



**STAFF REPORT  
ACTION REQUIRED**

**Contract Award – Request for Proposals No. 9117-14-7110  
Professional Engineering Services and Program  
Management Services for Basement Flooding Protection  
Program**

<b>Date:</b>	June 1 , 2015
<b>To:</b>	Public Works & Infrastructure Committee
<b>From:</b>	Executive Director, Engineering & Construction Services Director, Purchasing & Materials Management Division
<b>Wards:</b>	All
<b>Reference Number:</b>	P:\2015\Cluster B\TEC\PW15042 (AFS#20861)

**SUMMARY**

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The purpose of this report is to advise of the results of Request for Proposals (RFP) No. 9117-14-7110 for the Provision of Professional Engineering Services for delivery of the Basement Flooding Protection Program and to request authority to enter into agreements with CH2M Hill Canada Ltd., being the highest overall scoring bidder meeting the proposal requirements. The award of this contract will ensure that there is no interruption in the delivery of capital infrastructure to support the Basement Flooding Protection Program, the planned expenditures for which are expected to be up to \$180 million annually, based on Toronto Water’s approved 2015 Capital Budget and 2016–2024 Capital Plan.

There is an urgent need for the award of this assignment as any delay will jeopardize the City's ability to construct the infrastructure upgrades as scheduled and made public in Toronto Water’s 2015 Capital Budget.

**RECOMMENDATIONS**

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**The Executive Director of Engineering & Construction Services and the Director of Purchasing & Materials Management recommend that:**

1. The Public Works & Infrastructure Committee, in accordance with Section 195-14C of Toronto Municipal Code Chapter 195 (Purchasing By-Law) grant authority to the

Executive Director, Engineering & Construction Services, to negotiate and execute agreements with CH2M Hill Canada Limited, being the highest overall scoring proponent meeting the requirements of RFP No. 9117-14-7110, to provide contracted professional engineering services and program management services for the Program Management, Environmental Assessment Support, Preliminary Design and Detailed Design, Construction Administration and Post Construction Support services for the Basement Flooding Protection Program for a period of 10 years consisting of two 5 year terms, each in an amount not to exceed \$44,354,183.30, for a total cost of \$88,708,366.60 net of HST including disbursements, provisional allowances and contingencies, with the option to terminate the contract after the first five-year term, by the Executive Director, Engineering and Construction Services, in his sole discretion based on an evaluation of the Consultant's performance to that point, as follows:

- a. For the Program Management for the overall BFPP in an amount not to exceed \$46,511,817.60 net of HST, including labour, disbursements, provisional allowances and contingencies. This amount includes a contingency allowance of \$1,000,000.00, net of HST, for additional services, if necessary and authorized by the Executive Director, Engineering & Construction Services;
- b. For Environmental Assessment Support in an amount not to exceed \$1,674,600.00 net of HST, including labour, disbursements, provisional allowances and contingencies. This amount includes a contingency allowance of \$200,000.00, net of HST, for additional services, if necessary and authorized by the Executive Director, Engineering & Construction Services;
- c. For Preliminary Design in an amount not to exceed \$24,773,301.00 net of HST, including labour, disbursements, provisional allowances and contingencies. This amount includes a contingency allowance of \$500,000.00, net of HST, for additional services, if necessary and authorized by the Executive Director, Engineering & Construction Services; and,
- d. For Oversight, Quality Assurance/Quality Control and Administration of Detailed Design and Construction Administration in an amount not to exceed \$15,748,648.00 net of HST, including labour, disbursements, provisional allowances and contingencies. This amount includes a contingency allowance of \$780,000.00 net of HST, for additional services, if necessary and authorized by the Executive Director, Engineering & Construction Services.

All in accordance with the terms and conditions as set out in the RFP and any other terms and conditions satisfactory to the Executive Director, Engineering & Construction Services and in a form satisfactory to the City Solicitor. The dollar amounts set out in each of 1.a., b., c., and d., above, will be divided equally between the two 5-year terms.

## **Financial Impact**

The total contract award recommended in this report is \$100,240,454.00 including HST and all applicable charges. This represents a total cost to the City of \$90,269,634.00 net of HST recoveries.

Funding for this contract award is available in Toronto Water's Approved 2015 Capital Budget and 2016-2024 Capital Plan for the Basement Flooding Protection Program – Phase 4 under Account No. CWW421-15, with forecast expenditures as shown in the table below (net of HST recoveries).

Year	Funding Details	Year	Funding Details
2015	\$1,130,000	2020	\$12,000,000
2016	\$4,000,000	2021	\$12,000,000
2017	\$6,000,000	2022	\$11,000,000
2018	\$10,000,000	2023	\$11,000,000
2019	\$12,000,000	2024	\$11,139,634

The Deputy City Manager & Chief Financial Officer has reviewed this report and agrees with the financial impact information.

## DECISION HISTORY

City Council, at its meeting on October 8-11, 2013, requested the General Manager, Toronto Water, report during the 2014 budget process on the capital and operating budget impacts of expanding the Basement Flooding Protection Program on a City-wide basis beyond the existing 34 priority study areas, including methodologies for setting priorities and resource implications, so that the program continues to address urban flooding risks in a fair, well-organized, and efficient manner. The Council decision can be viewed at: <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.PW25.7>

At its meeting of December 16-18, 2013, City Council expanded the Basement Flooding Protection Program across the entire City, and specifically delineated 7 new study areas beyond the previously identified 34 study areas to address the basement flooding impacts associated with the extreme storm event of July 8, 2013. The staff report that provides background information about expanding the Basement Flooding Protection Program can be viewed at: <http://www.toronto.ca/legdocs/mmis/2013/ex/bgrd/backgroundfile-63918.pdf>

On August 25, 2014, City Council authorized the Executive Director, Engineering & Construction Services, through Program Management Engineering Consulting Assignment agreements for the Basement Flooding Protection Program, to appoint professional engineering consultants as agents of the City for the purposes of approving, committing the City to, and authorizing on behalf of the City, construction contract change orders within the terms outlined in the Council approval. The Council decision can be found at: <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2014.PW33.13>

At its meeting of March 10 and 11, 2015, City Council adopted Toronto Water's 2015 Capital Budget and 2016-2024 Capital Plan, which includes \$1.546 billion for basement flooding relief, of which \$1.492 billion is included for Basement Flooding Protection related studies, design and capital construction and \$0.054 billion is included for the Basement Flooding Protection Subsidy Program. This represents an increase of 60% over the previously approved 2014-2023 Capital Plan. The Council decision can be found at: <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2015.EX3.1>

In support of Toronto Water's 2015 Capital Budget and 2016-2024 Capital Plan submission, a Briefing Note titled "2015 Capital Budget Briefing Note, Basement Flooding Protection Program – Project List: 2015 to 2019" containing the planned schedule for engineering design and construction of infrastructure upgrades supporting Toronto Water's Basement Flooding Protection Program. A copy of the Briefing Note can be found at: <http://www.toronto.ca/legdocs/mmis/2015/ex/bgrd/backgroundfile-77552.pdf>

At its meeting of March 10 and 11, 2015, City Council, in considering Engineering & Construction Services Division's 2015 Operating Budget submission, approved the addition of two permanent positions to the Engineering & Construction Services complement needed to fulfill the Council-approved expansion and accelerated delivery of the Basement Flooding Protection Program. The Council Decision can be found at: <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2015.EX3.4>, and specifically: <http://www.toronto.ca/legdocs/mmis/2015/ex/bgrd/backgroundfile-77451.pdf>

## **ISSUE BACKGROUND**

The City's Basement Flooding Protection Program was originally approved by Council in 2006. The purpose of this multi-year Program is to reduce the risk of basement and surface flooding during extreme storm events. To achieve this, Council approved new service level standards for sanitary sewer and storm drainage systems to provide an enhanced level of service, where feasible. The new service standards include:

- a) Sanitary sewer design based on a storm event equivalent to the May 12, 2000 storm, which is equivalent to a storm event with a return frequency of between one in 25 and one in 50 years; and,
- b) Storm drainage design based on the one in 100-year storm event, where feasible, to protect against surface flooding from ponding on the street, where a proper major (overland flow) drainage system does not exist.

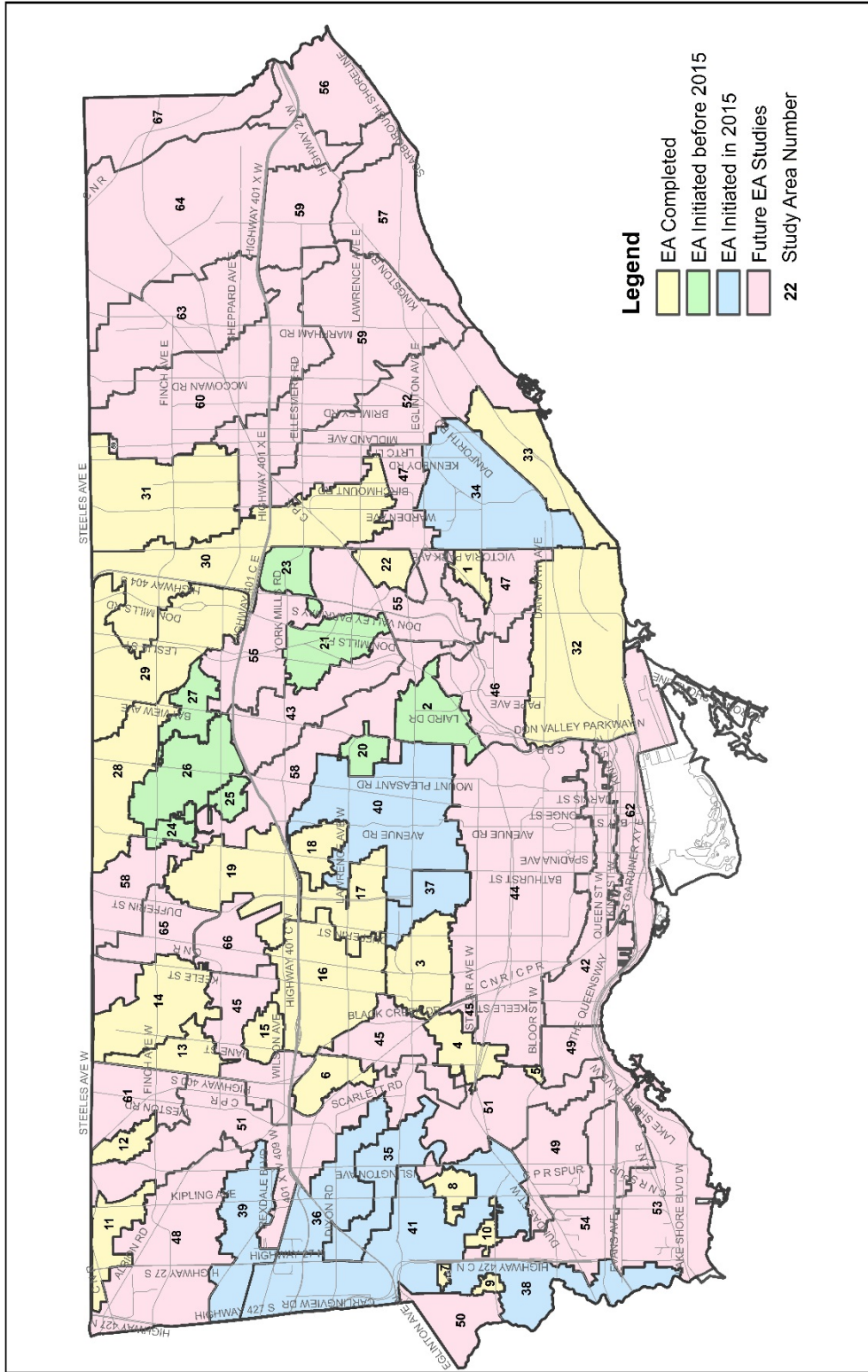
When the Basement Flooding Protection Program was originally established, the City identified 31 basement flooding study areas. Subsequently, the program was expanded to 34 study areas. Following the extreme storm event of July 8, 2013, Council, at its meeting of December 16 to 18, 2013, expanded the Program across the entire City, and specifically delineated 7 new study areas. In December 2014, City Council directed

