



**General Purposes Committee
Electronic Meeting**

**Anderson Room, City Hall
6911 No. 3 Road**

**Monday, June 3, 2024
4:00 p.m.**

Pg. # ITEM

MINUTES

GP-4 *Motion to adopt the **minutes** of the meeting of the General Purposes Committee held on May 21, 2024.*



ENGINEERING AND PUBLIC WORKS DIVISION

1. **FCM FEASIBILITY STUDY ON FINANCING OPTIONS FOR ENERGY RETROFITS TO EXISTING GROUND-ORIENTED HOUSING**

(File Ref. No. 10-6000-01) (REDMS No. 7562606)

GP-7

See Page GP-7 for full report

Designated Speaker: Gabriel Berenguer and Norm Connolly

STAFF RECOMMENDATIONS

- (1) *That Council endorse a funding application in the amount of \$175,000, to be submitted to the Federation of Canadian Municipalities (FCM), to conduct a feasibility study on a low-interest energy retrofit financing program for existing ground-oriented residential buildings;*

- (2) *That the Chief Administrative Officer and General Manager, Engineering and Public Works, be authorized to enter into a funding agreement with FCM, should the application be successful; and*
- (3) *That the Consolidated 5 Year Financial Plan (2024-2028) be amended accordingly.*



PLANNING AND DEVELOPMENT DIVISION

- 2. **RICHMOND RESPONSE: YVR AIRPORT ZONING REGULATIONS**
(File Ref. No. 01-0153-01) (REDMS No. 7686776)

GP-14

See Page GP-14 for full report

- (1) *That as described in the staff report titled “Richmond Response: Proposed Airport Zoning Regulations for YVR”, dated May 23, 2024, from the Director, Policy Planning, staff comments be endorsed and submitted to Transport Canada as part of their Canada Gazette public consultation process on the proposed Vancouver International Airport Zoning Regulations;*
- (2) *That a letter be prepared outlining the City of Richmond’s concerns on Transport Canada’s proposed Vancouver International Airport Zoning Regulations and request a review of the proposed Airport Zoning Regulations for the Vancouver International Airport to the following:*
 - (a) *Minister of Transport and Quebec Lieutenant;*
 - (b) *Minister of Environment and Climate Change;*
 - (c) *Minister of Fisheries, Oceans and the Canadian Coast Guard;*
 - (d) *Minister of Environment and Climate Change Strategy;*
 - (e) *Minister of Agriculture and Food;*
 - (f) *Members of Parliament for Richmond;*
 - (g) *Members of the Legislative Assembly for Richmond;*
 - (h) *Provincial Agricultural Land Commission Chair; and*
 - (i) *YVR Board Chair; and*

- (3) *That staff be directed to initiate dialogue with the Vancouver Airport Authority to re-affirm their commitment to applying to Transport Canada to increase building heights in select portions of the City, in particular the south end of the City Centre Area Plan.*

COUNCILLOR LAURA GILLANDERS

ADDED 3. **FEDERAL GRANTS AND SALVATION ARMY HOUSE**

(File Ref. No.) (REDMS No.)

- (1) *Staff research and advise options for obtaining the federal grant money available for costs associated with housing refugees and asylum seekers; and*
- (2) *Staff review the policies of Salvation Army House to analyze how we can make the shelter more available to Richmond residents such as by looking at access to emergency rooms, lengths of stay, and wait times.*

ADJOURNMENT



General Purposes Committee

Date: Tuesday , May 21, 2024

Place: Council Chambers
Richmond City Hall

Present: Mayor Malcolm D. Brodie, Chair
Councillor Chak Au
Councillor Carol Day
Councillor Laura Gillanders
Councillor Kash Heed
Councillor Andy Hobbs
Councillor Alexa Loo
Councillor Bill McNulty
Councillor Michael Wolfe

Call to Order: The Chair called the meeting to order at 4:02 p.m.

MINUTES

It was moved and seconded

That the minutes of the meeting of the General Purposes Committee held on May 6, 2024, be adopted as circulated.

