1 Executive Summary

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1.1 Rezoning Application Summary

This document constitutes the rezoning application for the 6.2-hectare Little Mountain site located between Main Street and Queen Elizabeth Park, 33rd Avenue and 37th Avenue. It contains all pertinent material for the City of Vancouver to make an informed assessment of the site master plan proposal and of its key components. The rezoning application is supplemented with Design Guidelines, a more specific document that sets the base for the individual design of all future elements of the plan.

The Little Mountain site is currently zoned RM-3A, Medium Density Residential. Through this application, the proponent, Holborn Properties Ltd., is seeking a rezoning to CD-1 classification. Key zoning parameters of the proposed CD-1 Zone are shown in Table 1-1.

The actual development statistics of the master site plan presented in this document are summarized in Table 1-2.

Table 1-1: Summary zoning parameters of proposed CD-1 zone

Key zoning parameter	Proposed CD-1 Zoning
Density	Maximum 2.5 FSR, based on the gross parcel area of 61,846.14 m² (665,705.67 sq. ft.), before subtracting areas to be dedicated to the City.
Height	Maximum 36.6 m (120 ft.) In addition, maximum number of storeys apply for each individual parcel.
Site coverage	Minimum gross building coverage ratio 40%
Uses	Residential uses plus supporting local retail / commercial uses, Neighbourhood House, and Daycare.
Residential Parking	Minimum 1 space per 100 m² or 1.5 spaces per unit, whichever is less Maximum 2 spaces per unit
Visitor Parking	Minimum 0.075 spaces per unit Maximum 0.15 spaces per unit
All other Parking / Loading	According to Parking By-law

Note: This is only a summary. For more details see Section 2.1.3

Table 1-2: Summary development statistics for the proposed development

Parameter		Dimension
Site area		6.18 hectares (15.3 acres)
Gross building coverage ratio		40%
Total gross FSR		2.50
	Non-market residential	Minimum 26,895 m² (289,500 sq. ft.)
	Neighbourhood House	Minimum 1,115 m² (12,000 sq. ft.)
	Daycare	Minimum 764 m² (8,224 sq. ft.)
Total proposed floor area		**Maximum 154,615 m² (1,664,266 sq. ft.)**

Note: This is only a summary. For more details see Sections 2.4.4 and 2.5

1.2 Alignment with Policy Statement

In July 2012, BC Housing and the City of Vancouver signed a Memorandum of Understanding (MOU) regarding the future for Little Mountain. It set the course of action for the selection of the developer of Little Mountain and the initiation of the planning process, which resulted in the approval of the "Little Mountain Policy Statement" by City Council in June 2012.

The Policy Statement provides guidance regarding future development of the 6.2-hectare site. It was created through a collaborative process between the City, the community, and the proponent developer (Holborn). After the document's approval, Holborn contracted IBI Group and other consultants to lead the rezoning effort, whose result is the present document.

Based on the key planning principles and guiding principles contained in the Policy Statement, the consultants developed seven urban design objectives and twelve specific design strategies. The four elements – key principles, guiding principles, objectives, strategies – informed the final master plan design.

All of the proposed zoning parameter changes sought for the new CD-1 zone are supported by the Little Mountain Policy Statement, as well as the broader policy framework of the City of Vancouver.

2012 City Policy Statement for Little Mountain

2013-2015 Rezoning Application Design Process

Policy Statement

Key Principles

The overarching direction

Create a complete community. Provide a balanced mix of uses that makes Little Mountain a socially sustainable and functionally complete community.

Create a clear and accessible system of public open space. Provide an interconnected and highly public open space system that is accessible, legible and animated.

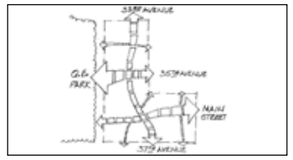
Design for green mobility. Foster pedestrian, bike, and transit-friendly infrastructure and amenities that reduce motorized vehicle impacts and use.