Toronto Water to initiate and expedite the completion of the requisite Environmental Assessment studies for the remainder of the City, specifically identified as Study Areas 42 through 67 (Figure 1).

For each study area, the following steps must occur to identify and construct infrastructure upgrades to reduce the risk of basement flooding:

1. ***Completion of an Environmental Assessment (EA) Study:*** For each Study Area, Toronto Water, with support from Engineering & Construction Services, undertakes a Class EA study, as per the requirements of the *Ontario Environmental Assessment Act*. The Basement Flooding Class EA study involves an investigation into the causes of flooding within the study area, including a comprehensive assessment of the existing sanitary sewers and storm drainage systems including the existing storm sewers, leading to the identification of options available to meet the upgraded Council approved design standards. A preferred solution, specific to the study area, is then finalized with input from the public.
2. ***Prioritization and Coordination:*** Once the Class EA study is complete, the recommended infrastructure improvements for the study area are added to Toronto Water's running 5-year Basement Flooding Protection Program Project List, which is presented annually to City Council through the Capital Budget submission process. The 2015 Capital Budget Briefing Note, which contains the project list for 2015–2019, is included in Attachment 1 for reference.
3. ***Design and Construction:*** Once the projects have been prioritized and approved by Council through the Toronto Water Capital Budget submission, the projects are transferred to Engineering & Construction Services for delivery, and undergo further investigation, preliminary and detailed design, and then construction.

Since 2009, the delivery of Basement Flooding Protection Program infrastructure projects has relied on Engineering & Construction Services staff, working with Toronto Water staff, to oversee multi-year engineering consultant program management assignments, for the engineering design and contract administration services for the delivery of the associated capital projects



**Figure 1: Basement Flooding Protection Program Study Area Map**

The use of this highly successful program management approach enabled Engineering & Construction Services in 2014 to:

- Deliver an estimated \$55 million in capital projects through 15 concurrent construction contracts;
- Assist Toronto Water on 5 concurrent Class EA studies; and,
- Undertake the engineering design for 20 new capital projects.

This represents the maximum delivery capacity, using the current program delivery model and based on a complement of 9 Full Time Equivalent staff in Engineering & Construction Services.

### **Expansion and Acceleration of the Program**

To support the geographic expansion of the Basement Flooding Protection Program, and accelerate implementation of the required infrastructure upgrades, Council has approved funding increases to undertake Class EA studies, preliminary and detailed design, and construction of infrastructure projects. Funding for the Program contained in Toronto Water’s 10 year Capital Plan has increased every year since 2012, as presented in Table 1 and shown in Figure 2. In 2015, Council increased funding to the Program by more than 60% compared to 2014, as shown in Table 1.

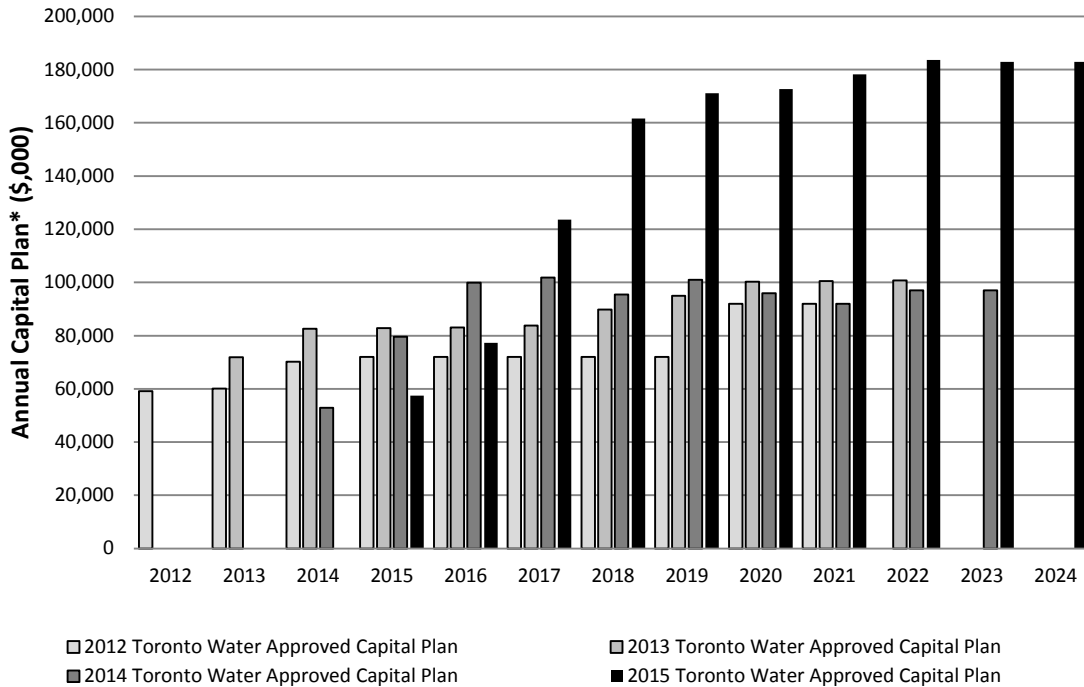
**Table 1. Council Approved 10-Year Capital Plan for the Basement Flooding Protection Program \***

Toronto Water Capital Budget	Basement Flooding 10-Year Capital Plan*
2012	\$733.3 million
2013	\$890.4 million
2014	\$912.7 million
2015	\$1,492.0 million

*\*Does not include Basement Flooding Protection Subsidy Program costs*

Meeting the requirements of the Council-approved expansion of the Program across the entire City, and achieving the significantly higher budgeted capital delivery rates, will require a significant increase in the annual throughput of the various Program components namely: Class EA studies, engineering design assignments, and construction contracts. The required increase, by component, is presented in Table 2.

**Figure 2  
Basement Flooding Protection Program 10-yr Capital Plan  
Comparison of 2012 to 2015 Budget Submissions**



**Table 2. Required Expansion of Program Components, in Comparison to 2014**

	2014 Delivery Achievements	Future Delivery Requirements
Number of Class EA studies	5	8
Number of Projects in Design	20	50
Number of Construction Contracts	15	45

Through organizational restructuring in the latter half of 2014, Engineering & Construction Services created a new dedicated Basement Flooding Protection Program Unit with a total of 11.5 Full Time Equivalent staff providing professional engineering and technical expertise to support delivery of the Program. The increase in staff complement supporting the Program was done by redirecting existing Engineering & Construction staff resources to the Unit.

Through the 2015 Toronto Water Capital Budget submission process, Toronto Water added 2 Full Time Equivalent positions to Engineering & Construction Services complement to be dedicated to delivery of the Basement Flooding Protection Program, bringing the total complement in the Basement Flooding Protection Program Unit 13.5 Full Time Equivalent staff.



## **Alternative Delivery Approaches**

As noted earlier, the current approach used to deliver the Program is now at maximum capacity which is insufficient to meet the forecasted demands on the Program delivery. Engineering & Construction Services, therefore, in consultation with Toronto Water, reviewed capital delivery approaches used by other jurisdictions delivering large scale, multi-year capital programs and assessed the applicability of alternate approaches to meet the forecasted Program delivery demands. Specifically, staff researched:

- Capital delivery approaches used in Miami-Dade County, San Francisco Public Utilities Commission, and the City of Calgary;
- The successes, failures and challenges of the different capital delivery approaches, and areas of expertise required for success; and,
- The capacity and expertise of the local (i.e., Toronto area) engineering consulting industry to support an alternate capital delivery model.

Based on the review, two alternative capital delivery strategies were developed:

### ***Alternative 1: Expand the Current Approach***

This would involve:

- Maintaining the current roles and responsibilities of City staff (i.e., to continue to manage the Program, including oversight of all construction contracts) and engineering consultants (i.e., to undertake engineering design and contract administration);
- Increasing the volume of work delivered by the engineering consultants through several concurrent professional engineering services assignments; and,
- Adding 10.5 Full-Time Employees (FTEs) to the Engineering & Construction Services complement to manage the higher number of external engineering consultants and the larger volume of contracts and EA studies, bringing the total complement to 24 FTEs dedicated to the Basement Flooding Protection Program.

