

POLICY REPORT URBAN STRUCTURE

Report Date:January 4, 2011Contact:Randy PecarskiContact No.:604.873.7810RTS No.:08993VanRIMS No.:08-2000-20Meeting Date:January 18, 2011

TO: Vancouver City Council

FROM: Director of Planning

SUBJECT: Amendment of the Grandview Boundary Industrial Area Rezoning and Development Policies and Guidelines

RECOMMENDATION

THAT Council amend the Grandview Boundary Industrial Area Rezoning & Development Polices and Guidelines, as contained in Appendix A, to allow consideration of additional density for General Office uses and a broader range of General Office uses through applications for site-specific rezoning of properties to CD-1 (Comprehensive District) on sites close to a SkyTrain station, noting that each rezoning would be subject to a full review and a Public Hearing, and to allow the necessary consequential amendments to the Grandview Boundary Industrial Area Plan, contained in Appendix B.

GENERAL MANAGER'S COMMENTS

The General Manager of Community Services recommends approval of the foregoing.

CITY MANAGER'S COMMENTS

The City Manager recommends approval of the foregoing.

COUNCIL POLICY

Industrial Lands Policies (1995): To retain most of the city's existing industrial land base for industry and service businesses.

I-3 District Schedule (1999): Council approved new zoning to permit high technology uses in industrial areas in close proximity to rapid transit.

Grandview Boundary Industrial Area (GBIA) Rezoning & Development Policies and Guidelines (2002) and Grandview Boundary Industrial Area Plan (2002): To guide rezonings and development in Grandview Boundary to create a vibrant mixed use industrial employment area.

Metro Core Jobs and Economy Land Use Plan: Issues and Directions Report (2007); Council approved the direction to focus job growth on rapid transit, and to create a diversity of job space types across the city.

False Creek Flats Rezoning Policy: Additional General Office Use in "High Technology" Districts (2009); To allow for consideration of a broader range of permitted General Office uses in areas zoned for high technology uses in the False Creek Flats and more employment density near rapid transit.

Regional Growth Strategy (RGS), Metro Vancouver 2040 (2010): Council supported the designation of Mixed Employment areas within the city, including the GBIA, to provide locations for a range of employment activities and more intensive forms of commercial development near rapid transit.

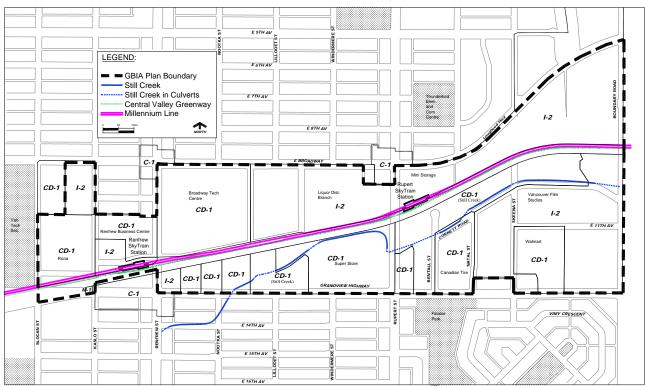
PURPOSE

This report recommends that the GBIA Rezoning & Development Policies and Guidelines be amended to allow increased density for General Office use and to allow a broader range of General Office uses through applications for site-specific rezoning of properties to CD-1. This amendment maintains the overall vision for the GBIA as a mixed employment area. The new rezoning policy would apply to sites close to rapid transit stations which were previously eligible for rezoning to the I-3 (high technology) zone. This amendment is similar to the rezoning policy recently adopted for the False Creek Flats which responded to a decrease in demand for "high tech" floor space.

BACKGROUND

The GBIA is an 81 ha (200 ac.) area located east of Slocan Street between East Broadway and Grandview Highway. The area serves as a mixed employment industrial area accommodating a variety of land uses: "light" industrial uses such as liquor distribution, storage, and film production studios; large format retail; and employee intensive uses including "high tech", institutional, and office located within walking distance of the two SkyTrain stations at Renfrew and Rupert Streets. In 2006 the area accommodated approximately 5,335 jobs.

Grandview Boundary Industrial Area Rezoning & Development Policies and Guidelines



Map 1: Grandview Boundary Industrial Area

Decline of "High Tech" Zoning

In 1999, during the "high tech" boom, Council enacted the I-3 District Schedule in anticipation of an increased demand for "high tech" office uses, particularly information technology and bio-technology. Industrial areas served by rapid transit were identified as suitable locations for the "high tech" zoning. In that year, several sites in the western portion of the False Creek Flats were rezoned to I-3. In the GBIA a different approach was taken. Sites within a 5 to 10-minute walk of a SkyTrain station were identified as eligible to rezone to I-3 and would be considered on a case-by-case basis.

The I-3 District Schedule allows Information Technology as an outright use up to 1.0 floor space ratio (FSR) and as a conditional use up to 3.0 FSR, which is the maximum for all land uses. A limited amount of General Office use is permitted (up to 1.0 FSR), although the floor area for this use may not exceed 33 percent of the total floor area. In the I-3 zoning, General Office use excludes the offices of accountants, lawyers and notary publics, real estate, advertising, insurance, travel and ticket agencies to limit the amount of customer traffic.

Since the 1990s, the demand for "high tech" office space has dropped significantly and there has been little interest in developing under the I-3 zoning. Developers have found it very difficult to secure tenants for the narrowly defined Information Technology office use and the limited amount of General Office permitted. Only one site in the GBIA, at 2900 East Broadway (Broadway Tech Centre), was rezoned to I-3. It has subsequently been rezoned to CD-1 to allow for an increased density and broader range of General Office uses.

Council addressed the downturn in demand for "high tech" space in the False Creek Flats in 2009 when it adopted the False Creek Flats Rezoning Policy: Additional General Office Use in "High Technology" Districts. This policy allows for consideration of rezonings for a broader range and density of General Office uses (up to 3.0 FSR) on I-3 zoned sites to provide opportunities for intensified employment uses on sites near rapid transit.

In the GBIA, there is similar interest in intensifying employment in general office space near rapid transit. In 2010, the site at 2665 Renfrew Street, adjacent to the Renfrew SkyTrain Station, was rezoned from I-2 to CD-1 for an institutional/office use development. The CD-1 zone for this site allows a broad range of General Office space and more density for General Office use than would have been permitted under either the I-2 or I-3 zone.