Excel in urban design and built form. Support compact mid-rise development density, massing and height that fits into its urban and natural surroundings.

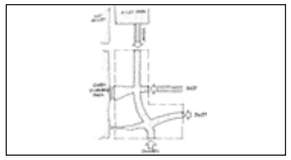
Achieve a high standard of sustainability. Improve the environmental, social, and economic vitality of the site through specific sustainability strategies.

Guiding Principles

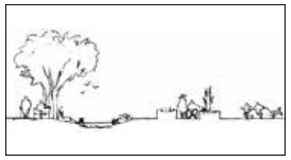
The aspirations for the site



Integration and permeability

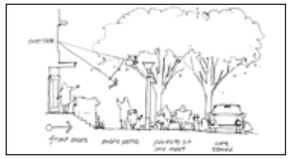


Public space focus

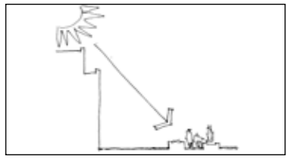


Sustainable public spaces

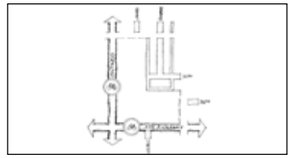
Streets for people



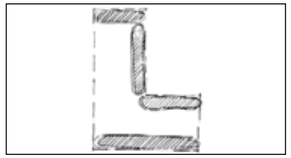
Legibility and animation



Solar access

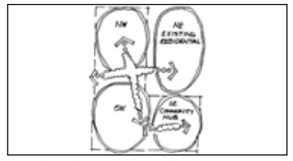


Greenways/bikeways

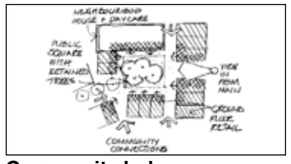


Transitional edges

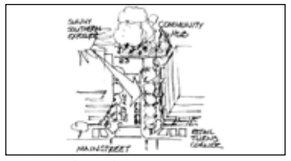
Opportunities for height



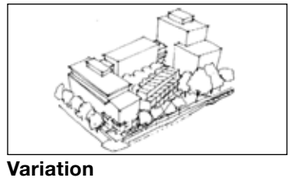
Distinct quadrants



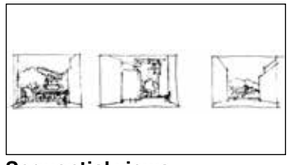
Community hub



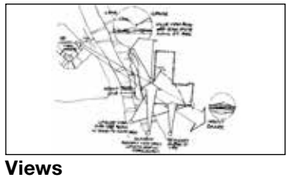
Main Street



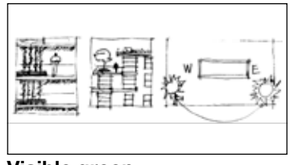
Variation



Sequential views

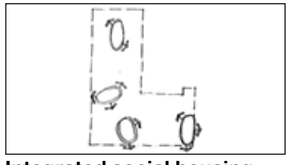


Views



Visible green

Memory and trees



Integrated social housing

Rezoning Application

Objectives

The desired end results

Complete community. Create a diverse and vibrant community, addressing existing needs and new demands for neighbourhood amenities and housing.

Contextual integration. Ensure integration of the site with the surrounding natural environment and neighbouring community.

Vibrant public realm. Ensure the site is unified by accessible, varied, and interconnected public spaces that maximize solar access and sequential views.

Memory. Reflect the spaces, people, and history of the site through landscape, urban, and building design elements.

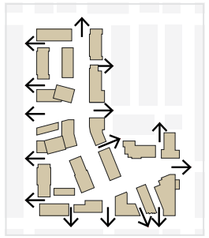
Balanced mobility. Provide safe and permeable multimodal transportation infrastructure, prioritizing walkability, bicycles, and transit access.

Unity and variety. Foster a unified site design while also maximizing variety, punctuation, and visual interest through the design of buildings and voids.