### ***Alternative 2: Expanded Program Management Approach***

This would involve:

- Transferring some City staff responsibilities to a Program Management consultant and changing the professional engineering services consultants' responsibilities to include:
  - Management of the many interdependent components of the Program, including coordination of all projects, performance tracking and reporting, stakeholder management, development of standard processes and procedures, and quality control/assurance;
  - Preparation of preliminary engineering designs;
  - Provide peer review of conceptual designs and preliminary costs from Class EA studies, completed under separate engineering services assignments, to test the reasonableness of estimates and ensure constructability of proposed infrastructure upgrades;

- Preparation of Requests for Proposals for separate professional engineering services to undertake detailed engineering design and contract administration services, which would be awarded through competitive bidding processes and contracted directly to the City but managed by the Program Management Consultant; and,
  - Review and authorization of routine construction contract change orders valued at less than \$25,000 as an agent of the City.
- Maintaining the current complement of 13.5 Full-Time Employees (FTEs) to manage the Program Management Consultant and the additional volume of construction contracts and EA studies.

### **Evaluation of Alternatives**

The criteria used to evaluate the alternatives included:

- **Capital Delivery Capacity:** Ability to deliver \$180M per year;
- **Cost:** Cost incurred by the City including both consulting fees and City staff costs;
- **Flexibility:** Ability of the City to adjust resource levels to accommodate fluctuations in program value or procedures;
- **Contract Administration Services:** Ability of the City to define Contract Administration services that are tailored to the complexity and type of each assignment prior to issuing detailed engineering design and contract administration requests for proposals;
- **Technical Expertise:** Access to a wide spectrum and large pool of technical experts; and,
- **Program Management Expertise:** Access to international experts involved in managing multi-project, multi-year programs.

While it is expected that both alternatives can meet the Program's required delivery targets, Alternative 2 is being recommended for the following reasons:

1. The total cost of Alternative 2 is lower than Alternative 1. For Alternative 1, the cost of City staff salaries (based on 24 Full Time Equivalent staff) plus overheads, and on-going consulting fees for detailed design and construction administration, are estimated to be \$78 million and \$57.6 million, respectively over 10 years, for a total of \$135.6 million. For Alternative 2, the cost of City staff salaries (based on 13.5 Full Time Equivalent staff) plus overheads, and consulting fees for Program Management, are estimated to be \$44.3 million and \$88.7 million, respectively, over 10 years, for a total of \$133.0 million.
2. There is a significant challenge in hiring an additional 10.5 Full Time Equivalent professional/technical staff under Alternative 1, given the difficulties associated with recruiting the calibre of professional staff required for this complex and ambitious program. This has been evident in recent recruitment efforts by Engineering & Construction Services.
3. A Program Management Consultant provides immediate access to international experts with expertise in the management of this type large

scale Program; and has access to the multi-disciplinary expertise which may be required on the more technically challenging design assignments.

4. A Program Management Consultant assignment can provide additional resources as may be required for a given Program component; and provides the nimbleness necessary to redirect and/or scale the assignment of staff resources as required for a given component and/or the program delivery expectations in a given year.

### **Expanded Program Management Consultant Responsibilities**

In this approach, shown schematically in Figure 3, the Program Management Consultant acts as an extension of City staff, providing:

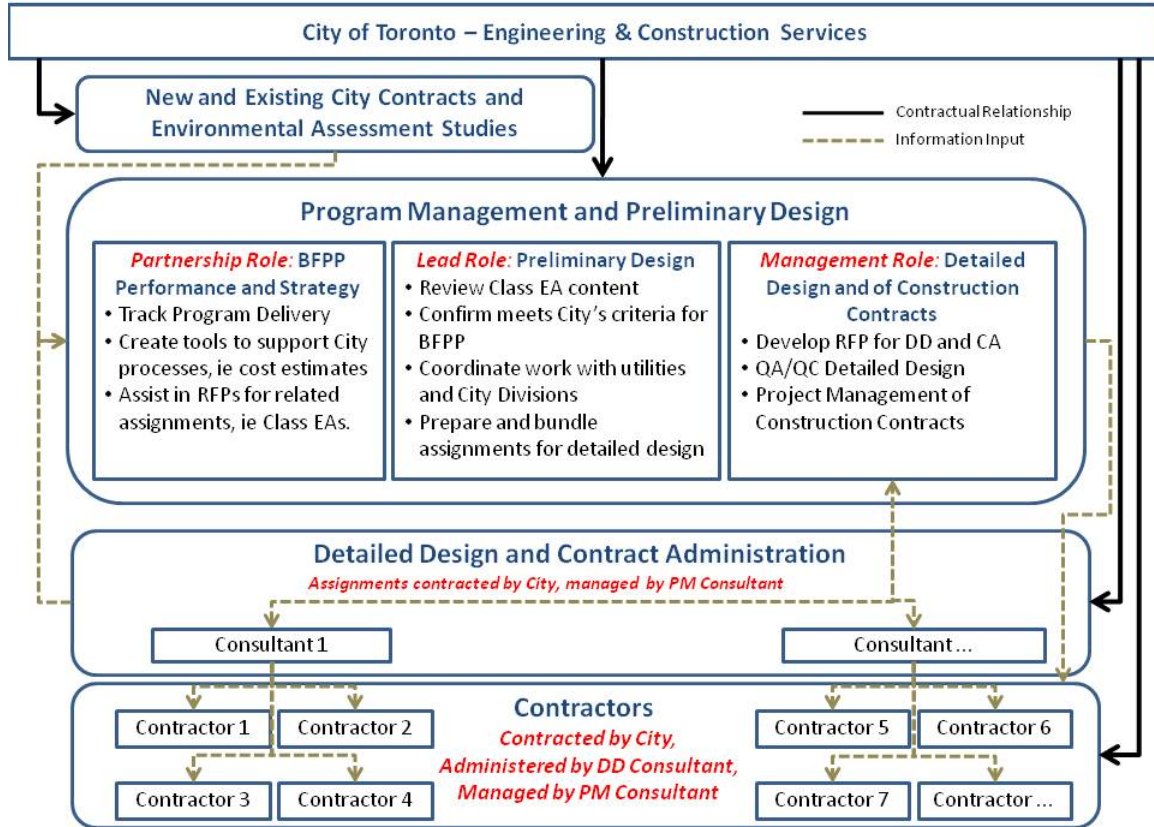
- Environmental assessment study support and conducting peer reviews of the work performed in these studies, including the computer simulation modelling and the constructability of the proposed infrastructure works;
- Preliminary design of the recommended infrastructure upgrades, including field investigations, engineering surveys, subsurface utility engineering, preliminary geotechnical investigations, and tree inventories; and,
- Oversight of the work of engineering consultants who are retained to provide detailed engineering design and contract administration services, including peer review of detailed engineering designs, processing of construction change orders to the appropriate signing authority level; and generating monthly reports on program delivery status.

City staff would continue to be responsible for the delivery of the program and will focus their efforts on the following tasks:

- Oversee the Program Management Consultant to track their performance against defined key performance indicators, review all payments and address any staffing or design issues;
- Expedite the delivery of the Class EA studies;
- Review all preliminary designs and confirm that basement flooding protection criteria are met, ensure coordination issues are addressed and project risks are identified and mitigated;
- Audit the detailed design and contract administration procedures, submissions and activities;
- Audit change orders approved by the consultant to ensure that all required documentation is in place, and that they have been properly reviewed and comply with the City's policies and procedures;
- Address non-routine public and Councillor inquiries; and,
- Review and authorize complex contract scope changes above the Program Management Consultant's assigned signing authority.

In addition, Engineering & Construction Services staff and the Program Management Consultant will jointly develop and implement a Customer Service and Strategic Communications Plan for the program. This plan will draw on past experience in the delivery of the Program, and build upon existing City procedures and best practices already employed by the City's Public Consultation Unit, by:

**Figure 3: Alternative 2 – Program Delivery Model Organization Structure**



- Building on relationships developed with the public and various stakeholders through the Class EA phase;
- Identifying protocols and processes for pro-active communication with the public; and,
- Ensuring residents are kept informed of the activities and timelines associated with the work in their neighborhood and minimize unanticipated disruption to the residents.

The Customer Service and Strategic Communications Plan will help ensure consistent and timely information about the program and projects is shared with the public and will identify any requirements or opportunities for additional public outreach.

This Plan will continue the use of the Field Ambassadors being used with great success on current Basement Flooding Protection Program projects. These individuals are the single point of contact for the community, with primary responsibility to facilitate communications between the public and project team for all construction projects.

In addition, the Program Management Consultant, in consultation with City staff, will develop a web-based portal to provide updates directly to each Councillor on the status of Construction activities within their Ward.

During the review of capital delivery approaches, noted above, one of the consistent messages provided by the jurisdictions consulted, was that co-location of consultants with staff was key to successful program delivery. Co-location fosters cohesive teams, where roles, responsibilities and authorities are clearly understood. This team based approach provides an environment where team members can share ideas, learn and gain knowledge from each other, and work together on solving problems and issues as they arise. Upon award of this contract, Engineering & Construction Services will make arrangements to provide for this co-location.

## **COMMENTS**

A Request for Proposal (RFP) was prepared by Engineering & Construction Services, in consultation with Toronto Water and in conjunction with the Purchasing & Materials Management Division, to procure the services of a Program Management Consultant to provide the following program management and professional engineering services:

- Program Management;
- Class EA Support;
- Preliminary Engineering Design; and,
- Oversight, Quality Assurance/Quality Control, and Administration of Detailed Design and Construction Administration.

RFP 9117-14-7110 was issued by the Purchasing & Materials Management Division (PMMD) on October 24, 2014, and was available for download in PDF format on the City's Internet website.

The RFP presented the scope of work and described the proposal evaluation process and criteria. Due to the high value and duration of this assignment, a Fairness Monitor, PPI Consulting Ltd., was engaged by the City (through a separate competitive procurement process) to oversee the procurement process for RFP 9117-14-7110.

