



City of  
Richmond

# Official Community Plan (OCP)

Schedule 1 of Bylaw 9000

**2041 OCP—Moving Towards Sustainability**



Artwork by Anthia Chen





Artwork by Anna Toth

## Richmond High School Student 2041 OCP Artwork by Anthia Chen and Anna Toth

The Richmond City Council wanted to include Richmond high school students in preparing the 2041 OCP. Council, in co-operation with the Richmond School Board, invited all Richmond High School Grade 11 and 12 students to create artwork for the 2041 OCP. The students were advised that the theme of the 2041 OCP was "Towards A Sustainable Community" and were given a deadline of April 18, 2011. City and School Board staff distributed contest information to the students and also provided it to the general public through a news release, the City's web site and local newspaper coverage. Eight submissions were received from Richmond Grade 11 and 12 students, from seven public and independent schools. A selection jury of City and School Board staff reviewed the submissions and chose the following two contest winners, based on their creative interpretations of the OCP sustainability theme:

- The 1st Place Winner was Anthia Chen, a Grade 12 Steveston-London Secondary student. Her artwork is used in the 2041 OCP cover design and she received a \$1,000 educational scholarship, and
- The 2nd Place Winner was Anna Toth, a Grade 11 J.N. Burnett Secondary School student. Her artwork is inside the 2041 OCP and she received a \$500 educational scholarship.

On Monday June 27, 2011, Council in full public session presented the awards and acknowledged all participants for their creativity, community awareness and citizenship.

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# Plan Interpretation

## **What is the Official Community Plan (OCP)?**

The OCP is a legal community planning document for managing the City's social, economic, land use, urban design, servicing, transportation and environmental future. It sets out a vision, goals, objectives, policies, guidelines and land use designations that reflect overall community values that have been determined through a public consultation process.

## **How is the Plan organized?**

The OCP is comprised of:

1. Schedule 1: the overall OCP; and
2. Schedule 2: Area Plans and Sub-Area Plans.

Area Plans cover portions of the 15 planning areas within Richmond (see Planning Area Boundaries Map and OCP Land Use Map).

Sub-Area Plans refer to smaller areas within specific planning areas.

The OCP addresses broad city-wide issues while the Area Plans and Sub-Area Plans address local neighbourhood issues.

## **Land Use Maps—Plan Precedence**

If there is a conflict with respect to a land use designation between the OCP Land Use Map (Schedule 1) and the Area Plan or Sub-Area Plan Land Use Maps (Schedule 2), the Area Plan or Sub-Area Plan Land Use Maps shall take precedence with the exception of sites designated OCP Conservation Area in which case this land use designation in Schedule 1 shall take precedence notwithstanding conflicting information which may be shown in Schedule 2.

## **Environmentally Sensitive Areas (ESA)**

The ESA policies, guidelines, and designations shown in Attachment 2 to the OCP (Schedule 1) supercede any contained in the Area Plan or Sub-Area Plans (Schedule 2).

## **Aircraft Noise Sensitive Land Use**

The Aircraft Noise Sensitive Land Use policies, guidelines and locations in Section 3.6.3 of the OCP (Schedule 1) supercede any contained in the Area Plan or Sub-Area Plans (Schedule 2).

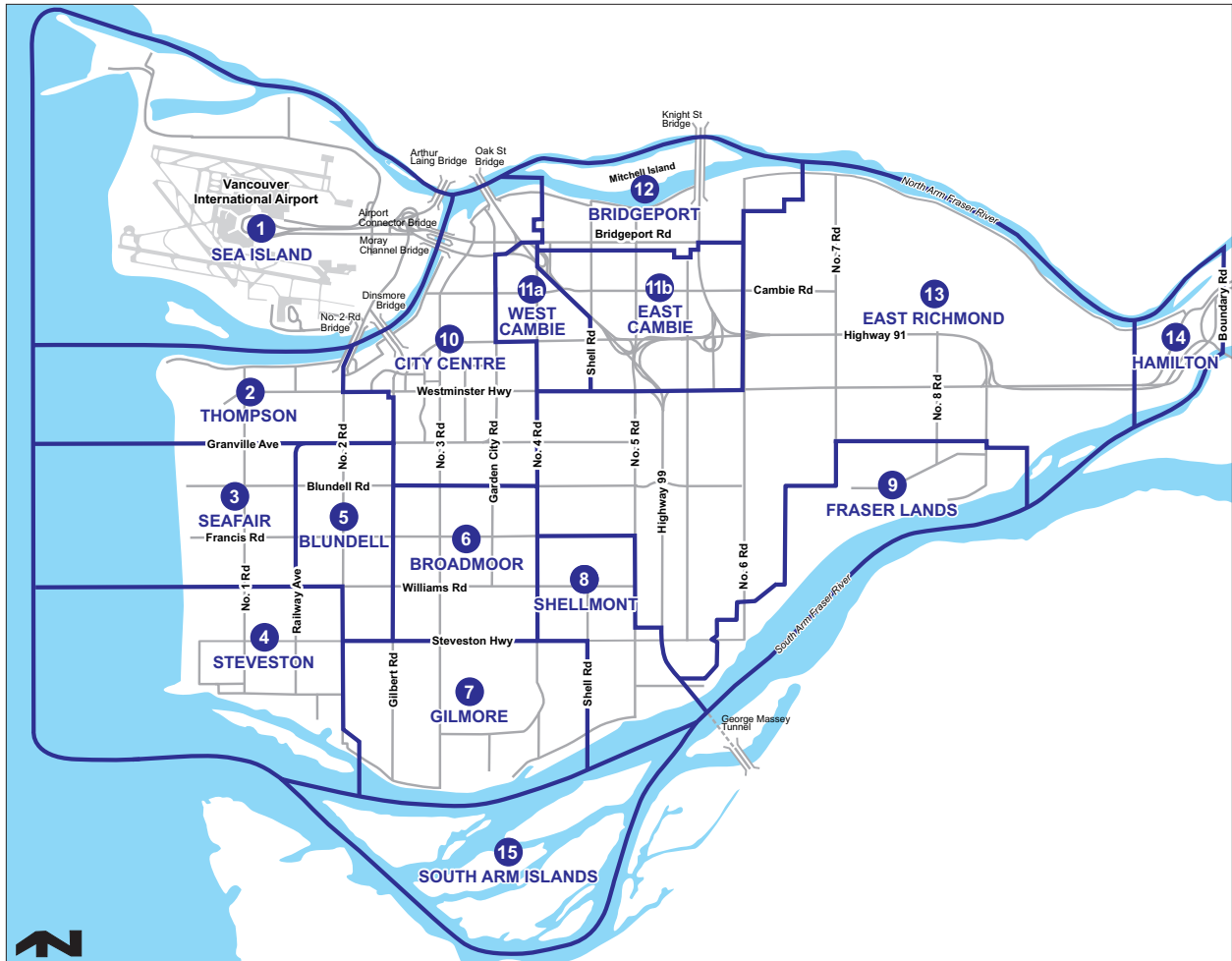
## **How does the OCP work?**

As a City document, the OCP can only encourage senior levels of government to take action; it cannot force or require senior governments to act. When implementing the OCP, the City will take into account agreements with other agencies.

## **Seeking Clarification**

The OCP is to be read as a whole and specific topics (e.g., townhouses) may be addressed in several chapters and maps, and in Development Permit Guidelines. For clarification of the OCP policies and maps, please consult with City planning staff. Council or its designate make the final decision.

# Planning Area Boundaries Map





# **1.0 Moving Towards a Sustainable Community**







# 1.0 Moving Towards a Sustainable Community

## 1.1 A New Plan for the Future—2041

An Official Community Plan (OCP) is a City’s statement of its long-term future community planning vision by describing the kind of community into which the City wishes to evolve. As a legal document under the Local Government Act, the OCP provides the City with one of its most powerful tools for bringing its vision to reality. The City of Richmond adopted its first OCP in 1986, updated it in 1999 and is now updating it to take the City to 2041. Updates follow about every ten years to guide land development and align with the region’s plans and respond to current issues.

Globally, regionally and locally, the next 30 years will be marked by a range of challenges such as the impacts of climate change, environmental quality, energy reduction, food insecurity and an aging population. The City, through adoption of a 2010 Sustainability Framework, began to chart a course to move towards being more resilient and adaptable in the face of these challenges. The Sustainability Framework helps the City imagine and design a better future. This OCP Update is guided by the following Vision of a Sustainable Richmond:

*“A sustainable and healthy island city that meets the needs of the present without compromising the ability of future generations to meet their own needs. It is a place where people live, work, and prosper in a welcoming, connected, accessible and vibrant community. In Richmond, the health of the people and the health of the eco-system are sustained through community participation and long-term economic, social and environmental well-being.”*

“The community planning decisions which municipalities make have as much or more of an impact on the health of people than the decisions which doctors and hospitals make”. These decisions include providing opportunities for affordable housing, child care, recreation, parks, trails, densification, walkability, access to nature and healthy lifestyles.”

Dr. Patrick O’Connor, Vice President, Medicine, Quality, and Safety, Vancouver Coastal Health, June 2012.



The 2041 OCP provides an opportunity to better address these challenges and work towards becoming a more adaptable and resilient City. The issue is how we can build on the strengths that have shaped Richmond and what we need to change, to meet the challenges of an ever-changing world.

This 2041 OCP establishes a broad 2041 vision, supporting goals, objectives, policies and new directions respecting land use, mobility, infrastructure, an ecological network and parks and open spaces. The City continues to place an emphasis on improving the health of neighbourhoods, building a vibrant downtown, fostering a resilient economy and a healthy business climate, addressing recreational needs, enhancing social development, preserving environmental quality and promoting the arts, culture and heritage.

This new OCP strives to continue to develop the City as a great place, and a greener, more resilient, connected and healthy City.



## 1.2 The Planning Process

### Community Engagement

In June 2009, Council directed that the 1999 Official Community Plan be updated to 2041 and approved a range of OCP background studies (e.g., 2041 population and employment estimates, employment lands, social planning, parks and open space, and environmentally sensitive area management strategies). The OCP Update has been made possible by the extensive participation of residents, business owners, stakeholders (e.g., Richmond School Board, YVR, Port Metro Vancouver, Metro Vancouver, Urban Development Institute) community groups and the City's advisory committees. The process involved three major rounds of community consultation beginning in November 2009 with over 30 public open houses over the 2 ½ year period, City-wide surveys and online discussion forums.



As well, separate community consultation processes were undertaken for the:

- 10 Year Social Development Strategy (twelve meetings with stakeholder and advisory committee groups, one online discussion forum and four study circles (Cantonese, Mandarin, recent immigrants and the general public);
- Parks and Open Space Strategy (seven focus groups).

Several hundred visitors came to the online discussion forum site with over 91,000 site visits and many comments posted.

### Recurring Themes and Messages

Certain themes emerged:

- provide more housing choices to facilitate better aging in place, complete neighbourhoods and affordable housing;
- undertake neighbourhood shopping centre densification planning;
- retain industrial lands and encourage office uses in the City Centre;
- improve streets and connectivity in neighbourhoods;
- provide more parks and open space;
- retain agricultural lands;
- improve transportation, transit service, and expand the cycling network across the City;
- have more walkable and accessible neighbourhoods;
- improve the ecological network and its services;
- improve opportunities to access the shoreline.

Also, residents say that they are willing to consume and waste less, use their cars less and make energy and other environment improvements in their homes and offices.



### OCP Update Concept

In April 2011, Council endorsed a 2041 OCP Concept based on the above public input, the findings of the OCP studies, City priorities, and sustainability principles. The 2041 OCP is based on the OCP Concept.





Richmond Town Centre, 1907. Credit: City of Richmond Archives Photo 1977 918.

## 1.3 Context

### Richmond Past and Present

The City was incorporated as a municipality in November 1879 and was designated as a City in 1990. Richmond's history is rooted in fishing, agriculture, shipping, and aviation. Composed of 17 islands, the Fraser River has always shaped the City's growth. The Coast Salish bands were known to set up temporary camps and year long dwellings on all of the islands for fishing and hunting.

Richmond was, and is, the centre of aviation in British Columbia. In 1949, the First Comprehensive Town Plan was created by bylaw which divided Richmond into districts to direct development and parkland. Residential, commercial, industrial and rural land use regulations were established.

In 1950, Richmond was still considered a small community until the subdivision of land began. Suburban development in the 1950s is an important component of Richmond's evolution. After the war, people were drawn to Richmond because it offered an abundance of land at lower prices compared to Vancouver, but in close proximity along the interurban tram that ran from Vancouver to Steveston.

Richmond has grown and changed dramatically over the past 50 years, especially now with the Canada Line in the City Centre and 2010 Olympic Winter Speedskating Oval which is now a world class athletic, sports training and community recreation centre. Today, the City Centre is a mixed use community poised to become a major regional hub. The City continues to attract migration from many countries and recent immigration has been most notably from China. The City's cultural diversity has enriched the community and made Richmond an exciting place to live.



## A Regional View

The City of Richmond is the fourth largest City in Metro Vancouver (MV) and a member municipality of the wider 22 member Metro Vancouver Region. A new Regional Growth Strategy, *“Metro Vancouver 2040 - Shaping Our Future”*, adopted by the MV Board in July 2011 is a framework to manage future development where the region will grow from 1.2 million to 3.4 million by 2040. It is a shared commitment by Metro Vancouver and member municipalities to work together to create a livable and sustainable region through the achievement of common regional goals.

The City and Metro Vancouver are committed to working in partnership to achieve the following shared goals:

- creating compact communities and directing growth to areas already designated for urban development;
- creating complete communities that are more walkable, mixed use and transit-oriented to reduce automobile use;
- supporting a sustainable economy by protecting and supporting employment lands (e.g., industrial);
- protecting agricultural, recreational and conservation lands that provide valuable ecosystem services;
- encouraging land use and public infrastructure capacity improvements of the built and natural environments to protect the environment and withstand climate change impacts;
- supporting sustainable transportation choices that reduce energy consumption and greenhouse gas emissions, improve air quality and promote walkability, bicycling, rolling (wheelchairs, scooters) and transit.

A more detailed description of how the City’s OCP policies support and relate to the Regional Growth Strategy is provided in Chapter 15—Regional Context Statement.



## 1.4 2041 OCP Vision

In 2041, Richmond has become a more sustainable City—a place of great spaces and experiences, whose greatest assets include its thriving downtown, diversified economy, healthy, distinct and connected neighbourhoods, its island shoreline, open spaces, and protected and productive agricultural lands. Richmond has adaptable and prosperous businesses that enrich people, the community, the natural environment, the world and future generations.





Richmond is a place where people:

- earn a living where they reside and participate in the global economy through an exchange of knowledge, entrepreneurship and trade;
- feel connected to their physical surroundings, the people around them, and their community;
- are active and healthy;
- respect, honour and celebrate the diversity in their community;
- feel connected to the past, celebrate the present and anticipate the future with enthusiasm.

Richmond has become more energy efficient and is responding to the challenges of climate change, in partnership with other levels of government, its citizens and its businesses.



## Goals

### 1. Welcoming and Diverse

The City is inclusive and designed to support the needs of a diverse and changing population.

### 2. Connected and Accessible

People are connected to and interact with each other. Places, buildings, and activities are connected and easily accessed by everyone. Decisions with respect to housing, business development, parks, recreation, transportation and community access, including street design (the public realm) and repair will be made with public consultation.

### 3. Valued for its Special Places

The City has a variety of places—big and small—in all neighbourhoods where residents and visitors will be drawn—for their vibrancy and natural beauty.

### 4. Adaptable

The City, residents and businesses have the ability to respond creatively to change. They build upon what already exists and upon experiences from both within and outside the community. In partnerships, they respond to the challenges of changing demographics, culture, technology and climate.



## 1.5 Key Issues to Address in Planning for the Future

Below are some of the key issues that the 2041 OCP seeks to address.

### Future Population Growth and Housing Demand

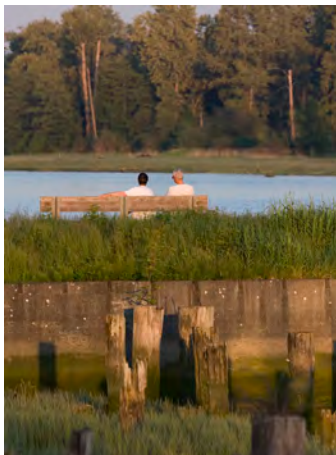
The City will grow by 80,000 people by 2041 and approximately 42,000 new housing units will be needed. The additional population will need to be accommodated within a limited land base so as to not impact the City's farmland or employment lands. While the City will be able to accommodate much of the growth through existing plans and policies, (e.g., West Cambie and the City Centre Area Plans), it will need to find ways to increase housing capacity for a portion of this growth. Much of the housing needed will be in the form of townhouses, anticipated apartments in densified shopping centres and to some extent coach houses and granny flats in areas outside the City Centre.

### Aging Population and Changing Demographics

The number of people over age 65 will substantially increase by 2041. They will represent 26% of the population in 2041 compared to 14% in 2011. The over 75 age group will represent 15% of the population in 2041 compared to 6% in 2011. Some will be active and healthy and others will be frail and will have health problems associated with advancing age. This will have implications for providing services or special programs to these age groups in the community. Some will want to "age in place"—that is, remain living safely in their own community despite declining abilities and enjoy the familiar social, cultural and spiritual connections that enrich their lives. The challenge will be to find ways to develop suitable housing choices and more accessible services (easy access by walking, rolling, transit) to allow them to "age in place" and meet their shifting mobility needs.

### Community Well-Being

Richmond is one of the most multicultural cities in Canada and the change in demographics has taken place quite recently. Richmond has a large and growing diverse population with more than 65% of the City's residents being visible minorities and of different ethnic backgrounds, which makes the City a vibrant and culturally diverse place to be. The City will need to continue to bring these diverse people together in meaningful ways and to better integrate them into all aspects of City recreation and social programs. Immigrants and newcomers will be welcomed.





### Placemaking

Richmond has access to nature, open spaces and a quality of life often associated with smaller communities; however, with development, change is occurring perhaps at a faster pace than some residents would like. The challenge will be to create new pleasant, enjoyable and memorable places, while embracing older special character areas through urban design, heritage conservation and animation of the public realm.

### Economic Uncertainty and A Levelling Off Of Boom Bust Cycles

To address economic uncertainty and boom bust cycles, Richmond will need to: maintain a diversified economy through a favourable business climate, support global industries that provide high paying jobs, support the financial well being of the City's population by enabling them to work where they live and through careful planning, not re-designating Richmond's needed employment lands for residential development.

Economic uncertainty and "boon-bust" cycle challenges indicate a need to:

- maintain a diversified economy through a favourable regional and city business climate;
- support global business and industries that provide high paying jobs;
- maintain the financial well being of the population and residents who work where they live;
- protect employment lands (e.g., industrial, office, retail, institutional).

### Food Security

Like most urban communities, Richmond imports the vast majority of its food, creating concerns for the stability of the food supply in the face of rising energy costs and climate change. As nearly 39% of Richmond's land base is protected agricultural land, the potential exists for this valuable asset to help meet local food security needs. There is also a demand for community garden space for those who lack access to land.

### Accessibility

"Accessibility" means the ability to approach, enter, use and/or occupy buildings and spaces by persons with physical or sensory disabilities". Richmond is recognized as leader in accessibility, is one of Canada's most accessible cities and wishes to build on these achievements. The City enjoys its effective working relationship with the Richmond Centre on Disability,





seniors and other community stakeholders. In 2041, the average age of the population will be older and there will be more people with accessibility limitations (e.g., physical, mobility, hearing, seeing, mental challenges). Many want the option of aging in place, rather than having to leave the community as many grew up here. Older residents, visitors and tourists and those with limitations make significant social and economic contributions to the community as they have valuable social, life and job knowledge and skills. They also have a significant positive effect on the local economy and businesses. To address these needs, the OCP aims to make the City even more accessible, for example, by requiring accessibility measures in neighbourhoods as shopping centres densify; in new residential, commercial and institutional buildings; along streets, sidewalks and trails; in parks, parking lots and bus shelters, and through building design. As accessibility needs and solutions evolve, one initiative which the City proposes is to continue working with the Richmond Centre on Disability (RCD), seniors, the community, Urban Development Institute (UDI) and Richmond small home builders group, to increase housing accessibility (e.g., accessible housing, adaptable housing, convertible housing, housing visitability, and aging in place and barrier free housing). The study is to be completed within one year of OCP approval.

**Social Issues**

There is a range of social issues to address including vulnerable population groups which will place demands on services and programs. The high and rising cost of living which includes significant increases in housing prices will contribute to economic hardship for some. For a large percentage of residents, renting or owning an affordable home is a problem because of employment challenges, fixed income or those whose wages have not kept up with the increase in the cost of living. There are long waitlists for supportive and subsidized rental units for families, seniors, people with disabilities and low-income singles of all ages. The challenge will be to find ways to ensure that the City has adequate and affordable housing to meet the full range of income and needs.

**Climate Change and a Large Environmental Footprint**

The earth’s climate is changing. Increasing greenhouse gas (GHG) emissions are causing a rapid rise in global temperatures and the effects will be felt both now and into the future. The UN Intergovernmental Panel on Climate Change’s (IPCC’s) Sixth Assessment Report, published in 2021, states that ‘human-induced climate change is already affecting many weather and climate extremes in every region across the globe.’ The report also states that global warming will exceed the 1.5°C target set in the 2015 Paris Agreement ‘unless deep reductions in carbon dioxide (CO<sub>2</sub>) and other greenhouse gas emissions occur in the coming decades.’

A fundamental challenge for Richmond and all communities will be to reduce GHG emissions even with a growing population and an expanding economy, while ensuring the City adapts to the anticipated impacts of climate change. Richmond will not only need to mitigate climate change by rapidly reducing GHG emissions from both buildings and in transportation, but also help shift the local consumption of goods and services towards a ‘circular economy’ model, while greatly increasing the extraction of GHGs directly from the atmosphere. At the same time, Richmond will also need to adapt to the local impacts of global warming, including managing the impacts of sea level rise, storm events, and rising temperatures as well as the local repercussions of climate change impacts occurring elsewhere.

*Bylaw 10328  
2022/03/21*



## Financial Challenges

With increasing demands for services, social programs, affordable housing, and maintenance costs to the City's infrastructure, more funding options will need to be explored (e.g., with senior governments to develop more funding sources, ideally without raising taxes).



## 1.6 Planning Directions

In the City Centre:

- direct most growth to high density mixed use urban villages;
- support development and re-development with transit options including biking, rolling and walking above automobiles;
- build a mix of large and small urban parks to provide diverse environments and year round activities;
- evolve an urban landscape that encourages and enables physical activity and social connections in everyday living.

Outside the City Centre:

- in the inner core of neighbourhood centres, encourage a mix of low to medium density uses and a diversity of ground-oriented residential housing choices;
- in the outer core of neighbourhood centres and along arterial roads, encourage new compact, walkable neighbourhoods;
- support intensified employment lands including industrial and commercial employment;
- enhance the existing parks and continue to develop the City-wide trail system;
- improve the transportation network with an emphasis on walking, rolling, cycling and transit;
- work towards agricultural viability with lands (farmland intact and productive);
- protect the City's Ecological Network and environmentally sensitive lands.

The 2041 OCP sets out the broad objectives and policies. Each chapter supports the sustainability theme. The ongoing efforts of many jurisdictions including those of senior government, the region, businesses and the community will be needed to move towards a more sustainable community.





## 1.7 Richmond Demographics and Changes to 2041

### 2041 Population Estimates

Since 1967, the City's population growth has averaged 2.7% per year. Currently, there are 200,000 residents in Richmond.

- Richmond will grow by 80,000 people by 2041. More population growth will occur in the City Centre (61%) than in the rest of Richmond. The City Centre will double its population by 2041 and increase its share of the City's population from 25% in 2011 to 36% in 2041.

### 2011-2041 Richmond Population Growth

Where	Existing 2011	2011-2041 30 Years	Future 2041
City Centre	50,000	+50,000	100,000
Outside City Centre	150,000	+30,000	180,000
Entire City	200,000	+80,000	280,000

Source: *Urban Futures*

### 2041 Housing Estimates

Currently, there are estimated to be 73,000 dwelling units in Richmond.

The City Center will add the most housing between 2011 and 2041, approximately 55% of future housing growth; Central Richmond (e.g., Thompson, Seafair, Blundell, Broadmoor, and the residential portion of Shellmont: 25%) and North Richmond: 10%.

- Much of the new housing growth in the area outside of the City Centre will be accommodated primarily by densifying housing options along arterial roads or around neighbourhood shopping centres.



### 2011-2041 Richmond Housing Projections

Where	Existing 2011	2011-2041 30 Years	Future 2041
City Centre	24,000	+23,000	47,000
Outside City Centre	49,000	+19,000	68,000
Entire City	73,000	+42,000	115,000

Source: *Urban Futures*

### 2041 Housing Types

- 75% of the City's new apartment development will occur in the City Centre, with 10% in North Richmond (e.g., Alexandra neighbourhood) and 5% in Central Richmond around the neighbourhood shopping centres.
- 50% of the new ground oriented housing (GOH) is projected to occur in the City's predominantly residential area of Central Richmond (e.g., Thompson, Seafair, Blundell, Broadmoor and the residential portion of Shellmont), while 30% will occur in the City Centre, 10% in Hamilton and 8% in North Richmond (Alexandra Neighbourhood).
- Steveston's share of net additional housing units (both apartment and ground oriented) on a City-wide basis is projected to be modest because of the constraints on available and developable land.

### 2011-2041 Richmond Housing Types

Where	2011 Estimate			Change Between 2011 and 2041			2041 Projection		
	GOH	Apt	Total	GOH	Apt	Total	GOH	Apt	Total
City Centre	7,200	16,800	24,000	+ 4,800	+18,200	+23,000	12,000	35,000	47,000
Outside City Centre	41,000	8,000	49,000	+13,000	+ 6,000	+19,000	54,000	14,000	68,000
TOTAL	48,200	24,800	73,000	+17,800	+24,200	+42,000	66,000	49,000	115,000

Source: *Urban Futures*

**Ground Oriented Housing:** Includes single detached houses, duplexes, townhouses, row houses and other forms of housing that have their own private entrance and access to a private outdoor area at the ground level (not necessarily on the ground—can use stairs), secondary suites, coach houses and granny flats.

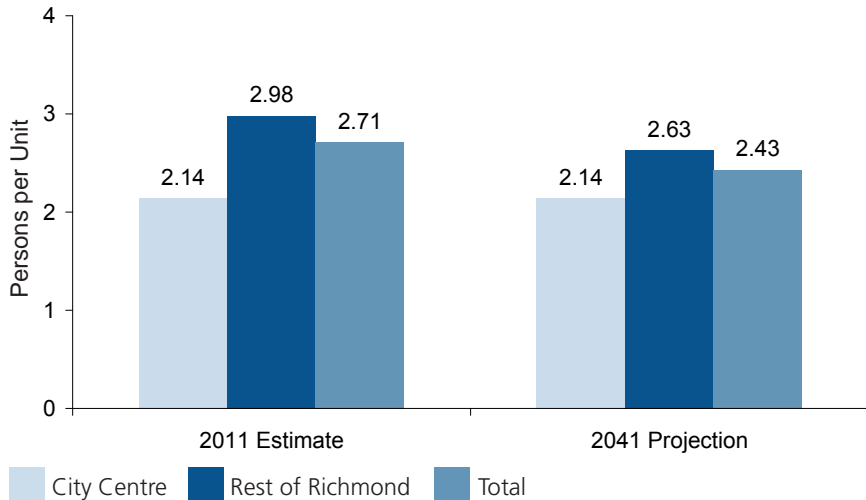
**Apartment Housing:** Housing which does not have its own private entrance (i.e., is accessed from a common indoor corridor) or access to a private outdoor area at the ground level and includes buildings 4 or less storeys (low-rise), 5 to 8 storeys (mid-rise) and 9 or more storeys (high-rise).



### 2041 Average Household Size

- The total number of households will increase, which means that more housing units will be needed, but average household size will decrease, which means there will be a demand for smaller housing units.
- Household sizes are decreasing outside of the City Center and in Richmond as a whole because of the aging population, the trend towards more multiple family housing forms and an increase in the prevalence of a secondary suite in most new single family homes.

#### Average Household Size in Richmond



Source: *Urban Futures*

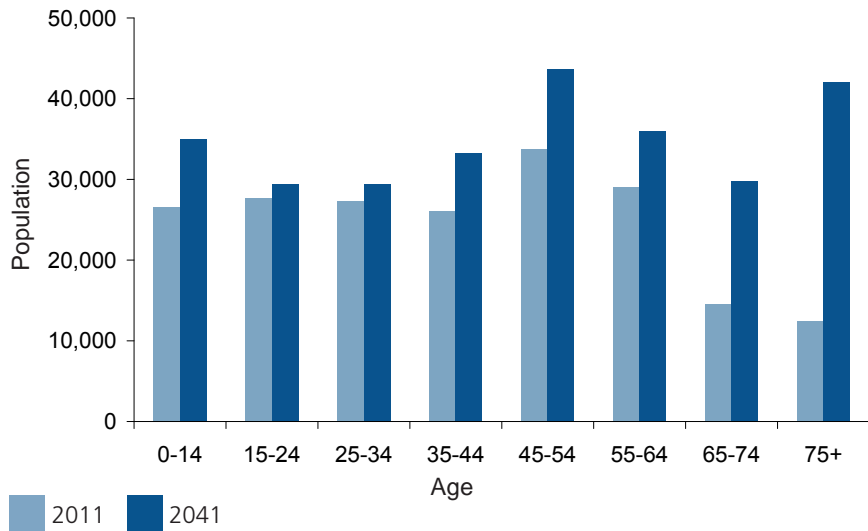
- The average size of households which dropped in the last few decades will drop even more, so that demand for less costly, smaller housing will continue.

### 2041 Age Distribution

- The +65 age groups are projected to grow faster than average, while all of the under 65 year age groups are projected to grow slower than average. The most significant change in absolute numbers is the growth in the numbers of two age groups:
  - +65-74—15,000 more people in 2041, which represents a 100% change from the 14,500 in 2011;
  - +75—30,000 more people from 12,500 people in 2011, which represents a 240% change;
  - the number of people in the 15-34 age groups will stay relatively the same.
- The increase in those over the age of 65 will bring a growing demand for housing forms that support aging in place. With a growing aging population, the number of persons with special access needs can be expected to increase and the needs for accessible, supportive, and specialized housing will increase accordingly. Proportionally, only older age groups will increase, but the actual number of people in all age groups will increase.



### Population by Age in Richmond



Source: Urban Futures

### Employment

Currently, 140,000 people are employed in Richmond with one of the highest jobs to labour forces ratios of 1.25 in the region.

- By 2041, there will be approximately 40,000 new jobs in Richmond.
- The main areas of the City where these jobs will locate will be the City Centre, Sea Island (YVR) and North Richmond.
- The City Centre will accommodate the greatest absolute increase in employment between 2011 and 2041, reinforcing its status as the central employment hub in Richmond.

### 2011-2041 Richmond Employment

Where	Existing 2011	2011-2041 30 Years	Future 2041
City Centre	42,000	+18,000	60,000
Outside City Centre	98,000	+22,000	120,000
Entire City	140,000	+40,000	180,000

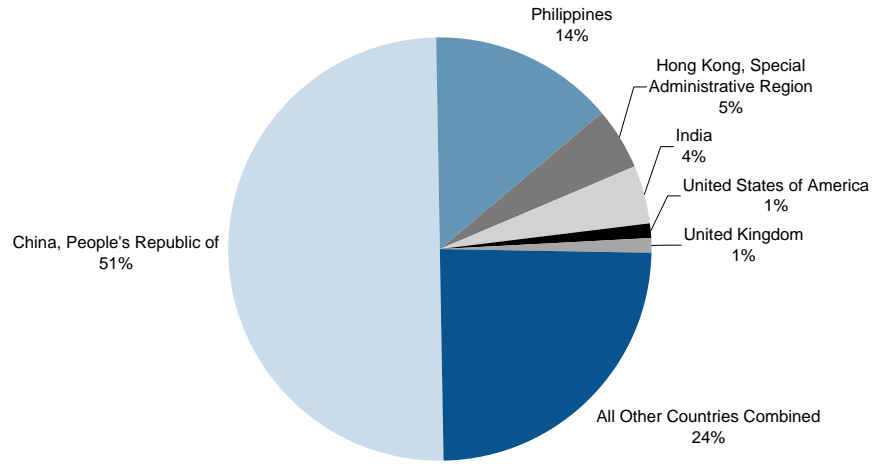
Source: Urban Futures

### Cultural Diversity

- Visible minorities are now the majority in Richmond where 65% of the population is a visible minority. This is the highest proportion of any municipality in BC and the second highest in Canada. The predominant minority group is Chinese, at 45% of the total population (the highest proportion in Canada by a wide margin).
- Since 1991, the overall proportion of immigrant residents has been increasing. As of May 2006, 41% of Richmond residents were Canadian by birth, and over 57.4% were immigrants.



### Countries of Origin for Recent Immigrants to Richmond 2001-2006 (2006 Census)



Source: Statistics Canada





## **2.0 Climate Change Response**





## 2.0 Climate Change Response

### Strategic Directions

**Empower:** Build Capacity

**Reduce:** Reduce Greenhouse Gas Emissions

**Improve:** Increase Carbon Sequestering

**Prepare:** Prepare for Climate Change

### OVERVIEW:

The earth's climate is changing, and according to the United Nations, "climate change is one of the greatest challenges of our time"<sup>1</sup>. In particular, "dealing with climate change is an economic necessity to avoid serious disruption to global and national economic and social activity".

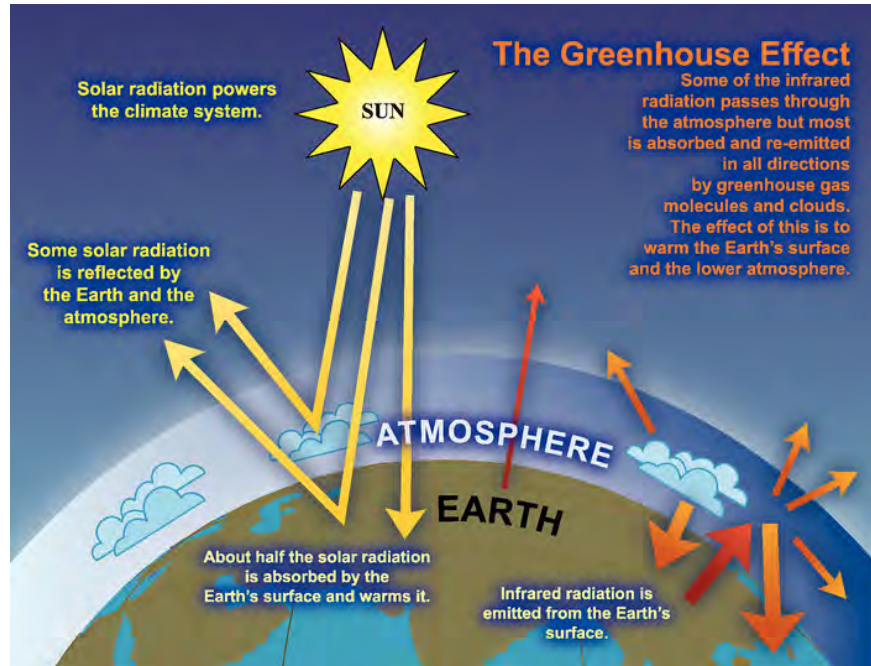
The scientific understanding of climate change is developing rapidly and scientists say that, although some of the changes in our climate are due to natural variations that have been taking place for millions of years, greenhouse gases being released into the atmosphere from human activities are inducing potentially dangerous levels of climate change<sup>2</sup>.

Greenhouse gases (GHGs) capture the solar radiation being reflected back from the earth's surface, contributing to the "greenhouse effect". Many GHGs are naturally occurring and are important for moderating temperatures to a level suitable for human living. However, human activities are significantly increasing the concentration of GHGs in the atmosphere, trapping more energy and causing a rise in global temperatures. It doesn't take a major change in temperature to create significantly different climatic conditions—5°C is the difference between the present average global temperature and an ice age<sup>3</sup>.

<sup>1</sup> Copenhagen Accord, 2009: <http://unfccc.int/resource/docs/2009/cop15/eng/l07.pdf> Rio+20 United Nations Conference on Sustainable Development, 2012: <http://www.uncsd2012.org/rio20/content/documents/compilationdocument/PoliticalGroups.pdf>

<sup>2</sup> IPCC Fourth Assessment Report, 2007. 2.4 Attribution of climate change: [http://ipcc.ch/publications\\_and\\_data/ar4/syr/en/mains2-4.html](http://ipcc.ch/publications_and_data/ar4/syr/en/mains2-4.html)

<sup>3</sup> UN "Climate Change as a Global Challenge", 2007: <http://www.un.org/ga/president/61/follow-up/climatechange/ClimateChangeBackgroundPaper.pdf>



The greenhouse effect (IPCC, 2007)

Primary human activities emitting greenhouse gases are those that involve the combustion of fossil fuels (e.g., heating our homes, driving our vehicles), those that generate waste and those that cause deforestation<sup>4</sup>. Scientists conclude that there will be serious consequences globally, regionally and at a local level if insufficient action is taken to reduce GHG emissions and adapt to unavoidable changing conditions<sup>5</sup>. Impacts may include diminishment in global food production, sea level rise, increased frequency and intensity of extreme weather events (e.g., storms, droughts, heat waves, natural disasters), energy servicing disruptions, infrastructure failures, species extinction and increased rates of disease<sup>6</sup>.

It is also known that, given already existing levels of greenhouse gas emissions, climate change is unavoidable and as such, some level of change will occur. Reducing further emissions is critical for reducing the amount of change that will occur and reducing the magnitude and extent of impacts. However, because not all levels of climate change can be averted, it is also important for communities to prepare for unavoidable change.

While climate change poses a significant challenge, responding to it presents opportunities for advancing overall sustainability. This is because many of the specific action initiatives that reduce impacts of climate change also simultaneously contribute to other sustainability objectives (e.g., community safety, resilient economies, strengthened local food security, live-work-play communities, reduced reliance on the automobile, higher performing buildings, and healthier natural environments).

<sup>4</sup> IPCC Fourth Assessment Report, 2007. *The Physical Science Basis: Executive Summary*: [http://ipcc.ch/publications\\_and\\_data/ar4/wg1/en/ch7s7-es.html](http://ipcc.ch/publications_and_data/ar4/wg1/en/ch7s7-es.html)

<sup>5</sup> IPCC Fourth Assessment Report, 2007. *The long-term perspective*: [http://ipcc.ch/publications\\_and\\_data/ar4/syr/en/spms5.html](http://ipcc.ch/publications_and_data/ar4/syr/en/spms5.html)

<sup>6</sup> IPCC Fourth Assessment Report, 2007. *3.3.1 Impacts on systems and sectors*: [http://ipcc.ch/publications\\_and\\_data/ar4/syr/en/mains3-3-1.html](http://ipcc.ch/publications_and_data/ar4/syr/en/mains3-3-1.html)





In the coming years, one of the most pressing challenges in securing a sustainable future will be to significantly reduce greenhouse gas emissions, and find ways to adapt to the unavoidable effects of climate change.

## 2.1 Managing Climate Change Response

### OVERVIEW:

Effectively responding to climate change is a challenging endeavour, requiring a strategic approach and sustained effort. The City of Richmond has advanced a wide range of action initiatives to both reduce GHG emissions and prepare for change. A key challenge for the City of Richmond will be to integrate new ideas and emerging best practices in a manner which is cost-effective and results in meaningful benefits for the local community. Effective response, however, will depend upon sufficient action being taken by all sectors of society, including senior governments, businesses and the general public.

### OBJECTIVE 1: A WELL-MANAGED PROGRAM

Advance a Climate Change Program that addresses climate change response priorities in a manner that supports the multiple needs of a sustainable community.

### POLICIES:

- a) advocate that senior governments advance necessary climate change services and that local governments are resourced appropriately for taking meaningful action;
- b) as part of the City's Sustainability Framework, implement and regularly update the City's Climate Change Strategic Program to establish and address climate change response priorities, including capacity building, emission reduction, carbon sequestration and adaptation;
- c) develop and evolve targets for climate change response as part of the City's Climate Change Strategic Program;
- d) integrate climate change considerations for achieving a low-carbon and a climate-prepared City into key policies, plans, programs and services, including the City's land-use and development policies, Transportation Plan, Infrastructure Plan, Parks and Open Space Strategy, Flood Management Strategy, Dike Master Plan, Social Development Strategy, Environmentally Sensitive Areas Management Strategy, Emergency Plan and Economic Development Strategy;
- e) regularly measure and report progress towards meeting established targets;
- f) review and update policies in a timely manner to integrate evolving climate change knowledge and best practices.



## OBJECTIVE 2: BUILD CAPACITY

Build community and City capacity to reduce the magnitude of climate change and effectively respond to unavoidable effects.

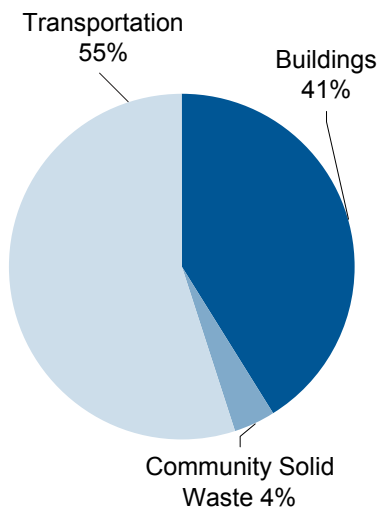
### POLICIES:

- a) deliver local programs and initiatives to increase awareness and empower the community and the City to take action to reduce and prepare for climate change impacts;
- b) advocate that senior governments and other organizations continue and expand programs which assist the community and City to take climate action (e.g., grants, incentives);
- c) advance partnership initiatives among the research community and practitioners to develop and implement climate change best practices that are cost-effective and provide meaningful benefit.



Building climate change awareness with young students through the Climate Change Showdown program

Richmond Community GHG Emissions by Sector (2010)



## 2.2 Climate Change Mitigation

Bylaw 10328  
2022/03/21

### OVERVIEW:

In 2007, emissions of greenhouse gases (GHGs) generated by the Richmond community were approximately 1,100,000 tonnes of CO<sub>2</sub> equivalent (according to data available in 2020). Approximately 58% of the community's greenhouse gas emissions were transportation-related and about 38% were generated from energy use in buildings. Waste contributed about 4% of emissions.

On May 17, 2010, Council adopted greenhouse gas reduction targets of 33% below 2007 levels by 2020 and 80% by 2050, and on January 27, 2014, Council approved Richmond's first Community Energy and Emissions Plan (CEEP). Thanks to actions taken by Richmond, and at the provincial and federal level, data available in 2020 indicates that total community GHG emissions decreased 7% below 2007 levels by 2017, even with a growing population and a larger local economy.



In March 2019, Richmond Council directed staff to revise the City's existing Community Energy and Emissions Plan (CEEP 2014) with additional measures to achieve community-wide GHG emission reductions consistent with the global targets recommended by the Intergovernmental Panel on Climate Change (IPCC) to limit global warming to 1.5°C above pre-industrial levels. In March 2022, Council adopted the updated Community Energy and Emissions Plan 2050, and the community-wide GHG emission reduction targets noted in Objective 1 below.

The City of Richmond has already established itself as a leader in implementing important climate action initiatives. However, concerted effort by all parties will be needed to achieve the GHG reductions needed to limit climate change to levels that will avoid unmanageable impacts and costs. The Federal and Provincial governments have extensive jurisdiction over the two major sectors responsible for the majority of Richmond's community GHG emissions—transportation and building infrastructure—so action by senior levels of government is critical. Equally important will be changes implemented by Richmond residents and businesses to reduce GHG emissions from transportation and buildings, both by reducing total energy demand, and by shifting away from the use of fossil fuels.

### **OBJECTIVE 1: REDUCE GHG EMISSIONS**

**Reduce community-wide GHG emissions 50% below 2007 levels by 2030, and achieve net zero GHG emissions by 2050. Continue to reduce direct GHG emissions from City operations and services, and maintain the City's standard of net zero GHG emissions.**

#### **POLICIES:**

The City shall:

- a) advance GHG emission reduction planning and actions consistent with the City's Sustainability Framework;
- b) advocate that senior governments take a leadership role in reducing GHG emissions (e.g., legislation, programs, education, capital investments);
- c) request that senior governments provide funding and incentives to municipalities and other parties to reduce GHG emissions (e.g., existing building retrofits, new building improvements, transit, ride sharing, electrical vehicle plug-ins, recycling);
- d) Maintain and update Richmond's Community Energy and Emissions Plan (CEEP) that identifies and advances strategic actions to achieve community-wide GHG emission reduction targets. The CEEP should include strategies and actions that:
  - i) reduce GHGs from existing buildings through energy retrofits;
  - ii) reduce GHGs from transportation by encouraging a shift to electric vehicles;
  - iii) reduce greenhouse gas emissions from new developments through high performance building design standards;
  - iv) strengthen land use and development policies that support compact and complete communities, sustainable transportation and sustainable resource use, including energy, water and materials;



- v) reduce automobile reliance through compact land use, transit-oriented development practices and strengthened investments in alternative modes of transportation;
  - vi) reduce net GHG emissions through capture and secure storage of GHGs from the atmosphere;
  - vii) minimize GHG emissions and maximize the value of resources within goods and services consumed by using Richmond's Circular Economy Vision and Principles;
  - viii) establish and regularly update sector-specific GHG reduction targets, including but not limited to building energy use, transportation and waste generation; and
  - ix) regularly report community-wide GHG emissions.
- e) maintain corporate energy and emissions programs that identify and advance strategic actions to reduce GHG emissions from City services and operations;
- f) regularly measure and report GHG emissions from City services and operations with evolving methodologies.



City acquisition of the last remaining portion of the Northeast Bog Forest



## 2.3 Carbon Sequestration

### OVERVIEW:

It is no longer sufficient to “do less harm”. To achieve a sustainable community, conditions must be reversed, shifting from a trend of deterioration to a state of health and strength. This means investing in supporting Earth’s natural systems which are responsible for balancing greenhouse gas levels and stabilizing climatic conditions.

### OBJECTIVE 1: IMPROVE CONDITIONS

Advance action beyond impact reduction and aim to improve conditions through action that sequesters carbon.

### POLICIES:

- a) protect and enhance Richmond’s natural environments to support carbon retention as well as other important ecosystem service (e.g., pollution reduction, nutrient generation, habitat);





- b) integrate carbon retention objectives into key policies, plans and programs, including but not limited to Parks and Open Space Strategy, Environmental Sensitive Areas Management Strategy and land use and development policies.



Before and after a dike improvement project which enhanced intertidal habitat and the City's flood protection defences



## 2.4 Climate Change Adaptation

### OVERVIEW:

Climate change has the potential to significantly affect a wide range of community interests. Existing levels of GHG emissions in the atmosphere mean that some level of climate change is unavoidable. Accordingly, at the same time as establishing an effective means of limiting Richmond's contribution to climate change and improving natural processes for stabilizing the climate, it is also important to prepare for its various impacts with a range of adaptation measures. Successful adaptation does not mean that impacts will not occur, but it does mean that they will be less severe.

### OBJECTIVE 1: PREPARE FOR CLIMATE CHANGE

Increase City and community resiliency to climate change impacts.

#### POLICIES:

- a) Sustainability staff to lead the development and implementation of adaptation strategies to manage climate change risk and optimize investment;
- b) Sustainability staff to lead the integration of climate change adaptation considerations into key policies, plans, programs and services, including land-use and development decision-making, city infrastructure design and management; floodplain management, emergency preparedness, natural ecosystem health, agricultural viability, social development planning and economic development;
- c) strengthen community resilience to projected global changes by increasing local self reliance and resource security (e.g., food security, energy security, groundwater security, intertidal ecological security).





## **3.0 Connected Neighbourhoods With Special Places**





## 3.0 Connected Neighbourhoods With Special Places

### 3.1 Promote Healthy and Connected Neighbourhoods

#### OVERVIEW:

The 2041 OCP Vision is for the City to be a place where people live, work and play in welcoming, vibrant and accessible spaces. This includes urban transit villages within the City Centre and single family neighbourhoods outside the City Centre. The 2041 OCP vision includes a thriving liveable City Centre and more distinct, healthy, connected and compact mixed-use neighbourhoods with a mix of housing, arterial road and neighbourhood shopping centre development.



There will be 280,000 residents living in Richmond in 2041, an increase of 80,000 new residents from 2011. To house these new residents, 42,000 new housing units will be needed—in ground oriented forms (18,000 units in single family, duplex, and townhouses) and apartment form (24,000 units in low, mid-rise and high-rise buildings). The majority of the growth in population (61%) and housing units (55%) will occur in the City Centre with 50,000 new residents moving there to live. In the City Centre, about 18,000 of the new units will be apartments and 5,000 will be ground oriented townhouse units. In the rest of Richmond, about 6,000 of the new units will be apartments and 13,000 will be a variety of ground oriented units.



## FACT

**Land use and design elements found in compact and walkable neighbourhoods are strongly linked to higher levels of physical activity. These elements include: residential and employment density, diversity of land uses, well-connected roads, bike paths, sidewalks, and transit accessibility. In contrast, residents of neighbourhoods with a lower degree of mixed use (typically lower-density areas) are more likely to be overweight or obese.**

Kim Perrotta, Public Health and Land Use Planning: Highlights, prepared for the Clean Air.

Partnership (CAP) in partnership with the Ontario Public Health Association (OPHA), 2011.



Richmond's residents said that they want to live in walkable, attractive neighbourhoods with amenities, shops and services close by. They want to retain their connection with each other, in their own neighbourhoods, support diversity, inclusiveness and the needs of a diverse and changing population including seniors and people with disabilities. They want to be connected and have neighbourhood centres with hearts (e.g., schools, shopping services, community centres).

Many more said that by 2041 they will prefer to live in their own home, close to friends and services or in a smaller unit in the same community, so that they could "age in place". The desire to live in single family homes will continue, but the demand for these will be at a slower rate than previous decades, and the demand for other forms of housing will increase. More medium to high-density dwelling units will be required for a growing and changing population. In fact, housing affordability, a home's proximity to services and amenities, and the availability of ground-oriented and apartment units will be major factors in attracting new residents, young families and young workers to Richmond.

### Elements of a Healthy Neighbourhood

Richmond's single family neighbourhoods will need to become more complete and inclusive. Richmond's neighbourhoods will need to carefully change so that they truly become places for all people. Richmond residents want their neighbourhoods to be places where there are opportunities to get out, move around easily, and meet up with their friends.

Some of the elements that make healthy neighbourhoods include:

- a diversity of housing densities, styles and types and tenures that are suitable for all people in their life cycles, income levels and abilities, including people with disabilities;
- opportunities to work close to home and walk to shops and amenities;
- residential and commercial buildings are easily accessible, especially by seniors and people with disabilities;
- a variety of linkages and connections (streets, walkways, rolling and bicycle pathways) that are pleasing and feel safe with many types of destinations within a short distance;
- a suitable range of convenient services, shops, amenities and facilities for daily living;
- special places to gather that foster a sense of community and identity.

Densification of the Neighbourhood Centres will play a more meaningful role in the future in many neighbourhoods by providing more types of housing, shops, services and jobs close to home. Residents strongly support more detailed future neighbourhood centre planning to create complete healthy communities.





**OBJECTIVE 1:**

Continue to build on the City Centre Area Plan’s (CCAP) vision to be a World class urban centre made up of distinct mixed use transit-oriented “urban villages”.

**POLICIES:**

- a) direct the majority of population, housing and employment growth to the City Centre with the focus around the transit oriented villages at the Canada Line stations and the waterfront communities adjacent to the Richmond Olympic Oval;
- b) provide for diverse housing choices (a range of ground-oriented townhouses, 4 to 6 storey and high-rise apartments) to support all ages, income groups families and household mixes;
- c) maintain employment lands, promote commercial uses in mixed development areas in the City Centre, support a range of high paying jobs, and support job creation in a variety of knowledge based and population serving industries;
- d) create “family-oriented neighbourhoods” by encouraging family-friendly housing especially near schools, child care and parks;
- e) support established neighbourhoods such as Moffatt, Acheson Bennett, St. Albans, McLennan South and McLennan North by maintaining the existing apartment and townhouse designations;
- f) use the Development Permit Guidelines in the City Centre Area Plan to reinforce the particular local character of the City Centre neighbourhoods and villages;
- g) apply the Ecological Network to promote ecosystem services, connectivity and green infrastructure.



## FACT

Each additional grocery store within about a kilometer distance was associated with 11% reduction in the likelihood of being overweight.

Larry Frank, 2009.



## OBJECTIVE 2:

To undertake, over time, separate Neighbourhood Shopping Centre planning processes to enable a wider variety of housing, stores, services, and amenities which support more jobs, effective transit, walking, rolling and cycling.

## POLICIES:

- a) over time, prepare Master Plans (e.g., by City staff, or with City staff leadership and developer work and paying for the costs) to replan neighbourhood centres (e.g., each may take a year or more to complete);
- b) each Master Plan is to have a sustainability theme and integrate sustainability, land use, employment, transportation, infrastructure, park, community facility, urban design, the Ecological Network and energy conservation policies to contribute to a more complete and vibrant community;
- c) while Council may vary the following centre densification planning sequence, at this time the sequence is as follows:
  1. Broadmoor Shopping Centre may continue as per the Council approved Broadmoor Neighbourhood Centre Master Plan:
    - the Inner Core is already approved for densification, it may continue;
    - in the Outer Core, requests to rezone:
      - sites under 1 ha (2.5 ac.), may occur without replanning the whole Outer Core;
      - sites 1 ha (2.5 ac.) or over, may occur only with the replanning of the whole Outer Core;
  2. Hamilton Shopping Centre: currently underway (completion anticipated in 2013);
  3. East Cambie Shopping Centre (To Be Determined by Council);
  4. Blundell Shopping Centre (To Be Determined by Council);
  5. Garden City Shopping Centre (To Be Determined by Council);
- d) developers who wish to redevelop large (> 1 ha; 2.5 ac.) sites located within the inner or outer core of the East Cambie, Blundell or Garden City neighbourhood centre areas will be required to undertake a neighbourhood centre master planning process and include the shopping mall site in the replanning;
- e) at this time, densification planning processes for the following neighbourhood centres is not anticipated as they are relatively new and/or there is little public support:
  - Terra Nova Shopping Centre;
  - Ironwood Shopping Centre;
  - Seafair Shopping Centre;



- f) where a shopping centre consists of multiple properties or is a single property owned by multiple owners, the developer requesting to undertake the shopping centre densification planning process shall secure the written agreement of all the property owners of the affected shopping centre;
- g) the financing of neighbourhood centre infrastructure is to be primarily by developers in a variety of ways including Development Cost Charges (e.g., for roads, water, sanitary, drainage, parks, park improvements) and other mechanisms (e.g., service agreements, latecomer charges, phased development agreements and other means);
- h) the financing of neighbourhood centre community amenities (e.g., affordable housing, child care, sustainability, district energy, community planning services, community beautification above and beyond the City's standard servicing agreement requirements) is to be primarily done by developers through a variety of mechanisms;
- i) other amenities may be required, as determined by Council.

**OBJECTIVE 3:**

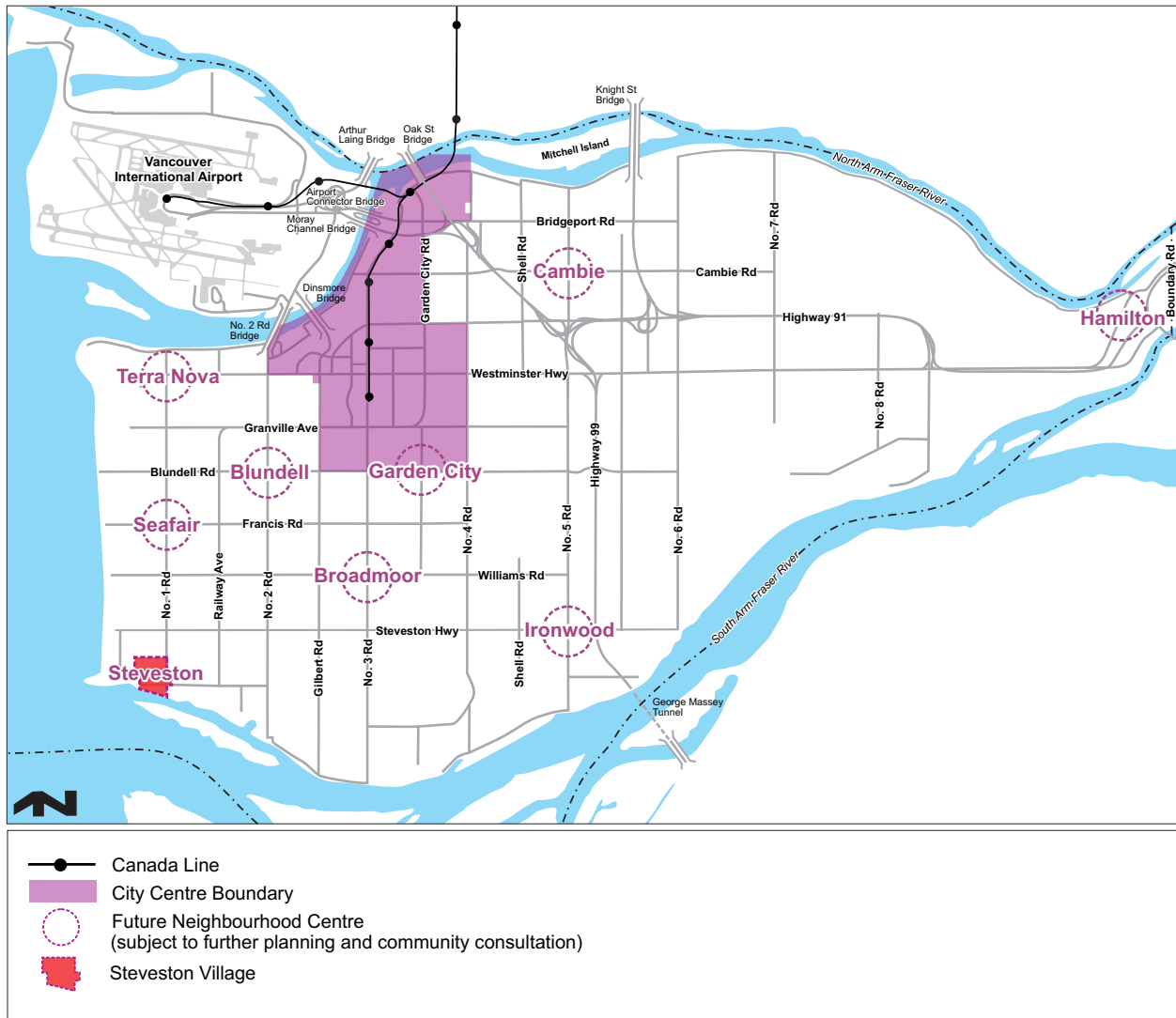
In Neighbourhood Shopping Centres, promote a diversity of land uses and densities that support a wide range of residential, employment and daily shopping, personal service and enhanced transit service.

**POLICIES:**

- a) accommodate a range of multiple family, commercial and institutional uses in neighbourhood service centres and include mixed use (residential above) in new commercial development, where possible;



## Future Neighbourhood Shopping Centre Map



- encourage the development of small, pedestrian-friendly, street front, personal service and assembly facilities on the major roads abutting the centre core to meet the needs of surrounding residents;
- encourage a mix of housing types including apartments, affordable housing units, family oriented apartments and other ground oriented housing and possible granny flats and coach houses;
- discourage the development of large big box stores in the neighbourhood shopping centres that could reduce the feasibility of smaller stores and retailers;
- establish Development Permit Areas and Design Guidelines for each shopping area to regulate the form and character of development to promote sustainability design excellence and reflect the unique qualities of each neighbourhood centre;
- in the Inner Core: Concentrate development to increase convenience;





g) in the Outer Core: Establish transition uses like appropriate ground-oriented housing forms (duplex, townhouse, fourplex, triplex), while preserving the existing neighbourhood where desirable.



**OBJECTIVE 4:**

Promote Neighbourhood Shopping Centres, schools, community centres and parks as “hearts” in a community, that provide a sense of place and welcome residents.

**POLICIES:**

- a) build on each Centre’s unique characteristics and respond to the adjacent neighbourhood context;
- b) create an environment for residents to walk, roll and bike by providing interconnected circulation with direct links to shopping, jobs, community centres, parks and schools;
- c) encourage publicly accessible outdoor and indoor spaces, a distinct public realm, quality landscaping, outdoor green space and plazas where people can meet;
- d) integrate commercial uses such as cafes and restaurants, to create social spaces, vibrancy, street life and enhance social gathering opportunities;
- e) ensure appropriate placemaking and wayfinding design in neighbourhood shopping to reflect unique identities;
- f) use buildings to frame public places and form distinct street frontages which create a pleasing human scale edge.

**FACT**

Poor infrastructure (like lack of sidewalks, steep terrain, poor lighting, and infrequent benches) is a deterrent for older adults and people with physical disabilities and mobility constraints. In contrast, safe crossings and being able to walk short distances to destinations are positively correlated with physical activity among older adults in particular, and reports of greater physical and mental health and life satisfaction.

Rimmer JH, Riley B, Wang E, Rauworth A, Jurkowski J. Physical activity participation among persons with disabilities: Barriers and facilitators. Am J Prev Med 2004 Jun; 26(5):419-25 and Fisher KJ, Li F. A community-based walking trial to improve neighbourhood quality of life in older adults.



**OBJECTIVE 5:**

Redeveloped mixed use Neighbourhood Shopping Centres will incorporate a range of sustainable buildings and infrastructure (e.g., energy efficient, green).





## **POLICIES:**

### **Energy**

- a) promote features in buildings and infrastructure to reduce energy requirements such as Leadership in Energy and Environmental Design (LEED), district energy systems, passive solar design (e.g., self shading, external solar shading devices and high efficiency windows), natural ventilation, solar photovoltaics, solar hot water heating, wind power and wall to window ratios in buildings;

### **Water**

- a) integrate water conservation measures in site and building design to reduce water consumption (e.g., water meters, low flow toilets and fixtures, rain capture for irrigation);

### **Materials**

- a) enhance healthy indoor air quality (e.g., green paint and floor covering with low emission ratings);
- b) encourage the use of recycled, recyclable, regionally sourced building materials and certified green products;
- c) integrate recycling capabilities into trash receptacle areas;
- d) encourage the use of durable and natural materials;

### **Landscaping**

- a) use native plant species that require little or no water to reduce irrigation needs;
- b) minimize the “heat island effect” in parking lots (e.g., planting shade trees, podium roofs with gardens and natural habitat);

### **Stormwater**

- a) manage stormwater quality and onsite detention to lessen the impact on the City’s stormwater system and maximize permeable ground cover to reduce runoff and increase infiltration (e.g., bio-swales);

### **Ecological Network**

- a) integrate the Ecological Network into Neighbourhood Service Centre Planning.



Bylaw 9691  
2017/05/08

## 3.2 Neighbourhood Character and Sense of Place

### OVERVIEW:

Some say that communities happen on foot, so enhancing the character and accessibility of neighbourhoods is important.

### OBJECTIVE 1:

Continue to protect single family neighbourhoods outside the City Centre.

### POLICIES:

#### Single Family Land Uses

- promote single family uses within residential quarter sections;
- explore incentives and other mechanisms to encourage the retention of existing housing stock in established single family neighbourhoods (e.g., secondary suites);
- to limit the commercialization of single family neighbourhoods, and to mitigate potential impacts on traffic, parking congestions, and noise in single family neighbourhoods, bed and breakfast operations shall be located no less than 500 metres apart;

#### Neighbourliness and Character Retention

- recognize that the physical elements of neighbourhoods such as housing styles, existing building setbacks, exterior finishes, building height and massing, existing trees and landscaping, attractive and appealing streets, street trees are just some of the factors that create the character of established single family neighbourhoods;
- work to ensure that new single family housing complements established single-family neighbourhoods using zoning or other appropriate regulations;
- continue to implement the Single Family Lot Size Policies to ensure that changes to the physical character of single family neighbourhoods occurs in a fair, complementary manner with community consultation;



- actively explore alternatives to Land Use Contracts (LUCs) (e.g., seek Provincial legislative changes, replace LUC with appropriate zones, apply development permit guidelines) to achieve better land use management over time;
- to encourage single family housing compatibility when requested by neighbourhoods, consider amending policies and bylaws (e.g., zoning), for example, to modify yard and building height requirements.

**Densification in Residential Areas**

- carefully manage coach houses and granny flats in residential areas as approved by Council (e.g., Edgemere; Burkeville; along arterial roads);
- coach houses and granny flats are not anticipated to be allowed in other areas except in Neighbourhood Centres. If such requests are made from owners and other neighbourhoods, they may be considered on a case by case rezoning basis;
- limit arterial road town houses to along certain arterial roads;
- carefully manage the densification of shopping centres outside the City Centre.

**OBJECTIVE 2:**

Enhance neighbourhood character and sense of place by considering community values.

**POLICIES:**

- a) when enhancing neighbourhoods, consider the following community values, for example:
  - sustainability objectives;
  - the compatibility of new housing types;
  - local employment opportunities;
  - traffic impacts and improving transit, walking, bicycling and rolling opportunities;
  - existing and future infrastructure;
  - the provision of community amenities;
  - other as necessary;
- b) encourage local commercial uses such as corner grocery stores, and new commercial and mixed uses where appropriate;
- c) applications to re-designate from “Community Institutional” to other OCP designations and to rezone Assembly zoned land for the purpose of redevelopment will be considered on a case by case basis:
  - without the need to retain assembly uses;
  - subject to typical development requirements (e.g., access; parking; layout; tree preservation; child care; public art; Affordable Housing Strategy requirements; servicing upgrades; etc.).



### **OBJECTIVE 3:**

Ensure that the City's neighbourhoods accommodate a range of uses with convenient access to jobs, services and recreation.

### **POLICIES:**

- a) continue to identify the unique needs and preferences of seniors, youth, families and workers so that they can use and enjoy outdoor spaces, buildings, and transportation infrastructure;
- b) continue to improve mobility and accessibility for an aging population, monitor potential barriers and consult with seniors and the disability community regarding improvements;
- c) locate affordable housing close to transit, shops and services in neighbourhoods as much as possible;
- d) make green spaces and outdoor seating safe;
- e) work with senior governments and community agencies to strive for full accessibility for all ages and abilities.





**OBJECTIVE 4:**

Recognize the importance of schools in neighbourhoods (e.g., education, day care, recreation, health, literacy and community life).

**POLICIES:**

- a) continue to consult with the School Board to ensure that Richmond residents have access to a range of educational, employment, recreation, sport, special event and community wellness opportunities, including where new school sites may best be located and how closed school sites may be used;
- b) strengthen pedestrian and cycling linkages between neighbourhoods and schools;
- c) create safe and walkable school areas and safe direct access to school sites;
- d) support public and private education programs and facilities to serve a broad range of interests and age groups.



**OBJECTIVE 5:**

Improve walking, rolling and bicycle linkages within neighbourhoods to create safer, more convenient and attractive routes to multiple destinations a short distance from home.

**POLICIES:**

- a) look for opportunities to use right-of-ways, undeveloped lanes and local roads to improve access, and use wayfinding to create more linkages among neighbourhood shopping centres, schools, parks, community centres;
- b) provide mid-block crossing opportunities especially along the arterial routes that abut the neighbourhood shopping centres and other neighbourhood places;
- c) increase landscaped walkways, trails and boulevards to improve attractiveness and safety;





- d) create landscape medians along the arterial roads, especially in neighbourhood centres, as appropriate;
- e) ensure that transit areas have adequate street furniture and possible public art.

**OBJECTIVE 6:**

Strengthen neighbourhoods by promoting a sense of place.

**POLICIES:**

- a) identify neighbourhood landmarks and significant locations that can serve as focal points;
- b) encourage good urban design along arterial roads and improve neighbourhood identity through distinctive streetscape elements;
- c) promote special streetscapes for individual neighbourhoods based on one or more of the following: bike lanes, trails, trees, setbacks, narrower driving pavement, distinctive street lights, boulevards, porches and roofscapes;
- d) coordinate development and ensure that urban design achieves an attractive pedestrian scale and enhances neighbourhood identity at major intersections and around community facilities;
- e) integrate a network of parks and trails throughout neighbourhoods;
- f) create public gathering spaces in neighbourhoods such as “pocket parks” and in parks themselves (e.g., playgrounds, gardens);
- g) integrate Ecological Network components into neighbourhoods;
- h) utilize landscape elements that integrate nature into neighbourhoods and enhance liveability;
- i) use edges, signage and gateways as opportunities to define neighbourhoods and to symbolize transitions to another area;
- j) encourage heritage opportunities to unify neighbourhoods by commemorating the past;
- k) limit residential uses in the Riverport Entertainment Area to existing residential uses.



**FACT**

**When different types of housing to meet different needs are integrated throughout the community, people are healthier, there is less disparity in health among people, and people are safer.**

Cohen, Rebecca. Centre for Health Policy. Positive Impact of Affordable Housing on Health: A Research Summary: 2007.



**3.3 Diverse Range of Housing Types, Tenure and Affordability**

**OVERVIEW:**

More effort should continue to be made to provide additional housing choices for people.

Affordable housing means ensuring that there is an adequate supply of housing to respond to the needs of low and moderate income residents.

A significant portion of the rental housing stock is composed of secondary suites. Secondary suites increase the affordability of single detached housing for the homeowner, and at the same time provide affordable accommodation for renters. This is the same for coach houses and granny flats.

There is a shortage of special needs housing options for people who cannot have their housing needs met through the traditional housing market. These housing options include shelter beds, transition housing, community care facilities, and supportive housing units.



**OBJECTIVE 1:**

**Encourage a variety of housing types, mixes and densities to accommodate the diverse needs of residents.**

**POLICIES:**

- a) encourage a mix of housing types and tenures to support diverse needs (e.g., income and abilities), lifestyles (ages and values) and preferences (e.g., housing for older residents, persons with disabilities, rental and ownership housing, new homeowners and empty nesters, young workers and families);



- b) encourage a variety of forms of housing in neighbourhoods in appropriate locations to achieve housing choice including:
  - single family and infill housing;
  - secondary suites and other detached dwelling units (coach houses and granny flats);

Bylaw 9879  
2018/09/04

- c) encourage all multiple family housing to provide a minimum of 40% of units with two or more bedrooms that are suitable for families with children;

Bylaw 10257  
2021/06/21

- d) as a condition of rezoning for all townhouse or multiple family housing development projects, require that no residential dwelling unit shall be restricted from being rented and that the future strata may not impose restrictions on the age of occupants within any residential strata lot, unless otherwise determined by Council;

## FACT

**Integrating different types of housing in a sensitive and well-designed way does not have a negative impact on neighbourhood residents in terms of decreasing property values, reported crime rates or neighbourhood complaints (i.e. noise, disruption and traffic).**

Patterson, 2008 in Alice DeWolff in association with the Wellsley Institute, Dream Team and University of Toronto, 2008. We are Neighbours. Accessed November 26, 2010.



- e) consider low and mid-rise multiple family housing (with grade access and private outdoor space) located near parks, schools, and community centres;
- f) consider fee simple row houses where there is lane access on a development site with at least 30 m (100 ft.) depth excluding the lane subject to a Development Permit application (e.g., within the City Centre such as the Spires Road area; within 400 m (1,312 ft.) or a five minute walk of a Neighborhood Service Centre such as Broadmoor or Hamilton);
- g) continue to implement the 2007 Richmond Affordable Housing Strategy and update it periodically;
- h) limit the demolition or strata conversion of existing rental units, (duplex strata conversions are acceptable), follow a no net loss rental policy and encourage a 1:1 replacement if a conversion of existing rental housing units in multiple family and mixed use developments is approved, with the 1:1 replacement being secured as affordable housing by a housing agreement in appropriate circumstances;
- i) make affordable housing a component of future neighbourhood planning;
- j) encourage partnerships with government and non-governmental agencies to support the creation of affordable, rental and special needs housing in the community and request increased senior government funding for it;
- k) encourage housing that incorporates “aging-in-place” concepts, accommodates special needs and supports independent living units;
- l) encourage seniors housing in locations central to community amenities, including public transit;
- m) consider the Seniors Affordable Supportive Housing Design Guidelines, City of Richmond, June 2002, in the planning, design and evaluation of seniors’ supportive housing projects;
- n) expedite rezoning and development permit applications, at no additional cost to the applicant, where the entire building(s) or development consist of affordable subsidized housing units;
- o) encourage the provision of indoor amenity space for the enjoyment and use of residents as part of multiple family development. In situations where it can’t be provided, cash in lieu, at an amount determined by Council Policy, may be provided.



**OBJECTIVE 2:** *Bylaw 9879  
2018/09/04*

**Protect and enhance the existing stock of market rental housing.**

**POLICIES:**

- a) acknowledge that market rental housing comprises an important and substantial component of the city's supply of affordable housing, meets the needs of a diverse population and contributes to social diversity and healthy communities;
- b) encourage property owners to maintain existing market rental buildings in good repair and in a safe condition. Maintenance, repair and renovation should be done while the tenant(s) still lives in the unit or has been provided with temporary alternate accommodation by the property owner(s) at the same rental rate before returning to the unit;
- c) support the identification of funding sources (e.g., from senior government or other) that may be used to upgrade and extend the life span of existing market rental buildings;
- d) discourage redevelopment of properties containing purpose-built market rental housing;
- e) consider allowing the redevelopment of sites that have existing market rental units only if the site continues to be used for rental housing and any existing rental units are replaced as affordable housing (e.g. low-end market rental, or LEMR) units;
- f) ensure that all existing market rental units are replaced at a minimum ratio of 1:1 (one new market rental unit for each existing market rental unit) that meet the City's Affordable Housing Strategy and are secured in perpetuity as affordable housing through one or more legal agreements or other alternate approach to the satisfaction of the City. Replacement market rental units will have the same number of bedroom units and the same number of ground oriented units as originally located on site.

**OBJECTIVE 3:** *Bylaw 9879  
2018/09/04*

**Support tenants at the time of redevelopment of existing market rental housing.**

**POLICIES:**

- a) protect tenants who may be displaced by the redevelopment of existing market rental units by requiring a tenant relocation plan. The tenant relocation plan will incorporate the following:
  - A minimum four months' notice to end the tenancy, and otherwise as set out in the provincial *Residential Tenancy Act*;
  - A right-of-first-refusal for existing, displaced tenants to rent replacement units as affordable housing, without having to meet the City's typical (low-end market rental) income thresholds;





- For tenants who have resided in the applicable rental units longer than one year:
  - three months' free rent or lump sum equivalent at the discretion of the tenant;
  - assistance in finding alternative accommodation which meets the tenant's needs, is located in Richmond, or in another location at the tenant's discretion, and where the rent does not exceed Canada Mortgage and Housing Corporation's (CMHC) average area rents for Richmond.

**OBJECTIVE 4:** *Bylaw 9879  
2018/09/04*

**Encourage the development of new purpose-built market rental housing units.**

**POLICIES:**

*Bylaw 10375  
2022/06/20*

- a) support the provision of new market rental housing units and replacement market rental housing units, where relevant, and secure all rental units in perpetuity by utilizing residential rental tenure zoning, where applicable, one or more legal agreements, and/or an alternative approach to the satisfaction of the City;
- b) proposed development sites for new market rental housing must at the time of development approval be designated in the OCP as Neighbourhood Residential, Apartment Residential or Mixed Use and must permit the housing type proposed (e.g., townhouses or apartments);

*Bylaw 10375  
2022/06/20*

- c) a minimum of 40% of market rental housing units in a development should include two or more bedrooms that are suitable for families with children and market rental housing units should incorporate basic universal housing features;
- d) stratification of individual market rental housing units is prohibited unless otherwise approved by Council;
- e) for new development, City-wide market rental provisions include the following:
  - for new development that includes more than 60 apartment units, the owner shall provide purpose-built market rental housing units in the building. The combined habitable space of the market rental housing units will comprise at least 15% of the total residential floor area ratio in the building, excluding residential floor area secured as affordable housing, and will be secured by utilising residential rental tenure zoning, where applicable. The associated density bonus is 0.10 floor area ratio above the base density set out in the OCP or Area Plan, which is applied to the site and included for the purpose of calculating the affordable housing built contribution;
  - for new townhouse development with 5 or more townhouse units, and for new apartment development with 60 or less units:
    - a community amenity contribution may be accepted through a rezoning application. Community amenity contributions will be collected in the Affordable Housing Reserve Fund and calculated on the total residential floor area of the development, excluding habitable residential floor area secured as affordable housing, as follows:





Bylaw 10375  
2022/06/20

- for townhouse development: \$28.52 per buildable m<sup>2</sup> (\$2.65 per buildable ft<sup>2</sup>);
  - for apartment development inside of the City Centre Area Plan: \$56.51 per buildable m<sup>2</sup> (\$5.25 per buildable ft<sup>2</sup>); and
  - for apartment development outside of the City Centre Area Plan: \$32.29 per buildable m<sup>2</sup> (\$3.00 per buildable ft<sup>2</sup>); or
  - the owner may make use of up to 0.10 FAR above the base density set out in the OCP or Area Plan conditional to the density bonus being used exclusively to secure habitable market rental floor area secured by utilizing residential rental tenure zoning. The secured market rental housing units are exempt from the affordable housing contribution requirement;
  - by February 28, 2023, and then every two years thereafter, the community amenity contribution rates are to be revised by adding the annual inflation for the preceding two calendar years by using the Statistics Canada *Vancouver Consumer Price Index – All Items* inflation rate; with revised rates published in a City Bulletin;
  - for new mixed tenure development that provides additional rental housing to address community need, the density bonus may be increased on a site-specific basis;
  - the secured market rental housing component in the development is eligible for exemption from public art and community planning contributions.
- f) for new development that provides 100% of the residential use at the site as secured market rental housing, the following considerations apply:
- the following density bonusing provisions may apply:
    - for ground oriented townhouses and wood frame apartment (inside or outside of the City Centre Area Plan): 0.20 FAR above the base density set out in the OCP or Area Plan;
    - for concrete buildings (inside or outside) of the City Centre Area Plan: 0.25 above the base density set out in the OCP or Area Plan;
    - for new development that provides additional rental housing to address community need, the density bonus may be increased on a site-specific basis.
  - new developments are subject to the following:
    - priority locations include sites that are located inside of the City Centre Area Plan or within the neighbourhood centres identified in the OCP. Other locations may be considered on a case by case basis;
    - developments meet or exceed the City's sustainability objectives related to building energy and emissions performance;
    - proposed developments demonstrate that they would integrate well with the neighbourhood and comply with OCP Development Permit Guidelines;
    - community consultation is undertaken.



Bylaw 10375  
2022/06/20

- new developments are eligible for the following incentives:
    - exemption from affordable housing requirements in recognition of the significant community benefit provided by the market rental housing units;
    - exemption from public art and community planning contributions;
    - expedited rezoning and development permit application review ahead of in-stream applications.
- g) conditional to exhausting all parking rate reduction provisions in the Zoning Bylaw, and subject to staff review of site specific considerations, new market rental units and/or Low End Market Rental units in a 100% rental building or a mixed tenure strata development may be eligible for the following parking reduction:
- up to a total 50% parking reduction on sites that are within 800 m (10 minute walking distance) of a Canada Line Station;
  - up to a total 30% parking reduction on all other sites;
  - the parking requirement may be further reduced, as determined by Council, on a site specific basis for projects that provide additional rental housing to address community need.

**OBJECTIVE 5:** Bylaw 9879  
2018/09/04

**Limit the strata conversion of existing residential rental or cooperative units.**

**POLICIES:**

- a) limit the strata conversion of existing rental or cooperative buildings involving three or more dwelling units (duplex strata conversions are acceptable). Council will consider the following before approving a residential strata conversion:
- the impact that a proposed conversion will have on the stock of rental housing in Richmond. If the rental vacancy rate is less than 4% and the number of affected units is 4 or more, then Council should consider refusing the application until vacancy rates have risen to 4% or higher;
  - the views of existing tenants submitted to the City in writing;
  - a tenant relocation plan to protect tenants who may be displaced by the proposed strata conversion. The tenant relocation plan will incorporate the following:
    - a minimum four months' notice to end the tenancy and otherwise as set out in the provincial *Residential Tenancy Act*;
    - a right-of-first-refusal for existing, displaced tenants to purchase a strata unit at a 5% discount from market prices;
    - for tenants who have resided in the applicable rental units longer than one year:
      - three months' free rent or lump sum equivalent at the discretion of the tenant;



- assistance in finding alternative accommodation which meets the tenant's needs, is located in Richmond, or in another location at the tenant's discretion, and where the rent does not exceed Canada Mortgage and Housing Corporation's (CMHC) average area rents for Richmond.
- the submission of a Building Condition Assessment Report in a form acceptable to the City from a registered architect, engineer, or another qualified professional, including an assessment of the life expectancy and the state of repair of the building, general workmanship and the degree of compliance with all City bylaws, servicing standards and requirements;
- provision of open space, landscaping and common facilities, in general compliance with the OCP's Development Permit Guidelines, along with preserving all required off street parking and loading spaces;
- other site-specific development conditions that might be appropriate to the specific circumstances.



**Accessible housing** is housing that can be approached, entered, used and/or occupied by persons with physical or sensory disabilities.

**Adaptable housing** is housing that is designed and built with basic universal housing features that do not affect the traditional look or function of the housing unit but add considerable utility to an occupant with mobility challenges.

Adaptable housing is limited to housing that is a single storey (i.e., apartment units).

Consistent with the BC Building Code, the basic universal housing features in adaptable housing include:

- one washroom with accessible:
  - toilet;
  - sink;
  - tub areas;
- one accessible bedroom:
  - doors and space;
  - window hardware and sill height;
  - closet;
- accessible kitchen:
  - counters;
  - cupboards;
  - plumbing;
- one living area:
  - window hardware and sill height;
- corridor widths and floor surfaces;
- outlets and switches;
- patio and/or balcony.

Additional basic universal housing features in Richmond include:

- task lighting at sink, stove and key working areas;
- easy to reach and grasp handles on cupboards;
- floor surfaces to be slip resistant.



### 3.4 Accessible Housing

#### OVERVIEW

The City of Richmond has always taken a proactive role with respect to accessible housing.

For example, in 2007, after consultation with the development industry (i.e., Urban Development Institute—UDI) and disability community (i.e., Richmond Centre on Disability—RCD), City Council adopted basic universal housing features in its Zoning Bylaw. Essentially, this provides an optional incentive for developers to build some apartments as adaptable housing. Where this is the case, 1.86 m<sup>2</sup> (20 ft<sup>2</sup>) per dwelling unit is excluded from the floor area ratio (maximum density) calculations. Over the past five years (2007–2012), it is estimated that approximately 10% of all the new apartment units that have been approved in Richmond were accessible (13% if you include one large project where nearly all of the apartments were accessible).

Similarly, Richmond has also endeavoured to ensure that some of its new townhouses are accessible. Over the same period of time (2007–2012), nearly every new townhouse project has provided at least one convertible housing unit within its development. Furthermore, close to half of all the projects involving more than 20 townhouse units provided two or more convertible housing units. All of this was done without any specific Zoning Bylaw provisions or density bonus (i.e., these convertible housing units were built by the developer through the Development Permit process).

All multiple family residential developments in Richmond are required to have aging in place features in all their new units.

With an aging population, it is expected that more people will require accessible housing in the future and/or have physical or sensory disabilities. Therefore, City staff want to continue working with RCD, seniors, UDI and the Small Home Builders group in Richmond who aren't part of UDI to come up with appropriate accessible housing requirements and incentives over the next year or two.



**Convertible housing** is housing that is designed and built to look like traditional housing but has features that are constructed or installed for easy modification and adjustment to suit the needs of an occupant with mobility challenges.

Convertible housing is limited to housing that is more than a single storey (i.e., townhouse units).

Typical convertible housing features include:

- vertical circulation such as wider staircase or the ability to install an elevator using stacked storage space;
- doors and doorways to entry, main living area, one bedroom and one washroom;
- corridor widths of hallways;
- one accessible parking space in garage and wider door to living area;
- one accessible washroom with toilet, turning diameter in kitchen;
- one window in living room and bedroom;
- outlets and switches;
- patios and/or balconies;
- wall reinforcement at top of staircase for future gate.

**Aging in place** is housing that is designed and built so that some accessibility features are provided now and so that others can be added more easily and inexpensively after construction.

Typical aging in place housing features include:

- stairwell handrails;
- lever type handles for:
  - plumbing fixtures;
  - door handles;
- solid blocking in washroom walls for future grab bars beside toilet, bathtub and shower.

## OBJECTIVE 1:

**Meet the existing need and future demand for accessible housing for the increasing population that has difficulties with or a reduction in their daily activities (e.g., mobility challenges).**

## POLICIES:

- a) aging in place continue to be required in all townhouses and apartments;
- b) adaptable housing features continue to be provided in apartments;
- c) convertible housing features continue to be provided in townhouse projects;
- d) City staff discuss with RCD, seniors, UDI and the Richmond Small Home Builders group ways to:
  - establish a certain percentage of apartments with:
    - visitability;
    - adaptable housing;
  - establish a certain percentage of townhouses with:
    - convertible housing (e.g., the larger the project, the more convertible housing);
    - 1 storey design; or
    - adaptable features, master bedroom, kitchen and accessible three piece washroom on the ground floor;
  - provide incentives for all forms of accessible housing (including customer-driven barrier free housing).





**Barrier free housing** is housing that is designed and built for universal access at the time of construction for an occupant/owner with mobility challenges.

Typical barrier free housing features include:

- wheel-in shower stall in one bathroom;
- grab bars in washrooms(s);
- lower countertops;
- kitchen work surfaces with knee space below;
- accessible appliances and cupboards;
- wider corridors and circulation areas;
- adaptable housing (basic universal housing) features or convertible housing features noted above.

**Visitability** is housing that is designed and built to enable a visitor with mobility challenges to enter the unit, visit with the occupant and easily use one bathroom.

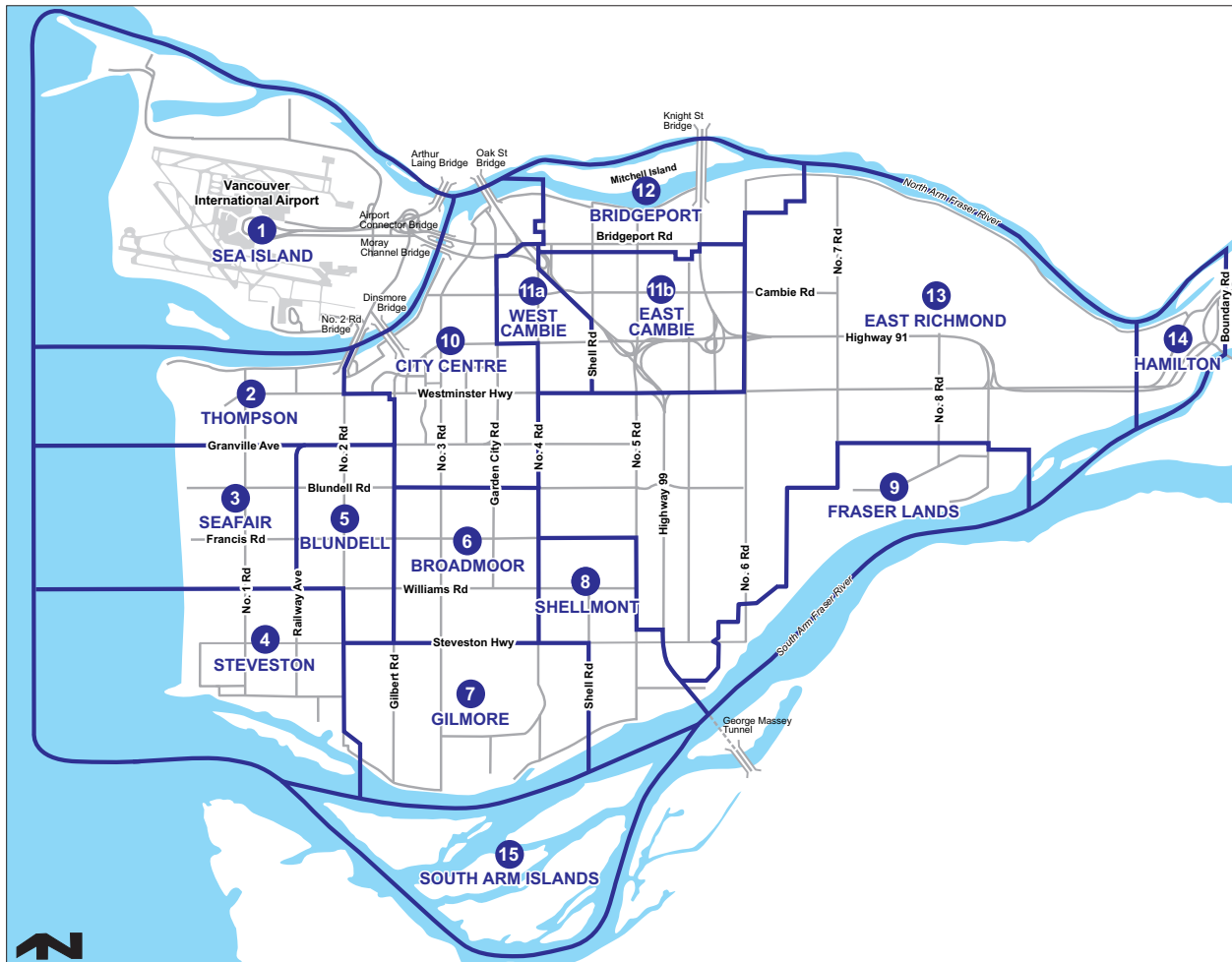
Typical visitability housing features include:

- one entrance with no steps and flush threshold;
- wider door and space at this one entrance;
- one accessible washroom on the visiting floor, with wider door and space.





## Planning Area Boundaries Map



### 3.5 Specific Richmond Neighbourhoods

#### OVERVIEW:

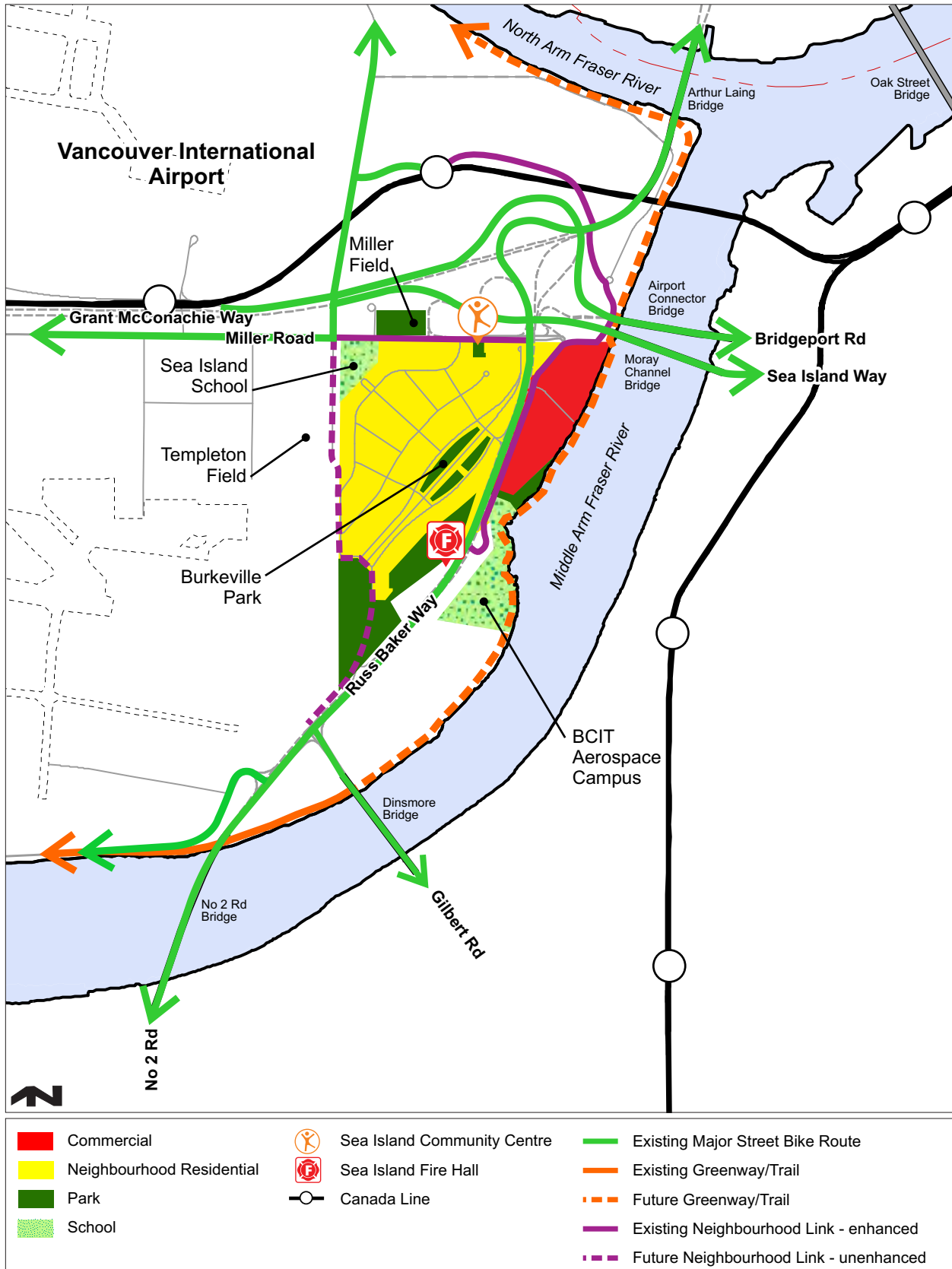
The City of Richmond has a limited developable urban footprint.

There are 16 neighbourhoods in Richmond. The following pages outline possible 2041 planning concepts for consideration when planning each neighbourhood.

Where there is an Area Plan or Sub-Area Plan in place (e.g., City Centre Area Plan; Steveston Area Plan), the Area Plan or Sub-Area Plan Land Use Map takes precedence over the following OCP Neighbourhood conceptual maps if there is a discrepancy. The exact location of proposed land uses, neighbourhood links and greenways within and outside of the Neighbourhood Shopping Centres will be determined through further studies and planning processes.



# 1. Sea Island (Burkeville)





## 1. Sea Island (Burkeville)

### MAIN CHARACTERISTICS

#### Live:

- Burkeville is the only residential community on Sea Island;
- predominantly small, single storey houses built in the 1940s on larger single family residential lots with access to a rear lane.

#### Work:

- home to the Vancouver International Airport (YVR) and its related services;
- location of the Metro Vancouver Iona Island Waste Management Treatment Plant.

#### Play:

- Sea Island Conservation Area (SICA), McDonald Beach and Iona Beach Regional Park;
- Sea Island Community Centre and Elementary School in Burkeville.

### MANAGEMENT HIGHLIGHTS

#### Connected:

- work with YVR to implement developments around the Sea Island Canada Line Stations, in accordance with their Land Use Plan;
- encourage YVR to develop airport related uses on its land;
- consider new pedestrian/cycling bridge between Sea Island and City Centre (e.g., at Cambie Road);
- consider a new small local commercial store in Burkeville.

#### Healthy:

- retain the unique heritage character of Burkeville (e.g., small homes);
- multiple family residential development is not anticipated;
- aircraft noise sensitive development is considered subject to certain limitations/requirements.

#### Diverse:

- significant employment growth on Sea Island in a variety of sectors;
- proposal to allow granny flats and coach houses in Burkeville.

