HOLDOM STATION AREA
GUIDE PLAN

1.0 INTRODUCTION

In anticipation of the future development of rapid transit along the Lougheed Corridor, and specifically a station at Holdom Avenue, the Holdom Station Area was designated for higher density development in Burnaby’s Official Community Plan (OCP), adopted in 1998. At the time, it was anticipated that an at-grade Light Rapid Transit line would be built by 2005. With the accelerated construction of the new Millennium SkyTrain Line a contemporary plan is required for the area in order to make the best use of this new investment in our community.

This document presents a land use plan for the Holdom Station Area based on the development of a higher density urban village and business centre. It seeks to encourage a compact, mixed use community centred around the transit station that, by design, will invite residents, workers and shoppers to drive their cars less and walk and ride transit more.

2.0 REGIONAL CONTEXT

The population of the Greater Vancouver Regional District (GVRD) is expected to reach nearly 3 million by 2025. To manage future growth over the next 20 years, the GVRD has adopted the Livable Region Strategic Plan. The plan aims to help the region develop in a way that maintains and protects the natural environment and, at the same time, guides the location of urban activities to create a high quality of community life. A key component of the plan is to focus growth in the central part of the region.

As part of the growth concentration area of the GVRD, Burnaby will be expected to accommodate a larger share of the region’s growth. Concentrating growth will allow more people to live closer to their jobs, lead to more efficient use of public transit, utilities and community infrastructure, and slow the consumption of rural land for urban development. A major contribution towards achieving a more compact metropolitan region is the development of the new Millennium SkyTrain Line. The construction of the line along the Lougheed Corridor in Burnaby presents opportunities to integrate new transit service and land use to make the most efficient use of this major investment in the city and region.
3.0 VISION

The Holdom Station Area is situated on the edge of the Brentwood Town Centre in northwest Burnaby and is generally bounded by Lougheed Highway to the north, the Kensington overpass to the east, the Burlington Northern Santa Fe (BNSF) railway line to the south and Delta Avenue to the west (see Map 1). To promote the close integration of land use and the delivery of new transit service, the area to the west of Holdom Avenue was designated as an urban village and the area to the east of the station was designated as a business centre in Burnaby’s Official Community Plan. Taken together, the urban village and business centre designations support the concept of transit-oriented development.

The term “urban village” generally refers to a mixed use, pedestrian friendly community where a range of higher density housing choices are developed within walking or riding distance to transit, commercial services and jobs. It includes a commercial component intended to provide “close to home” access to commercial facilities and services to meet the day to day and occasional shopping needs of the surrounding neighbourhood. The Holdom Station Area is one of thirteen areas designated for urban village development in the City.

The business centre designation supports the development of a higher density employment centre. It accommodates a market demand within the Lower Mainland for strategically located, high amenity business centres oriented to smaller, corporate headquarter facilities, post secondary educational institutions and operations involving research, sales and service, light manufacturing and management and administration. The business centre use is seen as being complementary to the service uses provided in the City’s town centres, particularly the Brentwood Town Centre. It seeks to make more efficient use of the lands within the station area, contribute to the City’s economic base and assist with overall employment and tax base objectives for Burnaby. It also recognizes the area’s locational advantages including proximity to transportation routes (Highway 1 and Lougheed Highway), transit, downtown Vancouver, housing (existing and future), post secondary institutions including Simon Fraser University and the British Columbia Institute of Technology, and nearby urban amenities (e.g. Brentwood Town Centre). It is one of eight business centre areas designated in the City.

While the creation of a higher density focal point to support the new station is desirable, the redevelopment of the area will not be immediate. Instead, it will take place on a site by site basis through the assembly and redevelopment of existing uses, as determined by market demand. In the medium term, this is expected to contribute to a mix of new office, commercial and residential developments among existing general industrial uses. Fortunately, some of the larger sites in the area are ready for redevelopment. Having an adopted plan in place that is supportive of transit-oriented development is an essential initial step in facilitating the transition of the area. Once the redevelopment of these sites occurs, the new direction for the Holdom Station Area will begin to take shape as more street-oriented pedestrian friendly developments are built.

3.1 Land Use Feasibility Study

To help gauge the economic and market feasibility and acceptance of the transformation proposed for the Holdom Station Area, a land use feasibility study was conducted by Coriolis Consulting on behalf of the City. The consultant was asked to evaluate various land use scenarios based on the area’s OCP designations, taking into account regional economic trends and existing land uses and influences. The time frame given to the consultant was for a phased redevelopment of the area over the next five to fifteen years.
The basic conclusion of the study was that there would be a market demand for both residential units (an annual average demand of 88 to 102 units over the next fifteen years) and business centre development (an annual average absorption of up to 60,000 to 90,000 square feet over the next ten to fifteen years) given the study area’s location. It was noted however, that given the relatively high value of existing improvements in the area, minimum threshold residential densities would be required to make redevelopment financially attractive and feasible in the short to medium term. It was also recommended that appropriate light industrial uses and ancillary commercial (retail and service commercial) be included as permitted uses in the business centre to improve market demand for the parcels.

