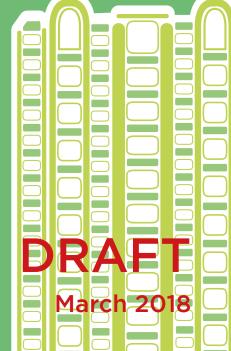


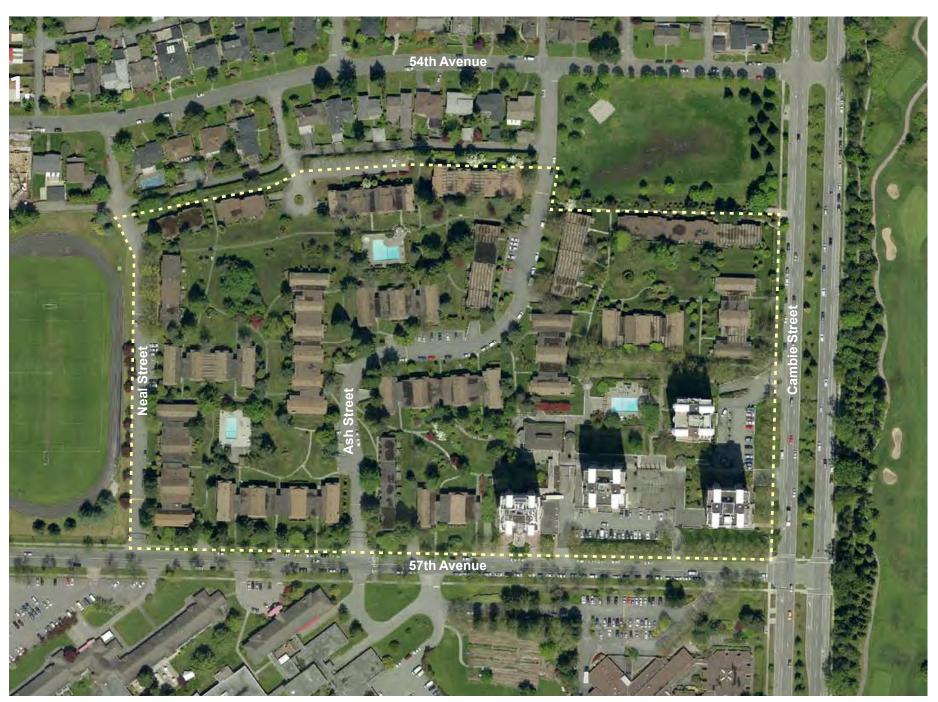


LANGARA GARDENS
POLICY STATEMENT
2018



# **CONTENTS**

1	Background	1
2	Vision & Guiding Principles	14
3	Langara Gardens Residents	18
4	Land Use & Density	24
5	Urban Design Legacy & Built Form	28
6	Parks, Open Spaces & Public Places	40
7	Circulation & Transportation	50
8	Sustainability & Green Infrastructure	62
9	Community Amenities	70
10	Illustrative Development Concept	76



Aerial view of Langara Gardens, circa 2015

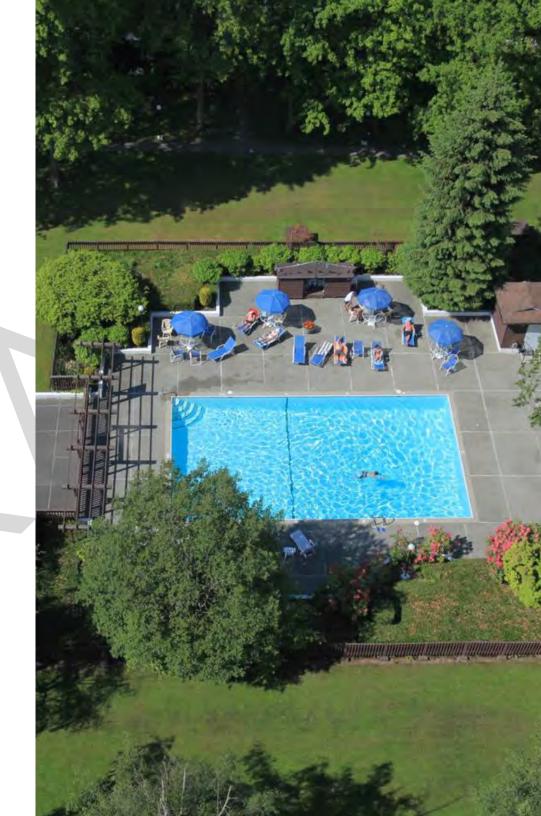
# 1. BACKGROUND

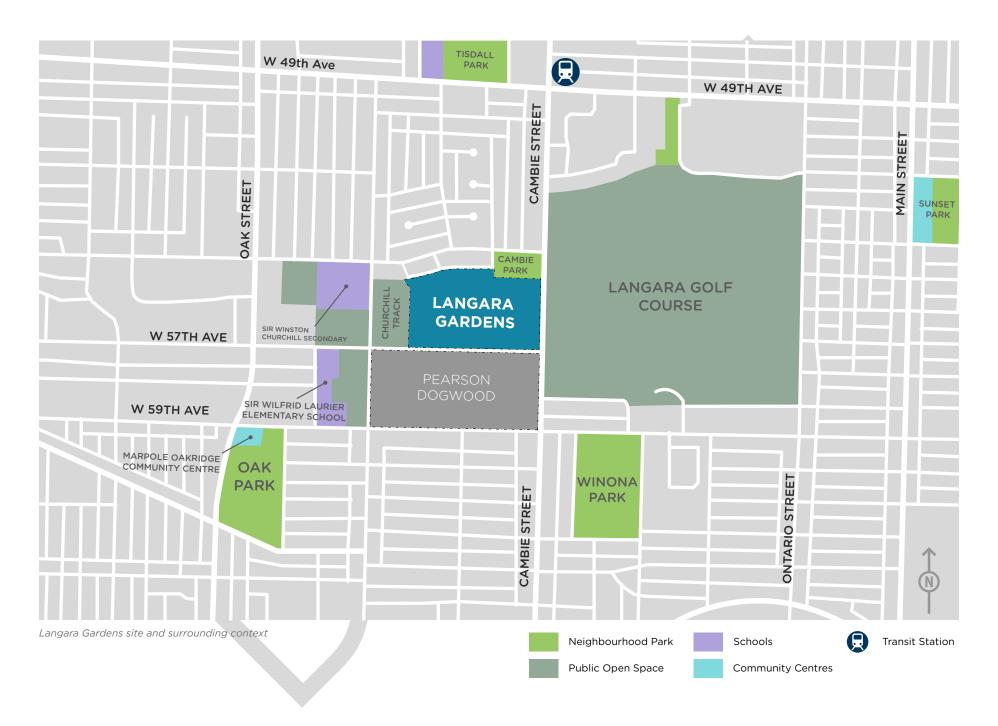
## 1.1 INTRODUCTION

A Policy Statement is a planning tool used by the City of Vancouver to describe general planning principles and policy that will guide future development of a large site. In June 2013, City Council endorsed a planning program for Langara Gardens which launched in April 2015.

A comprehensive planning program was undertaken to identify and evaluate new policies for the redevelopment of Langara Gardens. This Policy Statement contains a set of policies to guide consideration of an anticipated rezoning application for the Langara Gardens site. These policies are intended to be clear and robust, but also flexible enough to accommodate a variety of detailed plans or design solutions to be refined at the rezoning stage. Detailed outcomes will be subject to the more in-depth analysis that occurs at the time of rezoning.

This Policy Statement considers the future mix of uses, density and height, building forms, parks and public spaces, circulation and movement, community facilities and tenant relocation. Most topics in this document are introduced with a background section that outlines key issues and facts followed by more detailed policies. Unless otherwise noted, it is assumed that all existing Council policies are applicable to redevelopment of the site at the time of rezoning.















Leonora Markovich, circa 1960s

#### SITE DESCRIPTION

Langara Gardens is an 8.4 hectare (20.8 acre) site located west of Cambie Street between 54th and 57th Avenues. The property was rezoned to CD-1 (47) in 1968 to address the need for rental accommodation in Vancouver. The initial rezoning permitted a density of 0.687 FSR in the form of three 18-storey towers, garden flats and townhouse units in low-rise buildings. The rezoning also permitted commercial space along west 57th Avenue, as well as underground and surface parking for the site.

At the time of rezoning in 1968, the original parcel was subdivided and in accordance with the Subdivision Control Bylaw, a portion of the land was dedicated to the City as park space, as well as 5.0 acres to the school board for the Churchill School track. Cambie Park, the 2.3 acre park at West 54th Avenue and Cambie Street was then constructed. In 1987, the fourth tower which included additional commercial space was added to Langara Gardens increasing the permitted density to 0.782 FSR, resulting in 605 residential units. All residential units on the site are rental.

#### SITE HISTORY

Langara Gardens as we know it today, was designed in 1968 by architect Leonora Markovich, considered one of the early women in architecture in BC, Canada. Leonora was the fifth woman to become registered with the Architecture Institute of BC. Leonora was known for her innovative architecture that prioritized access to housing and amenities for average income families.

Langara Gardens provides an unprecedented example for its time of integrating high-rise towers outside of the urban core of the city with commercial development and amenities such as pools, landscaped gardens and outdoor spaces. These character defining features are prevalent today and have informed the vision for the future of Langara Gardens.



Langara Gardens, circa 1970s



Langara Gardens retail units, 2013



Langara Gardens, circa 1970s, City of Vancouver Archives



Langara Gardens, 2017

# 1.2 LANGARA GARDENS PLANNING PROGRAM

At the outset of the planning program for Langara Gardens, City Council directed staff to:

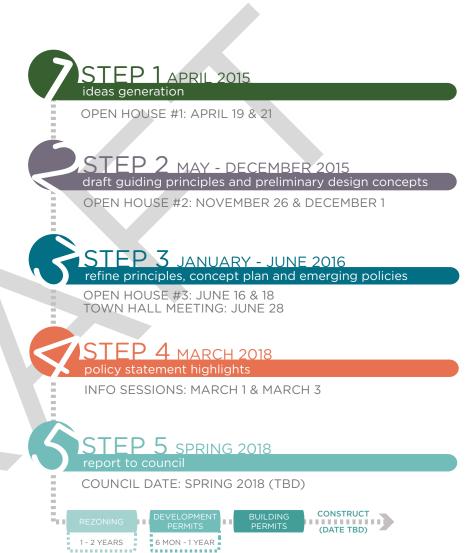
- Engage in a policy planning process to develop policies to guide site planning and to provide a basis for assessing future rezoning proposals.
- Conduct a public consultation process, including a Town Hall meeting, to establish and evaluate guiding principles and conceptual site plans.
- Create an opportunity for dialogue with Langara Gardens residents to better understand concerns they may have with redevelopment.
- Report back to City Council with a Policy Statement for Langara Gardens.

Public consultation for Langara Gardens planning program launched with two open houses in April 2015.

At the second set of open houses in November and December 2015 draft guiding principles and three different concept plans were presented. Public feedback was used to develop a preferred draft concept.

At the third set of open houses in June 2016, refined guiding principles, a preferred concept plan and emerging policies were presented. The feedback was used to revise and finalize the policies presented here. In addition, a Town Hall meeting was held to allow residents to share their concerns with members at City Council.

Prior to Council consideration of the Policy Statement, in March 2018 a public information session was held to present draft policy highlights and provide an opportunity to speak to the team about the project and process.



