



City of Coquitlam



Transit-Oriented Design Guidelines



**Lougheed and Burquitlam**

# TRANSIT-ORIENTED DESIGN GUIDELINES LOUGHEED AND BURQUITLAM

## TABLE OF CONTENTS

	PAGE NO.
<b>1.0 Overview</b>	<b>1</b>
1.1 TRANSIT-ORIENTED DEVELOPMENT	1
1.2 LOUGHEED TRANSIT-ORIENTED COMMERCIAL VILLAGE CENTRE	2
1.3 BURQUITLAM TRANSIT-ORIENTED VILLAGE COMMERCIAL CENTRE	3
<b>2.0 Design Guidelines</b>	<b>4</b>
2.1 GENERAL GUIDELINES	4
<b>2.1.1 MIXED-USE DEVELOPMENT</b>	<b>4</b>
<b>2.1.2 BUILDING SETBACKS</b>	<b>5</b>
<b>2.1.2 ORIENTATION – STREET FRONTAGE</b>	<b>5</b>
<b>2.1.3 PARKING</b>	<b>6</b>
<b>2.1.4 ORCHARD PARKING</b>	<b>7</b>
<b>2.1.5 BIKEWAYS AND BICYCLE PARKING</b>	<b>8</b>
<b>2.1.6 SIDEWALKS</b>	<b>8</b>
<b>2.1.7 STREETScape/LANDSCAPE DESIGN</b>	<b>9</b>
<b>2.1.8 CROSSWALKS/INTERSECTIONS</b>	<b>9</b>
<b>2.1.9 BUILDING SIGNS</b>	<b>10</b>
<b>2.1.10 SEMI-PRIVATE AND PRIVATE OUTDOOR OPEN SPACE</b>	<b>10</b>
<b>2.1.11 SUSTAINABLE DESIGN FEATURES</b>	<b>12</b>
2.2 SITE-SPECIFIC GUIDELINES	15
<b>2.2.1 LOUGHEED TRANSIT VILLAGE</b>	<b>15</b>
<b>2.2.2 URBAN QUARTER</b>	<b>16</b>
<b>2.2.3 BURQUITLAM TRANSIT VILLAGE</b>	<b>19</b>
<b>2.2.4 GROCERY STORE/BURQUITLAM TRANSIT VILLAGE</b>	<b>22</b>

## 1.0 OVERVIEW

In combination with the Lougheed and Burquitlam Neighbourhood Plans related to rapid transit improvements, it is useful to establish design guidelines to influence the transition of form and character of development of both public and private lands as they develop over time. These guidelines outline the context within which development is envisioned to occur.

### 1.1 TRANSIT-ORIENTED DEVELOPMENT

Both the Lougheed and Burquitlam Neighbourhood Plans have been developed in the context of Parts 1, 2 and 3 of the Citywide Official Community Plan (CW OCP) including the City's Regional Context Statement, which is a commitment to achieving the goals of the Greater Vancouver Regional District's *Livable Region Strategic Plan*, policies that are applicable citywide, and area policies contained in the City's Southwest Coquitlam - Town Centre (SWTC) Area Plan.

## 1.2 LOUGHEED TRANSIT-ORIENTED COMMERCIAL VILLAGE CENTRE



★ TERRACED STAIRS

*Lougheed Transit Village*



★ TERRACED STAIRS

*The Urban Quarter*

Lougheed Transit-Oriented Village Centre (Lougheed Centre) is envisioned as a medium- to high-density mixed-use development, also supportive of the objectives and policies of Transit-Oriented Development (TOD) outlined in Chapter 2 of the CW OCP.

The area to the north of Lougheed Highway, east of North Road, currently occupied by both a shopping centre and hotel complex, is intended to retain its current character as a retail, office/commercial precinct with potential for high-rise residential towers. To become a Transit-Oriented Village, additional retail development will be in-filled along North Road to provide for a more continuous and attractive pedestrian environment, with parking attractively screened and incorporated into development. Staircases cut into the escarpment east of the shopping centre are proposed to offer convenient pedestrian access between the adjacent residential neighbourhood and the commercial amenities as well as the SkyTrain station.

The pattern changes south of Lougheed Highway, east of North Road. This precinct, dubbed the "Urban Quarter", is intended to take a form similar to Vancouver's Yaletown, which is a dense precinct of mid-rise, mixed-use developments, mixing at-grade restaurants and unique retail establishments topped by offices and then residential uses. The Urban Quarter will have a downtown or urban look to it. It will feature closely spaced, medium-rise mixed-use buildings, combined with pedestrian-friendly streets, complete with urban public squares and pocket parks. Importantly, the Urban Quarter will provide a housing choice where one can live comfortably without the burden of owning an automobile. Live/work and loft development will be encouraged within the Urban Quarter with the intention that it will attract both a younger and older population. Uses which "extend the day into night" will be sought such as coffee shops and bookstores in an attempt to provide for a livelier atmosphere that provides "eyes on the street" for a sense of community security and vitality.

A public staircase that is cut into the escarpment will provide a convenient link between the Urban Quarter and the Lower Lougheed residential Neighbourhood to the east. It is intended that a series of high-rise residential towers be constructed above the escarpment, taking advantage of the spectacular views from the site. Additional park space will be added in the general Neighbourhood through private development and public park acquisition.



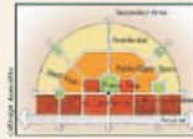
# CITY OF COQUITLAM

## Lougheed & Burquitlam Station Area Plans



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**TRANSIT-ORIENTED DEVELOPMENT:** The revival of the lost art of place-making ... the creation and restoration of compact, pedestrian-friendly, mixed-use neighbourhoods containing housing, workplaces, shops, entertainment, schools, parks and civic facilities essential to the daily lives of their residents – all within easy walking distance. TOD promotes the increased use of commuter and light rail transit, instead of building more highways and roads for auto travel. Transit-oriented development is essentially *a city on a small scale.*



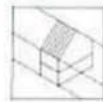
### TOD TYPOLOGY ~ BUILT FORM & DENSITY



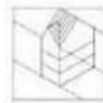
Single Family Home  
4.5 to 6.5 dwelling units/acre



