



Public Works and Transportation Committee

Anderson Room, City Hall
6911 No. 3 Road

Tuesday, March 17, 2020
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 February 19, 2020.*



NEXT COMMITTEE MEETING DATE

April 21, 2020, (tentative date) at 4:00 p.m. in the Anderson Room

PLANNING AND DEVELOPMENT DIVISION

1. **QUADRICYCLE BUSINESS – PROPOSED BYLAW AMENDMENTS TO PERMIT PERMANENT OPERATION**

(File Ref. No. 12-8275-06) (REDMS No. 6400125 v. 5)

PWT-9

See Page PWT-9 for full report

Designated Speaker: Sonali Hingorani

STAFF RECOMMENDATION

- (1) *That Business Licence Bylaw No. 7360, Amendment Bylaw No. 10145, to add a definition of a quadricycle operation, be introduced and given first, second and third reading;*

- (2) *That Vehicle For Hire Bylaw No. 6900, Amendment Bylaw No. 10128, to add regulations and requirements for the operation of a quadricycle, be introduced and given first, second and third reading; and*
- (3) *That Consolidated Fees Bylaw No. 8636, Amendment Bylaw No. 10143, which quantifies the Vehicle for Hire business fee for a quadricycle operation, be introduced and given first, second and third reading.*



2. **ICBC-CITY OF RICHMOND ROAD IMPROVEMENT PROGRAM – 2020 UPDATE**

(File Ref. No. 01-0150-20-ICBC1-01) (REDMS No. 6372030 v. 3)

PWT-23

See Page PWT-23 for full report

Designated Speaker: Fred Lin

STAFF RECOMMENDATION

- (1) *That the list of proposed road safety improvement projects, as described in Attachment 2 of the staff report titled “ICBC-City of Richmond Road Improvement Program – 2020 Update,” dated January 23, 2020 from the Director, Transportation, be endorsed for submission to the ICBC 2020 Road Improvement Program for consideration of cost-share funding; and*
- (2) *That should the above applications be successful, the Chief Administrative Officer and General Manager, Planning and Development be authorized to execute the cost-share agreements on behalf of the City, and that the Consolidated 5 Year Financial Plan (2020-2024) be amended accordingly.*



ENGINEERING AND PUBLIC WORKS DIVISION

3. **MITCHELL ISLAND ENVIRONMENTAL STEWARDSHIP INITIATIVES UPDATE**

(File Ref. No. 10-6175-04-01) (REDMS No. 6397888 v. 7)

PWT-30

See Page PWT-30 for full report

Designated Speaker: Chad Paulin

STAFF RECOMMENDATION

- (1) *That the Mitchell Island Stormwater Infrastructure Feasibility Study proposed within the staff report titled “Mitchell Island Environmental Stewardship Initiatives Update”, dated February 20, 2020 from the Director, Sustainability and District Energy, be endorsed and a funding application to conduct a feasibility study be prepared and submitted to the Federation of Canadian Municipalities’ Green Municipal Fund; and*
- (2) *That the Chief Administrative Officer and General Manager, Engineering and Public Works be authorized to enter into funding agreements with the Federation of Canadian Municipalities should the project be approved for funding, as outlined in the report titled “Mitchell Island Environmental Stewardship Initiatives Update”, dated February 20, 2020, from the Director, Sustainability and District Energy, and that the Consolidated 5 Year Financial Plan (2020-2024) be amended accordingly.*



4. **PROPOSED SOUTH ARM JETTY TIDAL MARSH PROJECT:
PROVINCIAL LAND TENURE APPLICATION**

(File Ref. No. 10-6150-11-01) (REDMS No. 6423982)

PWT-41

See Page PWT-41 for full report

Designated Speaker: Chad Paulin

STAFF RECOMMENDATION

That, for the purposes of environmental enhancement and consistency with the City’s Flood Protection Management Strategy, the Vancouver Fraser Port Authority’s Provincial Land Tenure Application for a 30 year lease, as identified in the “Proposed South Arm Jetty Tidal Marsh Project: Provincial Land Tenure Application” report dated March 3, 2020, from the Director, Sustainability and District Energy, be endorsed.



5. **MANAGER’S REPORT**

ADJOURNMENT





Public Works and Transportation Committee

Date: Wednesday, February 19, 2020

Place: Anderson Room
Richmond City Hall

Present: Councillor Chak Au, Chair
Councillor Kelly Greene, Vice-Chair
Councillor Alexa Loo
Councillor Linda McPhail
Councillor Michael Wolfe

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 January 21, 2020, be adopted as circulated.

CARRIED

PLANNING AND DEVELOPMENT DIVISION

1. REGIONAL HARMONIZATION OF VEHICLE WEIGHT AND DIMENSION LIMITS

(File Ref. No. 10-6360-00) (REDMS No. 6361233)

In response to queries from Committee, staff noted that the Provincial B.C. Regulation 26/58 Division 35 is the existing regulation in place and is currently being updated and the City's Community Bylaw staff can carry out joint enforcement with the Province on City roads and perform spot checks on all vehicles.

Discussion took place on vehicle cargo securement with regards to infractions and staff noted that a memo can be provided to Committee outlining the level and types of enforcement.

Public Works & Transportation Committee
Wednesday, February 19, 2020

In response to further queries from Committee, staff noted that (i) the focus of the report is to update the regional definition of a standard vehicle in coordination with TransLink's initiative to enable a regional permit system, (ii) all roads are designed based on national standards, and (iii) all trucks go through permit systems regarding the loads they are able to carry.

In reply to further queries from Committee, staff advised that information regarding damage to Richmond's infrastructure due to oversized vehicles can be provided in a staff memorandum.

It was moved and seconded

That Traffic Bylaw No. 5870, Amendment Bylaw No. 10123, to harmonize municipal vehicle weight and dimension limits and cargo securement requirements with the British Columbia Commercial Transport Regulations and Motor Vehicle Act Regulations, be introduced and given first, second and third reading.

CARRIED

2. APPLICATION TO 2020/2021 BC ACTIVE TRANSPORTATION INFRASTRUCTURE GRANTS PROGRAM

(File Ref. No. 01-0150-20-THIG1) (REDMS No. 6379120 v. 4)

In response to queries from Committee, staff noted that (i) the space required for a barrier in the lane depends on the size of the concrete barrier, (ii) as part of the project, multiple options of various barriers were considered, (iii) staff have worked closely with the Richmond Active Transportation Committee, (iv) there is limited road right of way at the location and the raised curb is the most feasible option, (v) this is a 2019 project slated to be built summer 2020, (vi) the design option being pursued is to have cyclists go off road at Lansdowne and the bike path will be behind the bus stop, (vii) the hydro poles will be situated between the proposed bike path and sidewalk, (viii) the removal of invasive plants is part of the project.

It was moved and seconded

(1) That the submission for cost-sharing to the 2020/2021 BC Active Transportation Infrastructure Grants Program for the Garden City Road Pedestrian and Cyclist Enhancements (Lansdowne Road-Westminster Highway) as described in the staff report titled "Application to 2020/2021 BC Active Transportation Infrastructure Grants Program" dated January 13, 2020, from the Director, Transportation be endorsed;

Public Works & Transportation Committee
Wednesday, February 19, 2020

- (2) *That, should the above application be successful, the Chief Administrative Officer and the General Manager, Planning and Development, be authorized on behalf of the City to execute the funding agreement; and*
- (3) *That the Consolidated 5 Year Financial Plan (2020-2024) be amended accordingly.*

CARRIED

ENGINEERING AND PUBLIC WORKS DIVISION

3. 2020 CLOTHES WASHER REBATE PROGRAM

(File Ref. No. 10-6000-01) (REDMS No. 6386389 v. 2)

In response to queries from Committee, staff noted that the roles and responsibilities of the City and BC Hydro have not changed for the rebate program and this rebate is for water and energy savings.