4.0 DESCRIPTION OF STUDY AREA

4.1 Physical Conditions

The Holdom Station Area covers a total of 116 acres. The highest point in the area is near the intersection of Lougheed Highway and Springer Avenue. The site slopes gently toward Still Creek in the Central Valley. The most notable changes in grade occur to the immediate south of the Lougheed Highway between Douglas and Springer Avenues, from Springer Avenue to the immediate east and from Douglas Road and Lougheed Highway to the immediate southwest. In general, most of the plan area has been graded for development purposes with the steeper slopes associated with road alignments and property lines.

A portion of the plan area is underlain with compressible peat and silt soils. These soils are generally located south of Goring Street and to the east of Holdom Avenue. Peat and silt soils are also found on the two properties to the immediate west of Holdom Avenue, north of Goring Street. Most of these soils are classified as “treatable peat” with only the southern portion of the Holdom Avenue right of way having more difficult peat soils. As a result, piling and/or pre-loading may be required on properties with treatable peat and under building parking rather than conventional underground parking may be necessary. New developments will be required to meet the Engineering Department’s flood proofing requirements and will be reviewed to assess their impact on adjacent infrastructure and neighbouring property.

A high percentage (approximately 90%) of the area is covered with impermeable surfaces. Most vegetation in the plan area is adjacent to the four watercourses in the plan area (see Map 2). The major watercourse in the area is Beecher Creek, a Class A fish bearing stream, which flows from north to south through the plan area. Beecher Creek Streamkeepers are working to protect and restore fish habitat in the creek. In recent years, the creek has been regularly stocked with coho salmon and cut-throat trout fry. Resident fish can now be found in the creek. Within the plan area, Beecher Creek has been channelled along property lines between Lougheed Highway and the railway line to the south. A portion of the creek (approximately 70 metres) has been piped along the north side of Goring Street.
Existing Watercourses

- Piped sections of watercourses
- Watercourses
- Road and Rail ditches

Existing Riparian Areas within Plan Area

- Beecher Creek: 0 - 7m
- Sunken Engine Creek: 0 - 5m
- Tributary to Crabapple Creek: 0 - 5m
- Delta Avenue Drainage: 0 - 50m

Map 2
Three other watercourses flow within or adjacent to the plan area. A Class A watercourse flows along the Delta Avenue right of way. This watercourse is currently non-fish-bearing, but could support fish with downstream access enhancements. Sunken Engine Creek is a tributary to Beecher Creek. The creek is almost entirely enclosed within stormdrains, but emerges as an open watercourse for two stretches along Holdom Avenue. These stretches are fish accessible. A tributary to Crabapple Creek runs along the southern edge of the Lougheed Highway, east and west of Kingsland Drive. The creek is fed from stormdrains north of the Lougheed Highway. The creek is not fish-accessible.

All four watercourses flow beneath the BNSF railroad and into Still Creek. Still Creek traverses the general industrial area to the south of the plan area as it flows into Burnaby Lake. Still Creek is primarily used by fish as a migration route. As discussed further in section 9.0, appropriate setbacks will be required for open watercourses as a condition of redevelopment.

4.2 Existing Uses and Locational Context

There are a total of 52 separate properties in the plan area, most of which are zoned for industrial use (see Map 3). These properties range in size from 0.14 to 7.6 acres. Buildings in the area have been constructed at low densities and contain a mix of industrial, warehouse and retail uses. Buildings range in age from 40 years to less than 5 years old with a number having had recent additions and modifications. In general, they are in fair to good condition and many contain stable business operations. This situation dictates the need for an orderly transformation process.

The new Millennium Skytrain Line runs along the northern boundary of the plan area. The newly constructed Holdom Station on the southwest corner of Holdom Avenue and Lougheed Highway is one of seven stations along the new line in Burnaby. Bus service is currently available on Lougheed Highway and Douglas Road. The main vehicular access to the plan area is from the intersection of Lougheed Highway and Holdom Avenue. Douglas Road provides north-south access. Willingdon Avenue to the west and the Kensington overpass to the east provide access to Highway 1. The BNSF line traverses the southern border of the site. About 40 to 48 trains pass through the area on a typical day. An overpass of the BNSF is planned for the longer term to replace the level crossing of the railway at Douglas Road.