# 1.3 APPROVED COUNCIL POLICY

The following City policies establish a general framework for redevelopment that are applicable to Langara Gardens. These policies, among others, will apply at various stages during the design development process:

- CityPlan: Directions for Vancouver (1995)
- Oakridge Langara Policy Statement (1995)
- Rental Housing Stock Official Development Plan (2007)
- Rezoning Policy for Sustainable Large Developments (2010, updated 2014)
- Green Buildings Policy for Rezonings (2010, updated 2017)
- Cambie Corridor Plan (2011)
- Greenest City Action Plan (2011)
- Housing and Homelessness Strategy (2011)
- Final report from the Mayor's Task Force on Housing Affordability (2012)
- Vancouver Neighbourhood Energy Strategy and Energy Strategy Guidelines (2012)
- *Transportation 2040* (2012)
- Vancouver Public Bike Share (2013)
- Renewable City Strategy (2015)
- Vancouver Bird Strategy (2015)
- Tenant Relocation and Protection Policy (2015)
- Rainwater Management Plan and Green Infrastructure Strategy (2016)
- Healthy City Strategy Action Plan (2016)
- Zero Emissions Building Plan (2016)
- Biodiversity Strategy (2016)
- Housing Vancouver Strategy (2017)

The key policies that have informed the Policy Statement are described herein:

### **CITYPLAN**

In June 1995, City Council approved *CityPlan: Directions for Vancouver. CityPlan* provides a framework for decisions on City funding, programs and actions. It includes directions on a range of topics from transportation to arts, and from housing to community services. Through *CityPlan*, Vancouver residents and City Council agreed on these directions for the City's future:

- Strengthen neighbourhood centres
- Improve safety and better target community services
- Reduce reliance on the car
- Improve the environment
- Increase the variety and affordability of housing
- Define neighbourhood character
- Diversify parks and public places
- Involve people and redirect resources

#### OAKRIDGE LANGARA POLICY STATEMENT

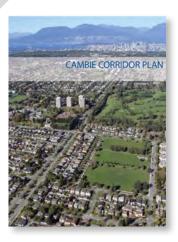
Approved by Council in 1995, the *Oakridge Langara Policy Statement\** (OLPS) provides the policy basis to evaluate rezoning applications. The following specific policies were approved for Langara Gardens:

- A mix of stacked townhouses and low-rise buildings should be encouraged to an overall site density of 0.9-1.0 FSR (gross).
- Consider accepting secured moderate rental housing (as defined by the Housing Department) as fulfillment of non-market housing requirements.
- Consider limited local convenience shopping and services along 57th Avenue.
- If an economic analysis shows that insufficient value is created to achieve both park and recreational objectives, allow for other public benefits to fulfill park and recreation requirements.
- Consider Langara Gardens as a potential site for a community facility.
- Provide street linkages and pathways through the site.
- Permitted building heights range from 9.14 m (30 ft.) to 12.19 m (40 ft.) with potential for a 20% increase in maximum height if built form analysis can demonstrate no significant negative impact on adjacent properties, and if a positive impact or additional public benefit is achieved.

#### CAMBIE CORRIDOR PLAN

Approved in 2011, the Cambie Corridor Plan is a rezoning policy for the sites adjacent to Cambie Street from 16th Avenue to Marine Drive. The plan provides directions to accommodate growth and optimize the benefits of the Canada Line as a catalyst for significant change in the area. The plan links land use, built form, transportation infrastructure, district energy systems, affordable housing and other elements of sustainability to make highly livable, resilient and prosperous communities along Cambie Street. The plan indicates that there will be site specific planning programs for major project sites, such as Langara Gardens.

Planning for Phase 3 of the Cambie Corridor Plan has been underway since May 2015 and the plan is anticipated to be presented to Council in spring 2018. The Phase 3 Plan considers appropriate transitions between mid-rise forms along the Corridor, major project sites (including Langara Gardens) and surrounding single-family houses. It also includes a Public Benefits Strategy and Public Realm Plan.



<sup>\*</sup>Note, pending approval of the Cambie Corridor Phase 3 Plan, the Oakridge Langara Policy Statement is proposed to be rescinded.

# 1.3 APPROVED COUNCIL POLICY (CONT.)

# RENTAL HOUSING STOCK OFFICIAL DEVELOPMENT PLAN

Approved in 2007, the *Rental Housing Stock Official Development Plan* (ODP) aims to protect the existing rental housing stock in specific areas of the City. The requirements in the ODP preserve rental housing by requiring one-for-one replacement in redevelopment projects. It applies to CD-1 zoned sites such as Langara Gardens.

#### TENANT RELOCATION AND PROTECTION POLICY

Updated in 2015, this Policy works in conjunction with the *Rental Housing Stock Official Development Plan* to protect the existing 'primary' rental housing stock. It is also part of the larger *Housing and Homelessness Strategy*, that addresses the housing needs of low and moderate income households.

The Tenant Relocation and Protection Policy requires that a Tenant Relocation Plan is provided when tenants in existing residential rental units are displaced or impacted as a result of redevelopment or major renovation activity.

# HOUSING VANCOUVER STRATEGY

In November 2017, Council approved the *Housing Vancouver Strategy* (2018 - 2027) and 3-Year Action Plan (2018-2020). The strategy seeks to shift the supply of new homes toward the right supply, with targets for new units along a continuum of housing types.

The Housing Vancouver targets were based on the core goals of retaining the current diversity of incomes and households in the city, shifting housing production towards rental to meet the greatest need, and coordinating action with partners to deliver housing for the lowest income households.

Overall, 72,000 new homes are targeted for the next 10 years, including 12,000 social, supportive and non-profit cooperative units and 20,000 purpose-built rental units. Nearly 50 percent of the new units will serve households earning less than \$80,000 per year, and 40 percent will be family-size units.

The redevelopment of Langara Gardens will help contribute to these housing targets. A key element of the planning program is to maintain or replace the 605 existing rental housing units on a one-for-one basis, in addition to delivering new affordable and market housing units and housing designed for families with children.

# MAYOR'S TASK FORCE ON HOUSING AFFORDABILITY

# Priority Action Plan from the Mayor's Task Force on Housing Affordability (2012)

The Task Force provided recommendations to increase the supply and diversity of housing, enhance the City's and community's capacity to deliver affordable rental and social housing, protect the existing social and affordable rental stock, to explore opportunities to renew and expand that stock, to streamline and create more certainty and clarity in the regulation process, and improve public engagement. To implement these recommendations the following items, which apply to Langara Gardens, were identified as priority actions:

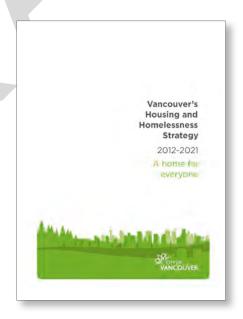
Action 5 - Revise and clarify Council's inclusionary housing policies to emphasize a flexible and creative approach to the delivery of affordable housing in large developments. The intent of the policy is to secure 20% of the units in large developments for affordable housing. When sufficient funding is not available to achieve 20%, the City will consider flexible options to create units for low to moderate income households such as innovative housing models, rental housing, etc.

**Action 10** – Enhance the City's family housing requirements to encourage more 3 bedroom units in new development. Langara Gardens will provide opportunities to deliver three-bedroom units.

#### HOUSING AND HOMELESSNESS STRATEGY

Approved in 2011, the *Housing and Homelessness Strategy 2012- 2021* provides a framework for addressing homelessness and increasing the variety of affordable housing options across the entire housing continuum to improve choice and affordability for all residents within the city. The three strategic directions are:

- Increase the supply of affordable housing.
- Encourage a housing mix across all neighbourhoods that enhance quality of life.
- Provide strong leadership and support partners to enhance housing stability.



# 1.3 APPROVED COUNCIL POLICY (CONT.)

#### TRANSPORTATION 2040 PLAN

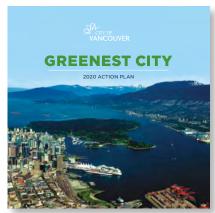
Approved in 2012, the *Transportation 2040 Plan* is a long-term strategic vision that will help guide transportation, land use decisions and public investments for the years ahead. The goals for the Transportation 2040 Plan are:

- Land Use: utilize land use to support shorter trips and sustainable transportation choices.
- Walking: make walking safe, convenient, comfortable and delightful. Ensure streets support a vibrant public life and encourage healthy lifestyles and social interaction.
- **Cycling:** make cycling safe, convenient, comfortable and fun for people of all ages and abilities.
- **Transit:** support transit improvements to increase capacity and ensure service that is fast, frequent, reliable, fully accessible and comfortable.
- Motor Vehicles: manage the road network efficiently to improve safety and support a gradual reduction in car dependence. Make it easier to drive less and accelerate the shift to low-carbon vehicles.
- Goods, Services and Emergency Response: support
   a thriving economy and Vancouver's role as a major
   port and Asia- Pacific gateway while managing related
   environmental and neighbourhood impacts. Maintain
   effective emergency response times for police, fire and
   ambulance.

• Education, Encouragement and Enforcement:
encourage sustainable transportation choices and
educate all road users to promote safe and respectful
behaviour. Support legislation and enforcement practices
that target dangerous conduct.

Transportation 2040 provides direction for the design of Langara Gardens to ensure all modes are accommodated with a particular emphasis on walking and cycling.





#### **GREENEST CITY 2020 ACTION PLAN**

The *Greenest City Action Plan*, approved in 2011, outlines actions required to achieve a healthy, prosperous and resilient city – with the ultimate goal of becoming the world's greenest city by 2020. It identifies strategies to promote green economic development, eliminate dependence on fossil fuels, promote green transportation options, utilize green building design and ensure everyone has access to nature, clean water and local food. The plan calls for compact, complete communities that promote walking and cycling, and are well-served by services, amenities and green space. Furthermore, the plan promotes the development of neighbourhood-scale low carbon energy systems, green construction and carbon-neutral buildings.

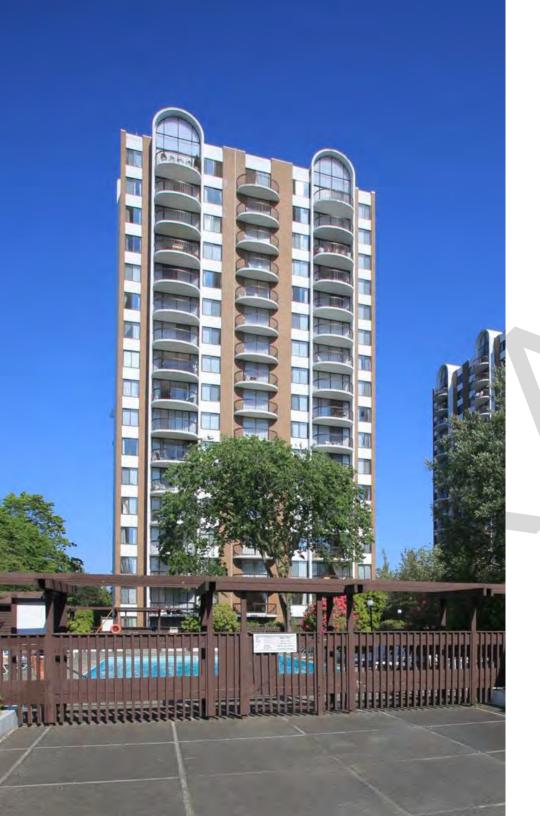
The Renewable City Strategy is a continuation of the Greenest City Action Plan and seeks to reduce energy use in Vancouver, increase the use and supply of renewable energy. A key part of the Renewable City Strategy is the Zero Emissions Building Plan, with the goal to have all new construction use only renewable energy by 2025.

As part of a key growth area in Vancouver, the Langara Gardens project provides a chance to advance sustainability and building energy efficiency. By design, Langara Gardens will be required to embody many of the goals in the Greenest City Action Plan: Climate Leadership, Green Buildings, Green Transportation, Zero Waste, Access to Nature, Lighter Footprint, Clean Air and Local Food.

# REZONING POLICY FOR SUSTAINABLE LARGE DEVELOPMENTS

The Rezoning Policy For Sustainable Large Developments, adopted in 2010 and updated in 2014, applies to sites of two acres or more and establishes polices to achieve higher sustainable development standards as an essential component in the rezoning of large development sites. Large sites are expected to be leaders and innovators and achieve higher performance standards in a number of areas. The policy requires submission of defined plans and studies to address the following objectives and indicate how the proposal is showing leadership in design:

- 1. Sustainable Site Design
- 2. Access to Nature
- 3. Sustainable Food Systems
- 4. Green Mobility
- 5. Rainwater Management
- 6. Zero Waste Planning
- 7. Affordable Housing
- 8. Low Carbon Energy Supply



# 1.4 ROLE OF THE POLICY STATEMENT

This Policy Statement establishes planning principles that will guide future redevelopment of Langara Gardens. It provides new policies regarding:

- Rental housing replacement and tenant protection (Section 3)
- Land use and density (Section 4)
- Urban design legacy and built form (Section 5)
- Parks, open spaces and public spaces (Section 6)
- Circulation and transportation (Section 7)
- Sustainability and green infrastructure (Section 8)
- Community amenities (Section 9)

Created through a comprehensive planning process, the Policy Statement provides clarity on the future of the site and guides the rezoning process. It represents the public and private interests that have been articulated in the planning process and ensures that those interests carry forward with the endorsement of City Council.

The policies in this document are intended to clearly articulate the character, scale and obligations of the Langara Gardens redevelopment, while also being flexible enough to accommodate a variety of detailed plans and design solutions to be refined and evaluated during the rezoning stage.





# 2. VISION AND GUIDING PRINCIPLES

## 2.1 VISION

The vision for Langara Gardens is to foster a strong community, which meets the City of Vancouver's objectives around environmental, economic and social sustainability.

Langara Gardens together with Pearson Dogwood are envisioned as a new mixed-use high density neighbourhood, providing region-serving health care and local-serving amenities, all close to effective transit.