### POLICIES:

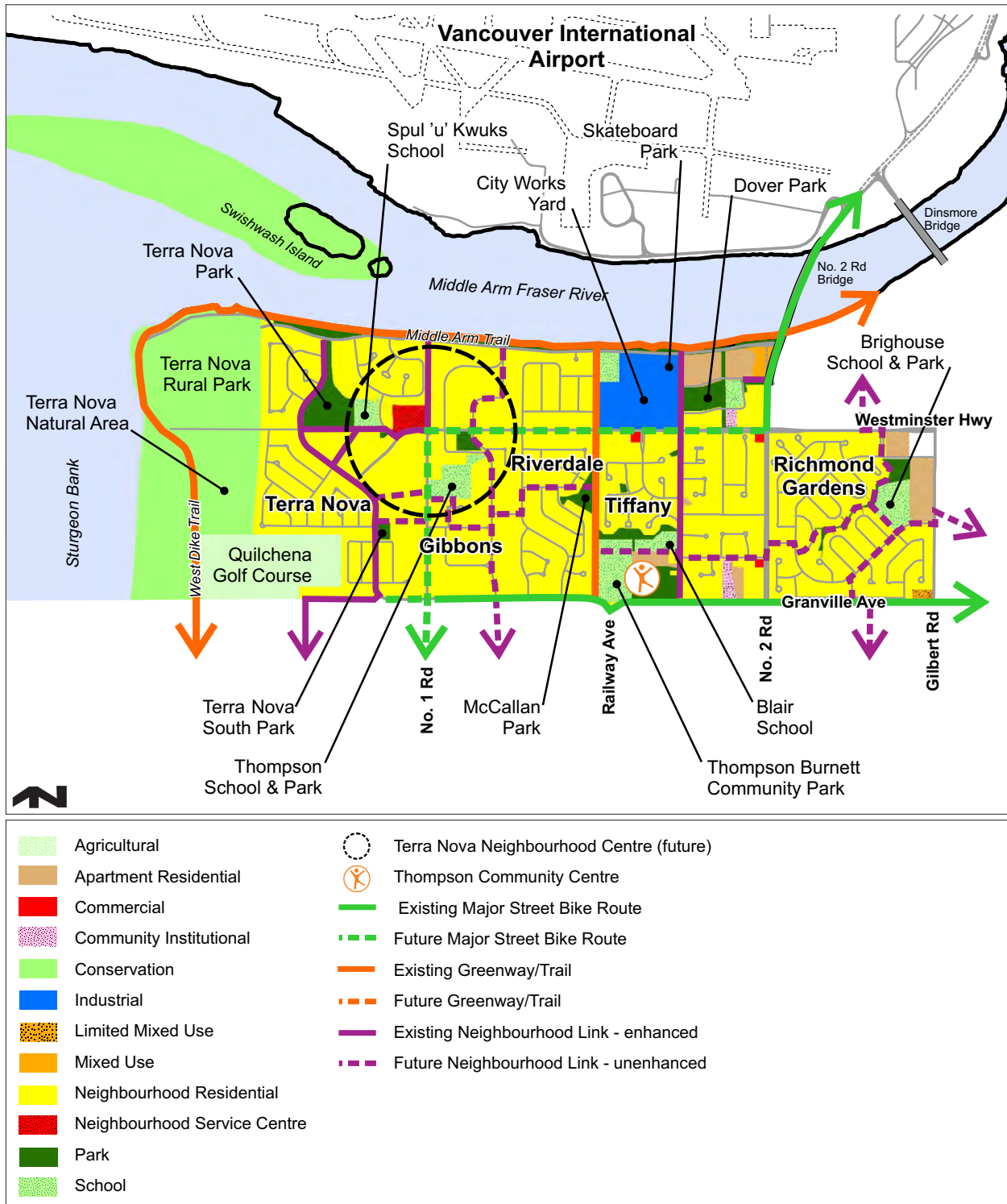
#### Sea Island

- a) see Resilient Economy;





## 2. Thompson





## 2. Thompson

### MAIN CHARACTERISTICS

#### Live:

- predominantly larger single family residential lots in the Gibbons, Riverdale and Richmond Gardens areas;
- some smaller single family residential lots in the Terra Nova and Garnet/Tiffany areas;
- multiple family residential townhouses and apartments.

#### Work:

- the key retail area is the Terra Nova Shopping Centre;
- some local/neighbourhood commercial on Westminster Highway and No. 2 Road;
- City's and School District's Works Yards.

#### Play:

- West Dike trail and dike trail along Middle Arm Fraser River;
- award winning Terra Nova Natural Area and Rural Park;
- Thompson Community Centre;
- Burnett Secondary School;
- 4 elementary schools: James Thompson, Brighthouse, Blair and Spul'u'kwuks;
- Quilchena Golf Course, which is in the ALR.

### MANAGEMENT HIGHLIGHTS

#### Connected:

- no densification of the Terra Nova Shopping Centre is proposed;
- enable new lane and smaller single family residential lots along the west side of No. 2 Road north of Walton Road and along the south side of Westminster Highway at Emerald Place.

#### Healthy:

- apply aircraft noise sensitive development requirements.

#### Diverse:

- granny flats and coach houses not being considered in this neighbourhood (particularly the Richmond Gardens area);
- subdivision (other than existing duplexes) or multiple family residential development not being considered in Gibbons and Riverdale areas;
- Dover/Walton/Garrison Roads have the potential for some smaller single family residential lots.

### POLICIES:

- a) see Dover Crossing and Terra Nova Sub-Area Plans.



### 3. Seafair



	Agricultural		Seafair Neighbourhood Centre (future)
	Apartment Residential		West Richmond Community Centre and Pitch & Putt
	Commercial		Existing Major Street Bike Route
	Community Institutional		Future Major Street Bike Route
	Conservation		Existing Greenway/Trail
	Neighbourhood Residential		Future Greenway/Trail
	Neighbourhood Service Centre		Existing Neighbourhood Link - enhanced
	Park		Future Neighbourhood Link - unenhanced
	School		Future Neighbourhood Link



### 3. Seafair

#### MAIN CHARACTERISTICS

##### Live:

- predominantly larger single family residential lots (e.g., Mores and Monds areas; Pendlebury Road);
- coach houses and compact single family residential lots permitted along No. 1 Road where there is an existing lane;
- some smaller single family residential lots in other areas (e.g., Lockhart/Marrington Road; Eperson Road; etc.);
- multiple family residential both in the form of townhouse residential and apartment residential (predominantly 3 storeys, although there is one older 7 storey apartment);
- concern that larger houses are replacing existing smaller homes to the detriment of the neighbourhood (e.g., Monds and Mores areas);
- serviced by a few churches, a synagogue, a private school and a congregate care facility.

##### Work:

- the key retail area is the Seafair shopping centre;
- a small amount of commercial development is elsewhere within the neighbourhood.

##### Play:

- West Richmond Community Centre;
- Hugh Boyd Secondary School;
- 4 Elementary Schools: Dixon, Gilmore, Quilchena, and Grauer;
- West Dike trail and Quilchena Golf Course, the latter of which is in the ALR.

#### MANAGEMENT HIGHLIGHTS

##### Connected:

- don't densify the Seafair shopping centre;
- limit future lanes and access points to the arterial road.

##### Healthy:

- better encourage alternative accessibility.

##### Diverse:

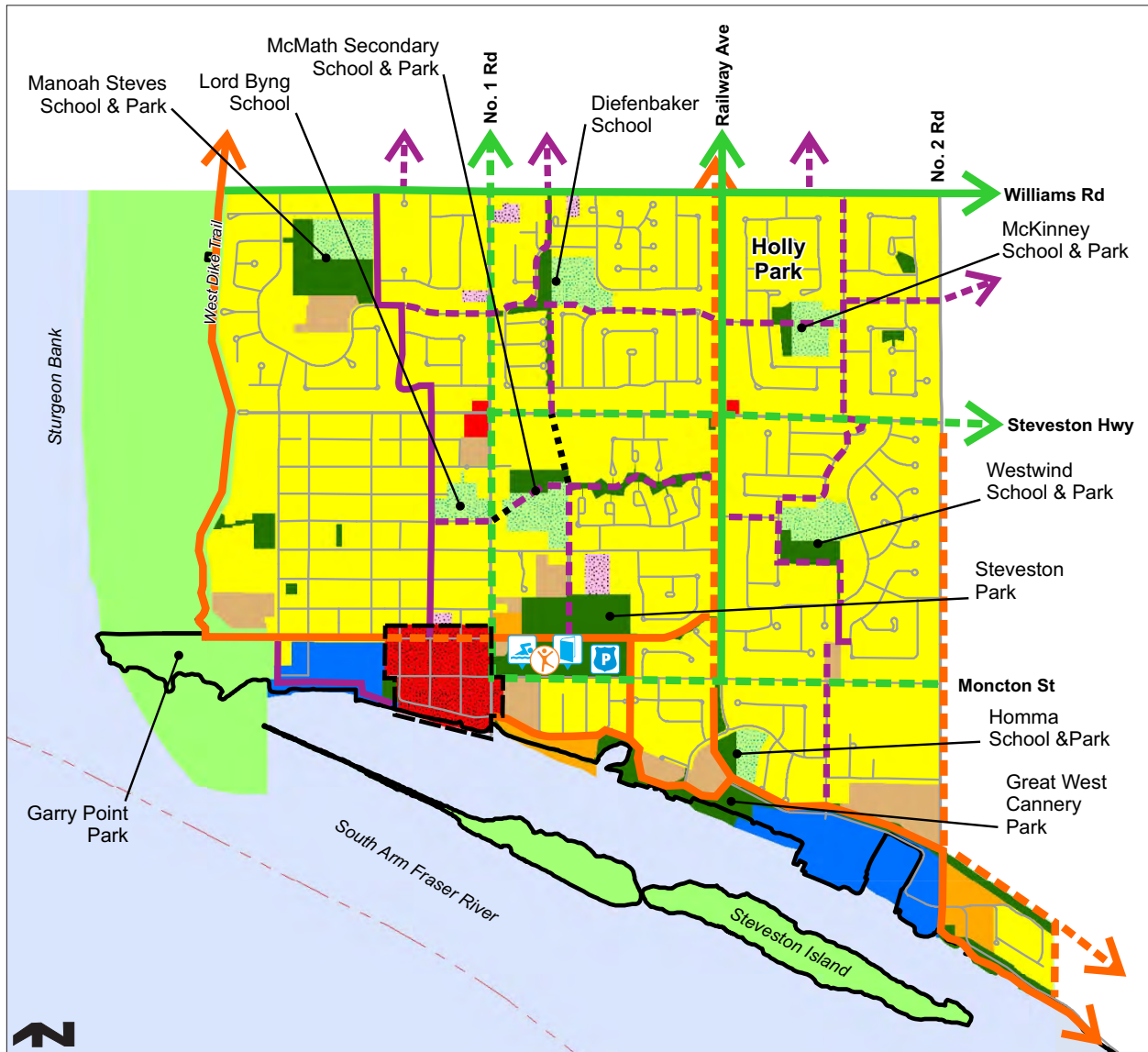
- limit the location of new townhouse residential and compact or smaller single family residential lots to selected arterial road locations;
- new townhouse development envisioned in area on the east side of No. 1 Road between Blundell Road and Coldfall Road subject to public consultation.

#### POLICIES:

- a) granny flats, coach houses, smaller single family residential lots and townhouse residential are not proposed in the Monds and Mores areas.



## 4. Steveston



Apartment Residential	Police Steveston Community Station	Future Major Street Bike Route
Commercial	Steveston Library	Future Greenway/Trail
Community Institutional	Steveston Pool	Existing Neighbourhood Link - enhanced
Conservation	Steveston Neighbourhood Centre (future)	Future Neighbourhood Link - unenhanced
Industrial		Future Neighbourhood Link
Mixed Use		
Neighbourhood Residential		
Neighbourhood Service Centre		
Park		
School		
		Existing Major Street Bike Route
		Future Major Street Bike Route
		Existing Greenway/Trail
		Future Greenway/Trail
		Existing Neighbourhood Link - enhanced
		Future Neighbourhood Link - unenhanced
		Future Neighbourhood Link





## 4. Steveston

### MAIN CHARACTERISTICS

#### Live:

- conserving its unique heritage character;
- a variety of compact, smaller and larger single family residential lots;
- townhouse residential and apartment residential uses scattered throughout the neighbourhood (including one older 7 storey seniors apartment);
- mixed uses (apartment residential over maritime uses or commercial and industrial uses).

#### Work:

- the key commercial node is the historic Steveston Village which is being conserved in heritage character;
- a few other commercial sites along Chatham Street and Steveston Highway;
- Steveston Harbour Authority industrial lands along the waterfront.

#### Play:

- Gulf of Georgia, Britannia Shipyard and Fisherman's Parks; Steveston Community Centre/Park, Garry Point Park, West Dike Trail, South Arm Fraser River open space and trails;
- McMath Secondary;
- 6 elementary schools: John G. Diefenbaker, McKinney, Manoah Steves, Lord Byng, Westwind and Homma;
- heritage, waterfront village.

### MANAGEMENT HIGHLIGHTS

#### Connected:

- densify Steveston Village subject to the Steveston Village Heritage Conservation Strategy;
- encourage waterfront connections and access within the Steveston neighbourhood for all of Richmond;
- prepare with senior governments and the Steveston Harbour Authority, a unified Steveston waterfront urban design policies and guidelines;
- assist the SHA in preparing its plans.

#### Healthy:

- retain waterfront walkways and access.

#### Diverse:

- convert Trites Road industrial area to single family residential and townhouse residential uses.

### POLICIES:

- a) see Steveston Area Plan.



## 5. Blundell



Apartment Residential	Blundell Neighbourhood Centre (future)
Commercial	Existing Major Street Bike Route
Community Institutional	Future Major Street Bike Route
Neighbourhood Residential	Future Greenway/Trail
Neighbourhood Service Centre	Existing Neighbourhood Link - enhanced
Park	Future Neighbourhood Link - unenhanced
School	Future Neighbourhood Link



## 5. Blundell

### MAIN CHARACTERISTICS

#### Live:

- predominantly larger single family residential lots, with some areas of smaller single family residential lots;
- coach house and single family residential lots along arterial roads with a lane;
- townhouse residential throughout the neighbourhood;
- a few apartment residential sites (including an older 7 storey apartment adjacent to Blundell shopping centre);
- serviced by a private elementary school and a number of churches.

#### Work:

- the key retail area is the Blundell Shopping Centre;
- some small commercial developments along No. 2 Road.

#### Play:

- Railway Avenue Greenway;
- London Secondary School;
- 4 elementary schools: Blundell, McKay, Wowk and Richmond Christian.

### MANAGEMENT HIGHLIGHTS

#### Connected:

- enable the Blundell Neighbourhood Centre densification planning process.

#### Healthy:

- the future use of the former Steveston Secondary School—TBD with School Board, City and Community discussion.

#### Diverse:

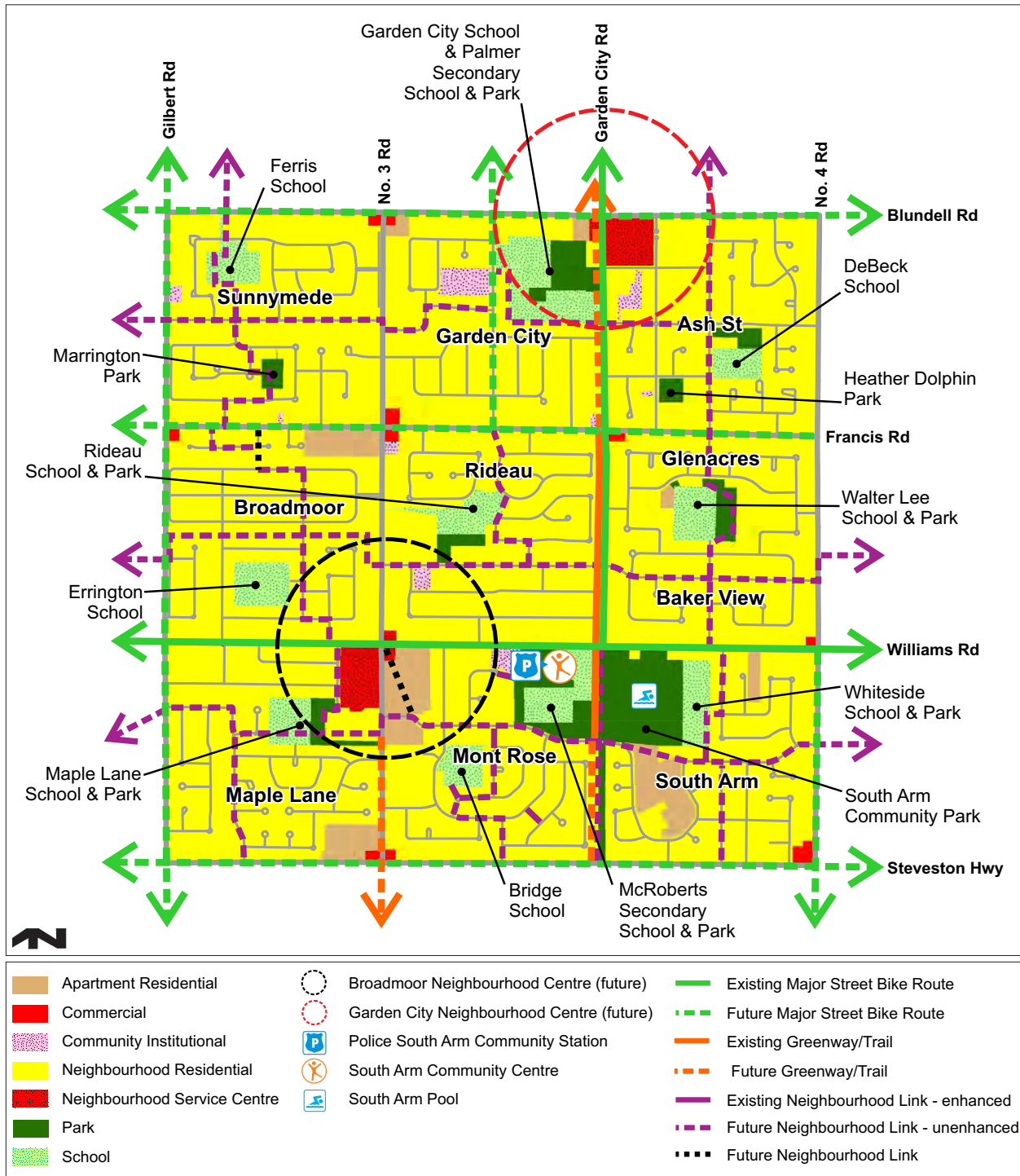
- encourage No. 2 Road, Gilbert Road and Railway Avenue to be distinct;
- new townhouse development envisioned along Blundell Road near Blundell Shopping Centre and along west side of Gilbert Road between Williams Road and Steveston Highway.

### POLICIES:

- a) see Laurelwood and East Livingstone Sub-Area Plans.



## 6. Broadmoor





## 6. Broadmoor

### MAIN CHARACTERISTICS

#### Live:

- predominantly larger single family residential lots;
- coach houses and compact single family residential lots along arterial roads with a lane;
- multiple family residential both in the form of townhouse residential and apartment residential.

#### Work:

- the Broadmoor and Garden City Shopping Centres are the key retail areas;
- a few other small commercial sites along the arterial roads.

#### Play:

- South Arm Community Centre/Park;
- McRoberts and Palmer Secondary Schools;
- 8 elementary schools: Bridge, De Beck, Errington, Ferris, Garden City, Lee, Maple Lane and Whiteside.

### MANAGEMENT HIGHLIGHTS

#### Connected:

- the densification of the Broadmoor Neighbourhood Centre as per the Broadmoor Neighbourhood Centre Master Plan may continue and more planning may occur around it in the future;
- the Garden City Neighbourhood Centre may undergo densification planning.

#### Healthy:

- accommodate a number of churches;
- the Williams Road bike lane and other non-vehicular links.

#### Diverse:

- consider densification of the Broadmoor Shopping Centre introducing apartment residential up to 6 storeys;
- new townhouse development is envisioned along No. 3 Road, Williams Road and Garden City Road.

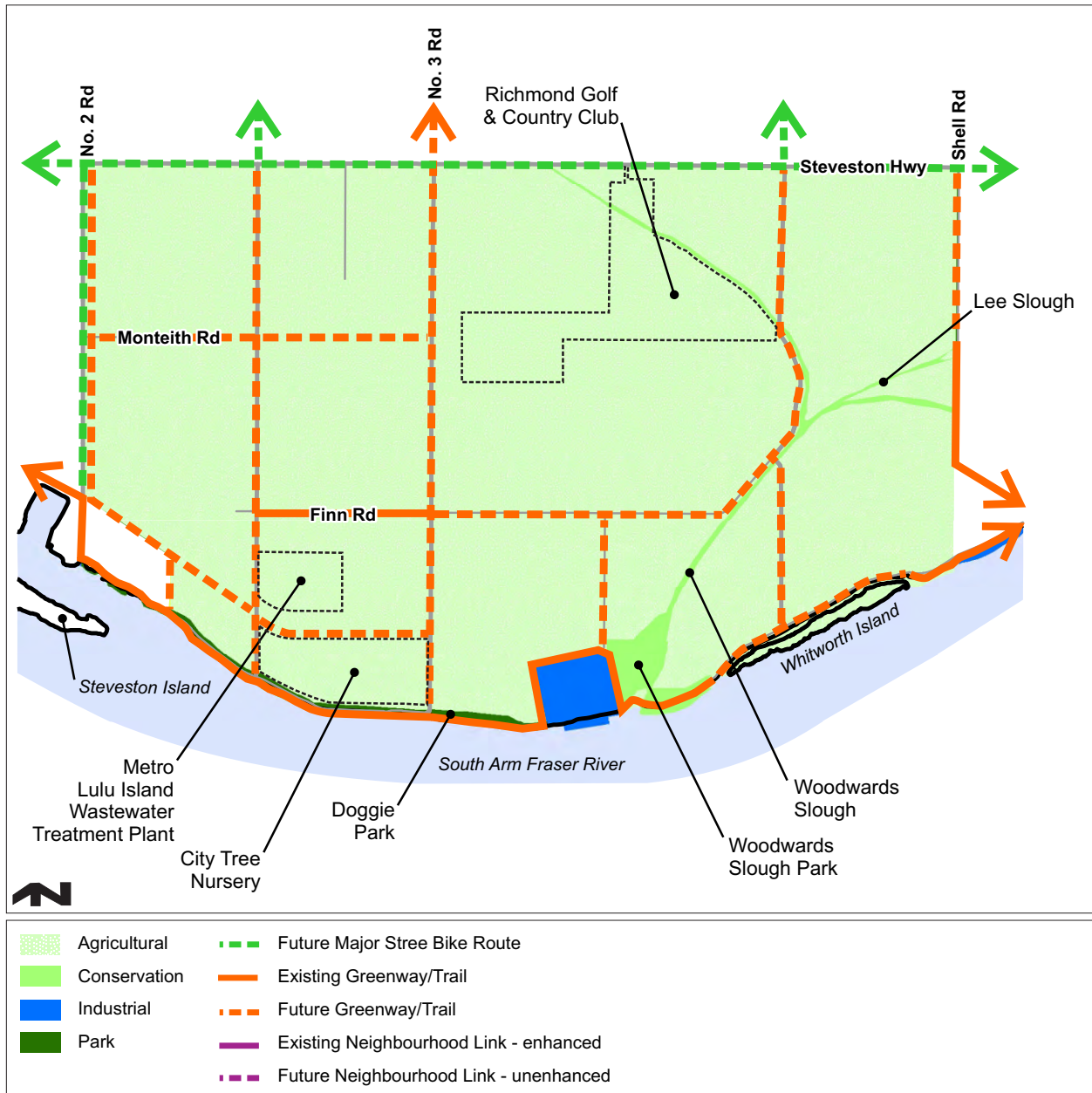
### POLICIES:

- a) see Ash Street, Central West and Sunnymede North Sub-Area Plans;
- b) see Broadmoor Neighbourhood Centre Guidelines.





## 7. Gilmore





## 7. Gilmore

### MAIN CHARACTERISTICS

#### Live:

- limited housing because the entire area is in the Agricultural Land Reserve (ALR);
- some smaller agricultural lots only have a house (i.e., they are currently not being farmed).

#### Work:

- farming is the major employment;
- one industrial site at the southern end of Garden City Road;
- Metro Vancouver Lulu Island Waste Management Treatment Plant.

#### Play:

- Richmond Golf Club and International Buddhist church on Steveston Highway;
- London Farm, No. 3 Road doggie park and Woodward's Slough.

### MANAGEMENT HIGHLIGHTS

#### Connected:

- promote horse trails for the farming community;
- promote continuous pedestrian access along the Fraser River;
- improve waterfront trails.

#### Healthy:

- retain farming, agricultural related industries and supportive uses as principal uses;
- ensure adequate buffers on residential lands abutting the Gilmore neighbourhood (i.e., north side of Steveston Highway; west side of No. 2 Road).

#### Diverse:

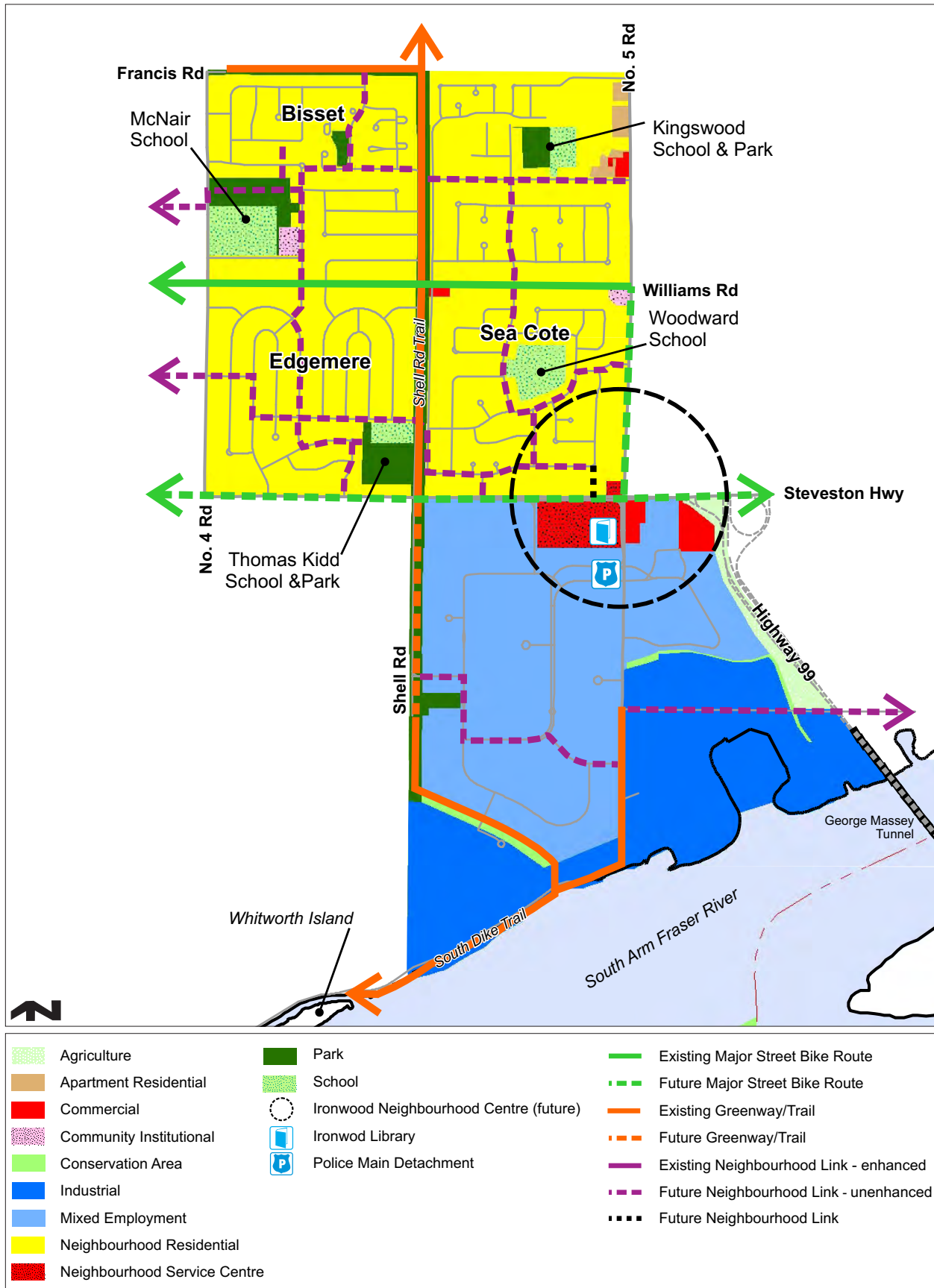
- encourage a variety of food production crops;
- limit housing and other non-farm uses;
- prohibit residential dwellings.

### POLICIES:

- a) see Resilient Economy;
- b) see Richmond Agricultural Viability Strategy (RAVS).



## 8. Shellmont





## 8. Shellmont

### MAIN CHARACTERISTICS

#### Live:

- predominantly larger single family residential lots;
- coach houses and compact single family residential lots permitted along arterial roads where there is an existing lane;
- multiple family residential predominantly in the form of townhouse development and some apartment residential;
- the former Fantasy Gardens site is undergoing a major mixed use redevelopment.

#### Work:

- the key retail areas are the Ironwood, Coppersmith and Sands Shopping Centres;
- some local commercial on Williams Road and No. 5 Road;
- Riverside Industrial Park used for both business park offices and industrial uses.

#### Play:

- Shell Road and South Dike Trail and Horseshoe, Lee and Hartnell Sloughs;
- the Gardens Agricultural Park;
- McNair Secondary School;
- 3 elementary schools: Woodward, Kidd and Kingswood.

### MANAGEMENT HIGHLIGHTS

#### Connected:

- provide an attractive gateway to Richmond;
- the densification of the Ironwood Shopping Centre is not proposed;
- consider a new future lane and compact single family residential lots along the east side of No. 4 Road north of McNair Secondary School.

#### Healthy:

- recognize Shell Road corridor and various sloughs as important trails and ecological or riparian management areas;
- support the removal of isolated ALR properties in the Riverside Industrial Park.

#### Diverse:

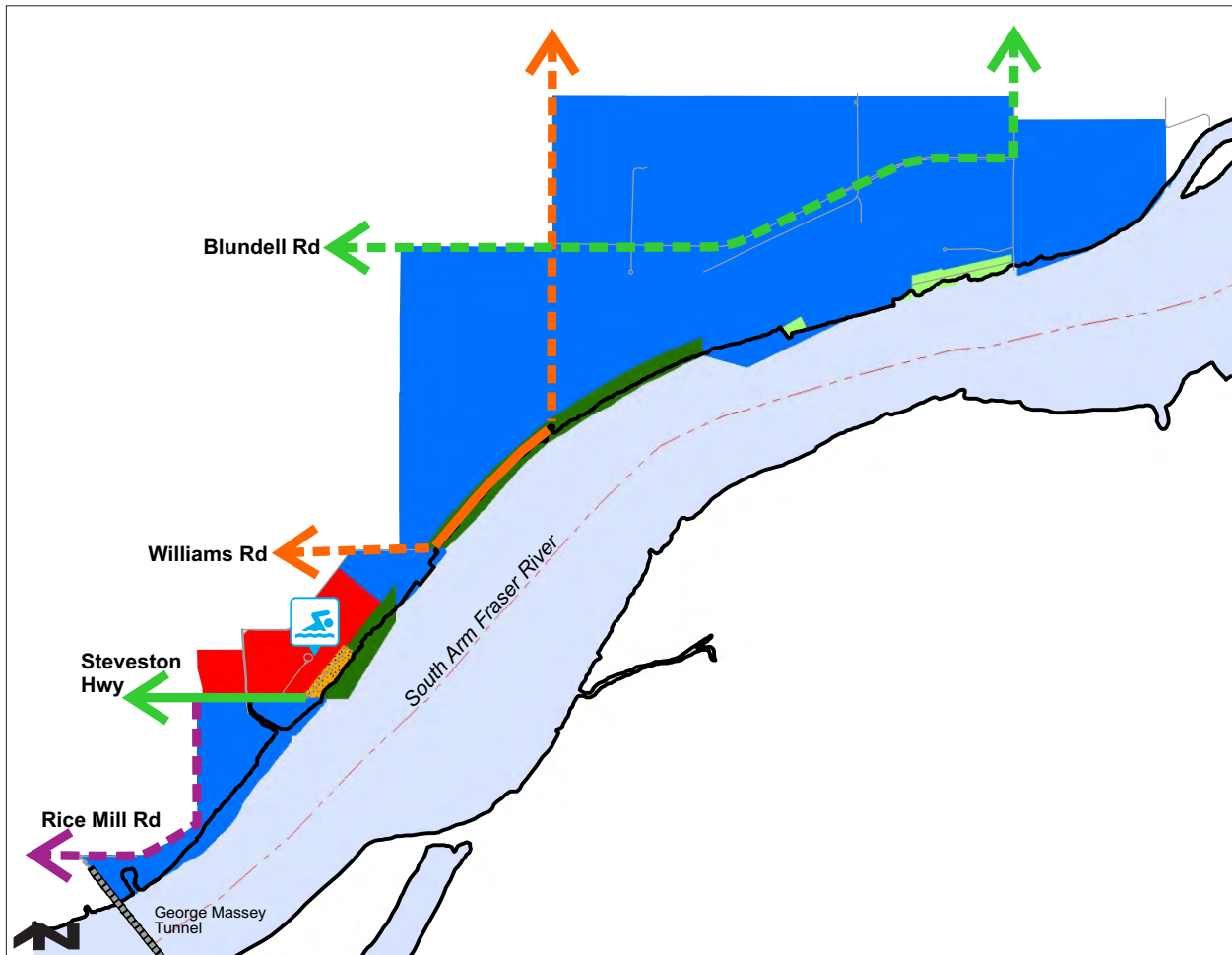
- a variety of distinct land uses (commercial; industrial; business park offices; residential; parks);
- mixed employment and industrial lands are not envisioned for commercial purposes and will not be converted to residential development;
- allow granny flats and coach houses in Edgemere where there is a rear lane.












### POLICIES:

- a) see Ironwood Sub-Area Plan;
- b) see Granny Flat and Coach House Guidelines.



## 9. Fraser Land Area



	Conservation Area		Richmond Wave Pool
	Commercial		Existing Major Street Bike Route
	Limited Mixed Use		Future Major Street Bike Route
	Industrial		Existing Greenway/Trail
	Park		Future Greenway/Trail
			Future Neighbourhood Link - unenhanced





## 9. Fraser Land Area

### MAIN CHARACTERISTICS

#### Live:

- Riverport is the only mixed use/residential area;
- limited housing elsewhere because area is predominantly industrial.

#### Work:

- Port Metro Vancouver's significant industrial lands;
- Riverport, Fraser Wharves and Ecowaste are other major employment sources.

#### Play:

- Riverport recreation and entertainment centre;
- trails and open space along the waterfront.

### MANAGEMENT HIGHLIGHTS

#### Connected:

- complete a north/south cross city trail connection;
- separate industrial traffic from farming vehicles;
- possible future connection to Blundell Road and Highway 99 interchange.

#### Healthy:

- retain the area around the perimeter of the Fraser Lands in the Agricultural Land Reserve (ALR);
- provide access to the waterfront where possible.

#### Diverse:

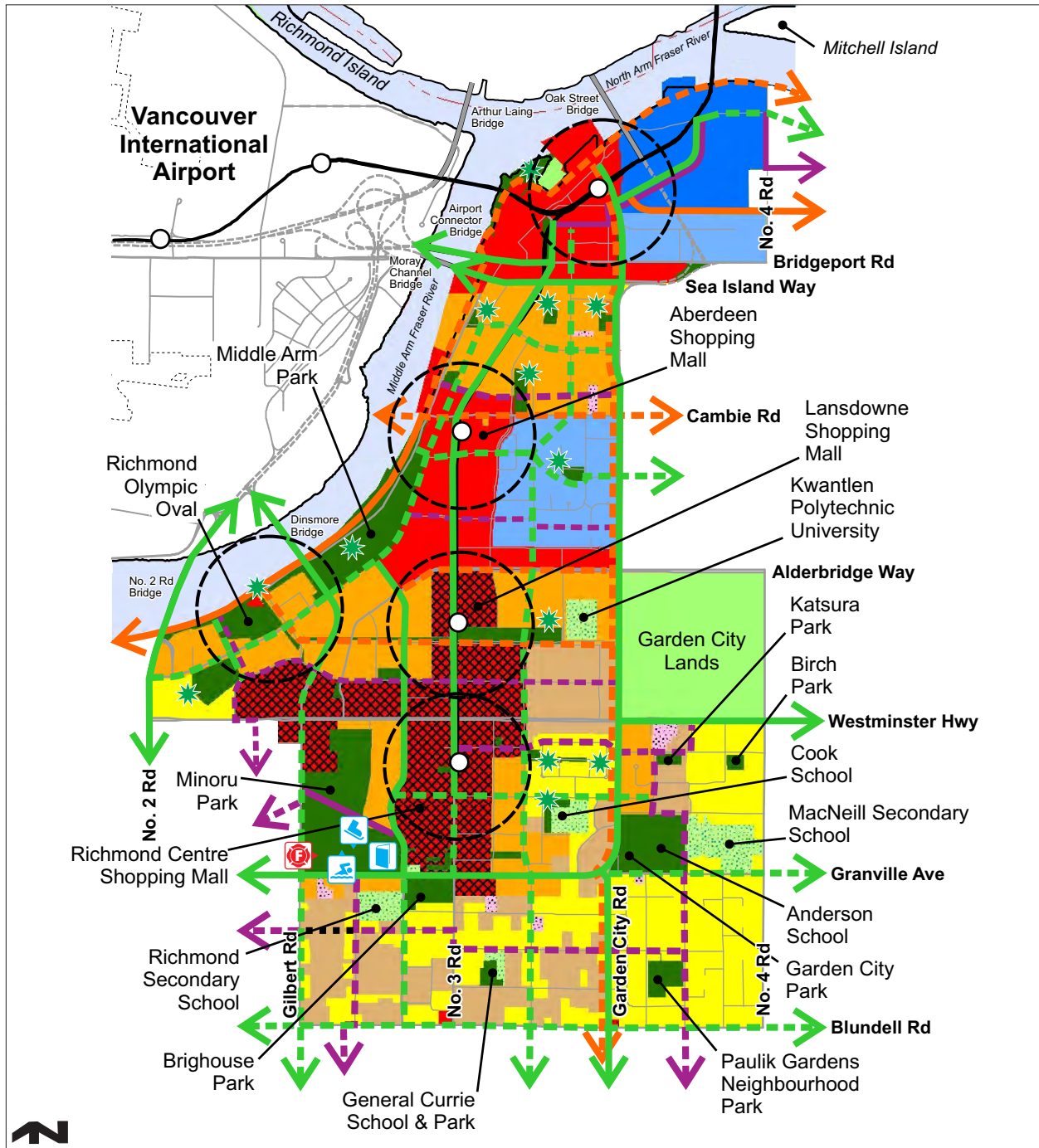
- retain industrial lands for industrial purposes only (not mixed employment) and prohibit residential/commercial conversions;
- consider agri-industry because of the proximity of farming operations and products.

### POLICIES:

- a) see Resilient Economy.



# 10. City Centre





## 10. City Centre

### MAIN CHARACTERISTICS

#### Live:

- a variety of high density urban villages with multiple family residential housing forms (townhouse residential; low-rise and high-rise apartment residential; mixed use residential over commercial);
- single family residential are gradually being phased out, with exception of Acheson Bennett area and a portion of McLennan South.

#### Work:

- the primary location of concentrated commercial development in Richmond;
- commercial integrated with mixed residential development;
- significant employment lands located in the aircraft noise sensitive land use areas where residential development is not permitted;
- mixed uses.

#### Play:

- a concentration of cultural, educational and recreational facilities;
- improve existing park space and new parks to provide greater diverse activity;
- 3 secondary schools: Richmond, MacNeill and Station Stretch (alternative);
- 3 elementary schools: Anderson, Cook, and General Currie;
- Reflect the need for an additional school in the City Centre area;
- Oval, Middle Arm, Golden Village.

### MANAGEMENT HIGHLIGHTS

#### Connected:

- provide a shorter street pattern to aid walking, cycling and rolling;
- encourage higher densities around the Canada Line stations;
- integrate Ecological Network principles and opportunities.

#### Healthy:

- complete the proposed Middle Arm Park to serve as an iconic “Jewel In The Crown” in the City Centre, which together with the Oval will dramatically increase the downtown’s attractiveness and function;
- plan the future of the Garden City Lands—TBD.

#### Diverse:

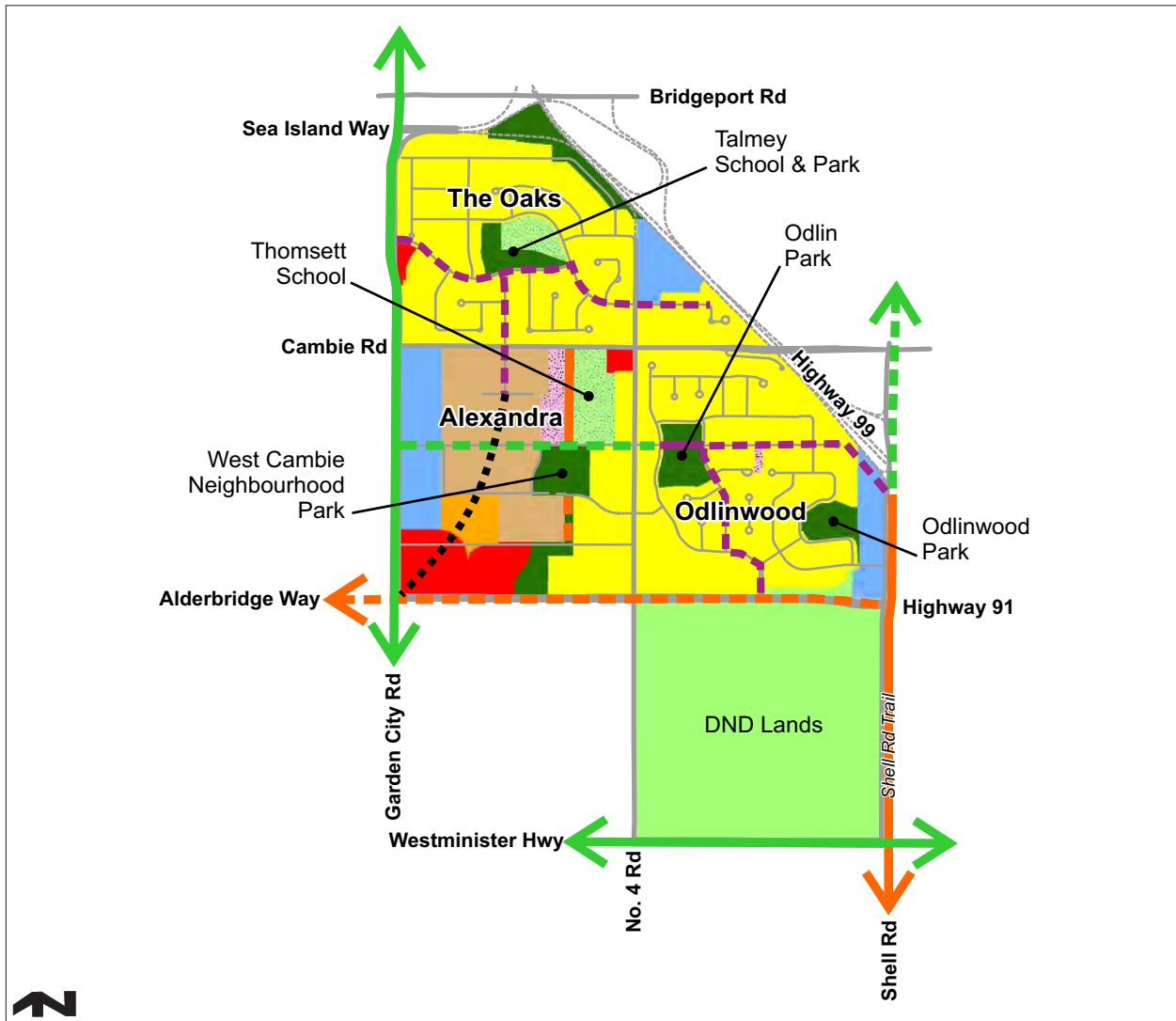
- housing, employment and recreation within distinct high density mixed use transit oriented urban villages.

### POLICIES:

- a) see City Centre Area Plan and St. Albans, Acheson Bennett, McLennan North and McLennan South Sub-Area Plans.



## 11a. West Cambie



Apartment Residential	Existing Major Street Bike Route
Commercial	Future Major Street Bike Route
Community Institutional	Existing Greenway/Trail
Conservation	Future Greenway/Trail
Mixed Employment	Existing Neighbourhood Link - enhanced
Mixed Use	Future Neighbourhood Link - unenhanced
Neighbourhood Residential	Future Neighbourhood Link
Park	
School	



## 11a. West Cambie

### MAIN CHARACTERISTICS

#### Live:

- centrally located between the City Centre and the Cambie Shopping Centre;
- Oaks and Odlinwood areas developed with a combination of small lot single family residential and townhouse residential;
- Alexandra neighbourhood undergoing redevelopment with apartment residential, townhouse residential and mixed use developments.

#### Work:

- limited amount of existing commercial and industrial development;
- the western and southern edges of Alexandra neighbourhood are designated for commercial and mixed employment purposes (e.g., business/office uses).

#### Play:

- West Cambie Neighbourhood Park;
- Odlinwood and Odlin major existing parks;
- 2 elementary schools: Talmey and Thomsett.

### MANAGEMENT HIGHLIGHTS

#### Connected:

- West Cambie Greenway;
- the Alexandra neighbourhood is to be better integrated with the Garden City Lands (TBD).

#### Healthy:

- aircraft noise sensitive land development is subject to certain requirements or prohibited;
- Department of National Defence (DND) lands designated as a Conservation Area in OCP.

#### Diverse:

- retain existing and potential employment land uses;
- retain neighbourhood housing types and tenure diversity.

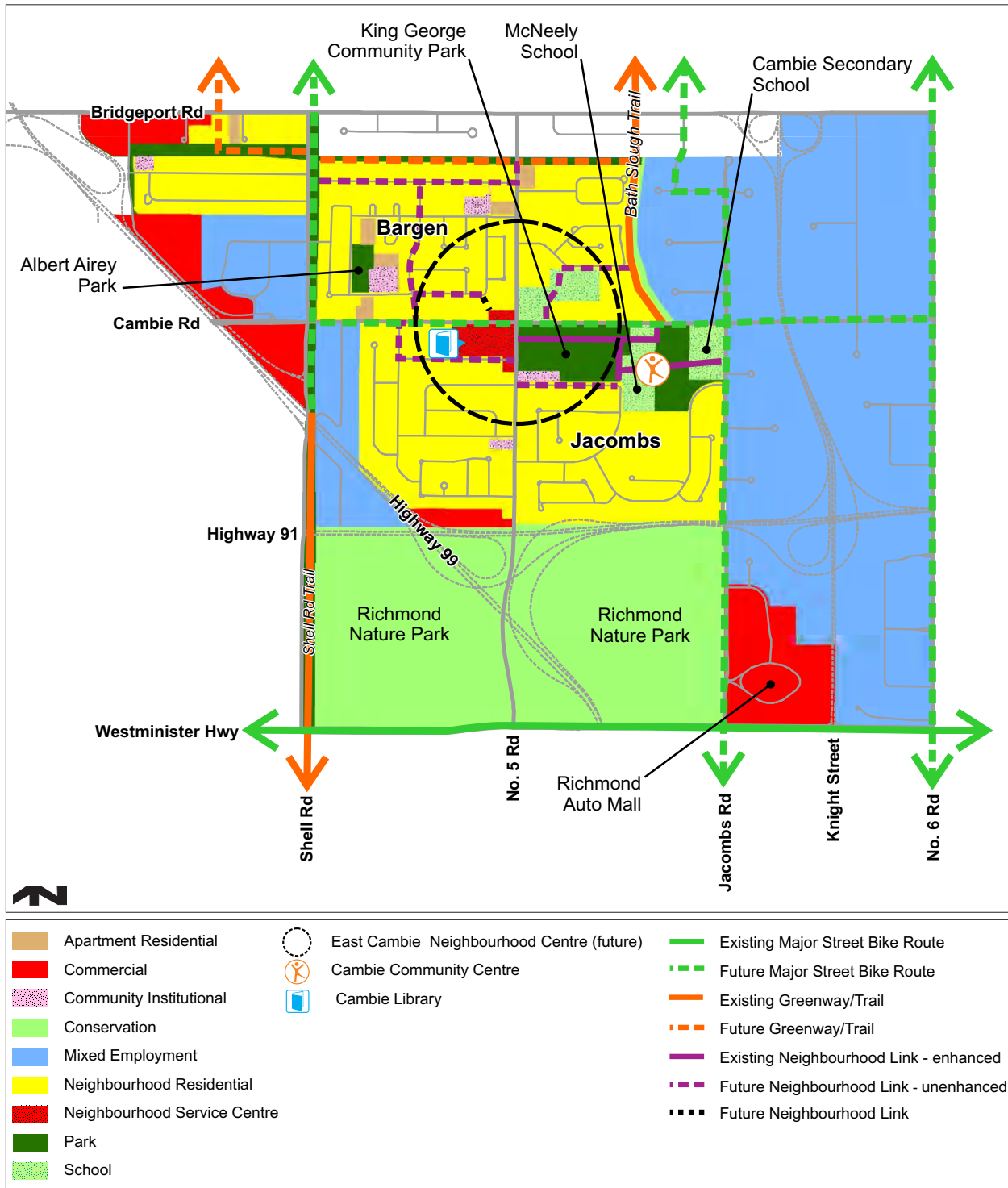
### POLICIES:

- a) see West Cambie Area Plan.





## 11b. East Cambie





## 11b. East Cambie

### MAIN CHARACTERISTICS

#### Live:

- a combination of smaller and larger single family residential lots;
- townhouse residential and apartment residential uses.

#### Work:

- Cambie Shopping Centre is the key retail area;
- additional commercial areas include the Richmond Auto Mall and hotel/automotive/other uses near Highway 99;
- mixed employment areas include industrial and business park offices in the Airport Executive Park, Crestwood Industrial Park, Knightsbridge Industrial Park, etc.

#### Play:

- Richmond Nature Park, King George Park/Cambie Community Centre and Bridgeport/Shell Road and Bath Slough trails;
- Cambie Secondary School;
- 2 elementary schools: Mitchell and McNeely.

### MANAGEMENT HIGHLIGHTS

#### Connected:

- densification planning of the Cambie Neighbourhood Centre may be undertaken;
- increase connectivity between the Nature Park, Community Centre and parks/sloughs.

#### Healthy:

- aircraft noise sensitive land development is subject to certain requirements or prohibited (e.g., no residential development in certain areas);
- the former Mitchell School and Sportstown sites represent two of the more major development opportunities (TBD).

#### Diverse:

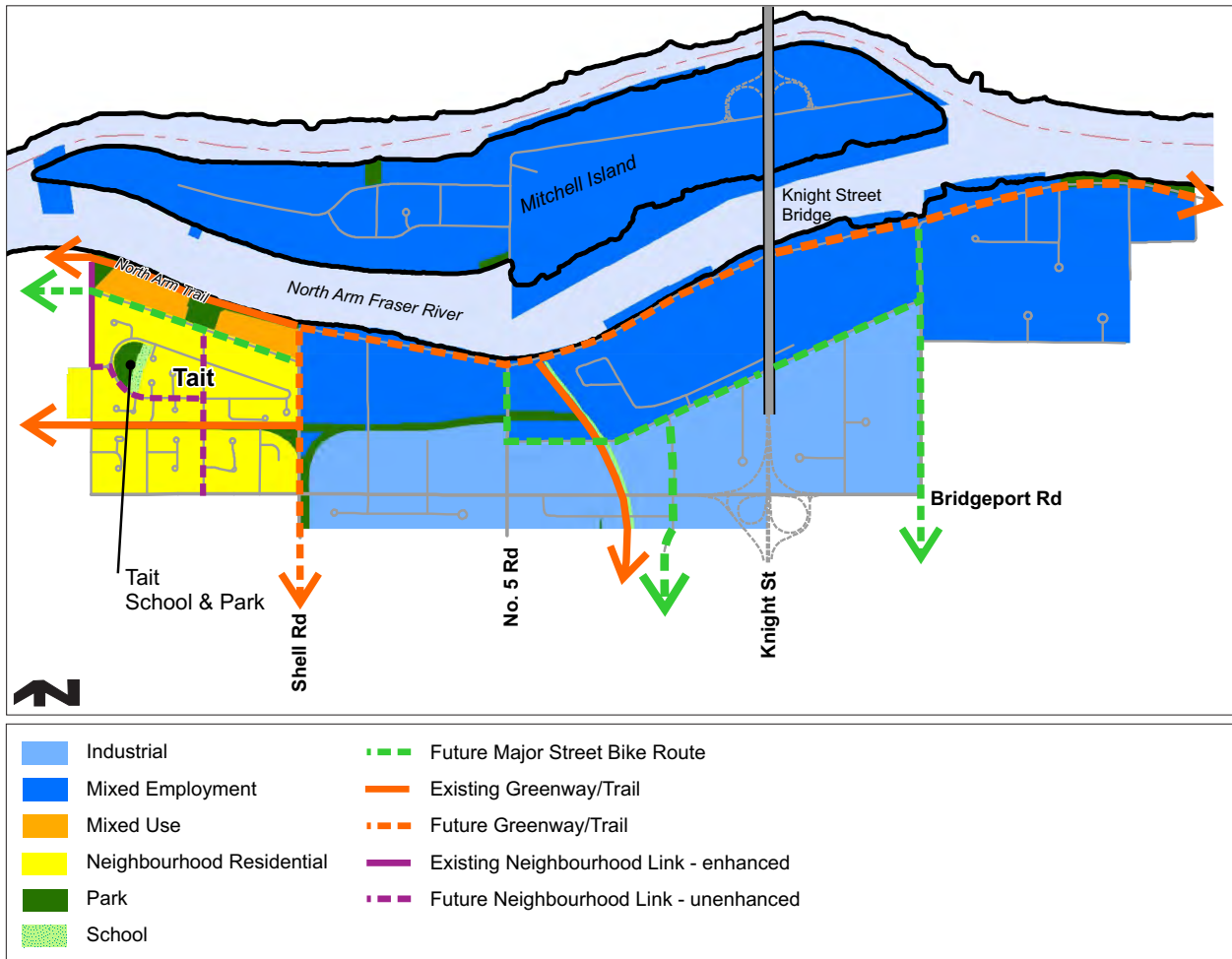
- mixed employment lands are not envisioned for commercial purposes (other than a limited range of commercial uses), and will not be converted to residential development;
- new townhouse development is envisioned along Cambie Road and No. 5 Road because of proximity to Cambie Shopping Centre.

### POLICIES:

- a) see East Cambie Area Plan.



## 12. Bridgeport (Tait)





## 12. Bridgeport (Tait)

### MAIN CHARACTERISTICS

#### Live:

- residential development is limited to the western edge of the neighbourhood;
- the north side of River Drive between No. 4 Road and Shell Road is undergoing a major mixed use redevelopment.

#### Work:

- the majority of the Bridgeport Road corridor is used for a limited range of commercial uses and industrial or office purposes;
- north of Vulcan Way and along the North Arm Fraser River (including Mitchell Island) are used for industrial purposes only;
- commercial area is limited to south side Bridgeport Road between Beckwith Place and Shell Road.

#### Play:

- Tait Elementary School and related facilities;
- various existing or proposed trails and waterfront parks.

### MANAGEMENT HIGHLIGHTS

#### Connected:

- the Tait area is identified for possible smaller single family residential lots;
- a lane is required along the north side of Bridgeport Road for coach houses and compact single family residential lots, and to a lesser extent along No. 4 Road, Shell Road and River Drive for smaller single family residential lots;
- improve waterfront trails.

#### Healthy:

- aircraft noise sensitive land development is subject to certain requirements or prohibited (e.g., no residential development in the majority of the mixed employment and industrial areas);
- a physical development and urban design strategy for the Bridgeport Road corridor may be undertaken to improve its viability and appearance.

#### Diverse:

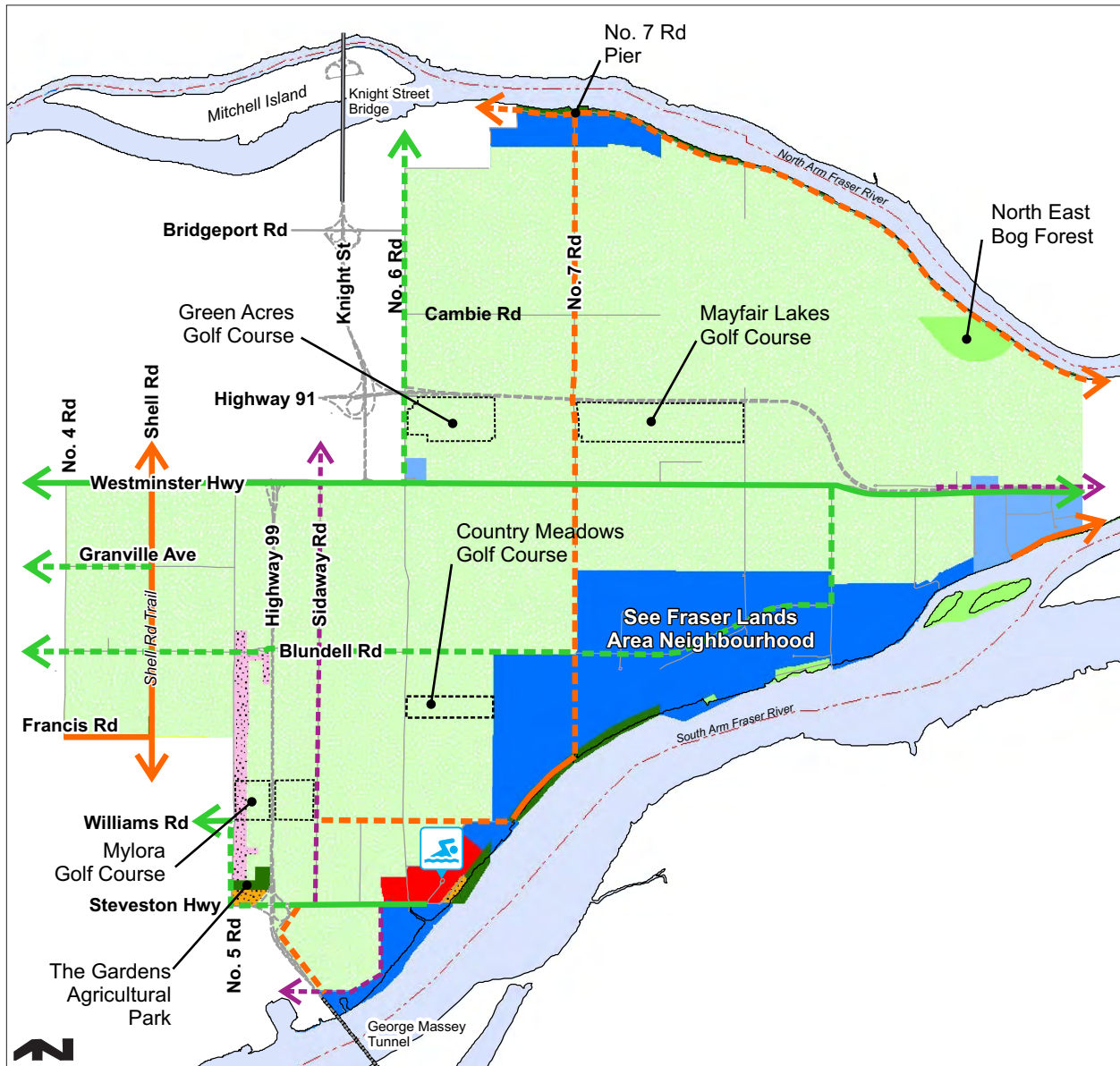
- the Bridgeport employment areas service the community as a whole and residents outside Richmond;
- mixed employment lands are not envisioned for commercial purposes (other than a limited range of commercial uses) and, along with industrial lands, will not be converted to residential development;
- permanent or predominantly commercial and office uses are not envisioned for the industrial areas.

### POLICIES:

- a) see Bridgeport Area Plan.



### 13. East Richmond



	Agriculture		Richmond Wave Pool
	Commercial		Existing Major Street Bike Route
	Community Institutional		Future Major Street Bike Route
	Conservation Area		Existing Greenway/Trail
	Industrial		Future Greenway/Trail
	Limited Mixed Use		Existing Neighbourhood Link - enhanced
	Mixed Employment		Future Neighbourhood Link - unenhanced
	Park		





### 13. East Richmond

#### MAIN CHARACTERISTICS

##### Live:

- limited housing because the majority of the area is in the Agricultural Land Reserve (ALR);
- some smaller agricultural lots only have a home (i.e., they are currently not being farmed).

##### Work:

- farming is the major employment;
- includes the western portion of Fraserwood Industrial Park included in this neighbourhood;
- also includes some industrial lands along River Road and a mixed employment area on No. 6 Road.

##### Play:

- Northeast Bog Forest;
- Mayfair Lakes, Green Acres, Country Meadows and Mylora Golf Courses;
- community institutional uses along No. 5 Road (and a few other scattered locations in the ALR).

#### MANAGEMENT HIGHLIGHTS

##### Connected:

- consider improving transportation for farming vehicles;
- possible future Blundell Road interchange at Highway 99 and connection to the Fraser Lands;
- complete a north/south cross city trail connection.

##### Healthy:

- continue to recognize farming and agri-related industries;
- ensure adequate buffers on residential lands abutting agricultural properties;
- provide pedestrian, bicycle and rolling access to waterfront where possible.

##### Diverse:

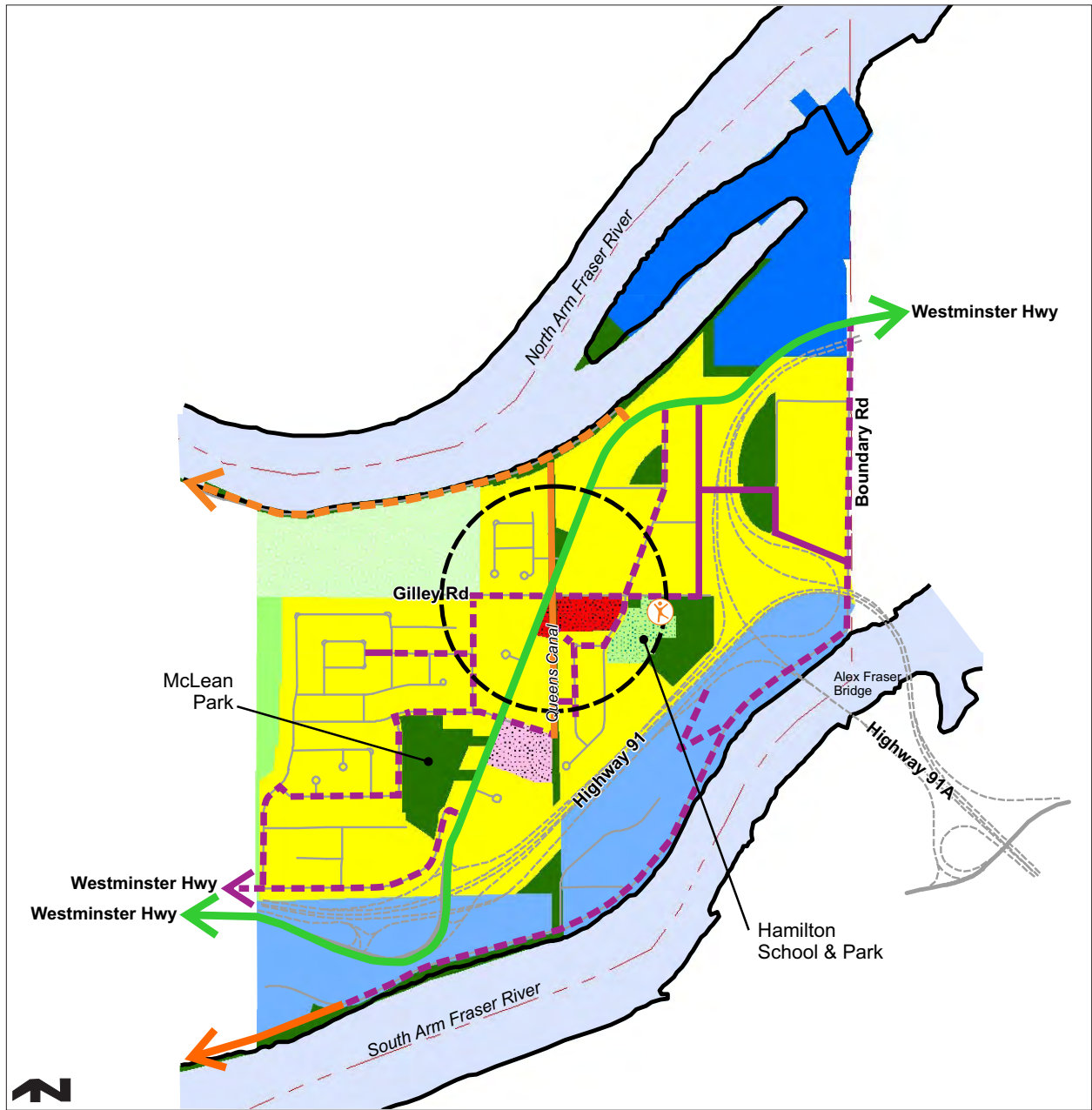
- encourage a variety of food production crops;
- mixed employment and industrial lands are not envisioned for commercial purposes and will not be converted to residential development.

#### POLICIES:

- a) prohibit principal residential dwellings;
- b) see McLennan Sub-Area Plan;
- c) see Resilient Economy;
- d) see Richmond Agricultural Viability Strategy (RAVS).



# 14. Hamilton



	Agriculture		Hamilton Neighbourhood Centre (future)
	Community Institutional		Hamilton Community Space
	Conservation Area		Existing Major Street Bike Route
	Industrial		Existing Greenway/Trail
	Mixed Employment		Future Greenway/Trail
	Neighbourhood Residential		Existing Neighbourhood Link - enhanced
	Neighbourhood Service Centre		Future Neighbourhood Link - unenhanced
	Park		
	School		



## 14. Hamilton

### MAIN CHARACTERISTICS

#### Live:

- Hamilton has a variety of smaller and larger single family residential lots (e.g., some coach houses on small lots; homes without sanitary sewer on large lots);
- there is also a significant amount of townhouse residential development and a few float homes.

#### Work:

- Hamilton Shopping Centre is the only commercial area;
- the eastern portion of Fraserwood Industrial Park is a key mixed employment area;
- Tree Island Industries and a new Trans Link bus facility are the major industrial lands.

#### Play:

- McLean Park and Queen's canal are the major park lands;
- Hamilton Elementary School and community space provide for the educational and recreational/cultural needs of the neighbourhood.

### MANAGEMENT HIGHLIGHTS

#### Connected:

- the Hamilton Area Plan update is underway for the Hamilton Neighbourhood Service Centre and Areas 2 and 3; to be completed in 2013;
- increase connectivity within the neighbourhood, along both arms of the Fraser River and to the rest of Richmond/New Westminster.

#### Healthy:

- continue to protect the farming (ALR) areas;
- ensure adequate buffers and sound proofing for residential uses along Highway 91.

#### Diverse:

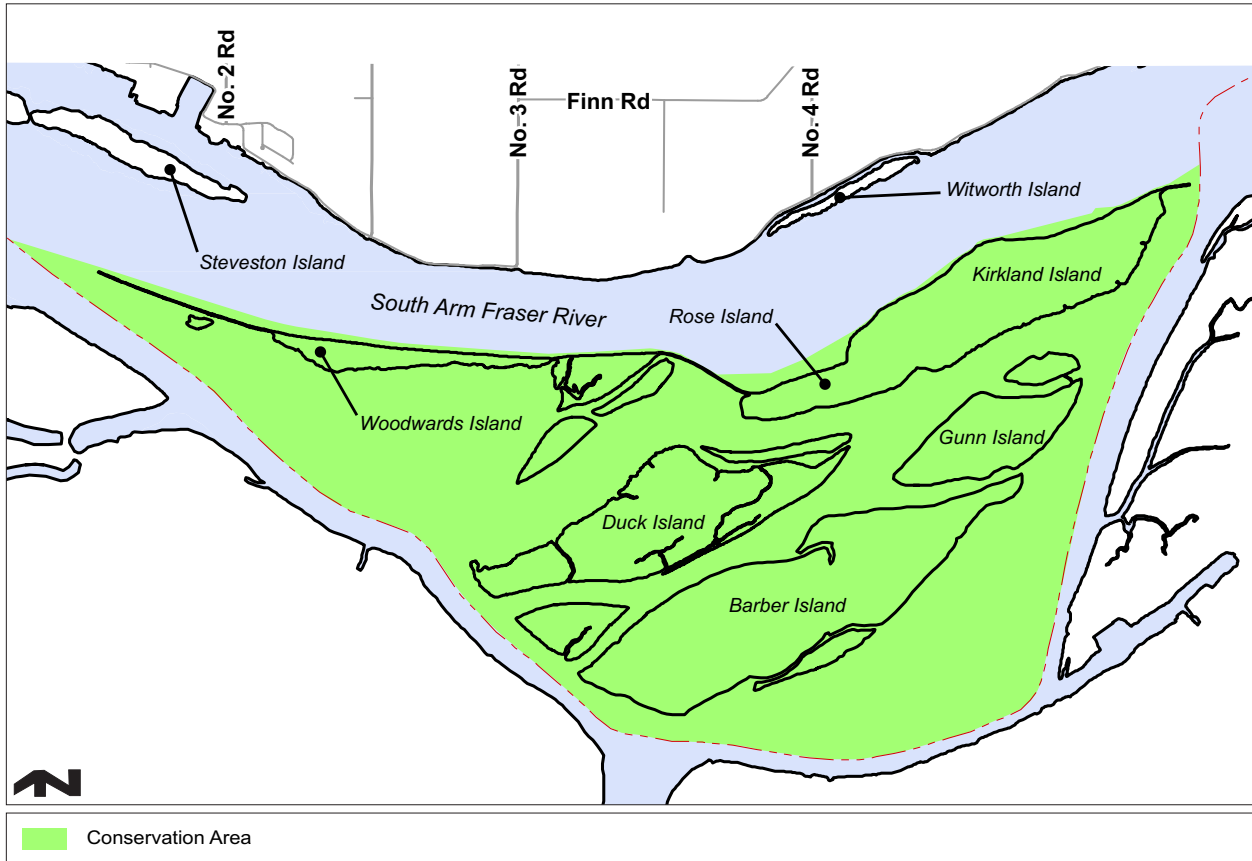
- potential redevelopment of Areas 2 and 3;
- mixed employment and industrial lands are not envisioned for commercial purposes and will not be converted to residential development.

### POLICIES:

- a) see Hamilton Area Plan.



## 15. South Arm Islands





## 15. South Arm Islands

### MAIN CHARACTERISTICS

#### Live:

- no residential.

#### Work:

- no employment (although dredging and recreational activities occur);
- some farming.

#### Play:

- recreational boating and activities.

### MANAGEMENT HIGHLIGHTS

#### Connected:

- improve waterfront trails;
- continued marine access only.

#### Healthy:

- potential limited farming use since some of islands are in the Agricultural Land Reserve (ALR).

#### Diverse:

- retain as OCP Conservation Area.

### POLICIES:

- a) see Island Natural Environment.





## 3.6 Specific Policies and Guidelines

### 3.6.1 Arterial Road Land Use Policy Bylaw 9603 2016/12/19

#### OVERVIEW:

The City supports densification along its arterial roads. The purpose of this densification is to locate developments on arterial road properties in close proximity to commercial services, public amenities, schools, and transit service. Two (2) guiding principles have been established for this form of developments:

1. Densification along major arterial roads should minimize traffic disruption by eliminating driveways along arterial roads;
2. Densification along minor arterial roads should result in no net increase in the number of driveways to maintain existing traffic flow.

This densification includes the following housing types:

- a) **Arterial Road Townhouse** – two (2) to three (3) storey townhouse units;
- b) **Arterial Road Row House** – attached dwelling units on fee simple lots (lane access);
- c) **Arterial Road Duplex/Triplex** – two (2) to three (3) attached dwelling units on one (1) lot (road access, no lane);
- d) **Arterial Road Compact Lot Duplex** – compact front to back duplex (lane access);
- e) **Arterial Road Compact Lot Coach House** – single detached dwelling with a coach house unit above a detached garage (lane access);
- f) **Arterial Road Compact Lot Single Detached** – single detached dwelling with or without a secondary suite (lane access).

#### OBJECTIVE 1:

**Direct appropriate development onto certain arterial roads outside the City Centre.**

##### 1. Arterial Road Land Use Policy Area

The 2041 OCP Arterial Road Land Use Policy only applies to the arterial roads in Central Richmond and Steveston shown on the Arterial Road Housing Development Map. It does not apply to lands located within the City Centre Area Plan (City Centre), the Agricultural Land Reserve (ALR) or Riverside Industrial Park.

##### 2. Additional New Arterial Road Areas

Additional new areas to the Arterial Road Land Use Policy outside Central Richmond and Steveston may be considered as part of the update of the applicable Area Plans (e.g., Bridgeport Area Plan; East Cambie Area Plan; West Cambie Area Plan; Hamilton Area Plan).

##### 3. Areas Not Within Arterial Road Policy

The Arterial Road Land Use Policy does not apply to “excluded areas” shown on the Arterial Road Housing Development Map. The excluded areas are:

- a) designated for uses other than Neighbourhood Residential on the City of Richmond 2041 OCP Land Use Map;



- b) zoned for other residential uses such as Edgemere Granny Flat or Coach House;
- c) located within a Single Family Lot Size Policy area that does not permit small lot subdivision or multiple-family development; or
- d) not considered fronting onto an arterial road.

#### **4. Arterial Road Housing Development Map**

The Arterial Road Housing Development Map will be used to guide townhouse, row house, duplex/triplex and compact lot (e.g., min. 9 m or 30 ft. wide lots with lane access, including single detached dwelling with or without a secondary suite, single detached dwelling with a coach house unit above a detached garage, and compact front to back duplex) developments. This Arterial Road Housing Development Map is developed based on the location criteria identified in the subsequent sections and this map is a guiding map that does not need to be amended to show new or re-designated development areas approved by Richmond City Council.

#### **5. Arterial Road Townhouse Areas**

Rezoning and Development Permit applications for Townhouse development may be considered in Central Richmond and Steveston where the site is located within walking distance of any one of the following sites identified on the Arterial Road Housing Development Map:

- a) 800 m (2,625 ft. or 10 minute walk) of a Neighbourhood Centre (e.g., Broadmoor, Blundell, Garden City, Seafair, Terra Nova or Ironwood Shopping Centres); or
- b) 800 m (2,625 ft. or 10 minute walk) of a City Community Centre (e.g., South Arm, Thompson, West Richmond or Steveston Community Centres); or
- c) 400 m (1,312 ft. or 5 minute walk) of a Commercial Service use (e.g., store, shopping plaza or gas/service station with a retail sales area); or
- d) 400 m (1,312 ft. or 5 minute walk) of a Public School (e.g., elementary or secondary school); or
- e) 400 m (1,312 ft. or 5 minute walk) of a Park on City or School Board lands (e.g., playing field or open space).

Townhouse development will not be considered in Central Richmond and Steveston on sites identified for any other Arterial Road Land Uses on the Arterial Road Housing Development Map, except if the proposed townhouse development is within 800 m (2,625 ft. or 10 minute walk) of a Neighbourhood Centre (e.g., shopping centre).

#### **6. Arterial Road Row House Areas**

Rezoning and Development Permit applications for Row House development may be considered in Central Richmond and Steveston on sites:

- a) where there is access to/from an operational municipal lane;
- b) located within 800 m (2,625 ft. or 10 minute walk) of a Neighbourhood Centre (e.g., Broadmoor, Blundell, Garden City, Seafair, Terra Nova or Ironwood).



### **7. Arterial Road Duplex/Triplex Areas**

Rezoning and Development Permit applications for Arterial Road Duplex/Triplex development may be considered in Central Richmond and Steveston on sites along minor arterial roads where there is no opportunity for lane establishment.

Arterial Road Duplex/Triplex development will not be considered in Central Richmond and Steveston on sites identified for Arterial Road Townhouse on the Arterial Road Housing Development Map.

### **8. Arterial Road Compact Lot Areas**

Rezoning and Development Permit applications, as required, for Arterial Road Compact Lot development (i.e., Arterial Road Compact Lot Single Detached, Arterial Road Compact Lot Coach House and Arterial Road Compact Lot Duplex) may be considered in Central Richmond and Steveston:

- a) where the site is located outside a Single Family Lot Size Policy;
- b) where there is access to/from an operational municipal lane.

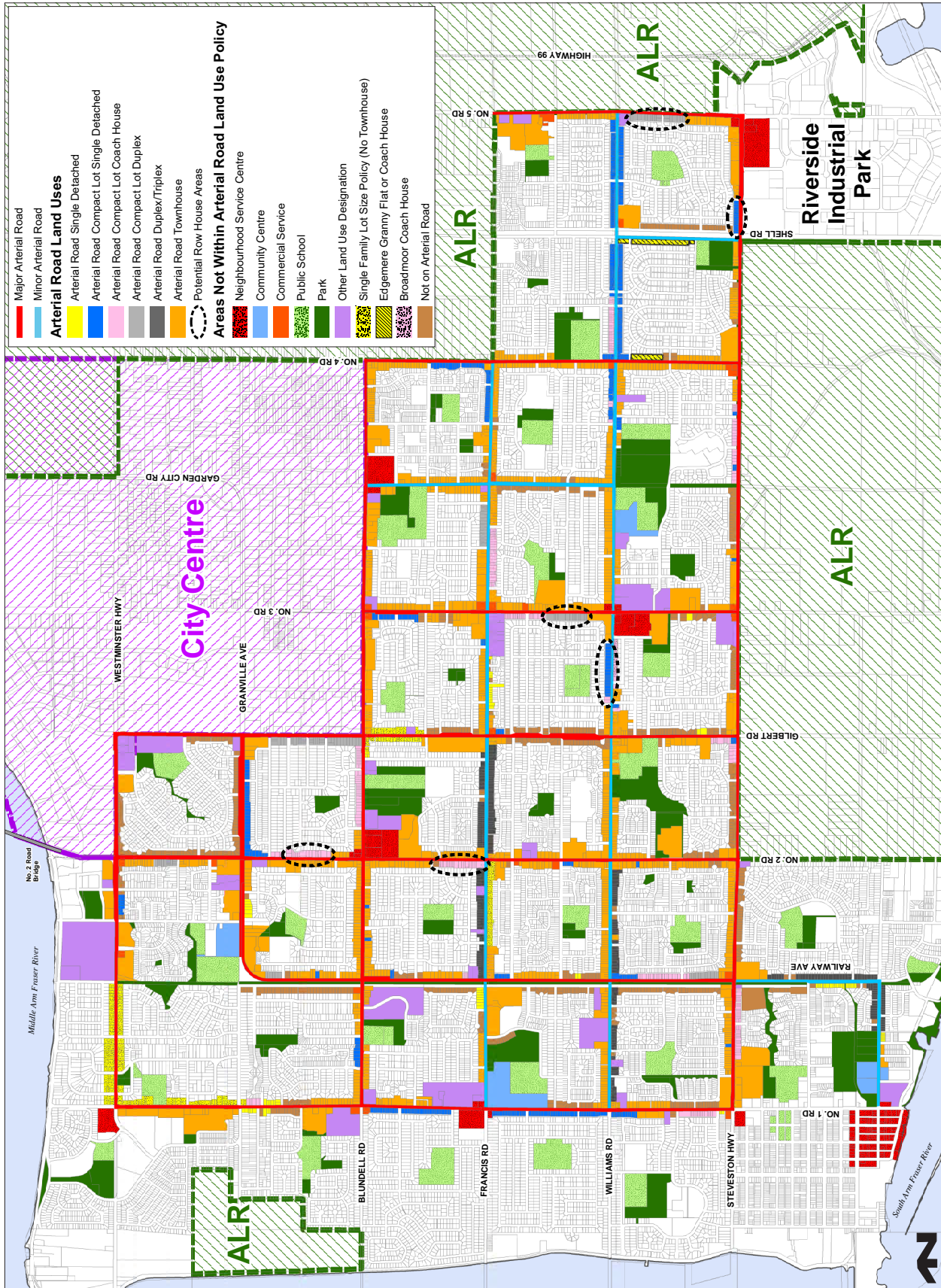
Compact lot development will not be considered in Central Richmond and Steveston on sites identified for Arterial Road Townhouse on the Arterial Road Housing Development Map.

### **9. Isolated Sites**

Rezoning and Development Permit applications, as required, for the construction of a coach house, granny flat or duplex/triplex along arterial road may be considered on isolated sites identified for Arterial Road Single Detached on the Arterial Road Housing Development Map based on its own merit.



# Arterial Road Housing Development Map





### Arterial Road Townhouse Development Requirements

All townhouse developments in Central Richmond and Steveston on the arterial roads shown on the Arterial Road Housing Development Map, should meet the following development requirements.

#### Land Assembly

1. Involve a land assembly with at least 50 m (164 ft.) frontage on a major arterial road and 40 m (131 ft.) frontage on a minor arterial road.

#### Residual Sites

2. Leave a residual site for future townhouse development with at least 50 m (164 ft.) frontage on a major arterial road and 40 m (131 ft.) frontage on a minor arterial road.

#### Newer Houses or Narrower Lots

3. Recognize that developing townhouses on lots with new houses (e.g., less than 10–20 years old) and/or with narrow frontages (e.g., less than 18 m or 59 ft.) will be more difficult, especially for land assembly purposes. Such new townhouse development may deviate from the minimum land assembly or residual site sizes, provided that:
  - a) the development site is an isolated (orphaned) site and is not able to consolidate with adjacent properties (e.g., surrounding lots recently redeveloped);
  - b) the development would not compromise the guiding principles of this policy and compromise the ability to consolidate access points;
  - c) it can be demonstrated that high quality development can be achieved in full compliance with the objectives of the Arterial Road Policy, Development Permit Guidelines, all other Townhouse Development Requirements, and the provisions of the Zoning Bylaw;
  - d) the form and character of the development, including massing and building height, are compatible with the adjacent existing developments;
  - e) density (i.e., in terms of total floor area and unit yield) and building height are reduced, where necessary, to ensure appropriate interface with adjacent existing single-family homes;
  - f) the proposed development provides a recognizable benefit to the area, such as tree retention and high quality pedestrian environment along the fronting streets.

#### Public Consultation

4. Include public consultation prior to Public Hearing where determined by Richmond City Council or City staff (e.g., if the site is the first townhouse development on that block of the arterial road; if it is expected that the surrounding property owners will want input into the development; if variances to any planning policy and/or zoning bylaw are being proposed; etc.).

#### Internal Lot

5. An internal lot facing and addressed off a local road may be included in a townhouse development if the lots facing and abutting the arterial road are less than 35 m (115 ft.) deep.





**Access—Arterial Roads Only**

- 6. Access should not be from a local road or lane, unless acceptable to the City.

**Shared Access**

- 7. Access may be required to be provided through or shared with adjacent townhouse development by means of a statutory right-of-way or other suitable arrangement to the City.

**Access Locations**

- 8. Driveway accesses should be located across from a local road or commercial access, where possible.
- 9. Townhouse access points should generally be located:
  - a) 35 m (115 ft.) to 50 m (164 ft.) from a local road;
  - b) 50 m (164 ft.) to 75 m (246 ft.) from a minor arterial road intersection;
  - c) 75 m (246 ft.) to 100 m (328 ft.) from a major arterial road intersection;
  - d) 80 m (262 ft.) to 100 m (328 ft.) from another townhouse access point.

**Additional Density**

- 10. Additional density along arterial roads (e.g., increase from the typical density of 0.60 FAR to a density of 0.70 FAR) may be considered:
  - a) on corner lots with required frontage improvements on two (2) or more streets and where significant road dedication is required, provided that the density bonus is used solely to balance the loss of land for road dedication; and/or
  - b) on a land assembly with more than 100 m (328 ft.) frontage on a major arterial road and 80 m (262 ft.) on a minor arterial road; and/or
  - c) on a site abutting a park or other non-residential land use if affordable housing is provided on site; and/or
  - d) where additional community benefits are provided (not including affordable housing contributions).
- 11. Additional density along arterial roads may also be considered for the provision of secured Low End Market Rental housing units, provided that:
  - a) the additional density is used for the provision of built Low End market Rental units secured by a Housing Agreement;
  - b) the built affordable housing units comply with the City's Affordable Housing strategy provisions related to unit sizes, tenant eligibility criteria and maximum rental rates;
  - c) the overall project complies with the form and character as per the Development Permit guidelines for arterial road townhouse developments.





Bylaw 10375  
2022/06/20

12. Additional density, up to 0.10 FAR above the base density set out in the OCP, may also be considered for the provision of secured market rental housing units provided that:
  - a) the additional density is used exclusively to secure market rental units;
  - b) where applicable, the purpose-built market rental housing units are secured by utilizing residential rental tenure zoning;
  - c) the proposed development demonstrates it integrates well with the neighbourhood and complies with OCP policies for the provision of market rental housing units.
13. The secured market rental housing component in a townhouse development is eligible for the following incentives:
  - exemption from the affordable housing contribution requirement;
  - reduced parking requirements; and
  - exemption from public art contributions.

#### **Development Permit**

14. A Development Permit is required for all townhouse developments.

#### **Arterial Road Row House Development Requirements**

All row house developments in Central Richmond and Steveston on the arterial roads shown on the Arterial Road Housing Development Map, should meet the following development requirements.

#### **Land Assembly**

1. Involve a land assembly with at least 19.65 m (64 ft.) frontage on an arterial road; or involve a land assembly including a corner lot with a minimum overall development site frontage of 21.45 m (70 ft.) along an arterial road; in order to facilitate a subdivision to accommodate a minimum of three (3) row house lots.

#### **Residual Sites**

2. Leave a residual site for future row house development with at least 19.65 m (64 ft.) frontage along an arterial road for an internal site and at least 21.45 m (70 ft.) frontage along an arterial road for a corner site.

#### **Lot Configuration**

3. Minimum lot depth must be at least 30 m (98 ft.) after lane dedication, where applicable.

#### **Density**

4. The maximum density for row house developments is 0.6 FAR.

#### **Lane Access**

5. Vehicle access should be from a functional municipal lane.

#### **Public Consultation**

6. Include public consultation prior to Public Hearing where determined by Richmond City Council or City staff (e.g., if the site is the first row house development on that block of the arterial road; if it is expected that the surrounding property owners will want input into the development; if variances to any planning policy and/or zoning bylaw are being proposed; etc.).



**Development Permit**

- 7. A Development Permit is required for all row house developments.

**Arterial Road Duplex/Triplex Development Requirements**

All duplex/triplex developments in Central Richmond and Steveston on the arterial roads shown on the Arterial Road Housing Development Map, should meet the following development requirements.

**Land Assembly**

- 1. Existing single family lot with at least 13.4 m (44 ft.) frontage on a minor arterial road may be redeveloped with a front to back duplex/triplex.
- 2. A land assembly with at least 20.7 m (68 ft.) frontage on a minor arterial road may be redeveloped into two (2) front to back duplex or triplex lots with a shared access, by means of a statutory right-of-way or other suitable arrangement to the City.

**Internal Lot**

- 3. An internal lot facing and addressed off a local road may be included in a duplex/triplex development fronting onto a minor arterial road if the adjacent corner lot abutting the arterial road is less than 35 m (115 ft.) wide or deep measured from the property line along the arterial road.

**Lot Size**

- 4. The minimum lot area for a duplex development is 464.5 m<sup>2</sup> (5,000 ft<sup>2</sup>) and the minimum lot area for a triplex development is 743.2 m<sup>2</sup> (8,000 ft<sup>2</sup>).

**Density**

- 5. The maximum density for duplex/triplex developments is 0.6 FAR.

*Bylaw 9864  
2018/06/18*

**Access**

- 6. Duplex/triplex access points should generally be located at least 12 m (39 ft.) from a road intersection.
- 7. For corner lots, access should be from a local road, where appropriate.

**Public Consultation**

- 8. Include public consultation prior to Public Hearing where determined by Richmond City Council or City staff (e.g., if the site is the first duplex or triplex development on that block of the arterial road; if it is expected that the surrounding property owners will want input into the development; if variances to any planning policy and/or zoning bylaw are being proposed; etc.).

**Development Permit**

- 9. A Development Permit is required for all duplex/triplex developments.

**Arterial Road Compact Lot Development Requirements**

All compact lot developments in Central Richmond and Steveston on the arterial roads shown on the Arterial Road Housing Development Map, should meet the following development requirements.

**Lane Access**

- 1. All compact lot developments must have vehicle access from a functional municipal lane.



**Internal Lot**

- 2. An internal lot facing and addressed off a local road may be included in a compact lot development fronting onto an arterial road if it is located between the arterial road and the proposed back lane as shown on the Lane Network Map.

**Compact Lot Single Detached**

- 3. Single detached housing with a secondary suite is permitted on all compact lots (e.g., min. 9 m or 30 ft. wide lots).

**Compact Lot Coach House**

- 4. Single detached housing with a detached coach house unit is permitted on compact lots with at least 35 m (115 ft.) lot depth.

**Compact Lot Duplex**

- 5. A front to back duplex is permitted on compact lots with at least 40 m (131 ft.) lot depth.
- 6. Duplex development may be considered on corner sites with lane access.
- 7. A Development Permit is required for all compact lot duplex developments.

*Bylaw 9864  
2018/06/18*

**Density**

- 8. The maximum density for compact lot developments is 0.6 FAR.

*Bylaw 9864  
2018/06/18*

**Corner Lot Building Facades**

- 9. Appropriate design treatment to both street facades shall be provided when the building is on a corner. The design of a corner should be unique and incorporate special features.

**Landscape Plan**

- 10. For Compact Lot Single Detached and Compact Lot Coach House developments, a landscape plan, prepared by a registered landscape architect, must be provided as a condition of Rezoning. Landscaping in Compact Lot Duplex developments is subject to a Development Permit.

**Landscape Cost Estimates**

- 11. The landscape architect must submit a cost estimate of the proposed landscaping (including fencing, paving, installation costs and a 10% contingency) with the landscape plan as a condition of Rezoning.

**Landscape Security**

- 12. Security in the amount of the cost estimate submitted by the landscape architect for landscaping must be provided as a condition of Rezoning.

**Grade—Front Yard**

- 13. The site grade between the City's sidewalk and the landscaping along the front property line should be the same.

**Grass Strip—Front Yard**

- 14. Wherever possible, a grassed strip with at least one (1) deciduous tree (minimum 6 cm or 2.5 in. caliper) per lot should be installed along the front property line (see New Trees—Front Yard).



**Existing Tree and Hedge Retention**

15. Wherever possible, existing trees and hedges should be retained, particularly if the trees are in the front yard and the hedges are in the side yard.

**Replacement Trees**

Bylaw 10339  
2022/03/21

16. Where existing trees are being removed, the replacement trees shall:

- a) meet the City’s tree replacement policy requirements as specified in Tree Protection Bylaw 8057;
- b) comply with the minimum planting sizes specified in the City’s Tree Protection Bylaw, unless approved otherwise by the Director of Development or designate;
- c) include an appropriate combination of coniferous and deciduous trees.

**New Trees—Front Yard**

17. In addition to the aforesaid landscaping along the front property line, one (1) deciduous tree (minimum 6 cm or 2.5 in. caliper) or one (1) coniferous tree (minimum height 3.5 m or 11.5 ft.) is to be planted on each lot in the front yard.

**Coniferous Trees**

18. Coniferous trees must be sized and spaced appropriately and be subject to Crime Prevention Through Environmental Design (CPTED) principles.

**Fencing—Front Yard**

19. Fencing in the front yard is limited to a maximum height of 1.2 m (3.94 ft.) and must be picket, wicket or post-rail rather than solid panel, which could be setback from the front property line if possible.

**Flowers and Low Lying Landscaping—Front Yard**

20. Fencing should incorporate flower beds, flowering shrubs and other low lying landscaping to provide improved articulation.

**Decorative Features—Front Yard**

21. Decorative arbours/brackets/trellis features may be used to further articulate the fencing provided that they are in scale with and totally complementary to the fencing details.

**Planting—Front Yard**

22. All front yard areas and front property lines must be planted with a combination of lawn, flower beds, flowering shrubs and ground cover to provide seasonal interest and water permeability.

**Shrubs—Front Yard**

23. If individual shrubs are planted in the front yard, they must be of a low height that will not exceed 1.2 m (3.94 ft.) and must be located behind any fencing on the front property line.

**Hedges—Front Yard**

24. Continuous hedges are not permitted in the front yard.



### **Walkways/Pathways—Front Yard**

25. Walkways/pathways from the arterial road to the entrance of the single family residence or coach house are not to consist of asphalt materials (e.g., should be aggregate concrete, stamped concrete, paving stones, pervious paving or other acceptable material to the City).

### **Lane Network for Compact Lots**

#### **Lane Network Map**

1. The Lane Network Map identifies areas where lane establishment and/or extension are possible.

#### **Connecting Lane**

2. Where a city block has been identified for Compact Lot development on the Arterial Road Housing Development Map but has limited opportunity for the existing lane to be extended to a local road, a connecting lane to an arterial road may be considered.

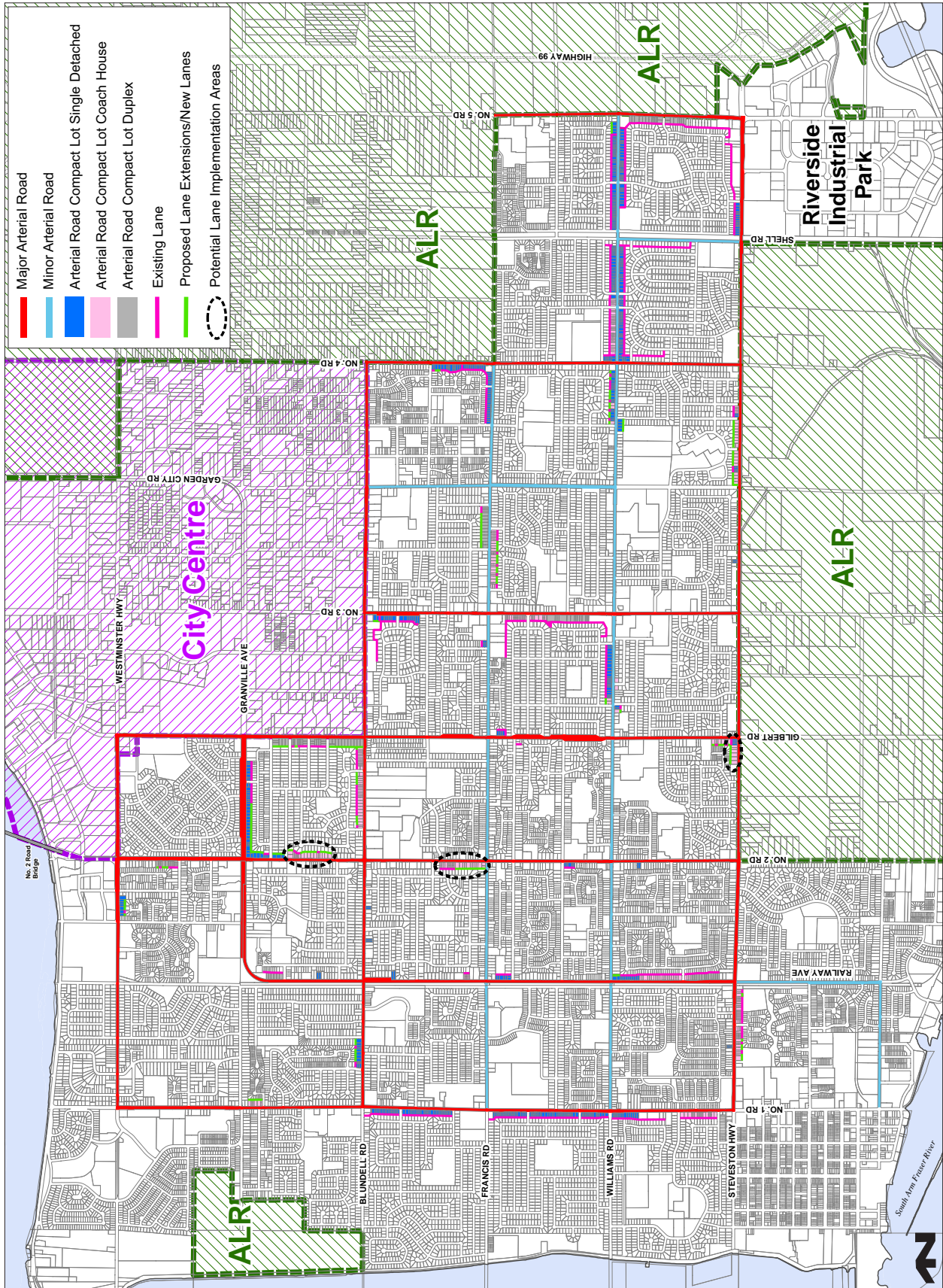
#### **Local Lane Implementation Strategy**

3. Where a new connecting lane between the rear lane and the arterial road is required, a local lane implementation strategy may be established to ensure that the initial developers will be able to recover their lane costs from later developments. Potential local lane implementation areas are identified on the Lane Network Map.
4. The location of the Connecting Lane will be determined at the time of a development application based on:
  - a) the overall access needs for the entire block;
  - b) location of the existing driveways;
  - c) type of traffic movements appropriate for the block.
5. Only one (1) additional lane access per block will be considered.
6. At the time of the development, the first developer will dedicate and build the Connecting Lane; the costs of land and construction would be reimbursed by later benefiting developers.
7. Future developments will contribute lane costs on a proportional basis (i.e., based on their development site area).