The Brentwood Town Centre Plan encompasses the area to the immediate west and northwest of the plan area. Included in the Brentwood Town Centre Plan is the multi- family town house and high rise residential area situated to the northwest of the plan area. Brentwood Mall is located approximately 1.5 km further to the west. The Parkcrest neighbourhood is a stable single family neighbourhood situated to the north of the plan area. Parkcrest Plaza, a low density shopping centre, lies on the southern border of the neighbourhood. No land use changes are proposed for this area in the context of the Holdom Station Area Plan. South of the plan area is an established general industrial area.
5.0 LAND USE CONCEPT

Consistent with OCP designations for the plan area, this guide plan provides a framework for the transformation of the Holdom Station Area into a urban village and business centre in support of the development of the new Millennium Skytrain station at the intersection of Holdom Avenue and Lougheed Highway. It envisions the replacement of lower density manufacturing, warehousing and distribution operations with higher density residential development north of Goring Street and west of Holdom Avenue and more intensive office, high-technology, specialized production and ancillary commercial uses south of Goring Street and east of Holdom Avenue. As a transition between the urban village and business centre, the land use concept includes an option to build live/work developments on the north side of Goring Street and Douglas Road. A commercial node along Holdom Avenue between Lougheed Highway and Goring Street will serve residents, business centre employees and transit users, creating a vibrant focal point for the area (see sketch on page 9).

5.1 Land Use Designations

The land use concept for the Holdom Station area is shown on Map 4. Potential land assemblies in support of the land use concept are shown on Map 5.

Major components of the land use framework include:

- **High Density Residential** - sites designated for higher density multi-family housing are generally within 500 metres of the Holdom SkyTrain station, an easy walk of about 5 to 10 minutes, and are expected to generate high levels of transit ridership. Slender high rise towers would be oriented toward the centre of the sites with townhouse or live/work low rise developments located along street frontages on Douglas Road, Goring Street and Springer Avenue. Residential development in this category would have a density of 80 to 100 units per acre.

- **Medium Density Residential** - the site designated for medium density multi-family housing is further from the Holdom station but within a one kilometre radius. Medium density multi-family housing forms could include stacked townhouses or low rise apartments at a density of 50 to 60 units per acre. Entrances to residential units would be oriented toward the street to create a pedestrian-scaled village streetscape. This type of housing would include family oriented designs given the area’s proximity to the designated school/park site on Dawson Street west of the Delta Avenue right-of-way.

Street oriented medium density residential development
• **Low Density Residential** - this site is located next to the designated school/park site on Dawson Street east of the Delta Avenue right-of-way. Ground oriented townhouses designed for families are indicated at a density of 15 to 20 units per acre.

• **Live/Work Development** - the street frontages along the north sides of Goring Street and Douglas Road include an option to build live/work developments\(^1\) as a transition between residential development to the north and business centre uses to the south (see sketch on page 13). The option to build live/work developments supports a growing trend in self-employment, tele-commuting and small business employment by offering the ability to live in the same place as one’s business. Live/work units would be two to three storeys in height with the work space (e.g. office or studio) oriented toward the street with living quarters located behind and on the second and third storey. Live/work developments would have a density of about 20 units per acre.

• **Street Front Commercial** - to meet the day to day and convenience shopping and service needs of residents, business centre employees and SkyTrain and bus passengers, Holdom Avenue between Lougheed Highway and Goring Street is designated as a commercial node. Stores, restaurants and other commercial services would be oriented toward the street to create a vibrant activity centre between the urban village and business centre. Commercial development would be integrated with residential buildings on the west side and office development on the east side of Holdom Avenue at an average expected floor area ratio of 0.1 of the total site area. A 2.0 metre front yard setback would be required for new development. This would create a potential for about 35,000 square feet of retail and service commercial space in the plan area.

The commercial sites on the northeast and northwest corners of Holdom Avenue and Lougheed Highway should be developed as mixed use developments consisting of neighbourhood commercial uses at street level with one to two storeys of residential above.

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\(^1\)Live work differs from traditional mixed use developments in that the work space and living space are completely integrated. It also differs from typical home occupation businesses in that the use is intended to permit customers and employees on the premises. Permitted uses typically include office, retail (limited), studios, and personal services aimed primarily at professional occupations that have limited or minimal impact on surrounding uses.
Goring Street showing live/work development and daylighted Beecher Creek.
• **Urban Business Centre lands** - the urban business centre component of the guide plan accommodates a broad range of higher density business, professional and high technology offices, research and development activities, light manufacturing, sales and service, and appropriate post secondary educational institutions (including student housing as an accessory use) as a component of any comprehensive redevelopment proposal, as generally outlined in Burnaby’s Zoning Bylaw B2 Urban Office District. Sites designated for higher density urban business centre development are generally within 400 metre walking distance of the Holdom SkyTrain station. Urban Business Centre sites would have a maximum gross floor area ratio (FAR) of 1.5 with a typical building height of four to six storeys. Office and other lower impact uses should be oriented toward the street and the residential interface to the north with light industrial uses oriented toward the rear of sites.