Secondary Units  
5 to 15 dwelling units/acre



Townhouse/Rowhouse  
4.5 to 28 dwelling units/acre



Apartments and Condominiums  
35 to 60 dwelling units/acre



Mixed-Use/Live Work  
100 jobs/acre with  
50 dwelling units/acre



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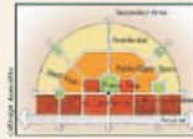
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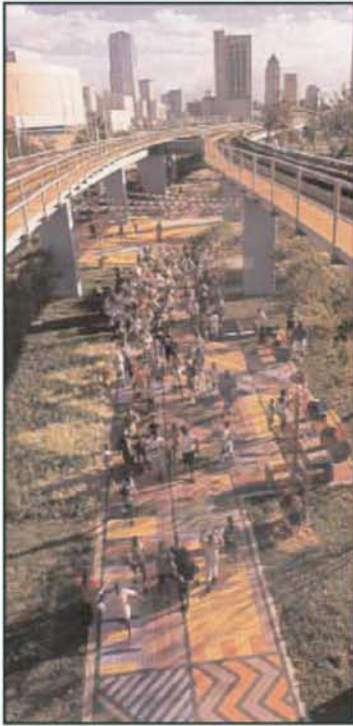


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### STATION AREAS ~ IDEAS FOR CREATING A SENSE OF PLACE



*Pedestrian Mall, Miami Metrolink, FL*



*'Beautiful Streets,' Vancouver, BC*



*Street Art, Vancouver, BC*



*Mural, Portland, OR*



*Platform Structures, Los Angeles Metrolink, CA*



*Street Heritage, Vancouver, BC*



*Public Art on Station Stairs, Los Angeles, CA*



*Burquitlam Community Gardens... You're well on your way!*

We can learn from the experience of other cities when we design our station environments. Here are some artful images that contribute to a **'SENSE OF PLACE.'**



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### 1.3 BURQUITLAM TRANSIT-ORIENTED VILLAGE COMMERCIAL CENTRE

Burquitlam Transit-Oriented Commercial Village Centre (Burquitlam Village) will be redeveloped with Clarke Road as its focus – running diagonally from Smith Avenue to Como Lake Avenue. The site of the current Burquitlam Plaza Shopping Centre, as well as the commercial uses west of Clarke Road, will become the new Transit-Oriented Village Centre, with redeveloped grocery stores, retail, office/commercial and high-density residential uses, all combined within a mixed-use format. A portion of existing Burquitlam Park will be integrated with development and redeveloped in part, with the remaining park uses redesigned to become more urban in character, featuring a potential community recreation centre (connected to the transit station by a convenient pedestrian pathway). Uses, which "extend the day into night", will be sought such as coffee shops and bookstores in an attempt to provide for a livelier atmosphere that provides "eyes on the street" for a sense of community security and vitality.

In order to serve this more intensive development, the Transit-Oriented Village Centre is to be bisected by a new road running east-west between Emerson Street and Clarke Road between Como Lake Avenue and Smith Avenue near the multi-modal transit station. This new road will provide a direct connection to the station by buses, cars, pedestrians, and bicycles.

A key planning concept for the new Transit-Oriented Village Centre is its treatment of the automobile. Major streets including Clarke Road, Como Lake Avenue, and the new east-west road through the current Burquitlam Plaza Shopping Centre site will have retail spaces fronting them, wide sidewalks, street trees, coordinated street furniture and lighting, with parking attractively screened and incorporated into development. Visitors should be enticed to walk along both sides of Clarke Road and the other major streets within this zone.

Parking structures will be encouraged within major development sites, either underground or, if above grade, camouflaged by storefront retail facilities. Any surface parking should be guided by the Orchard Parking Guidelines as outlined in these "Transit-Oriented Design Guidelines". The Orchard Parking Guidelines set out landscaping standards and safe, convenient pedestrian walkways through surface parking lots.

On the fringe of this more central, high-density zone – east of Emerson Street and west of Farrow Street – it is intended that current low-rise and single-family homes be redeveloped as medium-density apartment residential uses to provide more residential density nearest the transit station. Lower-density forms within this area, such as townhouses, are proposed to be located adjacent to one-family uses in order to allow a transition between different housing forms and densities.



*Burquitlam Transit Village*

## 2.0 DESIGN GUIDELINES

The following Design Guidelines support the Station Area Plans to foster the character envisioned through the public process is achieved. The Design Guidelines address both general elements, and more specific guidelines.

### 2.1 GENERAL GUIDELINES

#### 2.1.1 MIXED-USE DEVELOPMENT

##### **OBJECTIVE**

In pursuit of more compact, *complete* communities the City of Coquitlam is pursuing the encouragement of mixed-use development, which might be described as the vertical integration of a variety of uses – retail, office/commercial, hotel/lodging and/or residential within a single structure. In doing so, care needs to be taken to ensure that this mix of uses does not cause unnecessary conflict. A variety of preventive measures need to be considered with assembling mixed-use building programs.

##### **RECOMMENDED ACTIONS**

- a) Consider measures to address security and surveillance conflicts at the interface between different uses.
- b) Separate parking facilities by use.
- c) Place exhaust ventilation shafts and grates, garbage storage compaction and pick-up away from residential uses.
- d) Consider the placement of external lighting poles and fixtures to minimize the overspill of lighting.



## 2.1.2 BUILDING SETBACKS AND ORIENTATION

### BUILDING SETBACKS

#### OBJECTIVE

A major goal of Transit-Oriented Development is to encourage pedestrian-friendly environments by placing buildings of the appropriate scale adjacent or near to sidewalks, rather than separating them by parking lots.

#### RECOMMENDED GUIDELINES

- a) Place all retail/office/commercial development within a Transit-Oriented Village adjacent to streets to promote vibrant, pedestrian-friendly environments.
- b) Site buildings at or within 1.5 metres of a street front or urban square.
- c) Encourage at-grade retail development along commercial streets and ground-oriented residential uses along residential streets. All other uses should be discouraged at-grade.

### ORIENTATION - STREET FRONTAGE

#### OBJECTIVE

To further achieve the goal of pedestrian-friendly environments, building facades should contribute to an animated streetscape

#### RECOMMENDED GUIDELINES

- a) Occupy 80 percent of each block's linear street frontage, at-grade with street-facing buildings.
- b) Provide at least 60 percent of linear building frontage with windows, doors or alcoves at-grade.
- c) Orient building entrances towards the street.
- d) Discourage blank walls in excess of six metres in length on street-facing facades. Blank walls could be located on zero lot lines adjacent to buildings slated for future development.
- e) Discourage the location of garage doors that occupy more than nine metres of street-facing façade per block.
- f) Encourage the use of awnings or canopies to provide weather protection for pedestrians.
- g) Pursue continuous weather-protected pedestrian walkways of adequate width and height adjacent to the building facade to achieve a free and safe pedestrian movement, allowing for maximum visibility of building faces through the walkways from the public street.
- h) Orient balconies/patios up to four storeys above street level towards the street to provide "eyes on the street".