DISCUSSION

Increase in Density for General Office Use

Proposal:

Staff recommend that the GBIA Rezoning & Development Policies and Guidelines be amended (see Appendix A) to:

- allow for consideration of General Office use up to 3.0 FSR, which is the overall maximum density of the I-2 and I-3 District Schedules;
- remove the restrictions on the types of General Office use (e.g. accounting, advertising and insurance businesses) to allow for more flexibility; and
- allow the necessary consequential amendments to the GBIA Plan (see Appendix B).

Rationale:

Allowing more density for General Office use and a broader range of uses on sites previously eligible for I-3 zoning responds to the decrease in demand for "high tech" space and corresponds with the recent change in land use policy for the False Creek Flats area. The proposed change is also consistent with recent CD-1 rezoning activity and interest in the GBIA.

The proposed amendments support the current vision for the GBIA as a mixed employment industrial area with greater job density close to rapid transit and large format uses along Grandview Highway. Impacts from allowing office uses which generate customer traffic would be minimized by the proximity to SkyTrain stations at Renfrew and Rupert Streets as well as the Central Valley Greenway, which provides cycling and pedestrian access.

The proposed amendments are in keeping with the draft Regional Growth Strategy land use design actions which support higher density mixed employment areas close to rapid transit. Also, the Metro Core Jobs and Economy Land Use Plan anticipated that office development would occur outside the downtown core, along transit corridors.

Public Consultation

The proposed amendments do not alter existing zoning or form of development, but would allow consideration of increased density for office uses when sites are rezoned to CD-1. Each site-specific CD-1 rezoning application will require public consultation prior to proceeding to Public Hearing, as part of the rezoning process.

FINANCIAL IMPLICATIONS

There are no financial implications.

PERSONNEL IMPLICATIONS

There are no personnel implications.

CONCLUSION

To respond to reduced demand for "high tech" office space, this report proposes that the GBIA Rezoning & Development Policies and Guidelines be amended to allow for an increased density for General Office uses and a broader range of permitted General Office uses for sites near rapid transit stations in the GBIA.

* * * * *

NOTE: STRIKE OUTS INDICATE DELETIONS ITALICS INDICATE ADDITIONS

GRANDVIEW BOUNDARY INDUSTRIAL AREA REZONING & DEVELOPMENT POLICIES AND GUIDELINES

[Incorporating Guidelines for Still Creek CD-1 (249) By-law Number 6654, and applicable to CD-1 (452) By-law Number 9410 for 3585 Grandview Highway, and CD-1 (470) By-law Number 9693 for 2900 East Broadway]

Adopted by City Council on July 25, 2002 Amended April 12, 2005, September 12, 2006, December 12, 2006, and July 8, 2008





Contents

Page

1	Application and Intent	4
2	General Design Considerations	5
2.1	Area Character	5
2.2	Street Character	5
2.3	Station Area Built-Form and Character	
2.3.1	Renfrew Station Precinct Redevelopment Concept	
2.3.2	Rupert Station Precinct Redevelopment Concept	
2.7	Weather Protection	
2.11	Access and Circulation	
2.11.1	Vehicular Access	
2.11.2	Pedestrian Access	11
3	General Land Use Policies	11
3.1	Rezoning Policies	
3.1.1	Large Format Area Rezonings	
3.1.2	Large Format Uses and Impact on Neighbourhood Centres	
3.1.3	Station Area Retail/Service Uses	
3.1.4	High-Tech and General Office Development - Location and Access to Transit	14
4	Guidelines Pertaining to the Regulations of the Zoning and Development By-L (and Parking By-Law)	aw 14
4.1	Topography: Adjustments to Grade	
4.3	Height	14
4.4	Street and Greenway Setbacks	
4.4.2		
4.7	Building Setbacks	15
	Floor Space Ratio	
4.9	Floor Space Ratio Off-Street Parking and Loading	
4.9.1	Floor Space Ratio Off-Street Parking and Loading Off-Street Parking Requirements	
4.9.1 4.9.2	Floor Space Ratio Off-Street Parking and Loading Off-Street Parking Requirements Landscaping and Screening of Parking Facilities	
4.9.1 4.9.2 4.9.3	Floor Space Ratio Off-Street Parking and Loading Off-Street Parking Requirements Landscaping and Screening of Parking Facilities Loading and Outdoor Storage Areas	
4.9.1 4.9.2 4.9.3 4.16	Floor Space Ratio	
4.9.1 4.9.2 4.9.3	Floor Space Ratio Off-Street Parking and Loading Off-Street Parking Requirements Landscaping and Screening of Parking Facilities Loading and Outdoor Storage Areas	
4.9.1 4.9.2 4.9.3 4.16	Floor Space Ratio	
4.9.1 4.9.2 4.9.3 4.16 4.17	Floor Space Ratio	15 15 16 16 16 16 17 17 17 17 17 17
4.9.1 4.9.2 4.9.3 4.16 4.17 5 5.2 5.3	Floor Space Ratio Off-Street Parking and Loading Off-Street Parking Requirements Landscaping and Screening of Parking Facilities Loading and Outdoor Storage Areas Building Massing External Design Architectural Components Windows Main Entries to Street	
4.9.1 4.9.2 4.9.3 4.16 4.17 5 5.2 5.3 5.4	Floor Space Ratio	15 15 16 16 16 16 17 17 17 17 17 17 17 17 18 18 18 18 19
4.9.1 4.9.2 4.9.3 4.16 4.17 5 5.2 5.3 5.4 5.5	Floor Space Ratio Off-Street Parking and Loading. Off-Street Parking Requirements Landscaping and Screening of Parking Facilities Loading and Outdoor Storage Areas. Building Massing. External Design Architectural Components. Windows Main Entries to Street Building Articulation Exterior Walls and Finishing	15 16 16 16 16 17 17 17 17 17 17 17 18 18 18 18 19
4.9.1 4.9.2 4.9.3 4.16 4.17 5 5.2 5.2 5.3 5.4 5.5 5.7	Floor Space Ratio	15 15 16 16 16 16 17 17 17 17 17 17 17 17 17 17 17 17 17
4.9.1 4.9.2 4.9.3 4.16 4.17 5 5.2 5.3 5.4 5.5	Floor Space Ratio Off-Street Parking and Loading. Off-Street Parking Requirements Landscaping and Screening of Parking Facilities Loading and Outdoor Storage Areas. Building Massing. External Design Architectural Components. Windows Main Entries to Street Building Articulation Exterior Walls and Finishing	15 15 16 16 16 16 17 17 17 17 17 17 17 17 17 17 17 17 17
4.9.1 4.9.2 4.9.3 4.16 4.17 5 5.2 5.2 5.3 5.4 5.5 5.7	Floor Space Ratio Off-Street Parking and Loading. Off-Street Parking Requirements Landscaping and Screening of Parking Facilities. Loading and Outdoor Storage Areas. Building Massing. External Design External Design Architectural Components. Windows Main Entries to Street Building Articulation Exterior Walls and Finishing Lighting Signs Signs	15 15 16 16 16 17 17 17 17 17 17 17 17 17 18 18 18 18 19 21 21 21 22
4.9.1 4.9.2 4.9.3 4.16 4.17 5 5.2 5.3 5.4 5.5 5.7 5.8	Floor Space Ratio	15 15 16 16 16 17 17 17 17 17 17 17 17 17 17 17 17 17