• **Suburban Business Centre lands** - sites designated for slightly lower density business centre development are located further from the SkyTrain station. Uses permitted in the suburban business sites are the same as those permitted in the urban business centre district but at a slightly lower density, as defined in the B1 Suburban Office District of the Burnaby Zoning Bylaw. Suburban Business Centre sites would have a maximum gross floor area ratio of 1.0 with a typical building height of two to four storeys. The retail nursery operation on the eastern border of the plan area has been included in the suburban business centre lands. Redevelopment of this site is considered longer term.

### 5.2 Summary Land Use Figures

The plan presents significant changes in land use in concert with the development of the new Millennium Line SkyTrain station at Holdom Avenue. Tables 1 and 2 below provide a summary of residential units and floorspace totals projected for 15 years after the plan is adopted and one for when the plan reaches build out.

**Table 1 - Projected Residential Development**

<table>
<thead>
<tr>
<th>Year 15</th>
<th>Maximum Potential</th>
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<tr>
<td></td>
<td>Area(aka)</td>
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<tr>
<td>High Density (RM5)</td>
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<tr>
<td>Medium Density (RM3)</td>
<td>2.0</td>
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<tr>
<td>Low Density (RM1)</td>
<td>2.5</td>
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<tr>
<td>Total</td>
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</tr>
</tbody>
</table>
Table 2 - Projected Business Centre Development

<table>
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<tr>
<th>Floor Area</th>
<th>Existing* (square feet)</th>
<th>Year 15* (square feet)</th>
<th>Build Out** (square feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial</td>
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<td>798,800</td>
<td>390,400</td>
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<tr>
<td>Office</td>
<td>204,800</td>
<td>777,500</td>
<td>1,258,600</td>
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<tr>
<td>Other</td>
<td>64,300</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Street Front Commercial</td>
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<td>35,000</td>
<td>35,000</td>
</tr>
<tr>
<td>Total</td>
<td>1,134,100</td>
<td>1,611,300</td>
<td>1,684,000</td>
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<tr>
<td>Employment</td>
<td>1,615</td>
<td>1,710</td>
<td>4,655</td>
</tr>
</tbody>
</table>

* based on the total floor space in the study area
** based on land designated for business centre use only (excludes land designated for residential use)

6.0 TRANSPORTATION FRAMEWORK

The focal point of the plan area is the Holdom SkyTrain Station. As such, land use and transportation systems should be designed to support the efficient use of the station. Through careful design, the plan proposes to reduce vehicles trips by encouraging walking, cycling and transit use. Urban village residents and business centre employees will enjoy fast and convenient rapid transit access to downtown Vancouver and the Brentwood and Lougheed Town Centres along the new Millennium Line. Local bus service, roads and the urban trail network will link the area to other destinations in Burnaby and the region (see Map 6).

6.1 Public Transit

The Millennium Skytrain guideway follows the northern border of the plan area with Holdom Station located on the southwest corner of the intersection of Holdom Avenue and Lougheed Highway. As the area redevelops, it is expected that an increasing proportion of trips to and from the urban village and business centre will be accommodated on public transit.

Local bus routes have been adjusted to access the station. Bus route #136 has been re-routed through the area to provide a connection to Lougheed Town Centre to the east and Brentwood Town Centre to the west. Bus routes #129 and #131 have been combined as route #129 to provide a connection north to Hastings Street and south to the Edmonds Skytrain station through the plan area. Curb side bus stops have been provided on the east and west side of Holdom Avenue south of Lougheed Highway. In addition, a passenger pick-up and drop-off has been provided on the west side of Holdom Avenue, north of the intersection of Holdom Avenue and Goring Street.

