



Public Works and Transportation Committee

**Council Chambers, City Hall
6911 No. 3 Road**

**Wednesday, February 17, 2021
4:00 p.m.**

Pg. # ITEM

MINUTES

PWT-4

*Motion to adopt the **minutes** of the meeting of the Public Works and Transportation Committee held on January 19, 2021.*



NEXT COMMITTEE MEETING DATE

March 16, 2021, (tentative date) at 4:00 p.m. in Council Chambers

PLANNING AND DEVELOPMENT DIVISION

1. **RICHMOND ACTIVE TRANSPORTATION COMMITTEE –
PROPOSED 2021 INITIATIVES**
(File Ref. No. 01-0100-20-RCYC1) (REDMS No. 6583418 v. 2)

PWT-44

See Page PWT-44 for full report

Designated Speaker: Lloyd Bie

STAFF RECOMMENDATION

- (1) *That the proposed 2021 initiatives of the Richmond Active Transportation Committee, as outlined in the staff report titled “Richmond Active Transportation Committee - Proposed 2021 Initiatives” dated January 4, 2021 from the Director, Transportation, be endorsed; and*
- (2) *That a copy of the report titled “Richmond Active Transportation Committee – Proposed 2021 Initiatives” be forwarded to the Richmond Council-School Board Liaison Committee for information.*



2. **TRAFFIC SAFETY ADVISORY COMMITTEE - PROPOSED 2021 INITIATIVES**

(File Ref. No. 01-0100-30-TSAD1-01) (REDMS No. 6593164 v. 3)

PWT-55

See Page PWT-55 for full report

Designated Speaker: Lloyd Bie

STAFF RECOMMENDATION

- (1) *That the proposed 2021 initiatives for the Traffic Safety Advisory Committee, as outlined in the staff report titled “Traffic Safety Advisory Committee - Proposed 2021 Initiatives” dated January 4, 2021 from the Director, Transportation, be endorsed; and*
- (2) *That a copy of the staff report titled “Traffic Safety Advisory Committee - Proposed 2021 Initiatives” be forwarded to the Richmond Council-School Board Liaison Committee for information.*



ENGINEERING AND PUBLIC WORKS DIVISION

3. **PROPOSED 2021 PAVING PROGRAM**

(File Ref. No.) (REDMS No. 6528529 v. 6)

PWT-62

See Page PWT-62 for full report

Designated Speaker: Eric Sparolin

STAFF RECOMMENDATION

That the staff report titled, “Proposed 2021 Paving Program,” dated January 18, 2021, from the Director, Engineering be received for information.

☐

4. **SOUTH DIKE REPAIRS – GILBERT ROAD AREA**

(File Ref. No. 10-6050-01) (REDMS No. 6603864 v. 7)

PWT-70

See Page PWT-70 for full report

Designated Speaker: Eric Sparolin

STAFF RECOMMENDATION

That funding of \$500,000 from the Drainage Improvement Reserve Fund be approved to complete dike armouring repairs and debris removal along the south dike at Gilbert Road, and that the Consolidated 5 Year Financial Plan (2021-2025) be amended accordingly.

☐

5. **MANAGER’S REPORT**

ADJOURNMENT

☐



Public Works and Transportation Committee

Date: Tuesday, January 19, 2021

Place: Council Chambers
Richmond City Hall

Present: Councillor Chak Au, Chair
Councillor Alexa Loo (by teleconference)
Councillor Linda McPhail (by teleconference)
Councillor Michael Wolfe (by teleconference)

Also Present: Councillor Day (entered at 4:10 p.m. by teleconference)

Call to Order: The Chair called the meeting to order at 4:00 p.m.

MINUTES

It was moved and seconded

That the minutes of the meeting of the Public Works and Transportation Committee held on March 17, 2020, be adopted as circulated.

CARRIED

NEXT COMMITTEE MEETING DATE

February 17, 2021, (tentative date) at 4:00 p.m. in the Council Chambers

Public Works & Transportation Committee
Tuesday, January 19, 2021

PLANNING AND DEVELOPMENT DIVISION

1. TRANSLINK 2021 COST-SHARE FUNDING APPLICATIONS

(File Ref. No. 01-0154-04) (REDMS No. 6559547 v. 4)

It was moved and seconded

- (1) That the submission of road, pedestrian, bicycle, and transit facility improvement projects as part of the TransLink 2021 cost-share programs as described in the staff report titled "TransLink 2021 Cost-Share Funding Applications" dated December 2, 2020 from the Director, Transportation be endorsed and that the information be considered in the 2021 Capital Budget process; and*
- (2) That the Chief Administrative Officer and General Manager, Planning and Development be authorized to execute the successful funding agreements.*

The question on the motion was not called, as in reply to queries from Committee, staff noted that (i) the programs addressed in the report have the objective to maximize funding, (ii) a wide array of programs will be brought forward for Council consideration, such as walkway programs, (iii) TransLink will be providing the 2020 funding grants as promised, (iv) the requested 2021 funding is also in line to be awarded, and (v) this report addresses new projects for funding contributions.

The question on the motion was then called and it was **CARRIED**.

2. AMENDMENT TO TRAFFIC BYLAW NO. 5870 TO REVISE SPEED LIMIT ON FERGUSON ROAD

(File Ref. No. 10-6450-15-01) (REDMS No. 6546592 v. 3)

In reply to queries from Committee, staff advised that they will liaise with the other agencies regarding maintenance of Ferguson Road and the majority of the road work is complete and only minor works remain.

Councillor Day entered the meeting by teleconference (4:10 p.m.).

It was moved and seconded

That Traffic Bylaw No. 5870, Amendment Bylaw No. 10216, to revise the posted speed limit on Ferguson Road between McDonald Road and Shannon Road to 30 km/h, be introduced and given first, second and third readings.

CARRIED

Public Works & Transportation Committee
Tuesday, January 19, 2021

ENGINEERING AND PUBLIC WORKS DIVISION

3. MUNICIPAL ACCESS AGREEMENT WITH ROGERS COMMUNICATIONS CANADA INC.

(File Ref. No. 03-1000-21-023) (REDMS No. 6557459 v. 4)

It was moved and seconded

That the Chief Administrative Officer and the General Manager, Engineering & Public Works be authorized to negotiate and execute, on behalf of the City, a Municipal Access Agreement between the City and Rogers Communications Canada Inc. containing the material terms and conditions set out in the staff report titled, "Municipal Access Agreement with Rogers Communications Canada Inc.", dated December 10, 2020 from the Director, Engineering.

The question on the motion was not called as discussion took place on not including 5G in the agreement, and in response to queries from Committee, staff noted that (i) this agreement only covers underground installations as additional information is required for the 5G network, (ii) similar agreements are in place with other carriers with some terms that differ based on negotiations, (iii) the agreements encompass all City right-of-ways, (iv) although no complaints have been received recently, any issues or complaints that arise with regard to installation of telecommunication equipment will be addressed immediately.

The question on the motion was then called and it was **CARRIED**.

4. FLOOD PROTECTION GRANT FUNDING APPLICATIONS

(File Ref. No. 10-6060-01) (REDMS No. 6584389 v. 5)

It was moved and seconded

(1) That the Steveston Island Preliminary Dike Design submission to the National Disaster Mitigation Program (NDMP) for Mitigation Planning as outlined in the staff report titled "Flood Protection Grant Funding Applications" dated January 5, 2021 from the Director, Engineering be endorsed;

Public Works & Transportation Committee
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- (2) *That the Drainage Pump Station Backup Power Upgrade submission to the Investing in Canada Infrastructure Program (ICIP) for Adaptation, Resilience & Disaster Mitigation as outlined in the staff report titled “Flood Protection Grant Funding Applications” dated January 5, 2021 from the Director, Engineering be endorsed, and that any associated project costs beyond the eligible grant funding be funded from the City’s Drainage Reserve;*
- (3) *That the Dike Operation & Maintenance Manual Update submission to the Union of BC Municipalities (UBCM) Community Emergency Preparedness Fund for Flood Planning as outlined in the staff report titled “Flood Protection Grant Funding Applications” dated January 5, 2021 from the Director, Engineering be endorsed; and*
- (4) *That the Chief Administrative Officer and General Manager, Engineering and Public Works be authorized to negotiate and execute the funding agreements with the Government of Canada, the Province of BC, or UBCM for the above mentioned projects should they be approved for funding and that the Consolidated 5 Year Financial Plan (2021-2025) be amended accordingly.*

CARRIED

5. AWARD OF CONTRACT 6577P – ON CALL COLLECTION OF HAZARDOUS MATERIALS

(File Ref. No. 10-6405-12-01) (REDMS No. 6520351 v. 5)

It was moved and seconded

- (1) *That Contract 6577P – On Call Collection of Hazardous Materials be awarded at the unit rates quoted for a three-year term, commencing February 1, 2021 as follows:*
 - (a) *GFL Environmental Inc. at an estimated total contract value of \$450,000; and*
 - (b) *Tervita Corporation at an estimated total contract value of \$200,000; and*
- (2) *That staff report to Council for extensions beyond the initial three-year term, up to the maximum identified eight-year term under the provisions of Contract 6577P – On Call Collection of Hazardous Materials.*

CARRIED

Public Works & Transportation Committee
Tuesday, January 19, 2021

6. GLOBAL CONTAINER TERMINALS DELTAPORT EXPANSION – BERTH FOUR PROJECT

(File Ref. No. 10-6125-30-011) (REDMS No. 6548529 v. 4)

In reply to queries from Committee, staff noted that the map outlines major infrastructure projects in the lower mainland that would have environmental impacts in Richmond and Environmental Assessments should be coordinated by the Province to minimize confusion for stakeholders.

It was requested that copies of the staff report be provided to local MLAs and local MPs.

It was moved and seconded

That the comments outlined in the staff report titled "Global Container Terminals Deltaport Expansion – Berth Four Project", dated December 10, 2020, from the Director, Sustainability and District Energy, be endorsed and submitted to the BC Environmental Assessment Office, the Impact Assessment Agency of Canada, local MLA's and local MPs in response to the provincial and federal environmental assessments.