CARRIED

ENGINEERING AND PUBLIC WORKS DIVISION

1. **MUNICIPAL TOP-UPS FOR HEAT PUMP RETROFITS IN EXISTING GROUND-ORIENTED RESIDENTIAL HOMES**

(File Ref. No. 10-6000-01) (REDMS No. 7611425)

It was moved and seconded

(1) *That the report titled “Municipal Top-Ups for Heat Pump Retrofits in Existing Ground-Oriented Residential Homes” from the Director, Sustainability and District Energy, dated May 6, 2024, be endorsed;*

General Purposes Committee
Tuesday, May 21, 2024

- (2) *That the City enter into a Municipal Contribution Agreement with the Province of BC and BC Hydro to offer top-up incentives for heat pump and electrical service upgrades for ground-oriented residential homes in Richmond, and the General Manager, Engineering and Public Works/Deputy Chief Administrative Officer or Chief Administrative Officer be authorized to execute the agreement; and*
- (3) *That the Consolidated 5 Year Financial Plan (2024-2028) be amended accordingly.*

In response to queries from Committee, staff advised that (i) BC Hydro can be invited to Committee to discuss their service provisions, (ii) staff reviewed data from other municipalities and found that top-ups motivated more households to pursue electric heat pump retrofits, (iii) the program will be evaluated after two years, (iv) the Provincial government has recently updated and boosted their incentives program under Clean BC which will consist of three tiers and increase interest in heat pump retrofits, and (v) heat pumps operate at a higher level of coefficient; 1 unit of energy produces 2.5-3.5 units of heating or cooling.

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

PLANNING AND DEVELOPMENT DIVISION

2. **2024 CHILD CARE PROFESSIONAL AND PROGRAM DEVELOPMENT GRANTS – SECOND INTAKE**
(File Ref. No. 07-3070-04) (REDMS No. 7650132)

It was moved and seconded

- (1) *That the Child Care Professional and Program Development Grants be awarded for the total recommended amount of \$10,000 as identified in the staff report titled “2024 Child Care Professional and Program Development Grants – Second Intake” dated April 22, 2024, from the Acting Director, Community Social Development; and*
- (2) *That the grant funds be disbursed accordingly following Council approval.*

CARRIED

ADJOURNMENT

It was moved and seconded

That the meeting adjourn (4:09 p.m.).

CARRIED

2.

General Purposes Committee
Tuesday, May 21, 2024

Certified a true and correct copy of the Minutes of the meeting of the General Purposes Committee of the Council of the City of Richmond held on May 21, 2024.

Mayor Malcolm D. Brodie
Chair

Raman Grewal
Legislative Services Associate



City of Richmond

Report to Committee

To: General Purposes Committee **Date:** May 22, 2024
From: Peter Russell **File:** 10-6000-01/2024-Vol
 Director, Sustainability & District Energy 01
Re: **FCM Feasibility Study on Financing Options for Energy Retrofits to Existing Ground-Oriented Housing**

Staff Recommendations

1. That Council endorse a funding application in the amount of \$175,000, to be submitted to the Federation of Canadian Municipalities (FCM), to conduct a feasibility study on a low-interest energy retrofit financing program for existing ground-oriented residential buildings;
2. That the Chief Administrative Officer and General Manager, Engineering and Public Works, be authorized to enter into a funding agreement with FCM, should the application be successful; and
3. That the Consolidated 5 Year Financial Plan (2024-2028) be amended accordingly.

Peter Russell
 Director, Sustainability & District Energy
 (604-516-9873)

Att. 1

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF DEPUTY CAO
Finance Department	<input checked="" type="checkbox"/>	
Building Approvals	<input checked="" type="checkbox"/>	
Intergovernmental Relations	<input checked="" type="checkbox"/>	
SENIOR STAFF REPORT REVIEW	INITIALS:	APPROVED BY CAO

Staff Report

Origin

This report seeks Council approval for staff to proceed with a funding application to the Federation of Canadian Municipalities (FCM) Community Energy Financing initiative to conduct a detailed investigation of financing options that would help accelerate decarbonization and increase energy efficiency of existing ground-oriented residential buildings, which include single detached homes, townhouses, and multiplexes.

Council has previously advocated to the Province of BC to enable low-cost financing of energy and GHG emission retrofits for existing buildings. In May 2021, Council endorsed *Help Cities Lead Initiative*, which asked the Province to adopt a Property Assessed Clean Energy Program (PACE)¹ enabling legislation that would expand financing options for homeowners interested in reducing annual energy use and emissions. In February 2022, Council adopted the Community Energy & Emissions Plan 2050, which includes 77 actions and 199 implementation steps included within eight Strategic Directions. The implementation roadmap for Retrofit Existing Buildings includes 16 actions and 42 implementation steps, with adoption of ‘a low-interest financing program for building energy retrofits’ as a key implementation step to accelerate near-zero emission mechanical system retrofits in ground-oriented residential buildings. CEEP 2050 identifies retrofitting existing buildings as a major move to meet 2030 carbon reduction targets.