Millennium Line guideway
6.2 Road and Street Improvements

As redevelopment occurs in the plan area, and in the Brentwood Town Centre to the west, a number of additions and changes to the road pattern will occur in accordance with Burnaby’s adopted Transportation Plan. These changes will help to create a functional network of road and pedestrian connections to support the urban village and business centre. Specific improvements outlined in Burnaby’s Transportation Plan include:

- an eastward extension of Dawson Street to connect with Douglas Road. Once completed, the Dawson Connector will provide an east-west connection from Boundary Road to Holdom Avenue. It will provide for local circulation within the Brentwood Town Centre and the Holdom Station Area. Signalized intersections and pedestrian crossings will help break the flow of traffic. In the vicinity of the school/park site, specific traffic calming measures could be considered (e.g., corner bulges, elevated pedestrian crossings, different pavement surfaces and streetscape design);

- closure of Douglas Road at Lougheed Highway. Alternatively, a right turn in off Lougheed Highway may be permitted at this location;

- construction of an overpass of the BNSF railway at the southern end of Holdom Avenue to connect with the intersection of Douglas Road and Norland Avenue to the south. Once constructed, the at-grade crossing of the BNSF line on Douglas Road would be closed. The time-frame for its construction is likely beyond 10 years;

- construction of the Westminster Avenue connector. The connector will provide another north-south route over Highway 1 and would extend from Dawson Street via Delta Avenue to Westminster Avenue south of Highway 1 via an overpass of Highway 1. An at-grade crossing of the BNSF line on Douglas Road would be closed. The time-frame for its construction is considered longer term;

- widening of Roy Street to create a 20 metre right-of-way. Depending on traffic flows and future considerations, Roy Street may also be extended under the overpass to connect with Kingsland Drive to the east;

- an extension of Goring Street to the east to connect with Kingsland Drive. A signalized intersection would be created at Goring Street and Holdom Avenue to facilitate local access to the Holdom overpass;

- widening of Holdom Avenue south of Lougheed Highway to provide two southbound travel lanes and a passenger pick-up and drop-off and two northbound travel lanes, a bus priority lane and a right turn lane on the east side of Holdom Avenue (see sketch at the right). Funding for the intersection improvements was through a cost sharing arrangement through the Rapid Transit Project Office, TransLink, Coastal Ford and the City. Some on-street parking may be permitted on the east side of Holdom once the road is developed to full standard; and

- widening of existing streets, where required, to accomplish area specific improvements such as separated sidewalks and cycling provisions.
6.3 Pedestrian and Bicycle Linkages

Redevelopment of the Holdom Station Area presents an opportunity to pursue pedestrian and cycling improvements. As a large number of transit users will be walking to the station, it is critical that a safe, convenient and pleasant pedestrian environment is created. As a general industrial area, there are currently no provisions for pedestrians or cyclists. To enhance the connectivity between the station, residential areas, business centre developments, neighbouring parks and open spaces, a number of pedestrian and bicycle improvements will be pursued (see Map 7). These include:

- provision of an urban trail along the northern border of the study area providing connections to the Brentwood Town Centre to the west, Lougheed Town Centre to the east and the Central Valley Greenway and Burnaby Lake, via Kensington Avenue, to the south. An urban trail is an off-street shared cycling/pedestrian path geared to recreational and beginner cyclists. The urban trail will be protected as a 7 metre wide statutory right-of-way on the south side of Lougheed Highway. In some cases, the right-of-way may have to be established on private property on the south side of Lougheed Highway;

- designation of Lougheed Highway, Holdom Avenue and the Westminster Avenue Connector (including a portion of Douglas Road and Dawson Street) as cycle roads linking to the Brentwood and Lougheed Town Centres to the west and east and the Central Valley Greenway to the south. Cycle roads are arterial or major collector roads designated for use by experienced commuter cyclists. As road improvements are undertaken, cycle roads would be upgraded to include wider curb lanes and appropriate signage;

- provision of separated sidewalks on both sides of Douglas Road, Springer Avenue, Goring Street and Holdom Avenue as redevelopment occurs;

- provision of on-street parking on Dawson Street, Goring Street and Kingsland Drive as a measure to calm traffic for on-street cyclists and to shield pedestrians from road traffic; and

- improved street lighting.

In addition, business centre developments would be required to provide end of trip facilities for cyclists (e.g. lockers and showers) and explore other incentives to increase use of alternative modes of transportation.

6.4 Parking

The central location of the Holdom Station is expected to contribute to a reduction in the overall demand for on-site parking for new developments. Soil conditions may also limit the amount of underground parking that is feasible in the area. Given these conditions, reduced parking requirements (e.g. up to 10 percent) could be considered for business centre sites within 500 metres of the transit station as an incentive to encourage redevelopment and support transit use. Parking reductions for residential
_map_7.png
sites within 500 metres of the station could also be considered on a case by case basis by Council. Other parking management strategies could include the use of shared parking facilities to optimize use of parking spaces over the course of a day and time limited on-street parking to discourage transit patron parking on station area streets.