Langara Gardens will continue to be primarily residential, with a mix of housing opportunities for a variety of households, ages and income levels. A key element of the planning program is to maintain or replace the 605 existing rental housing units on a one-for-one basis. A robust Tenant Relocation Plan will address the needs of existing tenants who may need to move to accommodate redevelopment, including moving assistance, appropriate alternate accommodation on site or a right to return to the site after rental replacement housing is completed. The plan also seeks to welcome a diversity of new residents to Langara Gardens.

Retail, recreation, childcare and affordable housing will be integrated into the plan, providing opportunities for the needs of society's youngest members, as well as its oldest residents. Social wellbeing and a sense of community will continue to inform the design of spaces that promote interaction between residents. Langara Gardens should achieve high levels of quality in the design of buildings and of the public realm.

The garden-like setting is recognized as a defining feature of the site. New housing will be focused around green courtyards, significant existing trees, and integrated parks and open spaces that build on this green legacy.

Langara Gardens should promote efficient use of natural resources in its use of land, in its building practices and its energy consumption. It should utilize innovative approaches to stormwater management that restore natural systems.

The vision is for a healthy community that promotes walking, cycling and use of transit as efficient and attractive choices.

# 2.2 GUIDING PRINCIPLES

The following principles will guide future development of Langara Gardens. They build on ideas gathered through community consultation and reflect the goals of the City and landowner. These high-level principles summarize and integrate the more detailed policies in sections to follow.

#### RESPECT RESIDENTS

Ensure that the existing Langara Gardens residents are involved in the creation of a new vision for the site and utilize best practices to develop a 'Tenant Relocation Plan' for those who may be displaced when the site is redeveloped. The Tenant Relocation Plan will include, at a minimum, clear timelines, individualized attention, assistance in finding comparable replacement housing and reimbursement for moving costs/financial compensation for relocation.

### **MEMORY AND CHARACTER**

Design the site to respect the garden-like character by integrating significant mature trees and greenspace. Support the existing community by maintaining important gathering spaces and providing new community amenities. Reflect the site's history through site planning, public realm elements and public art.

#### **COMPLETE COMMUNITY**

Ensure that Langara Gardens, in combination with Pearson Dogwood across 57th Avenue, will provide a variety of opportunities for people to live, work, shop, and play. The new community will be well served by local shops, services and amenities.

#### **DIVERSITY OF HOUSING**

Increase the range of housing types and tenures at Langara Gardens while maintaining or replacing the 605 existing rental housing units on a one-for-one basis. 20% of the new units will be affordable housing integrated throughout the site, of which a minimum of 50% will be suitable for families with children.

## **COMMUNITY CONNECTIONS**

Provide new streets, and walking and cycling paths to integrate Langara Gardens with the Pearson Dogwood site and the surrounding community. Site design should provide for the integration of various transportation modes (e.g. walking and cycling) while providing direct connections to the future potential Canada Line station at 57th Avenue.

# SUSTAINABLE SYSTEMS AND ENVIRONMENTAL PERFORMANCE

Achieve an exceptional standard of sustainability through site design, architecture, energy supply systems, water use and rainwater management, as well as urban food and waste systems. Integrate visible rainwater management strategies focused on water quality protection and rainwater detention. Large sites such as Langara Gardens are fundamental to support the city's goals of achieving low carbon energy buildings.



angara Gardens residents



Langara Gardens, garden-like character, photo by James Cheng



Arbutus housing



# 3. LANGARA GARDENS RESIDENTS

## **3.1 BACKGROUND**

Designed in 1968, Langara Gardens is Vancouver's largest purpose built rental housing community. The original design included a variety of housing forms including ground-oriented garden apartments and townhouses, and three high-rise residential towers. A fourth tower was added in 1985, bringing the total unit count to 605. Today, approximately 1,400 residents call Langara Gardens home.

In choosing Langara Gardens as their home, residents value the garden setting, mature landscaping and trees, resort-like amenities and social spaces, and central location. These valued assets were used to establish the guiding principles and create the planning foundation for the future of the site as described in the following sections.

#### **RENTAL HOUSING**

The City of Vancouver's rental housing stock is protected by the *Rental Housing Stock Official Development Plan (ODP)*, in districts where there is significant stock of rental housing, including CD-1 zoned areas.

The Rental Housing Stock ODP protects or requires replacement of rental housing units on a one-for-one basis. With rezonings, Council has sought to replace specific unit types with similar unit types to ensure that a diversity in housing supply is maintained, and to continue to help meet the needs of renter households with children. This policy statement similarly seeks to replace rental units by type (e.g. two bedroom unit with a two bedroom unit).

The City also requires, through the *Tenant Protection* and *Relocation Guidelines* that for sites protected by the *Rental Housing Stock ODP* that the developer must provide assistance in finding suitable alternative accommodations to those affected by redevelopment. The City currently requires the provision of free rent and/or financial compensation (the amount depending on length of tenancy), assistance finding suitable alternative accommodation during redevelopment, and secures a right of first refusal to the replacement units at rents affordable to the existing tenants, as well as requiring financial support for moving expenses.

# 3.1 BACKGROUND (CONT.)

#### **TENANT RELOCATION**

Throughout the policy planning process, including the Town Hall meeting, Langara Gardens residents have emphasized the need for clear and on-going communication regarding their concerns about the timing of redevelopment, temporary and long-term relocation, financial compensation measures, and opportunity to return to the site. Many residents also expressed a desire to have input into the terms of the Tenant Relocation Plan, as well as personal assistance to support them through the transition.

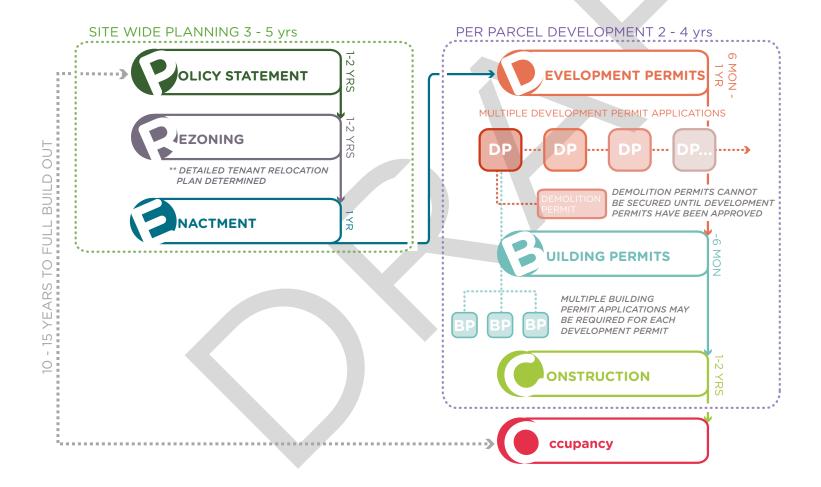
Ensuring that the Langara Gardens residents are supported through the redevelopment of the site is a primary concern for the City and the landowner. Unlike many other redevelopment sites, Langara Gardens is unique in that the development will be phased over many years, which enables existing residents to stay in the neighbourhood. In addition, a robust Tenant Relocation Plan that exceeds the City's minimum requirements will be developed, in consultation with the residents, as part of the rezoning process.



#### TIMEFRAMES AND CITY PROCESSES

The diagram below outlines the general stages in the planning process. The Policy Statement is the first stage, which sets out the general planning principles for the site and guides the subsequent rezoning application. At the time of rezoning a detailed tenant relocation plan will be established in consultation with existing residents.

Once the site has been rezoned, the applicant may apply for development permits for individual parcels of land. As and when development permits are approved, and subject to demolition and building permits, construction may commence. Overall, it is anticipated that the complete process (from planning through to full build out) may take approximately 10-15 years.



# 3.2 POLICIES

#### 3.2.1 RENTAL HOUSING REPLACEMENT

- All 605 existing rental units are protected and must be maintained or replaced on a one-for-one basis (e.g., two-bedroom with a two-bedroom unit).
- All replacement rental housing units will be secured for a term of 60 years or life of the building, whichever is greater, through legal agreements or other legal mechanisms.
- As rental replacement is required under existing zoning, any financial pro forma evaluations will need to reflect the rental replacement requirement when establishing the value of the land under existing zoning for the purposes of identifying the land lift, or increase in land value, that may occur upon rezoning.

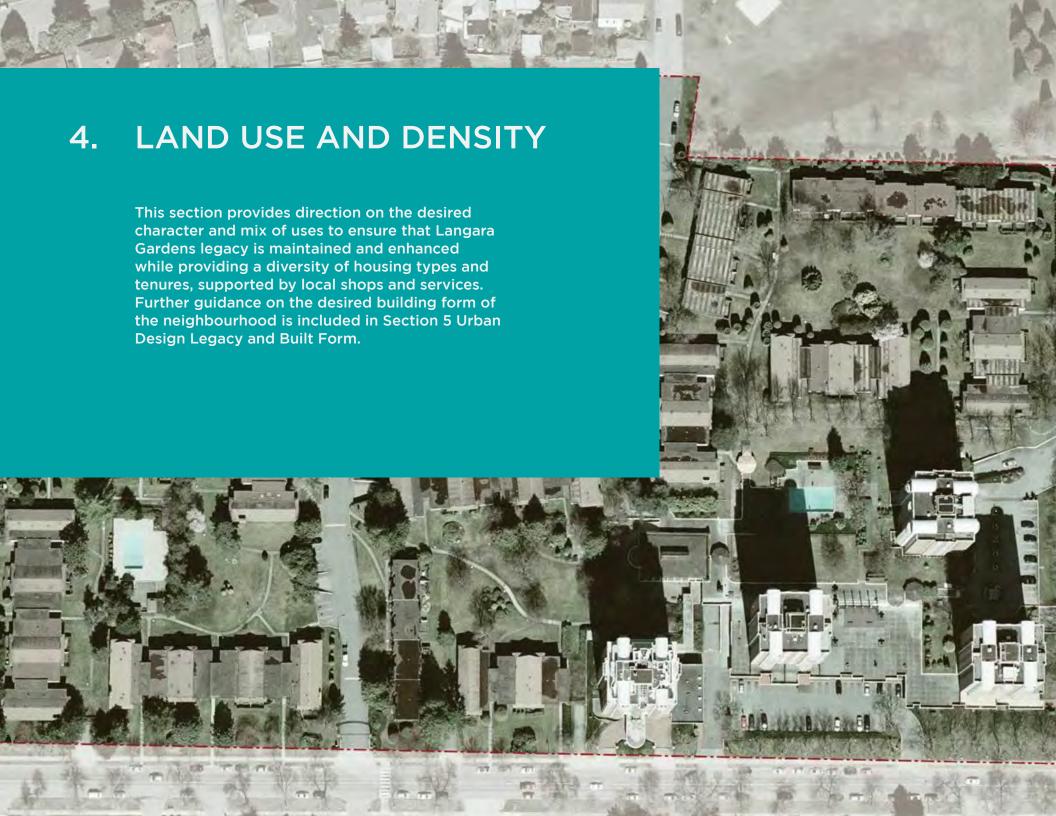
#### 3.2.2 TENANT RELOCATION PLAN

- At rezoning, establish a robust Tenant Relocation Plan (TRP), at the cost of the developer, that meets the requirements of the City's *Tenant Relocation and Protection Policy*. The current requirements include free rent based on length of tenancy, financial assistance for moving costs, assistance finding alternative housing options within the neighbourhood, and right-of-first refusal for returning tenants at discounted rents.
- The TRP should be based on best practices, established in consultation with the Langara Gardens residents, and should at a minimum:
  - enable existing residents to stay in the neighbourhood,
  - establish clear process and decision making timelines,
  - minimize the number of times households are required to move,
  - provide a framework for a smooth transition for those residents who live in buildings that will be redeveloped, and
  - during redevelopment any interim accommodations should be comparable in unit type and suitable to the tenants household's needs, unless otherwise agreed to by the tenant. Where possible, options should be tailored to the tenant (e.g. pet friendly, mobility considerations, smoke-free, etc.).

## 3.2.2 TENANT RELOCATION PLAN (CONT.)

- To supplement the TRP requirements:
  - offer the right-of-first refusal to allow tenants who are displaced by redevelopment to return to replacement units at their existing rental rate (plus inflation as allowed under the RTA).
  - provide additional moving expenses for returning tenants, if a second move is required,
  - secure additional support for vulnerable tenants (e.g. seniors, persons with disabilities, tenants with low incomes, mental health issues, etc) by hiring a relocation specialist or partnering with health organizations or other approaches as agreed by the City.
- The City's Tenant Relocation & Protection Policy typically applies to households occupying the buildings one-year or more prior to rezoning application. Because redevelopment of Langara Gardens will be phased over several years, the TRP will apply to residents who have lived at Langara Gardens for one-year or more, and who are occupying buildings at the time of Development Permit application for the phase or development in which they live. Approaches that accommodate the early relocation of tenants from multiple phases will be considered, if agreed by all parties, as part of TRP developed at rezoning.