A mandatory information meeting was held on November 13, 2014, which thirteen (13) firms attended. This resulted in receipt of a total of four (4) submissions by the January 8, 2015, closing date from the following firms:

1. Black & Veatch Canada Company
2. CH2M Hill Canada Limited
3. Stantec Consulting Ltd.
4. WSP Canada Inc.

All four (4) submissions complied with the mandatory RFP requirements, and all four (4) Technical Proposals were evaluated by a selection committee comprised of five (5) City staff from Engineering & Construction Services and Toronto Water. The proponents' Technical Proposals were first evaluated and scored independently, in accordance with the pre-established criteria and the RFP evaluation guide provided by PMMD specifically for this project. The scores were then jointly reviewed by all members of the selection committee under the guidance of PMMD and the Fairness Monitor and a consensus score was reached for each submission.

The proposal evaluation process specified that only those proponents that passed the Technical Proposal would be called for an Interview. In addition, the envelope containing the Cost of Services proposal would not be reviewed until the evaluation of the Technical Proposals and formal Interview was completed. A minimum threshold score of 52.5 points (75%) on the Technical Proposal was required in order for a proponent to be called for an Interview. Black & Veatch Canada Company and WSP Canada Inc. did not meet the minimum technical threshold score and, consequently, were not called for an Interview.

The Technical Proposals from CH2M Hill Canada Limited and Stantec Consulting Ltd. exceeded the minimum threshold score and these 2 firms were invited for individual Interviews. The scores for the Interviews were assigned based on the proponents' response to pre-defined questions. The total score for the Interview was combined with the score of the Technical Proposal. A minimum score of 63.75 points (75%) on the combined Technical Proposal and Interview was required before the Cost of Services envelope could be opened and evaluated.

Both CH2M Hill Canada Limited, and Stantec Consulting Ltd. exceeded the minimum combined score for the Technical Proposal and Interview and their Cost of Services envelopes were opened and scored in compliance with the criteria specified in the RFP. The Technical scores along with the Cost of Services scores were summed.

On completion of the above process, the proposal from CH2M Hill Canada Limited was ranked first with the highest overall point score. The selection committee concluded that the proposal submitted by CH2M Hill Canada Limited met the requirements of the RFP and demonstrated an appropriate level of effort for the proposed project.

It is being recommended that the contract be awarded for a period of 10 years consisting of two five-year terms. The City has retained the option to terminate the contract after the first five-year term based on an evaluation of the Consultant's performance to that point.

Proponents' scores and staff analysis of the evaluation results can be provided to Councillors in an in-camera presentation if requested by members of Council.

The Fair Wage Office has reported that the recommended firm has indicated that it has reviewed and understands the Fair Wage Policy and Labour Trades requirements and has agreed to comply fully.

### **Application of City's Social Procurement Policy**

This RFP was selected by Engineering & Construction Services in consultation with the Purchasing & Materials Management Division and the Social Procurement working group, as a pilot project for the development of the Social Procurement Policy as directed by City Council in May 2013. The RFP included an opportunity for the proponents to submit a proposal related to workforce development. CH2M Hill Canada Limited included a proposal to use social enterprises within the scope of the program management

assignment, by leveraging relationships through Microskills, a multi-cultural, non-profit, community based organization committed to assisting the unemployed, with priority given to women, racial minorities, youth and immigrants, to identify new hires and obtaining goods and services from social enterprises such as printing, translation and courier services. The City will work with CH2M Hill to refine their workforce development plan so it advances social procurement practices.

### **Fairness Monitor**

The firm of PPI Consulting Ltd. was retained through a competitive bidding process to act as Fairness Monitor for this RFP. The Fairness Monitor's scope of work:

- Addressing any concerns relating to accountability/fairness (monitoring the level of openness, transparency and competitiveness of the procurement process);
- Independent assurance of the integrity of the procurement process with a signed attestation statement for the RFP;
- Preparing a Final Attestation Report for the City.

The Fairness Monitor concluded that the RFP process satisfied the principles of openness, fairness, consistency and transparency. The Attestation Report from the Fairness Monitor is included as Attachment 2.

## **CONTACTS**

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## **SIGNATURES**

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Michael D'Andrea, M.E.Sc., P.Eng.  
Executive Director  
Engineering & Construction Services

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Michael Pacholok  
Director  
Purchasing & Materials Management

Attachment 1: 2015 Capital Budget Briefing Note - Basement Flooding Protection  
Program – Project List: 2015 to 2019  
Attachment 2: Fairness Monitor Attestation Report

Attachment 1  
2015 Capital Budget Briefing Note - Basement Flooding Protection Program – Project  
List: 2015 to 2019



Lou Di Gironimo, General Manager  
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## Briefing Note

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### 2015 Capital Budget Briefing Note Basement Flooding Protection Program – Project List: 2015 to 2019

#### Issue:

City Council directed the General Manager of Toronto Water to submit an updated five year list of Basement Flooding Protection Program capital projects through the annual Capital Budget submission process.

#### Background:

On September 21, 2011 City Council adopted the recommendations contained within the Wet Weather Flow Master Plan and Basement Flooding Protection Program Update Report. The report, which can be found at: <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2011.PW7.6>, provides a description of the methodology used to prioritize and plan sewer system improvement projects for the Basement Flooding Protection Program, and contains the following recommendations:

- 1) City Council direct that the prioritization of Basement Flooding Protection Program projects be consistent with the principle that the greatest number of properties are protected as soon as possible within approved funding envelopes and coordinated with other City capital programs;
- 2) City Council direct that projects identified through completed Environmental Assessments in the 32 identified Chronic Basement Flooding Study Areas, proceed to detailed design and construction, if the cost to benefiting property, as determined during the preliminary design phase, is less than or equal to \$32,000; and
- 3) City Council direct the General Manager, Toronto Water to submit an updated five year list of projects, through the annual Capital Budget submission process, where Class Environmental Assessment studies have been completed, and the projects be prioritized in conformance with Recommendations 1 and 2, and where the first two years of projects will be identified for construction (when their preliminary designs are completed) and the following three years of projects will be subject to confirmation for implementation through the preliminary design phases where cost estimates will be refined, and the project scheduling will be coordinated with Transportation Services and other utilities.



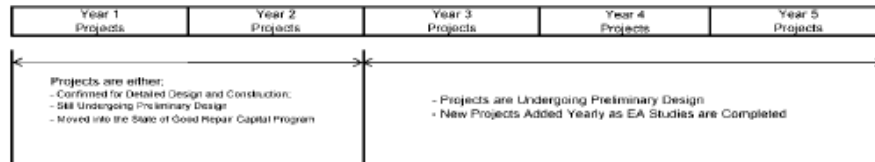
When the Basement Flooding Protection Program was originally established in 2006, the City identified 31 chronic basement flooding study areas. Subsequently, the program was expanded to a total of 34 priority study areas. Following the extreme storm event of July 8, 2013, Council approved a further expansion of the Program to 41 study areas (Areas 35 – 41). The staff report that provides background information about expanding the Basement Flooding Protection Program can be viewed at: <http://www.toronto.ca/legdocs/mmis/2013/ex/bgrd/backgroundfile-63918.pdf>

Basement Flooding Protection Program projects are identified through Environmental Assessment Studies, which assess the capacity of the existing drainage systems in a neighbourhood. Of the 41 City Council approved Basement Flooding Protection program priority study areas, Environmental Assessments for twenty five of the study areas have been completed as of the end of November 2014, one should be completed by the end of 2014, seven are underway with expected completion in 2015, and eight Study Areas (34 to 41) will begin in early 2015.

As part of the Environmental Assessment Study process, a construction cost is estimated along with a calculation of the number of benefitting homes for each recommended project. Projects where the EA study cost estimate per benefitting home is less than the City Council approved threshold value of \$32,000 per benefitting home are moved into the preliminary design stage of the implementation program. These projects first appear in the Year 3 to Year 5 grouping of projects, as highlighted by the following schematic.

Figure 1

**Schematic of Basement Flooding Protection Program  
5 Year Capital Planning of Projects**



The goal of the preliminary design stage is to ensure the physical constructability of projects, and to better define the project cost estimate. Through various field investigations, the design is refined and the full extent of the construction impacts can be understood (e.g. the extent of road works, and adjustments to existing utilities can be better quantified). This design refinement can result in changes to the scope and extent of the EA Study recommendations, and can result in significant project cost increases.

Projects that continue to meet the \$32,000 per benefitting home cost threshold at the completion of the preliminary design stage are moved into the detailed design stage. While it is typical for construction to start within two years following the completion of the preliminary design, projects can sometimes be delayed to allow coordination with the schedules of other works being delivered by other City of Toronto delivery groups

and utilities. Only once projects are moved into the detailed design stage, should they be communicated to the public as being projects that will be proceeding to construction.

Projects that no longer meet the \$32,000 per benefitting home cost threshold, at the completion of the preliminary design stage, are moved from the Basement Flooding Protection Program's 5 year capital plan and into the State of Good Repair's long term capital plan (i.e. 'the Infrastructure Backlog'). These projects will be sequenced for detailed design and construction, as the replacement of the existing drainage systems becomes warranted due to poor structural condition or to address land development needs.

**Key Points:**

- Table 1 (attached) contains a 5-year list of projects organized by year and by Ward. This list corresponds to the budget request contained within the recommended Toronto Water 2015 Capital Budget, and the 2016 to 2019 Capital Budget Plan.
- The projects identified in Table 1 fall into one of 5 categories, namely;

Under Construction Projects: These projects are projects that have already been awarded to a contractor for construction. These works are in various stages of completion.

Projects Confirmed for Construction: Preliminary Design for these projects has been completed, and it has been confirmed that the projects meet the allowable maximum cost of \$32,000 per benefitting home. These projects have been coordinated with the known capital programs of Transportation Services and other utilities.

Projects Undergoing Preliminary Design: Preliminary Design for these projects has not yet been completed. For these projects, it has not yet been confirmed that the allowable maximum cost of \$32,000 per benefitting home can be met, and as a result, these projects cannot yet be confirmed for detailed design and construction. These projects are in the process of being cleared and coordinated with the capital programs of Transportation Services and other utilities

Deferred Projects: Preliminary Design for these projects has been completed and the costs for these projects exceed the allowable maximum cost of \$32,000 per benefitting home. Due to their elevated costs, the detailed design and construction of these projects will be 'deferred' until such time as the remainder of the projects costing less than \$32,000 per benefitting home can be completed.

Projects No Longer Required: Through the preliminary design efforts it was determined that the construction of these projects would not be required in order to meet the enhanced service standards required by the Basement Flooding Protection Program. This was mostly achieved by adjusting nearby sewer upgrade works to control the storm and sanitary flows.