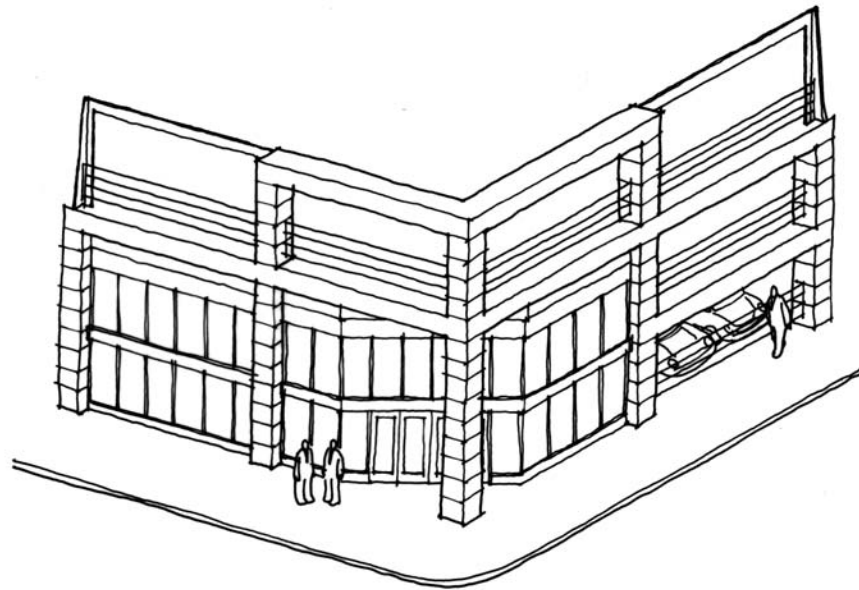
### 2.1.3 PARKING

#### **OBJECTIVE**

As the automobile is intended to assume a secondary role to that of the pedestrian, stringent parking policies are proposed within Transit-Oriented Development (TOD) areas.

#### **RECOMMENDED GUIDELINES**

- a) Provide structured parking, either underground or attractively screened and incorporated into development.
- b) Avoid above-grade, single-use parking structures.
- c) Encourage some convenient short-term parking (see Orchard Parking Guidelines).
- d) Encourage on-street parking on appropriate street-fronts.
- e) Consider parking reductions, including shared parking opportunities, through the demonstrating potential higher transit usage, lower car ownership rates or other factors deemed appropriate.



*Wrap parking structures with retail at grade, especially at corners*



## 2.1.4 ORCHARD PARKING

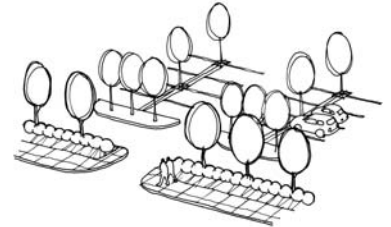
### OBJECTIVE

Ensure surface parking lots do not detract from a pedestrian-friendly environment.

### RECOMMENDED GUIDELINES

Orchard parking is required for any surface parking including that proposed as an interim solution (phase). Orchard parking standards for surface parking lots should include:

- a) Provide a minimum interior landscaped area of 7 percent of the total parking area.
- b) Provide walkways through a parking area to connecting sidewalks along logical pedestrian routes.
- c) Provide a minimum two metre wide perimeter landscape buffer around a parking lot. The landscape standards proposed for both interior and perimeter parking lot landscaping include the following:
- d) Provide a minimum tree spacing of ten metres on centre. The minimum tree caliper size at planting should be 7.5 cm as measured at 15 cm above ground level.
- e) Provide landscape islands, peninsulas or buffer strips that are a minimum of two metres wide, with a minimum topsoil depth of one metre for trees and other plantings.
- f) Provide shrubs and ground covers in landscape areas in accordance with the British Columbia Landscape Standards (latest edition) to provide 85 percent coverage in two years.
- g) Select tree and plant materials appropriate to southwestern British Columbia climate zones.
- h) Provide structural soil beneath paving material to encourage drainage, and accommodate tree root development in accordance with the British Columbia Landscape Standards (latest edition).
- i) Illustrate that the design and placement of interim surface parking lots as part of initial phases of development positively fosters the ultimate objectives for dense development with long term structured parking, or at least does not preclude it, through illustrations of an ultimate development pattern including structured parking accommodation.



*Orchard parking lot screened from street*

## 2.1.5 BIKEWAYS AND BICYCLE PARKING

### OBJECTIVE

The use of bicycles is encouraged within all Transit-Oriented Villages as an alternate mode of non-polluting transportation.

### RECOMMENDED GUIDELINES

- a) Accommodate shared bicycle facilities on all local streets.
- b) Develop urban Greenways pursuant to Schedule D of both the Lougheed and Burquitlam Neighbourhood Plans
- c) Provide bicycle parking in locations that are clearly visible from storefronts. (See background report for the City's Strategic Transportation Plan for guidance in the provision of bicycle parking facilities.)



## 2.1.6 SIDEWALKS

### OBJECTIVE

Pedestrians are encouraged to move throughout the neighborhood by means of convenient, safe, and attractive connections. Sidewalks within Transit-Oriented Villages are the major connector and deserve special consideration regarding their design.

### RECOMMENDED GUIDELINES

- a) Provide sidewalks that are a minimum width of 3 metres for commercial street fronts and 1.8 metres for side streets.
- b) Consider materials other than gray concrete for sidewalks, such as coloured concrete, coloured "stamped" concrete, coloured pavers, paving blocks or coloured, stamped asphalt.
- c) Consider the inclusion of sidewalk accent lines/edges of another material/colour.



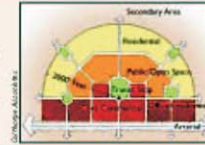
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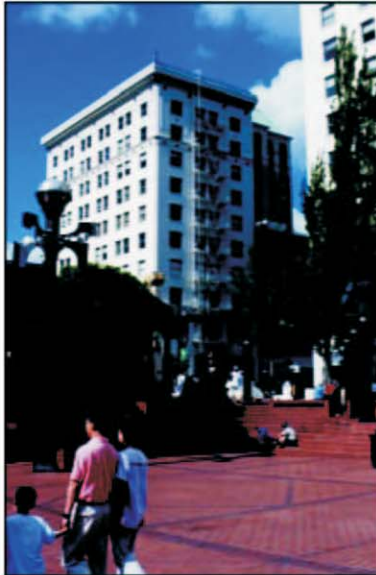
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### STATION AREAS ~ IDEAS FOR URBAN DESIGN

...integrating landscape treatment and urban design with community fabric.