Sustainable design. Increase passive and active sustainable practices through site-wide and building-specific strategies.

Design Strategies

The design's plan of action



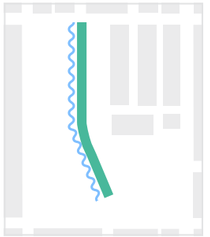
Permeability. Incorporate multimodal paths through the site that connect to the surrounding street network and other major destinations.

Housing Mix. Include a variety of housing types and tenures and supporting community uses.

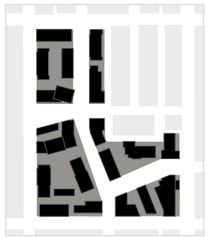
Open Space System. Include a public open space system that is interconnected, legible, and accessible.

Spatial Definition. Conceive buildings as defining elements that reinforce the public realm of streets and open spaces.

Street Orientation. Focus on rich, detailed, and pedestrian-oriented streetfront façades and uses to foster active use of the public realm.



Central Spine. Make the new central street with adjoining linear rain garden the organizing element of the site.

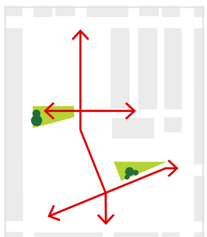


Small Scale. Break down blocks into smaller buildings, each with varied heights, massing, and architectural punctuation.

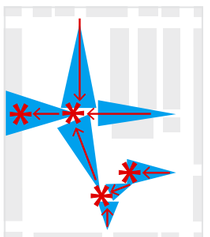
Sun Access. Design building orientation and massing to increase sun access to public spaces and dwelling units.

Street & Path Network. Include a network of streets and pedestrian mews that increases connectivity and encourages walkability.

Height Transition. Transition building height and massing towards the edges to ensure respectful contextual integration.



Past References. Retain historical pattern of open spaces, streets, and trees, striving to retain significant trees.



Sequential Views. Increase sequential views through building placement and street network design.

Site Master Plan
on the following page

1.3 Site Master Plan

The proposed site master plan is organized along the Central Spine, a new north-south street defined spatially by a series of open blocks of small-scale, mid-rise buildings. The framework is inspired by the structure of the earlier site plan's open spaces and the geometry of former building footprints while preserving a number of mature trees.

Key attributes of the site plan are:

- A scale of blocks similar to the city blocks of the neighbouring single-family areas, which allows for integration with the surrounding urban fabric.
- A porous block structure that allows for a range of public-to-private open spaces, clearly defining spatially the public realm, but also breaking down the scale of buildings within each block.
- Two generous interior courtyards in the larger blocks to the west of the site.
- A double-loaded residential typology, eliminating throughout the perception of rear façades.
- A series of streets and mid-block pedestrian mews, all of which break up the block pattern for added permeability.
- A "linear rain garden" along the Central Spine, a landscaped feature that serves the dual purpose of public amenity providing educational experience, and a sustainable stormwater management system.
- A plaza near Main Street, which is surrounded by community amenities such as the Neighbourhood House, the Daycare, non-market housing, retail and commercial space.
- A park on the 35th Avenue axis, which opens up the site to the large public open space of Queen Elizabeth Park.
- Community Garden spaces, located within the car-free Quebec Street extension, as well as other areas identified for possible edible landscaping.

Contextual Integration:
Building height transition down to surrounding neighbourhood

Sustainable Design:
Compact, mid-rise building form

Vibrant Public Realm:
Naturally landscaped Wedge Park opens up the site to QE Park

Memory:
Preservation of two significant oak trees

Unity and Variety:
Different residential typologies enliven the site but integrate within each building

Balanced Mobility:
Shared vehicular / pedestrian / bicycle arrival courts

Balanced Mobility:
Easy access to local bikeways

Sustainable Design:
Appropriate window-to-wall ratios reduce energy consumption and bird collisions

Vibrant Public Realm:
Individual entrances of ground floor units facing the street

