

NO: R178

COUNCIL DATE: September 23, 2024

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## REGULAR COUNCIL

TO: **Mayor & Council**

DATE: **September 19, 2024**

FROM: **General Manager, Engineering**

FILE: **5225-23**

SUBJECT: **Community Emergency Preparedness Fund - Disaster Risk Reduction –  
Climate Adaptation Program – Fall 2024 Intake**

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## RECOMMENDATION

The Engineering Department recommends that Council:

1. Receive this report for information;
2. Endorse the projects as identified in the attached Appendix “I” and direct staff to submit an application to the 2024 Community Emergency Preparedness Fund - Disaster Risk Reduction – Climate Adaptation program fall intake which is due on October 04, 2024; and
3. Authorize the Mayor and City Clerk to execute the related funding agreement with the Province of British Columbia for the aforementioned project, should it be approved for funding.

## INTENT

The intent of this report is to obtain Council endorsement of the identified projects detailed in the attached Appendix “I” and submit an application for funding to the Province of British Columbia’s Community Emergency Preparedness Fund - Disaster Risk Reduction – Climate Adaptation (“CEPF DRR-CA”) program fall intake.

## BACKGROUND

The Provincial CEPF DRR-CA program offers diverse funding streams to aid First Nations and local governments in bolstering disaster preparedness and reducing risks from natural hazards amid climate change. Managed by the Union of BC Municipalities (“UBCM”) and funded by the Province of British Columbia, the CEPF DRR-CA program has received \$369 million in provincial contributions since its inception in 2017. In early 2023, the Province announced a further \$180 million contribution to the CEPF DRR-CA program.

The funding stream has three distinct categories. Each category can contribute 100% of the cost of eligible activities to a maximum of:

- Category 1: Foundational activities (such as risk mapping and assessments) - \$150,000 per applicant;
- Category 2: Non-structural activities (such as land use planning and community education) - \$150,000 per applicant; and
- Category 3: Small scale structural activities (such as flood protection infrastructure) - \$5 million per applicant.

The Evaluation Committee may recommend that an application be approved in full or in part, based on the available funding and the merit of the proposed project in each category.

The City was successful in prior UBCM CEPF DRR-CA intakes under Category 3, securing a \$4.975 million grant as part of the 2023 intake, which included upgrades to the Upper Serpentine River dyke east of Highway 15 and Latimer Creek, as well as structural upgrades to the Fry's Corner Pump Station.

In March 2024, the City applied for a \$4.982 million grant under Category 3 as part of the 2024 spring intake, which included the construction of a new drainage pump station near 16060 – 60 Avenue. The City has not received an update on this funding at this time.

## **DISCUSSION**

This fall 2024 CEPF DRR-CA program application (under Category 3) will reduce flood vulnerability of adjacent floodplain lands by addressing priority structural upgrades to flood control infrastructure along the Serpentine River. The recommended projects are detailed in Appendix "I", and are also depicted on the map attached to this report as Appendix "II".

Staff are engaging with consultants to finalize the project's initial costing, with anticipated design and construction to commence in 2025 should funding be secured.

Pending Council's endorsement, staff will finalize the funding application for the UBCM fall 2024 CEPF DRR-CA program intake to meet the October 4, 2024 submission deadline.

## **FUNDING**

For the fall 2024 CEPF DRR-CA program intake, staff will be requesting \$4.0 million in funding under Category 3 to complete the projects noted above. The program funds 100% of eligible costs and at this time staff anticipate that \$4 million will be sufficient to fully fund the works.

Should the refined cost estimates surpass this amount, staff will work with the program administrators to adjust the scope of work to match the available funding and/or will supplement with available funding in the 2024 Drainage Utilities budget.

## CONCLUSION

Securing funding through the UBCM fall 2024 CEPF DRR-CA program intake will allow the City to continue supporting the protection of vulnerable farmland against climate change-induced challenges including riverine flood hazards. This funding will enable the City to implement critical projects and initiatives aimed at reducing flood vulnerability and strengthening the community's water resilience.

Scott Neuman, P.Eng.  
General Manager, Engineering

JHB/MO/bn

Appendix "I" – Detailed Project Descriptions

Appendix "II" – Project Location Map

[https://surreybc.sharepoint.com/sites/eng.administration/gm administration/corporate reports/2024/sept 23/2024 community emergency preparedness fund - climate adaptation program intake/2024 cepf - climate adaption program intake \(09192024\) final.docx](https://surreybc.sharepoint.com/sites/eng.administration/gm%20administration/corporate%20reports/2024/sept%2023/2024%20community%20emergency%20preparedness%20fund%20-%20climate%20adaptation%20program%20intake/2024%20cepf%20-%20climate%20adaption%20program%20intake%20(09192024)%20final.docx)

### Project Descriptions

The following projects have been identified for the fall 2024 CEPF DRR-CA program funding application:

#### 64 Avenue Drainage Pump Station Upgrades

The existing drainage pump station located at 16280 64 Avenue was identified as having deficiencies in the City's 2023 Drainage Pump Station Condition Assessment Study. The station requires structural upgrades and replacement of the electrical and mechanical systems to extend the overall station lifespan by 30 years.

