



Committee of the Whole Report

For the Meeting of November 21, 2019

To: Committee of the Whole **Date:** November 7, 2019
From: Fraser Work, Director of Engineering and Public Works
Subject: Agreement for Climate and Seismic Resilient Underground Infrastructure Project

RECOMMENDATION

That Council authorise the Mayor and City Clerk to execute:

- a) an agreement with the Government of Canada pursuant to the receipt of funding for the Climate and Seismic Resilient Underground Infrastructure Project (the "Agreement"), generally in accordance with the terms detailed in the Letter of Award attached as Appendix A, and
- b) any amendments to the Agreement that are substantially in accordance with the terms and conditions of the Agreement, provided that the form and contents are satisfactory to the City Solicitor and the Director of Engineering and Public Works.

EXECUTIVE SUMMARY

The Government of Canada's Disaster Mitigation and Adaptation Fund (DMAF) is a national \$2.0 billion competitive capital contribution funding program aimed at supporting large-scale infrastructure projects to help communities better manage the risks of disasters triggered by natural hazards. In January of 2019, the City of Victoria submitted a grant application to Infrastructure Canada under the DMAF seeking approval for the Climate and Seismic Resilient Underground Infrastructure Project. The project aim is to accelerate upgrades to water, sanitary sewer and storm drainage infrastructure to increase system resiliency to natural hazards.

DMAF provides funding of up to 40% of eligible project costs for municipal projects. Projects must be completed by March 31, 2028. Eligible investments under the DMAF program aim to reduce the socio-economic, environmental and cultural impacts of natural hazards and extreme weather events when considering current and potential future climate change impacts. Projects must have a minimum of \$20 million in eligible expenditures.

The City's application was based on the projected expenditure of \$38,483,000, for consideration of the eligible funding amount of \$15,393,320, in the period of 2020 to 2028. The application was approved in principle by Infrastructure Canada in April and was publicly announced in May this year.

The City has an on-going infrastructure renewal program to deal with aging underground infrastructure assets for water distribution, sanitary sewer and storm drainage systems. Located in a coastal earthquake prone region, this infrastructure is vulnerable to an array of natural hazards

including storms, sea-level rise, tsunamis and earthquakes. Damage to critical infrastructure can result in interruptions in essential public services, cause health and safety risks, and is associated with high costs for recovery and rehabilitation.

The City of Victoria has adopted a risk-based asset management approach to infrastructure renewal and replacement. Vulnerable pipe upgrades are prioritized based on their criticality and likelihood of failure as recommended in City Master Plans and the Citywide Seismic Vulnerability Assessment.

The DMAF funding will provide for replacement of the following underground infrastructure:

- 6.2 km of watermains to support fire protection;
- 5.6km of sewer trunks;
- 1.8 km of storm pipes; and,
- installation of duckbill (one-way flow) valves at 4 storm outfalls.

A project map indicating the location of this infrastructure is attached in in Appendix B.

Federal funding from the DMAF will require execution of the Agreement. Once signed by both sides, Canada is committed to financially supporting the project, provided that the City complies with Canada's requirements.

Accessibility Impact Statement

Improving resilience of core infrastructure can significantly benefit residents with accessibility challenges who may be more impacted during natural disasters. In addition, renewal of underground infrastructure typically includes reinstatement of surface assets with the opportunity to incorporate accessibility improvements.

2019 – 2022 Strategic Plan

Core Service Delivery

Impacts to Financial Plan

The 2020 Draft Financial Plan outlines proposed expenditures for underground infrastructures from 2020-2028. With the Agreement in place, the City will be eligible to receive \$15,393,320 to augment the planned expenditure of \$38,483,000 in the period of 2020 to 2028.

Official Community Plan Consistency Statement

The following OCP goals and objectives are supported by the recommendation in this report. From Section 11. Infrastructure

11 (A) Victoria's well-maintained infrastructure and facilities meet the needs of residents and business utilizing best management practices.

11 (B) Victoria's healthy, clean, high-quality drinking water is used in a thrifty way and maintained through generations.

From Section 18 Emergency Management

Disaster Resiliency and Planning

18.7 Continue to maintain and regularly update city hazard, risk and vulnerability assessments, and consider these studies in plans, policies, bylaws and decisions for maintenance, upgrades and replacement of public and private property.

18.8 Encourage senior governments, public agencies and utility providers to invest in physical and technological upgrades to infrastructure that reduce their vulnerability to major hazards

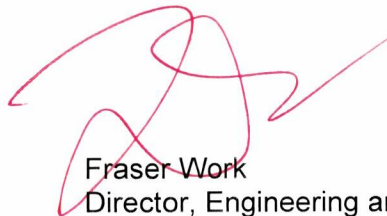
CONCLUSIONS

Final approval of federal funding for the Climate and Seismic Resilient Underground Infrastructure Project will require execution of the Agreement with the Government of Canada. The Agreement will provide access to additional funds to accelerate upgrades to water, sanitary sewer and storm drainage infrastructure to increase resiliency to natural and climate change related hazards.

Respectfully submitted,

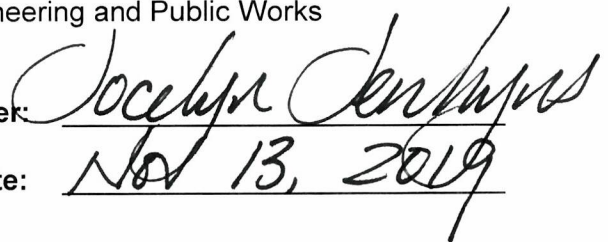


Nina Sutic-Bata
Manager, Underground Utilities



Fraser Work
Director, Engineering and Public Works

Report accepted and recommended by the City Manager:



Date:

Nov 13, 2019

List of Attachments (if relevant)

- Appendix A - Letter of Award
- Appendix B – Project Location Map