- The City also recognizes that the long development timeframe creates impacts for tenants currently living at Langara Gardens. Approaches that accommodate the early relocation of tenants (prior to DP application) will be considered as part of the TRP, limited to assistance finding alternative accommodation off-site, free rent based on tenancy, and one-time moving fees.
- The TRP will be developed in conjunction with a phasing plan that balances delivery of public amenities (parks, childcare and affordable housing) with an objective of providing temporary accommodation for current tenants, on-site, as much as possible, to keep residents in the neighbourhood.



# 4. LAND USE AND DENSITY

## 4.1 BACKGROUND

Nearly 50 years after Langara Gardens was designed and built, it continues to be the largest purpose built rental housing development in the City's history. The original vision of the architect was to provide high density living with supporting amenities in a suburban setting. Today, the site is primarily residential supported by three outdoor pools, an indoor pool, fitness centre, social lounge, and approximately 22,000 square feet of retail shops located at the corner of 57th Avenue and Cambie Street.

The Oakridge Langara Policy Statement (OLPS) supported infill and replacement of existing units to increase the overall site density of 0.9-1.0 FSR (gross) to be established through a comprehensive planning process. The OLPS also supported a modest increase in local serving retail and increased amenities such as parks to serve the new population. Through the current planning process, site densities beyond 1.0 FSR (gross) were explored to deliver on Council objectives related to sustainability, affordability and livability while respecting the existing and planned local context.

### MIX OF USES

Langara Gardens will continue to be a predominately residential neighbourhood containing a range of housing types, building forms, and unit sizes with a portion targeted to families with children, and including rental, affordable and market housing. As required by the City's Rental Housing Stock ODP, all of the existing 605 rental units will be maintained or replaced. Consistent with the Rezoning Policy for Sustainable Large Developments, 20% of the net new residential units (equivalent to 20% of the new residential floor area) will be affordable housing.

Improvements to the existing retail and parking area are envisioned to modernize the shops, improve visibility and pedestrian access, and animate the area. The redesigned retail area, may result in a modest increase (of approximately 5,000 sq. ft.) in retail and commercial floor area. A diversity of local-serving retail and commercial tenants, complementing development across 57th Avenue is encouraged.

A new 69-space childcare centre will be provided to address the childcare need generated by the Langara Gardens redevelopment, and the shortfall in the surrounding area. A 69-space childcare facility consisting of approximately 790 square metres (8,500 sq. ft.) indoor space, and 745 square metres (8,000 sq.ft.) outdoor space is identified on the plan.

# 4.2 POLICIES

#### **4.2.1 DENSITY**

A gross floor area of 236,000 square metres (2,540,000 sq. ft.) is proposed. The floor space ratio or FSR (a measure of density) is approximately 2.80 over the entire site, including the existing towers.

\*The gross floor area includes all above grade interior floor spaces for all uses including the residential, replacement rental, affordable housing, commercial, amenity spaces and all typical floor area exclusions such as storage areas, enclosed balconies, etc. The City's childcare centre may be considered for a floor area exclusion subject to analysis at the rezoning phase. The density is calculated over the full site area of 20.8 acres including the park expansion and circulation network.

#### 4.2.2 AFFORDABLE HOUSING

- A minimum of 20% of housing units (approximately 20% of the net new residential floor area) are required to be affordable housing units, prioritizing housing that meets the City's definition of social housing targeted towards low- to moderate-income households.
- A minimum of 50% of the affordable housing units will be for families with children, including two and three bedroom units.

### 4.2.3 FAMILY HOUSING

- A minimum of 67% of the 270 garden apartment and townhouse replacement units will be designed for families with children, comprised of at least 152 twobedroom units and 30 three-bedroom units.
- A minimum of 50% of the new affordable housing units will be for families with children, including two and three bedroom units.
- A minimum of 35% of the new market units will have two and three bedrooms, comprised of at least 10% three bedroom units.
- Design of family units will be in accordance with the *High-Density Housing for Families with Children Guidelines.*



Existing garden flats and townhouse units, photo by James Cheng

## 4.2.4 LOCAL-SERVING RETAIL

- Provide approximately 25,000 sq. ft. of local serving retail, including improvements to the existing retail space, exact floor area to be confirmed at rezoning.
- The majority of the floorspace should be local-serving convenience retail and commercial such as a cafe/ restaurant, deli, bakery, neighbourhood grocery store, professional offices and/or community bank.
- Create an inviting pedestrian-focused retail experience that compliments retail proposed on the Pearson Dogwood site, and the potential future Canada Line Station at 57th Avenue.



Tavern on the Green New York

#### 4.2.5 CHILDCARE

- Provide a dedicated, fully-finished and equipped 69-space childcare centre that serves infants, toddlers and 3-5 year olds, designed in accordance with the Childcare Design Guidelines and Childcare Technical Guidelines, which includes considerations of sunlight access, contiguous indoor/outdoor space, and adequate space allotments.
- At rezoning, using best practices, confirm the location of the childcare centre, taking into account accessibility to transit and bike connections, provision of vehicle dropoff, proximity to high-volume arterials, solar performance on outdoor spaces, adjacencies, and co-location with affordable housing buildings.
- At rezoning, identify opportunities to deliver units designed for licensed family childcare, within affordable housing buildings that are designed for families.



# 5. URBAN DESIGN LEGACY & BUILT FORM

## **5.1 BACKGROUND**

Langara Gardens is a large site located within the Langara neighbourhood of the Cambie Corridor. Supported by City policies, this area will experience considerable growth over the next 30 years, including several large scale developments providing a range of community amenities. Located on both a major arterial and the Canada Line, Langara Gardens is anticipated to deliver important amenities, including affordable housing, and also meet Council's objectives with respect to the Rezoning Policy for Sustainable Large Developments and the Green Buildings Policy for Rezonings.

Through a comprehensive site analysis and planning process for Langara Gardens, a conceptual plan was created which builds on the site's urban design legacy and contains a variety of building types and heights ranging from 3 to 28-storeys. This plan is an effort to balance key objectives around protection and replacement of rental units, provision of community amenities including affordable housing, creating appropriate scale and form of development, and reflecting the existing garden character of the site. A key factor in establishing height and building form is the relationship to the high-density Pearson Dogwood redevelopment to the south, and the changing context of the low-density residential neighbourhood to the north.

Fundamental to the concept plan, is respecting the unique characteristics of the site and its urban design legacy.



Residences on Georgia, James K.M. Cheng Architects and PFS Studio

# 5.1 BACKGROUND (CONT.)

#### LEGACY

Respecting the unique characteristics of Langara Gardens - it's mature gardens and significant trees, resort-like amenities, ground-oriented units, central courtyards, incidental building geometries, linear buildings, and mix of uses - led to the development of the legacy concept plan. The concept retains the pattern of the two existing streets, organizes linear buildings loosely around central courtyards, incorpoates the four existing rental towers, enables low site coverage by allowing taller buildings and improves local retail. Public spaces and pathways are located to enable retention of significant trees or groups of trees.



#### PERMEABILITY AND LIVABILITY

Langara Gardens is designed to be a highly permeable plan that invites people into and through the site, connects to the surrounding neighbourhood and provides easy access to amenities and public transportation. In addition to new public streets, the site will be designed to provide multiple public pathways for pedestrians and cyclists. Ample courtyards and open spaces, will continue to provide a garden backdrop for ground-oriented units and visual amenity for tower residents to enhance livability.

#### **BUILDING HEIGHT AND FORM**

Together Langara Gardens and Pearson Dogwood are intended to become a high-density mixed-use new node along the Canada Line. Langara Gardens will be primarily residential with a range of building types, with heights ranging from 3 to 28 storeys. The neighbourhood to the north of Langara Gardens has been identified for change as part of the Cambie Corridor Phase 3 planning process. In anticipation of future townhouses on 54th Avenue, a transitional edge of 6 storeys is proposed. The tallest buildings are located along Cambie Street and near the centre of the site, to minimize shadowing on the park and impacts on lower density development. Terraced mid-rise buildings step from 4 to 14 storeys to create roof top garden space and building height transitions. Low-rise townhouses line internal mews to create a sense of openess and an intimate scale for pedestrians.

### **VIEWS AND SOLAR ACCESS**

An important aspect of the legacy concept is retaining both garden level views between buildings to create an overall sense of green gardens, and sky views between the buildings to allow for access to sunlight. It is also desirable to locate buildings to benefit from long distance views of the North Shore Mountains and the Fraser River delta.

Access to sunlight is a fundamental principle which will guide the design of Langara Gardens. Optimizing sunlight, particularly on the park and public open space identified in Section 6, should be a key consideration in the placement of building forms at rezoning. Efforts will be made to minimize shadows on public parks.

The key times of year assessed for sunlight on public spaces are at the equinox (March and September 21) at 10 am, noon, 2 pm and 4 pm. This time of year is most important as it is both the growing season and when most people spend more time outside.

#### ANIMATION AND VARIATION IN DESIGN

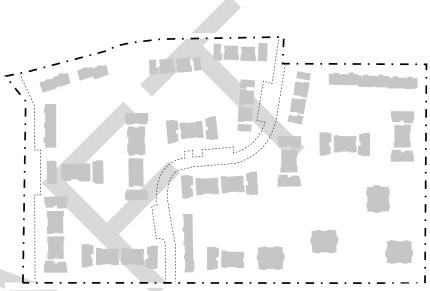
Langara Gardens will be inviting, enticing and attractive. The architecture will be characterized by variation in design and scale to create interest. Off-grid angles will reflect the site's legacy; these angles and building placement will help preserve the mature trees which characterize the site. The site edges will respond differently to the varying adjacencies particularly low-density housing to the north, and a new high-density neighbourhood to the south.

Public spaces will be designed to be high quality spaces that encourage social interaction. This can be done through architecture, landscape design, placement of active uses on public spaces, and programming. Special attention will focus on improving the retail at the corner of Cambie Street and 57th Avenue.

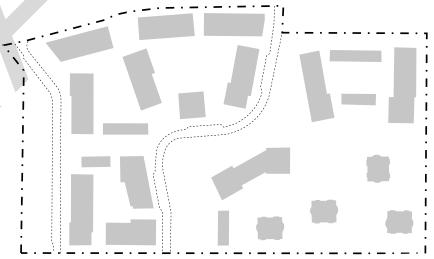
# **5.2 POLICIES**

### **5.2.1 URBAN DESIGN LEGACY**

- Reflect the ordering principles and characteristics of the existing development in the organization and design of new buildings:
  - **Courtyards:** Cluster buildings to loosely shape generous courtyards with open and inviting permeable corners.
  - Garden setting: Locate and design buildings to enhance the garden setting, including townhouses and low-rise buildings to complement the scale and engage the gardens and trees. Pools and water should be key amenities in the gardens.
  - Incidental geometries: Include minor deflections and off-grid alignments in key places responding to the subtle geometries of Ash Crescent.



existing building footprints



proposed building footprints

## **5.2.2 CHARACTER & MEMORY**

- Retain significant trees and provide varied and generous open spaces to preserve the garden-like character of the site. Organize buildings, public open spaces, roads and public paths around trees and open spaces to optimize growing conditions and opportunities for rainwater infiltration/retention.
- Planting patterns and species selection should consider ecological enhancements with regard to restoring natural processes, water and habitat.
- Priority trees and tree groupings include:
  - 1 Giant sequoia Ash Crescent / Central open space
  - 2 Pin Oak East/west pathway
  - 3 Red Oak Linear Park
  - 4 Deodora unique tree
  - 5 London Plane City trees located at Cambie and 57th
  - Other high quality species or groups identified through rezoning process.
- Consider incorporating outdoor swimming pools to preserve the social experience of Langara Gardens.
- Reflect First Nations history of the site in public art, landscape and public realm plans, where appropriate.