8	Public Realm Landscaping and Streetscape	23
8.1	General Provisions	
8.2	Public Realm Landscaping and Street Trees	
8.2.1	Street Tree Plan	
8.2.2	Tree Selection and Spacing Criteria	
8.2.3	Still Creek Landscaping	
8.2.4	Grandview Highway, Broadway/Lougheed Highway and Boundary Road	
8.2.5	Renfrew and Rupert Streets	
8.6	Central Valley Greenway	
8.7	Outdoor Storage and Display Areas	
9	Public Services	
9.1	Water and Sewer Services	
9.2	Storm Water and Flood Risks	
9.2.2	GVSDD Requirements	
10	Environmental Considerations	
10.1	Still Creek Watershed: Protection and Enhancement	
10.1.1	Creek Sensitive Development Practises	
10.1.2	Still Creek Enhancement Study	
10.2	Trees and Vegetation: Retention, Relocation and Replacement	
10.3	Soils: Retention, Cleansing and Replacement	
10.4	Air Quality and Transportation: Proximity and Land Use	
10.5	Energy: Conservation and Efficiency	
10.6	Solid Waste: Reuse and Recycle	

Note: These guidelines are organized under standard headings. As a consequence, there are gaps in the numbering sequence where no guidelines apply.

1 Application and Intent

These policies and guidelines are to be used in conjunction with the Grandview Boundary Industrial Area Plan and with the I-2, I-3, and Still Creek CD-1 (249) District Schedules of the Zoning and Development By-law, CD-1 (452) By-law Number 9410 for 3585 Grandview Highway, and CD-1 (470) By-law Number 9693 for 2900 East Broadway. The Still Creek CD-1 Guidelines (By-law No. 6654) have been rescinded and revised guidelines for properties adjacent to Still Creek are included here. The guidelines respecting Still Creek are highlighted as described below.

These Guidelines should be consulted in seeking approval for all rezonings, including rezonings to I-3 (High Technology Industrial District), to CD-1 *for office uses near* adjacent the SkyTrain stations, and to CD-1 for retail, institutional, cultural and recreational uses in the Large Format Area (LFA); and approvals for conditional uses within I-2, I-3 or Still Creek CD-1 Districts. As well as assisting the applicant, these guidelines will be used by staff and Council in the evaluation of projects.

The majority of guidelines apply to all applications. Some guidelines are only relevant to specific types of uses or locations in the area. These use or location specific guidelines are shaded and flagged with the following margin tags.

LFA	-	Large format non-industrial uses (retail, institutional, cultural and recreational) on Grandview Highway
I-2/I-3/ CD-1 (General Office)	-	High technology uses under the I-2 or I-3 schedules and General Office uses under CD-1 zoning.
Stat.	-	Station area uses on sites adjacent to Renfrew and Rupert SkyTrain Stations.
Still	-	Sites which are zoned Still Creek CD-1 and/or border on Still Creek

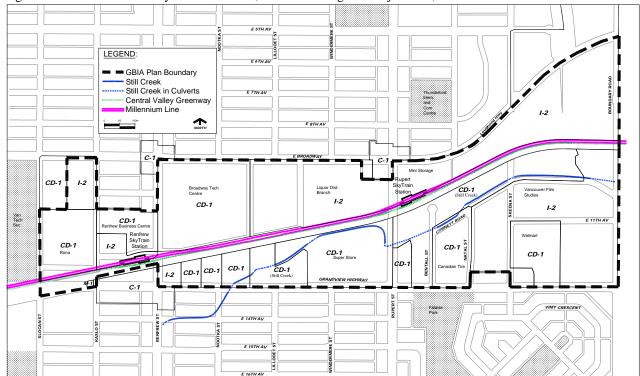


Figure 1. Grandview Boundary Industrial Area, Current Zoning and Major Uses, 2011

The intent of the guidelines is two-fold:

- (a) To guide the anticipated change to the built environment by:
 - (i) Assisting in converting the Grandview Boundary Industrial Area (GBIA) to an attractive and vibrant mixed use industrial *and office* employment centre; and
 - (ii) Ensuring new development around the SkyTrain Stations contributes to creating safe, active and interesting pedestrian oriented environments.
- (b) To recognize Still Creek as a valuable community resource by:
 - (i) Ensuring that Still Creek is enhanced as an open water course, that a public walking path is provided adjacent to the Creek as redevelopment occurs, and that new development contributes to enhancing the Creek for recreation and returning the Creek to a more natural condition.
 - (ii) Ensuring that new development does not increase the likelihood of future flooding in Grandview Boundary or downstream areas and is constructed to minimize flood damage in the event of flooding.



Still Creek at 3003 Grandview



Still Creek at 3400 Cornett

2 General Design Considerations

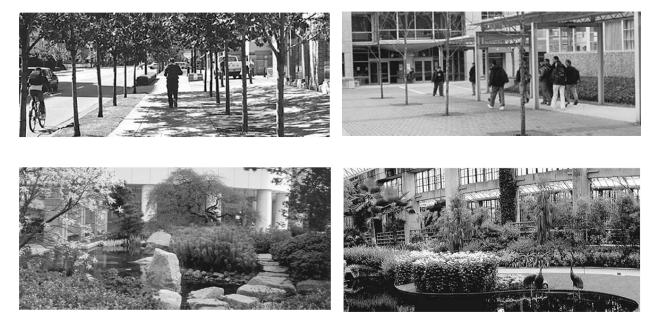
2.1 Area Character

The area has a traditional industrial character with few visual or pedestrian amenities and lacks a coherent identity or image. Tilt up concrete warehouse buildings surrounded by parking dominate the landscape. With the exception of Still Creek and landscaped setbacks along Grandview Highway, green space is generally lacking. To assist the emergence of a mixed-use and high-technology office employment centre, and to help create a distinct area image, streetscape improvements, Still Creek enhancements and redeveloped SkyTrain station areas will occur over time. Private developments will need to assist the transition through careful site planning, high-quality architectural building expression, public and private landscaping, and appropriate vehicular and pedestrian circulation, as set out in these policies and guidelines.

