



Public Works and Transportation Committee

Anderson Room, City Hall
6911 No. 3 Road

Wednesday, January 23, 2019
4:00 p.m.

Pg. # ITEM

MINUTES

PWT-5 *Motion to adopt the **minutes** of the meeting of the Public Works and Transportation Committee held on December 19, 2018.*



NEXT COMMITTEE MEETING DATE

February 21, 2019, (tentative date) at 4:00 p.m. in the Anderson Room

PLANNING AND DEVELOPMENT DIVISION

1. **2019/2020 BIKEBC PROGRAM SUBMISSION**
(File Ref. No. 01-0150-20-THIG1) (REDMS No. 6054370 v. 2)

PWT-10

See Page PWT-10 for full report

Designated Speakers: Joan Caravan and Donna Chan

STAFF RECOMMENDATION

- (1) *That the submission for cost-sharing to the Province of BC 2019/2020 BikeBC Program for the Westminster Highway multi-use pathway, as described in the report, titled "2019/2020 BikeBC Program Submission" dated December 14, 2018, from the Director, Transportation, be endorsed;*

- (2) *That, should the above application be successful, the Chief Administrative Officer and the General Manager, Planning and Development, be authorized to execute the funding agreement; and*
- (3) *That the Consolidated 5 Year Financial Plan (2019-2023) be updated accordingly.*



2. **GEORGE MASSEY CROSSING – FINDINGS OF INDEPENDENT TECHNICAL REVIEW**

(File Ref. No. 01-0150-20-THIG1) (REDMS No. 5920748 v. 7)

PWT-16

See Page PWT-16 for full report

Designated Speakers: Joan Caravan and Donna Chan

STAFF RECOMMENDATION

That a letter requesting the Ministry of Transportation and Infrastructure pursue short-term strategic improvements to the Steveston Highway interchange and expedite the completion of a business case for Highway 99 crossing improvements, as detailed in the staff report titled “George Massey Crossing – Findings of Independent Technical Review” dated December 21, 2018 from the Director, Transportation, be endorsed.



3. **RICHMOND ACTIVE TRANSPORTATION COMMITTEE – PROPOSED 2019 INITIATIVES**

(File Ref. No. 01-0100-20-RCYC1) (REDMS No. 6042766 v. 3)

PWT-23

See Page PWT-23 for full report

Designated Speakers: Joan Caravan and Donna Chan

STAFF RECOMMENDATION

- (1) *That the proposed 2019 initiatives of the Richmond Active Transportation Committee, as outlined in the staff report titled “Richmond Active Transportation Committee - Proposed 2019 Initiatives” dated December 13, 2018 from the Director, Transportation, be endorsed; and*
- (2) *That a copy of the report titled “Richmond Active Transportation Committee – Proposed 2019 Initiatives” be forwarded to the Richmond Council-School Board Liaison Committee for information.*



ENGINEERING AND PUBLIC WORKS DIVISION

4. **RECYCLING DEPOT - POTENTIAL ECO CENTRE UPGRADE OPTIONS**

(File Ref. No. 10-6370-04-01) (REDMS No. 5968841 v. 8)

PWT-34

[See Page PWT-34 for full report](#)

Designated Speaker: Suzanne Bycraft

STAFF RECOMMENDATION

- (1) *That Option 2 of the staff reported entitled, “Recycling Depot – Potential Eco Centre Upgrade Options” from the Director, Public Works Operations dated January 16, 2019, be endorsed; and*
- (2) *That the City’s Consolidated 5 Year Financial Plan (2019-2023) be amended to include \$1,226,000 for the Recycling Depot – potential eco centre upgrade as presented under Option 2 of the staff report entitled “Recycling Depot – Potential Eco Centre Upgrade Options”, funded from the Sanitation and Recycling provision.*



5. **FUEL PURCHASES AGREEMENT - SUNCOR ENERGY PRODUCTS PARTNERSHIP**

(File Ref. No. 02-0665-03-01) (REDMS No. 6073610)

PWT-51

[See Page PWT-51 for full report](#)

Designated Speaker: Suzanne Bycraft

STAFF RECOMMENDATION

- (1) *That the City enter into an agreement, as outlined in the staff report titled “Fuel Purchases Agreement – Suncor Energy Products Partnership” dated January 3, 2019 from the Director, Public Works Operations;*

- (2) *That the Chief Administrative Officer and General Manager, Engineering & Public Works, be authorized to negotiate and execute a fuel supply and delivery contract with Suncor Energy Products Partnership on the contemplated terms and conditions of the fuel consortium contract as outlined in City of Vancouver Request for Proposals No. PS20180305 Supply and Delivery of Fuels; and*
- (3) *That the current fuel purchase contract with Parkland Fuel Corporation under BCPPBG Contract No. PS11122 be extended until such time as the fuel supply and delivery contract with Suncor Energy Products Partnerships is executed and fuel delivery commences under the agreement with Suncor Energy Products Partnerships.*



6. **MANAGER'S REPORT**

ADJOURNMENT





Public Works and Transportation Committee

Date: Wednesday, December 19, 2018

Place: Anderson Room
Richmond City Hall

Present: Councillor Chak Au, Chair
Councillor Linda McPhail, Vice-Chair
Councillor Kelly Greene
Councillor Alexa Loo
Councillor Michael Wolfe (entered at 4:01 p.m.)
Mayor Malcolm Brodie

Also Present: Councillor Carol Day
Councillor Bill McNulty
Councillor Harold Steves

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 November 21, 2018, be adopted as circulated.

CARRIED

NEXT COMMITTEE MEETING DATE

January 23, 2019, (tentative date) at 4:00 p.m. in the Anderson Room

PLANNING AND DEVELOPMENT DIVISION

Public Works & Transportation Committee

Wednesday, December 19, 2018

1. **TRANSLINK POLICY FOR PROVISION OF WASHROOMS ON TRANSIT**

(File Ref. No. 01-0154-04) (REDMS No. 6032168 v. 3)

Councillor Wolfe entered the meeting (4:01 p.m.).

In response to questions from Committee, Sonali Hingorani, Transportation Engineer commented that TransLink has not yet identified which specific Sky Train stations will include facilities, just the criteria to identify key locations to maximize coverage and capture as many customers as possible. Ms. Hingorani further remarked that the next phase will include identifying locations for washroom facilities along the transit network based on TransLink's criteria along with an implementation strategy in 2019 and staff will provide input and feedback regarding the needs of Richmond at this stage.

Discussion took place on advocating to TransLink for the inclusion of washrooms at key Richmond transit locations and as a result, the following **motion** was introduced:

It was moved and seconded

- (1) *That the report titled "TransLink Policy for Provision of Washrooms on Transit" dated December 7, 2018 from the Director, Transportation, be received for information; and*
- (2) *That a letter be sent to Translink encouraging the provision of washrooms at all Canada Line stations as well as the new Richmond-Brighouse bus mall.*

CARRIED

ENGINEERING AND PUBLIC WORKS DIVISION

2. **2019 SUBMISSION TO THE DISASTER MITIGATION AND ADAPTATION FUND - RICHMOND FLOOD PROTECTION PROGRAM**

(File Ref. No. 10-6060-05-01) (REDMS No. 6037901 v. 7)

It was moved and seconded

- (1) *That the submission to the Disaster Mitigation and Adaptation Fund – Richmond Flood Protection Program requesting funding for up to 40% of the project cost, for a total of \$13,780,000, to upgrade 2.6 kilometers of dike and five pump stations be endorsed;*
- (2) *That the Chief Administrative Officer and General Manager, Engineering and Public Works be authorized to enter into funding agreements with the Government of Canada for the above mentioned project should it be approved for funding by the Government of Canada;*

2.

Public Works & Transportation Committee
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- (3) *That, should the above mentioned project be approved for funding by the Government of Canada, the Consolidated 5 Year Financial Plan (2019-2023) be updated accordingly; and*
- (4) *That copies of the submission be sent to Richmond Members of Parliament.*

The question on the motion was not called as discussion took place on forwarding the submission to local federal representatives.

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

3. **STREET LIGHTING CONVERSION PLAN STATUS UPDATE**

(File Ref. No. 10-6125-05-01) (REDMS No. 6022368 v. 15)

In response to queries from Committee, Levi Higgs, Corporate Energy Manager advised that (i) a capital request for \$430,000 has been submitted for phase 3 and approximately \$460,000 will be requested for phase 4 in 2020, (ii) staff can provide updates regarding electricity cost savings from the conversion to Committee as available, (iii) phases 1 and 2 included all arterial roads identified in the northwest and southwest areas of the City, done on a quadrant by quadrant basis and phase 3 is centered around the City Centre and Cambie areas, and (iv) light pollution is addressed by staff on a case by case basis for any issues noted by residents.

It was moved and seconded

That the staff report titled "Street Lighting Conversion Plan Status Update" from the Director, Engineering dated November 16, 2018, be received for information.

CARRIED

4. **DIKE MASTER PLAN - PHASES 3 AND 5**

(File Ref. No. 10-6060-01) (REDMS No. 5939748 v. 11)

In response to questions from Committee, Beata Ng, Acting Manager, Engineering Planning, remarked that the implementation of the Dike Master Plan is dependent on sea level rise and staff will continue to observe the rate and make adjustments accordingly. Ms. Ng further advised that superdikes have been implemented in Richmond including at the Richmond Olympic Oval and Imperial Landing in Steveston, and noted that this generally makes future dike development easier as the development is built up to where the dike is built. In response to further questions from Committee, Ms. Ng commented that the open houses are planned for mid to late January 2019, with the final report anticipated in March 2019.

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It was moved and seconded

That the public and key external stakeholders be consulted as identified in the staff report titled "Dike Master Plan – Phases 3 and 5" from the Director, Engineering, dated November 30, 2018.

CARRIED

5. MANAGER'S REPORT

(i) Recent Heavy Rainfalls

John Irving, Director, Engineering, and Tom Stewart, Director, Public Works Operations provided an update to Committee regarding the recent heavy rainfalls and extreme weather events and noted that extreme events are becoming more frequent with climate change and that the system performed well in response. They further commented that the pump stations were operating at a higher capacity than normal, 80-90% on the north side of Richmond.

In response to questions from Committee, Mr. Irving remarked that new residential developments are required to build higher to mitigate flooding and owners of older properties can improve drainage by connecting to the storm drainage system and creating additional barriers. Mr. Stewart, in response to further queries, noted that staff continually monitor and accumulate data to ensure that the City is proactive in its approach to pump station monitoring and that staff are able to respond to any issues that may arise during major events or address any component failures. Mr. Stewart further commented that approximately 100 calls were received regarding localized flooding.

(ii) FortisBC Update

Mr. Irving provided an update regarding the disruption to the FortisBC natural gas supply from the rupture of the Enbridge pipeline and advised that with recent warm weather, Enbridge is back up to 85% capacity with adequate storage for customers over the next couple of months.

ADJOURNMENT

It was moved and seconded

That the meeting adjourn (4:29 p.m.).

CARRIED

Public Works & Transportation Committee
Wednesday, December 19, 2018

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, December 19, 2018.

Councillor Chak Au
Chair

Amanda Welby
Legislative Services Coordinator



City of Richmond


Report to Committee

To: Public Works and Transportation Committee
From: Lloyd Bie, P.Eng.
Director, Transportation
Re: 2019/2020 BikeBC Program Submission

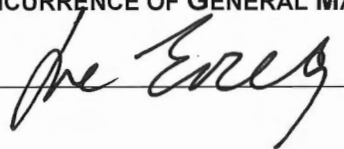


Date: December 14, 2018
File: 01-0150-20-
THIG1/2018-Vol 01

Staff Recommendation

1. That the submission for cost-sharing to the Province of BC 2019/2020 BikeBC Program for the Westminster Highway multi-use pathway, as described in the report, titled "2019/2020 BikeBC Program Submission" dated December 14, 2018, from the Director, Transportation, be endorsed;
2. That, should the above application be successful, the Chief Administrative Officer and the General Manager, Planning and Development, be authorized to execute the funding agreement; and
3. That the Consolidated 5 Year Financial Plan (2019-2023) be updated accordingly.


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

Att. 2

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

Staff Report

Origin

The Province of BC's BikeBC Program is a 50-50 cost-share program between the Province and local governments to support the construction of new bike lanes, trails and pathways to promote cycling as a means of reducing traffic congestion and greenhouse gas emissions. This report presents the proposed submission from the City for consideration of cost-share funding under BikeBC program for the 2019/2020 funding cycle.

This report supports Council's 2014-2018 Term Goal #3 A Well-Planned Community:

Adhere to effective planning and growth management practices to maintain and enhance the livability, sustainability and desirability of our City and its neighbourhoods, and to ensure the results match the intentions of our policies and bylaws.

3.3. Effective transportation and mobility networks.

This report supports Council's 2014-2018 Term Goal #5 Partnerships and Collaboration:

Continue development and utilization of collaborative approaches and partnerships with intergovernmental and other agencies to help meet the needs of the Richmond community.

5.1. Advancement of City priorities through strong intergovernmental relationships.

Analysis

Westminster Highway Multi-Use Pathway

Westminster Highway is the only designated east-west bike route linking the Hamilton area in east Richmond with the central part of the city. The bike route also serves an important regional function for cycling trips to New Westminster and Delta via connections to the Queensborough and Alex Fraser Bridges.

In the Hamilton area, cycling facilities are continuous on both sides of the street except for a section on the west side between Smith Crescent and Fraserside Gate. Currently, a minimal shoulder (0.4-0.8 m in width) accommodates two-way pedestrians and southbound cyclists with no protection from adjacent vehicle traffic. Beyond these limits, a designated southbound bike lane and pedestrian pathway exist to the northeast and southwest.

This project would fill in the gap in cycling and pedestrian facilities with the provision of a paved multi-use path that is delineated for pedestrians and cyclists where feasible and separated from vehicle traffic by a raised curb (Attachments 1 and 2). The project includes alignment of the pathway behind existing bus stops to minimize conflict with buses and loading/unloading passengers.

The project would significantly improve cycling connectivity in this area for both local and longer distance trips as well as enhance pedestrian access to the existing 410 and 418 transit services on Westminster Highway, particularly for the 410 route that has the highest ridership and frequency of all bus routes serving Richmond.

Proposed Funding

In September 2018, Council approved the submission of the Westminster Highway multi-use pathway project to TransLink for consideration of cost-share funding as part of its 2019 allocated and competitive cycling and pedestrian infrastructure programs. That application is seeking up to \$660,000 towards the project. The total cost of the project is estimated at \$1,100,000.

TransLink has not yet confirmed the funding the City may receive under its 2019 Program, which may be less than \$660,000. The project will proceed in 2019 only if the City is successful in securing at least \$550,000 combined external cost-share funding from either or both of the applications to TransLink and BikeBC; otherwise, the project will be deferred to 2020 for further consideration.

Table 1 below summarizes the estimated project cost, the proposed internal funding sources and the requested external funding sources. The City's portion of the cost will be considered during the 2019 Capital Budget process. Should the BikeBC submission be successful, the amount requested from TransLink would be reduced to \$275,000, as TransLink's capital cost-share funding program requires the deduction of any senior government grant funding with the balance then cost-shared 50-50 between the City and TransLink. Under this scenario, the City's cost would be reduced from \$550,000 to \$275,000.

Table 1: Project to be Submitted to 2019/2020 BikeBC Program

Project Name/Scope	Proposed City's Portion & Funding Source for 2019 ⁽¹⁾	Proposed TransLink 2019 Funding ⁽²⁾	Proposed BikeBC 2019/2020 Funding ⁽³⁾	Est. Total Project Cost
Westminster Highway (Smith Cr-Fraserside Gate): multi-use pathway on west side	Roads DCC \$440,000 (With full TransLink grant but no BikeBC grant) \$275,000 (With full BikeBC and TransLink grants)	\$660,000 (With no BikeBC grant) \$275,000 (With full BikeBC grant and TransLink grant)	\$550,000	\$1,100,000

- (1) The City's portion shown is based on available Roads DCC funding over the next five years and at least \$550,000 to be secured from combined current external cost-share applications. The City's actual portion (i.e., balance of remaining estimated cost after external grants) will be determined upon confirmation of the approved amounts to be received from external agencies.
- (2) The amount shown represents the maximum 50% funding contribution to be received from the external agency based on the City's cost estimate for the project. If the BikeBC application is successful, the TransLink 2019 funding would be reduced to \$275,000.
- (3) The amount shown represents the maximum 50% funding contribution to be received from the external agency 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.

If the BikeBC submission is successful, the City would enter into a funding agreement with the Province. The agreement is a standard form agreement provided by the Province and includes an indemnity and release in favour of the Province. Staff recommend that the Chief Administrative Officer and General Manager, Planning and Development be authorized to execute the agreement.

Financial Impact

The estimated cost of the project is \$1,100,000. Should the BikeBC submission be successful, the City's cost would be \$550,000. Should both the BikeBC and TransLink applications be successful for the full requested amounts, the City's cost would be \$275,000.

Conclusion

The pedestrian and bicycle facility improvement project proposed for submission to the provincial 2019/2020 BikeBC cost-sharing program would support the goals of the *Official Community Plan* to improve community mobility and reduce greenhouse gas emissions by encouraging more walking and cycling trips rather than driving. The potential receipt of external funding would enable the City to expedite the provision of sustainable transportation infrastructure and improve healthy and active travel options for the community.



