Hamilton

CITY OF HAMILTON CORPORATE SERVICES DEPARTMENT Financial Planning and Policy Division

| то: | Mayor and Members General Issues Committee |
|--------------------|--|
| COMMITTEE DATE: | October 5, 2016 |
| SUBJECT/REPORT NO: | Public Transit Infrastructure Fund (PTIF) and Clean Water and Wastewater Fund (CWWF) Grant Programs (FCS16083) (City Wide) |
| WARD(S) AFFECTED: | City Wide |
| PREPARED BY: | John Savoia (905) 546-2424 Ext. 7298 |
| SUBMITTED BY: | Mike Zegarac General Manager Finance and Corpørate Services |
| SIGNATURE: | Talk Co |

RECOMMENDATIONS

- (a) That the projects, as listed in Appendix "A" of Report FCS16083, be approved as the City of Hamilton's submission for consideration to Infrastructure Ontario for the requested funding amount of \$36,489,204, in accordance with the terms and conditions associated with the Public Transit Infrastructure Fund (PTIF);
- (b) That the projects, as listed in Appendix "B" of Report FCS16083, be approved as the City of Hamilton's submission for consideration to Infrastructure Ontario for the requested funding amount of \$32,918,072, in accordance with the terms and conditions associated with the Clean Water and Wastewater Fund (CWWF);
- (c) That the Mayor and Clerk be authorized to execute all necessary documentation, including Funding Agreements for funding under the PTIF and CWWF Programs, in a form satisfactory to the City Solicitor;
- (d) That in consultation with the Procurement Section, Corporate Services Department, the City of Hamilton Procurement Policy be amended for projects that are accepted under federal and or provincial funding programs with a completion deadline of March 2018, as follows:
 - (i) That the requirement to issue a formal Request for Proposals to the entire vendor community be waived; and,

SUBJECT: Public Transit Infrastructure Fund (PTIF) and Clean Water and Wastewater Fund (CWWF) Grant Programs (FCS16083) (City Wide) - Page 2 of 9

- (ii) That Request for Proposals will be issued on an invitational basis only and staff will invite at least three firms to bid for each Request for Proposals (Purchasing Policy #5.4).
- (iii) That the Manager of Procurement may waive the requirement for three Bids for Requests for Proposals (Purchasing Policy #5.4), but will only do so where the Client Department has demonstrated to the satisfaction of the Manager of Procurement that a minimum of three Bids cannot be obtained.
- (e) That the required funding agreement for the PTIF, include a clause that would allow the City to withdraw a project as listed in Appendix "A", or component of a project, should it become apparent that program timelines cannot be met;
- (f) That the operating budget and FTE impacts related to approved PTIF projects, estimated to be \$2.75 M and 29.0 FTE's be incorporated in the 2017 Tax Supported Operating Budget and \$1.43 M and 30.0 FTE's be incorporated in the 2018 Tax Supported Operating Budget
- (g) That copies of Report FCS16083 be forwarded to local Members of Provincial Parliament and to local Members of Parliament.

EXECUTIVE SUMMARY

Public Transit Infrastructure Fund (PTIF)

On August 23, 2016, the Government of Canada and the Government of Ontario announced they had reached a bilateral agreement that will provide more than \$2.97 billion in combined funding for projects that will reduce commute times and make public transit more efficient and inclusive for people in Ontario.

The Government of Canada is providing Ontario with \$1,486,680,000 under the new Public Transit Infrastructure Fund (PTIF), and will cover up to 50 per cent of the funding needed for projects supported under this agreement. The Ontario funding is to be allocated provincially on the basis of transit ridership.

Hamilton has been advised that the City will be eligible to receive an allocation of \$36,489,204 for projects with a total cost of \$72,978,408. The City must submit an application by October 18, 2016 to receive approval to access the PTIF funding. Eligible expenditures must occur between April 1, 2016 and March 31, 2018. Each eligible PTIF recipient may submit project(s) that represent up to 25 percent of their total

SUBJECT: Public Transit Infrastructure Fund (PTIF) and Clean Water and Wastewater Fund (CWWF) Grant Programs (FCS16083) (City Wide) - Page 3 of 9

allocation that extend to March 31, 2019 supported with a concrete demonstrated need/rationale for the extended completion deadline.