2.2 Street Character

With the arrival of Skytrain, and I-3 high-tech *and general office* uses (*near SkyTrain stations*), film studios and other non-traditional industry, a more active, interesting and attractive pedestrian-oriented street character and enhanced public realm are a priority. Except where landscaped setbacks are required, as described in Figure 8, new buildings should locate close to the street rather than setback set back behind surface parking, in order to create a more urban street feeling. Windows at grade are essential to enhance the pedestrian experience and provide transparency for casual surveillance. Small public open spaces linked to area Greenways and bikeways should be created at strategic points on large development sites to allow meeting and resting places for employees and pedestrians. Street trees should be planted extensively

throughout the area in keeping with the Tree Plan outlined in Section 8. Trees will serve to create a more pleasant pedestrian environment, but also introduce a unifying theme through coordination of tree species and placement. Together with the SkyTrain Station area improvements, the associated streets - Rupert and Renfrew - will be the focus of changes that will see these streets as the gateways into the area.



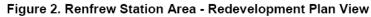
2.3 Station Area Built-Form and Character

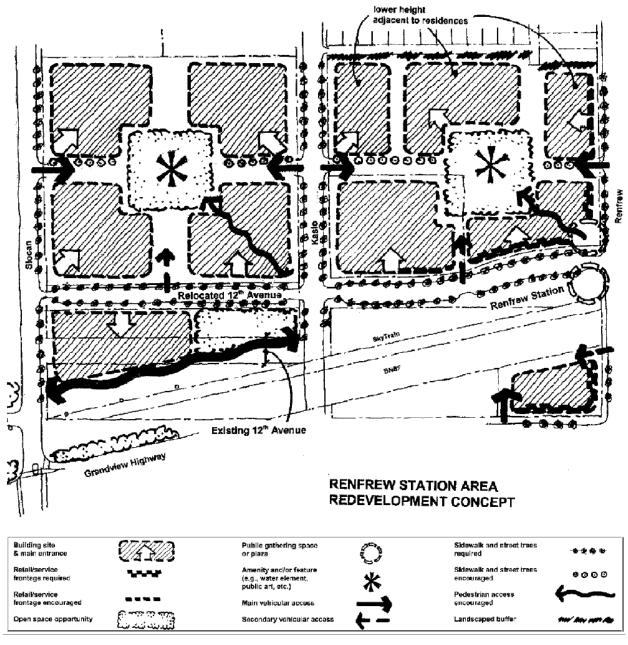
Station area development should focus on creating safe, convenient and pleasant pedestrian spaces and routes between the stations and adjacent employment destinations and residential areas. These areas should be the most densely developed and intensely used areas in the GBIA. New buildings should have an urban form with underground parking and a significant street wall to define and create the pedestrian space.

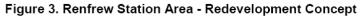
2.3.1 Renfrew Station Precinct Redevelopment Concept

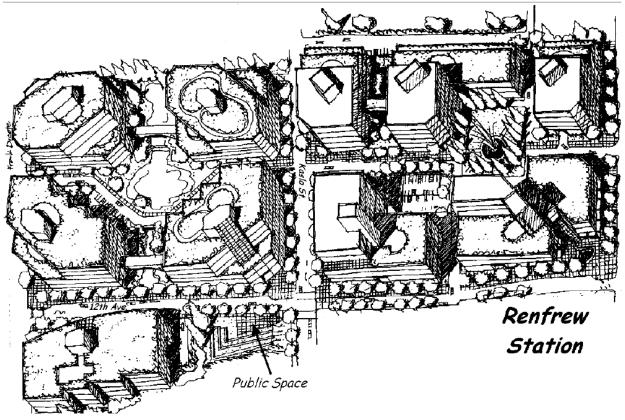
Figures 2 and 3 illustrate the basic elements of the future development of critical sites in this station precinct which these policies and guidelines seek to foster. They include:

- (a) Relocating 12th Avenue between Slocan and Kaslo Streets for both improved orientation and circulation, and to create a development site and public space adjacent to the SkyTrain guideway.
- (b) Street-wall built form defining tree-lined streets and sidewalks with pedestrian lighting.
- (c) "Green" contemporary architectural expression, including green roofs and natural ventilation.
- (d) Pedestrian-oriented retail and services located at grade near the Renfrew Station.
- (e) Major open space in the central area of development sites, with water as a preferred design feature.
- (f) Primary east-west vehicular access to development sites, with parking below grade.
- (g) A transition in scale of buildings in recognition of adjacent single family residential area between Renfrew and Kaslo Streets.





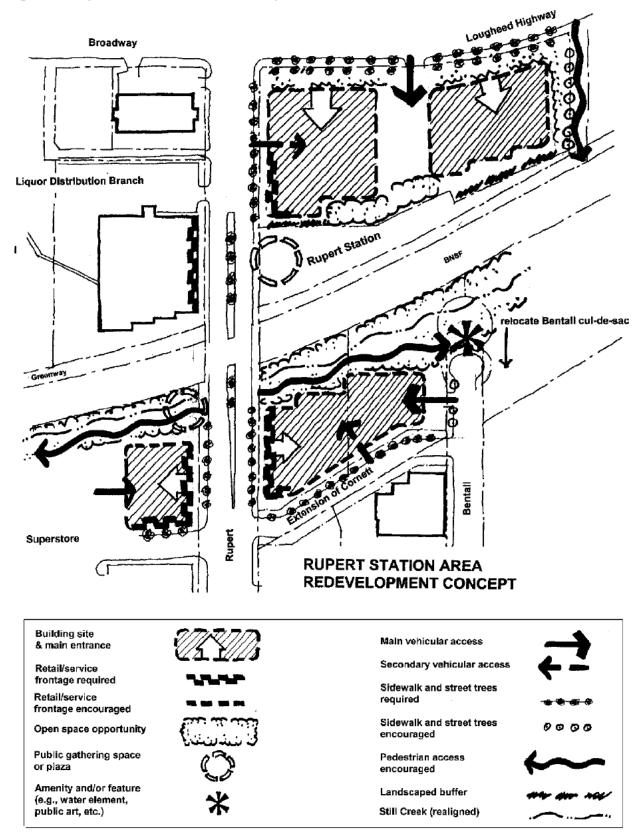


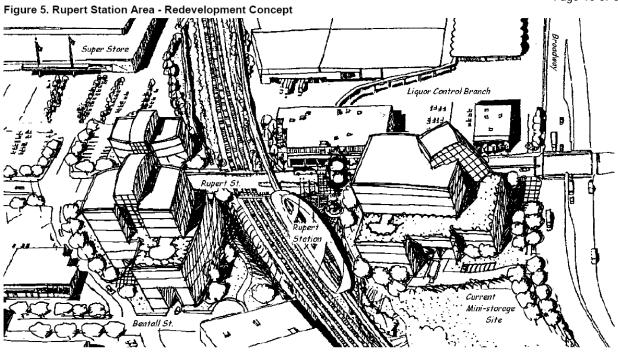


2.3.2 Rupert Station Precinct Redevelopment Concept

Figures 4 and 5 illustrate the basic elements of the future development of critical sites in this station precinct, which these policies and guidelines seek to foster. They include:

- (a) A realigned and meandering Still Creek adjacent to the south side of the BNSF railway, with a continuous pedestrian path.
- (b) Street-wall built form defining tree-lined streets and sidewalks.
- (c) "Green" contemporary architectural expression, including landscaped roofs and natural ventilation.
- (d) Pedestrian-oriented retail/services located at grade near the Rupert Station on Rupert Street.
- (e) A recreational feature such as a small stormwater retention pond located along the Creek alignment at the north end of Bentall Street.



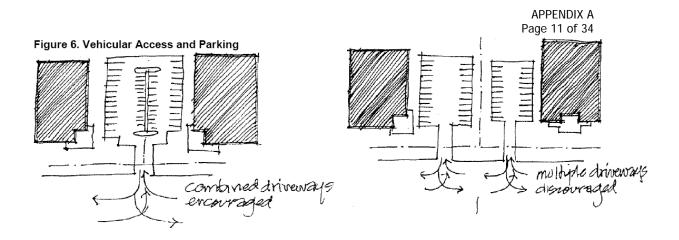


2.7 Weather Protection

- (a) Main building entries should provide generous weather protection that is designed to be an integral feature of the building's architectural character.
- (b) All commercial frontages along Rupert and Renfrew, including the transit stations, as well as commercially zoned intersections along Grandview Highway, should provide full weather protection on street frontages.
- (c) Canopy and/or awning systems detailing should consider integrated signage, lighting and display systems.
- (d) Canopy and awning systems depth should be maximized to provide greater weather protection.
- (e) Weather protection elements on overhangs may be considered in required yards and landscaped setbacks.

2.11 Access and Circulation

- 2.11.1 Vehicular Access
 - (a) A traffic and parking analysis will be required for rezonings and major developments to forecast traffic impacts. The City may require safety improvements for vehicular traffic as well as enhanced vehicle, pedestrian, and bicycle facilities. In addition, for non-LFA uses, information on proposed Transportation Demand Management (TDM) measures should be provided.
 - (b) Direct access onto Grandview and Broadway should be minimized.
 - (c) Shared driveways to abutting properties should be provided where possible as illustrated below to maximize safety, minimize impervious surfaces, and increase the landscaped buffer bordering the properties. The city standard crossing width should not be increased.

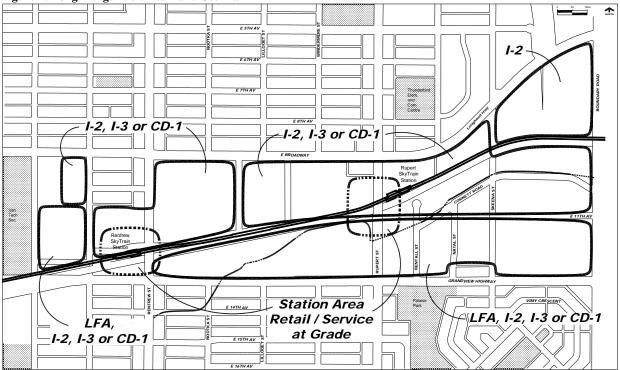


- 2.11.2 Pedestrian Access
 - (a) Ground-oriented pedestrian "streets" through large footprint buildings are encouraged to create connections to on-site circulation routes and amenities, consistent with a campus-like high tech/*office* environment. Such circulation through buildings should be clearly identified and designed for use by the general public.
 - (b) Larger sites that are developed with more than one building should provide weather protected pedestrian linkages to connect building entries within the site, and public rights-of-way should be integrated into development sites for convenient public access to adjacent properties, SkyTrain stations and City Greenway and Bikeway networks.
 - (c) Bridge/walkway systems with weather protection are encouraged for upper-floor connections between buildings on the same parcel.

3 General Land Use Policies

The GBIA Plan supports a variety of future uses and activities including a continuation of traditional industrial uses, high-tech industrial uses including film studios and bio-tech, general office uses, film studios, large format uses and retail/service uses near SkyTrain Stations. Implementation will occur through redevelopment or reuse of buildings under the existing I-2 and Still Creek CD-1 zones and through rezonings to I-3, *CD-1 (general office)* and CD-1 for large format uses (including retail, institutional, cultural and recreational uses) on Grandview Highway or for retail/service uses in the station areas. Figure 7 shows the preferred long-range land use plan.

Figure 7: Long-Range Preferred Land Use Plan



3.1 Rezoning Policies

- 3.1.1 Large Format Area Rezonings
- **LFA** Council will consider applications for site specific rezoning to CD-1 (Comprehensive District), for the purpose of large format retail, institutional, cultural and recreational uses. The minimum size of a retail store is 929 m² (10,000 sq. ft.). Some smaller sites may not be able to achieve the minimum size within the floor space ratio (FSR) limits. In these circumstances, the Director of Planning may allow a smaller store providing the FSR limit is achieved. Rezoning will require Council approval of a specific form of development at a Public Hearing.
- 3.1.2 Large Format Uses and Impact on Neighbourhood Centres

Retail Uses

- **LFA** The type of retail uses suited to the Large Format Area are those not normally found or appropriate in a neighbourhood centre. Neighbourhood centres, usually developed from existing shopping areas, are the "heart" of a neighbourhood. It is here that people find shops, jobs, neighbourhood-based services, public places that are safe and inviting, and a place to meet neighbours and join in community life. Examples of types of retail that would be better accommodated in the LFA include:
 - (i) retail which requires large sites by nature of the product (e.g., large display areas needed for bulky items such as furniture, home improvement, etc.);
 - (ii) retail that generally requires the use of a car;
 - (iii) retail that serves a wide catchment area; and
 - (iv) retail that does not sell goods that are or can be conveniently available in neighbourhood centres or other commercial areas.

The proposed use should not undermine the role of nearby neighbourhood centres by drawing customers away from local stores. Food and clothing retail often form the basis of local shopping areas and it is probable that large scale retailers selling these products will find themselves at odds with City policy and may not be successful.