...legible and strong pedestrian, bicycle and transit (bus) links to and from neighbourhoods



...respecting the natural landscape



...using landscaping to mitigate noise impacts

### LANDSCAPE MATERIALS SELECTION CRITERIA:

- Safety
- Longevity
- Cleanliness
- Universal access
- Waterwise plantings
- Local materials
- Ease of maintenance
- Resistance to vandalism
- Native plantings
- Attractiveness



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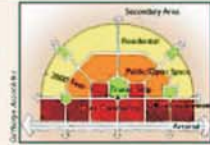
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### STATION AREAS ~ IDEAS FOR LANDSCAPE ARCHITECTURE

In existing neighborhoods, special care should be taken to achieve a comfortable fit between the old and the new:

- Employ sensitive landscape treatments consistent with the character of the neighborhood;
- Add a distinctive identity to the public spaces surrounding the station, using planting, paving, lighting, signage and street furniture to create 'pride of place';
- Use landscaping as a landmark feature identifying the station as a neighborhood focal point.



...water as a design element



*Landscape can be a powerful design tool. What kind of ideas do these images suggest to you?*



...build safety through lighting



...build safety through sight lines



...landscape treatment



...creating barrier-free places



The station as a welcoming entry to the neighbourhood...



...design neighbourhood 'places' through landscaping

*...encourage connections to other modes of transit (i.e. weather protected waiting areas/walkways and secure bicycle storage facilities).*



The Red Train in the Landscape becomes its own icon and identifier.



Wayfinding...



Signage...



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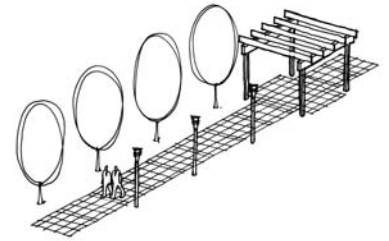
## 2.1.7 STREETScape/LANDSCAPE DESIGN

### OBJECTIVE

Pedestrians are given equal consideration to the automobile on the community's streetscape. Transit-Oriented Villages should feature increased efforts regarding streetscape design.

### RECOMMENDED GUIDELINES

- a) Consider a Village/Urban Centre theme.
- b) Coordinate architectural street light poles, light fixtures and banner arms.
- c) Coordinate street furniture, garbage receptacles and bicycle racks.
- d) Provide deciduous, shade street trees with a minimum caliper of 7.5cm (measured at 15cm above ground) spaced at 10 metres on centre, planted directly into the ground, with adequate volume of structural soil to optimize tree health, and in a surrounding tree grate.



*Enhance pedestrian walkways with pedestrian scaled lighting and street furniture, shade trees, trellises, etc.*

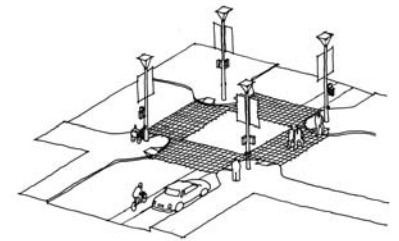
## 2.1.8 CROSSWALKS/INTERSECTIONS

### OBJECTIVE

Pedestrian crosswalks should provide a sense of safety and aesthetic quality.

### RECOMMENDED GUIDELINES

- a) Provide a colour and pattern of crosswalks that contrasts with the rest of the street to prompt drivers to be aware of a potential pedestrian/vehicle conflict.
- b) Select patterns and materials that do not create additional noise from traffic driving over it.



*Good intersection design enhances pedestrian safety*

## 2.1.9 BUILDING SIGNS

(See The City of Coquitlam Sign Bylaw)

### **OBJECTIVE**

Signs identify buildings and individual building tenants from the standpoint of both vehicular and pedestrian passersby. Signs should not obscure architectural elements/details such as pilasters, cornice lines, capping or edge of openings.

### **RECOMMENDED GUIDELINES**

Building signs within Transit-Oriented Development (TOD) zones should take the following formats:

- a) Place building identification signs below the cornice line of a building or over major entrances.
- b) Locate signs for individual ground level tenants either above the facility's major entrance, as part of the canopy, above façade windows, or as a projecting sign, protruding perpendicular from the store face.
- c) Use signs for shared-entry tenant addresses where multiple tenants share a building entry and an exterior identity, or when upper-storey tenants share a ground-level entry.
- d) Discourage portable signs in Transit Village Commercial Designations.

## 2.1.10 SEMI-PRIVATE AND PRIVATE OUTDOOR OPEN SPACE

### **OBJECTIVE**

Semi-private and private outdoor space should be considered as part of all developments.

### **RECOMMENDED GUIDELINES**

- a) Define semi-private and private outdoor space by using buildings or landscape elements on a minimum of two sides to create landscaped, outdoor rooms and spaces.
- b) Use gateways, trellises, special lighting and planting to create experiential sequences for pedestrians, i.e. an ornamental gate at the sidewalk, a tree-lined passage to a courtyard.
- c) Ensure that all outdoor areas, including entries, patios, streets, etc., are visually accessible to residents to encourage a general sense of security resulting from "eyes on the street".
- d) Provide one private outdoor patio space for each ground floor unit. This space should be in the form of a patio off the main living space.
- e) Provide ground-oriented residential units with a minimum depth of four meters of visually screened outdoor space at front or back of unit, accessed off main living area.



*Eyes on the Street:*

*Streets, walkways and open space should be visible to and therefore supervisable by residents in their dwellings*



## **A. PLANT MATERIALS**

- a) Select plant materials and place them to reflect both ornamental and functional characteristics.
- b) Use species native to southwestern British Columbia as well as ornamental species, as the basis of the plant palette.
- c) Use plant materials with low watering requirements.
- d) Use deciduous trees predominantly over evergreen trees. Locate trees in relation to buildings to provide shade from the sun in summer and promote use of the sun's warmth in winter. Select species to provide variations in texture, scale, seasonal colour and to minimize litter and other maintenance problems.
- e) Use evergreen shrubs and trees as screening devices, for example, along property lines, around mechanical appurtenances, hydro kiosks, etc., and to obscure grillwork and fencing associated with subsurface parking garages.
- f) Use flowering shrubs and trees where they can be most appreciated - adjacent to walks, recreational areas or as a framing device for building entries, stairs, and walks.
- g) Consider plants with perennial or seasonal colour to highlight special locations, such as courtyards, building entrances or access drives.