CARRIED

7. BANNING RODENTICIDES ON CITY-OWNED PROPERTY IN RICHMOND

(File Ref. No. 10-6160-06; 10-6125-01) (REDMS No. 6544080 v. 8; 6545190)

It was moved and seconded

- (1) That the City discontinue the use of rodenticides on city-owned property for one year, as described in the staff report titled "Banning Rodenticides on City-owned property in Richmond," dated December 10, 2020 from the Director, Sustainability and District Energy;*
- (2) That staff assess the outcomes of the one-year ban on city-owned property and report the findings to Council;*
- (3) That staff be directed to develop an integrated rodent management program, as described in the staff report titled "Banning Rodenticides on City-owned property in Richmond," dated December 10, 2020 from the Director, Sustainability and District Energy;*
- (4) That staff be directed to write a letter to the provincial Ministry of Environment, requesting that a review of the province's existing policies that allow for the retail sale of rodenticides be conducted; and*
- (5) That the 2021 rodent management transition program be endorsed with funding in the amount of \$67,000, from the Sanitation and Recycling Provision, and be included in the Consolidated 5 Year Financial Plan (2021-2025).*

5.

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The question on the motion was not called as staff responded to queries regarding rodenticides, noting that (i) there is limited research on snap traps posing a significant risk to other animals, (ii) preferred best practice for snap traps would be containing rodents, (iii) this report addresses the banning or use of rodenticide on City-owned property, (iv) a pest management process that is consistent with the City's current practices is being examined, (v) the delay in reporting back is due to the limited information that was available regarding rodents in Richmond, the extensive examination process to understand the problem, and reviewing potential solutions, (vi) discussions with other municipalities and subject matter experts have taken place, (vii) rodenticides do have a place for management of large infestations in specific targeted areas, and (viii) more details on non city-owned land processes will be provided in an upcoming report.

Deanna Pfeifer, referenced a PowerPoint presentation (attached to and forming part of these Minutes as Schedule 1) and provided information on:

- rat poisons and the effects on the entire ecosystem;
- better alternatives that exist;
- negative effects of rat poison on other animals;
- incorrect disposal of rat poison and dead animals; and
- lack of education and communication.

Adrian Nelson, Humane Solutions, spoke in favour of the staff report and noted that (i) there is no follow-up once the boxes have been installed, (ii) no accountability or statistics for what happens to the animals with poison, (iii) specific sites need to be examined and addressed based on situation, and (iv) ineffective rodent management plans can be costly.

The question on the motion was then called and it was **CARRIED**.

8. **MANAGER'S REPORT**

(i) Water Level Rise

Staff advised that there were higher than normal river levels on January 13, 2021 as a result of King Tides, storm surges and heavy winds. It was noted that the City's flood management protection system performed well as result of ongoing maintenance and work to the dike system. Staff then noted that water levels have decreased and expect it to continue over the next few days and a staff report will be provided to summarize the storm season.

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(ii) Recycling Depot

Staff highlighted that (i) the Recycling Depot is now open 7 days a week from 9:00 a.m. to 6:15 p.m., (ii) additional materials such as lead acid batteries and fire extinguishers are now accepted at the Depot, (iii) feedback regarding the new arrangements and structure of the Depot from the public has been positive, and (iv) a virtual tour of the Recycling Depot will be provided on the City's Recycling App.

ADJOURNMENT

It was moved and seconded

That the meeting adjourn (5:05 p.m.).

CARRIED

Certified a true and correct copy of the Minutes of the meeting of the Public Works and Transportation Committee of the Council of the City of Richmond held on Tuesday, January 19, 2021.

Councillor Chak Au
Chair

Sarah Goddard
Legislative Services Associate

Are you aware?



Key take away points

- Rat poisons are poisoning the entire ecosystem
- Not effective long term
- Better alternatives exists

NECROPSY #1

Barred Owl

- Well-muscled
- No sign of trauma
- Excellent body condition
- Diffuse pallor
- Presence of brodifacoum and bromadiolone in the liver
- Final Diagnosis-suspect anticoagulant rodenticide toxicity

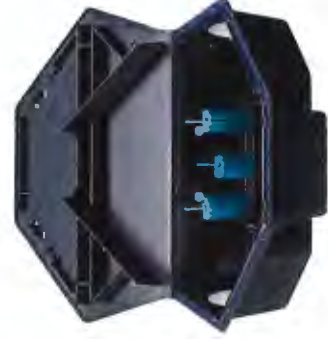
NECROPSY #2

Great Horned Owl

- bromadiolone
- brodifacoum
- difetialone

What are Rodenticides?

- BROMADIALONE
- DIFENACOUUM
- BRODIFACOUUM
- DIFETIALONE



<https://www.hantover.com/Protecta-LP-Rat-Bait-Station-Mouse-Trap-PCS-PROTLP/31084/p>

who is using rat poison?

- Pest Control Companies
- Homeowners
- Farmers



Rodent Bait Stations



Laws and policy

Federal

- Pest Control Products Act and Regulations
- Registration and re-evaluation
- Human health and safety
- Environment impact
- Value assessment
- Compliance and enforcement

Provincial/Territorial

- Transportation, sale, use, storage and disposal
- Training, certification and licensing of applicators and vendors
- Spills and accidents
- Permits and use restrictions
- Compliance and enforcement

Municipal

- Bylaws

So how did the poison get in the owl?

Between 1998-2003 70% of dead owls from BC had residues of at least one rodenticide-and the number of owls dying by poisons has only escalated over the recent years.

PWT - 19



- Owls and other birds of prey are at a particularly high risk of secondary poisoning because of their dependence on rodents as a food source.



Lethal Dose: Rat Poison & Local Wildlife

Local residents may inadvertently be poisoning wildlife. National Park Service researchers have found a direct link between exposure to anticoagulant rodenticides, commonly known as rat poison, and the deaths of wildlife in and around the Santa Monica Mountains. How rodenticide works its way through the food chain:



How anticoagulant rodenticide kills

These compounds interrupt blood-clotting, which leads to uncontrolled bleeding and death. They may also suppress the animal's immune system, making it susceptible to other diseases. **Symptoms include:**

- Nosebleeds
- Bleeding gums
- Ruptured blood vessels, causing bruising
- Internal hemorrhaging

Secondary disease, such as mange.

Blood in urine and feces



Check the label

Here are the most common anticoagulant compounds:

- Bromadiolone
- Brodifacoum
- Diphacinone
- Difethialone



What is mange?

A microscopic mite that burrows into the skin and causes...

1. Extreme itchiness and skin lesions.
2. Fluid and nutrient loss through the skin.
3. Infection, starvation, hypothermia or other complications, eventually leading to death.

SOURCES: Santa Monica Mountains National Recreation Area research, L.E.K. Serleys, UrbanCarnivores.com

CREDIT: National Park Service
<http://1.usa.gov/1SuhsXv>

What is mange
disease?

PWT - 22

<https://www.latimes.com/local/la-me-rat-poison-20140418-story.html>





Article

Impact of Rodenticides on the Coagulation Properties of Milk

Salam A. Ibrahim* and Tom Tse

Food Microbiology and Biotechnology Laboratory, Food and Nutritional Sciences Program,
North Carolina Agricultural and Technical State University, Greensboro, NC 27411-1064, USA;
sah@ncat.edu

* Correspondence: ibrah001@ncat.edu; Tel.: +1-336-285-4869

Received: 13 March 2018; Accepted: 4 April 2018; Published: 7 April 2018



Abstract: In this study, we investigated the impact of the rodenticides (strychnine, bromadiolone, and brodifacoum) on milk pH, rennet coagulation time (RCT), and coagulum strength. Sub-lethal amounts of strychnine and bromadiolone produced an unusually large change in milk pH, compared to brodifacoum and brodifacoum on milk coagulation properties. All three studied rodenticides significantly affected RCT and coagulum strength. The presence of sub-lethal amounts of each individual rodenticide increased RCT by an overall mean of 17% ($p < 0.001$). Rodenticide contamination decreased coagulum strength by an overall mean of 26% ($p < 0.05$). Our results suggest that such changes could be noticeable at the farm, thus, potentially averting the mixture of contaminated milk with the tanker supply, and preventing downstream distribution to consumers.

Keywords: rat poison; milk contamination; milk coagulation; rennet coagulation time; rodenticides

1. Introduction

Dairy products are a significant part of typical U.S. diets [1], in particular, milk's broad reach, in addition to its multi-stage processing chain, makes it especially vulnerable to intentional contamination. The processing of cheese begins with the coagulation of milk [2]. The coagulated milk is then further processed into the desired cheese product.

The coagulation of milk is a multi-stage process of overlapping physico-chemical changes. Cheese-making often begins with the aspartyl protease chymosin (also called rennet). Chymosin hydrolyzes the amide bond between Phe105 and Met106 of the κ -casein milk protein [3]. The catalyzed hydrolysis reaction releases the hydrophilic tail of κ -casein and the hydrophobic effect then drives aggregation of the casein micelles [2].

Milk coagulation depends on several parameters, including pH and temperature. The normal pH range of milk is between 6.4 and 6.8 [4]. A decrease in pH accelerates milk coagulation. At low pH, protonation of casein phosphate groups becomes more favorable, reducing zeta potential and, thus, accelerating coagulation [5]. However, a robust buffer prevents drastic pH changes in milk [6].