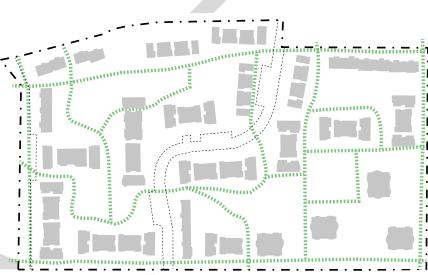
existing trees



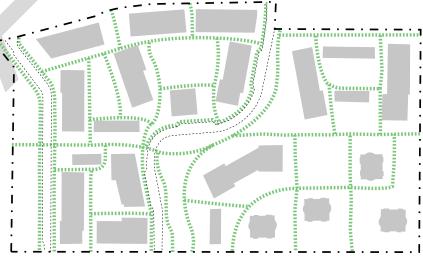
proposed trees

#### 5.2.3 PERMEABILITY AND LIVABILITY

- Ensure that courtyard configurations and widths provide access to sunlight and daylight, and amenable outlooks for residents.
- Design courtyards to be highly-useable and contribute to a sense of community through inclusion of entrances and patios for ground floor units. Consider designing courtyards to be suitable for families with children by providing areas for play near synergistic activities like garden plots.
- Design the lower floors of buildings with front doors, patios, and balconies to create a more human-scale experience for residents and people walking or cycling in the public realm.
- Ensure that building floorplates support highly livable dwellings in terms of depth, outlook and daylight access.
- Support the intended permeability of the plan with building form and massing that clearly signals public access where appropriate, as determined through the rezoning.



existing pedestrian movement



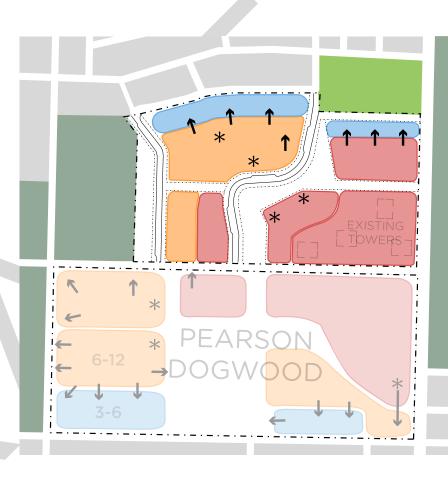
proposed pedestrian movement

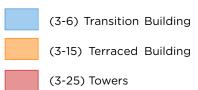
# 5.2.4 OPPORTUNITIES FOR HEIGHT

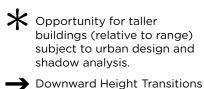
Two taller buildings, up to a maximum of 26 and 28 storeys (approximately 265 ft. and 285 ft. respectively), located toward the corner of Cambie Street and 57th Avenue may be permitted. Placement of the taller buildings is subject to urban design performance, including minimizing shadowing of the parks, public spaces and existing development. All taller buildings should demonstrate exceptional design.

# **5.2.5 TRANSITIONAL EDGES**

- Provide a respectful transition to the low density residential neighbourhood north of the Langara Gardens site by:
  - Limiting building heights to 3 to 6 storeys along the northern edge of the site; and
  - Stepping back upper levels to prevent shadowing on neighbouring properties.

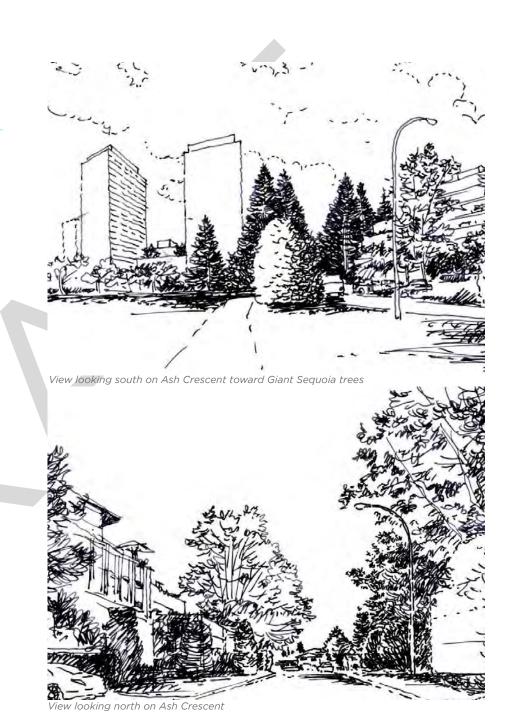






#### **5.2.6 VIEWS**

- Ensure that buildings are carefully located and designed to allow for an overall sense of green garden level views and sky views between buildings.
- Establish a physical connection and sequence of views between Cambie Park and the new park on the Pearson Dogwood site.
- Prepare a detailed view analysis as part of the rezoning process.



## 5.2.7 BUILDING VARIETY AND DESIGN

- Buildings are to be varied in scale and length, with a mix of types including townhouses, terraced buildings and residential towers.
- Long frontages (e.g. 200 ft.) should be avoided or expressed as a series of distinct buildings or building forms with significant articulation. Where a longer building form is proposed, it should demonstrate exceptional architecture.
- To create an expressive and varied skyline, provide a notable tower height differential between adjacent towers.
- Provide 2 to 4 storey ground-oriented buildings along the east-west connection and in other locations to enhance the scale of intimate spaces and create variety of housing types.
- Upper levels of buildings should be terraced and stepped back to create interest, improve access to light and views, create outdoor opportunities and reduce apparent bulk.
- Mid-rise and terraced buildings provide an opportunity for landscaped roofs, views, amenity spaces and rooftop play areas for children.
- Mid-rise and terraced buildings, where combined with a tower element (+ 14 floors), should generally be 4 to 6 floors and not exceed 8 floors.
- The floorplate of buildings with tower elements (above the 8th floor) should not exceed 604 square metres (6,500 sq. ft.) gross.

## 5.2.8 RETAIL EXPERIENCE

- Make improvements to the existing retail frontages to increase visibility and enhance the retail experience.
   Potential improvements may include extending the retail face toward the streets and dropping the level grade of the multi-use parking area to be level with the retail floor to enhance visibility and accessibility.
- Renovate the retail spaces to modernize the visual character and appeal of shops, and to improve relationship to the adjacent public spaces. As part of the renovation ensure structural performance of the existing portico.
- Provide patios and other social spaces, to encourage gathering and to animate the corner of 57th Avenue and Cambie Street.
- Consider inclusion of a smaller, stand-alone structure in the multi-purpose parking lot area to add interest and character.
- Establish a new connection from the retail level to the upper podium open space level to allow for enhanced pedestrian movement and greater connectivity.
- Submit a conceptual lighting strategy to enhance the retail area, at the time of rezoning.

#### **5.2.9 SOLAR ACCESS**

- Maximizing solar access on public spaces and neighbouring residences should guide the form, height and placement of buildings, with emphasis on:
  - Public parks
  - Public open spaces
  - Retail frontages with seating in the public realm
  - Urban agriculture
  - Outdoor pools
  - Neighbouring development
- Locate taller buildings to limit the extent of shadow on Cambie Park to no more than approximately 12% of the total park area measured on March 21st and September 21st, from 10:00am to 4:00pm.
- Emphasize general north-south building orientation for taller buildings to optimize solar access to public spaces, courtyards and residential units.

# **5.2.10 PARK FRONTAGES**

- Design buildings to frame and activate the edges of parks and public open space with front doors and active public spaces.
- Set-back townhouses and low-rise buildings to ensure they do not shadow Cambie Park.
- Ensure an active public edge to all park spaces with a road or secured public pathway on private property.

# **5.2.11 HOUSING MIX AND AFFORDABILITY**

- Integrate affordable housing and rental housing buildings throughout the site, with units in a variety of building types and sizes.
- Explore opportunities to increase affordability through the construction of wood-frame buildings of 6 storeys and less.
- Market housing should include opportunities for lock-off units, as well as units with modest finishes, to improve the variety of unit types, price points and tenure, and provide additional ways to achieve affordability in market housing.
- Explore opportunities to include passive house or other highly efficient building envelope systems, particularly for affordable housing or rental buildings.
- Provide ground-oriented housing by including front doors and private patio spaces to enhance the garden character at the ground level of low- and mid-rise buildings.
- At rezoning, identify opportunities to deliver units designed for family childcare, within affordable housing buildings that are designed for families.



Illustrative development concept, James K.M. Cheng Architects



# 6. PARKS, OPEN SPACES AND PUBLIC PLACES

# **6.1 BACKGROUND**

The original vision for Langara Gardens was to create a rich garden setting for residents in an urban environment, served by resort-like amenities including pathways, open spaces, lush landscaping and outdoor pools. As part of the original development, 2.3 acre Cambie Park and 5.0 acre Churchill track were subdivided and dedicated to the City and School Board.

The surrounding area benefits from a variety of parks and green spaces including Cambie Park, a future park on the Pearson Dogwood site, Langara Golf Course and walking trail, and several school sports fields. Redevelopment of Langara Gardens will create considerable demand for both park space and public open areas that can accommodate a variety of active and passive uses.

Preserving the garden character, while creating an open and inviting network of public parks, open spaces and public places has been a primary consideration in the planning process.



# 6.1 BACKGROUND (CONT.)

#### **NEW PARKS AND OPEN SPACES**

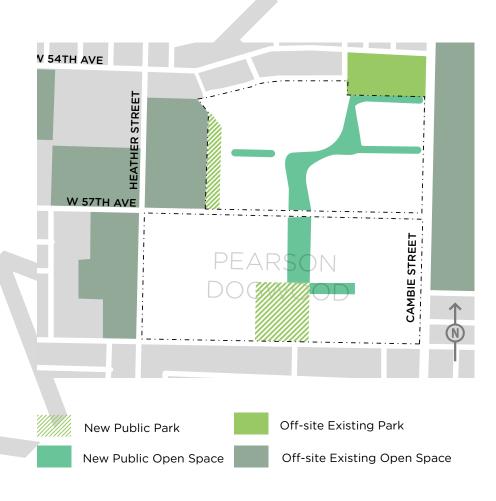
Langara Gardens will feature a connected network of new parks and public open spaces.

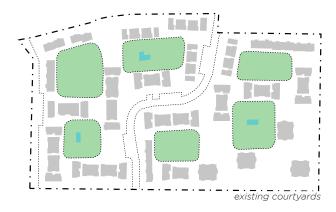
A significant north-south central public open space connects Cambie Park to the new park proposed on the Pearson Dogwood site, allowing pedestrians and cyclists to move easily between the sites. Cambie Park is proposed to be upgraded as part of the Langara Gardens redevelopment.

A new dedicated linear public park fronted by Neal Street will be provided adjacent to Churchill track. The development plan illustrates a 1.0 acre linear park that can be programmed for a variety of locally-serving active and recreational uses. The park will be designed to provide a grade transition from the running track to Neal Street and to the adjacent residential buildings. The park design will seek to maximize useable park.

A well proportioned pedestrian and cyclist pathway will connect east-west through the site, inviting the public to move across the site and between parks. This network of parks and public open spaces will enhance and reinforce ecological connections in the neighbourhood and to nearby Langara Golf Course.

Together, the parks, open spaces and public places will create unique destinations for residents and visitors to gather within Langara Gardens.

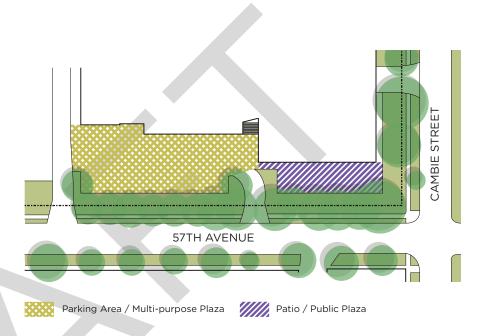






**COURTYARDS** 

A key element of the plan is to cluster buildings around courtyards. The courtyards will be semi-private open spaces that contribute a green outlook to the public realm. They will also contribute to the permeability of the plan and the garden-like setting, referencing back to the courtyards in the original design.



## **MULTI-PURPOSE PLAZA**

The existing retail and associated surface parking area will be upgraded and redesigned to create a high-quality and inviting public place to welcome people into the site and to support local-serving shops and services.

The parking area will be improved while also allowing multipurpose uses to extend across the retail frontages at the southeast corner of the site. The space will be framed by the existing London Plane trees, and enhanced by generous sidewalks, cafe seating, places for people to gather, weather protection, public bike share stations and other quality public realm treatments (street furniture, pedestrian lighting, etc.). It will become a signature public space supporting the redevelopment.

# 6.2.1 LEGIBILITY AND ANIMATION OF PUBLIC OPEN SPACES

- Create parks and public open spaces that are truly public, active, safe and welcoming through careful consideration of these spaces, the activities they foster, and relationships to the surrounding buildings, site circulation network and grades.
- Enliven streets, pedestrian mews, park and open space with frequent front doors and overlook from dwellings and community amenities.
- Create a comfortable relationship between public and private outdoor space through changes in elevation, building setbacks and stormwater features to define spaces and transitions.
- Line the retail plaza with pedestrian-scaled shops, café windows and entries, outdoor seating and displays.
   Consider additional social, retail or cultural uses to animate the plaza.