Balanced Mobility:
Non-vehicular mews / paths encourage walking and cycling

Sustainable Design:
Community Garden site

Sustainable Design:
Continuous coniferous tree canopy provides habitat for birds and other small species

Contextual Integration:
Residential land uses in buildings on 37th, 33rd, and Ontario

Figure 1-1: Key components of the site master plan and link to design objectives

Sustainable Design:
North-south alignment improves sunlight for most dwelling

Sustainable Design:
Linear rain garden along Central Spine reduces rainwater runoff

Balanced Mobility:
Streets designed to be traffic calmed for all users

Unity and Variety:
Buildings with different massing and form defining holistically the open spaces

Complete Community:
69-space Daycare

Complete Community:
Neighbourhood House

Memory:
Preservation of significant trees on historical road alignment

Vibrant Public Realm:
Community plaza surrounded by Daycare, Neighbourhood House and local retail

Sustainable Design:
Preservation of large growth trees throughout the site

Contextual Integration:
Local retail and services near Main Street/Community Plaza

Sustainable Design:
District energy Facility

Balanced Mobility:
Underground parking with bike rooms, electric charging stations and car-share spaces

Complete Community:
Non-market housing

Sustainable Design:
Possible edible landscaping/orchard

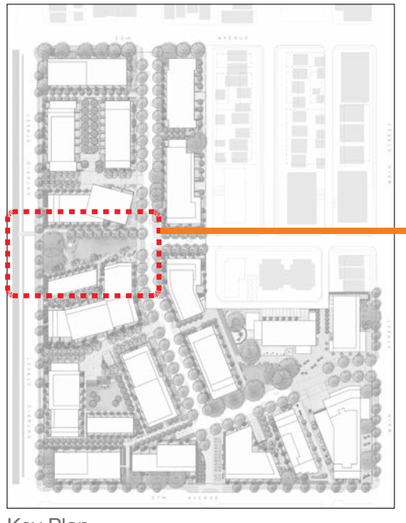
1.4 Public Realm

The site design for Little Mountain depends largely on the public realm concept. Through the alignment of buildings to streets and appropriate building-to-street proportions, the buildings reinforce a coherent and holistic public open space system, which contrasts with other schemes where the prevalence of architectural objects produces “leftover” public spaces.

Public open spaces are conceived as part of an integrated and interconnected network. It provides diverse amenities and plays a key role in achieving a neighbourhood with its own identity that is, moreover, highly integrated with the greater community. The preservation of existing mature trees and the open space relationship to Queen Elizabeth Park are also essential for the design concept.

