AGENDA INFORMATION

Regular Meeting

Other:

Date: SanJary 11, 2021

Date:



ALCAO

The District of North Vancouver REPORT TO COUNCIL

December 18, 2020 File: 11.5225.80/006.000

AUTHOR: Stephen Bridger, Section Manager Engineering Planning and Design

SUBJECT: Grant Funding Application – Gallant Creek Flood Conveyance Works

RECOMMENDATION:

THAT staff submit an application for grant funding for the Gallant Creek Flood Conveyance Works through the *Investing in Canada Infrastructure Program - COVID-19 Resilience Infrastructure Stream - Adaptation, Resilience, & Disaster Mitigation (ARDM)*;

AND THAT Council supports the project and commits to any associated ineligible costs and cost overruns.

REASON FOR REPORT:

Summary

A resolution of Council is required to support the District's grant application to replace an undersized culvert which conveys Gallant Creek below Gallant Avenue to Panorama Park where the creek discharges into Deep Cove via an open channel. This project is a major component of the District's Drainage Asset Management Plan and will increase the system resiliency to extreme flood events. The proposed Gallant Creek Flood Conveyance Works are planned for construction in summer 2021 and intended to reduce the likelihood of another flood event as have occurred in November of 2014 and 2018 causing damage to public and private property.

Funding Grant Program

In response to COVID-19, the governments of Canada and British Columbia have launched a new COVID-19 Resilience Infrastructure Program for pandemic response and economic recovery. Under this program, the federal government is contributing 80% of the grant funding while the provincial government is contributing the remaining 20%. The Covid-19 Resilience Infrastructure Program has multiple categories including Adaptation, Resilience, and Disaster Mitigation (ARDM) which focuses on structural and natural infrastructure projects to address the impacts of flood hazards. The ARDM program will fund eligible capital projects with up to ten million dollars (\$10,000,000) available per approved project. Eligible project costs include post-approval costs incurred for design, consultation and construction. The ADRM funding guidelines stipulate that construction must commence by September 30, 2021 and be substantially complete by December 31, 2021.

Document Number: 4634644

Project Selection, Background, and Features

The Gallant Creek Flood Conveyance Works project was selected for this ARDM grant application as Gallant Creek is a high priority for flood mitigation based on the District's Drainage Asset Management Plan and the District-wide *Debris Geohazard Risk and Risk Control Assessment* (BGC 2017). The project is ideally suited to the ARDM's focus on structural projects ready for construction in 2021.

The southern portion of the Deep Cove community, including major access/egress roads and the commercial town centre, is located on the Gallant Creek fan and is exposed to creek hazards. Gallant Creek is prone to debris floods which raises concerns related to blockages at road crossing culverts. The creek flows through several culverts in the Deep Cove community and the most downstream culvert along Gallant Avenue and Panorama Drive is the focus of the current project.

During the November 2014 flood, partial culvert blockages occurred at three (3) culverts including at Gallant Avenue. These blockages caused overland flooding that impacted properties and buildings on twelve (12) parcels including residences, commercial businesses and the Deep Cove Cultural Centre. Additional flooding occurred in November 2018 when the Gallant Avenue culvert inlet was again partially blocked resulting in overland flooding impacting an adjacent apartment building and commercial properties on Gallant Avenue.

The project is a critical component of the overall flood mitigation work plan for Gallant Creek that includes berms, a debris basin, channel improvements and culvert replacements. Several of the components have been implemented since the 2014 flood and as the most downstream culvert, the Gallant Avenue and Panorama Drive culvert needs to be replaced for the overall plan to be effective. The project primarily involves replacement of the existing culvert and adjacent creek channel works, but also necessitates work related to water mains, sanitary sewers, a park plaza, sidewalks and roads, including a temporary construction traffic detour. The project also incorporates fish passage features at the culvert outlet and riparian habitat improvements.

Timing/Approval Process:

The ARDM grant application submission deadline is January 11th, 2021 and a council resolution should be submitted with the application package where possible. The Gallant Creek project is well suited for the ARDM timeline eligibility criteria as it is scheduled to be tendered in early 2021 with critical in-stream works to be conducted in the summer 2021 instream construction window. Project completion is anticipated by the end of 2021.

Financial Impacts:

The total capital construction budget for the project is \$7.9 million (generally Class C cost estimate) including the culvert replacement and creek works, relocation/replacement of municipal infrastructure impacted by the culvert and creek works, and the temporary construction traffic detour. The grant application will request funding for the full amount which is within the \$10,000,000 individual project grant limit. If awarded, 100% of the eligible project costs will be funded by the program.

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Respectfully submitted,

Stephen Bridger

Section Manager Engineering Planning and Design

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| | REVIEWED WITH: | |
|---------------------------|------------------|--------------------|
| ☐ Community Planning | ☐ Clerk's Office | External Agencies: |
| ☐ Development Planning | ☐ Communications | Library Board |
| ☐ Development Engineering | Finance SW | ■ NS Health |
| Utilities | ☐ Fire Services | RCMP |
| ☐ Engineering Operations | ☐ ITS | ■ NVRC |
| ☐ Parks | ☐ Solicitor | ☐ Museum & Arch. |
| ☐ Environment | ☐ GIS | Other: |
| ☐ Facilities | Real Estate | |
| Human Resources | ☐ Bylaw Services | |
| Review and Compliance | ☐ Planning | |