



To: Public Works and Transportation Committee **Date:** January 15, 2025
From: Milton Chan, P.Eng.
 Director, Engineering **File:** 10-6060-01/2025-Vol 01
Re: **Disaster Resilience and Innovation Fund (DRIF) – North Dike Preliminary Design Project Grant Application**

Staff Recommendations

1. That the application to the Disaster Resilience and Innovation Fund (DRIF) as outlined in the staff report titled “Disaster Resilience and Innovation Fund (DRIF) – North Dike Preliminary Design Project Grant Application” dated January 15, 2025 from the Director, Engineering, be endorsed; and
2. That should the grant application be successful, the Chief Administrative Officer and the General Manager, Engineering and Public Works, be authorized on behalf of the City to negotiate and execute a funding agreement with the Province of British Columbia for the above mentioned project.

Milton Chan, P.Eng.
 Director, Engineering
 (604-276-4377)

Att. 1

REPORT CONCURRENCE		
ROUTED TO: Intergovernmental Relations & Protocol Unit Finance Department	CONCURRENCE <input checked="" type="checkbox"/>	CONCURRENCE OF GENERAL MANAGER
	<input checked="" type="checkbox"/>	
SENIOR STAFF REPORT REVIEW	INITIALS: 	APPROVED BY CAO

Staff Report

Origin

The Disaster Resilience and Innovation Fund (DRIF) is a provincially funded program intended to help communities plan and undertake projects that reduce the risk and impact of future disasters. DRIF is accepting applications for projects that support community resilience and long-term disaster risk reduction and climate adaptation planning.

Staff submitted an Expression of Interest to the Province in September 2024. At the end of December, staff were advised that the application for the North Dike Preliminary Design Project had been advanced to the full application stage and that a Council resolution is required as part of the submission. The deadline for submission of the grant application is January 31, 2025. As such, staff will prepare and submit an application for the project described in this report prior to the deadline.

Should Council choose not to endorse this submission, staff will contact the Province to withdraw the application.

This report supports Council's Strategic Plan 2022-2026 Focus Area #3 A Safe and Prepared Community:

Community safety and preparedness through effective planning, strategic partnerships and proactive programs.

3.1 Advance proactive, sustainable, and accelerated flood protection in collaboration with other governments and agencies.

3.3 Ensure the community is collectively prepared for emergencies and potential disasters.

3.4 Ensure civic infrastructure, assets and resources are effectively maintained and continue to meet the needs of the community as it grows.

This report supports Council's Strategic Plan 2022-2026 Focus Area #4 Responsible Financial Management and Governance:

Responsible financial management and efficient use of public resources to meet the needs of the community.

4.1 Ensure effective financial planning to support a sustainable future for the City.

4.4 Work with all levels of governments for grant and funding opportunities.

Analysis

Richmond continues to invest in its extensive network of flood protection infrastructure, which is integral to protecting the health, safety, and economic viability of the City. Predicted climate change impacts on weather patterns and sea level rise reinforce the need for continual upgrades to the City's flood protection infrastructure to address changing needs. The City's Flood Protection Management Strategy and Dike Master Plans are the guiding framework for the advancement of flood protection upgrades. The Flood Protection Management Strategy identifies senior government partnerships as a top priority.

Disaster Resilience and Innovation Fund (DRIF)

Funding and Program Overview

The DRIF program, administered by the Provincial Ministry of Emergency Management and Climate Readiness, supports communities in enhancing their resilience to natural and climate-driven disasters. It supports improving the understanding of hazards, vulnerabilities, and risk-reduction strategies, as well as implementing structural and non-structural projects that strengthen long-term disaster preparedness.

Funding Streams

DRIF funding opportunities are divided into two streams:

- Stream 1: Foundational and Non-Structural Projects
- Stream 2: Structural Projects

In September 2024, staff identified eligible projects and submitted Expressions of Interest (EOIs) for both streams. The North Dike Preliminary Design Project, estimated at \$1.14 million, was proposed under Stream 1 and has been approved to advance to the full application stage. The fund can contribute up to 100% of eligible costs for this project, to a maximum of \$400,000. The submission under Stream 2 for No. 6 Road North Drainage Pump Station and Dike Upgrade was not approved for this intake.

North Dike Preliminary Design Project

This project will develop a preliminary design to raise a low-lying section of the City's north dike along River Road between Nelson Road and the CN Train Trestle which is susceptible to flooding from the Fraser River. The scope includes engineering and environmental assessments that consider climate change impacts and address land constraints, erosion protection, and utility relocations. The project will establish a foundation for future design and construction phases, ultimately helping protect residents, businesses, and agricultural land from rising water levels, and enhancing overall flood resilience through sustainable dike improvements.

Financial Impact

The North Dike Preliminary Design Project has funding in place through the Council approved 2025 capital project, Dike Upgrade Designs. Should the City be successful with this grant application, the actual grant payment will be used to offset the previously approved City funding.