7.0 REDEVELOPMENT PROCESS

The incremental redevelopment of the Holdom Station area is expected to present a significant challenge for the development of both a vibrant urban village and higher amenity business centre. Redevelopment of individual sites would follow a market driven process influenced by building life span, business cycle, owner interest and other market influences. In the medium term, this is expected to contribute to a mix of new office, commercial and residential developments among existing general industrial uses.

As illustrated on Map 5, several of the properties in the plan area are large enough to be redeveloped on their own without the assembly of additional properties. As these properties redevelop, the transformation of the area will begin to take shape. In addition to new residential or business centre development, pedestrian improvements, road upgrades and other services will be provided on street frontages associated with these properties. In other areas, the assembly of a number of smaller properties will be required to create viable redevelopment sites, as shown on Map 5. While these assemblies are recommended, a degree of flexibility will be employed to ensure that feasible proposals are not impeded if full assemblies cannot be realistically achieved.

Where redevelopment is not expected or has not occurred in the medium term, interim provision of services and pedestrian improvements may be required. Any decision on City funding or provision of interim improvements necessary to create a cohesive redevelopment scheme could be considered, as needed, through the City’s capital budgeting process. Private development, however, will be required to provide a significant contribution to servicing costs on individual sites and abutting rights-of-way through the redevelopment approval process in recognition of the major redevelopment opportunities and increased densities proposed in the Holdom Station Area Plan.

8.0 URBAN DESIGN

As the majority of improvements will be provided through the redevelopment approval process, a consistent urban design theme is needed to foster unity and public identity with both the urban village and business centre. As sites redevelop, strict adherence to defined development standards and design criteria will be maintained through Comprehensive Development (CD) zoning.

8.1 Streetscapes

To foster the identity of the station area, a coordinated street design will be pursued and incorporate the following elements: separated sidewalks, street trees, ornamental lighting, landscaping, banners, street furnishings, consistent signage, landscaping and public art. Undergrounding of overhead power and telephones lines should also be pursued.

Residential and live/work developments should be oriented to the street with entrances clearly defined to create visual interest and a neighbourly environment. Office developments should also address the
street but incorporate slightly greater front yard setbacks. Parking facilities, loading and industrial operations associated with business centre sites should be oriented to the rear of sites. CPTED (crime prevention through environmental design) principles should be incorporated into site planning, landscaping and building design. An “eyes on the street” design approach to buildings facing public streets and walkways is an important element in this regard.

On-site parking should be located underground where feasible. Where this is not feasible, under building or structured parking should be located at the rear of sites and appropriately screened.

A centrally located commercial node along Holdom Avenue between Goring Street and Lougheed Highway will serve the day to day shopping and service needs of residents, transit users and employees of the adjacent business centre. Mixed use development along the commercial frontage on Holdom Avenue should be oriented to the street to enhance visibility and access to commercial services. A 2.0 metre front yard setback will be required. Other features of the mixed use development on Holdom Avenue would include:

• locating on-site parking away from the commercial street front;

• establishing a consistent setback pattern for the first four storeys of buildings to create a unified street frontage;

• locating commercial uses that do not require or contribute to an active shopping street environment above the first storey only; and

• requiring weather protection canopies on buildings along the commercial street front.

8.2 Landscaping

Currently, much of the Holdom Station area is covered with impermeable surfaces including buildings, surface parking and driveways. As such, mature vegetation is sparse and limited to a few isolated areas. The redevelopment of the area will present an opportunity to create a greener environment with street trees, urban trails, seating areas and landscaping. The greening of the landscape will also contribute to storm water management through a reduction of surface run-off, as discussed further in section 9.0.

Under Burnaby’s Business Centre Districts, overall site coverage, including building footprint, surface parking and other impermeable surfaces, is limited to a maximum of 65 percent of any site. Residential development will also be required to provide significant landscaped areas.
On-site landscaped areas should be multi-functional, providing environmental, recreational and aesthetic benefits. The incorporation of stormwater management facilities such as biofiltration ponds and swales into landscaped areas will be encouraged. Landscaping design should also consider the active and passive recreational needs of building users (e.g., office workers, residents and visitors).

All landscaping should meet the most recent edition of the B.C. Landscape Architects and BC Landscape and Nursery Association landscape standards. Landscaping should emphasize native planting and Integrated Pest Management (IPM) principles. IPM promotes an ecological approach to vegetation and pest management by encouraging the use of native, drought tolerant, and wildlife attracting species in landscaped areas. IPM can also reduce maintenance costs.

As part of the redevelopment approval process, specific design details, including plant selection and spacing requirements will be determined for landscaping on streets, driveways and parking areas.