The following are eligible investments under the PTIF:

- I. Capital projects for the rehabilitation, optimization and modernization of public transit infrastructure, or that improve the efficiency, accessibility and/or safety of public transit infrastructure (including rehabilitation or enhancement of existing guide ways, maintenance and storage facilities, transit stations or other public transit capital assets; refurbishment or replacement of existing rolling stock; intelligent transportation systems and replacement or enhancement of transit stations);
- II. Expenditures to support the asset management capacity of a public transit system;
- III. Expenditures to support the design and planning for the expansion and improvements to public transit systems, including transportation demand management measures and studies and pilot projects related to innovative and transformative technologies; and
- IV. Projects for system expansion, which may include active transportation, if they can be completed within the program timeframe

A number of projects were evaluated, based upon staff's interpretation of the criteria, as specified within the application processes and Program guidelines. As such, Appendix "A" to Report FCS16083 reflects the projects that require Council's endorsement under the PTIF funding program.

Clean Water and Wastewater Fund (CWWF)

The 2016 Federal Budget announced the establishment of a Clean Water and Wastewater Fund (CWWF) that proposes to invest up to \$569.6 million in the province of Ontario for immediate improvements to water distribution and treatment infrastructure, starting in 2016-17.

The CWWF is designed to accelerate short-term community investments, while supporting the rehabilitation and modernization of drinking water, wastewater and stormwater infrastructure, and the planning and design of future facilities and upgrades to existing systems.

The federal government will contribute 50% of the eligible project costs, up to the maximum federal allocation to Hamilton of \$21,945,381. In addition, the Province will

SUBJECT: Public Transit Infrastructure Fund (PTIF) and Clean Water and Wastewater Fund (CWWF) Grant Programs (FCS16083) (City Wide) - Page 4 of 9

contribute 25% of eligible project costs, up to the maximum provincial allocation for the City of \$10,972,691. The total CWWF funding allocation to Hamilton amounts to \$32,918,072 for projects totaling \$43,890,763.

Municipality allocations under the CWWF are based on the amount of water, wastewater and stormwater assets owned by municipalities and their economic conditions.

Projects must be complete with eligible costs being incurred between April 1, 2016 and March 31, 2018. Where need is demonstrated, up to 25% of costs can extend beyond March 31, 2018. Extensions beyond March 31, 2018 require pre-approval by the Province and the Federal Governments.

Applications to access CWWF funding to the Ontario Ministry of Infrastructure who is responsible for the administration of CWWF, must be completed by October 31, 2016.

Eligible project costs under CWWF are third-party costs such as:

- Environmental assessment costs (if any)
- Engineering costs, including tendering and contract administration of Feasibility studies, detailed design or pilot projects that support system optimization and/or asset management are permitted
- Design and planning for upgrades to wastewater treatment infrastructure to meet federal regulatory requirements are permitted
- Project management costs
- Materials
- Construction
- Contingency costs (maximum 15% calculation excludes professional fees)

A number of projects were evaluated, based upon staff's interpretation of the criteria, as specified within the application processes and Program guidelines. As such, Appendix "B" to Report FCS16083 reflects the projects that require Council's endorsement under the CWWF funding program.

SUBJECT: Public Transit Infrastructure Fund (PTIF) and Clean Water and Wastewater Fund (CWWF) Grant Programs (FCS16083) (City Wide) - Page 5 of 9

Supplemental lists of projects have been provided for both funding programs should either program intake be under-subscribed on a provincial basis and the opportunity to obtain PTIF/CWWF funding is made available to the City.

Recommendation (d) of Report FCS16083 recommends an amendment to the City of Hamilton Procurement Policy for projects receiving funding with a completion deadline of March 31, 2018. In light of the stringent time limitations, this recommendation should assist affected projects procurement to be streamlined and fast tracked to avoid funding clawbacks for not meeting the completion deadline.

Alternatives for Consideration – Not Applicable

FINANCIAL - STAFFING - LEGAL IMPLICATIONS

Financial: The 2017 Tax and Rate Supported Capital Budget and Capital Financing Plan have not been funded or approved by Council. However, the allocations for Hamilton under the PTIF and CWWF programs will be incorporated into the Tax and Rate Capital Financing Plans when presented to Council.