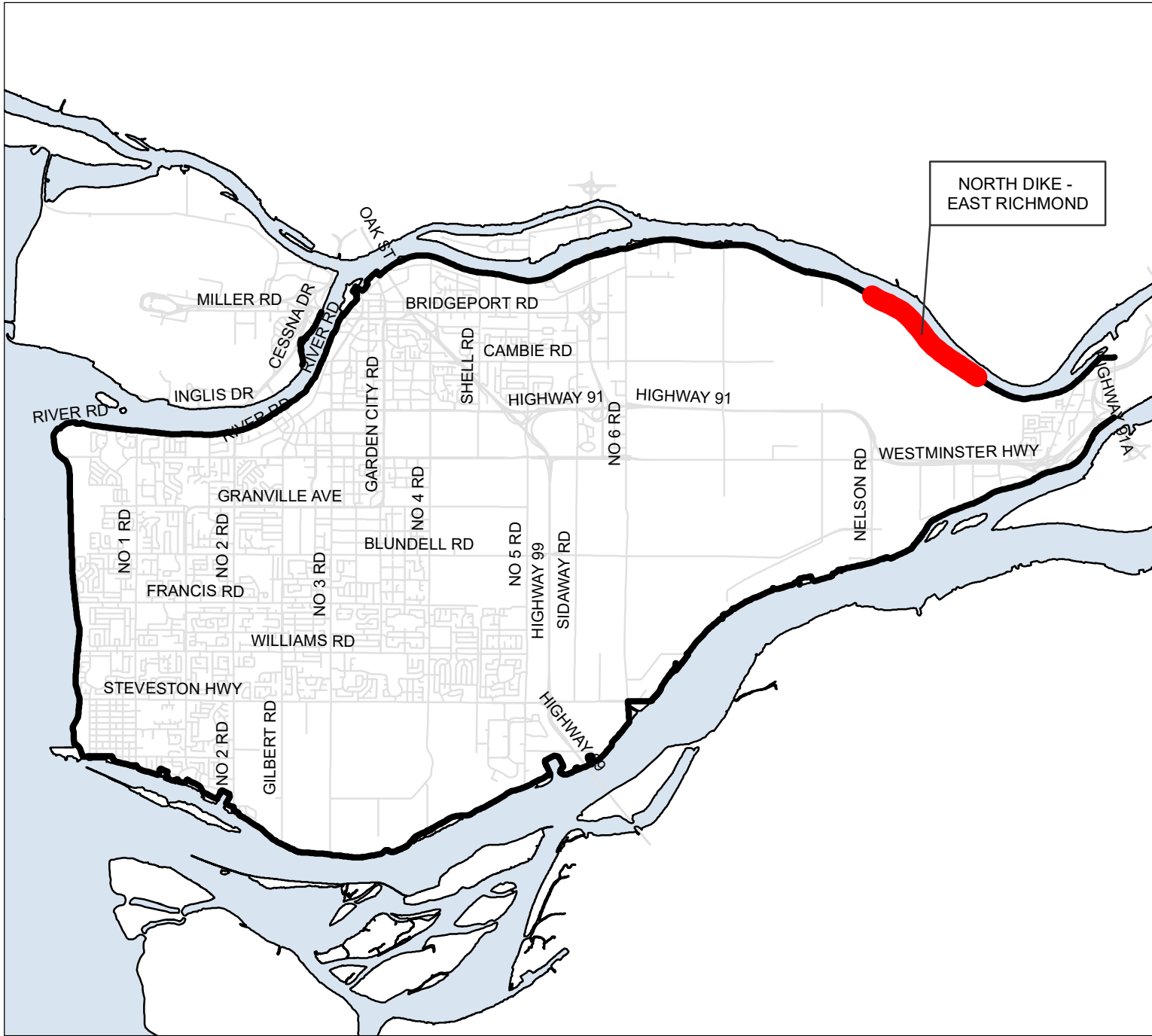
Conclusion

Grant funding opportunities are available through the DRIF to help communities reduce future flood risk and adapt to climate-related hazards. The North Dike Preliminary Design Project is critical to enhancing Richmond's flood protection infrastructure in East Richmond. Staff recommend that Council endorse the City's application for DRIF funding and, if successful, authorize the Chief Administrative Officer and the General Manager, Engineering and Public Works, to negotiate and execute a funding agreement with the Province of British Columbia.



Ridhi Dalla,
Senior Project Manager, Engineering Planning
(604-204-8521)

Att. 1: Project Location



Legend PWT - 18



Project Location



Dike Centreline



Street Centreline



Note:
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 For more information, please contact the City of Richmond, 2025, at 604-683-8000.
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Scale: 0 0.25 0.5 Kilometers
 Name: Riley Van Dusen
 Date: 2025-01-23