Joan Caravan
Transportation Planner
(604-276-4035)

JC;jc

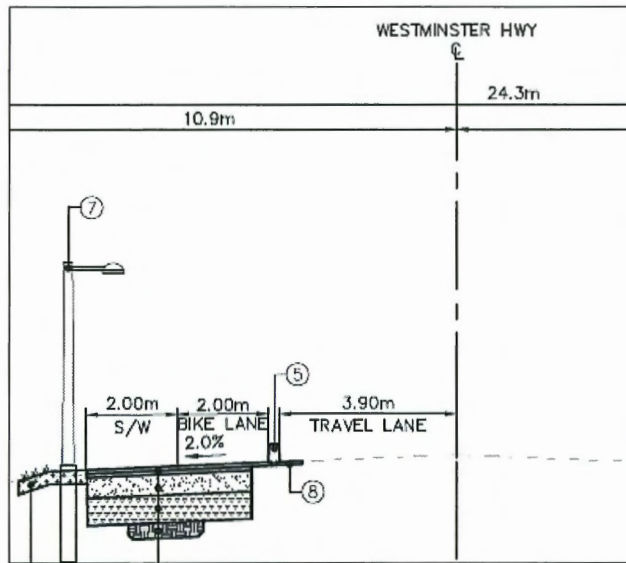
Att. 1: Proposed Westminster Highway Multi-Use Pathway: Context Map

Att. 2: Proposed Westminster Highway Multi-Use Pathway: Typical Cross-Sections and Photos

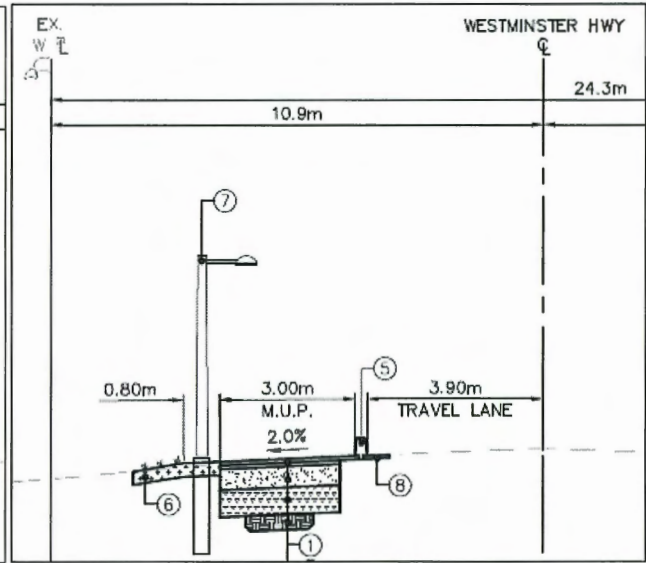
Proposed Westminster Highway Multi-Use Pathway: Context Map



Proposed Westminster Highway Multi-Use Pathway: Typical Cross-Sections and Photos



Delineation of Pathway between Pedestrians and Cyclists



Shared Multi-use Path where Constrained by Hydro Poles



Westminster Hwy at Westbound Bus Stop at Willett Ave



Westminster Hwy at Fraserside Gate: looking westbound



City of Richmond

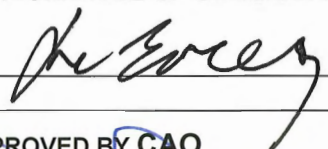

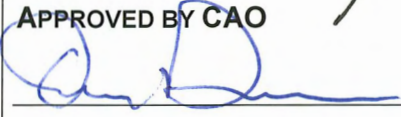
Report to Committee

To: Public Works and Transportation Committee **Date:** December 21, 2018
From: Lloyd Bie, P. Eng.
Director, Transportation **File:** 01-0150-20-
THIG1/2018-Vol 01
Re: **George Massey Crossing – Findings of Independent Technical Review**

Staff Recommendation

That a letter requesting the Ministry of Transportation and Infrastructure pursue short-term strategic improvements to the Steveston Highway interchange and expedite the completion of a business case for Highway 99 crossing improvements, as detailed in the staff report titled “George Massey Crossing – Findings of Independent Technical Review” dated December 21, 2018 from the Director, Transportation, be endorsed.


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

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

Staff Report

Origin

As background, Table 1 provides a chronology of the major milestones for the previous George Massey Tunnel Replacement project (the Project).

Table 1: Major Milestones of George Massey Replacement Tunnel Project

Date	Milestone
Sep 2012	Premier announces George Massey Tunnel (the Tunnel) to be replaced
Nov-Dec 2012	Phase 1 Consultation: Project need and potential constraints to Project scope
Mar-Apr 2013	Phase 2 Consultation: draft Project scope and goals; five crossing scenarios
Sep 2013	Premier announces the Tunnel to be replaced with bridge in the same corridor
Dec 2015	Ministry of Transportation and Infrastructure (the Ministry) releases Project Definition Report with detailed Project scope (e.g., 10-lane bridge, new Steveston Hwy and Hwy 17A interchanges, median HOV/transit lanes, decommission Tunnel)
Dec 2015-Jan 2016	Phase 3 Consultation: proposed Project scope
Jan-Jun 2016	Pre-application stage of Environmental Assessment (EA) process
Jun 2016	Ministry submits application to Agricultural Land Commission (ALC) for Project
Jul-Dec 2016	Application Review stage of EA process
Jan 2017	EA report for Project referred to Ministers
Feb 2017	EA certificate issued for Project and ALC application approved
Sep 2017	Ministry announces independent technical review (the Review) of the Tunnel corridor and cancellation of procurement process for construction of 10-lane bridge
Nov 2017	Ministry announces consultant (Westmar Advisors) retained to conduct the Review
Sep 2018	Review delivered to the Minister of Transportation and Infrastructure (the Minister)
Dec 2018	Minister releases the Review

On December 17, 2018, the Provincial Minister of Transportation and Infrastructure (the Minister) released the independent technical review (the Review) and identified a number of interim upgrades to the George Massey Tunnel (the Tunnel) to address deficiencies. This report provides an overview of the Review's findings and recommendations.

This report supports Council's 2014-2018 Term Goal #3 A Well-Planned Community:

Adhere to effective planning and growth management practices to maintain and enhance the livability, sustainability and desirability of our City and its neighbourhoods, and to ensure the results match the intentions of our policies and bylaws.

3.3. Effective transportation and mobility networks.

This report supports Council's 2014-2018 Term Goal #5 Partnerships and Collaboration:

Continue development and utilization of collaborative approaches and partnerships with intergovernmental and other agencies to help meet the needs of the Richmond community.

5.1. Advancement of City priorities through strong intergovernmental relationships.

Analysis

City Input

Staff met with the consultant and Ministry staff in January 2018 to provide the City's input as part of the Review. Staff conveyed Council's concerns regarding the Project. Specifically, that the City supports an improved crossing at this location but not the following features of the Project:

- the scale of the combined infrastructure of a 10-lane high level bridge and three-level interchange at Steveston Highway,
- the associated land use and agricultural impacts,
- traffic impacts on local roads and at the Oak Street Bridge, and
- lack of consistency with the *Regional Growth Strategy* or the *Mayors' Council Vision for Regional Transportation Investments*.

The City's concerns are fully documented in the Review.

Key Findings

The Review assessed the Project in three steps:

- (1) What are the Project goals?
- (2) What solutions were developed to meet the goals?
- (3) Would the planned solutions have met the Project goals?

The Review also provides recommendations for next steps and improvements to the Project.

Project Goals and Design Considerations

The Review traces how the Project scope (10-lane bridge, new Steveston Highway and Highway 17A interchanges, median HOV/transit lanes) was developed based on six Project goals and singles out specific functional criteria used to define the solutions to achieve some of the goals (Table 2).

Table 2: Project Goals and Functional Criteria for Goals 1, 4 and 6

Project Goals	Functional Criteria for Project Goals 1, 4 and 6
1. Reduce congestion.	Goal 1: Reduce Congestion (i) Eliminate queuing at any time to 2045
2. Improve safety.	Goal 4: Support Increased Transit on the Highway 99 Corridor (i) Provide convenience of transit by improving infrastructure (e.g., integrated bus stops similar to Skytrain stations)
3. Support trade and commerce.	Goal 6: Enhance the Environment (i) Provide a clear span structure with no piers in the Fraser River
4. Support increased transit on the Highway 99 corridor.	(ii) Construct project within existing corridor and reduce footprint of project infrastructure
5. Support options for pedestrians and cyclists.	
6. Enhance the environment.	

The Review finds that the Project goals did not include the following key design considerations identified in the Phase 1 consultation for developing potential crossing options:

- Alignment with Community, Regional and National Objectives: including concentrating growth in designated areas and providing access to regional town centres;
- Community Livability: including property, visual and noise impacts, as well as community access; and
- Cost: including capital cost, technical viability, time to implement, and impacts to road users during construction.

Inclusion of the above considerations would have introduced limitations to the Project scope and ensured that all criteria were optimized. The Review finds that the functional criteria defined for Goals 1, 4 and 6 were the primary factors in determining the significant scale of the infrastructure (e.g., 10-lane bridge, 3-level interchange at Steveston Highway, centre median transit exchanges).

The Review aligns with the City's position that the Project scope did not fully address a number of key considerations (i.e., alignment with local and regional plans, impacts to community liveability and cost).

Traffic Modelling and Forecast

The Review included an updated traffic forecast and compared the performance of the Project scope (10-lane bridge and 3-level Steveston Highway interchange) with two investment scenarios considered to be the minimum required to improve the crossing:

- Scenario 1: six general purpose lane crossing (no HOV/transit lanes) and an upgraded Steveston Highway overpass;
- Scenario 2: eight general purpose lane crossing (no HOV/transit lanes) and an upgraded Steveston Highway overpass.

In the absence of tolling or mobility pricing, reducing the number of lanes from 10 to six or eight will accommodate the majority of 2045 predicted traffic with delays in the peak direction in 2045 similar to today (i.e., 15 to 17 minutes in the peak direction during peak periods) and no delay in the non-peak direction. The Review acknowledges that eliminating all congestion would induce traffic and not provide any incentive to shift from single occupant vehicle (SOV) use. The Review supports the City's position that the significant increase in vehicle capacity to 10 lanes was not consistent with the *Official Community Plan* or the Mayors' Council regional transportation plan.

Bridge and Highway Infrastructure

The functional criteria defined for Goal 6 resulted in a bridge design that would be the largest to be built in British Columbia, the longest cable-stayed bridge in North America and one of the widest at 10 lanes. The Review finds that the bridge design could be simplified by allowing the main piers to be placed in the river, similar to other crossings, and using an alignment offset from the existing corridor. The potential environmental impacts and those to adjacent properties (including agricultural land) of this design would need to be considered and mitigated. These

modifications to the bridge design, including a reduction in the number of lanes, would achieve cost savings estimated at \$500 million.

The planned HOV/transit provisions (i.e., HOV/transit lanes adjacent to the median, median transit exchanges, and fly-over from Bridgeport Road) do not provide value for money. The Review states that TransLink has no future plans to extend light rapid transit (LRT) south of the Fraser River at the crossing and that the existing shoulder bus lanes function well and have substantial capacity for expansion. Eliminating the HOV/transit provisions would substantially reduce the scale of the Steveston Highway and Highway 17A interchanges, remove two under-utilized lanes from the crossing and allow for a phased highway expansion and overpass reconstruction based on need.

The Review identifies that the short-term need is expansion of the crossing as well as an improved Steveston Highway interchange. An upgraded Steveston Highway interchange is a minimum requirement regardless of the new crossing design. Under the two minimum investment scenarios, the free flow ramps and the centre median transit stops at Steveston Highway would be eliminated. These changes would allow a reduced scope for the Steveston Highway interchange comprising a total of five lanes (three eastbound and two westbound) for the overpass that would substantially reduce the scale of the interchange while also providing adequate functionality (Figure 1).

The Review further finds that seismically retrofitting the Tunnel is technically feasible but the total project cost may exceed the cost of an equivalent level of capacity in a new structure. A new tunnel crossing is feasible and may result in increased benefits and cost savings in comparison to a new bridge based on phased development and the use of existing infrastructure.

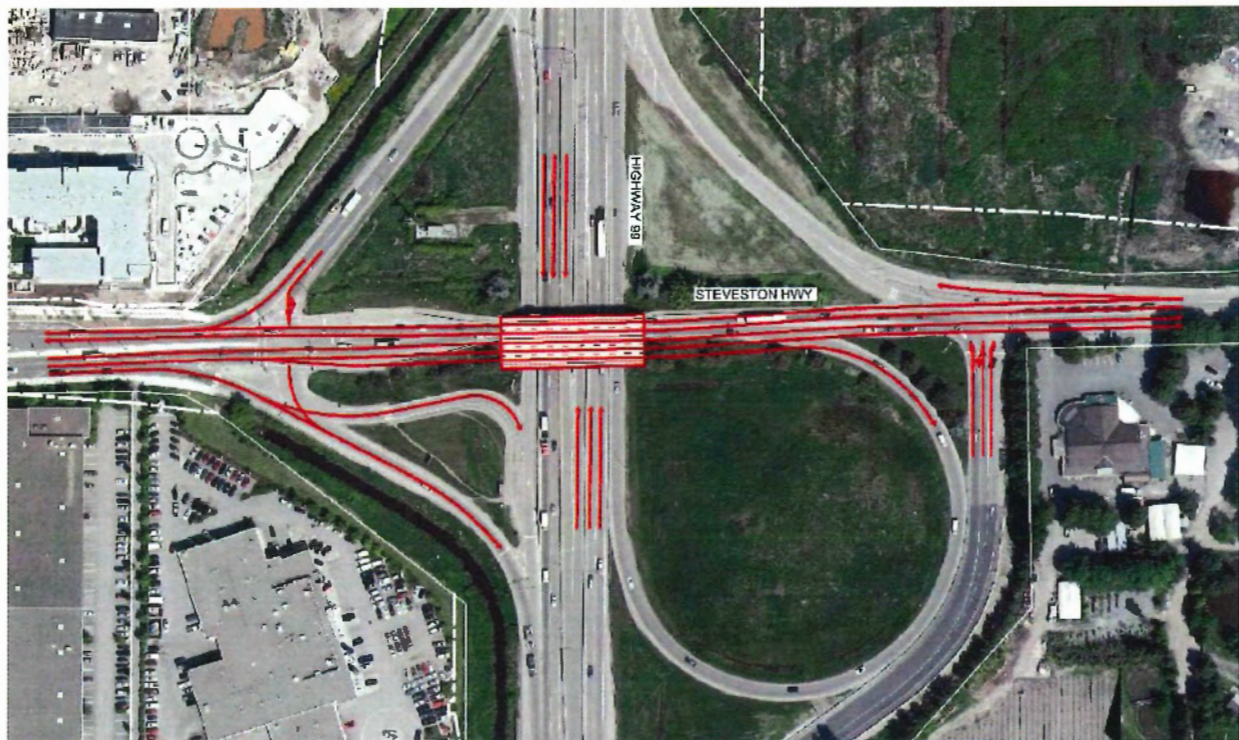


Figure 1: Potential Five Lane Overpass at the Steveston Highway Interchange

Recommendations

The Review recommends that the functional criteria defined to achieve the Project goals be re-examined. If modified, they could result in a reduced Project scope and cost while still providing increased capacity and reliability. Specifically, the Review has the following recommendations for the consideration of the Province:

- Capacity: instead of eliminating all queuing at any time to 2045, provide sufficient capacity to improve current reliability and reduce congestion to levels consistent with other crossings in Greater Vancouver. The number of lanes could then be reduced from 10 to six or eight with a corresponding smaller Project footprint. The scaled down capacity would encourage mode shift from SOV trips and any future transportation demand management measures (e.g., mobility pricing) would help ensure that the corridor performs at optimal traffic levels.
- HOV/Transit: eliminate the median HOV/transit lanes and transit stations, and maintain the existing shoulder bus lanes.
- Alternative Crossing Designs for a Bridge: Consider construction of piers in the water and an alignment adjacent to the existing corridor, which would allow significant cost savings.
- Alternative Crossing Designs for a Tunnel: Undertake a combined feasibility study to confirm the scope of an immersed tube tunnel and the scope and cost to retrofit the existing tunnel.

Staff support the Review recommendations, which echo and address the City's concerns and align with the City's suggested alternative crossing improvements.

Interim Improvements

At the time of the release of the Review, the Minister announced that \$40 million will be allocated to a number of interim upgrades scheduled to be undertaken in 2019 through 2020 on the Tunnel to address deficiencies. These upgrades include the following:

- converting tunnel and roadway lighting to the new LED standard and washing the interior more frequently to increase visibility to improve safety;
- upgrading the alarm, pumping, ventilation, fire door, and electrical systems to meet current standards and ensure reliability;
- resurfacing Highway 99 between Steveston Highway and the Highway 17 Interchange, including better lane markings and more reflective signs to improve safety; and
- improving tunnel drainage to reduce the risk to drivers from pooling water and ice at tunnel entrances.

The improvements related to lighting and pavement markings were identified in staff's recent letter to the Ministry sent in response to Council's resolution in November 2018:

That staff be directed to explore the current deficiencies related to lane markings and lighting in the George Massey Tunnel and forward those appropriate maintenance requests to the Ministry of Transportation for corrective action.

Next Steps

From January to April 2019, the Province will undertake consultation with regional municipalities and First Nations to identify new criteria and goals for a crossing that better aligns with regional plans. This information will be used to develop and assess appropriate bridge and tunnel options that reflect community preferences with a new business case to be developed by Fall 2020. In addition, scoping work for improvements to the Steveston interchange to reduce congestion will begin immediately.

To propel the timely implementation of improvements to the crossing, staff recommend that the Ministry be requested to:

- Pursue strategic improvements to the Steveston Highway interchange in the short-term that are compatible with potential crossing options in the longer term. Advancing the interchange upgrades ahead of the potentially phased crossing improvements combined with the interim improvements to the Tunnel would provide immediate tangible benefits and congestion relief for Highway 99 users.
- Expedite completion of the business case that will identify the preferred crossing option from Fall 2020 to early 2020.

Financial Impact

None.

Conclusion

The findings of the independent technical review of the George Massey Tunnel corridor corroborate the City's key concerns with the Project particularly with respect to the excessive 10-lane capacity of the bridge, the scale and impact of the infrastructure, and the lack of consistency with local and regional plans.

Staff recommend that the Ministry be requested to implement strategic upgrades to the Steveston Highway interchange in the short term to provide immediate benefits for Highway 99 users concurrent with consultation and planning for the longer term crossing options to be completed by early 2020.



Joan Caravan
Transportation Planner
(604-276-4035)
JC:jc



City of Richmond

Report to Committee

To: Public Works and Transportation Committee

Date: December 13, 2018

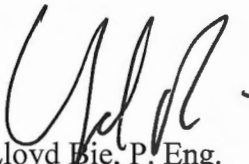
From: Lloyd Bie, P. Eng.
Director, Transportation

File: 01-0100-20-
RCYC1/2018-Vol 01

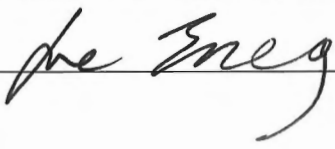

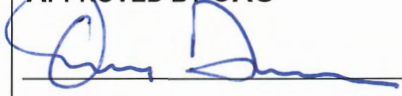
Re: Richmond Active Transportation Committee – Proposed 2019 Initiatives

Staff Recommendation

1. That the proposed 2019 initiatives of the Richmond Active Transportation Committee, as outlined in the staff report titled “Richmond Active Transportation Committee - Proposed 2019 Initiatives” dated December 13, 2018 from the Director, Transportation, be endorsed.
2. That a copy of the report titled “Richmond Active Transportation Committee – Proposed 2019 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 Recreation Services Engineering	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	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.