The PTIF allows for up to 50% of eligible project costs up to a maximum of \$36,489,204 to be funded from the Federal Government with the municipality required to fund the balance of the project shares of \$36,489,204. The CWWF provides up to 50% of eligible project costs up to a maximum of \$21,945,381 to be funded from the Federal Government. The Province will provide up to 25% of eligible project costs up to a maximum of \$10,972,691 with the municipality required to fund the balance of the projects shares of \$10,972,691.

Staffing: N/A

Legal: The City will have to enter into funding agreements to receive the PTIF/CWWF grants. The funding agreements will encompass the terms and conditions of the PTIF and CWWF programs as outlined in the Executive Summary of this Report.

HISTORICAL BACKGROUND

Public Transit Infrastructure Fund (PTIF)

On August 23, 2016, the Government of Canada and the Government of Ontario announced they had reached a bilateral agreement that will provide more than \$2.97 billion in combined funding for projects that will reduce commute times and make public transit more efficient and inclusive for people in Ontario.

SUBJECT: Public Transit Infrastructure Fund (PTIF) and Clean Water and Wastewater Fund (CWWF) Grant Programs (FCS16083) (City Wide) - Page 6 of 9

The Government of Canada is providing Ontario with \$1,486,680,000 under the new Public Transit Infrastructure Fund (PTIF), and will cover up to 50 per cent of the funding needed for projects supported under this agreement. The Ontario funding is to be allocated provincially on the basis of transit ridership with the total amount of funding a municipality may receive under PTIF will be equal to the aggregate of:

- I. a base of \$50,000; and
- II. an amount based on the ratio of total ridership of the potential recipient, to the sum of total ridership for all of the potential recipients

Hamilton has been advised that the City will be eligible to receive an allocation of \$36,489,204. The City must submit an application by October 18, 2016 to receive approval to access the PTIF funding. Eligible expenditures must occur between April 1, 2016 and March 31, 2018. Each eligible PTIF recipient may submit project(s) that represent up to 25 percent of their total allocation that extend to March 31, 2019 supported with a concrete demonstrated need/rationale for the extended completion deadline.

The following are eligible investments under the PTIF:

- I. Capital projects for the rehabilitation, optimization and modernization of public transit infrastructure, or that improve the efficiency, accessibility and/or safety of public transit infrastructure (including rehabilitation or enhancement of existing guide ways, maintenance and storage facilities, transit stations or other public transit capital assets; refurbishment or replacement of existing rolling stock; intelligent transportation systems and replacement or enhancement of transit stations);
- II. Expenditures to support the asset management capacity of a public transit system;
- III. Expenditures to support the design and planning for the expansion and improvements to public transit systems, including transportation demand management measures and studies and pilot projects related to innovative and transformative technologies; and
- IV. Projects for system expansion, which may include active transportation, if they can be completed within the program timeframe

SUBJECT: Public Transit Infrastructure Fund (PTIF) and Clean Water and Wastewater Fund (CWWF) Grant Programs (FCS16083) (City Wide) - Page 7 of 9

Clean Water and Wastewater Fund (CWWF)

The 2016 Federal Budget announced the establishment of a Clean Water and Wastewater Fund (CWWF) that proposes to invest up to \$569.6 million in the province of Ontario for immediate improvements to water distribution and treatment infrastructure, starting in 2016-17.

The CWWF is designed to accelerate short-term community investments, while supporting the rehabilitation and modernization of drinking water, wastewater and stormwater infrastructure, and the planning and design of future facilities and upgrades to existing systems.

The federal government will contribute 50% of the eligible project costs, up to the maximum federal allocation to Hamilton of \$21,945,381. In addition, the Province will contribute 25% of eligible project costs, up to the maximum provincial allocation for the City of \$10,972,691. The total CWWF funding allocation to Hamilton amounts to \$32,918,072.

Municipality allocations under the CWWF are based on the amount of water, wastewater and stormwater assets owned by municipalities and their economic conditions. Grants for First Nations are based on each community's population on reserve. All recipients receive a minimum of \$75,000.

Projects must be complete with eligible costs being incurred between April 1, 2016 and March 31, 2018. Where need is demonstrated, up to 25% of costs can extend beyond March 31, 2018. Extensions beyond March 31, 2018 require pre-approval by the Province and the Federal Governments.

Applications to access CWWF funding to the Ontario Ministry of Infrastructure who is responsible for the administration of CWWF, must be completed by October 31, 2016.