# Lane Network Map







### 3.6.2 Broadmoor Neighbourhood Centre Policies

#### OVERVIEW:

In 2010, the City approved a plan to densify the Broadmoor shopping centre. This plan underwent considerable public consultation and was well received by the neighbourhood. As part of this process, specific objectives, policies and Development Permit Guidelines were included in the OCP.

#### OBJECTIVE 1:

To establish policies for the Broadmoor Neighbourhood Centre to guide its long-term redevelopment.

#### POLICIES:

a) general:

- the redevelopment of the Broadmoor Neighbourhood Centre is to be consistent with the OCP policies and Development Permit (DP) Guidelines. The Council approved “Broadmoor Neighbourhood Service Centre Master Plan” dated April 7, 2010 has been prepared to guide Centre redevelopment. The 2041 OCP policies and DP Guidelines shall prevail, in the event of a conflict;

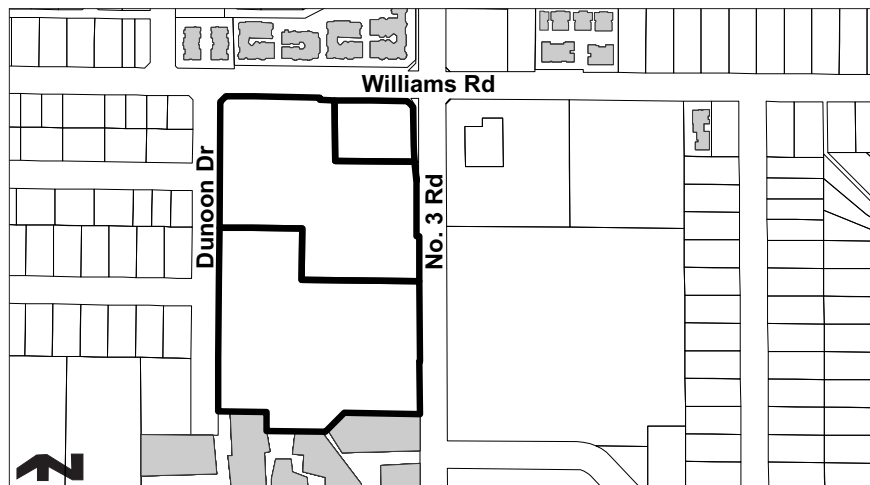
b) precedence:

- if there is a conflict with respect to a land use designation between the 2041 OCP Land Use Map and the more specific maps referred to in this section, the more specific map designations referred to in this section shall take precedence;

c) Broadmoor Neighbourhood Service Centre Area:

- see map;

#### Broadmoor Neighbourhood Centre Area Map



d) vision:

- the long-term Broadmoor Neighbourhood Centre Vision is: “A vibrant, accessible and sustainable mixed use hub where people will be able to live, work and meet their daily needs”;



e) flexibility:

- over the anticipated 30 year redevelopment period, as the Shopping Centre redevelops, owners clarify their proposals, more specific technical studies are completed and requirements become better known, Council may modify the OCP policies and DP Guidelines, and Master Plan, as necessary;

f) mix and range of land uses:

- generally, the mix of land uses will be 60% residential with a variety of housing types and 40% commercial (e.g., retail and office);
- the Broadmoor Neighbourhood Service Centre land uses are to be as per the OCP Definitions (e.g., Neighbourhood Service Centres);

g) density:

- base: The base density will be 0.5 Floor Area Ratio (FAR);
- maximum density: The maximum overall density will be 1.5 FAR and minor density variations across the site may be allowed, subject to Council approval;

h) building height:

- generally, the maximum building height of the redeveloped Broadmoor Neighbourhood Service Centre will not exceed 6 storeys (e.g., 24.3 m [80 ft.]) and the whole Centre area is not to be redeveloped to 6 storeys (e.g., 6 storeys along the arterials, lower elsewhere);

i) sustainability:

- Broadmoor Neighbourhood Service Centre redevelopment is to incorporate sustainability features (e.g., Leadership in Energy and Environmental Design);

j) Development Permit Guidelines:

- Shopping Centre redevelopment is to be consistent with the OCP Development Permit Guidelines;

k) City infrastructure:

- the infrastructure to support the redevelopment of the Centre shall be as per City requirements and technical studies;

l) financing infrastructure:

- the financing of Centre infrastructure is to be primarily by developers in a variety of ways including Development Cost Charges (DCCs) (for roads, water, sanitary, drainage, parks) and other mechanisms (e.g., service agreements, latecomer charges, phased development agreements);

Bylaw 9792  
2018/02/19

m) financing community amenities:

- the financing of community amenities (e.g., affordable housing, child care, community planning services, community beautification above and beyond the City's standard servicing agreement requirements) is to be primarily funded by developers, through density bonusing, phased development agreements and other means;



Bylaw 9792  
2018/02/19

- Density Bonusing: Additional density above a base density of 0.5 FAR, may be allowed where a developer:
  - satisfies the applicable City Affordable Housing Strategy contribution requirements;
  - provides, as per the Neighbourhood Service Centre Master Plan, a Broadmoor Amenity Contribution of \$25.47 per m<sup>2</sup> (\$2.37 per ft<sup>2</sup>) of the total net building floor area above 0.5 FAR to be allocated as follows:
    - for Child Care: \$12.70 per m<sup>2</sup> (\$1.18 per ft<sup>2</sup>);
    - for Community Beautification: \$9.79 per m<sup>2</sup> (\$0.91 per ft<sup>2</sup>);
    - for Other Amenities: \$3.01 per m<sup>2</sup> (\$0.28 per ft<sup>2</sup>);
- Phased Development Agreements and other mechanisms (e.g., voluntary contributions) may be used to obtain funds with Community Planning Contributions of \$3.01 per m<sup>2</sup> (\$0.28 per ft<sup>2</sup>) of the total net building floor area;
- on February 28, 2019, and then by February 28 every two years thereafter, the above contribution rates are to be revised by adding the annual inflation for the preceding two calendar years by using the Statistics Canada *Vancouver Construction Cost Index – Institutional* inflation rate for adjusting the above contribution rates, except that the Statistics Canada *Vancouver Consumer Price Index – All Items* inflation rate be used for adjusting the Community Planning Contribution rate; with revised rates published in a City Bulletin.

### 3.6.3 Noise Management

#### OVERVIEW:

There are several types of urban noise, which affect Richmond:

- noise from construction activity;
- land use noise from the Canada Line on residential uses and certain land uses (e.g., industrial uses on residential uses);
- ambient noise, such as traffic noise;
- aircraft noise.

#### Construction Noise

The City's Noise Bylaw regulates the hours of construction activity.

#### Land Use Noise

It is increasingly important to minimize unwanted noise from the Canada Line on nearby residential uses and from new industrial and commercial uses on any nearby residential uses, and by new multiple family residential uses on nearby industrial and commercial uses.

#### Ambient Noise

It is increasingly important that noise issues are addressed as the volume of City activity and the number of people affected increases.

#### Airport Noise

Airport noise falls under the Vancouver International Airport's (VIAA) jurisdiction. Both the VIAA and the City work towards managing airport noise and aircraft noise sensitive development in a complementary manner.



The City's goal is to:

- better co-ordinate and balance City, VIAA and other stakeholder interests to achieve economic, social development, and environmental protection, while minimizing aircraft noise related complaints and legal challenges to restrict or curtail airport operations;
- enable the VIAA to continue to operate and expand as a World Class Gateway airport and business which operates on a 24-hour per day (daytime and nighttime) basis;
- create high quality livable environments;
- improve aircraft noise sensitive land use and mitigation requirements;
- enable residents who choose to live in airport noise sensitive areas to:
  - be aware of the airport noise characteristics which may affect them and the risks that they are choosing to accept;
  - not experience unacceptable airport noise nuisance through proper building construction techniques and indoor liveability noise standards, given their conscious choice to live in such areas;
  - have little reason to complain or bring legal challenges against the City or the VIAA regarding airport noise nuisance.

An effective aircraft noise sensitive land use and area management system will establish:

- areas where aircraft noise sensitive land uses will be prohibited;
- areas where aircraft noise sensitive land uses will be considered, which may or may not actually be allowed based upon City priorities and requirements;
- for areas where aircraft noise sensitive land uses will be considered, requirements to better:
  - match aircraft noise sensitive uses to the different aircraft noise areas;
  - mitigate indoor aircraft noise;
  - minimize aircraft noise outdoors;
  - notify landowners and the public (e.g., developers, existing and potential residents) regarding the effects of aircraft noise and of the aircraft noise characteristics of areas in which they may choose to live, so that complaints and legal challenges to curtail airport operations will be avoided.

### **OBJECTIVE 1:**

**Manage urban development noise to maintain and enhance livability.**

### **POLICIES:**

- a) establish guidelines to reduce the noise exposure for multiple family residential development along high traffic streets;
- b) continue to encourage traffic noise reduction (e.g., signage to request truck drivers to avoid using engine brakes within West Richmond);
- c) reduce exposure to noise from construction by reviewing the Noise Bylaw to improve regulation and enforcement;



- d) preserve and create positive acoustic environments in public spaces, such as sound sculptures or acoustic playgrounds in City parks;
- e) establish quiet recreational areas to meet emerging needs for refuge from urban noise;
- f) foster public courtesy regarding noise issues and promote respect for the City's Noise Bylaw through educational campaigns in partnership with regional health authorities.

## **OBJECTIVE 2:**

**Mitigate noise from the Canada Line in nearby residential uses, and between industrial and commercial uses on nearby residential uses and vice versa.**

## **POLICIES:**

- a) to mitigate Canada Line Noise in adjacent New Multiple Family Residential Buildings (rezonings, Development Permits):
  - all new multiple family residential developments on sites located within 100 m (328 ft.) of the Canada Line right of way are required to achieve CMHC interior noise standards and ASHRAE 55-2004 "Thermal Environmental Conditions for Human Occupancy", and require noise covenants. Acoustical and thermal reports are to be required during the development review process to ensure that these mitigation standards are achieved;
  - where possible, all multiple family residential units should not be oriented directly adjacent to Canada Line guide way (avoid residential units at the guide way elevation);
- b) for all New Multiple Family Residential Developments (rezonings, Development Permits) within 30 m (98.4 ft.) of Commercial, Industrial and Mixed Use sites:
  - to mitigate noise from commercial, industrial and mixed uses within 30 m (98.4 ft.) of new multiple family residential uses:
    - all new multiple family residential units are required to achieve CMHC interior noise standards and ASHRAE 55-2004 "Thermal Environmental Conditions for Human Occupancy";
    - the registration of commercial, industrial and mixed use noise indemnity covenant on all new multiple family residential units;
- c) for New Commercial, Industrial and Mixed Uses (rezonings, Development Permits) within 30 m (98.4 ft.) of any Residential Use:
  - to mitigate unwanted noise on residential properties within 30 m (98.4 ft.) from commercial, industrial and mixed use areas, all new commercial, industrial and mixed use developments shall demonstrate that:
    - the building envelope is designed to avoid noise generated by the internal use from penetrating into residential areas that exceed noise levels allowed in the City's current Noise Bylaw;
    - noise generated from rooftop HVAC units will comply with the City's current Noise Bylaw;



d) after the OCP is approved, City staff will work with the Province to explore bringing forth Building Bylaw amendments to require, at the Building Permit stage, that commercial, industrial and mixed uses mitigate their noise on nearby residential uses, and that residential uses mitigate noise generated by nearby commercial, industrial and mixed uses. These improvements will complement the City Noise Bylaw and minimize nuisance and the need for enforcement.

**Summary**

The above requirements are summarized below:

	For new multiple family residential development within 100 m of the Canada Line ROW	For new multiple family development adjacent to commercial, industrial or mixed uses	For new commercial, industrial and mixed use developments adjacent to any residential areas
Noise covenants to be registered	Y	Y	N
Sound mitigation requirements	Y	Y	Y
Thermal comfort requirements	Y	Y	N
Noise generation within City Bylaw requirements	Y	Y	Y

**OBJECTIVE 3:**

To encourage the effective management of aircraft noise at the source.

**POLICIES:**

- a) continue to cooperate with the VIAA to manage and reduce aircraft noise to minimize its disturbance to the community;
- b) encourage the VIAA to reduce aircraft noise at the source, where feasible;
- c) encourage regular reviews and implementation of the VIAA’s Noise Management Plan to achieve maximum noise reduction;
- d) ensure community input through participation in the VIAA Noise Management Committee initiatives.





**OBJECTIVE 4:**

To manage aircraft noise sensitive development, areas and nuisance.

**POLICIES:**

**Terms**

“Aircraft noise sensitive land uses” include:

Use Category	Meaning
Residential	Defined as all residential uses, including live/work and work/live uses, nursing homes.
School	Defined as public and private places in which K-12 education is offered, as per provincial requirements.
Day Care	Defined as licensed day care uses.
Hospital	Defined as places which provide medical services, as per provincial requirements where patients stay overnight or for longer periods of time.

**Aircraft Noise Sensitive Development Management**

a) Relationship to Other OCP Policies

The Aircraft Noise Sensitive Development Policies, Table and Map are to be applied in conjunction with other OCP policies (e.g., OCP and area plan policies). All OCP policies are to be met.

For example, where:

- aircraft noise sensitive developments (e.g., residential) are proposed, the Aircraft Noise Sensitive Development Policies, Table and Map also apply;
- non-aircraft noise sensitive developments (e.g., assembly, places of worship, offices, commercial, institutional uses) are proposed and not affected by the Aircraft Noise Sensitive Development Policies, Table and Map, the other OCP and City policies apply.

b) Non-Aircraft Noise Sensitive Uses

Developers and property owners of non-aircraft noise sensitive uses (e.g., assembly, places of worship, offices, commercial, institutional uses) are encouraged to:

- consider:
  - the location of their developments in relation to existing aircraft noise areas;
  - the location of their developments in relation to possible future aircraft noise areas;
  - the degree of sensitivity of the uses in their development to aircraft noise;
- where appropriate, provide aircraft noise mitigation, to minimize aircraft noise nuisance.



c) Conformity

Aircraft noise sensitive land uses shall conform to the Aircraft Noise Sensitive Development Policies, Table and Map, and related City policies (e.g., Area Plans) and requirements (e.g., Zoning and Development Bylaw).

d) The Aircraft Noise Sensitive Development Table

Aircraft noise sensitive land uses are to be managed as indicated in the table entitled: Aircraft Noise Sensitive Development Table.

e) Aircraft Noise Sensitive Development Map

The map entitled “Aircraft Noise Sensitive Development Map” indicates where:

- the OCP aircraft noise sensitive land uses policy applies spatially;
- certain aircraft noise sensitive land uses are prohibited;
- certain aircraft noise sensitive land uses (e.g., residential) may be considered;
- City aircraft noise conditions, mitigation and insulation requirements apply.

f) Caution

**The “Aircraft Noise Sensitive Development Map” means that, in the areas where aircraft noise sensitive land uses are “considered”, those uses (e.g., residential) may or may not actually be developed, due to a wide range of City priorities and requirements, and senior government, stakeholder and private sector decisions.**

g) Aircraft Noise Sensitive Development Considerations

In areas where aircraft noise sensitive land uses may be considered, the following factors are to be taken into account, to determine if, where, how, to what degree, and to which requirements, aircraft noise sensitive land uses may occur in a specific location:

A. GROWTH NEEDS

1. Richmond’s limited land resource base.
2. As Richmond develops, the need for a wide range of land uses (e.g., assembly, residential, commercial, industrial, agricultural, office, institutional).
3. Canada Line and Oval supportive development.

B. CITY CORPORATE NEEDS

1. City Corporate land use and development needs (e.g., for community facilities and safety buildings, parks, infrastructure, environmental protection).
2. Achieving City policies.



### C. CORPORATE POLICIES

1. The City's Corporate Vision—appealing, livable, well managed.
2. City Strategies which include the:
  - Agricultural Viability Strategy;
  - Economic Development Strategy;
  - Land Acquisition Strategy;
  - 2010 Richmond Trail Strategy;
  - Social Development Strategy;
  - Recreational Strategy;
  - Waterfront Strategy;
  - 2022 Parks & Open Space Strategy.

### D. COMMUNITY PLANNING CONSIDERATIONS

1. The Official Community Plan including:
  - Neighbourhood Residential policies;
  - High-Density Mixed Use policies;
  - Neighbourhood Service Centre policies;
  - Area Plan policies (e.g., City Centre).
2. Livability considerations:
  - where aircraft noise sensitive land uses are permitted in an area or on a site, they are to achieve a high level of livability and maximize aircraft noise mitigation requirements;
  - the livability and aircraft noise mitigation considerations include:
    - varying the development mix:
      - mixing aircraft noise sensitive development (e.g., residential) with other non-aircraft noise sensitive land uses (e.g., parks, commercial, office);
      - mixing various aircraft noise sensitive developments including residential land uses (e.g., single family, mid-rise, high-rise, live/work, work/live);
    - varying the density of aircraft noise sensitive land uses;
    - varying the degree of aircraft noise sensitive land use site coverage;
    - orienting and facing land uses and buildings to minimize aircraft noise;
    - ensuring land use compatibility;
    - encouraging high quality, innovative urban design and landscaping.
3. The City's Public Hearing (e.g., OCP, rezoning), subdivision, Development Permit, Building Permit approval processes.



E. SERVICES AND INFRASTRUCTURE

1. The availability of City services and infrastructure.
2. The availability of Community amenities, parks, and facilities.

F. STAKEHOLDER CONSIDERATIONS

1. Transport Canada guidelines.
2. VIAA considerations.

G. OTHER

Other, as determined by Council.

h) Interpretation

Where necessary, Council, or its designate, shall make the final decision regarding interpretations of the aircraft noise sensitive development policies, guidelines, table, and maps (e.g., exact boundaries of areas).

i) Improved City-VIAA Co-operation

The City will continue to co-operate with the VIAA, to improve common City-VIAA airport and aircraft noise research, modelling, interior noise level limits, covenants, full disclosure statements, noise insulation standards, building design elements, community design elements, public document notification and the Richmond-VIAA Accord.



## OCP Aircraft Noise Sensitive Development

### A. AIRCRAFT NOISE SENSITIVE LAND USES DEFINED:

Residential	Defined as all residential uses, including live/work, work/live uses, nursing homes.
School	Defined as public and private places in which K-12 education is offered, as per provincial requirements.
Day Care	Defined as licensed day care uses.
Hospital	Defined as places which provide medical services, as per provincial requirements, where patients stay overnight or for longer periods of time.

### B. AIRCRAFT NOISE SENSITIVE AREAS Bylaw 9525 2016/03/21

Areas <small>NOTE 1</small>	Reference NEF Contours	Objective	Requirements
1A. Restricted Area.	Approximately greater than NEF 35.	<ul style="list-style-type: none"> <li>• <b>Objective: To avoid all new aircraft noise sensitive land uses.</b></li> <li>• New Aircraft Noise Sensitive Land Uses are prohibited.</li> </ul>	<ul style="list-style-type: none"> <li>• Restrictive Covenants.<sup>NOTE 2</sup></li> </ul>
1B. Restricted Area.	Approximately NEF 30 to NEF 35.	<ul style="list-style-type: none"> <li>• <b>Objective: To avoid all new residential land uses.</b></li> <li>• New Residential Land Uses are prohibited.</li> <li>• Consider other aircraft noise sensitive land uses.</li> </ul>	<ul style="list-style-type: none"> <li>• Restrictive Covenants.<sup>NOTE 2</sup></li> <li>• An Acoustic Report.<sup>NOTE 3</sup></li> <li>• Noise mitigation incorporated in construction.</li> </ul>
2. High Aircraft Noise Area.	Approximately NEF 30 to NEF 40.	<ul style="list-style-type: none"> <li>• <b>Objective: To consider all new aircraft noise sensitive land uses, except new single family.</b></li> <li>• All new Aircraft Noise Sensitive Land Uses may be considered, except new single family, more specifically:                             <ul style="list-style-type: none"> <li>- new single family detached development requiring amendments to the OCP, Area Plan, or existing zoning other than "Single Detached (RS1; RS2)" are prohibited, however,</li> <li>- rezonings from one "Single Detached (RS1/RS2)" sub-zone to:                                     <ul style="list-style-type: none"> <li>- another "Single Detached (RS1; RS2)" sub-zone (e.g., RS1/A-K; RS2/A-K); or,</li> <li>- the "Compact Single Detached (RC1; RC2)" zone;</li> </ul> </li> </ul>                             may be considered, subject to all applicable Policies (e.g., Sub-Area Plans, Single-Family Lot Size Policies, and Richmond Zoning Bylaw 8500).                         </li> </ul>	<ul style="list-style-type: none"> <li>• Restrictive Covenants.<sup>NOTE 2</sup></li> <li>• An Acoustic Report.<sup>NOTE 3</sup></li> <li>• Noise mitigation incorporated in construction.</li> <li>• Mechanical ventilation incorporated in construction.</li> <li>• Central air conditioning system incorporated in construction.<sup>NOTE 4</sup></li> <li>• Required Design Guidelines for siting and/or replacement of outdoor amenity areas with indoor amenity areas (e.g., enclosed balconies and increased size and type of indoor amenity areas).</li> </ul>



Areas NOTE 1	Reference NEF Contours	Objective	Requirements
3. Moderate Aircraft Noise Area.	Approximately NEF 30 to NEF 35.	<ul style="list-style-type: none"> <li>• <b>Objective: To consider all new aircraft noise sensitive land uses.</b></li> <li>• All Aircraft Noise Sensitive Land Uses may be considered.</li> </ul>	<ul style="list-style-type: none"> <li>• Restrictive Covenants.<sup>NOTE 2</sup></li> <li>• An Acoustic Report.<sup>NOTE 3</sup></li> <li>• Noise mitigation incorporated in construction.</li> <li>• Mechanical ventilation incorporated in construction.</li> <li>• Central air conditioning capability (e.g., ductwork).<sup>NOTE 4</sup></li> </ul>
4. Aircraft Noise Notification Area.	Approximately NEF 25 to NEF 30.	<ul style="list-style-type: none"> <li>• <b>Objective: To consider all aircraft noise sensitive land uses.</b></li> <li>• All Aircraft Noise Sensitive Land Uses may be considered.</li> </ul>	<ul style="list-style-type: none"> <li>• Restrictive Covenants.<sup>NOTE 2</sup></li> <li>• An Acoustic Report.<sup>NOTE 3</sup></li> <li>• Noise mitigation incorporated in construction (as required).</li> </ul>
<p><b>Residential Uses on the Fraser River</b>                      New residential uses (e.g., house boats) on the Fraser River which are above the 30+ NEF contour are only allowed in certain areas (see OCP Map).</p>			
Not designated.	Approximately less than NEF 25.	<ul style="list-style-type: none"> <li>• <b>Objective: No aircraft noise sensitive concerns or considerations.</b></li> <li>• All Aircraft Noise Sensitive Land Uses may be considered.</li> </ul>	Not required.

**C. PLANNING CONDITIONS**

Single-hatched	Approximately NEF 35 to NEF 40.	<ul style="list-style-type: none"> <li>• <b>Objectives: No new rezonings may proceed prior to Area Plan updates.</b></li> </ul>	<ul style="list-style-type: none"> <li>• Restrictive Covenants.<sup>NOTE 2</sup></li> <li>• An Acoustic Report.<sup>NOTE 3</sup></li> <li>• Noise mitigation incorporated in construction.</li> <li>• Mechanical ventilation incorporated in construction.</li> <li>• Central air conditioning system<sup>NOTE 4</sup> incorporated in construction.</li> <li>• Required Design Guidelines for siting and/or replacement of outdoor amenity areas with indoor amenity areas (e.g., enclosed balconies and increased size and type of indoor amenity areas).</li> </ul>
Cross-hatched	Approximately NEF 30 to NEF 40.	<ul style="list-style-type: none"> <li>• <b>Objective: To support the 2010 Olympic Speed Skating Oval.</b> <ul style="list-style-type: none"> <li>- Residential use: Up to 2/3 of the buildable square feet (BSF).</li> <li>- Non-residential use: The remaining BSF (e.g., 1/3).</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Restrictive Covenants.<sup>NOTE 2</sup></li> <li>• An Acoustic Report.<sup>NOTE 3</sup></li> <li>• Noise mitigation incorporated in construction.</li> <li>• Mechanical ventilation incorporated in construction.</li> <li>• Central air conditioning system incorporated in construction.<sup>NOTE 4</sup></li> <li>• Required Design Guidelines for siting and/or replacement of outdoor amenity areas with indoor amenity areas (e.g., enclosed balconies and increased size and type of indoor amenity areas).</li> </ul>





Areas <small>NOTE 1</small>	Reference NEF Contours	Objective	Requirements
Dotted	Approximately NEF 30 to NEF 40.	<ul style="list-style-type: none"> <li>• <b>Objective: Current 2004 rezoning applications (i.e., Aberdeen, Suntech, Wall) may proceed, prior to Area Plan updates, based on the formula:</b> <ul style="list-style-type: none"> <li>- residential use: Up to 2/3 of the buildable square feet (BSF);</li> <li>- non-residential use: The remaining BSF (e.g., 1/3);</li> <li>- the Aberdeen residential component is limited to the conversion of the previously approved hotel.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Restrictive Covenants.<sup>NOTE 2</sup></li> <li>• An Acoustic Report.<sup>NOTE 3</sup></li> <li>• Noise mitigation incorporated in construction.</li> <li>• Mechanical ventilation incorporated in construction.</li> <li>• Central air conditioning system incorporated in construction.<sup>NOTE 4</sup></li> <li>• Required Design Guidelines for siting and/or replacement of outdoor amenity areas with indoor amenity areas (e.g., enclosed balconies and increased size and type of indoor amenity areas).</li> </ul>

**Notes**

1. The Areas in the above Table are identified on the “Aircraft Noise Sensitive Development Map”.
2. Restrictive Covenants on Land Titles include information to address aircraft noise mitigation and public awareness.
3. Indoor Sound Level Mitigation—Building Components (e.g., walls, windows) must be designed to achieve the following indoor sound level mitigation criteria (with doors and windows closed):

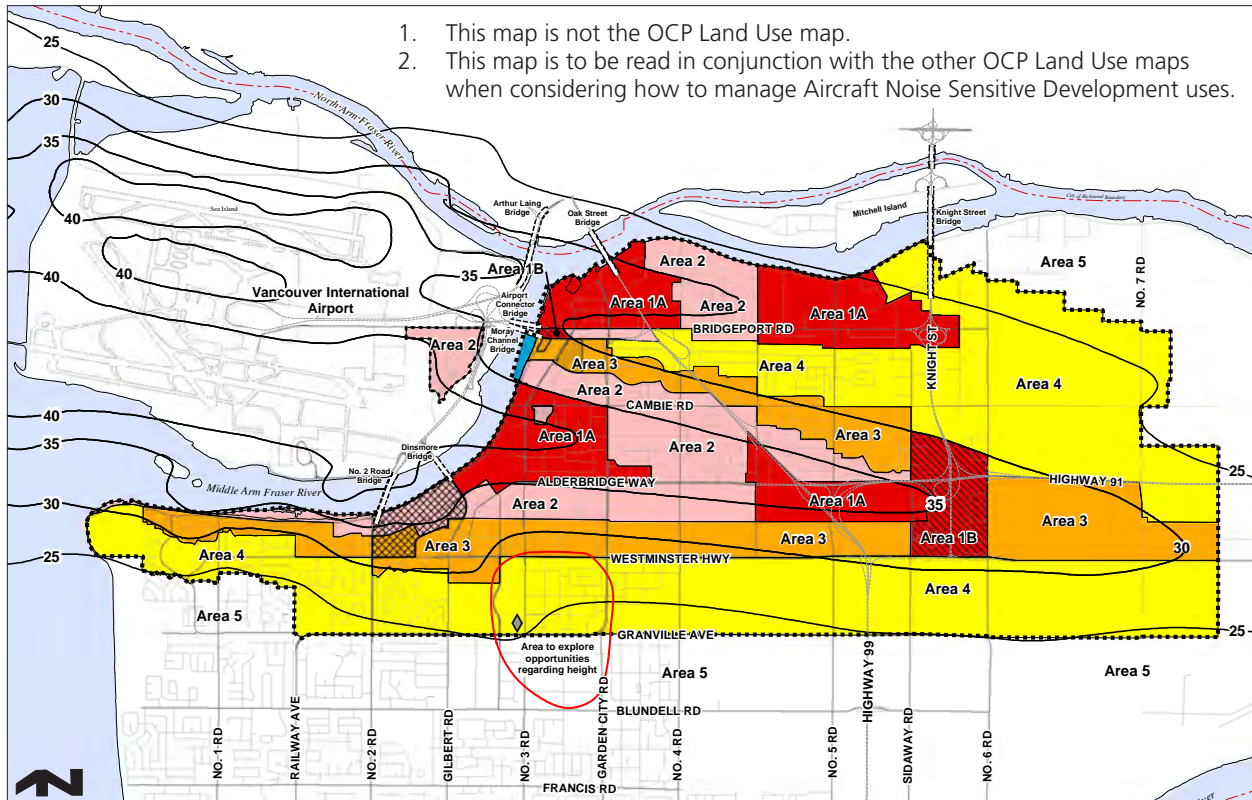
Portions of Dwelling Units	Noise Levels (decibels)
Bedrooms	35 dB
Living, dining, and recreation rooms	40 dB
Kitchen, bath, hallways, and utility rooms	45 dB

4. The standard required for air conditioning systems and their alternatives (e.g., ground source heat pumps, heat exchangers and acoustic ducting) is the ASHRAE 55-2004 “Thermal Environmental Conditions for Human Occupancy” standard and subsequent updates as they may occur.



# Aircraft Noise Sensitive Development Map Bylaw 9121 2015/06/15

1. This map is not the OCP Land Use map.
2. This map is to be read in conjunction with the other OCP Land Use maps when considering how to manage Aircraft Noise Sensitive Development uses.



## Aircraft Noise Sensitive Development (ANSD) Policy Areas (see Aircraft Noise Sensitive Development Policy Table)

### No New Aircraft Noise Sensitive Land Uses:

- AREA 1A**  
New Aircraft Noise Sensitive Land Use Prohibited
- AREA 1B**  
New Residential Land Uses Prohibited

### Areas where Aircraft Noise Sensitive Land Uses may be considered: subject to Aircraft Noise Mitigation Requirements

- AREA 2**  
All Aircraft Noise Sensitive Land Uses (except new single family) may be considered (see Table for exceptions)
- AREA 3**  
All Aircraft Noise Sensitive Land Use types may be considered
- AREA 4**  
All Aircraft Noise Sensitive Land Use types may be considered

### No Aircraft Noise Mitigation Requirements

- AREA 5**  
All Aircraft Noise Sensitive Land Use types may be considered

- Objective: Current rezoning may proceed prior to Area Plan updates, based on the formula:  
- Residential use: Up to 2/3 of the buildable square feet (BSF);  
- Non-residential use: The remaining BSF (e.g., 1/3)
- Objective: To support the 2010 Olympic Speed Skating Oval:  
- Residential use: Up to 2/3 of the buildable square feet (BSF);  
- Non-residential use: The remaining BSF (e.g., 1/3)
- On Fraser River Above 30 NEF Residential (e.g. house boats) may be considered
- Area to explore opportunities regarding height. Potential would be subject to application process
- 2015 Noise Exposer Forecast (NEF) Contours
- Extent of Aircraft Noise Insulation
- City Hall



### 3.6.4 Potential City Centre Building Height Increase

#### OVERVIEW

The City wishes to explore increasing building height in a portion of the City Centre. Transport Canada regulates building heights around the airport. YVR and the City have identified a possible area to study for increasing building height (around City Hall see OCP ANSD Map).

#### OBJECTIVE 1:

**Maximize City Centre viability safely by exploring with YVR possible increases in building height around City Hall to improve sustainability, social, economic and environmental benefit.**

#### POLICIES:

- a) continue to explore with YVR the possibility of increasing building height around City Hall;
- b) if such building height increases are allowed by the Federal Government, study the implications and benefits (e.g., how high to build, what uses would occur, what the community benefits may be).

### 3.6.5 Health Canada Licensed Medical Cannabis Production, Non-Medical Cannabis Production and Cannabis Research and Development Facilities

*Bylaw 9837  
2018/06/18*

#### OVERVIEW

The City wishes to regulate the location and number of medical and non-medical cannabis production and cannabis research and development facilities in Richmond.

Council may consider medical and non-medical cannabis production and research and development related facilities, on a case-by-case review basis, subject to meeting rigorous social, community safety, land use, transportation infrastructure, environmental and financial planning, zoning and other City policies and requirements. This section establishes the policies and requirements, by which such proposed facilities may be considered and, if deemed appropriate, approved.

#### TERMS

In this section, the following terms apply:

- “Medical Cannabis Production Facility”—means a facility for the cultivation or processing of medical cannabis in a fully enclosed building or structure in accordance with the appropriate federal and provincial legislation and regulations, including supporting accessory uses related to cultivation, processing, testing, research and development, packaging, storage, distribution and administrative office functions that are directly related to and in support of cultivation and processing activities;



- “Non-Medical Cannabis Production Facility”—means a facility for the cultivation or processing of non-medical cannabis in a building or structure, as well as outdoor cultivation, in accordance with the appropriate federal and provincial legislation and regulations, including supporting accessory uses related to cultivation, processing, testing, research and development, packaging and storage and administrative office functions that are directly related to and in support of cultivation and processing activities;
- “Cannabis Research and Development Facility”—means a facility for the research and development, including testing, of cannabis only in a fully enclosed building or structure in accordance with the appropriate federal and provincial legislation and regulations.

**OBJECTIVE 1:** *Bylaw 10061  
2019/09/03*

Protect the City’s social, economic, land use and environmental interests when considering proposed medical and non-medical cannabis production facilities, cannabis research and development facilities and the production and cultivation of cannabis, including any related accessory uses, on land within the Agricultural Land Reserve by preventing their unnecessary proliferation, avoiding long-term negative effects, and ensuring minimal City costs.

**POLICIES:**

- a) limit a medical cannabis production facility, non-medical cannabis production facility and cannabis research and development facility, through the rezoning process, to a total of one facility only. This single facility will only be permitted in an OCP designated Mixed Employment or Industrial area. Any proposals for additional facilities may be considered on a case-by-case basis and may require additional OCP amendments;
- b) subject to c) below, production and cultivation of cannabis and any related accessory uses is not permitted in the Agricultural Land Reserve;
- c) where the use of land in the Agricultural Land Reserve for the production and cultivation of cannabis and any related storing, packing, preparing and processing uses is done so in a manner in accordance with Sections 4, 8 and 11(1)(2) of the *Agricultural Land Reserve Use Regulation (as amended)*, the use cannot be prohibited and is subject to the applicable regulations contained in Richmond’s Zoning Bylaw 8500;
- d) a medical cannabis production facility or non-medical cannabis production facility or a cannabis research and development facility must:
  - i) be located in a stand-alone building, which does not contain any other businesses with the exception of non-medical cannabis production, which can be located outside in accordance with the appropriate federal and provincial legislation and regulations;
  - ii) have frontage on an existing, opened and constructed City road, to address infrastructure servicing and emergency response requirements;

*Bylaw 10061  
2019/09/03*



- iii) avoid negatively affecting sensitive land uses (e.g., residential, school, park, community institutional);
- iv) not emit any offensive odors, emissions and lighting to minimize negative health and nuisance impacts on surrounding areas;
- e) applicants shall engage qualified professional consultants to prepare required studies and plans through the City's regulatory processes (e.g., rezoning, development permit building permit, other as required);
- f) applicants shall ensure that proposals address the following matters, through the City's regulatory processes (e.g., rezoning, development permit, building permit, other):
  - i) compliance with City social, community safety, land use, building, security (e.g., police, fire, emergency response), transportation, infrastructure (e.g., water, sanitary, drainage), solid waste management, environmental (e.g., Environmentally Sensitive Areas, Riparian Management Areas, Ecological Network), nuisance (e.g., noise, odour and emissions) financial and other policies and requirements;
  - ii) compliance with all federal, provincial and regional (e.g., Metro Vancouver) policies and requirements;
  - iii) compliance with the City Building Regulation Bylaw, Fire Protection and Life Safety Bylaw, Noise Regulation Bylaw, Business License Bylaw, Business Regulation Bylaw and other related, applicable City Bylaws;
  - iv) compliance with the current BC Building Code, BC Fire Code, BC Fire Services Act, BC Electrical Code, and other related codes and standards;
- g) the applicant/owner of a Health Canada licensed and City approved medical cannabis production facility or non-medical cannabis production facility or cannabis research and development facility shall be responsible for full remediation of the facility should it cease operations or upon closure of the facility;
- h) consultation with stakeholders on a proposed facility shall be undertaken as deemed necessary based on the context specific to each proposal.

## **4.0 Vibrant Cities**







## 4.0 Vibrant Cities

### 4.1 Arts, Culture and Heritage

#### **OVERVIEW:**

Richmond wants to strengthen its sense of place and distinct identity that generate, in residents and visitors alike, clear, unique images, exciting expectations and happy memories. Through its diverse culture, visible heritage, vibrant and pervasive arts, architecture and landscapes, interesting and people friendly streets, excellent cuisine and exciting events and celebrations, Richmond welcomes and encourages creativity and participation among visitors and residents.

Arts and culture include all forms of creative expression, from individual to collective, from grassroots to professional and institutional. These forms of expression frequently draw inspiration from the existing natural and artificial landforms, built environments, belief systems and values which shape who we are—our local, regional, national and global identities. By building on these foundations, arts and culture evolve, develop and enhance our cultural identities and foster a sense of place.

**Culture:** relates to the set of shared behaviours, goals and attitudes that are manifested in a group. Culture gives people a formula for organizing experiences and to interpret and cope with the world and one another (e.g., relating to each other, creating distinct identities, interacting with the world). Cultural systems shape our development and influence our way of life, spiritual beliefs, class and value systems.



**Arts:** include disciplinary, multi-disciplinary and inter-disciplinary work in the literary, media, performing and visual arts and new media. Artistic activity involves creation, production, presentation, distribution and dissemination. It includes arts education, arts instruction, art collection, community arts, public art, arts training, arts facilities and venues and arts programs.

**Heritage:** is a legacy inherited from the past, valued in the present, which it helps interpret and shape the future. Heritage activity includes museums, archives, historic sites, built heritage, cultural heritage landscapes, natural heritage, archaeological resources, educational and interpretive programs and events.

Arts and heritage are the tangible products of culture.

The arts play a pervasive, socially integrating role in fostering community identity, creativity, cohesion, innovation, well-being and vitality. There is increasing awareness that participation in various forms of arts and culture contribute to help self-confidence, personal well-being, community identity, citizenship and pride.

A vibrant cultural sector provides benefits not just to its creators and viewers, but to society as a whole in the form of needed innovation and originality. The presence of innovation and creativity in all citizens provides a way to see and adapt to new situations and develop new solutions.

The City of Richmond has an exciting array of heritage resources, in both public and private ownership, that are unique in Metro Vancouver and has an impressive legacy of heritage conservation.

Culture has long been recognized as a means to community building, encouraging outdoor activity, healthy lifestyles, life-long learning, increasing accessibility to programs for all levels of society and celebrating diversity and cultural differences.

Cultural vitality is essential to a healthy and sustainable society as it expands the way we think about the world around us and how we adapt to changing situations. Richmond citizens' innovation and creativity provide a way to adapt to new situations and develop new solutions to social, economic and environmental challenges.



### General

Richmond is one of the most diverse cities in Canada. In 2006, 57.4% of the population were immigrants with 18.8% of that having arrived between 2001 and 2006. Bridging the understanding and appreciation of the arts and heritage across diverse cultures enriches the community.

As the community continues to grow and participation in arts and cultural activities increases, the demand for arts space will continue to be a challenge.

The City lacks a supply of affordable housing and creation spaces suitable to the creative sector. As housing prices escalate in Richmond, many local artists have, and will continue to be forced to move out of the City to other areas in the region that are more affordable. The City may lose the opportunity to build on its artistic talent and creative potential.

Heritage resources must be properly managed and supported for them to fulfil their potential of contributing to the vibrancy of the city and position Richmond as a destination city. Heritage conservation policy and programming require the creative management of heritage assets and the preservation of stories as well as entrepreneurial community partnering and cost sharing.

Historically, the focus has been on tangible heritage (such as buildings, sites, artefacts), rather than intangible heritage (such as storytelling, rituals and events). With the growth in new media, intangible heritage can become more accessible through recording and on-line sharing.



The City plays a multifaceted role in ensuring a healthy and contributing arts, culture and heritage sector including:

- welcoming artists and arts organizations;
- facilitating opportunities for lifelong learning, creating and participating;
- creating supportive sector environments through policies, programming and land use management approaches (e.g., heritage density bonusing).

Many factors contribute to making Richmond a more vibrant, healthy, sustainable and engaged community and the presence of a thriving arts, cultural and heritage sector plays a critical role.

In order to create the environment for the City to be a thriving, resilient, diverse and creative community where people have a strong sense of identity and a clear sense of the attributes that make it unique; where citizens are empowered, engaged and connected; and a vibrant tourist destination, the following concepts will be focused on:

- **Cultural Engagement:** facilitate and create an environment and culture that support the arts and culture and enhance their contribution to vibrancy and community vitality.
- **Lifelong Learning:** foster a joy of reading and a culture of life long learning.
- **Celebrating Heritage:** preserve, promote and celebrate community heritage.
- **Community Revitalization:** encourage and develop a mosaic of appealing, lively and distinctive areas, vibrant public spaces, festivals, events and activities.
- **An Economic Engine:** harness the benefits of and support a creative economy and contribute to the thriving community tourism sector.





Credit: GTFX

### **OBJECTIVE 1:**

Create a culture and climate that supports and enhances the arts and culture sector.

#### **POLICIES:**

- a) continue to promote creativity and cultural expression;
- b) improve strategies to attract cultural industries and services;
- c) facilitate improved community engagement and experiences in arts, cultural and heritage activities;
- d) collaborate with the Richmond School Board, community groups, Vancouver Coastal Health and others to promote improved arts opportunities that enable all to experience cultural, art and heritage activities and develop creativity;
- e) continue to request senior governments and partners to support policies, programming and funding to significantly advance the arts, culture and heritage in one of Canada's most culturally diverse cities;
- f) seek grants, partnerships and other sources of funding to assist with facility development and replacement;
- g) innovatively explore and support the provision of cultural, art and heritage space (e.g., city incentives, partnerships, zoning), including the provision of affordable creation spaces (work spaces for visual and performing artists and arts organizations) and affordable housing for artists.



### **OBJECTIVE 2:**

Foster a joy of reading and a culture of life long learning.

#### **POLICIES:**

- a) the main city library service is in the City Centre;
- b) continue to respond to the community's informational and recreational library needs by providing collections in a wide variety of print, multimedia and digital formats;
- c) expand free and easy access to high quality and responsible library services within neighbourhoods;
- d) library branches are to provide a welcoming gathering place for all ages and backgrounds with sufficient space, collections and staff to meet public needs;
- e) recognizing that Richmond residents are amongst the heaviest users of library materials in Canada, the Richmond Library system will strive to meet the diverse needs of residents (maintain substantial collections of print, multimedia and digital materials that reflect the interests and needs of our diverse community);
- f) continue to provide up-to-date information technology, equipment and facilities to support public education;
- g) continue to create library programs that are informative, entertaining and reflect the multicultural nature of our community;
- h) the library will work with other community agencies to provide services to better meet community needs.





### **OBJECTIVE 3:**

With a network of unique, historic assets, an excellent archive, vibrant heritage programs and a new destination museum, Richmond will be in a unique position to become the leading museum and heritage destination in the Metro Vancouver region. Celebrate heritage by preserving, promoting and commemorating tangible and intangible elements.

### **POLICIES:**

- a) enhance and update the directions adopted in the 2007 Richmond Museum & Heritage Strategy;
- b) position and brand Richmond as the leading museum and heritage destination in the Metro Vancouver region;
- c) improve the conservation of heritage resources by updating heritage inventories, incorporating special conservation policies for identified heritage areas (e.g., Steveston, City-wide), conserving known archaeological sites in accordance with provincial legislation and offering incentives where appropriate to private owners of heritage resources;
- d) enhance, preserve and celebrate the built, natural and cultural heritage of Richmond and ensure it is visible and accessible;
- e) encourage the preservation and celebration of community heritage;
- f) where possible, encourage the adaptive reuse of heritage buildings to maintain them for the future;
- g) continue to engage the private and volunteer sectors and take advantage of partnership opportunities with senior levels of government to preserve and rehabilitate heritage assets;
- h) integrate a broad interpretation of heritage into festivals and celebrations unique to Richmond.



#### OBJECTIVE 4:

Encourage and develop a mosaic of appealing, lively and distinctive areas, vibrant public spaces, festivals, events and activities.

#### POLICIES:

- a) promote animated public spaces and places where people can gather and celebrate through: art friendly public spaces and facilities that connect communities, an animated public realm (including City infrastructure such as pump stations, district energy utilities), and enhance the quality of life;
- b) build on the strengths of the Public Art Program to ensure that it is a key element in shaping, animating and enriching the public realm, civic pride and community identity;
- c) prepare Public Art Plans for specific areas of the City where appropriate such as City Centre and Steveston;
- d) recognize the importance of community festivals in the community's cultural life, and support and encourage their production through community groups and organizations;
- e) work with the community to develop several unique signature festivals and events that become a tourist draw to the City;
- f) create cultural districts within the City such as in City Centre with the Arts and Entertainment District;
- g) create opportunities for people to experience art in everyday life and for artists and communities to participate in the design, look and feel of the City through public art initiatives;
- h) promote opportunities to interpret Richmond's spectacular island foreshore and natural environment through the arts.





### **OBJECTIVE 5:**

Harness the benefits of and support a creative economy and tourism sector that positions Richmond as a cultural destination.

### **POLICIES:**

- a) build on the City's Tourism Strategy and develop programs to strengthen the contribution of the City's arts, heritage and diverse cultures to the thriving tourism sector;
- b) continue to develop and position Richmond as a cultural destination both for residents and visitors through festivals, heritage sites, exhibitions and performances, arts education programming for children and youth and master art classes and workshops for adult artists;
- c) encourage, through policies and working with the private sector, cultural industries (film, publishing, recording, new media) within the City;
- d) study how to better attract and retain cultural (e.g., arts) industries.





## 4.2 Recreation and Community Wellness

### OVERVIEW:

Recreation services, programs and facilities contribute to Richmond being a vibrant city by providing opportunities for residents to be physically active and healthy, nurture a permanent commitment to wellness and feel increasingly connected to their community.

The World Health Organization defines wellness in the following manner: “Wellness is the optimal state of health of individuals and groups. There are two focal concerns: the realization of the fullest potential of an individual physically, psychologically, socially, spiritually, economically, and the fulfillment of one’s role and expectations in the family, community, place of worship, workplace and other settings.”

A current profile of residents in Richmond related to recreation and wellness finds that while Richmond residents are not as overweight as other BC residents, have a longer life expectancy and smoke less, they appear to be less physically active, eat fewer fruits and vegetables, have a lower sense of belonging and, for children and teens, have a low involvement in sport and are spending a high proportion of their time using computers and other similar devices. These factors indicate that Richmond has work to do to achieve true community wellness.

A 2009 community needs assessment shows that residents are generally satisfied with their recreation experiences at City facilities and with the delivery of programs, services and facilities. Residents also found few barriers to accessing services except within some specific cultural or ethnic groups. These results point to the success of City and community partners’ parks and recreation programs and services, although more focus is needed on serving cultural and ethnic communities.

Similar to the trend across North America, Richmond’s population is increasingly becoming more aged. Below-replacement fertility rates will see younger generations grow more slowly, with longer life expectancies resulting in rapid growth for older generations.





Considering these trends, those responsible for planning and delivering recreation and wellness programs and services must focus on the following concepts:

- Collaboration—strategies to deliver services with others;
- Serving a unique population—strategies to ensure that our services meet the needs of diverse populations;
- Connecting and growing—strategies to ensure that residents have opportunities for life-long learning and enjoy a feeling of belonging in the community;
- Living healthy and active lives—strategies to encourage people to make healthy and active lifestyle choices throughout their lives;
- Investing in parks and recreation infrastructure (e.g., the Oval sports facilities)—strategies to ensure that places and spaces support active and healthy living objectives.



### **OBJECTIVE 1:**

Collaborate with others to ensure that there is a coordinated, efficient response to quality of life recreation and community wellness needs (e.g., community associations, local sport organizations, the Richmond Olympic Oval Corporation, Volunteer Richmond Information Services, social agencies, the private sector, Richmond School District, Vancouver Coastal Health).

### **POLICIES:**

- a) continue to deliver recreation services with a variety of community associations and non-profit groups;
- b) build on established working relationships with the Richmond School District, Metro Vancouver, Vancouver Coastal Health and other key agencies to jointly address recreation and community wellness issues;
- c) explore opportunities for collaboration with new groups and the private sector;
- d) coordinate and enhance recreation and wellness services being provided by other agencies where required;
- e) support the co-planning and co-delivery of community sport hosting events;
- f) in consultation with stakeholders and residents, guide the future planning of recreation and wellness programs and services to meet community needs.



## OBJECTIVE 2:

Ensure that recreation and wellness services, programs, spaces and places meet diverse community needs.

### POLICIES:

- a) continue to reach-out to 'hard to reach' populations (e.g., new immigrants, socially isolated individuals), people with disabilities, older adults and youth (especially low-asset youth);
- b) deliver a broad range of programs and opportunities that appeal across all cultures, age groups and to under-served groups;
- c) address recreation accessibility and affordability issues in collaboration with community agencies through guidance and financial support where appropriate;
- d) include diverse cultural and ethnic populations in celebrations;
- e) ensure existing and future demographic flexibility in system and space design.



## OBJECTIVE 3:

Provide opportunities to connect with neighbours, feel a sense of belonging, and engage in lifelong learning.

### POLICIES:

- a) ensure that people have opportunities to connect with the physical environment through stewardship and other engagement activities;
- b) maximize volunteer involvement in the delivery of parks, recreation and wellness programs and services;
- c) better link the trail system to neighbourhoods, community facilities and nature;
- d) better facilitate community programs and events to provide residents opportunities to interact;
- e) provide a range of programs and services that allow for individual development at all levels of ability and expertise.





#### **OBJECTIVE 4:**

Encourage people to make healthy, active lifestyle choices throughout their lives.

#### **POLICIES:**

- a) ensure that children and youth have an opportunity to build healthy habits through physical activity—both through unstructured play and organized activities and programs;
- b) increase awareness of, and opportunities for children to learn, physical literacy and fundamental movement skills through encouraging recreation and sport service providers to incorporate physical literacy concepts into programs;
- c) reduce barriers to living a physically active life for vulnerable populations;
- d) promote opportunities for active lifestyles for aging populations and programs that allow older adults to ‘age in place’;
- e) develop, support and promote opportunities for people of all ages to be active for life and achieve one’s highest potential.



#### **OBJECTIVE 5:**

Invest in parks and recreation infrastructure to support active and healthy living objectives.

#### **POLICIES:**

- a) advocate for long-term senior government funding to assist with the replacement of aging municipal recreation infrastructure;
- b) continue to develop the facilities prioritized in the endorsed Parks and Recreation Facilities Strategic Plan;
- c) prioritize co-location with other services in selecting potential sites;
- d) design new spaces to: eliminate physical access barriers, encourage programmed and unstructured activity, ensure flexibility of use and minimize functional obsolescence (e.g., ensuring that the space can be altered at a later date to accommodate changing demands from users).

## **5.0 Safe City**





## 5.0 Safe City

### OVERVIEW:

Richmond continues to grow and evolve into a vibrant and diverse metropolitan City with most of the vertical growth focussed in the urban City Centre area. As Richmond continues to change, it brings with it an increased desire to build, grow and sustain a safe City. There is a need to deliver public safety services in a strategic, agile, coordinated and cost-efficient way that includes everyone taking some responsibility for their safety. Through the design of safe attractive gathering places and strategically located service delivery facilities, Richmond will be one of the safest and livable cities in Canada.



### Police

Police services are important to the quality of life, life safety, and well-being for all Richmond citizens. Enhanced personal safety and security, and lower economic costs are two of the benefits of reducing crime and other anti-social behaviours.

The Richmond detachment of the RCMP is committed to working in partnership with the citizens of Richmond to achieve the goal of "Safe Home and Safe Communities" to provide quality police services in a cost-effective, proactive manner. These strategies include but are not limited to partnerships, education, problem solving, increased visibility, intelligence-led policing, crime reduction initiatives and enforcement.





### Fire-Rescue Services

Richmond Fire-Rescue delivers fire and life safety prevention, education and emergency response services. It places an emphasis on service excellence in the delivery of its prevention and education services to support and manage the growing demand for emergency 9-1-1 fire and rescue services.

To meet the challenges of delivering its services in support of a safe city, Richmond Fire-Rescue believes that it must be: capable of responding to 9-1-1 fire and rescue calls in urban and rural environments; prevention focussed; public educators through community partnerships; integrated with community safety providers; agile; responsive to customer needs; able to operate at a optimum level in the event of a significant major emergency; and able to deliver services in a financially sustainable manner.



### Emergency Programs

Emergency Programs develops emergency plans and programs, and educates and implements these plans to ensure that the City is prepared to respond and recover from emergencies and disasters.

Community-based emergency preparedness allows Richmond residents to be prepared for and able to respond to anticipated disruptions and potential hazards following an emergency or disaster. By working in partnership, community neighbourhoods and the City can reduce injuries, protect property, reduce emergency needs, manage existing resources until organized assistance becomes available, and recover quickly.

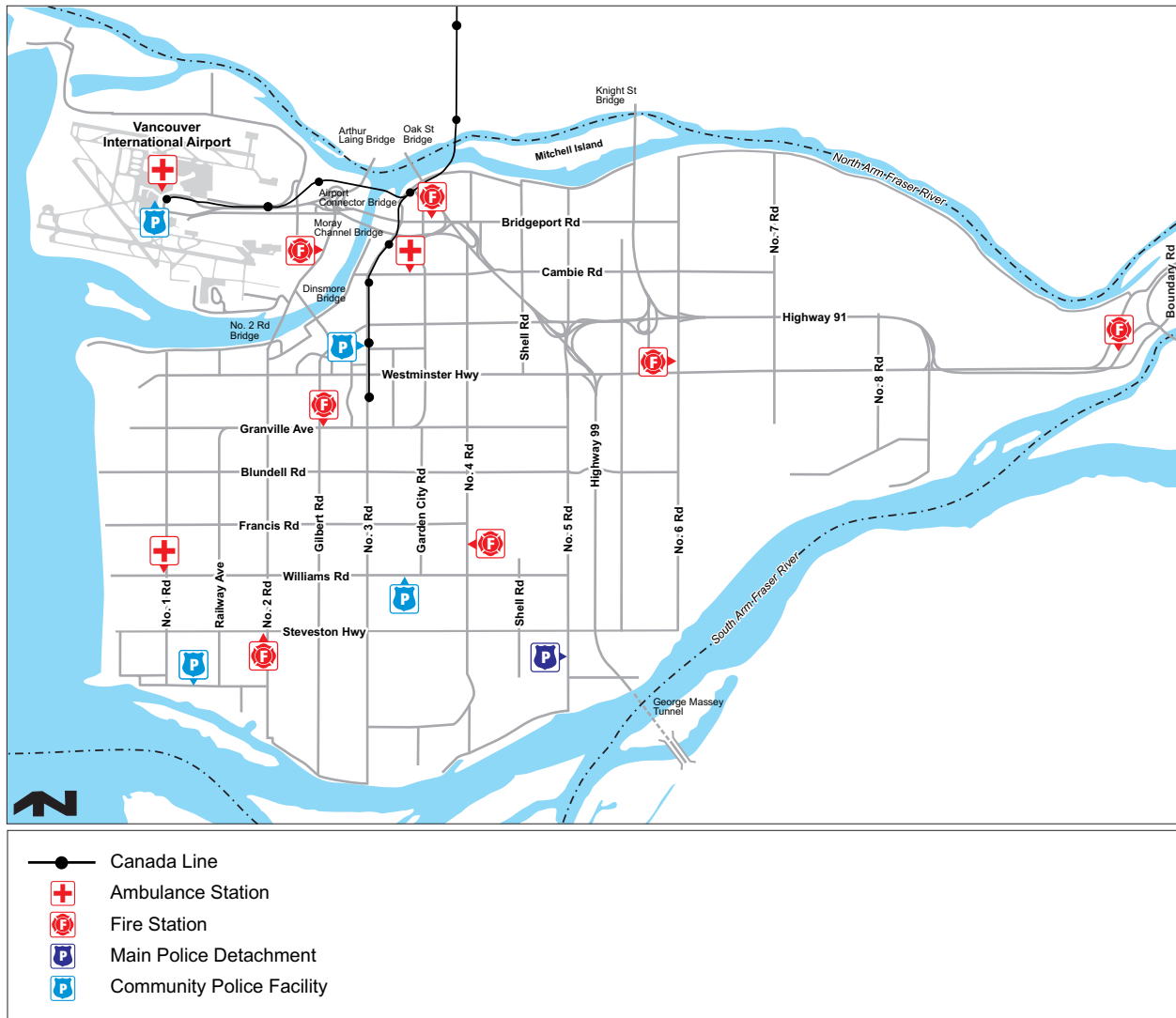


### Community Bylaws

City Council establishes bylaws to manage activities and provide an appealing, safe and livable community. These bylaws regulate, prohibit or impose a variety of requirements, and enforcement is undertaken often on a complaint basis where necessary to obtain compliance with City regulations. The goal for Community Bylaws is to work with the residents, businesses and stakeholders to educate and establish compliance prior to enforcement.



## Community Safety Facilities Map



### OBJECTIVE 1:

Maintain a safe community through the provision of sufficient fire rescue, policing and emergency services and facilities.

### POLICIES:

- a) review and maintain RCMP detachment, Community Police Offices, Richmond Fire Rescue and Emergency facilities in appropriate locations to ensure effective service delivery;
- b) review fire and policing considerations for all public and private developments;
- c) periodically monitor the effectiveness of the locations of these facilities and delivery of services.





## OBJECTIVE 2:

Increase Police effectiveness through community awareness, and partnerships in crime prevention, road safety and emergency assistance.

## POLICIES

- a) establish crime prevention programs in conjunction with the local community;
- b) ensure local input in setting policing priorities through public forums, advisory groups and task forces;
- c) increase community awareness of crime prevention programs, including appropriate security measures for private property;
- d) continue pedestrian and traffic safety awareness and education programs in conjunction with the community, insurance providers and other agencies, supported by effective enforcement if necessary;
- e) increase crime reduction and prevention strategies around organized crime;
- f) use community forums, media and social media to explain the role and interdependency of police and the community around prevention;
- g) participate in regular exercises to test emergency readiness;
- h) educate the community in the use of appropriate City and other contact for relevant needs including the "proper" use of 9-1-1;
- i) establish partnerships with the community to ensure emergency assistance.



### OBJECTIVE 3:

Reduce high-risk threats to public safety through crime reduction strategies and targeted enforcement.

#### POLICIES

- a) increase enforcement for potential serious crimes;
- b) target the sources and suppliers of drugs through increased enforcement;
- c) use of bike squads and community policing initiatives to increase local policing services;
- d) ensure adequate prevention and enforcement at high accident intersections and roadways.



### OBJECTIVE 4:

Clearly define appropriate Fire Rescue strategies and responses that meet the needs of the changing community.

#### POLICIES

- a) develop community safety plans for each part of the community, and work in partnership with other service providers (e.g., police, ambulance, emergency programs, health, and other City departments);
- b) use community forums, media and social media to explain the role and interdependency of fire prevention and the community;
- c) work with the development community to ensure that safety standards are met;
- d) work with the community to ensure that buildings and homes are equipped and the equipment is maintained, to prevent fires and accidents;



- e) ensure local input in setting fire-rescue policies;
- f) increase community education and awareness relating to safety and accident prevention (e.g., hazardous materials, fires, use of 9-1-1.).

### **OBJECTIVE 5:**

**Ensure the city's emergency plans are current and appropriate.**

#### **POLICIES**

- a) maintain, review, and update the City's emergency plans annually;
- b) educate, train and exercise the City's emergency plans;
- c) partner with public safety agencies to ensure the emergency plans are up to date and a coordinated response is in place;
- d) maintain a centrally-located, multi-agency Emergency Operations Centre;
- e) work with the community to develop emergency response capabilities which are woven into the social fabric of the community neighbourhood associations, schools, workplaces, places of worship and other existing organizations;
- f) increase community awareness of emergency management programs and strategies.

### **OBJECTIVE 6:**

**Ensure that the public safety agencies serving Richmond have a common communication and dispatch system that enables direct inter-agency communication and coordination.**

#### **POLICIES**

- a) ensure that emergency services are coordinated in an effective and efficient way;
- b) ensure that borderless responses are encouraged in emergency situations;
- c) work to proactively provide input into communication and dispatch service enhancements.

### **OBJECTIVE 7:**

**Maintain safe and secure neighbourhoods through good design practices.**

#### **POLICIES**

- a) encourage best practices for crime reduction through design for all developments in the City (e.g., Crime Prevention Through Environmental Design—CPTED);
- b) enhance bicycle lanes and pedestrian walkways to ensure safe movement;
- c) periodically review crosswalk lights and traffic lights for safety.

## **6.0 Resilient Economy**





## 6.0 Resilient Economy

### OVERVIEW:

#### Vision

Richmond serves as a pre-eminent Asia-Pacific, sea, air, land and intermodal gateway facilitating the exchange of people, goods and knowledge. It is home to a diversified range of sectors, with a favourable jobs-to-labour force ratio and jobs for local and regional residents from across the social spectrum. Richmond's future economic resilience is accomplished by balancing residential with business tax-base growth, the retention and intensification of existing employment lands, and the application of an asset-driven economic development approach, incorporating local and regional natural, social and economic assets.

#### Objectives

To achieve its vision for a resilient economy, the City's economic development policies will focus on six core objectives:

1. Asia-Pacific Gateway—foster a strong and competitive Asia-Pacific Gateway enabling sector that capitalizes on Richmond's strategic location, industry infrastructure and Asia's economic growth.
2. Knowledge-Based Industries—cultivate a thriving innovation and creative hub that generates high-paying jobs and attracts skilled talent locally and from abroad.
3. Amenities and Attractions (e.g., retail, restaurants, arts)—develop a diversified and lighter-footprint commercial sector providing jobs for local workers, serving local residents and attracting visitors.





4. Sustainable Resource Use—champion a viable agricultural sector for both commercial and non commercial farmers and resource-sharing initiatives (e.g., energy, water, transportation, administrative services, office space, child care) amongst users and neighbours of employment lands.
5. Population Services—nurture a responsive institutional sector that better serves the access, mobility and safety needs of a growing, multicultural and demographically changing community.
6. Micro-Business—facilitate and support the needs of entrepreneurial, home-based and micro-businesses.

### Strategies

Two core strategies guide the achievement of Richmond's six resilient economy objectives:

1. 2041 Employment Lands Strategy—completed in 2010, ensures an adequate and appropriate supply of employment lands and associated policies to meet future community economic development needs.
2. Resilient Economy Strategy—to be done to establish a proactive economic and skills development plan based on Richmond's natural, social and economic assets.

The 2041 OCP incorporates an Employment Lands Strategy, which examines the supply of employment lands and policies to address Richmond's long-term economic and business development needs. Upon adoption of the 2041 OCP, the City will prepare an asset-driven Resilient Economy Strategy aimed at establishing a flexible and sustainable framework for economic development, which complements the Employment Lands Strategy.

### Employment Lands Strategy

Maintain an adequate, demand-driven supply of employment lands to support future Richmond business, economic development and community needs.

### Background

The 2041 Employment Land Strategy (ELS) determines the City's employment land use needs for the next 30 years, including projections for employment, employment building area, employment land area type and density.

The 2041 ELS determined that Richmond has enough employment lands to meet demand in all sectors to 2041, including any employment lands



currently planned for redevelopment to other uses.

### Employment Lands Required to 2041 from ELS Report – By Land Use Type

Category	Total Supply (2009)*	Projected Required Land (2041)	Net Surplus or Deficit (2041)
Industrial	1,706 ha (4,216 ac.)	1,441 ha (3,561 ac.)	265 ha (655 ac.)**
Commercial	450 ha (1,112 ac.)	433 ha (1,069 ac.)	17 ha (43 ac.)
Office	176 ha (436 ac.)	181 ha (449 ac.)	-5 ha (-13 ac.)
Institutional	488 ha (1,206 ac.)	502 (1,240 ac.)	-14 ha (-34 ac.)
TOTAL	2,820 ha (6,970 ac.)	2,557 ha (6,319 ac.)	263 ha (651 ac.)

\* The available 2009 supply (*Source: City of Richmond*) is based on current Official Community Plan designations (land zoned and designated for future development), which may change with future OCP reviews.

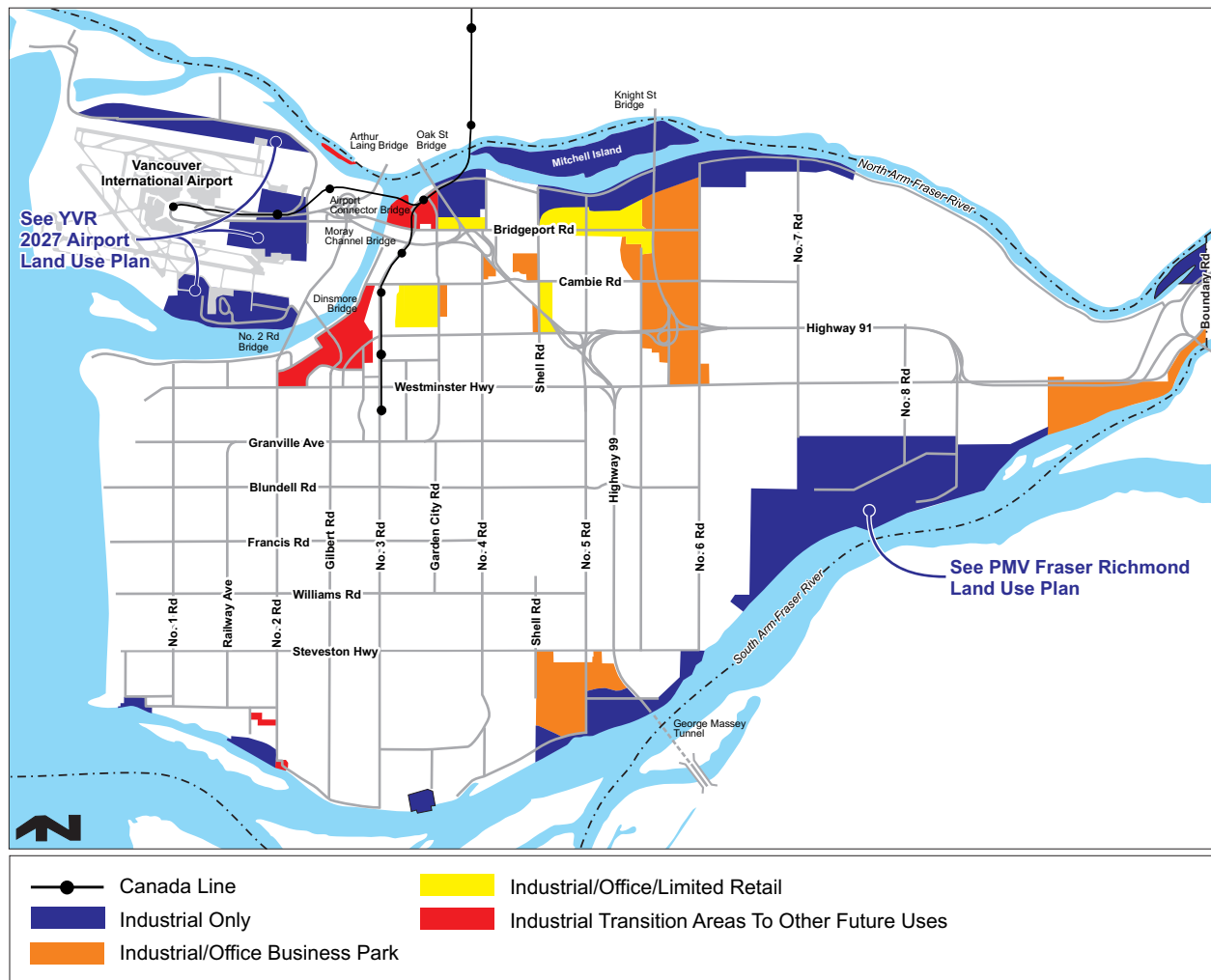
\*\* The total supply of industrial land (1,706 ha or 4,216 ac.) may be able to meet future needs (1,441 ha or 3,561 ac.). However some of these designated industrial uses are limited to certain types of users (e.g. Vancouver International Airport Authority and Port Metro Vancouver), which limits potential availability to all users; thus the actual surplus may be less than indicated. Specifically, the limitation to airport-related and port-related uses, as designated in YVR's and PMV's long-term land use plans, will make the majority of the industrial land surplus unavailable for small- and medium-sized traditional manufacturing uses. The projected industrial land surplus is also contingent on the ability to convert all of the OCP designated and yet to be redeveloped property for employment uses. If some of this expected development does not occur, the indicated surplus will be further reduced (e.g., if the area cannot be properly serviced or if a land owner does not want to develop their land).

Note that the City, YVR and Port Metro Vancouver will monitor land use and periodically update their employment projections and land needs. If YVR and the Port use all their lands for their purposes, the City will strive to accommodate uses which are dislocated elsewhere in the City to other existing industrial areas. It is understood that some industrial uses may leave the City and may be replaced by higher density employment lands and uses (e.g., in the City Centre).



1. Industrial Lands to 2041
  - a) In 2009, there were an estimated 1,261 ha (3,115 ac.) of industrial-zoned land in Richmond.
  - b) By 2041, 1,441 ha (3,561 ac.) including 180 additional hectares (446 ac.) will be needed.
  - c) As the OCP designates 1,706 ha (4,216 ac.) as industrial-zoned land, there remains 265 ha (655 ac.) of land for future industrial needs.
  - d) The projected supply of industrial land for traditional industrial uses is likely to be lower based on sector-specific restrictions by land owners (e.g., marine-oriented transportation on PMV lands, and airport- and Asia Pacific Gateway-related uses on YVR lands).
  - e) It is acceptable that industrial businesses may relocate elsewhere within or out of the City due to highest-and-best-use market needs and the City will try to help retain these uses.
  - f) Co-operate with Eco Waste and others to meet long-term City and Port needs.

## Industrial Lands to 2041 Map

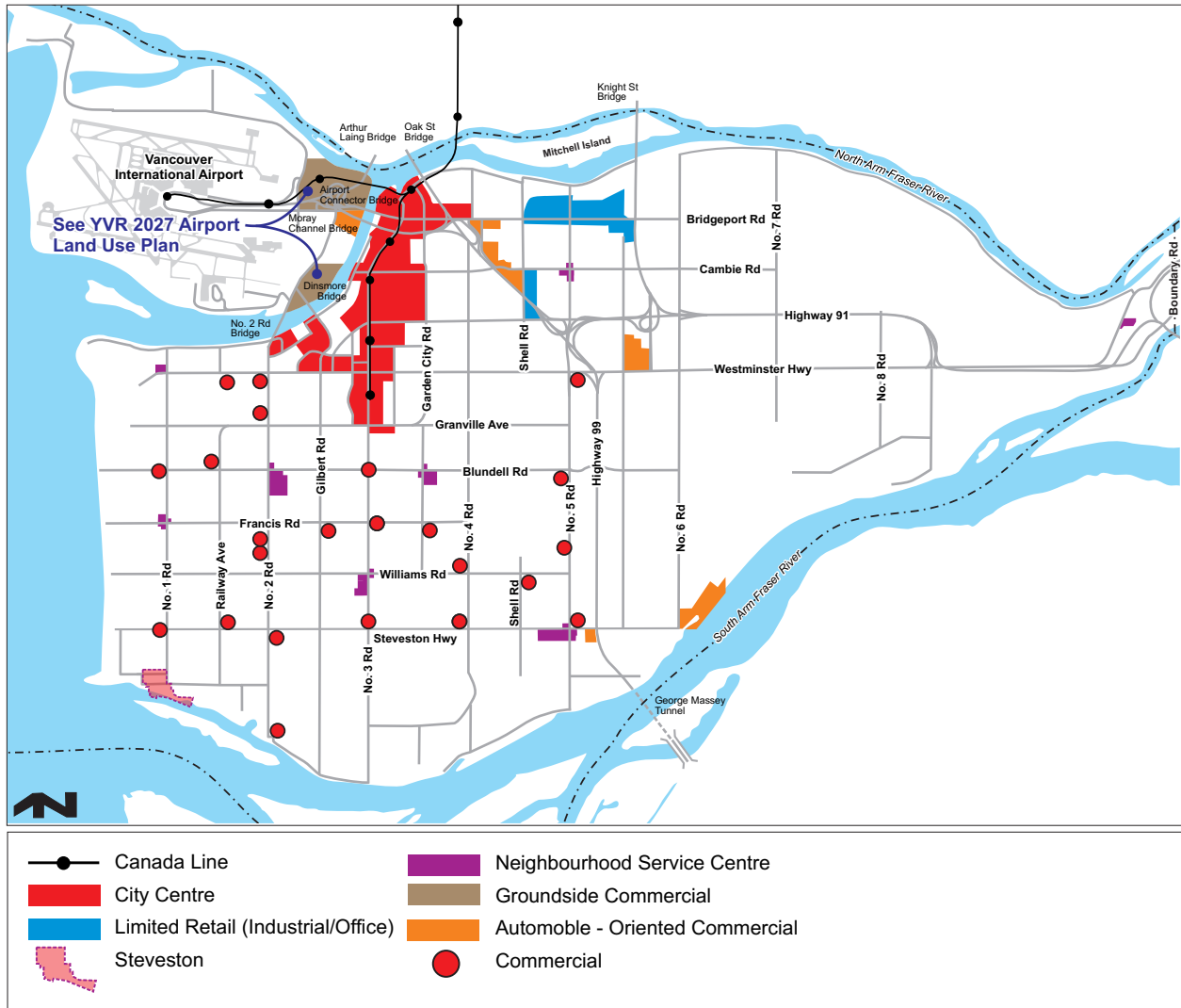




2. Commercial Lands to 2041

- a) In 2009, there were an estimated 401 ha (990 ac.) of commercial-zoned land in Richmond.
- b) By 2041, 433 ha (1,069 ac.) including 32 additional hectares (79 ac.) will be needed.
- c) The OCP designates 450 ha (1,112 ac.) as potential commercial-zoned land providing an ample supply to meet future needs.
- d) North Richmond and East Richmond sub-areas may have more commercial land than required (23 ha or 56 ac. and 3.6 ha or 9 ac., respectively).

**Commercial Lands to 2041 Map**

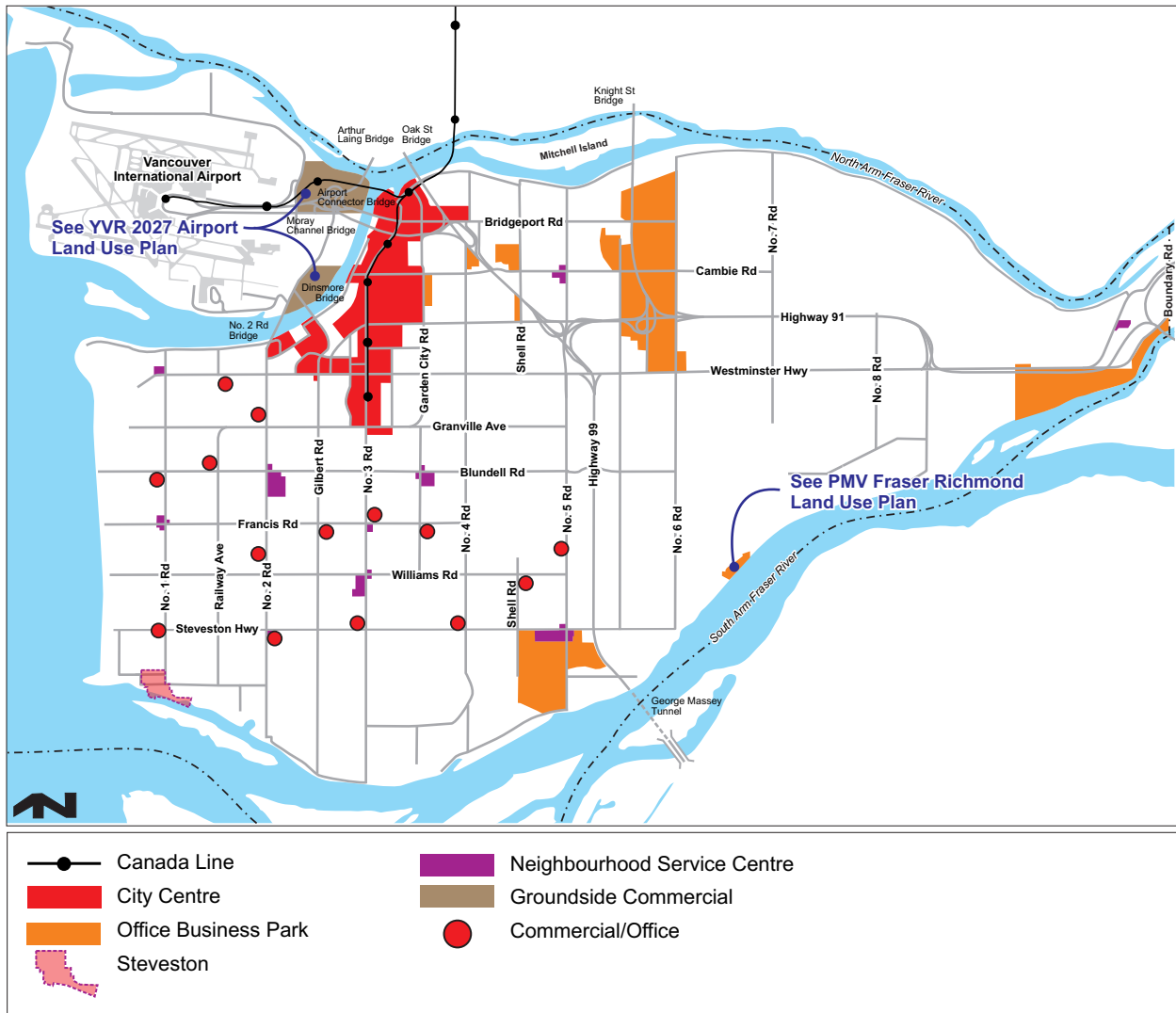




3. Office Lands to 2041

- a) There were an estimated 176 ha (436 ac.) of office-zoned land in Richmond in 2009.
- b) By 2041, 182 ha (449 ac.) will be needed—a deficit of 5.3 ha (13 ac).

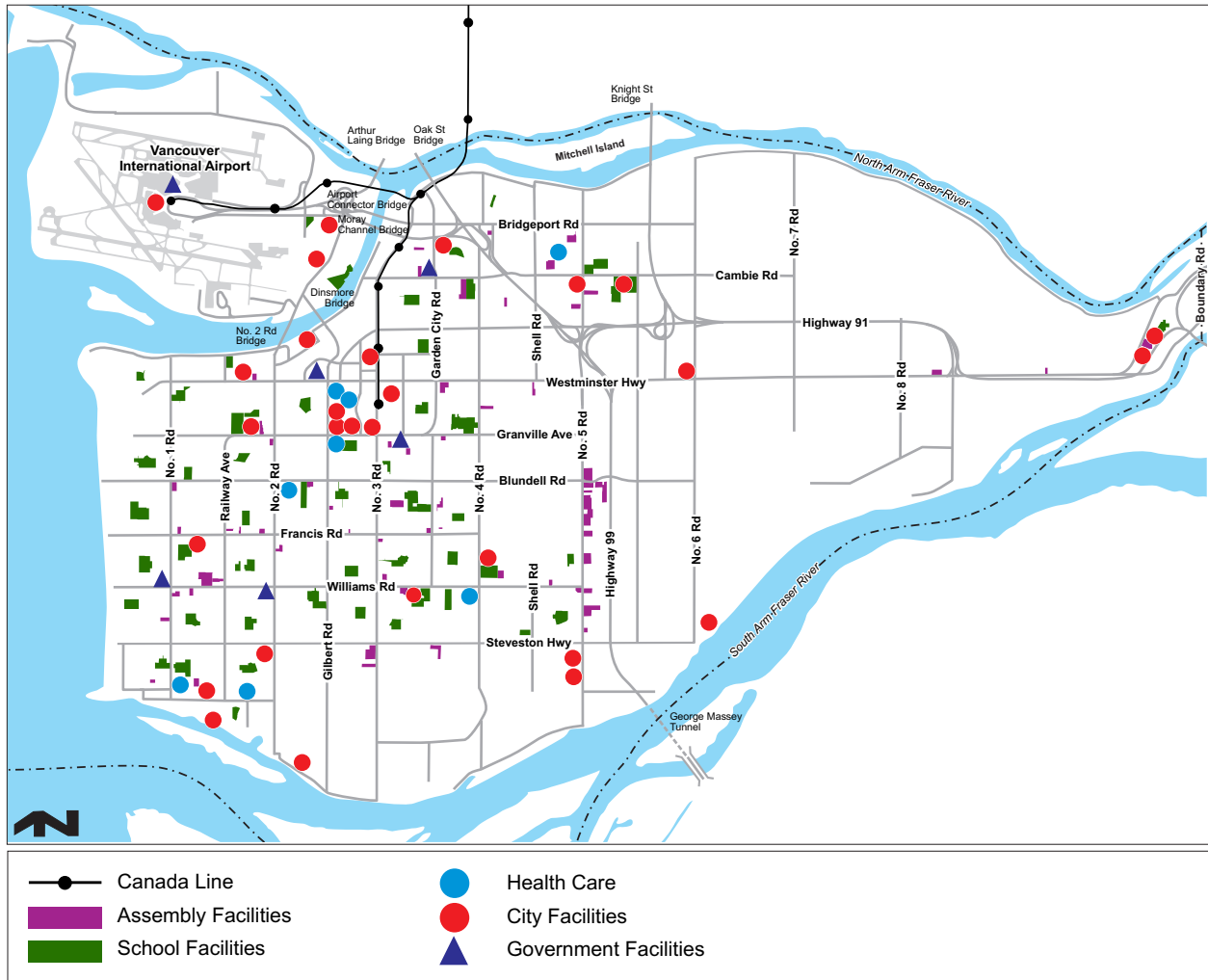
### Office Lands to 2041 Map





4. Institutional Lands to 2041
  - a) There were an estimated 488 ha (1,206 ac.) of institutional-zoned land in Richmond in 2009.
  - b) By 2041, 502 ha (1,240 ac.) will be needed—a deficit of 14 ha (34 ac.).

### Institutional Lands to 2041 Map







## 6.1 Multi-Objective Employment Lands Policies

### OBJECTIVE 1:

Support the development of community-wide employment lands to achieve a resilient economy through the following overarching policies.

### POLICIES:

- a) pursue targeted, high-paying, quality employment uses (e.g., office uses supporting knowledge-based industry jobs), while continuing to support lower-paid jobs for a vibrant community (e.g., commercial uses supporting farm workers, arts and entertainment, tourism and service jobs);
- b) densify neighbourhood commercial centres through multi-use development integrating a range of employment uses;
- c) review DCC rates and programs, to encourage employment lands development (e.g., light industrial DCCs based on level of use, parkland DCCs on employment lands, potential for DCC rates reduction in areas with established infrastructure and lower DCCs on upper storeys to encourage employment lands densification);
- d) ensure that the 2040 Regional Growth Strategy continues to reflect Richmond's employment strengths and interests;
- e) continue to coordinate long-term community planning with neighbouring jurisdictions, vital to long-term employment and a resilient local and regional economy (YVR, PMV, TransLink, Metro Vancouver, Steveston Harbour Authority);
- f) continue to seek from TransLink provisions for suitable transit services to all major employment areas in the community;
- g) establish the City Centre as Richmond's principal commercial and office area;



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- h) advance servicing programs and provide adequate, flexible services (e.g., utilities and roads sized to projected and intensive use of employment lands);
- i) periodically review the Zoning Bylaw to simplify the list of permitted uses on employment lands and re-examine FARs, lot coverage and building heights to enable densification and multi-use;
- j) enable multi-use, rather than singular use, of employment lands;
- k) permit temporary use permits in areas designated Industrial, Mixed Employment, Commercial, Neighbourhood Shopping Centre, Mixed Use and Limited Mixed Use, Agricultural (outside of the ALR) where deemed appropriate;
- l) consider increasing density for multi-storey industrial buildings provided that the following criteria are met:
  - a maximum floor area ratio of 1.5 provided this is for industrial uses (e.g. heavy and general industrial);
  - a minimum site area of 2.5 ha (6.2 acres) to allow efficient truck access and truck and vehicle ramping (the minimum site area may be reduced if demonstrated that a smaller site area is feasible);
  - the site should be located within 1-kilometre of an access point to a major road network or Provincial highway to facilitate efficient vehicle and truck movement;
  - the site should not be located within 100 m (328 ft.) of a residentially zoned lot;
  - corner lots are discouraged as any visible exterior ramping for trucks and vehicles should be from the interior side yard or rear yard; and
  - transportation (e.g., truck access and egress) and servicing issues (e.g., water, sewer, drainage) have been addressed through the rezoning application process;
- m) consider reducing parking requirements for employment developments along major transportation corridors, in combination with other non-vehicular transportation improvements and near transit hubs;
- n) explore the potential for shared parking between sites of different uses (e.g., office and hotel) where parking demand occurs at different times of day;
- o) increase sustainability initiatives (e.g., resource-sharing and eco-industrial applications) for employment lands and mixed-use development;
- p) explore sector-specific workforce housing options and programs (e.g., market rental housing for highly mobile technology sector employees, affordable housing and lower commute times for lower paid services or seasonal farm employees).



## 6.2 Objective Specific Employment Lands Policies

### OBJECTIVE 1: ASIA-PACIFIC GATEWAY

Situated on a major crossroad route between North America and Asia, Richmond is geographically positioned and endowed to support trade activity and an exchange of resources and skills between two continents. Foster a strong Asia-Pacific Gateway enabling sector that capitalizes on Richmond's strategic location, existing transportation and industry infrastructure, and Asia's economic growth is a key objective in support of a competitive local economy.



Credit: Fraser Wharves

### POLICIES:

#### Community-Wide Employment Lands

- a) protect the industrial land base:
  - integrate YVR and PMV long-term economic development plans with Richmond's long-term plans to recognize the potential unavailability of YVR and PMV lands for traditional manufacturing uses (e.g., marine-facing industrial on PMV lands, such as container terminal operations, and gateway-supporting industrial, such as freight operations, on Sea Island);



- monitor the availability of industrial lands in Richmond, as other research under way becomes available (e.g., economic and OCP updates);
  - wherever possible, aim to accommodate traditional manufacturing displaced by higher-priced development within the City;
- b) continue to implement the City's Aircraft Noise Sensitive Development Policy and maintain compliance throughout the development applications and building permitting processes;



- c) improve road infrastructure to achieve efficient truck movement;
- d) improve dredging and rail services within the existing urban footprint boundary;
- e) promote short sea shipping to reduce road usage and GHG emissions;
- f) promote wider roads in logistics-driven areas for truck traffic and narrower roads in business parks for vehicular traffic;
- g) pre-service lands where long-term industrial development is expected and it is feasible to do so;
- h) investigate the feasibility of establishing minimum floor area ratios (FARs) in industrial zones;
- i) except in areas of industrial development abutting residential use, consider increasing the maximum building height in industrial zones (e.g., from 12 m to 20 m or 39.4 ft. to 65.6 ft.) or removing it altogether;
- j) consider increasing maximum lot coverage (e.g., from 60% to 75%) in industrial zones, provided that parking and loading requirements are met;
- k) consider allowing hotels as permitted uses in mixed employment business parks;
- l) consider reducing surface parking requirements in areas of low employment-to-building area ratios (e.g., traditional industrial zones);
- m) continue collaboration and coordination with Asia Pacific Gateway partners, including YVR, PMV, Metro Vancouver and tourism bodies;
- n) explore establishing light industrial DCCs based on building area, rather than land area, to ensure a more equitable infrastructure improvement capital cost collection system based on levels of use;





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- o) periodically review parkland DCCs on employment land uses;
- p) consider area-specific DCC reductions or eliminations in areas of redevelopment with already established infrastructure;
- q) consider creating a DCC incentive of lower DCCs on upper storeys in multi-storey industrial developments;
- r) continuously monitor and adjust the balance of DCCs vis-à-vis municipal taxes and their impact on employment lands development;
- s) do not encourage retail sales in the Industrial (I) and Light Industrial (IL) zones, but allow limited retail (e.g., 15% of the overall floor area up to a maximum of 500 m<sup>2</sup> [5,382 ft<sup>2</sup>]) for mixed employment business parks in the Industrial Business (IB) and Industrial Retail (IR) zones, or in site-specific zones which permit a mix of industrial and employment uses, provided the retail is ancillary to manufacturing uses only;

### Area-Specific Employment Lands

#### City Centre

- a) manage employment land uses as per the OCP Aircraft Noise Sensitive Development (ANSD) and City Centre Area Plan (CCAP) policies;
- b) generally support building height restrictions under the flight path;
- c) consider, with YVR, increasing building height in certain areas of the City Centre;
- d) encourage higher density industrial employment uses (e.g., advanced technology manufacturing);

#### North Richmond

- a) manage employment land uses as per the OCP Aircraft Noise Sensitive Development (ANSD) policy;
- b) implement the employment lands policies of the Bridgeport Area Plan;



Credit: YVR

#### Sea Island

- a) support YVR in promoting airport-related industrial and office development on Sea Island that enhances YVR as the Asia-Pacific Gateway hub of North America, minimizes City transportation and servicing costs, and expands Richmond's business tax base and employment growth;
- b) facilitate airport related operational aspects of developments on Sea Island and nearby Lulu Island (e.g., transportation and infrastructure linkages);



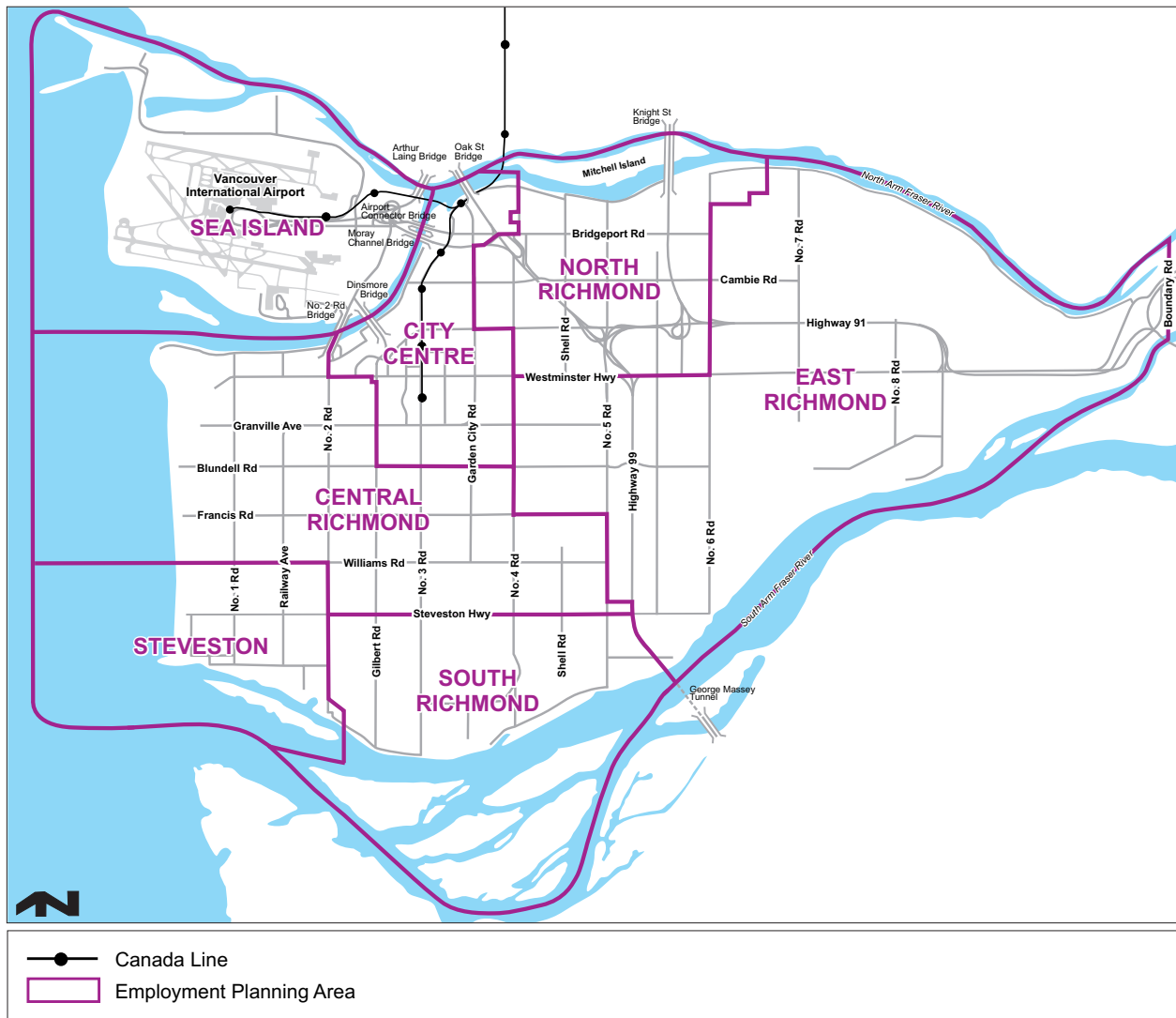
*East Richmond*

- a) retain the industrial areas along the South Arm of the Fraser River for marine-oriented logistics and transportation industries;
- b) maintain adequate flexibility in industrial land designations within the urban footprint to meet future land use needs;
- c) prohibit riverfront residential development along the south arm of the Fraser River in areas of potential conflict with industrial zones;

*Steveston*

- a) continue to coordinate City development plans with the Steveston Harbour Authority to accommodate the industrial land needs of the Steveston Home Port and specific industries, such as fishing and fish processing;
- b) encourage displaced industrial land users to relocate to East and South Richmond;
- c) consider establishing a minimum FAR of 0.4 to intensify Steveston industrial lands for industries wholly contained within a building.

**Employment Area Boundary Map**







Credit: Advanced Cyclotron Systems

## OBJECTIVE 2: KNOWLEDGE-BASED INDUSTRIES

Richmond offers a superb quality of life—a key ingredient of attracting skilled workers to a community. Cultivating a thriving technology and creative hub that supports high-paying jobs and attracts skilled talent is a key objective in pursuing a self-regenerating Richmond economy.

### POLICIES:

#### Community-Wide Employment Lands

- consider increasing office FARs along major transportation corridors (e.g., 1.5 FAR in Neighbourhood Shopping Centres);
- enhance the attractiveness of business parks by encouraging: mixed-use and public spaces, the upgrading of City services and pedestrian-friendly streetscape design;



Credit: Ultrasonix



#### Area-Specific Employment Lands

##### City Centre

- establish City Centre as the primary area of future office development in the City, to accommodate future regional/local office and institutional demands;



Credit: fSONA

- b) consider policy and tax incentives for stand-alone and/or mixed-use office space in the Bridgeport and Aberdeen commercial reserves;
- c) ensure that public realm improvements (streetscape, public spaces) maintain high property values and, where appropriate, encourage the re-development of single-storey retail and light industrial properties to higher-density office space;

#### *North Richmond*

- a) maintain flexible land use designations along certain portions of Bridgeport Road which are designated Mixed Employment lands to accommodate limited mixed industrial/office uses;
- b) in the redevelopment of Bridgeport Road, enable improved access (e.g., secondary back-lane access for businesses) and a more attractive physical environment;

#### *Sea Island*

- a) continue consultation with YVR to encourage the development of new airport-related groundside commercial uses on Sea Island to address their operational aspects, such as traffic implications and infrastructure connectivity;
- b) support airport passenger, visitor and tourism related commercial development (e.g., terminal services, hotels, accessory use retail);

#### *Central Richmond*

- a) in the redevelopment of Neighbourhood Shopping Centres allow for professional services and population-serving businesses (e.g., medical clinics, financial institutions);
- b) consider intensified mixed development (e.g., 4-6 storey versus 1-2 storey), which incorporate small office space in residential/commercial redevelopments.