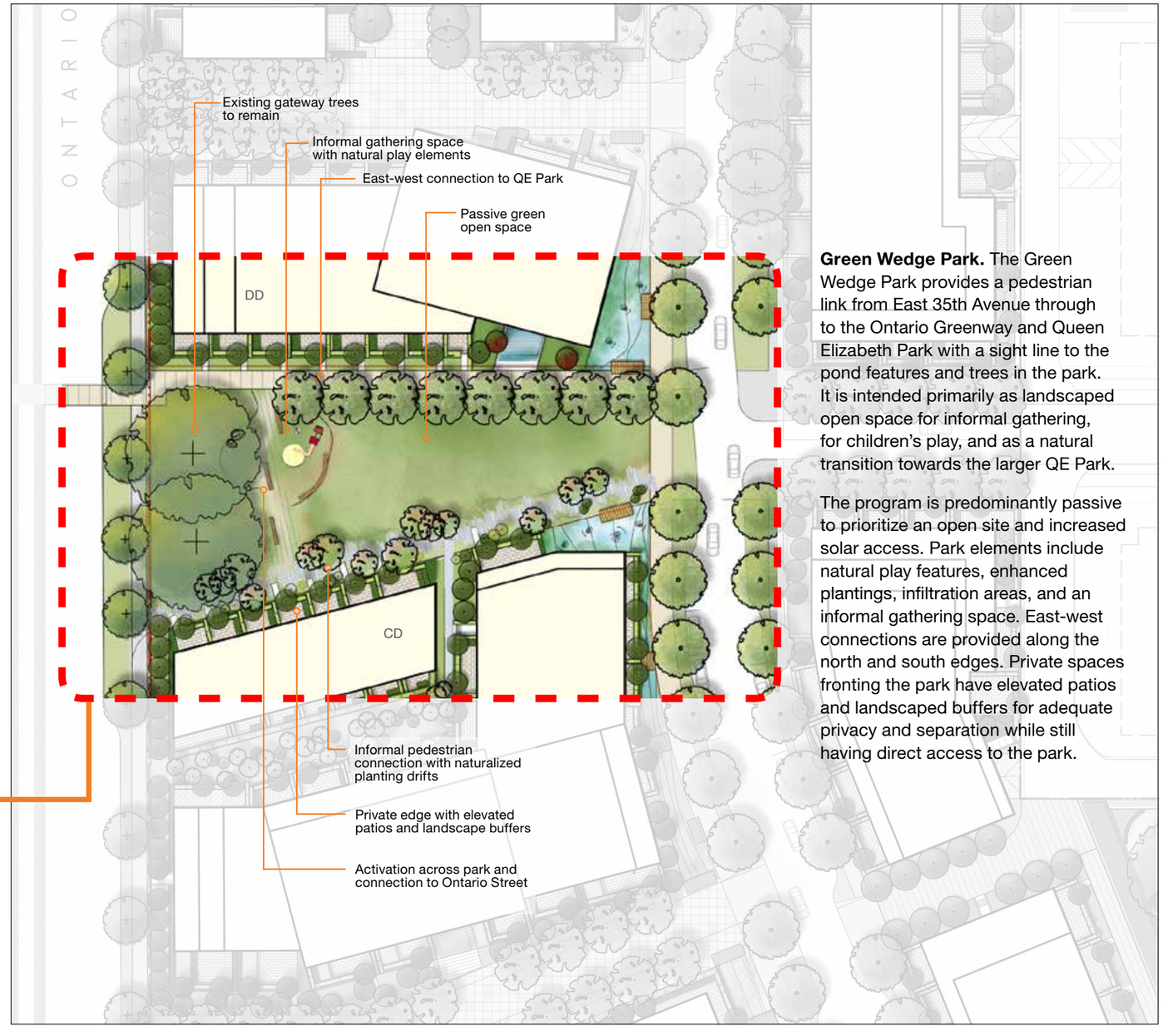
Three key public open spaces stand out in the Little Mountain open space network:

