Semiahmoo Town Centre Plan



Surrey Community Planning Envisioning Surrey Together

Land Acknowledgement

Surrey is situated on the unceded and ancestral lands of the Salish peoples, including the Semiahma (Semiahmoo), ἀiἀəǧ (Katzie), and ἀʷɑːn̓λ̓əń (Kwantlen) Nations.

Semiahmoo Town Centre is located on the traditional homeland of the Semiahma. It is on their lands that our communities now live, work, and play. The Semiahma were the first peoples to reside in the area. They are and will continue to be active in shaping the future of the neighbourhood and the City of Surrey.

We strive to forge new positive relations.



Semiahmoo Town Centre Plan Planning and Development, Engineering, and Parks, Recreation and Culture City of Surrey 13450 104 Avenue Surrey, British Columbia V3T 1V8

Approved By Council: January 31,2022.



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What's a land use plan?

Land use plans designate what can be built and where. They guide the height, use, and look of new buildings, as well as locations and funding for new streets, parks and other public services.

How will the plan improve the neighbourhood?

Many public facilities and services are used daily by residents. These include community centres, cultural spaces, childcare facilities and libraries. When new development and rezoning occurs in an area with a land use plan, developers must make contributions to help fund these amenities. They are also required to upgrade sidewalks and other infrastructure.



SEMIAHMOO TOWN CENTRE

The Semiahmoo Town Centre Plan (the Plan) provides a comprehensive strategy to guide growth and development within the established heart of South Surrey. The Plan was developed with extensive public and stakeholder consultation. Preliminary planning, studies and technical analysis established clear context and supported an evidence-based approach to decision making. Leading best practices and market trends were carefully considered and applied.



COMMUNITY ENGAGEMENT

Over the past 4 years, over 30,000 residents have been involved throughout one of the most comprehensive community engagement processes conducted for a land use plan to date.



Approximately 34,848 touchpoints with participants, residents, and stakeholders.



PROJECTIONS

The 136-hectare (336-acre) Plan Area will accommodate modest population growth over several decades, support housing diversity by providing more apartment and townhouse development opportunities and strengthen local business by adding residents and providing new commercial and medicalsupportive office space.

To accommodate this increase in population and business, the plan designates additional parkland and envisions new community amenities. The Plan includes four additional neighbourhood parks. New parks are located within or adjacent to areas where development is expected. The result is 6.17 hectares (15.25 acres) of active parkland. All future residents within the Plan Area will have access to a park within 500 metres (approximately a five to 10-minute walk).

It is estimated that between 642-820 elementary students and 663-834 secondary students will be enrolled in the public-school system from the Plan Area once it is fully built out.

Existing Population Projected Population Existing Parkland Projected Parkland 7,815 18,188 4.41 ha 6.17 ha Existing Employment **Projected Employment** Projected Dwellings **Existing Dwellings** 1,943 6,899 4,410 11,115 Secondary Elementary **Existing Students Projected Students Projected Students Existing Students** 193 228 748 731

Projecting at Build Out

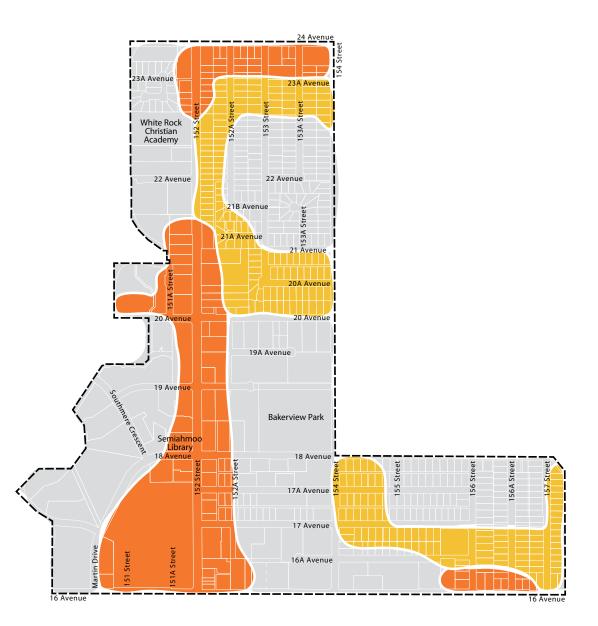
Projections are estimated for the Plan Area at full build out. This means when every single lot in the Plan Area is redeveloped to full potential. In developed areas, like Semiahmoo Town Centre this is likely to take 30-50 years.

GROWTH STRATEGY

Semiahmoo Town Centre is a designated Urban Centre within Metro Vancouver's Regional Growth Strategy (RGS). Urban Centres are transit-oriented communities with diverse populations, a range of employment opportunities, public spaces, and lively cultural and entertainment amenities. These characteristics make Urban Centres ideal locations to direct and accommodate growth in our region.

The Plan acknowledges the Urban Centre designation and presents a hierarchy of growth. It focuses density near long term Rapid Transit and shorter term RapidBus service along 152 Street and 16 Avenue, within the existing Semiahmoo Shopping Centre site, and into a medical district north of Peace Arch Hospital. The intensity of uses transitions away from the core into a largely established context of low-rise residential apartments and townhouses. Densities transition to low-rise and detached housing forms towards the existing neighbourhoods in the periphery.

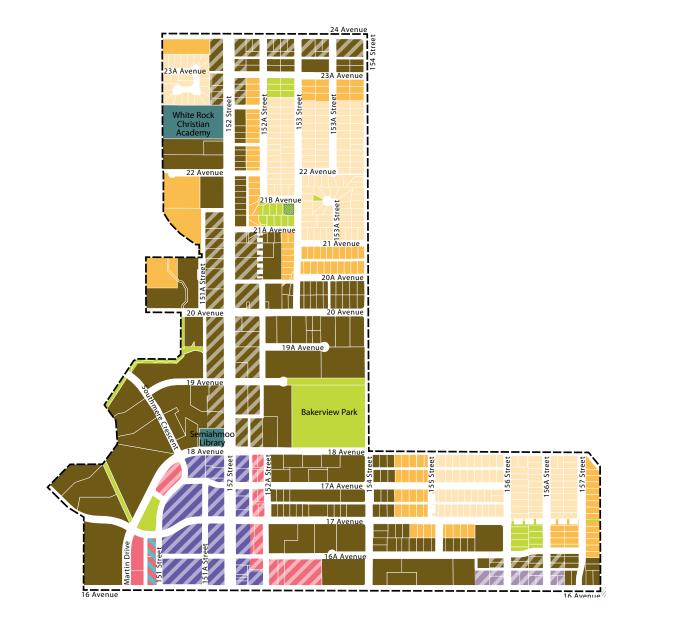
- Contain Redevelopment to Nodes and Corridors
- Provide A Variety of Housing
- Integrate Existing Neighbourhoods



LAND USE STRATEGY

The Plan recognizes the Town Centre as the primary commercial, institutional, and civic heart of South Surrey. Redevelopment is intended to focus density within mixed-use areas at key locations:

- along transit-served commercial high streets;
- at Peace Arch Hospital; and,
- within the Semiahmoo Shopping Centre redevelopment site.

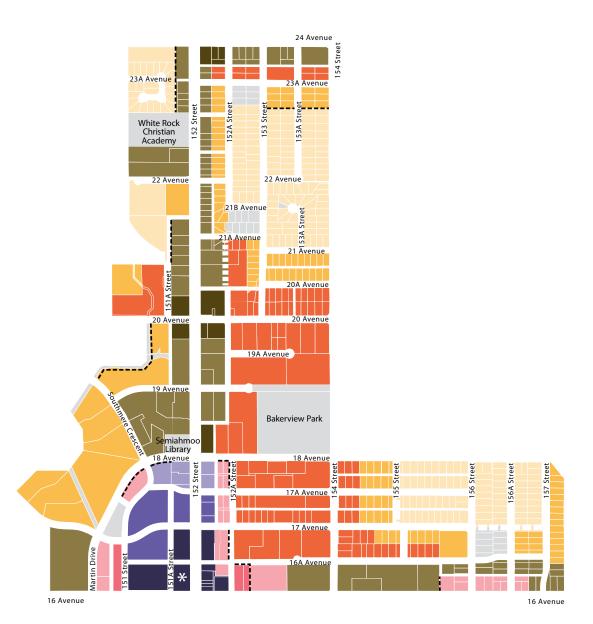


- High-Rise Mixed-Use
- Mid-Rise Mixed-Use
- Mid-Rise Medical Mixed-Use
- Low-Rise Mixed-Use
- Mid-Rise Residential
- Low-Rise Residential
- Mouse Residential
- Low Density Residential
 - Bus Layover Facility Parks & Open Space Detention Pond

BUILDING HEIGHT STRATEGY

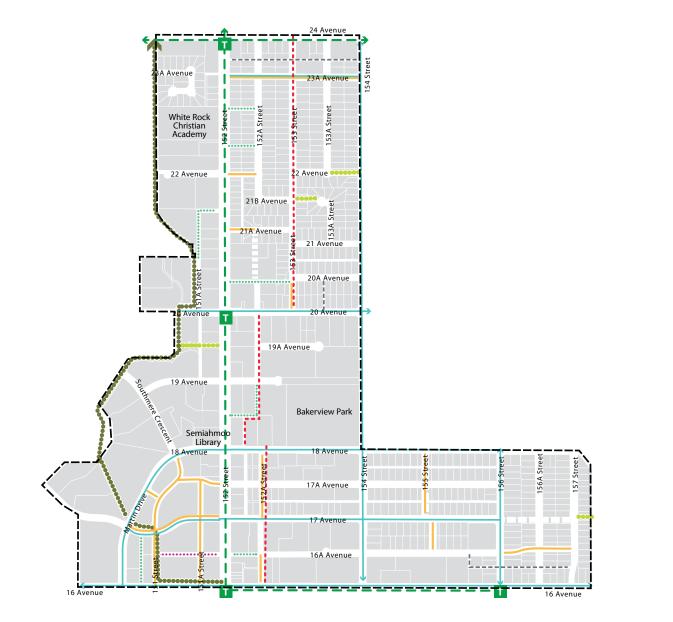
The Plan recognizes Semiahmoo Town Centre as an established community with a surrounding height context. To balance growth with this context the tallest buildings are strategically located at the intersection of 16 Avenue and 152 Street. Buildings gradually step down from that point to create a defined skyline and sensitively transition to existing buildings that are not expected to redevelop within the life of this plan.

- Up to 2.5 Storeys
- Up to 3 Storeys 4th storey permitted where underground parking is provided.
- Up to 5 Storeys 6th storey permitted with approx. 5 metre step back.
- Up to 6 Storeys
- Up to 8 Storeys
- Up to 12 Storeys
- Up to 16 Storeys
- Up to 20 Storeys
- Up to 24 Storeys
- Up to 28 Storeys
- Landmark Building Additional height may be considered for exceptional architecture and sustainable design
- Not Applicable Parks and Civic Uses
- --- Sensitive Interfaces



TRANSPORTATION STRATEGY

A high-quality multi-modal transportation network will support the Town Centre's transformation into a more vibrant urban centre. The transportation strategy outlines a finer grain street network to support compact neighbourhood development and connectivity. The street network is complemented by an integrated network of off-street pathways and open spaces. Upgrades to existing roads will also serve to deliver new sidewalks, treed boulevards and cycling infrastructure. The transportation strategy will deliver safe and efficient travel options for all residents.



- T Proposed RapidBus (Route and Stops)
- New Roads
- Protected Cycle Track
- •••••• Semiahmoo Trail Greenway
- ••••••••• Pedestrian Connection
- Pedestrian Street
- ······ Green Lane
- ----- Lane
- ----- Shared Street Bikeway

PARKS & OPEN SPACE STRATEGY

Semiahmoo Town Centre's open spaces are planned as an accessible and connected network of public parks, natural areas, and pathways. These are supported by smaller public plazas, and the on-site outdoor spaces of schools and private developments. The plan envisions four additional new neighbourhood parks as well as the extension of the Semiahmoo Trail Greenway and other multi-use pathways. Together they provide a range of amenities, and support access to nature, healthy ecosystems, and climate resiliency.



LEGEND

Existing Parkland
 Future Parkland
 ZZZ Detention Pond
 Semiahmoo Heritage Trail
 Semiahmoo Trail Greenway
 Pedestrian Connection

"Keeping the 'small town character' is going to destroy the potential for those that grew up in this community to stay here"

Online Survey Response, Semiahmoo Town Centre Planning Process, 2018-2021

Introduction | Why a plan for Semiahmoo?

Section 1

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Section 9

The Semiahmoo Town Centre Plan has been developed through extensive community consultation, with support from residents, stakeholders, agencies, and City staff.

The Plan is a contemporary strategy that envisions a compact, sustainable, transitsupportive urban centre. It fosters a community and cultural hub for South Surrey, while presenting updated land uses, infrastructure and amenities to support another 30 years of growth.

The plan is organized into the following sections:

Background & Context: an overview of the planning context and process.
Plan Framework: vision, guiding principles, growth concept and projections.
Land Use: land use designations and development parameters.
Urban Design: building form and design guidelines.
Transportation: new road connections and upgrades.
Parks & Open Space: protected parks and natural areas.
Community Amenities: recreation and cultural amenities, schools, and libraries.
Utilities & Servicing: infrastructure improvements.
Implementation: policies and financing required to build out the plan.





Policy Context

Planning and development in Surrey is guided by social, environmental, and economic contexts. The Official Community Plan (OCP) and Sustainability Charter, together with the City's climate targets and plans, provide the policy framework for sustainable growth. Together they implement broader direction from Metro Vancouver's Regional Growth Strategy (RGS). Other Strategic plans, such as Surrey's Biodiversity Conservation Strategy (BCS); Parks, Recreation, and Culture (PRC) Plan; and the Transportation Strategic Plan frame the provision of natural and built infrastructure.

Figure i: Plan Hierarchy



The Official Community Plan

The OCP includes the City's adopted commitment to reduce community greenhouse gas (GHG) emissions to net zero before 2050. A new Climate Change Action Strategy is being updated to outline a road map for reaching this target, as well as incorporating climate change adaptation.

Regional Growth Strategy

The Regional Growth Strategy (RGS) provides guidance for growth in the Metro Vancouver region. It designates Semiahmoo Town Centre as a Municipal Town Centre (Urban Centre). This designation denotes the area as a municipal and regional hub, intended to be one of the region's primary focal points for concentrated growth and transit service. Urban Centres are located within 800 m of a rapid transit station or 400 m of TransLink's Frequent Transit Network (FTN). They are typically characterized by high and medium density housing, services, and community and cultural activities oriented to the local needs of surrounding communities.

The Semiahmoo Town Centre plan boundary encompasses the northern portion of the Semiahmoo Municipal Urban Centre as outlined within the RGS. The southern portion of the Semiahmoo Municipal Urban Centre is shared with the City of White Rock. The OCP densities have been updated to correspond with the land use designations within this plan.

LEGEND

Semiahmoo Town Centre Plan Area RGS Municipal Urban Centre

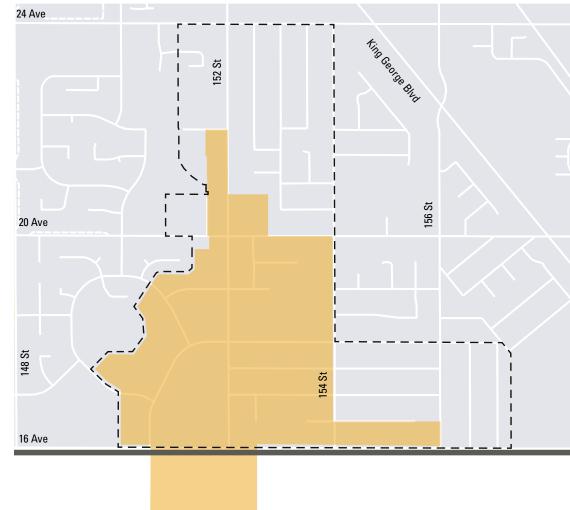


Figure ii: Regional Growth Strategy

White Rock

The Official Community Plan

"The City of Surrey will continually become a greener, more complete, more compact and connected community that is resilient, safer, inclusive, healthier and more beautiful."

Surrey is facing challenges: population growth and housing affordability; transportation and mobility; community amenities; and the climate crisis. The OCP identifies five long-term sustainability goals to help address the challenges of urban growth, climate change and demographic shifts.

The OCP also contains the City's target to reduce community greenhouse gas (GHG) emissions to net zero before 2050. These goals are embodied within the Semiahmoo Town Centre Plan.

Figure iii: OCP Sustainability Goals



Long-Term Sustainability Goal 1

Accommodate population growth by maximizing the efficient use of urban land while minimizing the impacts of change in existing neighbourhoods.



Long-Term Sustainability Goal 2

Improve the balance of local jobs to population to reduce commuting time, traffic congestion, greenhouse gas emissions, and the burden of property taxes on residential properties by diversifying the local tax base.



Long-Term Sustainability Goal 3

Reduce automobile reliance by re-orienting land use patterns to include higher density, mixed-use developments with access to transit, cycling and walking.



Long-Term Sustainability Goal 4

Promote a compact urban form that supports transit while reducing costly infrastructure extensions and avoiding development in environmentally sensitive areas.



Long-Term Sustainability Goal 5

Serve the needs of the city's population by providing housing diversity and community programs to support all ages and socio-cultural groups.

Climate Context

The global and local impacts of climate change are increasing in severity. In November 2019, the City joined other BC municipalities and declared climate change as an emergency. In March 2020, Council adopted targets to reduce community GHG emissions to net zero and corporate emissions to absolute zero, before 2050.

The City is creating a new Climate Change Action Strategy (CCAS). It will identify strategies for community and corporate emissions reduction to reach these targets. The CCAS will also include strategies for addressing climate adaptation, to increase the resilience of Surrey's communities to the expected changes in the local climate.

Land use has a particularly important role to play in reaching the City's GHG targets. Designing communities with a variety of forms of housing and a mix of amenities within a short walk, cycle, or roll from home, and connected by frequent transit, can enable reduced transportation emissions while also supporting biodiversity, health and social connections. Meanwhile, policies to support more efficient, compact and low-carbon buildings can help to reduce the secondlargest source of emissions in the city – heating space and hot water in buildings. Ultimately, focusing growth in compact transit-supported areas helps reduce the extent of suburban sprawl and the environmental impacts and servicing costs associated with it.

The Sustainability Charter

The Sustainability Charter provides a longterm vision and overarching framework of how Surrey will become a thriving, green, and inclusive city. Key to implementing the objectives in the Sustainability Charter is the Sustainability Dashboard. The interactive dashboard is a performance-based tool to help staff and the community gauge the City's progress to improving our socio-cultural, economic, and environmental wellbeing.

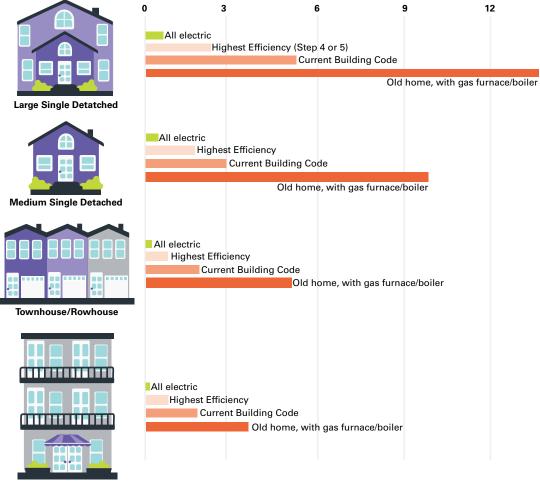


Biodiversity Conservation Strategy

Biodiversity is the variety of life on earth. Healthy, diverse ecosystems give us "natural services" including clean water to drink, soil to grow our food, and the outdoor spaces we love to live near and play in.

The Biodiversity Conservation Strategy (BCS) recognizes Surrey's existing biodiversity as a key foundation of a healthy, livable, and sustainable community. The Semiahmoo Town Centre Plan Area forms part of what the BCS refers to as the "urban matrix". These reflect high density, developed areas adjacent to the BCS's Green Infrastructure Network. While they may be heavily developed or have reduced natural areas, lands within the urban matrix provide important opportunities for integrating innovative greening approaches that can increase biodiversity values at the site and streetscape level. Applying the City's Biodiversity Design Guidelines (BDGs), developed as an extension of the BCS, are a way to achieve these objectives.

Figure iv: Annual GHG Emissions per Building Type





GHG emission calculations are based on the emissions factor for electricity purchased from BC Hydro, from the Province's Methodological Guidance for Quantifying Greenhouse Gas Emissions for Public Sector Organizations, Local Governments and Community Emissions.

Rapid Transit Context

As an urban centre, SemiahmooTown Centre is a high priority for long term RapidTransit service. RapidTransit for Surrey is defined a:

- In an exclusive right-of-way, where rapid transit vehicles are separated from general traffic by physical barriers similar to Bus Rapid Transit (BRT); and/or
- In a grade-separated right-of-way, where rapid transit vehicles operate in a guideway either above or below grade similar to SkyTrain

As part of Transport 2050, TransLink has identified longer term Rapid Transit corridors part of the Major Transit Network (MTN) which includes Rapid Transit to Semiahmoo Town Centre on both the 152 Street, 16 Avenue, and 24 Avenue. In the shorter term the Mayor's Council "10-Year Vision for Metro Vancouver Transportation" identified extension of the R1 King George RapidBus from Newton Exchange to Semiahmoo Town Centre. RapidBus service along with transit-oriented densities within this Plan Area will lay the foundation for additional rapid transit opportunities.

LEGEND

Major Transit Network
 Major Transit Growth Corridors

Urban Centres

- Frequent Transit Development Areas
- First Nation Reserves and Tsawwassen Treaty Lands
- Urban Containment Boundary
- Non-Urban Land



Figure v: Draft Metro Vancouver Transport 2050 Major Transit Growth Corridors

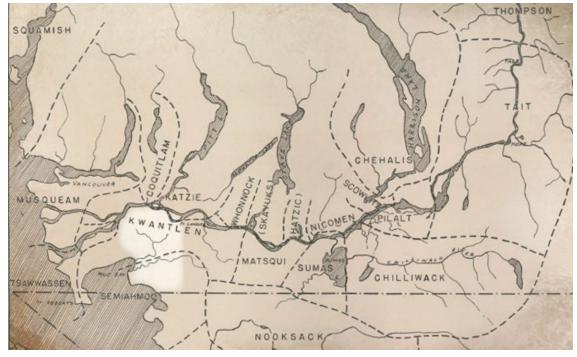
First Nations Context

Semiahmoo Town Centre's name originates from the Semiahma (Semiahmoo First Nation), the first peoples to live in the area. They are and will continue to be active in shaping the future of the neighbourhood and the City of Surrey. It is on their lands that we all live, work, and play.

This plan acknowledges the impacts European settlement has on the Semiahma way of life and recognizes the ongoing legacy of colonialism. The limiting of cultural practices, loss of access to traditional territories, and concentration onto limited reserve lands severally diminished traditional ceremonial and cultural practices.

The City of Surrey recognizes the need to reconcile this legacy and forge new positive relations. The Semiahmoo Town Centre Plan seeks to reaffirm the deep, intrinsic connection between Semiahma (the people) and Semiahmoo (the place).





Map of Traditional Territories

This famous 1952 map - with Surrey highlighted - is based on research by archaeologist Wilson Duff for the Provincial Museum of British Columbia in 1949 and 1950. It shows the ancestral territories of First Nations of the Fraser Valley as described by community elders. Today the contents of the map have shifted somewhat: many nations are in discussions to define their overlapping territories, some nations have returned to using their traditional names, and tribal affiliations in the eastern Fraser Valley have become more nuanced than the map describes.

As quoted in "Surrey: A City of Stories" by K. Jane Watt (2017). Map image from Anthropology in British Columbia: Memoir No. 1, page 20.



Overlooking Semiahmoo Town Centre, ca. 1980s. (City of Surrey Archives)

"The only way forward is sustainable higher density."

Online Survey Response, Semiahmoo Town Centre Plan Process, 2018-2021

1 Background & Context | How we got here

Section 1					1				
Background & Context	Section 2	Section 3	Section 4	Section 5	Section 6	Section 7	Section 8	Section 9	

The foundation of any land use plan is its context. Geography, history, and people frame and define the area. They also set the stage for the future and support the direction of the Plan. This section provides background on the plan and provides a profile of the existing community.

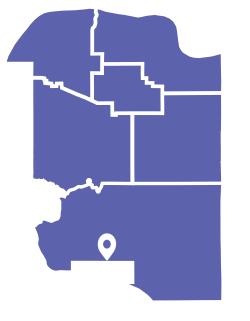
1.1 Plan Area
 1.2 Community Context
 1.3 Site Context
 1.4 Planning Process

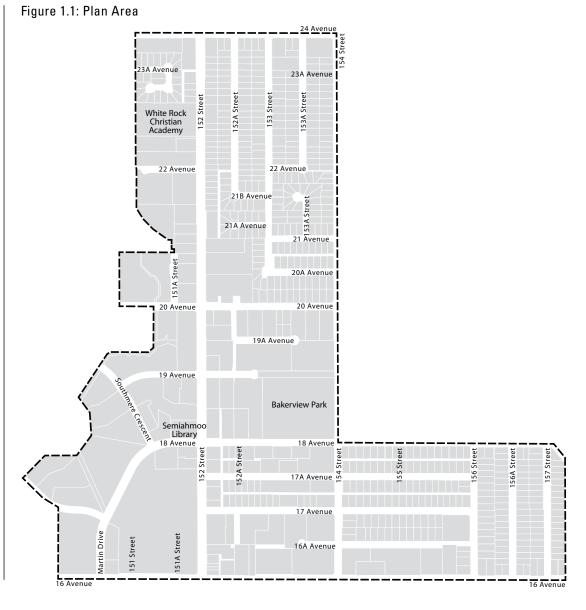


1.1 Plan Area

The Semiahmoo Town Centre Plan encompasses an area of 136 hectares (336 acres) centred on 152 Street between 16 Avenue and 24 Avenue. The Plan Area, as shown in **Figure 1.1**, is generally bounded by 24 Avenue to the north, 16 Avenue to the south, the Semiahmoo Heritage Trail and an existing open space network to the west, and 154 Street and Earl Marriott Secondary School to the east.

The plan boundary encompasses the north half of the Semiahmoo Municipal Town Centre shared with the City of White Rock and identified within the RGS.



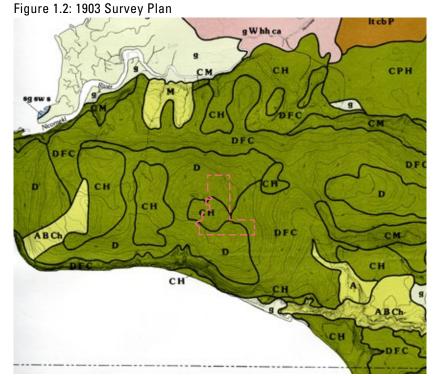


1.2 Geography

Semiahmoo Town Centre overlooks Semiahmoo Bay. Located on the plateau of the White Rock escarpment, its topography is relatively flat.

Prior to being logged in the early 20th century, the landscape was comprised of a dense mixed coniferous forest of douglas fir, grand fir, cedar, hemlock, pine, and spruce, interspersed with alder, dogwood, vine maple, and briars. With the exception of Sunnyside Acres Urban Forest, the remaining second growth forest was cleared in the 1960s through 1980s to make way for suburban development and singledetached subdivisions.

The town centre's original forests, natural watercourses and wetlands have been significantly affected by the human settlement and development activities of the past century (see **Figure 1.2**). Today, SemiahmooTown Centre is a highly urbanized landscape.



LEGEND

Approximate Semiahmoo Town Centre Plan Area Salt marsh Prairie Labrador tea M Maple bottom A Alder bottom Mixed deciduous regeneration forest Mixed coniferous forest on organics CH Mixed wet Mixed wet Mixed Coniferous Douglas Fir

Detail view from "Vegetation of the Southwestern Fraser Lowland, 1858-1880" by M.E.A. North, M.W. Dunn and J.M. Teversham, Environment Canada (City of Surrey Archives).

1.3 History

The Semiahmoo Town Centre plan does not include a comprehensive historical study. The following provides a brief overview of the history of the area.

This area has always been known as and has always been home to the Semiahma people. There is a long and deep history here, one that stretches back thousands of years. The Semiahma have strong linguistic and cultural ties south and west of the Semiahmoo peninsula, including traditional fishing sites and common land. There were numerous village sites in and near present-day Surrey, White Rock, Semiahmoo, Boundary Bay, and Bellingham Bay.

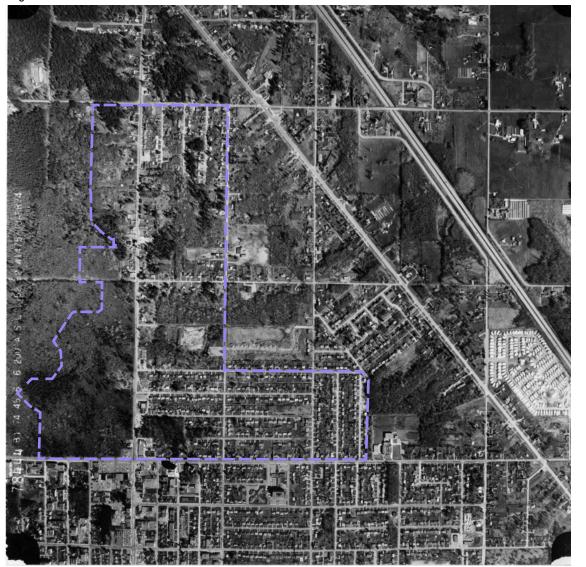
Beginning in the late 18th Century, European newcomers began arriving on Pacific shores, first Spanish (1791-92), then English (1792). The latter of which reported fishing camps at present-day Point Roberts capable of containing hundreds of people. Over the next decades more newcomers began arriving as part of the land-based fur trade, with the Hudson's Bay Company establishing Fort Langley (1827) and Fort Victoria (1843). In 1846, the current American-Canadian international boundary was set at the 49th parallel, bisecting the traditional territory of the Semiahma. The 1858 Gold Rush marked the start of large numbers of newcomers arriving on these lands, and the creation of the Colony of British Columbia. Over the coming decades, the interests of newcomer settlers were prioritized: Indigenous peoples were dispossessed of their lands, resource sites, and cultural practices. In 1887, a small amount of reserve land was established for the Semiahma people.