Credit: Tourism Richmond



Credit: Tourism Richmond

### OBJECTIVE 3: AMENITIES AND ATTRACTIONS

Amenities and attractions, such as retail, restaurants, arts and entertainment, are the businesses that support diversified population-serving and tourism industries and a vibrant local community. A diversified and lighter-footprint commercial sector that provides jobs for local workers, serves the needs of local residents and attracts visitors is a key objective in meeting the needs of a growing population and attracting visitors to Richmond.



### POLICIES:

#### Community-Wide Employment Lands

- a) discourage stand-alone large footprint retail development (e.g., box retail, malls) in automobile-access only areas; integrate large-footprint retail into City Centre and neighbourhood densification and redevelopment;
- b) based on market demand, allow for commercial/retail uses (such as hotels, food establishments) in business parks;





## Area-Specific Employment Lands

### *City Centre*

- a) establish the City Centre as the primary commercial development area in the City, to accommodate the future demand for population- and visitor-serving industries, such as retail, amenities and attractions;
- b) promote grade-level retail for mixed-use development;
- c) consider mixed projects (e.g., 50-50 hotel and residential) in areas outside of the City Centre commercial/industrial reserves;



### *North Richmond*

- a) promote land assembly to provide larger sites (1,858 m<sup>2</sup> or 20,000 ft<sup>2</sup> plus) for mixed use commercial sites in the Alexandra neighbourhood;
- b) evaluate enhancing opportunities for redeveloping the Alexandra neighbourhood through potential property tax incentives, DCC and permit fee reductions, and permit process streamlining;
- c) prepare a redevelopment strategy for the Bridgeport Road commercial area (e.g., property ingress/egress, signage, landscaping, lighting, building form, cohesive design, employee amenities, streetscape design, secondary/lane access for business);

### *Sea Island*

- a) continue consultation with YVR to encourage the development of new airport-related groundside commercial uses on Sea Island to address their operational aspects, such as traffic implications and infrastructure connectivity;
- b) support airport passenger, visitor and tourism related commercial development (e.g., terminal services, hotels, accessory use retail);



*Central Richmond*

- a) allow for local population serving commercial and retail uses in the redevelopment of Neighbourhood Centres (e.g., buildings which include both residential and ground level retail components);
- b) encourage the retention of existing commercial-zoned sites in Central Richmond and/or encourage mixed use developments if these sites redevelop;



*Steveston*

- a) maintain and enhance the visitor appeal of Steveston (e.g., retain waterfront commercial uses, add attractions);
- b) where appropriate, encourage mixed use projects that include an employment component.



#### **OBJECTIVE 4: SUSTAINABLE RESOURCE USE**

To ensure long-term business continuity by implementing a sustainable approach to managing natural and man-made resources for industries. As an industry sector, agriculture provides specific opportunities, with 40% of Richmond's land zoned as agricultural. Within the urban footprint, resource sharing amongst users and neighbours of employment lands, opportunities exist (e.g., energy, water, transportation, administrative services, office space, child care).

#### **POLICIES:**

##### **Community-Wide Employment Lands**

- a) continue to protect the agricultural land base;
- b) promote eco-industrial development related to employment lands—commercial or mixed developments that incorporate a capacity to share resources (e.g., energy, water, parking, transportation, child services);
- c) consider area-specific DCC reductions in employment areas where infrastructure and road impacts are minimal;
- d) encourage the reduction of impervious surfaces in employment lands development;
- e) promote opportunities to integrate the ecological features and services into development;
- f) strategically develop waterfront properties for employment use and continue to improve flood protection;
- g) in areas of improved transit service outside City Centre, consider reducing parking requirements and promote densification;
- h) support private sector investment towards mitigating the impacts of climate change (e.g., renewable energy, stormwater and waste reduction);





### **Area-Specific Employment Lands**

#### *City Centre*

- a) consult with TransLink to ensure that there are adequate capacities on the Canada Line to accommodate population and employment growth;
- b) encourage mixed uses in higher density development areas to provide stable demand for eco-industrial development;

#### *East Richmond and South Richmond*

- a) retain ALR lands;
- b) encourage industrial and business park uses to provide a buffer to agricultural lands;
- c) work with partners to expand food production, urban farming and related employment within the ALR (e.g., food processing, storage and shipping, where approved by the ALC).



## OBJECTIVE 5: POPULATION SERVICES

As the population increases and ages, employment lands will be needed to meet a range of public and institutional uses. A growing, culturally diverse and demographically changing community at the regional level contributes to this trend. Dedicating employment lands and allocating services within the community is a key objective to ensure responsive and adequately resourced public and institutional sectors.



## POLICIES:

### Community-Wide Employment Lands

- a) incorporate institutional uses (e.g., schools, medical centres, childcare) into planned areas of dense population and employment (e.g., mixed use projects in City Centre and Neighbourhood Centres);
- b) investigate the feasibility of intensifying current school/institutional (SI) zones (e.g., consider minimum FARs on which the building is located, net of park or playground areas);



### **Area-Specific Employment Lands**

#### *City Centre*

- a) encourage retail and office uses on the perimeter of large institutional uses (e.g., hospital, WorkSafe BC) that flank major perimeter roads;
- b) encourage major public and institutional uses (e.g., universities, Crown corporations) in the Bridgeport and Aberdeen commercial reserves.

### **OBJECTIVE 6: MICRO BUSINESS**

Entrepreneurs, home-based and micro businesses include a wide range of industries, from arts and entertainment, to contractors, designers, and architects. Development policies that support the employment needs of micro businesses are a key component to building a vibrant and innovative community.

### **POLICIES:**

#### **Community-Wide Employment Lands**

- a) encourage suitably selected home-based businesses (e.g., designers, software developers) which can access nearby support services within the residential areas of the City Centre and Neighbourhood Shopping Centres;
- b) consider zoning bylaw policies to allow for a wider variety of home business uses (e.g., woodworking shop);
- c) encourage live-work elements as parts of mixed-use development projects.

## **7.0 Agriculture and Food**







## 7.0 Agriculture and Food

### 7.1 Protect Farmland and Enhance Its Viability

Bylaw 10230  
2021/04/19

Richmond agriculture: an important contributor to the local economy.

In 2011:

- no. of farm operators: 295
- no. of farms: 211
- amt. of land farmed: 3,072 ha.
- gross receipts: \$48.6 million
- jobs: 1,631
- paid labour: 26,197 weeks

Richmond agriculture is diverse:

- cranberries, blueberries, strawberries, raspberries
- other fruits, and vegetables, nut trees
- greenhouses and nurseries
- poultry and mushrooms
- honey bees and honey
- horses, hay and pasture
- oats, corn, alfalfa

Source: 2011 Census of Agriculture.

#### OVERVIEW:

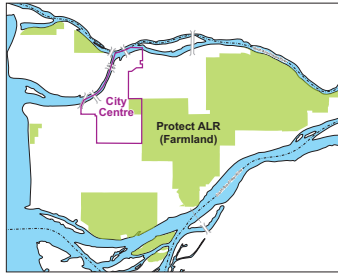
Richmond has a rich agricultural tradition and history and today, it remains a vital component of land use in the City. Farmers have made use of the fertile soils to produce a wide variety of crops and livestock. As the fourth largest city in the Metro Vancouver region, Richmond is fortunate to have significant amounts of protected farmland within its boundaries. Nearly 39% (4,993 ha.) of its land base is protected in the Agricultural Land Reserve (ALR). Additional protection and policy support is provided through Metro Vancouver’s Regional Growth Strategy’s goals, objectives and its agriculture land use designations intended to protect the agricultural land base in the region.







## ALR and City Centre Map



The City recognizes the importance of agriculture as a food source, an environmental resource, a heritage asset and an important contributor to the local economy. Agricultural land and farming is sustained by long-term City policies that maintain an urban containment boundary that keeps residential growth outside of the ALR. As well, it is to be noted that the City owns and controls dedicated roads (except for Provincial highways) in the ALR.

Richmond residents have always placed a high value on the protection of the City's farmlands.

The City's Farming First Strategy includes themes, objectives and policies to guide decisions on the land use management of agricultural land, enhance public awareness of agriculture and food security issues, and strengthen agricultural viability in Richmond. The Farming First Strategy is a result of a multi-phase process, which included a review of existing policies and practices in Richmond, best practice research from other jurisdictions, and input from the City's Food Security and Agricultural Advisory Committee (FSAAC) and Richmond residents.

### OBJECTIVE 1:

Continue to protect the City's agricultural land base in the Agricultural Land Reserve (ALR).

### POLICIES:

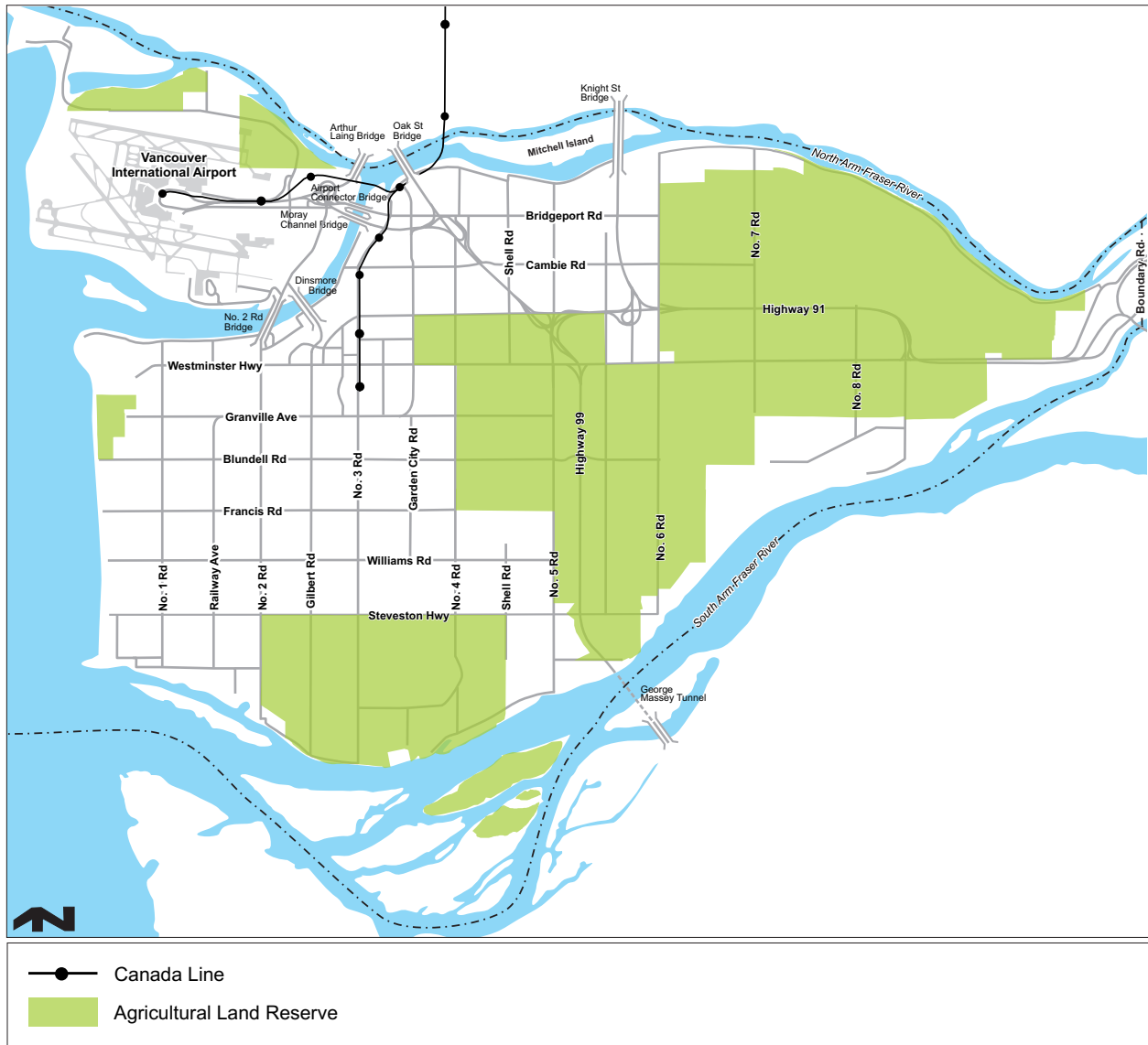
#### Farmland Protection

- a) Maintain the existing ALR boundary and do not support a loss of ALR land.
- b) Ensure that land uses adjacent to, but outside of, the ALR are compatible with farming by establishing effective agricultural buffers on the non-agricultural lands.
- c) Designate all parcels abutting, but outside of, the ALR boundary as Development Permit Areas with Guidelines for the purpose of protecting farming.
- d) Limit the area used for residential development on properties in the ALR. The following policies are to be regarded as guidelines which may be applied by Council, in a flexible manner, individually or together, on a case-by-case basis, when considering rezoning applications, to increase house size in the City's agricultural areas:
  - the need to accommodate a variety of cultural and intergenerational family needs and farm situations;
  - verification that the site has been or can be used for agricultural production;
  - verification that the applicant has been farming in Richmond or elsewhere, for a significant period of time, or if they are a new farmer, they can demonstrate that they are, or will be, capable of farming;
  - demonstration that there is a need for a larger farm house, to accommodate existing and / or anticipated workers on the site, through the submission of a detailed report from a Professional Agrologist indicating such, or through other information;
  - submission of a farm plan which is acceptable to Council that may include justifying any proposed on-site infrastructure, or farm improvements including providing financial security to ensure that the approved farm plan is implemented.



- e) Limit the number of dwelling units to one on lots within the ALR. Any proposal for additional dwelling units would require approval from both Council and the Agricultural Land Commission (ALC).
- f) Seasonal farm labour accommodation, as an additional residential use, may be considered so long as the accommodation is accessory to the principal agricultural purpose and helps to support a farm operation in the Agricultural Land Reserve.

## Agricultural Land Reserve Map





## **OBJECTIVE 2:**

Ensure agricultural production remains the primary use of agricultural land.

## **POLICIES:**

### **Land Use Considerations**

- a) Continue to encourage the use of the ALR land for farming and discourage non-farm uses (e.g., residential).
- b) Limit the subdivision of agricultural land into smaller parcels, except where measurable benefits to agriculture can be demonstrated as per the policies and regulations of the *Agricultural Land Commission Act*.
- c) Consider agricultural projects which achieve viable farming while avoiding residential development as a principal use.
- d) Encourage soil-based farming by regulating the amount of hardsurfacing in agricultural buildings, structures and greenhouses.
- e) Ensure agricultural production (e.g., growing of crops and raising animals) remains the primary use of agricultural land and ancillary uses (e.g., farm retail, storing, packing, preparing and processing of farm products) are secondary uses and consistent with the scale of the farm operation.
- f) Ensure soil deposit and removal proposals enhance agricultural capabilities (e.g., greater range of potential crops) and are consistent with City bylaws and policies, and Provincial requirements.

## **OBJECTIVE 3:**

Enhance long-term agricultural viability and opportunities for innovation.

### **Long-term Viability**

- a) Build relationships with farmers and the agricultural community through the City's Food Security and Agricultural Advisory Committee (FSAAC) to address issues impacting agricultural viability and food security.



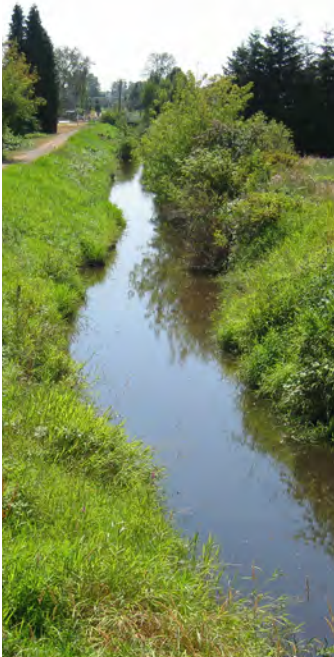
- b) Increase public awareness of City and other initiatives related to agriculture by disseminating information on farming practices, farm products, and educational programs through the City's website, social media or other forms of communication.
- c) Provide information for new farmers and property owners of agricultural land, including property owners who own small parcels (e.g., less than 5 acres), to encourage active farming or lease the land for farming (e.g., Provincial land matching program).
- d) Encourage value-added agricultural related business initiatives consistent with City and Provincial regulations, while ensuring agricultural production remains the primary use of land.
- e) Develop agriculture-specific signage guidelines in order to support seasonal farm retail activities, including any necessary amendments to the City's Sign Bylaw.
- f) Continue to develop relationships with non-profit, academic and government organizations which promote local agriculture, organic growing, climate adaptation, carbon management and reductions in pesticide use.

#### **OBJECTIVE 4:**

**Support the use of agricultural land for local food production and encourage a local food network to increase local food supply and consumption.**

##### **Local Food Network**

- a) Continue to collaborate with Metro Vancouver, the Province, food producers, Vancouver Coastal Health, other municipalities and stakeholders to advance the goals in the Metro Vancouver Regional Food System Strategy.
- b) During the development application process, encourage applicants to consider urban agriculture into development projects outside of the ALR, including rooftop gardens, community gardens, vertical farming, backyard gardening, indoor farming, edible landscaping and the planting of food bearing trees.
- c) Raise public awareness, in coordination with the FSAAC, of local farming, farmer's markets, and local food products, produce and programs.
- d) Support food tourism initiatives, in coordination with Tourism Richmond, the FSAAC, and other local stakeholders to highlight local food production.
- e) Strengthen relationships with external organizations that provide agriculture-related educational opportunities and promote local farming.



**OBJECTIVE 5:**

**Continue improvements to irrigation and drainage infrastructure in support of agricultural production.**

**Servicing and Infrastructure**

- a) Continue improvement of irrigation and drainage infrastructure to provide secure and suitable water supplies and functional drainage systems that support the agricultural sector while protecting environmental assets, in consultation with the agricultural community and relevant City departments.
- b) Consider separate water meters for the principal dwelling and the farm operation and ensure adequate service connections are installed for the farm operation.
- c) Update and implement the East Richmond Agricultural Water Supply Study.
- d) Encourage sustainable farm practices that utilize on-site water drainage, storage and use, and result in the reduction of potable water use.
- e) Continue to monitor the impact of the Fraser River ‘salt wedge’ on agricultural land and support improvements to supply salt-free irrigation water to affected areas.

**OBJECTIVE 6:**

**Support farm access to properties located in the ALR.**

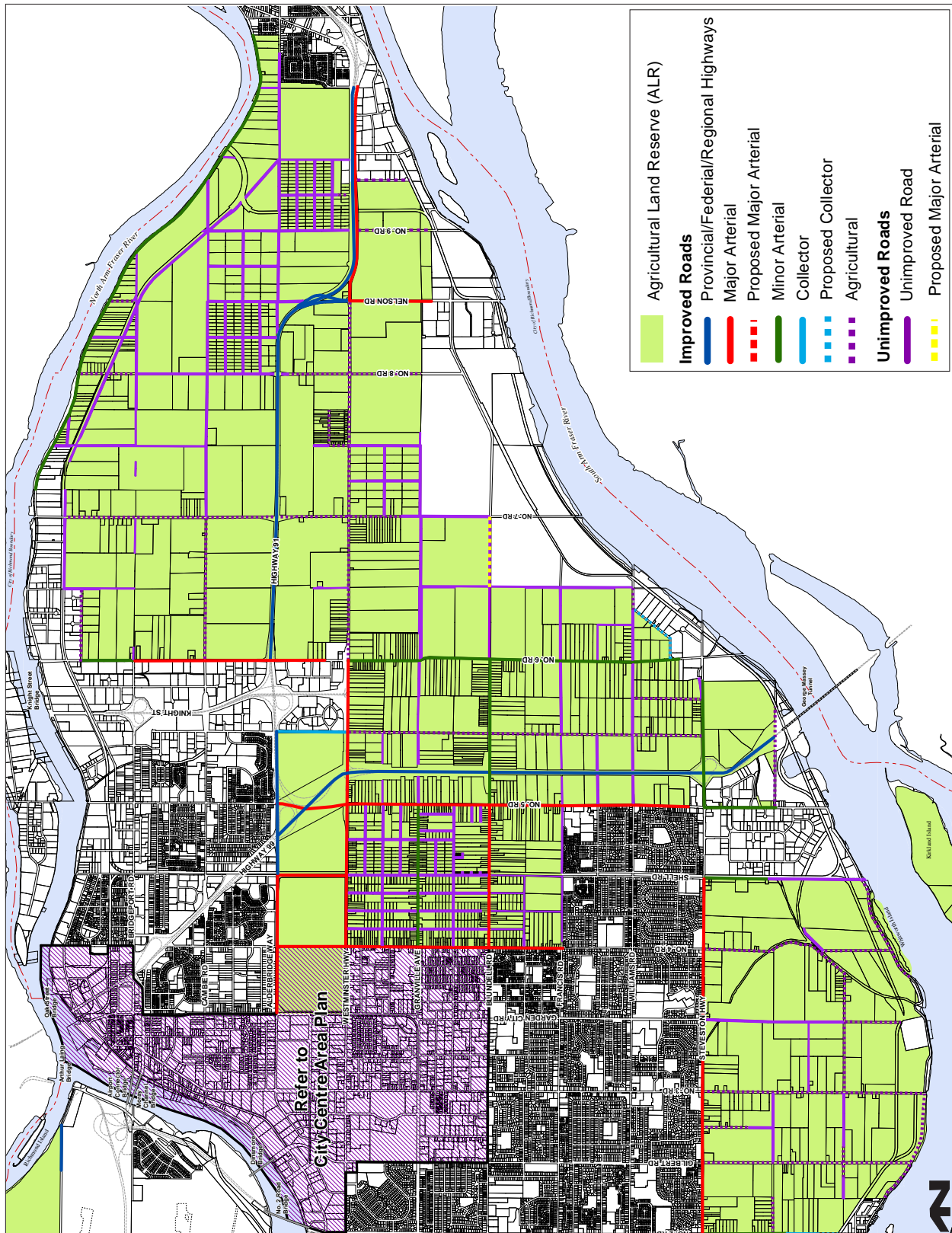
**Farm Access**

- a) Discourage, wherever possible, roads in the ALR, except as noted on the Existing Status of Road Improvements in the ALR Map.
- b) Consider how proposed road improvements (e.g., road widening) on existing City roads may impact farmland.
- c) For agricultural operations on agriculture sites with no direct road access, the City may facilitate farm access only (no new or improved roads) through unopened road allowances (via licensing agreements with the City).
- d) Regulate all soil deposition and removal, including for farm access roads, as permitted by Provincial regulations, through a City permitting process to ensure impacts are mitigated (e.g., adjacent properties, City property, Riparian Management Areas, and Environmentally Sensitive Areas).





## Existing Status of Road Improvements in the ALR Map







## **OBJECTIVE 7:**

**Mitigate the impacts of climate change on agricultural production.**

### **Climate Change**

- a) Coordinate with Metro Vancouver, ALC, and the Ministry of Agriculture to assess the long-term impacts of climate change on agriculture and develop a coordinated response and tools to protect agricultural production.
- b) Continue to protect agricultural land and agricultural production, while supporting the City's Dike Master Plan, Flood Protection Management Strategy and climate action initiatives to address sea-level rise.
- c) Encourage sustainable farming practices, in coordination with relevant City departments, the FSAAC, ALC and Ministry of Agriculture, including water and soil conservation, greenhouse gas emissions reductions and soil management.
- d) Continue to protect agricultural land and agricultural production, in coordination with the City's Dike Master Plan, Flood Protection Management Strategy and climate action initiatives to address sea-level rise.

## **OBJECTIVE 8:**

**Maintain a balance between the natural environment and agricultural production.**

### **Environment**

- a) Continue to implement standard assessment criteria for farming properties where designated Environmentally Sensitive Area (ESA) or Riparian Management Area (RMA) will be impacted, while continuing to support agricultural production.
- b) Investigate opportunities for reducing emissions from crop and livestock production, in coordination with the FSAAC, ALC and Ministry of Agriculture.
- c) Explore opportunities to promote the relationship between agricultural viability and biodiversity through agricultural practices that benefit wildlife.

## **OBJECTIVE 9:**

**Continue to work collaboratively with upper levels of government to enhance agricultural viability.**

### **Coordination and Collaboration**

- a) Coordinate with ALC and Ministry of Agriculture to ensure City bylaws and policies are consistent with Provincial policies and regulations, including the *Agricultural Land Commission Act*, ALR Regulations, ALC Policies and the Minister's Bylaw Standards.
- b) Coordinate with ALC and Ministry of Agriculture to ensure development proposals are consistent with Provincial policies and regulations.



- c) Coordinate with Metro Vancouver to support the Regional Growth Strategy, which includes agricultural designations and policies for protection of agricultural land.

**Upper-level Government Support**

- d) Continue to communicate with upper levels of government to address the following agricultural-related issues:
- Review income threshold for farm status to encourage legitimate farming operations;
  - Protection for farmers who lease farmland and encourage longer term leases;
  - Strengthening the *Agricultural Land Commission Act* and the ALR Regulations to explicitly prohibit non-farm uses in the ALR and encourage agricultural production;
  - Enforcement of contraventions on ALR property (including monitoring, inspections, and penalties for non-compliance);
  - Improved regulations for non-soil based greenhouses and limiting such structures to areas with lower soil class agricultural land (e.g., Class 4 or lower);
  - Explore financial incentives for farming operations (e.g., grants, tax breaks and training opportunities);
  - Explore financial incentives for environmental/sustainable farm operations, organic farming and reduction in pesticide use;
  - Incorporation of environmental stewardship initiatives into the *Farm Practices Protection (Right to Farm) Act*.



Credit: Richmond Food Security Society

## 7.2 Promote Urban Agriculture and Advance Food Security

### OVERVIEW:

Urban agriculture is commonly defined as the growing of food (fruits, vegetables, grains, mushrooms, meat, dairy products) and herbs within cities. Over the last few years, there has been renewed interest in growing local foods, not only in back yards, but in community gardens located in parks, school yards, vacant lots, along roads, privately donated land and rooftops.

Richmond imports the vast majority of its food from elsewhere which has caused concerns for the stability of the food supply. These issues have focussed more attention toward food security. In a food-secure community, the growing, processing and distribution of healthy, safe food is economically viable, socially just, environmentally sustainable and regionally based.

Action to increase food security can be seen as a continuum that ranges from:

- providing emergency food for those in need (e.g., providing support for food banks and community kitchens);
- building capacity to help those in need (e.g., programs to promote healthy eating and food preparation skills) and access within the community (e.g., ensuring that neighbourhoods have grocery stores within walking or cycling distance);
- strengthening the local food system (e.g., support for community gardens and farmer's markets; raising awareness about the supply of local food such as food directories);
- food waste management (e.g., composting).



Credit: Richmond Food Security Society



### **OBJECTIVE 1:**

To support and increase the range of urban agriculture (e.g., community gardening) and strengthen the food system beyond production.

### **POLICIES:**

#### **Urban Food Production**

- a) continue to seek out opportunities to collaborate with others to increase urban agriculture, the number of community gardens, edible landscapes and food-bearing trees;
- b) encourage the retention of open space for food production (e.g., edible landscaping, gardens, rooftop gardens, food bearing trees) for the use of residents in new residential developments;
- c) continue to support incubator farms in order to help new farmers develop the necessary skills and their businesses;
- d) support the Richmond Fruit Tree Sharing Farm Project which offers stewardship programs to local groups and corporations on its farm site at Terra Nova Rural Park;
- e) explore the keeping of small animals (e.g., poultry and bees) on a limited basis on small agricultural parcels, in consultation with the AAC, ALC and Vancouver Coastal Health;

#### **Food System Infrastructure**

- a) seek ways to support the food system (e.g., retail uses, bakeries, restaurants, street vending opportunities);
- b) explore local street vending opportunities.



## **OBJECTIVE 2:**

Strengthen the local food system to contribute to the economic, ecological and social well being of the City.

### **POLICIES:**

- a) continue to collaborate with Metro Vancouver, the Province, food producers, Vancouver Coastal Health, other municipalities and stakeholders to advance the goals in the Metro Vancouver Regional Food System Strategy;
- b) develop a “Richmond Food Strategy” with citizens and community groups to determine the best role for the city;
- c) continue to raise awareness to strengthen food security; for example:
  - Richmond School Yard Society, Richmond Fruit Tree Sharing Project which offers stewardship programs to local groups and corporations at Terra Nova Rural Park;
  - Kwantlen Farm School at Terra Nova Rural Park;
- d) promote available programs and continue to support community organizations involved with food production/distribution (e.g., Richmond Local Food Guide).





**OBJECTIVE 3:**

Support Locally Grown Food.

**POLICIES:**

- a) develop a “Buy Local” marketing initiative to increase the demand for locally grown agricultural products, in partnership with Tourism Richmond, Chamber of Commerce, the RFI, and others.



**FACT**

In a recent evaluation of the Community Food Action Initiative--across all incomes --86% of participants reported that their participation gave them better 'food skills' and helped them to eat better or have a healthier lifestyle.

Canadian Food Action Initiative, Vancouver Coastal Health.

**OBJECTIVE 4:**

Increase access to affordable, healthy food for residents.

**POLICIES:**

- a) continue to support programs that promote healthy eating and increase food-related skills and knowledge about sustainable food systems;
- b) support Terra Nova Schoolyard Society;
- c) encourage local gardeners to grow extra produce or distribute produce they don't use to the Richmond Food Bank or other community groups;





- d) support programs that encourage children and families to learn healthy eating habits.

**OBJECTIVE 5:**

Find ways to recover food waste.

**POLICIES:**

- a) support the efforts of community groups and the private sector to establish initiatives that divert recoverable food from the pre-waste stream for redistribution to local food banks;
- b) develop strategies to encourage organic waste diversion from multi-family housing and commercial properties;
- c) support the recycling and re-use of organic waste;
- d) develop an educational program to promote awareness around food production, health, and impacts on the community.



Credit: Richmond Food Security Society

Bylaw 9506  
2016/02/15

**7.3 No. 5 Road Backlands Policy**

**OVERVIEW:**

Since 1990, the City and the Agricultural Land Commission (ALC) have agreed that, within the Agricultural Land Reserve (ALR), there shall be a unique area called “No. 5 Road Backlands Policy Area” as shown on the attached No. 5 Road Backlands Policy Area Map.

Bylaw 10258  
2021/05/17

The purpose of the Policy is to allow Religious Assembly uses on the westerly 110m (“Frontlands”) of the properties located on the east side of No. 5 Road between Blundell Road and Steveston Highway (the area outlined in bold lines on the No. 5 Road Backlands Policy Area Map), if the remaining portions (“Backlands”) are actively farmed.

For the purposes of Section 7.3, “Religious Assembly” shall have the same meaning as given to that term in the Use and Term Definitions section of Richmond Zoning Bylaw 8500 (Section 3.4), as amended.



Bylaw 10258  
2021/05/17

**OBJECTIVE:**

Religious Assembly uses may be permitted in the Frontlands if the Backlands are actively farmed.

**POLICIES:**

Bylaw 9506  
2016/02/15

- a) in the Frontlands, Religious Assembly uses may be considered subject to the agricultural development of the Backlands, which is to be considered and approved by the City and the Agricultural Land Commission through the necessary land use approval process;
- b) in the Frontlands, uses that are clearly ancillary to a Religious Assembly use may be considered and approved by the City and the Agricultural Land Commission through the necessary land use approval process;
- c) residential uses (e.g., congregate housing, community care facility, multiple-family housing, housing for older adults) are not permitted in the Frontlands or the Backlands;

Bylaw 10258  
2021/05/17

- d) the City will continue to strive for a partnership approach with property owners to achieve farming of the Backlands (e.g., based on the approved farm plans);
- e) in the Backlands, a limited infrastructure component (e.g., little or no regional and on-site drainage, irrigation or farm access roads) could be allowed, where a full infrastructure component is not practical;
- f) in the Frontlands, satisfactory sanitary sewage disposal is required as a condition of non-farm use or rezoning approval;

Bylaw 9506  
2016/02/15

- g) all applicants proposing to develop new Religious Assembly facilities on the Frontlands or expand an existing Religious Assembly facility must either:
  - provide evidence of Farm Status under the BC Assessment Act to demonstrate that the subject parcel has been farmed for the five consecutive years preceding the ALC’s consideration of an application, or (if no ALC approval is required) the City’s processing of a rezoning application; or
  - provide evidence that the Backlands portion of the subject parcel is currently available for farming via a lease registered on title between the property owner and a legitimate farming enterprise for a term of at least five years, and either:
    - provide evidence that the parcel is currently being farmed; or
    - provide a plan for how it will be farmed;
- h) applicants shall submit the necessary reports to the City to achieve and maintain farming with all costs to implement works associated with an approved farm plan to be paid by the applicant;

Bylaw 10258  
2021/05/17

**Development Application Procedure and Requirements**

- a) all proposals for Religious Assembly development are subject to City and ALC approval through the necessary development application process to be reviewed on a case-by-case basis and in accordance with the OCP;
- b) consideration of Religious Assembly development in the Frontlands is generally subject to:



Bylaw 9506  
2016/02/15

- i) submission and approval of an ALR Non-Farm Use application that is required to be endorsed by the City prior to being considered by the ALC. If the City endorses the ALR Non-Farm Use application, it will be forwarded to the ALC for consideration;
  - ii) pending the outcome of the ALR Non-Farm Use application, a rezoning application will also be required and subject to the required statutory process;
  - iii) other Development Applications (i.e., Environmentally Sensitive Area Development Permit, Development Variance Permit) may also be required based on the proposal or site context;
- c) in certain cases, a rezoning application will not be required following approval of an ALR Non-Farm Use application. Under these circumstances, any specific requirements to be secured through the ALR non-farm use application are to be confirmed through the necessary resolution of Council upon consideration of the application;
- d) in considering development proposals (i.e., ALR Non-Farm Use applications or rezoning application) in the No. 5 Road Backlands Policy area, the City requires the applicants to:
- i) prepare farm plans with access;
  - ii) explore farm consolidation;
  - iii) commit to do any necessary on-site infrastructure improvements;
  - iv) co-operate as necessary to remove constraints (e.g., required infrastructure) to farming the Backlands, in partnership with others;
  - v) commit to legal requirements as may be stipulated by Council to achieve acceptable land uses (e.g., farming the Backlands);
  - vi) provide financial security to ensure the approved farm plan is implemented;
  - vii) undertake active farming of the Backlands;
  - viii) register a statutory right-of-way on title for a future farm access road along the eastern edge of the property along the Backlands, to the satisfaction of the Director of Development;
  - ix) comply with such other considerations or requirements by Council;

### **Reporting Requirements**

- a) all property owners who are required to farm the Backlands must, in a form acceptable to the City, report to the City on a yearly basis regarding the current status of the farm by providing clear evidence (e.g., detailed description of the farming activities conducted in the Backlands, photos, farm tax records) that the Backlands are actively being farmed in accordance with the approved farm plans, to Council and the ALC's satisfaction;

### **Amendments to the Above Policies**

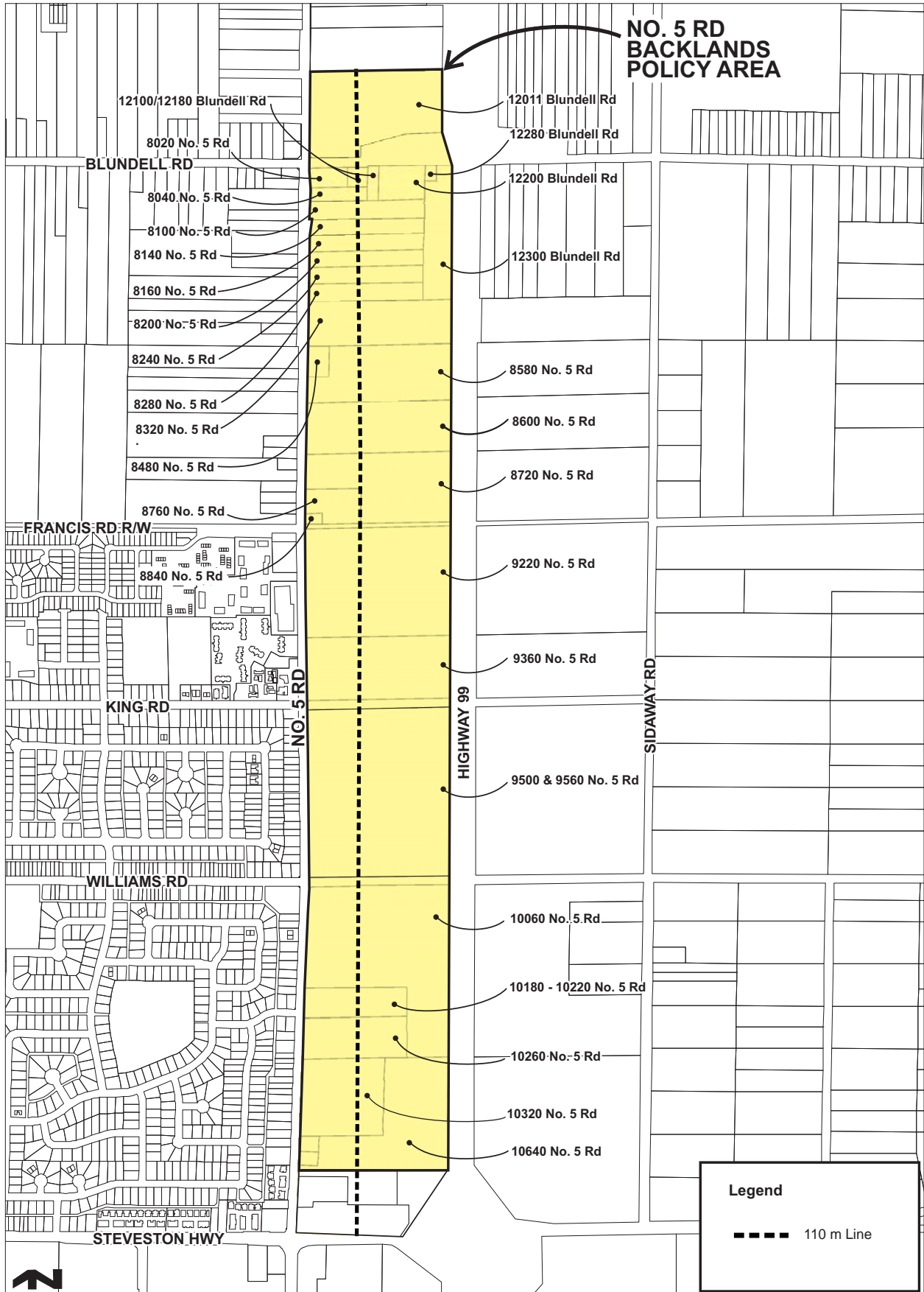
- a) amendments to these policies in the 2041 OCP is subject to the required statutory process, which will include consultation between the City, ALC and other stakeholders as deemed necessary;

### **Co-ordination of Review Process**

- a) the City and the ALC will co-ordinate efforts when reviewing applications for ALR non-farm use and subsequent rezoning applications, in order to ensure that the interests of each party are addressed. This co-ordinated effort will be done prior to granting any approvals.



# No. 5 Road Backlands Policy Area Map







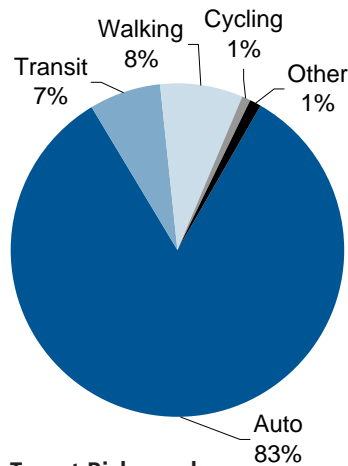
## **8.0 Mobility and Access**



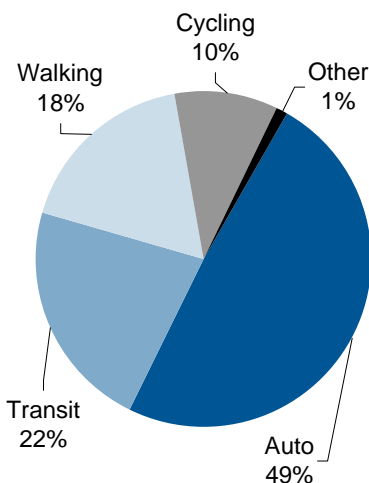


## 8.0 Mobility and Access

Richmond Mode Share (2008)



Target Richmond Mode Share (2041)



### OVERVIEW

Mobility and access are vital to the life of a city. Residents, employees and visitors need to get to places to work, live and play, and access health care services and recreational, shopping and cultural activities. Businesses require efficient goods movement and emergency service providers need clear and convenient access.

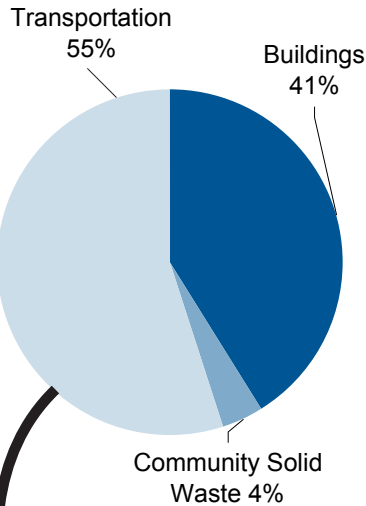
While private automobiles provide a high degree of personal mobility, greater consideration of the consequences of individual and collective travel choices is needed as this preferred travel mode affects the rate of climate change, the environment, air quality, the peace and quiet of neighbourhoods, the health and safety of residents, social equity, the quality, comfort and design of urban development, and investment and maintenance costs.

In 2008, 83% of all trips in Richmond were made by car. If everyone continues to drive at that rate as the population grows, the valued quality of life will decline due to rising traffic congestion, a deterioration in air quality and an omnipresence of cars in every neighbourhood.

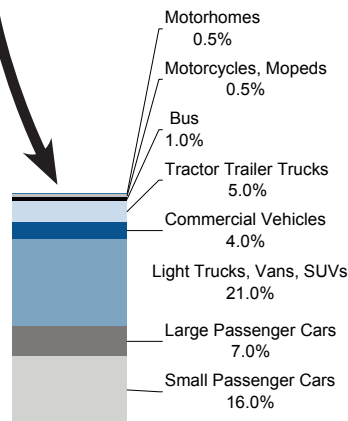
Moreover, on-road motor vehicle transportation accounts for over one-half of all greenhouse gas (GHG) emissions in Richmond as of 2010. Driving cars that use fossil fuels contributes to climate change and, if left unchecked, will significantly undermine efforts to achieve the City's GHG emission reduction targets of 33% below 2007 levels by 2020 and 80% below 2007 levels by 2050 (the same targets as those of the Province and Metro Vancouver).



**Richmond Community GHG Emissions by Sector (2010)**



**Transportation GHG Emissions by Motor Vehicle Type (2010)**



To make notable progress towards these goals will require that residents' travel patterns become more sustainable to ensure that access to people, services and goods is met without producing harm to the environment or social inequity. At a minimum, the percentage of trips by transit, cycling or walking needs to triple from 17% to 51% over the next 30 years. In other words, TransLink and the City need to offer, and residents need to choose, more sustainable travel modes for one of every two trips we make. Given recent positive trends in modal shift (e.g., growing transit use since the opening of the Canada Line) that will be further reinforced by the implementation of the policies outlined in this section, accomplishing such a shift is feasible.

A key action is creating compact, walkable and bikeable neighbourhoods with mixed land uses and convenient public transit service that foster low impact movement by foot, rolling (e.g., wheelchairs and scooters), bicycle, and transit.

Richmond's objectives and policies for meeting this challenge and transitioning to a more sustainable transportation system that enhances the vibrancy, safety and health of the city for future generations are based on achieving the following goals.

**Being Part of a Livable Region**

- Support TransLink's Transport 2040 and Metro Vancouver's 2040 Regional Growth Strategy, and encourage a greater share of trips made by transit, multiple-occupancy vehicles, cycling, and walking.
- Support a livable city by focussing growth in the City Centre and, subject to public acceptance, neighbourhood shopping centres to better meet the daily needs of residents with closer access to shopping, jobs, housing and personal services that, in turn, will help to decrease traffic congestion, energy consumption and air emissions.
- Strive to transform auto-dependant neighbourhoods to foster walking, rolling and cycling as the preferred travel options for accessing local services.
- Enhance transit, rolling and cycling connections between neighbourhood centres and major employment areas for easy city-wide travel without a car.

**Creating Everyday Transportation Choices**

- Increase the priority of sustainable transportation modes (cycling, rolling, walking) while maintaining an adequate balance in road capacity for all users.
- In recognition of changing demographics (e.g., aging population), retrofit existing transportation infrastructure to meet the accessibility and comfort needs of the community.
- Improve safety measures for road users, particularly pedestrians, cyclists and those with living with disabilities, and enhance neighbourhood livability.
- Continue to implement the Child- and Youth-Friendly Land Use and Transport Planning Guidelines for British Columbia.



No. 3 Road—Before



No. 3 Road—After

### Making Travel More Efficient

- Implement timely roadway improvements for goods movement to support economic activities.
- Deploy efficient and innovative transportation technologies to optimize the overall performance of the transportation system and reduce vehicle emissions and energy use.



## 8.1 Road Network

### OVERVIEW:

Richmond’s current road network has been largely designed to facilitate vehicle trips and the resulting street environments may be unappealing for many users. To become a sustainable city for people, not cars, the design of the road network needs to become more inviting for walking, rolling, cycling, and transit.





**OBJECTIVE 1:**

Reduce the reliance on private vehicle travel by increasing the priority of walking, rolling, cycling, and transit within the road network.

**POLICIES:**

- a) over time, redistribute road capacity from private vehicles to transit, cycling, rolling, and walking to enhance the livability of the city;
- b) re-design streets within a 400 m (1,312 ft.) radius around neighbourhood centres to better support walking, rolling, and cycling (e.g., wider and uninterrupted sidewalks, shorter street crossing distances, improved lighting, enhanced audible signals, more street benches, and signed off-street paths);
- c) create shorter blocks to improve connectivity and access, particularly around neighbourhood centres;
- d) re-program traffic signals to give priority to pedestrians (e.g., shorter wait time and longer crossing time) where appropriate, as well as priority for cyclists and transit at intersections along bike and bus routes;
- e) ensure that new developments provide transportation facilities and programs that encourage greater use of transit, walking, rolling, cycling, and energy efficient vehicles (e.g., electric cars).



**Neighbourhood Gateways**

Enhanced streetscapes near neighbourhood centres with:

- sidewalks on both sides of the street;
- curb ramps at all intersections;
- benches and landscaping;
- local connecting bike routes;
- gateway features that reflect neighbourhood characteristics.

**OBJECTIVE 2:**

Encourage sustainable travel by enhancing the safety, comfort and accessibility of the transportation system for vulnerable road users (e.g., pedestrians, the mobility challenged, cyclists).

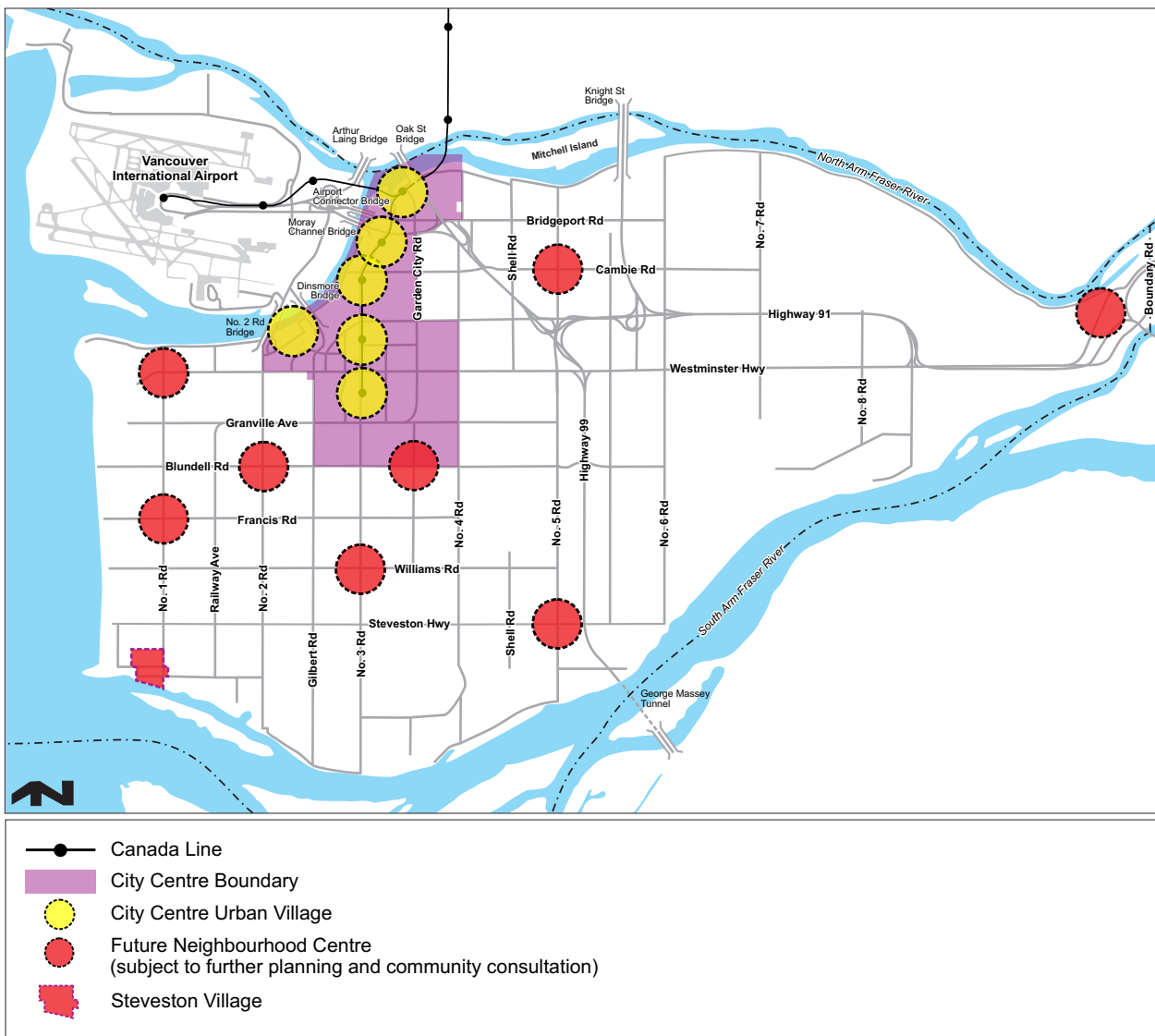
**POLICIES:**

- a) retrofit road and streetscape features to meet the changing mobility needs of the community to enhance accessibility, comfort and security for all ages and abilities of users (e.g., all sidewalks and pathways to have curb ramps at intersections as required, additional benches, larger font for signage, wayfinding maps);



- b) install accessible pedestrian signal features (e.g., audible wayfinding messages and “walk/do not walk” tones) at all special crosswalks (i.e., those with pedestrian-activated overhead flashing amber lights) and signalized intersections;
- c) implement traffic calming measures (e.g., speed humps, traffic circles) where necessary to mitigate speeding and cut-through traffic to enhance neighbourhood livability;
- d) implement pedestrian-friendly traffic control measures (e.g., lower speed limits, no right-turns allowed on red) in areas with high pedestrian volumes.

## Priority Areas for Distinctive Street Design and Pedestrian/Rolling/Cycling Improvements Map





**OBJECTIVE 3:**

Optimize the existing road network to improve circulation and goods movement and reduce the need for added road capacity.

**POLICIES:**

- a) implement road improvements identified in the City Centre Transportation Plan to reduce congestion and improve circulation in the city core;
- b) use a hierarchy of local to major roads that directs through traffic to major roads, allows local circulation in areas of intense land use activity and minimizes traffic intrusion into residential neighbourhoods;
- c) require shared access and lanes parallel to major roads to discourage individual driveways that impede through traffic flow and create safety hazards for transit, cyclists and pedestrians;
- d) support the implementation of improvements along Highway 99, including an upgraded interchange at Steveston Highway, to enhance local circulation and connectivity, increase safety and improve goods movement;
- e) implement timely road improvements for goods movement, particularly in commercial and industrial areas, to support and promote economic activities;
- f) implement new and proven technological measures (such as traffic signal preemption) to continually improve access and minimize response times for emergency services;
- g) limit the expansion of travel lane capacity for single-occupant private vehicles at all regional and provincial bridges/highways and give priority to transit, trucks and high-occupancy vehicles.

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### Implementation

Road and streetscape improvements will be undertaken through:

- development (e.g., redevelopment of neighbourhood centres);
- the City's annual Capital Program; and/or
- initiatives of senior governments (e.g., external grants, improvements to the Highway 99 corridor).

Projects carried out by the City will be evaluated and prioritized based on the following criteria:

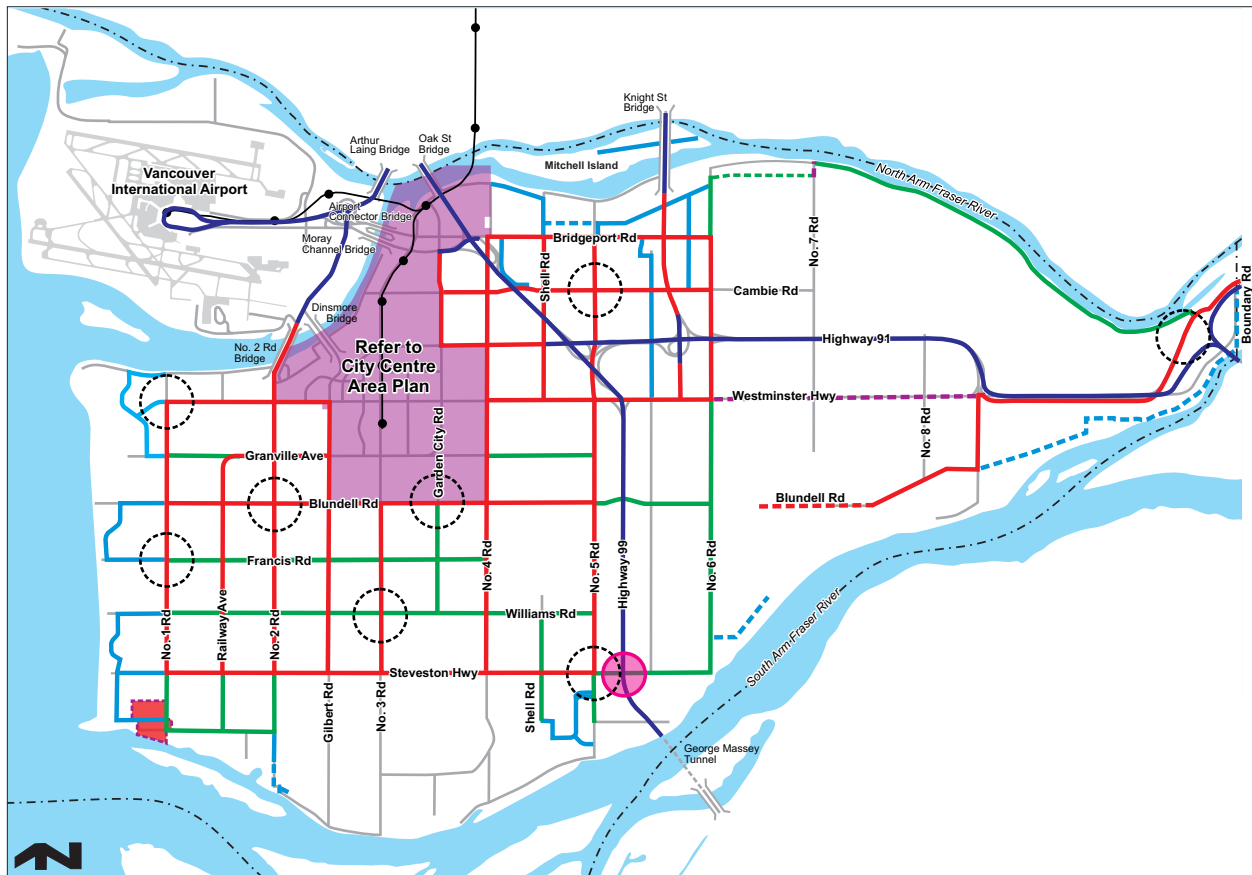
- within a 400 m (1,312 ft.) radius of a neighbourhood centre;
- crash history and traffic volumes/speeds on the roadway;
- enhances road safety for all users;
- provides a key connection for goods and transit;
- sufficient right-of-way available (i.e., no property acquisition required).

Road and streetscape improvements will be funded through the following mechanisms:

- development cost charges (DCC);
- as part of required works and services for new developments;
- voluntary developer contributions;
- general City revenues;
- grants and/or cost-share funding from senior governments;
- other future new revenue sources.



# Road Classification Map Bylaw 9901 2018/09/04



- |   |                                      |
|---|--------------------------------------|
| Canada Line   | Provincial/Federal/Regional Highways |
| City Centre Boundary  | Major Arterial                       |
| Future Neighbourhood Centre<br>(subject to further planning and community consultation) | Proposed Major Arterial              |
| Steveston Village   | Minor Arterial                       |
|   | Proposed Minor Arterial              |
|   | Collector                            |
|   | Proposed Collector                   |
|   | Agricultural                         |
|   | Proposed Upgraded Interchange        |

See Section 7.1 (Existing Status of Road Improvements in the ALR Map) for more detail on agricultural road network.





## 8.2 Transit

### Frequent Transit Network

Work with TransLink to establish a Frequent Transit Network with service:

- every 15 minutes;
- 13-15 hours per day;
- 7 days per week.



### OVERVIEW:

The Canada Line rapid transit system is a planned key element in transforming Richmond's City Centre from auto- to transit-oriented, as it offers a convenient, frequent, reliable, and accessible travel choice. Beyond the City Centre, transit service needs to be enhanced to better allow all trips to be made using a refined hierarchy of services (e.g., more frequent regional and local bus routes, neighbourhood community shuttles) tailored to meet the mobility needs of the community.

### OBJECTIVE 1:

Make transit the preferred travel choice of Richmond's transportation system.

### POLICIES:

- work with TransLink to establish a hierarchy of transit services:
  - a Frequent Transit Network (enhanced with transit priority measures along selected roadway sections) that directly connects the City Centre, major employment areas, neighbourhood centres, and other major destinations outside Richmond (e.g., town centres, University of British Columbia, Tsawwassen Ferry Terminal);
  - more convenient buses that better serve other key local destinations and activity centres (e.g., community centres, schools, parks);
  - community shuttles that better serve local neighbourhoods and lower density areas;
- in collaboration with TransLink, improve transit service through:
  - developing successive Richmond Area Transit Plans that identify planned short-term and long-term transit service improvements (both bus and rapid transit) for both existing routes (e.g., increased frequency, longer hours of operation, more capacity) and future services (e.g., new rapid transit and bus routes);



- enhancing transit coverage by introducing new routes along roadways not yet served by transit, particularly in east-west and north-south directions that do not necessarily travel through the City Centre;
- developing centralized transit exchanges in the City Centre, Steveston Village and elsewhere to maximize passenger convenience for transfers and minimize vehicle circulation;
- increasing HandyDART service for people who are unable to use public transit without assistance (e.g., longer and more flexible hours of operation, more capacity);
- exploring the potential of water-based public transit services.



**Transit Amenities**

Provide better amenities at bus stops:

- more shelters and benches;
- landing pads for full accessibility;
- better connected sidewalks and crosswalks;
- transit information at high passenger locations.

**OBJECTIVE 2:**

Enhance the appeal of transit service with supporting amenities.

**POLICIES:**

- a) for each neighbourhood shopping centre, establish weather-protected transit plazas with convenient pedestrian, rolling and bike access, wayfinding, and connections to bus stops.
- b) improve transit accessibility and amenities by providing:
  - landing pads to accommodate rolling (e.g., wheelchair and scooter access) including improved accessible taxi loading and unloading places;
  - better connected sidewalks, marked crosswalks and pedestrian lighting;
  - attractive, recognizable and comfortable shelters, benches and litter/recycling receptacles;
  - weather protection;
  - transit information (e.g., route maps) including real-time information at high passenger volume locations;



- c) encourage retail services to locate within Canada Line stations, exchanges and neighbourhood shopping centre areas for improved passenger convenience, as well as added security;
- d) implement transit priority measures (e.g., queue jumper lanes, transit-only signal phase) where warranted;
- e) encourage the use of transit through developer-provided transit passes or other incentives for residents and employees in new developments;
- f) seek opportunities to integrate car-share and bike-share programs with transit facilities to support a car-free lifestyle.

**Implementation**

TransLink is responsible for the provision of public transit service and the City will work with TransLink to facilitate service improvements. Transit amenity improvements will be undertaken through development and the City's annual Capital Program.

Projects carried out by the City will be evaluated and prioritized based on the following criteria:

- within a 400 m (1,312 ft.) radius of a neighbourhood centre;
- demonstrated community demand (e.g., upgrade of bus stop to become accessible);
- transit service frequency and/or passenger volumes;
- sufficient right-of-way available (i.e., no property acquisition required).

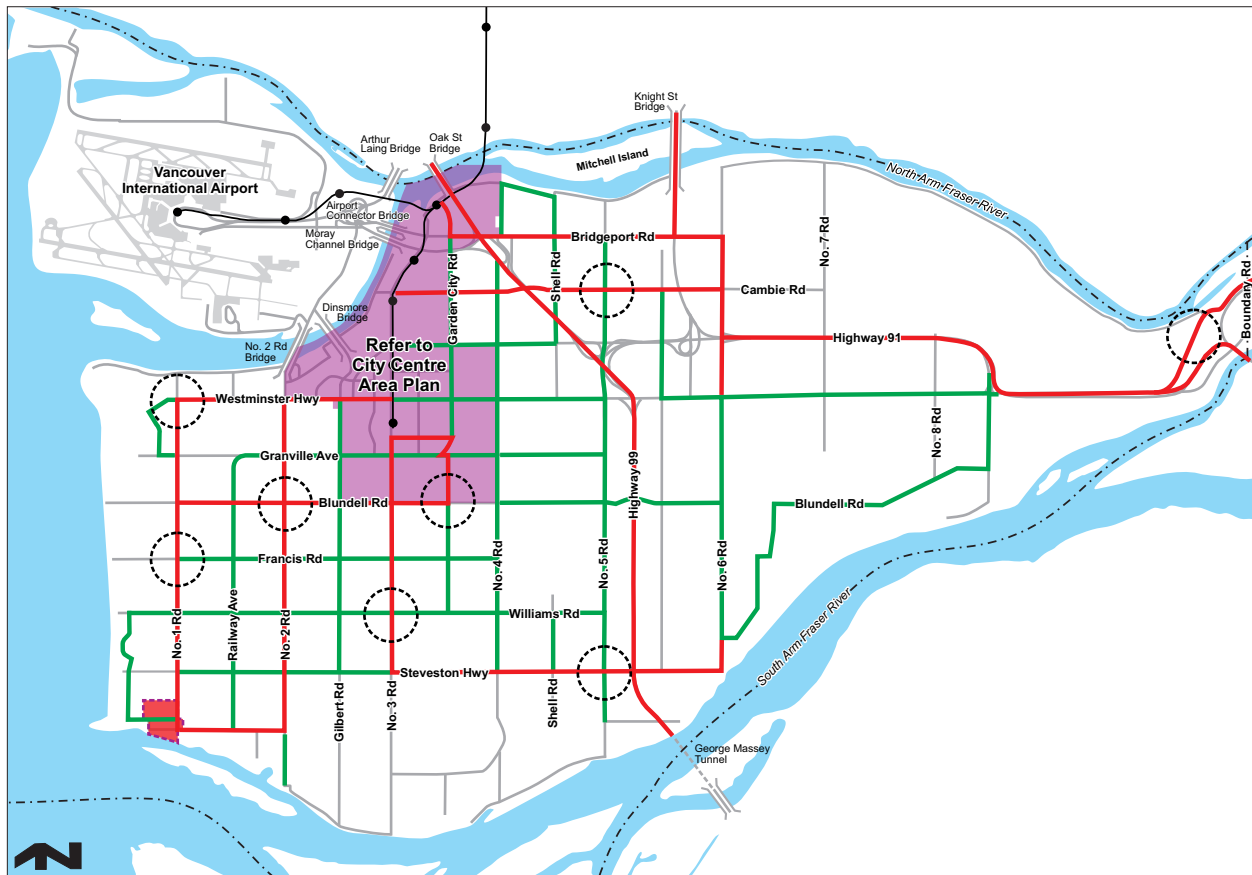
Transit amenity improvements will be funded through the following mechanisms:

- payment of development cost charges (DCC);
- as part of required works and services for new developments;
- voluntary developer contributions;
- general City revenues;
- grants and/or cost-share funding from senior governments;
- other future new revenue sources.





**Transit Network Map** *Bylaw 9901  
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- Canada Line
- City Centre Boundary
- Future Neighbourhood Centre  
(subject to further planning and community consultation)
- Steveston Village
- Frequent Transit Route  
(key transit corridors with higher levels of all day demand in both directions)
- Local Transit Route  
(transit corridors with varying levels of demand throughout the day in each direction)

Note: the transit network is a long-term concept that will be refined in collaboration with TransLink through successive Richmond Area Transit Plan updates.





**FACT**

Shifting from private motorized transport to walking, cycling and public transit is associated with reduced cardiovascular and respiratory disease from air pollution, less traffic injury, and less noise-related stress. In addition, significant health benefits are expected from increased physical activity, which can prevent some cancers, Type 2 diabetes, heart disease, and obesity-related risks.

American Public Health Association, The Hidden Health Costs of Transportation, February 10, 2010. 15 Mar 2012.



**8.3 Walking**

**OVERVIEW:**

Walking should be an experience that is enjoyed not merely endured. The walkability of a community is a key indicator of its health, safety and inclusiveness, and the quality of its public realm. To encourage more walking, whether for transportation, a stroll or sightseeing, barriers that limit walking need to be reduced and the pedestrian environment must be safe, appealing and accessible.

**OBJECTIVE 1:**

Foster a culture where people choose to walk for transportation and for health.

**POLICIES:**

- a) create a high quality and appealing streetscape by providing:
  - gathering and resting areas along streets, at bus shelters and within neighbourhood shopping centres where pedestrians are encouraged to linger and feel comfortable;
  - street furniture including more benches both along the street and in areas with higher volumes of pedestrians (e.g., City Centre, neighbourhood centres);
  - landscaped boulevards, trees and curbside parking where appropriate as a buffer from vehicle traffic;
  - pedestrian lighting to improve safety, visibility and minimize the potential for crime;
  - street-facing businesses oriented for pedestrian access;
  - continuous weather protection;
  - pedestrian-scale wayfinding and directional signage;
  - public art that animates the environment;
- b) encourage “walk to school” programs to increase community health and safety, and to reduce school-related vehicle trips.

**A Culture of Walking**

Improve the walking environment with features such as:

- gathering and resting areas including more benches;
- landscaped boulevards and trees;
- continuous weather protection (e.g., awnings) along commercial frontages;
- wayfinding and public art.







**OBJECTIVE 2:**

Expand and enhance the network for walking and rolling (scooters, skates and other personal low-powered travel modes).

**POLICIES:**

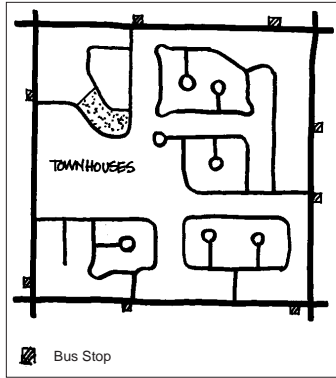
**Neighbourhood Links**

Establish a network of neighbourhood links that provide walking connections to:

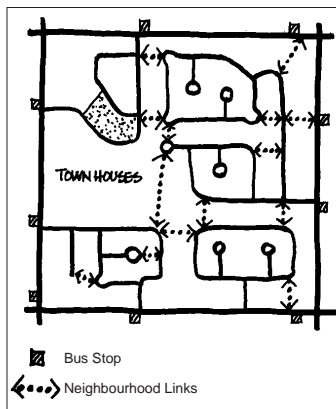
- local destinations (schools, parks, transit stops, neighbourhood centres);
- city-wide greenways.



- a) provide direct walking routes to popular local destinations such as schools, neighbourhood centres, transit stops, and recreation areas;
- b) where no side streets exist, provide safe opportunities for crossing at mid-block locations;
- c) improve the connectivity of the pedestrian and rolling network (e.g., sidewalks, neighbourhood links, greenways, trails) by placing a high priority on filling in missing gaps (e.g., discontinuous sidewalks);
- d) create new connecting pathways and links within neighbourhoods as development opportunities occur;
- e) in higher volume pedestrian areas or as a traffic calming measure, extend sidewalks across streets as raised crosswalks;
- f) provide appropriate measures of protection from vehicle traffic, particularly at intersections, such as:
  - curb extensions to decrease crossing distance and increase visibility;
  - traffic calming (speed humps, raised crosswalks, median refuges);
  - special pavement markings and textures;
  - priority via an advance walk phase before the green traffic signal for vehicles;
  - restrict vehicles from turning right on a red light;
- g) maximize the duration of the walking and rolling phase for pedestrians at all signalized intersections;
- h) minimize the waiting time at traffic signals by giving immediate priority to those wishing to cross the street;
- i) provide a barrier-free walking and rolling environment that is accessible for users of all abilities including:



Typical Subdivision with Limited Pedestrian Access



Enhanced Subdivision with Neighbourhood Links



- well-maintained and smooth walking surfaces that have an adequate width free of obstructions;
- curb ramps at all intersections;
- accessible pedestrian signal features at all signalized intersections and special crosswalks (crosswalks with pedestrian-activated overhead flashing amber lights);
- in high pedestrian areas, continuous detectable warning surfaces at curb ramps and street edges to delineate the pedestrian area from the street.



### OBJECTIVE 3:

Expand and improve walking and rolling connections to Neighbourhood Centres.

### POLICIES:

- Within a 400 m (1,312 ft.) radius around each neighbourhood centre, enhance the pedestrian and rolling environment by providing:
  - curb ramps at all intersections and in each direction of travel;
  - sidewalks on both sides of the street that are continuous across driveways;
  - a minimum sidewalk width of 1.5 m (4.92 ft.) and preferably 2.0 m (6.56 ft.);
  - shorter street crossings via curb extensions and/or narrower roadways (e.g., remove right-turn lanes);
  - pedestrian-scale lighting and wayfinding;
  - resting areas with benches and other streetscape features and amenities such as trees, litter and recycling receptacles, drinking fountains, banners, planters and other landscaping and public art.

### Implementation

Pedestrian and streetscape improvements will be undertaken as part of redevelopment and the City's annual capital program.





Projects undertaken by the City will be evaluated and prioritized based on the following criteria:

- within a 400 m (1,312 ft.) radius of a neighbourhood centre;
- provides direct access to local destinations such as schools, parks, neighbourhood centres, and transit stops;
- location coincides with proposed neighbourhood links identified in Section 3.5 (Specific Richmond Neighbourhood Maps);
- completes a gap in pedestrian facilities to create a continuous link;
- degree of neighbourhood support;
- crash history and traffic volumes/speeds on the roadway;
- sufficient right-of-way available (i.e., no property acquisition required).

Projects will be funded by the following mechanisms:

- payment of development cost charges (DCC);
- as part of required works and services for new developments;
- voluntary developer contributions;
- general City revenues;
- grants and/or cost-share funding from senior governments;
- other future new revenue sources.



## 8.4 Cycling

### OVERVIEW:

Richmond's flat topography makes cycling a practical and enjoyable means of travel that also provides significant health and environmental benefits. As nearly one-half of all trips within Richmond are 5 km (3.1 mi.) or less in length—which an average cyclist can ride in only 20 minutes—cycling is a fast, convenient and fun way to get around. Increasing the number of trips by bike requires an improved cycling network that is safe and continuous, secure bike parking, seamless integration with transit, and supportive strategies that seek to promote cycling as well as educate both cyclists and motorists.



Examples of major street bike routes:



Painted



Protected



Off-street

**OBJECTIVE 1:**

Encourage more bike trips by providing a safe and cohesive cycling network.

**POLICIES:**

- a) implement an expanded bike route network with designated facilities spaced at least every 800 m (2,625 ft.) that connect to major destinations within Richmond and to the rest of the region;
- b) for bike routes that use streets, match the route type to the road classification whereby:
  - selected arterial roads and collectors with higher traffic volumes and speeds have “major street bike routes” that comprise, either on-street bike lanes with physical separation from motor vehicles where possible, or off-street bikeways parallel to the roadway;
  - local roads with lower traffic volumes and speeds have “neighbourhood bike routes” where cyclists and drivers share the roadway with no delineation of separate cycling facilities;
- c) continue to update the existing major street bike network to:
  - identify and prioritize missing routes, gaps and deficiencies;
  - where feasible, upgrade key segments by providing a physical separation between cyclists and motorists;
- d) expand the major street bike route network by:
  - establishing new off-street bikeways as part of new developments including the re-aligned River Road via former CP Rail corridor (Hollybridge Way to Capstan Way), Capstan Way (River Road to Garden City Road) and Sexsmith Road-Brown Road-Cooney Road;
  - establishing on-street bike routes, with physical separation where feasible, by reallocating road space (e.g., reducing travel or parking lanes);
- e) establish a grid of neighbourhood bike routes that:
  - use local streets and connecting off-street pathways;
  - where feasible, are spaced approximately every 800 m (2,625 ft.) between every major road both north-south and east-west;
  - connect directly or through branch routes to local destinations such as schools, neighbourhood centres and recreation areas;
  - integrate with major street bike routes for connections to other city and regional destinations;
  - have distinctive, visible and recognizable wayfinding that guides cyclists and identifies nearby attractions;
  - where necessary, have traffic calming measures to moderate vehicle speeds and volumes;
  - have enhanced crossings at arterial roads (e.g., pedestrian signal with bicycle detection);



**Major Street Bike Network**

Complete missing links in the major street bike route network including:

- new north-south route between Railway Avenue and Garden City Road;
- new east-west route between Williams Road and Granville Avenue;
- completion of Shell Road north of Highway 99.



- f) require secure and sufficient short-term and long-term bike parking at all developments and consider covered and secure facilities in areas with high demand (e.g., libraries, recreation facilities, transit stations);
- g) encourage the provision of end-of-trip facilities (e.g., lockers, showers, changing rooms) in major developments;
- h) work with TransLink to ensure cyclists have full access to all transit services;
- i) support the implementation of a public bike-share system as part of a regional program that integrates with transit service.



**OBJECTIVE 2:**

Support skills training programs for cyclists, motorists and other road users (e.g., the mobility challenged).

**POLICIES:**

- a) encourage the inclusion of cycling skills training and testing in elementary and secondary school curricula;
- b) support programs offering cycling skills and traffic safety training and education for adults;
- c) encourage the inclusion of education material that emphasizes the rights and responsibilities of motorists, cyclists and the mobility challenged in driver training, testing and safety education programs.

**Neighbourhood Bike Routes**

Establish a City-wide network of neighbourhood bike routes that:

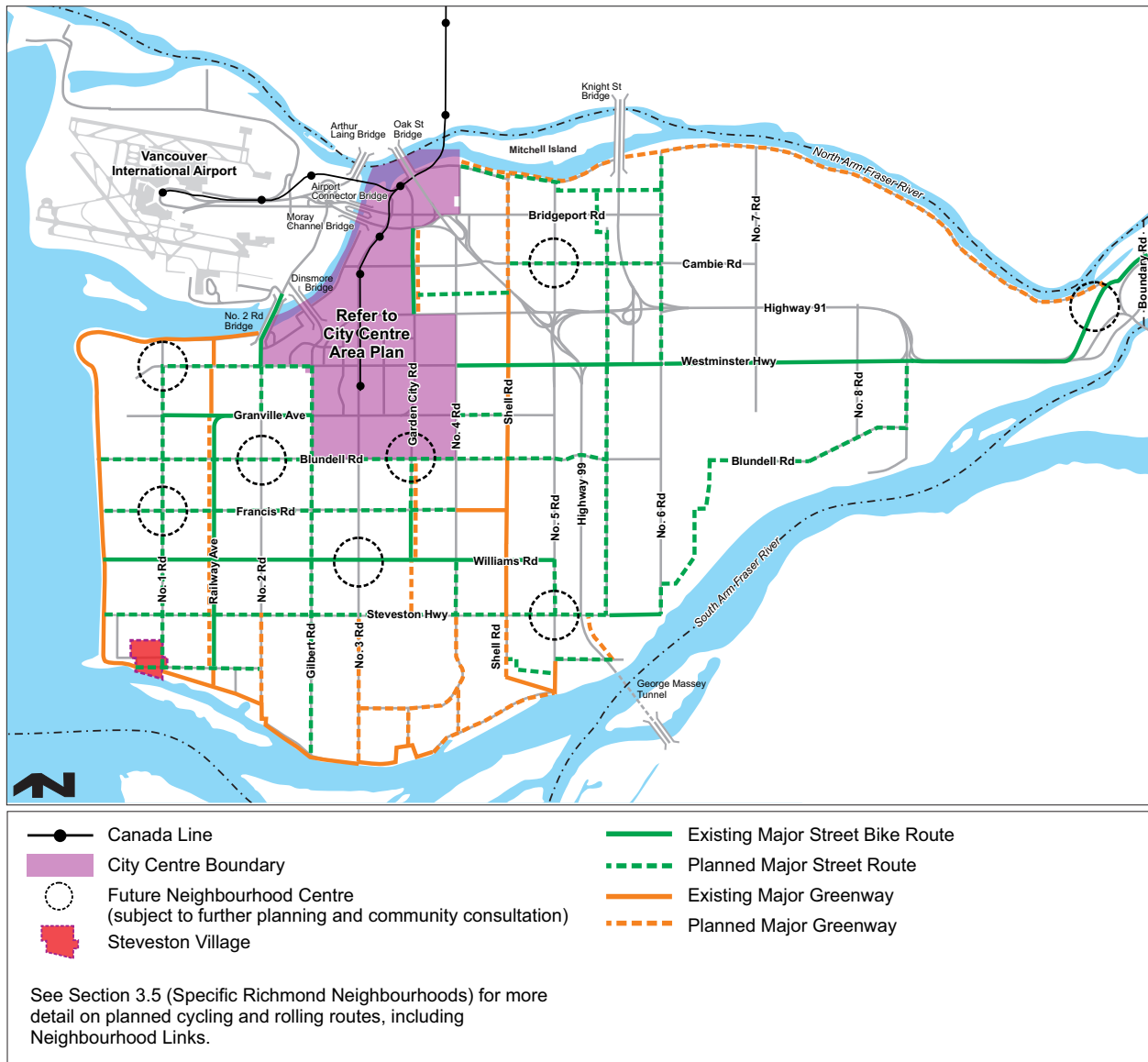
- use local streets and off-street pathways;
- are spaced between each north-south and east-west arterial road;
- connect to local destinations;
- integrate with major street bike routes and greenways;
- have distinctive wayfinding and enhanced crossings at arterial roads.





# Cycling Network Map

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## OBJECTIVE 3:

Support legislation that enhances the safety of cyclists and other vulnerable road users.

## POLICIES:

- a) support legislative amendments to better protect cyclists and other vulnerable road users including:
  - increased legal protection;
  - a better definition and support of rights and responsibilities;



- a better definition and regulation of motorized and non-motorized road users;
  - more effective regulation of vehicle design;
- b) consider the implementation of 30 km/h speed limits on certain bike routes (e.g., neighbourhood bike routes on local roads);
- c) delineate designated off-leash dog areas from adjacent greenways and trails used by cyclists.



**OBJECTIVE 4:**

Create a culture where cycling is seen as a normal, convenient and desirable travel option.

**POLICIES:**

- a) undertake and support community events that encourage and celebrate cycling;
- b) continue consultation with local stakeholders to identify and develop cycling facilities and programs;
- c) support and participate in cycling incentive campaigns targeted to workplaces, households and schools;
- d) support amendments to legislation to provide financial incentives for cycling as a travel mode (e.g., tax exemptions for bicycles and related safety equipment, free employee vehicle parking designated as a taxable benefit).

**Implementation**

Cycling infrastructure improvements will be undertaken as part of redevelopment and the City's annual capital program.

Projects undertaken by the City will be evaluated and prioritized based on the following criteria:

- within a 400 m (1,312 ft.) radius of a neighbourhood centre;
- provides direct access to local destinations such as schools, parks, neighbourhood centres, and transit stops;





- location coincides with proposed neighbourhood links identified in Section 3.5 (Specific Richmond Neighbourhoods);
- completes a gap in the cycling network to create a continuous link;
- crash history and traffic volumes/speeds on the roadway;
- sufficient right-of-way available.

Projects will be funded by the following mechanisms:

- payment of development cost charges (DCC);
- as part of required works and services for new developments;
- voluntary developer contributions;
- general City revenues;
- grants and/or cost-share funding from senior governments;
- other future new revenue sources.



## 8.5 Transportation Capacity and Demand Management

### Car-Sharing

Support and facilitate car-sharing services through:

- targeting the location of car-share parking spaces to where demand exists;
- supporting the provision of off-street car-share parking spaces in new developments;
- providing reserved on-street parking spaces.

### OVERVIEW:

As the shift to a more sustainable transportation system occurs, motor vehicles will not disappear, but their use will become more strategic and targeted to the type and purpose of the trip. For private travel, driving will be considered as an option. The optimization of our existing transportation system and management of travel demand are important strategies to encourage and support the transition to a reduced reliance on cars.

### OBJECTIVE 1:

**Manage travel demand at its source to reduce private vehicle trips.**

### POLICIES:

- a) support a shift to a more equitable user-pay system (e.g., region-wide road pricing, increased fuel taxes, distance-based or variable vehicle insurance rates) that reflects the true environmental, economic and social costs of driving.





b) support employer-based trip reduction programs such as:

- telecommuting, compressed work weeks, staggered shifts, and flexible work hours;
- free or discounted transit passes and incentives for cycling and walking;
- provide a ride home on an occasional basis for commuters who typically use transit, walk or bike;
- ride-sharing using company or privately-owned vehicles with preferred parking spaces;
- a reward system equivalent to the subsidized benefit of free workplace parking given in lieu of providing parking;
- the provision of secure bike parking with end-of-trip facilities;
- the reimbursement of business travel expenses for modes other than motor vehicles;

c) support the reduction of school-related vehicle trips and congestion by encouraging walk, bike and rolling to school programs;

d) in consultation with car-share companies, facilitate car-sharing as a convenient and cost-efficient alternative to private vehicle ownership through:

- targeting the location of car-share parking spaces to where demand exists with priority given to locations in close proximity to a Canada Line station, along a Frequent Transit Network route and future neighbourhood centres;
- designating on-street parking spaces for car-share vehicles;
- requiring the provision of off-street car-share parking spaces in new developments where demand exists as a tool to reduce private auto travel;

e) support revised tax policies that encourage a greater use of sustainable travel modes.

**OBJECTIVE 2:**

Use existing parking capacity more efficiently and as a tool to reduce private vehicle use.

**POLICIES:**

a) permit the provision of optional rather than mandatory parking spaces for residential developments where practical;

b) pursue mechanisms to allow developers' funding contributions towards alternative transportation modes (transit, cycling, walking) in lieu of providing vehicle parking;

c) permit reduced parking requirements for new developments located near major transit corridors and for mixed-use developments sharing parking, for example, for multiple family residential developments:

- in the City Centre, 30% reduction and up to a further 10% reduction with provision of transportation demand management measures for locations within 400 m (1,312 ft.) of the Canada Line;



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2017/12/18



- at neighbourhood centres outside the City Centre, up to 10% reduction with provision of transportation demand management measures;
- d) in concert with changing population demographics, increase the percentage of disabled parking spaces both on-street and in new developments;
- e) support the use of pay parking to reduce automobile use and encourage transit, cycling and walking;
- f) where pay parking is in effect, establish parking rates that are equal to or exceed transit fares and vary across times and priority locations.



**Electric Vehicles**

Facilitate a transition to electric vehicles by:

- requiring new residential developments to provide charging equipment for a minimum of 20% of the parking spaces;
- supporting a network of publicly available charging stations.

**OBJECTIVE 3:**

Optimize the performance of the transportation system.

**POLICIES:**

- a) expand the use of video detection at intersections to improve traffic flow and provide real-time monitoring;
- b) support new vehicle technologies that reduce non-renewable energy use and air emissions (e.g., electric cars and scooters);
- c) work towards providing on-line and wireless pre-trip and en route traveller information such as traffic conditions and parking locations with current capacity available.

**Implementation**

Transportation demand management (TDM) and capacity optimization measures will be undertaken as part of development and the City's annual capital and operating programs.

TDM projects undertaken by the City will be targeted to locations that generate a large number of vehicle trips and have adequate levels of pedestrian and cycling infrastructure as well as transit service to support a shift to alternate travel modes (e.g., in the City Centre, within a 400 m or 1,312 ft. radius of a neighbourhood centre, major employment centres).





Measures to optimize transportation capacity will be directed to key corridors such as river crossings and Richmond's portion of TransLink's Major Road Network.

Projects will be funded by the following mechanisms:

- payment of development cost charges (DCC);
- as part of required works and services for new developments;
- voluntary developer contributions;
- general City revenues;
- grants and/or cost-share funding from senior governments.

**OBJECTIVE 4:** *Bylaw 9520  
2017/12/18*

Support the adoption of plug-in electric vehicles and other vehicle technologies that can emit zero greenhouse gas and air contaminant emissions.

**POLICIES:**

- a) support the use of plug-in electric vehicles, including bicycles and mobility scooters, through the provision of electric vehicle charging infrastructure in new residential, commercial and mixed use developments;
- b) support renovations of existing buildings to facilitate the integration of electric vehicle charging infrastructure;
- c) support the ongoing development of publicly accessible electric vehicle charging infrastructure networks, including expanding the City-owned network of public electric vehicle charging stations.

## **9.0 Island Natural Environment** (an Ecological Network approach)





## 9.0 Island Natural Environment (an Ecological Network approach)

### OVERVIEW:

Richmond's spectacular estuarine location—at the point where the Fraser River meets the Pacific Ocean—means that the island City is located within one of the most productive ecosystems in the world. Our community relies upon a healthy and diverse landscape to maintain biological diversity and a resilient natural environment. Richmond's inland and foreshore habitats weave an intricate and unique tapestry of landscapes that provide a host of ecosystem services, the fundamental life supports for human settlements and a wide variety of plants and animals. These essential ecosystem services include temperature regulation, soil stability, clean air and water, carbon sequestration, pollination and drought and flood mitigation.

Increasing population growth will place higher demands on already stretched ecological resources. Research on ecological sustainability indicates that the worldwide use of resources is exceeding the Earth's capacity to renew and replenish them. At the same time, awareness is growing that Richmond will likely experience significant impacts from changing environmental conditions (e.g., climate change), urbanization and agricultural intensification. There is a concern for Richmond's natural environment in regards to the loss of local biodiversity due to climate change impacts (e.g., loss of foreshore habitat due to sea level rise and/or loss of inland habitat due to increasing storm intensity), urbanization and proliferation of invasive species.



Accommodating future growth, responding to climate change and adapting to urban and agricultural intensification necessitate a sustainable approach to protecting and maintaining the ecological health and resilience of our unique island natural environment. The objectives and policies for the natural environment identify a broad range of tools and approaches that target the protection, enhancement, connectivity and acquisition of ecological lands and services. These tools include policies to integrate ecological values, lands and connectivity into land use planning initiatives at a variety of scales and in a manner that promotes ecosystem services and human well-being.



## **OBJECTIVE 1:**

### **Protect, enhance and expand a diverse, connected and functioning Ecological Network.**

In a developing urban and rural environment, retention of biological productivity and biodiversity is a challenge. Biodiversity principles clearly indicate that contiguous or connected areas offer greater habitat value and overall ecosystem resiliency than numerous fragmented portions. To gain the maximum benefit to biodiversity through land-use planning, the creation of an Ecological Network (EN) will help guide the strategic enhancement, layout and acquisition of lands. The EN comprises larger "hubs", smaller "sites" and interconnecting corridors that act to conserve and connect natural and semi-natural areas. The EN approach recognizes the ecological services provided by these areas that contribute to the health and livability of the City. Connectivity between people, the built environment and natural lands is intrinsic to the EN. It is an innovative and opportunistic approach to better achieve the acquisition, protection, and enhancement of biodiversity components and the ecosystem services they support, within an expanding urban and agricultural context.

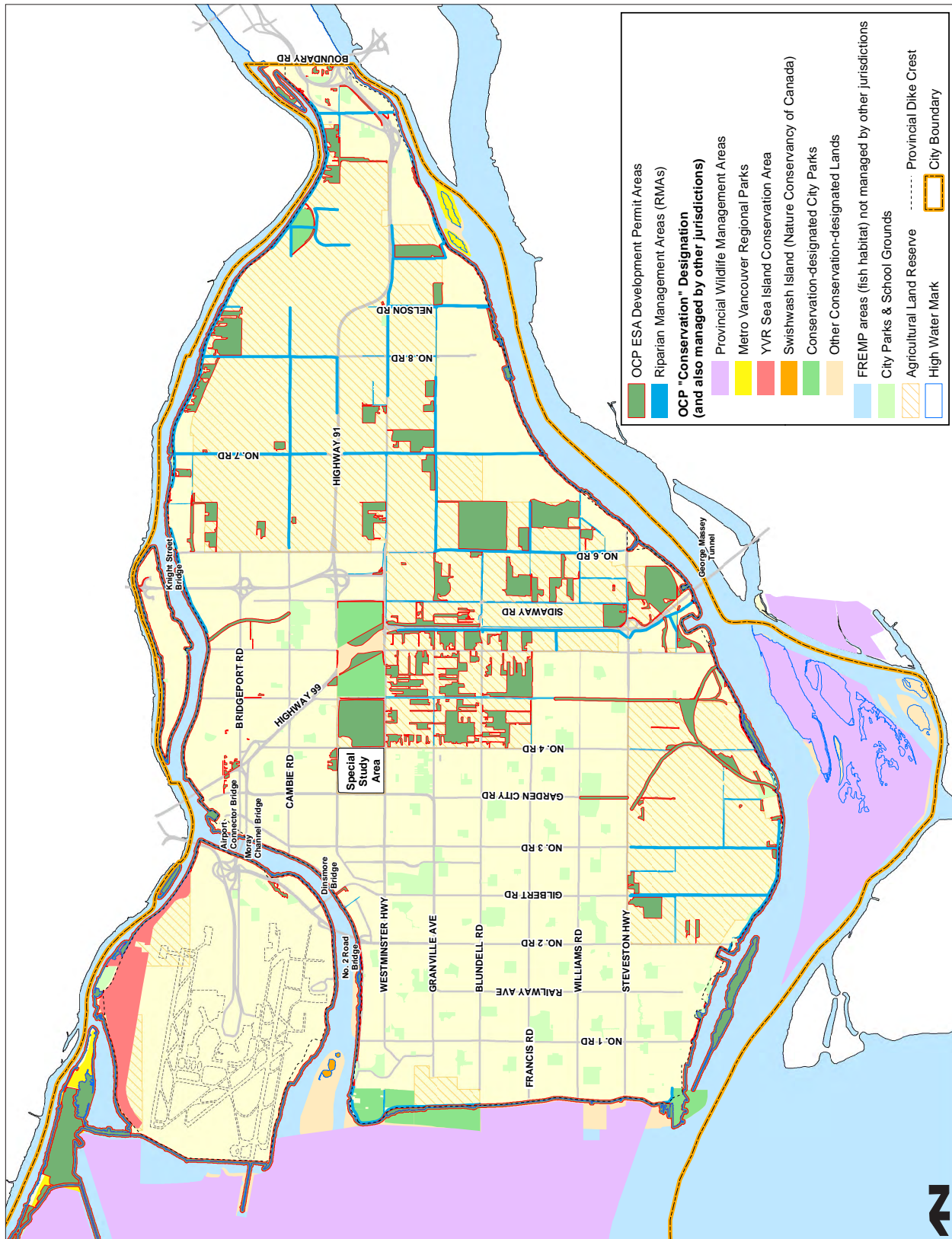
## **POLICIES:**

- a) identify an EN to provide an innovative framework to better protect the city's ecological resources (see Ecological Network Management Map);
- b) include the EN as a foundational tool within the Green Built and Natural Environment program of the City's Sustainability Framework. Implementation within the program will include the establishment of targets and adoption of the Ecological Network concept;
- c) establish a meaningful and robust EN by:
  - considering the prioritization of EN lands, including City, private and other jurisdictions, for future planning, land acquisition, protection and enhancement (e.g., Riparian Management Areas, Park and Open Space policies, Environmentally Sensitive Areas, school yards, agricultural lands, Wildlife Management Areas, etc.). The EN data set includes information for the relative "naturalness" of given areas and also assesses their suitability for restoration and enhancement of lands including functioning, impaired and non-functioning corridors. Prioritization and recommendations can be made to identify possible acquisition, enhancement and protection strategies. Note: Currently the EN map does not include any corridors. Amendments to the OCP will be made, as appropriate, prior to the next OCP update;





# Ecological Network Management Map

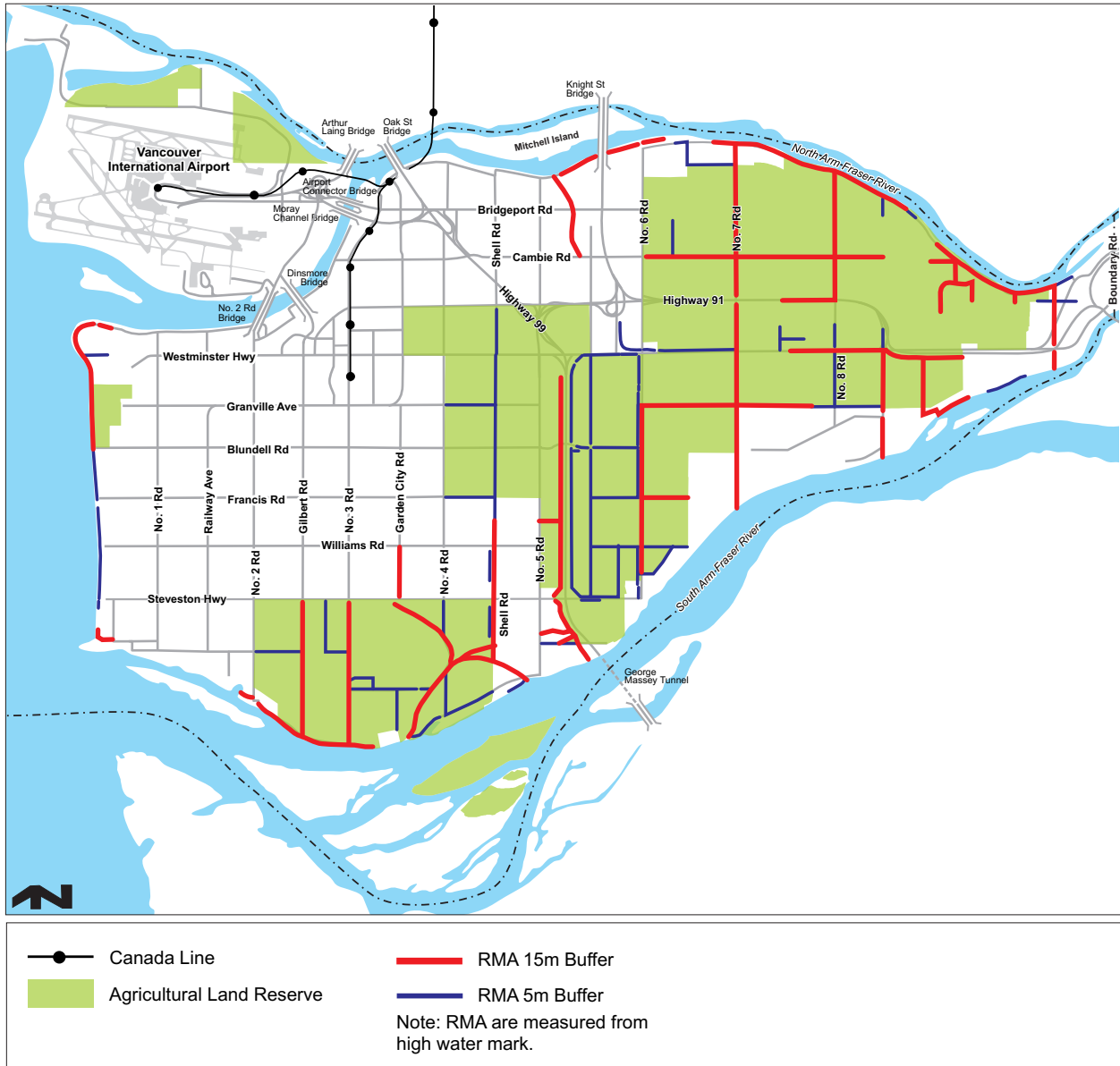




- establish clear goals and objectives to strengthen and expand the existing EN. This will include a review and recommendation of potential targets and metrics to assure successful implementation of the EN;
  - over time, establishing new design objectives (e.g., ecological landscape design guidelines), policies and principles for city lands, operations, environmental stewardship initiatives and private developments to ensure integration with the EN;
  - linking the EN to emerging social and economic opportunities (e.g., organic farming, community gardens, recreation, eco-tourism) that will encourage the use of the land in an ecologically responsible manner;
  - implementing the 2012 Environmentally Sensitive Areas (ESA) Management Strategy and updating it every five years (Policy Planning);
  - over time, updating the City's Riparian Management Areas (RMA) Response Strategy, Parks and Open Space Strategy and related policies to reinforce the value of connectivity;
  - all private development and City works will comply with the City's Environmentally Sensitive Areas policies, the City's RMA setbacks (5 m or 16.4 ft. and 15 m or 49.2 ft.), the City's Tree Protection Bylaw, the Fraser River Estuary Management Program (FREMP) project review process and will respond to the EN policies and all other applicable environmental legislation;
  - as city resources enable, strategically acquiring portions of the EN that become available and are considered important properties to be owned by the City;
  - continuing to establish partnerships, incentives, policies, programs and measures, as appropriate, to improve the EN;
- d) Environmental Sustainability will take the lead role in implementing the Ecological Network.