Overall, enzymatic coagulation is a physically apparent transformation driven by an underlying chemical one. The simultaneous cascade of events yields multiple points at which contaminant may play a role, whether in the pH, enzymatic hydrolysis, or hydrophobic assembly. In addition, more than a dozen antibiotic residues were found to significantly impact the milk coagulation process [7]. Thus, in this study, we hypothesized that rodenticides could contaminate the milk on farms and can affect the milk coagulation. During the coagulation process, several parameters are monitored for quality control purposes, including milk pH, gel strength, and rennet coagulation time (RCT) [8]. Of course, these parameters vary from day to day due to natural variations in milk quality and among individual cows [9]. However, changes that far exceed those expected due to normal variation may serve as

Foods 2018, 7, 57; doi:10.3390/foods7040057

www.mdpi.com/journal/foods

<https://www.mdpi.com/2304-8158/7/4/57/html>

Threatens children and pets



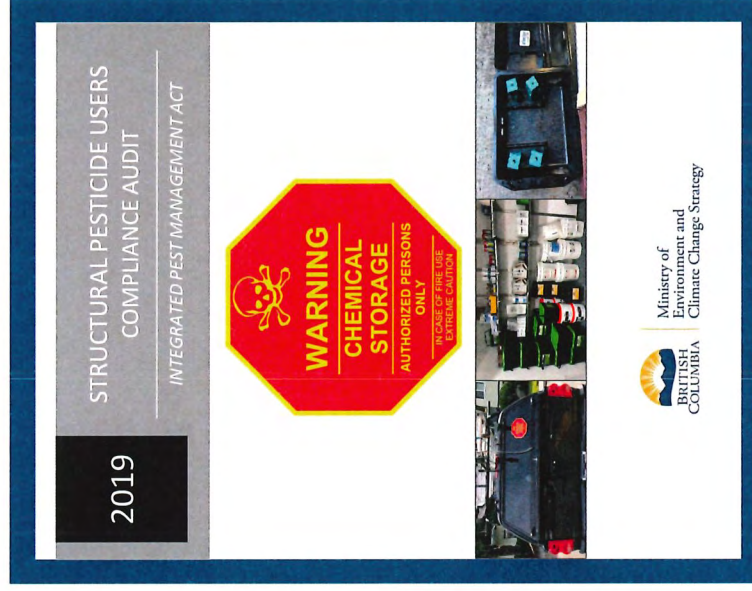
<http://www.panna.org/blog/company-thwarts-rat-poison-rules-%E2%80%94-again>



<https://www.startribune.com/3-tips-for-getting-cats-and-dogs-and-other-pets-to-play-nice/4/>

**Approx. 10,000 reports
of rodenticide exposures
in children annually in
U.S.**

Non compliance



-83% of inspected PCO's were NOT in compliance

-64% of the inspected users did not comply with the requirements to practice integrated pest management

-81% were non-compliant for pesticide record keeping



Abandoned Boxes

Not being used as a last resort



Bait boxes end up
being **PERMANENT**
by **NOT** dealing with
the problem



Boxes are not
tamper resistant

RAT POISON DISCARDED IN HOUSEHOLD GARBAGE



[This Photo](#) by Unknown Author is licensed under [CC BY-SA 4.0](#)

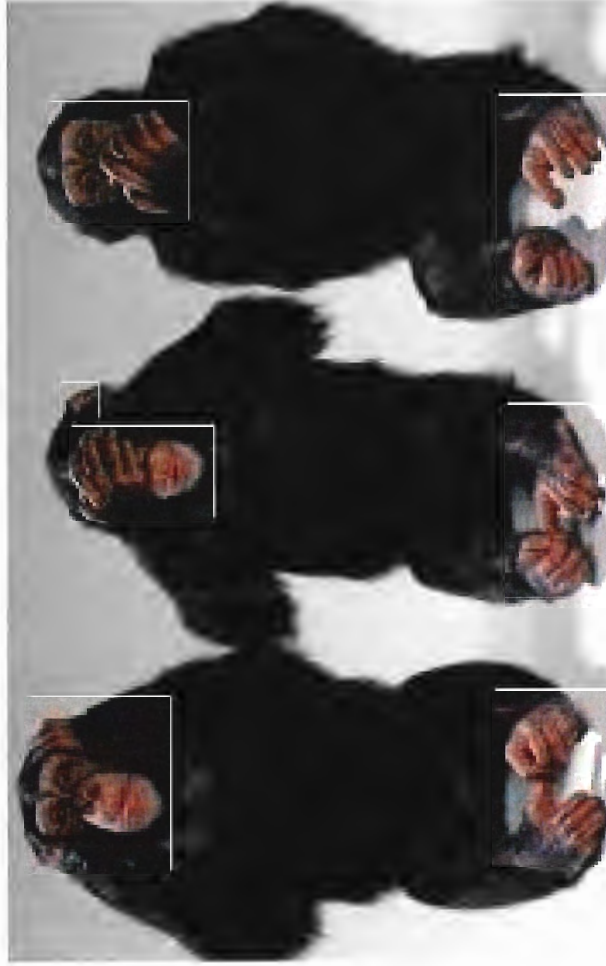
Data Collection is Problematic

- Few raptors are found
- Of the ones found people don't know they should report it
- Most dead animals are buried or tossed in the garbage
- Submitted to museums and taxidermists-going untested
- Difficulty finding out who to report it to
- Due to lack of communication are told to bury it or place in garbage
- Not all raptors necropsied are screened for rodenticides-even if suspected and evidence of internal bleeding
- Canada not testing other animals, therefore, I had to use statistics from other Countries
- Barriers to lab testing

VENDORS ARE **REPEATEDLY** NON COMPLIANT



Pest control companies not informing people of the dangers



“Leave it up to the highly qualified technicians “ Al Beddows-Sooke Councilor

Education?

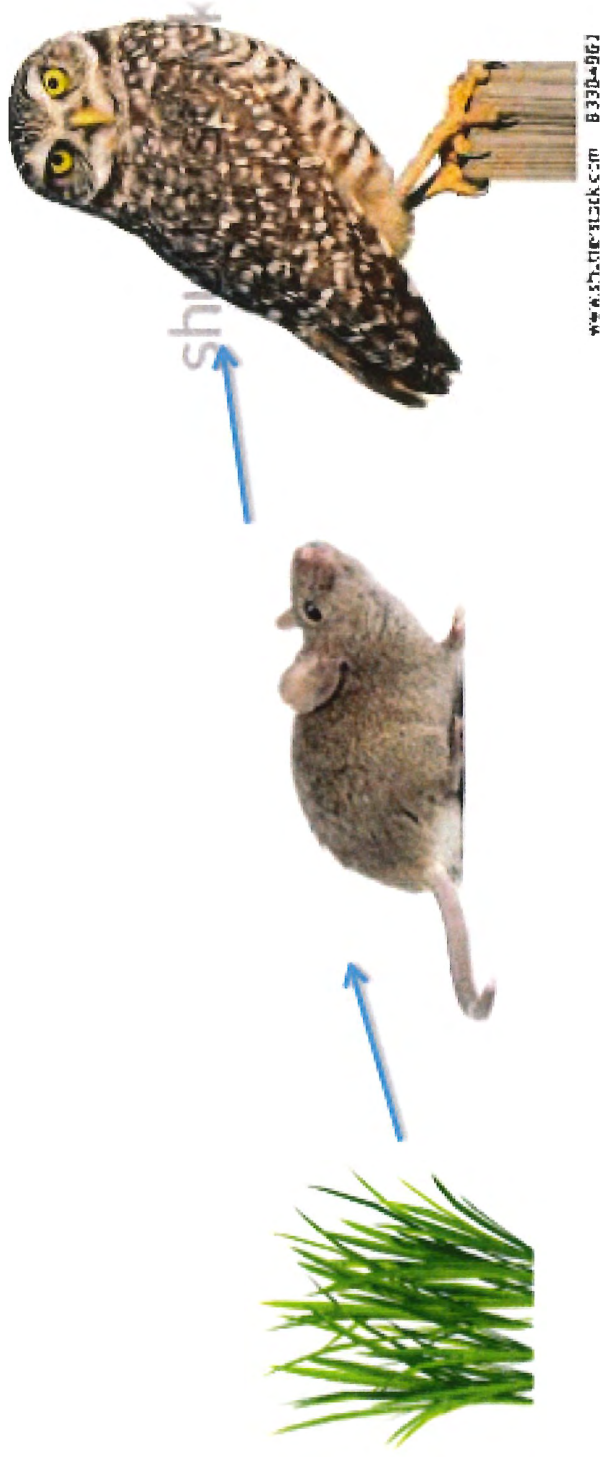
Basically a free online course to become a certified pest control operator

- 3 online modules and an exam

Ineffective long term

- Rats have a gene that enables them to develop resistance to poison
- Clearing a resident population simply makes space for new groups to move in
- Poisoned rats mate faster to compensate for thinning numbers
- By distracting from the root of the problem, for example accessible food and shelter, relying on rodenticides permits infestations to rebound
- Making the rodent problem worse by killing rodent predators

One owl eats **1000** rodents per year



Grasses

Rodents

Owls

<https://disbenumber4.weebly.com/food-chain-and-food-web.html>

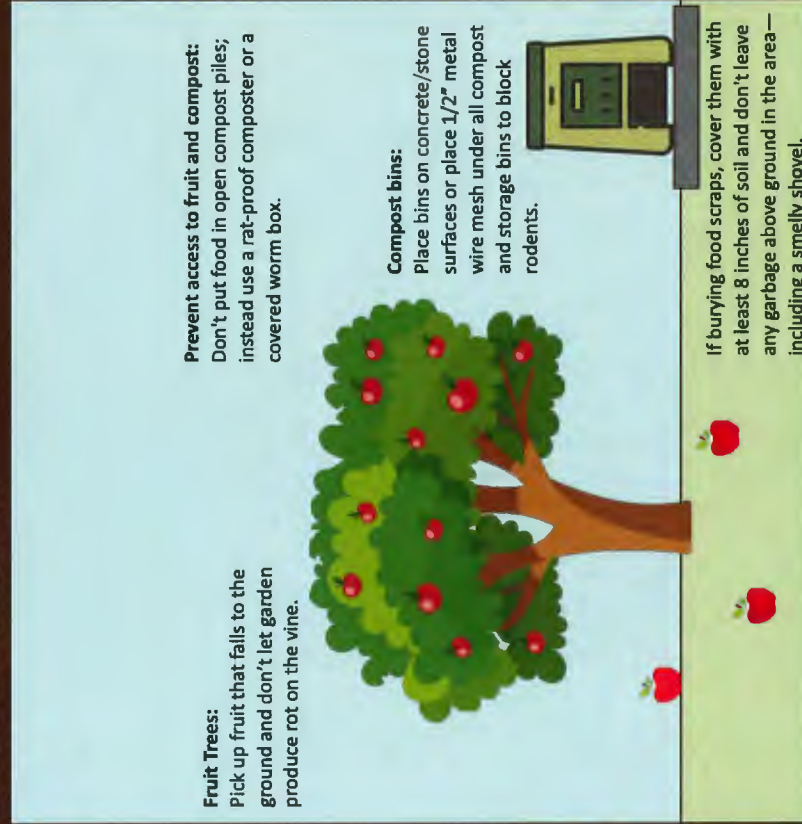
Rat Management: Simple Preventative Measures

Prevent access to all favourable rat nesting areas such as buildings, sheds and underneath garden patios and hut tubs. Carefully inspect and ensure there are no openings and cracks where rats can enter.



NB: If you are sealing up an opening ensure that other species such as bats or birds are not present. Be particularly cautious in the spring/summer when the above-mentioned species might have young.

Rat Management: Simple Preventative Measures



Prevent access to food and water: Store food and garbage in sealed heavy-duty containers.