In 1873-74, the Semiahmoo Trail was constructed, providing an overland route from Semiahmoo Bay to the Fraser River (a portion of which is now a protected heritage resource). In 1909, the Great Northern Railway established its sea-line route and was integral in establishing present-day White Rock and Crescent Beach. The town centre was modestly developed over the next 50 years with houses along 16 Avenue, 24 Avenue, and 152 Street. Semiahmoo High School opened in 1940 at its original location at Fir Street and Buena Vista Avenue in White Rock. The Semiahmoo Town Centre was not heavily populated until the 1970s and 80s, when most of the area was subdivided and the Semiahmoo Shopping Centre was built.

In 1978, a bylaw was passed to protect a section of the Semiahmoo Trail as a designated heritage site. The section of Semiahmoo Trail from 20 Avenue to the Nicomekl River was the first site to be designated by Heritage Designation Bylaw by the City of Surrey. The Semiahmoo Town Centre Plan refers to this section of the Semiahmoo Trail as the Semiahmoo Heritage Trail.

Today, the Semiahmoo Heritage Trail is valued as a linear park and recreational trail in South Surrey. It has remained largely unpaved and provides a natural, green corridor, and habitat to a variety of indigenous plants, trees and fauna. It contains the Semiahmoo Trail Greenway that stretches beyond the extents of the Heritage Trail to connect the Nicomekl River to the City of White Rock.

Figure 1.3: 1974 Air Photo



City of Surrey Archives

The Legend of P'Quals (the White Rock)

People lived here during a time when things were very different. People were attuned with nature and carried strong spiritual powers. The Salish Sea was protected by a sea-being and his son. The sea provided an abundance of food to the tribes who lived along its shores. The Cowichan people and their chief were one of those tribes. One day, the chief's daughter was bathing in the sea. The son of the sea-being rose to the surface and fell in love with her at first sight. The pair hoped to receive the support of their parents, but the new couple was denied. The young man was determined to keep his love at all cost. He raised a huge stone in his hands and said to his T/ ále (love), "I will hurl this stone over the water! Wherever it falls, there we will make our home." He cast the stone over the water, and watched as it grew. The young man took his new wife into his arms, and swam after the great boulder. This huge stone landed sixty miles away, on the shores of Semiahmoo Bay. The couple chose to make their home here, and today this stone is known as P'Quals. This story, along with knowledge of the rock as a glacial deposit, correlate to the oral histories of the Semiahma people as survivors of the great flood.

Combined oral history and adaptations from the Grand Chief Bernard Charles and Bernard Charles Senior

1800-1850 1400s 1700s 15,000 YEARS 1808 1400S 1740 AGO Doctrine of Discovery. Simon Fraser explores what is now the Fraser River. Russians begin trading off the BC coast. The Great Flood Pope issues numerous and end of the last official statements that 1824-1825 ice age. 1741 give Christian Europeans the right to own land McMillan Expedition set out to choose a site for Danish explorer, Vitus Bering, explores the BC coast. the new Hudson's Bay Company fort. The crew that they "discover" in travels from Semiahmoo Bay to Fort Langley via the the New World, even Nicomekl River, the Salmon River, and the Fraser though the land is already 1763 River, Henry Hanwell, captain of the William and occupied by Indigenous King George III recognizes Indigenous title to land Anne ship, is sent from Fort Vancouver to obtain peoples. through a Roval Proclamation. information about the coast. Alexander McKenzie accompanies this expedition to establish Indigenous trade relationships along the way. 1774 Spanish explorer, Juan Perez, sights Queen Charlotte 1827 Islands and visits off Vancouver Island. Fort Langley is established as the new Hudson's Bay Company fur trading post. 1780S Epidemics appear on the Pacific Northwest Coast. 1828 Thousands of Semiahmoo First Nations people die. Hundreds of thousands of Indigenous peoples die. The Mohawk Institute is established as a day school for boys from the Six Nations Reserve. In 1831, it begins to operate as a Residential School. Its goal is 1790S assimilating Indigenous children into British culture. Europeans explore and chart the Strait of Georgia, Boundary Bay, and Semiahmoo Bay. 1837-1842 • Francisco de Eliza y Reventa and José María Charles Wilkes heads the US Exploring Expedition. Narváez explore the Strait of Georgia, including The expedition surveyed the Pacific Ocean and stops at Boundary Bay. surrounding lands, including Puget Sound and the Captain George Vancouver charts most of the Columbia River. . Strait of Georgia. Spanish explorers Dionisio Galiano and Cayetano 1849 Valdes sail the northwest coast. A boat from British government grants the Hudson's Bay their ship travels to Bellingham Bay, Boundary Company the power to govern Vancouver Island as a Bay, and Semiahmoo Bay. British colony.

1.3.1 COLONIALISM IN SEMIAHMOO

16

| CITY OF SURREY

1850-1900

1846-1859

Oregon Treaty establishes the 49th parallel as US-British boundary. The boundary artificially splits the land, separating Semiahmoo First Nation in half. Semiahmoo First Nation members south of the boundary relocate to Lummi Nation.

1850-1854

Chief Hudson's Bay Company Factor, James Douglas, negotiates treaties with 14 First Nations, mostly on the southern end of Vancouver Island.

1858

The Fraser River Gold Rush. Fort Langley changes from a modest trading post to having 30,000 miners. To accommodate the influx of miners, a trail is built from Semiahmoo Bay to Fort Langley. The British government proclaims the mainland of British Columbia to be a separate colony from Vancouver Island. James Douglas becomes governor of both British colonies.

1857-1861

Portions of Beach Road are constructed by members of the Boundary Commission. St. Anne's Church is built on Beach Road. Royal Engineers transform the Semiahmoo Trail into a pack road.

1862

Smallpox epidemic breaks out on Vancouver Island and the West Coast. Semiahmoo is significantly impacted.

1863

St. Mary's Residential School is built in Mission. Children from Semiahmoo First Nation attend this Residential School.

1864

Governor Douglas retires and his reserves policy is reversed. Reserve sizes are cut back by the Chief Commissioner of Lands and Works.

1865

The new Indian Graves Ordinance addresses ongoing theft, vandalism, and outright destruction of Indigenous grave sites. Anyone who destroyed or damaged a grave "without the sanction of the government" could be fined or jailed.

1866

Vancouver Island Legislative Assembly calls for reserves to be opened up to non-Indigenous settlement. Vancouver Island and the mainland of British Columbia merge into one colony as British Columbia. New Westminster is appointed as the capital.

1866

Pre-Emption Ordinance rules bar Indigenous people from pre-empting land. This would remain in place until 1953. In 1875, land is made available to settlers for free.

1867

British North America Act states that the federal government is now responsible for all Indigenous peoples and reserves.

1868

The capital of British Columbia is moved to Victoria.

1871

British Columbia is admitted into Canadian confederation. The settler canning industry begins in British Columbia with the establishment of Fraser River Canneries. From 1871-1923, Indigenous people not allowed to fish commercially.

1872

Small pox epidemic in British Columbia. The epidemic largely impacts Indigenous peoples across the province. Indigenous peoples lose the right to vote in BC elections until 1949.

1876

Federal Indian Act is passed. The act is made to disempower Indigenous peoples in Canada.

1877 - 1879

Federal Fisheries Act comes into effect in British Columbia. The Canadian government prohibits the use of nets in freshwater for fishing. Introduction of salmon fishing licenses in Canada.

1879

Surrey is incorporated as a municipality.

1880-1884

An amendment to the Indian Act disempowers Indigenous women. If an Indigenous woman marries a non-Indigenous or non-treaty Indigenous person, she will "cease to be an Indian in any respect" and lose any rights that go with her status. An amendment to the Indian Act prohibits Indigenous people from 'assembling'. The federal pass system is implemented. It confines Indigenous peoples to their reserves. in 1884, an amendment to the Indian Act makes the potlatch is illegal in British Columbia.

1881

The first settler salmon canning factory is built at Semiahmoo Bay.

1900s-2000s

1883

Official federal Residential School System begins. The Indian Residential School Settlement Agreement identified 139 federally funded schools throughout the during of the system. However, there were numerous other schools throughout Canada that were privately funded by religious organizations.

1887

The Semiahmoo First Nation reserve is established. The federal government previously outlined that a reserve must include at least 80 acres per family of five. However, the province of British Columbia claimed that "coast tribes would not use that much land" and only sets out 20 acres per family. Only 392 acres were provided for the Semiahmoo reserve.

1889

The Federal Fisheries Act prohibits Indigenous peoples from selling fish or owning fishing licenses.

1890

Settlers create fish traps in Semiahmoo Bay north of the reef, thereby blocking traditional reef net locations.

1894-1895

Alaska Packers creates a continuous line of fish traps that cuts off most of the reef. Lummi Nation files a court case, claiming these actions violate the Mukilteo Treaty. Courts rule in favor of the Alaska Packers.

1899

Treaty 8 is signed by 39 First Nations, including 23 Alberta First Nations, 3 Saskatchewan First Nations, 6 Northwestern Territories First Nations, and 8 British Columbia First Nations.

1907-1910

Construction of the Great Northern Railway begins along the Semiahmoo Bay shoreline.

1913

Formal confirmation of the land boundaries of Semiahmoo First Nation reserve.

1913-1927

Campbell River Mill operates on Semiahmoo First Nation reserve land.

1914

Semiahmoo First Nation sends formal objection to the Minister of the Interior regarding the removal of shoreland from the reserve.

1914

White Rock pier opens and the area because very busy with summer tourists.

1920

An amendment to the Indian Act makes it mandatory that First Nations children aged 7-15 years old to attend Residential School.

1921

Canada stops treaty negotiations. No new treaties are signed until 1973.

1927

An amendment to the Indian Act makes it illegal for Indigenous people to hire lawyers and legal counsel, thereby making it impossible to fight for their rights through the Canadian legal system.

1930S

Migrants from the Prairies during Great Depression greatly

changes White Rock. It transforms from a resort town to a permanent settler town. St. Anne's Church is relocated to Semiahmoo First Nation Reserve and renovated.

1939-1945

Between 5000-8000 Indigenous soldiers fight for Canada during World War Two. Upon their return, most do not get the same recognition or support as their non-Indigenous peers.

1947

Indigenous peoples are given the right to vote in provincial elections in British Columbia.

1951

The potlatch ban lifted. An amendment to the Indian Act gives the provinces jurisdiction over the welfare of Indigenous children. This change creates the ability of social workers to take children during the Sixties Scoop.

1957

White Rock separates from Surrey and becomes its own city.

1960-1980

The Sixties Scoop. Thousands of children are placed into foster care. They are separated from their siblings and primarily adopted by non-Indigenous families.

1960

Indigenous peoples are given right to vote in federal elections without losing their Indian status.

1961

A new St. Mary's Residential School building is constructed. The original St. Mary's Residential School building is torn down in 1965.

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2000s-Present Day

1973

Indigenous rights discussed for first time in the federal House of Commons. Named for Nisga'a chief Frank Calder, the Calder Case supreme court ruling confirms that Indigenous peoples had title to the land before European colonization, unless a treaty is in place.

1984

St. Mary's Residential School closes.

1985

Passing of Bill C-31, which results in amendments to the Indian Act. Indigenous women who previously lost their Indian Status if they married a non-status person have their status reinstated.

1991

Canada establishes the Royal Commission on Aboriginal Peoples to examine the relationship between Indigenous peoples, the Canadian government, and Canadian society. It was tasked to investigate problems and suggest solutions.

1993

Surrey becomes a City.

1996

British Columbia Treaty Commission established.

The last Canadian Residential School closes. Over 150,000 children attend Residential Schools. A great deal of these children suffered terrible physical, verbal, and sexual abuse.

A boil water advisory is on and off at Semiahmoo First Nation Reserve until 2005. Then, the advisory becomes permanent until the present.

The Royal Commission on Aboriginal Peoples report is published. The report recommends a public inquiry into Residential Schools.

2000

Nisga'a treaty becomes law. The is the first treaty signed for a British Columbia First Nation since 1899.

2007

The Indian Residential Schools Settlement Agreement. A group of 27 British Columbia survivors file a class-action lawsuit against the Government of Canada and the United Church of Canada. The case lasts nine years in the Supreme Court of Canada. The settlement provides funding to create the Truth and Reconciliation Commission.

The General Assembly of the United Nations adopts an internationally agreed upon set of rights that recognizes and affirms the unique rights of Indigenous peoples worldwide. Canada, along with a handful of other colonial nations, votes against the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).

2008

Former Prime Minister Stephen Harper offers a public apology to Residential School survivors.

The Truth and Reconciliation Commission is launched. The commission holds hundreds of hearings and community events across the country. Almost 7,000 statements are recorded and approximately five million documents are gathered from government and church archives.

2009

June is declared to be National Indigenous History Month and June 21 is National Indigenous Peoples Day in Canada.

2015

The Truth and Reconciliation Commission publishes a 7-volume report. The report includes historical details of Canadian Residential Schools and outlines 94 calls to action.

2016

Canada signs the United Nations Declaration on the Rights of Indigenous Peoples.

2019

Ground-breaking ceremony for the infrastructure work for clean water at the Semiahmoo First Nation Reserve.

1.4 Community Profile

Demographic data was collected from local and adjacent Census dissemination areas to develop a community demographic profile.

Semiahmoo has a slow growth rate. Based on the 2016 Census data the population grew at a much slower rate (5%) than the overall City (11%). The population increased from 10,060 in 2011 to 10,590 in 2016. The area also has an aging population and smaller household sizes than average. There is a larger proportion of seniors aged 65 and over (18%) than citywide (14%). This senior population increased by 26% from 2011 to 2016. In addition, the area has a larger proportion of 1-2 person households (54%) than citywide (48%).

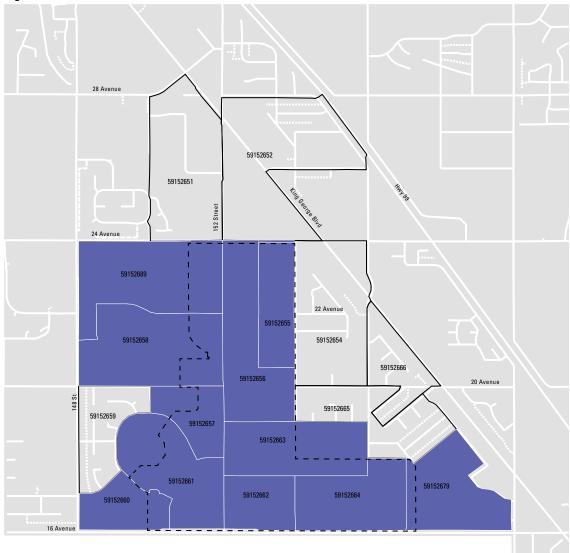


Figure 1.4: Dissemination Districts

LEGEND

Semiahmoo Town Centre Plan Area Dissemination Areas within Plan Area

1.5 Planning Process

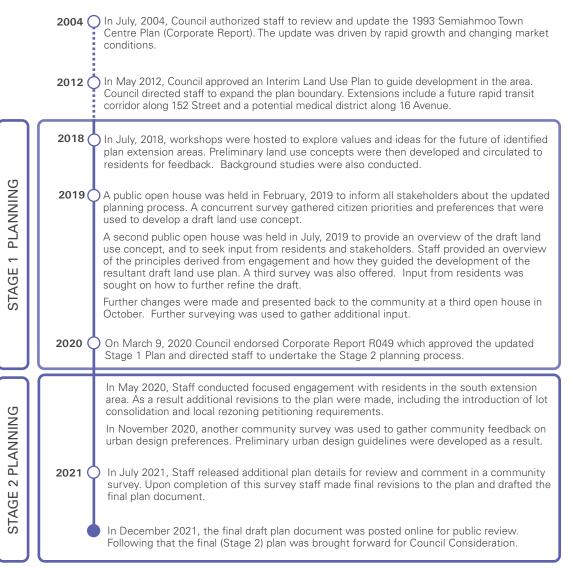
The process of updating the Semiahmoo Town Centre plan was initiated by Council in 2004. Council directed staff to update the Plan and reinforce the role of the Town Centre as the commercial and community hub for South Surrey.

In May 2012, following a multi-year community engagement process, Council approved an Interim Land Use Plan. Council also directed staff to continue the planning process, expand the Plan Area boundary, and consider future rapid transit along 152 Street as well as a potential medical district on 16 Avenue.

In May 2018 staff began the process of further updating the interim plan. The planning process included community engagement aimed at understanding the values and priorities of residents and stakeholders. Background analysis was conducted to evaluate and advise on transportation and economic conditions. These studies informed the Stage 1 draft land use plan, which was endorsed by Council in 2020.

Stage 2 planning work was undertaken through 2020 and 2021. Infrastructure servicing needs were identified based on proposed land use designations. Financing strategies, urban design guidelines and related policies and strategies were developed to support future development.

Figure 1.5: Planning Process Timeline





1.6 Community Engagement

Over the past 4 years, over 30,000 residents have been involved throughout one of the most comprehensive community engagement processes conducted for a land use plan to date.

From 2018-2020, residents provided their input on the challenges facing Semiahmoo and how the plan could address those challenges for the next generation. Engagement activities included workshops, open houses, stakeholder meetings and surveying. Common themes and community feedback on housing, transportation, and amenities formed the basis of the Stage 1 Plan.

After the Stage 1 approval in 2020, resident and stakeholder involvement continued to support the refinement of the plan. Additional surveys and stakeholder meetings through 2020 and 2021 provided additional opportunity for input on urban design guidelines, including building heights and public realm design. Key issues such as climate change, tree canopy, and green space were reinforced within the plan.

The Semiahmoo Town Centre Plan is the product of nearly four years of engagement, over 30,000 voices, and countless differing perspectives of local residents. The resulting plan presents an approach that balances the input and perspectives of residents with the growth and climate change related challenges that Surrey will face over the next 30 years. Figure 1.6A: Engagement by the Numbers

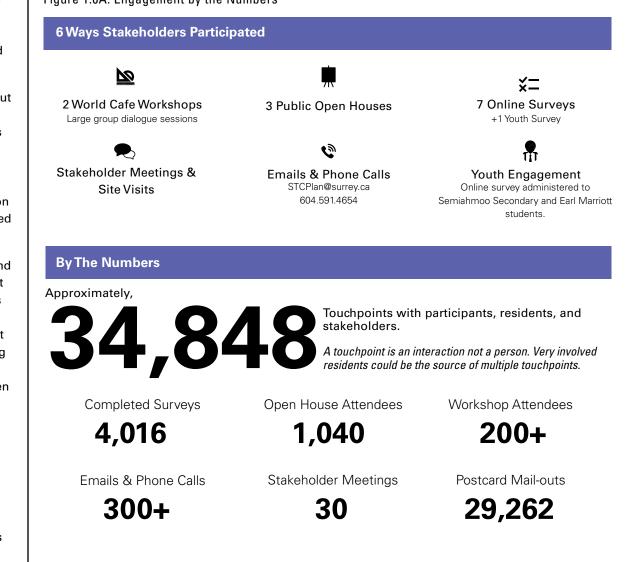
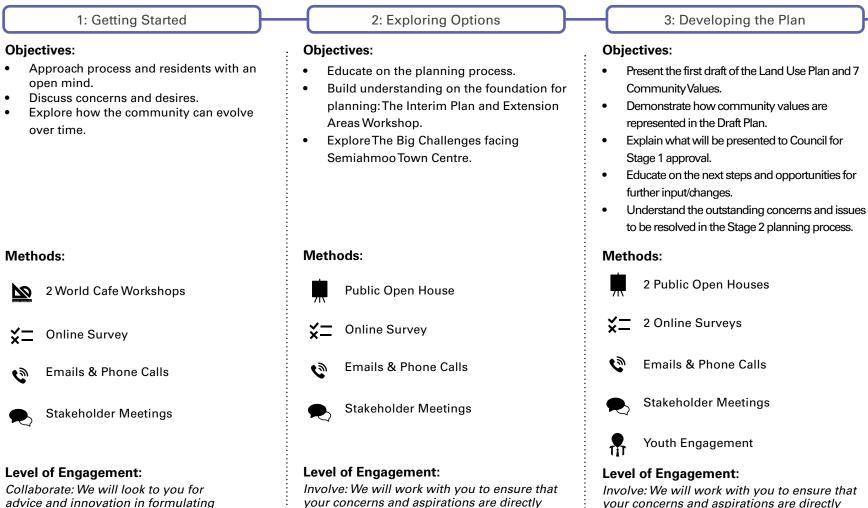


Figure 1.6B: Engagement Timeline



advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.

your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision. Involve: We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision. 4: Refining the Plan

Objectives:

- Connect directly with South Extension Area.
- Understand community architectural character preferences and public amenity opportunities.
- Mitigate outstanding concerns through Urban Design Guidelines.
- Connect with Semiahmoo First Nation.

5: Completing the plan

Objectives:

- Share detailed public space (streets & plazas) designs.
- Provide response and rationale where outstanding concerns could not be addressed.
- Inform of the final plan contents prior to Council consideration.

Methods:

- 1 Online Surveys
 - Stakeholder Meetings
- Emails & Phone Calls
- Release of Final Plan

Level of Engagement:

Consult: We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.

Community Feedback is just one input in the planning process

Every land use plan is the summation of opinions from three groups. Sometimes these groups have competing objectives. Each group provides a valuable lens that cannot be ignored. The resultant plan is better than if it was completed by any one group alone.

Staff and Council ensure the Plan aligns with established City and inter-municipal policies (e.g. Official Community Plan, Sustainability Charter, and Regional Growth Strategy). These policies we have committed to keep us moving towards the same goal.

Technical Experts provide detailed background studies and professional opinions on everything from traffic, the housing market, public health, biodiversity and more. They provide a quantitative and scientific lens to decision making.

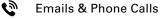
Residents are the local expert. Where technical experts provide objective accounts, residents provide the qualitative, personal, subjective account of the community. They are our best resource for firsthand knowledge.

Methods:

★ 3 Online Surveys



Stakeholder Meetings



Level of Engagement:

Involve: We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision. "Communities that can house a diversity of ages and incomes are stronger because they provide opportunities for different generations to assist each other."

Online Survey Response, Semiahmoo Town Centre Plan Process, 2018-2021

2 Plan Framework **The Big Picture**

Plan Framework

Section 2

Section 4

Section 5

Section 6

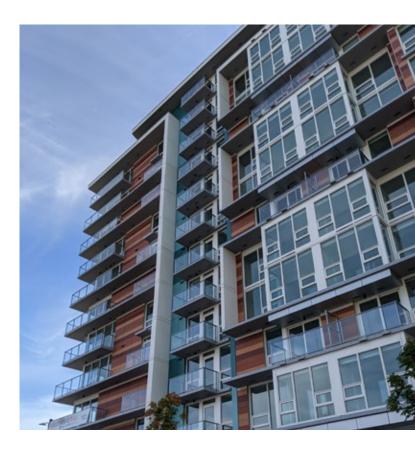
Section 8

Section 9

This section outlines the plan framework that envisions the transformation of Semiahmoo Town Centre into a vibrant regional centre. The vision and principles were established to address key challenges facing the community: population growth and housing; transportation and mobility; and community amenities.

This framework was revisited throughout the planning process to ensure it reflected the values and priorities of residents and stakeholders, as well as the City's growth and sustainability goals.

2.1 Vision 2.2 Planning Principles 2.2 Growth Concept 2.3 Growth Projections





2.1 Vision

The foundation of the plan is based on the enduring vision and themes that emerged through community and stakeholder consultation, supported by the City's growth and sustainability goals:

Semiahmoo Town Centre is the civic and cultural heart of South Surrey. Together with the City of White Rock, this area forms a dynamic regional urban centre and destination for the entire lower mainland. For locals, it is a desirable and inclusive community with housing types that meet the lifestyle and affordability needs of young people, families, and the elderly. It is pedestrian and transit focused. Redevelopment showcases the opportunity to transition to sustainable buildings and green the existing urban landscape.

2.2 Planning Principles

Building from the vision, the plan is framed around ten planning principles. These principles drive the strategic direction, policy framework, and implementation strategies that shape growth. They are enshrined within the growth concept and support the transformational vision for a vibrant urban town centre.

The Planning Principles are a combination of seven community values as established throughout engagement from 2018-2020 and three city-wide and regional policy obligations for smart growth. Community Values

Improve Connectivity

Provide more connections to support walking and cycling throughout the community.



Focus Density to Key Locations

Build density and mixed-use strategically, with a high-quality public realm and active streetscapes.



Encourage a Medical District

Support redevelopment and expansion of medical offices and supporting uses near the existing Peace Arch Hospital.



Provide a Range of Housing Types

Increase family-oriented and senior-oriented apartments and townhouse housing stock within the Town Centre.



Enhance Local Shops, Services, and Business

Increase the quantity and variety of commercial on main streets and surrounding Peace Arch Hospital and Semiahmoo Shopping Centre.



Create More Community Spaces

Plan for improved and expanded community and cultural facilities, and placemaking opportunities to foster social connectivity.



Recognize Established Neighbourhood

Respect existing single-detached neighbourhoods and low-rise residential buildings that are planned to be retained long term.



Accommodate Growth Sustainably

Focus growth into established urban centres to maximize the benefits of compact sustainable development.



Foster Inclusivity

Support a diverse inter-cultural and inter-generational group of residents with varying incomes, needs, and abilities.



Encourage Multi-Modal Travel

Shift the emphasis from automobile reliance to walking, cycling and public transportation.

2.3 Growth Concept

The plan recognizes the town centre as the primary commercial, institutional, and civic heart of South Surrey. It reinforces and builds upon its regional designation as an Municipal Urban Centre.

It focuses density near long term Rapid Transit and shorter term RapidBus service along 152 Street and 16 Avenue, within the existing Semiahmoo Shopping Centre site and into a medical district north of Peace Arch Hospital. The intensity of uses transitions away from the core into a largely established context of low-rise residential apartments and townhouses. Densities transition to traditional two-storey attached and detached housing forms towards the existing neighbourhoods in the periphery.

Contain Redevelopment to Nodes and Corridors

Growth is focused into mixed-use areas along 152 Street, 24 Avenue, 16 Avenue and the existing Semiahmoo Shopping Centre site. The plan focuses the highest intensities around the Semiahmoo Shopping Centre site and the interface with the City of White Rock. Mixed-use development will extend north along 152 Street and 24 Avenue to create pedestrian oriented, commercial high streets. A smaller mixed-use area provides medical supportive uses north of Peach Arch Hospital. New community, cultural amenities, parkland, public spaces, improved connectivity, and public transit will support new residents in these areas and enhance the vibrancy of the civic and cultural heart of South Surrey.

Provide a Variety of Housing

Transition areas provide a buffer between mixed-use areas and the surrounding low-density residential neighbourhoods. Modest low-rise and townhouse densities in these areas serve to support the diverse and changing housing needs of residents. New local amenities, including new neighbourhood parks, will accommodate new residents. New road connections will improve walkability and circulation, and more direct connectivity to long term Rapid Transit and shorter term RapidBus stops.

Integrate Existing Neighbourhoods

The Plan integrates new development with existing residential neighbourhoods by maintaining existing land uses within approximately 60% of the Plan Area. It recognizes that Semiahmoo Town Centre is an established urban neighbourhood and allows for a diversity of housing types. Much of the existing low-rise residential apartments and single-detached areas at the peripheries of the plan are expected to remain unchanged.

Figure 2.3 Growth Concept Map



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2.4 Growth Projections

2.4.1 POPULATION PROJECTIONS

The Plan will accommodate modest population growth over several decades. Although urban areas such as this are never truly finished, the plan is expected to yield an estimated total population of 18,188 residents, an increase of 10,373 from today. To accommodate this increase in population the plan designates additional parkland and envisions new community amenities.

2.4.2 HOUSING PROJECTIONS

The Plan supports housing diversity within the broader South Surrey community by providing more apartment and townhouse development opportunities.

High-rise mixed-use and mid-rise apartments will support the intent of the plan by attracting new residents and sustaining new and existing local businesses. Transitional mid and low-rise development will buffer the core area and provide more affordable wood frame apartment dwellings. Existing lowdensity neighbourhoods will gradually infill with small lot single family, duplex, and row housing dwellings.

All future development within the Plan Area will be within walking distance of shops, services, and public transit. Combined, the plan enables a variety of housing types that support a broad housing need. In total, the number of dwelling units will increase from the existing 4,410 (2020) up to 11,115 at full build-out, which is 50 years and beyond.

2.4.3 EMPLOYMENT PROJECTIONS

The Plan strengthens local business by adding residents and providing new commercial and medical-supportive office space. Mixed-use development within the existing Semiahmoo Shopping Centre site, Peace Arch medical precinct and along 152 Street and 24 Avenue main streets will provide commercial retail units at street level with potential office uses above. The area will evolve to include new institutional, medical, office, and commercial uses that will support the intent of a vibrant and active town centre. Total jobs within the Plan Area will increase from the existing 1,943 (2020) up to 6,899 at full build-out.



2.4.4 PARKLAND PROJECTIONS

The Plan includes four additional neighbourhood parks. New parks are located within or adjacent to areas where development is expected. The result is 6.17 hectares (15.25 acres) of active parkland. All future residents within the Plan Area will have access to a park within 500 metres (approximately a five to 10-minute walk). The Plan also includes small public plazas to support retail and recreational uses, and active and vibrant streetscapes that integrate biodiversity design principles.

2.4.5 STUDENT PROJECTIONS

It is estimated that between 642-820 elementary students and 663-834 secondary students will be enrolled in the public-school system from the Plan Area once it is fully built out. However, full build out in this context is gradual and over many decades.





Elementary

Existing	Projected
193	731
Secondary	
Existing	Projected
228	748

Why is Surrey growing?

Surrey is one of the fastest growing cities in Canada. All established Town Centres are planned to grow and densify over the next 30 years.

If we stop planning for growth, that doesn't mean growth stops. Over 1,000 new residents move to Surrey every month. Our predictions say this growth is expected to increase in the next generation due to BC's economy, migration, and displaced climate refugees from Canada and elsewhere.

Plans like the Semiahmoo Town Centre Plan help to control the housing supply to prevent homelessness from rising. They also maintain public services by projecting school capacities, public transit needs, hospital expansions, etc.

Why here?

All established Town Centres are planned to grow and densify over the next 30 years. The majority of Surrey's undeveloped lands are natural ecosystems, wetlands, forests, and farmland. To mitigate climate change, we need to protect these areas. It is also more efficient to develop in existing urban areas with existing utilities, services, transit, shops and amenities. Sprawling out into the suburbs impacts the environment more and places a heavier burden on everyone's property taxes to service and maintain.

The Semiahmoo Town Centre Plan redevelops about 130 acres (52 hectares) of urban area (~40% of the Plan Area). To accommodate this growth in traditional greenfield suburban development, would require the development of ~1200 acres (470 hectares) of watercourses, wildlife habitat, forests, and/or farmland. This is an area ~2.5 times the size of Sunnyside Acres Urban Forests and contains enough trees to capture 3,120 tonnes of carbon per year.

"Not all families have to live in single-family dwellings."