## **B. SCREENING AND LANDSCAPING**

- a) Provide attractive screen fences or walls to screen service areas and parking entries of multi-unit buildings. Establish planting areas adjacent to the fence or wall and, where possible, 75 cm caliper deciduous trees at a minimum of 6 metres on centre.
- b) Locate garbage, service, equipment and hydro kiosks in discrete areas, where possible, and enclosed or screened by landscaping, fencing, or other architectural means.
- c) Sufficiently screen and landscape all electrical meters and vents with use of fencing, walls, and planting.
- d) Construct screen fences and walls high enough to differentiate between the public and private realms, but low enough for visual comfort and security.

### **C. SITE FURNISHINGS AND LIGHTING**

- a) Install permanent outdoor seating in semi-private spaces. Seating should be one of the following: incorporated as part of the design of the building or custom designed in a style related to the architecture of the building (permanent benches of wood, stone, brick or pre-cast concrete); or catalogue items of substantial materials and durability appropriate to the design of the development.
- b) Provide area lighting for illuminating all sidewalks, passageways and footpaths. Lighting shall be shielded from casting light higher than a line 15 degrees below the horizontal plane, as measured from the light sources and shall not cast light directly into adjacent residential windows. A translucent or optical lens diffuser globe or shield is recommended.
- c) Locate the mounting height of light sources for ground level illumination a maximum of 3.8 metres, measured from the finished grade of the area to be lit.

### **D. WALLS AND FENCES**

- a) Where appropriate, use low walls and fences to define public and private boundaries and spaces.
- b) Design fences to be compatible with the character of adjacent buildings.
- c) Ensure that any fences used are open, to promote safety and visibility, and low (maximum 1.2m.) along streets to maintain an open character, sight distance and clearance.
- d) Divide fences and retaining walls into regular modules that reflect the module of the principal building, especially for publicly visible areas.
- e) Use both thick and thin vertical elements for supports and panel divisions in the design of fences. Fence posts and support pillars may be emphasized and built up for this purpose.
- f) Consider materials that are compatible with the principal building. Post or pier materials may differ from fence materials, for example, metal fences with masonry posts.
- g) Consider the following fence materials: wrought iron, cast iron, welded steel ornamental fences and wood picket fences of substantial design.
- h) Consider the following retaining wall materials: brick, stone, concrete, pre-cast concrete, and stucco-faced concrete.
- i) Discourage fence and wall materials such as a standard chain link fence or unfinished or un-surfaced concrete block.

### **E. ENTRANCES**

- a) Announce the entrance of a multifamily building by giving it a scale that is in keeping with the building's stature on the street. The scale must, however, remain pedestrian-oriented.
- b) Extend the entry axis into the foreground landscape with walkways and planting material.
- c) Provide ground floor units with individual, smaller entries and patios that access the street and read as front doors. All entries should be visible from the street.

## **F. PAVING MATERIALS**

- a) Paving materials recommended for semi-private pedestrian surfaces are listed below. In general, a maximum of three materials should be, as follows:
- b) Consider mixing a maximum number of paving materials combined in a particular application to three.
- c) Consider the following paving materials: stone, such as granite, slate or sandstone; brick pavers; concrete unit pavers; poured-in-place concrete with any of the following treatments – integral colour, scored patterns; ornamental insets such as tile or stamped patterns; crushed limestone or crushed granite.
- d) Discourage large areas of asphalt.

### **2.1.11 SUSTAINABLE DESIGN FEATURES**

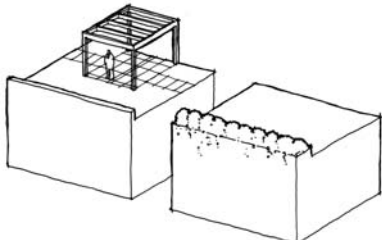
#### **OBJECTIVE**

As the resource base diminishes and increased pressure is put on the environment, there is a growing awareness of the need to become more sustainable; to use less resources and energy and to recycle those that still exist. A Transit-Oriented Neighbourhood is an appropriate location to explore sustainable design features, some examples of which are listed below.

#### **RECOMMENDED GUIDELINES**

- a) Establish a centralized recycling depot within each development.
- b) Establish a centralized composting area.
- c) Provide for centralized secure bike storage.
- d) Provide biodiversity through the selection of plant materials.
- e) Incorporate native plants and trees into landscaping plans.
- f) Utilize permeable surface treatments wherever possible, such as pavers, brick, and subsurface water storage systems (e.g. Invisible Structures, Inc.).
- g) Incorporate structural soil mixes underneath road and pathway bases to allow for the transmigrations of roots and water into the ground system.
- h) Incorporate Greens Roofs into new building structures (as described below).

As many of the following elements as possible are strongly encouraged to be implemented giving due consideration to cost-effectiveness, evolving capacity for successful implementation of new environmental technology, risk avoidance, and market needs.



Green Roof treatments include amenity spaces and landscaping

### A. GREEN ROOFS

Green roofs are defined as the development of a roof, as part of a building or structure, which incorporates a contained green space. The introduction of plants provides increased biomass to assist in the conversion of emissions into oxygen. Green roofs also can improve the storm water management of a project, as well as provide improved sound and temperature insulation, add public amenity and decrease the "heat island" effect. Moisture held in the soil and utilized by the plant material slows down the surge of water to the storm water system by delaying the time that the water is released into the system.

Green roofs can be further defined as *extensive* or *intensive* green roofs. Extensive green roofs are typically lower in capital cost, lower in weight on the roof and require minimal maintenance. The choice of plant material for these types of roofs are limited as is the recreational potential for the roof.

Intensive green roofs involve higher capital costs, more maintenance and weight on the roof but they can be utilized for recreational purposes with a greater choice of plant materials.

Within the Lougheed and Burquitlam Station Area Plans both types of green roofs could be utilized. Developments could incorporate intensive green roof systems to accommodate outdoor sitting areas, tennis courts and play spaces.

### B. GREEN BUILDINGS

Buildings play a significant role in impacting both local and global environments. Considering this, efforts should be made to reduce the ecological footprint of buildings - i.e. decrease energy, water, and materials' impacts. In addition, efforts should be made to make all buildings healthy through improved indoor air quality.

### C. ENERGY

- a) Install renewable energy sources including geothermal, solar domestic hot water, and photovoltaic cells.
- b) Comply with the Model National Energy Code for Buildings 1997 or the energy efficient design requirements of ASHRAE/IES 90.1-1999.
- c) Install EnergyStar rated appliances.
- d) Utilize compact fluorescents for exterior lighting including landscape and interior lighting in common areas.
- e) Utilize landscaping to shade buildings and reduce solar heat gain.