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

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

This report supports Council’s Strategic Plan 2022-2026 Focus Area #5 Governance and Focus Area #5 A Leader in Environmental Sustainability:

5.1 Continue to demonstrate leadership in proactive climate action and environmental sustainability.

This report supports the implementation of Richmond’s Community Energy and Emissions Plan 2050, and OCP emission reduction policies through:

Strategic Direction 1: Retrofit Existing Buildings

Action Categories: Create incentives and remove barriers to low carbon energy retrofits

Analysis

Building retrofit financing is a method of funding improvements to existing buildings, such as low-carbon electrification and energy efficiency upgrades. Financing can be provided by a range of options, including city lending, third-party lending, PACE, utility on-bill financing, or other financial mechanisms aimed at improving building performance and reduce GHG emissions.

¹ PACE works by providing upfront financing for buildings energy upgrades, which are then repaid over time through an additional property tax payment. More information in the “Successful Financing Programs” section.

Utilizing established medium- and longer-term financing options for homeowners provides efficiencies for local implementation of citywide climate actions, as well as local take-up of available CleanBC incentives, thereby driving wider adoption of electric heat pumps and other building upgrades. The City currently has limited ability to provide significant direct financial incentives to homeowners seeking to implement a low-carbon retrofit, but can play a lead role in building local awareness, interest and participation in a building retrofit financing initiative. Consequently, resources allocated by the City to support financing initiatives would have a larger multiplier effect, enabling City funding to go further.

Implementing a financing mechanism to support building retrofits is crucial given the challenges posed by updating and oftentimes reconfiguring mechanical systems for space heating, cooling and domestic hot water systems. Together, these systems account for almost 90% of the GHG emissions from existing detached homes, duplexes and townhouses. Despite the existence of proven technologies that can dramatically decrease both total energy consumption and GHG emissions, as well as provincial and federal incentive programs, up-front capital costs pose a barrier for homeowners seeking to install high-efficiency electric heat pumps, upgrade the thermal performance of the building envelope, or implement energy efficient, mechanical ventilation.

A detailed retrofit action plan for existing buildings, listed in the CEEP as a key action, is currently in development. It will provide guidance on various key aspects, including energy data analysis, which might include a potential energy and greenhouse gas emissions reporting requirement, policy regulations, development of incentives and programs, demonstration projects, and financing mechanisms. Given the lead times to secure FCM funding, staff are bringing this request forward at this time. Additionally, financing options will inform the development of the strategy.

To support retrofits, staff have identified that reducing financial barriers for low-carbon retrofits in ground-oriented residential is a critical element to increase the number of energy retrofits in those buildings. The concurrent staff report titled *Municipal Top-Ups for Heat Pump Retrofits in Ground-Oriented Residential Homes* (May 21, 2024) proposes a municipal top-up incentive program for heat pumps and electrical service upgrades to further reduce this barrier.

Overview of ground-oriented residential buildings in Richmond

Richmond contains around 43,000 residential dwelling units within 28,000 ground-oriented buildings.² These buildings account for almost 60% of the city's total building stock by number, and 38% of total annual operational emissions from existing buildings, of which 28% comes from single-detached homes, and 10% from attached homes.

Attachment 1 includes a detailed breakdown of energy use and GHG emissions in ground-oriented detached and attached residential buildings in Richmond, categorized by age cohort. Ground-oriented homes constructed between 1946 and 1995 emerge as leading carbon emitters. These buildings commonly utilize gas-fired furnaces and/or boilers for space heating and domestic hot water, and experience significant heat loss through the building envelope.

² Statistics from 2019 Licker Geospatial study commissioned by the City
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Moreover, the majority of ground-oriented buildings do not have cooling systems. With longer and hotter summers expected in the upcoming years, the implementation of heat pumps can enhance a building's climate resilience by providing cooling, improving occupants' thermal comfort, and reducing health risks, especially among vulnerable populations.

Staff conducted estimates to assess the potential impact of retrofitting gas-fired furnaces and gas-fired domestic water heaters with electric heat pumps in ground-oriented residential homes in Richmond. On average, retrofitting the space heating system of a Richmond home built between 1946 and 1990 is anticipated to result in a reduction equivalent to 3.4 tonnes of CO₂ per year³, with an additional 1 tonne achievable by upgrading the domestic hot water system with electric heat pump water heater. Together, these retrofits could achieve 85-90% annual GHG emissions reduction per home in pre-1990 homes.