- The Green Wedge Park
- The Community Plaza
- The Central Spine



Key Plan

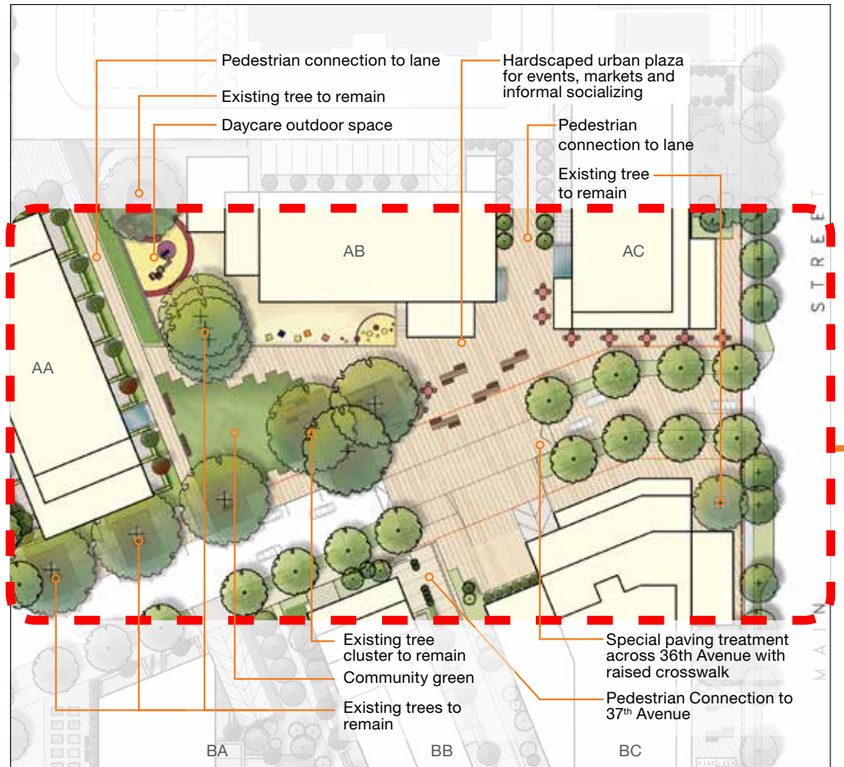
Figure 1-2: Green Wedge Park



Green Wedge Park. The Green Wedge Park provides a pedestrian link from East 35th Avenue through to the Ontario Greenway and Queen Elizabeth Park with a sight line to the pond features and trees in the park. It is intended primarily as landscaped open space for informal gathering, for children’s play, and as a natural transition towards the larger QE Park.

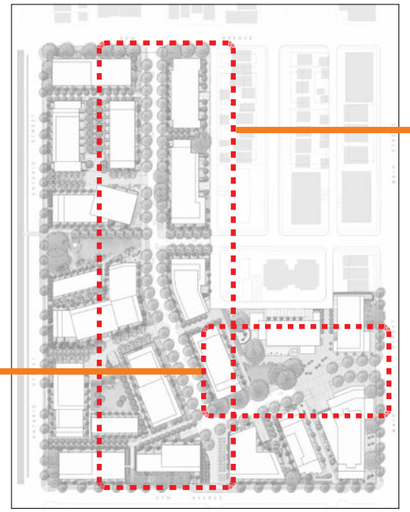
The program is predominantly passive to prioritize an open site and increased solar access. Park elements include natural play features, enhanced plantings, infiltration areas, and an informal gathering space. East-west connections are provided along the north and south edges. Private spaces fronting the park have elevated patios and landscaped buffers for adequate privacy and separation while still having direct access to the park.

Figure 1-3: Community Plaza



Community Plaza. The Community Plaza is the vibrant core of the site and is organized around significant retained trees. The plaza is framed by a collection of buildings with a variety of uses including Daycare, Neighbourhood House, residential, and commercial. The plaza is designed to support and augment the activities related to these buildings and to provide a social gathering space for community wide events. To increase the perception of the Community Plaza as the social heart of the site, special paving treatment from the plaza extends across 36th Avenue to the south sidewalk adjacent to building BC.

Diverse seating opportunities, a community green, public art, and specialty lighting helps support a vibrant and animated place for the Little Mountain Housing community. The Neighbourhood House entry, and retail uses at ground level in adjacent buildings with food services and outdoor seating, further animate the edges of the plaza.



Key Plan

Figure 1-4: Central Spine

Central Spine. The Central Spine is the character-defining element of the site, stretching from 33rd Avenue at James Street to 37th Avenue at the Quebec Street Extension. The two primary components of the Central Spine are the public Urban Trail and the Linear Rain Garden, the latter located on private property.

A hybrid of public and private spaces, the Central Spine reads as a unified corridor that supports a variety of functions and activities including off-street cycling, pedestrian movements, seating, socializing, increased habitat and green space, and an integrated rainwater management system for the private parcels. Residences along this edge have access to the Urban Trail through the provision of pedestrian footbridges extending from private patios to the public right-of-way.

1.5 Built Form

Parcels. The site master plan consists of 15 private parcels and supporting public-use lands: the Wedge Park, the Community Plaza-, streets rights-of-way, and an underground public district energy facility. The private parcels are labelled individually AA through EC, the first letter denoting the block, the second the building within the block.