- The scheduling of projects in the 2017 to 2019 time frame is subject to change, due to capital coordination issues and regulatory approvals which may be necessary; and this schedule will be further updated in future year Toronto Water Capital Budget submissions.
- The projects in the 5 year list have been identified from 19 of the completed Environmental Assessment (EA) studies. While 25 EA studies are complete, there was insufficient time to scope the capital work projects for inclusion in this Briefing Note from the most recently completed 6 EA studies. Early in 2015, many additional projects will be added to the 5 year plan, from both the six recently completed EA studies and from the seven EA studies that are scheduled for completion in 2015. Preliminary design efforts for some of these new projects may be initiated prior to appearing in the next annual Basement Flooding Protection Program project list Briefing Note document. This approach will be used to ensure that projects are initiated without delay.

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**Table 1: Basement Flooding Protection Program – Project list: 2015 – 2019**

**2015 - Year 1 Projects**

"Under Construction" Projects (i.e construction started in 2014 or earlier and continuing into 2015)

Project #	Location	Project Description	Ward	Councillor	Preliminary Design Cost Estimate (\$)	Cost / Benefitting Home
11-01	Evangeline Crt.	Storm and Sanitary Sewer Replacements / Upgrades	1	Crisanti	\$394,710	\$21,500
11-02	Kidron Valley Dr.	Storm and Sanitary Sewer Replacements / Upgrades	1	Crisanti	\$466,180	\$23,100
11-03	Dorward Dr. Silverstone Dr. Mount Olive Dr.	Storm and Sanitary Sewer Replacements / Upgrades	1	Crisanti	\$3,866,000	\$12,300
10-02	Martin Grove Rd. Don Albert Rd. Northglen Ave.	Storm Sewer Upgrades	3	Holyday	\$1,823,840	\$8,644
10-03	Glen Meadow Crt. Laurel Ave.	Storm Sewer Upgrades	3	Holyday	\$640,890	\$21,363
12-01 (Construction began in 2013)	Seacliff Blvd Navenby Cres. Gracedale Blvd. Cherrylawn Ave. Hasbrooke Dr. Finch Ave. W. Crimscott Rd. Pearldale Ave. Easement	Storm and Sanitary Sewer Replacements / Upgrades	7	Mammoliti	\$26,239,668	\$41,064 <sup>1</sup>
16-04	Winston Park Blvd. Deverell Cres	Storm Sewer Replacements / Upgrades	9	Augimeri	\$1,023,000	\$21,766
3-01B	Keele St. Yore Rd. Lonsborough Ave. Eglinton Ave. W. Tretthewey	Storm Sewer Replacements / New Storm Sewer	12	Di Giorgio	\$9,321,000	\$40,351 <sup>2</sup>
16-08	Cornelius Pkwy. Floral Pkwy. Ingleside Dr.	Storm Sewer Replacements / Upgrades & Inlet Storm Sewer Storage	9/12	Augimeri / Di Giorgio	\$2,699,170	\$31,755
16-09	Lookout Pl.	Additional Inlet Capacity & Storm Sewer Upgrades	12	Di Giorgio	\$229,200	\$22,920
16-13	Queens Dr.	Storm Sewer Replacements / Upgrades	12	Di Giorgio	\$218,000	\$4,449
16-23	Alladin Ave. Liscombe Rd.	Sanitary Sewer Replacements / Upgrades	12	Di Giorgio	\$605,430	\$4,400
16-31	Jane St.	Storm Sewer Replacements / Upgrades	12	Di Giorgio	\$670,600	\$10,160
16-36	Battersea Cr.	Inline Storm Storage Tank	12	Di Giorgio	\$505,000	\$25,250

16-40	Woolton Cres. Culford Rd	Storm Sewer Replacements / Upgrades	12	Di Giorgio	\$332,000	\$10,200
16-41	Cavern Cr.	Storm Sewer Upgrades	12	Di Giorgio	\$240,730	\$30,091
16-06	Paul David St. Cartwright Ave.	Additional Inlet Capacity & Storm Sewer Upgrades / Offline storm Storage / Watermain replacement	15	Colle	\$3,630,000	\$29,040
16-07	Jane Olser Blvd.	Storm Sewer Replacements / Upgrades	15	Colle	\$338,000	\$21,125
16-44	Ennerdale St. Easement	Sanitary Sewer Replacements / Upgrades	15	Colle	\$637,000	\$12,490
03-04	Charles Caccia Tank (formerly known as Nairn Park)	Combined Sewer Storage Tank / New Combined Sewer	17	Palacio	\$7,868,000	\$19,770

Projects Confirmed to Start Construction in 2015

Project #	Location	Project Description	Ward	Councillor	Preliminary Design Cost Estimate (\$)	Cost / Benefitting Home
14-05	Gosford Blvd Fletcherdon Cres. Hullmar (east of Gosford) York Gate Blvd. Artech Cr. Secroft Cres. Jane st. Shoreham Dr.	Storm Sewer Replacements / Upgrades	8	Perruzza	\$6,350,000	\$28,733
14-07	Derrydown Rd. Romfield Dr. Villatta Gdns. Paulvale Cres.	Storm Sewer Replacements / New Storm Sewer /	8	Perruzza	\$7,200,000	\$31,441
14-08	Fulwell Cres. Easement.	Storm Sewer Replacements	8	Perruzza	\$1,534,051	\$22,233
14-09	Blacksmith Cres. Hullmar Dr. Skye Cr. Bamford Cres. Easement Hiskey Cres. Janet St. Wheelwright Cres.	Storm Sewer Replacements	8	Perruzza	\$8,415,000	\$23,055
16-01	North Park Ravine	Sanitary Sewer Replacements / Inline Storage	12	Di Giorgio	\$839,300	N/A <sup>3</sup>
16-23B	Seabrook Ave. Rustic Rd. Aladin Dr. Culford Rd. Burr Ave.	Sanitary & Storm Sewer Replacements and Upgrades; High Capacity Catchbasins	12	Di Giorgio	\$1,530,000	\$12,400
16-26	Blue Springs Rd. Rustic Rd. Culford Rd	Storm Sewer Upgrades	12	Di Giorgio	\$1,207,000	\$30,990

16-27	Blue Springs Rd. Brief Rd. Falstaff Ave.	Storm Sewer Upgrades / Additional Inlet Storage	12	Di Giorgio	\$2,926,231	\$30,990
16-28	Beckett Ave. Falstaff Ave. Fleetwood Ave. Maidstone St.	Storm Sewer Upgrades / Additional inlet storage	12	Di Giorgio	\$2,672,132	\$31,811
16-29	Rustic Park.	Storm Dry Pond	12	Di Giorgio	\$367,000	\$3,248
16-30	Maple Leaf Park.	Engineered Wetland	12	Di Giorgio	\$641,850	\$16,458
16-32	Dante Rd. Demarco Blvd.	Sanitary Sewer Upgrades/ Replacements / In-line Storm Storage	12	Di Giorgio	\$771,000	\$11,900
16-37	Culford Rd. Dante Rd. Gracefield Park Easement	Storm Sewer Upgrades / Additional Inlet Storage / Storm Dry Pond	12	Di Giorgio	\$696,000	\$7,900
16-38	Sorlyn Ave.	Storm Sewer Replacements / Upgrades	12	Di Giorgio	\$337,000	\$18,722
16-33	Eugene St. Easement Joyce Pkwy	Storm Sewer Upgrades/ Off-line Storm Storage	15	Colle	\$2,054,319	\$30,661
18-02	Grey Rd.	New Storm Sewer/ Storm sewer Upgrade / Sanitary Upgrade	16	Carmichael Greb	\$515,600	\$5,261
29-12	Mallaby Rd. James Gray Dr.	Storm Sewer Upgrades	24	Shiner	\$999,000	\$12,333
29-20	Loganberry Cres. Easement	Storm Sewer Replacements / New Storm Sewer	24	Shiner	\$741,000	\$28,500
32-03	Ivy Ave.	New Storm Sewer	30	Fletcher	\$373,000	\$31,080
32-16A	Eastern Ave.	Combined Sewer / Storm Sewer Replacement	32	McMahon	\$1,171,014	\$9,678
29-02C	Kempell Cres. Houston Cres. Hobart Dr. Deerford Rd. Ashtead Pl. Easement	Storm Sewer Replacements / New Storm Sewer / Trench Drain Installation	33	Carroll	\$9,013,378	\$20,626
29-11	Angus Dr. Silas Hill Dr. Seneca Hill Dr. Easement	Storm Sewer Replacements / New Storm Sewer / Trench Drain Installation /	33	Carroll	\$7,346,724	\$28,257

Projects that are no longer required<sup>4</sup>

Project #	Location	Project Description	Ward	Councillor	EA Study Cost Estimate (\$)	Cost / Benefitting Home
16-39	Culford Rd. South of Woolton	Storm Sewer Replacements / Upgrades	12	Di Giorgio	N/A	N/A
16-43	Flamborough Dr. west of Keele	Sanitary Sewer Replacements / Upgrades	12	Di Giorgio	N/A	N/A
31-04	Hawkshead Cres.	Storm Sewer Replacements / Upgrades	39	Karygiannis	N/A	N/A

Projects undergoing preliminary design (targeted construction start year of 2015)

Project #	Location	Project Description	Ward	Councillor	Preliminary Design Cost Estimate (\$)	Cost / Benefitting Home
29-07A	Bestview Dr. Harrington Cres. Kentland Cres. Goldenwood Rd. Easement	New Storm Sewer, Trench Drain Installation	24	Shiner	\$6,210,000	\$27,973



Projects confirmed to start construction in 2016

Project #	Location	Project Description	Ward	Councillor	Preliminary Design Cost Estimate (\$)	Cost / Benefiting Home
14-03A	Conamore Cres. Dundee Dr. Hucknall Rd. Madron Cres. Derrydown Rd. Catford Rd. Killamarsh Dr. Council Cres. Sentinel Rd.	Storm Sewer Replacements / New Storm Sewer	8	Perruzza	\$15,157,000	\$46,925 <sup>5</sup>
31-12	Stonebridge Blvd.	Storm Sewer Upgrades/ Trench Drain Installation	39	Karygiannis	\$374,334	\$25,900
31-18	Robintide Crt. Bridlewood Blvd.	Storm Sewer Replacements/ Upgrades	40	Kelly	\$677,097	\$29,439 <sup>12</sup>