It was moved and seconded

- (1) *That the City of Richmond partner with BC Hydro to the end of 2020 to offer a combined rebate of \$100 for both spring and fall campaigns, equally cost shared between BC Hydro and the City, for the replacement of inefficient clothes washers with new high efficiency clothes washers; and*
- (2) *That the Chief Administrative Officer and General Manager, Engineering and Public Works be authorized to execute an agreement, on behalf of the City, with BC Hydro to implement the Clothes Washer Rebate Program.*

CARRIED

Public Works & Transportation Committee
Wednesday, February 19, 2020

4. **CITY OF RICHMOND PARTICIPATION IN THE BC BUILDING ENERGY BENCHMARKING PILOT PROGRAM**

(File Ref. No. 10-6125-07-02) (REDMS No. 6391961 v. 10)

In response to queries from Committee, staff noted that (i) buildings over 50,000 sq. ft. are welcome to participate in the program, (ii) the City currently measures and assesses energy performance of 45 buildings, (iii) the BC Building Energy Benchmarking Pilot Program is primarily funded through a grant from Natural Resources Canada and BC Hydro, (iv) the long term goal for benchmarking to be a mandatory provincial requirement, (v) the potential for the City of Richmond's participation is 700 buildings, (vi) City staff will be sending letters to building owners and managers about the program, (vii) Open Green Building Society is a BC based, non-profit environmental, non-government organization, (viii) the regional pilot will further advance the progress of benchmarking buildings in the City of Richmond, which it began two years ago.

It was moved and seconded

- (1) *That Council endorse the City's participation in a voluntary regional building energy benchmarking program, as outlined in the report titled "City of Richmond Participation in the BC Building Energy Benchmarking Pilot Program" from the Director, Sustainability and District Energy, dated January 16, 2020; and*
- (2) *That staff be directed to report back to Council at the conclusion of the pilot program in 2021, on options to establish an energy benchmarking initiative and supportive policies in Richmond, as outlined in the report titled "City of Richmond Participation in the BC Building Energy Benchmarking Pilot Program" from the Director, Sustainability and District Energy, dated January 16, 2020.*

CARRIED

5. **MANAGER'S REPORT**

(i) *Potholes*

Larry Ford, Manager, Roads & Construction Services, Engineering & Public Works, updated Committee on the status of the service and noted that (i) the City has completed 155 work orders, 490 potholes have been fixed, (ii) 33 locations remain on the list, (iii) YVR has fixed the hot spots on the way to the airport, and (iv) Public Works is prioritizing work on major roads.

Discussion ensued regarding a press release to inform the public on the projected timeline of repairing the potholes.

Public Works & Transportation Committee
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In reply to further queries from Committee, John Irving, General Manager, Engineering & Public Works, noted that a future report to Council will provide data with regards to the effects of large rainfall on the City's systems.

ADJOURNMENT

It was moved and seconded
That the meeting adjourn (4.33 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 Wednesday, February 19, 2020.

Councillor Chak Au
Chair

Stephanie Walrond
Legislative Services Coordinator



City of Richmond

Report to Committee

To: Public Works and Transportation Committee
From: Donna Chan, P.Eng., PTOE
Acting Director, Transportation
Date: January 31, 2020
File: 12-8275-06/2020-Vol
01
Re: **Quadricycle Business – Proposed Bylaw Amendments to Permit Permanent Operation**

Staff Recommendation

1. That Business Licence Bylaw No. 7360, Amendment Bylaw No. 10145, to add a definition of a quadricycle operation, be introduced and given first, second and third reading.
2. That Vehicle For Hire Bylaw No. 6900, Amendment Bylaw No. 10128, to add regulations and requirements for the operation of a quadricycle, be introduced and given first, second and third reading.
3. That Consolidated Fees Bylaw No. 8636, Amendment Bylaw No. 10143, which quantifies the Vehicle for Hire business fee for a quadricycle operation, be introduced and given first, second and third reading.

Donna Chan, P. Eng., PTOE
Acting Director, Transportation
(604-276-4126)

Att. 1

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

Staff Report

Origin

At its June 24, 2019 meeting, Council approved the issuance of a sole business licence for a multi-person quadricycle to be operated by Brew Bike Tours as a pilot program in the Steveston Village area from July to October 2019. As the operator has now requested permission to operate year-round, this report presents the proposed bylaw amendments to allow the on-going operation of a quadricycle service year-round in the Steveston Village area.

This report supports Council's Strategic Plan 2018-2022 Strategy #7 A Supported Economic Sector:

Facilitate diversified economic growth through innovative and sustainable policies, practices and partnerships.

7.3 Attract businesses to locate in Richmond and support employment and training opportunities in Richmond as we grow.

Analysis

Outcome of Pilot Project

Brew Bike Tours operated the pilot project in the Steveston Village area from July to October 2019. During that period, the company had one quadricycle in operation and all tours were conducted along the permitted routes (Attachment 1). While a tour to Britannia Heritage Shipyard was available, there was no demand from the public for that itinerary. The operator considers that the pilot project was well-received and that there is sufficient interest to support year-round operation of a quadricycle service in the Steveston Village area.

Proposed Bylaw Amendments

Amendments to the following three bylaws are required to permit year-round operation of a quadricycle service:

- Business Licence Bylaw No. 7360: to add a definition of a quadricycle operation;
- Vehicle For Hire Bylaw No. 6900: to add the regulations and requirements for the operation of a quadricycle; and
- Consolidated Fees Bylaw No. 8636: to add the vehicle for hire business fee for a quadricycle operation.

All of the proposed bylaw amendments reflect the terms and conditions of the business licence issued for the pilot program with a key exception that the business will now be permitted to operate year-round. The proposed hours of operation in each month are tailored to recognize the length of daylight hours while permitting limited operation at night (e.g., to allow a tour to finish that had started in the daylight hours).

Further, the permitted routes for a quadricycle operation in Richmond are proposed to be limited to the Steveston Village area only, with those routes (Attachment 1) based on the outcome of the pilot project. At this time, the Steveston Village area is considered to be the only locale that has

sufficient density and proximity of destinations for this type of business along with road and traffic conditions to support its safe operation (e.g., 30 km/h speed limit, traffic calming measures in place). A maximum of two quadricycles will be licenced and no more than two quadricycles may be in operation at any one time.

The proposed amendments also include housekeeping items related to the definition of a pedicab to provide consistency across all categories of vehicles for hire (i.e., assignment of a unique class to each category).

Financial Impact

None.

Conclusion

Following a successful pilot project in Summer 2019, the proposed bylaw amendments will allow the on-going year-round operation of a multi-person quadricycle service in the Steveston Village area that offers an interactive and environmentally friendly means of touring and learning about the history, culture and heritage of Steveston.



Joan Caravan
Transportation Planner
(604-276-4035)



Sonali Hingorani, P.Eng.
Transportation Engineer
(604-276-4049)

JC:jc

Att. 1: Streets in Steveston Permitted to be used by Quadricycle

Steveston Quadricycle Permitted Streets





**Business Licence Bylaw No. 7360
Amendment Bylaw No. 10145**

The Council of the City of Richmond enacts as follows:

1. **Business Licence Bylaw No. 7360**, as amended, is further amended by deleting Section 2.1.27.7.1 and replacing it with the following:
 - 2.1.27.6.1 The maximum number of **pedicabs** licenced by the **City** under this bylaw, and regulated under the **Vehicle For Hire Regulation Bylaw No. 6900** is 15.
2. **Business Licence Bylaw No. 7360**, as amended, is further amended by adding a new Section 2.1.27.7 as follows:
 - 2.1.27.7 Every Class Q **quadricycle applicant** must:
 - (a) establish and maintain a vehicle for hire business office in the **City** in accordance with Section 1.6 of this bylaw and must pay the fee specified for such office as set out in the Consolidated Fees Bylaw No. 8636;
 - (b) ensure that every **quadricycle** is operated in compliance with the **Vehicle For Hire Regulation Bylaw No. 6900**, as amended;
 - (c) present every **quadricycle** proposed to be operated to the Licence Inspector, who may inspect the **quadricycle** to determine whether it meets the requirements of the **Vehicle For Hire Regulation Bylaw No. 6900**, as amended;
 - (d) provide to the **City** a copy of a current policy for liability insurance, in a form and manner satisfactory to the **City**, in an amount not less than \$10,000,000.00, naming the **City** as an additional insured, and stating that the policy applies to each insured as if a separate policy has been issued to each; and
 - (e) obtain and display a vehicle for hire plate, as defined in the **Vehicle For Hire Regulation Bylaw No. 6900**, as amended, for each **quadricycle** proposed to be used.
 - 2.1.27.7.1 The maximum number of **quadricycles** licenced by the **City** under this bylaw, and regulated under the **Vehicle For Hire Regulation Bylaw No. 6900** is 2.
3. **Business Licence Bylaw No. 7360**, as amended, is further amended at Section 3.9 by deleting the definition of a **pedicab** and replacing it with the following in alphabetical order:

CLASS P - Pedicab

means a 3-wheeled cycle propelled by the foot power of the operator equipped with a carriage capable of carrying no more than 2 passengers plus the operator and without limitation, includes a 3-wheeled cycle that is propelled by the foot power of the operator and has motor assist capability.