## Riparian Management Map





## **OBJECTIVE 2:**

**Promote green infrastructure and the Green Infrastructure Network (GIN) and their underlying ecosystem services (e.g., clean air, water, soils), on all lands.**

Green infrastructure is referred to as the physical environment within and between our cities, towns and villages, forming a network of multi-functioning open spaces, including formal parks, gardens, woodlands, ponds, wetlands, watercourses, green corridors, street trees and open fields/lands (Davies, McFarlane, McGolin, and Roe, 2006). The Green Infrastructure Network (GIN), describes the interconnected network of these natural and engineered “green” elements occurring at a variety of scales and is a foundational support tool for the function and quality of communities and ecological systems. Green Infrastructure Network elements include the built and the natural environment such as district energy systems, green buildings, permeable pavement, eco-industrial development, and storm-water management. The Green Infrastructure Network provides the opportunity to create and enhance natural values through the development process.

## **POLICIES:**

- a) expand the EN with a complementary Green Infrastructure Network (GIN) as the key management tool;
- b) develop a Richmond specific approach to promote and track GIN opportunities to support the Ecological Network through the City’s capital and operation projects, policies and development application requirements;
- c) establish an Invasive Species Management Program which includes community and institutional partners, to reduce the spread of invasive species and consequent loss of biodiversity;
- d) create educational and outreach materials that interpret the direct value of the green infrastructure and the GIN, their underlying ecosystem services and significant natural features in the City;
- e) develop a toolbox of planning and environmental policies to support site and neighbourhood level planning processes to integrate the GIN tool within the EN. This will include the identification of opportunities to acquire, enhance and protect lands through redevelopment and rezoning;
- f) Environmental Sustainability will lead the implementation of this Objective 2.

## **OBJECTIVE 3:**

**Proactively implement practices to protect and improve water, air and soil quality.**

In the course of the City’s ongoing operations as well as the redevelopment and use of publicly owned lands, opportunities exist to not only preserve but actively improve environmental conditions. In some cases, new or strengthened City policies will be implemented; incorporating performance targets. Of particular note is the Integrated Stormwater Management planning process already underway, which will provide a framework to guide development towards sustainable rainwater management practices.



## POLICIES:



- a) incorporate ecological values, Ecological Network, and Green Infrastructure Network opportunities and consideration of targets into the City's Integrated Stormwater Management Plan being developed under Regional and Provincial process. Targets will be considered for inclusion within the City's Sustainability Framework programs. As part of plan implementation, encourage innovative measures to improve storm water quality and manage impervious areas where appropriate to reduce run-off volumes, sedimentation and erosion, and thus improve water quality;
- b) continue to partner with other government agencies in the Fraser River Estuary Management Program (FREMP) in regulating and assessing shoreline development along the Fraser River;
- c) prioritize the protection and enhancement of the Fraser River and West Dike foreshore habitat (e.g., RMA requirements, 30 m or 98.4 ft. foreshore and 30 m or 98.4 ft. inland setback buffer in accordance with the City's ESA development permit process and the Parks and Open Space Strategy);
- d) assure compliance for all capital, operations, development applications and other projects for the City's 5 m or 16.4 ft. and 15 m or 49.2 ft. setback requirements for Riparian Management Areas (RMAs) and for Environmentally Sensitive Development Permit Areas (ESAs);
- e) enhance the City's RMA network through the implementation of strengthened policy and/or bylaw approaches;
- f) overtime, review and update design guidelines to ensure that public access to natural areas is provided in a manner that best balances habitat protection with public access and ecological connectivity opportunities;
- g) establish and encourage Best Management Practices related to Air Quality and reduction of greenhouse gases, including education both internally and externally to the industrial, construction and agricultural sectors;
- h) cease the use of traditional pesticides through the ongoing implementation of the city's Enhanced Pesticide Management Program which includes the Pesticide Use Control Bylaw and educational initiatives which promote the use of new generation, low toxicity pesticides, organic gardening, natural lawn care, etc.;
- i) continue to expand City Operations practices to innovate best practices for landscape maintenance in the absence of traditional pesticides;
- j) continue to establish collaborative approaches with partner agencies to reduce the environmental (i.e. biodiversity loss), infrastructure and economic impact of invasive species expansion;
- k) continue to partner with senior governments and businesses to promote initiatives aimed at best practices for storm water management and spill response management;
- l) continue participation in the Site Profile system to assist the Provincial Ministry of Environment with screening and managing contaminated sites through the Development process;





- m) continue to work with senior government and other agencies to raise awareness of environmental and health impacts of discharges of polluting substances into the air, soil and water;
- n) over time, establish Adaptive Management Principles to better manage foreshore areas in light of the potential impacts of climate change (e.g., sea level rise);
- o) continue to partner with all levels of government and others to encourage more adaptable, resilient policies to better manage climate change.

#### **OBJECTIVE 4:**

##### **Develop Partnerships for “Ecological Gain”.**

Supporting the objective of improving baseline indicators such as water quality, the City will work towards creating a net gain in ecological values through the process of development, zoning and City capital and operation projects. This “Eco-Plus+” approach integrates environmental improvements as part of the City’s capital operations and the development process, rather than simply managing impacts. Combined with the Ecological Network concept, this provides the framework for creating strategic improvements to the City’s ecological values over time.

#### **POLICIES:**

- a) incorporate Ecological Gain principles into all City and development approval projects to maximize environmental values and benefits to the Ecological Network;
- b) consider the review and establishment of a target or metric to use for tracking the implementation and success of the Ecological Gain concept.



#### **OBJECTIVE 5:**

##### **Fostering Environmental Stewardship.**

Richmond takes pride in its beautiful setting at the mouth of the Fraser estuary. The City is defined by its proximity to the river, its history in agriculture and fishing as well as its diverse ecological values. With significant growth and the arrival of many new immigrants to the community an unrivalled opportunity presents itself to create a City-wide program of environmental education and awareness. With diverse cultural approaches to environmental stewardship, the City will take a leadership role in interpreting and valuing our natural environment to both long-standing and new residents.

#### **POLICIES:**

- a) identify and establish opportunities to support the Ecological Network through volunteer driven stewardship initiatives;
- b) continue to work with partner organizations, other levels of government, multicultural organizations and First Nations to develop and deliver environmental stewardship initiatives and collaborations that embrace the City’s Ecological Network principles;



- c) ensure outreach and educational programs in environmental stewardship are relevant to a multicultural audience;
- d) seek out sponsorship and private sector support for environmental stewardship and place-making initiatives;
- e) encourage the formation of community based volunteer environmental stewardship organizations.



#### **OBJECTIVE 6:**

Achieve long-term protection for Environmentally Sensitive Areas (ESAs) through the implementation of the 2012 ESA Management Strategy.

#### **POLICIES:**

- a) ESAs are identified in OCP Schedule 1 Attachment 2 Map;
- b) continue to provide protection for ESAs by requiring ESA Development Permits for proposed development activity in ESAs to ensure that development proposals meet ESA policies and guidelines;
- c) ensure that the ESA DPs review and minimize the impacts of the proposed development in the ESA;
- d) continue to require environmental impact assessments in cases where development applications are likely to negatively impact the ESA;
- e) strive to achieve additional protection for ESAs, by facilitating the environmentally sensitive development on lands adjacent to identified ESAs through particular attention to the subdivision of land, siting of buildings and structures, the provision of parking, storage and landscaping areas, and allow stormwater retention during rain events;
- f) encourage the restoration and re-creation of natural habitats to enhance ESAs, particularly those which are under City ownership;
- g) review and update the ESA policies and areas at least every five years;
- h) Policy Planning will lead the implementation of this Objective 6.



## **10.0 Open Space and Public Realm**







## 10.0 Open Space and Public Realm

The Public Open Space System is comprised of:

- outdoor spaces available for public use that are either publicly owned (e.g., parks and trails) or are secured through legal agreement with private landowners (e.g., plazas, squares and pedestrian walkways).

The Public Realm is comprised of:

- streets, plazas, squares, boulevards, and pedestrian and cycling linkages between and through neighbourhoods

### OVERVIEW:

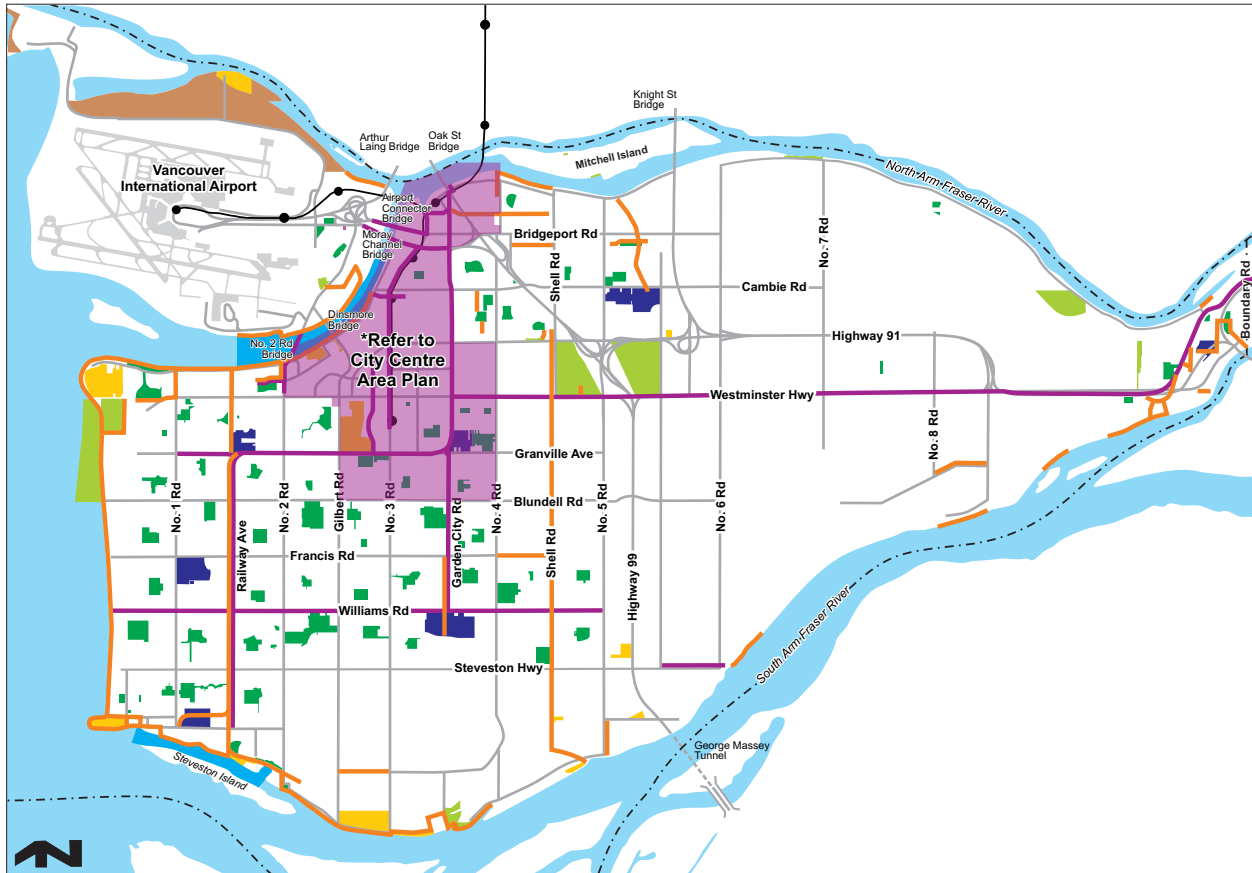
Parks and other types of public open space play a vital role in the quality of life and vibrancy of a city. A well designed, well connected system of parks and trails, greenways and streets, plazas and squares, waterfronts and waterways significantly contribute to individual and community wellness in the following ways:

- **Promote Healthy Lifestyles:** Convenient access to parks and open spaces is a strong indicator for healthy levels of physical activity. Access to places to walk, the most common reason people cite for visiting parks and trails, is a critical service the System can provide. Contact with nature and even simple green spaces with grass and trees, have been shown to have profound psychological and physical benefits, for example, reducing stress and contributing to the healthy development of cognitive functions in children such as memory formation and spatial learning.
- **Foster Community Cohesiveness:** Community cohesiveness is stronger where there are opportunities to engage in informal social contact, to play together, and where people of diverse ages and backgrounds can engage in shared experiences. The sports fields, playgrounds, places to walk dogs, community gardens, and public plazas play a central role in fostering a strong sense of community.
- **Support a Healthy City Environment:** The quality of city life is determined, in part, by the quality of the urban environment. The System contributes to the Ecological Network (EN) and provides desirable ecosystem services such as mitigating temperature extremes, improving air and water quality, contributing to biodiversity and ecological health, and reducing the need to expand expensive infrastructure such as stormwater systems. These services have a positive impact on human health, as well as reduce infrastructure operating costs.



- Contribute to Economic Development: A vibrant open space system can exert a positive influence on the city's economy. Great parks and signature places, like Richmond's waterfront parks and trails, confer economic benefits through improved property values, attraction and retention of businesses, and attraction of tourism with signature outdoor places and events.

## Current Parks and Public Open Space System Map



Canada Line	City Wide Park
Trails/Greenway	City Wide Natural Area
Cycle Route	Community Park
	Marine Recreational Area
	Neighbourhood Park
	Regional Park/Conservation Area

\*Refer to the CCAP for the locations of future parks in the city centre.  
 See Section 3.4 (Specific Richmond Neighbourhoods) for locations of Neighbourhood Links.  
 Refer to the 2010 Richmond Trails Strategy for more detail on planned future trails.



Richmond enjoys a wealth of parks and a waterfront trail network that is a regional destination. The City’s parks and open space system offers 121 parks, for a total of 688 ha (1,700 ac.) of dedicated park land and over 50 km (31 mi.) of trails. Many parks include land owned by the Richmond School District, the result of a long standing effort to co-locate school and park sites. Neighbourhood and community parks are equitably distributed so that every neighbourhood, with the exception in the short-term of some rapidly growing areas in the City Centre, has convenient access to diverse types of open space including playgrounds, sports fields and courts, gathering places, community gardens and natural areas. There are also approximately 170 ha (420 ac.) of open space on Sea Island, at Iona Beach Regional Park and the federally owned Sea Island Conservation Area.

**Richmond Parks and Public Open Space System Facts**

<b>Open Space Standard</b>	3.1 ha (7.66 ac.)/1,000 population City-wide	1.3 ha (3.25 ac.)/1,000 population in City Centre*	133.5 additional hectares (330 ac.) required for 2041 population of 280,000
<b>Park Distribution Standard</b>	Neighbourhood Parks <ul style="list-style-type: none"> <li>• Serve an 800 m (2,625 ft.) radius</li> <li>• 400 m (1,312 ft.) radius in City Centre*</li> </ul>	Community Parks <ul style="list-style-type: none"> <li>• Serve a 1.5 km (0.9 mi.) radius</li> </ul>	City-wide Parks <ul style="list-style-type: none"> <li>• Location determined by unique site attributes (e.g., waterfront)</li> </ul>
<b>Park Numbers</b>	80 Neighbourhood Parks (incl. school parks)	8 Community Parks	33 City-wide Parks

\* The higher population densities in City Centre mean that residents will have access to parks and public open spaces within 400 m (1,312 ft.) of where they live to the standard of 1.3 ha (3.25 ac.)/1,000 population. The balance of open space will be located elsewhere to meet the City-wide standard.

In the future, the city’s finite land area and increasing population will mean that the open space system must grow and diversify to meet community needs. With a projected population increase of 80,000 people to 2041, an additional 133.5 ha (330 ac.) of public open space will be required. While the quantity of open space is a factor in ensuring equitable distribution, the focus must be on increasing the diversity of the types and functions of the system of public open spaces and the public realm to enrich people’s daily experiences and, at the same time, contribute to the city’s sustainability.



### **OBJECTIVE 1:**

Continue to ensure that there is sufficient public open space that is equitably distributed (e.g., City Centre; City-wide) to meet community need.

### **POLICIES:**

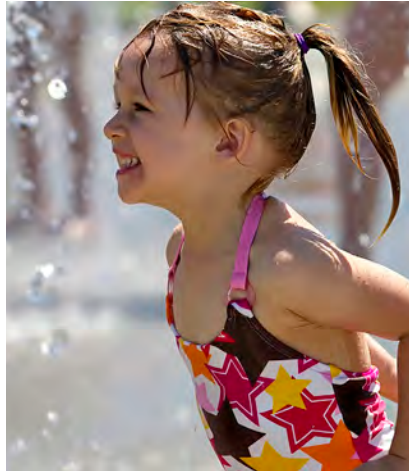
a) for City owned park spaces:

- ensure equitable access to parks and open spaces across the city;
- protect the current inventory of dedicated City park land and ensure no net loss of dedicated park land where changes occur;
- secure additional dedicated park land through the acquisition of new park sites in growing areas of the city;
- work with developers and other land owners (e.g., other levels of government) to secure publicly accessible open spaces that will make a meaningful contribution to the system;
- guide the development of the public realm to increasingly play a role in providing recreational opportunities and the stage for social life;

b) for School Board owned park spaces:

- it is acknowledged that the School Board is reviewing its long-term school and school/park needs. This matter will be addressed over the long-term. In this process, the City will collaborate with the School Board to achieve a “no net loss of parkland”.





### **OBJECTIVE 2:**

Provide a full range of appealing, welcoming places for residents and visitors of all ages and backgrounds to walk, roll, exercise, play, socialize and engage in healthy, active lifestyles.

### **POLICIES:**

- a) continue to provide outdoor sports and recreation facilities that encourage participation by all ages, abilities and financial means;
- b) ensure that all aspects of the System are designed to be inclusive and barrier free;
- c) promote the sense of belonging and connectedness people feel through the development of more and improved community gathering places;
- d) continue to work with community partners to further develop outdoor programs and facilities that support healthy lifestyles (e.g., community gardens, wellness walks).

### **OBJECTIVE 3:**

Showcase and enhance the City's identity through a rich variety of great places and experiences that bring to life Richmond's natural and cultural heritage.

### **POLICIES:**

- a) invest in the System's unique attributes to better foster a sense of city and neighbourhood identity (e.g., varying waterfront character areas, heritage and cultural features);
- b) ensure that Richmond's urban realm reflects the city's distinct culture and landscape through design, materials, public art and interpretive features;
- c) animate more public outdoor places by delivering programs and supporting events with community partners;
- d) showcase Richmond's significant natural, cultural and heritage sites through a broader range of educational and interpretive programs, and capitalize on new media opportunities.







#### **OBJECTIVE 4:**

Strengthen pedestrian, rolling (e.g., wheelchairs, scooters, etc.) and cycling linkages among every element of the city (neighbourhoods, schools, civic spaces, neighbourhood shopping centres, parks, natural areas, streets, commercial areas and industrial parks).

#### **POLICIES:**

- a) improve connections across the existing City-wide trails system;
- b) continue to improve pedestrian, rolling and cycling linkages within neighbourhoods to key destinations and amenities;
- c) improve the wayfinding and signage system for parks and major public destinations;
- d) expand the range of opportunities for cycling routes separated from automobile traffic.

#### **OBJECTIVE 5:**

Strategically expand the range of ecosystem services (e.g., biodiversity and habitat, rain water management, carbon sequestering) integrated within the open space and public realm to strengthen and contribute to the Ecological Network.

#### **POLICIES:**

- a) protect, enhance and sustain ecosystem services in parks and other public open spaces as these are significant parts of a robust Ecological Network (see Chapter 9.0);
- b) as practical, connect significant Ecological Network assets via existing or enhanced corridors (linear connections between ecosystems that facilitate the movement of species, water, nutrients and energy increasing the viability of those ecosystems);
- c) provide more opportunities for people to experience nature (e.g., bird watching, nature walks);



- d) provide recreational opportunities to appreciate and participate in agricultural activities;
- e) provide leadership in education and awareness of Richmond's unique ecological assets.



### **OBJECTIVE 6:**

Showcase Richmond's world-class waterfront and enhance the Blue Network (the Fraser River shoreline and estuary, and the internal waterways, the sloughs, canals, and wetlands) for their ecological value, recreational opportunities, and enjoyment.

### **POLICIES:**

- a) protect, enhance and connect the ecological values and public amenities in the Blue Network (e.g., trails, piers, floats, beaches, riparian areas and the foreshore);
- b) continue to acquire land for the waterfront park on the Middle Arm in City Centre;
- c) continue to support the City's signature maritime events (e.g., Ships to Shore, Maritime Festival, Dragon Boat Festival);
- d) develop recreational opportunities on and around sloughs and canals;
- e) deliver educational and interpretive programs that increase the community's connection to the Blue Network;
- f) include water as an element in the urban environment (e.g., Garden City Park stormwater detention pond, Water Sky Garden at the Oval).



### OBJECTIVE 7:

Ensure that the System offers a diversity of open spaces and performs a range of functions to better respond to changing community needs (e.g., from urban plazas to natural areas).

#### POLICIES:

- a) conduct regular consultation and needs assessment with residents, community organizations and others to address gaps in the System;
- b) balance the diversity of open space uses to ensure that community needs are met (e.g., formal programs and informal uses);
- c) increase the diversity of functions and activities available in neighbourhood parks;
- d) ensure that civic infrastructure is appropriately integrated such that community use and ecological values are not compromised.

### OBJECTIVE 8:

Sustain the quality of public open spaces through innovative, responsive management and shared stewardship between the City and multiple stakeholders.

#### POLICIES:

- a) align resources to improve customer service, efficiency and quality of asset management;
- b) increase the consideration of maintenance requirements through appropriate design and quality of construction;
- c) improve the health of the urban forest and communicate its value to the community;
- d) pursue additional revenue generating activities that provide community benefit and services not offered by the City. (e.g., bicycle rentals);
- e) ensure the quality of parks infrastructure through a comprehensive, long-term infrastructure replacement program.



## **11.0 Social Inclusion and Accessibility**







## 11.0 Social Inclusion and Accessibility

### OVERVIEW:

In a socially inclusive and accessible community, residents feel valued and respected, are able to have their basic needs met, and face no physical or social barriers to move about or participate in society.

Social inclusion and accessibility are key components of a sustainable Richmond. The City has a long standing tradition of recognizing the interconnectedness of land use and social planning. It also has a strong tradition of addressing social issues in its planning and service delivery.

The City is preparing a 10 year Social Development Strategy, which will identify social development and service delivery priorities for Richmond over the next 10 years. Some fundamental assumptions of the Strategy—and OCP—are that:

- it is important for the City's social development to proceed commensurate with its physical development;
- the City has a limited mandate and resources to address social issues; however, municipalities are the closest level of government to the people and are often the first level of contact when social concerns arise;
- in addressing social issues, it is essential for the City to be strategic, clearly articulating roles, managing expectations and working collaboratively with other levels of government, external agencies, community service providers, and other partners.



While the Social Development Strategy will provide more specific and detailed information pertaining to the City's social priorities and directions, the Strategy and OCP are intended to be complementary, mutually consistent planning frameworks. For the OCP, three key social issues and related objectives are addressed below:

- social equity and inclusion;
- engaging our citizens;
- building on social assets and community capacity.



## 11.1 Social Equity and Inclusion

### OVERVIEW:

Equity refers to fairness. For Richmond to be equitable—and socially sustainable—it is essential that the needs of all segments of the city's population are recognized and addressed. Further, as the population grows and physical development proceeds, it is important that the City's social fabric be maintained and enhanced—with all groups sharing in the benefits and none being excluded or left behind.

Richmond's population is increasingly diverse. In 2006, for example, 57.4% of the population were immigrants, with 18.8% of that figure having arrived between 2001 and 2006. Further, 90.5% of the recent immigrants (those arriving between 2001 and 2006) were born in Asian and middle eastern countries.

In addition to immigration status, the population is also diverse in terms of age, income levels, physical abilities, sexual orientation, and other factors. While presenting a strong opportunity for community vibrancy and enrichment, diversity also presents challenges—most notably with respect to communication, cross-cultural understanding, integration, and the potential marginalization of certain segments of the population. City policies, programs, and practices must therefore support social equity and inclusion. They must recognize and respect diversity, while ensuring that silos are not created and no one group gets left behind. The aim is to build and nurture a cohesive and inclusive community.



## OBJECTIVE 1:

Facilitate the establishment of an equitable, inclusive community, whereby City plans, policies, services and practices respect the diverse needs of all segments of the population.

### POLICIES:

- a) adopt and implement a 10 Year Social Development Strategy, which will be monitored and updated over time, to guide the City's future social development priorities and activities;
- b) continue to implement and update the Intercultural Strategic Plan, Youth Services Plan, and Older Adults Service Plan to ensure that they remain relevant and effective over time;
- c) recognize children and youth as valuable, contributing members of the community, providing them with opportunities to participate, as appropriate, in plans, policies, and programs affecting them and the community;
- d) continue to employ the developmental asset framework for the planning and delivery of youth services;
- e) in City land use planning and design, make Richmond an increasingly child and family friendly community (e.g., family-friendly features in public open spaces);
- f) respect and capitalize on the knowledge, skills and abilities of Richmond's older adults by providing them with opportunities to continue to make meaningful contributions to the community through volunteer activities and advice;
- g) adopt an "older adults planning for older adults" approach to the planning and delivery of older adult programs and services;
- h) promote aging in place, age-friendly and accessible communities where feasible, in City land use planning and design requirements;
- i) continue to provide community grants to non-profit societies that deliver social, health, and community safety services to Richmond residents;
- j) continue to consult with organizations representing persons with disabilities and other appropriate parties to assist in planning for the needs of persons with disabilities and gaining assistance and funding to improve the overall accessibility of the built environment;
- k) update the 2007 Affordable Housing Strategy and seek developer, senior government and other partner financial assistance;
- l) collaborate with other levels of government, external agencies and community partners to secure appropriate funding, housing and services for homeless people, with the aim of reducing and ultimately eliminating homelessness;
- m) work with senior levels of government, external agencies, and community partners to better understand the extent and needs of households in poverty and support collaborative efforts to prevent and address poverty in the community;



- n) continue to apply and achieve targeted measures, as appropriate and financially viable, to reduce financial barriers for low income residents to participate in City programs (e.g., Recreation Fee Subsidy Program, recycle sports equipment);
- o) ensure that social factors are considered, in conjunction with economic and environmental factors, in City planning and decision making.



## 11.2 Engaging Our Citizens

### OVERVIEW:

Citizen engagement can take a variety of forms (e.g., participation in City recreation programs, volunteering, sitting on a City or community advisory body, contributing to a community planning process, completing surveys using social media). Citizen engagement is crucial for a healthy society—and it is essential if the City is to achieve a representative and effective vision of being the most appealing, livable, and well managed community in Canada.

While the diversity of the City's population presents substantial opportunities and community enrichment, it also presents challenges. Rather than using a "one size fits all" approach to community engagement, a variety of community engagement strategies need to be employed. The strategies must recognize the unique characteristics, interests, and needs of various segments of the population. They must also provide welcoming and inviting opportunities for all to participate.

### OBJECTIVE 1:

**Encourage and facilitate the active engagement of all segments of the Richmond population in community affairs.**

### POLICIES:

- a) use a variety of traditional and innovative approaches for consulting with and involving members of the public in community activities and planning processes (e.g., study circles, online forums, social media);





- b) work with community partners to provide important City information in multiple languages, as appropriate, and as resources allow;
- c) work with community partners to develop effective approaches for eliciting the opinions and involvement of traditionally “hard to reach” groups (e.g., recent immigrants, homeless persons, people with disabilities) in community consultation initiatives;
- d) provide pertinent information (e.g., on City programs and initiatives, demographic statistics) to assist members of the public and partner organizations in understanding social issues facing the community and effectively participating in collaborative responses (e.g., Hot Facts, bulletins).



## 11.3 Building on Social Assets and Community Capacity

### OVERVIEW:

Social capital is a term to describe the linkages and communication channels amongst individuals and organizations and the community's capacity to work towards mutual gain. The underlying assumption is that connections are essential to the overall health and well being of the community.

The City's non-profit agencies, advisory committees, associations and community networking forums need to be nurtured as the city continues to grow and develop.

In addition to social capital, the City requires appropriate infrastructure to meet the social needs of its growing population, including:

- community facilities (e.g., child care centres, space for community service providers);
- affordable housing;
- accessible facilities, built environments, and transportation services.

The key challenges with social infrastructure relate to:

- costs (e.g., land, construction, operating) can be prohibitive—particularly in an escalating market such as Richmond;





- jurisdictional issues (e.g., various levels of government are responsible for some social infrastructure);
- priorities (e.g., given finite resources, which elements of the social infrastructure require priority support, and which ones do not?).

Through senior government funding, direct City funding or commitments obtained from developers through the rezoning process, Richmond has traditionally given priority to securing three types of social infrastructure: City facilities (e.g., recreation centres), child care centres, and affordable housing. In the future, additional emphasis will need to be placed on securing other types of social infrastructure—most notably space for non-profit agencies and other community amenities. Recognizing both the future needs and inherent challenges, a range of approaches will need to be pursued to ensure that the City is strategic, transparent, and effective in meeting its social infrastructure requirements.



### **OBJECTIVE 1:**

Facilitate the establishment of a comprehensive, high quality system of child care services in Richmond.

### **POLICIES:**

- a) continue to undertake periodic needs assessments to identify existing and future child care requirements, by type of care and geographic area of need;
- b) secure City-owned child care facilities, for lease at nominal rates to non-profit providers, from private developers through the rezoning process;
- c) encourage private developers to contribute to the City's Child Care Development Reserve Fund, as appropriate;
- d) consult and collaborate with child care providers and other community partners on child care issues;
- e) request senior governments to contribute funding and improve policies to address local child care needs;
- f) continue to administer the City's Child Care Grant Program to support the provision of quality, affordable, accessible child care in Richmond.



## OBJECTIVE 2:

Facilitate the provision of space for community agencies.

### POLICIES:

- a) establish mechanisms to assist non-profit agencies and community groups to secure office or program space, or funding (e.g., through senior governments, NGOs, the lease of any surplus City space, negotiation with developers in the rezoning process);
- b) establish clear, transparent guidelines for the securing and allocating of City-owned or negotiated community agency space (e.g., eligibility criteria, cost factors, timing, roles and responsibilities);
- c) support non-profit agencies and community partners to develop and maintain an inventory of space requirements for community agencies in Richmond.

## OBJECTIVE 3:

Develop and nurture strong, sustainable, and collaborative relationships with senior governments and community partners.

### POLICIES:

- a) develop and maintain strong networks and communication channels with senior government partners to seek their policy and financial assistance in addressing Richmond social issues;
- b) continue to participate in joint planning and networking initiatives with community partners (e.g., Richmond School District, Vancouver Coastal Health, Metro Vancouver, non-profit agencies);
- c) maintain strong networks with developers, the business community, and community agencies, collaborating as appropriate to address social issues.



## **12.0 Sustainable Infrastructure and Resources**







## 12.0 Sustainable Infrastructure and Resources

### OVERVIEW:

Providing sustainable infrastructure is a core municipal responsibility that is essential to the health, safety, mobility and quality of life for the City's existing and future residents, businesses and visitors.

### Guiding Principles

- **Meet the Demands of a Growing City**—determine the infrastructure improvements required to meet the needs of a growing population and develop successive implementation plans that maintain capacities that are ahead of demand.

The City's population will grow by 80,000 people and 40,000 jobs by 2041. This increase in population will result in higher demands on City infrastructure that will exceed the capacity of some infrastructure elements. It is important to identify those elements and improve them ahead of demand.

- **Adapt to Climate Change**—build climate change resilient infrastructure to meet climate change challenges that include rising sea levels, wetter winters and drier summers.

Climate change will impact Richmond in two critical ways:

- **sea level rise due to global warming.** Locally, sea level is predicted to rise 1.2 m (3.94 ft.) over the next 100 years. As the City is dependant on its diking system for protection from the waters of the Strait of Georgia and the Fraser River, diking improvements that stay ahead of rising sea levels are critical;



- **the intensity and duration of rainfall.** Climate change experts believe that, in the long run, rainfall intensity and duration will increase during the winter months. Drainage infrastructure must be improved to meet longer and more intense storm events to maintain the City's current level of flood protection.

- **Utilize Local Energy Sources**—reduce the City's dependence on external power supplies by reducing energy consumption and capturing waste energy and increasing geothermal and solar energy production.

Every year Richmond businesses and residents consume 24 Gigajoules of energy to heat their homes, and transport goods and people. This is equivalent to the chemical energy in approximately 4 million barrels of oil. As we are dependent on outside suppliers for our energy, our 'energy dollars' will continue to flow beyond our city boundaries until we develop local energy sources. There are opportunities for local companies to develop markets for geothermal and solar energy, as well as waste heat capture and re-use. This will in turn strengthen the local economy, make the city less dependent on foreign energy sources, help achieve our greenhouse gas emissions reduction targets of 33% below 2007 levels by 2020, and 80% below 2007 levels by 2050, and take us closer to meeting the City's community-wide energy reduction target of 10% below 2007 levels by 2020.

- **Efficient Infrastructure**—achieve greater infrastructure efficiency through the proactive planning of infrastructure upgrades and replacements, the use of new technologies, and educating the public on demand side management. Plan infrastructure with minimum life cycle costs and deliver projects on time and within budget.

Demand management has the potential to defer, reduce or eliminate the need for infrastructure capacity upgrading. Water demand can be reduced through water metering, low flow fixtures, leak reduction, pressure management, and reduction in discretionary uses such as lawn irrigation. Most water use reductions also generate sewer flow reductions. Sewer flows can also be reduced through inflow and infiltration (extraneous rainwater and groundwater) management. Education and technology can play critical roles in demand side management. Rainwater has the potential to be harvested and utilized in place of drinking water for uses such as irrigation. Life cycle management can extend the life of assets and reduce their over all cost. As some infrastructure decisions that appear cost effective in the short-term can have excessive operational costs that make them more expensive in the long run, infrastructure choices should always favour the long view.



## 12.1 Sanitary Sewers

### OVERVIEW:

Wastewater management is a core municipal responsibility that plays a critically important role in maintaining community health. The municipal sanitary sewer carries liquid waste from individual homes and businesses to Metro Vancouver treatment facilities via Metro Vancouver trunk sewers. At the treatment facilities, the wastewater undergoes primary and secondary treatments before being discharged to the Fraser River.

The City's sanitary sewer system includes a well developed network of gravity mains, pump stations and forcemains. Proactive maintenance of sewer infrastructure reduces sewer deterioration and facilitates deferring expensive sewer rehabilitation work, thereby reducing overall costs and customer inconvenience.

Richmond has endorsed Metro Vancouver's May 2010 *Integrated Liquid Waste Resource Management Plan*, which outlines an overall objective to manage wastewater in a manner that enhances the environment. Three key strategies in the plan that support this objective are:

- conserve resources;
- maintain infrastructure and stretch capacity;
- focus effort to maximize the environmental benefit per dollar spent.

The City's population is predicted to grow by 80,000 people in the next 30 years. This increase in population will result in higher demands on the City sanitary sewer infrastructure which in turn will exceed the capacity of some of its elements. To protect public health and safety, it is important to identify those elements and upgrade them through re-development activities (City and private) to maintain livability while facilitating growth.

**OBJECTIVE 1:**

**Maintain an efficient sewage system to protect public health and safety.**

**POLICIES:**

- a) maintain and improve the existing sanitary sewer system through a proactive maintenance program, the use of quality materials and applying best-management practices that minimize life cycle costs;
- b) improve the efficiency of the sewer system by:
  - maintaining low inflow and infiltration levels;
  - reducing waste volume through water conservation;
  - continuing to participate in the Metro Vancouver sanitary sewer source control program by supporting the Metro Vancouver Waste Water Discharge Permit process;
- c) focus on detecting and reducing fat, oil and grease (FOG) in the sewer system;
- d) develop public education programs to:
  - reduce FOG discharges into the sewer system;
  - reduce per capita water use which will, in turn, reduce sanitary sewer flows;
- e) continue to work with Metro Vancouver on sanitary trunk and treatment plant capacity improvement projects;
- f) participate in the on-going implementation of the May 2010 Metro Vancouver Integrated Liquid Waste Resource Management Plan.

**OBJECTIVE 2:**

**Proactive planning of infrastructure upgrades and replacements due to age and growth.**

**POLICIES:**

- a) budget and plan to replace aging infrastructure in alignment with the City's Aging Infrastructure Replacement Plan;
- b) coordinate the replacement of aging sewer infrastructure with other City infrastructure replacement projects;
- c) ensure that sewered areas of the City maintain service levels in alignment with the needs of present and future land uses;
- d) ensure that development related sanitary system upgrades are funded through Servicing Agreements, sewer DCC's, and senior government funding;
- e) require all new developments to be connected to sanitary sewer where sanitary system is available;
- f) discourage the development of private on-site sewage disposal systems, except in those areas where sanitary sewer is not available.



## 12.2 Irrigation and Drainage

### OVERVIEW:

The City of Richmond has diverse drainage and irrigation needs due to its flat topography and unique farming community.

The City's drainage system includes a well developed network of closed pipe systems, box culverts, open ditches, sloughs, floodboxes and pump stations. The primary purpose of this system is to drain surface water into the Fraser River and prevent flooding on private and public property across the municipality. However, in the Agricultural Land Reserve (ALR), the drainage system also serves as a supply of irrigation water from the Fraser River for use by farmers.

Storm drainage effectiveness in Richmond is closely monitored to ensure that individual neighbourhood's needs are met. Annual maintenance and capital programs are used to replace aging infrastructure and overcome drainage challenges created by land development and climate change.

### OBJECTIVE 1:

**Maintain and improve urban drainage systems to meet the public's needs and regional requirements.**

### POLICIES:

- a) maintain and improve drainage systems to service existing and future development;
- b) ensure that development related drainage system upgrades are funded through development Servicing Agreements, drainage DCC's, and senior government funding;
- c) budget and plan to replace aging infrastructure in alignment with the City's Aging Infrastructure Replacement Plan;
- d) prepare for the effects that climate change may bring to the region, such as increased rainfall intensities which may require higher drainage capacity (for example by participating in regional climate change initiatives, researching issues and options and implementing City Climate Change policies as practical and funding becomes available);





- e) encourage the use of collection and drainage systems that harvest rainwater for non-potable water uses, temporarily store rainwater during major storm events and reduce surface water contaminants from entering drainage systems;
- f) integrate rainwater management master planning with other city initiatives, such as shopping centre and arterial road densification, to meet drainage needs while minimizing pollution and soil erosion;
- g) upgrade drainage systems in established neighborhoods via redevelopment requirements and Local Area Service Plans;
- h) wherever practical, retain open watercourses to provide drainage, and ensure that the watercourse permitting process is followed;
- i) integrate drainage with the Ecological Network;
- j) ensure that single family developments built to elevated flood plain construction levels do not negatively impact local drainage systems;
- k) use drainage infrastructure upgrades as opportunities to create appealing public amenities, such as the award winning Cambie Drainage Pump Station.



## **OBJECTIVE 2:**

**Maintain and improve Agricultural Land Reserve drainage and irrigation systems to support agriculture.**

## **POLICIES:**

- a) maintain and refurbish pump stations and watercourses that are critical to field drainage and agricultural water use;
- b) monitor Fraser River salinity levels to help farmers understand how river water salinity impacts irrigation water availability;
- c) work with farmers to understand and address the effects that climate change may have on the Fraser River as a source of irrigation water;
- d) minimize the impact of development on field drainage and agricultural water use;



- e) minimize the impact of new roads, drainage works and utilities on agricultural lands, farm holdings and operating activities;
- f) facilitate the improvement of agricultural irrigation and drainage infrastructure that support the agricultural sector (e.g., request senior government funding, participate in joint government initiatives).



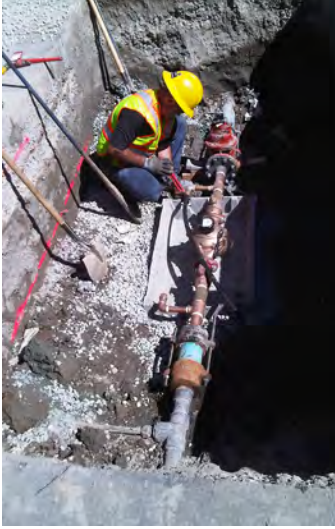
## 12.3 Water Supply and Distribution

### OVERVIEW:

Water supply is a core municipal responsibility that is essential to community health and safety. The City works with Metro Vancouver to supply adequate quantities of high quality drinking water to Richmond residents and businesses. Metro Vancouver delivers bulk water to the City and the City is responsible for distributing water to individual customers within the municipal boundary. The City has endorsed Metro Vancouver's 2011 Drinking Water Management Plan (DWMP) which includes three primary goals:

- provide clean, safe drinking water;
- ensure the sustainable use of water resources;
- ensure the efficient supply of water.

The City's population will grow by 80,000 people in the next 30 years and will result in higher demands on both the City's water distribution infrastructure and Metro Vancouver water supply system. To accommodate this growth, it is important to identify water system improvements and implementation plans that maintain adequate water service in the short, medium and long-term. Additionally, water demand management or conservation can reduce the impact of growth and extend the life of existing infrastructure.



### **OBJECTIVE 1:**

Provide sufficient quantities of high-quality drinking water at adequate pressure to meet present and future needs of the community.

#### **POLICIES:**

- a) provide adequate system capacity to meet the community's drinking water demand;
- b) maintain adequate fire fighting capacity;
- c) continue to monitor water quality through water sampling;
- d) use quality materials and best-management practices to maintain and construct water system elements that maximize service life and reduce overall costs;
- e) investigate the potential impacts of pressure management on water leakage and the service life of aging pipelines;
- f) minimize water system leakages by identifying leakage sources and maintaining a leakage level below the economic level of leakage;
- g) continue to work with Metro Vancouver on water supply capacity improvement projects;
- h) continue City to support the Metro Vancouver Drinking Water Management Plan.

### **OBJECTIVE 2:**

Proactive planning and implementation of infrastructure upgrades and replacements due to age and growth.

#### **POLICIES:**

- a) continue to replace and upgrade aging water infrastructure on an annual basis in alignment with the City's Aging Infrastructure Program;
- b) coordinate the replacement of aging water infrastructure with other City road and utility replacement projects;
- c) upgrade the water distribution system in coordination with new developments to accommodate growth;
- d) ensure that development related water system upgrades are funded through development Servicing Agreements, water DCC's, and senior government funding.

### **OBJECTIVE 3:**

Pursue demand management strategies and continue water conservation initiatives.

#### **POLICIES:**

- a) continue to raise public awareness regarding the benefits of water conservation;
- b) continue to move toward water metering through development, capital replacement and volunteer metering programs;



- c) promote the use of rain water retention systems for irrigation purposes;
- d) continue toilet rebate programs to reduce indoor water use;
- e) continue to implement lawn sprinkling regulations to reduce seasonal water use.



## 12.4 Energy

*Bylaw 10328*

*2022/03/21*

### **OVERVIEW:**

On July 26, 2010, Council endorsed the Corporate Sustainability Framework, Energy Strategic Program, which included a target 'to reduce energy consumption in the Richmond community by at least 10% from 2007 levels by 2020'.

The objectives and policies below focus on reducing energy use and emissions from buildings, while those relating to transportation and waste management are located in other sections of the Official Community Plan.

The City of Richmond is a leader in corporate energy management of its own facilities. The City has been recognized by BC Hydro as a Municipal Power Smart Leader (the highest recognition BC Hydro gives to organizations) several years in a row due to its outstanding efforts to incorporate new and alternative technologies into its energy system, and improve its corporate energy management program. The experience and knowledge which the City has gained through its energy management initiatives informs its community-wide energy use and emissions reduction efforts.

In 2007, almost 59% of the energy consumed in Richmond occurred in commercial buildings and residences. The BC Energy Step Code was established in 2017 by the province of British Columbia; it is a standard that local governments can choose to reference that requires improved energy performance from most types of new construction over and above what is required by the BC Building Code. There is a need to improve the energy performance of new buildings using tools such as the BC Energy Step Code, as well as speed the adoption of energy upgrades and renovations to existing buildings. Doing so will not only help the City achieve its emissions goals, but can also improve indoor environmental quality, health, productivity, and foster economic opportunity and jobs.





**OBJECTIVE 1:**

Achieve corporate leadership in energy reduction through the application of the Council endorsed Corporate Sustainability Framework-Energy Sustainability Strategic Program.

**POLICIES:**

- a) continue to build corporate awareness and capacity through on-going work place conservation awareness programs, customized information and targeted training to key work areas to improve energy management performance;
- b) reduce overall corporate energy consumption through conservation and efficiency by continuing the development of effective corporate programs, initiatives and policies to contribute to the Council endorsed targets;
- c) incorporate energy management best practices, efficient equipment and monitoring systems into new civic buildings and community amenities and infrastructure (e.g., energy efficient pumps and energy saving features when updating or constructing new pump stations);
- d) continue to implement the City’s High Performance Building Policy (#2306) to improve energy efficiency in new and renovated municipal buildings;
- e) accelerate transition to locally supplied renewable and clean energy sources for new capital projects and through retrofit of existing civic buildings and infrastructure;
- f) consider updating waterworks pressure reducing stations to include energy recovery;
- g) incorporate energy efficient lighting for City facilities, parks open space and roads through retrofits and during new construction.

*Bylaw 10328  
2022/03/21*

**OBJECTIVE 2:**

Improve the energy efficiency of existing buildings and vehicles and transportation infrastructure to reduce GHG emissions and other environmental impacts of energy use, and to reduce energy costs.

**POLICIES:**

- a) implement the strategies and actions recommended in the Council-adopted Community Energy and Emissions Plan.

*Bylaw 10328  
2022/03/21*





Bylaw 10328

2022/03/21

**OBJECTIVE 3:**

Improve the energy efficiency and greenhouse gas emissions performance of new construction.

Bylaw 10328  
2022/03/21**POLICIES:**

- a) Implement the strategies and actions recommended in the Council-adopted Community Energy and Emissions Plan.
- b) Implement the BC Energy Step Code (and greenhouse gas emission standards, as these become available for implementation by local governments) in a manner that maximizes the reduction of greenhouse gas emissions, while also increasing energy efficiency over time.
- c) Set out incremental increases in requirements for new construction, in consultation with stakeholders, so that starting in 2025, new buildings covered by the BC Energy Step Code will, by bylaw, have to achieve:
  - i) near-zero GHG emissions from operation, and/or
  - ii) the highest applicable level of energy efficiency under the BC Energy Step Code.



## 12.5 Recycling and Waste Management

**OVERVIEW:**

Safe and responsible solid waste management is a core responsibility for the City and with it comes challenges related to limited landfill space and effective disposal options. Richmond has endorsed Metro Vancouver's 2010 *Integrated Solid Waste and Resource Management Plan*, which outlines goals and objectives as the foundation for future waste reduction. The City has established targets for waste diversion and related objectives to support this Plan, and its programs and services are designed to align with the City's 2010 Corporate Sustainability Policy.



Waste diversion targets are supported by a comprehensive and diverse range of waste reduction and recycling services for Richmond residents, along with policies, bylaws and guidelines to provide for responsible solid waste management throughout the community. The City's garbage collection services are designed to strike a realistic balance between meeting recycling goals while enabling residents to have reasonable means to dispose of garbage. Recycling services for residents provide convenient options to recycle paper, plastic, aluminum, metal and glass, as well as food scraps and yard trimmings through recycling collection or home composting. The City's public spaces recycling and litter management programs enhance community beautification while addressing waste diversion, and its community outreach programs increase recycling, reuse and reduction of waste through education and awareness. The City also supports provincial and regional initiatives relating to banned or restricted items and household hazardous products disposal through drop-off recycling services at the City's Recycling Depot, and through support to product stewardship programs and other community services (e.g., producers and volunteer groups).

The successful diversion of waste from disposal and overall waste reduction are joint efforts. They involve all community members taking responsibility for recycling and waste reduction.

### OBJECTIVE 1:

Provide for effective and responsible solid waste and recycling management through programs, services, policies, guidelines and alignment with the regional 2010 *Integrated Solid Waste and Resource Management Plan* and Richmond's 2010 Corporate Sustainability Policy.

### POLICIES:

- a) continue to improve how solid waste will be managed, including updating bylaws, building guidelines, as well as fee structures and service levels for solid waste collection so that the City provides residents with an acceptable basic level of service at reasonable cost, while encouraging users to reduce unnecessary waste generation;
- b) provide information and education on options to better reduce waste;
- c) request senior governments to transfer additional waste management responsibilities to producers and consumers, including actions to limit the manufacturing of non-recyclable products and better promote manufacturer accountability for product handling, recycling and/or safe disposal;
- d) consider City bylaws that support regional disposal bans and work to implement programs, either in partnership with others or independently, to reduce materials from the waste stream that have detrimental environmental impacts;
- e) consider establishing policies for non-residential sectors to provide for safe and responsible solid waste management and increased recycling;
- f) continue to monitor waste disposal and recycling rates to measure progress toward established City targets, waste diversion and waste reduction objectives;



- g) continue to set good examples of waste reduction in the City's procurement practices by emphasizing reusable packaged products, minimizing the procurement of over-packaged products and promoting products that do not contain recycled materials.

### **OBJECTIVE 2:**

**Divert waste through improved multi-faceted recycling services, composting programs and education initiatives, by supporting community programs to reuse products and reduce consumption.**

### **POLICIES:**

- a) achieve a community-wide waste diversion rate of 70% by 2015 by increasing recycling and decreasing waste;
- b) increase the effectiveness of existing recycling programs by exploring options to expand recycling into public streetscapes and parks, broaden services for residents, developing more options for business/commercial sectors, and providing opportunities to increase private sector recycling;
- c) work with appropriate government partners to change to existing regulatory barriers that discourage the reuse of materials, promote material exchange networks and the re-engineering of recycled materials;
- d) target new recycling opportunities such as organics recycling and composting, FOG recycling, wood reuse and recycling and reuse and recycling in the demolition, land clearing and construction (DLC) sectors;
- e) increase public awareness to overcome barriers to recycling, reuse and waste reduction through City outreach programs and community partnerships.

### **OBJECTIVE 3:**

**Support regional requirements for banned and restricted materials including hazardous waste management, through improved City bylaws, enforcement, community awareness and drop-off programs, and partnerships with product stewardship/take back programs.**

### **POLICIES:**

- a) support regional initiatives to develop alternative programs to reduce waste and pollution, such as waste audits on construction sites, processes for tracking construction waste, and alternatives to traditional building material, recycling programs and improved commercial building design guidelines;
- b) encourage additional opportunities for the safe and convenient disposal of household hazardous waste through drop-off collection at the Richmond Recycling Depot, partnerships with community product stewardship/take back programs, and coordination with responsible disposal services in the community;
- c) develop and enforce bylaws that better align with regional waste disposal bans and/or restrictions;
- d) increase public awareness and education on disposal restrictions and bans.



## 12.6 Flood Protection

### OVERVIEW:

Located in the Fraser River delta, the City of Richmond is naturally low lying and would be subject to flooding from high tides, storm surges and freshets without diking. As a Local Diking Authority, the City manages dikes on Lulu, Sea and Mitchell Islands that protect against sea and river floods.

The City strives to meet Provincial Diking Inspector guidelines and requirements that address issues such as climate induced sea level rise, seismic design and dike alignment. The 2008-2031 Richmond Flood Protection Strategy forms a framework for understanding and meeting Richmond's flood protection needs and directs spending strategies.

Ongoing Fraser River and Steveston Harbour dredging is required to minimize the risk of flooding during the annual freshet season.

The Flood Plain Designation and Protection Bylaw No. 8204 regulates building construction levels and ensures that new building developments are set back an appropriate distance from the dike. These controls are essential for the protection of public safety, public property and enabling dike upgrades.

### OBJECTIVE 1:

**Maintain and improve flood protection measures throughout Richmond.**

### POLICIES:

- a) enforce the setback requirements of Flood Plain Designation and Protection Bylaw 8204 to facilitate future dike raising to accommodate climate change induced sea level rise;
- b) maintain and upgrade the perimeter dike systems on Lulu, Sea and Mitchell Islands while striving to meet Provincial Diking Inspector guidelines and requirements;





- c) develop Dike Master Plans to identify future perimeter dike and internal dike upgrade requirements and construction schedules;
- d) request senior government funding to maintain and upgrade Richmond's dike systems;
- e) work with stakeholder groups to ensure that future dike upgrades are appropriate and respect local community values;
- f) continue to request ongoing senior government funding to dredge the Fraser River and Steveston Harbour.



## 12.7 Building, Fire and Seismic Protection

### OVERVIEW:

Building, fire and seismic protection, like flood protection, are “Life Safety” matters which Richmond takes very seriously. Richmond takes a proactive and scientific approach to protecting City-owned, public and private buildings, structures, dikes and infrastructure against building, fire and seismic damage. Dike maintenance, height increases and seismic protection are addressed in the City's Flood Protection Strategy, related policies and Provincial Legislation. The City co-operates with the Federal and Provincial governments, and others in conducting scientific research and updating Building Code requirements.

The provincial Dike Safety Program is delivered through the Deputy Inspector of Dikes. Activities include: administering the Provincial Dike Maintenance Act, approving construction works on and adjacent to dikes, auditing dike owner's dike management programs, and issuing orders to protect public safety.

Federally, the Government of Canada supports the National Research Council (NRC) Institute for Research in Construction (NRC-IRC) which is the leading construction research agency in Canada. It also supports, for example, the Canadian Codes Centre, Canadian Construction Material Centre, building envelope technologies, and fire research to advance fire safety and design.





The BC Ministry of Energy and Mines, Office of Housing and Construction Standards, Building and Safety Policy Branch is responsible for developing and implementing a modern legislative framework for regulating safety in the design, construction and occupancy of buildings. The Province enacts the BC Building Code and regulations under the Local Government Act. The Code is based on the model National Building Code of Canada that provides minimum standards for topics such as: safety, health, accessibility, fire and structural protection of buildings; water and sewer damage; energy and water efficiency; and the alteration and demolition of existing buildings.

The Building Approvals Division aims to ensure public health, fire protection, life safety, and structural sufficiency by providing two main services:

1. "Permits" which reviews drawings for compliance with the BC Building Code, including plumbing and mechanical systems for large buildings;
2. "Inspections" which is responsible for on the site construction of the building, and the associated plumbing and gas work.

The Engineering Department provides sustainable infrastructure including dike maintenance and upgrading.

### **OBJECTIVE 1:**

**To provide and advance effective building, fire and seismic protection to ensure that Richmond is a safe place to live, work and play.**

### **POLICIES:**

- a) base building, fire and seismic protection initiatives on the following proactive principles:
  - Scientific Research;
  - Public Safety;
  - Risk Prevention;
  - Partnerships;
  - Standards;
  - Cost Effectiveness;
- b) co-operate with senior governments and others (e.g., institutions, developers) to advance building, fire and seismic protection research and best practices (e.g., geotechnical studies, site preparation), codes and regulations;
- c) continue to monitor, raise and seismically improve the City's dike system, as appropriate;
- d) update building bylaws and regulations, as appropriate;
- e) continue educational initiatives to inform developers, builders and the public of recent advances in building, fire and seismic protection.



## 12.8 Roads

### OVERVIEW:

While the City's Transportation Division plans roads and access, the Engineering Division manages them. The City's road infrastructure includes a well developed network of arterial roads, collector roads, local roads, lanes, bike lanes and pedestrian walkways that constitute approximately 20% of the developed land base in Richmond.

To meet the demands of a growing City, the existing roads and sidewalks must be maintained and improved to support transportation and pedestrian activities and minimize negative social and environmental impacts. New road development and improvements need to make the best use of the City's limited street capacity and balance competing user-demands and interests.

City streets are important public places that enhance the City's identity by linking people, community and nature, and promote a vibrant and 'distinctly Richmond' urban realm.

### OBJECTIVE 1:

Protect the City's capital investment in road infrastructure.

### POLICIES:

- a) continue maintenance and improvement programs in accordance with identified needs balanced with resources consistent with the City's Pavement Management Strategy;
- b) coordinate the improvements of aging road infrastructure with City utility replacement projects (e.g., perform street and pipeline renewal coincidentally in locations where both infrastructure elements have reached the end of their useful life);
- c) place a high priority on the maintenance of streets that function as transit corridors (e.g., No. 3 Road);
- d) give high priority to road and sidewalk network improvements that service higher-density areas and link higher-density commercial and residential areas;



- e) use quality materials and best management practices to maintain and construct road infrastructure elements that maximize service life and minimize overall costs;
- f) continue to work with Translink on Major Road Network Improvement projects.

## **OBJECTIVE 2:**

**Support safe transportation and pedestrian, cycling and rolling (wheel chairs, scooters) activities, vibrant public places and linkages among all City uses.**

## **POLICIES:**

- a) ensure that street designs promote efficient vehicle and pedestrian movements and do not compromise a safe, convenient, and aesthetically pleasing environment for pedestrians, cyclists, and transit-users;
- b) design streets in accordance with planned land use patterns and accepted engineering standards, including the provision of sidewalks on most streets;
- c) ensure wheel chair access at road intersections in pedestrian-oriented areas and at intersections with arterial roads where feasible;
- d) design sidewalks and trails to ensure rolling accessibility and safety;
- e) investigate the development of alternative street design and construction standards that will result in greater environmental benefits to the community (e.g., finer grids, right of passage).



## **12.9 Roadway Lighting**

### **OVERVIEW:**

Most roadways in Richmond's urban areas include roadway lighting which is designed to provide accurate and comfortable visibility at night on roadways, laneways, walkways, and bikeways. This lighting reduces night time accidents, improves traffic flow, and promotes business and use of public facilities at night. It also enhances the public's sense of personal security and assists police efforts to reduce crime and economic loss.



City standards include high-pressure sodium lights in residential, commercial and industrial areas, with metal halide (white light) for the City Center and other special areas. Innovative street lighting that enhances a local area or creates a sense of “place” and safety will be considered for new developments such as commercial and shopping areas.

### **OBJECTIVE 1:**

**Maintain a system of roadway lighting that supports safety, visibility and security on the City’s urban roadways, laneways, walkways and bikeways.**

#### **POLICIES:**

- a) maintain standardized lighting levels and uniform light distribution along urban roadways;
- b) ensure that new developments include underground lighting systems that comply with current roadway lighting standards;
- c) ensure that lighting improvements are primarily funded through redevelopment (service agreements) or through local area service programs;
- d) pursue initiatives and follow best practices to install, replace, and maintain roadway lighting on City streets;
- e) improve the resistance of roadway lighting systems to copper theft. (e.g., tamper proof access covers).

### **OBJECTIVE 2:**

**Achieve greater roadway lighting efficiency through the use of evolving energy saving technologies.**

#### **POLICIES:**

- a) research and promote the use of energy saving lighting technologies and design energy-efficient roadway lighting systems;
- b) continue to convert existing roadway lights to more energy-efficient lights;
- c) research and identify options for synergy between roadway lighting systems and other utility systems. (e.g., cellular antennas).

### **OBJECTIVE 3:**

**Use a system of roadway lighting to encourage the development of a safe, appealing, lively and distinctive character on the City’s urban roadways, laneways, and walkways.**

#### **POLICIES:**

- a) investigate roadway lighting and pole designs to enhance distinctive area character;
- b) promote and continue the use of banners, flower pot holders and decorative receptacles on roadway lighting systems for beautification purposes.



## 12.10 Street Trees

### OVERVIEW:

Richmond's urban forest is a valuable community asset. The trees within it have many life affirming qualities, and their influence on the Ecological Network and environment enhances the well-being of all living things. The ecological service benefits of trees include absorbing carbon dioxide, replenishing oxygen, filtering particulate pollutants, preventing soil erosion, creating shade from the sun's rays, and providing food and habitat for wildlife (e.g., bird nests).

Trees are planted within all areas of the City: in parks and open spaces; along trails and in natural areas; and as integral parts of the built environment.

Tree planting is a fundamental part of new road construction and many trees have been and will continue to be planted along major city streets. Trees are important elements in making positive and well defined human scaled places.

Street tree planting is a positive initiative but creates challenges for development projects, existing building upgrades, and the accommodation of infrastructure located within City owned road allowances and rights-of-way.

### OBJECTIVE 1:

Develop a comprehensive Street Tree Master Plan to provide a detailed, long-term policy framework for maintaining and funding City street trees.

### POLICY:

- a) the Street Tree Master Plan will be integrated with the City's overall Urban Forest Strategy, and coordinated with other City master plans and strategies.





## **OBJECTIVE 2:**

Continue tree planting as part of the City's road capital works program, and development related off-site works.

### **POLICIES:**

- a) ensure that the planning and design of street trees is coordinated with other City and privately owned overhead and underground utilities and services;
- b) ensure that the planning, design and planting of street trees is done in accordance with the tree planting details and growing medium specifications outlined in the most recent City Engineering Department Supplementary Specifications and Detail Drawings;
- c) maximize the soil volume available to support tree root development;
- d) ensure that street tree selection contributes toward a healthy diversity of tree varieties;
- e) continue to research best practices to optimize tree health and longevity of trees on Richmond's streets.

## **OBJECTIVE 3:**

Protect and retain the City's existing street trees, particularly in areas of new development within the City.

### **POLICIES:**

- a) ensure that existing street trees are only removed in accordance with the criteria established by the City's Urban Forest Strategy;
- b) ensure that planning of new developments takes into account the location and condition of existing street trees, and where necessary their replacement;
- c) ensure that street trees are protected from disturbance during installation or maintenance activities of other public or private utilities.



## **13.0 Implementation Strategy**





## 13.0 Implementation Strategy

### 13.1 Effective Implementation

#### 13.1.1 Provincial Requirements

##### **OVERVIEW:**

The Province of British Columbia requires all municipalities to adopt an Official Community Plan (OCP) under the Local Government Act. The legislation specifies the purpose and effect of an OCP, the required content and policy statements, consultation during OCP development, and adoption procedures and authority.

For example, all bylaws enacted or works undertaken by Council must be consistent with the adopted OCP. However, this does not mean that the City's existing Zoning Bylaw is replaced or superceded by the OCP (i.e., the existing zoning continues to apply to all properties in Richmond).

The Province continues to amend or update its requirements for OCPs. Consequently, it will be necessary for Richmond to update its OCP in order to reflect and respond to new Provincial directions (e.g., requirement that the OCP include greenhouse gas reduction targets and supporting policies and actions).



**OBJECTIVE 1:**

Ensure that the City of Richmond's Official Community Plan (OCP) remains consistent with Provincial legislation.

**POLICIES:**

- a) advise Council as necessary when the Province amends legislation affecting the OCP.

### 13.1.2 Community Values and Consultation

**OVERVIEW:**

The OCP co-ordinates and manages the City's public interest regarding a wide range of topics (e.g., sustainability, demographics, growth, land use, transportation, infrastructure, community services, parks).

**OBJECTIVE 1:**

Consider community values and input in implementing the OCP.

**POLICIES:**

- a) provide meaningful community input opportunities through a flexible range of tools such as online methods, surveys and open houses;
- b) explore ways to reach those who do not usually attend traditional City open houses and public meetings (e.g., social media);
- c) provide adequate information, which is tailored to the need, the issue, decision making timing and situation.

### 13.1.3 Strategic Vision

**OVERVIEW:**

The City of Richmond has as its strategic vision *"to be the most appealing, livable and well-managed community in Canada"*.

To achieve this vision, the City has adopted a number of strategies and approaches in the past and will continue to do so in the future. The OCP is one of the key tools to accomplish the City's strategic vision.

**OBJECTIVE 1:**

Be the most appealing, livable and well-managed community in Canada.

**POLICIES:**

- a) continue to implement the OCP to assist in achieving the City's Strategic Vision.



### 13.1.4 OCP Monitoring, Review and Amendments

#### OVERVIEW:

The 2041 OCP will be monitored and reviewed on an on-going basis (by Policy Planning). Periodically, reports will be prepared for key indicators—such as population, employment, housing, transportation, parks, climate change, the Ecological Network, ESAs, and community services (e.g., when Census Canada data is released every five years) (by Policy Planning and other departments).

The Local Government Act requires the Regional Context Statement in the OCP be reviewed and submitted to the Metro Vancouver Board for acceptance at least every five years.

Generally speaking, it has been the practice of the City of Richmond to review its OCP as a whole in approximate 10 year intervals.

Although the OCP is intended to provide clear policy direction for the future, it also has to be flexible to accommodate changes that were not anticipated when it was written. OCP amendments may involve the land use map designations and/or the text of the plan, and will occur as needed, as determined by Council.

#### OBJECTIVE 1:

**Ensure that the Official Community Plan (OCP) remains relevant.**

#### POLICIES:

- a) use the release of the Census Canada data and other data, and studies to assist in monitoring and reviewing the OCP;
- b) amendments to the OCP should:
  - be minimized, if at all possible;
  - benefit the community in Council's opinion;
  - be justified based on the need and effect of the proposed change.
- c) notification signs are required when an application is made to amend the OCP:
  - an applicant for an amendment to the OCP must post a notification sign(s) on the site;
  - sign must be maintained and continue to be erected a minimum of 14 days prior to and up to the date of the Public Hearing on the application;
  - sign must remain in place until City Council's final decision or the OCP amendment application is abandoned;
  - all signs must be removed within 21 days of the completion of Council's final decision or if the OCP amendment application is abandoned;
  - sign must indicate the project address, the City's project file number, a general description of the purpose of the OCP amendment, the applicant's name and contact number, the City's website address, the City's logo, a location map, information on public input opportunities, and a City contact for further information;

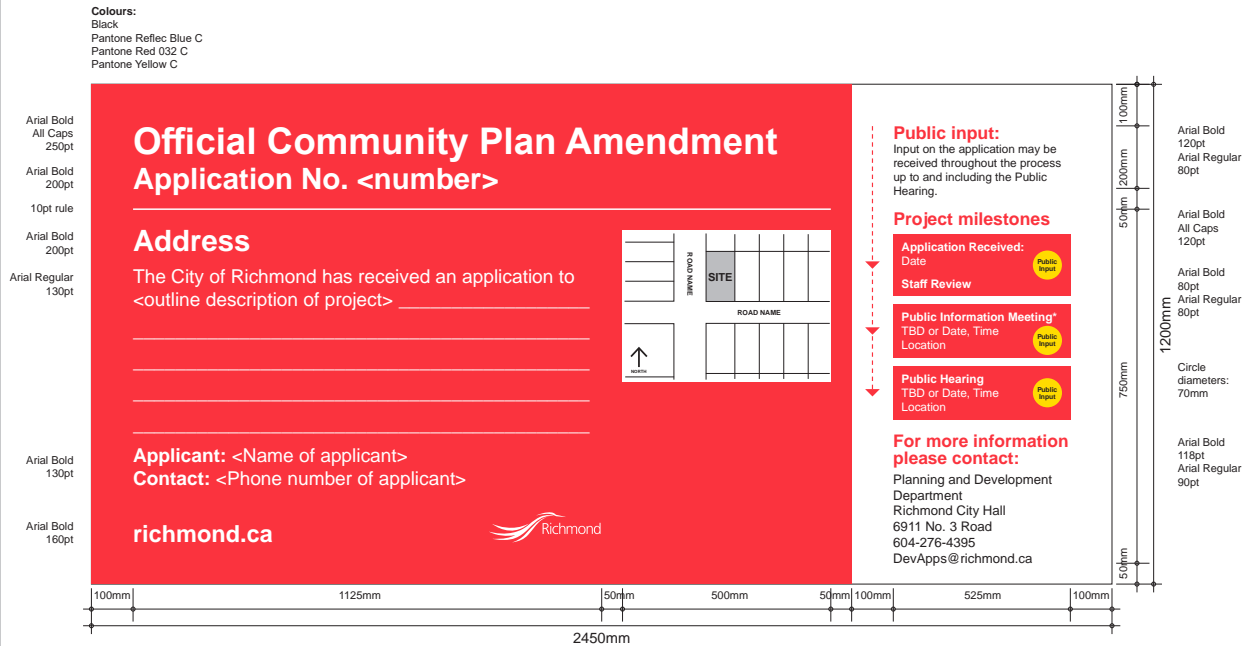
Bylaw 10004  
2020/03/16



Bylaw 10004  
2020/03/16

- all required notification signs for rezoning applications must comply with the specifications shown in the figure below:

**OCP Amendment Notification Sign Specifications**



Specification:

- Red background (Red 032) with white Helvetica. Medium lettering.
- Site map will have white background with red lines.
- The map will show the project location, adjoining roads and properties, address and north arrow.

- if the City advises the applicant that the sign is deficient, including new information on meeting dates that involve public input, all corrections and modifications must be completed as soon as possible and approved by the Director of Development not less than 14 days prior to the public hearing in respect of the OCP amendment application;
- sign must be located on the site near the front lot line, and be placed so as to be clearly visible from the fronting road, but not be located so as to interfere with pedestrian or vehicular traffic or obstruct visibility from roads, lanes or driveways;
- where the site also abuts a separate unconnected improved public road, a second sign must be located adjacent to the second road as determined by the Director of Development or the Director's designate;
- sign must be capable of withstanding weather, and be installed and maintained in a sound professional manner; and
- notwithstanding the above, a notification sign is not required for City-initiated OCP amendments.



## 13.2 Phasing and Priorities

### OVERVIEW:

The City has a variety of Area Plans and Sub-Area Plans for specific neighbourhoods in Richmond. The City Centre is one of the key areas where new growth is envisioned in the Area Plan and its Sub-Area Plans. Other major areas that have their own planning documents where new development will occur are Steveston, West Cambie (Alexandra Neighbourhood) and Hamilton. The only other phasing or priorities the 2041 OCP has identified, which are dealt with elsewhere in this document, involve the densification of the neighbourhood shopping centres, development along the arterial roads, and granny flats or coach houses in certain neighbourhoods. No other new Area Plans or Sub-Area Plans and additional OCP studies are contemplated at this time.

### OBJECTIVE 1:

Ensure all Area Plans, Sub-Area Plans and other planning documents, studies and initiatives of the City are consistent with the City of Richmond's Official Community Plan (OCP).

### POLICIES:

- a) update any Area Plans and Sub-Area Plans that require revision within one year of the adoption of the OCP (led by Policy Planning).

## 13.3 Sustainable Financing

### OVERVIEW:

Municipalities are required to keep their expenditures within their adopted annual budgets. Therefore, the demand for new capital improvements or expanded operations must be kept within current fiscal limitations. The City cannot count on tomorrow's population increases to pay for today's needs, nor can it expect increased financial assistance from the Provincial or Federal governments. Restraints on the City's budgets will mean that there will be increasing competition for limited financial resources.

The implementation of the OCP must be achieved in a sustainable, fiscally efficient and effective manner. The City will continue to optimize and streamline its service delivery, coordinate its capital planning and works, and seek innovative approaches to implement the OCP. At this time, with the adoption of the 2041 OCP, the City does not need to increase the DCC funding for:

#### Parks Acquisition and Development

While an additional 133 ha (330 ac.) of parkland is required to meet 2041 needs, it will be achieved through the following:

- in the City Centre, parks already in the DCC Program;
- outside the City Centre, new parks and properties adjacent to existing parks already in the DCC Program;
- the establishment of new parks on City owned land (e.g., the Garden City lands);



- securing publicly accessible open space on private property;
- securing parks through the development application (e.g., rezoning) process.

Furthermore, the recent acquisition of the Grauer Lands by the City and Ducks Unlimited Canada (not in the Park Acquisition DCC Program) has made a significant contribution to the Parks and Open Space System at a very low cost to the City.

### **Engineering Infrastructure**

- City Centre growth can be accommodated by the current DCC Program.
- Future infrastructure to accommodate growth around shopping centres outside the City Centre will be determined during the planning of each shopping centre once land uses and densities are known. At that time, infrastructure studies will be undertaken to determine if the DCC Program needs to be changed.

### **Transportation**

The provision of the transportation improvements envisioned in this OCP will be achieved via the following mechanisms:

- Roads DCC Program;
- as part of required works and services for new developments;
- voluntary developer contributions;
- general City revenues;
- grants and/or cost-share funding from senior governments;
- other future new revenue sources.

The provision of neighbourhood links outside of neighbourhood centres and outside the City Centre will require a future increase to the Roads DCC Program, which will likely be undertaken as part of an overall review and update of the DCC Program.

## **OBJECTIVE 1:**

**Adopt a sustainable financing strategy to implement the City of Richmond's Official Community Plan (OCP).**

### **POLICIES:**

#### **Development Responsibilities**

- a) new services and costs caused by growth are to continue to be provided by development proponents through such means as:
  - development cost charges for transportation improvements, utility upgrades and parkland acquisition and development;
  - works and services;
  - front-end financing and latecomer charges;
  - density bonusing (e.g., for affordable housing, child care and other community amenities/benefits);
  - developer contributions to items such as the public art program;
  - the recovery of City community planning costs, for future OCP updates and planning studies;





### **Municipal Responsibilities**

- a) non-growth services and costs are to be funded from the municipal tax base, user fees and rates, utility charges and reserves, general revenues, debt financing and other sources of intergovernment funding;

### **Other Funding Sources**

- a) The City will:
- apply for Provincial and Federal grants whenever possible;
  - consider innovative private/public partnerships and joint ventures;
  - continue to provide opportunities for community-initiated/paid improvements (e.g., Local Improvement Program; neighbourhood improvement charges; corporate sponsorships; fund raising).

### **OBJECTIVE 2:**

Ensure that new development (e.g., rezonings, Development Permits and variances, subdivisions) achieve the OCP and related City policies, bylaws and regulations.

### **POLICIES:**

- a) ensure that new development implements the OCP policies;
- b) where the OCP requires the City to first prepare refined strategies and policies (e.g., housing, sustainability, the Ecological Network), the strategies and policy studies are to be prepared and Council is to first approve such recommendations before they become requirements for development applications.

## **13.4 Others' Responsibilities**

### **OVERVIEW:**

Metro Vancouver, YVR, Port Metro Vancouver, TransLink, the School Board, Steveston Harbour Authority, and other Federal and Provincial stakeholders and partners play critical roles in implementing the OCP because of either, their senior jurisdiction, significant land holdings, important land uses, exemptions from local government controls, or social and economic impact on the City. As well, the City continues to work with First Nations, as appropriate. The City of Richmond has always endeavoured to work with these agencies to meet mutual interests and objectives.

At the same time, residents and business people will continue to be involved in finding acceptable, desirable and innovative ways to implement the OCP. Community participation in City processes will be required as Richmond grows and develops to the year 2041.

**OBJECTIVE 1:**

Partner with senior government, stakeholders and the community to implement the Official Community Plan (OCP).

**POLICIES:**

- a) continue to work with Metro Vancouver, YVR, Port Metro Vancouver, TransLink, the School Board, Steveston Harbour Authority, and other Federal and Provincial stakeholders and partners to implement the OCP;
- b) continue to co-operate with the following agencies in their planning:
  - Metro Vancouver—2040 Regional Growth Strategy (RGS) implementation;
  - Vancouver Coastal Health;
  - Agricultural Land Commission (ALC)—ALR regulation implementation;
  - YVR—2027 Master Plan implementation;
  - Port Metro Vancouver—planning;
  - Steveston Harbour Authority—planning;
  - Richmond School Board—planning;
  - First Nations—as appropriate;
- c) support the Steveston Harbour Authority in preparing effective plans and include them in City Steveston planning;
- e) discourage Port Metro Vancouver from using ALR lands for Port purposes and encourage the Port to use lands within the urban footprint;
- f) explore improved means to communicate with and involve the community in ongoing OCP implementation decision-making, recognizing that the final approach used lies with Richmond City Council.

## **14.0 Development Permit Guidelines**





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## 14.0 Development Permit Guidelines

### 14.1 Overview

#### 14.1.1 Background

From 2009 to 2012, the City undertook an extensive public consultation process to determine the community's vision for the future. As a result of this process, strong support was revealed for the:

- retention of agricultural lands for farming;
- protection of the City's ecological network, natural environment and island foreshore;
- proper design and implementation of more housing choices in certain neighbourhoods;
- planning for the densification of neighbourhood shopping centre areas over time;
- focussing development in the City Centre.

The Official Community Plan (OCP) is the blueprint for achieving this vision. One of the tools it will use for this purpose is the designation of Development Permit (DP) Areas and the specification of DP Guidelines as permitted in the Local Government Act. The DP Areas and Guidelines support the goals, objectives and policies of the OCP. They outline the City's expectations for future growth and change by redevelopment and development, and provide guidance regarding form and character of development or other objectives (i.e., promotion of energy conservation) for the community.

#### 14.1.2 Objectives

*The OCP DP Areas and Guidelines are intended to help support the establishment of:*

- the City Centre as a "premier, urban-riverfront community" characterized by outstanding public places and spaces where people can take pleasure in public life within walking distance of where they live, work, shop, learn and play;



- strong and identifiable local character for “neighbourhood centres” located within and around local shopping malls;
- pedestrian-friendly, walkable, green neighbourhoods with a strong human scale and unity of character;
- complete and sustainable neighbourhoods that include a range of housing choices and services, and promote residential densities that support convenient local retail/commercial uses that are easily accessible via an integrated pedestrian-vehicular circulation network;
- a high standard of development, incorporating basic design elements for site planning, building massing, building practices, quality of materials, energy efficient building practices and adequate climate and weather protection;
- natural features and ecologically significant areas that are protected, and Environmentally Sensitive Areas (ESAs) as a component of the ecological network;
- a special Richmond character, enhanced by the distinct qualities and opportunities of its developing districts and neighbourhoods;
- a high quality public realm, including public streets and lanes, parks and other open spaces, publicly accessible parts of buildings, and a built form defining and/or adjacent to public spaces.

### 14.1.3 Legal Authority

The Local Government Act allows the OCP to designate DP Areas for the following purposes.

*A DP Area is intended to address special development circumstances, and if a property is within a DP Area, certain types of development activity cannot proceed without a DP being issued.*

#### Protection of Farming

Bylaw 10231  
2021/04/19

The principal farming areas in Richmond are in the designated Agricultural Land Reserve (ALR). Farms along the edge of the ALR which abut non-farm development require special protection. Consequently, all significant new development (excluding single-family development) outside of, but along the edge of, the ALR requires a DP to reduce the impact on the existing or potential farms and related uses by adequate setbacks, screening or other appropriate measures.

#### Protection of the Natural Environment

As part of the OCP, the City has updated its ESA Strategy using an ecological network approach. Based on this Strategy and public consultation, certain areas are designated as ESA DP areas (Attachment 2 of the OCP).

#### Protection of Development from Hazardous Conditions

Because it is on an estuarine island, all development in Richmond has to be protected from flooding. The principal method used is to construct and maintain perimeter dikes. This is an ongoing task in which all three levels of government have participated from time to time.

A secondary method of protection is to minimize potential flood damage by raising vulnerable building areas above the maximum anticipated flood level. This raises questions of form and character where new development is interspersed with older development. The OCP contains DP Guidelines to minimize the impact of new development on its surroundings.

Finally, since the foreshore area is the front line of protection against flooding, it deserves special consideration. The foreshore areas are designated as an ESA DP Area and the DP Guidelines serve the dual purpose of flood and environmental protection. Marinas are also subject to special DP Guidelines because of their foreshore location.



### **Form and Character of Multiple Family Residential, Commercial or Industrial development**

Commercial and industrial developments have the potential for causing significant aesthetic, environmental or other adverse impacts on surrounding uses. All commercial developments are deemed to merit the site-by-site consideration afforded by the DP process. Industrial uses grouped together, as in an industrial park, do not merit the same consideration, but do where they are:

- adjacent to specified non-industrial uses;
- in the City Centre, where harmonious civic design is a major consideration.

A key housing policy of the OCP is to carefully integrate new housing development into existing neighbourhoods. All multiple family residential and mixed use projects merit site-by-site consideration for form and character in order to achieve the desired relationship to surrounding areas and to ensure high standards of new housing design.

### **Form and Character of Intensive Residential Development**

As part of the OCP, the City is proposing to permit granny flats and coach houses in certain selected neighbourhoods. In order to ensure that these new forms of housing fit into these neighbourhoods and are well designed, the public has supported the notion of designating the areas where the granny flats and coach houses will be permitted as DP Areas.

### **Energy and Water Conservation and Greenhouse Gas Emissions**

The Province is either requiring or encouraging local governments to address these environmental issues. In addition to the variety of other things Richmond is already or proposing to do, the establishment of some general DP guidelines regarding green buildings and sustainable infrastructure are included in this OCP.

## **14.1.4 Application and Intent**

*The intent of the DP Areas and Guidelines is to support the goals, objectives and policies of the OCP and to build upon the past achievements and strengths of the City of Richmond. The guidelines identify basic development standards to be applied across the entire community, as well as measures appropriate to specific land uses.*

A DP Area addresses special development circumstances, and if a property is within a DP Area, certain types of development activity cannot proceed without a DP being issued. The DP Guidelines include:

- General Guidelines: Basic development standards applicable across the City;
- Specific Guidelines: Development standards applicable to specific land uses.

In certain cases, these DP Guidelines are surpassed by more detailed DP Guidelines outlined in Area Plans or Sub-Area Plans adopted by the City of Richmond. In the event of a conflict between the DP Areas and Guidelines contained in the OCP (Schedule 1) and those contained in the Area Plans or Sub-Area Plans (Schedule 2), the latter shall apply. The only exceptions to this rule, in which case the OCP DP Areas and Guidelines apply, are:

- Environmentally Sensitive Areas (ESAs);
- marinas;
- sites abutting the edge of the Agricultural Land Reserve (ALR).

In the event of a conflict between the DP Guidelines and regulations outlined in the City of Richmond's Zoning Bylaw, the latter shall take precedent.



The DP Guidelines do not require literal interpretation, in whole or in part. They will, however, be taken into account in the consideration of DP applications. The DP Panel may, at its discretion, recommend denial of, or require modifications to a DP application for failure to meet the standards contained within these Guidelines, in whole or in part. Developers and architects are encouraged to read the reasoning behind the criteria and meet the spirit of the criteria as well as the letter of the law.

### 14.1.5 Development Permit Area Designations

Pursuant to the Local Government Act, the City of Richmond designates the following as DP Areas:

Bylaw 9603  
2016/12/19

- intensive residential areas where granny flats and coach houses are permitted (e.g., Edgemere);
- intensive residential areas where duplexes and triplexes are permitted along arterial roads within the Arterial Road Land Use Policy Area;
- all multiple family sites throughout the City;
- all commercial sites throughout the City;
- all mixed-use developments (where residential and non-residential uses are combined on a site) throughout the City;
- all industrial sites in the City Centre Area Plan (CCAP);
- those industrial sites adjoining or within 30 m (98.4 ft.) to another site which is zoned or designated for residential, community institutional, park, school, conservation area, or mixed use;
- Environmentally Sensitive Areas (ESAs) shown in Attachment 2 to this OCP;
- all marinas;
- all sites abutting to the edge of the Agricultural Land Reserve (ALR);
- all industrial sites with two or more storeys that have exterior vehicular access to upper storeys.

Bylaw 10180  
2021/02/16

### 14.1.6 Development Permit Area Exemptions

#### 14.1.6.1 All Areas Except Environmentally Sensitive Areas (ESAs)

Exemptions to the DP process are as follows:

- renovations to interiors of all buildings except neighbourhood public houses;
- renovations to interiors of neighbourhood public houses where the interior renovations cost less than \$5,000;
- exterior renovations of all buildings, except neighbourhoods public houses, which cost less than \$75,000;
- exterior renovations of neighbourhood public houses where the exterior renovations cost less than \$5,000;
- new buildings or building additions of 100 m<sup>2</sup> (1,076.4 ft<sup>2</sup>) or less;
- new ancillary buildings or building additions in rear or interior side yards that conform to the respective minimum setback requirements and do not exceed a height of 12 m (39.4 ft.) nor contain more than three storeys;
- exterior renovations of all buildings, exterior changes to all buildings or land, new buildings or building additions, new ancillary buildings on protected heritage property subject to a Heritage Alteration Permit or subject to a Heritage Revitalization Agreement. Heritage Alteration Permits issued for protected heritage properties that are to be conserved and maintained will be consistent with the "Standards and Guidelines for the Conservation of Historic Places in Canada", prepared by Parks Canada, and any Heritage Alteration Permits for new buildings or additions to protected heritage properties will be consistent with the applicable Development Permit guidelines in addition to the "Standards and Guidelines for the Conservation of Historic Places in Canada", prepared by Parks Canada.

Bylaw 10039  
2023/05/15





#### 14.1.6.2 Environmentally Sensitive Areas (ESAs) Only

Exemptions to the DP process are as follows:

- renovations to interiors;
- exterior renovations and construction activities which do not impact upon, or extend into, the designated ESA (e.g., within the existing footprint of buildings or paved areas);
- maintenance activities on existing structures which can be reasonably shown to not result in damage to trees, shrubs or fish habitat. (Note: the City may require that a qualified professional review such proposed works);
- regular and emergency City maintenance activities for drainage control and diking (environmental best management practises will be followed);
- construction and maintenance activities carried out by, or on behalf of the City, and designed to enhance and protect natural habitat and public trails;
- where an ESA covenant satisfactory to and in favour of the City of Richmond has already been registered for the protection of an ESA;
- streamside enhancement and fish and wildlife habitat restoration works (e.g., planting riparian species, removing invasive species) that have obtained the required senior government approvals;
- the removal of trees deemed hazardous by a qualified arborist that threaten the immediate safety of life and buildings;
- subdivision and development operations (which include but are not limited to demolition/clearing, fill placement, crossing replacement upgrade and building) on City owned lands which are within 30 m (98.4 ft.) landward of the high water mark and within 5 m (16.4 ft.) and 15 m (49.2 ft.) of the Riparian Management Area (e.g., West Dike). Such operations will be subject to the Riparian Management Area (RMA) protection requirements (see Bulletin Info-23);
- activities (e.g., construction of fences) on privately owned lands along the West Dike which are within 30 m (98.4 ft.) landward of the high water mark and within 5 m (16.4 ft.) and 15 m (49.2 ft.) of the Riparian Management Area. Such operations will be subject to the Riparian Management Area (RMA) protection requirements (see Bulletin Info-23);
- City parks which are below the high water mark and extend seaward 30 m (98.4 ft.);  
Note: There is a continuous 30 m (98.4 ft.) ESA buffer below the highwater mark. This exemption is intended to exclude those areas of park that fall into this buffer (e.g., Garry Point Park).
- First Nation owned lands (e.g., currently on Sea Island) near the Metro Vancouver Iona Sewage Treatment Plant and if more occur, they too are to be exempt;
- agricultural activities.

To take advantage of an ESA DP exemption for the agricultural activities identified below, property owners must provide, to the satisfaction of Council or its designated staff, information to demonstrate that they are legitimately farming:

- for existing farmers: For example, that they have generated on the affected site, legitimate agricultural income (e.g., from government tax records), and this information is to be supplemented by other sources (e.g., a government Farm Number, BC Assessment information, City tax or assessment information);
- for new farmers: a farm plan produced by a professional Agrologist to the satisfaction of the City (including information on unimproved/improved agricultural capability/suitability, soils, drainage, irrigation, proposed farm product and operator, and agricultural improvement cost estimate). Where legitimate farming activities are not demonstrated in accordance with the farm plan, or where this permission has not been granted but environmental assets and services have been modified, the City may require the owner to restore and rehabilitate the modified environmental asset and services;

Bylaw 10232  
2021/04/19



Bylaw 10232  
2021/04/19

- exempt agricultural activities:

Where the above criteria are met, the following agricultural activities are exempt from obtaining an ESA DP:

- accessory farm buildings (e.g., agricultural barns, sheds, accessory accommodation for seasonal farm workers, greenhouses), excluding the principal accessory farm residence;
- agricultural farm cultivation including land clearing, field drainage, irrigation, Agricultural Land Commission (ALC) and City approved farm soil filling, growing crops, fencing, raising animals and bee keeping;

- non-exempt agricultural activities:

For clarity, all owners of proposed residences in the ALR and City designated and zoned agricultural areas are to apply for and receive an ESA DP. Accessory residential buildings and structures (e.g., detached garages; swimming pools; tennis courts) and subdivisions will also require an ESA DP;

- other Federal and Provincial Agriculturally Related Policies:

- agricultural activities in Riparian Management Areas are subject to the Fisheries Act;
- non-agricultural buildings and infrastructure on ALR lands are subject to the conditions of the Provincial Riparian Area Regulations.



## 14.2 General Guidelines

*These Guidelines are intended to provide general conditions that would apply to applicable developments that require a Development Permit. The General Guidelines are supplemented, and may be superseded, by the additional Guidelines for specific land uses outlined in subsequent sections.*

### 14.2.1 Public and Private Views

*The intent is to maintain views wherever possible; public off-site views as well as private on-site views should be carefully considered in the site design of every development.*

- a) Taller buildings should be located to both protect existing views and provide new views, minimize shadow impacts on open space, create a sense of place and identify and provide landmarks in the cityscape.
- b) Design building massing to minimize the disruption of significant views from existing developments and public places while supporting opportunities for the creation of new views.
- c) The form and placement of buildings should consider the following aspects of public views from the site:
  - preservation to a reasonable extent, of views to the Fraser River, North Shore Mountains and south to Mount Baker;
  - views to “near” views of parks, natural and landscaped areas both on and off site, as well as special views, such as of the mountains or waterfront.
- d) Design building massing to minimize shadow impacts on open space, sun-shadow between new developments, and to create a sense of place and identity and to provide landmarks in the Cityscape.



- e) Views shall be preserved and enhanced through view corridors, the terracing of buildings and creation of public open spaces.
- f) Provide opportunities for near views of parks, gardens, green roofs, and landscaped areas for residents.
- g) Views should be shared between developments. Buildings should be massed to preserve views through and past the site. The design of the development itself should also create a good view for other developments.
- h) Situate open space furnishings to take advantage of views and sun.
- i) The form and placement of buildings should respect existing views and consider existing policy regarding heights and built form for redevelopment as the baseline for assessing private view impacts.
- j) Ensure that new development allow for views that retain a substantial amount of view to the sky or retain some views through a site or near the ground.

## 14.2.2 Public Realm and Pedestrian Amenity

*The intent is to create a high-quality, vibrant, and pedestrian friendly public realm.*

### 14.2.2.A Sunlight Penetration

- a) The height, massing, and siting of new development should not detract from and should allow for adequate sunlight penetration to the public realm (e.g., parks, streets) and private open space.
- b) On semi-private open spaces, both at-grade and above, maximize sunlight penetration/exposure during high-use periods of the day between March 21 and September 21 as follows:
  - between 10:00 a.m. to 2:00 p.m., for non-residential uses;
  - all day, but especially from 10:00 a.m. to 2:00 p.m. and 4:00 p.m. to early evening, for residential use.

### 14.2.2.B Weather Protection

#### Rain and Sun Protection

- a) Weather protection is strongly promoted where:
  - retail uses are encouraged at grade;
  - common entries to multiple family residential building front a public sidewalk or open space.
- b) Types of weather protection encouraged are awnings, canopies, and, under special circumstances, arcades.
- c) The design should also ensure good daylighting to protected areas through their proportion of height to depth, and special measures, such as glass roof panels.
- d) Weather protection considered to be permanent structures may not extend into public street right-of-ways.
- e) Typically canopies should be a minimum of 1.8 m (5.9 ft.) clear deep and 2.7 m (9 ft.) clear high.



### Wind Protection

- a) New development should seek to protect pedestrians in general and high activity pedestrian areas in particular, from the negative effects of the prevailing easterly wind, local wind conditions, and site-generated wind conditions:
  - design sites, buildings, and associated landscaped areas to minimize wind induced by buildings, and its impact on both the public and private realms;
  - provide areas of calm and wind mitigating measures to enhance enjoyment of the outdoors, and to extend the seasonal duration of outdoor activities, including socializing, shopping, and dining.

### 14.2.3 Public Art

*The intent is to promote and facilitate the integration of public art throughout Richmond that expresses the ideas of artists and the community and create opportunities to participate in the design, look and feel of Richmond.*

- a) Development should support the public art program by either:
  - contributing to Richmond's Public Art Reserve and Public Art Provision and/or;
  - providing public artwork which meets the terms of the "Richmond Public Art Program Policy, Administrative Procedures Manual and Plans" either on site or at a location acceptable to the City.
- b) Regardless of whether a development provides public art on-site, public art locations should be secured which benefit from:
  - visibility for pedestrians and/or motorists;
  - proximity to high pedestrian activity areas, (e.g., active retail areas, transit stops (especially those serving high ridership routes), places of public gathering, public open spaces, and recognized pedestrian routes;
  - opportunities to expand on existing or future public art works as part of an existing or proposed multiartwork concept;
  - places of special heritage or community significance.
- c) The "Richmond Public Art Program Policy, Administrative Procedures Manual and Plans" should be referred to for guidance on public art budget calculations and criteria.

### 14.2.4 Heritage Preservation

*The intent is to ensure that the character of development, including landscaping, and the siting, form, exterior design, and finish of buildings and structures respects, preserves, and enhances the historic nature of the heritage area.*

- a) New buildings and structures should be compatible in form, character, exterior design, and finish with existing historic structures.
- b) Retain and re-use historic and/or culturally-significant structures in ways which respect their unique value and heritage potential.
- c) Encourage the protection and enhancement of significant landscape features, including trees and water courses, through the sensitive design and infill of new development.
- d) Enhance public enjoyment and awareness of local natural and man-made features (e.g., the riverfront, and provide complementary amenities such as trails and signage).
- e) Encourage a variety of opportunities to respect, honour, and celebrate the heritage of the City of Richmond and its people.





- f) The exterior design and finish of buildings and structures should be compatible with existing heritage buildings on the same site or neighbouring sites, where appropriate.
- g) Retain and re-use historic and/or culturally significant structures in ways which respect their unique value and heritage potential.

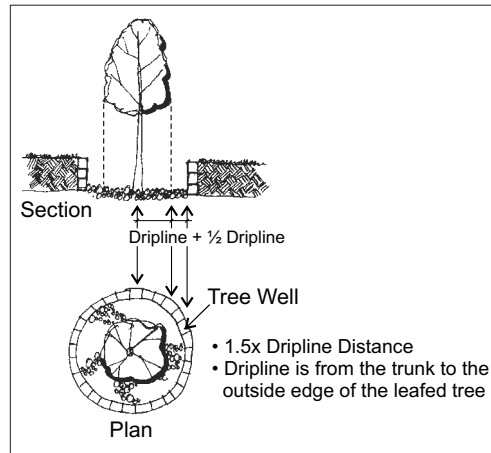
### 14.2.5 Site Landscaping

*The intent is to reinforce and enhance the image of the City of Richmond as the Garden City through preservation of mature vegetation and through inclusion of abundant landscaping in all developments.*

#### 14.2.5.A Tree Preservation

- a) Take special efforts to preserve trees and mature vegetation.
- b) Prior to the design of the project, a detailed survey indicating the location and condition of existing trees and vegetation on a site should be conducted and provided to the City as part of the development process.
- c) A Landscape Architect and Arborist should be retained to determine which trees are suitable for retention. For survey requirements refer to the City of Richmond Bulletins, *Tree Survey Guidelines for Rezoning, Subdivision and Non-ESA Related Development Permit Applications and Protection of Existing Trees During Construction*.
- d) Plan open spaces and walkways with landscaping first, then group buildings around the spaces. Special efforts should be made to retain trees identified on the Significant Tree Inventory.
- e) To reinforce a well-established landscape, developers are encouraged to retain and incorporate mature trees and landscaping into the development area. Where this is not possible, trees should be relocated. Where one or more existing trees are being removed, the City's tree replacement policy requirements as specified in Tree Protection Bylaw 8057 must be met.
- f) Landscape drawings shall include the following information:
  - the location of all protective tree fencing;
  - a grading plan or cross section showing finished grade;
  - a drainage plan for the site.
- g) Prior to the issuance of any permits (demolition, development, building), a tree protection fence shall be placed outside the drip-line of retained trees. The fence shall be constructed of 2 x 4 wood frame with cross-brace construction and snow fencing around or equivalent solid fence material (refer to information Bulletin "Protection of Existing Trees During Demolition and Construction" Tree-03). The tree protection fence shall be clearly signed "Tree Protection Zone – Do Not Enter" as per Information Bulletin Tree-03.