Athletes Village, London, UK, Patel Taylor Architects



Langara Gardens, significant grouping of Pin Oak trees, 2015

#### 6.2.2 CITY PARKS

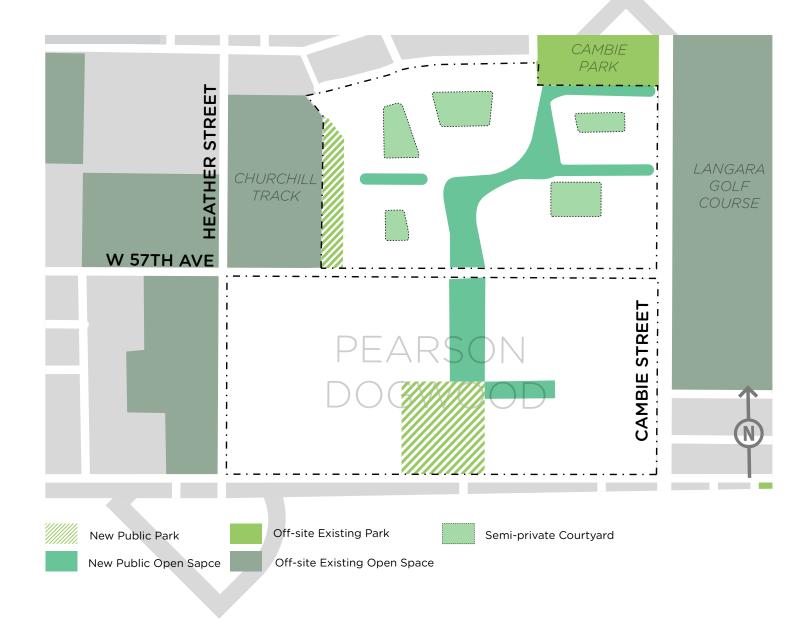
- The program and design of the parks will be determined through Park Board led public consultation at the time of development.
- The design of the parks and open spaces should reinforce the City's larger ecological network and create opportunities to enhance biodiversity.
- Ensure buildings adjacent to parks are set-back to avoid shadowing.

#### **New Linear Park**

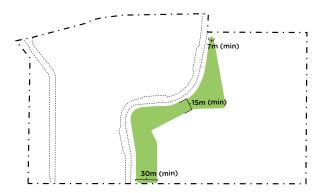
- Adjacent to Churchill track, provide a minimum of 1.0 acres of park dedicated to the City, exclusive of sidewalks and other transportation infrastructure required for Neal Street.
- Configure the park with sufficient width (minimum 25 m) to provide a grade transition from the track elevation to Neal Street and to accommodate desired program elements. Include active programming such as outdoor fitness equipment, play elements and a multiuse sports court, and facilities such as a washroom.
- Provide a pedestrian connection between the new linear park and Churchill track.
- Incorporate significant existing trees, including the grouping of Red Oak trees, into the design of the park, where appropriate.
- The park should be highly visible, bordered by public streets, mews and/or public walkways.

#### Cambie Park

- Provide improvements to Cambie Park, such as a playground, walking loop, lighting and seating. To be determined through the Park Board led process.
- Adjust the boundaries of Cambie Park along the western edge by approximately 7.3 m to accommodate a 20 m Ash Crescent street right-ofway by shifting the southern boundary to ensure no net loss of park space.
- Provide a multi-use pathway (minimum 2.4 m wide)
   on private property, secured through statutory rights of-way, along the southern boundary of Cambie Park
   adjacent to residential development. The pathway
   should be designed with high quality lighting and
   materials, and provide seating opportunities.

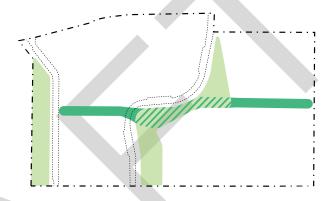


#### 6.2.3 OPEN SPACES



## **Central Open Space**

- Provide a substantial public open space connection following the curvature of Ash Crescent, secured by statutory rights-of-way to the City, linking Cambie Park to the new Pearson Dogwood park.
- Within the open space provide a multi-use pathway (minimum 4 m wide) to accommodate both pedestrians and cyclists.
- The central open space should be at least 1.5 acres. The dimensions may be variable, achieving at least 30 m at 57th Avenue, 7 m at the north end and 15 m elsewhere (measured from the Ash Crescent property line). See diagram above.
- Design of the central open space should seek to enhance vistas through the site, provide areas for seating and other passive and active recreation uses. The open space should functionally contribute to a site-wide rainwater management plan.



## **East-West Pathway**

- Provide an east-west pathway and public open space connection, secured by statutory rights-of-way to the City, between Cambie Street and Neal Street through the central section of the site linking new public parks and open spaces, and weaving through clusters and alignments of significant trees.
- The open space connection should be direct and highly public, with buildings oriented onto the open space, rich landscaping and a comfortable walking surface.
- The connection should be at least 15 m wide, with a minimum 4 m pathway. The exact route and detailed design to be determined through rezoning.
- Generally the pathway should align with existing trees that have been identified as priority trees including the row of Pin Oak trees near Cambie, the Giant Sequoias in the centre of the site, and the Deodora Cedar tree near Neal Street.

## **Green Edges**

- In keeping with the legacy of the site, significant building setbacks of at least 6 m should be provided along Cambie Street and 57th Avenue residential street frontages.
   Where possible, setbacks and street boulevards should contribute to a site-wide rainwater management plan.
- While these green spaces function as a visual and environmental amenity, new buildings should work to animate these spaces. Refer to illustrated street cross sections in Section 7.

## 6.2.4 SUSTAINABLE PUBLIC PLACES

- Create public spaces that advance and support Greenest City objectives through rainwater management, sustainable food systems and urban agriculture, green mobility, access to nature and habitat considerations.
- To achieve urban food objectives as outlined in the Rezoning Policy for Sustainable Large Developments, consider accommodating, on private land, community gardens adjacent or within the central open space.



Langara Gardens, existing edge condition along 57th Avenue



Langara Gardens, existing edge condition along Cambie Street

## 6.2.5 RETAIL PLAZA

- Upgrade the existing surface parking lot to create a highquality multi-purpose space that can be used for special events and public gatherings such as farmers markets, in addition to vehicle parking.
- The design of the retail plaza should incorporate the existing London Plane trees.
- Use high-quality materials and incorporate seating, lighting, weather protection and landscaping in the redesign of the space.
- Explore opportunities for rainwater management and green infrastructure, within the parking lot / plaza area.
- Ensure a cohesive relationship with patios and other social spaces, provided at the corner of 57th Avenue and Cambie Street.
- Consider measures to reduce the amount of vehicles moving through the plaza and measures to reduce vehicle conflict on 57th Avenue.



Langara Gardens, existing retail condition



Trout Lake Market, photo by Christoper Porter CC BY 2.0



# 7. CIRCULATION AND TRANSPORTATION

# 7.1 BACKGROUND

Green mobility is central to the City of Vancouver's transportation priorities, with an emphasis on people walking, cycling and taking transit. The future of Langara Gardens will reflect these priorities while also minimizing traffic impacts on the surrounding community. The transportation strategy recognizes that accessibility, servicing, delivery and emergency access are necessary.

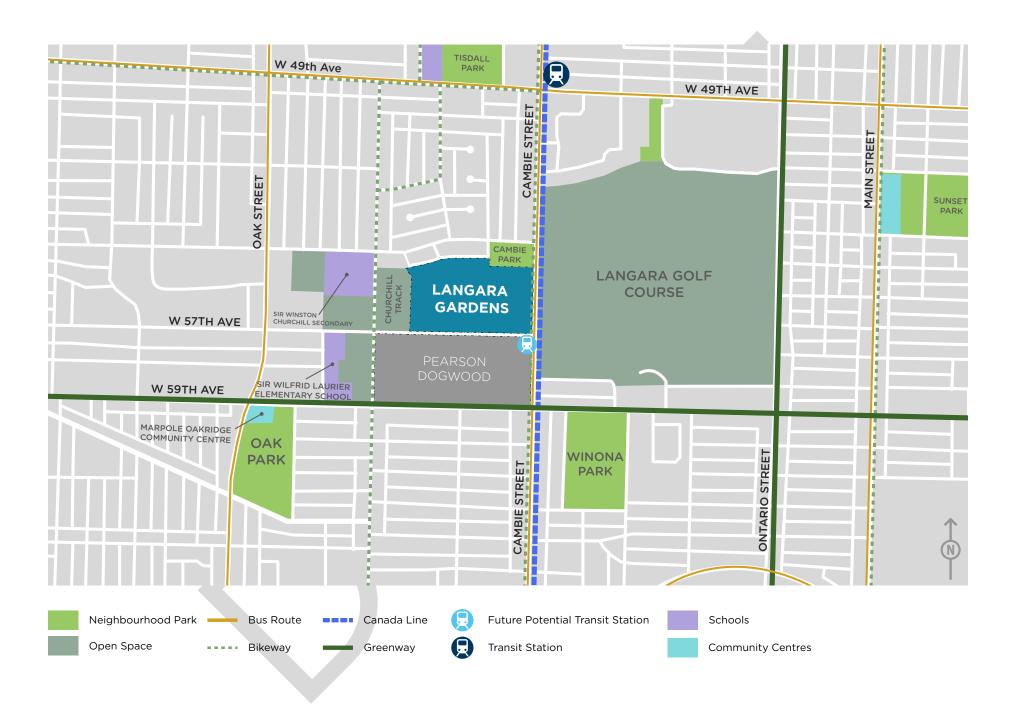
## **CONTEXT**

Langara Gardens is located adjacent to two arterial streets, Cambie Street, a regional arterial street on TransLink's major road network, and West 57th Avenue, a city collector road. The site is bordered by an existing laneway to the north. Two streets, Neal Street and Ash Crescent, provide access within the site.

Three significant bike routes are located near Langara Gardens: Heather Street Bikeway, one of Vancouver's most popular routes, connects north-south from False Creek to the Fraser River; Cambie Street Bikeway connects north-south from 29th Avenue to the Canada Line Pedestrian-Cycle Bridge; the North Arm Greenway runs east-west primarily along 59th Avenue from Angus Drive to Argyle Drive, east of Argyle Drive the route follows a number of

local streets to connect to Vivian Drive. A public realm plan is being developed for Cambie Street as part of the Cambie Corridor Phase 3 planning, which will provide direction on design of adjacent bicycle facilities.

Langara Gardens is served by the No. 15 bus on Cambie Street, and is located within a ten-minute walk from rapid transit at the Langara-49th Avenue Canada Line station. Cambie Street is an important corridor that is part of TransLink's Frequent Transit Network (FTN), which provides convenient, reliable and easy-to-use services with connections to east-west transit routes/services and destinations along the Canada Line.



# 7.1 BACKGROUND (CONT.)

#### CONNECTION AND PERMEABILITY

Langara Gardens will be connected and integrated with the surrounding community through a network of diverse and interesting public spaces including streets, lanes, pathways and open spaces.

The site is organized around the existing alignment of Ash Crescent connecting north-south between 54th and 57th Avenues. Ash Crescent will be redesigned to continue to 54th Avenue, and a separate multi-use path will safely accommodate people walking and cycling, while retaining the existing informal character and alignment. Neal Street will be shifted east to allow for a new linear park adjacent to Churchill Track. Neal Street will provide access for all modes to the new park and residential units, accommodate people walking and cycling, and retain significant trees where possible. The existing lane along the northern property line will be retained and expanded as necessary.

A significant east-west pathway for people walking and cycling between Cambie Street and Neal Street through the central section of the site will be provided to link new public parks and open spaces, weaving through clusters and alignments of significant trees. Smaller pedestrian pathways will be secured through development parcels to ensure that the fine-grain permeability of the site is retained. These pathways will be designed to be wheelchair accessible, where possible.

## **CANADA LINE**

Langara Gardens is located 800m from 49th Avenue Station and 1km from Marine Drive Station. When the Canada Line guideway was constructed it included flattened sections of track at 33rd Avenue and at 57th Avenue, should stations be needed in the future. The Mayors' Council 10-year plan identifies investment priorities but does not currently include provisions for future Canada Line stations.

To advance the construction of the station the City will seek contributions from nearby redevelopment projects including Langara Gardens, while also pursuing discussions with TransLink and other key stakeholders. At rezoning, a contribution will be secured from the developer as a partial contribution to the future potential station. Should the station not be attainable in the long-term, the contribution towards a future station would be re-allocated to address the amenity priorities identified for Langara Gardens and the Cambie Corridor consistent with the respective public amenity strategies.

## TRANSPORTATION STRATEGY

Langara Gardens will be comprehensively designed to support sustainable transportation modes by prioritizing walking, cycling and public transit. The site will be accessible to vehicles to support site servicing and access to underground parking. Traffic impacts on surrounding local streets will be mitigated through design. As part of the rezoning process, a Green Mobility Plan will identify ways to further encourage walking, cycling and transit use, while reducing vehicle use.