Eligible project costs under CWWF are third-party costs such as:

- Environmental assessment costs (if any)
- Engineering costs, including tendering and contract administration o Feasibility studies, detailed design or pilot projects that support system optimization and/or asset management are permitted
- Design and planning for upgrades to wastewater treatment infrastructure to meet federal regulatory requirements are permitted

SUBJECT: Public Transit Infrastructure Fund (PTIF) and Clean Water and Wastewater Fund (CWWF) Grant Programs (FCS16083) (City Wide) - Page 8 of 9

- Project management costs
- Materials
- Construction
- Contingency costs (maximum 15% calculation excludes professional fees)

POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

City of Hamilton Procurement Policy – Recommendation (d) of Report FCS16083 requests Council's approval for recommended amendment to the Procurement Policy for grant approved projects with a completion deadline of March 31, 2018 so that the risk of grant clawbacks as may occur under the program guidelines may be reduced.

RELEVANT CONSULTATION

Public Works Department – Transit and Hamilton Water divisions provided project proposals for submission consideration under the PTIF and CWWF programs respectively.

ANALYSIS AND RATIONALE FOR RECOMMENDATION

Staff have compiled a list of proposed projects for Council's consideration (refer to Appendices "A" and "B" to Report FCS16083). The projects proposed for submission were evaluated, based upon staff's interpretation of the criteria, as specified within the application process and the program guidelines.

Even with the 25 percent of total allocation extended to March 31, 2019, it should be noted that the timelines for completion of projects under the PTIF are extremely aggressive. For example, the Maintenance and Storage Facility - Phase 1 Design and Site Preparation includes detailed design and permitting (approximately \$12.2 M) as well as site preparation works such as demolition, remediation, grading and servicing (approximately \$16.2 M). As such, it is recommended that the required funding agreements for the PTIF include a clause that would allow the City to withdraw a project, or component of the project, should it become apparent that program timelines cannot be met. This could have the effect of forfeiting a portion of the available funding; however, it would protect the City from having to cover the federal contributions.

ALTERNATIVES FOR CONSIDERATION

Not Applicable.

SUBJECT: Public Transit Infrastructure Fund (PTIF) and Clean Water and Wastewater Fund (CWWF) Grant Programs (FCS16083) (City Wide)

- Page 9 of 9

ALIGNMENT TO THE 2016 - 2025 STRATEGIC PLAN

Economic Prosperity and Growth

Hamilton has a prosperous and diverse local economy where people have opportunities to grow and develop.

Healthy and Safe Communities

Hamilton is a safe and supportive city where people are active, healthy, and have a high quality of life.

Clean and Green

Hamilton is environmentally sustainable with a healthy balance of natural and urban spaces.

Built Environment and Infrastructure

Hamilton is supported by state of the art infrastructure, transportation options, buildings and public spaces that create a dynamic City.