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- h) Provide tree wells and/or creative grading of the ground away from vegetation to facilitate retention of existing trees and woodlot/hedgerow vegetation. Where tree wells are to be constructed the wells should be a minimum distance of 1.5 times the distance from the trunk of the tree to the drip line.
- i) Pruning, root pruning, and all work within 1.5 times the existing trees' drip-line shall be supervised by an Arborist.
- j) No excavation, storage of materials, parking, preloading, or filling shall occur within the drip-line of the trees being preserved.

#### 14.2.5.B City Boulevards

- a) Trees shall be protected on city property, boulevards and adjacent sites during development and are not to be removed or damaged under any circumstances unless authorized by the City.
- b) Ditches adjacent to a property may not be covered, altered, or filled-in other than as authorized by an approved Ditch Crossing Application from the City of Richmond Public Works Division.
- c) After completion of construction, City boulevards should be graded to suit existing drainage and landscaped with topsoil and grass or other materials to suit site-specific City objectives.

#### 14.2.5.C Open Space (Landscaping)

- a) Provide new plantings and trees to define public spaces and provide shade as needed.
- b) Maximize the amount of landscaped areas on a site and minimize the amount of impervious surfaces to increase the natural absorption of storm water. Development should strive to achieve a minimum of 25% of the site as soft landscaping, including plant materials.
- c) Where possible, the landscape should provide for or enhance wildlife habitat. Include species that will attract birds (which in turn enhance both biodiversity and create a pleasant soundscapes).
- d) A diversity of tree species is encouraged to increase the survival ratio of new landscaping. Indigenous or native species should be chosen whenever possible. Avoid tree species which would have difficulty surviving or be difficult to maintain in urban areas.
- e) Cluster trees to create "outdoor rooms" or to divide yards into smaller, more intimate areas for people to gather in while typically avoiding a heavily partitioned character.



- f) Public seating should be provided where walkways intersect public streets and areas of high activity; (see 14.2.12 Accessibility/Universal Design Principles).
- g) In general, plazas and forecourts should consist of these elements:
  - a widened hard surface;
  - decorative light standards;
  - fixed benches and/or other seating;
  - a distinct pattern, form or changes in colour of paving;
  - bollards preventing non-essential vehicular access;
  - accent planting;
  - bicycle racks in close proximity;
  - garbage and recycling receptacles;
  - areas for public art.
- h) Group trees and shrubs to frame building elevations and to add visual interest to blank facades and open spaces.
- i) Install plant material to soften building elevations, maintain a pedestrian scale and provide definition to public walkways and open spaces.
- j) Provide protection from excessive summer sun and cold winter winds, especially adjacent to outdoor areas where people congregate.
- k) Consider deciduous shade trees on the south side of buildings to reduce summer building heat loads and maximize winter building heat gain.
- l) Stabilize slopes through the use of soft and hard landscape material, such as retaining walls, ground cover and trees.
- m) Select plant materials which are ecologically sound, appropriate for the existing and future site conditions, and suitable for all seasons.
- n) Incorporate drought resistant plant material in order to reduce long-term maintenance requirements and conserve water (xeriscaping).
- o) Select native plant materials where appropriate and avoid the use of invasive plant species.
- p) Provide seasonal colour, texture and variety.
- q) Implement design practices, which contribute to successful long-term maintenance.
- r) Protect natural features and promote tree conservation.
- s) Landscape Planting Plans should include a detailed plant schedule providing the following information: botanical name, common name, quantities, proposed planting size and condition, mature size, volume of topsoil available per tree and any other appropriate remarks.
- t) The spacing of plant material should account for the ultimate size and form of the selected species as well as intention (e.g., screening, shade, aesthetics, naturalizing, rehabilitation, etc.).

## 14.2.6 Vehicle Access and Circulation

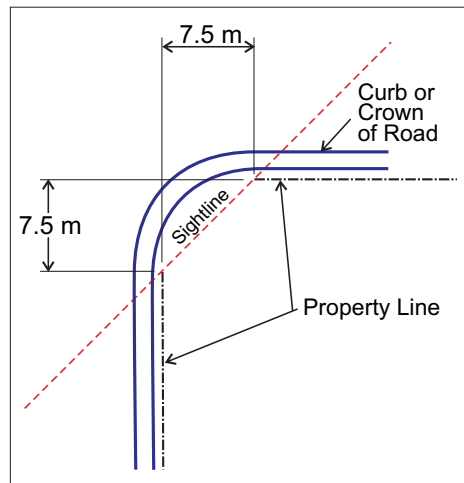
*The intent is to provide safe and efficient circulation for vehicles without compromising the pedestrian environment or the livability of developments.*

### 14.2.6.A Access Driveways

- a) Maximize the distance between access driveways and the distance between access driveways and intersections.



- b) Driveway access should be avoided along major collector and arterial roads. If driveways are required, the number of access points should be minimized and sharing of driveways with adjacent properties should be considered. Left turn movements at any driveway along arterials and collectors should be discouraged.
- c) Ensure pedestrian and cyclist safety and maximize visibility at driveways.
- d) Where the internal pedestrian walkways is adjacent to the drive aisle, an attractive, physical treatment should be incorporated into the design to define and delineate the pedestrian space.



- e) Sight Lines: Corner visibility for drivers shall be maintained by providing a Sight Triangle (ST) of 7.5 m x 7.5 m (24.6 ft. X 24.6 ft.) with no obstructions to the line of vision above 0.9.m (2.95 ft.) as per the Richmond Engineering Design Specifications. The ST should be measured from the intersection of the property lines adjoining the streets and bounded by the property lines and a line connecting the 7.5 m by 7.5 m (24.6 ft. X 24.6 ft.) distance.
- f) For driveways with security gates, the gate is to be setback at least 6 m (19.6 ft.) from the property line.
- g) Where gates require card activation by drivers the sensor device is to be centred on a pedestal in the centre of the driveway on the driver side. The driveway should be widened to accommodate the width of the pedestal.

#### 14.2.6.B Large Vehicle Access

- a) Access provision should be made for emergency vehicles, moving vans and service vehicles. Wherever possible, combine and share emergency vehicle access roads between developments. Until such time that the shared access is functional, all manoeuvring for trucks required on-site as outlined in the Richmond Zoning Bylaw shall be provided internally, with no more than one back-up movement required for turnaround.

#### 14.2.6.C Garbage/Recycling Collection Vehicle Access

- a) Vehicle access route requirements are intended to minimize traffic disruptions and avoid unnecessary manoeuvring by collection vehicles. Whether provided indoors or outdoors, the vehicle access route shall:
  - be designed in such a way as to allow a collection vehicle to enter the site, collect the garbage/recycling and exit the site in a forward motion, or via the use of a turnaround area allowing for a three-point turn of not less than one truck length—trucks will not be allowed to reverse onto a public road;



- be situated in a location that will minimize interface with pedestrian traffic and public vehicular access to the building's main parking area, including underground garage and visitor parking areas;
  - maintain a vertical clearance of 4.4 m (14.4 ft.) throughout the entire access route;
  - provide the collection vehicle a minimum turning radius of 12.5 m (41 ft.) throughout the entire access route.
- b) The site plan should include a diagram illustrating the anticipated movement of the collection vehicle through the building site. This diagram should indicate turning radii, and show how the layout of the loading area meets the necessary turning radius requirement for an appropriately sized collection vehicle.

#### 14.2.6.D Lanes

- a) New development should retain or expand existing lanes and, where appropriate, create new lanes to facilitate service functions.
- b) Where service lanes cannot be introduced, service functions should be internalized within the site in off-street locations.

#### 14.2.6.E Access

- a) Vehicle access to sites and their off-street parking area should be provided from a lane or a local street at the rear of a site to allow the fronting street to be developed for pedestrians activities, cycling routes and/or an expanded public realm.
- b) Minimize the typical width and frequency of driveways crossings of sidewalks. Where crossings are needed, use measures to ensure that such crossings do not inconvenience or endanger pedestrians or the mobility impaired and do not limit the provision of street trees, landscaping, or furnishings in appropriate locations.
- c) Driveways that cross pedestrian routes should be consolidated to reduce disruption to pedestrian movement, to maintain pedestrian safety on sidewalks, to reduce duplication of vehicular routes, and to provide for more coherent vehicular circulation.
- d) Adjacent developments are strongly encouraged to combine and share access driveways to minimize vehicular crossings to sidewalks and integrate driving aisles, pedestrian sidewalks, or walkways between adjacent sites.
- e) Vehicle (and parking ramps) and service entrances should be consolidated and integrated into the facade design to reduce vehicular crossings of pedestrian routes and limit the impact of these elements on buildings appearance.
- f) All site vehicular circulation is to be confined on-site without use of the adjacent public roadways or lanes.

### 14.2.7 Site Vehicle Parking

*The intent is to ensure that vehicle parking is appropriately located and designed taking into account pedestrians, crime prevention and parking reduction opportunities.*

#### 14.2.7.A Surface Parking

- a) Surface parking should be located to the rear of buildings and screened from public streets.
- b) Where provided to the rear of buildings, it should be screened from adjacent properties with a minimum of 2 m (6.56 ft.) wide x 1.5 m (4.92 ft.) high landscape planting or trellis strips.





- c) Trees should also be planted at a minimum ratio of one tree for every six parking stalls.
- d) In cases where surface parking is situated between a building and the adjacent public street, provide:
  - a covered walkway between the building and the adjacent public street;
  - a minimum of one tree for every two parking spaces situated on-site between the building setback line and the adjacent public street;
  - special paving and landscape measures to further enhance the pedestrian movement.
- e) Provide landscape, fencing, and other appropriate treatments for surface parking lots in order to improve the appearance of lots along public streets and contribute to the continuity of the street edge without compromising the safety and security of the public inside the lot and on public street.
- f) Parking lots should be partitioned into areas no larger than 0.25 ha (0.6 ac.). Areas should be defined at the boundaries by drive aisles, sidewalks, trees, and landscape.
- g) Non-residential developments with large or multiple-surface parking areas should provide a direct pedestrian pathway system through the parking area to provide convenient and safe pedestrian access between building entrances, parked cars, and sidewalks of adjoining streets; The pathway system should incorporate landscape with trees and benches, overhead weather protection, and distinct paving where appropriate. It should also be wide enough for wheelchairs/scooters and should include a tactile strip for the visually impaired.
- h) Internal vehicular ramps should not be used for pedestrian circulation.
- i) Where pedestrians must cross service roads or access roads to reach parking areas, crosswalks should be clearly designated by means of pavement markings, signs, flashing lights, or even traffic signals, if warranted.
- j) Provide curb cuts or curb letdowns in appropriate locations to facilitate convenient and direct access from the parking space(s) to the building(s) for people with disabilities. Pedestrian movement should be designed to avoid any obstruction by parked or manoeuvring vehicles.
- k) Minimize the surface area of blacktop asphalt parking by using alternate treatments and by complementing the asphalt with a variety of decorative paving materials.
- l) Consider the use of shallow concrete gutters or swales with rolled edges between driving aisles as an alternative treatment for surface drainage.

#### 14.2.7.B Parking Structures

- a) Multi-level parking structures should not front public streets at grade.
- b) Where possible, all garage structures and parking should be located to the rear or beneath buildings, with vehicular access from lanes. Where lane access is not possible, access should be from streets via narrow driveways.
- c) Parking control equipment, e.g., ticket dispensers and card readers, should be located a sufficient distance from the public street (minimum 6 m or 19.69 ft.) to prevent parking queues extending onto the street. Similarly, a minimum distance of one car length, and preferably two car lengths, should be provided between an exit gate and the street edge to accommodate cars waiting to enter the traffic stream;
- d) In the case of above-grade parking, provide non-parking uses or special facade treatments along street frontages to enhance the building's appearance, animation, and character. On non-street-fronting facades, walls of parking structures should be concealed with sloped, landscaped berms and massed landscape.



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2017/12/18

- e) Rooftop parking structures should be treated to reduce the visual impact as seen from above. For example, they may be landscaped with trees and overhead planting.
- f) Unfinished ceilings, lights, pipes, etc. should not be visible from a public street or sidewalk.
- g) Interior lighting levels (natural or artificial) should be inviting and not radiate a glare or unduly distort the colour of people, cars, signs, and other graphics.
- h) For sites with little or no surface parking, the ground-level parking areas in a parking structure should have sufficient height clearance to accommodate most light trucks and passenger vans.
- i) Refer also to Richmond Zoning Bylaw 8500, Section 7—Parking & Loading.

#### **14.2.7.C Crime Prevention Through Environmental Design (CPTED) Considerations for Parking Facilities**

- a) Pedestrian routes within and to/from parking facilities must be clearly delineated, logical in terms of directness, and easy to remember.
- b) Pay particular attention to the design and operation of parking facilities, both surface and multi-level, to ensure their convenient and safe use. For example, locate parking control personnel within visual range of the entire parking areas, wherever possible.
- c) Design exits and interior spaces within parking structures to ensure maximum visibility within the parking areas. Avoid hidden spaces or alcoves.
- d) Use glassed stairwells, elevators, and “open” ramping systems to enhance visibility and aesthetics.
- e) Provide adequate lighting to enhance security. Avoid “dark distant corners” in parking areas. Pedestrian entrances to buildings and designated pedestrian routes should be highlighted with additional secondary lighting fixtures.
- f) Consider using electronic security devices and monitoring systems as a supplement to natural surveillance opportunities to increase safety in parking structures and parking areas.
- g) Walls and ceilings of parking structures should be painted white to enhance or reflect light.
- h) Secure residential parking separate from public parking.
- i) Do not locate employee parking in remote areas of parking lots, behind blank walls, or within service or loading areas.
- j) Gate tenant parking apart from that for visitors and consider incorporating gates on visitor parking areas.
- k) Do not allow free access to adjacent buildings without direct monitoring.
- l) Public and private parking spaces should be designated.
- m) Pedestrian and vehicular access gates should be mechanically or manually controlled, or be within effective visual range of security/parking personnel.
- n) Elevators should be close to the main entrance with the entire interior of the elevator in view when the doors are open. Glass doors for elevators are preferable.
- o) Ground floors should be designed to be open for visibility, but secured to prohibit access by wire mesh or stretch cable.
- p) Access should be limited to no more than two designated, monitored entrances.



#### 14.2.7.D Parking Reduction Opportunities

- a) Projects with a mix of uses should seek to reduce parking needs where the varied parking demand for proximate uses allows joint use of a single parking facility. Shared-use opportunities may be possible between non-residential uses and residential visitor demand, or between mixes of non-residential uses. Where parking is to be shared, measures must be in place to ensure non-exclusive use.
- b) Residential projects with a high percentage of small units and good access to transit and public services should seek to limit the number of parking spaces provided to reflect the more limited parking demand of such development.
- c) Where a development proposal features reduced parking standards, the proponents shall identify potential “spill-over” impacts on the neighbouring area and possible mitigation measures.
- d) Refer also to Richmond Zoning Bylaw 8500, Section 7—Parking & Loading and Parking (Off-street) Regulation Bylaw 7403.

#### 14.2.8 Garbage, Recycling, Organics and Other Service Areas

*The intent is to organize site plans for efficient use of service areas and so that the impact of servicing functions on streets, developments, and open space is minimal.*

- a) Garbage, recycling, organics storage and disposal, loading docks, ramps to underground parking, vents, air conditioner compressors, meters and transformers should be incorporated into the design of the building and/or integrated into landscaped areas, and out of view from streets to minimize their noise and unsightly visual impact on pedestrian areas, streets and adjacent homes.
- b) Garbage, recycling and organics bins must be easily accessible, contained in a room within the development or an outdoor walled enclosure and screened from public view.
- c) The design of the enclosure of outdoor garbage, recycling and organics areas and the screening of other areas should be co-ordinated with the overall design of the development.
- d) Ensure shipping, loading bays, utility and garbage/recycling areas, satellite dishes, and other similar structures, (e.g., outdoor vents, mechanical equipment, satellite dishes) are located out of view from public streets or screened with landscaping, walls and buildings.
- e) Underground utility wires wherever possible and conceal related equipment so as not to impact the appearance or use of municipal boulevards, rights-of-way, pedestrian areas or public open spaces.

#### 14.2.9 Floodproofing and Dike Setbacks

*The intent is to ensure that floodproofing of buildings is carried out to protect public safety and private property from flood hazards in a manner which is consistent with the form and character of the community, and that sufficient space is reserved for future dike raising needs.*

##### 14.2.9.A Floodproofing

- a) All buildings must meet a minimum habitable floor elevation as identified in Richmond’s 2008–2031 Flood Protection Strategy defined in Bylaw 8204.
- b) Floor and pad elevations vary across the City based on location specific factors including whether or not a building is inside or outside of the dike.



- c) Buildings may be partially or fully exempt from meeting minimum floor elevations for a number of reasons specified in the bylaw, for example:
  - a permit is issued solely for building renovation;
  - a building's additions are relatively small;
  - the building's area is to be used for a carport or garage with unobstructed pedestrian access;
  - the building relates to farming (non-dwelling use);
  - a building has specific public access requirements;
  - the form and character of its neighbourhood is unacceptably compromised.
- d) Building floor and pad elevations may be achieved by:
  - structural elevation;
  - compacted fill;
  - a combination of the above.
- e) The method chosen to elevate a floor or pad should be the one that optimizes the relationship between the new construction and the surrounding existing development and land grading.
- f) Natural grade should be maintained wherever practicable. In some cases, where filling is necessary, it shall be accomplished by matching the grade on adjacent properties, or by changing grade at a slope not to exceed 6:1. Tall retaining walls or steep terraces are to be avoided.
- g) Construction or landfill should be carried out in a manner that is sympathetic to the character of an area. Precautions should be taken to avoid drainage problems, differential settlement, unsafe slopes, or unsightly edges to adjacent properties.

#### 14.2.9.B Dike Setbacks

- a) No landfill or structural support required to support a floor system or pad shall be constructed, reconstructed, moved, extended or located:
  - where a standard dike exists, within 7.5 m (24.6 ft.) of a dike right-of-way;
  - where a standard dike does not exist and land is situated within the dike alignment, within 30 m (98.4 ft.) of the natural boundary.

### 14.2.10 Green Buildings and Sustainable Infrastructure

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2022/07/18

*The intent is to provide general direction in regards to the undertaking of green building and sustainable infrastructure to support City of Richmond greenhouse gas (GHG) emission reduction and sustainability objectives and help reduce the demand for energy and resources.*

#### 14.2.10.A Low Carbon, Energy Efficient Buildings

- a) New buildings are encouraged to be designed to achieve low or zero GHG emissions in their operations.
- b) As required in the Building Regulation Bylaw, applicable new buildings will be designed and constructed to meet the BC Energy Step Code to support more energy efficient development, which may include, but may not be limited to, the high-performance building considerations set out in the table below.
  - Through rezoning, Development Permit and other permit approval processes, proposed buildings shall demonstrate compliance with the applicable requirements of the BC Energy Step Code to the satisfaction of the City (for example, by providing energy modelling outputs);



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- Compliance with a given Step of the BC Energy Step Code shall not compromise the intent of any of the Development Permit Guidelines contained in Schedule 1 or Schedule 2 of the OCP;
- In the event that, during the Building Permit process, a new building subject to an approved Development Permit requires remedial actions to achieve compliance with the applicable step of the BC Energy Step Code, any such remedial actions shall not compromise the intent of the Development Permit Guidelines applicable to the building.

Features	High-Performance Building Considerations
Massing & Roofs	<ul style="list-style-type: none"> <li>• Consider compact massing to reduce the overall size of the building envelope<sup>1</sup>.</li> <li>• Consider simple building and roof forms to enhance thermal performance.</li> <li>• Use fewer architectural features with complex junctions that may contribute to heat loss due to thermal bridges<sup>2</sup> and/or increased building envelope area (e.g., bay windows, dormers, recesses, and stepping).</li> </ul>
Orientation & Shading	<ul style="list-style-type: none"> <li>• Consider strategic building and window orientations that enhance opportunities for winter solar heat gain and summer shading.</li> <li>• Provide external shading devices on key south and west facades (e.g., balconies, fins, blinds, shutters, and deciduous trees).</li> <li>• Include operable windows to enable natural ventilation.</li> </ul>
Windows & Daylighting	<ul style="list-style-type: none"> <li>• Limit the window-to-wall-ratio (WWR)<sup>3</sup> to reduce solar heat gain (i.e. typically 40% or less, as applicable).</li> <li>• Consider fewer, larger windows (rather than more smaller or multi-pane windows) to minimize thermal bridging through window frames, mullions, and muntins.</li> <li>• Raise window sills to reduce window size without compromising daylighting.</li> </ul>
Balconies & Roof Decks	<ul style="list-style-type: none"> <li>• Use thermally-broken<sup>4</sup> balcony designs (e.g., modified slab, pinned, hanging, and self-supported) to reduce thermal bridging at building connection points.</li> <li>• Avoid recessed balconies and/or consider stacking recessed balconies to reduce thermal bridging due to increased wall area, corners, and connection points.</li> <li>• Where appropriate, consider using roof decks in place of balconies.</li> </ul>
Envelope Materials & Design	<ul style="list-style-type: none"> <li>• Increase insulation (e.g., thicker exterior wall assemblies and triple glazing), especially where heat loss is unavoidable (e.g., due to a high WWR).</li> <li>• Reduce use of lower-performing window/wall systems (e.g., curtain wall).</li> <li>• Where appropriate, consider enhancing thermal performance of the building envelope by utilizing variation in colour, materials, and pattern as building articulation strategies in lieu of complex massing and architectural features.</li> </ul>

<sup>1</sup> “Building envelope” means the connected system of foundations, floors, windows, walls, ceilings and/or roofs, which provide an air, moisture and heat insulation barrier separating the conditioned interior spaces of a building from unconditioned interior spaces (for example, an unheated garage or attic) and/or the outdoors.

<sup>2</sup> “Thermal bridge” means a building component or system that permits a greater heat transfer through the building envelope than surrounding materials.

<sup>3</sup> “Window-to-wall ratio (WWR)” means, for a given building, the total surface area of windows, divided by the total wall area (including windows).

<sup>4</sup> “Thermally-broken” means use of a building component or system to minimize heat transfer through the building envelope by mitigating potential thermal bridges.



**14.2.10.B Water Conservation**

- a) Design buildings and site infrastructure to use less potable water by considering the following:
- install plumbing fixtures that conserve water;
  - utilize high efficiency irrigation and drought tolerant plants for landscape areas to minimize the need for watering and maintenance;
  - specify water efficient HVAC, chillers, and other equipment and appliances.

**14.2.10.C Building Materials**

- a) Design buildings that incorporate sustainable building materials by using:
- recycled and renewable building materials;
  - new materials that have low embodied energy rating to help conserve energy;
  - materials that have long-life, low maintenance properties to extend the lifespan of the building;

**14.2.10.D Rainwater Management**

- a) Manage as much rainwater on site as possible by:
- incorporating intensive and accessible extensive Green Roofs, bio-swales, infiltration and other best management practices throughout the site to store rainwater, mitigate urban heat island effect, reduce heating and cooling loads and reduce the impact on City drainage systems;
  - using pervious surfaces to promote rainwater infiltration;
  - using rainwater harvesting systems for irrigation and toilet flushing.
- b) Newly or re-developing areas should manage rainwater runoff by using boulevard swales, rainwater gardens and other best practice techniques that slow down water conveyance and reduce pollutant wash off into the City's drainage system.

**14.2.10.E Waste Reduction**

- a) Reduce the generation of waste through careful design and construction practices, by recycling construction materials, and provide recycling facilities, as feasible by:
- recycling demolition waste;
  - support educational recycling programs for construction workers and site occupants;
  - providing facilities to encourage three stream waste separation and recycling.

**14.2.10.F Health and Air Quality**

- a) Improve indoor air quality, and minimize noise, noxious emissions, and dust by:
- retaining and planting trees where possible to improve air quality and mitigate heat island effects;
  - selecting and encouraging green materials (e.g., paints, adhesives that minimize toxic chemicals and gases).

**14.2.10.G Urban Agriculture**

- a) For urban developments, promote urban agriculture by providing where feasible, garden plots and necessary facilities (i.e., tool sheds, composting).



## 14.2.11 Crime Prevention Through Environmental Design (CPTED)

*The intent is that through the use of CPTED principles (Crime Prevention Through Environmental Design), opportunities for crime are minimized and a sense of security is promoted.*

CEPTED involves the proper design, effective use, maintenance, and management of the built environment to minimize opportunities for crime, fear of crime, achieve a greater sense of security and an improvement in the quality of life. CPTED involves the inclusion of the following four principles best applied at the concept stage of design and site planning:

- Natural Access Control;
- Natural Surveillance;
- Territoriality (defensible space);
- Maintenance.

### 14.2.11.A Natural Access Control

- a) Design features that guide people to and from a space by creating real or perceived barriers (e.g., separate lobbies and circulation between residential and non-residential uses).
- b) Create safe routes for pedestrians and create clearly-defined pedestrian entries and separate vehicle access from pedestrian access.
- c) Minimize the number of formal access points where possible.
- d) Define edges and corners with low landscaping, low curbing, low permeable fencing, columns, paving stones or decorative paving treatment, and elevation changes.
- e) Place orientation and directional signage at public access points.
- f) Design portions of the building to act as a form of access control.
- g) Provide separate lobbies and circulation between residential and non-residential uses.
- h) Semi-private open spaces should be situated and designed to maximize resident access, surveillance and enjoyment.
- i) Walkways should be direct, follow natural pathways and avoid blind corners.
- j) Illuminate walkways and access points to open spaces.

### 14.2.11.B Natural Surveillance

- a) Provide “surveillance” opportunities that allow people to easily view what is happening around them during the course of everyday activities.
- b) Make all exterior public or semi-public spaces visible and defensible, so that residents can control their own surroundings.
- c) Cluster residential units, shared tenant facilities, and semi private areas to encourage neighbour-to-neighbour surveillance without impairing necessary privacy.
- d) Design landscapes and circulation routes to allow clear, unobstructed views of surrounding areas, (e.g., make elevator lobbies clearly visible and easily accessible from the public street).
- e) Eliminate entrapment spots, and incorporate barriers that permit visual access without loss of privacy, (e.g., glazing in lobby doors and stair-wells).
- f) Encourage “eyes on the street” with windows, front doors, and activity generators (e.g., playgrounds and seating).



- g) Group common facilities or areas so that each facility or area will be automatically monitored by the constant presence of users of other facilities or areas.
- h) Ensure that windows and doors remain visible from the street and are not hidden by vegetation.
- i) Design buildings to allow for passive observation of outdoor amenity areas, pedestrian or vehicle access points to provide “eyes on the street”.
- j) Ensure a strong orientation between buildings and the street (e.g., porches, bay windows, stoops).
- k) Ensure that windows and door remain visible from the street and are not hidden by vegetation.
- l) Utilize a variety of glazing to project a sense of surveillance.
- m) Consider pedestrian or bike friendly design to activate space and add to passive surveillance.
- n) Illuminate spaces with low-level lighting that provides light and security for semi-private space, but does not produce glare into the adjacent residential buildings.
- o) Provide opportunities for passive surveillance (seating, arrangement of windows and viewing decks) that permit observation of children at play.
- p) Carefully select the types and location of planting to maintain visibility and surveillance and minimize opportunities for intruders to hide.
- q) Use low ground covers and shrubs less than 0.9 m (3 ft.) in height and prune trees limbs to a height of 3 m (9.84 ft.).
- r) Allow user to view entrances, exits, pathways and the immediately surrounding areas.
- s) Ensure lighting does not produce shadows close to pathways and entries or exits.
- t) Ensure windows and doors remain visible from the street and are not hidden by vegetation.
- u) Ensure unimpeded sightlines, particularly along pedestrian pathways and at building entrances to prevent concealment; apply the 2-2-8 rule to ensure a clear line of sight (i.e., 0.61 m (2 ft.) or from any entry/window or pedestrian access point, 0.61 m (2 ft.) or maximum landscaping/fence/ screening height).

#### 14.2.11.C Territoriality (Defensible Space)

- a) Distinguish public and semi-public spaces from private spaces and design symbolic barriers through building siting, design and landscape such as changes in paving, vegetation, grade or through architectural features (e.g., low wall, bollards, raised planters, rather than continuous solid fences or walls).
- b) Personalize impersonal space such as streets, surface parking and open spaces through the use of place-making techniques through the use of signage, colour, hard and soft landscaping, grading, fencing, artwork, lighting, community boards and gardens, landmark, pedestrian and bike paths, fountains, seating, and playground that encourage people to congregate.
- c) Light open spaces, pedestrian and vehicular circulation routes, parking lots, and building entries to provide security, safety, and convenient access without producing glare into adjacent properties and sensitive uses:
  - lighting should be located and designed to ensure that all areas are well lit. Avoid glare and reduce shadows;
  - apply suitable lighting to project ownership and control;



- lighting along pedestrian pathways should be at a scale appropriate for pedestrians while providing optimum visibility;
  - illuminate entry points, and set light levels to provide for a comfortable transition between neighbouring locations;
  - provide vandal-resistant light fixtures that are easy to maintain and operate.
- d) Semi-private open spaces should be clearly defined from public spaces for the exclusive use of building/complex occupants through the use of changes in grade, low walls or fences, planting, or siting within the confines of the buildings.
- e) Provide landscaping, terracing, screening, low-level hedges, and/or garden walls between private ground-oriented outdoor spaces and the public realm.
- f) Where a residential front yard provides a unit's only private open space, ensure that this space is usable/practical while also enhancing the streetscape. Changes in grade/terracing should be used in combination with hedges, trees, shrubs, open lattice screens, and low fences to provide an area of privacy near the unit while still providing an open, inviting public edge.
- g) Provide signage that is clearly visible, easy to read and simple to understand.

#### 14.2.11.D Maintenance

- a) Ensure the continued use of space for its intended purpose and ensure landscaping is maintained (not overgrown) and lighting is operable.
- b) To ensure safety and security, provide sightlines through any cluster of tall growing vegetation by selective and judicious pruning of shrubs or multi-stemmed trees and by keeping all other understorey to a maximum of 1.2 m (3.9 ft.) in height.
- c) Ensure city bylaws regarding nuisance, graffiti removal or unsightly premises are adhered to.

### 14.2.12 Accessibility (Universal Design Principles)

*The intent is to ensure that the design of a development enables all people, including people with disabilities, to have full and unrestricted access to every part of a project.*

#### 14.2.12.A Site Accessibility/Circulation

- a) All parking spaces allocated for people with disabilities should be located as close as possible to the main entrance of the building.
- b) Ensure that access for the mobility impaired is provided via at least one path of travel with a minimum clear width of 1.5 m (4.92 ft.) to the major portion of any open space, any building lobby accessible to the open space and any use that may be present on or adjacent to, open space.
- c) All pedestrian pathways should be fully accessible to people with disabilities. Pedestrian pathways should also include, wherever possible, a linear textured band of roughened surface for the benefit of people with vision impairment. The band should be appropriately located towards the middle of a pathway and should be designed to avoid potential conflicts with seating areas or plant materials at edges of walkways.
- d) Pedestrian pathways should provide easily understood direct connections between desired destinations (e.g., transit stops, pedestrian crossings, public sidewalks, building entry, amenity areas, and parking and service areas).
- e) Pedestrian pathways should be wide enough for a comfortable experience and to accommodate passing wheelchairs, strollers and bicycles.



- f) Building and site design features which segregate circulation/ areas/ uses for people with disabilities from typical public usage are discouraged, except where required due to reasons of safety or significant space limitations. For example, ramps are discouraged in favour of more gentle grade changes and alternate design approaches.
- g) Ensure that access for the mobility impaired (including people with baby strollers) is provided via at least one path of travel, with a minimum clear width of 1.5 m (4.92 ft.) to the major portion of any open space, any building lobby accessible to the open space, and any use that may be present on, or adjacent to, open space.
- h) Site designs should seek to integrate features that accommodate persons of varying ability levels.
- i) The design and placement of site furniture should allow a person in a wheelchair to sit alongside fixed seating or, where tables are provided, to allow a person in a wheelchair to pull up to each table.
- j) Ramped portions of walkways should have a maximum slope of 1:20 and minimum width of 1.2 m (3.94 ft.).
- k) All parking spaces allocated for people with disabilities should be designed to achieve the following:
  - located as close as possible to the main entrance(s) of each building;
  - located away from designated fire routes, intersections or commercial loading zones;
  - located with connection to pedestrian pathways. Landscape and other design features should be used to prevent vehicles from protruding over pedestrian pathways of travel.
- l) For shopping malls, large complexes or where multiple buildings exist on a site, the required number of designated spaces should be evenly distributed at all public entrances.
- m) The entrance nearest the designated parking spaces should be equipped with a power door operator.
- n) Designated parking space(s) are required to be painted with the international symbol of accessibility. The symbol shall be painted with white solvent-based traffic paint on a minimum 1.5 m x 1.5 m (4.92 ft. x 4.92 ft.) blue solvent-based traffic paint background.
- o) Designated parking space(s) are required to be marked with clearly visible signage that conforms to the *Motor Vehicle Act Regulations*. Signs mounted on moveable bases are unacceptable.
- p) Designated parking spaces should be:
  - located as close as possible to a required passenger elevator;
  - provide a minimum vertical clearance of 2.75 m (9.02 ft.);
  - provide level, non-slip, non-glare, textured, hard surfaces.
- q) Provide directional signage in large parking areas or for hidden parking spaces.

#### 14.2.12.B Site Design

- a) Site designs should seek to integrate features that accommodate persons of varying ability levels.
- b) Drinking fountains should be a maximum of 0.76 m (2.5 ft.) high and allow for both hand and foot operation to accommodate wheelchair users and companion animals.
- c) Seating in public areas should provide for:
  - minimum seat depth of 40 cm (15.7 in.) without backrests, or minimum seat depth of 35 cm (13.8 in.) where backrests at least 30 cm (11.8 in.) high are provided;
  - features designed to allow a wheelchair to sit alongside fixed seating or, where tables are provided, to allow a wheelchair to pull up to each table;





- minimum of 5% of all seating in public areas to be provided with backrests.

#### 14.2.12.C Building Design

- a) Building designs shall incorporate features which address the functional needs of persons with disabilities, including those who are mobility, visually, and hearing impaired and have reduced manual dexterity or strength.
- b) Building entries should be:
  - clearly addressed with large numbers visible from the street;
  - directly accessed from the street without stairs;
  - provided with level areas measuring at least 1.5 m x 1.5 m (4.9 ft. x 4.9 ft.) both inside and outside the doorways;
  - provided with weather protection, exterior lighting, and power-assisted door openers.
- c) New development should accommodate the function needs of residents of all ages and abilities.
- d) All rooftop areas intended for use (i.e., recreational) by building occupants or others should be designed and landscaped to ensure universal accessibility.
- e) Building design should accommodate the functional needs of people of all ages and abilities:
- f) Main entrances to buildings and internal circulation routes should be designed to comfortably accommodate pedestrians, people in wheelchairs, and children in strollers.
- g) At least one elevator in each building should be able to accommodate a prone stretcher.
- h) All outdoor and indoor common areas should be wheelchair accessible and incorporate measures for people with vision impairment.
- i) All doorways, including those within units and those accessing private outdoor areas, should be wheelchair accessible.
- j) Floor surfaces should be slip-resistant and non-glare.
- k) All locks, latches, handles, closers, and controls should be easy to read, reach, grasp, and use.
- l) Manoeuvring spaces in kitchens, bathrooms, bedrooms, and hallways should accommodate wheelchair accessibility.
- m) Counters, cupboards, sinks, tubs, and showers should be well lit and easy to use.
- n) Additional electrical/electronic features, such as outlets and controls, should be provided to allow the use of remote controls, computers, and security devices.

#### 14.2.13 Non-Residential Noise Mitigation

*The intent is to ensure that non-residential buildings are built to ensure that indoor and outdoor uses are appropriately designed and located so as to mitigate potential noise.*

- a) New non-residential development should ensure that sensitive indoor and outdoor uses are buffered to reduce noise impacts on adjacent residential uses through design and construction measures.
- b) Development in noise sensitive areas (see Section 3.6.3 Noise Management) may require a report from an acoustical consultant and special noise mitigation measures to mitigate potential noise sources.
- c) Locate building ventilation systems to minimize noise and exhaust in pedestrian areas, residential units and outdoor spaces.



- d) Landscape buffers should be provided along common property lines for new commercial/ industrial developments adjacent to residential uses.
- e) External HVAC units must be visually screened and achieve compliance with the City's Noise Bylaw and any other Public Health Bylaw noise limits.

#### 14.2.14 Agricultural Land Reserve (ALR) Landscape Buffers

*The intent is to accommodate and encourage development while minimizing the impacts of new developments on agricultural land.*

- a) The purpose of the Agricultural Land Reserve (ALR) buffer is to achieve public safety, and to minimize agricultural-urban land use conflicts and complaints.
- b) For all significant development immediately adjacent to sites designated within the ALR (i.e., no intervening road), a landscaped buffer of approximately 15 m (49.2 ft.) wide, or an alternative width deemed appropriate and acceptable to the Director of Development, should be provided between the development and the agricultural land.
- c) Where there is an intervening road between the ALR and the non-ALR lands, provide an appropriate landscaped setback on the non-agricultural lands (e.g. 3 m (9.8 ft.) to parking and 4.5 m (14.8 ft.) to buildings).
- d) The landscaped buffer should be designed, established and maintained in accordance with the Ministry of Agriculture's Guide to Edge Planning.
- e) Where a landscaped buffer is provided on sites near agricultural lands, the design of the development should protect the landscaped buffer from potential impacts related to on-site activities (e.g., drainage).

Bylaw 10231  
2021/04/19



Bylaw 9603  
2016/12/19

## 14.3 Intensive Residential Guidelines

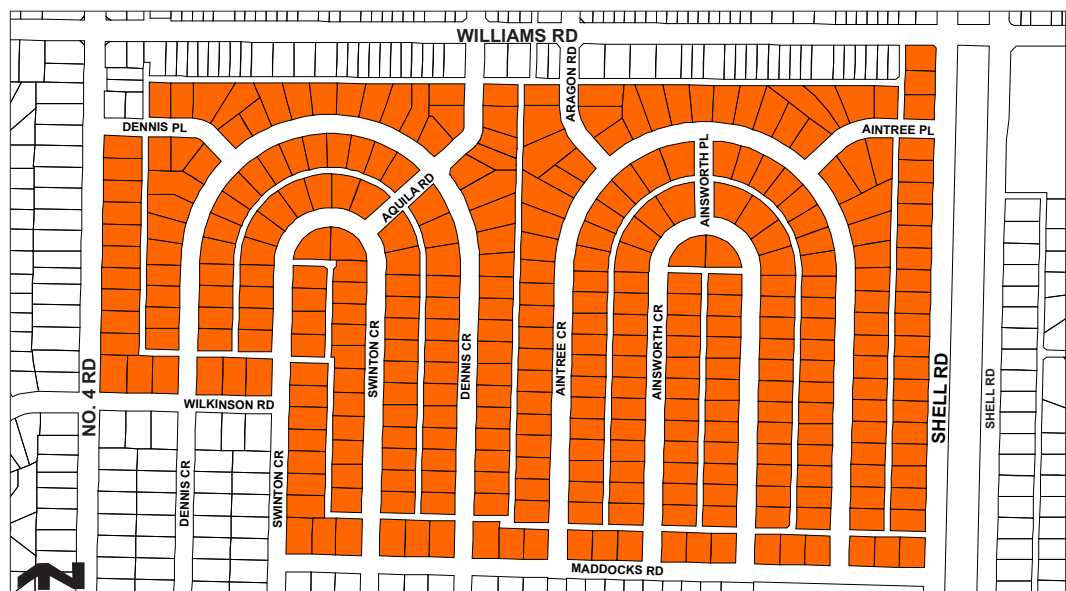
*These Guidelines are intended to provide direction on the general form and character of intensive residential developments.*

### A. GRANNY FLATS AND COACH HOUSES

*The intent is to ensure that granny flats and coach houses achieve high quality design, as well as integrate and blend into the form and character of existing neighbourhoods, in the following intensive residential areas:*

- Edgemere

#### Granny Flats and Coach Houses Map—Edgemere





### 14.3.1 Neighbourhood Character

*The intent is to achieve variety and have this new form of housing fit into the neighbourhood.*

- a) Granny flats and coach houses should demonstrate that they:
- respect the height and setback of neighbouring properties;
  - recognize the unique character of the neighbourhood.

#### 14.3.1.A Variety in Location

- a) No two similar granny flats and coach houses should be located in a row on neighbouring lots, and wherever possible the two granny flats and coach houses should be offset from each other so as not to be located side by side.

#### 14.3.1.B Variety in Design

- a) Variations in the design of granny flats and coach houses should be encouraged so as not to repeat the same architectural appearance, building form and elevations on the same lane in a City block (Modular construction is allowed).

### 14.3.2 Building Form

*The intent is to ensure that granny flats and coach houses are attractive and do not adversely impact adjacent homes.*

#### 14.3.2.A Scale and Massing

- a) The tallest element of granny flats and coach houses should be located adjacent to the lane.
- b) The upper level of coach houses should step back from the rear yard of the principal residence in order to enhance solar access to this yard and limit the sense of scale to adjacent neighbours.

#### 14.3.2.B Roofs

- a) A flat roof is not permitted on granny flats and coach houses, unless:
- it is built and approved as a green roof that is an urban garden; or
  - it has a contemporary architectural expression that is uniquely designed.
- b) Cross gable, shed and roof lines that run across or perpendicular to the property are encouraged, with a roof pitch of between 6:12 to 8:12.

#### 14.3.2.C Privacy of Neighbours

- a) Granny flats and coach houses should be:
- oriented and sited to protect the privacy and minimize the overlook and shadowing of adjacent properties;
  - screened from neighbouring yards by suitable landscaping.

#### 14.3.2.D Corner Lots

- a) Granny flats and coach houses on a corner lot are not to be accessed by vehicles from the street but from the lane only.
- b) Primary windows to living rooms and bedrooms may face the street and/or lane.

#### 14.3.2.E Visibility

- a) Granny flats and coach houses should front onto and be clearly visible from the lane, with the primary entry and front door:



- facing towards and accessible from the lane;
- illuminated at night.

b) A secondary entrance and access may be from the street.

#### 14.3.2.F Appearance of the Lane

a) Granny flats and coach houses should be designed to enhance the lane as a public road or space since this is the primary entrance and access point to these forms of housing.

#### 14.3.2.G Lighting along the Lane

a) Lighting on granny flats and coach houses should be designed to enhance the pedestrian experience of the lane at night by such means as eaves lighting, porch lighting, and bollard or garden lights (not high-wattage, motion-activated security lights).

#### 14.3.2.H Building Materials and Colours

a) The exterior materials and colours of granny flats and coach houses should:

- complement, but not replicate, the character of the principal residence;
- complement, the overall character of the existing neighbourhood;
- have a high quality of architectural design and detailing (e.g., vinyl siding would only be permitted if finished with wood or other high quality detailing).

#### 14.3.2.I Building Facades

a) The primary façade of granny flats and coach houses facing the lane, and the street on a corner lot, should be:

- articulated to create depth and architectural interest;
- visually broken into smaller components or sections to discourage wide, flat and unbroken facades.

#### 14.3.2.J Building Faces, Projections and Dormers

a) Granny flats and coach houses should be designed with consideration given to the relationship between window sizes and the placement and scale of building faces, projections and dormers.

#### 14.3.2.K Windows

- a) Windows should be oriented toward the lane and be designed to maximize light penetration into the interior of granny flats and coach houses while mitigating overlook onto the principal residence and adjacent properties.
- b) The primary living room and bedroom windows on any upper floor should face the lane.
- c) Windows in the upper floor of coach houses facing the yard of the principal residence should be modest in size.
- d) Side yard windows should also be modest in size and be recessed in that section of the building façade.
- e) Building faces and dormers should not be windowless, and sidelight windows should be incorporated into bay projections.
- f) Skylights, clerestory windows or glass block should be installed where possible.

#### 14.3.2.L Garage Doors

a) Garage doors should be recessed behind the main façade where feasible and designed to minimize the visual impact to the lane through careful detailing and sensitive design, such as garage windows and narrower door width facing the lane.





#### 14.3.2.M Impact on Private Outdoor Space

- a) Granny flats and coach houses should be located so as to minimize the amount of shadow cast onto the private outdoor space of the granny flat or coach house and the principal residence.

#### 14.3.2.N Trees and Vegetation Retention

- a) Existing trees and prominent landscape features located outside the building envelope of granny flats and coach houses should meet the Tree Bylaw, for example:
- retained, unless proven to be diseased or in conflict with utilities and services;
  - protected before land clearing, demolition or construction commences.

#### 14.3.2.O Underground Services

- a) Underground hydro and communication service lines should be utilized wherever possible to granny flats and coach houses.

#### 14.3.2.P Sustainability Initiatives

- a) Granny flats and coach houses should incorporate sustainable design elements acceptable to the City into site and building design and construction, and exhibit design excellence through such means as:
- natural filtration of rainwater into a rain garden, rainwater collection system, bio-swale or rock pit;
  - solar power technology as an energy source;
  - energy star appliances and low water plumbing fixtures;
  - green technology building products;
  - naturescaping and permeable materials on outdoor surfaces.

## B. DUPLEXES AND TRIPLEXES Bylaw 9603 2016/12/19

*These Guidelines are intended to ensure appropriate articulation and character to the building form and landscaping for duplex and triplex development on arterial roads.*

### 14.3.3 Neighbourhood Character

*The intent is to achieve variety in form and design to ensure this form of housing is compatible with existing neighbourhood character.*

- a) The form and character, scale and siting of new buildings should be compatible with the existing character and scale of the surrounding single-family neighbourhood.
- b) The exterior finish of duplexes/triplexes should:
- complement, but not replicate, the overall character of the existing neighbourhood;
  - have a high quality of architectural design and detailing.

#### 14.3.3.A Variety in Design

- a) Developments should include a variety of unit types, sizes, and unit treatments to encourage architectural diversity.
- b) Variations in the design of duplex/triplex clusters should be encouraged so as not to repeat the same architectural appearance, building form and elevations on the same block.
- c) No two (2) substantially similar duplex/triplex clusters should be located side by side.
- d) Duplex/triplex units within the same building cluster should avoid the mirror image effect.



- e) Variations in height and roof lines are recommended between building clusters and between units within a building cluster to provide visual diversity within the same development; however, overall expression should be a cohesive urban form and unity of architectural expression.

#### 14.3.3.B Streetscape

- a) The design of duplexes and triplexes should enhance the streetscape, and should include landscaped front yards and strong front doors and building entries.
- b) Small variations in setbacks between building clusters should be utilized, in order to reflect the scale and articulation found in single family areas.

### 14.3.4 Site Planning

*The intent is to provide direction on the location of the building clusters, services and parking.*

#### 14.3.4.A Circulation

- a) Each development should have adequate, well-defined circulation routes, parking areas and site access.
- b) Vehicle access should be from a lane or a local road, where possible.
- c) Access driveways from arterial roads should be limited to 6.0 m (19.7 ft.) in width, and driveways to adjacent lots should be combined/shared.
- d) All shared access must provide vehicle access and egress between the front lot line and the garages, carports, and parking pads on site.
- e) Internal drive aisle(s) providing access to garages should be designed to accommodate a turnaround area allowing for passenger vehicles.
- f) Fire access, adequate space for garbage and recycling facilities, and mail services should be provided on site to the satisfaction of the relevant authorities.

#### 14.3.4.B Entrances

- a) Entrances to units should front public streets, where possible, and be directly accessible from the adjacent public sidewalk with minimal changes in grade.
- b) Individual unit entrances should be designed to be highly visible from the street.
- c) Entry porches are encouraged. The maximum depth of the porches should be limited to 1.5 m (4.92 ft.). Design porches to incorporate prominent main entries and integrate into the façade.
- d) Verandas are encouraged. Verandas should be between 1.8 m (5.91 ft.) and 2.5 m (8.2 ft.) deep to allow for usability. Design verandas to be integrated into the facade and the main entries.

#### 14.3.4.C Parking and Garages

- a) Garages should be designed to minimize the visual impact along any rear lane and the internal drive aisle.
- b) Garage door width and driveway width should be minimized and driveways should be paired or combined to provide additional landscaping opportunities along the rear lane and internal drive aisle.
- c) Paired garage doors should be separated by a small landscaped area large enough to accommodate a tree with a minimum caliper size of 6 cm (2.5 in.).
- d) Garage doors should not front onto an arterial road.



- e) Front yards and flanking side yards should not be used for parking.
- f) Resident parking should be covered and screened from the street.

#### 14.3.4.D Outdoor Amenity Space

- a) Each dwelling unit should have a well-defined private outdoor space of 30 m<sup>2</sup> (323 ft<sup>2</sup>) unoccupied and unobstructed by any buildings, structures, projections and on-site parking, except for cantilevered roofs and balconies which may project into private outdoor space for a distance of not more than 0.6 m (1.97 ft.).
- b) Private outdoor space provided in the form of yard space should have a depth no less than 4.5 m (14.8 ft.); or 3.0 m (9.84 ft.) for duplexes on compact lots.
- c) Paved patio or deck space within a private outdoor space in the yard space should have a depth no more than 2.5 m (8.2 ft.).
- d) Private outdoor space provided in the form of balcony and/or deck above the ground floor should have a depth no less than 1.8 m (5.91 ft.).
- e) Where the only private open space of a unit is provided on the yard facing an arterial road, a balcony or deck space facing the interior side or back yard should be provided.

#### 14.3.4.E Garbage, Recycling and Organics Storage

- a) Garbage, recycling and organics storage bins should be easily accessible, and be contained within a roofed/walled enclosure.
- b) Where there is lane access, the roofed/walled enclosure should be set back a minimum of 1.5 m (4.92 ft.) from the rear lot line.
- c) Where vehicle access is from the fronting street, a paved area for the placement of garbage, recycling and organics storage bins should be provided within the front yard by the entry driveway; and this area should be screened from the street.

### 14.3.5 Building Form

*The intent is to ensure that duplexes/triplexes are attractive and do not adversely impact adjacent homes.*

#### 14.3.5.A Scale and Massing

- a) Building mass should be arranged to minimize shadowing and optimize natural lighting.
- b) At least 40% of the gross floor area of each duplex unit developed as a Compact Lot Duplex should be located on the second floor.
- c) The minimum length of party wall connecting duplex/triplex units on the same lot should be the greater of:
  - 5.4 m (17.7 ft.); or
  - 70% of the overall width of the front-to-back units or 70% of the overall depth of the side-by-side units.
- d) Party wall between duplex/triple units on the same lot should be no less than one (1) storey high.

#### 14.3.5.B Adjacencies

- a) Privacy of adjacent dwellings should be maintained through increased setbacks above the ground floor, careful placement of doors and patios, and offsetting windows on adjacent facades.
- b) Site design should include fencing, screening and landscaping, to ensure privacy for adjacent properties.



## 14.3.6 Architectural Treatment

*The intent is to ensure that development has a high quality character and finishing.*

### 14.3.6.A Character

- a) The primary façade of duplex/triplex unit facing the street should be articulated to create architectural interest.
- b) Entrances should be designed to articulate the individual units and to enhance the pedestrian-scale character of the site through a strong connection with public streets.
- c) Finished site grade of the main unit entries should be no more than 1.2 m (3.94 ft.) above the public sidewalk to ensure an appropriate level of street interface.
- d) Architectural treatment of unit entrances should reinforce proximity to grade level (e.g., avoid two-storey features).
- e) Duplexes and triplexes that are developed on flanking lots should be designed with sufficient articulation and building character to “address” both the flanking and fronting streets.
- f) The primary façade of duplex/triplex unit facing the internal drive aisle should be visually broken into smaller components or sections to discourage wide, flat unbroken facades.
- g) Discourage situations where the main entrances to units are adjacent to, or on the same façade as garage doors. Where this situation is unavoidable, unit entry should be visually prominent.
- h) Garage doors should be recessed behind the main façade along the internal drive aisle.
- i) In order to minimize the apparent bulk of a building, recessed and partly recessed balconies are preferred to projecting balconies.
- j) Exterior stairs should be designed to be integrated into the overall architectural and/or landscape concept of the development.
- k) Eaves, bay windows and other projections from the building face are encouraged.

### 14.3.6.B Windows

- a) Windows should be visually prominent in street fronting façades and should be articulated with colour and/or white trim. The use of muntins and mullions in street fronting windows is encouraged.
- b) Scale and proportions of dominant windows should be compatible with the massing and roof forms of the building or portion of the building that contains them. Large, horizontal picture windows are not considered appropriate.
- c) Side yard windows should also be modest in size and be recessed in that section of the building façade.
- d) Building faces and dormers should not be windowless, and sidelight windows should be incorporated into bay projections.

### 14.3.6.C Exterior Finishing

- a) Materials to convey an image of quality, durability and a high level of craftsmanship.
- b) Buildings and roofing materials should reflect the heritage and climate of Richmond.

### 14.3.6.D Materials

- a) A variety of complementary materials and colours is encouraged for visual interest.
- b) Strong, bold colours in contrast with white or light colours for façade details and trim is encouraged.



- c) Stone is recommended as an accent material.
- d) Stucco is acceptable when used in combination with other exterior finishing materials.
- e) Vinyl siding is acceptable if finished with wood or other high quality detailing.

#### 14.3.6.E Roof Materials

- a) Cedar shingles or a similar type of roofing (in terms of colour and texture), or high profile asphalt shingles are preferred to accentuate a single family character.

#### 14.3.6.F Flashing and Gutters

- a) Flashing and gutters should be integrated into the design of the building in terms of colour, location on the façade, or other method.

### 14.3.7 Landscaping

*The intent is that landscaping be lush and that fences or gate be attractive, particularly along any street frontages or common area.*

#### 14.3.7.A Trees Retention and Replacement

- a) Existing natural landscaping, including significant trees, should be retained and incorporated into site development plans.

#### 14.3.7.B Tree Planting

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2022/03/21

- a) Where one or more existing trees are being removed, the City's tree replacement policy requirements as specified in Tree Protection Bylaw 8057 must be met.
- b) Comply with the minimum planting sizes specified in the City's Tree Protection Bylaw where replacement trees are being planted.
- c) A grassed strip with at least one (1) deciduous tree (minimum 6 cm or 2.5 in. caliper) per lot should be installed along the front property line.
- d) A minimum of one (1) deciduous tree (minimum 6 cm or 2.5 in. caliper) or one (1) coniferous tree (minimum height 3.5 m or 11.5 ft.) should be planted on each lot in the front yard.
- e) In the case of a corner lot, additional trees should be planted within the flanking side yard.
- f) Include an appropriate mixture of deciduous and coniferous trees, with the coniferous being sized and spaced appropriately.

#### 14.3.7.C Landscaping

- a) Landscaping should pay special attention to front yard quality, including protection of mature trees. Low-maintenance, native plant materials are preferred.
- b) The grade between the City's sidewalk and the landscaping along the front property line should be the same.
- c) All front yard areas along front property lines should be planted with a combination of lawn, flower beds, flowering shrubs and ground cover to provide seasonal interest and water permeability.
- d) If individual shrubs are planted in the front yard, they should be of a low height that will not exceed 1.2 m (3.94 ft.) and should be located behind any fencing on the front property line.
- e) Continuous hedges are not permitted within the front yard.
- f) For duplex development on a compact lot, an unobstructed, permeable pathway of a minimum 0.9 m (2.95 ft.) wide should be provided between the front or flanking lot line and the pedestrian entry to each of the dwelling units.





- g) A walkway should also be provided between parking garage/area and each of the duplex units.
- h) Material for walkways/pathways from the arterial road to the entrance of the duplex/triplex units should be aggregate concrete, stamped concrete, paving stones, pervious paving or other acceptable material to the City. Asphalt is not permitted.
- i) Permeable material is strongly encouraged for use in unenclosed surface parking areas and carports as well as paths.
- j) Landscaping should be provided on areas along the rear property line and internal drive aisle where the areas are not used for parking purposes.
- k) Provide adequate lighting to enhance security and visibility, particularly along the rear lane and internal drive aisle. Exterior lighting should be designed to avoid “light-spill” onto adjoining properties.

#### 14.3.7.D Fences and Gates

- a) Fences within the front and flanking side yards should be a maximum of 1.2 m (3.94 ft.) in height and should be placed a minimum of 0.50 m (1.64 ft.) from the internal edge of the sidewalk.
- b) Fences in front yards and flanking side yards should be picket, wicket or post-rail; metal transparent fences with brick or stone pilasters are also encouraged. Solid panel is not permitted.
- c) Fencing areas should be designed to incorporate flower beds, flowering shrubs and other low lying landscaping.
- d) Decorative arbours/brackets/trellis features may be used to further articulate the fencing provided that they are in scale with and complementary to the fencing details and be placed a minimum of 2.0 m (6.56 ft.) from the front property line.
- e) Vehicle gates at duplex/triplex site entrances are discouraged. To define the boundary between private and public space, provide:
  - pavement in contrasting colour and texture across driveway entrances;
  - minor architectural elements;
  - appropriate landscaping.
- f) Fences within the side and rear yards should be a maximum of 1.83 m (6 ft.) in height.





## 14.4 Multiple Family Guidelines

*These Guidelines are intended to provide direction on the general form and character of townhouses, stacked townhouses, rowhousing, low to mid-rise housing and high-rise housing (outside the City Centre).*

The Multiple Family Guidelines and General Guidelines apply to all multiple family residential developments.



### A. GENERAL CONSIDERATIONS

*The intent is to carefully integrate new multiple family residential development into existing neighbourhoods.*



### 14.4.1 Pedestrian-Oriented Streetscapes

*The intent is to give prominence to the pedestrian realm as a major element of the neighbourhood theme and character.*

#### 14.4.1.A Streetscape

- a) Streetscapes should animate the street and provide a high level of pedestrian interest along their public edges.
- b) Along major roads, provide exterior staircases up to the first habitable level wherever appropriate. Exterior stairs should be designed to be integrated into the overall architectural and/or landscape concept of the development.
- c) At the common entry to multiple family residential buildings, provide public seating and clear, pedestrian-oriented signage. Art at building entries is encouraged.
- d) Ground oriented units are encouraged in all types of multiple family developments. Grade-level residential units along publicly-accessible walkways and streets should feature individual front doors fronting the walkways and street, with individual paths leading from the public sidewalk or pedestrian walkways to front doors. The front doors of the units should be accessible and visible from the public sidewalk and should not be hidden by vegetation.
- e) Grade-level units should be no more than 1.2 m (3.94 ft.) above the grade of adjacent public sidewalks and walkways.
- f) Employ features such as front stairs, stoops, gateways, porches and weather protection to enhance the residential quality of unit and building entries, the visibility of such entries, a comfortable architectural rhythm along the street and a human scale.
- g) Create an attractive street frontage, using windows and doors to help animate the building facade and promote a more human-scale character. Windows and doors should be oriented streetward.
- h) Use internal drive-aisles to maximize the sense of open space and enhance pedestrian character. Where possible, vehicle and pedestrian access should be either specifically marked or separated from each other and appropriately located.
- i) Visually enhance pedestrian linkages and create a sense of arrival through the use of arrival plazas, special plantings and benches at intersections.

#### 14.4.1.B Entrances, Stairs and Porches

- a) Entrances to buildings and complexes should front public streets and be directly accessible from sidewalks or other public areas with minimal changes in grade. The entrances should be designed to be highly visible from the street and clearly addressed with large numbers.
- b) Convenient indoor waiting areas and outdoor pedestrian weather protection should be provided at building entrances.
- c) New developments should promote the provision of individual grade-level entries to residential units wherever possible, with intimate courtyards, landscape features and/or special weather protection at common building entries.
- d) Enhance the livability of dwellings and the vitality of parkways and linear walkways by providing secondary entrances, doorways, gates and garden entries to ground level units adjacent to pedestrian routes.

#### 14.4.1.C Yards

- a) Yards adjacent to streets, lanes, public walkways and pathways should be designed to be open and inviting and allow good visibility from adjacent public areas to building entries.



- b) Define the street edge through landscaping with layers of planting, low walls, hedges, or changes in grade along the property line.
- c) Yards should be raised no more than 0.5 m (1.64 ft.) above adjacent public sidewalks; low retaining walls in front yards along the street should not be higher than 0.5 m (1.64 ft.). In yards that abut public spaces, landscaped terraces no greater than 0.5 m (1.64 ft.) in height and no less than 0.75 m (2.46 ft.) deep should be used to reach the new grade.

#### 14.4.1.D Fences

- a) Fences or walls along the streetfront should be limited in height and length and should be supplemented with landscaping.
- b) Fences or walls should be no more than 15 m (49.2 ft.) long without a break or jog.
- c) Fences should be a maximum of 1.2 m (3.94 ft.) high when located within front yard of the street.
- d) Landscaping on the street side of fences should include plants of low maintenance varieties (e.g., hearty shrubs, groundcover and trees). Large evergreen hedging along the street is not acceptable.

#### 14.4.1.E Fire Access

- a) Fire lanes should conform to the City's Building Bylaw and be designed to meet the needs of the City's Fire Department. They should be similar in design to other access routes and, wherever possible, combined with pathways and other routes. Decorative forms of paving should be used both for aesthetic reasons and to distinguish them from common asphalt-paved vehicular access routes. Where they intersect or are combined with pedestrian pathways, distinctive paving should be used to highlight the dual function.

#### 14.4.1.F Preservation of Existing Natural Features

- a) Wherever possible, existing trees and natural features should be retained.
- b) Special attention should be paid to the preservation of mature trees. Any hard-surface area, including building footprint and driveways, should be planned and designed to maximize retention of existing woodlots or specimen trees. Existing mature trees and vegetation corridors should be retained and incorporated, wherever possible, into the design of external streetscapes and internal private landscapes.
- c) Special efforts should be made to retain mature trees by adjusting retaining walls to accommodate trees.

### 14.4.2 Building Scale and Form

*The intent is to ensure that all multiple family residential developments have adequate sunlight and are appropriately located on site.*

#### 14.4.2.A Sunlight Access

- a) Ensure that a minimum of 75% of dwellings and their private open spaces in each development receive direct sunlight every day of the year.
- b) To ensure sunlight access to residences, the minimum north-south spacing between adjacent buildings should be determined by the vertical angle of the sun at solar noon at the equinoxes.

#### 14.4.2.B Diversity

- a) Developments should include a variety of unit types and unit treatments to encourage architectural and social diversity.





#### 14.4.2.C Adjacency Considerations

- a) New multiple family developments should be designed to maintain a residential character and be compatible with adjacent uses.
- b) Side yard interfaces with adjacent single family housing should be particularly sensitive to issues of privacy/overlook. Consideration should be given to greater setbacks above the ground floor, special landscaping measures and/or orienting living areas away from neighbouring sites.

#### 14.4.2.D Scale and Massing Considerations

- a) The apparent length and mass of buildings should be reduced through architectural design and detailing. Establish residential scale through articulation of the building facade through the use of projections, recesses, solids and voids and by including house-like elements such as chimneys and multi-paned windows.
- b) Vary the design to include more than one building form on each site sharing common architectural elements.
- c) Break up the apparent length of individual buildings by expressing larger buildings as a series of smaller buildings, or as identifiable parts of a grander scheme. Building facades should be broken up into smaller components, with special measures used to reinforce a rhythm and scale that gives the appearance of individual units along the street (e.g., smaller components that express strong unit identity with direct grade access).
- d) Reduce the apparent height of buildings with architectural treatment that promotes recognition of individual storeys and avoids the appearance of sheer blank walls, for example:
  - give each building or portion of building a distinct top, middle and base;
  - use trim, intense colour accents, secondary roof elements, building recesses;
  - terraced building forms that emphasize lowered height of end units.
- e) Large projecting balconies are discouraged along streetfronts, as they emphasize building bulk. Recessed balconies will be permitted in some areas.
- f) Avoid the appearance of a solid wall of buildings by varying street edge treatment through use of strategically placed open spaces with intensely clustered plantings, staggered or varied building setbacks and other techniques.

#### 14.4.2.E Space Between Buildings

- a) Buildings should relate to the height and spacing of adjacent buildings. A ratio of 1:4 between the distance and height of the adjacent buildings should be considered.
- b) The size of spaces between buildings should be determined by designing for an identifiable use which enhances the amenity and enjoyment of residents.

### 14.4.3 Architectural Treatments

*The intent is to employ a variety of overall roof heights and forms, and to maximize light into units and to express the residential character of the neighbourhood through appropriately scaled and proportioned windows.*

#### 14.4.3.A Roof Form and Elements

- a) A variety of overall roof heights and forms should be employed within a multiple building proposal to give interest and offer a residential character.
- b) Sculpt and terrace upper floors in buildings over 4 storeys in height to reduce mass, create a transition in height and maximize views.



- c) Reduce apparent height of buildings and establish a pedestrian scale along walkways, semi-private open space and main vehicular entrances through the use of secondary roofs or trellises over entries, patios and other openings at lower levels.
- d) Consider pitched roofs to express a traditional residential character.
- e) Decorative elements close to the roof should emphasize and complement the roof pitch visible from the street.
- f) Mechanical equipment must be concealed from view and antennae, radio-wave receiving and transmitting devices, vents and similar obtrusive equipment should be situated where least visible from public areas.
- g) Skylights should be designed to minimize interruption of the roof line.
- h) In general, flat roofs are not considered appropriate for townhouses. However, this roof form might be appropriate in low to medium rise (and mix-use) developments at the perimeter of Neighbourhood Centre areas to reflect the transition character of these areas.

#### 14.4.3.B Windows and Skylights

- a) Orient principal windows to the south in order to maximize solar gain.
- b) Consider the use of various forms of projections, such as bay windows, as a device to maximize sunlight and views, provide interesting unit articulation and improve building mass.
- c) Locate windows to focus views, to maximize light penetration into units and to minimize opportunities to look into units from other units or from paths and open spaces around buildings.
- d) Traditional window treatment with a vertical impression should be used where visible from the street. Skylights, plastic bubble windows, tinted glaze and other non-traditional windows should not be used in prominent locations on buildings that are visible from the street.
- e) Windows should be openable, of residential scale and should add to the sense of neighbourliness, safety and security by providing visual interest while maximizing surveillance opportunities over public areas.
- f) The openable part of a window should be located a minimum of 0.6 m (2 ft.) above a floor as a safety precaution for small children.
- g) Windows, used singly or in combination, should be transparent at eye-level to reinforce the sense of surveillance over the street.
- h) Consider the use of skylights as a means to access light within a vocabulary of pitched roof forms, except where aircraft noise is of concern.

#### 14.4.3.C Materials

- a) Exterior cladding materials and detailing should be carefully considered to counteract the effects of the rainy west coast climate of Richmond. Stucco should be treated to prevent discolouration and particular care should be taken in detailing of north-facing facades.
- b) A variety of complementary materials and colours is encouraged for visual interest.
- c) Ensure the façades of the buildings are visually interesting through a sufficient level of surface and architectural detail.
- d) Select roofing materials that are suitable for the level of articulation desired in the roof forms.



#### 14.4.4 Pedestrian Access

*The intent is to provide clear, convenient and safe pedestrian access to and within multiple family residential development sites.*

##### 14.4.4.A Pedestrian Circulation

- a) Pedestrian circulation should be provided for all major areas of the site. Pedestrian access throughout the site should be designed to be accessible to disabled persons.
- b) Consider designing the circulation system to encourage children's play throughout a development:
  - make the system safe for bicycles and tricycles. Drop curbs at road crossings; create traffic calming devices; vary the paving;
  - explore the possibilities of reclaiming hard surfaces as play areas;
  - accommodate play on internal roads through a design that avoids conflict between cars and people (e.g., a basketball hoop in a dead-end roadway);
  - indicate shared uses of roadways through devices such as changes in road surface, variation in road width and signage. Clear delineation of edges and surfaces is important.
- c) To avoid duplication, pathways should be combined with fire lanes wherever possible.

##### 14.4.4.B Pedestrian Pathways

- a) Pathways should be treated with decorative surfaces and landscaped with small-scale plant materials, shrubs and trees. Where possible, existing vegetation should be preserved along these pathways.
- b) All paths should be open to the sky.
- c) Maximize visibility and animation along pathways by orienting windows, entries and balconies on adjacent buildings towards pedestrian paths.
- d) Ensure that pathways are well-lit, visible from the street and clearly marked, with entrances embellished by ornamental planters, trees, or prominent architectural components.
- e) Pathway should have focal areas in the form of arrival plazas and entry courts.

##### 14.4.4.B Public Pedestrian Corridors

- a) Main pedestrian access corridors through developments should be a minimum of 6 m (19.69 ft.) wide and should:
  - include a paved walkway, minimum 2 m (6.56 ft.) wide, with the distance between adjacent building faces being at least 6 m (19.69 ft.);
  - have a maximum length of 70 m (230 ft.) (as measured between public streets or open spaces), except where the space between adjacent building faces is less than 9 m (29.53 ft.), in which case the maximum walkway length should be 15 m (49.21 ft.) between open spaces;
  - should have focal areas in the form of arrival plazas and entry courts;
  - should provide a series of events and places for the public and residents to experience.



## 14.4.5 Landscaping and Open Space Design

*The intent is to ensure that multiple family residential sites are landscaped with attractive landscaping, screening and surface treatment, enhance the natural beauty of Richmond, improve the livability of the development, and provide adequate separation between uses.*

### 14.4.5.A Public Open Space

#### Trees

- a) Plant trees along all street frontages to form an avenue of trees. The spacing between trees may vary according to the species.
- b) Major internal roadways should be lined with landscaped and treed boulevards. Pedestrian-oriented lighting should be included along the internal roadways.
- c) Trees may be planted in pairs at entranceways to define a gateway.
- d) Landscape all pedestrian paths with trees and other plant materials.

#### Building Setbacks

- a) Building setbacks along major streets are encouraged to provide for “display gardens” and semi-private entry transition areas.
- b) Where a development faces across a street from an existing single family neighbourhood, front yard landscaping features should be used to create a sense of transition. Appropriate features might include: roofed pedestrian entry portals; trellises; and small entry courts edged with ornamental trees, shrubs and plants.

#### Landscape Treatments

- a) Create visual focal points by providing landscaped areas at the curves of internal roads and at the “dead-ends” of development sites. Allow for future pedestrian access to adjacent development areas within the landscaped areas.
- b) Consider using mounds of earth or berms to contain or screen an area and to create visual and textured interest in otherwise flat terrain.
- c) Use landscaped trellises to conceal garages and visitor parking stalls.
- d) Vines or other cover should be planted to soften retaining walls.
- e) Soften hard surfaces through the use of landscaping, trellises and tree planting.

#### Surface Treatment

- a) Show variety and change of use through variations in the colour and texture of materials for patios, walkways and roadways. Use changes in paving materials near entrances to walkways and children’s play areas.
- b) Use a variety of decorative surface treatments (e.g., stamped concrete grey pavers) to soften the visual impact of driveways.
- c) Consider using materials that support children’s play throughout a development (e.g., rubber tiles instead of concrete pavers; walkways for chalk drawings, etc.).
- d) Use permeable surfaces as much as possible.

#### Signage

- a) Signage should have a pedestrian scale and orientation. Back-lit acrylic signs or permanent, free-standing commercial signage will not be permitted.
- b) Way finding signage to visitor parking spaces for residential units should be provided at the entrance to the development, at each location where a visitor vehicle needs to turn and at a maximum spacing of 50 m (164 ft.). The design/format and colour of the way finding signage is to be reviewed and approved by the City.

Bylaw 8994  
2013/03/18



#### 14.4.5.B **Semi-Private Open Space**

- a) Provide convenient, safe and accessible semi-private open spaces for the common use of all building/complex occupants.
- b) Semi-private open spaces should be clearly defined from public spaces for the exclusive use of building/complex occupants through the use of changes in grade, low walls or fences, planting or siting within the confines of the building.
- c) Spaces should be situated and designed to maximize resident access, surveillance and enjoyment.
- d) Provide landscaping with substantial trees, planting and features appropriate to a range of ages and interests, including families with children.
- e) Illuminate spaces with low-level lighting that provides light and security for semi-private space but does not produce glare into the adjacent residential buildings.
- f) Semi-private open spaces for family-oriented housing should be equipped with children's play apparatus and benches. Locate equipment and seating to take advantage of sun and natural shelter from the weather.
- g) Spaces should be designed to ensure barrier-free access.
- h) Ground surfaces should be paved with a mixture of hard surfaced and natural landscaping.

#### 14.4.5.C **Private Open Space**

- a) Public and private outdoor space should be clearly defined to enhance both the privacy of residences and the pedestrian experience.
- b) Provide landscaping, terracing, screening, low-level hedges and/or garden walls between private ground oriented outdoor spaces and the public realm;
- c) Separate private outdoor spaces from the semi-private open spaces. Use changes in grade and/or landscaping to ensure the privacy of an individual unit's open space without the use of high fences.
- d) Private outdoor spaces should be separated from the private outdoor spaces of other units for privacy purposes. Private outdoor spaces in family-oriented developments should be "enclosed" (i.e. fenced, for the security of small children and pets).
- e) Where a change in grade no greater than 1.2 m (3.94 ft.) occurs between the outdoor space of a unit and the level of a street or public access it faces, "front stair" connections should be provided between the two outdoor spaces.
- f) Articulate building edges to define private balconies and patios that become a natural extension to the residential unit.
- g) Where a residential front yard provides a unit's only private open space, ensure that this space is usable/practical while also enhancing the streetscape. Changes in grade/terracing should be used in combination with hedges, trees, shrubs, open lattice screens and low fences to provide an area of privacy near the unit while still providing an open, inviting public edge.
- h) Undersides of balconies and porches that are visible from a street or public walkway should be covered by soffits or exterior finishes to provide a finished appearance to public view.
- i) Consider the importance and the safety of small household pets by ensuring that a gap no larger than 5 cm (2 in.) is provided between the ground and the base of a fence. All fences should have gates that provide direct access to semi-private and public areas.





### Balcony and Outdoor Space Sizes

- a) Ensure a substantial depth of balconies, patios and gardens to create usable and livable outdoor spaces.
- b) Apartment units should have a private outdoor space of 6 m<sup>2</sup> (64.59 ft<sup>2</sup>) in area and 1.8 m (5.9 ft.) in depth, with larger than-minimum spaces strongly encouraged. An area of shelter and privacy should be provided within each private outdoor space. It is suggested that half of the minimum required outdoor space be recessed behind the building face.
- c) Each townhouse unit should have a private outdoor space of 30 m<sup>2</sup> (323 ft<sup>2</sup>) in area (not in average). Private outdoor space provided in the front yard and/or rear yard of the unit should have a depth no less than 4.5 m (14.76 ft.). Private outdoor space provided in the form of balcony and/or deck above the ground floor should have a depth no less than 1.8 m (5.9 ft.).
- d) Paved patio or deck space within a private outdoor space in the yard space should have a depth no more than 2.5 m (8.2 ft.).

### Balcony and Outdoor Space in Aircraft Noise Sensitive Development

- a) Private balcony space in aircraft noise sensitive development should mitigate the impact of aircraft noise by appropriate siting and/or by using appropriate noise mitigation techniques and architectural treatment (e.g., enclosed balconies) that do not result in the balcony being indoor living space.
- b) Private open space (e.g., patios, decks) in aircraft noise sensitive development should mitigate the impact of aircraft noise by appropriate siting and/or by using appropriate noise mitigation techniques and architectural treatment (e.g., canopies, fences, landscaping) that do not result in the area being indoor living space.

#### 14.4.5.D Amenity Space

- a) Indoor and Outdoor amenity space should be provided as outlined in the following chart in order to provide common amenities to be shared by all households in each multiple family development project of more than three units.

Number of Dwelling Units	Indoor Amenity Space Required	Outdoor Amenity Space Required
0-3 units	None	None
4-19 units	<ul style="list-style-type: none"> <li>• Indoor amenity space of a minimum of 50 m<sup>2</sup> (538 ft<sup>2</sup>).</li> </ul>	<ul style="list-style-type: none"> <li>• Outdoor amenity space of 6.0 m<sup>2</sup> (64.59 ft<sup>2</sup>) per unit.</li> <li>• Outdoor space should be designed to facilitate children's play.</li> </ul>
20-39 units	<ul style="list-style-type: none"> <li>• Indoor amenity space of a minimum of 70 m<sup>2</sup> (753 ft<sup>2</sup>).</li> </ul>	<ul style="list-style-type: none"> <li>• Outdoor amenity space of 6.0 m<sup>2</sup> (64.59 ft<sup>2</sup>) per unit.</li> <li>• Outdoor space should be designed to facilitate children's play and 3.0 m<sup>2</sup> (32.29 ft<sup>2</sup>) per unit should be designed as a children's play area.</li> </ul>
40 units or more	<ul style="list-style-type: none"> <li>• Indoor amenity space of a minimum of 100 m<sup>2</sup> (1,076 ft<sup>2</sup>).</li> </ul>	<ul style="list-style-type: none"> <li>• Outdoor amenity space of 6.0 m<sup>2</sup> (64.59 ft<sup>2</sup>) per unit.</li> <li>• Outdoor space should be designed to facilitate children's play and 3.0 m<sup>2</sup> (32.29 ft<sup>2</sup>) per unit should be designed as a children's play area.</li> <li>• The maximum play area size is 600 m<sup>2</sup> (6,459 ft<sup>2</sup>).</li> </ul>



Bylaw 9792  
2018/02/19

- b) • Contributions of cash in-lieu of providing indoor amenity space for multi-family developments under the Development Permit Guidelines, may be provided by an applicant/developer as an option as part of the Development Permit application process as set out below.

Number of Dwelling Units in a Multi-Family Project	Amount of Cash-In-Lieu Payment (exempt where the average unit size exceeds 148 m <sup>2</sup> )
1-3 units	None
4-19 units	\$1,600 per unit; plus
20-39 units	\$3,200 per unit; plus
40 units & above	\$4,800 per unit for the remaining units

- Cash in lieu funds are to be deposited in a Leisure Facilities Reserve Fund to be used for indoor public amenity space as identified by the Community Services Division and in alignment with Council priorities for facility and amenity needs for the local community and City-wide.
- On February 28, 2019, and then by February 28 every two years thereafter, the above contribution rates are to be revised by adding the annual inflation for the preceding two calendar years by using the Statistics Canada *Vancouver Construction Cost Index – Institutional* inflation rate; with revised rates published in a City Bulletin.

**14.4.5.E Indoor Amenity Space**

- a) The amenity space shall include a multi-purpose facility designed to accommodate a variety of activities such as parties, children’s play and meetings (e.g., involving 40% of the development’s estimated adult population).
- b) In larger, family-oriented developments, special emphasis should be placed on the design of indoor amenity space and associated outdoor areas in order that they may provide opportunities for licensed childcare use (should such a need be recognized) without compromising tenant needs.
- c) Indoor amenity spaces should be located on the south face of buildings and should be linked directly to outdoor amenities and to public walkways wherever possible.

**14.4.5.F Outdoor Amenity Space**

**Location**

- a) Outdoor amenity space should be in a central location on the site where it is convenient for the largest number of residents on site and contiguous with an indoor amenity space wherever possible.
- b) Outdoor amenity space may also locate in the area where existing landscape features are to be retained on site.
- c) Outdoor amenity space may also locate adjacent to open space on a neighbouring multiple family site. Siting and design of these open spaces should be complementary and should encourage common use by residents of both sites. No fence or barrier shall be erected between the open spaces, though changes in grade may be used to better define public versus semi-public areas.
- d) Outdoor amenity spaces and play areas should not be located near parking areas or garbage/recycling storage areas.
- e) Locate the outdoor amenity area to take advantage of sunlight and of natural shelter from inclement weather.



- f) Outdoor amenity space located within any required yard setback is discouraged. If this situation is unavoidable, the size of the outdoor amenity area should be substantially larger and wider than the minimum requirement in order to provide an adequate landscape buffer to deal with the interface along the property lines and clearly differentiate public, semi-private and private spaces.
- g) Amenity areas should be consolidated in one compact area as linear or scattered configurations are generally not as successful in meeting residents' needs.
- h) The minimum longitudinal dimension for an outdoor amenity space should be 5 m (16.4 ft.). It is recommended that an outdoor amenity space, when located on ground level, should have at least 50% of the minimum longitudinal dimension front an internal road or walkway.
- i) The recommended shape configuration should be a maximum ratio of 1:3 (width to length).
- j) Ensure that surveillance of the area is provided from adjacent units and that the area has barrier-free access.

### **Play Areas**

- a) For multiple family developments up to 19 units in size, outdoor space should be designed to facilitate children's play. For developments over 19 units in size, children's play space should be provided at a ratio of 3 m<sup>2</sup> (32.29 ft<sup>2</sup>) per unit. The maximum suggested size for a children's play area is 600 m<sup>2</sup> (6,459 ft<sup>2</sup>).
- b) Locate children's play apparatuses and benches within the open space along with other urban design features such as gardens, fountains, arbours and art.
- c) Outdoor fenced play areas should be located, where possible, adjacent to indoor spaces on the south side of the buildings, in a sunny location protected from easterly wind. Opportunities for passive adult surveillance should be provided, such as seating nearby and/or arrangement of windows and viewing decks that permit observation of children at play.

### **Surface Treatment**

- a) Provide a mixture of permeable hard-surfaced and natural landscaping in the outdoor amenity area.

### **Aircraft Noise Sensitive Development Outdoor Amenity Space**

- a) Outdoor amenity space in aircraft noise sensitive development should mitigate the impact of aircraft noise by appropriate siting and/or replacing outdoor amenity space with an equivalent area of additional indoor amenity space designed to facilitate children's play, senior's enjoyment, or other appropriate passive recreational use.

## **14.4.6 Services**

*The intent is to ensure that multiple family residential developments provide adequate garbage, recycling, organics, mail and other services for the convenience of the residents.*

### **14.4.6.A Garbage and Recycling**

- a) There should be a minimum of one garbage container per complex.
- b) Recycling should be provided at a minimum of one facility for each 10 residential units, with a minimum of 3 carts per depot area (3 bins for 3 material types).
- c) Organics (food scraps, etc.) collection should be included on-site.
- d) Refer to the City's document entitled "Waste Management Guidelines for Multiple-Family Residential and Mixed-Use Buildings" for additional requirements and details.



### **Recycling, Garbage and Organics Storage**

- a) A room in the development or a gated and covered structure should be provided to contain residents' garbage, recycling and organics materials.

### **Recycling, Garbage and Organics Storage Area Design**

- a) The design of this structure should complement the design of the units in the project.
- b) The enclosure should be in a central location that is easily accessible to all residents but away from pedestrian accesses and children's play areas.
- c) Landscape screening of the enclosure should be provided. The area should be easily accessible for collection purposes and should provide adequate manoeuvring space for 13.7 m (44.95 ft.) long garbage trucks.
- d) A recycling area of a minimum of 2.4 m (7.87 ft.) by 3.5 m (11.48 ft.) in size for each 30 units, should also be provided near garbage areas.
- e) The recycling area should be well lit, sprinklered, separated from the remainder of the building by a one-hour fire separation and wheelchair accessible.
- f) If located outdoors, the recycling area should be screened from public view, without a roof and a minimum 3 m (9.84 ft.) away from a combustible building. Located next to a building, the side of the building next to the recycling area should be of non-combustible materials.

### **On-site Composting**

- a) Consider providing an area for on-site composting to generate materials that can be used for landscape maintenance or to allow for garden plots on the site.

#### **14.4.6.B Mail Delivery**

- a) Provide a covered mail box in a central location that is easily accessible to all residents. The design of this structure should be to Canada Post standards and be compatible with the design of the units in the project.

#### **14.4.6.C Storage**

- a) Provide adequate area for storage within dwelling units, particularly for family-oriented developments.

### **14.4.7 Acoustics**

*The intent is to minimize the impacts of aircraft noise and traffic/transit noise to residential developments.*

- a) Provide acoustic separation between dwelling units, particularly in family-oriented developments. Control sound transmission passively through unit design (e.g., avoid placing bedrooms of one unit adjoining the living room of the neighbouring unit; avoid hard-surfaced floor areas such as kitchens over bedrooms or other quiet rooms).

#### **14.4.7.A Traffic/Transit Noise and Commercial/Industrial Adjacency**

- a) Developments that may be affected by land use interface issues (traffic/transit noise, commercial/industrial adjacency) must be designed and constructed in a manner that mitigates potential noise within the proposed dwelling units. Dwelling units must be designed and constructed to achieve:
- ASHRAE 55-2004 "Thermal Environmental Conditions for Human Occupancy" Standard for interior living spaces;



- CMHC guidelines for interior noise levels as indicated in the chart below:

Portions of Dwelling Units	Noise Levels (decibels)
Bedrooms	35
Living, dining, recreation rooms	40
Kitchen, bathrooms, hallways and utility rooms	45

- b) All Development Permit applications are required to provide an acoustical report to demonstrate how all residential units meet the above requirements. Inclusion of the thermal requirements is critical as being able to meet thermal comfort standards with the windows closed during the summer months is extremely important. All units within the project are to meet these standards. The source noise level referenced in the acoustical report should be based on the maximum source level noise permitted by the City Noise Bylaw.
- c) The acoustical report must also detail whether additional noise alternatives is required due to the proximity of the Canada Line guideway or station platform.
- d) New multiple family residential development adjacent to the Canada Line guideway is to ensure the building design reflects Canada Line adjacency. Where possible, residential units should not be created directly adjacent to the guideway (e.g., avoid residential units at the guideway elevation if possible).
- e) Where private outdoor space is adjacent to noise source (i.e., arterial roads, commercial/ industrial developments), noise mitigating measures should be utilized, such as fencing, berming and landscaping; or provide special mitigation measures as determined by a registered professional trained in acoustics.
- f) Noise from major street and commercial/industrial interface can also be mitigated by:
- careful site layout;
  - orienting private outdoor spaces away from noise source;
  - orienting the front entry and public part of the dwelling toward the noise source and locating quiet rooms such as bedrooms away from the noise source;
  - recessing balconies and facing them with solid balustrades;
  - finishing soffits with material which absorbs or baffles sound waves;
  - providing extra insulation for walls of buildings adjacent to the noise source;
  - triple-glazing windows to reduce noise infiltration;
  - using enclosed balconies or sunrooms facing the noise source as a buffer between living areas and the noise source.

#### 14.4.7.B Aircraft Noise

- a) All Development Permit applications in areas identified in the Aircraft Noise Sensitive Development Map (see Section 3.6.3 Noise Management) shall require evidence in the form of a report and recommendations prepared by a person trained in acoustics and current techniques of noise measurement, demonstrating that the noise level in those portions of the dwelling units listed below shall not exceed the noise level and thermal condition standards set out in the corresponding right-hand column and the ASHRAE 55-2004 "Thermal Environmental Conditions for Human Occupancy". The noise level utilized is an A-weighted 24-hour equivalent (leq) sound level and will be defined simply as noise level in decibels.





Portions of Dwelling Units	Noise Levels (decibels)
Bedrooms	35
Living, dining, recreation rooms	40
Kitchen, bathrooms, hallways and utility rooms	45

- b) Skylights are discouraged in homes located within the area identified in the Aircraft Noise Sensitive Development Map.
- c) In addition to the above, a trained professional is to assist in the design of the private patios and balconies to minimize the noise levels with recommendations for building material selection and space planning.

#### 14.4.8 Edge Conditions (Environmentally Sensitive Areas and Public Open Space)

*The intent is to accommodate and encourage new development while responding to and enhancing adjacent uses such as parkland or environmentally sensitive areas.*

- a) Where multiple family sites lie adjacent to an ESA or park, these landscapes should be “extended” into and through the multiple family site, especially along walkways, pathways, semi-public open spaces, and public areas. In addition, dense planting of indigenous plant material (with appropriate soil and irrigation conditions) should be provided to screen any fences on or adjacent to the ESA from the view of residents.



## B. TOWNHOUSES, STACKED TOWNHOUSES AND ROW HOUSING

*The intent is to ensure that all new townhouse and row house development demonstrates high quality design and neighbourhood fit and careful integration into the character and fabric of existing buildings and streetscapes.*

#### 14.4.9 Building Location and Organization (Site Planning)

*The intent is to provide direction on the location of the multiple family residential units, services and parking.*

##### 14.4.9.A Street Presence

- a) Varied setbacks are encouraged between townhouse clusters along street frontages within a site.



- b) A smaller front yard setback maybe considered to create a well defined street edge (e.g., entry, front stoop and landscaping between the public sidewalk and unit) and to reinforce a stronger “urban” character, provided that compatibility with setbacks of adjacent residential development is achieved.
- c) Finished grade elevation of main floor units to be no more than 1.2 m (3.98 ft.) above the public sidewalk to ensure an appropriate level of street interface.

#### 14.4.9.B Entrances

- a) Entrances to townhouses should enhance the pedestrian-scale character of the area by strengthening a unit’s connection with public streets and internal roadways.
- b) Main pedestrian entrances to the housing units should front onto public streets and walkways; otherwise, front onto the internal courtyards, walkways and drive aisles.
- c) Where townhouses are designed with the end wall adjacent to the public street, the pedestrian entry for the end unit should be designed to face the street.
- d) Porches are encouraged. The maximum depth of the porches should be limited to 1.5 m (4.92 ft.). Design porches to incorporate prominent main entries and integrate into the facade, rather than appearing “tacked on”.
- e) Verandas are encouraged. Verandas should be between 1.8 m (5.9 ft.) and 2.5 m (8.2 ft.) deep to allow for usability. Design verandas to be integrated into the facade and the main entries.
- f) Discourage situations where the main entrances to units are adjacent to, or on the same façade as garage doors. Where this situation is unavoidable, sufficient space for access to front doors should be provided and the pedestrian entry should have a visual prominent.
- g) Unit entrances should not be located adjacent to visitor parking stalls, outdoor amenity area and garbage and recycling collection area. If this situation is unavoidable, a transition zone between the unit entry and these amenities is required.

#### 14.4.9.C Adjacent to Parks and Open Space

- a) Organize layout and design of townhouses adjacent to parks and pedestrian corridors so that buildings:
  - face parks and open spaces across a parkside street and/or face an abutting linear park or pedestrian corridor;
  - have direct access from the units to the park/pedestrian corridor.

#### 14.4.9.D Garbage, Recycling and Organics Storage

- a) Garbage, recycling and organics storage bins must be easily accessible, contained within a roofed/walled enclosure.
- b) Locate storage structures and/or enclosures closer to the site entrance.
- c) Consider attaching the enclosures to a townhouse cluster ending.
- d) Locating storage structures and/or enclosures at the entry driveway is discouraged. If this situation is unavoidable, the facilities must be fully enclosed and screened from public view.
- e) Locating storage structures and/or enclosures within any required yard setback is discouraged. If this situation is unavoidable, the facilities must be fully enclosed and screened from view.



#### 14.4.9.E Parking and Garages

##### Surface Parking

- a) Surface parking should not be located within the front yard or flanking side yard.
- b) Surface parking located within the required side and rear yard setbacks is discouraged. If this situation is unavoidable, the parking stalls should be appropriately screened and designed with adequate manoeuvring space at the “dead-ends”.
- c) Surface parking should not be located in obstruction to any unit entrances and internal pedestrian circulation.

##### Parking and Garages

- a) The setback to garage doors from the edge of an internal drive aisle should not be less than 0.6 m (1.97 ft.) or more than 1.0 m (3.28 ft.) to ensure that temporary parallel parking does not occur across the garage door.
- b) Paired garage doors should be separated by the entry door to the unit or by a small landscaped area that could accommodate a tree with a minimum caliper size of 6 cm (2.36 in.).
- c) Garages that provide a tandem parking arrangement will be evaluated on a site by site basis.
- d) In developments containing more than 20 units, a combination of two-car side by side garages with single car tandem parking garages is recommended.
- e) If a one-storey attached garage extends toward the internal drive aisle, its mass should be minimized as much as possible and the portion of a one-storey garage that extends out toward the internal drive aisle should be no more than 50% of the depth of the garage.

#### 14.4.10 Building Form

*The intent is to have new development fit into the neighbourhood and on the site.*

##### 14.4.10.A Building Massing and Scale

- a) Buildings should be compatible in scale and form with the surrounding developments.
- b) Overall massing of the buildings should be based on simple, regular shapes with strong gable roof forms, with a strong pitch as a component in the façade toward the street.
- c) High pitch, strong roof slopes and overhangs/eaves projections are recommended; the minimum desirable roof slope is 8/12.
- d) Consider the use of roofs as key elements to help “break up” multiple family buildings so they may adopt a form, scale and rhythm sympathetic to adjacent single family developments.

##### 14.4.10.B Articulation of Building Clusters

- a) Clusters along the street should not be repetitive. Duplex clusters should avoid the mirror image effect.
- b) Small variations in setbacks for individual units within a building cluster along a street are recommended to reflect the scale and articulation found in single family areas and avoid long, continuous and unarticulated building frontages along the street. Staggering of units along internal drive-aisles is also encouraged.
- c) Variations in height, separations, roof lines may be considered between clusters to provide visual diversity within the development; however, overall expression should be a cohesive urban form and unity of architectural expression.



- d) Eaves, bay windows and other projections from the building face are encouraged.
- e) The height of the end units of a building cluster should be lowered to provide mass articulation and, where the cluster ends perpendicular to the street, achieve a gradual transition to pedestrian scale.
- f) The maximum number of townhouse units in a cluster should be six. The number of units in a cluster may be increased to eight if the cluster is at the edge of a school site or a park/pond, or if the adjacent clusters are separated by broader open areas developed to improve circulation and enhance the landscape.
- g) Any housing unit exposed to direct views from the street (such as cluster ends on both sides of a drive aisle entrance to a site or cluster ends that abut a public street), should provide sufficient architectural detailing and be treated as a front elevation.

#### 14.4.10.C Transition to Adjacent Single Family Housing

- a) Townhouse units situated near single family developments should be particularly sensitive to issues of privacy/overlook over adjacent properties. Consideration should be given to greater setbacks above the ground floor, special landscaping measures and/or orienting living areas away from neighbours.
- b) Provide a transition between townhouse units and single family housing by building duplex units along property lines as buffer zones.

#### 14.4.10.D Light, View & Privacy

- a) Maximize sun access through proper building configuration, massing and building cluster orientation.
- b) Consider terracing upper levels of townhouse clusters to increase sun penetration to the interior of the site, especially toward outdoor amenity areas.
- c) Provide adequate distance between buildings to ensure appropriate light, view and privacy.
- d) The location and orientation of windows, decks and balconies should be carefully considered to reduce looking into close-by windows of existing adjacent development.

### 14.4.11 Building Face: Architectural Treatments

*The intent is to ensure that development has a high quality character and finishing.*

#### 14.4.11.A Image and Character

- a) Architectural design, character, materials and detailing of townhouse developments should incorporate many of the features found in single family areas but at a higher intensity of development.
- b) Individual units of townhouse clusters that front on the street should be designed to be identifiable through single family residential design features including, among others, simple roof forms with strong gable lines, dormers and habitable attics, extended porches and recessed entries that will also provide articulation to facades and reinforce a unified residential character along the street.
- c) To relate to the character of any adjacent single family in the neighbourhood, the design of townhouses fronting the street may incorporate, as a dominant component of the facade, one or several of the following architectural features/elements: bay windows; windows with muntins and mullions; rectangular/square shaped windows; French doors; porches, verandas and colonnades where possible.
- d) Provide appropriate design treatment to both street facades when the building is on a corner. The design of a corner can be unique and incorporate special features.



- e) Individual unit designs should be varied to avoid significant repetition either within a row or between adjacent rows of units.
- f) Townhouse units fronting onto a local road should reflect a single family character (e.g., 2 storey height, except that 2 ½ storeys may be permitted at the corner of an arterial road and local road).
- g) Consideration should be given to variations in building height, separations, roof lines and setbacks between buildings to provide visual diversity within the same development.
- h) Architectural treatment of unit entrances should reinforce proximity to grade level (e.g., avoid two-storey features).
- i) Decorative architectural detailing, complementary to the rest of the units, is to be considered in the building clusters along the internal drive aisle.
- j) Incorporate decorative architectural treatments that are complementary to unit finishes, such as windows, on and above garage doors.