# 7.2 POLICIES

### 7.2.1 STREETS FOR PEOPLE

- Design new streets to prioritize people walking and cycling over motorized vehicles. The site will be comfortably and safely accessed by people of all ages and abilities walking and cycling.
- Provide high-quality design of the pedestrian realm and streets (e.g. materials, lighting, street furniture, street trees, landscaping, signage, etc.). Use of non-standard treatments within public rights-of-way will require appropriate maintenance agreements as determined.
- Traffic will be calmed, where appropriate, with any vehicles on the site having a purpose for being there (e.g., access to homes, shops, services and deliveries), and not simply short-cutting across the site.

# 7.2.2 LEGACY STREETS

- Provide two new streets, which connect north-south between 54th Avenue and 57th Avenue. Maintain the general alignment of the existing streets to reflect the legacy of the site.
- Employ street design measures to limit traffic speed and discourage short-cutting across the site, while accommodating on-street parking, lighting, street trees, sustainability measures, street furniture and protected bicycle facilities, where appropriate.
- To enhance safety, ensure that vehicular intersections and/or driveway locations are designed to be either aligned, or separated by more than 20 m.





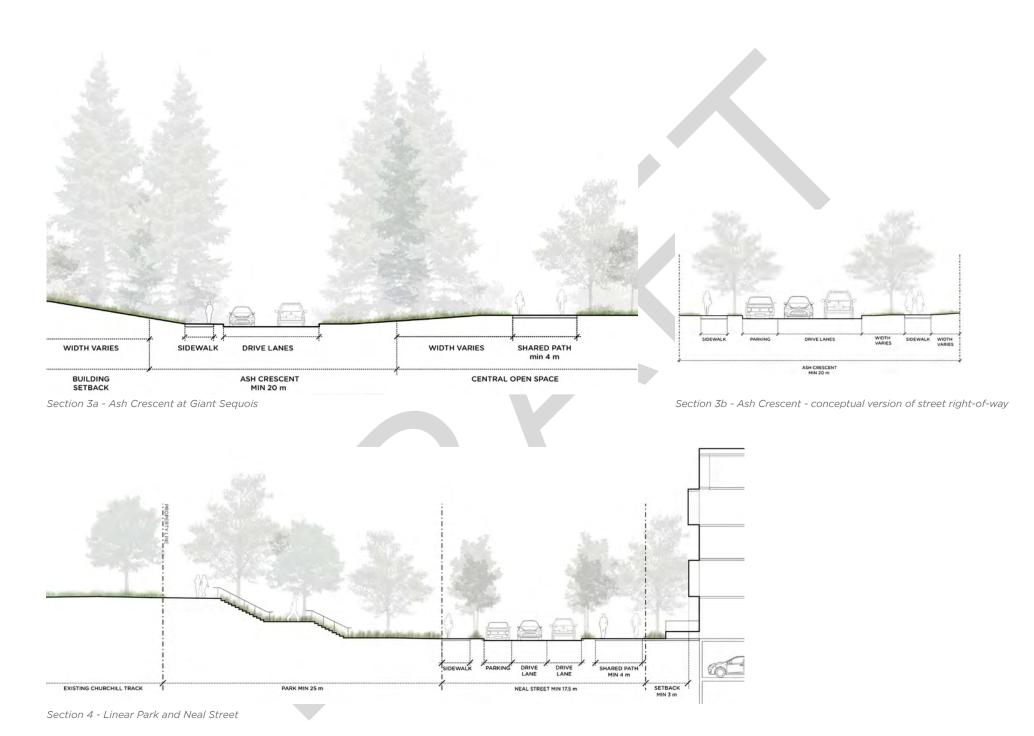
Steet section context map

#### **Ash Crescent**

- Provide a new dedicated street, with a minimum width right-of-way of 20 m, to provide primary access into and through the site.
- Design the street to reflect its existing informal character.
- Ensure that people walking and cycling are accommodated within the street and/or in the adjacent public open space.
- Provide any on-street parking as parallel parking and allow for visitor parking. Angled and perpendicular parking are not supportable.

#### **Neal Street**

- Provide a new relocated Neal Street dedicated to the City of a minimum width of 17.5 m.
- Create a highly public edge to the new linear park adjacent to Churchill track.
- Align the relocated street to protect the existing Red Oak trees at the northern end.
- Incorporate a multi-use walking and cycling path (minimum 4 m wide), on the east side of the street within the right-of-way.
- Design of intersection with 57th Avenue with new street to the south (on the Pearson Dogwood site) to ensure safe and clear pedestrian, cycling and vehicle circulation. Approach to be determined through Rezoning.



## 7.2.3 IMPROVEMENTS TO EXISTING STREETS AND LANES

- Improve local intersections at 54th Avenue and Cambie Street and in other locations where necessary, as determined through the detailed traffic analysis to be completed as part of the rezoning application.
- Minimize driveways across cycling facilities and sidewalks on both Cambie Street and 57th Avenue.
- Access to underground parking is preferred from internal lanes or streets.

Provide improvements to existing streets and lanes as noted:

#### **Cambie Street**

 Improve Cambie Street adjacent to Langara Gardens to provide an enhanced pedestrian realm and protected cycling facilities between 54th Avenue and 57th Avenue as described in the Cambie Corridor Plan.

#### 57th Avenue

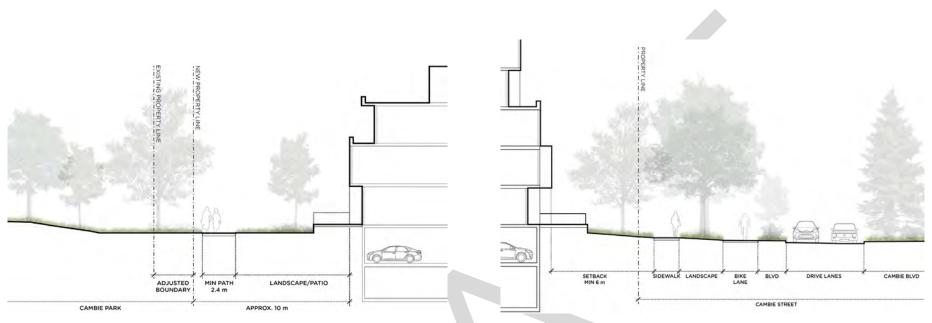
- Improve 57th Avenue between Cambie Street and Heather Street to upgrade sidewalks and provide a protected bike facility, while maintaining, where possible, existing high-quality street trees.
- Provide a signalized pedestrian crossing at Ash Crescent and 57th Avenue.

#### **Heather Street Bikeway**

• Improve Heather Street bikeway between 54th Avenue and 57th Avenue to improve pedestrian, cyclist and vehicle movement.

## Laneways

- Standard laneways are a minimum of 6 m and will be dedicated to the City.
- Consider enhanced public realm treatment of laneways to improve site permeability and to promote walking and cycling through the site.



Section 1 - Cambie Street edge

Section 2 - Cambie Street edge



## 7.2.4 WALKING AND CYCLING CONNECTIONS

- Integrate all ages and abilities in the street right-of-way design for walking and cycling connections throughout the site.
- Provide safe and visible pedestrian crossings where the open space connection intersects with streets or bicycle paths.
- The public realm should accommodate existing trees, where possible. New street trees should be appropriately located with consideration to species, size, and spacing. Provide pedestrian-scale lighting where appropriate.
- Refer to Section 6 for more detail on walking and cycling connections.

# 7.2.5 WALKING AND CYCLING SUPPORTIVE BUILDING DESIGN

- Design buildings to support walkability through provision of ground-oriented units with convenient 'front doors' to the adjacent public realm.
- Ensure permeability by providing public paths, secured by statutory rights-of-way to the City, to connect between buildings and/or through development parcels.
- Design buildings to encourage, not just accommodate, bicycle use. Measures might include direct access from the lobby to a secured bike storage room at grade, providing more than the minimum required interior or exterior bicycle racks, or supplying bike maintenance stations. Refer to the Green Mobility list of interventions for further suggestions.
- Provide clear linkages from buildings to adjacent bike paths and greenways.
- Provide space for at least two Public Bike Share stations on private property, secured by statutory rights-of-way to the City, in locations that are in close proximity to major bike routes and important destinations.

## 7.2.6 TRANSIT IMPROVEMENTS

- Ensure appropriate walking and cycling connections are provided to the potential future Canada Line Station at Cambie Street and 57th Avenue to facilitate access to rapid transit from the site.
- Improve amenities at transit stops with shelters or other weather protection, street trees to provide shade, benches, lighting, litter receptacles and information such as way-finding signage.
- Promote security by providing safe and convenient routes to transit stops along Cambie and other potential future transit routes.

# 7.2.7 MINIMIZE IMPACTS ON NEIGHBOURING STREETS

- Design the site to integrate with the surrounding community while minimizing the impacts of new motor vehicle traffic on the surrounding streets.
- Design roads and connections to prevent motor vehicle shortcutting through the site.

#### 7.2.8 PARKING AND LOADING

- Design parking and loading in accordance with the requirements set out in the City's Parking By-law.
- Access should be located and designed to minimize impact on public open spaces, parks, or streets.
- Commercial loading and servicing shall be contained on-site and not impact or rely on use of City streets for either servicing or maneuvering.
- The number of locations and width of driveway crossings should be minimized and shared where possible.
- Entry points should be designed as integral parts of buildings, generally contained within a block face and flanked by commercial or residential space. Entries should be perpendicular to the sidewalk, not angled across.
- A comprehensive parking and loading study will be required at the zoning stage to address parking and loading needs on the site.
- Parking under public parks or streets is not permitted.

# 7.2.9 GARBAGE AND RECYCLING

• Accessible and adequate off-street garbage and recycling facilities should be provided for all uses.



This section provides direction on expectations regarding sustainability and green infrastructure for this site, based on applicable City of Vancouver policies.



# 8. SUSTAINABILITY AND GREEN INFRASTRUCTURE

# 8.1 BACKGROUND

Established City of Vancouver policies ensure that all new developments – in particular, large developments – achieve very high levels of sustainability. These policies align with high level strategies like the *Greenest City Action Plan* and *Renewable City Strategy*. These city-wide policies identify strategies to transition Vancouver toward using 100% renewable energy by 2050 and eliminating dependence on fossil fuels. They also promote green transportation options, utilize green building design and ensure everyone has access to nature, clean water and local food.

As part of a key growth area in Vancouver, the Langara Gardens project provides a chance to advance sustainability and building energy efficiency. Langara Gardens is required to meet or exceed the requirements under the *Green Building Policy for Rezonings* and the *Rezoning Policy for Sustainable Large Developments*.



# 8.1 BACKGROUND (CONT.)

#### **GREEN BUILDINGS**

The Green Building Policy for Rezonings requires that all buildings achieve high green performance. In 2016 the policy was updated to adopt limits on greenhouse gas emissions, thermal energy and total energy use in new buildings, and establish administrative requirements as intended in the Zero Emissions Building Plan.

On large phased developments such as Langara Gardens, Green Building standards will apply at Development Permit application to ensure the highest standards are met at the time of building design.

# SUSTAINABLE LARGE DEVELOPMENT PLANNING

The Rezoning Policy for Sustainable Large Developments mandates that as part of the rezoning process, a series of plans or studies be conducted by the proponent in a range of areas pertaining to environmental and social sustainability to demonstrate innovation and leadership in development approaches/design. These deliverables are currently:

**1. Site design:** create a design that considers, and where appropriate, incorporates layout and orientation approaches that reduce energy needs and facilitate passive design solutions. Incorporate urban agriculture and replicate natural systems where possible.

- **2. Access to nature:** provide a plan that demonstrates how the project will provide natural habitats, enhance the ecosystem as well as create public open spaces and opportunities for people to directly experience nature.
- **3. Sustainable food systems:** provide a sustainable local food plan that considers urban agriculture and sustainable community food systems.
- **4. Green mobility:** create a green mobility plan, which will provide measures and strategies to prioritize sustainable travel to and from the site. This will include prioritizing walking, cycling and public transit over automobile use, and facilitating the incorporation of low carbon vehicles, such as electric vehicles.
- **5. Rainwater management:** create a rainwater management plan that recognizes rainwater as a resource to enhance the community and the environment.
- **6. Zero waste planning:** create a solid waste diversion strategy to reduce waste, increase opportunities for material reuse and recycling, and reduce greenhouse gas (GHG) emissions.
- **7. Affordable housing:** provide a strategy that considers a range of unit types and tenures to enhance the affordability, in accordance with Council's Affordable Housing Policies.
- **8. Low carbon energy:** work with the City to determine the best approach to secure low carbon energy performance for all buildings in the development.