Staff also conducted a sensitivity analysis to determine estimated annual energy savings that could be achieved by retrofitting these building with electric heat pumps. Modelled scenarios included variations in predicted carbon price and average efficiency of heat pumps. Cost savings in terms of space heating, under these scenarios, ranged from \$3,000 to \$7,200 over the 15-year life cycle of the heat pump. Lifetime savings from a new heat pump domestic hot water system varied between \$650 and \$1,800 over the same lifespan.

Current heat pump incentives offered by provincial and federal governments seek to minimize the incremental purchase and installation costs of heat pumps relative to natural gas systems. However, upfront costs, as aforementioned, remain a primary barrier to proceeding with a heat pump retrofit, since these programs only provide rebates after upgrades are implemented. Heat pumps utilized for space heating and cooling, typically cost between \$12,000 and \$30,000, while up-front costs for heat pump water heaters range from \$6,000 to \$15,000. These costs include labour for equipment installation, but do not factor in heat pump rebates currently in the market. However, even with federal and provincial rebates, the homeowner has to show proof that the equipment is installed and paid for before receiving a heat pump rebate⁴. Covering all upfront costs at once poses a potential barrier to wider adoption of electric heat pumps. Potential implementation of a low-interest financing program reduces this barrier by spreading these costs over a longer period.

Successful Financing Programs in Canada

Several successful financing programs have been implemented in Canada in recent years and three notable examples are included below. The following programs use a Property Assessed Clean Energy (PACE) financing mechanism, in which loans are repaid by means of an additional levy on the home's annual property tax payment. With PACE, the loan is tied to the property rather than the property owner, so that both the capital asset and any remaining repayment debt are transferred from one owner to the next when a property is sold.⁵

- **District of Saanich - Heat Pump Financing Program:** This program offers up to \$12,000 in zero-interest financing to support the upgrade of existing fossil fuel furnaces or boilers to efficient electric heat pumps. Loan repayment occurs over a ten-year period. This program

³ Considering the incremental GHG emissions from addition of cooling by installing a heat pump

⁴ Clean BC Income Qualified Program process is the only incentive program that provides rebates directly to registered contractors, alleviating upfront costs to customers.

⁵ Due to the absence of PACE-enabling legislation in BC, other financing mechanisms will be explored in the proposed feasibility study.

has been very successful, reaching full capacity within two weeks of the first intake. The first intake was a pilot financed by FCM and Real Estate Foundation of BC. Recently, District of Saanich Council approved the expansion of this program, partially financed by FCM.

- Province of Nova Scotia - Clean Energy Financing:** Operating since 2016, this program helps Nova Scotia municipalities provide low-interest financing to qualifying homeowners interested in undertaking clean energy upgrades, with 12 municipalities participating. The program offers financing for up to ten years, with the maximum loan amount and interest rate varying between participating municipalities. Due to its success, new FCM investments were recently approved, helping to drive future GHG reductions of 1,617 tonnes of CO₂/year and energy savings of 20,400 GJ/year.
- City of Toronto - Home Energy Loan Program (HELP):** Since 2014, homeowners in Toronto can borrow up to \$125,000 to cover the cost of home energy improvements, such as heat pumps, air sealing, water heaters, envelope insulation, EV chargers and more. Interest repayment rates vary based upon the loan term. In 2022, the City extended this program, which in the first six years of operation financed 229 projects with a total value of \$5.67 million.

FCM Community Energy Financing Initiative

FCM’s Community Efficiency Financing (CEF) program is designed to support local innovation in energy retrofit financing. Specifically, CEF seeks to identify alternative financing models, such as PACE, but also utility on-bill financing as well as innovative third-party lending.

CEF provides funding to support program development at all stages, and staff are requesting Council approval to apply for the feasibility study grant, which would fund 80 percent of eligible costs up to \$175,000. Table 1 shows the sequencing of FCM funding available to support this initiative, including expected timeline.

Should the City application be successful, staff will update Council at future date on results of the feasibility study and recommended next steps.

Table 1: Funding available through FCM Community Energy Financing (CEF) program

CEF Stage	Grant Up To	Grant Cap	Status	Timeline
Feasibility Study	80%	\$175,000	Seeking Council endorsement to proceed	Now
Program Design	80%	\$175,000	Based upon favourable results from the Feasibility Study, staff would seek Council approval to proceed with Program Design.	2025/2026
Capital Program	80%	FCM funding options available: a) \$10M Capital Loan with grant up to 50% of the loan amount. [or] b) \$2M in Credit Enhancement (leverage ratio 5:1 or greater) with up to \$5M grant	Based upon favourable results from Program Design phase, staff would seek Council approval to proceed with Capital Program (a) or (b).	2026

Financial Impact

FCM offers up to \$175,000 in funding to conduct a Community Energy Financing (CEF) Program study. Work on this study is anticipated to start during the second half of 2024, and will take approximately six months to complete. If Council endorses the recommendation to proceed, staff will submit a grant funding application to FCM.