Online Survey Response, Semiahmoo Town Centre Plan Process, 2018-2021

3 Land Use | What We Are Doing



The land use strategy reflects the vision and principles of the plan, providing direction on the form and character of SemiahmooTown Centre as it redevelops. Land use designations and policies guide new development. They outline where and how homes, shops, pathways, parks, and community spaces fit together to create a complete community. They also outline where major redevelopment and change is not expected.

Council, staff, and residents expect future development proposals to correspond with the land uses and design direction of the plan.

3.1 Land Use Strategy3.2 Building Height Strategy3.3 Mixed-use Designations3.4 Residential Designations3.5 Other Designations



3.1 Land Use Strategy

The Plan recognizes the town centre as the primary commercial, institutional, and civic heart of South Surrey. Redevelopment is intended to focus density within mixed-use areas at key locations:

- Along transit-served commercial high ٠ streets;
- At Peace Arch Hospital; and, ٠

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Within the existing Semiahmoo Shopping ٠ Centre site.

The plan assigns land use designations to outline general development expectations and parameters. Development is expected to occur in accordance with these designations through the implementation of applicable zoning and development permit application processes.

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MIXED-USE DESIGNATIONS





MID-RISE

Provides a transition Confined to the existing between high-rise Semiahmoo Shopping Centre site and along 152 development and existing low-rise residential buildings. Street south of 18 Avenue to establish a concentrated town centre urban core.

RESIDENTIAL DESIGNATIONS



Provides a transition along the periphery of the plan's urban mixed-use core.

Provides a transition and recognizes the presence of existing low-rise strata developments that are not



likely to redevelop.

TOWNHOUSE

MID-RISE MEDICAL

MIXED-USE

Supports the growth of

Peace Arch Hospital.

medical offices and medical

supportive uses around the

Provides a buffer between low-density residential neighbourhoods and the Plan's designated higher arowth areas

LOW-RISE MIXED-USE



Establishes retail main street locations along 152 Street and 24 Avenue and provides a transition of density on the north interface of the midrise medical district.

LOW DENSITY



Maintains established lowdensity neighbourhoods while allowing for urban infill redevelopment.

OTHER DESIGNATIONS



Allows for the retention and expansion of recreational, cultural, and community uses.



Outlines the location of essential off-street bus layover operations





Outlines the location of new and existing parkland

Figure 3.1 Land Use Strategy

(////)



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3.2 Building Height Strategy

The Plan outlines a building height concept to thoughtfully locate taller buildings and provide a transition to established neighbourhoods.

The tallest buildings will interface with the City of White Rock's established high-rise urban context at 152 Street and 16 Avenue. Heights generally and gradually transition downward moving away from this location.

The mid-rise node at 16 Avenue and 156 Street is an exception to the above noted height transition. Modest building heights are permitted in a small node at this location to accommodate employment and medical service objectives. Building heights interface with existing mid-rise development south of 16 Avenue at Peace Arch Hospital. Heights transition down from this node towards the surrounding existing neighbourhood.

A consistent 6 storey street wall is envisioned for 152 Street, with exception to key intersections and sites adjacent to future long term Rapid Transit and shorter term RapidBus stops. In these locations modest additional building height may be considered to punctuate the street and provide variability to sight lines.

At the discretion of the City Architect and Advisory Design Panel, additional building height may be considered at the northwest corner of 152 Street and 16 Avenue. Height in excess of the maximums outlined in the Building Height Map and designations' Development Parameters, will require an amendment to the Town Centre Plan.

Sensitive Interfaces

Sensitive interfaces occur when new development directly abuts a development of significantly lower height or natural features. Where noted on the map and elsewhere when the adjacent development is not expected to see substantial redevelopment, new development should adhere to the following guidelines:

- A. Provide a view analysis of affected areas for staff and stakeholders to review.
- B. Provide enhanced setbacks and landscaping.
- C. Design podiums to match allowable height of adjacent buildings.
- D. Step back massing away from sensitive interfaces to orient the bulk of building massing along less sensitive interfaces.

How tall is a storey?

The Plan assumes a standard height of 3 metres for residential storeys and 4 meters for office or commercial storeys.

Figure 3.2 Building Height Strategy

LEGEND

provided.

*



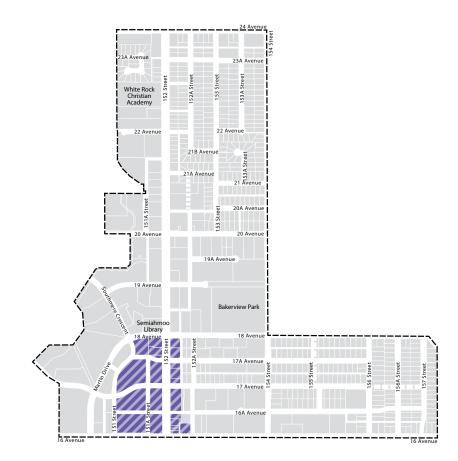
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3.3 Mixed-Use Designations

3.3.1 HIGH-RISE MIXED-USE

INTENT

Development within this designation is intended for high density mixed-use. High-rise towers are permitted, supported by a mixed-use podium. Street-level retail and commercial uses are required in all development in this area. Additional storeys above ground level may contain office, residential, and/or commercial. Institutional and civic uses are permitted at street-level and/or within the tower podium.



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DEVELOPMENT PARAMETERS

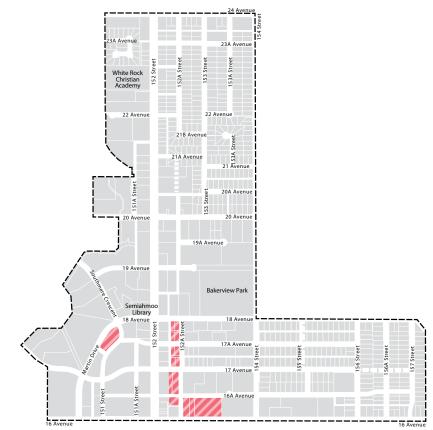
Base Density	2.5 FAR*	
Building Height	Refer to Figure 3.2 Building Height Strategy	
Tower Floorplate	Maximum 650 square metres	
Tower Spacing	Minimum 50 metres face-to-face, 30 metres corner-to-corner	
Tower Dimensions	Maximum 30 metres on any side	
Podium Height	Minimum 9 metres (~2 storeys) Maximum 25 metres (~6 storeys)	
Podium Depth	Maximum 20 metres for residential uses. To support viable commercial spaces with adequate space for service and function, a minimum depth of 12 metres is recommended. Additional depth encouraged for office uses.	
Interfaces	Refer to Figure 4.3 Ground Floor Use in Mixed- Use Areas	
Unit Mix	A minimum of 30% of new multi-family housing units should be family-oriented 2-bedroom or greater, and at least 10% as 3-bedroom or greater**	
Parking	Underground only	
Design	Development is subject to urban design approval to ensure appropriate interface treatments, consistency with design guidelines and land use designation intent (see Section 4.0).	

*Additional density may be considered where community amenities contributions are provided in accordance with Schedule G of the Zoning By-law. A future update to Schedule G of the Zoning By-law will include density provisions ("Zero Carbon Incentive") to encourage the construction of buildings that limit their contribution to climate change (see **Section 9.1.6**). Where additional density is provided, development should not exceed the above noted non-density related Development Parameters.

3.3.2 MID-RISE MIXED-USE

INTENT

Development in this designation is intended for medium density mixeduse development. Mid-rise point towers are permitted, supported by a mixed-use podium. Street-level retail and commercial uses are required. Additional storeys above ground level may contain office, residential, and/or less active commercial. Institutional uses are permitted at ground-level and/or within the tower podium. Terraced buildings, which include several floors above the podium that are incrementally smaller than the podium, may be considered subject to appropriate interfaces.



DEVELOPMENT PARAMETERS*

Base Density	2.5 FAR**	
Building Height	Refer to Figure 3.2 Building Height Strategy	
Tower Floorplate	Maximum 750 square metres	
Tower Spacing	Minimum 30 metres face-to-face, 20 metres corner-to-corner (measured from above podium)	
Tower Dimensions	Maximum 30 metres on any side above 20 metres	
Podium Height	Minimum 6 metres (~2 storeys) Maximum 18 meters (~4-5 storeys)	
Podium Depth	Maximum 20 metres for residential uses. To support viable commercial spaces with adequate space for service and function, a minimum depth of 12 metres is recommended. Additional depth encouraged for office uses.	
Interfaces	Refer to Figure 4.3 Ground Floor Use in Mixed- Use Areas	
Unit Mix	A minimum of 30% of new multi-family housing units should be family-oriented 2-bedroom or greater, and at least 10% as 3-bedroom or greater***	
Parking	Underground only	
Design	Development is subject to urban design approval to ensure appropriate interface treatments, consistency with design guidelines and land use designation intent (see Section 4.0).	

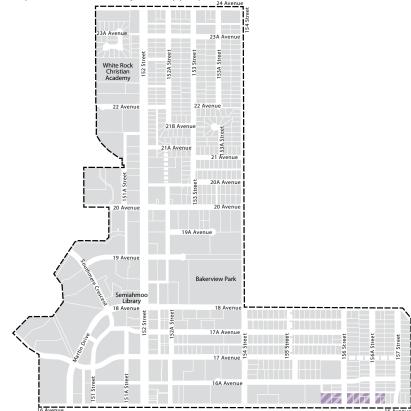
* Buildings taller than 12 storeys should refer to **3.3.1 High-Rise Mixed-Use Development Parameters**.

**Additional density may be considered where community amenities contributions are provided in accordance with Schedule G of the Zoning By-law. A future update to Schedule G of the Zoning By-law will include density provisions ("Zero Carbon Incentive") to encourage the construction of buildings that limit their contribution to climate change (see Section 9.1.6). Where additional density is provided, development should not exceed the above noted non-density related Development Parameters.

3.3.3 MID-RISE MEDICAL MIXED-USE

INTENT

Development within this designation is intended as medical supportive office, clinical practitioners, and medical supportive retail (e.g.: pharmacy) within a mid-rise point tower with a mixed-use podium. Active commercial uses are permitted at ground level. Medical supportive uses and services are anticipated in all developments, at ground-level and/or within the tower podium. Additional storeys above ground level may contain office, residential, and/or commercial. Terraced buildings, which include several floors above the podium that are incrementally smaller than the podium, may be considered subject to appropriate interfaces.



DEVELOPMENT PARAMETERS

Base Density	1.0 FAR Office/Medical Oriented Commercial + 1.5 FAR Residential/Office/Commercial*	
Building Height	Refer to Figure 3.2 Building Height Strategy	
Tower Floorplate	Maximum 750 square metres. Additional area may be permitted for office uses.	
Tower Spacing	Minimum 30 metres face-to-face, 20 metres corner-to-corner (measured from above podium)	
Tower Dimensions	Maximum 30 metres on any side above 20 metres.	
Podium Height	Minimum 12 metres (3-4 storeys) Maximum 20 metres (4-5 storeys)	
Podium Depth	Maximum 20 metres for residential uses. To support viable commercial spaces with adequate space for service and function, a minimum depth of 12 metres is recommended. Additional depth encouraged for office uses.	
Interfaces	Refer to Figure 4.3 Ground Floor Use in Mixed- Use Areas	
Unit Mix	A minimum of 30% of new multi-family housing units should be family-oriented 2-bedroom or greater, and at least 10% as 3-bedroom or greater**	
Parking	Underground only	
Design	Development is subject to urban design approval to ensure appropriate interface treatments, consistency with design guidelines and land use designation intent (see Section 4.0).	

*Additional residential density above the combined 2.5 FAR base will only be considered if the required 1.0 FAR of medical related mixed-uses and services is provided and amenities are provided in accordance with Schedule G of the Zoning By-law. A future update to Schedule G of the Zoning By-law will include density provisions ("Zero Carbon Incentive") to encourage the construction of buildings that limit their contribution to climate change (see **Section 9.1.6**). Where additional density is provided, development should not exceed the above noted non-density related Development Parameters.

** See Section 9.1.3 Housing Policies.

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3.3.4 LOW-RISE MIXED-USE

INTENT

Development within this designation is intended as low-rise with street-level active commercial and service uses. Additional storeys above ground level may contain office, residential, and/or less active commercial.



DEVELOPMENT PARAMETERS

Base Density	2.25 FAR*	
Building Height	Refer to Figure 3.2 Building Height Strategy	
Building Spacing	Minimum 20 metres face-to-face, 12 metres end- to-face, 6 metres end-to-end	
Building Depth	Maximum 20 metres for residential uses. To support viable commercial spaces with adequate space for service and function, a minimum depth of 12 metres is recommended. Additional depth encouraged for office uses.	
Interfaces	Refer to Figure 4.3 Ground Floor Use in Mixed-Use Areas	
Unit Mix	A minimum of 30% of new multi-family housing units should be family-oriented 2-bedroom or greater, and at least 10% as 3-bedroom or greater**	
Parking	Underground only	
Design	Development is subject to urban design approval to ensure appropriate interface treatments, consistency with design guidelines and land use designation intent (see Section 4.0).	

*Additional density may be considered where amenities are provided in accordance with Schedule G of the Zoning By-law. A future update to Schedule G of the Zoning By-law will include density provisions ("Zero Carbon Incentive") to encourage the construction of buildings that limit their contribution to climate change (see **Section 9.1.6**). Where additional density is provided, development should not exceed the above noted non-density related Development Parameters.

3.4 Residential Designations

3.4.1 MID-RISE RESIDENTIAL

INTENT

Development in this designation is intended for medium density residential development. Mid-rise point towers are permitted, supported by a podium. Limited ground level commercial (retail) uses are permitted, subject to an appropriate neighbourhood interface. Terraced buildings, which include several floors above the podium that are incrementally smaller than the podium, may be considered subject to appropriate interfaces.



DEVELOPMENT PARAMETERS

Base Density	2.5 FAR	
Building Height	Refer to Figure 3.2 Building Height Strategy	
Tower Floorplate	Maximum 750 square metres	
Tower Spacing	Minimum 30 metres face-to-face, 20 metres corner-to-corner (measured from above podium)	
Tower Dimensions	Maximum 30 metres on any side above 20 metres	
Podium Height	Minimum 6 metres (~2 storeys) Maximum 18 metres (~6 storeys)	
Podium Depth	Maximum 20 metres for residential uses	
Unit Mix	A minimum of 30% of new multi-family housing units should be family-oriented 2-bedroom or greater, and at least 10% as 3-bedroom or greater**	
Parking	Underground only	
Design	Development is subject to urban design approval to ensure appropriate interface treatments, consistency with design guidelines and land use designation intent (see Section 4.0).	

*Additional density may be considered where amenities are provided in accordance with Schedule G of the Zoning By-law. A future update to Schedule G of the Zoning By-law will include density provisions ("Zero Carbon Incentive") to encourage the construction of buildings that limit their contribution to climate change (see **Section 9.1.6**). Where additional density is provided, development should not exceed the above noted non-density related Development Parameters.

3.4.2 LOW-RISE RESIDENTIAL

INTENT

Development within this designation is intended for low-rise residential development between 3 to 6 storeys. Limited ground level commercial (retail) uses are permitted, subject to an appropriate neighbourhood interface.



DEVELOPMENT PARAMETERS

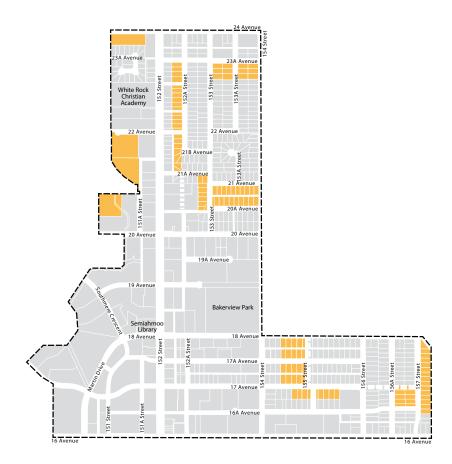
Base Density	2.0 FAR*	
Building Height	Refer to Figure 3.2 Building Height Strategy	
Building Spacing	Minimum 20 metres face-to-face, 12 metres end- to-face, 6 metres end-to-end	
Building Depth	Maximum 20 metres for residential uses	
Unit Mix	A minimum of 30% of new multi-family housing units should be family-oriented 2-bedroom or greater, and at least 10% as 3-bedroom or greater**	
Parking	Underground only	
Design	Development is subject to urban design approval to ensure appropriate interface treatments, consistency with design guidelines and land use designation intent (see Section 4.0).	

*Additional density may be considered where amenities are provided in accordance with Schedule G of the Zoning By-law. A future update to Schedule G of the Zoning By-law will include density provisions ("Zero Carbon Incentive") to encourage the construction of buildings that limit their contribution to climate change (see **Section 9.1.6**). Where additional density is provided, development should not exceed the above noted non-density related Development Parameters.

3.4.3 TOWNHOUSE

INTENT

Development within this designation is intended for multiple family attached townhouses. The designation supports traditional groundoriented townhouses and stacked townhouses with underground parking.



Base Density	1.0 FAR*	
Building Height	Refer to Figure 3.2 Building Height Strategy	
Design	Development is subject to urban design approval to ensure appropriate interface treatments, consistency with design guidelines and land use designation intent (see Section 4.0).	
Traditional Townh	ouse	
Building Depth	Maximum 12 metres	
Building Length	Maximum 42 metres	
Building Spacing	Minimum 10 metres face-to-face, 6 metres end-to- face, 3 metres end-to-end	
Clustering	Minimum 2 attached units. Maximum 6 units per building	
Parking	Vehicle access restricted to internal driveway or rear lane. Enclose resident parking spaces and minimize surface parking.	
Stacked Townhou	se	
Building Depth	Maximum 12 metres	
Building Length	Maximum 42 metres	
Building Massing	Step back upper-most storey a minimum of 3 metres	
Building Spacing	Minimum 10 metres face-to-face, 4 metres end-to- face, 3 metres end-to-end	
Clustering	Minimum 4 units per building, maximum 12 units per building. Back-to-back units are not permitted.	
Parking	Underground only	

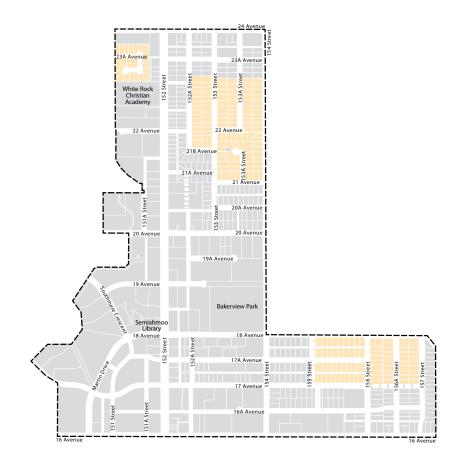
*Additional density may be considered where amenities are provided in accordance with Schedule G of the Zoning By-law. A future update to Schedule G of the Zoning By-law will include density provisions ("Zero Carbon Incentive") to encourage the construction of buildings that limit their contribution to climate change (see Section 9.1.6). Where additional density is provided, development should not exceed the above noted non-density related Development Parameters.

....

3.4.4 LOW DENSITY RESIDENTIAL

INTENT

Development within this designation is intended for modest redevelopment and infill while keeping with the existing character of the single-detached neighbourhood. The designation supports a range of 2.5-storey fee-simple residential uses, including single-detached dwellings, duplexes, and/or lane-serviced rowhouses and coach houses.



DEVELOPMENT PARAMETERS

Base Density	Detached	Up to 29 UPH (10/13 UPA)*
	Duplex	Up to 37 UPH (13/15 UPA)*
	Rowhouse	Up to 57 UPH (20/23 UPA)*
Building Height	Up to 9.0-9.5 metres (30-31 feet)	
	Detached	Approved building schemes
	Duplex	will be required at the time of subdivision to control housing designs.
Design	Rowhouse	Minimum 2 attached units. Maximum 6-unit width per building. RM-23 zoning should refer to Townhouse Design Guidelines.

*Additional density may be considered where amenities are provided in accordance with Schedule G of the Zoning By-law. A future update to Schedule G of the Zoning By-law will include density provisions ("Zero Carbon Incentive") to encourage the construction of buildings that limit their contribution to climate change (see **Section 9.1.6**). Where additional density is provided, development should not exceed the above noted non-density related Development Parameters.

Development within this designation should conform with the density requirements of applicable fee simple zoning within the Surrey Zoning By-law, 1993, No. 12000.

3.5 Other Designations

3.5.1 CIVIC

Civic uses are foundational to the development of complete communities. They form the social, educational, health, recreational, and cultural foundation of the community. The Civic designation allows for the retention and expansion of recreational, cultural, and community uses.

3.5.2 PARKS & OPEN SPACE

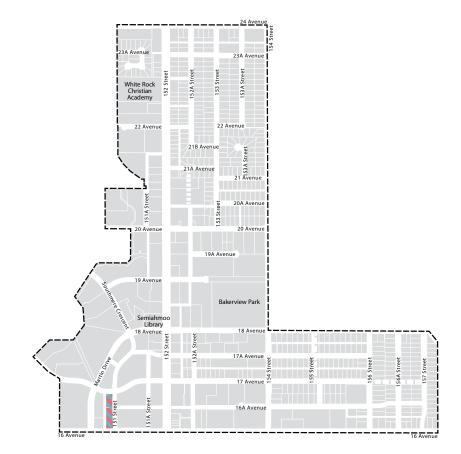
The Parks and Open Space designation outlines the location of new and existing parkland. Rezoning and subdivision for the purpose of development is not permitted within the Parks and Open Space designation. See **Section 6: Parks & Open Space** for details.



3.5.3 BUS LAYOVER OR BUS LAYOVER & MID-RISE RESIDENTIAL

INTENT

The Bus Layover designation outlines the location of enclosed offstreet bus layover operations. It permits commercial redevelopment to complement bus operations and enhance the street. The layover facility must accommodate 12-14 bus parking spaces. This future facility supports the long term transit objectives for South Surrey.



OPTION A: Stand-Alone Facility

As a stand-alone facility, visual and acoustic treatments above and along the east interface with 151 Street are required. Greening of the roof and wall interfaces is suggested to provide a backdrop for the Semiahmoo Trail Greenway, enhance sight-lines from the 16A Avenue pedestrian street, and improve views from apartments above. Commercial frontage buildings are envisioned along 17 Avenue and 16 Avenue to provide continuity of the street wall along commercial areas. One large crew washroom facility is required for bus operators. It may be integrated within the commercial buildings.

OPTION B: Integrated Facility

Alternatively, the bus layover facility is permitted to be enclosed within a building envelope. Should the facility be accommodated to the satisfaction of the City of Surrey and TransLink, the designation will permit the development of a mid-rise residential building. The intent, development parameters, and associated design guidelines of **3.6.1 Mid-Rise Residential** are required. A green wall along the 151 Street interface is required.

"Green and sustainable design significantly breaks up the visual experience of living alongside a 'tower.'"

Online Survey Response, Semiahmoo Town Centre Plan Process, 2018-2021

4 Urban Design | Fostering a Sense of Place

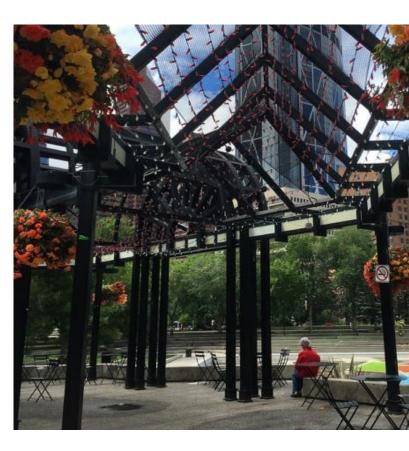


Urban design is the process of establishing the physical pattern and character of a neighbourhood. It is a tool to create a built environment that fosters community and a sense of place. The urban design strategy will advance the vision and principles of the Plan through development.

Individual buildings on the block designed in tune with the Plan, make great streets and neighbourhoods. This requires attention to the way buildings contribute to the public realm, meet the sidewalk, and shape the skyline.

The urban design strategy is to be read in conjunction with related documents, including the OCP Form and Character Development Permit Guidelines. Where there is a conflict between the Plan and OCP guidelines, this Town Centre Plan's Guidelines take precedence.

4.1 Urban Design Concept4.2 Form4.3 Ground Floor Uses in Mixed-Use Areas4.4 Interfaces4.5 Setbacks4.6 Plazas



4.1 Urban Design Concept

4.1.1 PEDESTRIAN EXPERIENCE

As an urban neighbourhood, town centre residents can meet most of their daily needs within walking distance. The urban design guidelines create a human centric public realm to accommodate and welcome pedestrians.

- A. Increase block permeability for pedestrian access, daylight, air and connectivity through the neighbourhood by breaking up block sizes manageable for the human scale.
- B. Consider universal accessibility standards in the design of walkways, plazas, building access and wayfinding to serve the safety and comfort of users of all ages and abilities.
- C. Place weather protection (canopies of at least 1.8 metres deep) on all commercial interfaces.
- D. Place trees to shade the sidewalk and driving surfaces to reduce urban heat island effect.
- E. Provide visual interest along streets using active building frontages, high-quality architectural details at pedestrian level and landscaping.
- F. Individualize ground level units and visually scale down buildings to a length of 30 metres.
- G. Include small scale details and fine grain textures along the pedestrian level building facade to visually stimulate and enrich the pedestrian experience.
- H. Create a comfortable experience for pedestrians by including amenities and features such as visual art, drinking fountains, lighting, and street furniture.
- I. Provide benches at regular intervals to provide places for rest.
- J. Avoid locating mechanical vents in locations that physically or visually interrupt pedestrian spaces or disrupt the experience with drafts or noise. Locate mechanical vents away and from pedestrian spaces and the public realm.
- K. Provide access to parking and commercial servicing (loading) areas from lanes to minimize interruption of the public realm.

4.1.2 A PLACE FOR EVERYONE

Streets, plazas, public open spaces, and parks belong to everyone and are where public life happens. These spaces are where residents connect with each other to make community. These spaces should be easy to find, access and use. Increase block permeability for pedestrian access, daylight, air and connectivity through the neighbourhood by breaking up block sizes manageable for the human scale.

- Optimize views from buildings and provide connectivity towards streets, plazas, public open spaces, parks, and natural areas.
- B. Maintain clear sight-lines between buildings to important neighbourhood sites and natural features.
- C. Support public life at street level by framing the edge of public open spaces with active frontages.
- D. Create publicly accessible open space (plazas and seating areas) at street corners.
- E. Create enjoyable, functional open spaces that take advantage of natural light and contributes to a pleasant microclimate.
- F. Promote neighbourhood safety and sociability by designing for viewpoint opportunities and activity along streets, pathways, and natural areas.
- G. Increase pedestrian permeability through sites and enhance routes along the periphery.
- H. Where a development directly abuts a transit stop, allow for additional building setbacks to accommodate pedestrian volumes.



4.1.3 GREENING SEMIAHMOO

Semiahmoo Town Centre is a distinct urban neighbourhood with a unique character. Semiahmoo Town Centre will be characterized by its incorporation of nature and greenery into architecture and design.

- A. Incorporate natural elements into building design such as green walls, green roofs, and constructed habitat features.
- B. Provide generous landscaping in alignment with the Biodiversity Design Guidelines along public realm frontages.
- C. Use natural materials (such as brick, stone, and timber) and neutral colours in building exteriors. Avoid the use of vinyl siding and fibre cement panels.
- D. Prioritize locally produced/manufactured natural materials (e.g. masonry, and wood) that are durable and visually distinctive.
- E. Use materials that maximize energy efficiency and extend the life of the building.
- F. Structural expression is encouraged using mass timber.
- G. Colour palettes should be neutral and inspired by the region's existing natural environment.
- H. Identify, retain, and incorporate existing mature trees and potential wildlife tree features into the overall site design.
- I. Incorporate existing natural features and native plants and trees (refer to the City of Surrey's Biodiversity Design Guidelines).
- J. Use roof tops for roof patios, green roofs, high albedo roofing finishes, energy harvesting arrays, or a combination to reduce heat island effects.
- K. Orient development views towards parks and natural areas. Provide connectivity where possible.
- L. Consider natural drainage flows in the design of on-site stormwater management infrastructure. Systems should maintain groundwater recharge and base flows to receiving streams, and protect watershed health to limit risk and flooding.
- M. Minimize impervious surfaces using low impact development approaches.

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- N. Apply tree and landscaping approaches that maximize biodiversity values while working with space and site constraints.
- O. Avoid extensive glazed surfaces that contribute to glare and reflection, create unwanted heat gain, contribute to overall building inefficiency and energy waste. Any large (multi-storey) uninterrupted glass facades should have screened, or etched patterns or other deterrents added to reduce bird-window strike issues.
- P. Minimize light pollution impacts:
 - Avoid or reduce the use of blue-tinted LED lighting which disrupts wildlife and human sleep patterns. Use yellow, orange, or red-tinted (warm) lighting which has less impact on nocturnal foraging behaviour in wildlife
 - Sidewalks, plazas, and other active use public open space should meet Crime Prevention Through Environmental Design (CPTED)/safety requirements but ensure lighting is shielded to limit glare and illuminate only the areas intended.
 - Avoid excessive or ornamental exterior lighting on buildings to minimize impacts to people and wildlife.
 - Reduce LED impacts such as sky glow and lighting bleed over by employing smart technology such as motion sensitive lighting and dimming and timers.





4.1.4 AN ESTABLISHED URBAN NEIGHBOURHOOD

Approximately 60% of the Plan Area is not expected to redevelop significantly. This area forms an established urban context. New construction is expected to complement and respond to this context.

- A. Align podium heights to create a consistent street wall along streets and congruity across streets.
- B. Align setbacks of new development to the anticipated ultimate streetwall of the entire city block as projected from the ultimate road allowance.
- C. Situate the bulk of massing and height in low-rise and mid-rise apartments towards main roads.
- D. Respect established trees and vegetation in site design by clustering buildings to avoid disturbance of any existing trees.
- E. Consider the future development of neighbouring lots. Where redevelopment is not expected, treat the transition as a "Sensitive Interface" (see Section 3.2 Building Heights).

4.1.5 **Ć**ELÁSET

Semiahmoo First Nation's culture, art, and history can be felt and experienced in the urban landscape. The Semiahma people and culture shapes the Town Centre and contributes to its sense of place. Visitors and residents of all backgrounds are enriched by this culture. They connect with the deep history of this place. There is gratitude for this land and its history.

- A. Undertake an archaeological assessment at the onset of multi-family redevelopment projects to ensure Indigenous belongings and ancestors are treated respectfully. There is a duty to preserve the deep history of this place.
- B. Incorporate traditional and contemporary Semiahmoo First Nation art and design into the built environment (tree grates, benches, manhole covers).
- C. Increase the visibility of traditional Coast Salish place names through the naming and renaming of public spaces (parks, plazas, streets, etc).
- Utilize public art and the urban landscape to tell the story of the land and the Semiahma people.