## **RESILIENT CITY**

The City of Vancouver is initiating work on a resilient city strategy to better position the city to deal with day-to-day or cyclical issues like affordable housing, crime, transportation and social inequity and significant shock events such as fires, floods and earthquakes.

Significant large site redevelopments such as Langara Gardens afford a unique opportunity to improve the structural integrity and life safety of older buildings. As part of the Langara Gardens redevelopment an analysis of the four original towers was completed. Building upgrades will be sought through rezoning of the site, in a manner which seeks to minimize the relocation of tenants. Langara Gardens will need to meet any Council Policy applicable at the time of rezoning.

#### LOW CARBON ENERGY SYSTEMS

Energy used by buildings generates 55% of Vancouver's total greenhouse gas emissions. A high priority strategy of the *Greenest City 2020 Action Plan* is to reduce building emissions through the pursuit of low carbon neighbourhood energy systems. The *Neighbourhood Energy Strategy*, adopted in 2012, identified the Cambie Corridor as a target area for neighbourhood energy system development.

As a compact mixed-use development, Langara Gardens provides an ideal context for the implementation of a low carbon energy system. Low carbon energy systems supply heat energy primarily derived from highly efficient and renewable sources for space and domestic hot water heating, and in some cases cooling, for one or multiple buildings. The Zero Emissions Building Plan (2016) supports the use of low carbon energy systems, in combination with basic improvements to building envelope and ventilation systems, as a pathway for new buildings to meet or exceed performance limits related to greenhouse gas emissions.

# 8.2 POLICIES

#### 8.2.1 GREEN BUILDINGS

- All new buildings will meet or exceed the green building standards identified in the *Green Building Policy for Rezonings* or other applicable policy, at the time of building design (Development Permit application).
- Explore opportunities to achieve zero emissions and utilize 100% renewable energy when designing new buildings.
- Buildings are to visually express green elements as well as embody green building and passive design features such as green roofs and terraces, roof top gardens, rainwater capture and storage, trees and plantings on upper levels and balconies, green walls and supports for vertical plant growth. These features should be integrated so as to enhance the overall passive and rainwater management performance of the buildings.
- Any new city-owned buildings, including affordable housing and childcare, will achieve Passive House or an alternate near-zero emissions standard, and LEED Gold certification, with only low carbon fuel sources.

## 8.2.2 SUSTAINABLE LARGE DEVELOPMENTS

- Langara Gardens will meet or exceed the requirements identified in the *Rezoning Policy for Sustainable Large Developments*, to be determined at rezoning.
- Integrate visible rainwater management strategies focused on water quality protection and treating rainwater as a resource, to meet the requirements of the City's Integrated Rainwater Management Plan.



One Brighton, UK, Feilden Clegg Bradley Studios

#### 8.2.3 BUILDING UPGRADES

- As part of the redevelopment of Langara Gardens, the developer will provide upgrades to improve the building performance of the existing towers, to the satisfaction of the Chief Building Official. These should include:
  - Structural upgrades to the three original towers built prior to the 1980 NBC, to improve performance in the event of an earthquake. Building upgrades should target 75% of the lateral force levels specified by the Vancouver Building By-law in effect at the time of building permit application (i.e. S4 upgrade level as described in Table 11.2.1.2.B of the 2014 VBBL).
  - Non-structural building elements (exterior cladding, interior partitions, ceilings, mechanical and electrical equipment, etc.) will be reviewed and restrained on the existing four towers to improve their performance in the event of an earthquake.
  - Fire safety improvements, such as provision or upgrade
    of sprinkler systems, standpipes, fire alarm systems,
    fire separations and emergency power are sought to
    improve building performance of the four existing towers
    in the event of a fire or other emergency.
- Mitigation strategies to improve building safety will consider impacts to tenants. Strategies to upgrade the buildings without impacting tenants will be encouraged. If tenants are impacted, the *Tenant Relocation and Protection Policy* may apply.

 At rezoning, the developer will complete a phasing strategy to determine the timing of building upgrades.
 The phasing strategy should consider tenant relocation, amenity delivery, adjacent buildings and financial implications.



Langara Gardens, existing towers with retail at grade

#### 8.2.4 LOW CARBON ENERGY SYSTEMS

- Explore opportunities to achieve the City's GHG emission reduction targets for new buildings through the development of low carbon energy systems.
- Low Carbon Energy Supply Feasibility Study to be developed in collaboration with City Staff and to include assessment of building and/or district- scale energy systems that incorporate low carbon sources (such as sewage heat recovery, geoexchange, surface water exchange, heat recovery, air source heat pumps, solar thermal, biomass, etc.), with consideration for nearby development parcels.
- Approach to heating and cooling in mixed-use complexes to explore opportunities for heat recovery, thermal energy storage, and energy sharing between buildings.

#### 8.2.5 DEMOLITION WASTE

- Recycle/reuse at least 75% of demolition waste (excluding hazardous materials) for demolition of existing buildings on site. Recycling compliance reports showing the recycling target was met will be required after demolition of each phase.
- At rezoning, provide a site-wide strategy for the Recycling and Reuse Plan for Green Demolition/ Deconstruction, with a detailed plan provided at the time of development permit application for each parcel. The detailed plan should include an inventory of salvageable items and a clear operational strategy for ensuring separation and recycling of wood and other recyclable materials.

#### 8.2.6 UTILITIES AND SITE SERVICING

- Ensure that existing utilities, including adjacent and offsite water, sanitary and stormwater mains, street lighting, and third party utilities are upgraded as necessary, at no cost to the City, to meet the demands of the proposed development.
- Design, construct and install all new utilities incidental to servicing the site, at no cost to the City, within the proposed road network or statutory rights-of-way.
- Provide all electrical services (including all third party utilities) on private property, without relying on space within streets or the public realm.
- Concurrent with a rezoning application, a geotechnical analysis of the site including analysis of any groundwater conditions and soil conditions that may affect the development will be provided to the City. To achieve the densities outlined in this policy statement, all new development on Langara Gardens (including underground parking structures) will appropriately respond to geotechnical conditions and manage any groundwater on site.



## 9. COMMUNITY AMENITIES

#### 9.1 BACKGROUND

#### **COMMUNITY AMENITIES**

Community facilities are generally funded through the City's Capital Plan and through Financing Growth tools such as Development Cost Levies (DCLs) and Community Amenity Contributions (CACs). Community Amenity Contributions are provided to mitigate the impact of new development (growth) resulting from rezoning or to address existing needs in the surrounding community.

The City expects to negotiate a CAC based on the community needs that have been identified and the financial ability of the rezoning to support the amenity package.

The needs of the area were assessed based on the public benefits identified in the *Oakridge Langara Policy Statement* and *Cambie Corridor Plan*, as well as the needs generated through increased population associated with redevelopment of Langara Gardens and the surrounding area. The assessment identified requirements for parks and affordable housing, and an outstanding need for childcare facilities in the area.

# AFFORDABLE HOUSING AND PROVISIONS FOR TENANTS

Since 1988, the City's policy for new neighbourhoods is to achieve 20% of the new units to be for affordable housing. This encourages balanced communities and ensures that people with low and moderate incomes are also able to live in well- planned, conveniently-located neighbourhoods. To meet these objectives, 20% of all units are to be provided as affordable housing in a variety of unit sizes and types, including 50% of the units designed to be suitable for families with children.

The rate of change policies require one-for-one replacement of existing rental housing, and a robust tenant relocation plan that will allow existing tenants to return at affordable rents. Refer to *Section 3* for more information.

## 9.1 BACKGROUND (CONT.)

#### **TRANSPORTATION**

Potential improvements to the local transportation network resulting from redevelopment of Langara Gardens have been evaluated. As part of the public benefit package, local improvements to Heather Street Bikeway between 54th and 57th Avenues are needed to enhance pedestrian and cyclist movement adjacent to Churchill Secondary School and the track. See *Section 7.2.3* for details.

At rezoning, a contribution will be secured from the developer as a partial contribution to the eventual construction of a future Canada Line station at 57th Avenue. Should the station not be attainable in the long-term future, the contribution towards a future station would be re-allocated to address the amenity priorities identified for Langara Gardens and those in and around the Cambie Corridor consistent with the respective public benefit strategies.

Other improvements, to be determined at rezoning, may be necessary to address the increased demands on the present transportation network.

#### **SURROUNDING CONTEXT**



Community Centres, Schools, Parks And Transportation

#### 9.2 POLICIES

#### 9.2.1 AFFORDABLE HOUSING

- A minimum of 20% of housing units (approximately 20% of the net new residential floor area) are required to be affordable housing units, prioritizing housing that meets the City's definition of social housing targeted towards low- to moderate-income households.
- The City's priority is to secure turn-key social housing units constructed by the developer, with the lands and buildings to be owned by the City. The housing units are anticipated to be delivered at high quality and modest cost, consistent with the City's Housing Design and Technical Guidelines and on terms that are satisfactory to the City, funded through the CAC. If the overall value of the CAC is not sufficient to cover the entire cost of the developer's delivery of turn-key units, the City will consider further options to deliver the affordable housing, determined at the time of rezoning in accordance with Council's policies for Sustainable Large Developments.
- Consistent with the strategic direction in Housing Vancouver Strategy direction (Action 3C), the City will work with the applicant to explore increased affordable housing requirements to better reflect Housing Vancouver targets, including the need for social housing and housing for 'Missing Middle' households, while providing flexibility in delivery to ensure financial viability and the delivery of other community amenities.

#### 9.2.2 EXISTING TENANTS

• The City's Tenant Relocation and Protection Policy requires that existing tenants be provided with the right-of-first refusal to return to replacement units at discounted rents (currently set at a 20% discount to market rents). In recognition that a 20% discount below market rents may not be affordable for many residents at Langara Gardens, returning tenants will be offered rents that are similar to their rents before relocation (plus inflation as allowed under the RTA), to be confirmed through the rezoning.

#### 9.2.3 PARKS AND OPEN SPACE

- Provide at least 1.0 acres of City-owned park in addition to open space, in accordance with the policies set out in Section 6 Parks, Open Spaces and Public Places.
- Reconfigure Cambie Park as required to accommodate full 20 m rights-of-way for Ash Crescent, and improve the park to the satisfaction of the Park Board.
- Provide improvements to Churchill track to the satisfaction of the Park Board in consultation with the Vancouver School Board.

## 9.2 POLICIES (CONT.)

#### 9.2.4 CHILDCARE CENTRE

- Provide a dedicated, fully-finished and equipped 69-space childcare centre that serves infants, toddlers and 3-5 year olds, designed in accordance with the Childcare Design Guidelines and Childcare Technical Guidelines, which includes considerations of sunlight orientation, contiguous indoor/outdoor space, and adequate space allotments.
- Refer to Section 4 Land Use and Density for guidance on location and design of childcare facilities.

#### 9.2.5 TRANSPORTATION IMPROVEMENTS

- Provide Neal Street and Ash Crescent legacy streets, dedicated to the City.
- Provide for improved pedestrian and cyclist movement on Heather Street between 54th and 57th Avenues adjacent to Churchill Secondary School.
- Provide a financial contribution for a future potential Canada Line Station at 57th Avenue.
- Refer to Section 7 Circulation and Transportation for further details.

# 9.2.6 DELIVERY OF COMMUNITY AMENITIES / PHASING STRATEGY

- A phasing strategy, to establish timing and triggers for the delivery of community amenities and building upgrades will be determined at rezoning. The tenant relocation plan and phasing strategy will be complimentary.
- The phasing strategy will ensure that community amenities are delivered in step with market development, and are not delayed until the final phase.
- Delivery of the package of amenities including park, childcare facility, affordable housing and other amenities will be secured through the rezoning process. The delivery mechanisms may include in-kind or cash contributions by the developer, supported by other funding sources if required.



## 10. ILLUSTRATIVE DEVELOPMENT CONCEPT



Illustrative concept plan and surrounding context





Optimum heights diagram (NB: Optimum heights are in storeys. See Section 5.2.7 for policies relating to building variety and design)

Langara Gardens Project Staff Team: Susan Haid, Pat St. Michel, Kirsten Robinson, Beverley White, Scott Bell, Tate White, Megan Herod, Ann McLean, Dave Hutch, Catarina Gomez, Matthew Roddis, Katy Amon, Dan Garrison, Daniel Naundorf, Alina Cheng, Jennifer Draper, Nelson Szeto, John Turecki, Rosaline Choy, Mark Pickersgill, Michelle Schouls, Juliana Wong, Chris Baber, Patrick Enright, Ashley St. Clair, Kelly Anderson, Brian Sears, Michael Chin, Sean Martinez.

**External Consultants:** James K.M. Cheng Architects, PFS Studio, Bunt & Associates, Coriolis Consulting Corp., Donald Luxton & Associates Inc., Arbortech Consulting.