All types of retail use, except the sale of food (i.e. grocery store), will be considered. However, retail uses including clothing will require a retail impact analysis to be paid for by the applicant. Staff will set the terms of reference and hire an independent consultant. The extent of the trade area to be examined will depend on the proposed use. The study should demonstrate how the proposed development will affect retail competition in the determined trade area. Projects are preferred which are likely to permanently increase the number and variety of competing retail businesses in the area. Applications which reduce competition or which could lead to store closures in the trade area are discouraged.

Institutional, Cultural and Recreational Uses

While many of these uses could be accommodated in Neighbourhood Centres and would benefit from proximity to neighbourhood residents, some may be more appropriate for the Large Format Areas because they:

- (i) require large sites which are difficult to find or assemble in and near Neighbourhood Centres;
- (ii) serve a large area and therefore would benefit from better access from arterial roads and access to public transit and rapid transit; and
- (iii) are unsuitable for Neighbourhood Centres (e.g. casinos, bingo halls, etc.).

To preserve the balance of land for industrial and local serving uses, institutional, cultural and recreational uses are prohibited in the I-2 areas and discouraged in the I-3/*CD-1* (general office) areas, except as described below:

Institutional Uses:

Institutional uses such as schools (elementary, secondary, university, college, business, arts or self-improvement) and churches could be considered. These uses will be considered in the Large Format Areas or in the I-3/CD-1 (general office) area when they relate directly to high-tech industrial development and require safe and direct access to SkyTrain Stations.

Cultural and Recreational Uses:

Cultural and recreational uses such as billiard halls, bingo halls, bowling alleys, casinos, clubs, halls, fitness centres, rinks and swimming pools could be considered. Generally, cultural and recreational uses will be considered in the Large Format Areas only and require rezoning to CD-1. Cultural and recreational uses may be considered as part of mixed-use development with other permitted industrial uses. Fitness centres and similar recreational uses that serve area workers will be considered on arterials in existing buildings.

- 3.1.3 Station Area Retail/Service Uses
- **Stat** Small-scale uses which help make a station environment more vibrant and also feel safer, and which do not tend to either generate destination vehicular traffic or require large off-street loading facilities are encouraged in Station areas. These include:
 - (i) Convenience stores and services (eg. news stands, local grocery store);
 - (ii) Small cafes;
 - (iii) Professional/community services and offices;
 - (iv) Light manufacturing;
 - (v) Artist studio (excluding associated residential component).

Station Area retail uses should be located at grade, either within a station, on a station site, under the guideway or on Rupert, Renfrew, Hebb Avenue or East 12 th Avenue, directly adjacent to or across from a station. Development could either be in a stand alone single storey or a mixed use multi-storey form with local serving office uses, *general office* or high-tech industrial offices above grade. Rezoning to CD-1 would be required.

3.1.4 High-Tech and General Office Development - Location and Access to Transit

I-2/I-3/ Some forms of high technology industry, such as information technology and general office,

CD-1 can achieve high worker density and are best located in close proximity to rapid transit.

(General Office) Developments should coordinate with TransLink to improve access to transit, provide stops and, where needed, provide comfortable, safe bus shelters. All proposals for high-tech development or uses with high worker density require safe and direct access to SkyTrain stations (5-10 minute walk).

4 Guidelines Pertaining to the Regulations of the Zoning and Development By-Law (and Parking By-Law)

4.1 Topography: Adjustments to Grade

- 4.1.1 The grade of new development in the Still Creek flood plain should be set in consultation with the City Engineer. The City's Flood proofing Policies should be consulted for general information on Flood proofing.
- 4.1.2 Any significant alterations of existing grade should support convenient pedestrian access, reflect the natural slope of the land and help visually integrate the building massing into the landscape.

4.3 Height

- **I-2/I-3/** (a) For I-2 and I-3 developments the allowable height is 18.3 m (60 ft.). The Director of Planning may consider height up to 30.5 m (100 ft.) where view impact studies demonstrate minimal impact on nearby residential properties and Still Creek, and where increased height also assists in providing usable public open space at grade.
- **LFA** (b) For large format stand-alone retail developments and institutional, cultural and recreational uses, a maximum height of 12.2 m (40 ft.) is recommended.
- Stat (c) Height should not exceed 9.2 m (30 ft.) where station area retail is a stand-alone use.
 - (d) The Director of Planning may consider heights up to 18.3 m (60 ft.) for other stand-alone conditional uses or for mixed use projects, where view impact studies demonstrate minimal impact to nearby residential properties and Still Creek, and where increased height also assists in providing usable public open space at grade.
 - (e) Lower forms are encouraged near residential areas and higher forms near transit stations and other lower lying areas.
 - (f) Height should not exceed 9.2 m (30 ft.) to a depth of 9.2 m (30 ft) from the required landscape setback for sites bordering Grandview Highway, Broadway and Boundary Road.

4.4 Street and Greenway Setbacks

- (a) Landscape setbacks should be provided as shown in Figure 8, unless otherwise specified. These setbacks will create a necessary green buffer to nearby residential and other uses, and contribute to the street character described in Section 2.2. They provide a suitable gateway to the city, and should be free of parking and manoeuvring areas, signs, fences and product display.
- (b) Requirements may be relaxed for retail uses at grade in the Station Areas.

- 4.4.2 Building Setbacks
- **Still** The health of Still Creek is influenced directly by the amount of natural vegetation between the water and the built areas. This natural vegetation serves to protect the stream bank from erosion, slow storm water run-off, filter contaminants from water draining into the Creek, add to the Creek's natural beauty, and provide recreational opportunities.
 - (a) Buildings and impermeable surfaces should be set back at least 5.0 m (16.4 feet) from the edge of the GVSDD Easement.
 - (b) The setback should be landscaped with native vegetation. Areas for seating and viewing Still Creek are appropriate in the setback but should be small in scale and designed to blend with the natural setting and have minimal impacts on the Creek.
 - (c) Design solutions should accommodate the objective and intent to achieve a minimum 2.0m publicly accessible greenway along the Creek. Where possible and desirable, the Greenway should be outside of the 5.0m setback.

