A - Location Map

Hamilton Road from Highbury Avenue to Horton Street

"Main Street" conceptual design

Proposed 2018 Construction - Hamilton Road from Egerton Street to Chesley Avenue & Sackville Street (all)





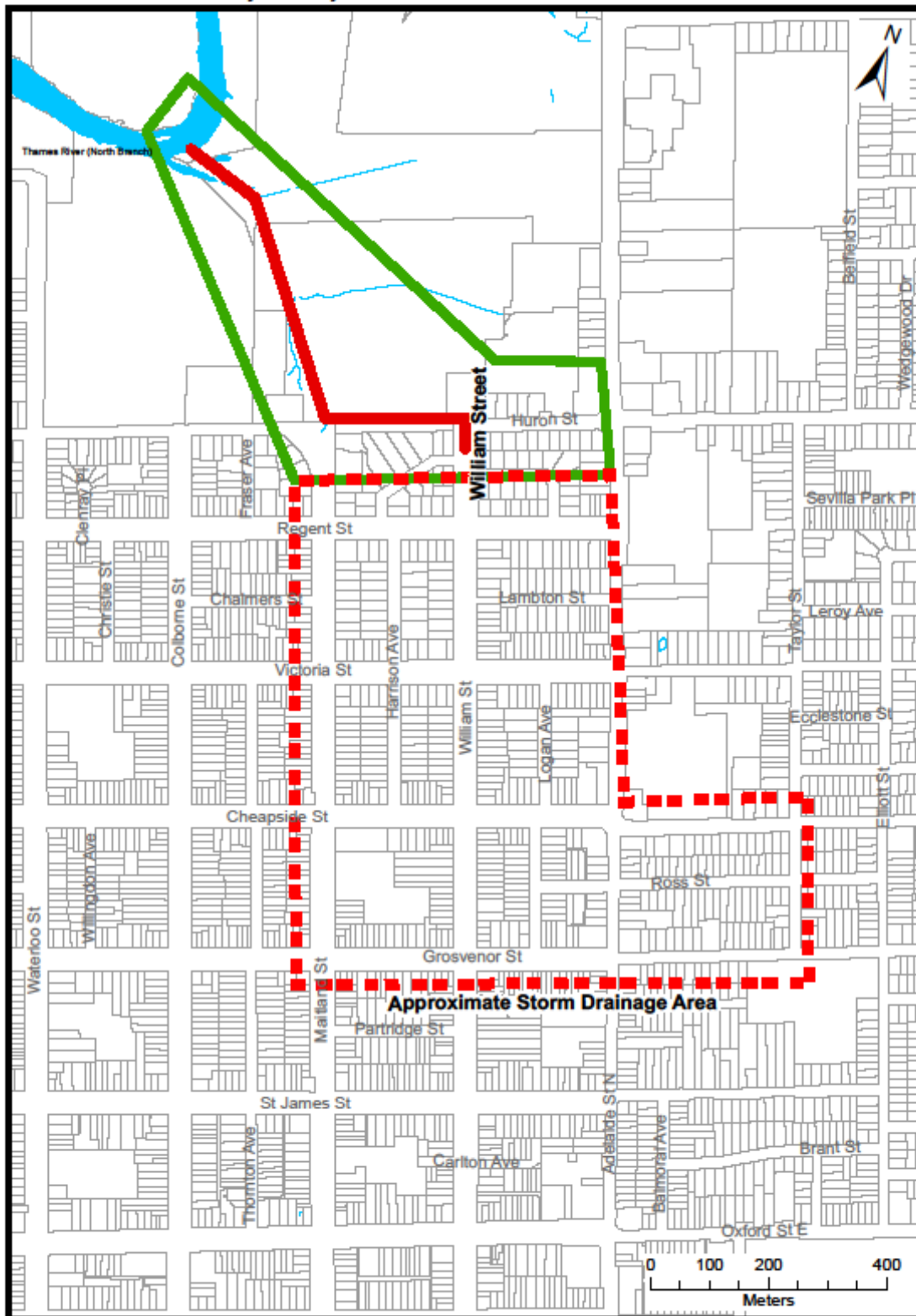
2017 Infrastructure Renewal Program

Contract B - Location Map

William Street Storm Trunk Sewer - Huron Street to Grosvenor Street

Proposed 2016 / 2017 Environmental Assessment - intersection
Huron Street / William Street to Thames River