Projects Undergoing Preliminary Design (targeted construction start year of 2016)

Project #	Location	Project Description	Ward	Councillor	Preliminary Design Cost Estimate (\$)	Cost / Benefiting Home
14-10	Kennerly Crt.	New Storm Sewer	8	Perruzza	\$1,540,000	\$66,957 <sup>5</sup>
03-03	Dynevor Rd. Hanson Rd. Blandford St. Glenholme Ave. Genessee Ave. Lauder Ave. Northcliff Blvd. Westmount Ave. Martin St. Holmesdale Rd. Ennerdale Rd. Chudleigh Rd. Harvie Ave. Kirknewton Rd. Dufferin St. Allenvale St. Easement Kitchener Ave. Eglinton Ave. W. Snider Ave. Caledonia Rd. Croham Rd. Bowie Ave. Little Blvd. Chamberlain Ave. Gilbert Ave. Dunraven Dr. Silverthorn Ave. Dunraven Dr. Hyde Ave. Nashville Ave. Dynevor Rd. Rogers Rd.	New Storm Tunnels / Storm Sewers / Combined Sewer Replacements	12,15/17	DiGiorgio/ Colle/ Palacio	\$101,600,000	\$39,441 <sup>8</sup>



30-18	Reiber Cres. Pineway Blvd. Easement	Storm Sewer Upgrades	24	Shiner	\$591,000	\$5,794
32-04	Eastern Ave. Winnifred Ave. Mosley St. Leslie St. Easement	Storm Sewer upgrades	30	Fletcher	\$1,886,868	\$11,793
32-17	Alton Ave. Queen St E. Laing St.	Combined Sewer Upgrades	30 / 32	Fletcher / McMahon	\$532,782	\$8,325
32-18	Ravina Cres. Earl Grey Rd. Shudell Ave. Hunter St.	New storm sewer	30	Fletcher	\$998,648	\$14,473
32-19	Gerrard St E. First Ave.	New Storm Sewer and Combined Sewer Upgrades	30	Fletcher	\$256,726	\$4,209
32-20	Pape Ave.	New Storm Sewer	30	Fletcher	\$419,438	\$2,330
32-21	Queen St E. Leslie St. Jones Ave. Coady Ave.	New Storm Sewer and Combined Sewer Upgrades	30	Fletcher	\$2,009,746	\$9,949
32-23	Morse St.	Storm Sewer upgrades	30	Fletcher	\$440,166	\$6,379
32-24	Booth Ave. Empire Ave	Storm Sewer Upgrades	30	Fletcher	\$647,393	\$4,434
32-25	Saulter St. Eastern Ave.	New Storm Sewer	30	Fletcher	\$613,927	\$11,162
32-05	Glen Manor Dr.	New Storm Sewer	32	McMahon	\$178,200	\$4,816
32-06	Rainsofrd Rd.	Combined Sewer Upgrades	32	McMahon	\$35,323	\$1,039
32-07	Elmer Ave.	Storm Sewer upgrades	32	McMahon	\$120,815	\$6,041
32-08	Queen St. E	Install Diversion Sewers	32	McMahon	\$26,680	\$834
32-10	Lake Shore Blvd E.	New Storm Sewer / Storm Sewer Replacements	32	McMahon	\$1,132,380	\$18,873 <sup>a</sup>
32-11	Woodbine Ave. Kewbeach Ave. Buller Ave. Kippendavie Ave. Kenilworth Ave.	Storm and Combined Sewer Upgrade	32	McMahon	\$1,633,693	\$9,610
32-12	Waverley Rd.	New Storm Sewer amd bypass	32	McMahon	\$215,679	\$6,740
32-13	Lee Ave.	New Storm Sewer amd bypass	32	McMahon	\$232,706	\$10,118
32-15	Kerr Rd.	Storm Sewer Upgrades	32	McMahon	\$103,596	\$2,302
32-16B	Minto Ave.	New Storm Sewer Installation, Storm Sewer Upgrades, Install Backflow Valve, Sanitary Sewer Upgrades	32	McMahon	\$220,914	\$2,893
32-27	Kingswood Rd. Queen St E. Neville Park Blvd.	New Storm Sewer and Storm Sewer Upgrades	32	McMahon	\$989,376	\$17,667
30-17	Snapdragon Dr. Clematis Rd. Brian Dr.	Storm Sewer Upgrades	33	Carroll	\$3,000,000	\$28,571

Sheppard Ave E.						
Projects Undergoing Preliminary Design (targeted construction start in 2017, 2018, & 2019)						
Project #	Location	Project Description	Ward	Councillor	EA Study Cost Estimate (\$)	Cost / Benefitting Home
8-03	Beaverbrook Ave.	Sanitary Sewer Replacements	3	Holyday	\$627,900	\$3,651
9-01	Renforth Dr. Allonsius Dr. Windust Gt. Bumhamthorpe Rd. Tranquil Dr. Boreal Rd. Saturn Rd. Easements Renforth Dr. Carsbrooke Rd. Crendon Dr. Glos Rd. Botley Rd. Elderfield Cres.	Sanitary / Storm Sewer Replacements / New Storm Sewer	3	Holyday	\$29,113,900	\$53,518
8-04 A	Thorncrest Rd.	Sanitary / Storm Sewer Replacements	4	Campbell	\$2,826,100	\$23,165
8-04 B	Kipling Ave. Great Oak Dr.	New Sanitary Sewer	4	Campbell	\$2,826,100	\$23,165
13-02	Larchwood Rd. Laura Rd. Frith Rd. Ryewood Dr. Jane St. Lomar Dr. Sheppard Ave. W. Snowood Crt.	Storm Sewer Replacements / New Storm Sewer / Trench Drain Installation / New Overland Shallow Storm Sewer	7	Mammoliti	\$13,292,367	\$23,361
15-13	Black Creek Trl (Easement to Outlet) Marlington Cres. Chalkfarm Dr. Neames Cres. Jane St. Exbury Rd.	Storm Sewer Replacements / Install Trench Drain / New Overland Shallow Storm Sewer	7	Mammoliti	\$6,153,106	\$13,734
14-12	Derrydown Rd. Candlewood Cres. Lamberton Blvd. Clayhall Cres. Keegan Cres.	Storm Sewer Replacements / Upgrades	8	Peruzza	\$5,080,000	\$31,358
13-01	Friary Crt.	Storm Sewer Replacements	9	Augimeri	\$97,034	\$6,065
15-01	Tavistock Rd.	Storm Sewer Replacement	9	Augimeri	\$87,091	\$2,720
15-02	Forthbridge Cres. Lexfield Ave. Calvington Dr.	Storm Sewer Replacements	9	Augimeri	\$770,027	\$5,969
15-05	Exbury Rd. Troutbrooke Dr. Buxton Rd. Peacham Cres.	Storm Sewer Replacements/ New Storm Sewers	9	Augimeri	\$1,276,722	\$12,896
15-06	Camborne Ave.	Storm Sewer Replacement	9	Augimeri	\$658,361	\$6,710
15-07	Wilson Ave.	Storm Sewer	9	Augimeri	\$2,413,387	\$9,972

	Julian Rd. Victory Dr.	Replacements				
15-08	Clevedon St. Lexfield Ave. Richard Clark Dr. Tumpane St. Letchworth Cres. Deevale Rd. Deevale Rd. Heathrow Dr.	Storm Sewer Replacements / New Storm Sewer	9	Augimeri	\$2,879,643	\$11,427
15-09	Epsom downs Dr. Tumpane St.	Storm Sewer Replacements	9	Augimeri	\$1,475,623	\$11,012
15-10	William Cragg Dr. Dana Ave. Westcliffe Rd. Richard Clark Dr. Tumpane St.	Storm Sewer Replacements	9	Augimeri	\$2,062,009	\$12,573
15-11	Jane St. Heathrow Dr.	Storm Sewer Replacements	9	Augimeri	\$546,214	\$12,702
15-12	Troutbrooke Dr. Monclova Rd. Jane St.	Storm Sewer Replacements	9	Augimeri	\$1,374,245	\$13,342
16-22	Ianhall Rd. Wilson Ave. Julian Rd. Nash Dr. Roding St. Roding Park	New Storm Sewer / Storm and Sanitary Sewer Upgrades	9	Augimeri	\$3,450,000	\$23,469
19-01	Bayhampton Crt.	Storm Sewer Upgrade	10	Pasternak	\$466,400	\$9,145
19-02	Purdon Dr. Aristan Dr.	Storm Sewer Upgrades	10	Pasternak	\$945,800	\$11,822
19-03	Westgate Blvd.	New Storm Sewer / Storm & Sanitary Sewer Upgrades	10	Pasternak	\$12,853,700	\$13,986
19-04	Honiton St. Cavotti Cres.	Storm Sewer Upgrade / Inline Storage	10	Pasternak	\$936,600	\$22,844
19-06	Elison Ave. Westgate Blvd.( not Westgate Ravine) Garraff Blvd. Timberlane Dr.	Storm Sewer Upgrade / Sanitary Sewer Upgrades / New Sanitary Sewer / Sanitary In-line Storage	10	Pasternak	\$11,303,600	\$18,115
19-07	King High Ave. Laurelcrest Ave. Faywood Blvd.	Sanitary Sewer Upgrades	10	Pasternak	\$230,400	\$2,916
19-08	Barksdale Ave. Wilmington Ave.	Storm Sewer Upgrade	10	Pasternak	\$283,100	\$4,718
19-11	Clifton Ave. Maxwell St. Hove St. Shaftesbury St. Overbrook Pl. Beaver valley Rd.	Sanitary Sewer Upgrades / New Sanitary Sewers	10	Pasternak	\$1,917,600	\$3,938
19-12	Wilmington Ave. Maxwell St. Elder St.	New Storm Sewers	10	Pasternak	\$2,051,500	\$12,068
19-13	Tillplain Rd. Waterloo Ave. Cocksfield Ave. Wilmington Ave. Searle Ave.	Storm Sewer Upgrades/ New Sanitary Sewer	10	Pasternak	\$12,880,300	\$14,703