#### 14.4.11.B **Shape and Layout of Windows**

- a) Windows should be visually prominent in street fronting façades and should be articulated with colour and/or white trim. The use of muntins and mullions in street fronting windows is encouraged.
- b) Scale and proportions of dominant windows should be compatible with the massing and roof forms of the building or portion of the building that contains them. Large, horizontal picture windows are not considered appropriate.

#### 14.4.11.C **Exterior Walls and Finishing**

##### **Quality and Durability of Materials**

- a) Materials to convey an image of quality, durability and a high level of craftsmanship.
- b) Buildings and roofing materials should reflect the heritage and climate of Richmond.

##### **Materials**

- a) The number of dominant materials used in any elevation should be no more than two (2). A third material might be used on upper floors, on gable ends.
- b) Recommended materials to be used on any elevation can include: clapboard, scale, wood, vinyl and shingle siding, brick and board and batten.
- c) Horizontal siding and wide trim around windows is the recommended basic finishing. Consider the use of strong, bold colours in contrast with white or light colours for façade details and trim.
- d) Stone is recommended as an accent material.
- e) Stucco is acceptable when used in combination with other exterior finishing materials.

##### **Roof Materials**

- a) Cedar shingles or a similar type of roofing (in terms of colour and texture), or high profile asphalt shingles are preferred to accentuate a single family character.

##### **Flashing and Gutters**

- a) Flashing and gutters should be integrated into the design of the building in terms of colour, location on the façade, or other method.





## 14.4.12 Landscaping and Open Space Design

*The intent is that landscaping be lush and that fences or gates be attractive, particularly along any street frontages or common areas.*

### 14.4.12.A Landscaping

- a) Landscape both the public boulevard and private property to enhance the pedestrian environment.
- b) Consider a landscape design of the street-fronting portion of the site that reflects the character of front yards in adjacent single family, where appropriate to the context.
- c) Where the ground floors of units are not intended as habitable space, yards should be raised to enhance relationships between the first living level and the public realm and to discourage conversion of ground floor space to other uses. However, unit entry should be no more than 1.2 m (3.94 ft.) above the grade of adjacent public sidewalks and walkways.
- d) Where the only private open space of a unit is provided on the yard facing an arterial street, a balcony or deck space adjacent to the main living area, facing the internal drive aisle or walkway, should be provided.

### 14.4.12.B Fences and Gates

- a) If fences are unavoidable, provide metal transparent fences and brick or stone pilasters (in combination with landscaping).
- b) In some cases, wooden picket, lattice, three board fences or similar is acceptable.
- c) Vehicle gates at townhouse site entrances are discouraged. To define the boundary between private and public space, provide:
  - pavement in contrasting colour and texture across driveway entrances;
  - minor architectural elements;
  - appropriate landscaping.
- d) Individual gates that access street fronting yards and the main door of street oriented townhouse units are encouraged.
- e) Trellises, arbours and low walls may be considered at the entrance point of walkways from the street to the interior of townhouse sites or ending of internal drive aisle to screen paved areas from view and to clearly define the threshold between public and private spaces.
- f) Fences within the front yard should be no higher than 1.2 m (3.94 ft.) and should be placed a minimum of 0.50 m (1.64 ft.) from the internal edge of the sidewalk. Trellises and arbours should be placed a minimum of 0.50 m (1.64 ft.) from the fences along the front property line. In yards that abut public spaces, landscaped terraces no greater than 0.5 m (1.64 ft.) high and no less than 0.75 m (2.46 ft.) deep should be used to reach the new grade.
- g) Internal drive aisles that provide access to garages should be treated as vehicle courtyards and include textured, contrasting, coloured pavers.
- h) The use of decorative pavers within a drive aisle is encouraged to define a pedestrian pathway where there is no other means of pedestrian circulation through the site.



### 14.4.13 Arterial Road Guidelines for Townhouses Bylaw 9603 2016/12/19

*The intent is to provide articulation and character to the building form and landscaping of townhouse development on the arterial roads.*

#### 14.4.13.A Front Yard—Building Heights and Form

- a) Building massing of 3 storey townhouse units should be reduced by stepping back the top storey or enclosing it under a pitched roof.

#### 14.4.13.B Side Yard—Building Heights

- a) Step down to a maximum building height of 2 storeys or 9 m (30 ft.), whichever is less, within 7.5 m (25 ft.) of the side yard interface with single-family housing and 2 storey townhouse developments. For townhouse buildings with a flat roof, the maximum height is 7.5 m (25 ft.).

#### 14.4.13.C Rear Yard—Building Heights and Form

- a) Along the rear yard interface with single-family housing:
- the building height should be 2 storeys or 9 m (30 ft.), whichever is less. For townhouse buildings with a flat roof, the maximum height is 7.5 m (25 ft.);
  - the building form should be limited to two (2) units in a townhouse cluster (i.e., duplex), except in certain situations where the City deems three (3) units in a townhouse cluster (i.e., triplex) as being appropriate.

#### 14.4.13.D Rear Yard—Setbacks

- a) Along the rear yard interface with single-family housing:
- should have a 6 m (19.7 ft.) setback;
  - may have a ground floor setback of 4.5 m (14.8 ft.) up to 50% of the width of the building, subject to:
    - no impact to tree preservation;
    - appropriate opportunities for tree planting (e.g. a landscaped area that could accommodate a tree with a minimum caliper size of 8 cm (3 in.) or a minimum height of 4.0 m (14 ft.), outside of any SRW's);
    - the provision of appropriate private outdoor space (e.g. minimum 30 m<sup>2</sup> or 323 ft<sup>2</sup>);
    - bay windows and porches not projecting into the 4.5 m (14.8 ft.) setback.

#### 14.4.13.E Front Yard—Setbacks

- a) Along the front yard facing the arterial road:
- should have a 6 m (19.7 ft.) setback;
  - may have a 4.5 m (14.8 ft.) setback where a 6 m (19.7 ft.) rear yard setback to both the ground and second floors of the rear units is provided, subject to:
    - no impact to tree preservation;
    - an appropriate interface with neighbouring properties;
    - appropriate building articulation with a mix of projections, recesses, and staggered or varied building setbacks;
    - appropriate opportunities for tree planting (e.g. a landscaped area that could accommodate a tree with a minimum caliper size of 8 cm (3 in.) or a minimum height of 4.0 m (14 ft.), outside of any SRW's);
    - the provision of appropriate private outdoor space (e.g. minimum 30 m<sup>2</sup> or 323 ft<sup>2</sup>);
    - balconies, bay windows, and porches not projecting into the 4.5 m (14.8 ft.) setback.



#### 14.4.13.F **Design Fronting Local Roads**

- a) Design the townhouse units fronting onto a local road to have a single-family character (e.g., 2 storey height, except that 2½ storeys may generally be permitted at the corner of the arterial road and local road).

#### 14.4.13.G **Overlook and Privacy**

- a) Locate windows and private outdoor areas carefully to avoid adjacent overlook and privacy concerns.

#### 14.4.13.H **Roof Lines**

- a) Vary roof lines to break down the massing, promote opportunities for sunlight penetration and provide visual interest.

#### 14.4.13.I **Landscaping**

- a) Landscaping for townhouse developments shall:

Bylaw 10339  
2022/03/21

- meet the City's tree replacement policy requirements as specified in Tree Protection Bylaw 8057 where one or more existing trees are being removed;
- comply with the minimum planting sizes specified in the City's Tree Protection Bylaw where replacement trees are being planted, unless approved otherwise by the Director of Development or designate;
- have a minimum planting height of 0.3 m–0.45 m (1 ft.–1.48 ft.) for shrubs; shrubs over 1.2 m (3.94 ft.) in height is discouraged;
- include an appropriate mixture of deciduous and coniferous trees, with the coniferous being sized and spaced appropriately and to address Crime Prevention Through Environmental Design (CPTED) principles.

### 14.4.14 **Arterial Road Guidelines for Row Houses**

Bylaw 9603  
2016/12/19

*The intent is to provide articulation and character to the building form and landscaping of row house development on the arterial roads.*

#### 14.4.14.A **Site Planning**

- a) All row house units should be oriented toward the arterial road with vehicle access from a rear lane.

#### 14.4.14.B **Variety in Design**

- a) Developments should include a variety of unit types, sizes, and unit treatments to encourage architectural diversity.
- b) Variations in the design of row house clusters should be encouraged so that no two (2) substantially similar row house clusters are located side by side.
- c) Row house clusters should avoid the mirror image effect.

#### 14.4.14.C **Street Presence**

- a) All row housing units should be oriented towards the street through individual front entrances and landscaped front yards.
- b) Row housing units that are developed on flanking lots should be designed to address both the flanking and fronting streets.

#### 14.4.14.D **Entrances**

- a) Pedestrian entry for the corner unit should be designed to face the flanking street.
- b) Entrances should be designed to articulate the individual units in keeping with surrounding neighbourhood character and to enhance the pedestrian-scale character of the area.

**14.4.14.E Private Outdoor Space**

- a) A private outdoor space with a minimum area of 30 m<sup>2</sup> (323 ft<sup>2</sup>) and a minimum width and depth of 4.5 m (14.8 ft.) should be provided on the lot outside of the front yard and flanking side yard unoccupied and unobstructed by any buildings, structures, projections and on-site parking, except for cantilevered roofs and balconies which may project into private outdoor space for a distance of not more than 0.6 m (1.97 ft.).

**14.4.14.F Parking and Garages**

- a) All row housing lots should have direct access to a rear lane from which parking can be accessed.
- b) Garages should be designed to minimize the visual impact along the rear lane.
- c) Garage door width should be minimized and paired up to provide additional landscaping opportunities along the rear lane.
- d) Paired garage doors should be separated by a small landscaped area that is sufficiently large to accommodate a tree with a minimum caliper size of 6 cm (2.5 in.).

**14.4.14.G Garbage, Recycling and Organics Storage**

- a) Garbage, recycling and organics storage bins should be easily accessible, and should be contained within a roofed/walled enclosure that is set back a minimum of 1.5 m (4.92 ft.) from the rear lot line.

**14.4.14.H Building Massing and Scale**

- a) Building mass should be arranged to minimize shadowing and optimize natural lighting. Consider terracing upper levels to increase sun penetration to the interior of the site, especially toward the private outdoor areas.
- b) The maximum number of units in a row house cluster should be 6 units and the maximum length of a row house cluster should be of 35 m (115 ft.).
- c) At least 40% of the gross floor area of each row house unit should be located on the second floor.
- d) The maximum building depth of an interior unit should be 15 m (49 ft.).
- e) Party wall between two (2) row housing units should be no less than 75% of the total area of the exterior walls on or adjacent to the common side lot line on either unit.
- f) The maximum length of a garage cluster should be 20 m (66 ft.).

**14.4.14.I Character**

- a) Row house developments should use visual means to separate units in order to avoid monotony and avoid the impression of one long, continuous and unarticulated building front.
- b) Row house units should be designed to be identifiable through single family residential design features that will also reinforce a unified residential character along the street.

**14.4.14.J Windows**

- a) Side yard windows should be modest in size and be recessed in that section of the building façade.
- b) Building faces and dormers should not be windowless, and sidelight windows should be incorporated into bay projections.

**14.4.14.K Materials**

- a) Vinyl siding is acceptable if finished with wood or other high quality detailing.



#### 14.4.14.L **Tree Planting**

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- a) Where one or more existing trees are being removed, the City's tree replacement policy requirements as specified in Tree Protection Bylaw 8057 must be met.
- b) Comply with the minimum planting sizes specified in the City's Tree Protection Bylaw where replacement trees are being planted.
- c) A grassed strip with at least one (1) deciduous tree (minimum 6 cm or 2.5 in. caliper) per lot should be installed along the front property line.
- d) A minimum of one (1) deciduous tree (minimum 6 cm or 2.5 in. caliper) or one (1) coniferous tree (minimum height 3.5 m or 11.5 ft.) should be planted on each lot in the front yard.
- e) In the case of a corner lot, additional trees should be planted within the flanking side yard.
- f) Include an appropriate mixture of deciduous and coniferous trees, with the coniferous being sized and spaced appropriately.

#### 14.4.14.M **Landscaping**

- a) The grade between the City's sidewalk and the landscaping along the front property line should be the same.
- b) All front yard areas along front property lines should be planted with a combination of lawn, flower beds, flowering shrubs and ground cover to provide seasonal interest and water permeability.
- c) If individual shrubs are planted in the front yard, they should be of a low height that will not exceed 1.2 m (3.94 ft.) and should be located behind any fencing on the front property line.
- d) Continuous hedges are not permitted within the front yard.
- e) Material for walkways/pathways from the arterial road to the entrance of the row house units should be aggregate concrete, stamped concrete, paving stones, pervious paving or other acceptable material to the City. Asphalt is not permitted.
- f) An unobstructed, permeable pathway of a minimum 0.9 m (2.95 ft.) wide should be provided between the rear lane and the private outdoor space of the lot if the lot in question is an interior lot or an end lot, which has a lot width equals to or great than 7.2 m (24 ft.).
- g) Landscaping should be provided on areas along the rear property line and internal drive aisle where the areas are not used for parking purposes.
- h) Provide adequate lighting to enhance security and visibility, particularly along the rear lane. Exterior lighting should be designed to avoid "light-spill" onto adjoining properties.

#### 14.4.14.N **Fences and Gates**

- a) Fences in front yards and flanking side yards should be picket, wicket or post-rail; metal transparent fences with brick or stone pilasters are also encouraged. Solid panel is not permitted.
- b) Fencing area should be designed to incorporate flower beds, flowering shrubs and other low lying landscaping.
- c) Decorative arbours/brackets/trellis features may be used to further articulate the fencing provided that they are in scale with and complementary to the fencing details and be placed a minimum of 2.0 m (6.56 ft.) from the front property line.





## C. LOW TO MID-RISE HOUSING

*The intent is to integrate 4-storey buildings (and up to 6 storeys at some locations) into some areas located in close proximity to future Neighbourhood Centres (e.g., Broadmoor, Blundell and Garden City Shopping Centres), to provide a more urban character to the Neighbourhood Centres and to define a transition between the Neighbourhood Centres and lower density townhouses and single family neighbourhoods.*

### 14.4.15 Building Location and Organization (Site Planning)

*The intent is to provide direction on the location of the apartment entrances, services and parking.*

#### 14.4.15.A Building Orientation/Setbacks from the Street

- a) Locate the main facade parallel to the street, not perpendicular and set it in line with adjacent buildings.
- b) Whenever possible, a north-south orientation of the building should be provided to improve sun access for most of the units.
- c) Provide individual access from grade for as many units as possible and these units should be setback a minimum of 4.5 m (18.76 ft.) from the property line.

#### 14.4.15.B Entries and Front Yards

- a) To reinforce a friendly and pedestrian oriented streetscape, provide grade level units with presence on the street including:
  - separate and individual pedestrian entries;
  - entry gates and front gardens as semi private amenity space;
  - raised patio areas or porches/stoops.
- b) To provide adequate privacy to these outdoor areas, the front deck/patios along the street frontage should be:
  - 3.0 m (9.84 ft.) minimum depth;
  - a minimum of 0.6 m (1.97 ft.) to a maximum of 1.0 m (3.28 ft.) above the sidewalk grade elevation.
- c) Finished grade elevation of main floor units may be slightly higher than the patio/deck elevation but not higher than 1.2 m (3.94 ft.) above the public sidewalk.



- d) If in close proximity to a Neighbourhood Centre area (shopping mall site), consider providing retail/office uses (Live/Work type) in the building main floor with reduced front yard setbacks and clear and direct access from the public sidewalk.

#### 14.4.15.C Main Building Entrances

- a) The main entry to the building should be located fronting on the street and the main lobby clearly visible from the sidewalk.
- b) Building entrances should be clearly identifiable. Consider highlighting the entrance to the building with a canopy that extends toward the street.
- c) Consider gateways, special paving on entry walks, rows of trees or pairing of light standards along the way leading to the building entrance(s).
- d) Individual buildings in apartment complexes should have a clearly visible street address and direct access to their own parking areas.
- e) The main entrance should be in a prominent location to enable a motorist to easily identify a multiple family complex and the driveway at the same time.
- f) Entrances for sites with long driveways should be accessible by a distinct and separate pedestrian sidewalk that is clearly visible from the public street.
- g) Buildings with the main pedestrian entrance located on the street may have the front setback reduced provided there is sufficient transition space between the sidewalk and the entrance.

#### 14.4.15.D Landscaping and Open Space Design

- a) Landscaping should consider low retaining walls or step planters to help define private and semi-private space of units fronting the street.
- b) Low stone or masonry walls or pilasters in combination with low transparent metal fences are required along all street frontages to achieve a strong delineation of public and private space.
- c) Fences within the front yard should not be higher than 1.2 m (3.94 ft.).
- d) Low retaining walls, planters and/or raised decks should be located a minimum of 0.5 m (1.64 ft.) from the inside edge of the public sidewalk and should not be higher than 0.5 m (1.64 ft.). Landscaped terraces no greater than 0.5 m (1.64 ft.) high and no less than 0.75 m (2.46 ft.) deep should be used to reach the new grade.
- e) Landscaped areas should include large deciduous trees to provide shade in summer and allow for sun penetration in winter time.
- f) Front yard areas should be landscaped in the same character and relate to the landscaping and streetscape found in the single family or townhouse areas of the adjacent neighbourhood.
- g) The distance from the sidewalk to the closest paved area within the site should not be less than the required front yard setback.
- h) Trellis structures in combination with low planters, fences and landscaping should be used to screen any paved areas exposed to views from the street.

#### 14.4.15.E Access and Parking

- a) Access to be provided from a secondary street or from a rear lane.
- b) Parking should be located in parking structures or in covered parking lots, with clearly marked entrances and generally screened from public view.
- c) Visitor parking may be provided at grade if screened from view from the street and not located within the required front yard setback.



- d) No portion of surface parking or an internal drive aisle should be provided within the required front yard setbacks.
- e) In order to screen paved areas and long views toward the interior drive aisles of a proposed development, landscaping, combined with trellis structures and low planters should be provided at any internal drive aisle that ends at the front yard setback line, perpendicular to the street.
- f) On-street parking (parking pockets) in front of the ground floor units is desirable to activate the street, reinforce pedestrian character and act as traffic calming.

#### 14.4.16 Building Form

*The intent is to have new development fit into the neighbourhood and on the site.*

##### 14.4.16.A Massing and Scale

- a) Development should be massed and located in such a way that respects the scale of adjacent buildings, protects views, minimizes overlook and shadowing of existing residences.
- b) The maximum length of an apartment building (or a building face without a strong recessed vertical break) should be no more than 40.0 m (131.23 ft.).
- c) Street wall building should respond to the rhythm of adjacent blocks. Long frontages should be avoided or expressed as a series of distinct adjacent buildings or building forms.
- d) Break the massing into smaller vertical components to express the rhythm of a series of house forms or the individual and repeated expression of rowhouses.
- e) Building massing should be broken down in various sub-components and articulated to facilitate the transition to lower density and smaller scale forms, such as townhouses and single family housing.
- f) Architectural features and a unique resolution of the end/corner of building(s) should be considered to establish landmarks at strategic locations.

##### 14.4.16.B Terracing and Setbacks

- a) Building setbacks should aim to optimize views, open space and achieve a proper interface with adjacent developments.
- b) Employ terracing and building setbacks on upper levels of taller street-wall buildings (over 4 storeys) to create interest, improve access to light and views and to reduce apparent bulk.
- c) Variation in setbacks along the building frontage is recommended to provide stronger massing articulation and avoiding continuous long, flat, building frontage to the street.
- d) Provide stepping-back of the upper levels of buildings to allow for mass and height transition (and allow for terraces/decks in upper level units) toward lower townhouse building areas and/or the street.
- e) Transition from higher to lower building height/mass should take place across a street.
- f) Height /mass transition to abutting sites, without the intervention of a street, should be achieved through gradual stepping-down of the height to match that of the lower abutting existing or expected building type.
- g) In buildings higher than 4 storeys, floors above the second level should be recessed from the lower floors by a minimum of 2.0 m (6.56 ft.) to maintain the pedestrian scale at street level.



- h) New development along edges immediately adjacent to existing residential and where there are no intervening streets or lanes, should not exceed 3 storeys and should be setback a comparable distance from the shared property line.

#### 14.4.17 Building Face: Facade Articulation

*The intent is to ensure that development has a high quality character and finishing.*

##### 14.4.17.A Roof Design

- a) Roof design should relate to the size and scale of the building, relate to the character of the surrounding buildings and contribute to the streetscape.
- b) Roof forms should borrow gable roof characteristics when inserted in an area with a dominant single family or low-density townhouse residential character.
- c) Flat roofs are considered appropriate at strategic locations if provided with large overhangs.

##### 14.4.17.B Balconies and Decks on Upper Levels

- a) Balconies and decks should be designed as integral parts of the building massing and facade composition.
- b) Recessed entries and decks in upper levels should be used to articulate facades and reinforce a unified residential character.

##### 14.4.17.C Windows

- a) Punched-in windows and brick veneer should be dominant on the lower portions of the building to reduce the apparent building mass and height. Extension of these features up to the top of the building may be also used to provide interest and provide vertical articulation to the building façade.
- b) Window placement and design should be well ordered and be of a simple configuration.
- c) Large picture windows without muntins and/or mullions are not appropriate.
- d) Window planters are suggested to create a festive and friendly face for the dwelling units facing the street.

##### 14.4.17.D Exterior Walls and Finishing

###### Quality and Durability of Materials

- a) Materials should be designed and detailed to express quality and ensure durability.
- b) Materials used should be appropriate to the scale and design of building elements.
- c) Exterior wall cladding materials should be limited in number and changes in cladding should relate to the building design, such as to express the base or foundation of the building.
- d) The same quality of materials and architectural treatment should be used in all facades.
- e) Large blank walls should be avoided. Window openings, detailing, materials, colour, wall articulation and landscaping should be used to enliven them and reduce their scale.

###### Materials

- a) Recommended exterior materials include wood siding, stained or painted; vinyl siding in combination with other quality materials such as brick; brick veneer, acrylic stucco, stone and stucco are to be used preferably in the lower parts of the building.
- b) Stone and masonry is to be on planters and paving.



### Roofing, Eaves, Brackets

- a) Building details and roofing structures (eaves, brackets, etc.) should express a high level of craftsmanship and reflect the local/regional climate.

### Guardrails, fences, canopies, sunscreens

- a) Consider steel or aluminum for guardrails, fences, canopies, sunscreens and other architectural details. These materials may be combined with glass where appropriate.

### Colours

- a) Light colours are preferable for use on fascias and trim to contrast with strong colours for wall finishing materials to highlight architectural details. Soffits and ceiling of balcony projections could consider burnished natural wood to add a touch of warmth and single family flavour.
- b) Deep, rich colours and greys are recommended for the buildings or combined with lighter colours to highlight, contrast and articulate facades. A variety of colours is encouraged in the buildings where in group and even within individual buildings.

### Flashing and Gutters

- a) Flashing and gutters should be well integrated into the design of the building and positioned in the facades following the inside corners in an inconspicuous manner.

### Shading Elements

- a) The west side of buildings should provide shading elements such as sunshades, screens, eave projections, balconies, overhangs, etc. to minimize the impact of horizontal sunlight late in the afternoon.



## D. HIGH-RISE HOUSING

*The intent is to provide guidelines for high-rise housing outside of the City Centre and outside those areas covered by an Area Plan or Sub-Area Plan.*

### 14.4.18 Building Location and Organization (Site Planning)

*The intent is to ensure that the entrances to the main building are highly visible from the street and easy to access for pedestrians.*

#### 14.4.18.A Main Building Entrances

- a) Entrances to buildings should be located on a public street.





- b) Individual buildings in apartment complexes should have a clearly visible street address and direct access to their own parking areas.
- c) The main entrance should be in a prominent location to enable a motorist to easily identify a multiple family complex and the driveway at the same time.
- d) Entrances for sites with long driveways should be accessible by a distinct and separate pedestrian sidewalk that is clearly visible from the public street.
- e) Buildings with the main pedestrian entrance located on the street may have the front setback reduced provided there is sufficient transition space between the sidewalk and the entrance.

### 14.4.19 Building Form

*The intent is to have new development fit into the neighbourhood and on the site.*

#### 14.4.19.A Massing and Scale

- a) Towers should be designed to minimize shadowing, view and privacy impacts.
- b) Towers should have “slim” profiles and compact floor plates. Tower floor plates above an elevation of approximately 21 m (68.9 ft.) from grade should be limited to a maximum size of approximately 600 m<sup>2</sup> (6,459 ft<sup>2</sup>).
- c) Towers should incorporate low-rise “podium” buildings of a scale and character in keeping with the local area.
- d) Towers should be set back at least 4.5 m (14.76 ft.) from the face of low-rise “podium” buildings.
- e) Where appropriate, mid-rise terracing between towers and low-rise “podium” buildings are encouraged.
- f) A distance of at least 24 m (78.74 ft.) to 36 m (118.11 ft.) between towers should be maintained.
- g) Staggered spacing of towers and units is recommended to maximize primary private views past neighbouring high-rise developments and to avoid overlook from one tower to another.
- h) Towers should be designed to break down the massing and present a residential scale to the street.
- i) Provide a side yard height step-back where towers are adjacent to townhouse or single family housing. Also, provide height step-backs at street corners, in the form of lower (e.g., 1 or 2 storeys), building elements.

#### 14.4.19.B Roofscape

- a) Vents, mechanical rooms, mechanical equipment and elevator penthouses should be integrated into architectural roof treatments, or screened with materials and finishes compatible with the overall building design.
- b) Open upper decks of parking garages should be landscaped.
- c) Rooftops should be landscaped and made accessible to residents as usable common (and private) outdoor space, particularly on roofs of low-rise “podium” buildings. For mixed uses, where alternative public open spaces are limited, accessible lower-level roof decks should also be developed to provide open space for non-residential tenants, or the public.





## 14.5 Commercial and Commercial/ Mixed Use Guidelines

*These Guidelines are intended to guide the form and character of development in Neighbourhood Service Centres as well commercial buildings and mixed use developments (e.g., commercial and residential uses) outside the City Centre and Steveston Village.*

The Commercial and Commercial/Mixed Use Guidelines and General Guidelines apply to developments that require a Development Permit in these areas.



## A. COMMERCIAL MIXED-USE REDEVELOPMENT WITHIN SHOPPING MALL SITES, OUTSIDE THE CITY CENTRE

*The intent is to enhance the design, character and function of shopping mall sites to reinforce their future role as vibrant, compact mixed use hubs and community focal points with a mix of housing, shops and services.*

Prior to redevelopment and densification, shopping malls outside the City Centre will be subject to specific master planning processes. Below are some general considerations to guide the redevelopment of the shopping mall sites.

### 14.5.1 Site

*The intent is to ensure that development fits into the neighbourhood and enhances the public/pedestrian realm.*

#### 14.5.1.A Street Presence

- a) Place new buildings along the perimeter of the site close to property lines along the arterial roads to reinforce building frontage continuity and create a street edge.
- b) Commercial units at the ground floor should have direct pedestrian access to the public sidewalk along the arterial roads.

#### 14.5.1.B Mall Site Integration to Adjacent Neighbourhood

- a) Create a hierarchy of access routes and pathways through the site.
- b) Improve the connectivity of the site to the broader community by creating multiple access points/connections to the site from adjacent neighbourhood, local streets, parks, school sites and other focal points.
- c) Design prominent corners (mall site intersections) and entry points as unique gateways and landmark features that identify the access points for pedestrians.
- d) Consider creating a public urban space at a corner.
- e) Provide pedestrian connections through main blocks of buildings to the adjacent neighbourhood.



#### 14.5.1.C Pedestrian Circulation and Connections

- a) Pedestrian corridors should connect significant nodes within the site, have a beginning and ending, and be separated from parking areas and driveways.
- b) Define sidewalks and pedestrian corridors through the site by using contrasting pavement colours, surfaces and textures.
- c) Embellish corridors with landscaped features and human scale lighting.
- d) Ensure that corridors are universally accessible and accommodate a range of users (e.g., wheelchairs and strollers) by methods such as curb cuts and level entry ways.
- e) Extend pedestrian pavement across drive aisles to reinforce pedestrian priority over vehicles and establish a continuity of pedestrian circulation.
- f) Transit stops should be visible and easily accessible by pedestrians and cyclists.
- g) Buildings adjacent to transit stops should integrate transit shelters into building design with weather protection - awnings, overhangs and waiting spaces.

#### 14.5.1.D Character and Amenities

- a) Provide open spaces, unique landscapes, public art, furnishings and landmark features to enhance the character and reinforce the role of the shopping centre as a neighbourhood focus.
- b) Create and design internal nodes to be neighbourhood gathering places.
- c) The choice of materials, colours and elements such as lamp standards, benches, fences and trash receptacles should be consistent in design and contribute to an identifiable character.
- d) Seating (seating walls or benches integrated with planters) should be provided along all pedestrian routes.
- e) Bicycle parking facilities should be provided at all residential and commercial building entrances.

#### 14.5.1.E Signage

- a) Consider signage that identifies the neighbourhood centre by name, provides directional information within the shopping centre sites and to key focal points in the community.
- b) Signage should be integrated with the existing architecture and be compatible with adjacent residential areas.

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2013/03/18

- c) Way finding signage to visitor parking spaces for residential units should be provided at the entrance to the development, at each location where a visitor vehicle needs to turn and at a maximum spacing of 50 m (164 ft.). The design/format and colour of the way finding signage is to be reviewed and approved by the City.

#### 14.5.1.F Vehicle Access and Loading and Parking

- a) Multiple vehicle access points will be discouraged.
- b) Access will be designed to minimize disruption of the pedestrian environment.
- c) Integrate loading areas as part of the building and provide appropriate visual screens and/or gates.

#### 14.5.1.G Parking

##### Parking Within the Building Envelope

- a) All residential parking and most of the commercial parking will be located within the building envelope on one or more levels.
- b) Parking structures will be screened from view either by wrapping the parking with residential or commercial units, or through the use of architectural features.





### Surface Parking

- a) Minimize the amount of surface parking and limit to convenience parking for retail shops.
- b) Organize parking into small clusters and screen from direct views from streets by the placement of buildings, trellis and/or lattice structures, low planters and landscaping.

#### 14.5.1.H Landscaping

- a) There should be a hierarchy of continuous, grade separated pedestrian walkways through parking lots.
- b) Pedestrian walkways and sidewalks through surface parking areas should be separated from parking spaces by a landscaped area and include shade trees at an approximate ratio of one tree per six parking spaces.
- c) Trees in parking lots should be planted as rows with continuous trenches (not pocket planted).
- d) Plant a double row of trees around the perimeter of the site and on main entry driveways to form a canopy over the sidewalks and driveways.
- e) Plant “groves” of trees and shrubs in surface parking areas so that, approximately 10 years after planting, at least 50% of the parking lot will be covered by a canopy of leaves in the summer.
- f) Provide a few larger planting areas to create visual landmarks and that allow the growth of large size trees on small landscaped islands evenly distributed throughout the parking areas.
- g) Trees and shrubs and appropriate landscaping reinforce the alignment of the pedestrian corridors through the site and add colour, texture and interest around the site.
- h) Utilize trees and landscaping to separate sidewalks from parking areas to protect people from vehicle traffic and create a pleasant pedestrian zone.

### 14.5.2 Form and Character

*The intent is to provide architectural detail and weather protection along the streetscape.*

#### 14.5.2.A Massing and Height

- a) Buildings will vary in height and massing to create identifiable nodes and interest and contain a variety of commercial spaces and residential units.
- b) Employ terracing and building setbacks on upper levels or taller (over 4 storeys) of street-wall buildings to create interest, improve access to light, to reduce overlook and minimize massing.
- c) Large building blocks should be architecturally broken down into an expression of smaller street-fronting retail.

#### 14.5.2.B Commercial Building Facades

- a) Facades should be broken down into smaller components with individual retail entrances and windows fronting the street and major pedestrian routes.
- b) Facade and glazing facing streets should allow visual connection between the interior and the street. Solid walls or large expanses of reflective glass or glass block are not appropriate.
- c) Provide an active streetscape with direct pedestrian access from the street sidewalk.



- d) Provide as much outdoor space adjacent to building fronts as possible to allow use or activity in the building to be extended onto the sidewalk for vibrancy. Examples are outdoor seating areas for restaurants, display areas, for retail stores and display sales areas for produce and flowers.
- e) Consider providing outdoor space adjacent to internal building fronts to allow use or activity in the buildings to be extended onto the sidewalk without obstructing pedestrian circulation (e.g., outdoor seating areas for restaurants, display areas for retail stores, and display/sales areas for produce and flowers).

#### 14.5.2.C Canopies, Awnings and Overhangs

- a) Provide awnings, canopies and overhangs for continuous weather protection along street frontages and on pedestrian routes on all internal facing buildings.
- b) Fabric canopies and signage on canopies are discouraged.

### 14.5.3 Green Building and Sustainable Infrastructure

*The intent is to incorporate innovative approaches for green infrastructure and green buildings that flexibly address on-site rainwater management, energy efficiency and renewable energy production, potable water conservation and waste minimization.*

- a) In shopping mall redevelopment, buildings and site infrastructure will be designed so that, at a minimum, they will meet City Centre Area Plan policies for green buildings (e.g., LEED rating system and credits), or LEED Silver Certification or equivalency.
- b) Design will minimize the use of energy and reduce Greenhouse Gas Emissions.
- c) Applicants will demonstrate how buildings measures up to LEED Silver equivalency and quantify reductions in Greenhouse Gas Emissions.
- d) Buildings will be designed to use:
  - less potable water;
  - mitigate, manage, and clean as much rainwater on site as possible;
  - reduce the generation of waste through careful design and construction practices;
  - incorporate ways to improve indoor air quality, reduce noise, noxious emissions and dust.
- e) Consider opportunities for urban agriculture (growing of food) on the site.
- f) Local sustainable materials should be used wherever possible (e.g., wood, recycled or renewable materials).



## B. COMMERCIAL BUILDINGS

*The intent is to help reinforce the “inner core” of neighbourhood centres and commercial nodes outside the City Centre by encouraging development that enhances pedestrian interest, complements the character of the shopping areas, and provides for the personal expression of individual stores and businesses. These guidelines are intended to achieve a level of unity in commercial areas.*

### 14.5.4 Building Scale and Form

*The intent is to encourage a high standard of design for commercial buildings.*

- a) Street-oriented development is encouraged. Small-scale retail fronts that provide visual diversity, reinforce a human scale, and enhance pedestrian interest are preferred.
- b) Developments should have a strong and continuous street edge definition, with small shops, “anchor” stores, community services and significant public uses at grade.
- c) Single, dominant building masses should be avoided.
- d) Substantial variations in massing should include changes in height and horizontal plane. Changes in massing should relate to the building’s structural systems and reflect its interior arrangement of spaces.

#### 14.5.4.1 Building Frontages

- a) Buildings should reflect a street-edge character in their built form, and provide sufficient building continuity to maintain interest and a viable commercial activity along the street frontage (along the arterial roads) and around internal parking areas.
- b) Building frontages should reflect a strong human, pedestrian scale with direct access to retail uses at short intervals along the street.
- c) Building frontages should be as continuous as possible along both sides of any arterial road and or commercial node adjacent to the shopping mall site.
- d) Buildings should be located with their longer side fronting on the street. Building frontage should extend for at least 2/3 of the site frontage along the street.
- e) Continuity of the commercial frontage is to be achieved by a series of narrow frontage retail bays instead of a large single commercial space. The CRU’s should have a facade module of between 6.0 m (19.69 ft.) to 8.0 m (26.25 ft.) and be clearly expressed in the continuous commercial frontage by a small setback articulation.



#### 14.5.4.2 Variation in Setbacks

- a) Small commercial/retail unit frontage setbacks are recommended at various intervals to achieve facade articulation along the length of the street.
- b) Vary setbacks for commercial frontages between 0.30 m (0.98 ft.) to 0.50 m (1.64 ft.) and display windows or storefronts should encompass a minimum of 70% of the unit's frontage.
- c) Consider providing small building frontage setbacks at specific locations so as to provide extra space for outdoor pedestrian activity, to define building entry areas, and achieve facade articulation along the length of the street. Recess building facades at the corner, building ends and mid-building locations.

#### 14.5.4.3 Corner Sites/Intersections

- a) Commercial buildings should architecturally anchor corners and act as landmarks.
- b) On a corner site, a dominant mass combined with strong architectural features should be considered on the portion of the building at the street intersection to anchor the corner and become a visual landmark.
- c) Commercial units at corner locations should provide an active frontage on both street sides, with facades that offer the same detailing. Glassed storefront of CRUs should extend around the corner(s) for at least 1/3 of the side elevation.
- d) The design of facades facing lanes should incorporate high quality finishes and materials complementary to overall design.

### 14.5.5 Architectural Elements, Materials

*The intent is to utilize materials and architectural elements that enhance the street and reflect the image of Richmond.*

#### 14.5.5.1 Image and Character

- a) Storefronts/overall appearance should consider incorporating elements of the residential architectural vocabulary (e.g., roof form, window shapes).
- b) Monotonous building frontages should be avoided by incorporating variety, glazing and articulation.
- c) Use of vertical elements and material and colour changes to add interest and to maintain the unity of street enclosure.
- d) Bay windows and recessed doors (muntins and wide trims) are desirable as standard features in commercial storefronts to reinforce a pedestrian residential scale.
- e) The primary facade of commercial buildings should address public streets and main pedestrian corridors, with individual entries distinguished by display windows, shop windows, awnings, canopies, and signage to enliven the public realm and create an engaging walking environment.
- f) CRU facing streets should be double loaded with service corridor down the middle (e.g., with CRUs facing the street and CRU's facing the interior of the site).
- g) CRUs facing a street should be a maximum of 6 m (19.69 ft.) to 8 m (26.25 ft.) wide.
- h) Parkades along fronting streets should have retail/commercial storefronts facing the street.

#### 14.5.5.2 Materials

- a) Building materials should reflect the regional heritage, climate and landscape and express a level of craft in the process of construction.



- b) Desirable facade materials are wood (lap siding), masonry, brick, stucco and metal cladding with strong detailing (trim) around the storefront (e.g., doors, windows).
- c) Choice of roofing materials should achieve an appropriate fit with the structural massing, articulation and roof forms of the building.
- d) Windows and fenestrations should be provided on the street fronting side of the building even though in some cases, the principal access to the commercial retail units may need to be provided from the internal parking areas.
- e) Outdoor display areas that are fenced and are used for overnight storage are not permitted.
- f) Building form and materials should be co-ordinated with and be responsive to the “human scale” of buildings on adjacent streets (commercial, residential).

### 14.5.6 Sidewalk Treatment, Curb Extensions

*The intent is to provide wide, landscaped boulevards and pedestrian accesses to commercial developments.*

- a) Consideration should be given to provide for wider sidewalks that extend to the building face. Recommended cross-section includes: 1.5 m (4.92 ft.) wide decorative paving boulevard with trees in grates (or grass boulevard in front of residential areas where on-street parking is provided) and a minimum 2.0 m (6.56 ft.) wide patterned paved sidewalk (in commercial areas, this pavement to extend up to the face of the commercial building).
- b) Boulevard conditions from back of gutter should include 1.5 m (4.92 ft.) wide boulevard planting strip with street trees, light poles and grass, 2.0 m (6.56 ft.) wide public sidewalk, 1.5 m (4.92 ft.) Public Right of Passage (PROP) Statutory Right-of-way (SRW) for second row of street trees, 2.0 m (6.56 ft.) wide PROP SRW sidewalk on private land fronting the CRUs.
- c) 1.5 m (4.92 ft.) wide colour contrasting pavers boulevard with trees planted on grates to be provided along all street fronting (arterial roads) commercial areas that allow on-street parking and along commercial frontages along an internal parking area of a commercial centre.
- d) Special paving pattern and materials on sidewalks to be used to define a distinct character in commercial and mixed-use areas of the Neighbourhood Centres.
- e) Decorative paving (or pavement of contrasting colour and texture) may also be used to identify on-street parking areas/lanes; a concrete roll-over curb is suggested at the line of the pavement change.
- f) Curb extensions (i.e., narrowing of driving lanes) are recommended at intersections or pedestrian crossings along retail/commercial streets or fronting in and around neighbourhood centres to reduce the crossing distance for pedestrians and to limit vehicle speed.

### 14.5.7 Signage

*The intent is to include signage in the Development Permit process so as create suitable, sensitive signage.*

- a) Signage should be integrated with the building and to create a hierarchy of scale (some designed for visibility from the road and other signage designed at a pedestrian scale).
- b) Signage for the various stores should be compatible with the character of the street.
- c) Signs should be colourful, decorative and offer graphic imagery.





- d) Acceptable sign types include:
  - projecting, hanging and handcrafted signs;
  - canopy signs, under-canopy signs;
  - fascia signs and window signs.
- e) Fascia signs and projecting signs should be incorporated as part of the architectural character proposed for the commercial areas. Sign lighting should preferably be spot or flood lighting.
- f) Sign size, location and information provided on signs should be designed and oriented to pedestrian and relate to the scale and character of the surrounding residential areas.
- g) Free-standing signs are not considered appropriate in neighbourhood centre areas unless approached as a public art visual landmark that announce the neighbourhood centre rather than to provide copy area for anchor and principle.
- h) Encourage a comprehensive design approach to signage in commercial areas, avoid the proliferation of signage in commercial areas and minimize visual distraction for drivers.
- i) Signage should consist of functional, attractive, discrete and informative signs compatible with the overall design of the buildings and complementary to the image and character of the City.
- j) Ensure that signage is an integral and attractive part of all designs.
- k) Discourage conventional back lit sign bands and boxes in favour of more sophisticated, less homogeneous approaches that are supportive of local character and a comprehensive design strategy. Wall mounted, backlit acrylic boxes are discouraged.

### 14.5.8 Canopies and Awnings

*The intent is to have attractive canopies and awnings that enhance the pedestrian experience.*

- a) All commercial buildings at ground floor level along the arterial should be provided with adequate weather protection and to reinforce a pedestrian scale. Canopies, awnings or architectural overhangs, should extend at least 1.8 m (6 ft.) from the face of the building.
- b) Metal structures and glass, or metal are recommended as primary materials and vinyl is discouraged.
- c) If not made out of glass, canopies should have a flat, solid colour and should be co-ordinated with the colour scheme of the building.
- d) A 45° inclination slope is recommended for canopies.
- e) Compatibility and co-ordination of canopies is encouraged.
- f) Where appropriate (i.e. building fronting the public open space/park), a colonnade treatment along the ground floor retail commercial frontage may be considered to provide weather protection for pedestrians and outdoor extension of commercial users, and achieve a stronger vertical separation between retail/commercial and residential uses.

### 14.5.9 Landscaping and Street Furniture

*The intent is to have appropriate landscaping and services, including plazas where appropriate, in the public domain.*

#### 14.5.9.1 Tree Plantings

- a) Low shrubs and tree planting on the curb extensions, and pavement treatment at intersections and pedestrian crossing, should be used to reinforce the priority of pedestrians over vehicles.



- b) Street tree planting should include a combination of species in order to provide biodiversity, and promote tree health by lowering the potential impact of common pests and diseases.
- c) Formal tree planting in grates and unique sidewalk pavement (colour, pattern, texture) is recommended for main pedestrian routes in front of commercial frontages or through large commercial parking areas.
- d) Self standing trellis structures combined with low planters and landscaping are recommended along street frontage and at the end of parking areas/drive aisles that are exposed to direct views from adjacent streets.

#### 14.5.9.2 Street Furniture

- a) Street furniture including benches, garbage receptacles, etc to be design-co-ordinated.
- b) A combination of planters and seating areas with trees is recommended along commercial frontage sidewalks within the neighbourhood centre; arrangement of planters should allow for clear circulation of pedestrians.

#### 14.5.9.3 Lighting, Lamp Posts

- a) Lamp posts with single or double luminaries of a strong contemporary character and scale that also reinforce a pedestrian priority are recommended for use in the Neighbourhood Centre and on all areas around commercial nodes.
- b) Street light posts in the Neighbourhood Centre areas and commercial centres should include hardware for hanging flower baskets and/or banners, duplex electrical outlets, and provide pedestrian scale luminaries over the sidewalk.
- c) Wall mounted lighting fixtures are recommended on all commercial developments along commercial streets in addition to standard street lighting, and around parking areas.

#### 14.5.9.4 Urban Plazas

- a) At the corner of larger commercial sites and at the corner of major street intersections, consider providing a small urban plaza/public space node.
- b) Urban plazas should contain a vertical landmark feature/public art to serve as a visual reference point for the neighbourhood center.
- c) Urban plazas should also be considered along the open linear spaces/pedestrian corridors at the transition point between residential and commercial areas of the Neighbourhood Centre.
- d) The main entrance to retail/commercial units or higher density multiple-family residential buildings around this urban plaza/intersection should be oriented toward the corner.

### 14.5.10 Parking

*The intent is to provide safe and efficient circulation for vehicles without compromising the pedestrian environment or the livability of developments.*

#### 14.5.10.1 Access

- a) Access to parking areas should be provided from a lane or from secondary streets. In cases where access can only be provided from a fronting street, the entrance should be located and designed to minimize disruption of the pedestrian environment on the street.
- b) Access from a main or fronting street should be designed as a single access point, or as a shared access with a neighbouring site. Multiple access points are discouraged.



#### 14.5.10.2 Off-street parking

- a) Surface parking for any development within should be provided behind the building(s), screened from direct views from adjacent streets or from any public open space, or linear pedestrian corridor that links commercial and residential areas within the neighbourhood.
- b) Employee parking should be identified as a special parking area and located at a less prominent, but safe location.
- c) Where parking is provided directly at the back of a long commercial building, the entrance to the building and/or a breezeway between the parking area and the street should be provided to facilitate access to street fronting commercial uses. Access to residential uses in upper levels may also be provided from the breezeway.
- d) The edge of any parking area exposed to views from a street should include trellis structures combined with low walls and landscaping to screen parking and achieve a visual bridge between buildings.
- e) Low dense landscaping comprised of a combination of well-spaced trees, shrubs, and ornamental plants shall be planted and maintained around the perimeter of parking lots to screen the cars from public streets.
- f) In addition to perimeter landscaping, major trees of a minimum 7.6 cm (3 in.) calliper shall be interplanted within the parking lots.
- g) Consider permeable paving for surface parking.
- h) Discourage parking configurations that unnecessarily restrict vehicle movement within off-site surface parking lots.

#### 14.5.10.3 On-street Parking

- a) Short-term on-street parking should be considered (and encouraged) in front of commercial buildings on any street within neighbourhood centre areas.
- b) Where on-street parking is provided in front of retail commercial frontages, the grass boulevard should be replaced by decorative pavers.
- c) Decorative pavers (or pavement of contrasting colour and texture) may also be used to identify on-street parking areas/lanes; a concrete roll over curb is suggested at the line of the pavement change.
- d) Angle parking is recommended in parking pockets on both sides of a commercial street or parking drive aisles of commercial centres in order to reduce the amount of paved areas and facilitate safer pedestrian crossings.
- e) Landscaped curb extensions which define the parking pockets to be planted with trees and shrubs and, where appropriate, because of the intensity of commercial activity, accommodate benches and associated street furniture.

#### 14.5.10.4 Parking Structures

- a) Any above-ground parking structures should be located at the rear of a development or away from the main or fronting street and should be treated with decorative screening and/or landscaping to minimize the visual impact of a parkade from the street.
- b) Above-grade parking structures that face a street or public space should be designed with commercial frontage (e.g., retail shops or offices, at the ground floor level).

#### 14.5.10.5 Shared Parking Arrangements

- a) Encourage shared parking between office, retail and residential (off-peak) parking provided that shared parking is not exclusively assigned.
- b) Consideration should be given to shared parking access driveways between adjacent developments.



#### 14.5.10.6 Electrical Vehicle Outlets

- a) Consider some co-op, family and 5% of CRU parking stalls equipped with conduit for electrical vehicle outlets and 5% of CRU parking stalls equipped with 240-volt electrical outlets.

#### 14.5.10.7 Parking Area Lighting

- a) Non-glare lighting shall be provided in parking areas for safety and convenience.
- b) Lighting shall be oriented directly into the parking lot and away from residential areas to avoid intrusion into those areas.
- c) Lighting should be directed so that there is a maximum of 3 foot-candles at the property lines.

### 14.5.11 Amenities

*The intent is to ensure that amenities are provided to commercial employees.*

- a) Developments over 2,000 m<sup>2</sup> (21,529 ft<sup>2</sup>) should provide amenity spaces within the project.
- b) Amenity spaces should be provided at a minimum ratio of 1 m<sup>2</sup> (10.8 ft<sup>2</sup>) per 100 m<sup>2</sup> (1,076.41 ft<sup>2</sup>) of gross leasable building area.
- c) Amenity spaces may consist of social, recreational, educational, or cultural facilities, either indoor or outdoor. Consolidate in one location, either dedicated to a single use or adaptable to multiple uses.
- d) On-site employee or public amenities should include change rooms, showers, lockers, a lounge, and a covered outdoor seating area.
- e) Ensure the shape of the facility, the configuration of spaces within the facility, and the location of the facility are tailored to its intended uses(s).
- f) Situate the facility to encourage public use and provide for convenient public access (i.e., in a highly-visible, grade level location fronting a pedestrian-oriented street or open space).
- g) Wherever possible, provide direct public access from the facility to the outdoors, and convenient access to bicycle parking, vehicle parking, and passenger drop-off areas. Ensure that barrier-free access is provided to and throughout the facility.
- h) Whenever possible, provide access to outdoor open space for use by facilities users.
- i) Ensure that exterior windows extend for a length equal to, or greater than, 20% of the perimeter of the facility.

### 14.5.12 Garbage and Recycling

*The intent is to organize site plans for efficient use of service areas so that the impact on streets, open space and other development is minimal.*

- a) Garbage and recycling container storage areas should be integrated as extensions of the building, enclosed, covered and screened with landscaping from views from any adjacent residential development, views from above, nearby sidewalks, and pedestrian walkways.
- b) Garbage, recycling, and pick-up should be situated in areas which do not conflict with pedestrian traffic.



## C. MIXED-USE COMMERCIAL-RESIDENTIAL BUILDINGS

*The intent is to create a vibrant mixed use neighbourhood centre by integrating new mixed use commercial-residential buildings into the inner core of neighbourhood centre areas (on the arterial roads adjacent to shopping mall sites) to produce a high quality living environment for residents.*

### 14.5.13 Site

*The intent is to ensure that development fits into the neighbourhood and enhances the public/pedestrian realm.*

#### 14.5.13.A Street Presence

- a) Buildings should be located with their longer side parallel to the street to define a continuous building frontage.
- b) Mixed use developments should accommodate commercial uses at grade and residential uses above and be designed to ensure that each different use, is self-contained and has a separate entrance.
- c) Frontage of mixed-use buildings should reinforce the character of the immediate context by locating street-frontage ground floor commercial uses oriented to and having direct access from the commercial frontage street(s). Conversely, access to residential upper levels should be located toward the residential areas of the neighbourhood.
- d) Commercial component of the mix-use buildings should have a minimum 2.0 m (6.56 ft.) setback, maintain a continuous frontage and provide pedestrian street interest and amenity. Outdoor extensions of cafes and restaurants are encouraged where the context is appropriate (e.g., around the south public open space /park).
- e) Retail commercial uses are preferred along street frontages; office commercial uses should preferably be located on upper levels. If office commercial uses are proposed at street level, they should not extend for more than 1/3 of the building frontage.
- f) Street fronting character and relationship to the street of residential units at grade will generally meet the street fronting guidelines associated with mid rise residential buildings in Section 14.4.C.
- g) The front door entry area of each unit should be architecturally highlighted and identified.





- h) Corner units with entries on both elevations should be articulated to address both streets (with a vehicular or pedestrian character, if necessary).
- i) All commercial buildings should reflect a street-edge character in their built form and provide sufficient building continuity to maintain interest and a viable commercial activity along the street frontage and around the internal parking areas frontage.
- j) Windows and fenestrations should be provided on the street fronting side of the buildings even though in some cases the principal access to the commercial retail units may need to be provided from the internal parking areas.

#### 14.5.13.B Weather Protection

- a) Retail commercial uses located at ground floor level should be provided with adequate weather protection. Awning or architectural overhangs, extending a minimum of 1.8 m (6 ft.) from the building face should be provided.
- b) All weather protection elements (canopies or other) should be designed to facilitate a continuous, architecturally integrated building frontage. Minimum canopy protection from the building face to be not less than 1.8 m (6 ft.).
- c) Where appropriate (i.e., building fronting the public open space/park), a colonnade treatment along the ground floor retail commercial frontage may be considered to provide weather protection for pedestrians and outdoor extension of commercial users, and achieve a stronger vertical separation between retail/commercial and residential uses.

#### 14.5.13.C Signage

- a) No other free-standing sign other than a single identification sign should be provided along any street abutting a neighbourhood commercial centre or arterial road. Signage should be restricted to fascia sign on buildings or storefront signs.
- b) Way finding signage to visitor parking spaces for residential units should be provided at the entrance to the development, at each location where a visitor vehicle needs to turn and at a maximum spacing of 50 m (164 ft.). The design/format and colour of the way finding signage is to be reviewed and approved by the City.

Bylaw 8994  
2013/03/18

#### 14.5.13 D Parking

- a) Vehicular access to residential parking should be provided from lanes or secondary streets so as to avoid potential conflict with pedestrian activity along the commercial frontage.
- b) Surface parking should be provided behind the building(s) screened from direct views from adjacent streets or from any public open space and pedestrian corridor.
- c) Where parking is provided directly at the back of long mixed use building, the entrance to the building and/or breezeway between the parking areas and the street should be provided to facilitate access to street fronting commercial uses. Access to residential uses in upper levels may also be provided from this breezeway.
- d) The edge of any parking area exposed to views from a street should include trellis structures combined with low walls and landscaping to screen parking and achieve a visual bridge between buildings.

#### On-street Parking

- a) On-street short term parking should be provided along the neighbourhood streets in front of all mix-use developments. On-street parking is a convenience for people visiting ground floor shops and offices for a short time. This parking option helps to improve the public realm at the street edge by providing pedestrians with a buffer to moving traffic and help to reinforce a more peaceful ambiance for the residential uses on upper levels.
- b) Short term on-street parking areas should preferably be identified by decorative, coloured pavers contained within a series of parking pockets.



### Shared Parking

- a) Where there is some shared use of parking between residential and commercial uses, the parking area reserved for joint use should be accessible and clearly marked as such. It should be accessible to both uses at all times and in perpetuity.
- b) Consideration should be given to shared parking access driveway between adjacent developments.
- c) Concrete pavement of public sidewalk should be continued and be well defined across driveway entrances to parking areas/parkades.
- d) Presence of opening of the entry to parkade in the street building frontage should be minimized. The use of trellis or open beams structure combined with low edge planters and/or landscaping is recommended.
- e) Wall of parking level(s) exposed to views from the street are not permitted. If screening of the parking levels with a commercial or residential frontage is not possible, a sloping landscaped areas or stepping planters (including tree planting) should be provided along the street, in front of the parade structure.
- f) A minimum 0.50 wide (1.64 ft.) landscaped area should be provided along the street between the edge of the public sidewalk and the first low retaining wall/planter around any parkade structures that is not screened by a building.
- g) The closest retaining wall/planter alongside a public sidewalk should not be higher than 0.60 m (1.97 ft.).

#### 14.5.13 E Servicing and Loading

- a) Visual impact of service and loading areas adjacent to the street should be avoided. The impact of these should be minimized through proper design of enclosures, integration of building mass, screening, high quality finishes, sensitive lighting and landscaping.

#### 14.5.13 F Garbage and/or Recycling

- a) Open garbage and/or recycling containers storage areas of commercial uses that are exposed to the street are not permitted. These service areas must be integrated as extensions of the building, enclosed, covered and screened with landscaping from views from any adjacent residential development, views from above, nearby sidewalks and pedestrian walkways.

### 14.5.14 Building Form

*The intent is to provide architectural detail to the development.*

#### 14.5.14 A Building Massing

- a) Residential uses above the street retail commercial uses should be set back from the ground floor level at least 3.0 m (9.85 ft.); and consider terraces, balconies and/or decks toward the street to improve privacy and achieve a good separation between uses.
- b) Recommended maximum building height is two storey for commercial uses with additional residential floors above in mixed-use development at strategic landmark locations (see Commercial section).
- c) The massing, setbacks and orientation of buildings shall be co-ordinated with and be responsive to the human scale of buildings on adjacent streets (commercial, residential).
- d) A minimum height of two storey (9.0 m or 29.53 ft.) is recommended for commercial only building along a street frontage in a neighbourhood centre and along arterial roads.



- e) Mixed-use buildings should be designed to ensure that each different use, especially a residential use, is self-contained and has a separate entrance.
- f) Design buildings and outdoor spaces to enhance visual privacy and reduce sound transmission between different uses.
- g) Mixed-use developments should provide venting from restaurants to the top of the uppermost roof in the development. Venting from restaurants should also incorporate sufficient noise- and odour-reducing equipment to prevent sound and smell overflows from creating an environmental nuisance.



## 14.6 Industrial Guidelines

*These Guidelines are intended to encourage and maintain industrial development in the City of Richmond while maintaining a high standard of visual integration into the built and natural environment, and minimizing negative impacts on neighbouring uses.*

The Industrial Guidelines and General Guidelines apply to industrial developments that require a Development Permit.

### 14.6.1 Adjacent Uses (Edge Conditions)

*The intent is to ensure that industrial developments compliment and do not adversely impact adjacent uses, particularly residential development.*

- a) Locate parking and site entrances for heavy vehicles, service vehicles and trucks away from residential sites. In sites where this is not possible, provide landscaping and other measures to reduce noise, fumes, and other potential impacts on adjacent residential areas. An impact study may be required.
- b) Buildings in developments that adjoin designated agricultural lands and residential areas should be designed and oriented to maximize views beyond and between buildings.
- c) Where industrial sites abut residential areas, consider increasing the setbacks to reduce impacts such as noise, odour, or shadow from any industrial building or structure.
- d) Provide a landscaped buffer, minimum 6 m (19.7 ft.) wide, between industrial developments and adjacent residential areas.
- e) All exterior lighting should be oriented away from residential areas to avoid impacts such as glare into adjacent residential neighbourhoods. The lighting should be directed so that there is a maximum of 3 foot-candles at the property line.



- f) Fences abutting residential sites should be constructed with materials in keeping with the fences generally used in residential areas.
- g) Unenclosed storage areas should not be located beside or across from residential sites or be visible from any street.
- h) External HVAC units must be visually screened and achieve compliance with the City's Noise Bylaw and any other Public Health Bylaw noise limits.
- i) for all industrial sites that have two or more storeys with exterior vehicular access to upper storeys, they shall be located no closer than 100 m of a residentially zoned site, have good access to truck routes and the Provincial highway network. Corner lots are to be discouraged as any visible exterior ramping for trucks and vehicles should be from the interior side yard setback or the rear yard setback.

Bylaw 10180  
2021/02/16

### 14.6.2 Circulation and Parking

*The intent is to guide the location of vehicles and trucks on industrial sites.*

- a) Parking should not be located within front yard setbacks.
- b) Vehicle circulation should be designed to avoid conflicts between trucks or other heavy vehicles and employees' and visitors' passenger vehicles.
- c) Loading areas and zones should be located in the side and rear of buildings.
- d) Surface parking must be defined by landscaping and screening elements. Refer to general landscaping guidelines for parking lot landscape treatment.
- e) For industrial development with two or more storeys that have exterior vehicular access to upper storeys:
  - the number and size of access driveways to the site should be limited to minimize impact on sidewalks and the public realm;
  - exterior ramping should be from the interior side yard setback or the rear yard setback; and
  - design loading/parking areas to maximize flexibility, to adapt and to accommodate changing industrial uses and practices.

Bylaw 10180  
2021/02/16

### 14.6.3 Building Scale and Form

*The intent is to encourage a high standard of design for industrial buildings.*

- a) Locate offices, reception, and other public use areas at the front of buildings to face streets. Design facades so that these areas are easily identifiable and visible from roads.
- b) Buildings should generally be located at the minimum setback from property lines next to streets.
- c) Buildings should be designed to exhibit a cohesive appearance and architectural character. Consider providing skylights, roof forms or other elements to visually express interior spaces or functions. Also consider using architectural elements, materials, finishes, glazing, and textured surfaces.
- d) Façade articulation, such as recessed window and door penetrations, is encouraged to create depth and variation. Deeply articulated facades integral to the design of the building are encouraged; "add-on" elements are discouraged.
- e) Include glazing as a major component on street-facing building facades. Features such as texture, graphics, reveals, and colours should be incorporated into facades that may contain blank walls. Landscaping should also be provided in front of blank walls.
- f) Building facades with significant areas of non-reflective opaque materials should have decorative floodlighting to accent recessed or articulated surfaces.
- g) Main entries should be located and designed to be clearly identified from street or entry driveways.





- h) Entrances to buildings and dramatic multi-storey interior spaces should be illuminated to enhance their after-dark visibility and significance.
- i) Service doors (e.g., an overhead door at a loading dock) should not be located on a building façade that faces a street. Design service doors to fit with the overall design of the building.
- j) Ancillary or secondary buildings on a site, including those constructed for the purpose of storing materials, should be visually screened from public streets with dense evergreen planting or should be designed and finished in a manner consistent with the principal building.
- k) All rooftop mechanical equipment should be screened from public view or integrated within the architecture.
- l) For industrial development with two or more storeys that has exterior vehicular access to upper storeys:
- encourage vertical stacking of industry and production spaces;
  - building elements over 12 m in height are to be oriented with consideration of daylight and solar performance, architectural expression and impact on adjacencies;
  - reduce physical and visual bulk and massing for building elements with height over 12 m by stepping back the portion of the building above 12 m from the street frontage;
  - encourage architectural and façade articulation (e.g., transparent views through to on-site uses and connections, building recesses, clerestory windows at upper storey, etc.); and
  - visible vehicle ramps are to be architecturally treated.

Bylaw 10180  
2021/02/16

#### 14.6.4 Site Planning and Landscaping

*The intent is to provide direction to the landscaping, storage and servicing of industrial lands.*

- a) Identify and retain, as far as possible, existing mature trees on sites. Provide measures for their preservation and long-term maintenance.
- b) Provide a minimum 3 m (9.8 ft.) wide landscaped area along all property lines that abut streets. Co-ordinate the landscaping with that of adjoining developments and integrate landscaping with landscaping in the public realm.
- c) Provide landscaping to identify and define entrances to the site and buildings.
- d) Developments with more than one building on a site should provide sidewalks and pathways connecting the buildings and sidewalks along the front of each building where entrances are located.
- e) Create visual landmarks at locations of high visibility or significant street corners. Provide landscaping at these locations and consider incorporating features such as flag poles, banners, visual art, ornamental trees, and architectural elements and structures.
- f) Fences should be integrated into the landscaping, with adequate planting provided in front of the fence, particularly on sites adjoining or across from residential sites. Berms may be considered as an addition to or as an alternative to a fence.
- g) Chain link fences should be avoided, particularly along street frontages. If a chain link fence is unavoidable, a dense landscaped material such as a hedge must be provided on the outside of the fence.
- h) Outside storage and staging areas may be permitted in the side or rear yard of buildings under the following conditions:
- such areas do not encroach on required minimum setbacks;
  - staging and storage of supplies, materials, products, or vehicles are visually screened from public thoroughfares and/or residential uses with landscaping or with screening finished in a manner consistent with the principal building.



- i) Service areas, dumpsters and garbage containers, recycling containers, and utility kiosks should be integrated into the landscape and screened. The minimum treatment should be evergreen planting a minimum 2 m (6.6 ft.) in height. Alternative treatment to screen areas adjacent to buildings would be a building or screen wall constructed from the same materials and colours as the principal building, minimum 2 m (6.6 ft.) high.
- j) Any part of a building site left vacant for future development should be landscaped consistent with the landscape plan for the remainder of the building site. The minimum ground surface treatment shall be lawn. If the undeveloped portion of the site is unaltered from its natural state (i.e., forested or retaining mature trees and native vegetation), the natural state should be preserved.
- k) Surface treatments such as bark mulch, gravel, or similar material are not acceptable.
- l) All landscaped areas should be irrigated with an approved automatic irrigation system.
- m) All landscaping shall be completed within 60 days after the substantial completion of the construction of any improvements on the building site.
- n) Consider providing landscaping on flat roofs to soften the visual impact of large expanses of roof as seen from above.
- o) For industrial development with two or more storeys that have exterior vehicular access to upper storeys:
  - yard setback areas should be raised no more than 0.5 m (1.64 ft.) above adjacent public sidewalks; low retaining walls in front yards along the street should not be higher than 0.5 m (1.64 ft.). In yards that abut public spaces, landscaped terraces no greater than 0.5 m (1.64 ft.) in height and no less than 0.75 m (2.46 ft.) deep should be used to reach the new grade;
  - visible exterior vehicle ramps shall be setback and screened by a minimum of 5 m layered landscaped treatment including vertical screening while providing strategic visual access to entries and access areas.

Bylaw 10180  
2021/02/16

### 14.6.5 Amenities

*The intent is to ensure that amenities are provided for industrial employees.*

- a) Provide indoor amenities such as a lunch room for employees and provide an outdoor landscaped area in close proximity to the indoor amenity area. The landscaped area should be accessible from the indoor space and should include seating areas and a structure for shelter from sun or rain. Consider including a space for outdoor recreation.
- b) For industrial developments with multiple tenancies, provide amenity spaces for the common use of employees and visitors. Amenity spaces for individual tenancies may be consolidated into large indoor and outdoor amenity spaces for the common use of all tenancies.

### 14.6.6 Environmental Controls

*The intent is to encourage environmental responsibility in industrial areas.*

- a) Industrial development should be designed so that the uses and activities shall not cause nor become an annoyance or nuisance to surrounding areas by reason of unsightliness, the emission of odours, liquid effluents, dust, fumes, or smoke, vibration, noise or glare, high brightness light sources, heat, or anything which creates or causes a health, fire, or explosion hazard, electrical interference or undue traffic congestion.
- b) Garbage and waste material shall be stored in containers which are weatherproof and animal-resistant within the boundaries of each site and shall be visually screened from all adjacent sites and public thoroughfares.
- c) Glare and bright yard or building lighting should be avoided and must be visually screened from the views of surrounding residential areas.



## 14.7 Environmentally Sensitive Area (ESA) Guidelines

*ESA DP Guidelines apply to developments and subdivisions that occur in designated OCP Environmentally Sensitive Areas (ESAs). They are intended to protect and enhance the environmental resources and ecosystem services in ESAs which are part of the OCP Ecological Network. Environmentally Sensitive Areas are critical components in maintaining Richmond’s natural attributes and liveability.*

### 14.7.1 ESA DP Guideline Process and Requirements

The table below explains the basic requirements and process to follow when:

- a property is exempt from an ESA DP;
- an ESA DP is required.

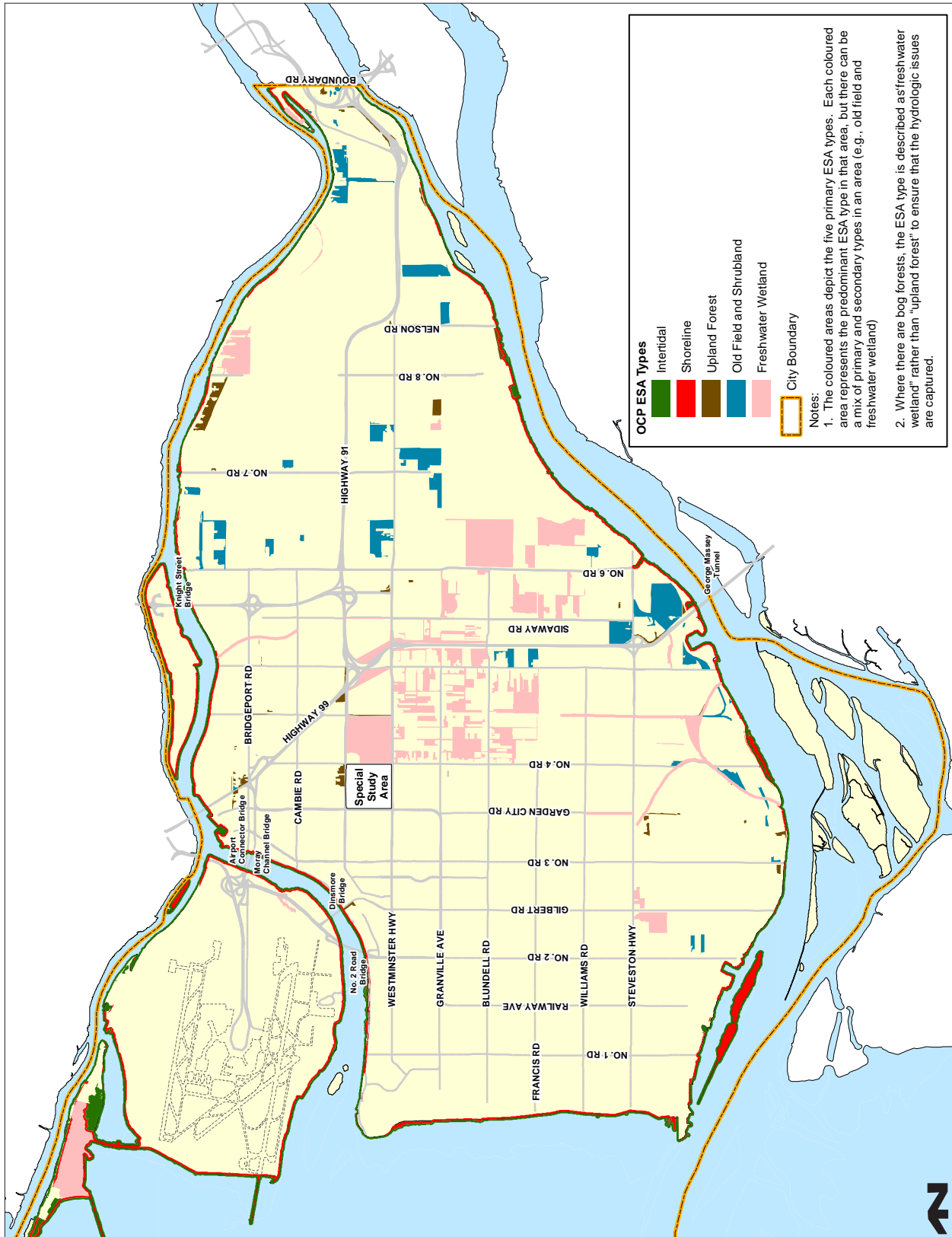
Overview ESA DP Guidelines Process and Requirements
1. All property owners, who appear to be affected by an OCP ESA designation within or near their property, are to first consult City staff, to determine if and how their property is affected by an ESA designation and the approval requirements and the process.
2. City staff will verify: <ul style="list-style-type: none"> <li>• if there is an ESA designation on their land;</li> <li>• if a proposed activity is exempt (<b>Type 1</b>) as per Section 14.1.6.2 “Development Permit Area Exemptions.” This process includes determining if the property owner is a legitimate farmer (e.g., are actually generating or will be actually generating farm income from the affected property).</li> </ul>
3. If a proposed activity is within an ESA, staff will determine if, with modifications to their proposal, they can avoid affecting the ESA and thus be exempt from an ESA DP.



<b>Overview</b> <b>ESA DP Guidelines Process and Requirements</b>		
<p>4. If the proposed activity encroaches into the ESA on the property, an ESA DP will be required.</p> <ul style="list-style-type: none"> <li>• <b>Type 1 and Type 2</b> level of disturbance will be determined by City ESA staff using existing information such as recent orthophoto imagery and City of Richmond 2012 ESA maps and data.</li> <li>• City staff will advise on the process, requirements and next steps depending on the level of disturbance to the ESA (<b>Type 2 or Type 3</b>).</li> </ul>		
Type 1	Type 2	Type 3
Exemption from an ESA DP	Minimal ESA Disturbance ESA DP Requirements	Moderate to Significant ESA Disturbance ESA DP Requirements
<p>If a development or activity is exempt from an ESA DP, the activity can proceed (e.g., to any other Development Permit or Building Permit Process). See Chapter 14.1.6.2 for ESA exemptions.</p> <p><b>Example:</b> A bona fide farmer wishes to cultivate land on his/her property which an ESA will affect.</p>	<p><b>Example:</b> The proposed construction of a single family house will extend into an ESA area, thereby decreasing the ecological functioning and spatial extent of the ESA by less than 0.1 ha (1,000 square meters; 11,760 sq. ft).</p> <ul style="list-style-type: none"> <li>• City staff will work with the owner to identify the location, condition and type of ecological features on the site including the boundaries of the ESA using existing information such as recent orthophoto imagery and City of Richmond 2012 ESA maps and data.</li> <li>• At a minimum, an owner survey is required to identify existing trees, vegetation, and known wildlife habitat within and adjacent to the portion of the ESA affected by the development proposal.</li> <li>• City staff and the owner will work together to discuss appropriate mitigation such as compensatory plantings.</li> <li>• An environmental assessment of the site may be required.</li> </ul>	<p><b>Example:</b> Proposal for multi-family development on a site where the new building will significantly or adversely affect the ecological functioning of an ESA and encroach into an ESA by more than 0.1 ha (1,000 square meters; 11,760 sq. ft), or the ESA is a fresh water wetland affecting drainage and local hydrology.</p> <ul style="list-style-type: none"> <li>• Due to its complexity, the City will require an Environmental Report (see 2012 City of Richmond ESA Management Strategy) and be in general conformance with the BC government publication "Develop with Care". At a minimum, the report will contain:                         <ul style="list-style-type: none"> <li>- a preliminary bio-inventory (site survey);</li> <li>- a detailed inventory and conservation evaluation including an assessment and recommendations regarding mitigation and compensation for lost ESA area;</li> <li>- an environmental monitoring program, if applicable.</li> </ul> </li> </ul>



## OCP ESA Development Permit Type Map







### 14.7.2 Intertidal

*The intent is to prevent infilling or direct disturbance to vegetation and soil in the intertidal zone, maintain ecosystem processes such as drainage or sediment that sustain intertidal zones.*

**Area Designation:** Coastal areas within 30 m (seaward) of the high water mark<sup>1</sup> which are influenced by waves, tides, and other processes along the Fraser River or Strait of Georgia. Also includes the shallow subtidal zone in some sites.

**Typical Conditions:** Mudflats, and a range of vegetated estuarine or salt marsh communities; tidal channels or shallow ponds are often present; developed shorelines with riprap, docks, and pilings are also included.

**Justification:** The intertidal zone is important for:

1. fish and wildlife habitat—the intertidal zone around Richmond’s Islands is recognized for its importance for fish such as juvenile salmon from throughout the Fraser River watershed, but also for spawning eulachon, and smaller fish such as starry flounder which are an important part of the foodweb;
2. protection of Richmond’s dikes and other infrastructure from wave and current water erosion by dissipating energy;
3. aesthetic and cultural values that make intertidal zones an important part of Richmond’s parks and greenways.

**Related Regulations:** All intertidal zones in the City of Richmond area are considered *fish habitat* under the federal Fisheries Act. DFO regulates activities affecting fish habitat through their participation in the Fraser River Estuary Management Program (FREMP)<sup>2</sup>. Port Metro Vancouver, as a federal agency, is also responsible for fish habitat management. Many intertidal zones also have important values for migratory wildlife such as shorebirds and waterfowl; migratory birds and their nests are protected under the Migratory Birds Convention Act and intertidal zones designated as part of provincial Wildlife Management Areas (including Sturgeon Bank WMA) are also managed for conservation values. Other

<sup>1</sup> The High Water Mark is the highest extent of tidal inundation under normal tides (e.g., no storm surges or abnormal water temperatures). It is usually defined in the field by vegetation and debris indicators. Note that the high water mark used for the ESA mapping was defined by visual interpretation of 2009 orthophoto imagery supplemented with field assessment in a few areas.

<sup>2</sup> Fraser River Estuary Management Program. See here or [http://www.bieapfrempp.org/main\\_frempp.html](http://www.bieapfrempp.org/main_frempp.html)





relevant legislation and regulations that affect the intertidal zone include the provincial Dike Maintenance Act, the provincial Wildlife Act (for listed wildlife as well as Wildlife Management Areas), the federal Species at Risk Act, and the federal Navigable Waters Protection Act.

**Environmental Report Assessment Requirements:** For all ESA areas classified as intertidal zone:

1. Confirm the ESA boundary including location of high water mark based on field assessment by a qualified professional.
2. Assess and confirm ecological characteristics including general vegetation types using existing information such as FREMP mapping and field assessment by a qualified professional.
3. Review FREMP habitat coding (red, yellow, green) and relevant policies.
4. Identify any previous habitat compensation or enhancement activities such as a marsh restoration and fill removal.
5. Review site history to determine the potential for contaminants or buried structures based on previous use.
6. Identify any nearby (within 100 m or 328 ft.) wildlife use such as raptor or heron nests using existing information and field surveys by a qualified professional<sup>3</sup>.

#### Guidelines

- a) Preserve all intertidal zones, except in accordance with the conditions of the Development Permit and other necessary permits or approvals (e.g., FREMP, Port Metro Vancouver, and Navigable Waters).
- b) Maintain ecological processes important to the long-term health of the intertidal zone including drainage and hydrology and natural sediment or detritus movement (accretion and erosion).
- c) Development must not increase shade or disrupt the movement of detritus or other materials. Where water access is necessary for transportation or recreation facilities, filling of the intertidal zone shall be avoided. The preferred method of development over the intertidal zone is on pilings or floating structures.
- d) Consider contiguous or nearby ESA areas such as shoreline zone which have the potential to influence the intertidal zone.
- e) No alterations should be made to the intertidal area without an appropriate environmental assessment and implementation of mitigation measures. The City may require preparation of an Environmental Protection Plan (EPP) prepared by a qualified professional to guide environmental management on sensitive, complex, or large sites.
- f) No recreational trails or other facilities shall be constructed in the intertidal zone.
- g) Permitted works shall use careful site design to avoid the most sensitive portions of the intertidal zone (see FREMP habitat coding).
- h) All works within or adjacent to the intertidal zone shall be constructed, where required, to preserve and enhance the shoreline by:
  - providing safe, durable access such that people are afforded an unobstructed view of the waterfront wherever possible;
  - retaining mature vegetation, including existing large trees, shrubs, and aquatic vegetation;
  - replanting disturbed areas with native vegetation.

<sup>3</sup> Inventory Method for Raptors (BC Environment 2001). [http://www.ilmb.gov.bc.ca/risc/pubs/tebiodiv/raptors/version2/rapt\\_ml\\_v2.pdf](http://www.ilmb.gov.bc.ca/risc/pubs/tebiodiv/raptors/version2/rapt_ml_v2.pdf)



- i) Where possible, restore degraded intertidal zones by removing historical fill, structures, or contaminated sediment, and recreating natural habitats such as mudflats and marsh.
- j) Conformance with these guidelines does not exempt applicants from meeting requirements of other agencies, such as participating in the Fraser River Estuary Management Program (FREMP), and Port Metro Vancouver. It is the responsibility of proponents to ensure they meet all external requirements.



### 14.7.3 Shoreline

*The intent is to preserve existing shoreline vegetation and increase natural vegetation in developed areas during redevelopment or retrofitting.*

**Area Designation:** Coastal areas within 30 m (98.43 ft.) (landward) of the high water mark with environmental values related to their association to the Fraser River and Strait of Georgia.

**Typical Conditions:** The marine riparian zone in Richmond typically includes the crest and backslope of the perimeter dike and its associated trails or roads, as well as developed or natural areas landward of the dike. Land uses are variable and typically include such things as developed lands such as roads, parking areas, landscaped areas, boat facilities and buildings.

**Justification:** The shoreline zone is important for:

1. fish and wildlife habitat, both within the forests and other ecosystems found within the shoreline, and the adjacent intertidal zone;
2. protection of Richmond's dikes and other infrastructure from wave and current erosion by dissipating energy;
3. filtering contaminants and sediment before it reaches the intertidal zone;
4. aesthetic and cultural values that forms an important part of Richmond's parks and greenways.

**Related Regulations:** Some shorelines in Richmond are considered fish habitat under the federal Fisheries Act because of their role in maintaining the health of the adjacent intertidal zone (e.g., shading, detritus additions, etc). Fisheries and Oceans Canada (DFO) regulates activities affecting fish habitat through their participation in the Fraser River



Estuary Management Program (FREMP)<sup>4</sup>. Port Metro Vancouver, as a federal agency, is also responsible for fish habitat management. Other relevant legislation and regulations that affect the shoreline zone include the provincial Dike Maintenance Act, the provincial Wildlife Act (for listed wildlife as well as Wildlife Management Areas), the federal Species at Risk Act, and the federal Navigable Waters Protection Act.

**Environmental Report Assessment Requirements:** For all ESA areas classified as shoreline zone:

1. Confirm the ESA boundary including location of high water mark based on field assessment by a qualified professional.
2. Assess and confirm ecological characteristics including general vegetation types using existing information such as FREMP mapping and field assessment by a qualified professional.
3. Review FREMP habitat coding (red, yellow, green) and relevant policies for the adjacent intertidal zone.
4. Identify any previous habitat compensation or enhancement activities.
5. Review site history to determine the potential for archaeological significance, contaminants or buried structures based on previous use. Refer to Provincial database on known archaeological sites.
6. Identify any nearby (within 100 m or 328 ft.) wildlife use such as raptor or heron nests using existing information and field surveys by a qualified professional<sup>5</sup>.

### Guidelines

- a) Preserve all natural vegetation and all trees in the shoreline zone, except in accordance with the conditions of the Development Permit and other necessary permits or approvals (e.g., FREMP, Port Metro Vancouver, and Navigable Waters).
- b) Maintain ecological processes important to the long-term health of the shoreline zone including drainage and hydrology.
- c) Consider contiguous or nearby ESA areas such as the intertidal zone which have the potential to influence the shoreline zone.
- d) No alterations should be made to the shoreline zone without an appropriate environmental assessment and implementation of mitigation measures. The City may require preparation of an Environmental Protection Plan (EPP) prepared by a qualified professional to guide environmental management on sensitive, complex, or large sites.
- e) No recreational trails or other facilities shall be constructed in the shorelines zone without written approvals from FREMP or other regulatory bodies.
- f) Permitted works shall use careful site design to avoid the most sensitive portions of the shoreline zone.
- g) Water quality and natural systems shall be protected by leaving stream banks intact and by not altering natural slopes and existing vegetation.
- h) All works within or adjacent to the shoreline zone shall be constructed, where required, to preserve and enhance shoreline values by:
  - providing safe, durable access such that people are afforded an unobstructed view of the waterfront wherever possible;

<sup>4</sup> Fraser River Estuary Management Program. See here or [http://www.bieapfremf.org/main\\_fremf.html](http://www.bieapfremf.org/main_fremf.html)

<sup>5</sup> Inventory Method for Raptors (BC Environment 2001). See here or [http://www.ilmb.gov.bc.ca/risc/pubs/tebiodiv/raptors/version2/rapt\\_ml\\_v2.pdf](http://www.ilmb.gov.bc.ca/risc/pubs/tebiodiv/raptors/version2/rapt_ml_v2.pdf)



- retaining mature vegetation, including existing large trees, shrubs, and aquatic vegetation;
  - replanting disturbed areas with native vegetation.
- i) Development proposals that include measures to restore degraded shoreline zones by removing historical fill, structures, or contaminated sediment, and recreating natural habitats such as riparian forest may increase the level of support by the agencies provided that the works comply with DFO and FREMP guidelines. In many areas, the shoreline zone has been developed or landscaped and improvements including tree planting will enhance its ecological value over the long-term.
- j) Conformance with these guidelines does not exempt applicants from meeting requirements of other agencies, such as those participating in FREMP and Port Metro Vancouver. It is the responsibility of proponents to ensure they meet all external requirements.



#### 14.7.4 Upland Forest

*The intent is to maintain stands or patches of healthy upland forests by preventing or limiting tree removal or damage and maintaining ecological processes that sustain forests over the long-term.*

**Area Designation:** Treed areas (woody vegetation >5 m (16.4 ft.) tall) not including forested wetlands (swamps and bog forests) or forested riparian zones, adjacent streams, rivers, and other watercourses.

**Typical Conditions:** Richmond's upland forests are typically forested with paper birch, red alder, and black cottonwood with lesser amounts of western hemlock and western red cedar. Non-native trees (e.g., European birch, Sycamore maple) are also common. Upland forests range in size from large hubs (e.g., >10 ha or 24.7 ac.) to small groups or even rows of single trees. Developed forest areas such as maintained trees in urban parks with an understory of mowed grass are not included as ESAs. Future ecological restorative works in public parks would add to the ESA inventory. Understorey vegetation is variable and ranges from partially landscaped areas, to dense thickets of native shrubs mixed with ferns, forbs, and mosses.



**Justification:** Upland forests are a critical part of Richmond's ecological network. Its environmental values include:

1. habitat for wildlife and plants;
2. carbon storage in above- and below-ground plant material;
3. hydrologic cycle importance through rainfall interception and evapotranspiration;
4. improvements to air quality by capture or modification of particulates and gasses such as ozone;
5. aesthetic values in urban parks and greenways.

**Related Regulations:** The City of Richmond's Tree Protection Bylaw (No. 8057)<sup>6</sup> regulates tree removal or damage on private and public lands and applies in ESAs. Its goal is to sustain a healthy, viable urban forest. Upland forests are not explicitly protected or managed through provincial or federal legislation. Relevant regulations which influence forest protection in urban areas include the BC Wildlife Act if there are any listed wildlife (herons and eagles), the Migratory Bird Convention Act which protects the nests of most birds during the nesting season, and potentially the federal Species at Risk Act.

**Environmental Report Assessment Requirements:** For all ESA areas classified as upland forest:

1. Confirm the ESA boundaries based on field assessment by a qualified professional.
2. Assess and confirm general ecological characteristics including general vegetation types using existing information such as recent orthophoto imagery and field assessment by a qualified professional.
3. Review current and previous mapping including 2011 ESA, and Metro Vancouver 2011 Sensitive Ecosystem Mapping.
4. In areas proposed encroaching or adjacent (within 20 m or 65.62 ft.) to an upland forest ESA, conduct a tree survey that locates each tree, records species, size (diameter), and health based on the requirements of Richmond's Tree Protection Bylaw. The City will review the impact assessment and may approve encroachment if there is a net ecological benefit.
5. Identify any nearby (within 100 m or 328 ft.) wildlife use such as raptor or heron nests using existing information and field surveys by a qualified professional<sup>7</sup>.

### Guidelines

- a) Preserve all upland forest, except in accordance with the conditions of the Development Permit and other necessary permits or approvals (e.g., Wildlife Act).
- b) Permitted works shall use careful site design to avoid the most sensitive portion of the upland forest (e.g., largest or older trees, wildlife habitat features, and natural understory).
- c) Where tree removal in ESA areas cannot be avoided, preserve the largest and healthiest trees and minimize the creation of narrow forest patches with edge habitat (maintain the mass and volume of the internal forest). The City of Richmond requires tree replacement on or near the development site. This may include nearby parks or other public lands. Some trees may be retained on site as artificial snags or downed logs under the direction of City staff.

<sup>6</sup> City of Richmond Tree Protection Bylaw (summary). See here or <http://www.richmond.ca/services/Sustainable/environment/treeremoval.htm>

<sup>7</sup> Inventory Method for Raptors (BC Environment 2001). See here or [http://www.ilmb.gov.bc.ca/risc/pubs/tebiodiv/raptors/version2/rapt\\_ml\\_v2.pdf](http://www.ilmb.gov.bc.ca/risc/pubs/tebiodiv/raptors/version2/rapt_ml_v2.pdf)





- d) The City of Richmond's tree replacement requirements are specified in the Tree Protection Bylaw except in cases where an area-for-area replacement is permitted.
- e) The compensation ratio is replacement of one tree (6 cm or 2.36 ft. calliper as defined by BC Nursery Trades Association for deciduous tree, 2 m (6.56 ft.) height for coniferous) for every tree that is removed in an ESA area or 1.5 m<sup>2</sup> (16.15 ft<sup>2</sup>) for every 1.0 m<sup>2</sup> (10.76 ft<sup>2</sup>) of upland forest removed. Replacement trees are to be planted in other areas of the ESA unless permission is granted to plant trees on other parts of the property or City property.
- f) Preserve snags and downed logs where they are not a risk to safety.
- g) Maintain ecological processes important to the long-term health of the upland forest including hydrologic processes and soil quality.
- h) Avoid excavation, filling or soil compaction in a zone around trees measuring 30 cm (11.81 in.) for every 2.5 cm (0.98 in.) of trunk diameter (e.g., 25 cm or 9.84 in. diameter tree = 300 cm or 118.11 in. root protection zone). Use tree protection fencing and signs during construction. Works that may affect the roots of retained trees should be designed to avoid direct damage or be raised above the soil level (e.g., decks or pilings).
- i) Where possible, improve the conditions of the forest by removing invasive plant species, including: English ivy, Yellow Lamium, Himalayan Blackberry, Japanese knotweed, common Laurel, and Daphne Laurel.
- j) Restore or enhance upland forest through active management such as tree planting and thinning.
- k) Where trees are removed at the ESA edge, plant trees and understory shrubs at the margins to increase habitat in the ecotone.
- l) Vegetation is to be selected that is consistent with the existing plant communities, provide high food source and habitat values.
- m) Use pruning, thinning, supplemental planting, or other methods to reduce the risk of wind throw on newly exposed forest edges.
- n) Locate trails or other recreational facilities to avoid the most sensitive portions of upland forests, and constructed to minimize tree or shrub removal, soil excavation, or compaction. Avoid trails in the centre of large forest patches where recreation use including dog walking will reduce habitat value for wildlife.
- o) The City may require the preparation of an Environmental Protection Plan (EPP) prepared by a qualified professional to guide environmental management on sensitive, complex, or large sites.
- p) Conformance with these guidelines does not exempt applicants from meeting requirements of other agencies. It is the responsibility of proponents to ensure they meet all external requirements.



### 14.7.5 Old Fields and Shrublands

*The intent is to maintain the extent and condition of old fields and shrublands, while recognizing the dynamic nature of these ecosystems. Preservation should recognize the balance between habitat loss and creation with the overall objective of preventing the permanent loss of old fields and shrublands.*

**Area Designation:** Old fields and shrublands are temporarily (>2 years) or permanently abandoned agricultural or cleared lands that support mixed grass, forb, and shrub vegetation. Grass and shrub vegetation is often intermixed with increasing shrub cover after 10 years without mowing. Old field and shrubland is a man-made habitat type associated with the changing pattern of farming in agricultural landscapes, particularly the abandonment of farms.

**Typical Conditions:** Old field and shrublands support dense grass or shrub growth. Reed canary grass or bentgrass are commonly abundant but mixed with velvetgrass, orchard grass, and red fescue and weedy perennials such as creeping buttercup, red clover, white clover, and purple-leaved willow herb depending on moisture levels. Hardhack, Himalayan blackberry, or cut-leaf blackberry are the most common shrub species (note hardhack is often an indicator of disturbed wetlands). Old field characteristics develop quickly, usually two to three years after cessation of annual mowing or tilling in agricultural fields. Hedgerows are an important part of old field and shrubland communities.

**Justification:** Old fields and shrublands are important for:

1. biodiversity including small mammals and the owls<sup>8</sup> and hawks that hunt in them, and invertebrate pollinators (bees and flies);
2. carbon storage in wet soils (above-ground biomass is minor);
3. hydrological benefit in areas with seasonal flooding;
4. the cultural history of Richmond and are found in areas that were important farms.

**Related Regulations:** Old fields and shrublands are not explicitly protected or managed through provincial or federal legislation. The Migratory Bird Convention Act protects the nests of most birds during the nesting season, and the federal Species at Risk Act protects a small suite of listed species that may infrequently use old fields such as vesper sparrow and streaked horned lark.

<sup>8</sup> Including the regionally rare Short-eared Owl, which have been observed on Sea Island.



**Environmental Report Assessment Requirements:** For all ESA areas classified as old field or shrubland:

1. Confirm the ESA boundaries based on field assessment by a qualified professional.
2. Assess and confirm general ecological characteristics including general vegetation types using existing information such as recent orthophoto imagery and field assessment by a qualified professional.
3. Review current and previous ESA mapping including 2011 ESA, and Metro Vancouver's 2011 Sensitive Ecosystem Mapping.
4. Review site history (age of old fields) based on historical air photo assessment and local knowledge.

### **Guidelines**

- a) Preserve large patches of old field and shrubland except in accordance with the conditions of the Development Permit and other necessary permits or approvals (e.g., Wildlife Act).
- b) Permitted works shall use careful site design to avoid the most sensitive portions of the old field and shrubland unit such as more diverse areas with a range of grasses, seasonally flooded areas, areas with perching sites for raptors.
- c) Old fields slowly change to shrublands and finally to forest cover over 10 to 25 years. While this evolution will create positive ecological benefits, maintaining old fields provides unique habitat benefits and contributes to biodiversity. Management practices such as infrequent strip mowing as occurs in the Sea Island Conservation Reserve is needed to maintain them as old fields over time.
- d) Work with farmers to retain old fields and shrublands (hedgerows) where they do not conflict with farm use. Leasing arrangements by the City may be investigated as a possible means of retaining old fields and shrublands on some sites.
- e) Enhance the value of old fields and shrublands by providing perching or roosting sites, or planting hedgerows.
- f) Conformance with these guidelines does not exempt applicants from meeting requirements of other agencies. It is the responsibility of proponents to ensure they meet all external requirements.



### 14.7.6 Freshwater Wetland

*The intent is to maintain the areal extent and condition of fresh water wetland designated as ESAs by preserving vegetation and soils, and maintaining pre-development hydrology, drainage patterns and water quality.*

**Area Designation:** Areas with vegetation and soils influenced by the presence of freshwater in the rooting zone for plants<sup>9</sup>; includes open, forested, and shrub bogs, swamps, marshes, wet meadows, seasonally flooded fields, and shallow (<2 m or 6.56 ft. depth) ponds and ditches.

**Typical Conditions:** Wetlands are widespread in Richmond and include bog forests with pine and birch trees, shrub swamps with Labrador tea and other bog plant species, cattail marshes, reed canary grass marshes, ditches and ponds. In some cases, wetland vegetation has been removed and only the soil remains from the previous wetland ecosystem. Bogs and related peatland wetlands are found within the previous boundaries of Lulu Island bog. Many large freshwater wetlands in Richmond such as Richmond Nature Park are within the ecological network but are not designated as Development Permit areas because they are protected as parks.

**Justification:** Freshwater wetlands are important for:

1. regulating water flow (hydrology) by storing water during rainfall and promoting groundwater infiltration;
2. influencing water quality through filtration, capture, and transformation of a variety of chemical constituents in plants and soil;
3. providing habitat for a diverse and often unique community of plant and animal species including amphibians, waterfowl, dragonflies, sedges, and peat-mosses;
4. storing carbon in saturated organic soils, particularly peat soils that are common in Richmond.

<sup>9</sup> A wetland is land where the water table is at, near, or above the surface or which is saturated for a long enough period to promote such features as wet-altered soils and water tolerant vegetation. Wetlands include organic wetlands or "peatlands", and mineral wetlands or mineral soil areas which are influenced by excess water but produce little or no peat (Environment Canada, 1996).





**Environmental Report Assessment Requirements:** For all ESA areas classified as freshwater wetland:

1. Confirm the ESA boundary based on field assessment by a qualified professional.
2. Assess and confirm general ecological characteristics including general vegetation types using existing information such as recent orthophoto imagery and field assessment of soil and vegetation by a qualified professional. Wetland identification often requires specialized skills particularly in disturbed areas where soil and natural vegetation has been modified.
3. Review current and previous mapping including 2011 ESA, Metro Vancouver's 2011–2012 Sensitive Ecosystem Mapping, and Canadian Wildlife Service's historical and current wetland mapping.
4. Review the site's drainage system including watercourses, ditches, and stormwater pipes using City of Richmond's online GIS Inquiry mapping tool supplemented by field assessment if necessary.
5. Assess impacts to site hydrology for development activities that have the potential to affect hydrology and seasonal water table fluctuations (e.g., land drainage, ditches, large areas of impervious surface coverage, stormwater discharge or water storage).
6. Identify any nearby (within 100 m or 328 ft.) wildlife use such as raptor, crane, or heron nests using existing information and field surveys by a qualified professional<sup>10</sup>.
7. Assess freshwater wetland ESA areas for the presence of species or ecological communities at risk (see BC Conservation Data Centre<sup>11</sup> for current ranking).