The SENĆOŦEN word for "advance" or "go forward" is "ĆELÁSET". We will strive to forge new positive relations as we move forward.



4.2 Form

4.2.1 TOWER FORM GUIDELINES

Developments within the High-Rise Mixed-Use, Mid-Rise Mixed-Use, Mid-Rise Mixed-Use Medical, and Mid-Rise Residential designations will adhere to the following guidelines:

- A. Integrate the tower base with the street, using forms and architectural features in human scale and contextualized with surrounding low-rise scale datums.
- B. Minimize the tower offset from the podium's street frontage to maintain a closer relationship to the streetwall.
- C. Articulate and proportion the podium massing laterally in relationship to the tower width by using visual breaks, recessed volumes or strong architectural features.
- D. Visually minimize bulk and massing while expressing the mid-storeys.
- E. Create elegant tower forms with Fparticulation.
- F. Scale down upper floors to create distinct tower tops and architectural interest.
- G. Integrate functional rooftop installations to create unique expression, using high quality materials.

Left 2-storey podium with 20-storey high-rise tower

4.2.2 MID-RISE FORM GUIDELINES

Developments within the Mid-Rise Mixed-Use, Mid-Rise Mixed-Use Medical, and Mid-Rise Residential designations will adhere to the following guidelines:

- A. The tower to podium junction should visually delineate the two masses, so that the tower is planted to the ground and carries up its vertical form.
- B. Differences between the tower and podium width may transition by terracing floor areas 2-3 storeys at the top of taller podiums.
- C. Articulate and proportion the podium massing laterally in relationship to the tower width, showing segmentation, such as using visual breaks, recessed volumes or strong architectural features.
- D. Rooftop gardens are encouraged on podiums.





4.3 Ground Floor Use in Mixed-Use Areas

Mixed-use developments contain a range of residential, commercial, and other uses.

To facilitate pedestrian engagement and street-level vibrancy within mixed-use areas, three ground-floor use classifications (Active, Less Active, and Residential) specify appropriate ground level interfaces. Active uses are intended for smaller format retail units that animate the public realm. All ground floor use classifications must adhere to additional interface guidelines outlined in **4.4 Interfaces.**

Active

Active frontages are required in the mixed-use core to generate a high degree of pedestrian street activity. In these areas, as illustrated **Figure 4.3**: **Ground Floor Use in Mixed-Use Areas**, "active" ground floor uses are required, including:

- Food and beverage uses such as restaurants, cafés, pubs, and coffee shops.
- Retail commercial uses such as clothing stores, jewelers, florists, and general retail.
- Personal service uses such as hairdressers, beauty parlors and shoe repair shops.
- Retail professional services, such as travel agencies, notary public, optical and insurance sales.
- Entertainment uses that generate demand during evening and weekends.
- Interactive uses that animate the streetscape, such as such as outdoor café spaces and merchandise displays (e.g. patios, flowers or produce).
- Includes small unit storefronts with flexible space.

Less Active

Areas outside of the mixed-use core with lower pedestrian volumes can be considered for less active ground floor uses. In these areas, as illustrated in the **Figure 4.3**: **Ground Floor Use in Mixed-Use Areas**, "active" or "less active" ground floor uses are required, including:

- Any of the uses outlined above as "Active."
- Ground floor office such as lawyers, accountants, as well as general office use.
- Larger format commercial such as drug stores, grocery and liquor stores.
- Larger format service uses such as childcare, fitness studios and medical clinics.
- Financial institutions such as banks and credit unions.
- Institutional uses such as places of worship, care facilities, supportive housing, and other civic and institutional uses.

Residential

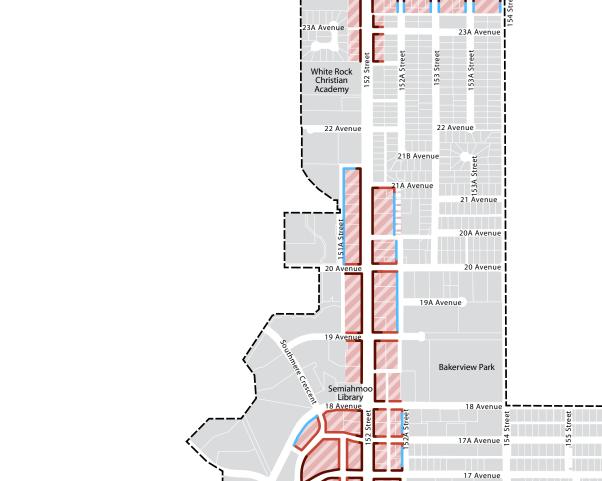
Interfaces on quiet residential streets are best suited for at-grade residential units. These interfaces will take the expression of ground floor townhouses or apartments with individual entrances from the street.

Figure 4.3 Ground Floor Use in Mixed-Use Areas

LEGEND

Active

Less ActiveResidentialMixed-Use



Martin Drive

16 Avenue

51 S

24 Avenu

16A Avenue

Street

56

Street

56A

157 Street

16 Avenue

4.4 Interfaces

The interface of a developments generally refers to how the building's ground floor meets the public realm. These conditions contribute to the overall look and feel of the neighbourhood. They work to provide a human-scale pedestrian-oriented environment.

4.4.1 GENERAL INTERFACE GUIDELINES

All development within Semiahmoo Town Centre will adhere to the following guidelines:

- A. Frame development sites with built edges against all streets.
- B. Create street enclosure with proportional street wall podium heights.
- C. Clearly acknowledge the public realm through building and site design.
- D. Buildings should support a safe, comfortable, and attractive public realm.
- E. Make residential entrances less prominent and secondary to commercial entrances in mixed-use developments.
- F. Locate vehicular access points, such as parking ramps, servicing, loading and pickup/drop off areas, from lanes to minimize interruption of streets and impact on the pedestrian environment. If no lane is available, provide a driveway from the street, separating and leading vehicles away to an access point that does not face the public realm.
- G. Screen and hide views of parking ramps from the street, public realm and above. Parking ramps should be incorporated into the building envelope without visible presence to those interfaces.
- H. Locate all vehicular parking and stopping areas underground.
- I. Design lower floors to be in scale with the pedestrian environment.
- J. Provide visual interest at ground level with articulation and a mix of materials.
- K. Avoid projecting floor area past the floor below.
- L. Consider architectural details of the underside of balconies and soffits from views below.
- M. Screen roof top equipment from street view and overlook from above.
- N. Screen and architecturally integrate wireless communication equipment into the building.
- O. Integrate signage into building architecture, so that it is complementary, and does not dominate the building elevation or site. Free-standing and monument signs are not supported.
- P. Roofs of lower buildings should be greened and treated to address overlook from higher buildings.
- Q. Use high quality finishing materials at public realm interfaces and street level building elevations.

Top: Commercial corner interface Middle: Commercial corner interface Bottom: Commercial interface

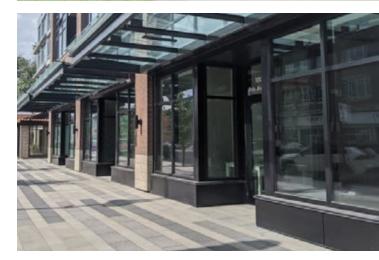
4.4.2 COMMERCIAL INTERFACE GUIDELINES

Commercial interfaces within High-Rise Mixed-Use, Mid-Rise Mixed-Use, Mid-Rise Mixed-Use Medical, Low-Rise Mixed-Use, and Commercial/Bus Layover Facility designations will adhere to the following guidelines:

- A. Expose and connect all commercial retail units directly to the public thoroughfare and plaza.
- B. Wrap ground floor retail around building corners along intersecting streets.
- C. Express storefronts with unit individualization that is distinct from its neighbours on the same building or immediate vicinity.
- D. Minimize interrupting commercial frontages with residential lobbies or entrances.
- E. Cover walkways and storefronts with weather protection canopies at least 1.8 m deep on arterial and collector streets, and plazas. On local streets, provide coverage at least 1.5 metres deep. Depth-of-canopy to height-above-sidewalk ratio should be about 1:2 to ensure adequate protection.
- F. Integrate signage into building architecture, so that it is complementary, and does not dominate the building elevation or site. Free-standing and monument signs are not supported.
- G. Arrange building and site lighting to avoid glare, light spill and light pollution.
- H. Avoid using overt security measures at storefronts, such as bars on windows or bollards; instead, integrate hidden measures into the building.
- I. Incorporate at-grade street planters and ensure generous soil volumes for landscaping that integrate biodiversity objectives such as, pollinator-friendly planting palettes and edible plants (refer to the City of Surrey Biodiversity Design Guidelines).
- J. Locate parking underground. Locate any above-grade stalls (e.g. car-share, drop-off) behind buildings, away from streets and open spaces.
- K. Avoid columned arcades along the public realm.









4.4.3 RESIDENTIAL INTERFACE GUIDELINES

Development within Mid-Rise Residential, Low-Rise Residential designations and residential interfaces within High-Rise Mixed-Use, Mid-Rise Mixed-Use, Mid-Rise Mixed-Use Medical, and Low-Rise Mixed-Use designations will adhere to the following guidelines:

- A. Design residential common entrances to be distinct from commercial entrances in mixed-use buildings.
- B. Locate primary building entrances along higher classified public thoroughfares.
- C. Increase the connectivity of the site with common walkways to the public realm.
- D. Clearly articulate and express a 2 to 3 storey townhouse appearance in residential buildings.
- E. Orient front doors and porches to face the street and provide direct (straight) walkway access to the public thoroughfare.
- F. Use extended porches or recessed entries to articulate facades and reinforce a residential character.
- G. Express each unit's individuality with its own porch entrance and weather protection, separated from its neighbour. Avoid unit entrances sharing porches or weather protection with other units.
- H. Provide a 3-metre patio (in addition to the walkway and landscape boulevard) for ground-floor residential units along a lane.
- I. Complement individual entrances with landscaping, including a flowering tree.
- J. Set main floor elevations to be between 0.6 1.2 metres above the adjacent public thoroughfare grade.

Left

Apartment building with grade-level townhouses and individual entrances

- K. Where raised patios are along a public thoroughfare, each tier of a retaining wall is limited to 0.6 metre high and a minimum of 1 metre horizontal staggering. Facing material should be durable, high quality and in character with the architecture of the building. Each base of the wall should include an irrigated landscape strip at least 1 metre wide and 0.5 metre at the uppermost tier. Any fence or guardrail should be visually transparent and located behind the landscape strips.
- L. Locate active living spaces (such as living, dining rooms and kitchens) to face the public thoroughfare with overlooking windows. Locate private spaces (such as bedrooms) on upper floors or away from unit frontages.
- M. Locate inactive spaces (indoor amenity rooms, service rooms, bathrooms, and closets) away from public thoroughfares and other public realm interfaces.
- N. Locate indoor and outdoor amenity areas adjacent to ensure they can be used together.

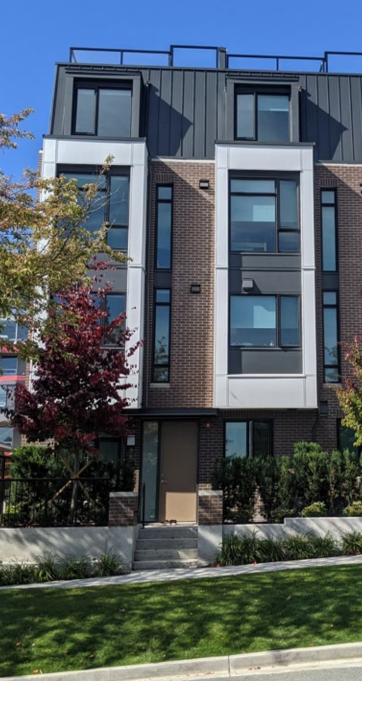




Top Apartment building primary entrance

Middle Corner residential plaza

Bottom Apartment building with grade-level townhouses and individual entrances



Left Stacked Townhouse

4.4.4 TOWNHOUSE INTERFACE GUIDELINES

Development within Townhouse designations will adhere to the following guidelines:

- A. Increase the connectivity of the site with common walkways to the public realm.
- B. Orient front doors and porches to face the street and provide direct (straight) walkway access to the public thoroughfare.
- C. Extended porches or recessed entries should be used to articulate facades and reinforce a residential character.
- D. Set main floor elevations to be between 0.6 1.2 metres above the adjacent public thoroughfare grade.
- E. Where raised patios are along a public thoroughfare, each tier of a retaining wall is limited to 0.6 metre high and a minimum of 1 metre horizontal staggering. Facing material should be durable, high quality and in character with the architecture of the building. Each base of the wall should include an irrigated landscape strip at least 1 metre wide and 0.5 metre at the uppermost tier. Any fence or guardrail should be visually transparent and located behind the landscape strips.
- F. Provide a 3-metre patio (in addition to the walkway and landscape boulevard) for ground-floor residential units along a lane.
- G. Express each unit's individuality with its own porch entry and weather protection, separated from its neighbour. Avoid unit entries sharing porches or weather protection with other units.
- H. Avoid placing balconies directly above the porch to retain the sense of entry at ground level.
- I. Complement individual entrances with landscaping, including a flowering tree.
- J. Locate active living spaces (such as living, dining rooms and kitchens) to face the public thoroughfare with overlooking windows. Locate private spaces (such as bedrooms) on upper floors or away from unit frontages.
- K. Locate indoor and outdoor amenity areas adjacent to ensure they can be used together.
- L. Use soft edges (landscaping etc.) to create opportunity for more pedestrian activity and interaction.

Top: Stacked Townhouse Interface Middle: Townhouse Interface Bottom: Townhouses with front porch entryway

- M. Consider shrubs and low hedges in lieu of fencing along a public thoroughfare. If fencing is proposed, limit its height to 1 metre; setback 1 metre from the public thoroughfare; and provide landscaping in front. Low fences (1.2 metre height) between units will be permitted.
- N. Provide 3.5 metre driveway aprons. Include and locate trees along drive aisles between garages.
- O. On-site pedestrian pathways should be at least 1.8 metres wide for universal accessibility.
- P. Use of natural materials such as wood, or brick is encouraged at street level. The predominant use of fibre cement panels is not considered appropriate. Large areas of exposed natural or painted concrete are discouraged.
- Q. Vary materials from building to building to provide variation and diversity in the streetscape. Limit the number of materials used within a single building to avoid overwhelming the palette.
- R. Simple traditional architecture with verandas and porches are encouraged.
- S. Use extended porches and recessed entries to articulate facades and reinforce residential character.
- T. Vertical expression and identification of individual units should be emphasized while reinforcing a unified character.
- U. Hidden and integrated roof top decks are encouraged within traditional roof forms.
- V. On large blocks, frontages should be varied with minor repetition.
- W. Stacked Townhouses should consider the following guidelines:
 - All units must be accessed from individual front entrances facing the street or internal courtyard. Buildings will not have shared internal corridors.
 - All units require private outdoor space. Private outdoor amenity space to be provided at front door and/or rooftop patios.
 - Ground level units should be 0.6 metres above adjacent grade to create a comfortable public realm interface. Access to upper units must comply with the BC Building Code.
 - Living areas and bedrooms require windows to ensure light, air and views.
- X. Integrate signage into building architecture, so that it is complementary, and does not dominate the building elevation or site. Free-standing and monument signs are not supported.







4.5 Setbacks

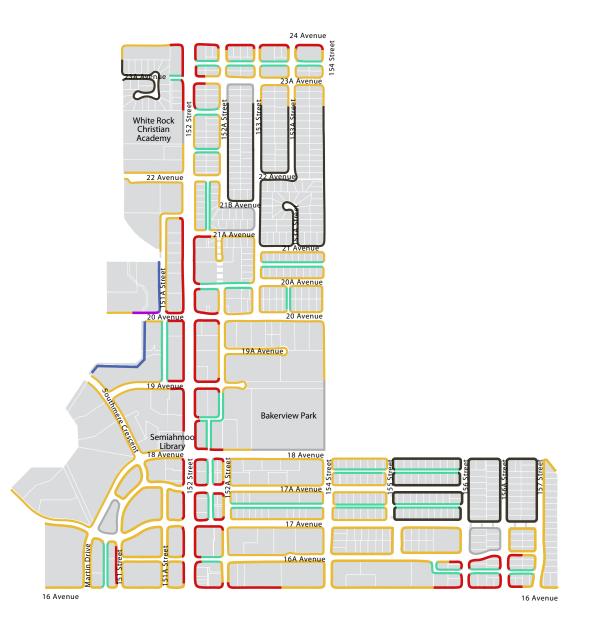
Setbacks provide privacy, environmental protection, landscaping opportunities, and enhance the public realm. The Setback Map provides a guideline of standard urban setbacks for the expected ground floor land uses. Development should conform with the setback requirements of applicable zoning within the Surrey Zoning By-law, 1993, No. 12000 or seek an appropriate variance as supported by staff. Dimensions and details may be subject to change during review by staff for development applications. In general, minimum setbacks are to be provided as follows:

- 3.0 metres to building on commercial interfaces.
- 4.5 metres to building and 1 metre to retaining walls and fences on residential interfaces.
- 4.5 metres to building on all roads within the Semiahmoo Shopping Centre site regardless of commercial or residential ground floor use.
- Green Lanes:
 - Residential Interface
 - 3.0 metres to building on the side with sidewalk.
 - 6.5 metres to building on the side without a City sidewalk, in order to provide an onsite tree boulevard and walkway (See **Figure 5.3.4B** in **Section 5 Transportation**).
 - Commercial Interface
 - 1.5 metres to building on the side with sidewalk
 - 4.5 metres to building on the side without a City sidewalk, in order to provide an onsite tree boulevard and walkway (See **Figure 5.3.4B** in **Section 5 Transportation**).
- Typical Lanes
 - Commercial 4.5 metres to building.
 - Residential 6.5 metres to building.
- Lanes vary within Low Density Residential Areas as per the Surrey Zoning By-law.
- Internal property line setbacks to be determined at application.
- Additional setbacks may be required along sensitive interfaces, environmental areas, and heritage features.
- Additional setbacks buildings and other structures (including retaining walls) are required for protected ditches as per the Official Community Plan's Sensitive Ecosystem Development Permit Guidelines.

Figure 4.5 Setbacks

LEGEND

- 3.0 metres
- ---- 4.5 metres
- 7.5 metres
- ---- 10 metres
- ----- Low Density Residential 3.5 - 7.5 metres
 - Lanes Setback Varies



4.5.1 TYPICAL RESIDENTIAL SETBACK

A typical residential setback will provide for private amenity (patio) space at the front door and landscaping requiring a tree on private property.

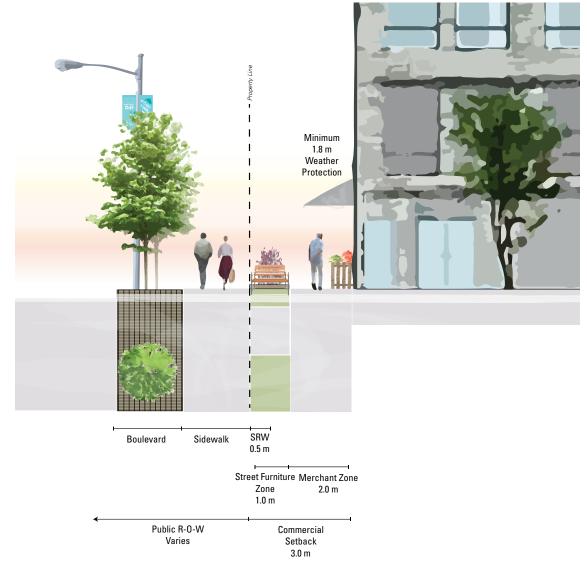
Figure 4.5.1: Typical Residential Setback



4.5.2 TYPICAL COMMERCIAL SETBACK

A 3.0 metre commercial setback will allow for a 2.0 metre weather protected merchant zone for display of goods and café seating. A 1.0 metre street furniture zone accommodates benches and limited landscaping. New development should consider adjacent building setbacks and modify setbacks accordingly to produce a consistent street wall and high-quality commercial pedestrian street.

Figure 4.5.2: Typical Commercial Setback

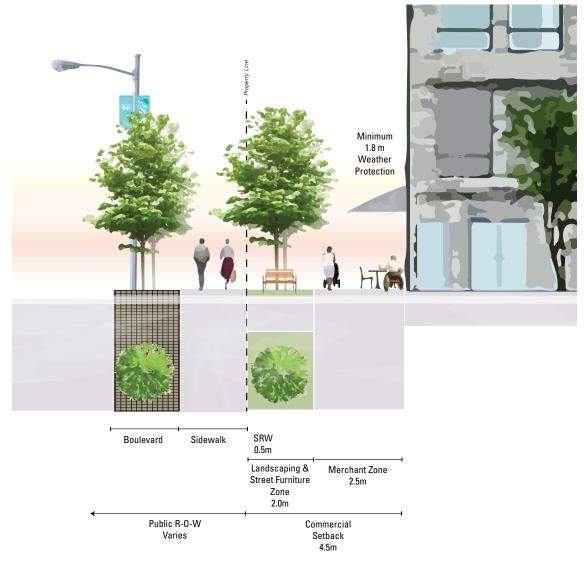


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4.5.3 GREEN COMMERCIAL SETBACK

A 4.5 metre commercial setback will allow for a 2.0-2.5 metre weather protected merchant zone for display of goods and restaurant seating. A 2.0 metre street furniture zone accommodates benches and landscaping including a second row of street trees on private property.







Conceptual Rendering: Semiahmoo Trail Greenway at 151Street (Frank Ducote)

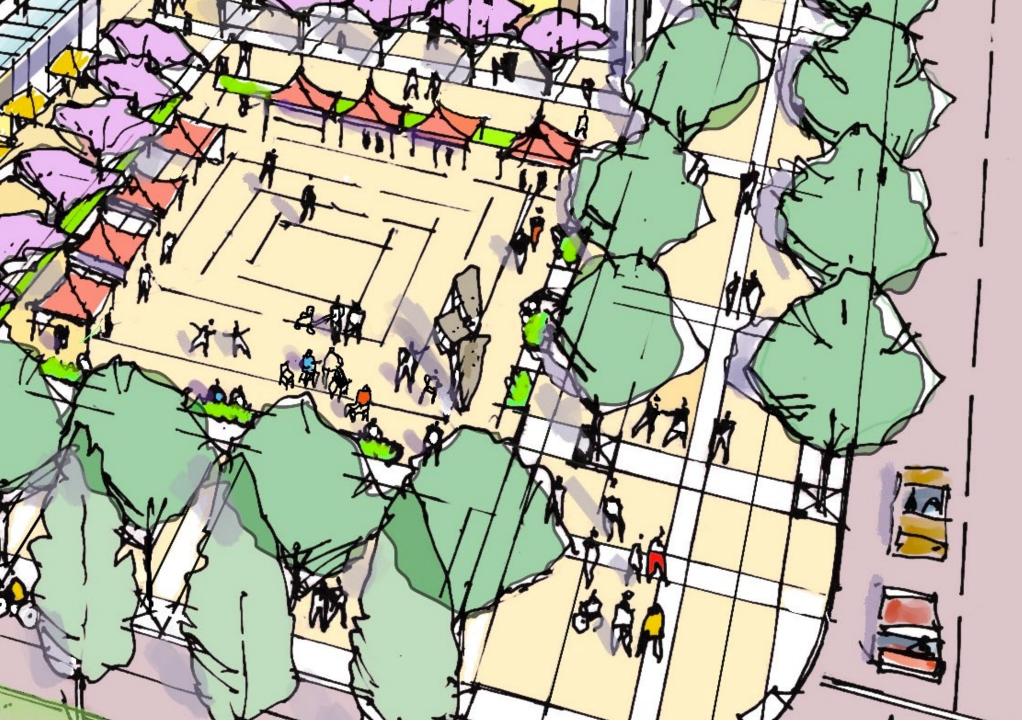
4.6 Plazas

Plazas support neighbourhoods and enhance quality of life by providing space and infrastructure for positive social interaction and cultural opportunities. As publicly accessible open space in higher density areas, they expand the public realm and allow for gathering, socializing, resting, eating and commerce.

Plazas require clear visibility, access, strong design, and program of use. Careful thought should be given to a plaza's principal function and its relationship with adjacent public thoroughfares, buildings and uses. Individual plazas function best as part of a hierarchy of open spaces, serving immediate local needs.

All plazas will be secured through adjacent development as publicly accessible open space, through increased setbacks. They will abut the public thoroughfare property lines. As such they are intended to remain open to the public and not permitted to be gated or restricted to private access.





Conceptual Rendering: Plaza at 16 Avenue and 152 Street (Frank Ducote)

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4.6.1 PLAZA SITES

Publicly Accessible Open Space

Each mixed-use, multi-family, or townhouse development will provide one or more publicly accessible feature plaza(s) a minimum of 30 square metres in area, relative to the project's scale. In some developments, one larger plaza may be appropriate.

Plaza 1 (NW corner of 16 Avenue & 152 Street)

This large plaza marks the south entrance to Surrey (and the Town Centre) from White Rock. The existing plaza at this location will be replaced or expanded upon to the intersection and wrap the corner northward on 152 Street. This large plaza accommodates commerce, public art, seating, wayfinding, urban landscaping (including trees), drinking fountain, and a public transit stop. Shade elements should be integrated. Minimum size: 500 square metres, with a 15 metres depth.

Plaza 2 & 3 (NE corner of 16A Avenue & 152 Street and NW corner of 17 Avenue & 152 Street)

These two plazas facilitate public transit and passenger queuing, while providing seating, wayfinding and urban landscaping. Surrounding buildings should have large high-quality expansive weather protection and interconnected shopfronts. Minimum size: 200 square metres, with a 10.5 metres depth.

Plaza 4 (NE corner of 16 Avenue & 151 Street)

This plaza serves as an amenity along the Semiahmoo Trail Greenway and capitalizes on south sight-lines towards ocean views. Its orientation will be longitudinal along 16 Avenue to maximize views and sunlight exposure. It includes public art relating to the Semiahmoo Trail Greenway, seating, and robust landscaping. Minimum size: 300 square metres, with a 7.5 metres depth.

Plaza 5 (NE corner of 17 Avenue & 151 Street)

This plaza serves as a landing space between the park across 151 Street and the 17 Avenue high street. It features open space orientated seating with sightlines towards the park. Its orientation will be longitudinal along 151 Street to expand the public realm facing the park. Minimum size: 200 square metres, with a 6 metres depth.

Plaza 6 & 7 (NE and SW corners of 20 Avenue and 152 Street)

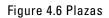
Located at the midpoint of 152 Street within the Town Centre and along 20 Avenue's Sunnyside Greenway, these twinned plazas invite pedestrians and cyclists to pause and rest. The plazas accommodate commerce, seating, bicycle parking, drinking fountains, and urban landscaping including trees. Surrounding buildings should have large high-quality expansive weather protection and interconnected shopfronts. Minimum size: 200 square metres, with a 7 metres depth.

Plaza 8 (SE corner of 24 Avenue & 152 Street)

This plaza marks the north entrance to the Town Centre. As a prominent corner, this plaza is a gateway opportunity to accommodate public art, seating, wayfinding, and urban landscaping. Minimum size: 300 square metres, with a 7.5 metres depth.

Plaza 9 (SE corner of 16A Avenue and 156A Street)

This plaza faces the park located across 16A Avenue. The plaza complements the area's medical uses by providing ample seating and rest areas for patients awaiting appointments or transport, tables for medical staff to enjoy lunch, and robust planting and landscaping. Seating and sight-lines should be oriented towards the park. Minimum size: 200 square metres, with a 7.5 metres depth.



LEGEND

Plazas
 Parks
 Detention Pond
 Semiahmoo Heritage Trail
 Semiahmoo Trail Greenway
 Pedestrian Connection
 Pedestrian Street
 Green Lanes



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4.6.2 PLAZA DESIGN GUIDELINES

Most plazas will be publicly accessible open space on private property, delivered through development. Plazas are to maintain visibility and open access to the public at all times to encourage street activity and public safety. Plazas and adjacent development should function together to enhance the public realm with coordinated urban design.

Plaza design is subject to the Urban Design review process and endorsement by the City Architect.

- A. Provide clear visibility of the plaza from the street and visibility out from the plaza.
- B. Abut the plaza along at least two street property lines to increase exposure.
- C. Align the edge of the plaza to blur the distinction between public and private property to expand the sense of open space.
- D. Set the plaza grades flush with the adjacent municipal sidewalk and limit the amount of grade change on the plaza to allow visibility and ease of access. Avoid raising or depressing the plaza below the adjacent municipal sidewalk. Avoid the use of retaining walls or berms.
- E. Maintain universal access with gentle grading and avoiding stairs or ramps.
- F. Avoid obstructive landscaping, furnishing and fixed articles that block sight lines into the plaza.
- G. Connect building entrances, lobbies, units, and storefronts onto adjacent plazas.
- H. Furnish with a variety of amenities to encourage public usage and to create a sense of liveliness and excitement. Key amenities can include public art, seating, tables, games, drinking fountains and bike racks.
- I. Orient seating towards views, streets, and parks. Place seating near building entrances and amenities.
- J. Maximize accessible and comfortable seating with opportunities for weather protection from rain and sun.
- K. Consider weather protection for open spaces, particularly where commercial uses line the edges. Such protection should be provided at waiting points and along major pedestrian routes.
- L. Use subtle, pedestrian lighting in character with the overall site and adjacent architecture, while also providing nighttime generalized lighting to enhance safety and nighttime use.

- M. Integrate landscaping with shade trees and durable planting, incorporating where practical biodiversity objectives (Refer to the City of Surrey Biodiversity Design Guidelines). Specify plants for the level of maintenance planned at the site, including robust and drought tolerant species wherever possible.
- N. Provide natural elements which reflect seasonal change, such as deciduous trees, as well as shrubs, ground covers, and flowers in a variety of colours and textures.
- O. Flush in-ground planters should be used instead of raised planters.
- P. Incorporate irrigation and adequate drainage to assure plant survival over time. Integrate stormwater management into landscaping features wherever possible.







Top Residential Corner Plaza

Middle Commercial Plaza

Bottom Linear Feature Plaza

"As the city of Vancouver and Victoria have proven, if you build it, bikes will come."

Online Survey Response, Semiahmoo Town Centre Plan Process, 2018-2021

5 Transportation | **How We Get Around**



The transportation component for the plan follows the guiding principles outlined within the City's 2008 Transportation Strategic Plan, the updated Surrey Transportation Plan, and supplementary plans, including the City's Vision Zero Surrey Safe Mobility, Walking, and Cycling Plans as well as the Electric Vehicle Strategy.