4. **Business Licence Bylaw No. 7360**, as amended, is further amended at Section 3.9 by adding the following definition of a **quadricycle** in alphabetical order:

CLASS Q - Quadricycle

means a 4-wheeled cycle equipped with a carriage capable of carrying no more than 15 passengers plus the operator, and is propelled by the foot power of the operator and a minimum of 6 passengers.

5. This Bylaw is cited as “**Business Licence Bylaw No. 7360, Amendment Bylaw No. 10145.**”

FIRST READING

SECOND READING

THIRD READING

ADOPTED

MAYOR

CORPORATE OFFICER

CITY OF RICHMOND
APPROVED for content by originating dept. 
APPROVED for legality by Solicitor



**Vehicle For Hire Regulation Bylaw No. 6900
Amendment Bylaw No. 10128**

The Council of the City of Richmond enacts as follows:

1. **Vehicle For Hire Regulation Bylaw No. 6900**, as amended, is further amended by deleting the heading PART THREE A: PEDICABS and replacing it with the following:

PART THREE A: PEDICABS (CLASS P)

2. **Vehicle For Hire Regulation Bylaw No. 6900**, as amended, is further amended by adding a new Part Three B as follows:

PART THREE B: QUADRICYCLE (CLASS Q)

3B.1 Quadricycle Requirements

3B.1.1 A quadricycle must:

- (a) have a track width of not less than 1 metre;
- (b) have a rear track width that is greater than the height of the seat frame as measured from level ground to the seat frame;
- (c) have a minimum of 6 pedalling passengers and maximum of 15 passengers, plus the operator at any time while in operation;
- (d) have helmets available for all passengers, which are mandatory for passengers who are younger than 17 years and optional for passengers 17 years and older.

3B.1.2 A quadricycle must at all times be equipped with:

- (a) at least 2 sets of pedals for motive power;
- (b) disc or drum brakes;
- (c) front headlight and rear tail lights;
- (d) rear brake lights;
- (e) operational turn signal lights and four-way flashers;
- (f) reflectors on sides and rear of the **quadricycle**;

- (g) a standard bell or horn;
- (h) a fire extinguisher;
- (i) a first aid kit;
- (j) a repair kit; and
- (k) a slow moving vehicle sign.

3B.1.3 In addition to the requirements of Subsection 3B1.1 and 3B1.2, each **quadricycle** operator must:

- (a) not permit any alcohol consumption on the **quadricycle**;
- (b) not permit any cannabis consumption on the **quadricycle**;
- (c) not permit any smoking or vaping on the **quadricycle**;
- (d) meet any additional conditions as set forth in the *Motor Vehicle Act* and its Regulations, and any regulations established by the Insurance Corporation of British Columbia.

3B.2 Licence and Vehicle For Hire Plate

- 3B.2.1 A person must not operate a business using a **quadricycle** unless that person holds a valid business licence issued under the provisions of this bylaw and the **Business Licence Bylaw No. 7360**, as amended, and has paid the annual licence fee prescribed in the **Consolidated Fees Bylaw No. 8636**, as amended.
- 3B.2.2 Maintain a **vehicle for hire business office** in the **City**, except that the office may be that of another **licencee**;
- 3B.2.3 Not more than 2 **quadricycles** may be used at any one time on the same route as approved by the Director of Transportation.
- 3B.2.4 The **vehicle for hire plate** issued under the provisions of this bylaw must be attached to the rear of the **quadricycle** frame or bumper.

3B.3 Area of Operation

- 3B.3.1 An operator must not operate a **quadricycle** except on the route(s) established in Schedule 3 to this bylaw, and in accordance with any conditions and restrictions required by the Director of Transportation.
- 3B.3.2 An operator may not deviate from the approved routes or stop-over locations unless approved in writing by the Director of Transportation or added to Schedule 3 to this bylaw.

3B.4 Hours of Operation

3B.4.1 A **quadricycle** operator may only permit a **quadricycle** to operate during the following hours each day:

- (a) Month of January, from 9:00 a.m. to 6:00 p.m.;
- (b) Month of February, from 9:00 a.m. to 6:00 p.m.;
- (c) Month of March, from 9:00 a.m. to 6:00 p.m.;
- (d) Month of April, from 9:00 a.m. to 7:00 p.m.;
- (e) Month of May, from 9:00 a.m. to 8:00 p.m.;
- (f) Month of June, from 9:00 a.m. to 9:00 p.m.;
- (g) Month of July, from 9:00 a.m. to 9:00 p.m.;
- (h) Month of August, from 9:00 a.m. to 8:00 p.m.;
- (i) Month of September, from 9:00 a.m. to 7:00 p.m.;
- (j) Month of October, from 9:00 a.m. to 6:00 p.m.;
- (k) Month of November, from 9:00 a.m. to 6:00 p.m.;
- (l) Month of December, from 9:00 a.m. to 6:00 p.m.

3B.4.3 A **quadricycle** operator may not operate the **quadricycle** on July 1.

3B.5 Traffic and Parking

3A.5.1. A **quadricycle** operator must comply with this bylaw, the City's **Traffic Control and Regulation Bylaw No. 5870**, the British Columbia *Motor Vehicle Act* and its Regulations, and any other applicable enactment, all as amended or replaced, and without limiting the foregoing, must not use:

- (a) transit or taxi/tour bus stops;
- (b) loading zones/bays;
- (c) vehicle, motorcycle or accessible parking spaces.

3B.6 Operator Requirements

3A.6.1 An **operator** must not operate, permit or allow a **quadricycle** to be operated unless:

- (a) the operator is 19 years of age or older;
 - (b) the operator holds a valid, current British Columbia Driver's Licence;
 - (c) the operator must stay with the quadricycle at all times;
 - (d) the operator has provided the City with a copy of \$10 million liability insurance with the City of Richmond named as an Additional Insured.
3. **Vehicle For Hire Regulation Bylaw No. 6900**, as amended, is further amended at Section 10.1 by deleting the definition of a pedicab and replacing it with the following within Subsection Vehicle For Hire in alphabetical order:

CLASS P - PEDICAB

means a 3-wheeled cycle propelled by the foot power of the operator equipped with a carriage capable of carrying no more than 2 passengers plus the operator and without limitation, includes a 3-wheeled cycle that is propelled by the foot power of the operator and has motor assist capability.

4. **Vehicle For Hire Regulation Bylaw No. 6900**, as amended, is further amended at Section 10.1, Subsection Vehicle For Hire by adding the following definition of a quadricycle in alphabetical order:

CLASS Q - QUADRICYCLE

means a 4-wheeled cycle equipped with a carriage capable of carrying no more than 15 passengers plus the operator, and is propelled by the foot power of the operator and a minimum of 6 passengers.

5. **Vehicle For Hire Regulation Bylaw No. 6900**, as amended, is further amended by adding Schedule A attached hereto as the new Schedule 3 to Bylaw No. 6900.
6. This Bylaw is cited as "**Vehicle For Hire Regulation Bylaw No. 6900, Amendment Bylaw No. 10128.**"

FIRST READING

SECOND READING

THIRD READING

ADOPTED

MAYOR

CORPORATE OFFICER

CITY OF RICHMOND
APPROVED for content by originating dept. 
APPROVED for legality by Solicitor





**Consolidated Fees Bylaw No. 8636
Amendment Bylaw No. 10143**

The Council of the City of Richmond enacts as follows:

1. The **Consolidated Fees Bylaw No. 8636**, as amended, is further amended at SCHEDULE – BUSINESS LICENCE by deleting the Business Licence Bylaw No. 7360 – Vehicle for Hire Businesses table and replacing it with the following:

Description	Fee
Vehicle for Hire Business Fee	
Each vehicle for hire applicant must pay (1) and (2)*:	
(1) Vehicle for hire office fee	\$146.00
(2) Per vehicle licence fee*	
<i>based on the number of vehicles</i>	
CLASS "A" Taxicab	\$135.00
CLASS "B" Limousine	\$87.00
CLASS "C" Sightseeing Taxicab	\$135.00
CLASS "D" Airport Taxicab	\$135.00
CLASS "E" Private Bus	\$135.00
CLASS "I" Charter Minibus	\$135.00
CLASS "J" Rental Vehicle	
Group 1	\$17.50
Group 2	\$87.00
CLASS "K" Driver Training Vehicle	\$65.25
CLASS "M" Tow-Truck	\$135.00
CLASS "N" Taxicab for Persons with Disabilities	\$135.00
CLASS "P" Pedicab	\$135.00
CLASS "Q" Quadricycle	\$135.00
<i>*Notwithstanding the per-vehicle licence fees stipulated in Section 2, the maximum licence fee for any Vehicle for Hire business</i>	\$4,088.00
Transferring a vehicle for hire licence within any calendar year	\$50.25
Replacing a vehicle for hire licence plate or decal	\$20.75

2. This Bylaw is cited as "**Consolidated Fees Bylaw No. 8636, Amendment Bylaw No. 10143.**"

FIRST READING

SECOND READING

THIRD READING

ADOPTED

MAYOR

CORPORATE OFFICER

CITY OF RICHMOND
APPROVED for content by originating dept. 
APPROVED for legality by Solicitor



City of Richmond

Report to Committee

To: Public Works and Transportation Committee

Date: January 23, 2020

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

File: 01-0150-20-ICBC1-
01/2019-Vol 01

Re: ICBC-City of Richmond *Road Improvement Program – 2020 Update*

Staff Recommendation

1. That the list of proposed road safety improvement projects, as described in Attachment 2 of the staff report titled "ICBC-City of Richmond *Road Improvement Program – 2020 Update*," dated January 23, 2020 from the Director, Transportation be endorsed for submission to the ICBC 2020 *Road Improvement Program* for consideration of cost-share funding; and
2. That should the above applications be successful, the Chief Administrative Officer and General Manager, Planning and Development be authorized to execute the cost-share agreements on behalf of the City, and that the Consolidated 5 Year Financial Plan (2020-2024) be amended accordingly.

Donna Chan, P. Eng., PTOE
Acting Director, Transportation
(604-276-4126)

Att. 2

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Finance Engineering RCMP	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	
SENIOR STAFF REPORT REVIEW	INITIALS: 	APPROVED BY CAG

Staff Report

Origin

At the April 23, 2019 Council meeting, Council endorsed a number of proposed joint ICBC-City of Richmond road safety improvement projects for 2019. This report summarizes the projects implemented in 2019 with funding from ICBC and presents a list of projects proposed to be implemented with funding contributions from ICBC as part of the 2020 ICBC-City of Richmond *Road Improvement Program* partnership.

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.

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

The City has been in partnership with ICBC in the *Road Improvement Program* since 1994. This partnership is an important component of the City's traffic safety program as it enables the City not only to undertake more traffic safety enhancements than it could alone, but also to expedite some of these road safety improvement projects. Each year, a list of potential eligible capital projects is developed for inclusion in the *Road Improvement Program* based on community requests and input from the Traffic Safety Advisory Committee and other stakeholders.

Completed 2019 ICBC-City of Richmond Road Improvement Projects

A total of nine groups of City projects fully or substantially completed in 2019 (Attachment 1) will receive a total of \$200,000 from ICBC's 2019 *Road Improvement Program* (sample of completed projects shown in Figures 1 and 2).



Figure 1: Special Crosswalk at Garden City Road-Saunders Road



Figure 2: Speed Hump and Stop Sign on Diamond Road at Barmond Road

Over the past five years, ICBC has contributed a total of \$1,084,390 towards the City's transportation projects (Figure 3).

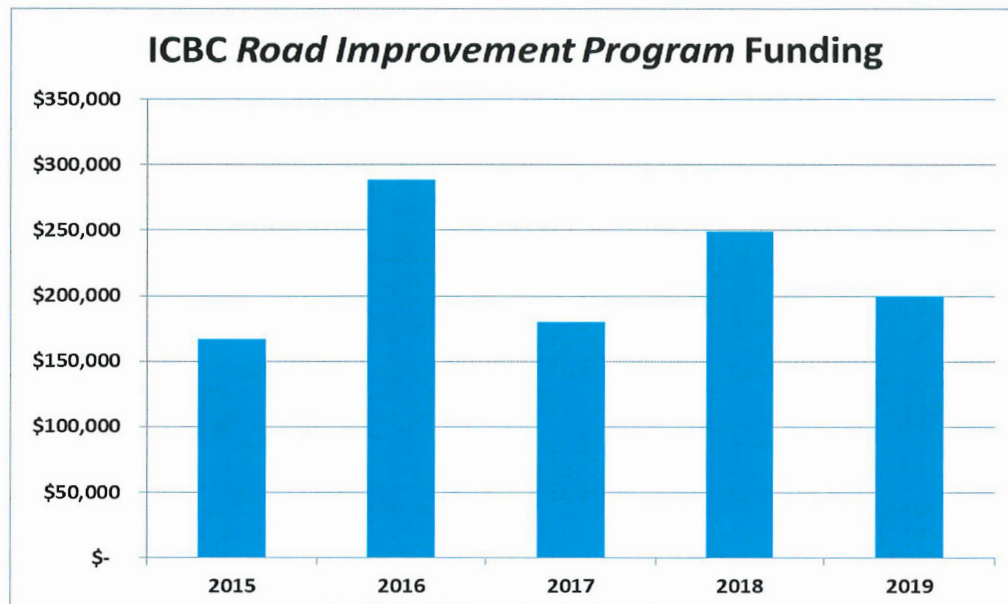


Figure 3: Annual ICBC Road Improvement Program Funding received by City

Proposed 2020 ICBC-City of Richmond Road Improvement Projects

Attachment 2 lists 16 groups of projects proposed for submission to the 2020 *Road Improvement Program* for funding contribution from ICBC, all of which draw from approved Capital Budgets. The projects align with the objectives of the City and ICBC to improve the safety of all road users by implementing new infrastructure improvements to reduce crashes and injuries. ICBC's potential funding contribution to these projects will be determined by historical traffic crash rates at these locations and the estimated reduction in ICBC claim costs resulting from the proposed traffic safety improvements, project eligibility vis-à-vis the funding guidelines, and the total funding available, which varies from year to year. The outcome of ICBC's review of the projects will be reported back as part of the 2021 update of the *City-ICBC Road Improvement Program*.

Upon approval of a project by ICBC, the City will be required to enter into a funding agreement with ICBC. The agreement is provided by ICBC and generally includes an indemnity in favour of ICBC. Staff recommend that the Chief Administrative Officer and General Manager, Planning and Development be authorized on behalf of the City to execute the funding agreements for the approved projects and that the consolidated 5 Year Financial Plan (2020-2024) be amended accordingly to reflect the receipt of external grants. Should any submitted projects receive funding from ICBC, the City's portion of the total capital cost would be reduced accordingly.

Financial Impact

The total estimated cost of all the projects identified in Attachment 2 is \$12,936,000. As indicated in Attachment 2, the City's estimated portion of the costs of the projects (\$7,885,410)

is fully funded with the funding sources having been previously approved by Council as part of past or current Capital Budgets.

Conclusion

ICBC is a significant long-time partner working with the City to promote traffic safety in Richmond. The traffic safety initiatives jointly implemented by ICBC and the City, including various road and traffic management enhancements, educational efforts and enforcement measures, have resulted in safer streets for all road users in Richmond. Therefore, staff recommend that Council endorse the various local road safety improvement projects for submission to the 2020 joint ICBC-City of Richmond *Road Improvement Program*.