This report reviews the 2018 activities of the RATC and identifies a number of initiatives for 2019 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 2014-2018 Term Goal #2 A Vibrant, Active and Connected City:

Continue the development and implementation of an excellent and accessible system of programs, services, and public spaces that reflect Richmond's demographics, rich heritage, diverse needs, and unique opportunities, and that facilitate active, caring, and connected communities.

2.3. *Outstanding places, programs and services that support active living, wellness and a sense of belonging.*

This report supports Council's 2014-2018 Term Goal #3 A Well-Planned Community:

Adhere to effective planning and growth management practices to maintain and enhance the livability, sustainability and desirability of our City and its neighbourhoods, and to ensure the results match the intentions of our policies and bylaws.

3.3. *Effective transportation and mobility networks.*

Analysis

The RATC undertook and participated in a number of activities in 2018 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 2018

The City continued to improve Richmond's active transportation network in 2018, which now comprises over 72 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

- Westminster Highway (No. 8 Road-Nelson Road): Conversion of the directional shoulder bike lanes to a two-way off-street multi-use pathway (MUP) on the south side including new and upgraded accessible bus stops (Figure 1). The completed section now provides a continuous off-street pathway 5.5 km in length between No. 6 Road and McMillan Way.
- River Drive (Van Horne Way-No. 4 Road): Substantial completion of an off-street MUP on the south side with pedestrian lighting. The MUP will be completed by Spring 2019 and will fill a critical gap in cycling and pedestrian facilities that provides a link between the Tait neighbourhood and the Bridgeport Canada Line station and transit exchange.
- Great Canadian Way (Van Horne Way-Bridgeport Road): Upgrade of the existing off-street pathway and sidewalk on the west side to an MUP with pedestrian lighting (Figure 2). Wayfinding signage will be installed in early 2019. At its northern end, the new MUP connects to the existing MUP on Van Horne Way that in turn links to the Canada Line Bridge. At its southern end, the new MUP will connect to an MUP being constructed as part of the frontage requirements of developments on the west side of Garden City Road between Sea Island Way and Capstan Way. Collectively, these improvements are part of the City's continued efforts to upgrade existing and establish new cycling facilities that are physically separated from adjacent vehicle traffic, particularly in the City Centre.



Figure 1: Westminster Highway MUP with accessible bus stop



Figure 2: Great Canadian Way MUP

- Local Street Bikeways: Progress was made on the following bike routes that use a combination of local streets with low traffic volumes and speeds and off-street connecting pathways.
 - Midtown: Initiation of a new north-south bike route east of and parallel to Gilbert Road that will link Steveston Highway and Granville Avenue. One existing pathway was upgraded and one new pathway constructed to provide off-street connections as part of Phase 1 south of Francis Road. Completion of the route from Francis Road to Granville Avenue is planned as Phase 2 in 2019.
 - Parkside: This existing north-south bike route along Ash Street between Williams Road and Granville Avenue was extended to Westminster Highway with the upgrade of existing pathways through Garden City Park and Anderson School. Pavement markings and signage will be implemented in early 2019 to complete the extension.
 - Odlin Road: Initiation of a new east-west bike route located primarily along Odlin Road between its eastern terminus (east of No. 4 Road) and Aberdeen Canada Line Station. The existing pathway through Odlin Park was upgraded and improvements made to the east leg of the Browngate Road-Hazelbridge Way intersection to facilitate the through movement of cyclists. Completion of the route with the construction of a new MUP between Odlin Road and Brown Road is planned in 2019.



Figure 3: Wayfinding Signage on Shell Road Trail

Improvement of Existing Facilities

- Trail Wayfinding: Street name signs based on Parks' Wayfinding Strategy were installed at the cross streets along the Shell Road and Bridgeport Trails to orient cyclists who may be unfamiliar with the routes (Figure 3).
- Quick Fixes: The City participated in a regional initiative organized by HUB Cycling (a non-profit organization that works to improve cycling conditions in Metro Vancouver) to address minor maintenance and improvement measures identified by the local Richmond HUB Committee. The quick fix items included new signage and pavement markings (Figure 4) and the addition of green paint at conflict points.
- TransLink Initiatives: The Committee provided input into the design work for TransLink's planned construction of a secure bike parkade at the Bridgeport Canada Line Station, anticipated in 2019.



Figure 4: Stencils added to Bike Path to Delineate from Sidewalk

Design of Planned Facilities

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

- *Steveston Highway (Shell Road-Mortfield Gate)*: Construction of a two-way off-street paved pathway on the south side as Phase 1. Future phases would extend the pathway westward to No. 2 Road where it would link to the off-street pathway currently being constructed on No. 2 Road south of Steveston Highway.
- *Garden City Road Bike and Pedestrian Paths*: Currently, southbound cyclists and two-way pedestrians share the use of a paved shoulder on the west side of Garden City Road between Lansdowne Road and Westminster Highway. This project would construct a delineated protected southbound bike path and two-way pedestrian path to improve the safety of users.
- *Railway Greenway*: Upgrade of the remaining intersections to the ultimate standard as exists at Steveston Highway and the north side of Francis Road (i.e., curb and gutter, concrete landing pad, relocated traffic signal pole, pathway markings).
- *No. 6 Road Multi-Use Pathway*: Construction of a two-way off-street paved pathway for pedestrians and cyclists on the west side of No. 6 Road between Cambie Road and Bridgeport Road. There are currently discontinuous pedestrian and no cycling facilities on this road section, which is a planned cycling route.

Promotion of Active Transportation Network in 2018

The Committee participated in the following activities in 2018 to promote cycling and other active transportation modes in Richmond.

- *Bike to Work Week (May and October 2018)*: The Committee worked with the organizer (HUB Cycling) of this region-wide annual initiative to continue to successfully stage these events in Richmond. A total of 524 riders who reside in Richmond registered on-line for both events (up from 519 in 2017) including 126 new bike commuters (up from 109 in 2017). These riders collectively logged 2,333 trips for a total distance of 28,431 kilometres thereby avoiding the emission of 6.2 tonnes of greenhouse gases (Figure 5).

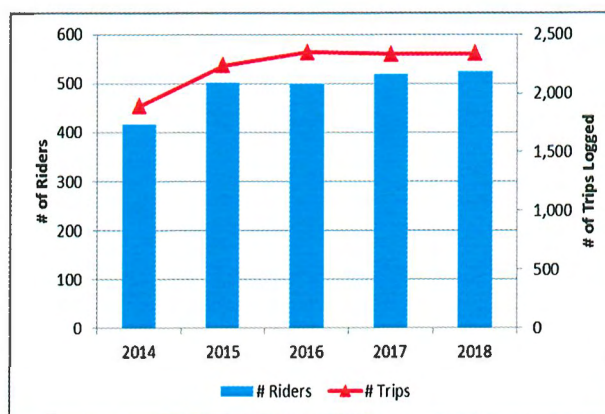


Figure 5: Participation of Cyclists who reside in Richmond in Bike to Work Week

A total of four celebration stations for cyclists were held in Richmond including two sponsored by the City at the Canada Line Bridge for both the Spring and Fall events. Collectively, these celebration stations logged 416 cyclists, which is comparable to past years.

- 18th Annual “Island City, by Bike” Tour (June 10, 2018): Each year in June, as part of regional Bike Month activities and the City’s Environment Week events, the Committee and the City jointly stage guided tours for the community of some of the city’s cycling routes (Figure 6). The 18th annual “Island City, by Bike” tour was based at Thompson Community Centre and offered short (eight km) and long (25 km) rides with escorts provided by volunteer members of the Richmond RCMP bike squad. The short loop featured the Railway Greenway and the Crabapple Ridge Neighbourhood Bike Route while the long ride went out to Iona Island. Activities included a bike and helmet safety check prior to the ride plus a barbecue lunch and raffle prize draw at the finish. Richmond RCMP also provided registration services for an anti-theft bike initiative. The event attracted 80 cyclists of all ages and ability, which is comparable to attendance at past recent events.
- Update of Cycling & Recreational Trails Map: The new map is a partnership with Tourism Richmond that now includes information on Richmond attractions. The updated edition will be distributed in early 2019 to community centres, libraries and other civic facilities as well as handed out at various City events (Figure 7).
- Participation in City Events: Committee members provided information on how to get around Richmond in fun, safe and environmentally friendly ways at the following City events: Public Works Open House (May 14, 2018) and All Aboard! (August 18, 2018) at the Steveston Interurban Tram Building.
- HUB Cycling Bike to Shop Day (June 26, 2018): HUB Cycling staged the third annual Bike to Shop Days event to encourage people to ride to and shop at local businesses. The event aims to show people how easy, fun and convenient it can be to shop by bike. For the first time, HUB Cycling hosted a guided ride from the Marine Gateway Canada Line station to Steveston that attracted 35 participants, 33 of whom had never ridden across the Canada Line Bridge. A celebration station in Steveston (No. 1 Road-Bayview Street) attracted 274 people over a two-hour period (Figure 8). The



Figure 6: Committee Members at 2018 Bike Tour Event

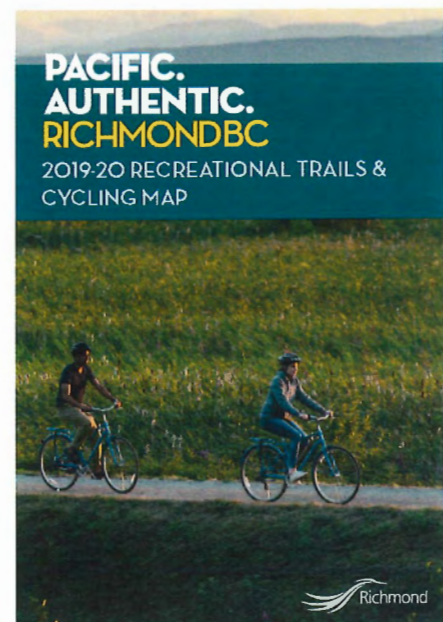


Figure 7: Map Cover



Figure 8: Bike to Shop Day Station

station provided local and regional cycling information, snacks, free bike tune-ups, and chances to win prizes. Local merchants offered discounts to participants.

- **Public Bike Share Pilot Program:** The Committee provided feedback on potential station locations to support the anticipated expansion of the station network in the peak cycling season of Spring-Summer 2019.

Active Transportation Education in 2018

The City provided funding to HUB Cycling to operate cycling education courses for local residents with input from the Committee. 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 leveraged additional funding support from TransLink to expand the number of elementary school students who received on-bike training.

- **Bike to School Education for Students:** As shown in Table 1, a total of 588 students from six elementary schools participated in either two or five day bike education courses held in co-operation with Richmond School District. The courses include in-class lessons, on-bike playground cycling safety training for younger students and neighbourhood road ride education for older youth. The courses were well received and enjoyed the enthusiastic participation of all students and teachers (Figure 10).

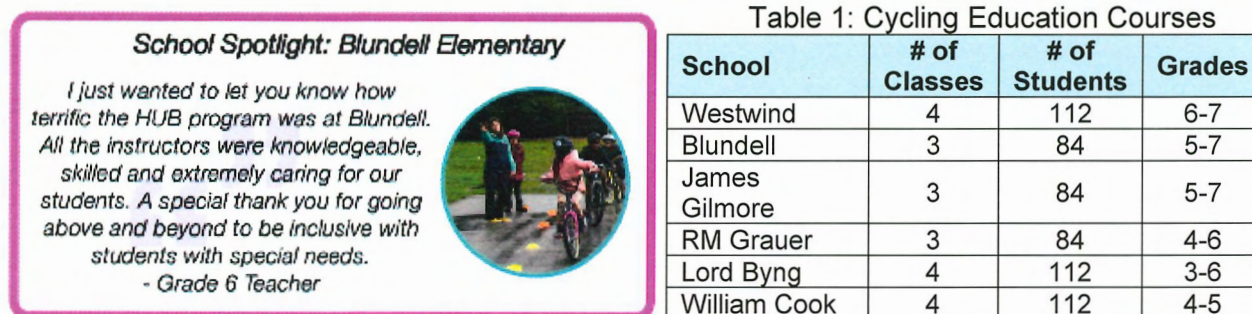


Figure 10: Teacher Feedback

In addition to the school program delivery, HUB Cycling was invited to deliver a presentation at a Student Environmental Sustainability Conference held by Diefenbaker Elementary School in October 2018. Two break-out sessions for approximately 70 students in total were delivered on the topic of active transportation.

- **StreetWise Education for Adults:** One course targeted to seniors was held in co-operation with the Minoru Place Activity Centre. A total of 16 riders (the number of participants is limited to maintain the teacher-student ratio) took part in a five hour course to enable them to build their cycling skills and gain confidence riding on city streets. A follow-up survey of participants indicated a 21% increase in cycling frequency as well as a shift towards riding all year round.

Proposed Active Transportation Network Initiatives in 2019

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.

- *Planned Active Transportation Network Expansion*: Planned City capital projects include further progress on the Crosstown and Midtown Neighbourhood Links and completion of the Odlin Road bike route. The implementation of several off-street paved multi-use pathways includes Alderbridge Way (Shell Road-No. 4 Road) and Sexsmith Road (Beckwith Road-Charles Street). Conceptual design will also be initiated for the northern extension of the Shell Road Trail (Highway 99 Overpass to River Road). 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, installation of delineators to prevent motorists from encroaching into bike lanes, and the expansion of bicycle parking including additional on-street bike corrals.
- *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 and TransLink's bike parkade at the Bridgeport Canada Line Station.

Project costs associated with the expansion and improvement of the active transportation network for 2019 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 2019

The Committee will encourage and promote active transportation as sustainable travel modes that also have significant health benefits via the following activities.

- *Public Bike Share Pilot Program*: The Committee will continue to provide input on the deployment and operation of the pilot program.
- *19th Annual "Island City, by Bike" Tour*: Assist in the planning, promotion and staging of the seventeenth annual bike tour of Richmond during Bike Month in June 2019, which is set for Sunday, June 9th at Britannia Heritage Shipyard. 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 May and October 2019, which includes the provision of celebration stations in Richmond for cyclists.
- *Bicycle Education for Students and Adults*: In co-operation with HUB, the Richmond School District and a variety of community agencies, expand the delivery of safe cycling education courses to additional elementary schools and new immigrants.
- *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. Continue to update, revise and enhance related 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 2019 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*.



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

Att. 1: Location of Planned Active Transportation Network Projects for 2019

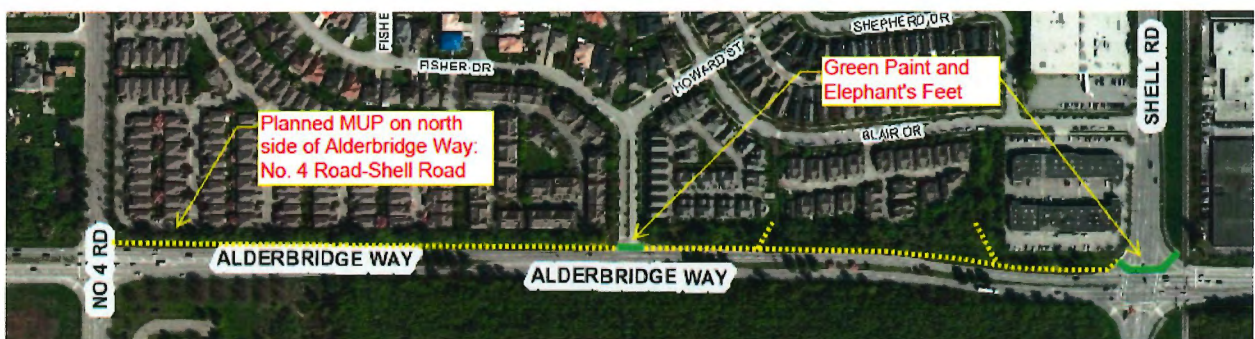
Location of Planned Active Transportation Network Projects for 2019



Crosstown Neighbourhood Link: Phase 3



Odlin Road Bike Route



Alderbridge Way (No. 4 Road-Shell Road) Multi-Use Pathway

Location of Planned Active Transportation Network Projects for 2019



Midtown Neighbourhood Link: Phase 2



Sexsmith Road (Beckwith Rd-Charles St)
Multi-Use Path



City of Richmond

Report to Committee

To: Public Works and Transportation Committee **Date:** January 16, 2019
From: Tom Stewart, ASCT.
Director, Public Works Operations **File:** 10-6370-04-01/2018-
Vol 01
Re: Recycling Depot - Potential Eco Centre Upgrade Options

Staff Recommendation

1. That Option 2 of the staff reported entitled, "Recycling Depot – Potential Eco Centre Upgrade Options" from the Director, Public Works Operations dated January 16, 2019, be endorsed.
2. That the City's Consolidated 5 Year Financial Plan (2019-2023) be amended to include \$1,226,000 for the Recycling Depot – potential eco centre upgrade as presented under Option 2 of the staff report entitled "Recycling Depot – Potential Eco Centre Upgrade Options", funded from the Sanitation and Recycling provision.

Tom Stewart, ASCT.
Director, Public Works Operations
(604-233-3301)

Att. 5

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Project Development Finance	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS: 	APPROVED BY CAO

Staff Report

Origin

The City operates a Recycling Depot at 5555 Lynas Lane. Its central location and wide range of services make it a popular facility with residents. The Recycling Depot hosts over 160,000 visits annually, equal to one visitor every 53 seconds. The number of visits continues to increase with population growth and as new commodity streams are added.