Land Uses. All non-residential uses of the plan are gathered in ground floor of the buildings of the southeastern quadrant because of its connection to the higher pedestrian activity and transit access on Main Street. Non-market housing for seniors and families, the Neighbourhood House, a 69-space childcare facility, and local retail and commercial spaces are all anchored by the Community Plaza.

The rest of the plan includes only residential uses. Most buildings have walk-up townhomes on the ground floor that are directly accessible from the public streets, pedestrian mews, or private courtyards, activating the public realm at street level.

Building Massing and Height. Shorter buildings are placed on the north and south parcel boundaries that front single-family plots and to the side abutting to the back lane of the northeast quadrant. Higher buildings are located in central locations, where impact is lowest.

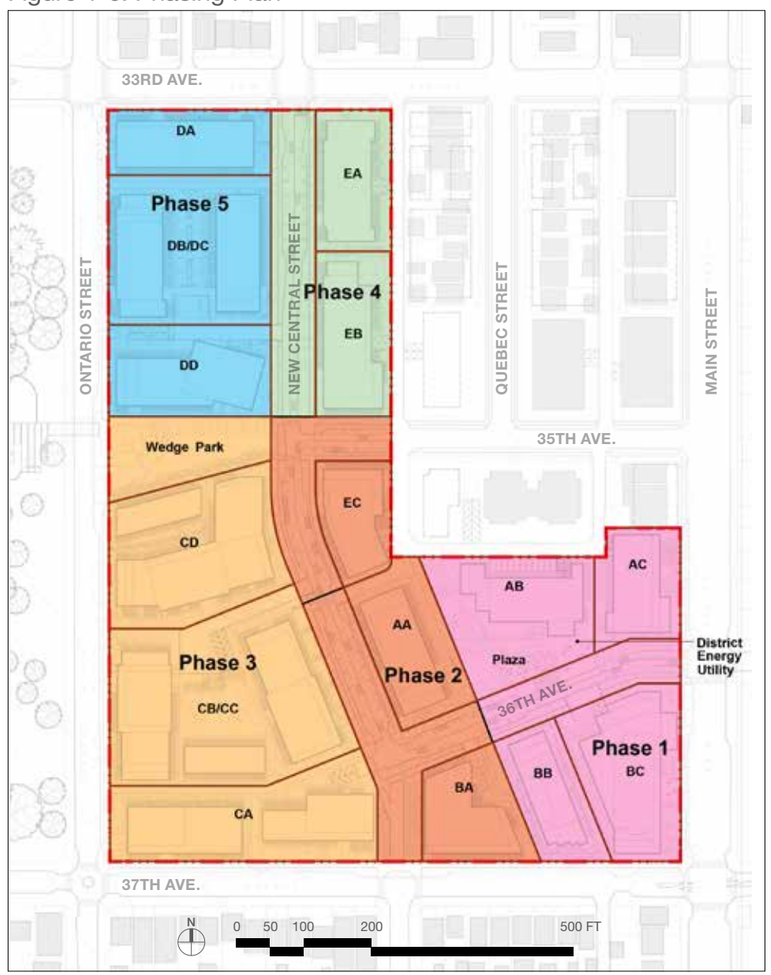
Building heights vary considerably across the site in order to integrate to the context. All building heights comply with the location and number of storeys contained in the Policy Statement.

Phasing. The project's phasing strategy begins in the southeast corner and moves westward and then northward towards 33rd Avenue. While proposed to be built over the next decade, it is difficult to determine exact days of completion for each stage, given changes in construction sequencing, City approval process, and real estate market conditions.