APPENDICES AND SCHEDULES ATTACHED

Appendix "A" to Report FCS16083: City of Hamilton PTIF Project Submissions

Appendix "B" to Report FCS16083: City of Hamilton CWWF Project Submissions

City of Hamilton Public Transit Infrastructure Fund Project Submissions

| Project Description | Total Project Cost | Funding Request | Funding % | Completion Date |
|--|-----------------------|--------------------|--------------|---|
| Maintenance and Storage Facility - Phase 1 Design and Site Preparation | \$28,650,000 | \$ 14,325,000 | 50.0% | \$19,527,700 by Mar 31, 2018 \$9,122,300 by |
| | #40.000.000 | . 5.400.000 | F0 00/ | Mar 31, 2019 |
| Fleet expansion as per Ten Year Local Transit Strategy. | \$10,380,000 | \$ 5,190,000 | 50.0% | Mar 31, 2018 |
| Transit shelter and bus stop rehabilitation and replacement. Includes enhanced passenger information (real time bus arrival), shelter refurbishment, replacement and stop upgrades such as bus stop markers. | \$ 7,043,408 | \$ 3,521,704 | 50.0% | Mar 31, 2018 |
| Automated Passenger Counters | \$ 4,300,000 | \$ 2,150,000 | 50.0% | Mar 31, 2018 |
| Transit Priority Measures on A-Line/T-Line including queue jump lanes and transit signal priority | \$ 3,850,000 | \$ 1,925,000 | 50.0% | Mar 31, 2018 |
| Infrastructure: - end of line permanent Operator facilities - rehabilitate loops - rehabilitate on-street stop locations (e.g. rutting) | \$ 3,300,000 | \$ 1,650,000 | 50.0% | Mar 31, 2018 |
| Vehicle hoist replacements (11) at Mountain Transit Centre | \$ 3,025,000 | \$ 1,512,500 | 50.0% | Mar 31, 2018 |
| Sustainable transportation/transit connections - installation of sidewalks and landing pads on Rymal Road East | \$ 3,025,000 | \$ 1,512,500 | 50.0% | Mar 31, 2018 |
| Radio system replacement - switch from analogue to digital | \$ 3,000,000 | \$ 1,500,000 | 50.0% | Mar 31, 2018 |
| HVAC upgrades at Mountain Transit Centre | \$ 2,200,000 | \$ 1,100,000 | 50.0% | Mar 31, 2018 |
| Passenger information technology (e.g. real time mobile app, mobile web solution, Wi-Fi on buses, social media feeds, other technical software upgrades) | \$ 1,605,000 | \$ 802,500 | 50.0% | Mar 31, 2018 |
| Garage Door Replacement (32) at Mountain Transit Centre | \$ 1,320,000 | \$ 660,000 | 50.0% | Mar 31, 2018 |
| New wash racks at Mountain Transit Centre | \$ 880,000 | \$ 440,000 | 50.0% | Mar 31, 2018 |
| Support fleet - 8 vehicles to accommodate growth | \$ 400,000 | \$ 200,000 | 50.0% | Mar 31, 2018 |
| Total | \$72,978,408 | \$ 36,489,204 | 50.0% | |

City of Hamilton Supplemental PTIF Project Submissions

| Project Description | Total Project Cost | Funding Request | Funding % | Completion Date |
|--|-----------------------|--------------------|--------------|--------------------|
| Driver training simulator | \$ 825,000 | \$ 412,500 | 50.0% | Mar 31, 2018 |
| Branding - including application to assets as directed by Marketing Strategy | \$ 3,440,000 | \$ 1,720,000 | 50.0% | Mar 31, 2018 |
| Sustainable transportation/transit connections - Claremont Access Bike Lanes | \$ 3,000,000 | \$ 1,500,000 | 50.0% | Mar 31, 2018 |
| Infrastructure Additional Locations: - end of line permanent Operator facilities - rehabilitate loops - rehabilitate on-street stop locations (e.g. rutting) | \$ 1,857,300 | \$ 928,650 | 50.0% | Mar 31, 2018 |
| Total | \$ 9,122,300 | \$ 4,561,150 | 50.0% | |

| | City | of Hamilton Clean Water Wastewater I | Fund Proje | ct Submis | sions | |
|---------------------|-----------------|---|-----------------------|--------------------|--------------|--------------------|
| Funding Category | Project Type | Project Description | Total Project Cost | Funding Request | Funding % | Completion Date |
| Stormwater | Rehab | West Mountain Sewer ('Juggernaut") - The existing storm sewer has become structurally deficient. Replacement/repairs to the storm sewer are required to reduce the risk and liability associated with sewer collapse and backup issues. Structural deficiencies have been identified on the 5400mmx4500mm Storm Interceptor from Upper Ottawa to Upper Wentworth. The interceptor is located in easement just south of and parallel to the Lincoln Alexander Parkway. Monitoring of rock movement in 2014 through 2015 in order to determine most suitable remedial intervention. | \$ 10,500,000 | \$ 7,875,000 | 75.0% | March 31, 2018 |
| Water | Rehab | Structural lining - Due to recorded failures and predicted high probability for increased failure rates in the near future, the existing watermain has become structurally deficient and requires rehabilitation. This is intended to reduce overall service outages. The watermain will be lined with a structural liner which will extend the service life of the asset. | \$ 7,000,000 | \$ 5,250,000 | 75.0% | March 31, 2018 |
| Wastewater | Rehab | Wastewater system lining program - The existing combined and/or sanitary sewers have become structurally and service deficient. Rehabilitation is intended to decrease infiltration, improve hydraulics and restore structural integrity while reducing the risk and liability associated with sewer collapse and backup issues. | \$ 6,555,763 | \$ 4,916,822 | 75.0% | March 31, 2018 |
| Wastewater | Rehab | Woodward WWTP Methane Sphere - Minor structural repairs and repainting of entire structure | \$ 4,000,000 | \$ 3,000,000 | 75.0% | March 31, 2018 |
| Water | New | Water Treatment Plant (New Corrosion Control Building) - new chemical feed and storage facility in order to reduce lead concentrations in the distribution system. | \$ 3,080,000 | \$ 2,310,000 | 75.0% | March 31, 2018 |
| Water | New | Lynden Additional Water Supply - Construction of a new water well supply, booster pumping and water treatment system. | \$ 2,600,000 | \$ 1,950,000 | 75.0% | March 31, 2018 |
| Water | Rehab | Osler Road Pumping Station (HD011) Upgrades - Replace three existing pumps (like for like) and associated electrical appurtenances. Landscaping and access upgrades, architectural restoration. | \$ 1,500,000 | \$ 1,125,000 | 75.0% | March 31, 2018 |
| Wastewater | Rehab | Mainline Sewer Condition Assessment Program - Inspection and analysis of large and small diameter sewermains throughout the city using various inspection methods. Work is prioritized by asset criticality, diameter, functionality and other service level identifiers. Co-ordinated with the capital roads program to provide structural and service conditions and to identify capital rehabilitation and replacement priorities. Assignments to engineering consulting firms and small urgent mainline repairs are also funded from this program. | \$ 1,500,000 | \$ 1,125,000 | 75.0% | March 31, 2018 |