To improve convenience and broaden the scope of services for residents, the range of accepted items is expanded when feasible. For example, on September 1, 2018, flexible plastic packaging was added (in collaboration with Recycle BC). Commencing in 2019, as approved by Council in the Sanitation and Recycling utility budget and rates, two key service level enhancements were introduced:

1. *Expanded Scope*: The scope of materials accepted is expanded to include upholstered furniture, electronics, propane tanks and butane cylinders, and
2. *Expanded Hours of Operation*: The hours of operation is expanded to six days per week (Tuesday – Sunday), also from 9:00 a.m. – 6:15 p.m. (Previously, the Recycling Depot was open 5 days per week, i.e. Wednesday – Sunday from 9:00 a.m. – 6:15 p.m.).

By expanding the range of materials accepted and the hours of service at the City's Recycling Depot, public convenience is enhanced, thereby promoting greater recycling to support achieving established waste diversion targets.

This report explores configuration changes/site improvements to update aging infrastructure, improve operations to keep pace with growth, and improve the user experience. In addition, potential enhancements for establishing a one-stop-drop Eco Centre facility, where enhanced services can be offered and an even broader range of materials can be accepted, are also conceptually discussed.

This report supports Council's 2014-2018 Term Goal #4 Leadership in Sustainability:

Continue advancement of the City's sustainability framework and initiatives to improve the short and long term livability of our City, and that maintain Richmond's position as a leader in sustainable programs, practices and innovations.

4.2. *Innovative projects and initiatives to advance sustainability.*

This report supports Council's 2014-2018 Term Goal #6 Quality Infrastructure Networks:

Continue diligence towards the development of infrastructure networks that are safe, sustainable, and address the challenges associated with aging systems, population growth, and environmental impact.

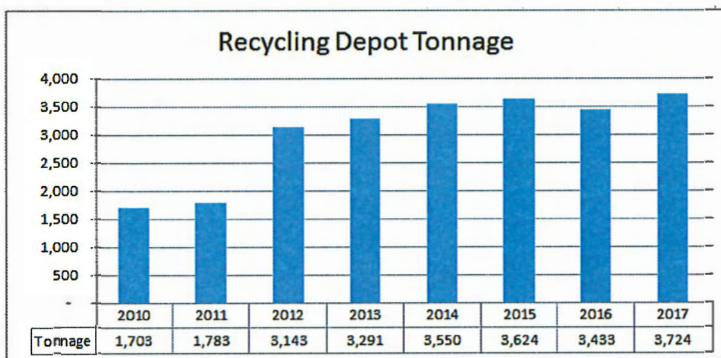
6.2. *Infrastructure is reflective of and keeping pace with community need.*

Analysis

Background

The Recycling Depot footprint is approximately 1.47 acres. It originally opened at the present site in March, 1993. The Recycling Depot is an integral component of the City's overall suite of recycling services. These various recycling services are designed to achieve the City's waste diversion target of 80% by 2020. In and of itself, the Recycling Depot makes up 8% annually of the City's current 78% single-family diversion rate. For context, over 3,700 tonnes of recyclables were received at the Recycling Depot in the last year, representing a significant waste diversion component.

Table 1: Recycling Depot Tonnage from 2010 to 2014



Overall tonnage received at the depot has steadily increased over the last several years, more than doubling since 2010, as shown in Table 1. The Recycling Depot is also a key and necessary service to help mitigate illegal dumping of various materials since residents have access to a conveniently located drop off site where items are accepted at no

charge. This helps to better contain costs associated with managing illegally dumped items.

A variety of materials are currently accepted at the Recycling Depot, some in partnership with industry product stewardship agencies. A full list of items currently accepted and those newly added in 2019, along with applicable stewardship agencies, is shown in Attachment 1.

Current Issues and Challenges

1. Recycling Awareness and Blue Box/Blue Cart Contamination Concerns:

Recycling is continually evolving as regional disposal bans are implemented (designed to promote recycling vs. disposal of items) and provincial recycling regulations are expanded to place the onus on producers of various products for managing the waste their products create, i.e. industry stewardship programs. The City also introduces new programs and services where appropriate to support residents in recycling and waste diversion. These are designed with the goal of diverting 80% of residential waste by 2020, in line with regional diversion targets under the Integrated Solid Waste and Resource Management Plan.

While these are positive environmental initiatives, industry stewardship programs can result in a scattering of different locations for residents to take their waste for recycling or disposal. This approach has created a degree of confusion and inconvenience for residents in knowing where they can deliver various recycling/waste items. This contributes toward challenges with non-acceptable items being placed in residential blue boxes (i.e. contamination issues) and illegal dumping throughout the City.

The City offers a variety of services to support proper residential recycling and disposal of items. In addition, a number of outreach and education tools are used to inform residents about recycling and disposal locations. This includes the Richmond Collection Schedule app, which incorporates the Recycling Wizard tool. Using this tool, residents can enter the material/s they are wishing to recycle/dispose, and the Recycling Wizard provides locations and advice on where the items can be delivered in Richmond.

Even with these various initiatives, residents often comment that recycling is becoming somewhat complicated to navigate, particularly in relation to the different locations they need to travel for delivering their materials. Therefore, the more the City can offer to expand the range of acceptable items at the Recycling Depot, the easier it is for residents to recycle. This mitigates illegal dumping and captures more materials for recycling to contribute toward reduction targets.

2. Aging Infrastructure:

As previously noted, the Recycling Depot was initially opened at the present site in 1993. While general site improvements have been undertaken over time to maintain daily operations, there are a number of more major improvements emerging, including replacement of site trailers to address wear, tear and degradation from age. The current site trailers have ongoing challenges with rodent intrusion and general deterioration, and will require replacement in the near term (within two years).

3. Operational/Site Flow Issues:

With the hours of service and scope of acceptable materials being broadened in 2019, there will undoubtedly be increased user traffic. To improve efficiency and avoid safety conflicts between users and service providers, the site layout should be made more efficient through the addition of equipment which can more readily load and/or handle materials on site. Other improvements, such as fencing (to segregate and contain the new special waste items to be accepted) and enhanced lighting will also improve the site. In addition, with the 2019 expansion to include upholstered furniture, a new and large tent structure would help to ensure furniture items remain dry, which is a requirement of the processing facility. Site layout improvements will help to mitigate conflicts and inconvenience for users during those times when service vehicles are on site to remove and replace containers, etc.

4. User/Staff Feedback:

Users of the Recycling Depot are often very complimentary about the customer service received by staff on site. Many appreciate when new recycling streams are added so they can recycle larger quantities and varieties of material. Critical user feedback includes improvements to traffic flow to avoid delays from back-ups (getting stuck behind other users). Feedback from staff relates primarily to the lack of a covered structure. This exposes staff to prolonged sun and heat exposure in the warmer months. As management expectations are to remain on site to be readily available to assist customers on a regular basis, the lack of access to shaded areas is a potential health and safety concern for on-site staff. A covered pathway area in and around the

recycling containers is suggested to address this concern and would also serve to protect users from weather elements as well.

Opportunities

A range of options can be pursued to help address some of the issues and challenges noted above. These include maintaining the status quo, undertaking upgrades necessary to address emerging aging infrastructure, and a full Eco Centre facility. An Eco Centre facility/concept would serve to further simplify recycling and improve convenience by creating one location where residents can bring the majority of banned/stewardship program materials and other items for recycling/safe disposal. It also enhances opportunities for promoting reuse and education aspects more fully. These options are discussed in more detail below.

Recycling Depot Improvements/Eco Centre Options

The options presented with this report for Council's consideration, include:

1. Status Quo.
2. Improved User Experience/Operational Site Improvements.
3. Eco Centre – One-Stop-Drop Facility.

These options assume that the facility remains at its current location and is continued to be operated by City staff.

Option 1: Status Quo Arrangement – (Not Recommended)

The status quo option includes only the minimal changes being undertaken at the site to expand to the various items being added in 2019 including:

- Upholstered furniture including: office-type or cushioned table chairs; armchairs, loveseat/recliners, couches, sectional/sofa-beds or loveseat/couch with reclining seats;
- Propane tanks, including small (one pound) tanks;
- Butane cylinders (such as the type used for portable burners); and
- Electronics (computers, televisions, audio/video systems, etc.)

The locations for these new items are shown in Attachment 2, "Option 1: Status Quo – Minimal Configuration Change for 2019 Added Materials". Minimal site changes (surface restoration work, site paving, small tent structure, updated signage, promotion activities, etc.) are currently being undertaken to accommodate these new materials. Associated costs are included in existing minor capital budget allocations, so there are no added cost impacts associated with this option.

Advantages: The advantages of this option are that it allows the new materials approved by Council as part of the 2019 Solid Waste and Recycling utility budget and rates to be added

within current budget allocations. The site changes under this option are currently being implemented to coincide with the service/hours expansion commencing January, 2019.

Disadvantages: The disadvantages of this option are that it does not allow for operational equipment and site improvements necessary to improve efficiency nor does it address the challenges being experienced with aging facilities. Improved efficiency will be necessary due to the depot being open an additional day each week (i.e. one less day where the site is closed for manoeuvring materials and emptying roll off bins with service vehicles, etc.). This option also does not allow for modernization or improvements for the experience of users at the site as part of keeping pace with continued growth (discussed in more detail under Option 2).

Summary Comments: This option meets immediate requirements for expansion of new materials and operating hours in 2019. However, it is not recommended because it does not address current challenges with aging facilities, nor does it allow for necessary operational improvements to manage a growing user base and anticipated growth in overall tonnage received.

Option 2: Improved User Experience/Operational Site Improvements (Recommended)

Option 2 includes site improvements and equipment to increase site/operations flow as well as replacement of ageing, deteriorating site trailers. Larger tent-style structures for keeping upholstered furniture-style items from becoming waterlogged are a component of this option, as are improvements to the hazardous waste area. This option would also allow for some additional items, such as tires, car batteries, used motor oil, fire extinguishers and smoke alarms to also be accepted.

These improvements would modernize the Recycling Depot and make the drop-off experience more pleasant for depot users. Equipment, such as a small loader for more efficient handling of yard waste and a forklift for helping to manoeuvre large and bulky items (to minimize physical demands on staff/potential injuries, etc.) would also be added.

The proposed site improvements would help to minimize traffic conflicts between customers and service vehicles, as well as improve working conditions for staff at the site. The current site trailers are experiencing signs of aging, and additional efforts are needed to minimize vector intrusion. Staff commonly report unpleasant odours in the site trailers from repeated cycles of locating and disposing of deceased rodents, etc. in hard to reach areas of the trailers. The site trailers have deteriorated to the point where they will require replacement within the next two years in any event.

These general site improvements, including the proposed locations of the new materials to be added for storage/drop-off, are shown in Attachment 3, "Option 2: Improved User Experience/Operational Site Improvements Including 2019 Added Materials".

One-time costs for these improvements are estimated at \$1.226 million:

- | | |
|---------------------------------------|------------|
| • Equipment (small loader, forklift): | \$ 240,000 |
| • Drainage, water, power, paving | \$ 197,000 |
| • Site structures (tents, trailers) | \$ 470,000 |

• Covered structure/awning/gates	\$ 132,000
• Contingency, escalation, insurance/permit fees	<u>\$ 187,000</u>
• Total estimated site improvements:	\$1,226,000

If approved by Council, these costs could be accommodated from the sanitation and recycling provision.

Advantages: This option would modernize the Recycling Depot, add equipment to better accommodate the additional materials to be added in 2019, create fewer conflicts or delays for users (i.e. more servicing/bin management activity will need to take place during regular operating hours with the depot being open one additional day per week), improve operational flow as well as the overall experience for the growing number of users at the Recycling Depot. The range of materials accepted can be expanded to include tires, car batteries, used motor oil, fire extinguishers and smoke alarms. Sanitation and Recycling provision funding is available to accommodate the associated capital expenditures.

Disadvantages: The principal disadvantages of this option are the costs involved and potential temporary inconvenience to users during the time when the construction/improvement activities will take place. A longer (i.e. estimated at 6-9 months) timeline for implementation is required.

Summary Comments: This is the recommended option since it modernizes the site, improves operational flows, and helps the City keep pace with growing demands for recycling drop off services and increasing user growth. This option also addresses the need to replacing aging infrastructure at the site, which will be required in the near term regardless.

Option 3: Eco Centre – One-Stop-Drop Facility for Expanded Range of Materials/Services

The Eco Centre concept encompasses expanding the facility to accept an even broader range of materials, including most product stewardship materials and other non-putrescible household waste. A key difference with this option is that a reuse/repair component is added to allow for donation and/or exchange of waste. Another key addition is an education centre, which would allow for classroom style workshops and recycling education to be undertaken. The hazardous waste collection area would be fully enclosed and expanded. Attachment 4, “Option 3: Eco Centre One-Stop-Drop Facility for Expanded Range of Materials/Services” presents a schematic of this option in concept only for information and reference.

Examples of Additional Materials:

- Automotive items such as anti-freeze.
- Household items such as mattresses, carpet, toilets, car seats, non-recyclable furniture.
- Potential hazardous waste items such as pharmaceuticals, drywall, residual chemical products, etc.
- Textiles and other reusable household goods.

Reuse/Repair Centre: The Reuse Centre would allow for items such as used clothing and household items for potential donation to charities (used pots and pans, cutlery, ironing boards, etc.) to be accepted. The concept could include working with a charitable organization to operate the Reuse Centre whereby these materials are accepted and either re-used or re-sold for the benefit of that charitable organization. Items could be re-used or re-sold at the Recycling Depot or other sites for the charitable organization involved. The Reuse Centre would help to provide a convenient outlet for residential drop off of these items, thereby helping to minimize contamination in curbside/multi-family recycling programs, and deterring illegal dumping. The Reuse Centre could potentially evolve in scope to include a “Repair Facility” concept, where residents could bring materials for repair, as opposed to simply donation or recycling/disposal. Volunteers and/or charitable agencies could also be engaged in the “Repair Facility” component.

Education Centre: The Education Centre would provide a learning environment where Recycling Depot tours for school students and public education workshops could be held. Ongoing education allows for the recycling momentum to be continually renewed and maintained. In addition, other environmental outreach initiatives could be delivered from the education centre (invasive plants, pesticide use, sustainability initiatives, water conservation, grease management, etc.). The Education Centre could evolve to incorporate a research and development component and help foster advancements in waste management, such as supporting transition to circular economy concepts.

Expanded Hazardous Waste Collection Centre: The Hazardous Waste collection area would provide for a secured and controlled environment where a wider variety of hazardous waste materials are sorted and contained in an enclosed structure. This centre would be equipped with removable spill catchments, ventilation, and be outfitted with explosion-resistant devices (lighting, exhaust fan/sump pump, etc.).

Eco Centre Design: Given space limitations on the existing site, a modular system where the Recycling Depot surface area is raised and other operations/storage areas are located underneath could be pursued. Facilities could be put in place to collect fees for accepting items (such as mattresses, drywall, etc.) to help support cost recovery.

In addition to the new materials that could be added under the Eco Centre option, the biggest distinction in service levels is the re-use and education centre components. This adds a new service dynamic to the current Recycling Depot in more broadly engaging charitable organizations in the reuse and donation aspects. Further, public education and outreach would be enhanced with the addition of an education centre. Participants would be able to learn in a classroom-style setting. Currently, tours and workshops are offered mainly to schools and tour groups on a request basis, generally on those days the Recycling Depot is closed. The depot tours are conducted using site ‘walking tours’ at the depot. Waste reduction and how to recycle correctly workshops are held in available meeting rooms at various City facilities.

The Eco Centre model option would require the addition of the modular structure at a preliminary estimated additional cost of \$3 million over and above those identified under Option 2. The total capital expenditure requirement for this option, therefore, is estimated at \$4.4 million. Annual operating costs would increase by an estimated \$1.2 million for staffing and

general operating costs, representing an annual increase of approximately \$15.00-\$18.00 per household.

Advantages: This option results in a very modernized facility, the first of its type in the Lower Mainland. It takes advantage of the small footprint of the existing site by raising the user area, and allows for activities and storage to be undertaken underneath. An even broader range of materials would be accepted, improving convenience for residents and helping to deter illegal dumping. Attachment 5 shows further details of the various materials and service areas of the Eco Centre concept as compared with those accepted under Options 1 and 2.

The reuse and education centre concepts broadly expand the service dynamic in support of waste reduction, while allowing for enhanced community engagement. This positions the City to better address future waste management challenges and could serve as a catalyst to evolve toward a circular economy.

The modular system design provides for a flexible construction concept. This would allow for an adaptable structure which can be expanded and re-designed at its current (and any future location) to meet changes in regulations, stewardship program expansion, etc.

Disadvantages: This option is the highest cost alternative and requires the most disruption to users during construction. It also requires the longest implementation period, i.e. estimated at two years. This option further adds annual operating costs of \$1.2 million, which impacts the rates charged to residents.

Summary comments: The modular design concept for an Eco Centre is an efficient and attractive concept, which allows for a wider range of materials to be accepted and re-use and education concepts to be incorporated. The costs identified in this report are very preliminary in nature and would require more detailed review and adjustment if this approach is desired. The modular nature of the structure for the site improvements elements outlined allows many components to be relocated to a new location (i.e. if/when the Works Yard is relocated to a new site). However, it may not be prudent to undertake such a substantial capital construction project when a Works Yard relocation project is being considered in the near future. For these reasons, this option is not recommended at this time. The Eco Centre concept can, however, be considered as part of future planning associated with the Works Yard relocation project.

Options: Summary Review

An overview summary for each of the options discussed above, including the items to be accepted, is included in Attachment 5.

Financial Impact

Capital improvements costs of the recommended Option 2 are estimated at \$1.226 million. These costs can be accommodated from the Sanitation and Recycling provision account (\$2.4 million available as of November 30, 2018). If approved, the City's Consolidated 5 Year Financial Plan (2019-2023) will be amended accordingly.

Conclusion

This report presents various options to accommodate planned service expansion at the City's Recycling Depot in 2019 as well as discusses the Eco Centre concept. Capital equipment and site improvements which accommodate the new materials and hours of service as approved by Council in the 2019 Sanitation and Recycling utility budget and rates are outlined for Council's consideration.

The recommended site improvements will modernize the Recycling Depot, expand the range of materials accepted, improve operational flow, keep pace with an increasing user base, and improve the overall user experience at the depot.

These efforts to expand recycling and modernize the site are important steps toward increasing waste diversion as the City strives for the final push toward our 80% waste diversion target by 2020.