Figure 1-5: Land Use Plan

- Retail / Commercial
- Neighbourhood House (above)
- Daycare
- Housing – Non-market Seniors
- Housing – Non-market Family
- Housing – Non-market Family (above)
- Housing – Market
- Project Boundary

Figure 1-6: Phasing Plan



- Phase 1
- Phase 2
- Phase 3
- Phase 4
- Phase 5

Figure 1-7: Building Massing and Height

Figure 1-8: View from Southwest

Figure 1-9: View from Northeast

1.6 Sustainability Measures

The Little Mountain site plan contains numerous characteristics that enhance its social, environmental, and economic sustainability, while also meeting the requirements contained in the City of Vancouver's Rezoning Policy for Sustainable Large Developments. For each of the eight distinct sustainability policies, targets were established, specific actions were proposed, and the attainability of different LEED points was assessed.

The key elements – physical components, administrative actions, and operational practices – that are proposed include:

.1 Sustainable Site Design

- Orient most buildings north-south to ensure sun access to dwelling units
- Have compact and mid-rise buildings to increase energy efficiency
- Minimize paved surfaces to reduce the heat island effect
- Locate deciduous trees in front of buildings, especially along west and south façades
- Keep all large growth trees along the site boundary's sidewalks
- Keep most suitable, large trees already existing within the site parcel

.2 Access to Nature

- Plant over 400 new trees on the site, exceeding a 7:1 tree replacement rate
- Provide tree and shrub plantings to create a continuous tree canopy as well as upper layer and understory habitat for birds and other small species
- Provide safe, legible and accessible connections to site open spaces and Queen Elizabeth Park
- Develop and implement bird-friendly development guidelines for future building design

.3 Sustainable Food Systems

- Facilitate the creation of a Neighbourhood Garden Association for on-going maintenance, capacity building and operations of Community Gardens and a Community Food Market
- Provide edible plant guidelines, resources, and toolkits for establishing edible gardens on balconies, rooftops, and terraces.
- Promote edible landscaping to supplement ornamental landscaping
- Introduce food-bearing trees (where appropriate) in the edges of the Community Garden area
- Establish a community kitchen in the Neighbourhood House to bring local food to table

.4 Green Mobility

- Promote and inform new residents of the opportunities for walking, cycling, and transit
- Develop a pedestrian- and cycle-friendly network of streets, lanes, mews, and off-street connections to integrate with the City system
- Ensure bicycle storage and support measures that meet or exceed best practices
- Improve environment for bus passengers waiting at stops
- Provide spaces for car share vehicles
- Promote ride-share programs with residents

.5 Rainwater Management

- Require new buildings to comply with LEED stormwater credits 6.1 and 6.2
- Require each parcel to have on-site storm detention as required to meet stormwater quantity targets
- Require each parcel to have on-site water quality system, mechanical or natural, to meet the stormwater quality targets
- Include a surface rainwater storage, infiltration, and biofiltration system for all private parcels to the west of the new street along the Central Spine (i.e., the Linear Rain Garden)
- Reduce rainwater runoff rates with green roofs, rooftop gardens, and other landscape strategies
- Harvest rainwater for use in private gardens, Community Gardens, and site landscaping

.6 Zero Waste Planning

- Allocate space for a dedicated in-unit, shared common area and in-building garbage and recycling bins for residential and retail waste
- Provide a dedicated reuse kiosk and bulletin board in residential and retail garbage and recycling rooms
- Establish a strata council waste reduction champion
- Education and outreach initiatives, including move-in manuals, waste tours, zero waste challenge programs, annual barbecue/swaps, newsletters, bulletin board postings and an online portal

.7 Affordable Housing

- Provide at least 224 new, replacement units of non-market housing, plus an additional 10 units for the Musqueam, in the early phases of the project
- Allocate additional density as non-market housing use for the City of Vancouver
- Include a mix of unit types, sizes, and finishes that ensures family-oriented units, while allowing a greater variety of tenures and price ranges

.8 Low Carbon Energy Supply

- Require future development to include provisions for buildings to be "district energy ready"
- Include a parcel for the district energy peaking plant that could double-up as the site's main thermal energy supply until district energy connection is achieved
- Prepare more detailed analysis of load basis, including phasing of loads
- Refine specific technology and fuel supply options (air-source heat pumps and external district energy connections)
- Prepare more detailed system design and costing analysis in early phases