| Funding Category | Project Type | Project Description | To | otal Project Cost | Funding Request | Funding % | Completion Date |
|---------------------|--------------------|---|----|----------------------|--------------------|--------------|--------------------|
| Water | Rehab | Freelton Tower (HDT03) Upgrades - Recoat tank shell exterior and interior, replace recirculation system, replace site fencing and site pavement, replace MCC and I&C components and misc station repair and upgrades | \$ | 1,425,000 | \$ 1,068,750 | 75.0% | March 31, 2018 |
| Wastewater | Study/ Planning | Western Interceptor Sewer CCTV and Sonar Inspection - Closed Circuit Television (CCTV) and sonar inspection of the western interceptor (Main/King CSO Tank (HWY 403) to Woodward Treatment Plant and Barton St. from Ferguson Ave. to Gage Ave.). Inspection is required for structural condition assessment and to determine volume of sediment inside the sewer. | \$ | 1,400,000 | \$ 1,050,000 | 75.0% | March 31, 2018 |
| Water | Rehab | Ben Nevis (HD08A) WPS Upgrade - Replace pumps and motors (3), replace starters and misc station repairs and upgrades | \$ | 1,200,000 | \$ 900,000 | 75.0% | March 31, 2018 |
| Wastewater | Rehab | Sewer Lateral Replace/Rehab Program - Co-ordination of lateral rehabilitation and inspection in the public road allowance for laterals that are deteriorating and causing back-ups in homes. Rehabilitation through trenchless technologies of deteriorated laterals, reducing back-ups and extending the useful life. | \$ | 1,000,000 | \$ 750,000 | 75.0% | March 31, 2018 |
| Water | Study/ Planning | Metallic WM condition assessment - A detailed inspection of metallic watermain will help determine remaining life of the watermain. This will dictate future needs, management strategies, and will help reduce the risk associated with major ruptures, and service outages. This project involves data collection through various technologies such as non-destructive acoustical testing, pipe sample laboratory testing, and project assignments to engineering consulting firms. Detailed condition assessment - Inspection of pipeline using specialized equipment. | \$ | 800,000 | \$ 600,000 | 75.0% | March 31, 2018 |
| Water | Study/ Planning | Prestressed Concrete Cylinder Pipe assessment Program - Prestressed Concrete Cylinder Pipe Condition Assessment Inspection Program using remote field transform coupling (RFTC) inspection. The RFTC inspection will provide information of the condition of Prestressed Concrete Cylinder Pipe (PCCP). RFTC inspections detect breaks in the pre- stressed wires. These wires give the pipe its strength. The inspection help to manage future needs of these pipelines and prevent any major ruptures to occur. | \$ | 500,000 | \$ 375,000 | 75.0% | March 31, 2018 |
| Wastewater | Rehab | Elgin St. (FC001), Rhodes Court (DC009) and Calvin St. (HC011) SPS Upgrades - FC001 - replace pumps (2) and process piping and misc station repairs and upgrades DC009 - rehabilitate pumps and motors(2), replace I&C systems and misc station repairs and upgrades HC011 - rehabilitate pumps(2), replace station electrical, process electrical, standby power and I&C components. Misc station repairs and upgrades. | \$ | 430,000 | \$ 322,500 | 75.0% | March 31, 2018 |