Suzanne Bycraft
Manager, Fleet and Environmental Programs
(604-233-3338)

- Att. 1: Items Currently Accepted at Recycling Depot and Items Added in January, 2019
2: Option 1: Status Quo – Minimal Configuration Change for 2019 Added Materials
3: Option 2: Improved User Experience/Operational Site Improvements Including 2019 Added Materials
4: Option 3: Eco Centre One – Stop – Drop Facility for Expanded Range of Materials/Services
5: Recycling Depot/Eco Centre Options Summary

Attachment 1**Table 1: Items Currently Accepted at the Richmond Recycling Depot and Items Added in January, 2019**

Material Category	Accepted Items	Stewardship Agency
Aerosol and Spiral Wound Cans	<ul style="list-style-type: none"> Aerosol cans for food, air fresheners, shaving cream, deodorant, hairspray, etc. Spiral wound cans and metal lids for frozen juice concentrate, cookie dough, nuts, coffee, baby formula, etc. 	
Appliances (large)	<ul style="list-style-type: none"> Dishwashers Washing machines/dryers Stoves/ovens Fridges/freezers Air conditioners/dehumidifiers Range hoods/over range microwaves Food waste disposers Trash compactors Electric beverage dispensers (plumbed in) 	Major Appliance Recycling Roundtable (MARR) (Pilot program only)
Appliances (small)	<ul style="list-style-type: none"> Kitchen countertop appliances Microwave ovens Electric time measurement Weight measurement appliances Garment care appliances Portable air treatment appliances Personal care appliances Floor/surface cleaning appliances 	Canadian Electrical Stewardship Association (CESA) ElectroRecycle – Product Care
Batteries and Cell Phones	<ul style="list-style-type: none"> Household batteries (rechargeable & single use) Cellular phones and their batteries Portable power banks 	Call2Recycle
Books	<ul style="list-style-type: none"> Used books 	
Cooking Oil and Animal Fats	<ul style="list-style-type: none"> Food based oils Animal fats 	
Corrugated Cardboard	<ul style="list-style-type: none"> Clean corrugated cardboard Clean pizza boxes 	
Exercise, Hobby and Textile Machines	<ul style="list-style-type: none"> Sewing, embroidery & knitting machines Electric exercise machines Portable, electric sports, leisure or craft devices 	Canadian Electrical Stewardship Association (CESA) ElectroRecycle – Product Care
Glass Bottles and Jars	<ul style="list-style-type: none"> Glass bottles Glass food jars 	Recycle BC
Lights and Light Fixtures	<ul style="list-style-type: none"> Residential light bulbs (fluorescent, CFL, LED, halogen, incandescent and other mercury containing lamps) Light fixtures (indoor and outdoor) String lights Table/desk lamps Bike lights, book lights, night lights, flashlights 	LightRecycle – Product Care
Metal Food and Beverage Containers	<ul style="list-style-type: none"> Tin, steel and aluminium cans Aluminium foil and foil containers 	
Metal Items	<ul style="list-style-type: none"> Bike frames, clean auto parts, BBQ's, hangers, piping, etc. 	

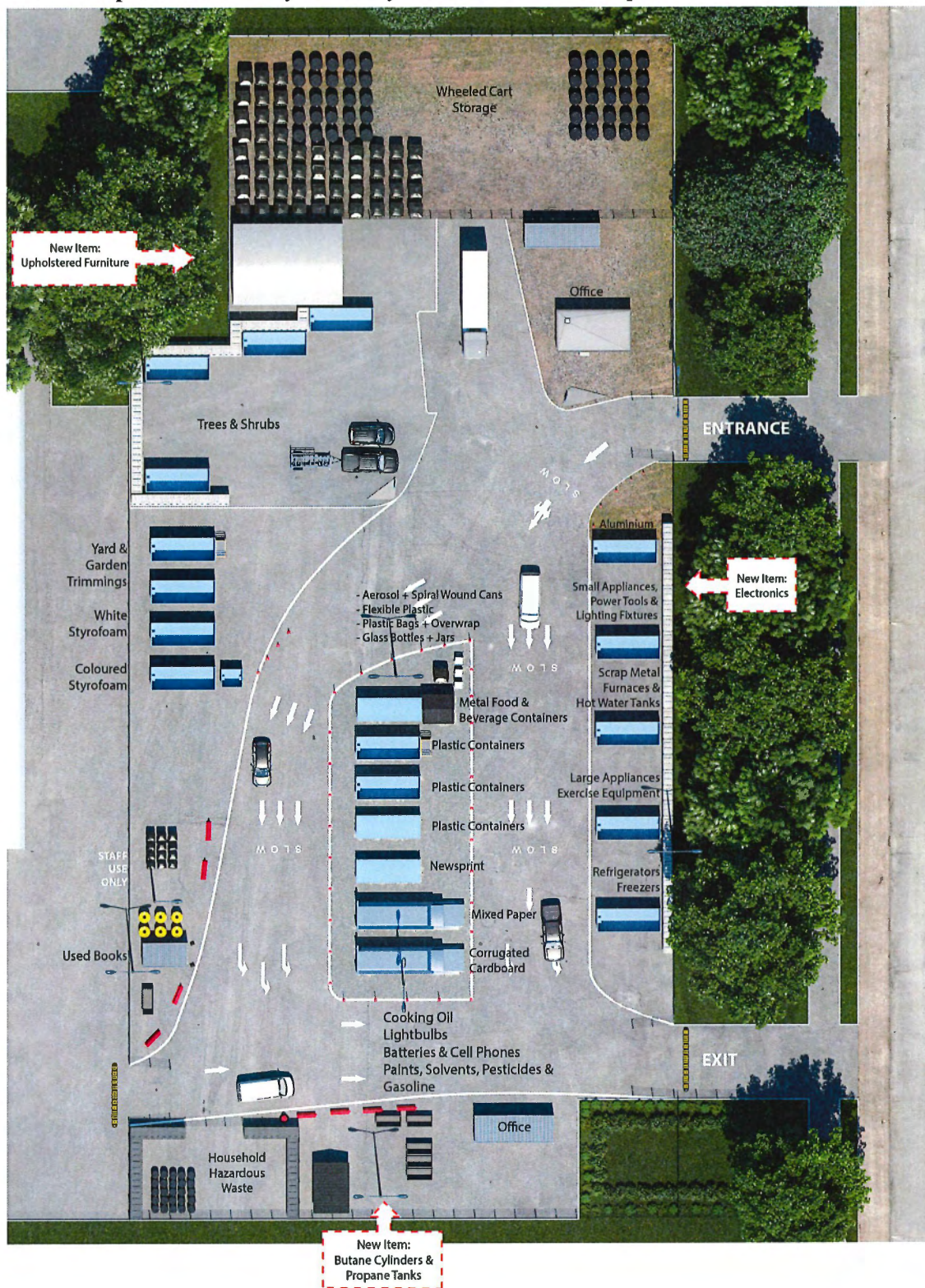
Attachment 1 Cont'd

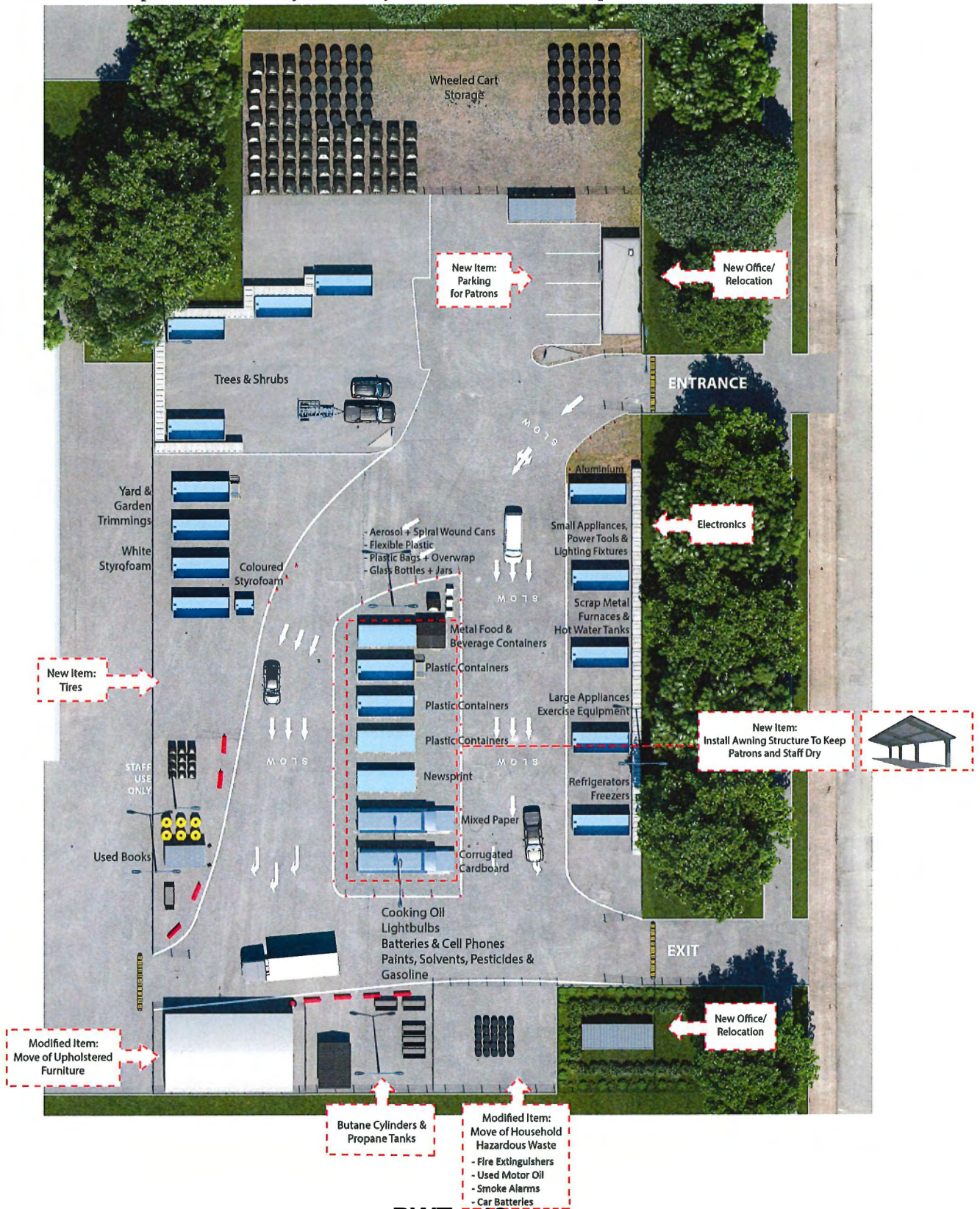
Table 1: Items Currently Accepted at the Richmond Recycling Depot and Items Added in January, 2019

Material Category	Accepted Items	Stewardship Agency
Newspaper	<ul style="list-style-type: none"> Newspaper, non-glossy flyers/inserts 	
Other Flexible Plastic Packaging	<ul style="list-style-type: none"> Stand-up & zipper lock pouches Crinkly wrappers Flexible packaging with a plastic seal Woven and net plastic bags Plastic shipping packaging Shrink wrap and bags with code 5 	Recycle BC
Paints, Solvents, Pesticides, Gasoline and Flammable Liquids	<ul style="list-style-type: none"> Household paints Aerosol paints Domestic pesticides Flammable aerosols Flammable liquids Gasoline 	ReGeneration – Product Care
Plastic Containers and Rigid Plastics	<ul style="list-style-type: none"> Plastic food & beverage containers Plastic garden pots & trays Rigid plastic containers Other rigid plastic household items 	
Plastic Bags and Overwrap	<ul style="list-style-type: none"> Plastic bags for groceries, dry cleaning, bread, newspapers and flyers Clear bags for produce and dry bulk goods Frozen vegetable bags Outer wrap for paper towels, tissues and other bulk products Outer wrap for feminine hygiene and diapers 	Recycle BC
Power Tools	<ul style="list-style-type: none"> Test and measurement tools Hand held power tools (corded and cordless) Bench top & free standing tools Demolition power tools 	Canadian Electrical Stewardship Association (CESA) ElectroRecycle – Product Care
Styrofoam	<ul style="list-style-type: none"> Packaging Styrofoam blocks Take out containers, plates & meat trays Drink cups 	Recycle BC
Yard and Garden Trimmings	<ul style="list-style-type: none"> Branches & limbs Grass & leaves Trees & shrubs 	

Attachment 1 Cont'd**Table 1: Items Currently Accepted at the Richmond Recycling Depot and Items Added in January, 2019**

Material Category	Accepted Items	Stewardship Agency
Propane Tanks	<ul style="list-style-type: none"> • Empty propane tanks (refillable) • Empty small 1 lb. propane tanks 	
Butane Cylinders	<ul style="list-style-type: none"> • Empty butane cylinders 	
Electronics	<ul style="list-style-type: none"> • Electronic toys • Electronic musical instruments • IT or telecom devices & equipment • Medical & monitoring equipment • Computers & peripherals • Televisions & monitors • Printing & copying products • Non-cellular phones & answering machines • Video gaming systems & accessories • Audio/video systems 	Electronic Products Recycling Association (Potential)
Upholstered Furniture	<ul style="list-style-type: none"> • Office or cushioned dining chair • Armchair, recliner, loveseat, couch • Sectional, sofa-bed or loveseat/couch with reclining seats 	

Option 1: Status Quo – Minimal Configuration Change for 2019 Added Materials**Address:** 5555 Lynas Lane**Hours of Operation:** Tuesday to Sunday from 9:00 a.m. to 6:15 p.m.

Option 2: Improved User Experience/Operational Site Improvements Including 2019 Added Materials**Address: 5555 Lynas Lane****Hours of Operation: Tuesday to Sunday from 9:00 a.m. to 6:15 p.m.**

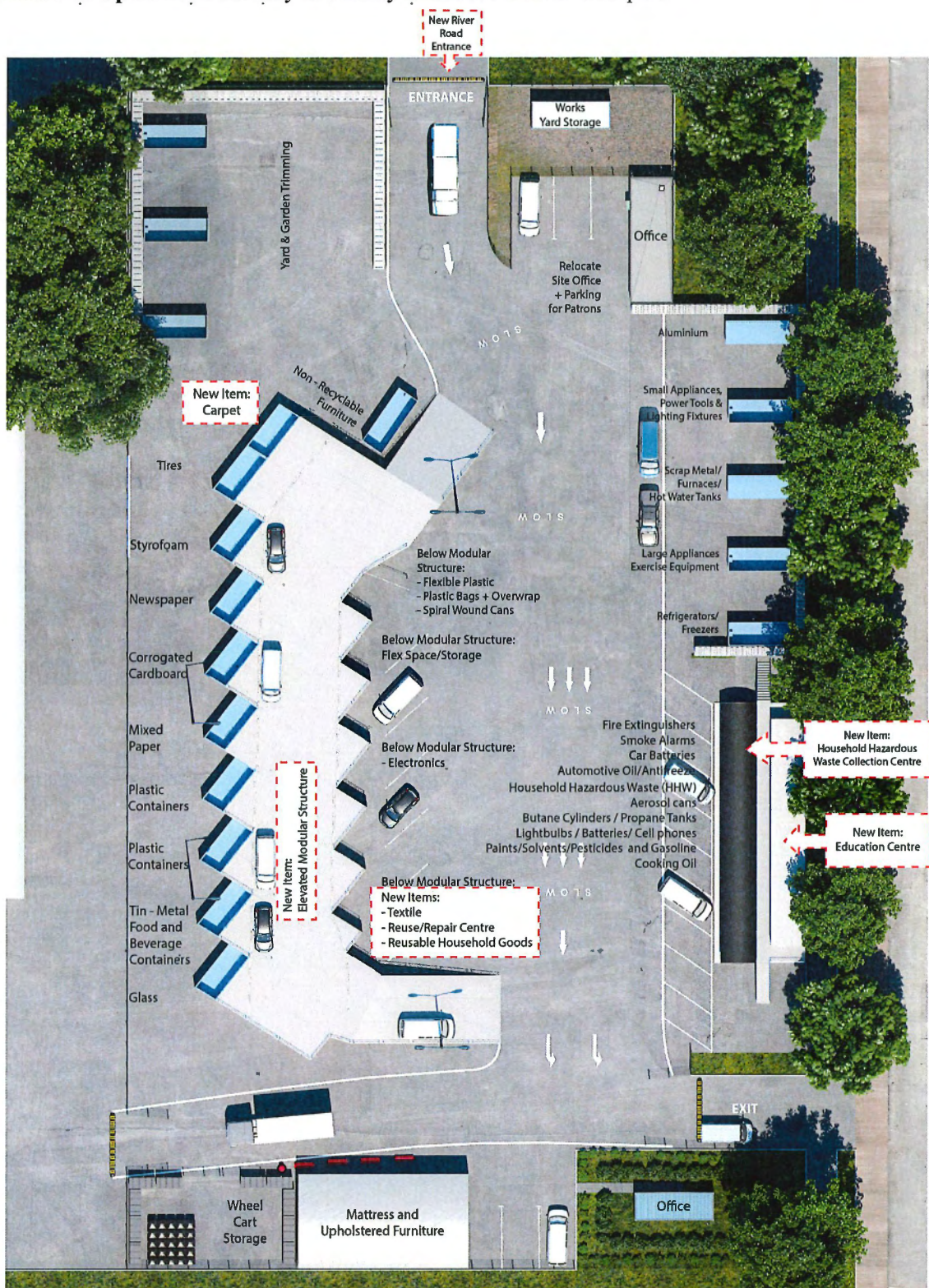
Option 3: Eco Centre One-Stop-Drop Facility for Expanded Range of Materials/Services**Address:** 5555 Lynas Lane**Hours of Operation:** Tuesday to Sunday from 9:00 a.m. to 6:15 p.m.