Fred Lin, P.Eng., PTOE
Senior Transportation Engineer
(604-247-4627)



Joan Caravan
Transportation Planner
(604-276-4035)

Att. 1: 2019 Road Improvement Projects receiving ICBC Funding

Att. 2: Proposed 2020 City-ICBC Road Improvement Projects

2019 Road Improvement Projects receiving ICBC Funding

Project Description	Location	ICBC Contribution	Estimated Total Cost
Installation of Special Crosswalk	<ul style="list-style-type: none"> Garden City Road-Saunders Road No. 4 Road-Mortfield Road 	\$5,000	\$180,000
Full Traffic Signal with LED Overhead Street Name Signs	<ul style="list-style-type: none"> No. 5 Road-Vulcan Way Railway Avenue-Garry Street 	\$33,500 \$7,500	\$325,000 \$350,000
Installation of LED Overhead Street Name Signs	<ul style="list-style-type: none"> Railway Avenue-Williams Road Railway Avenue-Francis Road Railway Avenue-Blundell Road Railway Avenue-Granville Avenue Shell Road-Bridgeport Road Shell Road-Cambie Road Shell Road-Alderbridge Way Kwantlen Street-Alderbridge Way Hazelbridge Way-Alderbridge Way No. 4 Road-Cambie Road No. 5 Road-Bridgeport Road Simpson Road-Bridgeport Road St. Edwards Drive-Bridgeport Road 	\$29,000	\$195,000
Installation of Video Detection Cameras	<ul style="list-style-type: none"> No. 1 Road-Francis Road Railway Avenue-Francis Road Railway Avenue-Steveston Highway Gilbert Road-Lansdowne Road No. 3 Road (3,600-block) Buswell Street-Granville Avenue Garden City Road-Williams Road 	\$42,000	\$280,000
Installation of UPS (Uninterruptible Power Supply) at Intersections	<ul style="list-style-type: none"> Westminster Highway-Lynas Lane Russ Baker Way-Cessna Drive Russ Baker Way-Ingis Drive No. 2 Road-Granville Avenue No. 2 Road-Blundell Road 	\$12,500	\$100,000
Construction of Multi-Use Pathway	<ul style="list-style-type: none"> Alderbridge Way (Shell Road-No. 4 Road): Phase 1 (Fisher Drive-No. 4 Road) No. 6 Road (Cambie Road-Bridgeport Road) 	\$7,500	\$1,200,000 \$500,000
Installation of Speed Reader Boards	<ul style="list-style-type: none"> River Road (No. 6 Road-Westminster Hwy) Shell Road (10,000-block at Kidd Elementary School) McLean Avenue (22,000-block at playground) Westminster Highway North (20,000-block at Choice School) Steveston Highway (8,800-block) No. 5 Road (9,500-block) 	\$30,000	\$100,000
Neighbourhood Stop Sign Infill & Traffic Calming (16 stop signs & 25 speed humps)	Monds Neighbourhood (bounded by Francis Road, No. 1 Road, Williams Road, West Dyke)	\$27,000	\$80,000
Installation of Pedestrian Zone Markers	<ul style="list-style-type: none"> Blanshard Drive (Spul'u'kwuks Elementary School) Kingfisher Drive (Westwind Elementary School) Fourth Avenue (Manoah Steves Elementary School) 	\$6,000	\$10,000
Total		\$200,000	\$2,720,000

Proposed 2020 City-ICBC Road Improvement Projects

Proposed 2020 ICBC-City of Richmond Road Improvement Program Project	Estimated Total Cost	Source & Amount of City Funds ⁽¹⁾		External Funding: TransLink ⁽²⁾
Installation of special crosswalk (all side-mounted): <ul style="list-style-type: none"> Shell Road-Maddocks Road Van Horne Way-River Road Shell Road Trail-Granville Avenue Shell Road Trail-Blundell Road Other locations to be determined⁽⁴⁾ 	\$60,000 \$60,000 \$60,000 \$60,000	2018 Special Crosswalk Program	\$240,000	-
Installation of full traffic signal: <ul style="list-style-type: none"> Blundell Road-Moffat Road No. 5 Road-King Road Other locations to be determined⁽⁴⁾ 	\$350,000 \$325,000 -	2020 Traffic Signal Program 2019 Traffic Signal Program	\$350,000 \$325,000	-
Installation of pedestrian signal: <ul style="list-style-type: none"> Westminster Hwy-Westminster Hwy North (upgrade from existing fire signal) Other locations to be determined⁽⁴⁾ 	\$100,000	2020 Traffic Signal Program	\$100,000	\$50,000 (Pending)
Installation of traffic video cameras: <ul style="list-style-type: none"> Oval Way-River Road No. 3 Road-Granville Avenue Great Canadian Way-River Road Great Canadian Way-Van Horne Way No. 3 Road-Saba Road No. 3 Road-Leslie Road No. 3 Road-Capstan Way No. 3 Road-Williams Road No. 3 Road-Yaohan Entrance No. 3 Road-Cambie Road No. 3 Road-Browngate Road No. 3 Road-Ackroyd Road Other locations to be determined⁽⁴⁾ 	\$360,000 (\$30,000 per intersection)	2020 Traffic Video and Communication Program	\$360,000	-
Installation of fibre optic cable: <ul style="list-style-type: none"> Westminster Hwy (No. 6 Road-Fraserwood Pl) 	\$75,000	2020 Traffic Video and Communication Program	\$75,000	-
Installation of pedestrian zone markers in various locations pending results of traffic studies ⁽³⁾	\$10,000	2020 Traffic Calming Program	\$10,000	-
Traffic calming measures in various locations pending results of traffic studies ⁽³⁾	\$290,000	2020 Traffic Calming Program	\$290,000	-
Installation of UPS (uninterruptible power supply): <ul style="list-style-type: none"> No. 2 Road-Francis Road No. 2 Road-Williams Road Gilbert Road-Westminster Hwy Railway Avenue-Steveston Hwy No. 2 Road-Steveston Hwy Gilbert Road-Steveston Hwy No. 5 Road-Horseshoe Way Other locations to be determined⁽⁴⁾ 	\$140,000 (\$20,000 per intersection)	2018 Traffic Signal Program 2020 Traffic Signal Power Backup System (UPS)	\$40,000 \$100,000	-
Cambie Road-No. 5 Road intersection upgrade: <ul style="list-style-type: none"> left-turn lanes on all four legs multi-use pathways on Cambie Road at intersection multi-use pathways on No. 5 Road (Cambie Road-Thorpe Road) 	\$2,760,000	2020 Roads DCC Program	\$1,380,000	\$1,380,000 (Pending)

Proposed 2020 City-ICBC Road Improvement Projects

Proposed 2020 ICBC-City of Richmond Road Improvement Program Project	Estimated Total Cost	Source & Amount of City Funds ⁽¹⁾		External Funding: TransLink ⁽²⁾
Construction of pedestrian pathway:				
• River Road (No. 6 Road-Burdette Ave)	\$350,000	2018 Arterial Roadway Improvement Program	\$350,000	-
• St. Edwards Drive (350m east of Cambie Road-Bird Road)	\$300,000	2020 Arterial Roadway Improvement Program	\$300,000	-
• Westminster Hwy (Muir Road-150m east)	\$190,000	2020 Neighbourhood Walkway Program	\$95,000	\$95,000 (Pending)
• Viking Way (Cambie Road-Bridgeport Road)	\$655,000	2020 Neighbourhood Walkway Program	\$655,000	-
• Other locations to be determined ⁽⁴⁾				
Upgrade of Railway Greenway intersections at:				
• Blundell Road (north and south sides)	\$450,000	2019 Arterial Road Improvement Program	\$168,750	\$281,250 (Confirmed)
• Francis Road (south side)				
• Williams Road (north and south sides)				
Construction of multi-use pathway:				
• Westminster Hwy (Smith Cr-Fraserside Gt)	\$1,100,000	2019 Roads DCC Program	\$550,000	\$550,000 (Pending)
• Garden City Road (Lansdowne Road-Westminster Hwy)	\$1,000,000	2019 Roads DCC Program	\$500,000	\$500,000 (Confirmed)
• Alderbridge Way (Shell Rd- No. 4 Road): Phase 2 (Shell Road-Fisher Drive)	\$1,200,000	2018 Roads DCC Program	\$600,000	\$600,000 (Confirmed)
• Steveston Hwy (Shell Road-Mortfield Gate)	\$2,000,000	2019 Roads DCC Program	\$590,000	\$1,410,000 (Confirmed)
• Charles Street (Sexsmith Road-Bridgeport Station Entrance)	\$350,000	2019 Active Transportation Improvement Program	\$156,660	\$193,340 (Confirmed)
Removal of Channelized Right-Turn Islands:				
• Cooney Road-Westminster Hwy (northeast corner)	\$208,000	2020 Arterial Roadway Improvement Program	\$208,000	-
• Garden City Road-Lansdowne Road (northwest corner)	\$483,000	2020 Arterial Roadway Improvement Program	\$286,000	-
		2020 Active Transportation Improvement Program	\$197,000	-
Top 20 Collision Prone Intersections: Short-Term Improvements	\$500,000	2020 Roads DCC Program	\$500,000	\$104,000 (Pending)
Top 20 Collision Prone Intersections: Preliminary Designs for Medium-/Long-term Improvements	\$600,000	2020 Roads DCC Program	\$600,000	-
Road Safety Studies: locations to be determined ⁽⁴⁾	\$100,000	2020 Transportation Planning, Functional and Preliminary Design	\$100,000	-
Total	\$12,936,000		\$7,885,410	\$2,984,590 (Confirmed) \$2,179,000 (Pending)

- (1) Should the submitted project receive funding from ICBC, the City's portion of the total cost would be reduced accordingly.
- (2) The amount shown represents the maximum funding contribution to be received based on the City's cost estimate for the project. The actual approved amount may be lower than requested. The actual invoiced amount follows project completion and is based on incurred costs. The projects will proceed only if a minimum of 50% external funding is secured.
- (3) Implementation is subject to consultation with and support from affected residents.
- (4) Additional locations may be identified for submission to ICBC prior to its annual program deadline.