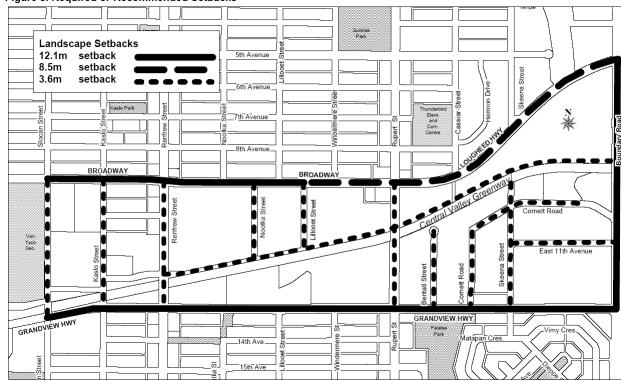


Figure 8. Required or Recommended Setbacks

4.7 Floor Space Ratio

LFA (a) The FSR for large format retail uses should not exceed 0.6. The minimum retail floor area is 929 m² (10,000 sq. ft.). When incorporated in a mixed-use building, a total FSR of 3.0 is allowable subject to the same considerations as for I-2/I-3/*CD-1*(*General Office*) development outlined in (b) below.

The FSR for institutional, cultural and recreational uses should not exceed 1.0.

I-2/I-3/ (b) Whether I-2, and I-3, and CD-1 projects developed for high-tech and general office uses will be able to achieve the maximum 3.0 FSR is dependent on a number of factors. These include:
Office) (i) Site size and configuration, achieving landscape and open space guidelines, and

- (i) Site size and configuration, achieving landscape and open space guidelines, and overall quality of site and architectural development.
- (ii) Contributions to enhancing Still Creek and maximizing on-site stormwater retention.
- (iii) Adequate internal vehicular circulation and underground parking.

(iv) Achieving a sensitive relationship to adjacent residential areas.

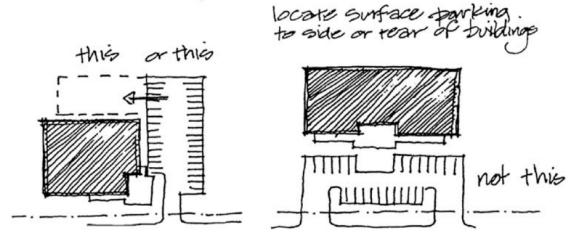
4.9 Off-Street Parking and Loading

- 4.9.1 Off-Street Parking Requirements
 - (a) Section 10.1 should be consulted prior to design and construction of all parking areas.
 - (b) Excessive parking is discouraged and parking standards provided should recognize and encourage transit use. In general, parking standards should not exceed 2 spaces per 1000 sq-ft.
- **LFA** (c) Parking requirements for retail uses should be consistent with the Parking By-law requirement for Grocery Stores. Where the retail use is for furniture, or similar type of retail, which in the opinion of the Director of Planning in consultation with the City Engineer, requires less parking, the parking standard for office and retail uses may apply.

The parking requirements for Institutional Uses, or Cultural and Recreational Uses should be consistent with the Parking By-law for these uses.

- Stat (d) No off-street parking is required for stand-alone small-scale (less than 250m²) uses in the station areas, which do not tend to either generate destination automobile traffic or require off-street loading facilities.
 - (e) Surface parking facilities should be located to the rear or beside buildings as shown in Figure 9.
 - (f) No parking or manoeuvring should be permitted in landscaped setback areas.
 - (g) Parking lots are a major source of harmful run-off to Still Creek. In addition to the environmental considerations outlined in Section 10, careful design of parking, loading and drive aisles should occur to strictly minimize hard surfacing on the site.

Figure 9. Parking Location



4.9.2 Landscaping and Screening of Parking Facilities

- (a) A layered landscape treatment should be provided to screen parking and loading areas while providing strategic visual access to entries and access areas.
- (b) Safety and security are important factors in the layout, size and characteristics of plant material and earth-berming that affect visual access throughout the site.
- (c) Security fences should be limited to black vinyl covered chain link fence that is accompanied by appropriate plant material that minimizes its visual impact and takes into account Crime Prevention Through Environmental Design (CEPTD) principles.

- 4.9.3 Loading and Outdoor Storage Areas
 - (a) Loading areas should be located to the rear of the property, and not be visible from major streets.
 - (b) Loading areas should be screened from view from all Greenways and Still Creek.

4.16 Building Massing

- (a) Neither the width nor depth of an individual building should exceed 61.0 m (200 ft).
- (b) Additional width or depth may be considered where the proposal demonstrates exceptional design merit.
- (c) Where the need for longer, wider buildings can be demonstrated, consideration should be given to facade articulations, and connections by transparent bridges and walkways on the upper floors.
- (d) For sites adjacent Still Creek, building massing should respect the importance of sunlight on the Creek and building location, height, roof treatments and overall design should all be considered to minimize shading of the Creek To help achieve this objective, the Director of Planning will consider relaxations to regulations controlling massing and building location.

4.17 External Design

- (a) Generic "big box" building designs that exhibit little facade interest and transparency to the street should be avoided.
- Stat (b) Storefronts should be transparent at grade and contain no blank wall exceeding 1.0 m in length.
- **I-2/I-3/** (c) High clearance warehouse-type spaces should have windows at the upper storey of the CD-1 facade.

(General Office)

Still (d) New buildings near Still Creek should take advantage of the Creek views and sounds of lowing water by providing orientation to the Creek through location of windows which open, employee meeting areas and access to outdoor patios.

Transparency and Fenestration: High Clearance warehouse-type Spaces should have windows at the Upper storey of the Facade



Vienthe potetion

Comfort and Interest at Grade Level

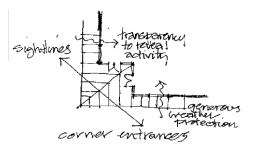
5 Architectural Components

5.2 Windows

Views into building activities should be provided, especially at grade levels; accordingly, use of mirrored or highly reflective glass is discouraged.

5.3 Main Entries to Street

- (a) Main building entries should be clearly identifiable, visible, transparent and accessible from the street.
- (b) Pedestrian interest and comfort at entries should be provided through specifically designed seating, signage, lighting and features that signal the building's use.
- LFA (c) Non-retail uses should have separate and distinct entries.
 - (d) Corner entries that can provide access from both the street and parking facilities are encouraged.





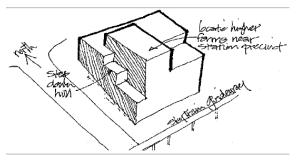
Architectural Characteristics: Entrances

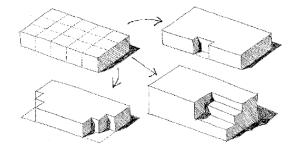
5.4 Building Articulation

- (a) Building articulation can be achieved utilizing glazing, canopy and shading systems, as well as exposed structural components.
- (b) Feature banding to break up perceived wall height may be used to assist in achieving horizontal articulation.
- (c) Highly visible circulation and building systems are encouraged.
- (d) Vertical service elements, such as stair and elevator shafts, that are located to the perimeter of the building, may be used to assist in articulation, as well as express their function.
- (e) Rooftop mechanical systems, elevator penthouses and other appurtenances should be integrated into the form of the building and screened from view.