Table 3: Recycling Depot/Eco Centre Options Summary

Materials Accepted	Option 1: Status Quo – Minimal Configuration Change for 2019 Added Materials	Option 2: Improved User Experience/Operational Site Improvements Including 2019 Added Materials	Option 3: Eco Centre One-Stop-Drop Facility for Expanded Range of Materials/Services
Aerosol and Spiral Wound Cans	✓	✓	✓
Appliances (large)	✓	✓	✓
Appliances (small)	✓	✓	✓
Books	✓	✓	✓
Cooking Oil and Animal Fats	✓	✓	✓
Corrugated Cardboard	✓	✓	✓
Electronics	✓ New 2019	✓	✓
Flexible Plastic Packaging	✓	✓	✓
Glass Bottles and Jars	✓	✓	✓
Lights and Light Fixtures	✓	✓	✓
Metal Food and Beverage Containers	✓	✓	✓
Metal Items	✓	✓	✓
Mixed Paper Products	✓	✓	✓
Newsprint	✓	✓	✓
Paints, Solvents, Pesticides, Gasoline and Flammable Liquids	✓	✓	✓
Plastic Bags and Overwrap	✓	✓	✓
Plastic Containers and Rigid Plastics	✓	✓	✓
Power Tools	✓	✓	✓
Styrofoam	✓	✓	✓
Yard and Garden Trimmings	✓	✓	✓
Batteries and Cell Phones	✓	✓	✓
Butane Cylinders	✓ New 2019	✓	✓
Exercise, Hobby and Textile Machines	✓	✓	✓
Propane Tanks	✓ New 2019	✓	✓
Upholstered Furniture	✓ New 2019	✓	✓
Car Batteries		✓	✓
Fire Extinguishers		✓	✓
Smoke Alarms		✓	✓
Tires		✓	✓
Used Motor Oil		✓	✓
Antifreeze			✓
Bathtubs			✓
Bicycle Tires			✓
Car Seats			✓
Carpet			✓
Drywall			✓
Mattresses			✓
Pharmaceuticals			✓
Reusable Household Goods			✓
Textiles			✓
Thermostats			✓
Toilets			✓
Residual Chemical Products			✓
Non-Recyclable Furniture			✓
Hours of Operation	Tuesday to Sunday from 9:00 a.m. to 6:15 p.m.	Tuesday to Sunday from 9:00 a.m. to 6:15 p.m.	Tuesday to Sunday from 9:00 a.m. to 6:15 p.m.
Additional Service Areas			
Re-Use Centre			✓
Education Centre			✓
Estimated Capital Improvement Costs	N/A	\$1,366,000	\$4,400,000
Additional Operating Cost	Included	Included	\$1,200,000
Annual Operating Cost Impact to Residents	Included	Included	\$15-\$18 per household
Est. Implementation Timeline	3 Months	6-9 Months	2 Years




City of Richmond

Report to Committee

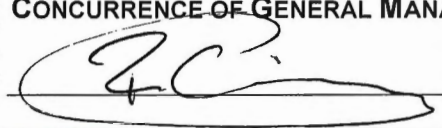

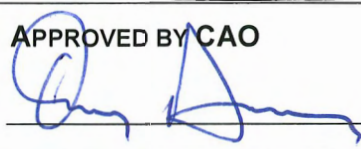
To: Public Works and Transportation Committee **Date:** January 11, 2019
From: Tom Stewart, ASCT.
Director, Public Works Operations **File:** 02-0665-03-01/2018-
Vol 01
Re: **Fuel Purchases Agreement - Suncor Energy Products Partnership**

Staff Recommendation

1. That the City enter into an agreement, as outlined in the staff report titled "Fuel Purchases Agreement – Suncor Energy Products Partnership" dated January 3, 2019 from the Director, Public Works Operations;
2. That the Chief Administrative Officer and General Manager, Engineering & Public Works, be authorized to negotiate and execute a fuel supply and delivery contract with Suncor Energy Products Partnership on the contemplated terms and conditions of the fuel consortium contract as outlined in City of Vancouver Request for Proposals No. PS20180305 Supply and Delivery of Fuels; and
3. That the current fuel purchase contract with Parkland Fuel Corporation under BCPPBG Contract No. PS11122 be extended until such time as the fuel supply and delivery contract with Suncor Energy Products Partnerships is executed and fuel delivery commences under the agreement with Suncor Energy Products Partnerships.


Tom Stewart, ASCT.
Director, Public Works Operations
(604-233-3301)

Att. 1

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Law	<input checked="" type="checkbox"/>	
Finance	<input checked="" type="checkbox"/>	
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS: 	APPROVED BY CAO 

Staff Report

Origin

At their December 11, 2017 meeting, Council approved the City of Richmond's participation in the BC Petroleum Products Buying Group the ("BCPPBG"). The BCPPBG is a buying consortium for fuel purchases, which allows the City to receive the benefits of economies of scale, process and information for all City fuelling operations (Public Works Yard, Fire halls, etc.).

The City of Vancouver is the lead agency coordinating the competitive bid process on behalf of the BCPPBG. The City of Vancouver issued Request for Proposal No. PS10180305 (Supply and Delivery of Fuels) on March 5, 2018. There were five bid respondents. The City of Vancouver's evaluation team concluded that the proposal submitted by Suncor Energy Products Partnership ("Suncor") best meets the BCPPBG's requirements and provides best overall value. The City of Vancouver followed their standard procurement methods in this tender process. Key criteria considered included technical, sustainability and financial requirements. Richmond staff are in agreement with the methodology applied.

This report recommends that the City of Richmond enter into an agreement with Suncor (the "Supply and Delivery of Fuels Agreement") under the terms and conditions contemplated through the BCPPBG consortium competitive bid process. A copy of the Supply and Delivery of Fuels Agreement is attached as Attachment 1. The City will become party to the Supply and Delivery of Fuels Agreement by executing the letter agreement attached as Schedule D the Supply and Delivery of Fuels Agreement.

This report supports Council's 2014-2018 Term Goal #6 Quality Infrastructure Networks:

Continue diligence towards the development of infrastructure networks that are safe, sustainable, and address the challenges associated with aging systems, population growth, and environmental impact.

6.1. Safe and sustainable infrastructure.

Analysis

Background

The current fuel purchase supplier is Parkland Fuel Corporation ("Parkland") under BCPPBG Contract No. PS11122. The contract with Parkland commenced December 14, 2011 and continues pending 60 days written notice to cancel the contract. This notice will be provided by the City of Vancouver to Parkland once the Supply and Delivery of Fuels Agreement is signed. The planned start date with Suncor is fluid at this time. The City of Richmond is coordinating its efforts to align with that of the City of Vancouver for contract commencement.

Fuel Consumption

The City of Richmond has 10 fueling tanks, located at the City Works Yard and several fire hall stations. These are used for fueling all gasoline and diesel powered City vehicles and equipment.

Fuelling services at the Works Yard are also made available to the Richmond RCMP and Richmond School Board on a cost-recovery basis. Richmond Fire Rescue is also able to fuel at the City Works Yard, if required.

The City uses approximately 1.4 million litres of fuel annually consisting of gasoline and bio-diesel. Of this amount, Richmond Fire Rescue uses approximately 135,000 litres annually. Additionally, approximately 200,000 litres of fuel is purchased to support fuelling services at the Works Yard for the Richmond RCMP and School Board.

BCPPBG Fuel Purchases Contract

Key terms of the Supply and Delivery of Fuels Agreement include:

1. Contract term is five years, with the option to extend for two additional one-year terms.
2. Costing is based on a variable structure which adjusts for variations in fuel pricing, with fixed discounts, i.e.:
 - a. Suncor regional weekly rack rate. The weekly rack rate is the price refineries sell fuel to their various clients, which varies based on fuel commodity market pricing.
 - b. Less a fixed discount for diesel and gasoline products. The discount remains fixed for the entire term of the agreement.
 - c. Plus bridging (delivery fees, etc.). Bridging fees includes items such as freight from the terminal, the terminal cost and delivery. Under the terms of the Supply and Delivery of Fuels Agreement, the bridging fee will be fixed for three years after which it is subject to adjustments.

Expected savings to the City under the Supply and Delivery of Fuels Agreement compared to what consumers would pay at fuelling stations vary depending on commodity pricing, but are generally between 4%-6%. Rates vary due to the weekly rack rate changes, which are subject to the commodity price.

Financial Impact


Annual costs for fuel vary based on commodity pricing and consumption. Fuel expenditures in 2018 were approximately \$1,500,000 for City operations and \$175,000 for Richmond Fire Rescue, for a total of \$1,675,000.

Under the terms of the Supply and Delivery of Fuels Agreement, approximate savings of 2% over current rates paid by the City are expected due to the applicable discount. Given the volatility of fuel pricing (i.e. weekly rack rate), annual budget estimates are developed based on average fuel pricing for average yearly costs.

Conclusion

The BCPPBG consortium approach for gasoline and diesel fuel purchased achieves economies of scale through a large-scale purchasing approach, thereby representing best value. The proposal by Suncor represents best value, as determined through the competitive bid process administered by the City of Vancouver on behalf of BCPPBG participants.

This report recommends that the City enter into the Supply and Delivery of Fuels Agreement with Suncor under the terms and conditions contemplated under City of Vancouver Request for Proposals No. PS20180305 Supply and Delivery of Fuels.



Suzanne Bycraft
Manager, Fleet and Environmental Programs
(604-233-3338)

SJB:

Att. 1: Form of Agreement – Supply Agreement

January 11, 2019

- 5 -

Attachment 1 – Supply Agreement

REQUEST FOR PROPOSALS NO. PS20180305
SUPPLY AND DELIVERY OF FUELS
PART D - FORM OF AGREEMENT

*[NOTE: THIS TEMPLATE IS EXPECTED TO BE MODIFIED TO REFLECT A FINAL BUSINESS AGREEMENT
BETWEEN THE CITY AND A SUCCESSFUL PROPONENT, IF ANY.]*

SUPPLY AGREEMENT

BETWEEN:

<  **SUPPLIER NAME** >

AND:

CITY OF VANCOUVER

RELATING TO THE SUPPLY AND DELIVERY OF FUELS

DATED <  >

{00636516v1}

#153564v2

Attachment 1 Cont'd – Supply Agreement

SUPPLY AGREEMENT

THIS AGREEMENT is made as of < >

BETWEEN:

< > **SUPPLIER NAME**, a < > corporation organized under the laws of < > and having an office at < >

(hereinafter referred to as the "Supplier")

AND:

CITY OF VANCOUVER, a municipal corporation continued under the *Vancouver Charter* (British Columbia) and having an office at 453 West 12th Avenue, Vancouver, British Columbia, V5Y 1V4

(hereinafter referred to as the "City")

WHEREAS the Supplier is in the business of < >;

AND WHEREAS the City wishes to purchase < >, upon and subject to the terms and conditions hereinafter set forth,

NOW THEREFORE, in consideration of the premises and the covenants herein contained, the parties hereto agree as set forth herein.

{00636516v1}

Attachment 1 Cont'd – Supply Agreement

PS20180305

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**ARTICLE 1
INTERPRETATION**

1.1 Definitions

In this Agreement, unless something in the subject matter or context is inconsistent therewith:

- (a) "Agreement" means this agreement, including the schedules hereto, and all amendments made hereto or thereto by written agreement between the Parties;
- (b) "BCPPBG" means the British Columbia Petroleum Product Buying Group;
- (c) "Business Day" means a day that is not a Saturday, a Sunday or a public holiday in Vancouver, British Columbia;
- (d) "Competent Authority" means:
 - (i) any multinational, federal, provincial, state, regional, municipal, local or other government or governmental body and any ministry, department, division, bureau, agent, agency, commission, board or authority of any government or governmental body, domestic or foreign;
 - (ii) any domestic, foreign or international judicial, quasi-judicial or administrative court, tribunal, commission, board, panel, arbitrator or arbitral body acting under the authority of any of the foregoing; or
 - (iii) any quasi-governmental or private body exercising any statutory, regulatory, expropriation or taxing authority under the authority of any of the foregoing;
- (e) "Confidential Information" means all or any confidential information (however recorded or preserved) disclosed before, on or after the date of this Agreement by either Party or any of its Representatives to the other Party or its Representatives in connection with this Agreement, concerning:
 - (i) this Agreement; or
 - (ii) the affairs, operations, processes, know-how, suppliers, plans or intentions of the disclosing Party or of any member of the disclosing Party's Group, including, without limitation, any information which is not generally known to the public or which has been specifically identified as confidential or proprietary by the disclosing Party,but does not include:
 - (iii) any information that is or becomes generally available to the public or to industry professionals (other than as a result of its disclosure by the receiving Party or its Representatives in breach of this Agreement);

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- (iv) any information that was available to the receiving Party on a non-confidential basis prior to disclosure by the disclosing Party;
 - (v) any information that was, is or becomes available to the receiving Party on a non-confidential basis from a person who, to the receiving Party's knowledge, is not bound by a confidentiality agreement or other duty of confidentiality with or to the disclosing Party or a member of the disclosing Party's Group or otherwise prohibited from disclosing the information to the receiving Party;
 - (vi) any information that was known to the receiving Party before the information was disclosed to it by the disclosing Party or its Representatives and was not subject to a confidentiality agreement or other duty of confidentiality (including any obligation under this Agreement) with or to the disclosing Party or a member of the disclosing Party's Group;
 - (vii) any information that the Parties agree in writing is not confidential or may be disclosed; and
 - (viii) any information unrelated to this Agreement that is developed by or for the receiving Party independently of and without reference to the information disclosed by the disclosing Party;
- (f) "Consent" means an approval, clearance, registration, franchise, right, privilege, certification, quota, consent, permit, licence, qualification, filing, exemption, certificate or permission and any such other matter or authorization whatsoever, including any condition thereof, that is lawfully and necessarily required from any Competent Authority in connection with the Supply;
 - (g) "Delivery" means the completion of delivery of the Products ordered in a particular Order, as amended, in accordance with Section 3.4;
 - (h) "Delivery Date" has the meaning ascribed to such term in Section 3.2(b)(iv);
 - (i) "Delivery Location" has the meaning ascribed to such term in Section 3.2(b)(iv);
 - (j) "Effective Date" has the meaning ascribed to such term in Section 2.1;
 - (k) "Encumbrance" means any mortgage, charge, pledge, hypothecation, security interest, assignment, lien or claim of lien (statutory or otherwise), easement, deemed or statutory trust, restrictive covenant, adverse claim, exception, reservation, right of occupation, any matter capable of registration against title, right of pre-emption, privilege or other encumbrance or third party right of any nature or any other arrangement or condition that, in substance, secures payment or performance of an obligation;
 - (l) "Force Majeure" means, exhaustively, any:

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- (i) war, hostilities (whether war is declared or not), invasion, act of foreign enemies;
 - (ii) rebellion, terrorism (or threat of terrorism), revolution, insurrection, military or usurped power or civil war;
 - (iii) riot, civil commotion or disorder, strike or lockout by persons other than the Supplier's personnel and other employees, Subcontractors or any other person for whom the Supplier is responsible;
 - (iv) natural catastrophe, such as an earthquake, forest fire, landslide or flood; or
 - (v) change in Law or action by a Competent Authority, which makes it illegal or impossible for a Party to perform its obligations under this Agreement;
- (m) "Group" means:
- (i) in respect of the Supplier, the group constituted from time to time by:
 - (A) the Supplier;
 - (B) all persons that directly or indirectly control or are controlled by the Supplier; and
 - (C) all persons that are directly or indirectly controlled by any person that directly or indirectly controls the Supplier; and
 - (ii) in respect of the City, the group constituted from time to time by:
 - (A) the City; and
 - (B) all bodies corporate directly or indirectly controlled by the City.
- (n) "Intellectual Property Rights" means any and all current and future proprietary rights provided under patent law, copyright law, design patent or industrial design law, or any other applicable statutory provision or common law principle, including trade secret law, that may provide a right in ideas, formulae, algorithms, concepts, inventions, know-how, computer software, database or design, or the expression or use thereof, whether registered or unregistered, together with any right to apply for or register any of the foregoing;
- (o) "Laws" means all laws, statutes, codes, ordinances, decrees, rules, regulations, by-laws, judicial or arbitral or administrative or ministerial or departmental or regulatory judgments, orders, decisions, rulings, determinations or awards of any Competent Authority whether or not having the force of law and any legal requirements or bases of liability under the common law or civil law, including all such Laws relating to Taxes, the environment, human health or safety, pollution and other environmental degradation, and hazardous materials;

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- (p) "Letter Agreement" means an agreement in the form of Schedule D.
- (q) "Order" means an order for Products submitted by the City in accordance with Section 3.2, which may be titled "Purchase Order";
- (r) "Other BCPPBG Entity" means each individual entity that is a part of the BCPPBG, other than the City;
- (s) "Other City Entity" means each of the Vancouver Public Library Board, the Vancouver Police Board, the Vancouver Art Gallery Association, and the Parking Corporation of Vancouver;
- (t) "Parties" means the City and the Supplier and "Party" means one of them or any of them, as the context requires;
- (u) "Permitted Purpose" has the meaning ascribed thereto in Section 7.1;
- (v) "Products" means the products set out in Schedule A, and, where the context requires, Products ordered or supplied hereunder;
- (w) "Proposal" means the Supplier's proposal dated < >, submitted by the Supplier to the City in response to the < > RFP;
- (x) "Representative" means a Group member of a Party, or an official, officer, employee, agent, subcontractor or other representative of a Party or any member of its Group, or any other person for whom the Party is responsible;
- (y) "RFP" means the City's Request for Proposal number PS< >;
- (z) "Sales Tax" has the meaning ascribed to such term in Section 8.1;
- (aa) "Specifications" means, for each Product, the specifications therefor set forth in Schedule B;
- (bb) "Subcontractor" means any person engaged by the Supplier to perform any part of the Supply;
- (cc) "Supply" means the supply of Products by the Supplier to the City pursuant to Orders;
- (dd) "Taxes" means all taxes, duties, imposts, levies, assessments, tariffs and other charges imposed, assessed or collected by a Competent Authority, including:
 - (i) any gross income, net income, gross receipts, business, royalty, capital, capital gains, goods and services, harmonized sales, value added, severance, stamp, franchise, occupation, premium, capital stock, sales and use, real property, land transfer, personal property, ad valorem, transfer, licence, import, customs, profits, windfall profits, environmental, carbon, emissions, pollution, payroll, employment, employer health, pension plan, anti-dumping, countervailing, or excise tax, duty, import, levy, assessment, tariff or other charge;

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- (ii) all withholdings on amounts paid to or by the relevant person;
- (iii) all statutory remittances, employment insurance premiums and social security or pension plan contributions or premiums and Canada pension plan contributions;
- (iv) any fine, penalty, interest or addition to tax;
- (v) any tax imposed, assessed, or collected or payable pursuant to any tax-sharing agreement or any other contract relating to the sharing or payment of any such tax, levy, assessment, tariff, duty, deficiency or fee; and
- (vi) any liability for any of the foregoing as a transferee, successor, guarantor, or by contract or by operation of law.