Staff recommends that the CEF Study move forward, with an estimated \$220,000 cost, and that the Local Government Climate Action Program (LGCAP) revenue be used to fund the study. If the grant application is successful, a portion of the LGCAP funding source will be replaced by the FCM grant to fund up to 80% of total eligible costs of the proposed study, to a potential maximum of \$175,000. If approved, the Consolidated 5 Year Financial Plan (2024-2028) will be amended accordingly.

Conclusion

This report seeks Council approval to proceed with an FCM grant funding application to support an energy financing feasibility study for ground-oriented residential buildings. The scope of the study includes a baseline assessment, engaging stakeholders, evaluating a range of financing mechanisms, analyzing the impact of various retrofit measures covered by the financing program, and establishing next steps. This study will also determine the potential of an energy retrofit financing program to reduce the incidence of energy poverty for low-income households.

An energy retrofit financing program could offer a range of benefits to homeowners considering energy-related improvements to building envelope and/or mechanical systems. Based upon experiences from pilot programs elsewhere in Canada, they reduce the upfront capital cost barrier, hold the promise of lower energy bills after a retrofit, and enable allocation of energy cost savings toward repayment of the loan. These programs also increase the relative number of households considering and participating in an energy-related retrofit initiative, thereby boosting GHG emissions reduction in these homes, and creating a more comfortable and resilient living environment for occupants.



Gabriel Berenguer Vieira
Senior Climate Action Specialist
(604-247-4617)
GB

Att. 1: Ground-Oriented Residential: Building Count, Energy Use and Emissions by Age Cohort

Ground-Oriented Residential: Building Count, Energy Use and Emissions by Age Cohort

Table A.1: Residential Single Detached Homes

Age Cohort	Buildings Count	Building Area (m ²)	Total EUI (kWh/m ² /yr)	GHGs (tCO ₂ e/yr)	GHG Emissions (% of all buildings)
pre-1946	525	66,218	249.37	2,139	0.50%
1946-1977	9,164	1,406,677	196.54	35,816	8.34%
1978-1995	11,138	2,807,333	143.87	52,324	12.19%
1996-2010	4,554	1,449,002	109.37	20,529	4.78%
2011-2016	2,425	953,152	96.01	11,856	2.76%
Total	27,806	6,682,382	<i>N/A</i>	122,664	28.57%

Table A.2: Residential Single Attached Homes

Age Cohort	Buildings Count	Building Area (m ²)	Total EUI (kWh/m ² /yr)	GHGs (tCO ₂ e/yr)	GHG Emissions (% of all buildings)
Pre-1946	9	437	289.37	16	0.00%
1946-1977	3,112	399,558	221.4	11,433	2.66%
1978-1995	5,314	761,697	162.83	16,030	3.73%
1996-2010	5,876	771,151	127.95	12,752	2.97%
2011-2016	1,358	174,015	111.29	2,503	0.58%
Total	15,669	2,106,858	<i>N/A</i>	42,734	9.94%

Table A.3: All Ground Oriented Homes

Building Category	Building Count	Building Area (m ²)	Total EUI (kWh/m ² /yr)	Total GHGs (tCO ₂ e/yr)	GHG Emissions (% of all buildings)
Total	43,475	8,789,240	<i>N/A</i>	165,398	38.51%



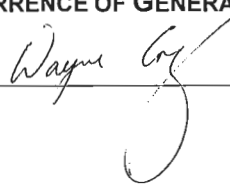

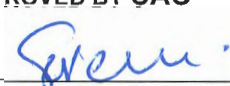
To: General Purposes Committee **Date:** May 23, 2024
From: John Hopkins **File:** 01-0153-01/2024-Vol 01
Director, Policy Planning
Re: **Richmond Response: Proposed Airport Zoning Regulations for YVR**