**Related Regulations:** Freshwater wetlands are not explicitly protected or managed through provincial or federal legislation unless they are fish habitat or require a federal permit or approval (e.g., Navigable Waters Protection Act of Canadian Environmental Protection Act). Relevant regulations which influence wetland protection in urban areas include the BC Wildlife Act if there are any listed wildlife (herons and eagles), the Migratory Bird Convention Act which protects the nests of most birds during the nesting season, and potentially the federal Species at Risk Act for SARA-listed species. Commitments by Metro Vancouver's member municipalities under the regional Liquid Waste Management Plan may eventually provide some protection of freshwater wetlands for their role in urban watershed management.

### Guidelines

- a) Preserve the extent and condition of all freshwater wetlands in ESAs, except in accordance with the conditions of the Development Permit and other necessary permits or approvals.
- b) Maintain ecological processes important to the long-term health of freshwater wetlands including drainage patterns, hydrology, seasonal water table fluctuations, and water quality.
- c) Consider contiguous or nearby ESA areas, or other areas of the Ecological Network, which have the potential to influence the freshwater wetland. Use vegetated buffers of at least 30 m (98.43 ft.) around wetlands to prevent direct or indirect disturbance.
- d) No alterations should be made to freshwater wetland without an appropriate environmental assessment and implementation of mitigation measures. The City may require preparation of an Environmental Protection Plan (EPP) prepared by a qualified professional to guide environmental management on sensitive, complex or large sites.

<sup>10</sup> Inventory Method for Raptors (BC Environment 2001). See here or [http://www.ilmb.gov.bc.ca/risc/pubs/tebiodiv/raptors/version2/rapt\\_ml\\_v2.pdf](http://www.ilmb.gov.bc.ca/risc/pubs/tebiodiv/raptors/version2/rapt_ml_v2.pdf)

<sup>11</sup> BC Species and Ecosystem Explorer. See here or <http://a100.gov.bc.ca/pub/eswp/>





- e) No recreational trails or other facilities shall be constructed in freshwater wetlands.
- f) Permitted works shall use careful site design to avoid the most sensitive portions of the freshwater wetland.
- g) Development proposals that include measures to restore degraded freshwater wetlands by removing historical fill, structures, or contaminated sediment, and recreating natural habitats such as sedge marsh or shrub swamps will be viewed positively by the City.





## 14.8 Marina Guidelines

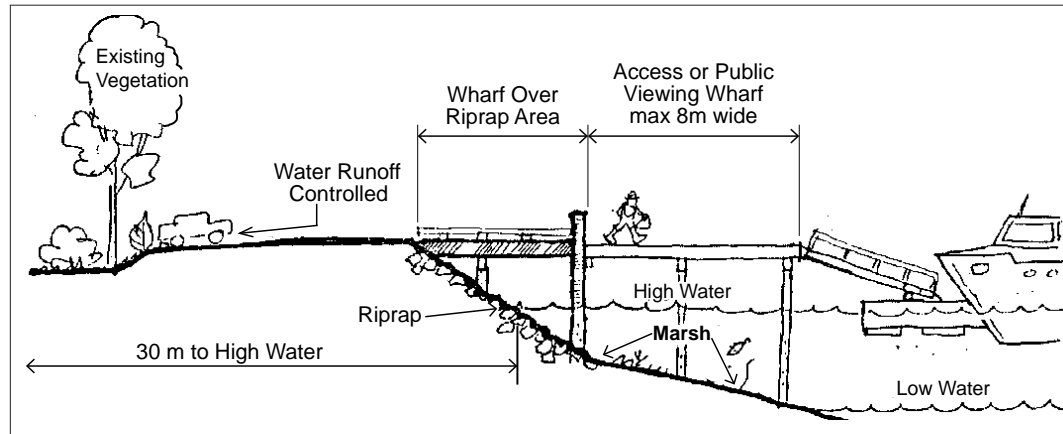
*These Guidelines are intended to ensure that marinas, which are located in an Environmentally Sensitive Area (ESA), are built to respect the natural environment and are appropriately located and designed.*

The Marina Guidelines, Environmentally Sensitive Area (ESA) Guidelines and General Guidelines apply to all marina developments that require a Development Permit.

### 14.8.1 Environment

*The intent is to protect and enhance the shoreline and foreshore areas.*

- a) No alterations should be made to the shoreline that would adversely affect fish or wildlife habitat. The environmentally acceptable method of development is by using upland areas or by construction of wharves or floating docks rather than by land fill. For the purposes of these marina guidelines, the shoreline is defined as the intertidal areas plus the area within 30 m (98.4 ft.) of the high-water mark.
- b) Wharves should not extend over marshes or other productive foreshore areas. Wharves should not, in any case extend over the water beyond the mean low-water mark (see sketch), except for wharves which are less than 8 m (26.2 ft.) wide and are for the purpose of access to floats or for public viewing access.

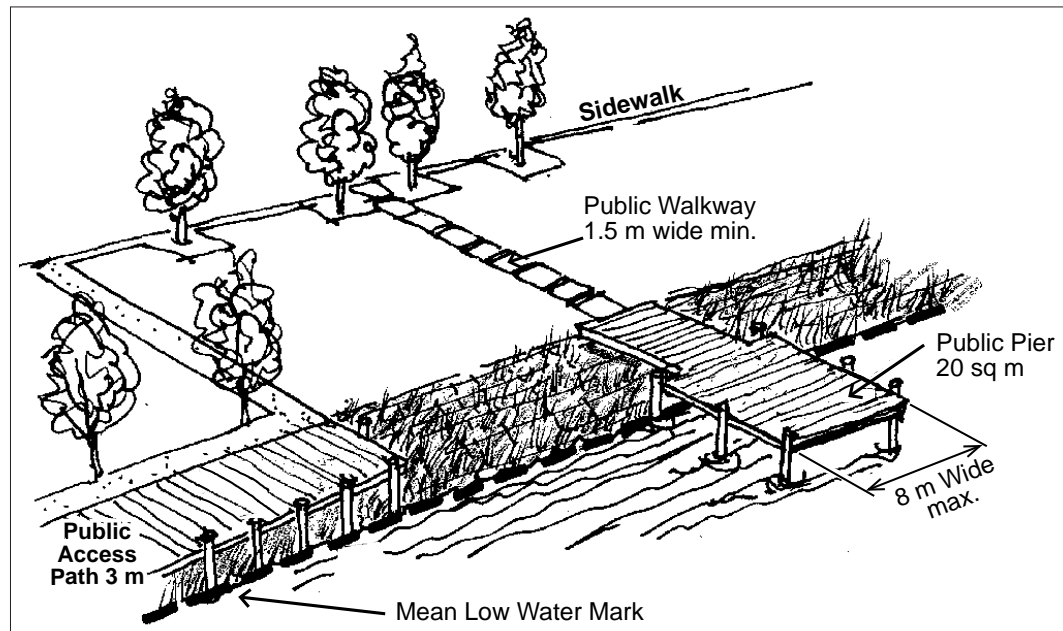


- c) Existing vegetation within 30 m (98.4 ft.) of the high-water mark should be retained or enhanced. Areas disturbed during construction or dredging shall be replanted where necessary with native species.
- d) Run-off should not be permitted to adversely affect water quality for fish. Measures taken to control run-off shall be indicated in the Development Permits.
- e) Conformance with these guidelines does not exempt applicants from meeting the requirements of other agencies such as those participating in the Fraser River Estuary Management Program (FREMP).

### 14.8.2 Public Access

*The intent is to secure adequate public access to the water.*

- a) A continuous 3 m (9.8 ft.) public-access pathway should be constructed parallel to and as close to the water's edge as practicable provided it does not impact wildlife habitat areas.





- b) In existing marinas where it is not possible to provide a continuous 3 m (9.8 ft.) public access, then a public pier of minimum 20 m<sup>2</sup> (215 ft<sup>2</sup>) should be provided at the water's edge. The public pier shall be connected to the City trail or sidewalk via a minimum 1.5 m (4.9 ft.) wide public walkway.

### 14.8.3 Landscaping

*The intent is to protect existing trees and enhance the landscaping.*

- a) All undeveloped portions of the upland shall be landscaped. The marina developer should plant and maintain on the upland one tree for every 15 m (49.2 ft.) of water frontage, or equivalent. Appropriately size native species of trees should be used wherever possible.
- b) New tree planting is not permitted on the dike. Permission to plant trees adjacent to the dike should be requested from the City's Engineering Planning Department and is subject to the Provincial Diking Inspector's review.
- c) Existing trees should be preserved wherever possible, and many fulfil the requirements of this section.

### 14.8.4 Design

*The intent is to protect public views and provide sufficient facilities, parking and services to the marina.*

#### 14.8.4.A Views

- a) Buildings, float homes, or boat shelters on the waterfront should not obstruct the waterfront view from public roads, walkways and trails which intersect the shoreline. A view corridor equal to the width of the road should be maintained free of buildings, signs or storage.
- b) Buildings should not unduly obstruct views from public walkways or trails.

#### 14.8.4.B Common Facilities

- a) Shared common facilities should be provided at a minimum of 50 m<sup>2</sup> per ha (218 ft<sup>2</sup> per ac.) of lot developed for residential moorage. Shared common facilities may include covered mail pickup, bulletin board, storage, shared meeting rooms, play areas, or childcare facilities. Common facilities should include both an outdoor upland play area and an indoor recreation area.

#### 14.8.4.C Float Homes Separation

- a) All float homes and other floating habitable structures should maintain a minimum clear distance of 3 m (9.8 ft.) between structures.
- b) Plans should indicate screening and other mitigation measures to reduce the impact of incompatible adjacent uses.
- c) Areas within 10 m (32.8 ft.) of bridges should be kept clear of buildings except as approved by the Harbour Commission and the BC Ministry of Transportation and Infrastructure and as specified in the permit.
- d) Walkways, gangways and piers should have pedestrian-scale lighting; however, lighting should be shielded so as not to affect navigation. Light should not exceed two foot-candles at the harbour headline.
- e) Garbage and recycling containers should be located in inconspicuous places and screened from public view. Access for collection vehicles should be provided.



**14.8.4.D Parking**

- a) The vehicular egress and access to the street should be clearly marked and the street address should be posted in a conspicuous place and lighted.
- b) Parking lots should be designed so that pedestrian access is clearly separated from driveways and parked vehicles. In particular, the main dock entrance, the public street and parking areas should be linked by a walkway.
- c) All parking areas should be provided with adequate curbs in order to retain vehicles within the parking areas and to ensure that sidewalks, landscape areas, and buildings are separated from parked vehicles.
- d) Measurement of parking spaces may allow for 0.6 m (2 ft.) overhang, provided that adequate curbs are installed, and provided that adjacent sidewalks have 1 m (3.3 ft.) clear width.
- e) Two-way traffic should be provided in parking lots wherever practicable. Visitor parking should be clearly marked as such.

**14.8.4.E Access**

- a) Direct pedestrian access should be provided from parking and loading areas to the main dock. Pedestrian overpasses to parking located across major roads may be required.

**14.8.4.F Dike Maintenance**

- a) Wharves should be designed keeping in mind that public access may be needed for maintenance of the dike surface or for repairs to the rip-rap. A continuous 4 m (13.1 ft.) wide vehicular access must be provided on top of the dike, and a continuous 9 m (29.5 ft.) two-way emergency vehicular access should be provided either on the dike or adjacent to the dike. In some cases, the adjacent (public) road may serve as the two-way access.
- b) Access roads should be designed with a minimum impact on existing habitat.

**14.8.4.G Construction Around Dikes**

- a) All dike improvements should conform to the Provincial Diking Inspector's guidelines and obtain Provincial Diking Inspector review and approval under the Provincial Dike Maintenance Act.



## 14.9 Broadmoor Neighbourhood Centre Guidelines

*These Guidelines are intended to enhance the design, character and function of the Broadmoor Neighbourhood Centre.*

The Broadmoor Neighbourhood Centre Guidelines, Commercial and Commercial/Mixed Use Guidelines and General Guidelines apply to developments that require a Development Permit.

### 14.9.1 Centre Vision

*The intent is to establish a vision for the Broadmoor Neighbourhood Centre based on public consultation that occurred.*

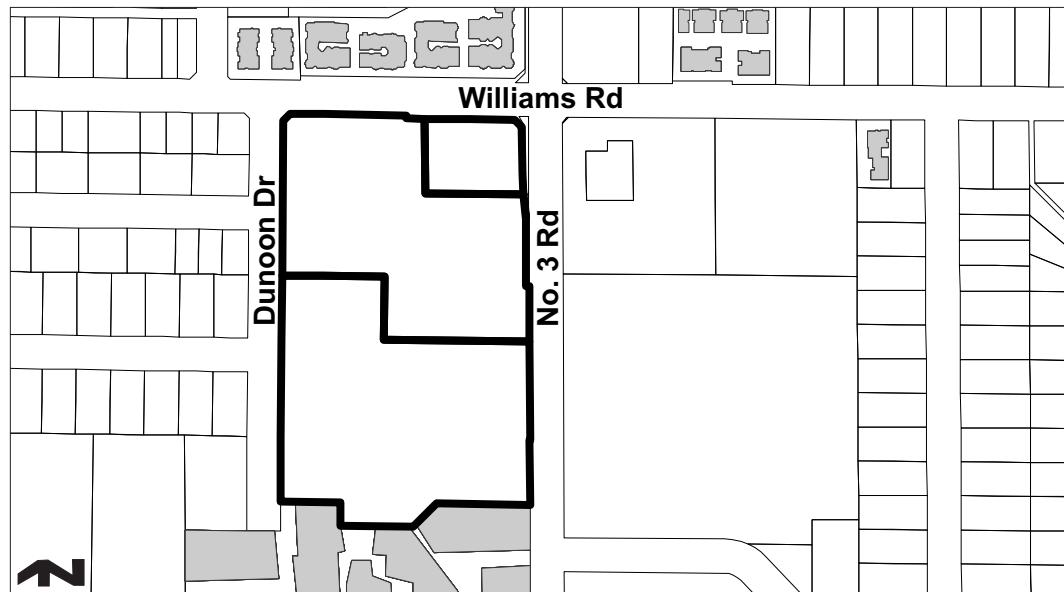
*"A vibrant, accessible and sustainable mixed use hub where people will be able to live work and meet their daily needs."*

The Neighbourhood Centre is envisioned to become:

- a vibrant, compact mixed use hub with a mix of housing, shops and services;
- the heart of Broadmoor where people will be able to live, work, and meet their daily needs;
- pedestrian oriented with public spaces where people can meet and pedestrian paths that link to adjacent neighbourhoods and parks;
- an area which reflects the principles of sustainability with a contemporary design that integrates durable and natural materials.



### Broadmoor Neighbourhood Centre Area Map



#### 14.9.2 Form and Character

*The intent is to create a functional commercial node with more urban character and respond appropriately to the adjacent neighbourhood context.*

- a) The Master Plan area exemplifies a sustainable, durable and contemporary design character.
- b) Buildings will vary in height from 2 to 6 storeys and contain a variety of commercial spaces and residential units.
- c) Buildings are placed along the perimeter of the site, close to the property line along No. 3 Road and Williams Road to reinforce building frontage continuity, especially along No. 3 Road.
- d) Large open surface parking areas to be partially screened from direct views from the street (using a combination of landscaping and lattice/arbours structures).
- e) Building frontage building heights vary between 2 and 6 storeys.
- f) Density is greatest along the main arterial of No. 3 Road and the northeast corner of the site at Williams Road and No. 3 Road, where a public urban space and architectural features would establish a landmark at this neighbourhood intersection and key gateway.
- g) Residential units are located above commercial uses and townhouse forms are at ground level when adjacent to existing residential areas.
- h) Residential units above commercial uses along No. 3 Road and Williams Road to be setback from the edge of the commercial/parking floors so that the streetwall is perceived to be not higher than 4 storeys.
- i) Buildings of various heights and massing create identifiable nodes and interest, particularly along No. 3 Road and Williams Road.
- j) Commercial retail units (CRU's) at ground floor to have direct pedestrian access from the public sidewalk.
- k) Decorative pavement to extend from public sidewalk to the building face where there is no substantial grade difference.
- l) Building facades are animated by views into active retail space.



- m) If no fenestrations provided, housing forms wrap around otherwise blank edges of internally oriented commercially space.
- n) An identifiable mass and/or landscaping feature will be created at the entrance to Dunoon Drive by incorporating a feature “ending” to the last and northerly townhouse block on the Williams Road portion.
- o) There will be residential units suitable for all family types, including opportunities for ground-oriented housing, and upper level apartment/condominiums with access to useable roof space.
- p) Where the street frontage is comprised of residential development at grade (e.g., along Dunoon), buildings will:
  - have their major entries onto Dunoon Drive or the perimeter of a privately-owned publicly accessible areas;
  - be developed with entry transitions and semi-private outdoor spaces;
  - will include steps and changes in grade, fences, gates, low walls, hedges and other plantings.
- q) Where buildings are located immediately adjacent to existing residential areas, upper storeys are stepped back to reduce overlook concerns and minimize massing.
- r) Residential windows and balconies overlook common areas and public streets, providing “eyes on the street”.
- s) Ground-oriented commercial units front internal surface parking areas, front No. 3 Road and portions of Williams Road providing an active streetscape with direct pedestrian access from the street sidewalk.
- t) Large buildings blocks are architecturally broken down into an expression of smaller street-fronting retail with varied frontages.
- u) Building and landscape design at the corner of Williams Road and No. 3 Road is distinctive and welcoming.
- v) Continuous weather protection is provided along commercial building frontages in the form of relatively continuous canopies and awnings.
- w) Commercial units provide proportional and abundant glazing at street level to contribute to an active and interesting streetscape.
- x) There will be no extensive blank walls or obscured windows along the street frontage, at grade or on upper levels.
- y) Streetscapes (defined by building heights and setbacks, sidewalk and landscaping) are consistent with a more urban overall character and compatible with the general character of the Master Plan area, and are complementary to the existing neighbourhood context.
- z) Terracing and building setbacks on upper levels of taller (over 4 storeys) street-wall buildings are employed to create interest, improve access to light and to reduce bulk.
- aa) Height and massing are varied on street buildings to create a diverse and well-articulated shopping area.
- bb) Building articulation, glazing and a variety of materials are used to prevent long, featureless facades.
- cc) Awnings and overhangs provide shade in the summer and weather protection along pedestrian routes, at the entrances of shops and residences.
- dd) Materials, colours and elements such as light standards, benches, fences and trash receptacles, contribute to a sustainable, durable, contemporary design character.
- ee) Local and sustainable products are used wherever possible (e.g., wood, recycled or renewable materials).



### 14.9.3 Flood Plain Construction Levels

*The intent is to ensure that floodproofing is carried out in a sensitive and attractive manner.*

- a) Protruding retaining walls necessary to meet flood elevation levels are screened from view with landscape planting or banks (Note: for direction on treatment of road frontages, Section 2.10.2 (a) "Attractive, Accessible Street Frontages, pages 2-116 and 2-117 of the City Centre Master Plan (CCAP) will be referred to. See pages 3-29 and 3-30 of the CCAP for direction on concealing parking below grade).

### 14.9.4 Key Gateways and Neighbourhood Nodes

*The intent is to establish the key principles and gateway or node considerations for the development of the Broadmoor Neighbourhood Centre.*

#### **General Principles:**

- the Master Plan area is permeable, safe, welcoming and accessible to people of all ages and abilities;
- prominent corners and entry points are designed as gateways that identify access points to the commercial area and routes into the neighbourhood;
- a neighbourhood node internal to the site is designed as a place to gather and interact with residents and visitors;
- the Broadmoor Master Plan identifies primary and secondary pedestrian corridors through the site and into the neighbourhood to connect to the surrounding neighbourhoods and Maple Lane Park;
- the pedestrian routes are direct, universally accessible and can accommodate a range of uses (e.g., wheelchairs and strollers);
- sidewalks and pedestrian corridors are well-defined through a combination of surfaces, landscape features and human-scale lighting;
- transit stops are visible and easily accessible by pedestrians and cyclists;
- buildings adjacent to transit stops integrate transit shelters into building and/or urban design with weather protection (e.g., awnings, overhangs and spaces for waiting);
- stairs and ramps are provided to access above grade entrances to residential and commercial units from the public realm;
- elements such as lamp standards, benches, fences and trash receptacles within the public realm are consistent in design and contribute to a sustainable, durable, contemporary design character;
- trees and other landscape features contribute to an attractive and comfortable public realm;
- trees, shrubs and appropriate landscaping frame pedestrian routes, reinforce the alignment of the pedestrian corridors through the site and add colour, texture and interest around the site;
- seating (seating walls or benches integrated to planters, or other) are provided along all pedestrian routes and in the central neighbourhood node;
- primary pedestrian corridor routes through the Master Plan area will be identifiable by pavement colour and texture, and will be separated, where feasible, from parking areas, and driveways;
- public art will contribute to the overall character and vibrancy of the service centre.





## Guidelines

### Gateways and Neighbourhood Nodes

- a) There are two landmark gateways and two neighbourhood nodes envisioned for the Master Plan area. These serve as a welcome to the neighbourhood centre and provide an opportunity for social interaction or seating. They are envisioned to enhance the quality of the urban environment for the benefit of land owners, tenants and residents. Key features of each gateway and node are identified below:

#### Williams Road and No. 3 Road Gateway

- a) The gateway at Williams Road and No. 3 Road will integrate an identifiable landmark feature consistent with the general character of the Master Plan, which could include a unique building design or landscape feature.
- b) The gateway will integrate site signage that identifies the service centre and provides directional information to key focal points in the community or at the service centre.
- c) The gateway functions as the welcome to the 'heart' of Broadmoor.

#### No. 3 Road (south) Gateway

- a) This gateway provides the primary vehicle access and pedestrian corridor to the service centre from No. 3 Road; the primary pedestrian corridor extends further to the east and provides access to the adjacent neighbourhood from No. 3 Road.
- b) This gateway will be designed to open up the entrance to the shopping area (to views) from No. 3 Road and highlight the beginning of the main pedestrian route and connection to Dunoon Drive and Petts Road through the neighbourhood center.
- c) Integration of all modes of transportation, safe and accessible design are the primary organizing principles for the design of this gateway.
- d) The gateway will be predominantly hardscape complimented by vegetation and corner architectural feature on adjacent buildings.
- e) Opportunities for gathering and informal interaction through the integration of landscape or architectural elements should be explored.
- f) The gateway will integrate site signage that provides directional information to key focal points at the service centre.

#### Central Plaza Node (A)

- a) At the centre of the service centre this node is also an anchor associated with the neighbourhood and is 800 m<sup>2</sup> (8,611 ft<sup>2</sup>) in size.
- b) Is internal to the site and it is the organizing space within the central surface parking area.
- c) Provides a central space/structure as a node in the middle of the central parking area to break the extent of paved parking surfaces into two smaller, friendlier parking clusters and organizes the parking area vehicular circulation.
- d) Contains a distinguishable feature such as a light structure retail/kiosk and associated plaza with seating, designed to facilitate gathering as well as green landscaped areas to create a buffer to the surrounding parking areas and vehicular circulation.
- e) Will include benches, waste receptacles and could be the place for a public art piece as a tall vertical element that serves as a landmark that identifies the service centre.



### **Dunoon Drive Node (B)**

- a) Located along Dunoon Drive across from Petts Road, this space identifies the western entrance to the Primary Pedestrian Corridor to No. 3 Road through the neighbourhood service centre.
- b) Encourages pedestrian connectivity between Maple Lane Park and the service centre, and offers a key connection between park/neighbourhood and No. 3 Road.
- c) Establish a break along the continuous built frontage along Dunoon Drive and is 800 m<sup>2</sup> (8,611 ft<sup>2</sup>) in size.
- d) Adjacent buildings will be designed to ensure good access to sunlight and will front onto this area.
- e) Reinforce safety by implementing “eyes on the street” principles with clear overlook from any adjacent commercial or residential buildings, with individual residential units oriented towards and having direct access to the open space; where possible individual front doors should open along the gateway edge sidewalks.
- f) Signage provides directional information and identifies the service centre.
- g) Benches, lighting and waste receptacles are provided.

## **14.9.5 Key Pedestrian Corridors**

*The intent is to identify and plan for the important pedestrian connections in the Broadmoor Neighbourhood Centre.*

### **Primary East-West (E-W) Pedestrian Corridors—No. 3 Road to Dunoon Drive E-W Pedestrian Corridor**

- a) A centrally located, landscaped pedestrian spine that extends parallel to the vehicular access route and provides a direct connection from No 3 Road to Dunoon Drive and Petts Road.
- b) Includes decorative pavement and a double row of trees to highlight the east-west primary pedestrian corridors through the Master Plan area.
- c) Will include a 2.5 m (8.2 ft.) wide paved path with a 1.5 m (4.92 ft.) wide boulevard for tree, shrubs or other vegetation on each side.
- d) Integrate coloured pavement (contrasting with asphalt on parking/drive aisles) and pedestrian scale lighting.
- e) Integrate paved bump-outs with landscape features and seating areas along the drive aisle of this corridor; if feasible integrate parallel parking or another design solution to ensure pedestrian feel protected from the drive aisle at this edge.
- f) Ensure a vertical element (signage, gateway feature) is provided at the termini (No 3 Road (south) and Gateway B discussed above) to draw people through the corridor.
- g) Should be designed to be durable and include shade trees.

### **E-W Access Pedestrian Corridor**

- a) This is a primary pedestrian corridor to the internal neighbourhood node (A) from the northern access on No. 3 Road, and links to the internal north-south pedestrian corridor network.
- b) The corridor will be a paved 2.5 m (8.2 ft.) wide sidewalk allowing a 1.5 m (4.92 ft.) wide boulevard for trees, trees grates and seating along the edge of the commercial parking areas.
- c) The corridor will extend along the internal storefronts or active building facades and will include raised crossings where vehicles cross its path.



### **North-South (N-S) Pedestrian Corridors—N-S Internal Pedestrian Corridor**

- a) Provides a direct internal corridor between Williams Road and the two main E-W Primary Pedestrian Corridors connecting through the site with the internal commercial services.
- b) Includes decorative or coloured pavement and a row of trees to highlight the north-south primary pedestrian corridors through the Master Plan area.
- c) Is located along commercial frontages to the east of the development, where possible, and connects Williams Road to the internal node and the two east-west pedestrian corridors.
- d) Facilitates the integration of the service centre with the pedestrian network and connecting to surrounding residential areas.
- e) Provides pedestrian scale lighting, signage, waste receptacles and seating along the pathway.

### **N-S Pedestrian Corridor on Dunoon Drive from Petts Road to Maple Lane Park**

- a) An enhanced pedestrian realm is desirable to extend along Dunoon Drive from the Dunoon Drive node at Petts Road to the south portion of the Master Plan area to highlight and reinforce the linkage to Maple Lane Park.
- b) Integrates with Maple Lane Park by incorporating strong and well identifiable public use pedestrian corridor along Dunoon Drive, toward Maple Lane Park.
- c) Encourage linkages to Maple Lane Park and Petts Road so that residents can easily access the service centre via pedestrian friendly corridors rather than through parking and loading driveways, or by using the car.
- d) Facilitate and allow views to the site that can be seen from Maple Lane Park; therefore providing a highly integrated pedestrian corridor connected with two gateways to access the shopping area, from Dunoon Drive and the southern portion of the site.

### **Secondary Pedestrian Corridors**

- a) These corridors are extensions of the Primary Pedestrian Corridors and complete the pedestrian circulation network. They extend along the internal and external frontage of the residential and commercial buildings and include City sidewalks along the periphery if not identified on the Master Plan concept.
- b) Pedestrian crossings will be enhanced to be safe and highly visible at No. 3 Road and Williams Road to facilitate strong linkages to the Service Centre and to the surrounding neighbourhood to the north and east.

## **14.9.6 Centre Integration With Maple Lane Park**

*The intent is to have the Broadmoor Neighbourhood Centre integrate with Maple Lane Park.*

- a) The Broadmoor Neighbourhood Service Centre will:
  - integrate with Maple Lane Park by incorporating public use pedestrian corridors and extending walkways through the shopping area and open spaces to the south along Dunoon Drive, toward Maple Lane Park;
  - provide linkages to Maple Lane Park and Nevis Drive and Pett Road so that residents can access the shopping area via pedestrian friendly corridors rather than through parking and loading driveways.



### 14.9.7 Parking, Loading and Access

*The intent is to provide direction to the parking, loading and access needs of the Centre.*

- a) Surface parking is limited to convenience parking for retail shops, while most commercial and residential parking is located within the building envelope on the first or second level.
- b) The Broadmoor Neighbourhood Service Centre will:
  - provide parking organized in small clusters, contain the parking areas within the centre of the site and minimize the amount of exposed surface parking.
- c) Surface parking exposed to views along Williams Road frontage will be partially screened from views (incorporating a combination of landscaping, low lattice fence 1.21 m (4 ft.) and trellis/arbour structure):
  - provide a balanced supply of parking that meets the residential and commercial needs of the development, while supporting and encouraging alternative modes of transportation;
  - provide ways for commercial loading and service vehicles to enter and exit the shopping area from No. 3 Road and Williams Road and ultimately not from Dunoon Drive;
  - utilize trees and landscaping to separate sidewalks from parking areas to protect people from vehicle traffic and create a pleasant pedestrian zone;
  - provide clusters of small car parking spaces combined with full size parking spaces to introduce landscaping islands with trees and other appropriate vegetation to facilitate natural drainage in the parking area, and to provide shade and visual relief of the parking surface.
- d) Bicycle parking facilities will be provided at all residential and commercial building entrances.
- e) When vehicle parking is located within a building, the parking structure will be screened from view, either by wrapping the parking with residential or commercial units, or through the use of architectural features such as louvers.
- f) Loading areas will be integrated as part of the building(s) and provided with appropriate visual screens and/or gates.
- g) Parking lots and structures are well lit and designed according to CPTED principles.
- h) Surface parking lots are landscaped with trees.
- i) Parking areas, building entrances, sidewalks and public spaces are designed to be safe and accessible to people of all ages and abilities.

### 14.9.8 Green Buildings and Sustainable Infrastructure

*The intent is to incorporate innovative approaches for green infrastructure and green buildings, that flexibly address on-site rainwater management, energy efficiency and renewable energy production, potable water conservation and waste minimization.*

- a) At the minimum, the buildings in the development will meet By-law No. 8385, “Green Roofs and Other Options Involving Industrial and Office Buildings Outside the City Centre”. Other approaches to green buildings will be considered such as those required in the City Centre Area Plan (e.g., LEED rating system and credits), or LEED Silver Certification or equivalency.



- b) The Broadmoor Service Centre will design buildings and site infrastructure that:
- minimize the use of energy and reduce Greenhouse Gas Emissions;
  - use less potable water;
  - use resources efficiently and incorporate sustainable building materials;
  - mitigate, manage, and clean as much rainwater on site as possible;
  - reduce the generation of waste through careful design and construction practices;
  - incorporate ways to improve indoor air quality, noise, noxious emissions and dust;
  - consider opportunities for urban agriculture on the site.





## **15.0 Regional Context Statement (RSC)**





# 15.0 Regional Context Statement (RCS)

## 1. Purpose

The purpose of a Regional Context Statement is to legally show how the 2041 OCP is, or can be made, to be consistent with the 2040 Regional Growth Strategy (RGS).

## 2. RCS Contents

The 2041 OCP Regional Context Statement is as follows:

### 2040 Metro Vancouver Regional Growth Strategy (RGS)

<b>The Regional Context Statement (RCS) Policy</b> (e.g., provides examples of how the OCP is or can be made consistent with the 2040 RGS)	
<b>RGS GOAL 1 CREATE A COMPACT URBAN AREA</b>	
<b>STRATEGY 1.1 Contain urban development within the Urban Containment Boundary.</b>	
Role of Municipalities 1.1.3 Adopt Regional Context Statements which: a) depict the Urban Containment Boundary on a map, generally consistent with the Regional Land Use Designations map (Map 2); b) provide municipal population, dwelling unit and employment projections, with reference to guidelines contained in (RGS) Appendix Table A.1, and demonstrate how municipal plans will work towards accommodating the projected growth within the Urban Containment Boundary.	See OCP RCS Map: shows the City's Urban Containment Boundary (UCB), which is consistent with the MV RGS.  The 2040 RGS projection (estimates) for the City are: <ul style="list-style-type: none"> <li>• Population = 275,000</li> <li>• Dwelling Units = 115,500</li> <li>• Employment = 181,000</li> </ul> The City's 2041 OCP projections (estimates) are consistent with the 2040 RGS, as follows: <ul style="list-style-type: none"> <li>• Population = 280,000</li> <li>• Dwelling Units = 115,000</li> <li>• Employment = 180,000</li> </ul> The 2041 OCP enables the City to strive to achieve these projections, subject to long-term market forces, and government policies and support.  The City will strive to achieve these projections by implementing the 2041 OCP and Area Plans, and undertaking demographic projection and policy refinements in collaboration with Metro Vancouver.  The City considers that any City projection differences are deemed to be within acceptable RGS estimates (e.g., as such are affected by government policies and funding, the market, the economy, immigration policies).



<b>The Regional Context Statement (RCS) Policy</b> (e.g., provides examples of how the OCP is or can be made consistent with the 2040 RGS)	
<p><b>STRATEGY 1.2 Focus growth in Urban Centres and Frequent Transit Development Areas.</b></p> <p>Role of Municipalities</p> <p>1.2.6 Adopt Regional Context Statements which:</p> <p>a) provide dwelling unit and employment projections that indicate the municipal share of planned growth and that contribute to achieving the regional share of growth for Urban Centres and Frequent Transit Development Areas as set out in Table 2 (Metro Vancouver Dwelling Unit and Employment Growth Targets for Urban Centres and Frequent Transit Development Areas);</p>	<p>In the 2041 OCP, the City's projected regional share of planned dwelling unit and employment growth are provided (see below) and contribute to achieving the City's regional growth share for its Urban Centre (i.e., City Centre) and any future Frequent Transit Development Areas:</p> <p>For the City Centre:</p> <ul style="list-style-type: none"> <li>• Dwelling units = 47,000</li> <li>• Employment = 60,000</li> </ul> <p>For Outside the City Centre:</p> <ul style="list-style-type: none"> <li>• Dwelling units = 68,000</li> <li>• Employment = 120,000</li> </ul> <p>Note: For FTDA's - In the 2041 OCP, no FTDA's have been identified at this time. Such may be identified over the long-term based on community input, and collaboration with TransLink and Metro Vancouver.</p> <p>These estimates are deemed to be consistent with the 2040 RGS, as any differences are regarded as minor and subject to long-term market forces, government policies and immigration.</p> <p>i) - ii) See 2041 OCP RCS Map which identifies one City Urban Centre (i.e., City Centre) which is consistent with the 2040 RGS.</p> <p>The City's City Centre accommodates most City growth in a manner which is consistent with the 2040 RGS.</p> <p>iii) The 2041 OCP encourages office development, for example, in the City Centre, through non-residential reserves (e.g., near the River Rock Casino, Aberdeen Mall), density bonusing incentives (e.g., for "Institutional" uses), when such developments are near transit like the Canada Line and its 5 stations with an emphasis of creating City Centre High Density Urban Villages which allow offices.</p> <p>iv) The 2041 OCP supports reduced parking requirements in the City Centre for example by continuing reduced residential and commercial parking requirements (e.g., up to 30% and up to and a further 10% reduction for providing TDM measures within 400 m (1,312 ft.) of the Canada Line).</p>
<p>b) include policies for Urban Centres which:</p> <p>i) identify the general location, boundaries and types of Urban Centres on a map generally consistent with the guidelines set out in Table 3 (Guidelines for Urban Centres and Frequent Transit Development Areas) and the Regional Land Use Designations map (Map 2);</p> <p>ii) focus growth and development in Urban Centres, generally consistent with guidelines set out in Table 3 (Guidelines for Urban Centres and Frequent Transit Development Areas);</p> <p>iii) encourage office development through policies and/or other financial incentives, such as zoning that reserves capacity for office uses and density bonus provisions;</p> <p>iv) in coordination with the provision of transit service, establish or maintain reduced residential and commercial parking requirements in Urban Centres, where appropriate;</p>	<p>i) - ii) See 2041 OCP RCS Map which identifies one City Urban Centre (i.e., City Centre) which is consistent with the 2040 RGS.</p> <p>The City's City Centre accommodates most City growth in a manner which is consistent with the 2040 RGS.</p> <p>iii) The 2041 OCP encourages office development, for example, in the City Centre, through non-residential reserves (e.g., near the River Rock Casino, Aberdeen Mall), density bonusing incentives (e.g., for "Institutional" uses), when such developments are near transit like the Canada Line and its 5 stations with an emphasis of creating City Centre High Density Urban Villages which allow offices.</p> <p>iv) The 2041 OCP supports reduced parking requirements in the City Centre for example by continuing reduced residential and commercial parking requirements (e.g., up to 30% and up to and a further 10% reduction for providing TDM measures within 400 m (1,312 ft.) of the Canada Line).</p>



<b>The Regional Context Statement (RCS) Policy</b> (e.g., provides examples of how the OCP is or can be made consistent with the 2040 RGS)	
<p>c) include policies for Frequent Transit Development Areas which:</p> <ul style="list-style-type: none"> <li>i) identify on a map, in consultation with TransLink, the general location and boundaries of Frequent Transit Development Areas that are generally consistent with:                             <ul style="list-style-type: none"> <li>• Table 3 (Guidelines for Urban Centres and Frequent Transit Development Areas);</li> <li>• TransLink's Frequent Transit Network, which may be updated over time;</li> <li>• other applicable guidelines and policies of TransLink for the Frequent Transit Network;</li> </ul> </li> <li>ii) focus growth and development in Frequent Transit Development Areas, generally consistent with the guidelines set out in Table 3 (Guidelines for Urban Centres and Frequent Transit Development Areas);</li> <li>iii) in coordination with the provision of transit service, establish or maintain reduced residential and commercial parking requirements within Frequent Transit Development Areas, where appropriate;</li> </ul> <p>d) include policies for General Urban areas which:</p> <ul style="list-style-type: none"> <li>i) identify the General Urban areas and their boundaries on a map generally consistent with the Regional Land Use Designations map (Map 2);</li> <li>ii) ensure development in General Urban areas outside of Urban Centres and Frequent Transit Development Areas are generally lower density than development in General Urban areas within Urban Centres and Frequent Transit Development Areas;</li> </ul>	<p><b>The Regional Context Statement (RCS) Policy</b>                      (e.g., provides examples of how the OCP is or can be made consistent with the 2040 RGS)</p> <p>At this time, the 2041 OCP does not identify FTDA's.</p> <p>Such may be identified over the long-term based on community input, and collaboration with TransLink and Metro Vancouver.</p> <p>i) The 2041 OCP RCS Map: identifies where the RGS General Urban designation is located.</p> <p>ii) The 2041 OCP supports such actions, for example, by proposing that:</p> <ul style="list-style-type: none"> <li>• in the City Centre: development occurs at higher densities (e.g., 3 FAR);</li> <li>• outside the City Centre:                             <ul style="list-style-type: none"> <li>- development occurs at lower densities (e.g., up to 1-2 FAR), for example, townhouses along certain arterial roads and the densification of some shopping centres to provide a mix of housing types, local-serving commercial activities and good access to transit at lower densities;</li> <li>- non-residential major trip generating uses may include: office, commercial, (e.g., generally limited to 1.5 FAR and with TOD and related measures).</li> </ul> </li> </ul> <p>At this time, no Frequent Transit Development Areas are established but may be later.</p> <p>At this time, no small scale Local Centres are established as they are not currently needed, but may be established later, if needed.</p>





<p><b>The Regional Context Statement (RCS) Policy</b> (e.g., provides examples of how the OCP is or can be made consistent with the 2040 RGS)</p> <p>iii) At this time no small scale Local Centres are proposed.</p> <p>iv) Non-residential major trip-generating uses include, for example, large box retail, and high density office towers, commercial and institutional uses.</p> <p>The 2041 OCP mainly encourages such uses in the City Centre (e.g., at up to 3 FAR).</p> <p>The 2041 OCP excludes such uses, in much of the General Urban area outside of the City Centre by only allowing them on a limited basis at lower densities certain areas for example:</p> <ul style="list-style-type: none"> <li>• as per the existing West Cambie Area Plan, Alexandra quarter section policies at up to 1.2 FAR;</li> <li>• in certain Mixed Employment places along Bridgeport Road at up to 1.2 FAR;</li> <li>• along the east side of No. 5 Road (“Highway To Heaven”) which allows large community institutional uses (e.g., assemblies, schools; at 0.25 FAR), where the “backlands” are farmed.</li> </ul> <p>v) Infill development is allowed by directing it to established areas, for example:</p> <ul style="list-style-type: none"> <li>• permitting townhouses along certain arterial roads;</li> <li>• densifying around some shopping centres, to provide a mix of housing types, local-serving commercial activities and good access to transit, at low density (e.g., 1.2 FAR);</li> <li>• permitting smaller single family lots in some areas;</li> <li>• permitting coach houses and granny flats (e.g., in Edgemere).</li> </ul> <p>At this time, no Frequent Transit Development Areas (FTDA) are identified but may be after more City planning and consultation with TransLink.</p>	<p>The 2041 OCP does not propose any Urban Centres or FTDA’s which overlay Industrial, Mixed Employment or Conservation and Recreation areas.</p>
<p>iii) where appropriate, identify small scale Local Centres in the General Urban areas that provide a mix of housing types, local serving commercial activities and good access to transit. Local Centres are not intended to compete with or compromise the role of Urban Centres and should preferably be located within Frequent Transit Development Areas (see Map 11);</p> <p>iv) exclude non-residential major trip-generating uses, as defined in the Regional Context Statement, from those portions of General Urban areas outside of Urban Centres and Frequent Transit Development Areas;</p> <p>v) encourage infill development by directing growth to established areas, where possible;</p>	<p>e) include policies that, for Urban Centres or Frequent Transit Development Areas that overlay Industrial, Mixed Employment, or Conservation and Recreation areas, the Industrial, Mixed Employment, and Conservation and Recreation intent and policies prevail, except that higher density commercial would be allowed in the Mixed Employment areas contained within the overlay area;</p>



<b>The Regional Context Statement (RCS) Policy</b> (e.g., provides examples of how the OCP is or can be made consistent with the 2040 RGS)	
<p>f) for Urban Centres, Frequent Transit Development Areas and General Urban areas, include policies which:</p> <ul style="list-style-type: none"> <li>i) support continued industrial uses by minimizing the impacts of urban uses on industrial activities;</li> <li>ii) encourage safe and efficient transit, cycling and walking;</li> <li>iii) implement transit priority measures, where appropriate;</li> <li>iv) support district energy systems and renewable energy generation, where appropriate.</li> </ul>	<p>The 2041 OCP, in the City Centre:</p> <ul style="list-style-type: none"> <li>• continues to support industrial uses, for example, by designating several non-residential areas for industrial activities (e.g., around the River Rock Casino, Aberdeen Mall);</li> <li>• encourages safe and efficient transit, cycling and walking (see Mobility and Access chapter), for example, in high density villages around the Canada Line, creating a finer network of streets, promoting rolling (e.g., wheel chair and scooter use) and bicycle lanes and pathways;</li> <li>• enables transit priority measures, for example, providing a transit-only signal on No. 3 Road to provide bus access to the Richmond-Brighouse off-street bus mall;</li> <li>• enables, promotes and requires, district energy systems and renewable energy generation, where appropriate. (see the Sustainable Infrastructure and Resources chapter), for example: district energy is being required around the Oval and explored elsewhere in the City Centre; having energy efficient requirements above the BC Building Code (e.g., LEED, EnerGuide 80, ASHRAE 90. 1-2007 standards); increasing waste diversion by increasing recycling (and decreasing waste), and promoting solar energy, sewage and river heat recovery, and exploring wind systems.</li> </ul> <p>The 2041 OCP, for areas outside the City Centre:</p> <ul style="list-style-type: none"> <li>• continues to support industrial uses, for example, by designating several areas for industrial uses (e.g., Mitchell Island; the portions of Riverside Industrial Park; along Bridgeport Road);</li> <li>• encourages safe and efficient transit, cycling and walking (see Mobility and Access chapter), for example: along certain arterial roads and when densifying shopping centres), promoting walking, bicycling and rolling (e.g., wheel chair and scooter use), bicycling lanes and pathways;</li> <li>• supports the implementation of transit priority measures, for example, queue-jumper lanes in congested areas where feasible and, when densifying shopping centres, reduce parking and improving TOD measures;</li> <li>• enables, promotes, and requires district energy systems and renewable energy generation, where appropriate, (see the Sustainable Infrastructure and Resources chapter), for example: district energy is being required in the West Cambie Alexandria neighbourhood; and having energy efficient requirements above the BC Building Code (e.g., LEED, EnerGuide 80, ASHRAE 90. 1-2007 standards), increasing waste diversion by increasing recycling and decreasing waste, and promoting solar energy, sewage and river heat recovery, and wind systems.</li> </ul>



<b>The Regional Context Statement (RCS) Policy</b> (e.g., provides examples of how the OCP is or can be made consistent with the 2040 RGS)	
<b>STRATEGY 1.3 Protect Rural areas from urban development.</b>	
Role of Municipalities 1.3.3 Adopt Regional Context Statements which:	
a) identify the Rural areas and their boundaries on a map generally consistent with the Regional Land Use Designations map (Map 2);	<ul style="list-style-type: none"> <li>• The 2040 RGS does not designate any City land as RGS "Rural".</li> <li>• 2041 OCP does not propose any land to have a RGS "Rural" designation.</li> </ul>
b) limit development to a scale, form, and density consistent with the intent for the Rural land use designation, and that is compatible with on-site sewer servicing;	
c) include policies which: <ul style="list-style-type: none"> <li>i) specify the allowable density and form, consistent with Action 1.3.1, for land uses within the Rural land use designation;</li> <li>ii) support agricultural uses within the Agricultural Land Reserve, and where appropriate, outside of the Agricultural Land Reserve.</li> </ul>	
<b>RGS GOAL 2 SUPPORT A SUSTAINABLE ECONOMY</b>	
<b>STRATEGY 2.1 Promote land development patterns that support a diverse regional economy and employment close to where people live.</b>	
Role of Municipalities 2.1.4 Adopt Regional Context Statements which:	
a) include policies that support appropriate economic development in Urban Centres, Frequent Transit Development Areas, Industrial and Mixed Employment areas;	The 2041 OCP supports such policies (see Resilient Economy chapter), for example, by focussing on six core strategies: <ol style="list-style-type: none"> <li>1. The Asia—Pacific Gateway;</li> <li>2. Knowledge Based Industries;</li> <li>3. Amenities and Attractions (e.g., population serving industries, retail, accommodation, cultural sport, natural and visitor attractions);</li> <li>4. Sustainable Resource use (e.g., protect agricultural lands, promote Eco-Industrial uses, promote adequate transit services, support increased agricultural viability, local resource generation, use and sharing);</li> <li>5. Population Services (e.g., schools, universities, hospitals, child care);</li> <li>6. Micro Businesses (e.g., promote live-work, work-live uses and home based businesses).</li> </ol>



<b>The Regional Context Statement (RCS) Policy</b> (e.g., provides examples of how the OCP is or can be made consistent with the 2040 RGS)	
	<p>These long-term economic objectives are to be implemented, for example:</p> <ul style="list-style-type: none"> <li>• in the City Centre: by designating industrial, office and commercial and institutional areas along the Canada Line, around the Canada Line Stations and around the Oval;</li> <li>• outside the City Centre: by designating Industrial areas, for example, (e.g., Mitchell Island, portions of the Riverside Industrial Park, along Bridgeport Road) and by designating Mixed Employment areas (e.g., portions of the Riverside Industrial Park, along Bridgeport Road, and along the Knight Street Corridor (e.g., Crestwood)).</li> </ul> <p>No FTDA are designated, at this time.</p>
<p>b) support the development of office space in Urban Centres, through policies such as zoning that reserves land for office uses, density bonus provisions to encourage office development, variable development cost charges, and/or other financial incentives;</p>	<p>The 2041 OCP highly supports office uses in the City Centre, for example, by designating areas (e.g., around the casino and Aberdeen Mall) for non-residential uses such as offices; and encouraging offices around the Canada Line Stations and Oval; providing density bonuses, reduced parking requirements and promoting TOD measures.</p>
<p>c) include policies that discourage major commercial and institutional development outside of Urban Centres or Frequent Transit Development Areas;</p>	<p>The 2041 OCP discourages such uses (e.g., big box retail, universities, institutional uses), outside the City Centre, for example, by limiting them to certain areas where they are already allowed (e.g., in the 2006 approved West Cambie Alexandra area and the 2010 approved Broadmoor Shopping Centre footprint area, and around certain to be densified shopping centres (e.g., 400M around the Broadmoor, Hamilton, East Cambie, Blundell, Garden City shopping centres), but at lesser densities than the City Centre (e.g., less than 1.5 FAR).</p> <p>In the majority of Richmond, outside the City Centre, large institutional uses (e.g., assemblies) are discouraged, however they are allowed on a limited basis (e.g., in West Cambie, along the east side of No. 5 Road [Highway To Heaven]).</p> <p>This approach balances achieving RGS policies with creating more complete, compact neighbourhoods, promoting TOD, and walkability, and reducing GHG and energy emissions (see Mobility and Access chapter).</p> <p>No FTDA are proposed at this time.</p>
<p>d) show how the economic development role of Special Employment Areas, post secondary institutions and hospitals are supported through land use and transportation policies.</p>	<p>The 2040 RGS in Map 11, titled: "Local Centres, Hospitals and Post Secondary Institutions" currently recognizes the Vancouver International Airport (YVR) as a Special Employment Area, and the Richmond Hospital and post secondary institutions (e.g., Kwantlen Polytechnic University, Trinity Western University) in the City Centre, and Port Metro Vancouver as long as its needs are met in the urban footprint.</p> <p>The 2041 OCP supports such uses (see Resilient Economy; Mobility and Accessibility chapters), for example:</p> <ul style="list-style-type: none"> <li>• Re Land Use: for example, designating YVR as Airport (Industrial) and integrating YVR and City land use plans; designating the Hospital and Post Secondary uses as institutional or other appropriate designation to protect and enhance them.</li> <li>• Re Transportation: by encouraging efficient transit services to and from them (see Resilient Economy; and Mobility and Access chapters)</li> <li>• Note: With such stakeholders, the City has strong ongoing, mutually beneficial partnerships.</li> </ul>



The Regional Context Statement (RCS) Policy (e.g., provides examples of how the OCP is or can be made consistent with the 2040 RGS)	
<b>STRATEGY 2.2 Protect the supply of industrial land.</b>	
Role of Municipalities 2.2.4 Adopt Regional Context Statements which:	
a) identify the Industrial areas and their boundaries on a map generally consistent with the Regional Land Use Designations map (Map 2);	The 2041 OCP designates Industrial areas consistent with the 2040 RGS (See OCP RCS Map).
b) include policies for Industrial areas which: <ol style="list-style-type: none"> <li>i) support and protect industrial uses;</li> <li>ii) support appropriate accessory uses, including commercial space and caretaker units;</li> <li>iii) exclude uses which are inconsistent with the intent of industrial areas, such as medium and large format retail, residential uses (other than industrial caretaker units where necessary), and stand-alone office uses that are not supportive of industrial activities;</li> <li>iv) encourage better utilization and intensification of industrial areas for industrial activities;</li> </ol>	The 2041 OCP supports and protects Industrial uses for example by (see Resilient Economy chapter; see OCP RCS Map): <ul style="list-style-type: none"> <li>• designating Industrial areas consistent with the 2040 RGS;</li> <li>• designating YVR on Sea Island as Airport (Industrial);</li> <li>• co-operating with YVR to assist in achieving its long-term airport needs (e.g., through servicing, transportation improvements);</li> <li>• designating Port Metro Vancouver (PMV) lands which are within the urban footprint as Industrial. Note, the PMV Gilmore lands are designated Agriculture;</li> <li>• enhancing industrial policies and guidelines for certain portions of the Bridgeport Road Corridor to make it more efficient and attractive;</li> <li>• supporting accessory commercial space (e.g., small retail) and caretaker units;</li> <li>• excluding medium and large format retail (e.g., big box) and principal residential uses;</li> <li>• excluding non-supportive stand alone offices;</li> <li>• promoting walking, cycling and transit in Industrial areas;</li> <li>• over time, consider increasing Industrial density and height, and improving energy efficiencies (e.g., transit) and amenities (e.g., bike paths, open space).</li> </ul>
c) identify the Mixed Employment areas and their boundaries on a map generally consistent with the Regional Land Use Designations map (Map 2);	The 2041 OCP designates Mixed Employment areas consistent with the 2040 RGS (See RCS Map) (e.g., along Bridgeport Road, the Knight Street corridor, portions of the Riverside Industrial Park).



<b>The Regional Context Statement (RCS) Policy</b> (e.g., provides examples of how the OCP is or can be made consistent with the 2040 RGS)	
<p>d) include policies for Mixed Employment areas which:</p> <ul style="list-style-type: none"> <li>i) support a mix of industrial, commercial, office and other related employment uses, while maintaining support for established industrial areas, including potential intensification policies for industrial activities, where appropriate;</li> <li>ii) allow large and medium format retail, where appropriate, provided that such development will not undermine the broad objectives of the Regional Growth Strategy;</li> <li>iii) support the regional objective of concentrating commercial and other major trip-generating uses in Urban Centres and Frequent Transit Development Areas;</li> <li>iv) where Mixed Employment areas are located within Urban Centres or Frequent Transit Development Areas, support higher density commercial development and allow employment and service activities consistent with the intent of Urban Centres or Frequent Transit Development Areas;</li> <li>v) allow low density infill / expansion based on currently accepted local plans and policies in Mixed Employment areas and support increases in density only where the Mixed Employment area has transit service or where an expansion of transit service has been identified in TransLink's strategic transportation plans for the planned densities;</li> <li>vi) exclude residential uses, except for an accessory caretaker unit;</li> </ul>	<ul style="list-style-type: none"> <li>i) - iii) The 2041 OCP supports such policies (i.e., Outside the City Centre) (see Resilient Economy), for example, by:                             <ul style="list-style-type: none"> <li>• designating Mixed Employment areas consistent with the 2040 RGS (e.g., portions of the Riverside Industrial Park, and along Knight Street and portions of the Bridgeport corridor);</li> <li>• actively implementing the 2009 approved City Centre Area Plan;</li> <li>• considering outside the City Centre, densifying certain planning areas and shopping centres over time which allow mixed employment uses;</li> </ul> </li> <li>iv) Note: The 2041 OCP does not designate Mixed Employment areas in the Urban Centre (i.e., the City Centre) and does not propose FTDA's at this time;</li> <li>v) The 2041 OCP enables Industrial and Mixed Employment activities in certain areas (e.g., portions of the Bridgeport Road Corridor, Crestwood), as these areas already have good access and transit service;</li> <li>vi) excluding residential uses, except for accessory caretaker units in Mixed Employment areas.</li> </ul>





<b>The Regional Context Statement (RCS) Policy</b> (e.g., provides examples of how the OCP is or can be made consistent with the 2040 RGS)	
<p>e) include policies which help reduce environmental impacts and promote energy efficiency.</p>	<p>The 2041 OCP includes such policies, (see the Sustainable Infrastructure and Resources chapter), for example, by exploring, promoting and requiring district energy systems and renewable energy generation, where appropriate (e.g., in the West Cambie Alexandria area), through energy efficiency requirements above the BC Building Code (e.g., LEED, EnerGuide 80, ASHRAE 90. 1-2007 standards), increasing waste diversion by increasing recycling and decreasing waste, and promoting solar energy, sewage and river heat recovery, and wind systems.</p>
<b>STRATEGY 2.3 Protect the supply of agricultural land and promote agricultural viability with an emphasis on food production.</b>	
<p>Role of Municipalities                      2.3.6 Adopt Regional Context Statements which:                      a) specify the Agricultural areas and their boundaries on a map generally consistent with the Regional Land Use Designations map (Map 2);                      b) include policies to support agricultural viability including those which:                      i) assign appropriate regional land use designations that support agricultural viability and discourage non-farm uses that do not complement agriculture;                      ii) discourage subdivision of agricultural land leading to farm fragmentation;                      iii) where feasible, and appropriate with other governments and agencies, maintain and improve transportation, drainage and irrigation infrastructure to support agricultural activities;                      iv) manage the agricultural-urban interface to protect the integrity and viability of agricultural operations (e.g., buffers between agricultural and urban areas or edge planning);                      v) demonstrate support for economic development opportunities for agricultural operations (e.g., processing, agri-tourism, farmers' markets and urban agriculture);</p>	<p>The 2041 OCP designates Agricultural areas consistent with the 2040 RGS (See RCS Map).</p> <p>The 2041 OCP supports such policies, (see OCP Agriculture and Food chapter).</p> <p>Note that Richmond continues to implement its 2003 Richmond Agricultural Viability Strategy (RAVS) which has been a very valuable strategy to enhance agriculture viability (e.g., establishing the Richmond Agricultural Advisory Committee [AAC], improving agricultural drainage, buffering urban developments along the ALR boundary, enabling seasonal farm worker dwellings, promoting agri-industries [cranberry processing, farm based wineries] supporting \$1.25 million Nelson Road interchange and seeking senior government funding for drainage).</p> <p>i) designating Agricultural areas consistent with the 2040 RGS (See RCS Map);</p> <ul style="list-style-type: none"> <li>• continue to implement the 2003 Richmond Agricultural Viability Strategy (RAVS) which has been a very valuable strategy to enhance agriculture viability (e.g., established the Richmond Agricultural Advisory Committee [AAC], improving agricultural drainage, buffering urban developments along the ALR boundary, enabling seasonal farm worker dwellings, promoting agri-industries [cranberry processing, farm based wineries] supporting \$1.25 million Nelson Road interchange and seeking senior government funding for drainage);</li> </ul> <p>ii) discouraging subdivision into small farms which would create impractical farm sizes and by co-operating with the ALC and following ALR requirements;</p> <ul style="list-style-type: none"> <li>• encouraging lot owners who do not have access to improved roads, to either consolidate their lots or enter into farm access agreements in order to gain farm access;</li> <li>• discouraging wherever possible, roads in the ALR except, as noted on the Agriculture and Food chapter map titled Existing Status of Road Improvements in the ALR map;</li> </ul> <p>iii) continuing to maintain and improve drainage, irrigation and transportation, to support agricultural activities (e.g., in East Richmond), where feasible and with other agencies;</p> <p>iv) continuing to manage the agricultural-urban interface to protect the viability of agricultural operations (e.g., requiring buffers between agricultural and urban areas, consulting with the Agricultural Advisory Committee);</p> <p>v) supporting such opportunities, for example, by implementing and enhancing the 2003 Richmond Agricultural Viability Strategy (RAVS), as resources enable (e.g., senior government drainage funding, allowing seasonal farm dwellings, agri-tourism, farm based wineries, and the proposed Kwantlen horticultural farm and sustainable farm programs);</p>



<b>The Regional Context Statement (RCS) Policy</b> (e.g., provides examples of how the OCP is or can be made consistent with the 2040 RGS)	
vi) encourage the use of agricultural land, with an emphasis on food production; viii) support educational programs that provide information on agriculture and its importance for the regional economy and local food systems.	vi) supporting food production, for example, by improving infrastructure (e.g., diking, irrigation, drainage), enabling a range of farming, discouraging principle residential uses, supporting food security, urban agriculture and regional food strategies; vii) supporting a range of educational agricultural programs, for example by collaborating with the Province, ALC, Metro Vancouver, Vancouver Coastal Health, Richmond food security groups, and hosting farm tours and workshops.
<b>RGS GOAL 3 PROTECT THE ENVIRONMENT AND RESPOND TO CLIMATE CHANGE IMPACTS</b>	
<b>STRATEGY 3.1 Protect Conservation and Recreation lands.</b>	
Role of Municipalities 3.1.4 Adopt Regional Context Statements which:	
a) identify Conservation and Recreation areas and their boundaries on a map generally consistent with the Regional Land Use Designations map (Map 2);	The 2041 OCP designates Conservation and Park areas consistent with the 2040 RGS (See RCS Map).
b) include land use policies to support the protection of Conservation and Recreation areas that are generally consistent with the following: <ul style="list-style-type: none"> <li>i) public service infrastructure, including the supply of high quality drinking water;</li> <li>ii) environmental conservation;</li> <li>iii) recreation, primarily outdoor;</li> <li>iv) education, research and training facilities and uses that serve conservation and/or recreation users;</li> <li>v) commercial uses, tourism activities, and public, cultural or community amenities that are appropriately located, scaled and consistent with the intent of the designation;</li> <li>vi) limited agriculture use, primarily soil-based;</li> </ul>	The 2041 OCP supports such policies (see OCP Connected Neighbourhoods; Island Natural Environment, Open Space and Public Realm; and Sustainable Infrastructure and Resources chapters), for example, by: <ul style="list-style-type: none"> <li>• public service infrastructure, including the supply of high quality drinking water, for example, by co-operating with Metro Vancouver to provide clean, safe drinking water, monitoring, minimizing leakages and improving, distribution and conservation;</li> <li>• implementing the new Island Natural Environment, Open Space and Public Realm policies and co-operating with agencies (e.g., FREMP, BC Environment, Metro Vancouver, YVR, Port Metro Vancouver);</li> <li>• enabling a range of recreation uses including outdoor activities for all ages both in Conservation and Park areas and across the City, for example, through the City's extensive parks and facilities including the Garry Point Park, Terra Nova Nature and Rural Parks, Metro Vancouver's Iona Beach Regional Park and through stakeholder interpretive and wellness programs;</li> <li>• enabling certain commercial uses (e.g., canteens) tourism activities (e.g., Tall Ships, Ships To Shore, the Steveson Salmon Festival), multi-cultural celebrations (e.g., Chinese New Year) and public, cultural amenities (e.g., Minoru Park, the Richmond Nature Park and interpretive programs, McDonald Beach boat launch);</li> <li>• enabling primarily soil-based agriculture use in Conservation and Park areas (e.g., the Terra Nova Nature and Rural Parks).</li> </ul>
c) include policies, where appropriate, that effectively buffer Conservation and Recreation areas from activities in adjacent areas.	The 2041 OCP supports such policies (see OCP Connected Neighbourhoods; and Island Natural Environment, Open Space and Public Realm chapters), for example, by having large park areas and ample park facility setbacks, including planting park edges with trees, and separating park and recreation uses by roads.



<b>The Regional Context Statement (RCS) Policy</b> (e.g., provides examples of how the OCP is or can be made consistent with the 2040 RGS)	
<p><b>STRATEGY 3.2 Protect and enhance natural features and their connectivity.</b></p> <p>Role of Municipalities</p> <p>3.2.4 Adopt Regional Context Statements which include policies and/or maps that indicate how ecologically important areas and natural features will be managed (as conceptually shown on Map 10) (e.g., steep slopes and ravines, intertidal areas and other natural features not addressed in Strategy 3.1).</p> <p>3.2.5 In collaboration with other agencies, develop and manage municipal components of the Metro Vancouver Regional Recreation Greenway Network and connect community trails, bikeways and greenways to the Regional Recreation Greenway Network where appropriate.</p> <p>3.2.6 Identify where appropriate measures to protect, enhance and restore ecologically important systems, features, corridors and establish buffers along watercourses, coastlines, agricultural lands, and other ecologically important features (e.g., conservation covenants, land trusts, tax exemptions and ecogifting).</p> <p>3.2.7 Consider watershed and ecosystem planning and/or Integrated Stormwater Management Plans in the development of municipal plans.</p>	<p>The 2040 RGS Map 10 is titled: Natural Features and Land Cover, RGS Strategy 3.2 primarily addresses conservation and recreation uses including commercial, tourism, public, cultural and community amenities, and related education, research and training facilities and that serve the users.</p> <p>The 2041 OCP supports such actions (see OCP the Connected Neighbourhoods; and Island Natural Environment and Open Space and Public Realm, and Sustainable Infrastructure and Resources chapters), for example, by implementing the 2012 Environmentally Sensitive Areas (ESA) Management Strategy which includes a best practices Ecological Network Concept, Riparian Area and enhanced 2012 ESA policies and guidelines.</p> <p>The Ecological Network (EN) policies strive to better manage over approximately 16,188 ha (40,000 ac.) through interagency co-operation.</p> <p>The RGS Map 9 is titled: "Regional Recreation Greenway Network" and includes RGS Conservation and Recreation areas, the Regional Recreation Greenways Network, watercourses, tidal flats and wetland areas.</p> <p>The Regional Recreation Greenway Network is to be connected, as feasible, to City trails, bikeways and greenways and parks where appropriate.</p> <p>The 2041 OCP supports such actions (see OCP Connected Neighbourhoods; and Island Natural Environment and Open Space and Public Realm chapters), for example, by promoting a maintaining and enhancing a range of City-wide parks and trails to improve mobility and accessibility for all ages.</p> <p>The 2041 OCP supports such actions (see OCP Island Natural Environment, Open Space and Public Realm chapter), for example, by implementing the 2012 Environmentally Sensitive Areas (ESA) Management Strategy which includes an Ecological Network, the Eco Plus+ Concept, Riparian Area and enhanced ESA policies and guidelines. It also encourages the exploration of conservation covenants, land trusts, tax exemptions, ecological gain and eco-gifting approaches.</p> <p>The 2041 OCP considers such actions (see Island Natural Environment and Sustainable Infrastructure and Resources chapters), for example, by implementing the 2012 Environmentally Sensitive Areas (ESA) Management Strategy which includes Ecological Network, Eco Gain, Riparian Area and enhanced ESA policies and guidelines.</p> <p>The 2041 OCP supports integrated stormwater management plans, for example, by supporting Metro Vancouver's Drinking Water Management Plan and integrating it with City-wide and area plan infrastructure improvements over time. Annual progress is anticipated, based on approved City priorities and work programs, and senior government and regional partner funding, programming and support.</p>



<b>The Regional Context Statement (RCS) Policy</b> (e.g., provides examples of how the OCP is or can be made consistent with the 2040 RGS)	
<p><b>STRATEGY 3.3 Encourage land use and transportation infrastructure that reduce energy consumption and greenhouse gas emissions, and improve air quality.</b></p> <p>Role of Municipalities</p> <p>3.3.4 Adopt Regional Context Statements which:</p> <p>a) identify how municipalities will use their land development and transportation strategies to meet their greenhouse gas reduction targets and consider how these targets will contribute to the regional targets;</p>	<p>a) The 2041 OCP supports such actions (see Climate Change Response chapter), for example, by addressing the following:</p> <ul style="list-style-type: none"> <li>• Community-wide GHG Reduction Targets (similar to Metro Vancouver's):                             <ul style="list-style-type: none"> <li>- 1–33% below 2007 levels by 2020;</li> <li>- 2–80% below 2007 levels by 2050:                                     <ul style="list-style-type: none"> <li>o as Richmond's GHG emissions are generated 41% by buildings and 55% by transportation achieving both targets is subject to the understanding that the Province and other jurisdictions will undertake necessary GHG reduction improvements and provide the City with funding to achieve these targets including building retrofits and TOD measures;</li> <li>o as well the City will continue to implement City GHG related policies (e.g., the City's Sustainability Framework, Official Community Plan [e.g., compact land use patterns, complete communities]; City Centre Area Plan [e.g., High Density Urban Villages, and Transit Oriented Development, transportation demand management and district energy initiatives]);</li> </ul> </li> </ul> </li> </ul> <p>b) Community-wide Energy Reduction Target of 10% from 2007 levels by 2020:</p> <ul style="list-style-type: none"> <li>• similar to above, achieving Richmond's Energy Reduction Target is subject to the understanding that the Province and other jurisdictions will undertake the necessary improvements and funding;</li> <li>• examples of improving air quality include changing from a 2008 mode share of 83% automobile, to a reduced 2041 automobile mode share of 49% (e.g., by promoting transit, walking trails, bicycle paths, ride share). Regarding electric car plug-ins, promote having a minimum of 20% of parking stalls with a 12 volt receptacle and an additional 25% of parking stalls to accommodate future electric vehicle charging equipment (e.g., pre-ducting).</li> <li>• promoting improved Triple Bottom Line (i.e., social, economic, environmental) analyses to achieve more benefits (e.g., promote improved energy performance within existing [retrofit] and new buildings; the increased use of transit; a greater diversion of solid waste through increased recycling and material reuse, improved waste energy capture);</li> <li>• implementing a comprehensive Community Energy and Emissions Plan (CEEP);</li> <li>• requesting increased provincial assistance, as many of the community's GHG reduction targets and actions (e.g., improved building energy efficiencies, reduced emissions from vehicles, the increased reliance on walking, cycling and transit), require Provincial legislation, policy, program and funding assistance;</li> <li>• supporting integrated storm water management and water conservation objectives, for example, see the Sustainable Infrastructure and Resources chapter;</li> </ul>
<p>b) identify policies and/or programs that reduce energy consumption and greenhouse gas emissions, and improve air quality from land use and transportation infrastructure, such as:</p> <ul style="list-style-type: none"> <li>• existing building retrofits and construction of new buildings to green performance guidelines or standards, district energy systems, and energy recovery and renewable energy generation technologies, such as solar panels and geoechange systems, and electric vehicle charging infrastructure;</li> <li>• community design and facility provision that encourages transit, cycling and walking (e.g., direct and safe pedestrian and cycling linkages to the transit system);</li> </ul>	



<p><b>The Regional Context Statement (RCS) Policy</b> (e.g., provides examples of how the OCP is or can be made consistent with the 2040 RGS)</p>	
<p>c) focus infrastructure and amenity investments in Urban Centres and Frequent Transit Development Areas, and at appropriate locations along TransLink's Frequent Transit Network;</p> <p>d) implement land use policies and development control strategies which support integrated storm water management and water conservation objectives.</p>	<p>c) Investments in GHG emissions and energy consumption reductions which improve air quality are concentrated in the City Centre, and will be considered in shopping centre densification and any future FTDA's;</p> <p>d) Policies which support integrated storm water management include participating in regional climate change initiatives, harvesting rain water for non-potable uses and storing rain water on site.</p> <p>Policies which support water conservation include participating in regional climate change initiatives, reducing water demand through water metering, low flow fixtures, leak reduction, pressure management approaches, and reduced lawn watering.</p>
<p><b>STRATEGY 3.4 Encourage land use and transportation infrastructure that improve the ability to withstand climate change impacts and natural hazard risks.</b></p>	
<p>Role of Municipalities</p> <p>3.4.4 Adopt Regional Context Statements that include policies to encourage settlement patterns that minimize risks associated with climate change and natural hazards (e.g., earthquake, flooding, erosion, subsidence, mudslides, interface fires).</p> <p>3.4.5 Consider incorporating climate change and natural hazard risk assessments into the planning and location of municipal utilities, assets and operations.</p>	<p>The 2041 OCP supports such actions (see OCP Climate Change Response; Sustainable Infrastructure and Resources; and Island Natural Environment and Open Space and Public Realm chapters), for example, by implementing comprehensive climate change management, capacity building, mitigation, carbon retention and adaptation policies which address community response, emission reduction, and target integration with other City policies (e.g., land use, transportation). As well, the City supports continued improvements in Building Code, seismic and flood protection policies.</p> <p>The 2041 OCP supports such actions (see Sustainable Infrastructure and Resources), for example by, implementing the City's 2008–2031 Flood Protection Strategy and Flood Plain Designation and Protection bylaws, improving the critical perimeter dike, supporting Fraser River dredging, flood proofing City buildings to appropriate standards and co-operating with stakeholders in flood management best practices.</p>





<p><b>The Regional Context Statement (RCS) Policy</b> (e.g., provides examples of how the OCP is or can be made consistent with the 2040 RGS)</p>	
<p><b>RGS GOAL 4 DEVELOP COMPLETE COMMUNITIES</b></p>	
<p><b>STRATEGY 4.1 Provide diverse and affordable housing choices.</b></p>	
<p>Role of Municipalities 4.1.7 Adopt Regional Context Statements which:</p> <p>a) include policies or strategies that indicate how municipalities will work towards meeting the estimated future housing demand as set out in Appendix Table A-4, which:</p> <p>i) ensure the need for diverse housing options is articulated in municipal plans and policies, including neighbourhood and area plans;</p> <p>ii) increase the supply and diversity of the housing stock through infill developments, more compact housing forms and increased density;</p> <p>iii) in collaboration with the federal government and the province, assist in increasing the supply of affordable rental units for households with low or low to moderate incomes through policies, such as density bonus provisions, inclusionary zoning or other mechanisms, particularly in areas that are well served by transit;</p> <p>iv) encourage and facilitate affordable housing development through measures such as reduced parking requirements, streamlined and prioritized approval processes, below market leases of publicly owned property, and fiscal measures.</p>	<p>The 2041 OCP supports such actions (see OCP Connected Neighbourhoods chapter), for example, by:</p> <p>i) - ii)</p> <ul style="list-style-type: none"> <li>• implementing the 2007 Affordable Housing Strategy and completing its update (e.g., in 2012);</li> <li>• enabling a range of housing types (e.g., secondary suites, coach houses, granny flats, live-work, work-live, row housing) and affordable housing in High Density Urban Villages around the Canada Line Stations and Oval, as shopping centres densify, along certain arterial roads and in many residential neighbourhoods;</li> <li>• considering innovative housing policies when updating area plans.</li> </ul> <p>iii) - iv)</p> <ul style="list-style-type: none"> <li>• collaborating with the federal government, Province, Metro Vancouver, UDI, developers and housing agencies to increase affordable housing and rental units for households with low or low to moderate incomes (e.g., through research, policies funding);</li> <li>• enabling a wide range of incentives to improve housing and its affordability (e.g., density bonusing, parking reductions near transit, using the City Affordable Housing Reserves);</li> <li>• the OCP enables the City to pursue multiple objectives at the same time, for example promoting affordable housing by reducing parking and providing density bonusing. In cases, this may include partly reducing parking to achieve affordable housing and also partly taking cash-in-lieu of parking to support providing TDM measures. This approach continues to work well as it provides flexibility to meet community and project specific needs.</li> </ul>





<b>The Regional Context Statement (RCS) Policy</b> (e.g., provides examples of how the OCP is or can be made consistent with the 2040 RGS)	
<p>Role of Municipalities</p> <p>4.1.8 Prepare and implement Housing Action Plans which:</p> <ul style="list-style-type: none"> <li>a) assess local housing market conditions, by tenure, including assessing housing supply, demand and affordability;</li> <li>b) identify housing priorities, based on the assessment of local housing market conditions, and consideration of changing household demographics, characteristics and needs;</li> <li>c) identify implementation measures within the jurisdiction and financial capabilities of municipalities, including actions set out in Action 4.1.7;</li> <li>d) encourage the supply of new rental housing and where appropriate mitigate or limit the loss of existing rental housing stock;</li> <li>e) identify opportunities to participate in programs with other levels of government to secure additional affordable housing units to meet housing needs across the continuum;</li> <li>f) cooperate with and facilitate the activities of the Metro Vancouver Housing Corporation under Action 4.1.5.</li> </ul>	<p>The 2041 OCP supports such actions (see Connected Neighbourhoods; Social Inclusion and Accessibility chapters), for example, by:</p> <ul style="list-style-type: none"> <li>• completing the 2007 Affordable Housing Strategy update;</li> <li>• partnering with senior governments, the MVHC, housing providers and operators, and developers to provide housing projects based on specific updated housing needs assessments;</li> <li>• periodically updating City demographic projections including dwelling units.</li> </ul>
<p><b>STRATEGY 4.2 Develop healthy and complete communities with access to a range of services and amenities.</b></p>	
<p>Role of Municipalities</p> <p>4.2.4 Include policies within municipal plans or strategies, that may be referenced in the Regional Context Statements, which:</p> <ul style="list-style-type: none"> <li>a) support compact, mixed use, transit, cycling and walking oriented communities;</li> </ul>	<p>The 2041 OCP supports such actions (see OCP Connected Neighbourhoods; and Mobility and Access chapters), for example, by:</p> <ul style="list-style-type: none"> <li>• in the City Centre, implementing High Density Urban Villages around the Canada Line stations and the Oval;</li> <li>• outside the City Centre, densifying certain shopping centres to enable more compact uses;</li> <li>• updating area plans to facilitate mixed uses, and improved mobility and access.</li> </ul>



<b>The Regional Context Statement (RCS) Policy</b> (e.g., provides examples of how the OCP is or can be made consistent with the 2040 RGS)	
b) locate community, arts, cultural, recreational, institutional, medical/health, social service, education facilities and affordable housing development in Urban Centres or areas with good access to transit;	The 2041 OCP supports such facilities (see Vibrant City and Connected Neighbourhoods chapters), for example, by locating community, arts, cultural, recreational, institutional, health, social service, education facilities and affordable housing uses, in the City Centre (e.g., the Arts Precinct), and when densifying certain shopping and updating area plans (e.g., the Broadmoor Shopping Centre, Hamilton area), as densification can facilitate the provision of these services.
c) provide public spaces and other place-making amenities for increased social interaction and community engagement;	The 2041 OCP enables such spaces and amenities (see Vibrant City; and Island Natural Environment, Open Space and Public Realm chapters), for example, by providing City World Class facilities (e.g., the Oval), City parks (e.g., Minoru Park, Garry Point Park, Richmond Nature Park, Brighthouse Park, McDonald Beach Park, Britannia Heritage Shipyard Park and London Farm), City facilities (e.g., the Gateway Theatre), the City's eight community centres and library system, and the School Board's 38 elementary and 10 secondary schools, to enable improving social engagement and multi-cultural celebrations.
d) support active living through the provision of recreation facilities, parks, trails, and safe and inviting pedestrian and cycling environments;	The 2041 OCP supports active living (see Vibrant City; Connected Neighbourhoods; Social Inclusion and Accessibility; and Ecological Network, Open Space and Public Realm chapters), for example, by: <ul style="list-style-type: none"> <li>• in the City Centre, completing the 16 ha (40 ac.) Middle Arm Park on the Fraser River and acquiring over time, another 65 ha (160 ac.) of parkland for a total of 162 ha (400 ac.);</li> <li>• elsewhere in the City, maintaining and enhancing a wide range of recreation facilities, parks, trails, and safe and inviting pedestrian and cycling environments; improving trails and paths to better connect shopping centres, community centres and schools; providing more bike and rolling paths; and upgrading community facilities over time, as resources enable.</li> </ul>
e) support food production and distribution throughout the region, including in urban areas, roof top gardens, green roofs and community gardens on private and municipally-owned lands and healthy food retailers, such as grocery stores and farmers' markets near housing and transit services;	The 2041 OCP supports such actions, (see Agriculture and Food; Vibrant City; Resilient Economy; Island Natural Environment; Open Space and Public Realm chapters), for example, by providing more community gardens on City and private lands, encouraging ALR lands to be farmed, promoting green roofs and food security activities.
f) assess overall health implications of proposed new communities, infrastructure and transportation services, including air quality and noise, with input from public health authorities;	The 2041 OCP enables such assessments (see OCP Safe City); Social Inclusion and Accessibility; Connected Neighbourhoods; Sustainable Infrastructure and Resources chapters), for example, by: <ul style="list-style-type: none"> <li>• continuing to co-operate with Richmond Health Services, promoting healthy lifestyles and wellness programs;</li> <li>• providing safe infrastructure (e.g., transit, roads, trails, dikes and buildings);</li> <li>• improving policing, emergency and fire fighting services;</li> <li>• implementing the OCP Aircraft Noise Sensitive Development (ANSND) policies;</li> <li>• consulting with Metro Vancouver to improve air quality.</li> </ul>



<p><b>The Regional Context Statement (RCS) Policy</b> (e.g., provides examples of how the OCP is or can be made consistent with the 2040 RGS)</p>	
<p>g) support universally accessible community design;</p>	<p>The 2041 OCP supports universally accessible community design (see OCP Connected Neighbourhoods chapter), for example, by encouraging and requiring a range of improved neighbourhood and housing and building accessibility (e.g., aging in place for all new multi-family residential dwelling units, convertible units in townhouse rezoning applications, adaptable units in apartment rezoning applications).</p>
<p>h) where appropriate, identify small scale Local Centres in General Urban areas that provide a mix of housing types, local-serving commercial activities and good access to transit. Local Centres are not intended to compete with or compromise the role of Urban Centres and should preferably be located within Frequent Transit Development Areas;</p>	<p>The 2041 OCP does not propose RGS Local Centres at this time.</p>
<p>i) recognize the Special Employment Areas as shown on the Local Centres, Hospitals and Post-Secondary Institutions map (Map 11). Special Employment Areas are located outside of Urban Centres and Frequent Transit Development Areas, and are region-serving, special purpose facilities that have a high level of related transportation activity due to employee, student, or passenger trips.</p>	<p>The 2041 OCP (see OCP General Land Use Map; OCP RCS Map) recognize the facilities in 2040 RGS Map 11, titled: "Local Centres, Hospitals and Post Secondary Institutions". These facilities include the Vancouver International Airport (YVR) as a Special Employment Area, and the Richmond Hospital and post secondary institutions (e.g., Kwantlen Polytechnic University and Trinity Western University).</p>
<p><b>RGS GOAL 5 SUPPORT SUSTAINABLE TRANSPORTATION CHOICES</b></p>	
<p><b>STRATEGY 5.1 Coordinate land use and transportation to encourage transit, multiple-occupancy vehicles, cycling and walking.</b></p>	
<p>Role of Municipalities</p>	
<p>5.1.6 Adopt Regional Context Statements which:</p>	
<p>a) identify land use and transportation policies and actions, and describe how they are coordinated, to encourage a greater share of trips made by transit, multiple-occupancy vehicles, cycling and walking, and to support TransLink's Frequent Transit Network;</p>	<p>The 2041 OCP (see Mobility and Access; Connected Neighbourhoods; and Sustainable Infrastructure and Resources chapters) identify such policies and actions:</p> <ul style="list-style-type: none"> <li>• in the City Centre: for example, by better enabling TOD, walking, bicycling and rolling modes;</li> <li>• outside the City Centre: for example, along arterial road redevelopment and in densified shopping centres;</li> <li>• City-wide: improving transit, and bike and rolling paths, and working closely with TransLink to implement the Frequent Transit Network (FTN).</li> </ul>



<b>The Regional Context Statement (RCS) Policy</b> (e.g., provides examples of how the OCP is or can be made consistent with the 2040 RGS)	
b) identify policies and actions that support the development and implementation of municipal and regional transportation system and demand management strategies, such as parking pricing and supply measures, transit priority measures, ridesharing, and car-sharing programs;  c) identify policies and actions to manage and enhance municipal infrastructure to support transit, multiple-occupancy vehicles, cycling and walking.	The 2041 OCP (see Mobility and Access chapter) identifies such policies and actions, for example, by: <ul style="list-style-type: none"> <li>• supporting the implementation of transit priority measures in congested areas where feasible, facilitating the provision of car-share services around Canada Line stations and promoting ride-sharing.</li> </ul> The 2041 OCP (see Mobility and Access chapter) identifies such policies and actions, for example, by improving transit stops, providing bus shelters and benches, expanding the network of bike and rolling paths, and promoting ride sharing programs.
<b>STRATEGY 5.2 Coordinate land use and transportation to support the safe and efficient movement of vehicles for passengers, goods and services.</b>	
Role of Municipalities 5.2.3 Adopt Regional Context Statements which:	
a) identify routes on a map for the safe and efficient movement of goods and service vehicles to, from, and within Urban Centres, Frequent Transit Development Areas, Industrial, Mixed Employment and Agricultural areas, Special Employment Areas, ports, airports, and international border crossings;	The 2041 OCP (see Mobility and Access chapter; RCS Map): <ul style="list-style-type: none"> <li>• identifies such routes;</li> <li>• identifies such policies and actions, for example, by, promoting efficient transportation, services and alternatives in the City Centre;</li> <li>• improves along arterial roads and in densified shopping centres, bike and rolling paths;</li> <li>• promotes working closely with TransLink to implement the Major Road Network (MRN) and Frequent Transit Network (FTN), and co-operation with senior governments.</li> </ul>
b) identify land use and related policies and actions that support optimizing the efficient movement of vehicles for passengers, Special Employment Areas, goods and services on the Major Road Network, provincial highways, and federal transportation facilities;	The 2041 OCP (see Mobility and Access chapter) supports such strategies, for example, by improving web-based traffic information including real-time displays of traffic conditions, transit priority measures in congested areas where feasible and traffic signal coordination.
c) support the development of local and regional transportation system management strategies, such as the provision of information to operators of goods and service vehicles for efficient travel decisions, management of traffic flow using transit priority measures, coordinated traffic signalization, and lane management;	The 2041 OCP (see Mobility and Access chapter) supports such strategies, for example, by improving web-based traffic information including real-time displays of traffic conditions, transit priority measures in congested areas where feasible and traffic signal coordination.



<b>The Regional Context Statement (RCS) Policy</b> (e.g., provides examples of how the OCP is or can be made consistent with the 2040 RGS)	
<p>d) identify policies and actions which support the protection of rail rights-of-way and access points to navigable waterways in order to reserve the potential for goods movement, in consideration of the potential impacts on air quality, habitat and communities.</p>	<p>The 2041 OCP (see Mobility and Access chapter) identifies such policies and actions, for example, by co-ordinating efforts with senior governments, railway companies, Port Metro Vancouver and FREMP.</p>
<b>2040 RGS AND 2041 OCP AND RCS IMPLEMENTATION (See RGS Section F Implementation)</b>	
<b>RGS Section F Implementation Policies</b>	
<p>Providing for Appropriate Municipal Flexibility</p> <p>6.2.7 A municipality may include language in its Regional Context Statement that permits amendments to the municipality's Official Community Plan to adjust the boundaries of regional land use designations (or their equivalent Official Community Plan designation) within the Urban Containment Boundary, provided that:</p> <p>a) the municipality may re-designate land from one regional land use designation to another regional land use designation, only if the aggregate area of all proximate sites so re-designated does not exceed one hectare;</p>	<p>The 2041 OCP hereby permits such amendments.</p>
<p>b) notwithstanding section 6.2.7 (a), for sites that are three hectares or less, the municipality may re-designate land:</p> <ul style="list-style-type: none"> <li>• from Mixed Employment or Industrial to General Urban land use designation, if the site is located on the edge of an Industrial or Mixed Employment area and the developable portion of the site will be predominantly within 150 metres of an existing or approved rapid transit station on TransLink's Frequent Transit Network; or</li> </ul>	<p>The 2041 OCP hereby permits such amendments.</p>



<b>The Regional Context Statement (RCS) Policy</b> (e.g., provides examples of how the OCP is or can be made consistent with the 2040 RGS)	
<ul style="list-style-type: none"> <li>• from Industrial to Mixed Employment land use designation if the developable portion of the site will be predominantly within 250 metres of an existing or approved rapid transit station on TransLink's Frequent Transit Network; provided that:                             <ul style="list-style-type: none"> <li>- the re-designation does not impede direct rail, waterway, road or highway access for industrial uses; and</li> <li>- the aggregate area of all proximate sites that are re-designated does not exceed three hectares;</li> </ul> </li> </ul>	<p>The 2041 OCP hereby permits such amendments.</p>
<p>c) the aggregate area of land affected by all re-designations under section 6.2.7 (a) and (b) together cannot exceed two percent of the municipality's total lands within each applicable regional land use designation.</p>	<p>The 2041 OCP hereby permits such amendments.</p>
<p>6.2.8 A municipality may include language in its Regional Context Statement that permits amendments to the municipality's Official Community Plan to adjust the boundaries of the municipality's Urban Centres and Frequent Transit Development Areas, provided such boundary adjustments meet the guidelines set out in Table 3 (Guidelines for Urban Centres and Frequent Transit Development Areas) of the Regional Growth Strategy.</p>	<p>The 2041 OCP hereby permits such amendments.</p>
<p>6.2.9 Municipalities will notify Metro Vancouver of all adjustments, as permitted by sections 6.2.7 and 6.2.8, as soon as practicable after the municipality has adopted its Official Community Plan amendment bylaw.</p>	<p>The City will implement RGS policy 6.29.</p>





<p><b>The Regional Context Statement (RCS) Policy</b> (e.g., provides examples of how the OCP is or can be made consistent with the 2040 RGS)</p>	<p>6.2.10 If a municipality includes language in its Regional Context Statement that permits amendments to the municipality's Official Community Plan to adjust the boundaries of regional land use designations within the Urban Containment Boundary or the boundaries of Urban Centres and Frequent Transit Development Areas, as permitted by sections 6.2.7 and 6.2.8 respectively, the prescribed adjustments do not require an amendment to the municipality's Regional Context Statement. All other adjustments to regional land use designation boundaries will require an amendment to the municipality's Regional Context Statement, which must be submitted to the Metro Vancouver Board for acceptance in accordance with the requirements of the Local Government Act.</p>
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The 2041 OCP hereby permits such amendments.





## **16.0 Definitions**



# Definitions

## General Definitions

### **Accessibility**

The ability to approach, enter, use and/or occupy buildings and spaces by persons with physical or sensory disabilities.

### **Adaptable Housing**

Housing that is designed and built with features that do not affect the traditional look or function of the housing unit but add considerable utility to an occupant with mobility challenges (e.g., entry, one bedroom and one washroom doors and doorways; corridor widths and floor surfaces; window hardware and sill height in one bedroom and one living area; outlets and switches; one accessible washroom with toilet, sink and tub areas; kitchen counters, cupboards and plumbing; one bedroom and closet; patios and balconies; task lighting at sink, stove and key working areas; easy to reach and grasp handles on cupboards; floor surfaces to be slip resistant).

### **Aging in Place**

Housing that is designed and built so that some accessibility features are provided now and so that others can be added more easily and inexpensively after construction (e.g., stairwell handrails; lever type handles for plumbing fixtures and door handles; solid blocking in washroom walls for future grab bars beside toilet, bathtub and shower).

### **Barrier Free Housing**

Housing that is designed and built for universal access at the time of construction for an occupant/owner with mobility challenges (e.g., wheel-in shower stall in one bathroom; grab bars in washroom(s); lower countertops; kitchen work surfaces with knee space below; accessible appliances and cupboards; wider corridors and circulation areas; adaptable/convertible features).

### **Convertible Housing**

Housing that is designed and built to look like traditional housing but has features that are constructed or installed for easy modification and adjustment to suit the needs of an occupant with mobility challenges (e.g., vertical circulation such as a wider staircase or the ability to install an elevator using stacked storage space; doors and doorways to entry, main living area, one bedroom and one washroom; corridor widths of hallways; one accessible parking space in the garage and wider door to living area; one accessible washroom with toilet; adequate turning diameter in kitchen; one window in living room and bedroom; outlets and switches; patios and balconies; wall reinforcement at top of staircase for future gate).

### **Greenways**

Significant city-wide pedestrian, rolling and cycling linear corridors that link multiple destinations such as parks, natural areas, historic sites, community facilities and amenities, residential, and commercial areas. Greenways have a higher standard of amenity such as wider sidewalks, landscaped boulevards, unique paving materials, designated cycling lanes or wide off-street paths shared with pedestrians, gathering/rest areas and special features (e.g., gateways, public art). Greenways, in some cases, may also function as ecological corridors.



### **Major Street Bike Route**

Designated cycling facility with signs and pavement markings on an arterial or collector road where cyclists have either an exclusive space (e.g., bike lane) or a shared space with vehicles (e.g., wide curb lane).

### **Neighbourhood Links**

Neighbourhood pedestrian and cycling routes along local streets and off-street pathways that provide safe and convenient physical connection to local destinations such as schools, parks, community facilities or neighbourhood shopping centres.

Enhanced neighbourhood links have pedestrian facilities (e.g., path or sidewalk) on at least one side of the street, pavement markings and wayfinding signage for cyclists, and wider off-street pathways that are shared between pedestrians and cyclists.

Unenhanced neighbourhood links do not have any enhanced treatments for pedestrians and cyclists, do not have pavement markings and wayfinding signage for cyclists, may or may not have pedestrian facilities (e.g., path or sidewalk), and have substandard off-street pathways (e.g., narrow width).

Future unenhanced neighbourhood links are proposed future off-street pathways through and between developments that do not have any enhanced treatments for pedestrians and cyclists.

### **Trails**

City-wide recreational corridors that accommodate a wide variety of pedestrian, rolling, cycling and other non-motorized uses (e.g., equestrian) that are typically off-road and provide access to, or are in proximity to the City's major natural areas (e.g., the waterfront and natural areas like the Richmond Nature Park). With restoration and enhancement, some of the corridors have the potential to function as ecological corridors, linking natural areas in Richmond's Ecological Network.

### **Visitability**

Housing that is designed and built to enable a visitor with mobility challenges to enter the unit, visit with the occupant and easily use one bathroom (e.g., one entrance with no steps and flush threshold; wider door and space at this one entrance; one accessible washroom on the visiting floor, with wider door and space).

# Land Use Map Definitions

## **Agricultural Land Reserve Boundary**

Land within the Agricultural Land Reserve established pursuant to the provisions of the Agricultural Land Commission Act.

## **Agriculture**

Those areas of the City where the principal use is agricultural and food production, but may include other land uses as permitted under the Agricultural Land Commission Act.

## **Airport**

Those areas of the City where the principal uses are airport terminals and facilities, runways and airport-related businesses.

## **Apartment Residential**

Those areas of the City where the principal uses are multiple family housing in the form of townhouses and apartments, which can include housing for seniors (e.g., congregate care; intermediated care; assisted living; etc.).

## **Commercial**

Those areas of the City where the principal uses provide for retail, restaurant, office, business, personal service, arts, culture, recreational, entertainment, institutional, hospitality and hotel accommodation. Marina uses are permitted on the waterfront, in which case retail sales are limited to boats, boating supplies and equipment, and related facilities and services for pleasure boating and the general public. Commercial areas exclude residential uses, except for caretaker accommodation.

## **Community Institutional**

Those areas of the City which are intended for institutions engaged in religious, educational or cultural activities, and may include other uses as permitted under Official Community Plan policies.

## **Conservation Area**

Those natural and semi-natural areas of the City with important environmental values whose protection has been secured by federal, provincial or municipal ownership or legal conservation designation and by a long-term policy commitment by a senior level of government. They include municipal parks with high conservation values, provincial Wildlife Management Areas, the federally managed Sea Island Conservation Area and Metro Vancouver regional parks. Conservation Areas may also be subject to the City's Environmentally Sensitive Area (ESA) Development Permit Guidelines and may be used for recreational, park, agricultural and food production purposes or alternatively have no or limited public access.

## **Downtown Mixed Use**

Those areas in the downtown of the City where high-rise and high density development provides for residential, commercial, industrial, office and institutional uses.

## **Industrial**

Those areas of the City where the principal uses provide for the production, manufacturing, processing, assembling, fabrication, storing, transporting, distributing, testing, cleaning, servicing or repair of goods, materials or things. Industrial includes the operation of truck terminals, docks and railways, and wholesale business activities. Ancillary offices are only permitted to administer the industrial uses. Industrial areas exclude hazardous wastes, retail sales and residential uses, except for caretaker accommodation.

**Limited Mixed Use**

Those areas of the City which provides a mix of residential, as the predominant use, and limited commercial, industrial, office, institutional or community and pedestrian-oriented uses, as the minority use, intended to enhance the public amenity and livability of the area.

**Mixed Employment**

Those areas of the City where the principal uses are industrial and stand-alone office development, with a limited range of support services. In certain areas, a limited range of commercial uses are permitted such as the retail sale of building and garden supplies, household furnishings, and similar warehouse goods.

**Mixed Use**

Those areas of the City which provides for residential, commercial, industrial, office and institutional uses. Marina uses and waterborne housing are permitted on the waterfront, in which case the retail sales is limited to boats, boating supplies and equipment, and related facilities and services for pleasure boating and the general public.

**Neighbourhood Residential**

Those areas of the City where the principal uses are single family, two-family and multiple family housing (specifically townhouses). Sites abutting section line roads are deemed suitable for institutional uses such as fire halls and other emergency/communication services (e.g., ambulance station; telephone facilities).

**Neighbourhood Service Centre**

Those areas of the City which are intended to accommodate the retail, restaurant, office, personal service, business, arts, culture, entertainment, recreational, institutional and community facility and service needs of area residents, and may include residential uses.

**Park**

Those areas of the City where the principal use is public or private recreation, sports, public open space and natural areas, and may include agricultural and food production, recreational/social/cultural facilities and activities or public administration, City works/utilities, emergency services such as fire halls, and school facilities. Parks exclude residential uses, except for caretaker accommodation.

**School**

Those areas of the City where the principal use is education, such as kindergarten to grade 12, a post secondary college or university and related offices/facilities for school purposes. Schools exclude residential uses, except for caretaker accommodation and dormitories for the specific use of the School buildings only.