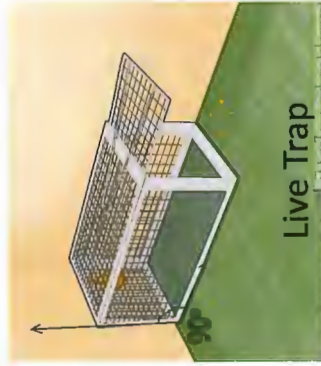
http://www.barnowisbc.ca/uploads/3/0/2/7/30276721/bmp_urban_rat_control_march_2020.pdf

Safe and effective rodent control



PWT 38

Peppermint oil is a natural repellent for rodents



Put snap trap in box to avoid accidental injury to pets and other wildlife



Install Owl Nesting Boxes



RODENT SOLUTIONS

Humane Solutions is Western Canada's leader in humane wildlife and pest control. We provide permanent, poison-free alternatives for our clients in an environmentally degradative industry.

WHY WE DON'T USE POISON:

- ① Ineffective & inhumane
- ① No opportunity for data collection
- ① Never achieves permanent result
- ① Toxin bioaccumulation in wildlife
- ① Risk to people & pets
- ① Secondary poisoning of predators & birds of prey



PERMANENTLY RAT FREE:



Onsite Assessment & Quote
A specialist will conduct a full inspection of your property, determining the required program to effectively manage rodent populations, as well as any required resource mitigation. Quotes are free.

Resource Mitigation

Our techs inspect every square inch of your structure and pest-proof active and potential accesses to stop the flow of rodents into your structure. We offer industry-leading warranties on all structural work. Available food and attractants are also identified and mitigated.



Targeted Implementation

We install our innovative trapping stations and remove any poison if it is present. We focus the traps on targeted locations and create data tables with trap IDs, catch metrics & sites of hot spot activity. As all our traps are within secure, no-sight stations & we use our own proprietary bait, there is no risk to children or pets.



- No poison
- Ability to collect data
- Effective & humane
- Pest proof active and potential accesses
- Industry leading warranties on all structural work
- Quotes are free
- Innovative trapping stations
- No risk to children or pets

Good Nature traps



https://cdn.shopify.com/s/files/1/0027/1613/9581/t/10/assets/spo_banner.jpeg?v=1587023853



<https://www.pinterest.ca/pin/129689664257808581/>

What can municipal governments do?

Join a growing list of municipalities that have committed to a ban of rodenticides



VICTORIA NEWS



A Facebook user shared a photo of an owl found on a road in Oak Bay on Aug. 23 – the third owl found in the area. The owl was found by a resident and was taken to a veterinarian. (Photo submitted by Fred Hooper)

Oak Bay join Saanich in municipal ban of rat poison

Ban on commercial rat poisons implemented due to owl deaths



SAANICH NEWS







A great horned owl found dead near Kempt Park, was likely killed by rat poison. On Monday evening it was found by a resident and taken to a veterinarian. (Photo submitted by Robert Vancetta)

Saanich bans municipal rodenticide use after owl deaths

District unanimously approves ban and community education

NINA GROSSMAN / JUL. 14, 2020 11:10 a.m. / LOCAL NEWS / NEWS







VICTORIA NEWS

City of Port Moody

District of Sooke

City of North Vancouver

City of West Vancouver

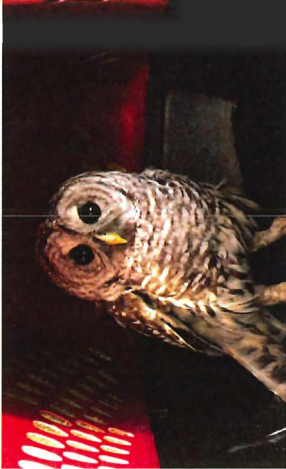


VICTORIA NEWS

New West bans rat poisons on civic lands

New Westminster is the latest municipality to back a ban on anticoagulant rodenticides because of their negative impacts on wildlife. Council approved a motion by Coun.

Sep 29, 2020 11:35 AM By: Theresa McManus





VICTORIA NEWS



Sooke council unanimously agreed to ban the use of anticoagulant rodenticides on any of their owned lands. (Photo submitted by Sooke Island Health)

Sooke jumps on board to ban use of rat poison

City staff will educate residents on harmful effects of rodenticides

SCOTT NEWS STAFF / Sep. 16, 2020 7:00 a.m. / LOCAL NEWS / NEWS

Fun Fact:

Barred Owls
have hearts on
their feathers



Thank you!





City of Richmond

Report to Committee

To: Public Works and Transportation Committee

Date: January 4, 2021

From: Lloyd Bie, P. Eng.
Director, Transportation

File: 01-0100-20-
RCYC1/2020-Vol 01

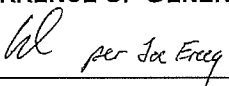

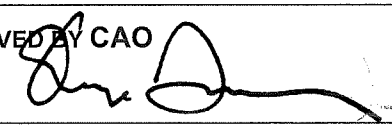
Re: Richmond Active Transportation Committee – Proposed 2021 Initiatives

Staff Recommendation

1. That the proposed 2021 initiatives of the Richmond Active Transportation Committee, as outlined in the staff report titled “Richmond Active Transportation Committee - Proposed 2021 Initiatives” dated January 4, 2021 from the Director, Transportation, be endorsed; and
2. That a copy of the report titled “Richmond Active Transportation Committee – Proposed 2021 Initiatives” be forwarded to the Richmond Council-School Board Liaison Committee for information.

Lloyd Bie, P. Eng.
Director, Transportation
(604-276-4131)

Att. 1

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Parks Services	<input checked="" type="checkbox"/>	 per Joe Enay
Recreation Services	<input checked="" type="checkbox"/>	
Engineering	<input checked="" type="checkbox"/>	
SENIOR STAFF REPORT REVIEW	INITIALS: 	APPROVED BY CAO 

Staff Report

Origin

The Richmond Community Cycling Committee was formed in 1993 to allow City staff to work in partnership with the community to promote commuter and recreational cycling in Richmond. In 2013, Council approved the evolution of the Committee into the Richmond Active Transportation Committee (RATC) to reflect a broader mandate that includes skateboarding, in-line skating and low-speed scooters. The Committee provides input and feedback to the City on infrastructure projects designed for these modes and undertakes various activities in co-operation with the City that encourage, educate and raise awareness of active transportation. Committee members are local residents and/or employees who reflect a diverse range of ages and cycling skills. Several members, including a co-Chair, are also members of HUB Cycling's local Richmond-YVR Committee, which enables direct and on-going communication with the agency.¹

This report reviews the 2020 activities of the RATC and identifies a number of initiatives for 2021 that would support its mandate to provide input and advice to the City on issues in the planning, development, improvement, and promotion of an active transportation network that supports a greater number of trips by cycling, walking and rolling. The Committee's activities contribute towards the City's sustainability goals articulated in Richmond's *Official Community Plan* and *Community Energy and Emissions Plan* to reduce greenhouse gas emissions by prioritizing and funding walking, rolling and cycling infrastructure. The Committee's initiatives also support the goals and actions of the City's *Community Wellness Strategy* and, in turn, Richmond's long-term health, liveability and vibrancy.

This report supports Council's Strategic Plan 2018-2022 Strategy #4 An Active and Thriving Richmond:

An active and thriving community characterized by diverse social and wellness programs, services and spaces that foster health and well-being for all.

- 4.1 *Robust, affordable, and accessible sport, recreation, wellness and social programs for people of all ages and abilities.*
- 4.2 *Ensure infrastructure meets changing community needs, current trends and best practices.*

This report supports Council's Strategic Plan 2018-2022 Strategy #6 Strategic and Well-Planned Growth:

Leadership in effective and sustainable growth that supports Richmond's physical and social needs.

- 6.3 *Build on transportation and active mobility networks.*

¹ HUB Cycling is a regional non-profit organization that works to improve cycling conditions in Metro Vancouver.

Analysis

While planned in-person events were curtailed in 2020 due to the COVID-19 pandemic, the Committee participated in a number of activities that contributed to enhanced cycling and rolling opportunities, and increased education and awareness of active transportation in Richmond.

Planning, Expansion and Improvement of Active Transportation Network in 2020

The City continued to improve Richmond's active transportation network in 2020, which now comprises 79.4 km of on- and off-street bike and rolling routes (excluding dyke trails). The Committee provided feedback on the planning, design, construction, and/or improvement of the following facilities.

Construction of New Facilities

- *River Parkway (Gilbert Road-Cambie Road) and Cambie Road (River Road-No. 3 Road):* Construction of the new River Parkway, scheduled to open in early 2021, includes protected bike lanes (Figure 1). As part of the same project, a two-way off-street multi-use pathway (MUP) was constructed on the south side of Cambie Road, which provides seamless connectivity between the Middle Arm Greenway, the bike lanes on River Parkway, the northbound bike lane on No. 3 Road, and the Aberdeen Canada Line Station (Figure 2).



Figure 1: River Parkway Bike Lanes



Figure 2: Cambie Road MUP

- *Odlin Road Neighbourhood Bike Route:* Completion of an off-street MUP between the western terminus of Odlin Road and Brown Road including pedestrian lighting (Figure 3). The completed MUP is part of the overall planned bike route along Odlin Road west to Hazelbridge Way at Browngate Road, which will be completed in 2021 with the installation of pavement markings and signage. A planned western extension along Browngate Road to No. 3 Road and the Canada Line Aberdeen Station is proposed as part of the 2021 Capital Budget, which is subject to Council approval.



Figure 3: Odlin Road MUP



Figure 4: Sexsmith Road MUP

- Sexsmith Road (Beckwith Road-Charles Street): Completion of Phase 1 of an off-street MUP with pedestrian lighting that provides safe walking and cycling access to/from the Canada Line Bridgeport Station and Exchange (Figure 4). As Phase 2, the MUP will be extended along the north side of Charles Street to the pedestrian-cycling entrance to the station area. Construction of Phase 2 is anticipated in 2021.

Improvement of Existing Facilities

- Quick Fixes: The City participated in an annual regional initiative organized by HUB Cycling to address minor maintenance and improvement measures identified by the local Richmond-YVR HUB Committee. The quick fix items included new pavement markings such as elephant's feet (intermittent squares parallel to crosswalk markings that indicate cyclists are permitted to ride in the crosswalk) and wayfinding signage (Figure 5).
- Network Screening Study: Implementation of the short-term recommended improvements arising from the City's review of the top 20 collision prone intersections included measures specifically for cyclists such as the addition of green paint at conflict points (Figure 6).