Proposed 2018 Construction - new storm outlet structure, channel, modifications to
Thames Valley Parkway & structures - Huron Street / William Street to Thames River



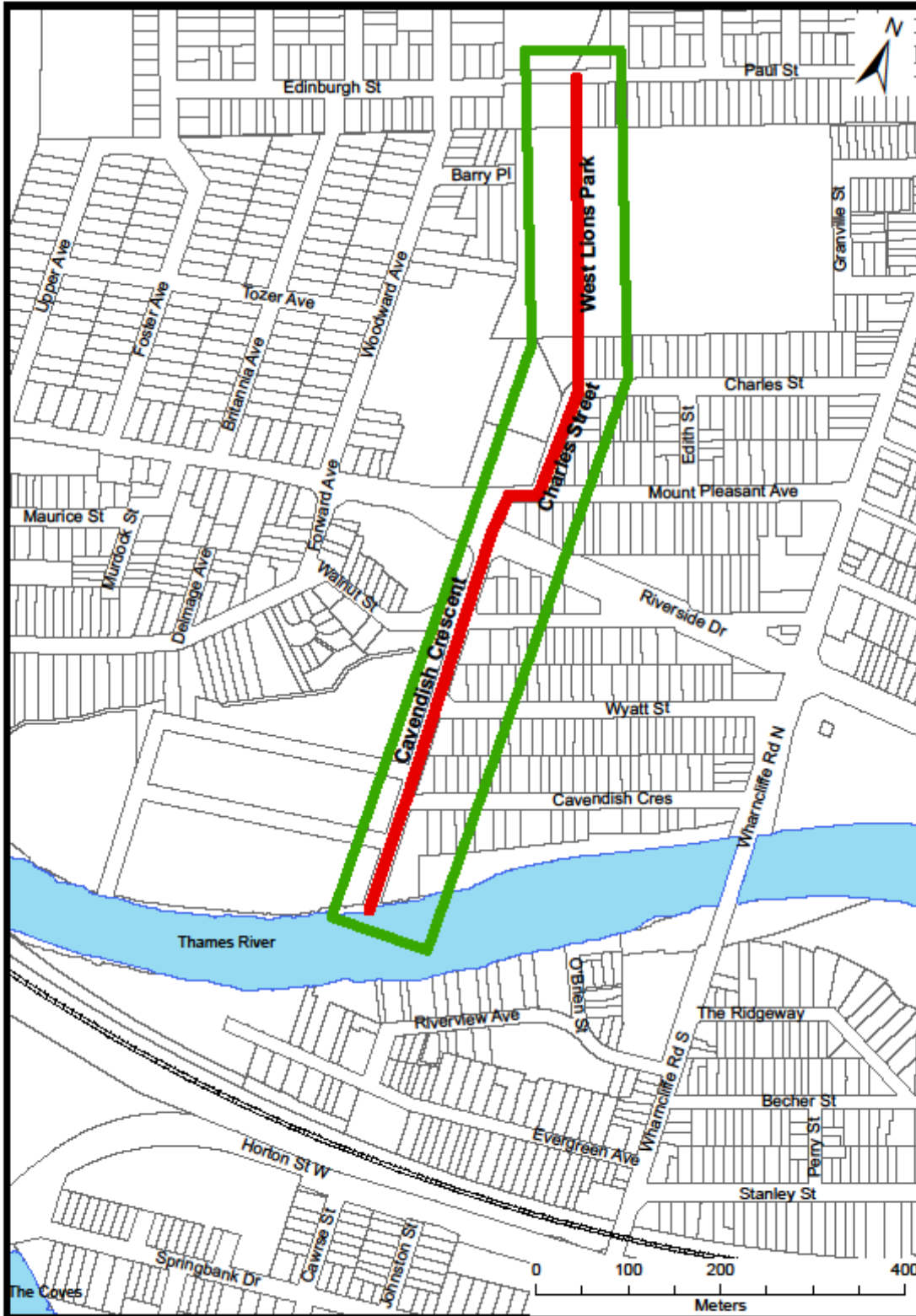


2017 Infrastructure Renewal Program

Contract C - Location Map

Cavendish Crescent from Thames River to Charles Street

Charles Street from Cavendish Crescent to Paul Street (including West Lions Park)





2017 Infrastructure Renewal Program

Contract D - Location Map

Wellington Road Storm Outlet through Watson Park

Watson Park Sanitary Trunk Sewer Replacement

Watson Street Reconstruction