Staff Recommendations

1. That as described in the staff report titled “Richmond Response: Proposed Airport Zoning Regulations for YVR”, dated May 23, 2024, from the Director, Policy Planning, staff comments be endorsed and submitted to Transport Canada as part of their Canada Gazette public consultation process on the proposed Vancouver International Airport Zoning Regulations;
2. That a letter be prepared outlining the City of Richmond’s concerns on Transport Canada’s proposed Vancouver International Airport Zoning Regulations and request a review of the proposed Airport Zoning Regulations for the Vancouver International Airport to the following:
 - a. Minister of Transport and Quebec Lieutenant;
 - b. Minister of Environment and Climate Change;
 - c. Minister of Fisheries, Oceans and the Canadian Coast Guard;
 - d. Minister of Environment and Climate Change Strategy;
 - e. Minister of Agriculture and Food;
 - f. Members of Parliament for Richmond;
 - g. Members of the Legislative Assembly for Richmond;
 - h. Provincial Agricultural Land Commission Chair; and
 - i. YVR Board Chair; and
3. That staff be directed to initiate dialogue with the Vancouver Airport Authority to re-affirm their commitment to applying to Transport Canada to increase building heights in select portions of the City, in particular the south end of the City Centre Area Plan.

John Hopkins
Director, Policy Planning
(604-276-4279)

Att. 2

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Law	<input checked="" type="checkbox"/>	
Intergovernmental Relations	<input checked="" type="checkbox"/>	
Parks Services	<input checked="" type="checkbox"/>	
Sustainability	<input checked="" type="checkbox"/>	
Building Approvals	<input checked="" type="checkbox"/>	
Development Applications	<input checked="" type="checkbox"/>	
SENIOR STAFF REPORT REVIEW	INITIALS: 	APPROVED BY CAO 

Staff Report

Origin

This report provides an update regarding Transport Canada's proposed amendments to existing Vancouver International Airport Zoning Regulations (AZR). The AZR is managed by Transport Canada pursuant to Section 5.4 of the *Aeronautics Act*. The stated purpose of the revised AZR is to protect the usability of the Vancouver International Airport (YVR) by restricting land uses and property regulations such as building height, that conflict with the airport's safe operation.

This report supports Council's Strategic Plan 2022-2026 Focus Area #1 Proactive in Stakeholder and Civic Engagement:

Proactive stakeholder and civic engagement to foster understanding and involvement and advance Richmond's interests.

1.2 Advocate for the needs of Richmond in collaboration with partners and stakeholders.

This report supports Council's Strategic Plan 2022-2026 Focus Area #2 Strategic and Sustainable Community Growth:

Strategic and sustainable growth that supports long-term community needs and a well-planned and prosperous City.

2.3 Ensure that both built and natural infrastructure supports sustainable development throughout the City.

Background

The current AZR for YVR was last updated in 1981. The Vancouver Airport Authority (VAA) first proposed amending its AZR in 2014 to protect the airspace for two future runway options: a south parallel runway and/or a foreshore runway, outlined in the VAA's YVR 2037 Master Plan, adopted in 2017. To minimize the impact to building heights within the City Center area, the VAA proposed four specific areas that would allow a slightly higher building height than what would otherwise be permitted. On May 21, 2019, Council endorsed amendments to the City Centre Area Plan and Zoning Bylaw to adjust building and structure height in order to comply with the proposed AZR. Later in 2019, VAA sent the proposed AZR to Transport Canada for their review and approval. Attachment 1 indicates the geographical location of the new AZR.

Transport Canada notified City of Richmond staff in February 2021 that they intend on proposing additional provisions in the AZR that include restricting potential wildlife hazards and limiting devices that may interfere with communications. City staff met with Transport Canada on several occasions in 2021 and 2022. Through those meetings, City staff indicated no concerns about limiting devices that may interfere with communications, but did express concerns about how Transport Canada proposed to manage wildlife hazards.

Analysis

The proposed AZR, as posted recently in the Canada Gazette, has three themes:

- (1) **Future Viability and Safe Airport Operations:** This relates to the revision of building heights to accommodate the need for the construction of an additional runway in the future.
- (2) **Wildlife Hazards and Communication Interference:** Two key restrictions are introduced including prohibiting the use of lands for new activities or uses that attract wildlife – particularly birds – near a flight path, and prohibiting the use of lands in a way that causes interference with any signal or communication to and from an aircraft.
- (3) **Airport Terminology:** Updating language in the AZR to use current airport terminology.

City staff have been working with VAA staff on interpretation and implementation of the proposed amendments to the AZR. Staff have indicated no concerns with the revised building heights and agreed upon “bump outs” as they are consistent with the Council endorsed amendments to the City Centre Area Plan and Zoning Bylaw in 2019. Staff also do not have any concerns about changes in airport terminology as those amendments are largely housekeeping.