Figure 5: No. 2 Road MUP
Wayfinding SignageFigure 6: Westbound No. 5 Road
approaching Westminster Hwy

Design of Planned Facilities

The Committee provided feedback on the progress of design for the following planned active transportation improvement projects.

- Granville Avenue-Cooney Road: Widening and enhanced protection of the westbound bike lane on Granville Avenue as part of intersection improvements to remove the channelized right-turn at the northwest corner. Construction has been approved as part of the 2020 Capital Budget.

Design funding for the following four cycling improvements was approved as part of the 2020 Capital Budget. Construction funding will be considered as part of future capital budget processes, which are subject to Council approval.

- No. 2 Road (Steveston Highway-Williams Road): Extension of the existing MUP on No. 2 Road south of Steveston Highway north to Williams Road via a two-way off-street paved pathway on the east side.
- River Road (McCallan Road-No. 2 Road): New two-way off-street paved MUP on the south side of River Road that will connect the northern end of the Railway Greenway with the western end of the Middle Arm Greenway.
- Steveston Highway (No. 2 Road-Railway Avenue): Extension of the committed two-way off-street paved MUP on the south side of Steveston Highway (Shell Road-No. 2 Road) west to connect to the Railway Greenway.
- Shell Road (Highway 99 Overpass-River Road): Extension of the existing MUP on Shell Road south of the Highway 99 overpass north to River Road via a two-way off-street paved pathway on the east side (Highway 99 overpass-Caithcart Road) and west side (Caithcart Road-River Road).

Promotion of Active Transportation Network in 2020

The Committee participated in the following activities in 2020 to promote cycling and other active transportation modes in Richmond.

- Bike to Work Week (May and September 2020): The May 2020 event of this region-wide annual initiative organized by HUB Cycling was held completely on-line due to the COVID-19 pandemic. In September 2020, the Committee worked with HUB Cycling to support two “Knowledge Hubs” in Richmond (City Hall and Thompson Community Centre) that were carefully supervised to comply with existing public health guidelines (Figure 7).

Collectively, a total of 321 riders who reside in Richmond registered on-line for both events including 110 new bike commuters (30% decrease from 2019, likely due to many residents working from home). These riders collectively logged 1,166 trips for a total distance of nearly 20,000 km thereby avoiding the emission of 4.3 tonnes of greenhouse gases.

- 20th Annual “Island City, by Bike” Tour: Originally scheduled for June 13, 2020, this annual event was cancelled due to the COVID-19 pandemic.



Figure 7: Knowledge HUB at Thompson Community Centre

- *HUB Cycling Bike to Shop Week (August 17-23, 2020)*: HUB Cycling stages this annual event to encourage people to ride to and shop at local businesses. Due to the COVID-19 pandemic, a one-week online behaviour campaign was presented followed by a Shop Local Challenge that encouraged 800 people to cycle directly to local businesses in Vancouver and Richmond. The social media campaign specifically highlighted participating organizations including the Kwantlen Street Farmers Market and restaurants in Steveston.

Active Transportation Education in 2020

The City provides funding to HUB Cycling to operate cycling education courses for the community and elementary school students. The City's support for cycling education generates multiple benefits including increased safety, encouragement of a life-long healthy activity and sustainable mode of travel, and potential to reduce traffic congestion around schools as more students choose to ride a bike, all of which align with the City's Official Community Plan goals. The City also leverages additional funding support from TransLink to expand the number of elementary school students who received on-bike training.

- *Bike to School Education for Students*: Beginning in 2020, the City planned to provide Ride the Road (RtR) cycling education courses for all Grade 6 and 7 public school students over a two-year period (i.e., 19 schools per year). However, no courses were held in Spring 2020 due to the COVID-19 pandemic.

In Fall 2020 with revised delivery methods to comply with existing public health guidelines, a total of 354 students from four elementary schools learned the rules and responsibilities of riding on city streets and bike paths, and received hands-on practice with fundamental cycling skills on school grounds and local neighbourhood streets in co-operation with Richmond School District

Table 1: Cycling Education Courses

Elementary School	# of Classes	# of Students	Grades
Maple Lane	3	354	5-7
James Gilmore	3		5-7
Westwind	4		6-7
Tomekichi Homma	4		6-7



"It was a fabulous program and we will definitely be having them back if possible"
- Sarah Bearisto, teacher at Maple Lane Elementary, speaking about RtR blended program



"I think I will ride my bike more often because I am more confident riding on the road and I got to learn to take care on my bike. Thanks HUB!!!!"
- Grade 6 student, RtR recipient in Richmond

Figure 8: Feedback on Ride the Road Courses

(Figure 8, Table 1). HUB's fleet of bikes includes a range of specialized adaptive bikes that are available to children with physical and cognitive differences to help achieve a goal of 100% participation.

- *Cycling Education Courses for Adults*: Originally planned courses for new immigrants to enable them to build their cycling skills and gain confidence riding on city streets were cancelled due to the COVID-19 pandemic. Similarly, basic bike maintenance courses were also cancelled.

Proposed Active Transportation Network Initiatives in 2021

The Committee will provide input at the earliest conceptual stage on the prioritization, planning, design, and implementation of the following projects that expand and/or improve the network of infrastructure that can be used by active transportation modes.

- *Update of Cycling Network Plan*: Development of an updated city-wide cycling master plan that supports long-term mobility objectives, reflects best practices in cycling infrastructure design and current community needs, and includes a prioritized implementation strategy. This work is anticipated to be completed by the third quarter of 2021.
- *Planned Active Transportation Network Expansion*: Planned City capital projects include further progress on the Crosstown and Midtown Neighbourhood Bike Routes. The implementation of several off-street paved multi-use pathways includes Phase 1 of Steveston Highway (Shell Road-Mortfield Gate) and Charles Street (Sexsmith Road-Bridgeport Canada Line Station). In addition, the design of cycling facilities will be initiated along the following corridors: Browngate Road (No. 3 Road-Hazelbridge Way) and Lansdowne Road (Gilbert Road-Pearson Way). See Attachment 1 for project locations.
- *Active Transportation Network Spot Improvements*: Potential projects include localized improvements to existing on-street cycling facilities such as improved pavement markings (e.g., green painted bike lanes at potential conflict areas), additional signage, new ramps to facilitate access to off-street pathways, and installation of delineators to prevent motorists from encroaching into bike lanes.
- *Planned Park, Road and Development Projects*: The Committee will review additional City and external agency projects that impact existing or would incorporate new active transportation infrastructure as part of the overall project such as the George Massey Tunnel Crossing Improvement.

Project costs associated with the expansion and improvement of the active transportation network for 2021 are accommodated in the City's annual capital budget and considered as part of the annual budget review process. Some of these projects are eligible for financial contribution from external agencies (e.g., ICBC and TransLink). If successful, staff will report back on the amount of financial contribution obtained from these external agencies through the annual staff reports on ICBC and TransLink cost-sharing programs respectively.

Proposed Education and Promotion of Active Transportation in 2021

The Committee will encourage and promote active transportation as sustainable travel modes that also have significant health benefits via the following activities, which will be funded from existing departmental budgets.

- Potential Public E-Scooter Share Pilot Program: Amendments to the Motor Vehicle Act approved in October 2019 give the Province the ability to establish a regulatory framework to allow for pilot projects in communities to test new personal motorized mobility technologies such as e-scooters. In January 2020, the Ministry of Transportation and Infrastructure (the Ministry) released its Pilot Project Proposal Package for communities interested in establishing pilot projects. Subsequently, the Committee provided input on the City's proposal for a pilot e-scooter share program that was submitted to the Ministry in March 2020. Once the Province has finalized its regulatory framework, anticipated in the first quarter of 2021, staff will present a report seeking Council endorsement of a pilot e-scooter share program. The Committee will continue to provide input on the City's potential consideration of a pilot project throughout this process.
- Bicycle Education for Students and Adults: The Committee will support the contractor, the Richmond School District and a variety of community agencies in the expansion of cycling education courses to all Grade 6 and 7 elementary school students (over a two-year period) and, pending public health protocols, similar courses for adults including seniors and new immigrants.
- 20th "Island City, by Bike" Tour: Pending public health orders and guidelines, assist in the planning, promotion and staging of the twentieth bike tour of Richmond, which is set for Sunday, June 13th at the Minoru Centre for Active Living. Both the long and short routes will seek to feature recent improvements to the active transportation network to raise community awareness of the neighbourhood facilities that support walking, cycling and rolling activities.
- Bike to Work and School: Assist in the planning, promotion and staging of this region-wide event during Spring and Fall 2021, which includes the provision of Knowledge Hubs in Richmond for cyclists.
- Promotion of Active Transportation Network: Continue to participate in City events related to health and transportation to raise the awareness of new active transportation facilities both locally and regionally. Both the Committee and HUB Cycling will be invited to attend the annual Public Works Open House event in May 2021 should it proceed. The Committee will also continue to update, revise and enhance active transportation information on the City's website and Facebook site.

Financial Impact

None.

Conclusion

The Richmond Active Transportation Committee continues to build its diversity of users' experience to support its broader mandate that includes other rolling transportation modes. The Committee's proposed 2021 initiatives would continue efforts to further encourage greater and safer use of active transportation modes in Richmond, which in turn will support progress towards meeting the City's target for the reduction of greenhouse gas emissions as well as the travel mode share targets of the City's *Official Community Plan*. Active transportation also promotes and/or increases physical activity and overall health and wellness outcomes in line with the City's *Community Wellness Strategy*.