1.2 Headings

This division of this Agreement into articles and sections and the insertion of headings are for convenience of reference only and do not affect the construction or interpretation of this Agreement. The terms "hereof", "hereunder" and similar expressions refer to this Agreement, including its schedules, and not to any particular article, section or other portion hereof. Unless something in the subject matter or context is inconsistent therewith, references herein to articles, sections and schedules are to articles, sections and schedules of this Agreement.

1.3 Extended Meanings

In this Agreement:

- (a) words importing the singular include the plural and vice versa, words importing a gender include all genders and words importing persons include individuals, partnerships, associations, trusts, unincorporated organizations and corporations, except where the context requires otherwise;
- (b) any provision calling for "agreement" requires the relevant agreement to be recorded in writing and signed by both Parties;
- (c) the words "include", "includes", "including" and "included" shall be construed without implying limitation by the words which follow those words and without prejudice to the generality of the provisions to which such words relate, unless inconsistent with the context;
- (d) the rule of interpretation known as *ejusdem generis* shall not apply;
- (e) each reference to a specific statute, regulation, law or any subordinate instrument or statutory or regulatory provision shall be construed as including any legal or regulatory provision which subsequently amends or replaces the same, and shall include any and all subordinate instruments, orders, rules, regulations and bylaws made thereunder or guidelines issued in respect thereof;

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- (f) each reference to a writing means a writing that is hand-written, type-written, printed or electronically made, and which results in a permanent un-editable record; and
- (g) "control" when used to describe a relationship between one person and any other person, has the following meanings:
 - (i) a person controls a body corporate if securities of the body corporate to which are attached more than 50% of the votes that may be cast to elect directors of the body corporate are beneficially owned by the person and the votes attached to those securities are sufficient, if exercised, to elect a majority of the directors of the body corporate;
 - (ii) a person controls an unincorporated entity, other than a limited partnership, if more than 50% of the ownership interests, however designated, into which the entity is divided are beneficially owned by that person and the person is able to direct the business and affairs of the entity;
 - (iii) the general partner of a limited partnership controls the limited partnership; and
 - (iv) a person who controls an entity is deemed to control any entity that is controlled, or deemed to be controlled, by the entity.

1.4 Schedules

The following are the schedules hereto, each of which is deemed to be part hereof:

Schedule A	Products and Prices
Schedule B	Product Specifications
Schedule C	Estimate of Product Requirements
Schedule D	Form of Letter Agreement

**ARTICLE 2
EFFECTIVENESS**

2.1 Effective Date

This Agreement shall come into full force and effect on the date hereof (the "Effective Date").

2.2 Term

- (a) Unless earlier terminated pursuant to ARTICLE 6, this Agreement shall terminate on the [•] anniversary of the Effective Date or on such later date as the Parties may agree in writing.
- (b) Subject to termination pursuant to ARTICLE 6, the term of this Agreement may be extended for up two successive one-year periods following the [•]

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anniversary of the Effective Date, at the option of the City, upon written notice from the City to the Supplier.

- (c) Notwithstanding the foregoing, if the City and the Supplier continue to deal with each other in respect of the subject matter of this Agreement following the expiry of this Agreement, without any additional or other written agreement in respect thereof, this Agreement shall be deemed to have been renewed on a month-to-month basis on the same terms and conditions as before the expiry of the Agreement and it may be cancelled without cause by either party on thirty (30) days' prior written notice to the other.

ARTICLE 3 SUPPLY; GENERAL TERMS

3.1 Supply

- (a) During the term of effectiveness of this Agreement, the Supplier shall supply, and the City shall purchase, such quantities of Products as the City may order under Section 3.2, in accordance with this Agreement.
- (b) The Supplier shall maintain at all times sufficient inventories of the Products to meet the business plans and requirements of the City.
- (c) Without limiting the foregoing Section 3.1(a), Schedule C hereto contains a current estimate of the City's Product requirements for each of the three successive 12 month periods beginning on the Effective Date. The Supplier acknowledges such estimates and affirms its capacity to supply Products to the City in accordance therewith; although the City can offer no assurances that it shall purchase Products in accordance with such estimates.
- (d) During the term of this Agreement, any Other BCPPBG Entity or Other City Entity may, at any time during the Term, require the Supplier to supply Products to it at the prices in this Agreement and otherwise on the terms and conditions stated in this Agreement, and the Supplier shall comply with each such requirement. Moreover, the Supplier shall, upon the request of that Other BCPPBG Entity or Other City Entity, promptly enter into a Letter Agreement (or failing that shall be deemed to have entered into a Letter Agreement) with each relevant Other BCPPBG Entity or Other City Entity memorializing that the Supplier shall supply Products to such Other BCPPBG Entity or Other City Entity in accordance with the terms and conditions of this Agreement.

3.2 Orders

- (a) The City may deliver Orders to the Supplier from time to time during the term of effectiveness of this Agreement.
- (b) Each Order shall:
 - (i) be given in writing;
 - (ii) refer to this Agreement;

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- (iii) specify the Products ordered; and
- (iv) specify the date by which the Products ordered pursuant to the Order are to be delivered (the "Delivery Date"), and the location or address to which they are to be delivered (the "Delivery Location").

3.3 Product and Supply Requirements

- (a) The Supplier shall manufacture, pack, transport and supply the Products (in each case to the extent applicable) in accordance with all:
 - (i) Product manufacturer recommendations and requirements;
 - (ii) generally accepted industry standards and practices; and
 - (iii) applicable Laws.
- (b) The Products supplied to the City by the Supplier under this agreement shall:
 - (i) be new;
 - (ii) conform to the Specifications;
 - (iii) be free from defects in design, material and workmanship and remain so for ~~< >~~ months after Delivery; and
 - (iv) comply with all applicable Laws.
- (c) The Supplier shall ensure that the Products are properly packed and secured in such manner as to enable them to reach their destination in good condition.
- (d) The Supplier shall obtain and maintain in force at all times all Consents needed to manufacture (if applicable) and supply the Products in accordance with the terms of this Agreement.
- (e) The Supplier shall ensure that title in Products supplied by the Supplier hereunder, when such title passes to the City hereunder, shall be free and clear of Encumbrances. The Supplier shall not enter any contract that reserves ownership of Products supplied by the Supplier hereunder in favour of any third party and, at the request of the City, the Supplier must provide evidence that no such contract has been entered into.
- (f) The Supplier shall adhere to, and shall ensure that the Products and Supply conform to, the City's Supplier Code of Conduct referred to on page ~~< >~~ of the ~~< >~~ RFP.

3.4 Delivery Requirements

- (a) The Supplier shall deliver the Products ordered in each Order to the applicable Delivery Location by the applicable Delivery Date. The Supplier shall not, however, deliver the Products ordered in an Order more than [•] Business Days in advance of the Delivery Date without the prior written consent of the City.

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- (b) Delivery of the Products specified in an Order shall be complete on their arrival at the Delivery Location.
- (c) The Supplier shall not deliver the Products specified in an Order by instalments except with the prior written consent of the City.
- (d) If the Products specified in an Order are not delivered in accordance herewith by the specified Delivery Date, then, without limiting any other right or remedy the City may have under this Agreement or otherwise, the City may:
 - (i) refuse to take any subsequent attempted delivery of such Products associated with such Order;
 - (ii) obtain substitute products from another supplier and recover from the Supplier any costs and expenses reasonably incurred by the City in obtaining such substitute products; or
 - (iii) claim damages against the Supplier for any other costs, expenses or losses resulting from the Supplier's failure to deliver the Products specified in the Order by the Delivery Date,

provided that the Supplier shall have no liability for any failure or delay in delivering the Products specified in an Order to the extent that such failure or delay is caused by the City's failure to comply with its obligations under this Agreement.
- (e) Each shipment of Products shall be accompanied by a delivery document from the Supplier showing the Order number, the date of the Order, the type and quantity of Products included in the Order, and, in the case of an Order being delivered by instalments, the outstanding balance of Products remaining to be delivered.
- (f) If the Supplier requires the City to return any shipping containers, or other packaging or shipping materials, to the Supplier, that fact must be clearly stated on the delivery document accompanying the relevant Products, and any such returns shall be at the Supplier's expense.
- (g) In respect of any Products that originate outside Canada, the Supplier shall be responsible for all customs and import Taxes, costs, expenses, administrative duties and formalities.

3.5 Rejection of Defective Products

- (a) The City shall not be deemed to have accepted any particular Products until it has had a reasonable time to inspect them following Delivery, or, in the case of a latent defect in the Products, until a reasonable time after the latent defect has become apparent.
- (b) If any Products delivered to the City do not comply with the Specifications, or are otherwise not in conformity with the terms of this Agreement, then, without limiting any other right or remedy that the City may have, the City may at any time reject those Products and:

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- (i) require the Supplier to remove the rejected Products from any City facility or work site at the Supplier's risk and expense within < > Business Days of being requested to do so;
 - (ii) require the Supplier to repair or replace the rejected Products at the Supplier's risk and expense within < > Business Days of being requested to do so;
 - (iii) require the Supplier to repay the price of the rejected Products in full (whether or not the City has previously required the Supplier to repair or replace the rejected Products); and
 - (iv) claim damages for any other costs, expenses or losses resulting from the Supplier's delivery of Products that are not in conformity with the terms of this Agreement.
- (c) The City's rights and remedies under this Section 3.5 are in addition to the rights and remedies available to it under ARTICLE 5, ARTICLE 6 and applicable Laws.
 - (d) The terms of this Agreement shall apply to any repaired or replacement Products supplied by the Supplier pursuant to Section 3.5(b).
 - (e) If the Supplier fails to promptly repair or replace rejected Products in accordance with clause 3.5(b), the City may, without affecting any of its other rights hereunder, obtain substitute products from a third-party supplier, or have the rejected Products repaired by a third party, and the Supplier shall reimburse the City for the costs it incurs in doing so.

3.6 Risk and Title

- (a) The risk in Products delivered to the City hereunder shall pass to the City on Delivery.
- (b) Title to Products delivered to the City hereunder shall pass to the City on Delivery. The Supplier shall deliver to the City any documentation, including a bill of sale, which the City may reasonably require to evidence the transfer of title in and to Products to the City, free and clear of all Encumbrances.

3.7 Certain Supplier Representations and Warranties

The Supplier represents and warrants that:

- (a) the Supplier has the full right, power, and authority to enter into this Agreement and to perform the Supply;
- (b) Supplier is a < > duly organized, validly existing and in good standing under the laws of < > and is lawfully authorized to do business in the Province of British Columbia;
- (c) the Supplier is not a party to or bound by any agreement (written or oral), indenture, instrument, licence, permit or understanding or other obligation or

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restriction under the terms of which the execution, delivery or performance of this Agreement does or shall constitute or result in a violation or breach;

- (d) the Supplier has a valid City of Vancouver business license or a Metro West Inter-Municipal business license that applies to all of the Supply;
- (e) all statements made by the Supplier in its Proposal are true and accurate;
- (f) the Supplier is an authorized distributor of the Products; and
- (g) the Supplier and the Supplier's personnel and Subcontractors have the skills, training, experience and expertise which are necessary to supply the Products in accordance with the terms of this Agreement.

3.8 Product Warranties

- (a) All Products provided under the Agreement shall be non-defective and fit for their respective intended purposes, shall function correctly, as intended, and shall be safe.
- (b) All costs associated with warranty replacements or repairs shall be the responsibility of the Supplier, including repair, adjustment, and shipping costs, and replacements of Products.
- (a) If requested by the City, the Supplier shall handle and manage any claim on a manufacturer warranty for any defect in any Product.
- (c) The Supplier shall deliver to the City all such documentation as the City may require to evidence any warranty required by this Section 3.8 or to evidence the Supplier's compliance with this Section 3.8, and the Supplier shall assign all warranties, and do all other things necessary, to ensure that the City receives the full benefit of each warranty or other covenant set forth in this Section 3.8.

3.9 No Exclusivity

- (a) The City is not bound to treat the Supplier as its exclusive supplier of any Products.
- (b) The City shall be entitled, in its sole discretion, to purchase products of the same type as, or similar to, the Products, from any supplier at any time.

3.10 Absence of Conflicts of Interest

- (a) Neither the Supplier, nor any of its Representatives has given or shall give or offer to give to the City or any official, officer, employee or agent of the City any gratuity, reward, advantage or benefit of any kind as consideration for doing or forbearing to do, or for having done or forbore to do, any act in connection with this Agreement.
- (b) To the best of the Supplier's knowledge, the Supplier, its Subcontractors, and their respective directors, officers, employees and agents have no pecuniary

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interests or any other current or past interests or dealings, including with any officials, officers or employees of the City, that would cause any conflict of interest or be seen to cause a conflict of interest in respect of the Supply. Should such a conflict or perceived conflict arise during the term of this Agreement, the Supplier shall declare it immediately in writing to the City. The City may direct the Supplier to resolve any conflict or perceived conflict to the satisfaction of the City. The Supplier warrants that neither the Supplier nor any of its Subcontractors, or any of their respective directors, officers, employees or agents, has any predisposition, affinity or association with any third party which would impair or be seen to impair or qualify the Supplier's provision of the Supply.

**ARTICLE 4
PAYMENT****4.1 Payment to the Supplier**

- (a) The Supplier shall be entitled to invoice the City for each Order made by the City, on or at any time after Delivery.
- (b) Subject to ARTICLE 6, the City shall pay the Supplier in respect of each Order in accordance with Section 4.3, Schedule A and ARTICLE 8, following the receipt of an invoice relating to such Order prepared and delivered in accordance with Section 4.1(a), Section 4.2 and Section 4.3.
- (c) Notwithstanding any other provisions of this Agreement, the Supplier shall not be entitled to payment for any Supply that has not been performed in compliance with the provisions of this Agreement.

4.2 Content of Invoices

- (a) Each of the Supplier's invoices shall set out, at a minimum (and in such form or format as required by the City):
 - (i) the relevant Order number;
 - (ii) the invoice date;
 - (iii) an itemized list of the amounts owing and details of any applicable taxes;
 - (iv) a description of the Products to which the invoice relates; and
 - (v) the total amount payable under the invoice; and
 - (vi) such other information as the City may require from time to time.
- (b) Any terms or conditions proposed by the Supplier to govern the Supply that are contained in any invoice (or in any shipping document, packing list or similar document) are void and of no effect, notwithstanding any statement in such document concerning the means by which the City may accept or be deemed to accept such terms or conditions.

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4.3 Procedure for Invoices

- (a) The Supplier shall address each of its invoices to the City, Attention: Accounts Payable, and email it to APInvoice@vancouver.ca, or to such other address as is specified in the relevant Order. The City shall thereafter pay the invoice within 30 days, provided the other requirements of this Agreement have been satisfied and subject to the other provisions hereof.
- (b) The City shall not be liable for any interest on any invoice amount in respect of any period for any reason.
- (c) The City expects to make payments by electronic funds transfer and the Supplier shall provide banking information to the City to enable it to do so.

4.4 Currency of Payment

All prices stated herein are denominated in, all invoices hereunder shall be stated in, and all payments hereunder shall be made in, Canadian dollars.

4.5 Set Off

Notwithstanding any provision to the contrary in this Agreement and without prejudice to any other remedy which the City may have (whether in common law or equity), the City shall be entitled to deduct from and set off against any sum(s) otherwise due to the Supplier hereunder any sums which are due from the Supplier to the City or which the Supplier is liable to pay to the City under this Agreement or in connection herewith (including without limitation any monies overpaid to the Supplier under this Agreement or otherwise due and payable to the City by reason of any error in payment under this Agreement).

**ARTICLE 5
LIABILITY AND INSURANCE**

5.1 Indemnification by the Supplier

- (a) The Supplier shall indemnify and keep indemnified and hold the City and its officials, officers, employees and agents harmless against all losses, liabilities, claims, demands, costs and expenses (including legal fees), fines, penalties or charges (including those imposed by statute or otherwise imposed), arising out of, in connection with or consisting of:
 - (i) any loss or damage arising from a claim by any third party concerning or arising out of the Supply or the use of the Products, to the extent that such claim arises out of any negligence, wilful misconduct or failure to adhere to this Agreement by the Supplier or any of its Representatives;
 - (ii) any occupational illness, injury or death of any person, which occurs during, or as a result of, the Supply or the use of the Products, to the extent that such illness, injury or death is attributable to the acts or omissions of the Supplier or any of its Representatives or is attributable to a Product attribute, feature, defect or failure;

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- (iii) any other failure by the Supplier to fully comply with the provisions of this Agreement;
 - (iv) any defect in any of the Products or any failure of any Product or any failure of any Product to meet reasonable safety standards or applicable safety requirements;
 - (v) a breach by the Supplier or any Subcontractor of any Law in the course of, or as a result of, the provision of the Supply;
 - (vi) any actual or alleged infringement of any Intellectual Property Rights caused by the Supply or the use of the Products, and
 - (vii) any breach of the warranties of the Supplier contained herein.
- (b) Nothing in this Section 5.1 or otherwise in this Agreement shall limit or exclude any direct liability (whether in contract, tort, for breach of statutory duty or any other legal basis) of the Supplier to any person.
- (c) The Supplier appoints the City as the trustee of the City's officials, officers, employees and agents in relation to the covenants of indemnification of the Supplier contained in this Section 5.1 and the City accepts such appointment.

5.2 Insurance

- (a) In addition to those mandatory insurance policies that the Supplier is required to carry by any applicable Laws, the Supplier shall take out and maintain in force, with a reputable insurance company legally authorized to conduct business in British Columbia, during the term of this Agreement and for a period of five years afterwards, commercial general liability insurance with coverage of not less than \$5,000,000 million per occurrence and at least \$5,000,000 million of annual aggregate coverage endorsing the City as an additional insured on a primary and non-contributory basis and providing a waiver of subrogation in favour of the City.
- (b) The Supplier shall ensure that any Subcontractors also maintain the same insurance as the Supplier, having regard to the obligations under this Agreement which they are contracted to fulfil.
- (c) The Supplier's liabilities under this agreement shall not be deemed to be released or limited by the Supplier taking out the insurance policies referred to in Section 5.2(a).
- (d) The cost of the insurances arising under this Section 5.2 shall be deemed to be incorporated into the prices specified in Schedule A.
- (e) As a condition precedent to any payment from the City to the Supplier under this Agreement, and as and when reasonably requested by the City, the Supplier shall provide documentary evidence (to the reasonable satisfaction of the City, including by completing the City's standard reporting documents used for this purpose) that the insurances required by this Section 5.2 have been taken out and are being maintained.