Sites situated along the Skytrain guideway will be required to provide an 18 metre wide landscaped buffer within the setback area required of new development. Where necessary, the 7 metre wide statutory right-of-way will be incorporated in the landscaped buffer to accommodate the urban trail. Sites abutting the BNSF railway will be required to provide a 2 metre wide landscaped buffer within the setback area of new developments. Landscaped buffers would be protected through covenants on each affected site but included in the overall site area used to calculate the permitted development density of each site.

9.0 ENVIRONMENTAL PROTECTION AND ENHANCEMENT

The existing industrial nature of the Holdom Station area provides limited natural amenities. Map 2 shows the existing watercourses and vegetated areas within the plan area. The following section outlines requirements for new development to enhance habitat and environmental values.

9.1 Watercourses

A key initiative will be the enhancement of Beecher Creek, a Class A, fish bearing, permanent watercourse which flows from north to south through the area (see Map 8). Significant enhancements have been made to upper reaches of the creek in recent years by local streamkeepers groups working in partnership with the City and government agencies. Redevelopment should provide improvements to the reaches within the plan area.

Through redevelopment, the culverted section of Beecher Creek along Goring Street will be daylighted. Hydrologic studies will determine the design of the new channel to address flood safety issues. The new design will also seek to incorporate fisheries habitat enhancements. As part of the enhancement work, a 2.0 metre wide pedestrian path is proposed along the west side of the creek from Lougheed Highway to Roy Street. The path would be constructed within the outer 5 metres of the required riparian leave corridor with the potential for viewing points along the creek where environmental conditions allow.
Proposed Riparian Areas within Plan Area

- Beecher Creek: 15m
- Delta Avenue Drainage: 15m

*map shows riparian areas within the Plan Area only

Legend:
- piped / former watercourses
- open / daylighted watercourses
- road and rail ditches
- vegetated riparian area*
- non-riparian / green space
- potential habitat compensation

City of Burnaby Planning & Building Department

Map 8
The potential extension of Roy Street would entail a road crossing of Beecher Creek adjacent to the BNSF railway. Any habitat losses will be compensated as per Fisheries Act requirements.

Upgrading of Holdom Avenue and construction of the BNSF overpass may impact Sunken Engine Creek. The reach north of Goring Street will be enclosed when the road is developed to full standard. The reach south of Goring Street may be impacted during construction of the Holdom overpass with its final alignment flowing beneath or east of the overpass. Details will be determined during engineering design review. Any habitat losses will be compensated, as per Fisheries Act requirements. Compensation measures could include habitat creation and enhancement works on Beecher Creek south of the BNSF railway.

All creeks within the plan area lack riparian vegetation. Riparian vegetation has many ecological benefits, including stabilizing stream banks, moderating stream temperature, and providing nutrient inputs into the stream. Riparian corridors also improve ecological linkages with Beecher Creek north of Lougheed Highway and the Still Creek corridor and Burnaby Lake Park to the south. The corridors can also provide aesthetic benefits to adjacent development. At the time of development, the following measures will be used to restore viable riparian vegetation:

- All new development (including structures and hard surfaces) will be set back at least 15 metre from the top of bank of Beecher Creek and the Delta Avenue watercourse, creating a riparian leave-area corridor.

- All existing structures and hard-surfaces will be removed from the leave areas. The only development permitted within a leave area will be a proposed 2.0 metre wide trail along the outer 5 metres of the leave area on the west side of Beecher Creek. The leave areas will be revegetated in accordance with Ministry of Water, Land, and Air Protection guidelines. Planting plans should select vegetation that can provide shade to the stream and diversity of habitat. The primary purpose of riparian leave-areas will be for conservation and they will be protected by restrictive covenants. The leave-area may be fenced from the rest of the parcel.

- The tributary to Crabapple Creek, flowing adjacent to the Lougheed Highway, will be buffered from development by a 18.0 metre landscaped setback. An urban trail will be constructed within the setback area. The rest of the setback area will be revegetated in accordance with Ministry of Water, Land, and Air Protection guidelines.

From a development potential perspective, riparian leave areas will contribute to the total development potential of the site. The maximum density for each site located adjacent to the watercourse will be based on the area of the entire parcel, while the actual development will be located outside the riparian leave areas.
9.2 Stormwater Management

Sites within the plan area drain to Still Creek, via one of five drainage systems. Sites east of Holdom Avenue drain to Sunken Engine or Crabapple Creeks. Sites west of Holdom and adjacent to Beecher Creek drain via Beecher Creek. Western sites drain to Still Creek via an unnamed piped system, along the BNSF railway, or via the Delta Avenue watercourse.