Staff, however, do have significant concerns over the newly introduced wildlife hazards prohibition. The proposed Wildlife Hazard provision of the AZR (Attachment 2) is vague, and the Regulatory Impact Analysis Statement posted on the Canada Gazette does not provide much clarity on what the prohibited activities or uses would be. Rather, it states that Transport Canada will publish a circular with additional non-regulatory guidance on what land uses might be attractive to wildlife and anticipates publishing the advisory circular on its website by early 2024. To date, the circular is not available.

City staff have been working with VAA staff to better define what land uses may be of concern. Through those discussions, VAA staff have identified the following land uses:

- Agriculture (in particular, dairy operation, annual crop production, perennial berry crop production);
- Food waste facilities (landfill, waste transfer station, compost facility, fish processing);
- Greenspace (amenity turf grass, amenity wetlands, restoration wetlands, wetland ecosystems); and
- Infrastructure (storm water detention ponds, ditches, sewage treatment, bridges and other aerial structures).

YVR staff also prepared a draft memorandum of understanding (MOU) to City staff for discussion. Unfortunately, the MOU establishes the City as the gatekeeper to the AZR when managing all land uses that may attract birds, when this responsibility should reside with VAA. The MOU also proposes a 60-day window for the VAA to review wildlife reports, which would create a significant delay in approvals.

Many land use changes that may attract birds do not involve the City’s jurisdiction, such as changes in agriculture (provincial Agricultural Land Commission), fish habitat compensation (federal Department of Fisheries and Oceans), or diking upgrades (provincial Minister of Environment).

With that, City staff have advised VAA staff that the terms of the MOU are not acceptable or appropriate given the airports local context, the implication on City operations and the inability for the City to restrict agricultural activity within the ALR. Further, City staff have requested that VAA staff consult with the ALC staff as the restrictions are contrary to the ALC Act.

Overall, it is difficult to discern what the City's role will be with respect to these new wildlife hazards. At a minimum, the City will have to comply with the prohibitions on activities or uses that attract wildlife with respect to City properties and City projects. The Regulatory Impact Analysis Statement specifically notes that Richmond will be required to consider the new land-use restrictions in its urban planning. For example, the design and implementation of certain urban features, such as parks or water management systems, would need to meet the new standards in all affected areas to prevent new attractants for wildlife, particularly birds that pose safety hazards for landing and departing aircraft. It is important to point out that the regulations will not apply to existing uses or activities that may attract birds, only to new activities or uses.

However, the Regulatory Impact Analysis Statement also states that VAA would be responsible for monitoring the lands around the airport for compliance and for reporting any potential violations or issues to Transport Canada. Furthermore, in accordance with subsection 5.7(1) of the *Aeronautics Act*, the Minister of Transport (and not the City) has the power to give written notice to advise the owner or lessee of lands subject to the AZR that they are making use of lands in contravention of the zoning regulation. The notice would indicate that, unless the owner or lessee of the lands discontinues the contravening use, the Minister may take action to ensure its removal, and may issue fines. Based on these statements, it seems to indicate that the City would only be responsible for its own properties and its own projects.

The proposed AZR do provide that a person must not "permit another person to use" any lands for activities or uses that attract wildlife. Further clarity is needed on what uses or activities are prohibited, and in what areas of the City, in order to determine the extent, if any, that the City has permitting authority over these uses or activities. Staff could then consider approaches to transfer the compliance burden to applicants and the VAA, which is similar to existing practices with respect to confirming compliance with building height.

Consultation and the Proposed AZR

The *Aeronautics Act* provides that the Minister of Transport shall publicize a public notice of every proposed change to the AZR through the local newspaper, if any, serving the area which the AZR relates and in the Canada Gazette, and provide an opportunity to allow interested persons to make representations to the Minister. The Minister of Transport recently began a 60-day public consultation period on April 20, 2024 in the Canada Gazette, which closes on June 19, 2024 (<https://www.gazette.gc.ca/rp-pr/p1/2024/2024-04-20/html/reg3-eng.html>). As there is no legal requirement for Transport Canada to provide direct notice, and Richmond's local news service does not publish a printed newspaper, City staff only became aware of this public comment period through VAA staff.