**D. WATER**

- a) Install water meters in all buildings.
- b) Install low flow (maximum 6 liters per flush) toilets in all bathrooms.
- c) Provide rainwater collection systems to collect rainwater run-off from roofs to be used in landscape irrigation.
- d) Use a variety of drought tolerant plants in landscaping.
- e) Consider water-efficient appliances in all buildings.

**E. RESOURCE EFFICIENT MATERIALS AND WASTE**

- a) Reuse wood/reclaimed lumber where possible.
- b) Utilize other materials with recycled content where possible.
- c) Adopt a construction waste-recycling program.
- d) Ensure that all site waste is sent to a waste recycler.
- e) Provide a recycling area in all units and a central location point within buildings.

**F. HEALTHY BUILDINGS**

- a) Ensure that indoor spaces have adequate ventilation, i.e. ASHRAE 62-1999, the recognized North American standard.
- b) Flush individual units with outdoor air for seven days prior to occupancy.
- c) Utilize exterior grade plywood or material with comparably low formaldehyde levels for sub-floors.
- d) Provide operable window openings in all occupied rooms.
- e) Utilize low VOC (volatile organic compounds) paint that is Environmental Choice certified.
- f) Utilize hard surface flooring options instead of carpets (e.g. hardwood, ceramic, tile, slate, etc.).
- g) Provide end of trip facilitators for bicyclists, such as bike lockers and shower facilities.

## 2.2 SITE-SPECIFIC GUIDELINES

### 2.2.1 LOUGHEED TRANSIT VILLAGE

This area will transform the least from its current character. Major changes include a second high-rise apartment or hotel on the parking lot of the Executive Inn site. Similarly, the Caribou Shopping Centre will likely add on to the retail area in the short- to medium-term. In the long-term, this site will be redeveloped with much more density – a mixed-use enclave of retail at-grade, office/commercial development in the immediate floors above, and topped by high-rise residential towers.

Another short-term objective is to infill retail development along the North Road street front to encourage an enhanced, continuous pedestrian experience. It will consist of one- to two-storey developments with a strongly defined street front presence.



#### A. PEDESTRIAN CONNECTIONS

##### OBJECTIVE

Pedestrian connections to the commercial area from the residential areas to the east are required. The hillside to the east of the Lougheed Centre should be terraced, using a retaining wall of planters, featuring columnar trees, and a terraced walkway from the escarpment above. The walkway is intended to provide connection for residents east of Lougheed Centre to access the commercial amenities and the Lougheed SkyTrain Station.

##### RECOMMENDED ACTION

Secure public rights-of-way between Lougheed Centre and the residential Neighbourhood to the east. Develop a well-lit, visible public staircase that will provide a safe connection between Neighbourhood amenities.

#### B. NORTH ROAD SIDEWALK TREATMENT

##### OBJECTIVE

Given the unique role of North Road in feeding pedestrians to the Lougheed SkyTrain station, and the proposed SkyTrain alignment along North Road to Coquitlam's Regional Town Centre, it is suggested that a higher level of urban design that normal be pursued.

##### RECOMMENDED ACTION

Consideration should be given to the urban design of this area with a strategy of upgraded sidewalk materials and patterns, specialty street lighting and banner arms, sidewalk bollards, and urban furniture items.

## 2.2.2 URBAN QUARTER

The urban design/architectural flavour within the Urban Quarter will resemble that of Vancouver's Yaletown – a series of densely built, five to six-storey structures arranged along a grid of narrow streets. It is intended that this be a true mixed-use precinct of retail, office/commercial, live/work and residential loft uses. Many residential developments could feature double-height ceiling lofts, a feature that has proven marketable in downtown Vancouver.

### A) BUILDING SCALE AND ARTICULATION

#### OBJECTIVE

The Urban Quarter is seen as a unique precinct within the City of Coquitlam. Its building scale and material selection should reflect that fact.

#### RECOMMENDED ACTION

Building scale and material choice is that of traditional warehouse districts – brick, concrete, metal and glass. Entranceways should be clearly articulated; windows should be framed and repetitive across the façade of a building. The potential for terraced, rooftop gardens is encouraged.

### B) RETAIL AT-GRADE

#### OBJECTIVE

It is intended that the Urban Quarter be developed as a vibrant retail/entertainment precinct.

#### RECOMMENDED ACTION

All ground floor space in the Urban Quarter should be designated for retail use, either directed towards sales, or food and drink. It is intended that uses with extended hours – bars, coffee shops and bookstores – be pursued in an effort to extend night-time activity within the zone.

### C) UNIFORM BUILDING BASE AND CORNICE LINE

#### OBJECTIVE

A uniform roof cornice line throughout the precinct should take precedence over individual building expression.

#### RECOMMENDED ACTION

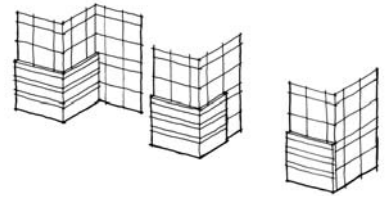
The form of "buildings as a group", should take precedence over the form of single buildings, by virtue of uniform height and cornice treatment. Similarly, the ground floor should express a solid base line, a fitting foundation for the mass it carries on its upper floors.

Within the Urban Quarter, building facades should have three recognizable elements: a top, a mid-section and a base.

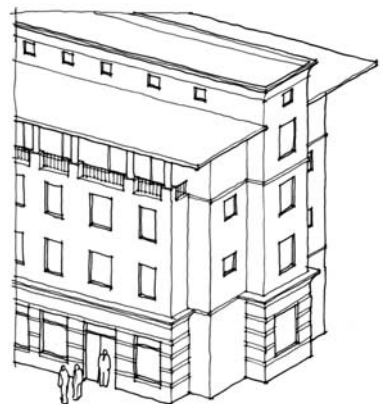
#### TOP

The top should create an attractive profile for the building and should be defined (but not limited to) one or more features such as:

- Cornice treatment;
- Roof overhang with brackets;
- Stepped parapets.



*Material changes at inside corners or wrapped at least 60cm around the corner, but not at outside corners*



*Uniform Building Base and Cornice Line: buildings to have a base, middle and top*



#### **MID-SECTION**

Materials within the middle should be characterized by a combination of solid cladding materials such as:

- Masonry, concrete or metal combined with a regular repeat of windows.
- The use of reflective mirror cladding should be discouraged.

#### **BASE**

The design of the base should visually support the building. The base should be at least 1.2 metres in height and defined by (but not limited to) one or more features such as:

- Thicker-than-normal walls.
- Richly textured materials (i.e. tile or masonry treatment).
- Special cladding materials (i.e. rock, ceramic tile or marble).