Much of the plan area is currently covered in impervious surfaces (parking lots and buildings). Lack of vegetation limits opportunity for rainwater interception, infiltration, or detention. Rainwater drains rapidly from the impervious surfaces and is generally untreated before entering watercourses and Still Creek.

Redevelopment should result in more landscaped, pervious surfaces, which may reduce peak stormflows. Stormwater infiltration may be feasible in the northern portion of the plan area, but is unlikely to be feasible in southern lots due to the high water table (at or near the surface) combined with typical layered flood plain soil conditions.

The key stormwater concern for the area is improving water quality flowing into Still Creek. Changes in land use from industrial to office, commercial and residential should improve the quality of stormwater run-off.

Stormwater quality will also be managed in the following ways:

- Site development will include installation of stormwater management facilities on-site, to ensure that there is no deterioration of, and where possible improve, water quality leaving the site. Stormwater facilities will be designed to achieve provincial Aquatic Water Criteria for metals;

- Site development applications will be accompanied by a stormwater management concept plan. This plan will show how stormwater management features and best management practices (BMPs) will be incorporated on site. BMPs may include, but not be limited to bioponds, swales, stormceptors, pervious paving and on-site rainwater tanks. Wherever possible, stormwater facilities should be integrated into landscaping to provide aesthetic benefits;

- Site development plans will include a covenant agreement providing for the installation, operation, and maintenance of the stormwater management systems by the property owner, in compliance with the approved plans during the effective life of the project; and

- Site redevelopment should seek to minimize the construction of impervious area through such measures as shared parking facilities, and multi-storied buildings. Site development plans will seek to maximize opportunities for vegetative interception and evaporation of rainwater.

9.3 Building Design

The anticipated area redevelopment presents an opportunity to incorporate environmentally friendly building materials, systems, and programs into the overall building and site design. Wherever possible, environmental initiatives will be pursued for new buildings through the redevelopment approval process.
9.4 Alternative transportation

The intent of the plan is to create a pedestrian friendly urban village. Offices, shops, and residences will be accessible by public transport and trail systems. New development should support use of alternative forms of transportation for both employees and residents to lessen reliance on the car. Initiatives to assist with this goal include:

- the creation of a network of sidewalks, cycle routes, open spaces, buffers and urban trails which will facilitate walking and riding and contribute to a reduction in the number of vehicle trips. Urban trails will link with destinations in the city as indicated in Section 6.3 and shown on Map 7;

- encouraging businesses to develop and implement alternative transportation programs within the work place such as ride sharing, transit incentives and flexible work hours; and

- requiring new residential and business centre development to provide secure bicycle parking. Business centre development will also be required to provide end-of-trip facilities such as showers and lockers.

10.0 COMMUNITY FACILITIES AND SERVICES

The development of a number of community facilities, services and initiatives in accordance with the adopted Brentwood Town Centre Plan will also serve new residents and employees of the Holdom Station Area. These include:

- an elementary school located on the south side of Dawson Street west of the Westminster Avenue extension. Construction of the school is proposed to coincide with supporting school enrollment. Prior to its construction, Parkcrest and Brentwood Park Elementary Schools would serve elementary school students in the area. A grade separated pedestrian crossing of Lougheed at Delta Avenue was originally proposed to facilitate student access to Brentwood Park Elementary in the Brentwood Town Centre Plan. A detailed design review will be required to determine its feasibility. It is also been proposed that the new elementary school be developed as a community school to respond to emerging local community needs;

- a small community centre facility either adjoining the school or separate from the school is proposed on the school/park site proposed for the Brentwood Town Centre Plan. The proposed facility would serve both Brentwood Town Centre and Holdom Station Area residents. Specific functions to be included in such a community centre would be further pursued by the Parks, Recreation and Culture Commission and staff, and include further public discussion. The major existing and proposed community facilities at Confederation, Kensington and Burnaby Lake Parks will provide for a substantial part of the recreational needs of residents and employees of the Holdom Station area.

- a density bonus for developments that provide public amenities, affordable housing or special needs housing, as outlined in Burnaby’s Zoning Bylaw; and

- inclusion of amenity space (e.g. community rooms, fitness centres) in residential and business centre developments through a relaxation in the permitted floor area.
11.0  CONCLUSION

The directions presented in the Holdom Station Area Guide Plan promote the close integration of land use and new transit service. Higher density urban village and business centres uses are focussed around the station to make the most efficient use of this major investment in our community. Taken together, the urban village and business centre designations support the concept of transit-oriented development and offer the potential to create a community where people are able to work, live, and shop in their own neighbourhood.

With Committee endorsement and Council adoption of the Holdom Station Area Guide Plan, staff will proceed with implementation of the Plan by using it as the basis for guiding future development.