	Hove St. Shaftesbury St. Baintree Cr. Bryant St. Brighton Ave. Goddard St. Wilson Heights Blvd. Tokay Cr. Codsell Ave. Amos Cres.					
19-14	Brockington Cres.	New Storm Sewer for Storage	10	Pasternak	\$487,000	\$11,326
19-15	Wild Gingerway	Storm Sewer Upgrades	10	Pasternak	\$83,700	\$1,993
19-16	Bathurst St. Palm Dr. Bonnacord Dr. Delia Cr. Laurelcrest Ave. Erica Ave. Clanton Park Rd. Romney Rd. Collinson Blvd. Midvale Rd. Raeburn Ave.	New Storm Sewers/ Storm Sewer Upgrades Storm Storage Sewer	10	Pasternak	\$3,876,200	\$14,966
19-17	Tresillian Rd. Romney Rd.	New Storm Sewer for Storage	10	Pasternak	\$1,335,200	\$4,526
19-18	Ridley Blvd. Armour Blvd.	Storm Sewer Upgrades	10	Pasternak	\$110,700	\$1,419
19-19	Sheppard Ave W. Reiner Rd. Banting Ave.	Storm Sewer Upgrade/ New Storm Sewer for Storage	10	Pasternak	\$2,056,800	\$23,916
19-20	Bainsbridge Ave. Faywood Blvd. Harlock Blvd. ( at Ellison Park)	New Storm Sewers for Storage	10	Pasternak	\$3,094,500	\$25,788
19-21	Almore Ave	New Storm Sewer	10	Pasternak	\$81,100	\$4,055
19-22	Tillplain Rd.	Storm Sewer Upgrades	10	Pasternak	\$59,600	\$1,923
19-23	Bainbridge Ave. Sandale Gdns. Wilmington Ave. Reiner Rd. Alexis Blvd. Bathurst St. Harlock Blvd. Cocksfield Ave. Maxwell St.	Sanitary Sewer Upgrade / Storm Sewer Upgrade/ New Storm Sewer for Storage	10	Pasternak	\$17,091,500	\$21,717
19-24	Wilson Ave. Wilson Heights Blvd. Goodwill Ave. Tippett Rd. ( not ttc wilson south lot). Model Ave.	Storm Sewer Upgrades/ ICI Parking Lot Storage Outlet	10	Pasternak	\$1,810,600	\$22,080
4-13	Hilldale Rd.	New Storm Sewer	11	Nunziata	\$2,071,000	\$28,370
6-01	Weston Rd.	Sanitary Sewer Replacement	11	Nunziata	\$190,000	\$3,065
6-02	Sykes Ave.	Sanitary Sewer Replacements/ New Storm Sewer	11	Nunziata	\$165,000	\$6,600
6-03	Pellatt Ave.	Sanitary Sewer Replacement	11	Nunziata	\$150,000	\$7,500

6-04	Robert St. Church St. Grattan St. Joseph St. Queens Dr. Patika Ave. Macdonald Ave. Vimy Ave. Wright Ave. King St. William St. Pine St. Elm St. John St.	Storm / Sanitary / Combined SewerReplacements/ New Storm Sewers	11	Nunziata	\$6,886,000	\$9,108
6-05	Weston Rd.	Sanitary Sewer Replacements	11	Nunziata	\$304,000	\$10,483
6-06	Centre Rd. Edmund Ave.	Sanitary Sewer Replacements	11	Nunziata	\$377,000	\$13,464
6-07	Clouston Ave.	New Storm Sewer	11	Nunziata	\$135,000	\$16,875
6-08	Wendell Ave. Gary Dr. Queenslea Ave. Walwyn Ave. Lamont Ave. Langside Ave. Woodward Ave.	New Storm Sewer/ Storm / Sanitary Sewer Replacements	11	Nunziata	\$2,199,000	\$21,772
16-12	Gracefield Ave. Keele St.	New Storm Sewer	12	Di Giorgio	\$229,200	\$22,920
17-11	Ingram Dr. Keele St	Storm Sewer Upgrade	12	Di Giorgio	\$405,800	\$22,544
4-01	Humbercrest Blvd.	New Storm Sewer	13	Doucette	\$283,000	\$4,288
4-02	Watson Ave.	New Storm Sewer	13	Doucette	\$317,000	\$4,117
4-03	Durie St.	New Storm Sewer	13	Doucette	\$211,000	\$3,403
5-01	Riverview Gdns. Halford Ave. Old Mill Dr. Catherine St.	Storm Sewer Replacements	13	Doucette	\$1,299,000	\$8,777
17-01	Dufferin St Mulholland Ave	Sanitary Sewer Replacement / Sanitary Sewer upgrade	15	Colle	\$320,000	\$13,333
17-02	Playfair ave	Sanitary Sewer Upgrade	15	Colle	\$244,000	\$4,436
17-03	Dalemount Ave	Sanitary Sewer Upgrade	15	Colle	\$97,100	\$4,222
17-05	William R Allen Rd. N	Sanitary In-Line Storage	15	Colle	\$994,200	\$4,213
17-09	Marlee Ave. Enid Cres. Marlee Ave. Stayner Ave.	Storm Sewer Upgrade / New Storm Sewer / Underground Storage	15	Colle	\$1,292,500	\$9,718
17-13	Hillhurst Blvd.	Storm Inline Storage (Superpipe)	15	Colle	\$403,900	\$10,356
17-10	Glen Long Ave.	Storm Underground Storage	15	Colle	\$990,500	\$21,533
17-12	Prue Ave	New Storm Sewer for Storage	15	Colle	\$368,100	\$24,540
17-06	Coldstream / Glenmount Ave. / Bathurst St.	New Storm Sewer / Underground Storage	15	Colle	\$3,077,500	\$25,225
17-07	Claver Ave.	New Storm Sewer	15	Colle	\$74,300	\$5,715

17-08	Marlee Ave	Storm Sewer Upgrade	15	Colle	\$105,200	\$3,757
18-01	Prince Charles Dr.	Sanitary Sewer upgrades	15	Colle	\$131,400	\$3,754
18-10	Wasdale Cres.	Storm Sewer Inline Storage	15	Colle	\$1,321,900	\$15,552
18-11	Ameer Ave. Sultana Ave. Baycrest Ave.	Storm Sewer Upgrade / New Storm Sewer / Storm In-line/ Off-line Storage	15	Colle	\$5,920,100	\$52,529 <sup>6</sup>
17-04	Ruby Cres. Cortleigh Blvd.	Sanitary Sewer Upgrades	16	Carmichael Greb	\$289,600	\$17,035
17-14	Alexandra Wood.	Storm Sewer Upgrade	16	Carmichael Greb	\$189,900	\$14,608
17-15	Hillhurst Blvd. Prue Ave. Viewmount Ave. Hillmount Ave. Dalemount Ave. Chaplin Cres. Glencairn Ave. Glen Park Ave.	Storm Sewer Upgrades / New Storm Sewers Storm Underground Storage	16	Carmichael Greb	\$40,914,000	\$72,789 <sup>5</sup>
18-03	Ledbury St.	Storm Sewer Upgrade	16	Carmichael Greb	\$166,000	\$15,091
18-04	Dunblaine Ave.	Storm Sewer Inline Storage	16	Carmichael Greb	\$1,668,700	\$17,943
18-05	Barse St.	Storm Sewer Upgrade/ New Storm Sewer	16	Carmichael Greb	\$113,500	\$5,405
18-06	St. Germain Ave.	Storm Sewer Upgrade	16	Carmichael Greb	\$134,700	\$16,838
18-07	Glengarry Ave.	Storm Sewer Inline Storage	16	Carmichael Greb	\$453,500	\$14,629
18-08	Douglas Ave.	Storm Sewer Upgrade	16	Carmichael Greb	\$58,900	\$6,544
18-09	Fairlawn Ave.	Storm Sewer Upgrade	16	Carmichael Greb	\$51,500	\$1,392
18-12	Brooke Ave.	New Storm In-line Storage	16	Carmichael Greb	\$2,093,400	\$41,868 <sup>5</sup>
19-25	Mcgillivray Ave. Carmichael Ave. Marquette Ave.	Storm Sewer Upgrades / New Storm Sewers	16	Carmichael Greb	\$3,535,000	\$5,245
25-01	Franklin Ave. Florence Ave. Pewter Rd. Cameron Ave. Poyntz Ave. Radine Ave. Poyntz Ave. Johnston Ave.	Sanitary Sewer Replacement/ Storm Sewer Replacements	23	Filion	\$4,821,000	\$19,055
29-06A	Newton Dr. Conacher Dr Bayview Ave.	Storm and Sanitary Sewer Upgrades, Trench Drain and Sub- surface Sanitary Storage Installation	24	Shiner	\$7,909,528	N/A <sup>6</sup>
32-22	Carlaw Ave.	Combined Sewer Upgrades	30	Fletcher	\$1,234,913	\$26,846
32-14	Craven Rd. Rhodes Ave. Queen St E.	New Storm Sewer and Combined Sewer Upgrades	30 / 32	Fletcher / McMahon	\$2,449,387	\$9,568
01-01	Joanith Dr. Glenwood Cr. Westview Blvd.	Storm Sewer Replacements, New Storm Sewers,	31	Davis	\$15,547,950	\$12,850