#### **D) STRUCTURED PARKING**

##### **OBJECTIVE**

The automobile is intended to play a secondary role to the pedestrian within the Urban Quarter.

##### **RECOMMENDED ACTION**

All development within the Urban Quarter should feature structured parking, preferably underground or hidden behind retail development if above grade.

#### **E) SIDEWALK REALM**

##### **OBJECTIVE**

A unifying feature of the Urban Quarter is the grid network of sidewalks.

##### **RECOMMENDED ACTION**

Sidewalks should preferably be constructed of coloured, patterned surfaces and lined with deciduous trees with grates. The potential exists for use of low profile wrought iron fences surrounding street side and/or building front flower gardens, fashioned after similar designs used in New York's Greenwich Village.

#### **F) NORTH ROAD SIDEWALK TREATMENT**

##### **OBJECTIVE**

Given the unique role of North Road in feeding pedestrians to the Lougheed SkyTrain station, it is suggested that a higher level of urban design than normal be pursued.

##### **RECOMMENDED ACTION**

Consideration should be given to the urban design of this area with a strategy of upgraded sidewalk materials and patterns, specialty street lighting and banner arms, sidewalk bollards, and urban furniture items.

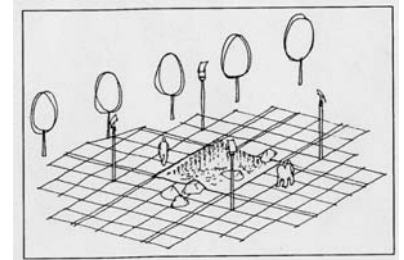
## **G) URBAN PLAZAS**

### **OBJECTIVE**

The Urban Quarter should feature a variety of "public realm" urban spaces.

### **RECOMMENDED ACTION**

Consideration should be given to a hard-surfaced urban plaza featuring a water feature and/or other outdoor urban art. Public areas should be landscaped, featuring trees and grass, shrubs and flowers, and combined with street furniture.



*Urban plaza with fountain, public art, trees and pedestrian scaled*

## **H) TERRACED HILLSIDE/CONNECTIONS TO GREENSPACE**

### **OBJECTIVE**

Enhanced community connections between the Urban Quarter and the adjacent neighbourhood to the east should be strengthened.

### **RECOMMENDED ACTION**

The hillside to the east of the Urban Quarter should be terraced, using a retaining wall of planters, featuring columnar trees, and a terraced walkway from the escarpment above. The walkway is intended to provide a connection for Urban Quarter residents with green space to the east of the development within the Lower Loughheed neighbourhood and, in turn, for residents of the surrounding residential community to access Urban Quarter amenities.





### 2.2.3 BURQUITLAM TRANSIT VILLAGE

The proposed Burquitlam Village Centre is intended to serve as the focus for the urban redevelopment throughout the Burquitlam Transit-oriented Development area. The new Burquitlam Village Centre should be a unified, coherent, architecturally designed development, one where public realm plazas have equal importance to the buildings that surround them. Construction of a new Community Recreation Centre is a possibility for this site.

#### **A) CENTRAL EAST-WEST STREET THROUGH VILLAGE CENTRE OBJECTIVE**

The redeveloped Burquitlam Village Centre site will require improved site access to accommodate both private vehicles and transit buses.

#### **RECOMMENDED ACTIONS**

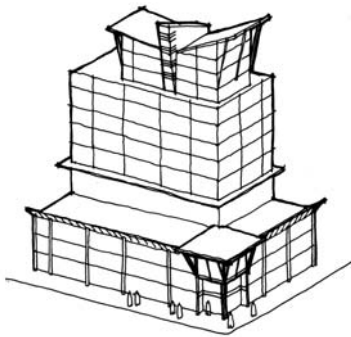
A new street will be developed through Burquitlam Village Centre to accommodate movement of pedestrians, cars, transit and the delivery of commercial goods to the retail businesses. This street is intended to be an East-West Connector as defined in the Burquitlam Neighbourhood Plan, Policy 3.7.4. This street is an important connection between the two halves of the Village Centre area that are divided by Clarke Road.

#### **B) URBAN ARCHITECTURE OBJECTIVE**

Burquitlam Village is intended to demonstrate the notion of the urbanization of Coquitlam. Its design should reflect this goal.

#### **RECOMMENDED ACTIONS**

While its architectural character may be "themed", its proportion needs to be that of a series of 'storefronts' comprising a street, preferably anchored at each end by larger retail developments, rather than the perpetuation of the "Big Box" format, surrounded by a sea of parking.



*Continual cornice, corner feature and stepped back towers*

#### **C) RETAIL AT-GRADE OBJECTIVE**

It is intended that Burquitlam Village be developed with a retail focus to both provide continuity of the shopping experience and promote the critical mass needed for a vibrant pedestrian precinct.

#### **RECOMMENDED ACTIONS**

All ground floor space within Burquitlam Village fronting commercial streets should represent retail sales uses or some other public amenity space such as a community centre, neighbourhood police station, etc. Exceptions to this requirement could be developments along Smith and Emerson Streets.

#### **D) ROOFTOP CORNICE LINE**

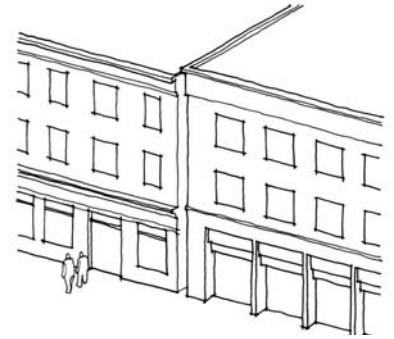
##### **OBJECTIVE**

The architectural expression of Burquitlam Village as a whole should predominate over the design of individual buildings within the village.

##### **RECOMMENDED ACTION**

A continual cornice, preferably three- to four-storeys above grade should be maintained throughout the development unless otherwise agreed upon by the City. Exceptions to this principle could include provision of architecturally enhanced features such as corner rotundas or bell towers. High-rise residential towers above the three- to-four-storey height limit, should be stepped back proportionally from the buildings' street front façade.

Developers need to demonstrate that overshadowing of public spaces and other private property will be minimized through the prudent positioning of towers within their property lines.



*Streetscape is comprised of a series of store fronts*

#### **E) STRUCTURED PARKING**

##### **OBJECTIVE**

In pursuit of more compact, land efficient development, surface parking lots will be discouraged.

##### **RECOMMENDED ACTIONS**

All development within the Village Centre precinct should feature structured parking, preferably underground. Where structured parking is provided at-grade, its street-facing façade should be lined with mixed-use development, e.g. retail, or ground-oriented residential.