City of Richmond

Report to Committee

To: Public Works and Transportation Committee
From: Peter Russell
Director, Sustainability and District Energy
Date: February 20, 2020
File: 10-6175-04-01/2020-Vol 01
Re: Mitchell Island Environmental Stewardship Initiatives Update

Staff Recommendation

1. That the Mitchell Island Stormwater Infrastructure Feasibility Study proposed within the staff report titled "Mitchell Island Environmental Stewardship Initiatives Update" dated February 20, 2020 from the Director, Sustainability and District Energy, be endorsed and a funding application to conduct a feasibility study be prepared and submitted to the Federation of Canadian Municipalities' Green Municipal Fund; and
2. That the Chief Administrative Officer and General Manager, Engineering and Public Works be authorized to enter into funding agreements with the Federation of Canadian Municipalities should the project be approved for funding, as outlined in the report titled "Mitchell Island Environmental Stewardship Initiatives Update" dated February 20, 2020, from the Director, Sustainability and District Energy and that the Consolidated 5 Year Financial Plan (2020-2024) be amended accordingly.

Peter Russell, MCIP RPP
Director, Sustainability and District Energy
(604-276-4130)

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

Staff Report

Origin

Mitchell Island, located in the ecologically sensitive Fraser River Estuary is an important industrial hub, locally and regionally. The nature of the activities on the island means that spills and other discharges to the environment pose a risk to the Fraser River ecosystem.

Council endorsed the staff report titled “Mitchell Island Environmental Stewardship Initiatives”, dated March 11, 2019 at the Regular Council meeting in May 2019 that included the following initiatives to improve compliance on Mitchell Island:

- Conduct more local business outreach;
- Improve multi-jurisdictional collaboration in the area; and
- Start an environmental monitoring program.

This report provides an update on these three initiatives and seeks Council’s endorsement to secure funding to assess stormwater infrastructure improvement opportunities on Mitchell Island.

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.

1.4 Foster a safe, caring and resilient environment.

Analysis

The Mitchell Island Environmental Stewardship Initiative was executed by staff following Council endorsement in May 2019. The response to the program by members of the public, local businesses and senior government has been positive. The initiative included the following activities:

- **Local Business Outreach** – Staff organized an environmental stewardship information session at the Mitchell Island Pier Park in May 2019. The event included informative booths, with displays, organized by all levels of senior government. During the event, members of the public were encouraged to interact with regulators and provide general suggestions relating to environmental stewardship on Mitchell Island. City staff were on hand to discuss the City’s flood management strategy, Environmentally Sensitive Areas, the Ecological Network, and our Pollution Prevention Programs (Attachment 1). A total of 90 attendees were recorded at the event and various suggestions from local workers and business owners relating to dust, litter and stormwater management were collected.
- **Improve Multi-Jurisdictional Collaboration in the Area** – Federal, provincial and municipal regulations and bylaws apply to activities on Mitchell Island. The program targeted the need to work more collaboratively with all levels of government to identify and enforce noncompliance activities such as unauthorized discharges to the Fraser River. Ten joint (federal, provincial and municipal) site inspections have been conducted since beginning the program. Results from the inspections have noted improper storage activities, unauthorized discharges and unlicensed operations. A water-side inspection of

Mitchell Island's foreshore was also completed in 2019. The Canadian Coast Guard provided transportation and BC Ministry of Environment and Climate Change Strategy, Environment and Climate Change Canada, and the City's consultant were in attendance. The purpose of the assessment was to share site information among agencies; visually assess the island's foreshore for unauthorized discharges; collect surface water samples; and to document new areas of concern.

- **Start an Environmental Monitoring Program** – Staff initiated a surface monitoring program following Council endorsement that included collecting regular surface water samples and comparing the results to applicable provincial and federal water quality standards. Results informed the joint site visits and indicated various local exceedances throughout Mitchell Island including concentrations of metals, fecal coliforms, polycyclic aromatic hydrocarbons and polychlorinated biphenyls above the applicable standards. Staff noted consistent effluent exceedance at primary outfalls on the island. Water quality at this location was attributed to specific industries in the area including various auto wrecking and salvage yards, metal recycling, and aggregate suppliers. Many businesses, once informed of their discharge quality, have responded to install pollution mitigation infrastructure (more information below).

2019 Highlights and Accomplishments

The 2019 Mitchell Island Environmental Stewardship Initiative has been effective at bridging the information gap that some business owners have between environmental regulations and site management. Businesses Owners have taken steps to improve operations onsite with stormwater containment structures, settling ponds, pH correcting technologies, impervious pavement, and wheel washes to comply with standard operating practices not present before the program. Large industries that have been operating outside of environmental regulations such as the BC Code of Practice for Concrete and Concrete Products Industry were brought into compliance, resulting in marked, measurable stormwater quality improvements.

Next Steps

Staff propose to make applications to the Federation of Canadian Municipalities' Green Municipal Fund to assist in funding a Mitchell Island Stormwater Infrastructure Feasibility Study to assess long-term stormwater infrastructure improvement opportunities for the island.

The Mitchell Island Stormwater Infrastructure Feasibility Study project will identify opportunities to improve the quality of Mitchell Island's stormwater. The project will also include education, enforcement, ongoing business involvement, operations and maintenance activities, source control, and engineered solutions. Engineered solutions will focus on green, nature-based solutions, rather than traditional treatment systems, to maximize positive environmental effects. Green infrastructure solutions improve water quality through sedimentation, filtration and chemical-biological processes, while capturing runoff and providing flood protection, improving air quality, and providing habitat. Once complete, results from Mitchell Island will be shared to increase the information available in the field of industrial area stormwater management.

The Federation of Canadian Municipalities' Green Municipal Fund sponsors initiatives that can potentially allow a community to remove 60% of total suspended solids or a significant amount of other contaminants from its stormwater runoff. This funding helps Canadian cities and communities of all sizes protect local bodies of water through stormwater treatment. The City will continue to look for partnerships to augment the City's impact on the island.

The City will continue to monitor the stormwater on Mitchell Island in 2020 and focus sampling at major stormwater discharge points such as the Mitchell Road, south outfall. Mitchell Island stormwater is not treated prior to discharge into the Fraser River, which is host to Sockeye, Pink, Chum, Chinook and Coho salmon among other aquatic species.

Financial Impact

The Federation of Canadian Municipalities' Green Municipal Fund, is a matching contribution grant, funding up to 50 percent of eligible costs. The value of the City in-kind contribution of staff salaries cannot exceed 10% of eligible costs.

It is anticipated that the feasibility study work program will take approximately 12 months to complete, and cost \$150,000 (see Table 1). Staff propose applying for funding of up to \$75,000, based on the amount required to complete the feasibility study and if approved by Council, that the Consolidated 5 Year Financial Plan (2020-2024) be amended accordingly.


The City will contribute matching funds from the existing 2020 Capital Budget that was approved by Council. The approved capital project has sufficient funding for the City's portion of this initiative.

Table 1. Feasibility Study Project Budget

Budget Source – City of Richmond	
Mitchell Island Stormwater Infrastructure Feasibility Study Project	\$60,000
Staff Time (In-Kind Contribution)	\$15,000
Total City Budget	\$75,000
Budget Source - FCM	
FCM's Green Municipal Fund 50% Match for Project Cost	\$75,000
Total FCM Budget	\$75,000
Total Budget	\$150,000

Conclusion

Staff will continue the Mitchell Island program that was started in 2019, along with other agencies. Staff is requesting that Council endorse a submission to the Green Municipal Fund, to obtain funding up to \$75,000 for a Mitchell Island Stormwater Infrastructure Feasibility Study. This project will aim to improve the quality of stormwater that is discharged from the Mitchell Island industrial business district to the Fraser River ecosystem.