As staff have expressed concerns about the wildlife hazard regulations, staff intend to provide comments as part of the Canada Gazette consultation process, subject to Council endorsement. Comments would include:

- Acknowledgement that managing birds within an airport is crucial to aviation safety, but at the same time, expressing concern that the implications of prohibiting and/or severely restricting wildlife hazards is immense where an international airport is located in the Pacific Flyway which is a major flyway for migratory birds;
- Further to the comment above, the regulation does not reflect the local context of YVR where Sea Island and the affected parts of Lulu Island are a small part of the overall Sturgeon Banks which is a provincially managed wildlife area that consists of 5,182 hectares; a “one size fits all” approach to managing wildlife and birds is not appropriate;
- Expressing concern over the lack of guidance to gain a fulsome understanding on what activities or uses are considered to attract wildlife, and how those uses and/or activities will be determined;
- Advising that the City has little control or regulation over the agricultural uses of lands within the Agricultural Land Reserve (ALR) which is also regulated by the Farm Practices Protection (Right to Farm) Act;
- Advising that the City has little control or regulation over habitat restoration measures as regulated by the Department of Fisheries and Ocean (DFO), and also dike protection measures as part of long-term flood hazard management
- Expressing concern over the planning of new park space such as the future middle arm park and increasing the City’s tree canopy which may be in conflict with the proposed AZR;
- The draft AZR presents numerous conflicts with agencies and departments at both the Federal and Provincial level;
- The lack of meaningful consultation or any direct notification by Transport Canada has been problematic, in addition to the insufficient time to respond to the Canada Gazette public notification period; and
- The lack of any consultation with other approving authorities (e.g., ALC, DFO) by either Transport Canada or the VAA has been challenging.

Staff also recommend that a letter be prepared outlining the City of Richmond’s concerns and requesting a review of the proposed AZR for YVR to the following:

- Minister of Transport and Quebec Lieutenant;
- Minister of Environment and Climate Change;
- Minister of Fisheries, Oceans and the Canadian Coast Guard;
- Minister of Environment and Climate Change Strategy;
- Minister of Agriculture and Food;
- Members of Parliament for Richmond;
- Members of the Legislative Assembly for Richmond;
- Provincial Agricultural Land Commission Chair; and
- YVR Board Chair.

The City has until June 19, 2024 at 11:59 p.m. EST to submit comments on the Regulatory Impact Analysis Statement and the proposed replacement AZR. City staff will continue to work with VAA staff on guidelines in the event that the AZR are enacted and will update Council as appropriate. Bylaw amendments that would require Council approval may be required at a later date.

Potential Building Height Increase

Section 3.6.4 of the City's Official Community Plan includes policies regarding maximizing City Centre viability by exploring with YVR possible increases in building height around the south end of the City Centre (e.g., City Hall) for a number of social, economic and environmental reasons. The issue of increasing building height beyond the maximum building height of 45 metres above ground under the AZR was originally discussed in 2014 as part of the current amendment package being reviewed by Transport Canada. YVR staff have indicated that increased building height would not be part of this application, but there would be an opportunity to discuss under a separate application. The need for increased building height in key areas of the City Centre is especially relevant due to the imposition of Bill 47, which requires minimum residential building height, and densities, for areas within 800 metres from a rapid transit station such as the Canada Line. As a result, staff would recommend that staff be directed to initiate dialogue with the VAA.

Financial Impact

None

Conclusion

Since 2021, City staff have been working with staff from both Transport Canada and VAA on proposed additional provisions in the AZR that include restricting potential wildlife hazards. Through those meetings, City staff expressed concerns about how Transport Canada has proposed to manage wildlife hazards. Transport Canada is currently requesting public comment on the proposed AZR amendments through the Canada Gazette.

Subject to approval from Council, City staff will send comments and express concerns over the lack of detail on how to implement the new AZR with respect to managing wildlife hazards, in particular birds.



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- Att. 1: Geographical Location of the Proposed Airport Zoning Regulations
- Att. 2: Excerpt from the Vancouver International Airport Zoning Regulations: Wildlife Hazard Provisions

Geographical Location of the Proposed Airport Zoning Regulations



Yellow Colour: Outer surface (45m building height limit above ground)
Teal Colour: Take-off/approach surface (variable height limit)
Red Colour: Transitional surface (variable height limit)

**Excerpt from the Vancouver International Airport Zoning Regulations:
Wildlife Hazard Provisions**

Wildlife Hazard

Prohibition — activities or uses

6 (1) A person must not use, or permit another person to use, any of the lands in respect of which these Regulations apply for activities or uses that attract wildlife — particularly birds — that may create a hazard for aviation safety.

Exception

(2) Despite subsection (1), a person may use, or permit another person to use, the lands as a site for an open water storage reservoir for a period of 48 hours or less.