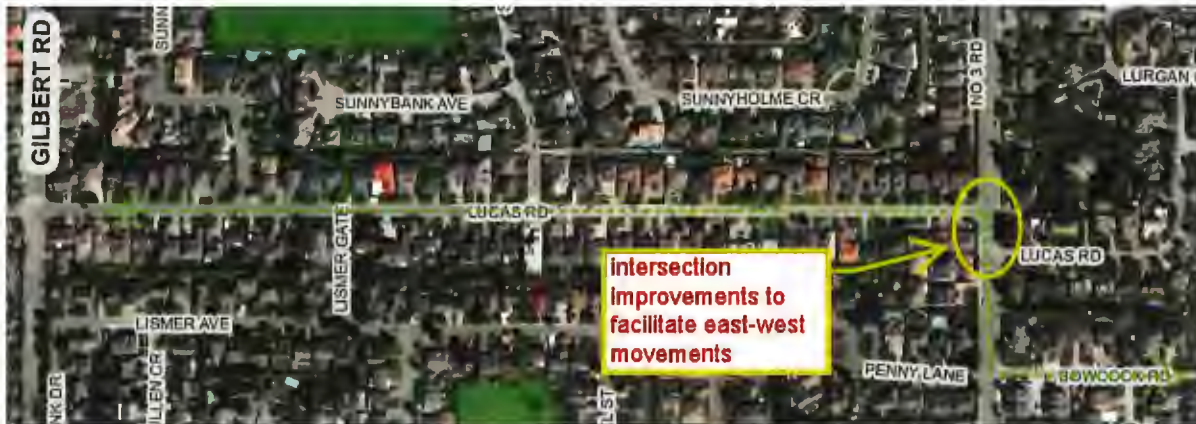
As the Richmond School District is an essential partner in the delivery of the cycling education courses for students, staff recommend that the report be forwarded to the Richmond Council-School Board Liaison Committee for information.



Joan Caravan
Transportation Planner
(Staff Liaison to Richmond Active Transportation Committee)
(604-276-4035)

Att. 1: Location of Planned Active Transportation Network Projects for 2021

Location of Planned Active Transportation Network Projects for 2021



Crosstown Neighbourhood Link: Phase 3



Midtown Neighbourhood Link: Phase 2



Charles Street (Sexsmith Road-Bridgeport Stn):
Multi-use Path on North Side

Location of Planned Active Transportation Network Projects for 2021



Steveston Highway (Mortfield Gate-Shell Road): Phase 1 - Multi-Use Pathway



Lansdowne Road (Gilbert Road-Pearson Way): Multi-Use Pathway (MUP)



Browngate Road (Hazelbridge Way-No. 3 Road): Two-Way Protected Cycle Track on South Side



City of Richmond

Report to Committee

To: Public Works and Transportation Committee
From: Lloyd Bie, P.Eng.
Director, Transportation
Date: January 4, 2021
File: 01-0100-30-TSAD1-
01/2021-Vol 01
Re: Traffic Safety Advisory Committee - Proposed 2021 Initiatives

Staff Recommendation

1. That the proposed 2021 initiatives for the Traffic Safety Advisory Committee, as outlined in the staff report titled "Traffic Safety Advisory Committee - Proposed 2021 Initiatives" dated January 4, 2021 from the Director, Transportation, be endorsed; and
2. That a copy of the staff report titled "Traffic Safety Advisory Committee - Proposed 2021 Initiatives" be forwarded to the Richmond Council-School Board Liaison Committee for information.

Lloyd Bie, P.Eng.
Director, Transportation
(604-276-4131)

Att. 1

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Community Bylaws	<input checked="" type="checkbox"/>	
Fire Rescue	<input checked="" type="checkbox"/>	
RCMP	<input checked="" type="checkbox"/>	
SENIOR STAFF REPORT REVIEW	INITIALS: 	APPROVED BY CAO

Staff Report

Origin

Council endorsed the establishment of the Traffic Safety Advisory Committee (TSAC) in 1997 to create a co-operative partnership between City staff, community groups and other agencies that seek to enhance traffic and pedestrian safety in Richmond.¹ The Committee provides input and feedback on a wide range of traffic safety issues such as school zone and adjacent roadway concerns, neighbourhood traffic calming requests and traffic-related education initiatives. This report summarizes the Committee's activities in 2020 and identifies proposed initiatives for 2021.

This report supports Council's Strategic Plan 2018-2022 Strategy #1 A Safe and Resilient City:

Enhance and protect the safety and well-being of Richmond.

1.1 Enhance safety services and strategies to meet community needs.

This report supports Council's Strategic Plan 2018-2022 Strategy #6 Strategic and Well-Planned Growth:

Leadership in effective and sustainable growth that supports Richmond's physical and social needs.

6.3 Build on transportation and active mobility networks.

Analysis

Road and School Zone Safety Initiatives in 2020

While the Committee did not meet in 2020, the member agencies collectively participated in the following measures aimed at improving the safety of Richmond roads for all users, particularly in school zones.

- In-Street Markers in School Zones:
Installation of in-street signs in the following two school zones to advise motorists of the reduced speed limit (Figure 1):
 1. Lynas Lane at Blair Elementary School
 2. General Currie Road at General Currie Elementary School

The in-street placement of the signage effectively narrows the roadway and



Figure 1: In-Street Marker on Lynas Lane

¹ TSAC has representation from the following groups: Insurance Corporation of BC (ICBC), Richmond School District, Richmond RCMP, Richmond Fire-Rescue, Richmond District Parents Association, Vancouver Coastal Health, and the City's Transportation and Community Bylaws Departments.

provides additional notification to motorists, thereby modifying driver behaviour and encouraging drivers to slow down.

- *School Zone Traffic Safety*: Traffic safety concerns at various schools across the city were reviewed and addressed. These concerns were typically related to motorist speeding and illegal parking/stopping in school zones, driver behaviour within school sites (e.g., prohibited turns when exiting parking lots) and pedestrian crossing facilities near schools.

The issues were addressed by a variety of measures, each tailored to the specific site conditions at the school. For example, following a request from a local resident, an improved pick up/drop off area was established on Forsyth Crescent at Thompson Elementary School and Gibbons Park (Figure 2).



Figure 2: Pick up/Drop off Area at Thompson Elementary School and Gibbons Park

Community Bylaws and Richmond RCMP regularly provide coordinated enforcement in school zones. Other typical on-going measures include the deployment of Speed Watch volunteers and clearing of vegetation to improve sightlines at crosswalks.

- *Community Requests for Traffic Calming*: Assessment of and consultation with local residents regarding potential traffic calming measures to address speed-related concerns followed by implementation where warranted and supported. Through this process, speed humps were installed on McLean Avenue to enhance road safety around the neighbourhood park. Traffic studies were consultation was completed in 2020 for the planned implementation of speed humps in Spring 2021 on Monteith Road (two speed humps) and Shell Road East south of Williams Road (three speed humps, two of which will be raised crosswalks).
- *Traffic and Signal Operations*: Traffic cameras were added at 12 signalized intersections (for a total of 95 intersections) to optimize traffic operations and provide real-time photos to the public via the City's website. Ten signalized intersections were improved to include overhead LED street name signs to enhance intersection visibility. A further 10 intersections were upgraded with UPS (uninterrupted power supply) to provide continuous power in the event of an outage. The Blundell Road-No. 5 Road intersection was upgraded to include left-turn arrows to improve traffic operations and traffic safety.
- *Temporary Road Changes in Steveston Village*: Implemented in Summer 2020 to provide increased space for physical distancing per public health guidelines related to the COVID-19 pandemic, with the addition of supplementary signage, electronic display boards, wayfinding kiosks, and planters.

- Speed Reader Boards: Temporary installation in Summer 2020 of three speed reader boards on No. 1 Road (southbound), Bayview Street (westbound) and First Avenue (northbound) to enhance road safety within Steveston Village, which is a 30 km/h zone (Figure 3). The devices use radar to measure motorists' speeds and provide feedback to drivers of the speed they are travelling relative to the 30 km/h speed limit, which encourages driver compliance. The devices also record traffic volumes and speeds that in turn help inform Richmond RCMP enforcement efforts.
- Network Screening Study: Initiated implementation of the recommended short-term improvements to improve traffic safety at the top 20 collision prone intersections with substantial completion anticipated in the first quarter of 2021.



Figure 3: Speed Reader Board on First Avenue

Traffic and Pedestrian Safety Campaigns in 2020

The Committee participated in the following ICBC- and Richmond RCMP-led road and pedestrian safety campaigns in 2020, which were reduced in number vis-à-vis 2019 due to the COVID-19 pandemic. Health protocols were followed including completion of a screening form by volunteers and RCMP officers to confirm fitness for work, physical distancing, and the use of masks, hand sanitizer, and gloves.

- Pedestrian Safety: In October, 16 Richmond RCMP officers and 18 community police volunteers conducted a total of four pedestrian safety education and enforcement campaigns that involved the distribution of 4,200 reflectors and proactive engagement with pedestrians (Figure 4). Tongs and a tray were used for handing out the reflectors. Locations focused on Canada Line Stations (Richmond-Brighouse, Bridgeport and Lansdowne) and the Minoru Centre for Active Living.



Figure 4: Pedestrian Safety Campaign

- Distracted Driving: As part of this campaign that is conducted year-round, Richmond RCMP officers and community police volunteers conducted two "Cell Watch" blitz days in March and two in September that included a total of six deployments (comprising 27 RCMP officers and 33 volunteers) who collectively checked 19,736 motorists. Targeted locations in March included Steveston Highway (Shell Road-Highway 99), Alderbridge Way-Hazelbridge Way, Garden City Road-Cook Road, and No. 3 Road-Lansdowne Road. Locations in September

featured No. 3 Road in the City Centre (at Ackroyd Road and at Lansdowne Road). A total of 44 violation tickets were issued.

Proposed Traffic Safety Activities for 2021

The Committee will resume meeting online in January 2021. In addition to developing and providing input on corrective measures to address identified traffic safety concerns, the Committee will undertake a number of proactive initiatives to enhance traffic safety in 2021.

- School Zone Traffic Safety: Review and provide comment on the development of a standard toolkit of engineering measures to address traffic safety-related issues within school zones and adjacent roadways while also improving consistency in the application of measures across the city. The Committee will also provide on-going review and improvement of traffic and pedestrian safety in school zones through improving vehicle parking and circulation layout at schools, supporting the enforcement of school zone traffic violations, and introducing new walkways and crosswalks as well as upgrading crosswalks to improve pedestrian safety.
- Discouraging Vehicle Speeding: Continue to jointly work on initiatives to curb vehicle speeding in the community. Pending Council approval to lower the speed limit to 30 km/h on Ferguson Road, a speed reader board will be installed in the first quarter of 2021 for westbound traffic on this street to support these efforts and complement Richmond RCMP enforcement activities.
- Network Screening Study: Review and provide comment on the recommended medium- and long-term improvement measures to enhance road safety at the top 20 collision prone intersections in Richmond (Attachment 1).
- Pedestrian and Traffic Safety Projects and Campaigns: Continue to support and participate in on-going multi-agency efforts to increase the level of pedestrian and traffic safety, such as the annual campaigns held by ICBC and Richmond RCMP in various locations.
- Traffic Calming: The assessment, community consultation, implementation, and monitoring of road safety and traffic calming measures where warranted in local neighbourhoods, together with consultation with Richmond RCMP and Richmond Fire-Rescue prior to the implementation of any traffic calming measures.