5.1 Transportation Strategy
5.2 Traffic Analysis
5.3 Street Typologies
5.4 Transit
5.5 Active Transportation
5.6 Parking
5.7 Traffic Control & Vision Zero





5.1 Transportation Strategy

A high-quality multi-modal transportation network will support the Town Centre's transformation into a vibrant urban centre. The transportation strategy outlines a finer grain street network to support compact neighbourhood development. The street network is complemented by an integrated network of off-street pathways and open spaces. The transportation strategy will deliver safe and efficient travel options for all residents.

The result is an open, connected, and continuous street network that supports cycling and pedestrian connectivity, and transit service. The future concentration of people and activities highlights the importance of the five pillars of the Surrey Transportation Plan:

- Grow the Transportation Network to create an efficient transportation system and improving connections;
- Prioritize Vision Zero by using a safe systems approach and applying Complete Streets;
- Tackle the Climate Crisis by encouraging active transportation and reducing car dependency to reduce Green House Gas emissions;
- Innovate through Technology and New Mobility by requiring development to provide and accommodate for variety of transportation solutions; and,
- Balance Equity to ensure both new and existing residents have access to a variety of transportation choices.

Figure 5.1 Transportation Strategy

New Roads

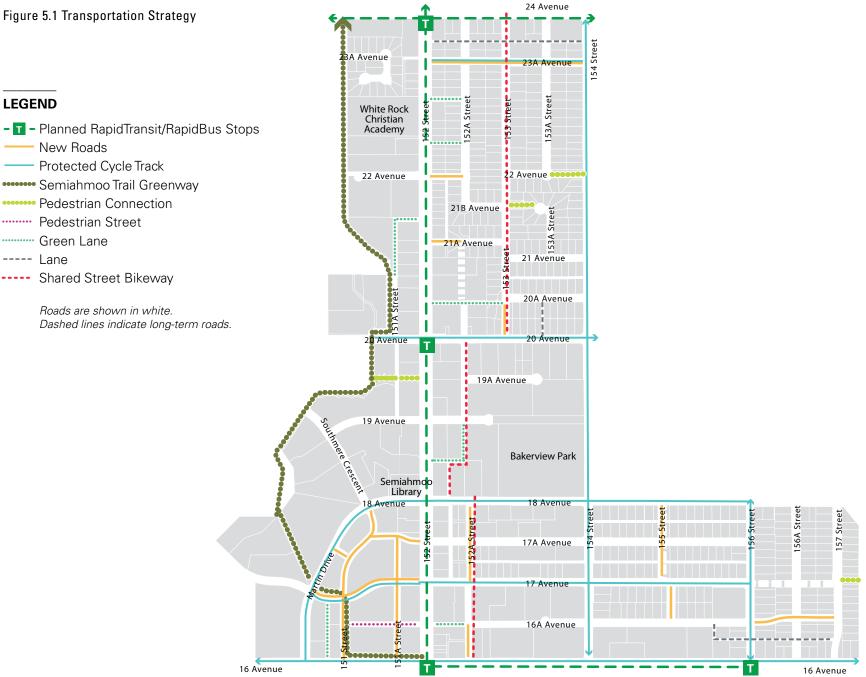
Green Lane

Pedestrian Street

LEGEND

.....

----- Lane



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Street Network

The street network includes a hierarchy of arterial, collector, and local roads. Green lanes, pedestrian streets, off-street pathways, parks, and plazas will also provide supplementary connections that support mobility and placemaking. Together, they create a network that meets the transportation demands of anticipated growth.

A fine grain interconnected continuous street grid will be established using a combination of existing and new connections. The resulting street network supports compact urban growth and prioritizes walking, cycling, and transit while considering efficient vehicle and goods movement. The presence of multiple parallel roadways and connectively between them will disperse traffic and provide alternative and more direct routing options between destinations.

Connectivity, walkability, and access to transit is improved with intersections spaced approximately 80 to 100 metres apart. This is consistent with new urban standards throughout Canada and is a measure of successful, walkable, town centres. The block sizes, where appropriate, are modified in consideration of natural and man-made constraints. Higher intersection density will also encourage slower vehicle speeds in support of Vision Zero principles to protect all road users.

The block spacing does not limit development viability and is consistent for urban town centres. To reduce any potential impacts of the finer grid on development and ensure equity, the floor area ratio (FAR) is calculated on a gross site area.

Key components of the Town Centre's street network already exist, including all arterial roads. The proposed road network is intended to provide a basis and some certainty for development proposals. Developments may be required to dedicate additional roads or lanes for access and circulation as determined on a case-by-case basis. Some properties may require long-term acquisition by the City to complete the remainder of the planned network. Existing roads will be upgraded to a contemporary urban standard with sidewalks and cycling facilities where applicable.

White Rock

Semiahmoo Town Centre is bounded by 16 Avenue to the south, which is also the municipal border with the City of White Rock.

The City of White Rock is poised for growth with a planned mix of single family dwellings, townhouses, apartment buildings, and high density mixed-use developments. The City of White Rock is currently developing an Integrated Transportation and Infrastructure Master Plan (ITIMP). The ITIMP will be a comprehensive multi-modal transportation master plan that will guide transportation investments, municipal infrastructure improvements, capital expenditures, and decision making for the next 20 years.

The City of White Rock envisions an integrated transportation network that will efficiently handle a growing community by prioritizing and encouraging walking as the first choice for short trips; cycling, and transit use for access to schools, local businesses, recreation facilities and local and regional employment centres; while also accommodating growth in vehicle traffic.

5.2 Traffic Analysis

While the Plan Area today has a well-established and regular grid of arterial and collector roads, the finer-grained grid, particularly local roads, is currently incomplete. This results in large block sizes with minimal pedestrian/cycling connectivity and concentration of traffic on arterial and collector roads.

Two significant capital projects outside of the Plan Area are expected to serve growth in the broader South Surrey Community in the short term:

- Highway 99 Interchange (2023-2025)
- 20 Avenue collector road widening and Highway 99 Overpass (2023-2025)

Additionally the existing R1 King George RapidBus is planned to extend to Semiahmoo Town Centre and significantly increase the level of transit service in the area.

Modeling Study

To evaluate the traffic impacts of development, a consultant, Parsons Inc., was retained by the City to provide transportation modeling and analysis for the Plan Area. The methodology for this work included:

- Collecting existing data related to transportation, land use and development in the study area;
- The City's travel demand model (Surrey Sub-Area Model / EMME) was used to assess overall travel patterns through the study area as well as to forecast future growth in trip-marking as a result of increased population and employment;
- The traffic operations microsimulation model (VISSIM) was developed for the SemiahmooTown Centre Plan Area and surrounding road network. This model uses trip volumes for origindestination pairs generated by the Surrey Sub-Area Model and loads these trips onto the road network;
- Calibration and Validation were conducted for the models using existing travel volumes, travel times and 2017 TransLink Trip Dairy trip generation rates;
- The proposed network improvement, including new road and cycling connections, new traffic signal and new traffic circle, were incorporated into the VISSIM model for the future scenario;
- Existing and future AM and PM peak hour traffic conditions were analyzed, including Level of Service (LOS), turning movement queue lengths, travel time and volumes, vehicle hour travel (VHT), vehicle kilometers travel (VKT), and network delay; and,
- Potential infrastructure improvements were identified and assessed at locations that are anticipated to have operational challenges in the future.



Trip Generation

Anticipated increases in overall trip making and the differential growth rates between modes are summarized in the table below. A 96% increase in overall PM peak trips is anticipated due to the growth in the Plan Area. This increase is expected over a long period of time (30+ years). Fortunately, there are higher growth rates for active (walk, bike, and transit) modes of travel as compared to single occupancy vehicle (SOV) and high occupancy vehicle (HOV) travel suggests that the Semiahmoo Town Centre Plan, will encourage a significant shift towards increased active transportation modes.

Results

In response to the anticipated increase in trips generated, potential network refinement mitigation measures were identified at locations that are anticipated to have operational challenges. The focus was on intersections within the Semiahmoo Town Centre Plan Area. In some limited cases intersections slightly beyond the immediate Plan Area were identified where it was anticipated that operations were of particular relevance for trips to, from and through the Plan Area.

The primary approaches to mitigating the identified issues included:

- Laning improvements at intersections, (primarily focused on providing new dedicated turn lanes and extending turn lane queue storage areas);
- New road connections through the study area; and,
- Providing signals at currently unsignalized intersections.

Overall, the road network, with associated improvements, is able to accommodate the anticipated growth in demand associated with development and land use intensification in the area. Associated improvements include:

• Growth in sustainable modes of travel is anticipated to outpace growth in

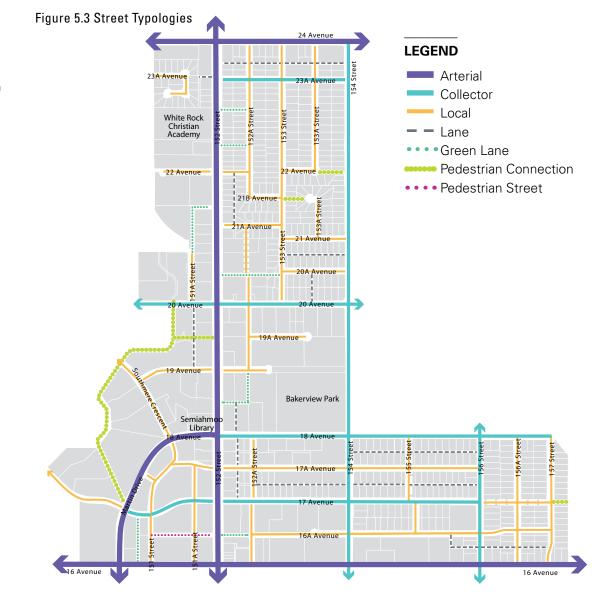
passenger vehicle modes, thereby helping accommodate increased trip-making without causing an equivalent increase in traffic volumes.

- Pre-existing baseline level of investment in the broader area road network – for example through the provision of a 20 Avenue overpass across Highway 99 in order to help relieve volumes on 24 Avenue and 16 Avenue, as well as the new road links proposed as part of Stage 1 of the SemiahmooTown Centre Plan.
- The new road network within the existing site of Semiahmoo Shopping Centre performs well, including a pedestrian-only area on 16A Avenue.
- No performance issues were observed in the future base scenario at the two right-in, right-out intersections of 16A Avenue with 152 Street. However, closing access to the intersection was tested as an optional refinement to preserve space for future transit stops. Closing the intersection will impact surrounding intersections by re-routing trips that would have previously used the 16A Avenue / 152 Street intersection, resulting in minor additional delay at those locations. The increased delay is not large enough to significantly affect the surrounding intersections.



5.3 Street Typologies

All typical roads within the Plan Area will follow the City's Engineering Design Criteria and Supplementary Standard Drawings. In addition to typical road standards, a number of unique roads and cross-sections have been identified to reflect unique conditions and to advance the Plan's urban design strategy. Road cross sections highlight the different roles, function, and character of each street.



5.3.1 ARTERIAL ROADS

Existing

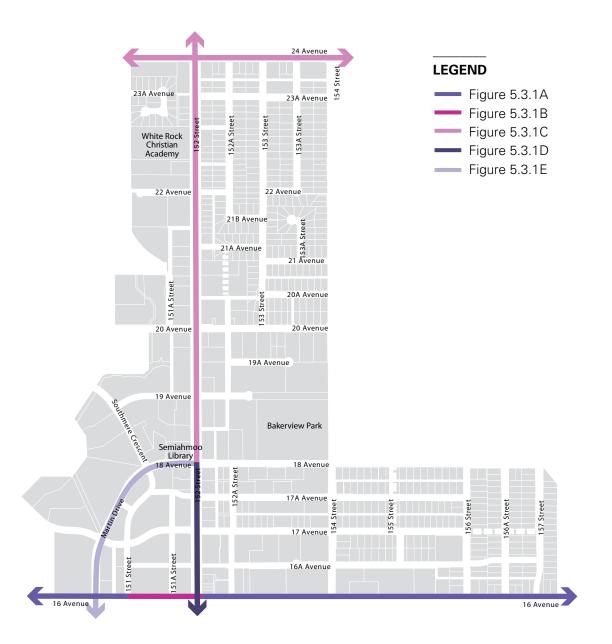
The Plan Area is framed by existing arterial roads, 152 Street, 24 Avenue, 16 Avenue, and Martin Drive. These are the main transportation corridors for moving people, traffic, and goods through the area and across the city. They typically include cycling and pedestrian infrastructure and are key routes for public transit and emergency services.

Some of the existing arterial roads in the Plan Area are an outdated standard that do not support adequate mobility for all users.

Planned

Widening and improvements are planned on all arterial roads. These improvements focus on expanding space for walking and cycling (sidewalks, one-way separated bike lanes, and multi-use pathways). Improvements will encourage active transportation by providing comfortable, connected, and safe environments. Arterial roads are also planned to accommodate public transit requirements to further reduce the reliance on private automobiles.

The arterial road standard in Surrey is a "complete streets" standard. It is planned for two traffic lanes in each direction, a landscaped median/left turn bay, grass boulevards with trees, sidewalks, cycling facilities, and street lighting. Through development additional road dedication will be required. Typically, improvements to arterial roads are undertaken as part of City capital works and prioritized through the City's 10Year Servicing Plan.



16 Avenue

The role of 16 Avenue is significant for both the Semiahmoo Peninsula and all of Grandview Heights. It is one of only three east west arterials, along with 24 Avenue, that spans the South Surrey area. It is part of TransLink's Major Road Network (MRN) and is intended to serve a broader purpose of carrying regional traffic and being a designated truck route. East of the Plan Area it provides connections with multiple provincial highways and the USA Border crossings. 16 Avenue is also the border between Surrey and White Rock. Given the road classification of North Bluff Road and existing context, the City expects to secure an ultimate 30.0 metre road allowance in sections that will provide for improved sidewalks, protected and separated cycling facilities, wider boulevards and turn lanes. The standard cross section is shown in **Figure 5.3.1A**. In locations with existing development this standard section will be modified to continue the improved facilities and service the growth in walking and cycling trips.

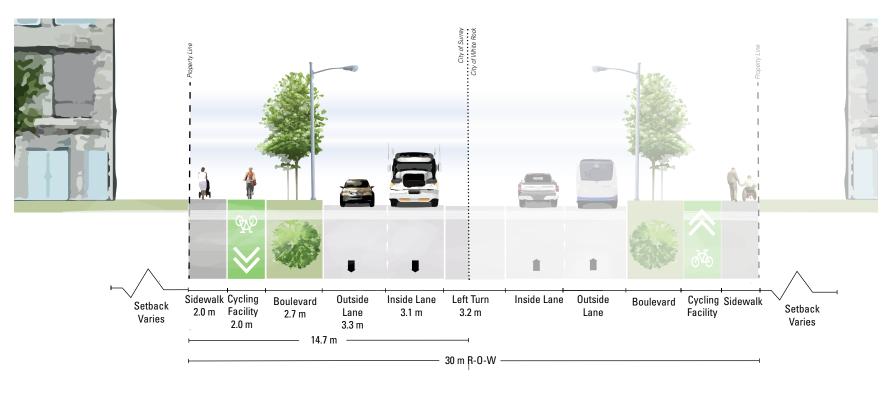


Figure 5.3.1A: 16 Avenue

16 Avenue between Martin Drive and 152 Street

In the heart of the Plan Area, between Martin Drive and 152 Street additional width is planned to accommodate the two-way cycling facility of the Semiahmoo Trail and a bus only lane required to support the Semiahmoo/White Rock Transit Exchange. This cross section requires a unique cross section of 19.5 metre from centreline, and will include a two-way cycling facility and bus only lane. The cross section is shown in **Figure 5.3.1B**.

The City of White Rock

Designs for 16 Avenue shown in Figure 5.3.1A and 5.3.1B have been prepared in collaboration with the City of White Rock. The south side of the road is within City of White Rock jurisdiction and shown for illustrative purposes only.

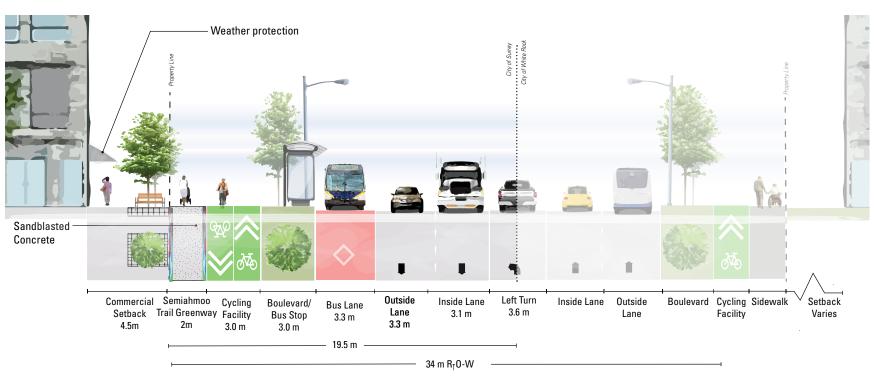


Figure 5.3.1B: 16 Avenue between Martin Drive and 152 Street

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Rapid Transit Cross Section

For both 152 Street and 24 Avenue, it is acknowledged that there is a significant amount of existing development along the corridor that is unlikely to redevelop and provide additional road allowance. To reflect these constraints the road allowance width for future long-term rapid transit has been reduced from the typical 40.0m to 34.0m. To accommodate this reduction boulevards are reduced and protected cycling facilities are not planned on these corridors and instead will be planned on parallel corridors. This will allow for the cross section to be flexible and be reduced where there are constraints while still protecting for long term rapid transit along the corridor.

24 Avenue

24 Avenue provides a critical connection across all of South Surrey, including the Semiahmoo Peninsula, Grandview Heights and Campbell Heights. It is an important connection into the Plan Area. Similar to 16 Avenue It is one of only three east west arterials, along with 32 Avenue, that spans the entire South Surrey area. Prior widening and improvements provide for generally two travel lanes in each direction, a median/left turn lane, bike lanes, and sidewalks at the Plan Area boundary.

Due to its connection to the Semiahmoo Town Centre, central location through Grandview Heights and Campbell Heights and transit supportive land uses, 24 Avenue has been identified as a corridor for long term rapid transit. The Plan prepares for these long term improvements by securing additional right-of-way/dedication with development to accommodate future improvements regardless of the preferred technology at the time of project funding.

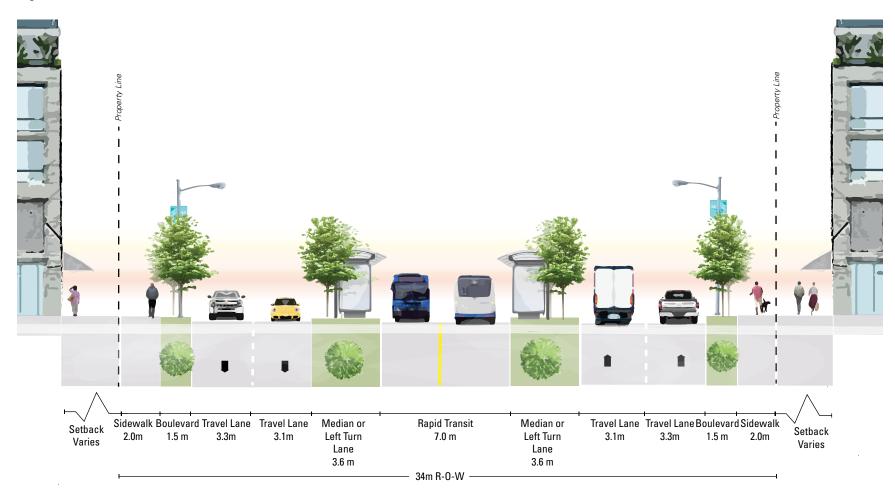
To maximize flexibility for various rapid transit technology options a 34.0m road allowance is proposed in the Plan Area and up to Highway 99 as shown in **Figure 5.3.1C**. This cross section will include an exclusive area reserved for future rapid transit and wide sidewalks.

152 Street

152 Street is the principle north south connection within the Plan Area and beyond, and one of the main arterial roads in Surrey. It is one of few north-south connections that span the full extent of the City. Similar to 16 Avenue it also part of TransLink's Major Road Network (MRN) and therefore carries regional traffic, is a designated truck route, and a significant transit corridor. It provides connections with multiple provincial highways (Highway 99 and Highway 1) and directly into White Rock. Prior widening and improvements provide for generally two travel lanes in each direction, a median/left turn lane, bike lanes in some sections, and sidewalks. The Mayors' Council 10 Year Vision Phase 3 identifies the R1 Rapid Bus as being extended allow 152 Street in the short-term.

152 Street plays a critical role in connecting South Surrey with Newton and Guildford Town Centre and to the Port Mann Bridge Highway 1. Similar to 24 Avenue, this has made the corridor an ideal candidate for future rapid transit. In the shorter term the Mayors' Council 10 Year Vision Phase 3 identifies the R1 Rapid Bus as being extended to Semiahmoo Town Centre along 152 Street in the short-term. To maximize flexibility for various rapid transit technologies a 34.0m road allowance is planned in **Figure 5.3.1C**.

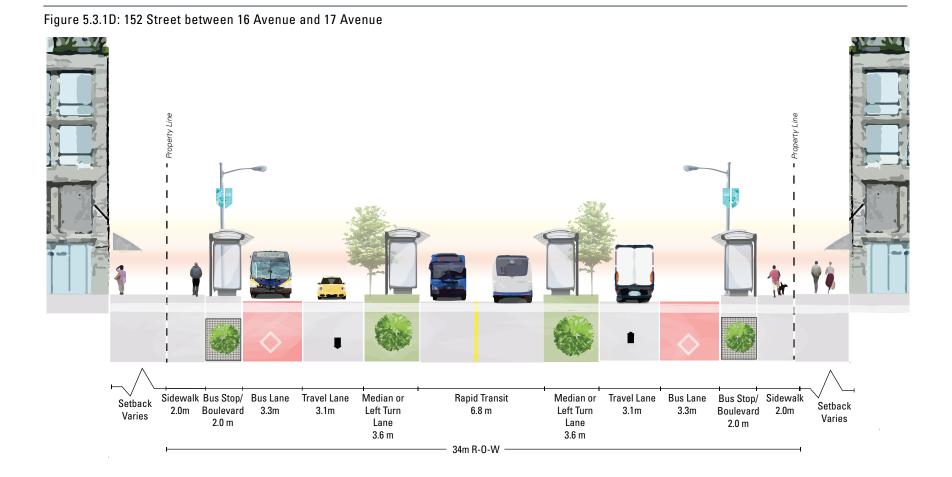
Figure 5.3.1C: 24 Avenue & 152 Street



152 Street between 16 Avenue and 17 Avenue

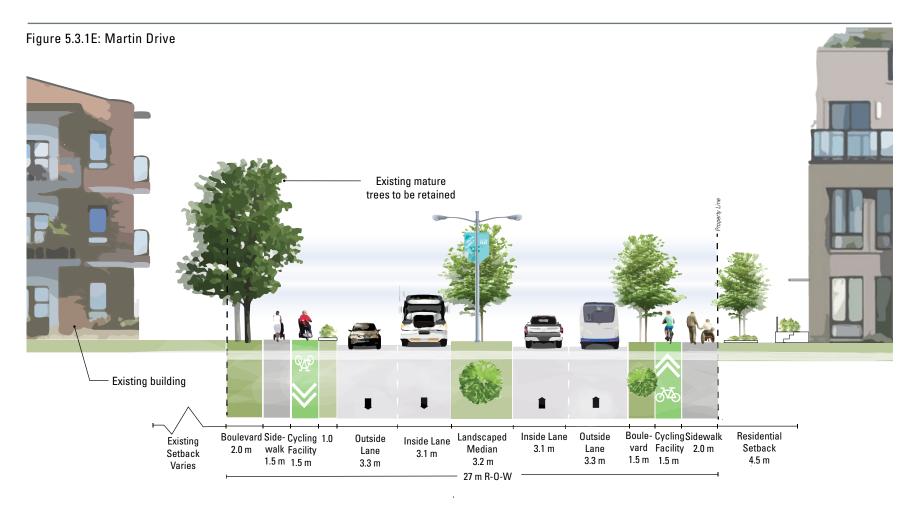
Within the core Plan Area, north of 16 Avenue an important expansion and improvement to the on-street bus exchange is planned and includes protecting for a future station location. The corridor width of 34m will be maintained but road space will be reallocated to

accommodate the necessary on-street bus stop positions as shown in **Figure 5.3.1D**. The most significant change is the reduction of one travel lane in each direction between 16 Avenue and 17 Avenue similar to Johnston Street in White Rock.



Martin Drive

Road dedication for Martin Drive will be to the standard 30.0m width. With the existing context along the western edge of Martin Drive unlikely to develop, the City has planned for a modified cross section that will protect for the existing mature trees along the western side of Martin Drive, future improvements to accommodate active transportation will be delivered through a unique cross section, which is intended to maximize tree retention as shown in **Figure 5.3.1E**.



5.3.2 COLLECTOR ROADS

Existing

Collectors are multi-modal complete streets that provide connections between neighbourhoods and within communities. They collect and distribute traffic between local and arterial roads and are primary neighbourhood corridors for walking and cycling. There are several existing collector roads in the Plan Area, including 17 Avenue, 18 Avenue, 20 Avenue, 154 Street, and 156 Street.

Collectors will typically require a 24 metre road allowance unless special standards are noted. Collectors are planned with one travel lane in each direction, left turn lanes at key intersections, boulevards with trees, sidewalks, protected cycling facilities, and street lighting. Outside of left turn lanes onstreet parking can be provided on Collectors.

Collector road improvements are typically delivered by development and funded by development to the local road standard, with DCC's funding the "up-sizing" to the Collector road standard.

Planned

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The plan grows the transportation network by protecting for future improvements to existing collector roads. The Collector Road standard will have enhanced sidewalks and protected cycling infrastructure as shown in **Figure 5.3.2A**.

CITY OF SURREY

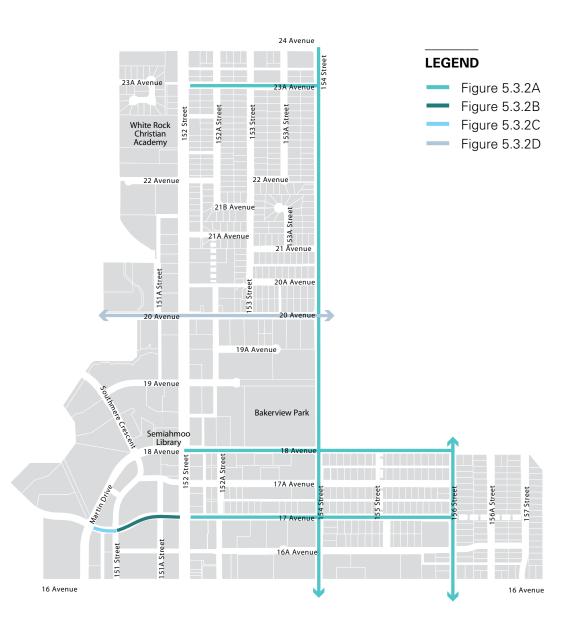
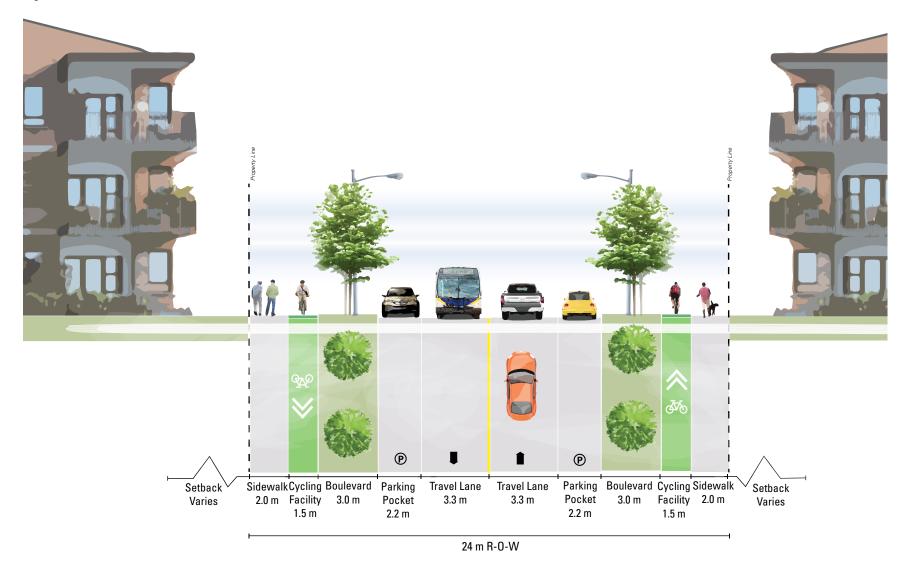
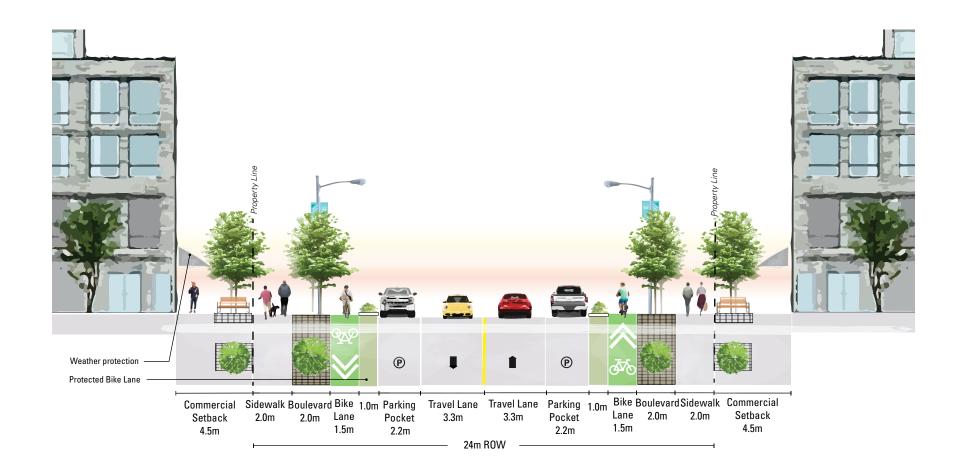


Figure 5.3.2A: Semiahmoo Collector Road Standard

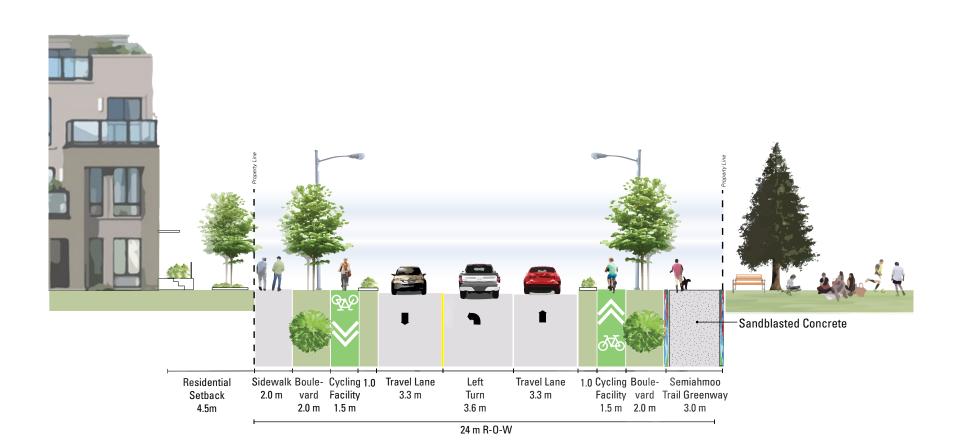


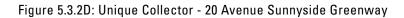
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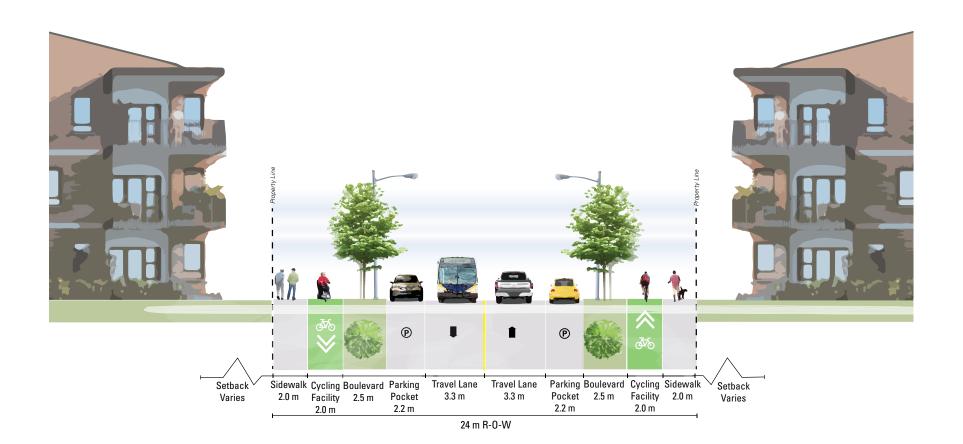
Figure 5.3.2B: Unique Collector - 17 Avenue between 151 Street and 152 Street











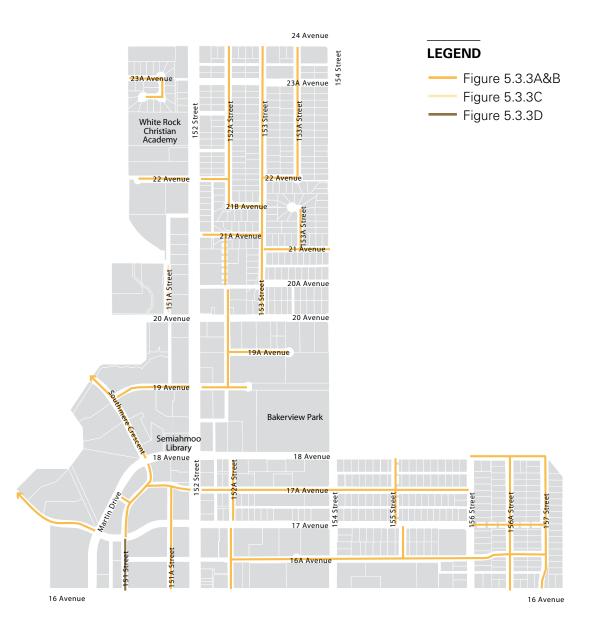
5.3.3 LOCAL ROADS

Local roads increase connectivity and access and are vital to supporting a walkable town centre. Local roads are the finer grained connections in the network, ideal for quieter streets. They offer safe local connectivity for pedestrians and cyclists, provide on-street parking, have lower design speeds, and provide access for development. Typically, local roads are planned to have one travel lane in each direction, on-street parking where possible, boulevard with trees, sidewalks, and street lighting.