Chad Paulin M.Sc., P.Ag.
Manager Environment
(604-247-4672)



Warren Mills, B.Sc, P.Ag., EP
Environmental Coordinator
(604-247-4694)

Att. 1: Stormwater Pollution Prevention Information Guides (3)

The following best management practises can be implemented into your automotive repair and salvage business to reduce your impact on the environment and neighboring infrastructure:

- regularly scheduling the appropriate pickup and disposal of waste/garbage from onsite;
- routinely inspecting all of your drums, tanks, and containers onsite and replacing them if damage is present; Maintain a clean and orderly facility;
- maintaining a clean and orderly facility;
- implementing material handling a training protocols for operational staff; and
- maintaining an environmental management plan.



More Information

City of Richmond Environmental Sustainability Services

Tel: 604-247-4694

Email: www.richmond.ca/sustainability/environment

City of Richmond Environmental Programs

City recycling services, depot information

Tel: 604-276-4010

Environment Canada

Email: www.ec.gc.ca/pollution/

BC Ministry of Environment

Tel: 604-582-5200

Email: www2.gov.bc.ca

Metro Vancouver Environmental Regulation & Enforcement Services

Tel: 604-432-6200

Email: www.metrovancouver.org/services/Permits-regulations-enforcement

Report a Spill

When a spill occurs, or there is the risk of one occurring, it must be reported immediately by calling 1-800-663-3456. This is known as the initial report or Dangerous Goods Incident Report (DGIR).

If you are unable to identify the material in question or there is an emergency, call the Richmond Fire Department at 911.



Automobile Repair and Salvage Industry

Stormwater Pollution Prevention Information Guide



City of Richmond

6911 No. 3 Road, Richmond, BC V6Y 2C1

www.richmond.ca

May 28, 2019

Sustainability
www.richmond.ca

Richmond is an island city located within one of the most productive ecosystems in the world. Our community relies on a healthy and diverse landscape to maintain biological diversity and a resilient natural environment.

Richmond's Drainage Network

The City's storm drainage system is designed to catch rainwater and direct it back to the Fraser River in an efficient way to prevent local flooding.

Water entering the Fraser River is **untreated** so it is important to prevent polluted water from entering local storm drains.

The Fraser River hosts many unique wildlife and aquatic habitat, including Pacific salmon species, orca, whales, and sea otters.

PWT - 36



Did you know?

An individual or business may be fined up to \$10,000.00 for discharging any waste water or other potentially polluting substances to the storm drainage system under the City's *Pollution Prevention and Clean-up Bylaw* (#8475).

In addition, these discharges may also violate *Section 36(3) of the Federal Fisheries Act*, since most of the City's drainage system is connected directly to the Fraser River.

High Impact Areas

- Trash containers and adjacent areas
- Material storage areas
- Vehicle and equipment maintenance areas
- Loading docks

Activities Often Associated with Pollutants

- Vehicle dismantling
- Used parts storage
- Vehicle and equipment storage; maintenance, and washing areas
- Storage of liquids in above-ground tanks
- Connections to storm drain

Potential Sources of Pollution at Your Facility

- Oils, gasoline and diesel fuel
- Transmission, power steering, washer, and brake fluid
- Battery acid and solvents
- Heavy metals such as aluminum, cadmium, copper, iron, zinc, mercury, and lead
- Lead from batteries, wheel weights and battery cable ends



- Chlorofluorocarbons (CFCs) and other refrigerants
- Asbestos
- Tires and plastics, polychlorinated biphenyls (PCBs) from foam rubber, carpets and plastic components

Minimizing Exposure

Where feasible, minimizing exposure of potential pollutant sources to precipitation is an important control option. An example of minimizing exposure is sheltering potential pollutants from precipitation events.

Erosion, Sediment Control, and Runoff

- Site activities, topography, and ground cover, are all that will influence the need to manage erosion, sediment, and runoff on your property including:
 - covering exposed soil with sod, mulch, and native plantings;
 - regular maintenance and repair of silt fences, sediment ponds, and access areas;
 - City approved berms and drainage ditches close to the property boundaries that protect neighboring areas;
 - City approved protective berms for uncovered, outdoor storage of parts, engine blocks, and above-ground liquid storage;
 - City approved detention ponds; and
 - City approved oil/water separators and filtration devices.

Dirty Vehicle?

Head to a commercial car wash to clean your vehicle.

Commercial car washes capture all washwater and discharge it to the Metro Vancouver sanitary sewer system where it is properly treated prior to discharge to the ocean.

This is the most environmentally responsible way to clean your vehicle, with the bonus of supporting local business.



PWT - 37

More Information

City of Richmond Environmental Sustainability Services

Tel: 604-247-4694

Email: www.richmond.ca/sustainability/environment

Environment Canada

Email: www.ec.gc.ca/pollution/

BC Ministry of Environment

Tel: 604-582-5200

Email: www2.gov.bc.ca

Metro Vancouver Environmental Regulation & Enforcement Services

Tel: 604-432-6200

Email: www.metrovancouver.org/services/Permits-regulations-enforcement

Report a Spill

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If you are unable to identify the material in question or there is an emergency, call the Richmond Fire Department at 911.



Car Washing

Stormwater Pollution Prevention Information Guide



City of Richmond

6911 No. 3 Road, Richmond, BC V6Y 2C1

www.richmond.ca

May 28, 2019

Sustainability
www.richmond.ca

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Richmond's Drainage Network

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Water entering the Fraser River is **untreated** so it is important to prevent polluted water from entering local storm drains.

The Fraser River hosts many unique wildlife and aquatic habitat, including Pacific salmon species, orca whales, and sea otters.



Washing your car with just water over a pervious surface like grass or gravel is the only responsible way to wash your car at home.

Did you know?

An individual or business may be fined up to \$10,000.00 for discharging any waste water or other potentially polluting substances to the storm drainage system under the City's *Pollution Prevention and Clean-up Bylaw* (#8475).

In addition, these discharges may also violate *Section 36(3) of the Federal Fisheries Act*, since most of the City's drainage system is connected directly to the Fraser River.

Wastewater from Car Washing

We all love clean cars or vehicles, but polluted water from car washing often contains:

- sediments;
- detergents;
- greases;
- oils; and
- other pollutants.

Polluted waters that enter the City's storm drains will have direct and serious consequences to our overall ecosystems.

If rinsing off small amounts of pollen or dust, use only water and wash on top of grass or gravel.



Greater Vancouver's Water Restrictions General Restrictions

Summer is when Greater Vancouver uses the most water, receives the least amount of rain, and has the least amount of water in storage. Metro Vancouver has amended the activation period for lawn sprinkling restrictions. Effective May 1 to October 15, lawn sprinkling is only permitted within the specific time periods.

The following restrictions apply when Stage 1, 2, 3, or 4 Restrictions are in force:

- all hoses must have an automatic shut-off device;
- water must not run off unnecessarily on impermeable surfaces such as pavement;
- artificial playing turf and outdoor tracks must not be watered except for health or safety reasons;
- hoses and taps must not run unnecessarily; and
- irrigation system must not be faulty, leaking, or misdirected.

Each Stage has its own additional restrictions, and car washing is prohibited in Stage 3 and 4 Water Restrictions.

Visit www.richmond.ca/safety/property/environment/water to learn more about Water Restrictions.

Chemicals and Cleaners

Chemicals and cleaners must be disposed of properly to avoid waterways.

Visit www.richmond.ca/services/recycling/banned to learn more about how to dispose of chemicals, cleaners, and other household items.

Saw Cutting

- Slurry and sediment from saw cutting operations should be confined to the immediate work area by using berms or diversion structures. Cover or barricade all nearby stormwater drains.
- Collect saw-cut slurry in a well contained area and allow it to dry. Dispose of dry slurry in garbage. Residue from cutting and grinding operations may also be picked up by means of a wet vac or vacuum attachment to the cutting machine.
- Residue must not be allowed to flow across the pavement, or be left on the surface of the pavement. It may be necessary to use a street sweeper or wash down the area and collect the water.
- Avoid saw cutting operation during rainfall events unless you can contain, capture, and dispose of cuttings, sediment, and wash water.
- Consult Metro Vancouver regarding waste water treatment and discharge options to the sanitary sewer system.