| Funding Category | Project Type | Project Description | Total Project Funding Cost Request | | Funding % | Completion Date |
|---------------------|--------------------|---|------------------------------------|---------------|--------------|--------------------|
| Water | Study/ Planning | Critical Watermain inspection - Critical high risk watermain data collection and analysis to facilitate condition assessment, prioritization of rehabilitation / replacement, or inspection cycle needs. Project involves data collection through various technologies such as non-destructive acoustical testing, pipe sample laboratory testing, and project assignments to engineering consulting firms. | \$ 400,000 | \$ 300,000 | 75.0% | March 31, 2018 |
| | | Total | \$ 43,890,763 | \$ 32,918,072 | 75.0% | |

City of Hamilton Supplemental Clean Water Wastewater Fund Project Submissions

| Funding Category | Project Type | Project Description | Total Project Cost | Funding Request | Funding % | Completion Date |
|---------------------|-----------------|--|-----------------------|--------------------|--------------|--------------------|
| Water | Rehab | Security System Upgrades Priority Outstations - Physical Security upgrades at six (6) water outstations, which includes: Greenhill PS & Reservoir, Kenilworth PS & Reservoir, Stone Church / Garth PS & Reservoir, Ferguson Avenue PS, York Road PS, and Garner Road PS & Reservoir. Installation of physical barriers, electronic access systems and site cameras. | \$ 4,540,000 | \$ 3,405,000 | 75.0% | March 31, 2018 |
| Stormwater | Rehab | Green Infrastructure Pilot Project - Low Impact Development Best Practice . Existing mature neighbourhoods in the city are experiencing flooding due to inadequate storm system. This project will assess, design and construct Low Impact best practices to address flooding in these neighbourhoods. | \$ 2,000,000 | \$ 1,500,000 | 75.0% | March 31, 2018 |
| Water | Rehab | Structural lining - Due to recorded failures and predicted high probability for increased failure rates in the near future, the existing watermain has become structurally deficient and requires rehabilitation. This is intended to reduce overall service outages. The watermain will be lined with a structural liner which will extend the service life of the asset. | \$ 1,000,000 | \$ 750,000 | 75.0% | March 31, 2018 |
| Wastewater | Rehab | Wastewater system lining program - The existing combined and/or sanitary sewers and laterals have become structurally and service deficient. Rehabilitation is intended to decrease infiltration, improve hydraulics and restore structural integrity while reducing the risk and liability associated with sewer collapse and backup issues. | \$ 1,000,000 | \$ 750,000 | 75.0% | March 31, 2018 |
| Wastewater | Rehab | Sewer Lateral Replace/Rehab Program - Co-ordination of lateral rehabilitation and inspection in the public road allowance for laterals that are deteriorating and causing back-ups in homes. Rehabilitation through trenchless technologies of deteriorated laterals, reducing back-ups and extending the useful life. | \$ 1,000,000 | \$ 750,000 | 75.0% | March 31, 2018 |

Appendix "B" to Report FCS16083 Page 4 of 4

| Funding Category | Project Type | Project Description | Tof | al Project Cost | Funding Request | Funding % | Completion Date |
|---------------------|-----------------|---|------|--------------------|--------------------|--------------|--------------------|
| Water | Rehab | HDR01 Kenilworth Reservoir - Upgrades are required in the interior of the reservoir in order to maintain an appropriate level of durability of the structure. The works include concrete restoration and process mechanical upgrades in order to improve the concrete deterioration and mechanical equipment. | \$ | 400,000 | \$ 300,000 | 75.0% | March 31, 2018 |
| Water | Rehab | Woodward WTP Fluoride Building HVAC - Implementation of HVAC upgrades will improve the environmental conditions in the fluoride building. | \$ | 350,000 | \$ 262,500 | 75.0% | March 31, 2018 |
| | | Total | \$ 1 | 0,290,000 | \$ 7,717,500 | 75.0% | |