Several new local roads and extensions of existing local roads are outlined within the plan, notably 23A Avenue, 22 Avenue, 17 Avenue, 16A Avenue, 152A Street, and 155 Street. These new local road connections are critical to servicing the Plan Area as they meet the principles of the plan, support transit-oriented development and vibrant urban core, and provide the necessary street connectivity for access and circulation.

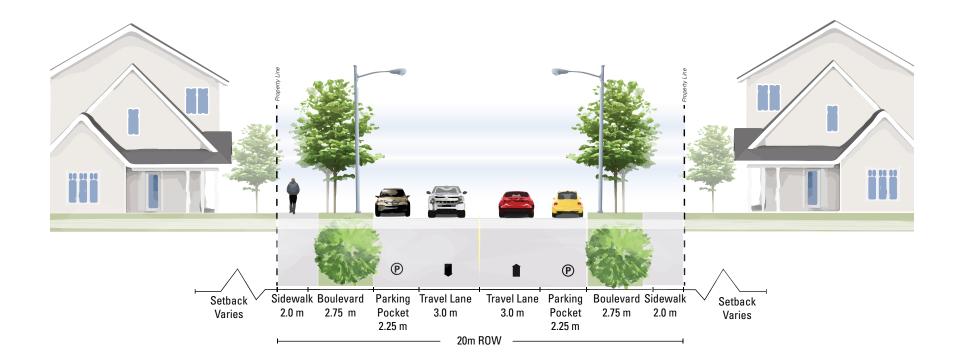
As part of the Vision Zero safe systems approach to road design intersections with local roads will typically have curb extensions (parking pockets) to shorten pedestrian crossing distance at intersections and encourage slower speeds through the intersection, particularly turning movements.

Local road specifications are outlined in the City of Surrey Engineering Design Criteria Manual (DCM) and vary by zoning. All locals roads will be as per DCM standards unless otherwise identified as a unique local road. Local road improvements are built and funded by development



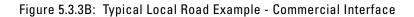
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Figure 5.3.3A: Typical Local Road Example - Residential Interface



Engineering Design Criteria Manual

Local road specifications are outlined in the City of Surrey Engineering Design Criteria Manual (DCM) and vary by zoning. All locals roads will be as per DCM standards unless otherwise identified as a unique local road.



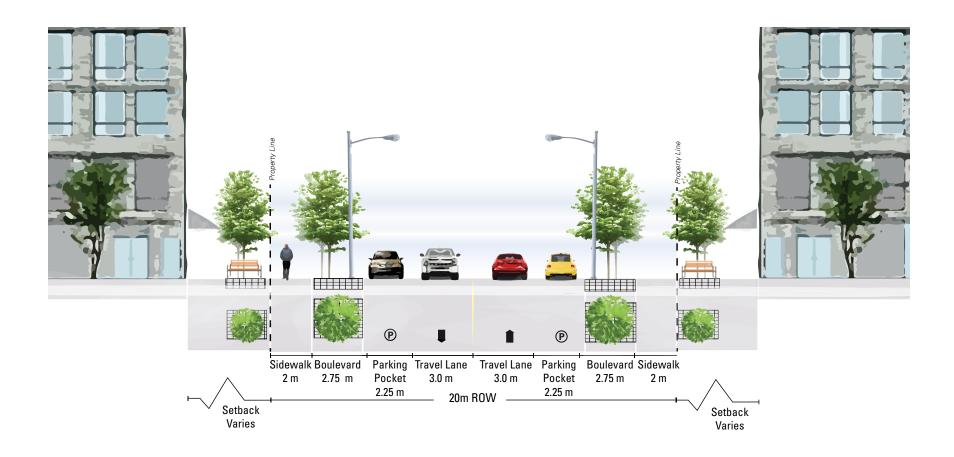


Figure 5.3.3C: 151A Street between 20 Avenue and Semiahmoo Heritage Trail



Tree Retention

An Arborist Report is required to determine the highest quality mature trees and tree clusters for retention. Landscape design drawings are expected to incorporate high quality deciduous and coniferous trees into the road cross section by meandering the multi-use path to produce a meaningful amount of tree protection.





5.3.4 LANES & GREEN LANES

Access management will ensure the appropriate locating, spacing and designing of the driveways, median openings and road intersections for access to/from roads and development sites.

The objectives of access management are to:

- Ensure roadway safety for all road users;
- Provide for efficient transportation operations for all modes; and
- Allow for reasonable access to adjacent land-uses; and,
- Avoiding direct access to arterial, collector, and local roads for the town centre plan is also consistent with prioritizing Vision Zero and the safe systems approach to road design for all users.

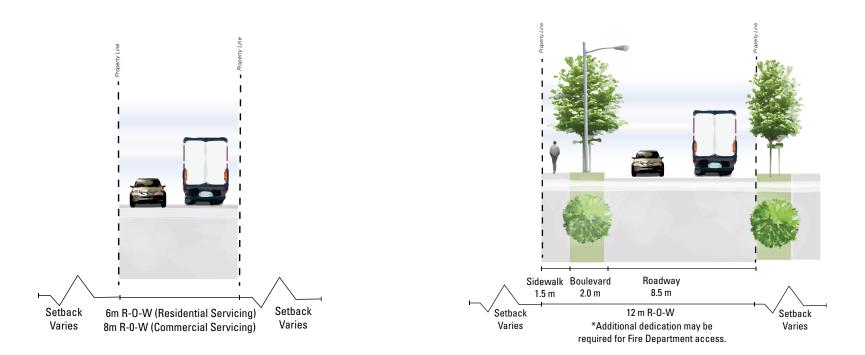
Green lanes are planned to facilitate access management. Specifically, to minimize site access conflicts with pedestrians and cyclists and maintain reasonable vehicle access and loading. Their primary role is to provide service and underground parking access and reduce the number of driveways on adjoining streets. Green Lanes are also uniquely designed to have a sidewalk, lighting, and a treed boulevard on one side to improve pedestrian connectivity, create additional greenery, and provide opportunities for stormwater absorption.



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Figure 5.3.4A: Typical Lane Standard

Figure 5.3.4B: Green Lane Standard



5.3.5 PEDESTRIAN STREETS & CONNECTIONS

Pedestrian connections are intended to provide efficient travel routes for pedestrians and cyclists between residential and commercial areas. They complement the walking and cycling network by providing key mid-block connectivity, while also prioritizing pedestrian access in key areas of the plan. Pedestrian connections are to be provided by development within dedicated road allowance. Pedestrian connections within parkland are owned and maintained by Surrey Parks Department.

Pedestrian streets feature paved multi-use pathways and will be shared by cyclists, pedestrians and other non-motorized users. Lighting and treed boulevards are incorporated to maximize safety and comfort, in keeping with Crime Prevention Through Environmental Design (CPTED) principles. Unique features may include visual markers to designate entrances and street furniture. Direct access to ground oriented residential or commercial storefronts will be encouraged to activate pedestrian streets. Additional pavement width may be required if needed for fire protection.

See **Section 6: Parks & Open Space** for portions of the Semiahmoo Trail Greenway within parkland.



Figure 5.3.5A Pedestrian Connection



16A Avenue Between 151 Street and 152 Street

A unique pedestrian street is planned for the heart of the Plan Area. Coupled with active commercial interfaces (such as restaurants, cafes, and shopping) the European style pedestrian street facilitates shopping, community gathering, and special events such as street festivals, farmers markets, and block parties. It will also serve to provide fire access and limited delivery and site access. It is designed with flush pavement edges to maximize flexibility for future special events. This portion of 16A Avenue from 151 Street and 152 Street is located central to the planned on-street transit exchange and transit stop at 16 Avenue and provides an alternate route to 16 Avenue. Street design includes, specialty paving, unique hard surfaced boulevards, flush curbs, two rows of street trees, and weather protection, as shown in **Figure 5.3.5B**.

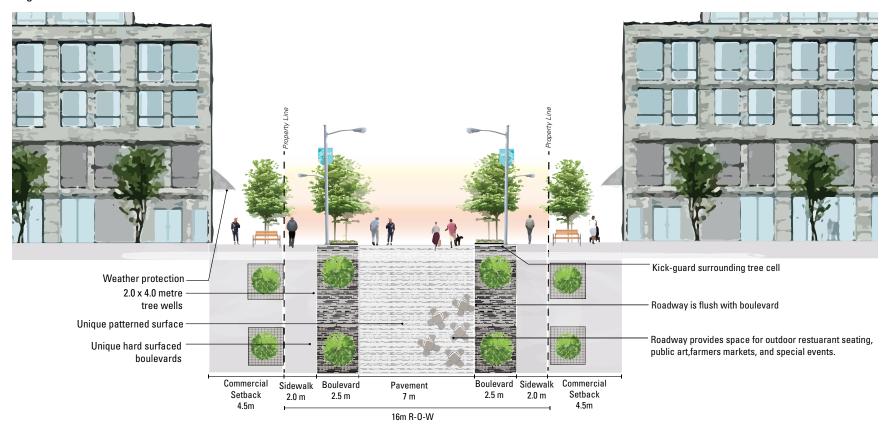


Figure 5.3.5B 16A Avenue Pedestrian Street



Conceptual Rendering: 16A Avenue Pedestrian Street (Frank Ducote)



5.4 Transit

Transit maximizes mobility. It reduces greenhouse gas emissions, increases mobility equity, and facilitates more efficient use of road space for people and goods movement. An efficient transit network also encourages increased walking to complete trips.

Semiahmoo Town Centre is a major transit hub with the White Rock Exchange (primarily located withing Surrey). With plans for expansion of public transit services to the area, transit-oriented development is critical to the intent of the plan. The plan's land uses and densities are transit-supportive, meaning growth will result in increased transit ridership. Over time this justifies continued investment in improved transit service levels and introduction of rapid transit in the long term.

Left: Conceptual Rendering: 24 Avenue (Frank Ducote)



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Existing Transit Services

A range of transit services connect Semiahmoo Town Centre with the rest of Surrey and other parts of the region, notably to Richmond and the Canada Line at Bridgeport Station. As of 2021, there are thirteen routes that serve White Rock Exchange which includes two Frequent Transit Network (FTN) routes:

- Route 321 on King George Boulevard to Surrey Central Station and the Expo Line SkyTrain through Newton Exchange; and,
- Route 351 which travels on King George Boulevard and Highway 99 to Bridgeport Station with connections to the Canada Line and Vancouver.

The rest of the routes are a combination of important local routes such as:

- Route 375 on 152 Street with connections to Panorama Ridge, Fleetwood, and GuildfordTown Centre; and,
- Route 531 on 24 Avenue with connections Grandview Heights, Campbell Heights, and Langley.

Additional service includes Peak Period Express Services, and neighbourhood community shuttle routes to White Rock, Ocean Park, and Morgan Heights.

Shorter Term RapidBus Expansion

As part of TransLink's Mayor's Council "10-Year Vision for Metro Vancouver Transportation", the R1 – King George RapidBus is planned to be extended from Newton Exchange to the Semiahmoo Town Centre on 152 Street. RapidBus service is expected in the short-term and will include increased service levels (especially during peak periods), upgraded stops with real-time passenger information, and transit priority measures to improve speed and reliability. This, along with expansion of FTN service on 152 Street, will lay the foundation for future rapid transit that is anticipated to be included as part of TransLink's updated RTS, Transport 2050. RapidBus service will require transit priority on the RapidBus route (bus lanes, queue jumps, in-lane stops, etc.), likely facilitated by the reallocation of space from travel or parking lanes.

In review of the potential transit demand generated by the Peace Arch Hospital, supporting medical services, and multi-family residential planned within the Medical District north of 16 Avenue at 156 Street, an initial review of the terminus for the planned R1 – King George RapidBus extension was conducted. Working with TransLink, the Plan proposes the extension of the terminus to 156 Street to serve this area. In consideration of this, development planned in the area would accommodate the necessary bus stop and layover spaces. The final routing and extension of this service would be done as part of TransLink's standard planning and engagement process.

Additional on-street layover for the proposed extension of RapidBus to a terminus near Peace Arch Hospital will include space for three articulated buses located on the south side 16A Avenue between 156 and 156A Street and drivers' facilities to be provided by adjacent development. Additional dedication to support this on-street layover facility will be required.

Long Term Rapid Transit

As part of the update to the Surrey Transportation Plan and TransLink Regional Transportation Strategy (RTS) – Transport 2050, Rapid Transit as part of the Major Transit Network has been identified on 152 Street to connect with King George Boulevard and on 24 Avenue through Grandview Heights, Campbell Heights to Langley City Centre.

The recommended principles for Rapid Transit in Surrey include defining rapid transit services as operating in an exclusive right-ofway where Rapid Transit is divided by physical barriers at grade, or separated by vertical separation above or below ground. Currently the technology, timing, and implementation is still to be determined.

Potential stations in the Plan Area align with RapidBus stops at 24 Avenue, 20 Avenue, 16 Avenue and 156 Street. All of these locations are adjacent to the highest planned densities. The exact location and format of each station is flexible and will be determined as part of future development of the Rapid Transit project.

On-Street Transit Exchange and Off-Street Layover Facility

While rapid transit on 152 Street and 24 Avenue will support the densities in the Plan Area, the focal point and centre of bus activity is the existing Semiahmoo Exchange ("White Rock Centre"). Currently, service to Semiahmoo and White Rock is challenged by limited layover space. Layover operations take place on 152 Street near 16 Avenue. This causes conflicts with traffic on the busy arterial road. To accommodate an expansion of bus transit service and shorter term RapidBus extension, a dedicated off-street bus layover facility that is covered and/ or underground is required.

The Plan identifies a location for an off-street layover facility to be within the Semiahmoo Shopping Centre redevelopment. This facility would be similar to the planned off-street layover facility planned in Surrey City Centre and would include:

- 12-14 layover spaces;
- 1 large crew washroom facility;
- Screening and landscaping along its east interface;
- Visual and acoustical treatments above and along the east interface; and,
- Consideration for the future electrification of buses.

The protection of the land for the facility is expected to be provided through the Semiahmoo Shopping Centre redevelopment to support the transit oriented densities planned on the site. The funding for the construction of the facility would be determined at a future date.

5.5 Active Transportation

Existing Network

Active transportation infrastructure within the Town Centre is currently limited. Much of the existing infrastructure was built to outdated standards. These standards present challenges for pedestrians such as mobility aids passing each other within limited sidewalk width or existing local roads without sidewalks. The limited amount of existing cycling infrastructure fails to provide a safe and intuitive cycling network for all ages and abilities.

Planned Network

Encouraging active transportation trips within the town centre and improving comfort and safety for vulnerable road users is a key safe systems principle of Vision Zero Surrey. Semiahmoo Town Centre's active transportation strategy provides for an enhanced and continuous on- and off-street walking and cycling network.

The Plan supports increased walking/cycling and improved safety by:

- Establishing smaller block sizes between 80 metres and 100 metres;
- Utilizing a 'Complete Streets' approach to road design with all roads having sidewalks and prioritizing vulnerable road users;
- Providing a continuous and connected network of protected cycling infrastructure;
- Protecting cycling infrastructure including protected cycling intersections;
- Including green lanes with sidewalks to create more walking connections within commercial areas;
- Increasing block permeability with pedestrian-only connections through development sites;
- Enhancing multi-use pathways and/or protected cycling facilities to provide comfortable connections for multi-modal trips through parks and green spaces;
- Requiring high-quality interfaces with development that include wider sidewalks, enhanced street furniture and lighting, street trees, and boulevard landscaping;
- Extending the Semiahmoo Trail Greenway into the Town Centre; and,
- Including accessible design features.

The 'Complete Streets' approach to road design will improve comfort, connectivity, and safety within the on-street network. In addition, the plan includes off-street multi-use pathways and park pathways to improve connectivity for walking and cycling throughout the neighborhood and broader South Surrey community. This will promote active lifestyles and wellbeing and reduce the need for residents to drive to shops, services, and schools. It will also support access and ridership to future transit service in the area.

New infrastructure will be delivered through development and City capital projects. Additional detail is provided in the Plan's Implementation section and Design Guidelines. These improvements will provide the framework for transforming the Town Centre into a place where active transportation is the natural first choice for short trips.

Figure 5.5: Active Transportation Strategy

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24 Avenu

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5.5.1 WALKING

The intent of the Plan is to ensure all residents are within a 10-15 minute walk of daily needs, including transit service. The majority of residents within Semiahmoo Town Centre will be within a 400m walk of transit stations. Residents and the majority of employment will also be within a 1.0 km (15 minute) walk of the heart of mixed-use and commercial amenities located at 17 Avenue and 151 Street.

Figure 5.5.1A: 1km Commercial Node Walkshed



Roads and off-street pathways within Semiahmoo Town Centre will provide safe and comfortable space for pedestrians through the following features:

- All roads include concrete sidewalks (a minimum of 2.0 metres in width in high traffic areas) or asphalt multi-use pathways on both sides.
- Sidewalks and multi-use pathways are separated from vehicle traffic by treed boulevards.
- Pedestrian street lighting along identified multi-use pathways.
- Off-street multi-use pathways of sufficient dedication (min. 8.0 - 10 m) to maintain sight lines, accommodate street lighting, and comply with CPTED principles.
- Off-street pathways provide key connections through parks and across natural barriers.
- Encouraging lane access to minimize the number of driveway crossings.
- Applying curb bulges where appropriate at intersections to narrow pedestrian crossing distances.



Figure 5.5.1B: 500m Parks & Open Space Walkshed



5.5.2 CYCLING

The Plan includes a network of multi-use pathways and separated cycle tracks. This infrastructure will play a significant role in providing connectivity to the broader regional cycling network.

The City's has adopted a Vision Zero Safe Systems approach for road design. This approach identifies that separation for cyclists from vehicles reduces the severity of collisions for vulnerable road users such as cyclists. This is consistent with the Complete Streets design principles to provide physically separated cycling facilities. As a result, all collector roads and 16 Avenue are planned to accommodate protected facilities. This includes either one-way protected cycling facilities (cycle tracks) or bi-directional multi-use pathways that are shared by cyclists, pedestrians, and other forms of nonmotorized transport. Local street bikeways are envisioned to provide a safe attractive cycling corridor parallel to corridors where protected cycling cannot be accommodated.

The protected cycling facilities network will allow for all areas within the plan to be within a 10 minute, 2.5 km bike ride. The cycling network extends beyond the Plan Area connecting with the broader community. These facilities also accommodate new and innovative micro-mobility technology solutions such as electric assist bike and e-scooters.

LEGEND

- Semiahmoo Town Centre Plan Area
 - Parks and Open Space
- Highway
- Arterial
- ---- Collector
- ----- Local
- •••••• Semiahmoo Trail
- School
- Parks and City Facilities
- Commercial Areas
- Other Facilities

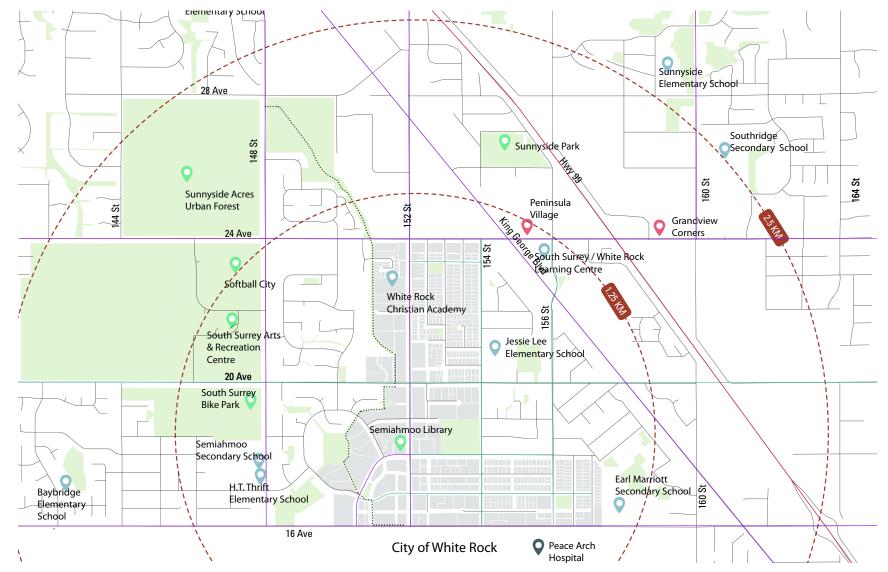


Figure 5.5.2 Regional Cycling Destinations

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5.6 Parking

As the Town Centre evolves, there will be a change in travel demand. Transit service will become more attractive and efficient, more people will live and work in the area, demand for green space and landscaping will increase and competition for curb space between various uses will increase. With new development and additional commercial and retail spaces, parking demand will increasingly become a challenge. The City's parking management strategies are envisioned to be complementary to transit, cycling, ride-hailing (such as Uber and Lyft), taxis, and car share services (such as Modo and Evo). They will work to achieve transportation, urban design, affordability, and environmental objectives including choice and equity of access.

On-Street Parking

Public streets are assets and as Semiahmoo Town Centre develops, road space for on-street parking will need to be allocated carefully. The following actions serve as the building blocks to efficiently maximize the management and use of on-street parking in Semiahmoo Town Centre:

- Examine price parking and introduce and adjust rates as needed to maintain optimal utilization.
- Ensure a mix and variety of on-street supply to support short stay, loading, and peak and off-peak uses. Regulate on-street parking spaces to favor higher priority uses and encourage turnover.
- Explore opportunities to support dedicated on-street car share parking.

Off-Street Parking

The nature of off-street parking will change as land values increase and development puts more emphasis on the efficient use of land. This will reduce the amount of surface vehicle parking and increase the amount of underground vehicle parking. Additionally, increases in personsize vehicles, such as bikes, electric assist bikes, and scooters will increase the need to allocate storage for these vehicles. The following actions serve as the building blocks for off-street parking management in Semiahmoo Town Centre.

Parking Requirements and Regulations

- Upon long-term confirmation and implementation of Rapid Transit, explore opportunities to right-size off-street vehicle parking requirements, in particular with supportive land uses and near transit stops. This will need to be balanced with mitigation measures such as cashin-lieu, the provision of transportation alternatives, and an increase in multimodal parking provisions. Parking reductions are not permitted in non-Rapid Transit areas.
- Underground all off-street parking within multifamily and higher density development.
- Allow shared use of public parking in partnership with private uses.
- Design surface lots and garage entrances to minimize their urban design impact.
- Develop sustainable design guidelines for parking facilities including surface lots.

Parking Supply

- Monitor downward trends in private vehicle demand and supply – to anticipate changes to parking supply requirements.
- Encourage major employers to develop "travel plans" that promote the use of non-vehicle transportation options and reduce the need for off-street parking.
- Increase the provision of secure off-street cycling parking supply.

Car Share/Ride Share

- Encourage provision of priority parking for designated carpools, car sharing, and potentially autonomous vehicles.
- Provide access to on-street and off-street car share parking.
- Explore opportunities to support the expansion of car share operations in Semiahmoo Town Centre.
- Explore opportunities for development led provision of car sharing spaces.





5.7 Traffic Control & Vision Zero

Vision Zero

Vision Zero Surrey is a collaborative data driven approach to road safety that aims to have zero people killed or seriously injured on roads by valuing human life above all else in the transportation network. To create better streets for everyone, a Safe Systems Approach is used for road design that includes applying best practices in speed management, prioritizing safety improvements at intersections - where most crashes occur -, and focusing efforts on protecting vulnerable road users such as pedestrians, cyclists and motorcyclists.

Based on safety analysis and site characteristics, some of the engineering measures that are implemented and that would be anticipated in the Plan Area include:

- Fully protected left turn only phases;
- Cycle tracks and protected cycling intersections;
- Leading pedestrian intervals (LPI) where pedestrians walk before traffic gets a green light;
- Removal of or redesigned right turn channelization lanes;
- Curb extensions at local road intersections;
- Speed humps, raised crosswalks and other speed management devices;
- Improved street lighting; and
- Enhanced crosswalks.

Figure 5.7.1 Intersection Control

LEGEND

- Planned New Traffic Signal
- Existing Traffic Signal
- Planned New Pedestrian Signal
- Existing Pedestrian Signal



Access Restrictions

Left turning movements will be restricted where traffic controls are not anticipated and consistent with the City's Design Criteria requirements for access management. These include highway-local, highway-collector, and arterial-local intersections. Right turns into and out of the local road will be permitted to improve safety and efficiency of these intersections.

Signals

Traffic signals exist at all arterial-arterial and arterial-collector intersections. Typically, traffic signals are installed on an engineering warrant basis which includes a criteria of traffic volumes, pedestrian demand, and safety assessments. Proactive planning for traffic signals will occur where road classifications warrant a higher order of intersection control. In these cases, safe access and circulation will be promoted and crossing opportunities for vulnerable road users will be provided.

A number of traffic signals already exist in the Plan Area. Additional traffic signals are anticipated to service and support the additional land uses for safe access, circulation, higher traffic volumes and increased activity. These are located at:

- Martin Drive and Southmere Crescent East
- 16 Avenue and 157 Street
- 16 Avenue and 150A Street (Foster Ave)
- 19 Avenue and 152 Street (conversion from Pedestrian Signal)
- 24 Avenue and 153 Street
- 17 Avenue and 154 Street
- 17 Avenue and 156 Street
- 18 Avenue and 154 Street
- 18 Avenue and 156 Street

This will decrease the spacing of signals to approximately every 400 metres. This is considered to be reasonable and a function of the tighter grid road network, higher traffic volumes and the increased active transportation demand to cross busier roads. The City's Traffic Management Centre (TMC) and use of Intelligent Transportation Systems will ensure safe and efficient operations on the corridor to maintain the highest people movement capacity along the arterial roads.

Additional pedestrian signals are anticipated at key locations to help reduce the walking distance to cross 152 Street and 16 Avenue at key locations at:

- 16A Avenue and 152 Street
- 21A Avenue and 152 Street
- 16 Avenue and Hospital Street

5.8 Electric Vehicle Charging Infrastructure

To encourage the use of electric vehicles ("EV") within the Plan Area, and support the City's Electric Vehicle Strategy objective of operating the largest public EV charging network in the Province, on-street electric vehicle ("EV") charging infrastructure will be required by mixed-use developments in locations where on-street parking is permitted and fronting the development site. The City will designate these spaces as "EV only" and install Level 2 (240V) charging stations and anticipate that the proportions of on-street EV parking will be up to 20% of the available on-street stalls depending on the context of the location. The City also requires new development to install private EV charging infrastructure. Refer to Section 9.1.5 for additional details.



"We like the overall plan and feel it will be a vast improvement over the existing development."