	St. Clair Ave E. Amsterdam Ave. O'connor Dr. Peard Rd. Taylor Creek Trl. Valor Blvd. Topham Rd. Squires Ave. Furnival Rd. St. Columba Pl. Merritt Rd. Glenburn Ave.	Storm Sewer Inline Storage				
32-26	Victoria Park Ave.	Combined Sewer Upgrades	32	McMahon	\$497,248	\$6,294
32-09	Hambly Ave.	Storm Sewer Upgrades	32	McMahon	\$194,666	\$2,949
22-01	Pitcairn Cres.	Storm Sewer Replacements	34	Minnan-Wong	\$126,506	\$1,040
22-02	Sundial Cres. Sulkara Crt. Sweeney Dr.	Storm Sewer Replacements	34	Minnan-Wong	\$1,014,543	\$6,855
22-04	Ruscica Dr. Victoria Park Ave.	New Storm Sewer/ Storm Sewer Replacement	34	Minnan-Wong	\$3,826,256	\$18,220
22-07	Tinder Cres. Sloane Ave. Trophy Dr. Eccleston Dr. Elvaston Dr.	Storm Sewer Replacements	34	Minnan-Wong	\$3,580,256	\$17,049
22-09	Eccleston Dr. Swift Dr.	Storm Sewer Replacements	34	Minnan-Wong	\$530,254	\$16,570
22-10	Anewen Dr. Woodthorpe Rd.	Storm Sewer Replacements	34	Minnan-Wong	\$1,145,860	\$17,361
22-15	Carrforth Rd. Sweeney Dr. Daleside Cres. Teak Ave.	Storm Sewer Replacements	34	Minnan-Wong	\$4,777,378	\$17,759
22-17	Knighton Dr.	Storm Sewer Replacements	34	Minnan-Wong	\$586,670	\$17,130
22-18	Cobham Cres.	Storm Sewer Replacement	34	Minnan-Wong	\$120,172	\$17,170
22-21	Salvi Crt. Ruscica Dr.	Storm Sewer Replacements	34	Minnan-Wong	\$589,166	\$17,300
22-22	Murellen Cres.	Storm Sewer Replacements	34	Minnan-Wong	\$246,246	\$17,650
33-01	Avalon Blvd.	New Storm Sewers	36	Crawford	\$500,000	\$19,231
	Kennedy Rd. Haslam St. Malta St. Preston St. Craiglee Dr.		36	Crawford	\$2,500,000	\$21,739
33-03	Chine Dr.	New storm sewers				
33-05	Montvale Dr. St Clair Ave E	New Sanitary Sewer for Storage	36	Crawford	\$2,900,000	N/A <sup>10</sup>



Projects moved to the State of Good Repair Program  
(ie. Preliminary Design Costs > \$32,000 per benefitting home)

Project #	Location	Project Description	Ward	Councillor	Preliminary Design Cost Estimate (\$)	Cost / Benefitting Home
16-05	Bridgeland Ave.	Additional Inlet Capacity & Storm Sewer Upgrades	15	Colle	\$1,386,000	\$39,600
16-10	Circle Ridge Treelawn Pkwy North Park Dr	Additional Inlet Capacity & Storm Sewer Upgrades	12	Di Giorgio	\$1,169,000	\$48,708
16-16	Wilson Ave. atKeele St.	Storm Sewer Replacements / Upgrades	9	Augimeri	\$970,960	\$80,913
29-05	Alamosa Dr. Alamosa St. Geraldton Cres. Allview Cres. Appian Dr. Pineway Blvd. Easement	Trench Drain Installation & Storm Sewer Upsizing, Inline Sanitary Storage and Sewer Replacements	33	Carroll	\$5,565,000	\$60,489
29-14	Northwood Dr. Conacher Dr.	Storm Sewer Upsizing, and Road/Blvd. regrading	24	Shiner	\$5,198,000	\$98,075
29-19	Woodthrust Crt. Page Ave. Easement	Trench Drain Installation & Storm Sewer Upsizing	24	Shiner	\$1,024,000	\$53,895
29-21	Beardmore Cres. Easement	Trench Drain Installation & Storm Sewer Upsizing	24	Shiner	N/A	N/A <sup>11</sup>
29-25	Saddletree Cres. Easement	Trench Drain Installation & Storm Sewer Upsizing	24	Shiner	N/A	N/A <sup>11</sup>
29-26	Janus Crt.	Trench Drain Installation & Storm Sewer Upsizing	24	Shiner	\$876,100	\$67,392
29-28	Parkway Forest Dr at Capella Starway	Regrading of Intersection (surface flow reduction)	33	Carroll	N/A	N/A <sup>11</sup>
29-30	Longhope Pl. Easement	Trench Drain Installation & Storm Sewer Upsizing	33	Carroll	N/A	N/A <sup>11</sup>
30-05	Kingslake Rd. BaronessCres. Sandbourne Cres.	Storm Sewer Replacements / Upgrades & Sanitary Sewer Inline Storage	33	Carroll	\$8,811,800	\$63,854
31-13	Orangewood Cres.	Storm Sewer Replacements / Upgrades	40	Kelly	\$590,000	\$41,800



Notes:

1. Design and construction for this project was committed to prior to the implementation of the current cost threshold of \$32,000 per benefitting home, and as such it is proceeding to completion.
2. Even though this project exceeds \$32,000 per benefitting home, it is proceeding to construction to allow completion in advance of the Eglinton Crosstown LRT project. The cost estimate provided is the combined cost estimate for Assignments 3-01 A, 3-01 B, and 3-01 C. The project has been split into parts to coordinate with the Metrolinx project schedule.
3. This project was initiated due to the poor condition of the existing sewers, and as such the \$32,000 per benefitting home rule is not applicable.
4. Due to analysis refinements and/or the installation of other nearby upgrades, these works are no longer needed to meet the basement flooding protection level of service targets.
5. Even though this project exceeds \$32,000 per benefitting home, the project is proceeding into detailed design and construction as the existing 2 year level of service is not being provided by the existing sewer system.
6. The scope of work for this project as defined by the EA study exceeds \$32,000 per benefitting property. However, as there is a need to replace some of the existing sewers due to their poor condition, efforts are being made to reduce the scope of the upgrades required to best achieve the state of good repair replacements and some flood risk reduction while minimizing capital costs.
7. A detailed Infiltration / Inflow study, as recommended by the Area 9 EA study, is being initiated in 2015. The goal of this study will be to adjust the scope of construction works required to bring the costs down below the allowable threshold of \$32,000 per benefitting home.
8. As this project will provide both basement flooding protection and combined sewer overflow reduction to Black Creek, it is proceeding through preliminary and detailed design even though it exceeds the \$32,000 per benefitting home threshold.
9. With Lake Shore Blvd. being a Pam Am Games route in 2015, this work is being targeted for a 2016 start date.
10. The number of benefitting homes is not yet available, but based on preliminary information, the cost per benefitting home is expected to be less than \$32,000 per benefitting home.
11. These projects were determined to be not constructable and the design did not proceed sufficiently to create updated cost estimates. A re-analysis of possible solutions is required to develop a constructable solution that can be reassigned to Engineering and Construction Services for implementation.
12. In the 2014 Capital budget Project List Briefing Note, this project was moved to the State Of Good Repairs program as it was estimated to cost greater than \$32,000 per benefitting property. Upon further review, the costing for this project has been found to be less than \$32,000 per benefitting property and this project is now moving forward into construction.

## Attachment 2 Fairness Monitor Attestation Report



### Introduction

On September 17, 2014, the City of Toronto engaged PPI as Fairness Monitors for the procurement process relating to the Basement Flooding Protection Plan Phase 4 project. As the Fairness Monitor, PPI reviewed and provided feedback on all RFP documents, attended the Mandatory Proponent Information Meeting, attended Proponent interview, and attended the consensus evaluation sessions for proposals received on January 8, 2015.

The objective of the RFP was to engage the successful Proponent to provide Program Management Services to develop, set-up, manage and coordinate a large and complex multi-year Program with the City in an integrated team focused on Basement Flooding Protection across the City of Toronto in the fourth phase of the Basement Flooding Protection Program (BFPP).

To achieve this COT was looking for a Proponent with a successful track record in meeting the requirements to successfully provide the services as outlined in the RFP. The term of the subsequent agreement is intended to be for the duration of the project which the COT believes will be five (5) years with an option to extend the assignment for an additional period of five (5) years. The work described in the RFP was for a ten (10) year period.

Danielle Sanagan was assigned as the Fairness Monitor by PPI Consulting Limited. She fulfilled this role from PPI's engagement on the project until completion of the procurement process. Justin Lau acted as the alternate Fairness Monitor and attended meetings in Danielle's absence.

### Timetable

The following is a summary of key activities and dates:

Activity	Date
RFP Issued	October 24, 2014
Mandatory information meeting	November 13, 2014
Deadline for Final Submission for Vendor Questions	December 3, 2014
Deadline for issuance of Addenda	No later than 2 days prior to the deadline Actual Date: December 10, 2014
Original Submission Deadline	December 19, 2014 12:00:00 EST
Extended Submission Deadline	January 8, 2015 12:00:00 EST
Mandatory Technical Requirements Consensus	January 22, 2015
Evaluation of Requirements by Selection Committee	January 23 – February 9, 2015
Rated Evaluation Consensus	February 10, 2015
Respondent Notified to Attend Interview	February 26, 2015
Interview	March 11 and 12, 2015
Contract Negotiation Period	Not yet completed.
Anticipated date to start the supply of Goods and/or Services	Not yet completed.

**Fairness Activities, Observations and Findings**

The following table summarizes the high level activities and our observations and findings as Fairness Monitor for this RFP process based on the deliverables outlined in the COT RFS.

Task	Supported Fairness
Addressing any concerns relating to accountability/fairness	Y
Independent assurance of integrity of the procurement process with a signed attest statement for the RFP.	Y
Review the RFP	Y
Review of Evaluation Criteria with respect to clarity and consistency.	Y
Oversee any questions, comments, or communications submitted by potential Proponents and review responses posted via Addendum.	Y
Attend Meetings Re: Evaluation Weightings and Criteria.	Y
Provide advice to the Selection Committee, Deputy City Manager and PMMD as requested.	Y
Attend Selection Committee evaluation sessions.	Y
Attend Proponent Interviews.	Y
Ensure that evaluation scores are accurate and documented methodology adhered to.	Y
Review evaluation results.	Y
Prepare a draft report	Y
Complete and distribute the Final Attest Report.	N/A
Attend debriefing sessions related to the RFP.	N/A
Assessing the procurement evaluation process to ensure integrity and fairness	Y
Advice on critical procurement considerations regarding the call documents including potential inconsistencies and review of the evaluation guide	Y
Verification of the roles, responsibilities, decision authorities, and reporting	Y
Ensuring that the evaluation team members understand their role in evaluation	Y

It is our professional opinion that the RFP process not yet including the debriefing process, including the evaluation of the proposal received in response to the fourth phase of the Basement Flooding Protection Program (BFPP), that we observed, was carried out in a fair, open and transparent manner.