Costs associated with the implementation of road and traffic safety improvements are normally accommodated in the City's annual capital budget and considered as part of the annual budget review process. Some of these projects are eligible for financial contribution from external agencies (e.g., ICBC and TransLink). If successful, staff will report back on the amount of financial contribution obtained from these external agencies through the annual staff reports on ICBC and TransLink cost-sharing programs respectively.

Financial Impact

None.

Conclusion

The Traffic Safety Advisory Committee is one of the few multi-agency forums in the region dedicated to enhancing pedestrian and traffic safety within its home municipality. Since its inception in 1997, the Committee has provided input on and support of various traffic safety improvements and programs and initiated a range of successful measures encompassing engineering, education and enforcement activities. Staff recommend that the proposed 2021 initiatives of the Committee be endorsed and this staff report forwarded to the Richmond Council-School Board Liaison Committee for information.



Bill Dhaliwal
Supervisor, Traffic Operations
(604-276-4210)



Joan Caravan
Transportation Planner
(604-276-4035)

JC:lce

Att. 1: Top 20 Collision-Prone Intersections in Richmond

Top 20 Collision-Prone Intersections in Richmond





City of Richmond

Report to Committee

To: Public Works and Transportation Committee
From: Milton Chan, P.Eng
Director, Engineering
Re: Proposed 2021 Paving Program




Date: January 18, 2021
File:

Staff Recommendation

That the staff report titled, "Proposed 2021 Paving Program," dated January 18, 2021, from the Director, Engineering be received for information.

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

Att. 3

REPORT CONCURRENCE		
ROUTED TO: Roads & Construction	CONCURRENCE <input checked="" type="checkbox"/>	CONCURRENCE OF GENERAL MANAGER 
SENIOR STAFF REPORT REVIEW	INITIALS: 	APPROVED BY CAO 

Staff Report

Origin

This report supports Council's Strategic Plan 2018-2022 Strategy #1 A Safe and Resilient City:

Enhance and protect the safety and well-being of Richmond.

1.2 Future-proof and maintain city infrastructure to keep the community safe.

As in previous years, staff are presenting the annual paving program report for information purposes.

Background

The paving program is required to maintain the City's road network to current operating levels as well as reduce the need for costly repairs. Staff have developed a prioritized list of locations that will be included in the 2021 Paving Program.

Analysis

The scope of work includes the milling and paving of roads and asphalt surfaces in priority order as identified by the City's Pavement Management System and staff. This also includes preparatory work such as curb and gutter repairs. The Pavement Management System software takes into account items such as the age, structure and current condition of the road. Updated pavement deflection data has been gathered on an assortment of road types (arterial roads, the TransLink Major Road Network, recently resurfaced segments, and sections with substantial surface cracking) to ensure that the Pavement Management System model results are accurate. The deflection data has been analyzed and included in the updated model.

Included in Attachment 1 is a list of the primary paving sites included in the 2021 Paving Program. As with past years, it is possible that identified paving locations may not be completed due to conflict with development projects that are not known at this time. Should the seasonal paving restrictions permit, any deferred primary paving locations would be replaced with the secondary paving locations. These secondary locations are listed in Attachment 2. Two maps of the proposed paving sites (Richmond West and Richmond East) are included in Attachment 3.

The proposed 2021 Paving Program includes approximately 17.4 lane kilometers of arterial and local roads. The anticipated cost of asphalt paving is approximately \$285 per meter of lane.

In most years, some paving work is required to address unforeseen road condition issues that arise during the year, such as settling utility trenches. These are added to the paving program throughout the course of the year. Since the specific locations are not known at this time, they are not shown on the attached location maps.

Procurement

Due to the financial uncertainties caused by COVID-19, procurement for the 2021 Paving Program will commence after approval of the 2021 Consolidated 5 Year Financial Plan (2021-2025) by Council.

Sustainability

The 2021 Paving Program also includes an amendment to the City's standard tendering practices that reflects upon the City's environmental initiatives and allows for the use of recycled asphalt. The successful bidder will be encouraged to employ sustainable methodologies, practices and materials that would assist in reducing harmful emissions, in direct alignment with the City's sustainability goals. The tender will also note that the contract award is subject to approval of the 2021 Capital Budget by Council.

As a part of Richmond's High Reclaimed Asphalt Pavement Pilot Project in 2020, a four lane wide, 800 meter long stretch of pavement was placed along the 7000 block of No. 5 Road that is made up of 40 percent reclaimed asphalt pavement (RAP). The performance of the RAP on this higher traffic volume arterial road is being monitored, and staff will review a lower traffic density local road for its further application.

TransLink Major Road Network (MRN) Funding

Due to the financial difficulties TransLink experienced in 2020, the amount of funding provided to the City under the 2020 Major Road Network Operations, Maintenance and Rehabilitation payment stream was reduced from \$3,739,300 to \$545,000. This funding fully supports the MRN Asphalt Re-Paving Program as well as maintenance of the MRN road network and traffic signals. As detailed in a May 4, 2020 Memorandum to Mayor and Councillors, this was addressed by using the MRN Provision to fund this 2020 revenue shortfall.

Based on the latest information staff have received from TransLink, the 2021 Major Road Network Operations, Maintenance and Rehabilitation funding will be available in full, in part due to the assistance provided by the Provincial and Federal governments. Staff will continue to liaise with TransLink on the status of this funding in 2021 and future years.

Financial Impact

Capital submissions for the 2021 Paving Program are included as part of the 2021 Consolidated 5 Year Financial Plan (2021-2025) as follows:

<u>Proposed Funding</u>	<u>Amount (\$)</u>
2021 Annual Asphalt Re-Paving Program – MRN	\$ 1,589,211
2021 Annual Asphalt Re-Paving Program – Non-MRN	\$ 3,344,160
Total Proposed Funding	\$ 4,933,371

Should Council approve the 2021 Consolidated 5 Year Financial Plan (2021-2025), procurement of the 2021 Paving Program will follow.

Conclusion

Staff have prepared a list of priority locations for the 2021 Paving Program. Procurement and commencement of paving at these locations will occur once the 2021 Consolidated 5 Year Financial Plan (2021-2025) is approved by Council.



Eric Sparolin, P. Eng.
Manager,
Engineering Design & Construction
(604-247-4915)



Wasim Memon, C.E.T.
Supervisor – Inspections
(604-247-4189)

ES:rd

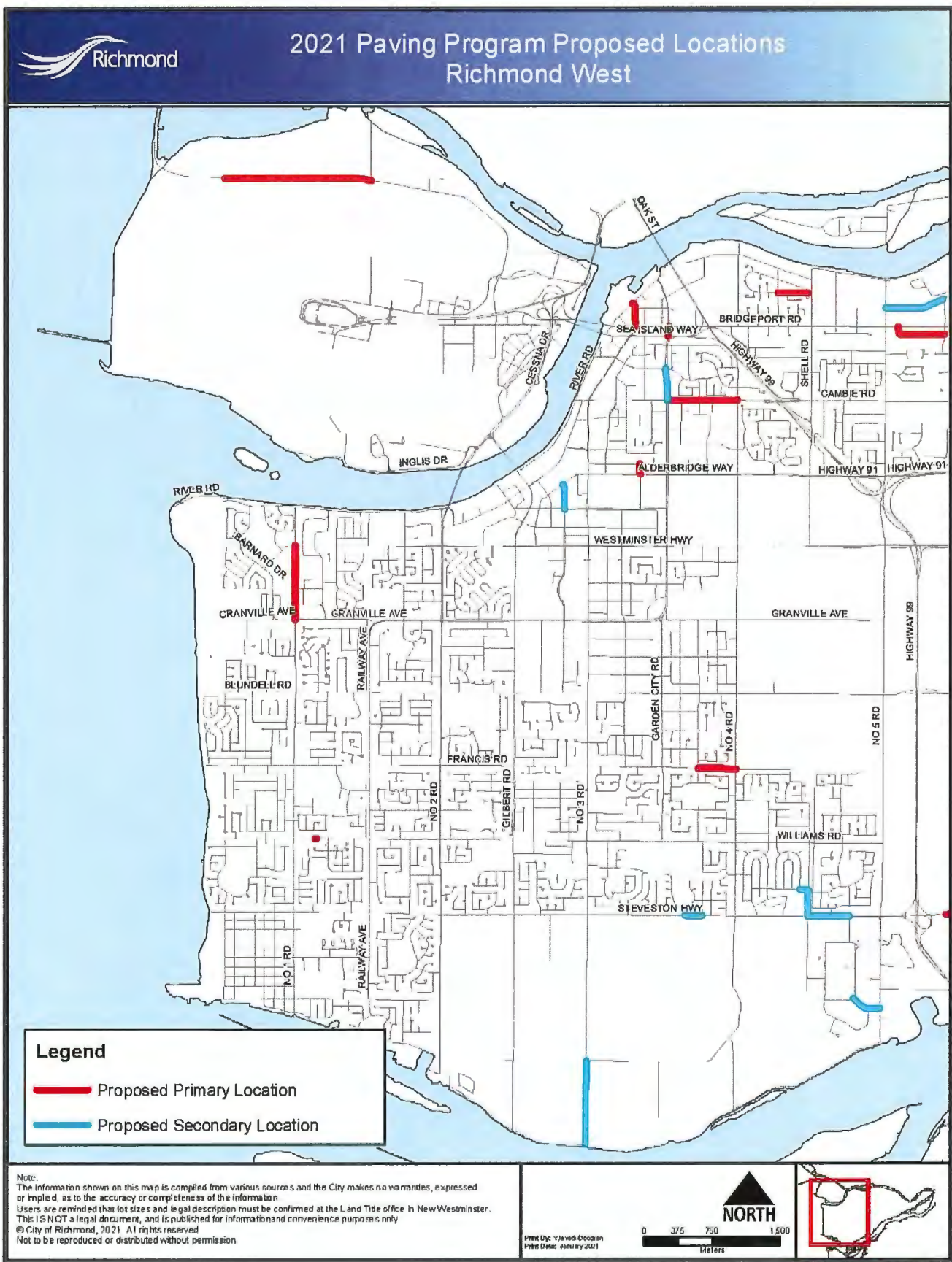
- Att. 1: 2021 Paving Program – Primary Locations
2: 2021 Paving Program – Secondary Locations
3: 2021 Paving Program Proposed Locations – Richmond West and Richmond East