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**ARTICLE 6
FORCE MAJEURE; TERMINATION**

6.1 Force Majeure

- (a) No Party shall be deemed to be in breach of this Agreement or otherwise liable to another Party in any manner whatsoever for any failure or delay in performing its obligations under this Agreement reasonably due to Force Majeure.
- (b) If either Party's performance of its obligations under this Agreement is affected by an event of Force Majeure, then:
 - (i) it shall give written notice to the other Parties, specifying the nature and extent of the event of Force Majeure, as soon as reasonably practicable after becoming aware of the event of Force Majeure;
 - (ii) performance of such obligation(s) shall be deemed suspended but only for a period equal to the delay reasonably caused by such event;
 - (iii) it shall not be entitled to payment from any of the other Parties in respect of extra costs and expenses incurred as a result of the event of Force Majeure; and
 - (iv) it shall use all reasonable diligence to mitigate the cause and the result of the event of Force Majeure and to remedy the situation and resume its obligations under this Agreement.
- (c) Notwithstanding the obligations of a Party affected by an event of Force Majeure pursuant to Section (b), if the event of Force Majeure renders it impossible or impractical for the Supplier to provide the Supply in accordance with this Agreement for a period of at least five days, the City may terminate this Agreement upon notice delivered to the Supplier at any time following the expiration of such period of five days.

6.2 Purchaser Termination Rights

The City shall have the following rights:

- (a) The City may terminate this Agreement at any time (and for its convenience) upon thirty days' written notice to the Supplier.
- (b) If the City reasonably considers that the Supplier is not discharging any of its material obligations under this Agreement, the City may inform the Supplier by notice stating the grounds for the notice. If evidence of remediation satisfactory to the City, is not received as soon as practicable or in any case within five days or such longer period as agreed by the Parties, the City may by a further notice to the Supplier of at least five days terminate this Agreement.
- (c) The City may terminate this Agreement with immediate effect if the Supplier becomes bankrupt or insolvent, goes into liquidation, has a receiver or administrator appointed over it or any of its assets of undertaking, enters into

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any arrangement for the benefit of its creditors, becomes the subject of any moratorium or carries on business under a receiver, trustee, manager or arrangement for the benefit of its creditors, or if any act is done or event occurs which (under applicable Laws) has a similar effect to any of these acts or events.

6.3 Supplier Termination Rights

After giving at least seven days' written notice to the City, the Supplier may terminate this Agreement when:

- (a) 90 days after the due date for payment of an invoice issued by the Supplier to the City hereunder, it has not received payment of that part which has not by that time been contested in writing by the City and provided always that:
 - (i) the Supplier has issued a notice of reminder to the City following the due date for payment in relation to such unpaid sum; and
 - (ii) the termination notice may not be issued until the expiry of 45 days following the issue of such reminder notice; or
- (b) the City commits any material persistent breaches of its obligations under this Agreement, which render performance by the Supplier of its obligations under this Agreement or a substantial part thereof impossible or significantly adversely affect such performance of this Agreement as a whole, and further which remain irremediable after 90 days.

6.4 Consequences of Termination

- (a) Termination of this Agreement shall not prejudice or affect the accrued rights or claims and liabilities of the Parties.
- (b) After termination of this Agreement, the provisions of Section 3.7, ARTICLE 5, ARTICLE 7 and ARTICLE 9 shall remain in force.

**ARTICLE 7
RIGHTS AND OBLIGATIONS CONCERNING INFORMATION**

7.1 Freedom of Information and Protection of Privacy Act

The Supplier acknowledges that the City is subject to the *Freedom of Information and Protection of Privacy Act* (British Columbia), which imposes significant obligations on the City's contractors to protect all personal information acquired from the City in the course of providing any service to the City.

7.2 No Promotion

The Supplier shall not disclose or promote its relationship with the City, including by means of any oral declarations, announcements, sales literature, letters, client lists, press releases, brochures or other written materials, without, in each case, the express prior written consent of the City. The Supplier shall not use the City's logo or any of the City's official marks without the express prior written consent of the City.

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7.3 Confidentiality Obligation

Each Party shall keep the Confidential Information of the other Party confidential and each Party shall not use such Confidential Information, except for the purpose of exercising or performing its rights and obligations under this Agreement or making use of the Products (a "Permitted Purpose"), or disclose such Confidential Information in whole or in part to any third party, except as expressly permitted by this ARTICLE 7.

7.4 Disclosure to Representatives

A Party may disclose another Party's Confidential Information to those of its Representatives who need to know such Confidential Information for the Permitted Purpose, provided that it informs such Representatives of the confidential nature of the Confidential Information prior to disclosure, and at all times it is responsible for such Representatives' compliance with the confidentiality obligations set out in this ARTICLE 7.

7.5 Disclosures Required by Law

A Party may disclose Confidential Information to the extent required by any applicable Laws or by any Competent Authority provided that, where legally permitted, it notifies the other Party before doing so, gives the other Party a reasonable opportunity to take any steps that such Party considers necessary to protect the confidentiality of that information, and notifies the third person that the information is Confidential Information. In any event, a Party shall furnish only that portion of the Confidential Information which it is legally required to disclose and shall use its reasonable endeavours to obtain a protective order or other reliable assurance that the Confidential Information shall be accorded confidential treatment.

7.6 Other Disclosures by the City

The City's obligations under this ARTICLE 7 are wholly subject to and qualified by, the applicable provisions of the *Freedom of Information and Protection of Privacy Act* (British Columbia) and, notwithstanding any other provision of this ARTICLE 7, the City may disclose Confidential Information in any manner compliant with such statute or otherwise in furtherance of its public role or duties, including in the course of publicly reporting to the Vancouver City Council.

**ARTICLE 8
TAXES****8.1 Taxes for Own Accounts**

Unless otherwise expressly stated in this ARTICLE 8, any Taxes becoming due and payable by either Party pursuant to any applicable Laws by either Party as a result of the entering into, the performance of obligations under or the taking of payment pursuant to this Agreement, shall be for the account of that Party, and for greater certainty the prices set forth in Schedule A include all such Taxes except for applicable Taxes arising under all sales, excise and value added tax legislation (including, without limitation, the *Excise Tax Act* (Canada) and similar Canadian provincial legislation) (collectively, "Sales Tax") as a result of the sale of the Supply within Canada hereunder, unless it is clearly stated that they are intended to be Sales Tax-inclusive.

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8.2 Withholding Taxes

- (a) Notwithstanding any other provision to the contrary, if the City considers it necessary to satisfy its obligations under any Law relating to Taxes, the City may:
 - (i) withhold an amount from a payment made to the Supplier; and
 - (ii) pay the withheld amount directly to the relevant Competent Authority.
- (b) If an amount withheld in accordance with Section 8.2(a) is paid by the City to the relevant Competent Authority, it is deemed to have been paid to the Supplier on the date on which the remainder of the payment to which it relates was paid to the Supplier.
- (c) The Supplier agrees and acknowledges that it has no claim against the City for any amounts withheld and paid to the relevant Competent Authority in accordance with Section 8.2(a).
- (d) If the City does not withhold an amount under Section 8.2(a) which it is required to withhold pursuant to any laws relating to Taxes, the Supplier agrees to pay that amount to the City, upon request by the City.
- (e) The Supplier agrees that the City shall not be required to increase any payment to the Supplier by the amount withheld by the City under Section 8.2(a).

**ARTICLE 9
DISPUTE RESOLUTION**

9.1 Optional Procedure

All claims, disputes or issues in dispute between the City and the Supplier in relation to this Agreement shall be decided by mediation or arbitration, if the Parties so agree in writing, or, failing any such agreement, by the courts of competent jurisdiction in the Province of British Columbia.

9.2 Arbitration

In the event that Parties agree to arbitration pursuant to Section 9.1:

- (a) the arbitration shall be conducted pursuant to the *Commercial Arbitration Act* (British Columbia) and shall be governed by the rules of the British Columbia International Commercial Arbitration Centre, except that the arbitrator or arbitrators shall be agreed upon by the Parties, and failing agreement by the Parties, shall be appointed by a court of competent jurisdiction within the Province of British Columbia. The parties shall share equally the costs of the arbitration but shall be responsible for their own separate costs and expenses in relation to the arbitration including legal fees and disbursements; and
- (b) the arbitration shall take place in Vancouver, British Columbia and shall be governed by the laws of British Columbia.

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**ARTICLE 10
MISCELLANEOUS**

10.1 Assignment

- (a) The Supplier shall not assign this Agreement (including by operation of law) without the express prior written consent of the City.
- (b) If the Supplier is a company, then any change in the control of the company shall be deemed to constitute an assignment for the purposes of Section 10.1(a).
- (c) No assignment permitted by the City shall relieve the Supplier from any obligation under this Agreement or impose any liability upon the City.
- (d) The City may at any time and from time to time assign this Agreement, in whole or in part, upon notice to (and without the consent of) the Supplier.

10.2 Time of the Essence

Time is of the essence of this Agreement.

10.3 Costs

Each of the Parties hereto shall pay its respective legal fees and other costs and expenses incurred in connection with the preparation, execution and delivery of this Agreement and all documents and instruments executed pursuant hereto and any other costs and expenses whatsoever and howsoever incurred.

10.4 Benefit of this Agreement

- (a) This Agreement shall inure to the benefit of and be binding upon the respective successors and permitted assigns of the Parties hereto.
- (b) Except as expressly set forth in the foregoing Section 10.4(a) or Section 5.1, nothing in this Agreement shall be construed to give any rights or benefits to anyone other than the City and the Supplier.

10.5 Entire Agreement

This Agreement constitutes the entire agreement between the Parties hereto with respect to the subject matter hereof and cancels and supersedes any prior understandings and agreements between the parties hereto with respect thereto. There are no representations, warranties, terms, conditions, undertakings or collateral agreements, express, implied or statutory, between the Parties in relation to the subject matter hereof other than as expressly set forth in this Agreement.

10.6 Amendments and Waiver

No modification of or amendment to this Agreement is valid or binding unless set forth in writing and fully executed by the Parties hereto and no waiver of any breach of any term or provision of this Agreement is effective or binding unless made in writing and signed by the

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Party purporting to give such waiver and, unless otherwise provided, is limited to the specific breach waiver.

10.7 Notices

- (a) Any Order, demand, notice or other similar communication to be given to a Party in connection with this Agreement must be given in writing and shall be deemed to be validly given if given by personal delivery to an authorized agent of a Party, or delivered by registered mail, by courier or by electronic transmission (with delivery confirmation or an email reply effectively acknowledging delivery), addressed to a Party as follows:

- (i) if to the Supplier:

<Supplier>
<address>

Attention: <>
Facsimile: <>
Email: <>

- (ii) if to the City:

City of Vancouver
<Department>
453 West 12th Avenue
Vancouver, BC V5Y 1V4

Attention: <>
Facsimile: <>

or to such other address or facsimile number as may be designated by notice given by either Party to the other, provided that, notwithstanding the foregoing, the Supplier's invoices shall be addressed as specified in Section 4.3 or as otherwise specified in the relevant Order.

- (b) Any Order, demand, notice or other communication given (and, in the case of electronic transmission, confirmed or acknowledged) in accordance with Section 10.7(a) shall be conclusively deemed to have been given:

- (i) if given by personal delivery, on the day of actual delivery thereof;
- (ii) if given by registered mail or courier, on the Business Day following confirmation by the postal service or the courier that the notice has been delivered; and
- (iii) if given by electronic transmission, on the day of transmittal thereof if given during the normal business hours of the recipient and on the Business Day during which such normal business hours next occur if not given during such hours on any day.

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Notwithstanding the foregoing, if the Party giving any demand, notice or other communication knows or ought reasonably to know of any difficulties with the postal system which might affect the delivery of mail, any such order, demand, notice or other communication must not be mailed but must be given by personal delivery, courier or electronic transmission.

10.8 Governing Law and Jurisdiction

- (a) This Agreement is governed by and must be construed in accordance with the laws of the Province of British Columbia.
- (b) All provisions of the *International Sale of Goods Act* (British Columbia) are specifically excluded from application to this Agreement.
- (c) This Agreement is subject to the exclusive jurisdiction of the courts in the Province of British Columbia except:
 - (i) as otherwise agreed by the Parties pursuant to ARTICLE 9; and
 - (ii) to the extent necessary to enforce, in another jurisdiction, any decision or award made pursuant to ARTICLE 9 or any judgment of any court in the Province of British Columbia.

10.9 Further Assurances

Each Party agrees to do all things and execute all deeds, instruments, transfers or other documents as may be necessary or desirable to give full effect to the provisions of this Agreement and the transactions contemplated by it.

10.10 Severance

If any term or condition of this Agreement is for any reason held to be illegal, invalid, ineffective, inoperable or otherwise unenforceable, it shall be severed and deemed to be deleted from this Agreement and the validity and enforceability of the remainder of this Agreement shall not be affected or impaired thereby. If any term or condition of this Agreement is found to be illegal, invalid, ineffective, inoperable or otherwise unenforceable, but would not be so if some part of it were deleted, the term or condition shall apply with such modifications as may be necessary to make it enforceable.

[The remainder of this page is intentionally left blank.]

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SUPPLY AGREEMENT

10.11 Counterparts

This Agreement may be executed in any number of counterparts. All counterparts, taken together, constitute one instrument. A Party may execute this Agreement by signing any counterpart.

10.12 Electronic Execution

Delivery of an executed signature page to this Agreement by either Party by electronic transmission shall be as effective as delivery of a manually executed copy of this Agreement by such party.

10.13 Voluntary Agreement

THE SUPPLIER ACKNOWLEDGES AND DECLARES THAT IT HAS CAREFULLY CONSIDERED AND UNDERSTOOD THE TERMS OF THIS AGREEMENT, THAT IT HAS EITHER CONSULTED LEGAL COUNSEL OR WAIVED THE RIGHT TO DO SO, AND THAT IT IS EXECUTING THIS AGREEMENT VOLUNTARILY.

IN WITNESS WHEREOF this Agreement has been executed as of the day and year first above written by and on behalf of the Parties by their duly authorized signatories:

<  SUPPLIER NAME >_____
Signature_____
Print Name and Title_____
Signature_____
Print Name and Title

CITY OF VANCOUVER

Signature_____
Print Name and Title_____
Signature_____
Print Name and Title

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SCHEDULE A - SUPPLY AGREEMENT

SCHEDULE A -
PRODUCTS AND PRICES

ITEM	PRICE/UNIT
< Name 1 >	\$< > per < > [unit type]>
< Name 2 >	\$< > per < > [unit type]>
< Name 3 >	\$< > per < > [unit type]>

< If applicable, include here price escalation or adjustment formulas (e.g. for inflation, exchange rate changes, etc.) >

Notwithstanding any other provision hereof, if the Supplier is, at any time during the term of effectiveness of this Agreement, party to a contract with another customer pursuant to which the Supplier charges effective prices lower than the prices charged to the City for the same goods, the above-listed prices shall be adjusted, retroactively to the date of effectiveness of such other contract, so that the prices charged hereunder are at least as low as the effective prices charged pursuant to such other contract.

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SCHEDULE B- SUPPLY AGREEMENT

SCHEDULE B -
PRODUCT SPECIFICATIONS

<u>ITEM</u>	<u>SPECIFICATIONS</u>
< Name 1 >	< Description 1. >
< Name 2 >	< Description 2. >
< Name 3 >	< Description 3. >

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SCHEDULE C- SUPPLY AGREEMENT

**SCHEDULE C -
ESTIMATE OF PRODUCT REQUIREMENTS**

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REQUEST FOR PROPOSALS NO. PS20180305
SUPPLY AND DELIVERY OF FUELS
SCHEDULE D

SCHEDULE D -
FORM OF LETTER AGREEMENT

[Date]

<= Add Supplier Name and Address>

Dear Sir or Madam,

Re: Agreement based upon the Supply Agreement between <= Supplier Name> and City of Vancouver dated <= > (the "Base Agreement")

The purpose of this letter agreement (this "Agreement") is to set out the terms and conditions upon which <= Supplier Name> (the "Supplier") shall supply <= Describe> to [Name of Other BCPPBG Entity or Other City Entity] (the "Purchaser").

Please have a duly authorized representative of the Supplier execute this Agreement and return one copy to the Purchaser.

1. Application of Base Agreement

The Supplier shall supply <= Describe> to the Purchaser at the price(s) and otherwise pursuant to the terms and conditions stated in the Base Agreement, as though each reference to the City of Vancouver or the "City" in the Base Agreement were instead a reference to the Purchaser, with the exceptions stated in the following Section 2.

2. Variations from the Base Agreement

(a) The Supplier's invoices to the Purchaser shall be submitted to the following mailing and/or email addresses, rather than the addresses stated in Section 4.3 of the Base Agreement: [Address]. The Purchaser's contact information for purposes of the application of Section 10.7 of the Base Agreement shall be the following in lieu of the City of Vancouver address, contact name and facsimile number stated in the Base Agreement: [Address, Contact Name and Fax number]

(b) Section 3.1(c) and Section 3.1(d) of the Base Agreement shall be excluded from the agreement between the Supplier and the Purchaser.

3. Miscellaneous

(a) This Agreement shall terminate upon the expiry or termination of the Base Agreement.

(b) This Agreement is governed by and must be construed in accordance with the laws of the Province of British Columbia.

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REQUEST FOR PROPOSALS NO. PS20180305
SUPPLY AND DELIVERY OF FUELS
SCHEDULE D

(c) This Agreement may be executed in any number of counterparts. All counterparts, taken together, constitute one instrument. A party may execute this Agreement by signing any counterpart. Delivery of an executed signature page to this Agreement by either party by electronic transmission shall be as effective as delivery of a manually executed copy of this Agreement by such party.

Yours truly,

[Name and Title of Other City Entity
Signatory]

Accepted and agreed on behalf of <@ Supplier Name>:

Signed: _____ Date: _____
Name: _____
Title: _____