Online Survey Response, Semiahmoo Town Centre Plan Process, 2018-2021

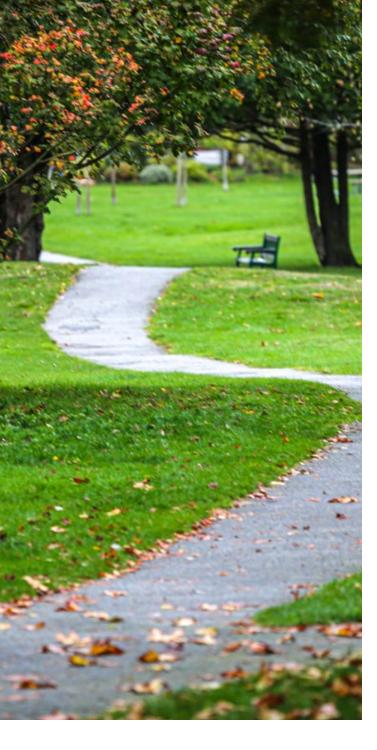
6 Parks & Open Space | Keeping it Green



Parks in Surrey are planned and designed through the lens of various plans, strategies, and policies. These include the Parks, Recreation and Culture Strategic Plan, the Biodiversity Conservation Strategy (BCS), and the Parks Design and Biodiversity Design Guidelines, along with various subplans and strategies including dog off-leash areas, playgrounds, natural areas, and greenways.

6.1 Parks & Open Space Strategy6.2 Parks6.3 Semiahmoo Trail Greenway6.4 Neighbourhood Enhancement





6.1 Parks & Open Space Strategy

Public spaces and access to nature provide the backdrop to everyday social life. They are essential to the wellbeing and health of residents. They help meet the daily recreation and social needs of residents while fostering neighbourhood walkability.

Semiahmoo Town Centre's open spaces are planned as an accessible and connected network of public parks, natural areas, and pathways. These are complimented by smaller public plazas, and the on-site outdoor spaces of schools and private developments. Together they support a range of amenities, access to nature, healthy ecosystems, and climate resiliency.

Locations of neighbourhood parks are selected to provide residents access to a park within a 10-minute walk (500m). This ensures everyone has access to public open space for relaxation, play, and exercise in their day-to-day lives. The plan designates four new neighbourhood park sites throughout the community. These will help address the long impacts of growth and provide new local amenities for all residents. These new parks are in addition to existing Bakerview Park, and those in the surrounding community (Southmere Village, Jessie Lee Park, Sunnyside Acres/South Surrey Athletic Park). Total planned parkland within the Plan Area is 6.17 hectares (15.3 ac.).

The City will acquire parkland over time and will continue to work with the community to plan future amenities. While each park will be subject to its own public engagement and detailed design process, a general overview of the park network follows.

Figure 6.1: Parks & Open Space Strategy

LEGEND

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24 Avenue

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6.1.1 PARK SITES

Bakerview Park

Bakerview Park is an existing 4-hectare (10 ac.) park located along 18 Avenue and 154 Street. As the largest park in the Plan Area, Bakerview Park will be the centerpiece of the Town Centre's open space network.

Bakerview Park currently contains Sunnyside Community Hall, two baseball diamonds, a soccer field, and a playground. A new concept plan for the park will be developed in the future. This will include planning for new amenities that reflect the park's urban context and that promote the park as being a walking and cycling destination for residents throughout the Plan Area.

New Park A & B

Park A is approximately 0.4 hectares (1 ac.) and located along 23A Avenue between 152A Street and 153 Street in the northern portion of the Plan Area.

Park B is approximately 0.6 hectares (1.6 ac.) and located along 153 Street between 21A Avenue and 21B Avenue in the north-central portion of the Plan Area. An existing lot within Park B is already under city ownership and is used as a detention pond to service the existing neighbourhood. The expansion of Park B will be for park purposes only.

Both parks will be developed with small scale amenities to serve the residents in the northern half of the Plan Area.

New Park C

Located along Martin Drive within the existing Semiahmoo Shopping Centre site, this 0.3 hectare (0.6 ac.) park will provide a centrally located open space for the surrounding high density mixed-use developments in the urban core of the plan. It will provide easily accessible gathering and social spaces for neighbouring residents, employees, and shoppers in the Plan Area.

This Park is also located along the proposed southern extension of the Semiahmoo Trail Greenway between 16 Avenue and 20 Avenue. This heritage trail and greenway runs north-south through South Surrey, connecting 16 Avenue to the Nicomekl River, and is well used by pedestrians and cyclists. Through the planning process of Park C, Parks will consider this connection and explore amenities that support the greenway infrastructure and its users (i.e. secure bike parking facilities, drinking fountains).

New Park D

Located at 16A Avenue and 156 Street, Park D is 0.71 hectare (1.8 ac) and adjacent to the proposed Medical District in the eastern portion of the Plan Area. This neighbourhood park will provide recreation amenities for residents and be a gathering and resting space for employees, patients, and visitors of the mixed-use medical offices.



LEGEND

Existing Parkland Future Parkland Detention Pond



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Conceptual Rendering: South Semiahmoo Medical District (Frank Ducote)



6.1.2 PARK DESIGN GUIDELINES

Development adjacent to parkland should positively contribute to park design and function by complying with the following guidelines:

- A. Multi-family development adjacent to parks should front units onto parkland and will provide a sidewalk within the private property onto which all ground-oriented units will front. Any fencing to delineate private property will be a maximum of 1.2 metres tall, visually permeable and located on the private property side of the frontage sidewalk.
- B. Design development to meet the existing natural grade of a park or plaza wherever possible. If retaining walls are required adjacent to a park or plaza, they must be entirely on private property, including any underpinning, and with all necessary setbacks required for maintenance from private property. Retaining walls are to be appropriately designed, treated, and screened to minimize their visual impact along park interfaces.
- C. If rights-of-way for servicing or any other access (temporary or permanent) is required through parkland, compensation for the rights-of-way and restoration of parkland is required to Parks standard.
- D. Any development adjacent to an existing or future park must submit an arborist report that includes all trees within the first 10 metres of parkland. Tree surveys and inventories may be requested further into parkland should there be significant trees that may be impacted by development. Removal of any tree of any size on parkland requires advanced written approval from the Parks Department.
- E. Provide continuity and connectivity benefits for wildlife through landscaping and planting approaches, as established by the City's Biodiversity Design Guidelines, within private development adjacent to parks.
- F. Work towards reconciliation with local First Nations through engagement in the planning and design of parks.
- G. Increase the visibility of traditional Coast Salish place names through the naming of public spaces (parks, plazas, etc.).

6.2 Semiahmoo Trail Greenway

The Semiahmoo Heritage Trail connects the Nicomekl River to 20 Avenue. It contains the Semiahmoo Trail Greenway. The Semiahmoo Greenway stretches southward beyond the extents of the Heritage Trail. Currently terminating at Martin Drive, the existing Semiahmoo Trail Greenway will be extended southward to 16 Avenue through the Semiahmoo Town Centre's mixed-use core.

See **Section 5: Transportation** for portions of the Semiahmoo Trail Greenway along road allowance.

Current conditions of the Semiahmoo Trail Greenway south of 20 Avenue are varied. Some connections are unpaved and unmarked. The existing greenway connections south of 20 Avenue will be upgraded with paving, higher accessibility standards, and improved wayfinding. These updates will provide a safe and intuitive route for pedestrians and cyclists on the Semiahmoo Trail Greenway into Downtown Semiahmoo. Community Amenity Contributions from development will used to complete these upgrades.



Figure 6.2A Semiahmoo Trail Greenway through Southmere Village Park



Figure 6.2B Semiahmoo Trail Greenway between 20 Avenue and Southmere Crescent East







6.3 Community Enhancement

Community identity and sense of place contribute to quality of life and connectivity. Strategies to enhance neighbourhood development and activity include:

Temporary Spaces

As development occurs, temporary vacant lots provide an opportunity for community building. Where possible, developers can turn these traditionally underutilized spaces into meaningful placemaking spaces for the community including farmers markets, community gardens, and pop-up event spaces. The City will work with developers and land owners when applicable to create temporary spaces for the community.

Community Space Stewardship

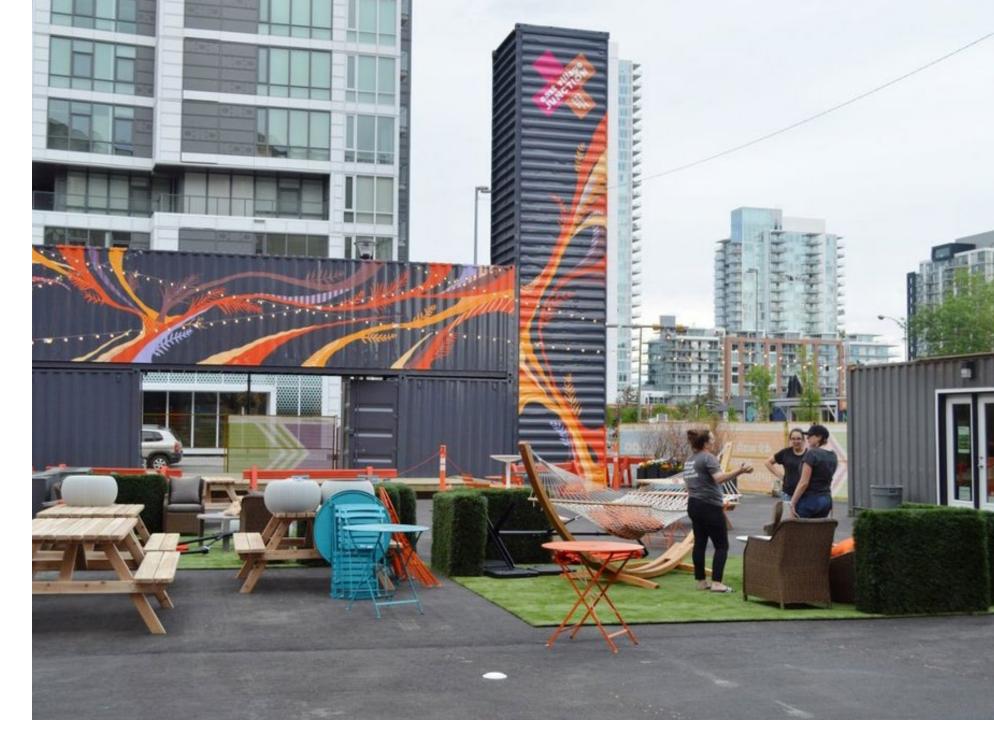
When people come together to enhance their neighbourhood, it contributes significantly to the health and quality of life in a community. The Semiahmoo Town Centre area is home to a mix of community groups contributing to neighbourhood and public life, providing stewardship over and animation of public spaces. Retaining and creating new opportunities for community members to shape and steward community spaces in Semiahmoo Town Centre will help connect the old with the new and contribute to the development of unique local character.

Retrofitting & Enhancing Public Space

As development occurs and shapes the community, there will be a need to improve existing public spaces in the Plan Area and on the periphery to create a cohesive urban experience for residents and visitors to the area. Development occurs at an uneven pace; interventions may be needed to bridge gaps in the urban environment.

Placemaking

Permanent and temporary placemaking features can be incorporated strategically into the urban environment to support vibrant street level activity and animation. Key areas that will benefit from enhanced public realm features and placemaking interventions can be identified. Static features, such as street furniture, plazas, public art, wayfinding signage and temporary parklets, can be employed as needed as the public realm needs of the neighbourhood develop and change. Flexible approaches to urbanism can support the needs of present and future land uses. Where possible, community led initiatives to animate, program, and improve public spaces can be planned and supported.



"Hire local artists. Murals are amazing. All art is amazing. Support First Nations artists Include the history of the Semiahmoo First Nation."

Online Survey Response, Semiahmoo Town Centre Plan Process, 2018-2021

7 Community Amenities | Building Community

					ſ	Section 7		
Section 1	Section 2	Section 3	Section 4	Section 5	Section 6	Community	Section 8	Section 9
						Amenities		

Town Centre areas create a critical mass of activity which facilitate cultural, social, educational, and economic exchange. Community facilities, services, and events are the foundation to that exchange. They provide amenities and programming that encourage active lifestyles, learning, opportunities for cultural and social interaction, and services to promote health and well-being.

Community and cultural facilities and services in Surrey are planned and designed through the lens of various plans, strategies, and policies. These include the Parks, Recreation and Culture Strategic Plan, along with various sub-plans and strategies.

7.1 Civic Facilities & Services7.2 Schools7.3 Public Art



7.1 Civic Facilities & Services

Civic facilities and services are essential components of the overall health and wellness of all residents. They provide year-round amenities and programming that encourage active lifestyles, learning, opportunities for social interaction, and the capacity to provide dynamic programming that supports all ages and abilities. Civic facilities and services welcome the entire community, and strive to serve vulnerable individuals, families, and children through fostering a sense of belonging and connection.

Semiahmoo Town Centre is currently supported by the Semiahmoo Library and the nearby South Surrey Recreation & Arts Centre.

The Semiahmoo Town Centre Plan expands these facilities and capacity for programs, activities, and community events within the Town Centre. In addition to creating a sense of place, these facilities are vital to attract new residents, enhance character, and support local business.



Community & Recreation Facilities

Community and recreation facilities and services act as community hubs that bring people together, supporting community capacity, volunteerism, and a sense of place. They will be transformational health and social service centres that, in collaboration with community partners, will make a positive impact on real social issues facing the community. Located just outside the town centre, the South Surrey Recreation and Arts Centre serves current and future recreation and social needs of residents.

Cultural Facilities

As the town centre evolves, cultural facilities and assets will contribute to a distinct and thriving town centre. They provide opportunity for social, educational, and economic exchange and celebrate the historical and cultural heritage of Surrey and its residents. They offer an opportunity to raise the public's awareness of Indigenous perspectives with performances, displays, public art, or installations that reflect on reconciliation and the legacies of colonialism.

Projects planned for Semiahmoo Town Centre:

A. An Arts Presentation Facility

To support events, presentations, concerts, exhibitions and other cultural programming.

B. Art Studio

This space is approximately 10,000 square feet for community and professional artmaking

Library Facilities

Semiahmoo Library opened in 2003. Prior to this, residents previously used the Fraser Valley Regional Library in White Rock. The Semiahmoo Library is approximately 22,200 square feet. The Semiahmoo Library provides collections that are appropriate for the community, based on demographics and expressed interests, some specialized collections and services, computer workstations, children's areas, study and reading space.

Currently the Semiahmoo Library is serving a large portion of South Surrey. The Semiahmoo Library currently serves the needs of the community. While South Surrey is growing rapidly, the addition of the new library in the Grandview Heights (2020-2025) will reduce demand on the Semiahmoo Library and ensure that library service will meet the needs of the growing town centre population.

7.2 Schools

The plan anticipates new growth taking place gradually over several decades. This is expected to slowly increase student numbers and enrollment in the Town Centre. The area is centrally located in various school catchments at both the elementary and secondary levels.

The School District has confirmed that the area currently has an adequate number of school sites to meet projected demand in school population. Over time the School District can accommodate expansions on these existing sites to address growth.

The 2022 School District Capital Plan includes expansions to both Peace Arch Elementary and Semiahmoo Secondary. This will increase overall school capacity in the short term.

Elementary

The Plan Area is served by H.T. Thrift and Jessie Lee Elementary, with direct adjacency to White Rock and Peace Arch Elementary.

Secondary

The Plan Area is served by Semiahmoo and Earl Marriott secondary schools. The planned addition to Semiahmoo Secondary along with catchment boundary changes associated with the new Grandview Secondary will provide additional capacity in the medium term.

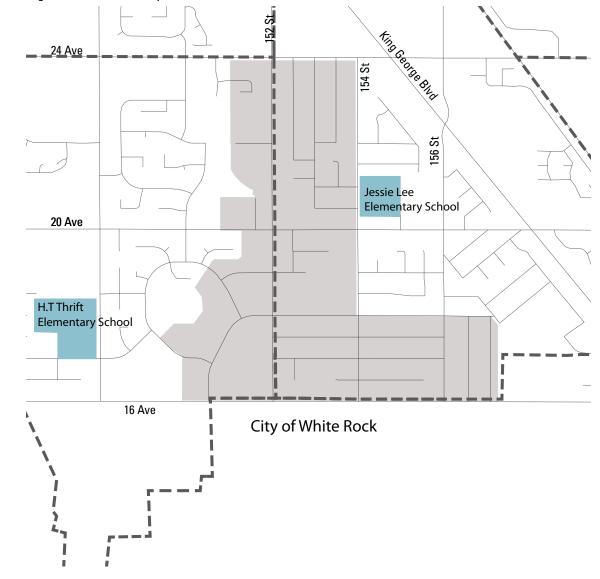


Figure 7.2A: Elementary School Catchments



Figure 7.2B: Secondary School Catchments

Semiahmoo Secondary

Semiahmoo Secondary was officially opened on November 29, 1940. Prior to this, students from South Surrey and White Rock traveled to attend school in Cloverdale at Surrey High School or across the border to Blaine High School in Washington State.

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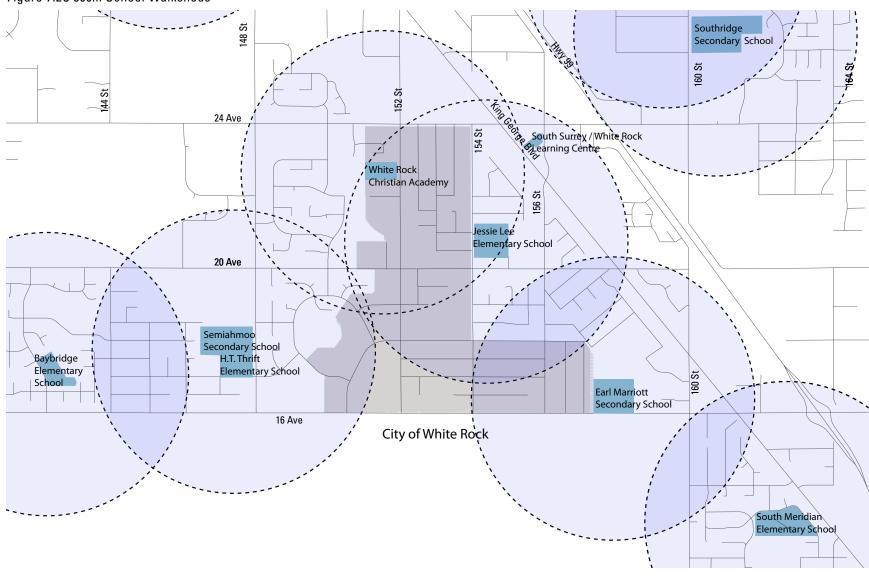


Figure 7.2C 800m School Walksheds



Semiahmoo Secondary, 1965. Photograph by Neville Curtis. City of Surrey Archives.



7.3 Public Art

Public art installations animate the public realm and contribute to creating a memorable and unique landscape. They also engage residents in the interpretation and expression of what is important and significant to the community. Public art features are envisioned to enhance the walkability and unique character of SemiahmooTown Centre.

Public art is also an opportunity to contribute positively to the national and civic goals of sustainability and reconciliation. Indigenous art reflects the values, culture, legacy and heritage of this place and the Indigenous populations living in this area, and the Semiahmoo First Nation in particular. Public art offers an opportunity for learning and recognition of the importance of the natural world, and First Nations peoples and cultures. Public art in Semiahmoo Town Centre should showcase the work of local Semiahmoo First Nation artists.

Sites for future artworks are identified within the Surrey Public Art Master Plan. New development is expected to contribute to public art through the City's Private Development Public Art Policy. See **Section 9.2 Community Amenity Contributions** for more details.

Semiahmoo Trail

The existing Semiahmoo Trail Greenway will be extended through the town centre's urban core. Between Martin Drive and 152 Street: 151A Street, 17 Avenue, and 16 Avenue will accommodate additional features to the Semiahmoo Trail Mosaic currently located at 16 Avenue. These additional public art features will integrate with the streetscape to guide the way to the Semiahmoo Trail. Examples of enhancements include: heritage storyboards, poetry stamped into concrete and other sculptural forms.

Public Art Fund

New public art projects are funded from contributions to the City public art reserve fund generated by the Private Development Public Art Program, as well as contributions from the City's capital construction projects such as new civic facilities

Figure 7.3: Public Art Locations

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- Semiahmoo Town Centre Plan Area Parks & Open Space
 - Existing Public Art Location
 - Potential Future Public Art Locations
- Public Art Opportunity in Cooperation with White Rock



"Emphasize and highlight the incredible natural history and present day richness of surrounding Semiahmoo Bay."

Online Survey Response, Semiahmoo Town Centre Plan Process, 2018-2021

8 Utilities & Servicing | The Building Blocks

Section 1	Section 2	Section 3	Section 4	Section 5	Section 6	Section 7	Section 8	Section 9

An efficient and reliable infrastructure network is critical for a livable and thriving neighbourhood. Future land uses and expected growth in the Plan Area will require infrastructure upgrades. This section outlines the utility servicing strategies that will support the Plan Area.

8.1 Drainage 8.2 Sanitary 8.3 Water



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8.1 Drainage

8.1.1 EXISTING DRAINAGE SYSTEM

The Plan Area is situated in the headwaters of three distinct watersheds (as shown on **Figure 8.1.1**). Existing drainage servicing is accomplished by an extensive network of storm sewers and open ditches that capture and convey flows to watercourses.

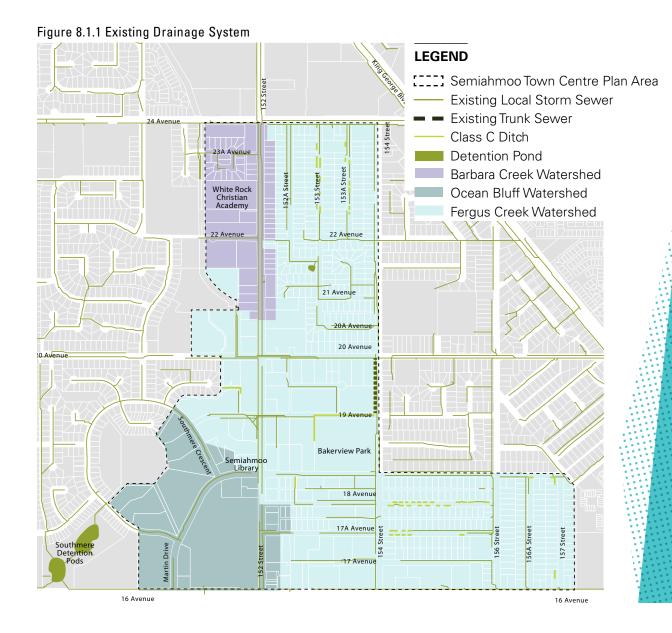
Stormwater runoff generated within the majority of the Plan Area (areas generally east of 152 Street) is conveyed east to Fergus Creek. Fergus Creek is a Class A watercourse that ultimately discharges flows to the Little Campbell River. The Little Campbell River traverses Semiahmoo First Nations lands before outletting to Semiahmoo Bay.

The southwest corner of the Plan Area is situated within the Ocean Bluff watershed. Runoff from the Ocean Bluff catchment is routed to the Southmere Detention Ponds, located at 14861 16 Avenue. These ponds provide both peak flow control and water quality treatment. Downstream of the ponds, stormwater flows are ultimately discharged to Semiahmoo Bay via the City of White Rock drainage system.

Runoff from the northwest Plan Area is conveyed by the municipal storm sewer system to Barbara Creek near 32 Avenue and Highway 99. Barbara Creek, a Class A watercourse, continues north and ultimately discharges to the Nicomekl River.

The existing storm sewers within the Plan Area were predominately installed in the 1970s and 1980s. This was a period when stormwater management focused on conveying rainwater off-site as quickly as possible, as opposed to current practice which emphasizes retaining rainwater on-site. On-site retention better maintains the natural predevelopment flow and quality of water in receiving watercourses. Development in the Plan Area has changed the natural hydrologic cycle. Changes include higher stormwater flow rates and volumes, decreased groundwater recharge, and reduced base flows to nearby watercourses. Urbanization has impacted surface and groundwater quality, due to pollutants from vehicles and other human activities that are carried by stormwater runoff to downstream environments.

To mitigate drainage impacts from development, the Southmere Detention Ponds were constructed in 1980. Located within Southmere Village Park, runoff from the highly urbanized southwest portion of the Plan Area is attenuated by these ponds before being released to the 16 Avenue drainage system which discharges into the Duprez Ravine Stormwater Bypass in the City of White Rock. The Southmere Detention Ponds are an important part of the overall Surrey/White Rock drainage system. These ponds are currently operating at full capacity. There is no opportunity to modify the pond release rates or increase storage volumes to accommodate future development in the Plan Area.



Watercourse Classification

The City classifies watercourses as follows:

Class A – Inhabited by fish year-round or potentially inhabited by fish year-round. Considered 'streams' as defined by the Provincial Water Sustainability Act and Riparian Areas Protection Regulation. Considered fish habitat as defined by the Federal Fisheries Act.

Class A(O) – Inhabited by fish primarily during the over-wintering period or potentially inhabited by fish during the over-wintering period with access enhancement. Considered a 'stream' as defined by the Provincial Water Sustainability Act and Riparian Areas Protection Regulation. Considered fish habitat as defined by the Federal Fisheries Act.

Class B – Provides food/nutrient value to downstream fish habitat. No fish potential present at any time of the year due to the presence of a natural fish barrier. Considered a 'stream' as defined by the Provincial Water Sustainability Act and Riparian Areas Protection Regulation. Considered fish habitat as defined by the Federal Fisheries Act.

Class C - A water feature that is not considered a 'stream' as defined by the Provincial Water Sustainability Act or the Riparian Areas Protection Regulation. Not considered fish habitat as defined by the Federal Fisheries Act. No fish potential present at any time of the year.

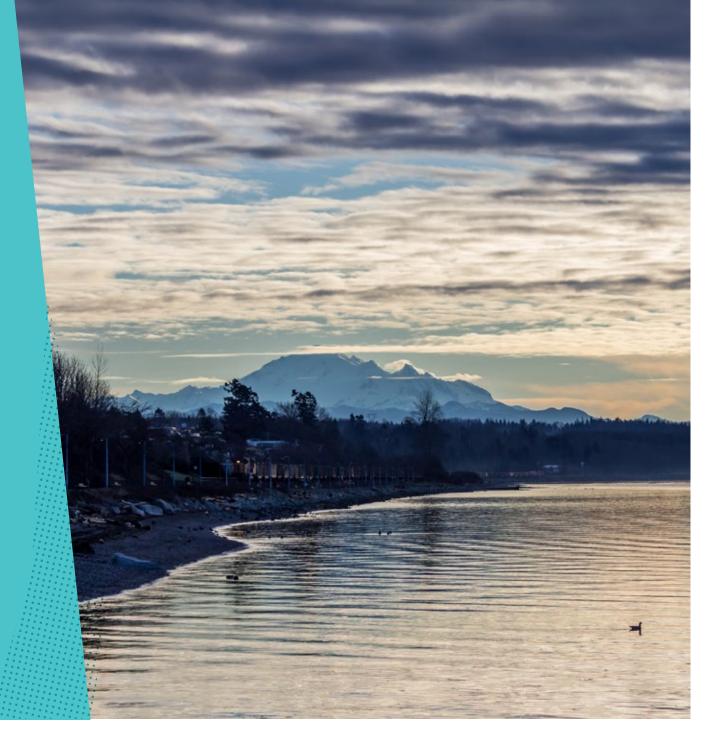
There are no known Class A, A(0) or B watercourses within the Plan Area boundary. The City's online mapping system (COSMOS) does not represent confirmed watercourse classification information in all locations. Class C watercourses must also be confirmed in the field by a Qualified Environmental Professional.

Semiahmoo Bay

As traditional territory of the Semiahma (Semiahmoo First Nation), Semiahmoo Bay is culturally and environmentally significant.

Currently, the Semiahmoo Shopping Centre site is almost entirely impervious. This means that little to none of the stormwater run-off infiltrates the ground. Instead, stormwater, oil drippings from the parking lot, and other pollutants flow off the site. The run-off makes its way down the hill towards White Rock. Eventually run-off ends up in the Semiahmoo Bay. The quality and quantity of stormwater run-off affects water quality and fish populations.

The Plan will introduce approximately 75,000 square feet of new permeable surfaces (greenspace and green roofs) on the Semiahmoo Shopping Centre site. New standards for infiltration will also require development to retain approximately 90% of the total annual precipitation on site through the use of onsite BMPs/low impact development (LIDs) such as topsoil, rain gardens, bioswales, and green roofs.



8.1.2 DRAINAGE UPGRADES

With the higher densities proposed, the Plan will increase the total surface imperviousness above existing conditions. To mitigate associated impacts and address the anticipated increase in the frequency and intensity of storms due to climate change, the following on-site Best Management Practices (BPMs) strategy is recommended for new, infill, and re-development:

- Include on-site BMPs in site development plans to address runoff volume and flow control;
- Implement on-lot water quality treatment units to remove pollutants from stormwater runoff;
- Preserve remaining natural features and maintain their links with external natural areas by incorporating approaches outlined in the City's Biodiversity Design Guidelines; and
- Preference should be given to permeable pavements and driveway technologies that allow precipitation to infiltrate to the ground. In addition, the footprints of impermeable structures should be minimized to maintain as much natural land cover as possible.

Low Impact Development (LID) measures are a critical part of the overall stormwater management strategy. They provide servicing and environmental benefits in terms of peak flow control and water quality improvement. In addition, LID features will integrate with and improve overall landscaping in the Plan Area.

The following outlines the performance targets for residential, civic, and mixed-use lots:

Runoff Volume Control - The performance target for the Plan Area is to capture and store (no discharge off-site) 42mm of rainfall in 24 hours (420 m³/ha) corresponding to 90% of the total annual precipitation. Where the mentioned volume capture cannot be infiltrated or reused on-site, a release rate of 0.122 L/s/ha will be required. Developers will be required to select and incorporate LID measures into site plans and buildings to satisfy the performance targets.

Runoff Rate Control -The performance target for the Plan Area is to control the 5-year postdevelopment flow to the more stringent of the following:

- 50% of the 2-year post-development flow or
- 5-year pre-development flow.

All other design criteria shall be in accordance with the City's Design Criteria Manual and the following Integrated Stormwater Management Plans (ISMP):

- Fergus Creek ISMP;
- Ocean Bluff and Chantrell Creek ISMP; and
- Elgin, Anderson, and Barbara Creeks ISMP.

Development applications that propose to continue utilizing existing conveyance routes to the City of White Rock storm sewer system, or contribute to the City's drainage network that ultimately discharges through Semiahmoo First Nations lands, will need to demonstrate that there will be no net increase in peak flows or volumes to these systems beyond existing conditions as a result of their development.