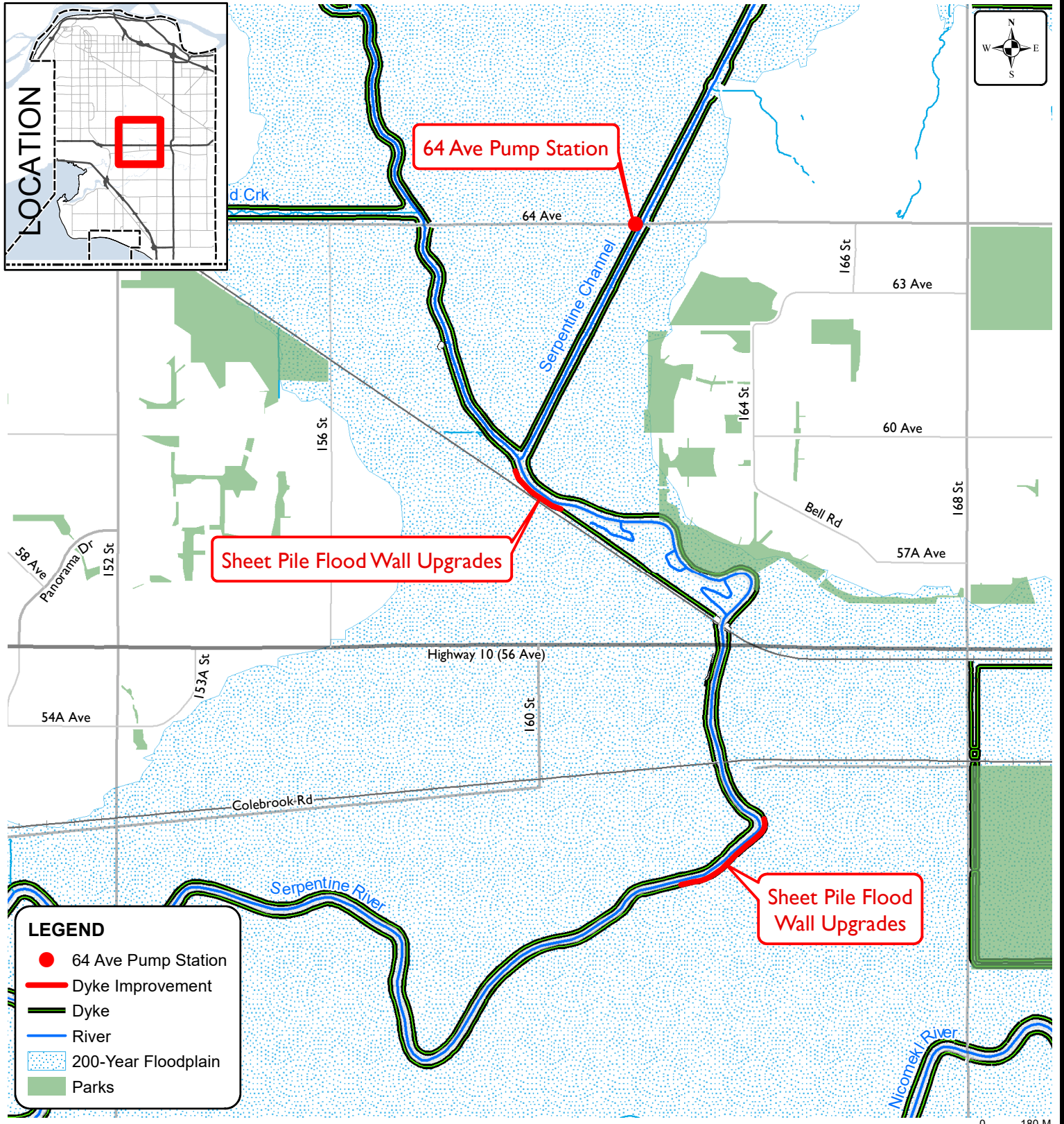
The pump house building sits on a pile supported concrete platform, which has experienced differential settlement to the point that the existing pump within the building has become unserviceable; further, the submersible pump accessible from outside the building is approaching end of life. This project will review rehabilitation and replacement options, and advance the detailed design and construction of the recommended approach.

#### Sheet Pile Flood Wall Upgrades

Structural upgrades and raising of two existing sheet pile flood walls are required along the central Serpentine River near the following locations:

- 59 Avenue and 160 Street
- 52 Avenue and 164 Street

Due to poor subsurface soil conditions, the ground beneath each sheet pile wall has settled and each sheet pile wall is now at a higher risk of overtopping in a major storm event. The project will review and implement an approach to raise the height of the flood walls by up to 0.6 metres to reinstate crest elevations.



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Scale: 1:20,000 0 180 M



**Community Emergency Preparedness Fund (CEPF)  
Proposed Fall 2024 Intake Projects**

**ENGINEERING  
DEPARTMENT**

The data provided is compiled from various sources and IS NOT warranted as to its accuracy or sufficiency by the City of Surrey. This information is provided for information and convenience purposes only. Lot sizes, Legal descriptions and encumbrances must be confirmed at the Land Title Office.