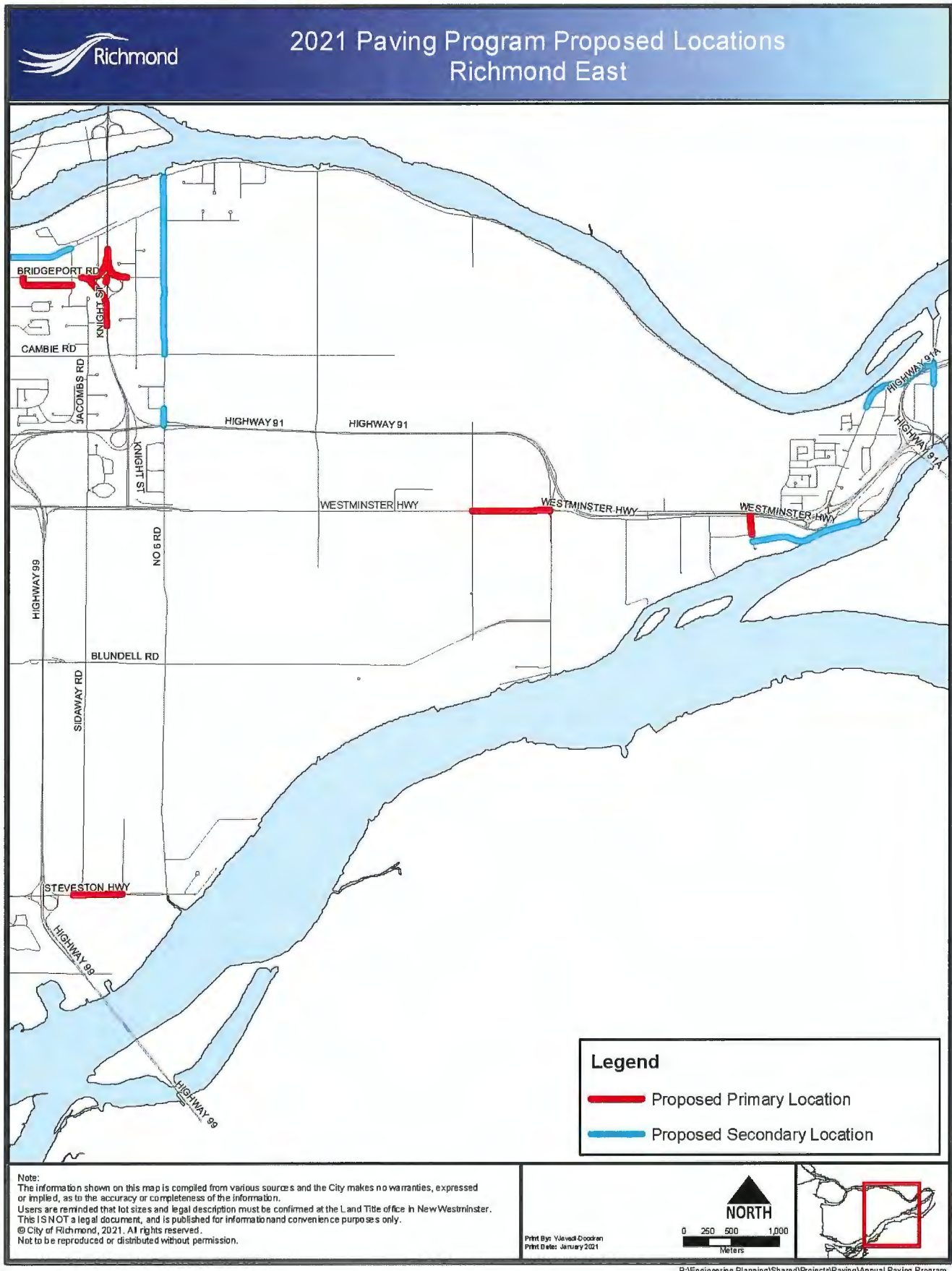
2021 PAVING PROGRAM – PRIMARY LOCATIONS

Location	Road Type
2000 Block Ferguson Road	Non-MRN
4151 Williams Road	Non-MRN
Bridgeport Road to Knight Street (East - North Loop)	MRN
Bridgeport Road to Knight Street (East - South Loop)	MRN
Cambie Road (Garden City Road to No. 4 Road)	MRN
Finlayson Drive (Gagnon Place to McLennan Avenue)	Non-MRN
Francis Road (Ash Street to No. 4 Rd)	Non-MRN
Fraserwood Place (Westminster Highway to Gordon Way)	Non-MRN
Great Canadian Way (Sea Island Way to Bridgeport Road)	Non – MRN
Knight Street East/South (Bridge Deck to 50m south)	MRN
Knight Street to Bridgeport Road (North - East Off-Ramp)	MRN
Kwantlen Street (Alderbridge Way to Alexandra Road)	Non-MRN
No. 1 Road (Westminster Highway to Granville Avenue)	Non – MRN
No. 3 Road (Bridgeport Road to River Road)	Non-MRN
Steveston Highway (Highway 99 Off-Ramp to Palmberg Road)	MRN
Vickers Way (Bridgeport Road to Sweden Way)	Non-MRN
Westminster Highway (No. 8 Road to Nelson Road)	Non-MRN

2021 PAVING PROGRAM – SECONDARY LOCATIONS

Location	Road Type
Boundary Road (Westminster Highway to Thompson Gate)	Non-MRN
Fraserwood Way (Fraserwood Place to Dyke Road)	Non-MRN
Garden City Road (Cambie Road to Capstan Way)	Non-MRN
Machrina Way (No. 5 Road to Horseshoe Way)	Non-MRN
Minoru Boulevard (Lansdowne Road to Alderbridge Way)	Non-MRN
No. 3 Road (Finn Road to Dyke Road)	Non-MRN
No. 6 Road (Bridgeport Road to River Road)	Non-MRN
No. 6 Road (Cambie Road to Bridgeport Road)	MRN
No. 6 Road (Highway 91 underpass to Maycrest Way)	MRN
Shell Road (Steveston Highway to Maddocks Road) + Maddocks Road (Shell Road to Aintree Crescent)	Non-MRN
Steveston Highway (Mortfield Gate to Southdale Road)	MRN
Steveston Highway (Shell Road to Coppersmith Place)	MRN
Vulcan Way (No. 5 Road to Sweden Way)	Non-MRN
Westminster Highway (Willet Avenue to Boundary Road)	MRN







City of Richmond

Report to Committee

To: Public Works and Transportation Committee
From: Milton Chan, P.Eng
Director, Engineering
Re: South Dike Repairs – Gilbert Road Area




Date: January 19, 2021
File: 10-6050-01/2021-Vol
01

Staff Recommendation

That funding of \$500,000 from the Drainage Improvement Reserve Fund be approved to complete dike armouring repairs and debris removal along the south dike at Gilbert Road, and that the Consolidated 5 Year Financial Plan (2021-2025) be amended accordingly.

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

Att. 2

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

Staff Report

Origin

Demands on the City's flood protection infrastructure are most significant during storm season in the winter and freshet season in the spring. On January 13, 2021, the region experienced a king tide event together with a wind storm and storm surge. Although the dike structure was never at risk, the storm caused local damage to the rip-rap armouring along the south dike around Gilbert Road, and a significant amount of large logs and woody debris accumulated in the area (Attachments 1 and 2).

It is necessary to repair the dike rip-rap armouring and remove the debris ahead of the 2021 freshet season.

This report supports Council's Strategic Plan 2018-2022 Strategy #1 A Safe and Resilient City:

Enhance and protect the safety and well-being of Richmond.

1.2 Future-proof and maintain city infrastructure to keep the community safe.

Analysis

As detailed in the City's Flood Protection Management Strategy, Richmond is situated approximately 1.0 m above sea level and flood protection is integral to protecting the health, safety, and economic viability of the City. Richmond is protected from flooding by infrastructure that includes 49 km of dikes, 585 km of drainage pipes, 61 km of culverts, 165 km of watercourses and 39 drainage pump stations.

The south dike at Gilbert Road is a typical dike structure in Richmond, consisting of impermeable dike fill with rip-rap armouring for erosion protection. This section of dike was most recently re-armoured in spot locations in 2018.

As a result of the recent winter king tide and storm events, a build-up of debris, mostly consisting of large logs and branches, accumulated along the Gilbert Road south dike area. In combination with the storm and king tide events, the woody debris dislodged portions of the rip-rap armour.

It is necessary to repair the dike prior to the upcoming spring freshet. Further damage to the dike will occur if the dike is not re-armoured and debris removed, resulting in a reduced level of flood protection to the City.

The scope of work includes inspection, reinstatement of rip-rap armouring along a 300 m stretch, debris removal along a 750 m stretch, and any necessary permitting to complete the work.

In accordance with the City's Procurement Policy (Policy 3104), procurement would be excluded from normal purchasing practices as this is considered an unforeseeable urgent situation or emergency.

Should Council not approve the funding request of \$500,000, any incurred urgent/emergency works costs that cannot be accommodated within the 5 Year Financial Plan will be reported to Council and the 5 Year Financial Plan will be amended to include the expenditure and the funding source.

Financial Impact

The total estimated capital cost is \$500,000 for the reinstatement of erosion protection and debris removal along the south dike near Gilbert Road.

In order to commence this urgent work immediately, staff recommend that existing Council approved Drainage and Diking capital projects be utilized as a temporary funding source until the Consolidated 5 Year Financial Plan (2021-2025) can be amended with this additional \$500,000 to be funded by the Drainage Improvement Reserve Fund.

Conclusion

Through the capital improvements and investment in preventative maintenance programs, the City has developed the ability to proactively prepare and respond to flood related concerns. The City continues to make significant progress in advancing dike planning efforts and implementing infrastructure improvements to the City's flood protection system.



Eric Sparolin, P.Eng.
Manager, Engineering Design and Construction
(604-247-4915)

ES:es

- Att. 1: Dike Damage Location
2: Debris Build-up and Dike Armour Damage

Dike Damage Location



Debris Build-up and Dike Armour Damage

