



City of Richmond

Report to Committee

To: Public Works and Transportation Committee **Date:** May 23, 2023
From: Milton Chan, P.Eng **File:** 10-6340-20-
 Director, Engineering P.2022CD00096/Vol
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Re: Drainage Canal Bank Failure Repairs – 12506 Vickers Way

Staff Recommendation

That funding of \$1,000,000 from the Drainage Improvement Reserve Fund for the drainage canal bank failure repairs at 12506 Vickers Way, be approved and that the Consolidated 5 Year Financial Plan (2023-2027) be amended accordingly, as detailed in the report titled “Drainage Canal Bank Failure Repairs – 12506 Vickers Way” dated May 23, 2023, from the Director, Engineering.

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

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Finance Department	<input checked="" type="checkbox"/>	
Sewer & Drainage	<input checked="" type="checkbox"/>	
Law	<input checked="" type="checkbox"/>	
SENIOR STAFF REPORT REVIEW	INITIALS: 	APPROVED BY CAO

Staff Report

Origin

In January 2021, settlement and surface cracks were observed by City maintenance staff along the drainage canal bank and pedestrian path located on City owned land at 12506 Vickers Way, in the Bath Slough drainage catchment.

The failing section of canal bank and pedestrian path was temporarily repaired by City forces. The cause of the failure was identified as the placement of heavy stacks of tiles on City property by a business operating on the adjacent private property. The condition of the canal bank has been continuously monitored while the damage was assessed and appropriate permanent repairs were determined. In recent months, this section of canal bank has deteriorated and immediate repairs are required.

Staff recommend that funding for permanent repairs be provided from the Drainage Improvement Reserve Fund.

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

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

Analysis

The drainage canal bank and pedestrian path located on the City owned land at 12506 Vickers Way is failing. The bank failure at this location presents the potential for danger to public safety, damage to public infrastructure and private property, adverse effects to the environment as well as potential impacts to the City drainage network's functionality.

The failing section of canal bank and pedestrian path was temporarily repaired by City forces and its condition has been monitored while further investigation and design of a permanent repair was undertaken. Based on the initial field observations and the completion of a geotechnical report completed by a third party professional, the slope failure was caused by heavy stacks of tiles placed near to the slough bank, on City property, by users of the adjacent private property at 12500 Vickers Way. As a result, in January of 2023 the City filed a Notice of Civil Claim against the property owner and tenant of 12500 Vickers Way in the BC Supreme Court, seeking an order that the City be compensated for all damages to the City property, as well as all repair costs.

In recent months, the condition of the canal bank has deteriorated and is now in urgent need of repair. The area is now closed to the public to ensure safety. The proposed repair work will include the installation of sheet piles to stabilize the bank, reconstruction of the bank and restoration of the pedestrian path and hand railing to allow safe pedestrian passage along this stretch of Bath Slough canal.

The costs for the repair works are estimated at \$1,000,000, including engineering consultant design and construction works.

Financial Impact

The total estimated capital cost for the repair of the failed section of canal bank and adjacent pedestrian path is \$1,000,000.

A temporary funding source will be utilized to fund the repair until the Consolidated 5 Year Financial Plan (2023-2027) can be amended with this additional \$1,000,000 to be funded by the Drainage Improvement Reserve Fund. In January of 2023 the City filed a Notice of Civil Claim against the property owner and tenant of 12500 Vickers Way in the BC Supreme Court, seeking an order that the City be compensated for all damages to the City property, as well as all repair costs. Any compensation received through the ongoing litigation process and any unused funds will be returned to the funding source.

Conclusion

The canal bank along 12506 Vickers Way is at risk of failure and in need of immediate repair. Staff will be using a temporary funding source to fund the repair. Staff recommend that funding for the repair work be provided from the Drainage Improvement Reserve Fund.



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