#### **F) ORCHARD PARKING**

##### **OBJECTIVE**

In areas where surface parking is developed, orchard parking measures are required.

##### **RECOMMENDED ACTIONS**

(See General Guideline 2.1.4 Orchard Parking above).

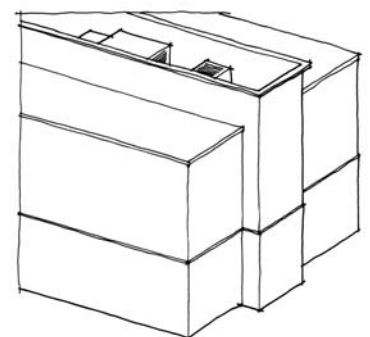
#### **G) ROOFTOP MECHANICAL ROOMS**

##### **OBJECTIVE**

Poorly designed mechanical systems are a source of blight that can be avoided.

##### **RECOMMENDED ACTIONS**

All rooftop mechanical equipment should be suitably organized and camouflaged by the provision of penthouses, visual screens or its incorporation into the architectural form of the building.



*Integrate rooftop equipment screens into the building architecture*

## **H) COMMUNITY POLICE STATION**

### **OBJECTIVE**

The community has identified the value in the maintenance of an on-site Community Police Station.

### **RECOMMENDED ACTIONS**

As a demonstration of responsible corporate citizenship, the provision of a neighbourhood police station should be accommodated within the Burquitlam Plaza area development.

## 2.2.4 GROCERY STORE/BURQUITLAM TRANSIT VILLAGE

The guidelines in this section are directed at the redevelopment of an anchor grocery store on the northern portion of the Burquitlam Plaza Shopping Centre site and are in addition to those for Burquitlam Village Centre.

A new grocery store is proposed as the first step in the refurbishment of Burquitlam Village Centre. Its site location and architectural treatment are keys to setting the *tone of expectation* for all subsequent site development. Accordingly, it is important that it incorporates the following urban design guidelines to fulfill the site's promise as a leader for future, responsive urban redevelopment in Burquitlam.

### A) LOCATION IN PLAN/RELATION TO EMERSON STREET

#### OBJECTIVE

A new grocery store on the current Burquitlam Plaza site should be located in a manner that best accommodates adjacent development in a village-like atmosphere and fosters the realization of the full ultimate development potential of the site.

#### RECOMMENDED ACTION

The grocery store should be located close to Emerson Street which is intended to be upgraded to city municipal collection street standard. This move will allow for more commercial site development in front of the first phase grocery store.

### B) URBAN ARCHITECTURE AND MATERIALS

#### OBJECTIVE

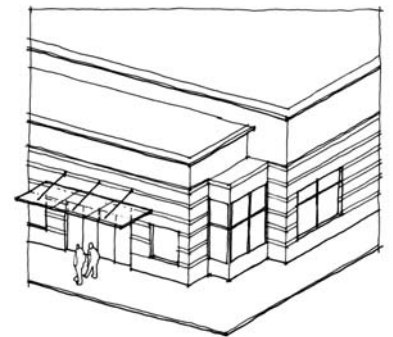
Burquitlam Centre is to be an urban centre, which is a shift from its current suburban setting.

#### RECOMMENDED ACTION

Development should encompass high quality architecture and materials reflective of an urban setting. Examples of how this objective can be achieved include:

- Repetitive bay spacing and articulation of façade details;
- Rectilinear, cornice-lined flat roofs;
- External building materials that include concrete, metal cladding, glass and wood accent;
- Rain protection canopies and plant trellises;
- A four metre wide sidewalk along the front/west façade to encourage a sense of urban space and facilitate events such as sidewalk merchandizing, i.e. outdoor fruit and vegetables stalls, outdoor café, etc.

Consideration should be given to the inclusion, along the front/west façade, of a deeper sidewalk, minimum 4 metres, to both encourage a sense of urban space and facilitate events such as sidewalk merchandizing, i.e. outdoor fruit and vegetable stalls, outdoor café, etc. Rain protection canopies and plant trellises are encouraged.



*Contemporary, rectilinear, cornice-lined, flat roof building*

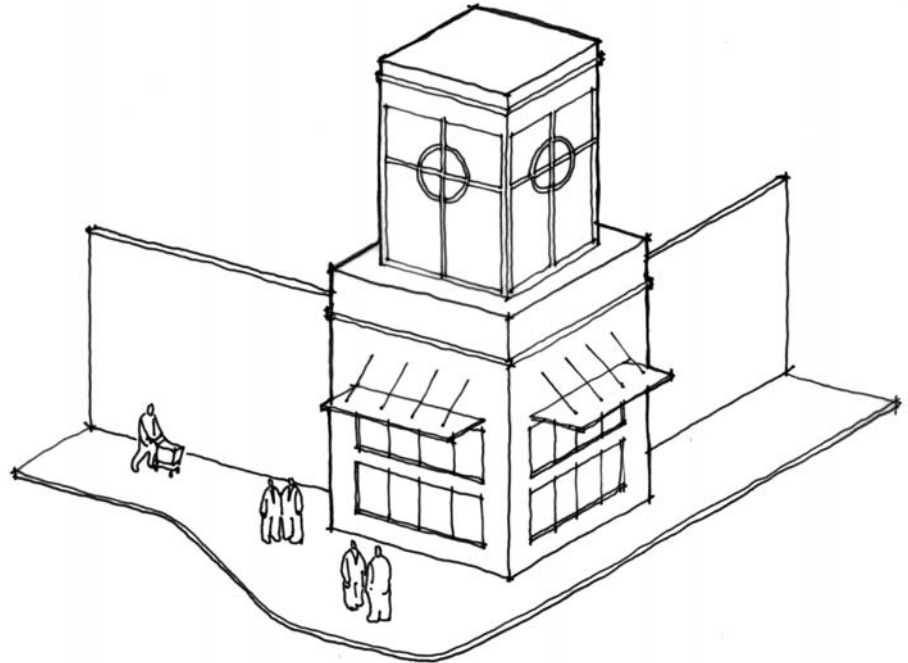
### **C) SPECIAL DESIGN FEATURES**

#### **OBJECTIVE**

Given the prominent, central location of the grocery store within the Burquitlam Village Centre site, consideration should be given to making the southwest corner of the facility a special design feature.

#### **RECOMMENDED ACTION**

The project's developers might consider incorporation of a clock tower to assist in the task of *place making* – the provision of site character and identity.



*Special treatment of southwest corner such as a clock tower*