More Information

City of Richmond Environmental Sustainability Services

Tel: 604-247-4694

Email: www.richmond.ca/sustainability/environment

Environment Canada

Email: www.ec.gc.ca/pollution/

BC Ministry of Environment

Tel: 604-582-5200

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Tel: 604-432-6200

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Concrete, Stone and Tile Industry

Stormwater Pollution Prevention Information Guide



City of Richmond

6911 No. 3 Road, Richmond, BC V6Y 2C1

www.richmond.ca

May 28, 2019

Sustainability

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Richmond is an island city located within one of the most productive ecosystems in the world. Our community relies on a healthy and diverse landscape to maintain biological diversity and a resilient natural environment.

Richmond's Drainage Network

The City's storm drainage system is designed to catch rainwater and direct it back to the Fraser River in an efficient way to prevent local flooding.

Water entering the Fraser River is **untreated** so it is important to prevent polluted water from entering local storm drains.

The Fraser River hosts many unique wildlife and aquatic habitat, including Pacific salmon species, orca, whales, and sea otters.



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Did you know?

An individual or business may be fined up to \$10,000.00 for discharging any waste water or other potentially polluting substances to the storm drainage system under the City's *Pollution Prevention and Clean-up Bylaw* (#8475).

In addition, these discharges may also violate *Section 36(3) of the Federal Fisheries Act*, since most of the City's drainage system is connected directly to the Fraser River.

Best Management Practices

Discharge of waste water containing concrete, stone and tile fines, or chemicals used to wash or finish these materials, must be contained to prevent them from draining to streets, lanes, or other areas where it may reach the stormwater drainage system.

These wastes pose a serious risk to Richmond's aquatic environment. Concrete slurry and saw-cut fines contaminate stormdrains and suffocate sea life.

At the Construction Site

Be aware of drainage catch basin locations prior to commencing work.

- Provide catch basin covers, inlet protection, or similarly effective containment devices over all nearby catch basins.
- Use drip pans, ground cloths, heavy cardboard or plywood wherever concrete, asphalt, or asphalt emulsion chunks and drips are likely to fall unintentionally, such as beneath extraction points from mixing equipment.



- Concrete delivery and pumping vehicles must not discharge any concrete, slurry, or rinse water into street gutters, stormwater drainages, drainage ditches, or onto the paved surface of a roadway or driveway.
- Direct aggregate wash water areas on the construction site where the sediments can filter through grass or gravel.
- If wastewater cannot be directed to suitable areas on the construction site, it should be contained, collected, and disposed of in an approved matter. Absorbents may be required to contain and collect wastewater.
- During rain events, portable asphalt mixing equipment should be covered by an awning or other similar structures to avoid contact with rainfall.

Clean-Up

- Designate a washout area away from stormdrains onsite where application and mixing equipment cleaning should be conducted. This washout area can also be used to contain excess material and slurry.
- Trucks and equipment should be returned to your facility for washing in a wash bay connected to the sanitary sewer.
- Sweep the pouring area to collect loose aggregate chunks and dust. Do not hose down the area to stormwater drains.



City of Richmond

Report to Committee

To: Public Works and Transportation Committee **Date:** March 3, 2020
From: Peter Russell **File:** 10-6150-11-01/2020-
Director, Sustainability and District Energy Vol 01
Re: **Proposed South Arm Jetty Tidal Marsh Project: Provincial Land Tenure Application**

Staff Recommendation

That, for the purposes of environmental enhancement and consistency with the City's Flood Protection Management Strategy, the Vancouver Fraser Port Authority's Provincial Land Tenure Application for a 30 year lease, as identified in the "Proposed South Arm Jetty Tidal Marsh Project: Provincial Land Tenure Application" report dated March 3, 2020, from the Director, Sustainability and District Energy, be endorsed.

Peter Russell
Director, Sustainability and District Energy
(604-276-4130)

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

Staff Report

Origin

The purpose of this report is to inform Council that the Vancouver Fraser Port Authority (the Port) has submitted an application to BC's Ministry of Forests, Lands, Natural Resource Operations and Rural Development (the Province) to obtain a (maximum) 30 year lease for lands that will support the construction of the South Arm Jetty Tidal Marsh Project. This report also provides an update on the Fraser River Estuary Connectivity Project located in the same general area.

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.

Analysis

Provincial Land Tenure Application for the proposed South Arm Jetty Tidal Marsh Project

The Port's South Arm Jetty Tidal Marsh Project is proposed on provincially-owned land located along the southern edge of Sturgeon Bank, on the north side of the Steveston Jetty, and at the mouth of the Fraser River, all within the City's municipal urban boundary (Attachment 1). The area is currently an unvegetated intertidal sand flat with shallow sub-tidal areas. The proposed project will convert approximately 50 hectares of existing sand flat into marsh habitat that is intended to benefit local fish and wildlife as part of the larger Sturgeon Bank Wildlife Management Area (Attachment 2). The Port is pursuing the project, in part, to offset the anticipated impacts associated with the proposed Roberts Bank Terminal 2 Project, which is currently seeking an Environmental Assessment Certificate from the Impact Assessment Agency of Canada.

The Port submitted a land tenure application to the Province in January 2020. The Province requires stakeholder consultation as part of the land tenure procurement process and is seeking comments from the City by April 8, 2020. Staff have reviewed the Port's land tenure package, which included a long-term management plan, concept designs and letters of support from the Musqueam and Semiahmoo First Nations. Staff are working with the Province to understand their processes for applying long-term management responsibilities to land tenures.

The project will be constructed approximately two kilometres from the City's west dike. The project, including construction, is not expected to pose a risk to the community, impede viewpoints along the west dike trail system, or compromise the City's long-term flood protection plans. The Port has developed a long-term management plan that is consistent with current efforts to revitalize Sturgeon Bank, including the Fraser River Estuary Connectivity Project. The final project, when completed, will serve to improve Sturgeon Bank's natural environmental and flood attenuation properties along the west dike, consistent with the objectives of the City's Flood Protection Management Strategy.

Staff have no additional concerns regarding the Port's application and recommend that Council endorse the Port's application.

Fraser River Estuary Connectivity Project

Staff last updated Council on this project via memorandum on October 15, 2019. Raincoast Conservation Foundation (Raincoast) and the Department of Fisheries and Oceans Canada are currently working along the Steveston Jetty to increase fish access, freshwater, nutrient loading, and sediment flow from the Fraser River to Sturgeon Bank through a series of breach points (illustrated in Attachment 1).

Raincoast concluded the first phase of the project in March 2019, which included constructing three, 50 metre-wide by 1.5 metre-deep, breaches along the Jetty to improve freshwater inputs to Sturgeon Bank at mid and high tide. Environmental monitoring is ongoing and Raincoast is pleased with its preliminary fish counts at the breach locations, which have exceeded expectations. Raincoast is currently planning the second phase of the work. Phase two activities include deepening the breaches to improve freshwater flow at low tide and is expected to be completed in 2020. Raincoast is also continuing discussions with regional stakeholders such as Metro Vancouver, regarding potential breaches on Iona Island and at McDonald Slough as part of the proposed Iona Island Wastewater Treatment Plant upgrades. The potential for this future restoration work remains dependent on securing funding. A firm schedule has yet to be defined.

Financial Impact

None.

Conclusion

Sturgeon Bank provides a critical habitat in the region and offers beneficial flood mitigation protection to the City's western most boundaries. Recognition of these key functions are also noted by several inter-jurisdictional stakeholders and assessments are currently underway to better understand the factors contributing to the observable changes on Sturgeon Bank.

Staff have reviewed the technical information related to the Vancouver Fraser Port Authority's Provincial Land Tenure Application and recommend that Council support the application. If endorsed, Staff will notify the Province of the resolution and will update Council accordingly when a final provincial decision is made, which is expected in May 2020.



Chad Paulin P.Ag., M.Sc.
Manager, Environment
(604-247-4672)

Att. 1: Fraser River Estuary Project Breach Locations

Att. 2: Proposed Port of Metro Vancouver South Arm Jetty Tidal Marsh Project



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Attachment 2. Proposed Port of Metro Vancouver South Arm Jetty Tidal Marsh Project



Current state at low tide.



Rendering of proposed new habitat at low tide

(Source: Port of Metro Vancouver)