The vast majority of the storm sewer network that requires upgrades to support future development are classified as local sewers and therefore are not eligible for Development Cost Charge (DCC) reimbursement. These upgrades will be addressed and funded through development frontage improvements.



8.2 Sanitary

8.2.1 EXISTING SANITARY SYSTEM

The Semiahmoo Town Centre Plan Area has a ridge line just west of 152 Street that runs from north to south. From this ridge line, the western area slopes south-westwards, towards 16 Avenue and 146 Street. The eastern area slopes eastwards, towards Highway 99.

The existing sanitary sewer system generally follows the slopes of the topography. The west catchment discharges to Metro Vancouver (MV)'s Ocean Park Trunk (OPT) at two locations:

- 16 Avenue and Martin Drive; and
- 16 Avenue and 148 Street.

The east catchment discharges to the North Bluff Pump Station by 16 Avenue and King George Boulevard. This pump station conveys the sewage by a 500 mm diameter forcemain that connects with the forcemain from the Semiahmoo Pump Station and flows northwards to the gravity trunk at 24 Avenue and King George Boulevard before discharging to Metro Vancouver's Rosemary Heights Pressure Sewer System by Highway 99 and 152 Street.

8.2.2 SANITARY UPGRADES

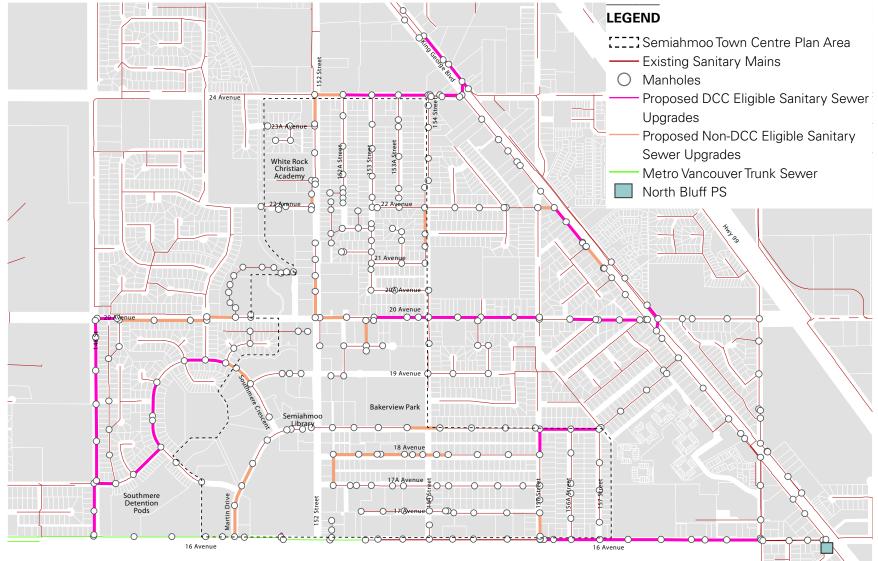
There are 38 local sewer sections and 58 trunk sewer sections to be upgraded associated with the Plan Area. Local sewers are small sewers (< 40 l/s) and are not eligible for development cost charges as part of the Plan. Therefore about 2,500 m of local sewers for a total of about \$6M will need to be upgraded through annual capital utility plans or through direct development contribution. The costs to upgrade the approximate 4,300 m of trunk sewers are provided in Table 9.4A. A map of the sanitary servicing works, and the minimum required trunk sized are shown on **Figure 8.2.2**

Increased demands will also require some upgrades to the North Bluff Pump Station, that would likely include mechanical upgrades and provision of additional overflow tank capacity.

Servicing the Plan Area is also dependent on regional sewers provided by Metro Vancouver, including the OPT on 16th Avenue, and the Rosemary Heights Sewer Near Highway 99 and 32 Avenue. The OPT currently has capacity issues during wet weather events, and additional growth in the Plan Area will accelerate the need for a combination of capacity improvement, inflow and infiltration reduction, and odour management along this sewer. The Rosemary Heights sewer currently has sufficient capacity up to growth planned for 2031; however, improvements to and possibly addition of new odour management facilities are foreseen to meet the future changes.

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Design Criteria and Guiding Principles

Servicing guidelines for the Semiahmoo Town Centre Plan and population projections for sanitary analysis are based on the City of Surrey Design Criteria Manual (DCM). A summary of key sewer design criteria applicable to this TCP is presented below:

Sewage Flow Rates

- Average daily sanitary flows of 350 L/cap/day
- Peaking factor as per Harmon's formula
- Inflow and Infiltration (I&I) allowance rate of 18,000 L/ha/day

Sewer Capacity / Sizing

- Manning's roughness coefficient, "n", of 0.013 for all pipes (local and trunk)
- Sewers designed to convey Peak Wet Weather Flow (PWWF)
- Local sewers (PWWF < 40L/s):
 - Existing sewer peak flow to be less than 70% of the pipe capacity (Opeak flow/Ocapacity < 0.70)
 - Proposed depth of flow to not exceed 50% of internal sewer diameter (d/D ≤ 0.50) or peak flow to not exceed 50% of the pipe capacity (Opeak flow/Ocapacity ≤ 0.50)
- Trunk sewers (PWWF \ge 40 L/s):
 - Existing sewer peak flow to be less than 83.7% of the pipe capacity (Opeak flow/Ocapacity < 0.837)
 - Proposed depth of flow to not exceed 70% of internal sewer diameter (d/D ≤ 0.70) or peak flow to not exceed 83.7% of the pipe capacity (Qpeak flow/Qcapacity ≤ 0.837)
- The minimum sewer size shall be 200 mm diameter for single family land uses and land uses with less than 90 people per hectare, and 250 mm diameter for others on the frontage of a development.

Hydraulic Analysis

Peak flow rates from the Plan Area are calculated using Harmon's Peaking Factor and the spreadsheet-based approach. The pipe capacities are calculated using Manning's Formula. The lengths and the slopes of the existing sewers are based on the as-built plans with occasional estimates from the City's GIS system. The slopes of the proposed sewers are estimated based on the contours of the existing sewers.

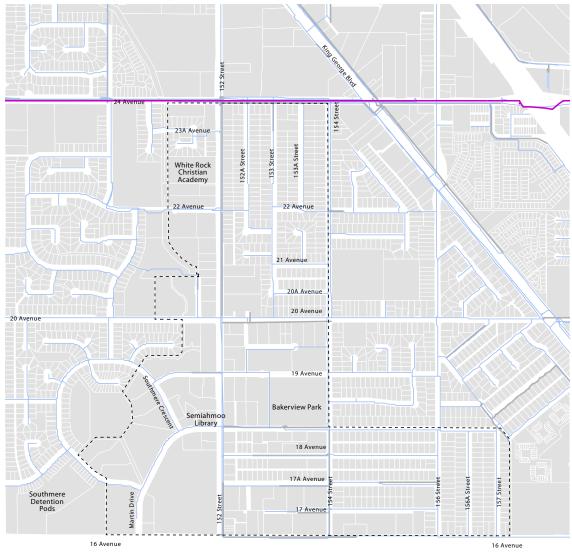
8.3 Water

8.3.1 EXISTING WATER SYSTEM

Semiahmoo Town Centre is within the 149-metre pressure zone supplied from Sunnyside Pump Station through the water feeder mains on 24 Avenue. The area within the Town Centre is currently serviced by watermains with diameter ranging from 150mm to 300mm which have adequate capacity to service the existing water demand.

The existing water system network for the Plan Area is shown in **Figure 8.3.1**.

Figure 8.3.1 Existing Water System



LEGEND

- Semiahmoo Town Centre Plan Area
- Existing Watermains
- Metro Vancouver Owned
- —— Abandoned

8.3.2 WATER UPGRADES

Future water servicing is designed to optimize the use of existing watermains. A phased infrastructure upgrade and replacement strategy is recommended based on timeline of anticipated development.

Per the DCM, as part of fronting development upgrade requirements, watermains within Semiahmoo Town Centre shall be upgraded by developers to a minimum of 250mm. Additionally, the DCM states that there will be no service connection made to a watermain on the opposite side of 152 Street. As such, watermains may be required on both sides of 152 Street, depending on the subdivision layout.

In the 2021-2030 10 Year Plan, the City has planned for a new 450mm feeder main on 20 Avenue between 148 Street to 152 Street, to improve the water supply to this Town Centre. Based on the hydraulic analysis conducted, the proposed feeder main on 20 Avenue, together with the other existing feedermains have adequate capacity to supply anticipated growth.

The proposed water system network for the Plan Area is shown in **Figure 8.3.2**.



Figure 8.2.3 Water Upgrades



Conceptual Rendering: 16 Avenue (Frank Ducote)

"Prohibit any fossil fuel use and prioritize renewables such as geothermal for large buildings, heat pumps for homes, as well as solar."

Online Survey Response, Semiahmoo Town Centre Plan Process, 2018-2021

9 Implementation | Making it Work



The plan will increase development intensity and population. To address the impacts of growth, funding will be required to improve local amenities and infrastructure necessary for a high quality of life.

This section of the plan outlines development policies and financing considerations required to support and implement the plan.

9.1 Development Policies9.2 Community Amenity Contributions9.3 Infrastructure Financing



9.1 Development Policies

9.1.1 LOT CONSOLIDATION AREAS

Lot consolidation requirements prevent the creation of undevelopable land remnants based on proposed land use designations. They also ensure equitable distribution of road dedication and construction costs across properties, and in some cases ensure development does not adversely impact existing residents.

Lot consolidation requirements have been generally identified in **Figure 9.1.1**. If land consolidation is proven to be unfeasible, the developer must:

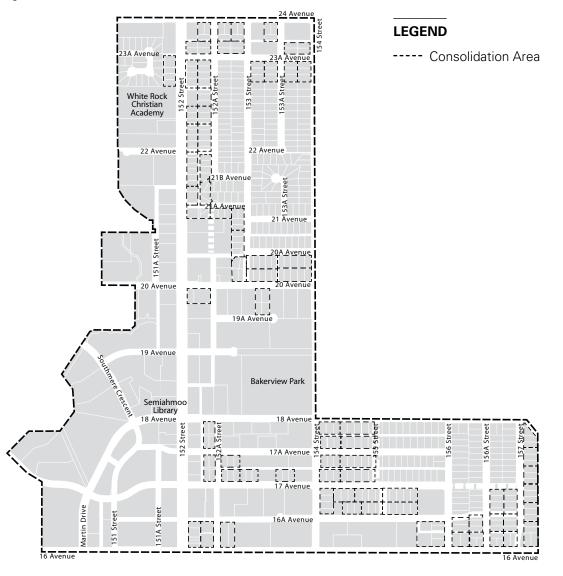
- Demonstrate that the development potential of the excluded property is not compromised to the satisfaction of the City; and,
- Share any required road construction costs amongst properties shown in the land consolidation area.

In all cases of infill development, the developer must provide a concept plan for adjacent properties to prove excluded properties remain developable.

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Figure 9.1.1 Lot Consolidation Areas



9.1.2 PETITION AREAS

Two low-density residential designated areas have been identified for petitioning requirements. These are areas intended for modest infill redevelopment that are also vested in keeping in scale and character of the existing single detached neighbourhood.

The majority of property owners in these areas were not supportive of significant development through the planning process. As a result, petitioning requirements have been included within these areas. Four petition areas (A, B, C, D) are included within the low-density residential designation (see **Figure 9.1.2A**).

Any development seeking a plan amendment to change land use designations or increase allowable density (above the 20 UPA) within these areas must demonstrate neighbourhood support through a supportive petition.

Petition Area A

Petition Area A currently contains 71 properties and sees the connection of 22 Avenue between 152A Street and 153 Street and improvements to an existing pedestrian connection between 153A Street and 153 Street, to be delivered through development.

Petition Area B

Petition Area B currently contains 45 properties and requires improvements to road network connectivity. Through development, the existing cul-de-sac will be connected to 153A Street to the north, 21B Avenue to the west, and 154 Street to the east. Existing irregular lots and low connectivity requires large block consolidations to redevelop.

Petition Area C

Petition Area C currently contains 42 lane accessed properties. At the time of a successful petition, staff will consider the realignment of 155 Street. If deemed feasible, 155 Street will be delivered by development and shift eastward to connect with the planned south portion of 155 Street.

Petition Area D

Petition Area D currently contains 40 properties. A successful petition will result in the extension of 17A Avenue between 156 Street and 157 Street, to be delivered by development. Developments seeking to amend the Plan:

- Must meet the consolidation requirements as shown in Figure 9.1.1B. Where no consolidation requirements are shown, a minimum 1-acre contiguous development site is required.
- Must submit a development application for plan amendment.

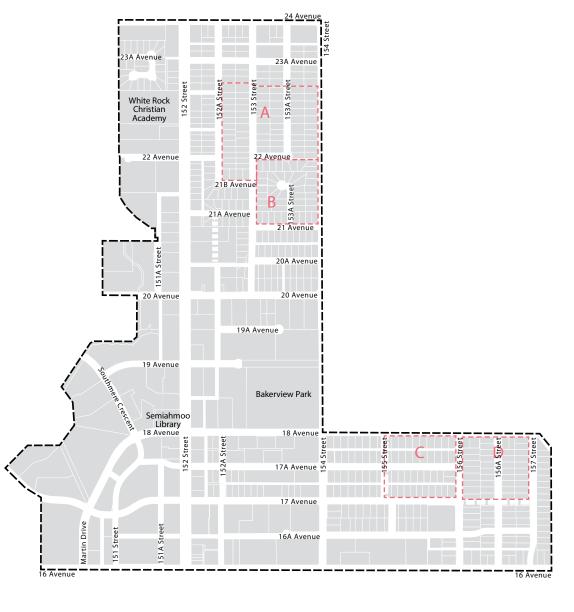
Upon completion of these requirements, Staff will initiate a petition to verify support. A supportive petition is defined as requiring support of 75% of properties in the noted petition area.

A supportive petition will enable Staff to begin reviewing and processing plan amendment applications within this area. If the required support threshold is met by this process, subsequent development applications in the specific petition area may proceed with a plan amendment application without petitioning the area. If the petition fails to meet the required support threshold, staff will not petition or process amendment applications within the specific petition area for a minimum of one year.

Applications for plan amendment should align with the lot consolidation requirements and road network shown in **Figure 9.1.2B**. Figure 9.1.2A Petition Areas

LEGEND

----- Petition Area

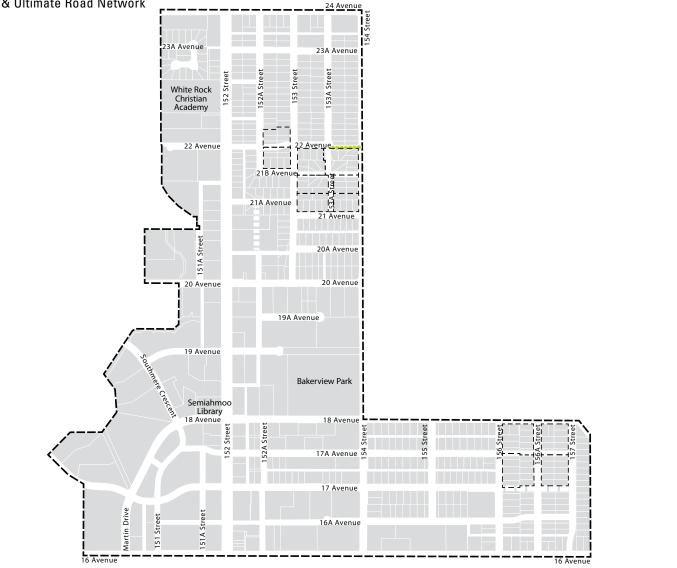


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Figure 9.1.2B Lot Consolidation Requirements & Ultimate Road Network

LEGEND

- Pedestrian Connection
- Road Connection
- ---- Consolidation Area



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9.1.3 HOUSING POLICIES

As a designated Town Centre, Semiahmoo plays an important role in achieving the City's housing goals. A diversity of housing forms and tenure types will support a full range of housing needs for the homeless, young families, older adults, low-income groups, and people living with disabilities. To support affordable housing objectives the Plan outlines the following policies that apply to new development within the Plan Area:

HOUSING POLICY 1

A minimum of 30% of new multi-family housing units should be family oriented 2-bedroom or greater, and at least 10% as 3-bedroom or greater.

HOUSING POLICY 2

Meet the Adaptable Housing Standards in the BC Building Code for all new multi-family residential units.

HOUSING POLICY 3

Conform with the City's Rental Housing Redevelopment Policy (Policy O-61) for re-development of purpose-built rental housing.

HOUSING POLICY 4

For new residential developments that require a rezoning, provide a per unit contribution to the Affordable Housing Reserve Fund. The funds will be used to purchase land for new affordable rental housing projects. Refer to **Schedule G** - **Section A of the Zoning By-law** for current rates.

HOUSING POLICY 5

Exempt Non-Market Housing from Capital Community Amenity Contributions.

HOUSING POLICY 6

Support additional density and variances to development parameters including building height for developments with a significant non-market housing component.

HOUSING POLICY 7

Consider Pilot Project rezonings that will support urban infill development to provide more housing choice and new small-scale, ground-oriented housing options for properties with the "Low Density Residential" land use designation.

9.1.4 DEVELOPMENT PERMIT AREAS

Where developments are located in designated Development Permit Areas (DPA), as identified in the OCP (steep slopes, farm protection, environmentally sensitive areas, etc.), as well as in the case of multiple unit residential or commercial developments, the OCP Design Guidelines will be implemented through the process of reviewing and approving the related Development Permit at the time of development application.

9.1.5 ELECTRIC VEHICLE CHARGING

As per the Zoning By-law, 100% of residential parking spaces in new residential developments are required to have an electrical outlet capable of supporting Level 2 EV charging (e.g. 220V outlet). All new commercial developments are required to provide a minimum 20% of parking spaces that have an electrical outlet capable of supporting Level 2 EV charging. The Zoning Bylaw requirements provide for EV Energy Management Systems to be implemented, where power can be shared between up to four parking spaces and where the minimum performance standard is achieved.

9.1.6 ZERO CARBON INCENTIVE

The City of Surrey has committed to reducing community GHG emissions to net zero before 2050, and to improve the resilience of the community to future climate impacts. Buildings are responsible for 40% of community wide GHG emissions, with 96% of these emissions coming from the use of natural gas for space and water heating. To reach Surrey's target, fossil fuels must be phased out of existing buildings, and new buildings must be zero-emitting from the outset to avoid costly and disruptive retrofits.

The Zero Carbon Incentive is intended to encourage the design and construction of buildings that limit their contribution to climate change. Where applicable, will enables an increase to the allowable base density of specific land use designations where zero carbon energy (electricity) is used for all on-site building operation, with no fossil fuel connections or building operation use.

Applicable developments will have the opportunity to utilize the Zero Carbon Density incentive to increase their maximum allowable base density as outlined in the Zoning By-law.

At approval of this plan, the above noted density provisions are not reflected in the Zoning By-law. These updates are expected to take place in early 2022. This text will be removed when amendments have occurred.

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9.2 Community Amenity Contributions

Plan Amendments & Density Bonus Considerations

Growth and development will lead to increased demand for community amenities. An increase to population and units will impact school capacities, parkland provision, civic facilities and services, and infrastructure capacity. To address these impacts, any TCP Amendment or OCP amendment that includes a rezoning with increased density, above base plan densities, will be subject to the City's density bonusing policies and by-laws. These contributions help offset the impacts of growth and help fund new community facilities and services.

Site specificTCP amendments will be considered carefully and weighed against their contribution towards the Plan's vision and principles. Community specific fixed Community Amenity Contribution (CAC's) rates are to be provided for residential development in accordance with Surrey Zoning Bylaw Schedule G Section C. Any Major OCP amendments will be subject to City Density Bonus Policy 0-5.

Minor adjustments to proposed lanes and local roads may be considered where appropriate, and may not trigger a formal TCP Amendment on their own if supported by City Engineering department. Adjustments to lanes and local road alignment may be considered without a formal TCP Amendment if in-keeping with original intent of the plan. There are four main categories of Community Amenity Contributions that will be applicable in Semiahmoo Town Centre:

- Area Specific Secondary Plan CAC's will apply to all residential development seeking increased density in keeping with land use designation (with some exceptions), and are applicable to all proposed residential units and commercial spaces.
- Universal City-Wide CACs apply to all density bonus rezonings/ subdivisions (with some exceptions). Affordable Housing and Public Art contribution rates, exemptions and collection processes are to be provided in accordance with the applicable policy.
- 3. Tier 1 Capital Project CAC's will apply to all residential development seeking increased density (with some exceptions) and are applicable to the portion of units that are consistent with the density of the Plan.
- 4. Tier 2 Capital Project CAC's will apply where residential rezoning's seek increased density above the Plan. Tier 1 Capital Project CAC's are applied up to the Plan designations and Tier 2 is then applied to the portion of density above the Plan. Capital Project CAC rates, phasing, exemptions and collection process are to be provided in accordance with Surrey's Community Specific Density Bonus Policies for the South Surrey area outlined in Surrey's Zoning Bylaw #12000, as outlined in Schedule G, and Density Bonus Policy O-54.

9.2.1 AREA SPECIFIC CAC'S

To enact the area specific Secondary Plan CAC's noted above, the Zoning By-law will be amended to add Semiahmoo Town Centre to the list of area specific Plan Areas within which monetary amenity contributions are required. The monetary contributions toward parks, arts and culture, police, fire and library materials will offset capital costs of providing services to new development and are applied on a standardized basis in all of Surrey's Secondary Plans.

The monetary contributions toward arts and culture, parks, open spaces and pathway development are based on the estimated capital costs for improvements for this TCP. The total cost is divided by the average anticipated number of dwelling units to ensure an equitable contribution.

Parkland Development

The scope of parkland development within the TCP will include three (3) new parks. The estimated cost of developing park amenities is \$19,422,388.81 which results in a \$3,011.69 (in 2021 dollars) per dwelling unit. This is captured through the Parks Development CAC. This estimate includes the construction of on-site park amenities, such as playgrounds, washroom buildings, parking lots, sports courts, athletic fields, tree and horticultural plantings, park pathways, seating areas, viewing platforms and passive open spaces. This also includes natural and riparian area management within land acquired by Parks.

Park amenity calculations do not include riparian area works on land conveyed to the City through the development process, such as invasive species removals, fence construction, replanting and naturalization, in-stream works and any other related riparian area costs, including planning and design costs, which are to be accounted for as part of the development process and subject to the Zoning Bylaw.

Parkland Road Frontage

Park road frontage construction is not included within the Parks Development CAC. Road frontages are also not funded through the parkland acquisition DCC. The estimated cost of developing associated park road frontages, included a half road, storm sewer contribution, curb and gutter, sidewalk, boulevard and street lighting is \$2,699,250.00. This results in a cost of \$418.55 (in 2021 dollars) per dwelling unit. This is captured through the Parks Road Frontage CAC.



Arts & Culture

Two culture facility projects are outlined for Semiahmoo Town Centre:

- A arts presentation facility to support events, presentations, concerts, exhibitions and other cultural programming.
- An art studio for supporting community and professional artmaking.

Estimated construction value of the arts presentation venue is \$39,000,000 (2021 construction value only), with a portion of this amount to be paid through general City capital funds. The result is a cost of \$3,023.72 per dwelling unit to be captured through the Arts & Culture CAC.

Library Materials

A study of library requirements has established that a contribution of \$186.61 (in 2021 dollars) per dwelling unit (nonresidential development is exempt) is necessary to cover the capital costs for library materials and services, which is sensitive to population growth. Consequently, a total of approximately \$1,203,447.89 will be collected from Semiahmoo Town Centre towards materials such as books, computers, and electronic media.

Fire Protection

Future development in this neighbourhood will drive the need to upgrade existing fire protection facilities. A study of fire protection requirements in Surrey has established that a contribution of \$358.33 per dwelling unit and \$2,149.96 per acre of non-residential development (in 2021 dollars) will cover the capital costs for fire protection. This will result in a total capital contribution from Semiahmoo Town Centre of approximately \$2,431,783.92 toward fire protection facilities.

Police Protection

Future development in this neighbourhood will drive the need to upgrade existing police protection facilities. A contribution of \$82.93 per dwelling unit and \$497.61 per acre of nonresidential development will cover the capital costs for police protection. This will result in a total capital contribution from Semiahmoo Town Centre of approximately \$562,801.16 toward police protection facilities.

9.2.2 UNIVERSAL CITYWIDE CAC'S

Affordable Housing

The TCP is subject to Affordable Housing CAC's for future rezonings, as identified in Schedule G of Surrey's Zoning Bylaw. The (2021) Affordable Housing contribution rates are \$1,000 as outlined in Schedule G of the Zoning Bylaw. Proposed development will provide the bylaw rates that are applicable at the time the future Building Permit is issued. This will result in a total affordable housing contribution from Semiahmoo Town Centre of approximately \$6,449,000 toward civic affordable housing projects in the South Surrey area.

Public Art

The TCP is subject to Public Art Contributions. Any re-zoning that includes more than 10 dwelling units, and/or any rezoning for Commercial with a total floor area of greater than 1,000 m², will be subject to Public Art Contributions. The rate of contribution is guided by the City's Public Art Policy. In 2021 the Public Art contribution is a fixed rate of 0.50% of the total project construction cost.

9.2.3 TIER 1 CAPITAL PROJECT CAC'S

The TCP area will be subject to Tier 1 Capital Plan Project CAC's for future rezonings, as identified in Surrey's Zoning Bylaw #12000. The Capital Project contribution rates are \$2,000 per applicable dwelling unit from January 1, 2022 as outlined in Section B.4 of Schedule G of the Zoning Bylaw. The proposed development will provide the zoning bylaw rates that are applicable at the time the future Building Permit is issued. This will result in a total capital contribution from Semiahmoo Town Centre of approximately \$12,898,000 (2022 rate) toward civic projects such as cultural, sport or recreation facilities within the South Surrey area.

9.2.4 TIER 2 CAPITAL PROJECT CAC'S

The TCP area is also subject to Community Specific Tier 2 Capital Project CACs. It is applicable for any rezoning proposing bonus density where the proposed increase is greater than the maximum density allowed in the Plan. Where applicable the CAC applies after the additional density of the Zero Carbon Incentive bonus. Any plan amendments proposed by future development will provide the Zoning Bylaw #12000 - Schedule G Community Specific Rates for South Surrey paid before Zoning Bylaw is adopted.

Community specific fixed rates for Semiahmoo Town Centre are charged on a per square foot basis for apartments, and on a per dwelling unit basis for single family and townhouses that exceed the plan limits. The South Surrey Community Specific contribution rates are \$20,000 per dwelling unit from January 1, 2022 for townhouse and single family dwellings, and \$30/sq. ft for apartments, as outlined in Section C of Schedule G of the Zoning Bylaw.



9.2.4 CAC'S SUMMARY

The estimated (2022 Rate) CAC's and total projected revenues from development in SemiahmooTown Centre is over \$65,000,000. The specific CAC's for SemiahmooTCP area are summarized below and are documented in Table 9.2.4.

TABLE 9.2.4: CAC'S FOR SEMIAHMOOTCP

COMMUNITY AMENITY CONTRIBUTION (CAC)	*PER UNIT CONTRIBUTION	PER ACRE CONTRIBUTION ALL NON-RESIDENTIAL	ANTICIPATED TOTAL CAC REVENUE
Plan Area Specific Amenit	y Contributions		
Police Protection	\$82.93	\$497.61	\$534,815.57 (Residential) \$27,985.59 (Non-Residential) Sub Total: \$562,801.16
Fire Protection	\$358.33	\$2,149.96	\$2,310,870.17(Residential) \$120,913.75 (Non-Residential) Sub-Total: \$2,431,783.92
Parkland Development Park Road Frontage	\$3,011.69 \$418.55 Sub-Total \$3,430.24	N/A N/A N/A	\$19,422,388.81 \$2,699,250.00 Sub-Total \$22,121,638.81
Arts & Culture	\$3,023.72	N/A	\$19,500,000.00
Library Materials	\$186.61	N/A	\$1,203,447.89
Citywide Amenity Contrib	utions*		
Capital Projects (Tier 1)	\$2,000	N/A	\$12,898,000.00
Affordable Housing	\$1,000	N/A	\$6,449,000.00
Total Contribution Revenue	\$10,081.83/unit	\$2,647.57/acre	\$65,166,671.78

9.3 Infrastructure Financing

New and upgraded infrastructure is required to support development of the town centre. **Table 9.4A** summarizes the projected DCC revenues and eligible costs for each of the major infrastructure systems that will be needed to support build-out.

Revenues are based on the DCC rates that came into effect on May 15, 2021 and include the DCC municipal assist factor for all DCC-Eligible Costs attributable to the TCP for each asset, as summarized in **Table 9.4B**.

Growth has always been planned for the Semiahmoo area. With the adoption of the Stage 2 Semiahmoo TCP, growth will result in approximately \$145,971,000 million in total DCC revenues.

The differences between the DCC eligible costs and estimated revenues will be used to help fund various growth projects adjacent to and / or near the Plan Area. Examples include projects in the 2021-2030 10-Year Servicing Plan such as new traffic signals, pedestrian signals, and intersection improvements at various locations near the Plan Area; water main upgrades on 20 Avenue and 148 Street; new water feeder mains around Sunnyside Pump Station; storm sewer upgrades; and sanitary upgrades to the North Bluff Pump Station.

TABLE 9.4A: PROJECTED DCC REVENUES AND CONSTRUCTION COSTS FOR MAJOR INFRASTRUCTURE

SERVICE	ESTIMATED DCC REVENUES [*]	DCC ELIGIBLE COST ATTRIBUTABLE TO SEMIAHMOO TCP	DIFFERENCE
Drainage	\$7,013,000	\$300,000	+\$6,713,000
Sanitary Sewer	\$12,609,000	\$12,220,000	+\$389,000
Water	\$8,422,000	\$1,760,000	+\$6,662,000
Arterial Roads	\$51,844,000	\$33,809,000	+\$18,035,000
Non-Arterial Roads	\$12,171,000	\$12,113,120	+\$58,580
Parkland	\$53,912,000	Land Purchase Cost	
TOTAL	\$145,971,000	\$60,008,000	

*DCC Revenues are based on Surrey's Development Cost Charge Bylaw, 2021, No. 20291 and include a 1% Municipal Assist Factor (MAF)

TABLE 9.4B: MUNICIPAL ASSIST FACTOR FOR ENGINEERING INFRASTRUCTURE

SERVICE	MUNICIPAL ASSIST FACTOR	COST OF THE MUNICIPAL ASSIST FACTOR
Drainage	1%	\$70,130
Sanitary Sewer		\$126,090
Water		\$84,220
Arterial Roads		\$518,440
Non-Arterial Roads		\$121,710
Parkland		\$539,120
TOTAL		\$1,459,710