I-2/I-3/CD-1 (General Office) Developments

LFA Developments





5.5 Exterior Walls and Finishing

- (a) Exterior building design should reflect the industrial character of the precinct by utilizing appropriate, durable materials.
- (b) Exterior materials that are encouraged include:
 - (i) contemporary metal cladding systems;
 - (ii) heavy timber structural elements;
 - (iii) glass and steel;
 - (iv) architectural concrete or brick;
- (c) Stucco, vinyl and corrugated metal are discouraged as primary exterior materials.
- (d) Roofs visible from the SkyTrain should be architecturally treated and/or landscaped as "green roofs" see 10.1 (f).
- (e) Exterior colours should enhance the building form and corporate colours should be clearly subordinate, providing accent colours only.

APPENDIX A Page 20 of 34



Architectural Characteristics











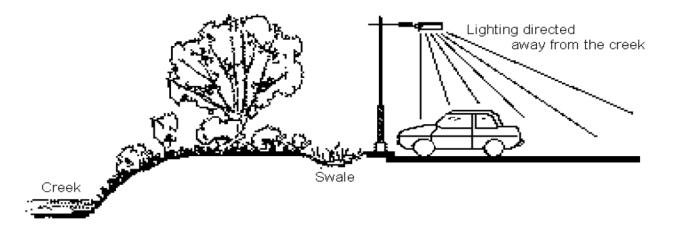






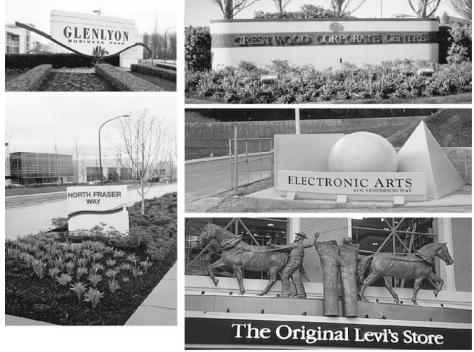
5.7 Lighting

- (a) Street, building, entry path and parking area lighting should be integrated into the site design.
- (b) For exterior lighting, incandescent and other white light sources are encouraged, while sodium vapour light sources are discouraged.
- (c) Exterior lights should be oriented away from adjacent residential properties, with cut-off shields to minimize light.
- Still (d) Site lighting used for security reasons should not detract from the amenity value of the Creek and minimize light pollution and glare on the Creek channel.



5.8 Signs

- (a) Corporate signage should be subordinate to the design of the building and architecturally integrated with the development.
- (b) Billboard signs and mobile signs should not be located on the site.
- (c) Internally illuminated or back light sign boxes are discouraged.



Signage

7 Open Space and Greenways

7.1 Public Open Space

The GBIA currently has no dedicated parks, few existing public spaces and lacks new open space opportunities. To provide for outdoor recreation for workers and the public, an enhanced Still Creek will be the major open space element and small public plazas and green spaces will be incorporated into redevelopments along Greenways or into the street edge of major sites such as planned for *at* the northwest and southwest corners of the Broadway Tech Centre (Figure 10, #1 and #2). Opportunities for these spaces on other larger parcels are shown in Figure 10 as "Potential Public Space."

In addition, proposed Still Creek retention ponds shown as #3 and #5, will offer opportunities for public recreation. These features are part of the long-term 10-50 year vision for Creek enhancement and they will be investigated further as part of an Integrated Stormwater Management Plan. Their size and location may change as a result of this work.

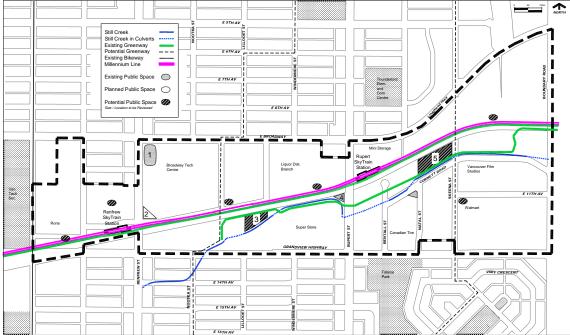


Figure 10. Public Open Spaces, Pedestrian and Cycling Routes

The following should guide design and location of public spaces and Greenways:

- (a) Given the large amount of hard surfacing in the GBIA, new public space should minimize further hard surfacing and maximize "soft" and green landscaping.
- (b) Landscaping elements and public art which reflect the industrial history of the area or enhance or celebrate Still Creek are encouraged.
- (c) Large sites indicated in Figure 10, as providing "Potential Public Space" should incorporate green spaces for employees and the public as part of site landscape design.
- (d) Public space should connect to future Greenways and other public routes to create a network of linked green spaces.
- (e) Where practical the Still Creek and Central Valley Greenways will be constructed on City owned land or City R.O.W. In some circumstances, an additional R.O.W. may be requested from adjacent development to provide a more useable trail width.

7.2 Semi-Private Open Space

Social semi-private open space is desirable for employees and should be provided wherever possible. It could be located at grade or on the rooftop as part of a landscaped rooftop garden and should maximize sun exposure.



Public Art in Open Space

Public Art reflecting Industrial History

8 Public Realm Landscaping and Streetscape

8.1 General Provisions



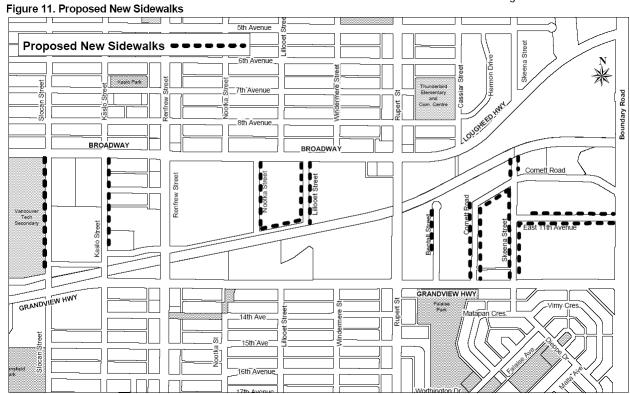
Semi-private Open Space



Public Open Spaces connected by Greenways

- (a) Continuous sidewalks should be provided for the site's full frontage to encourage pedestrian use. Figure 11 indicates where sidewalks are currently absent.
- (b) Landscape design should provide for views into buildings for pedestrian interest, as well as special features such as opportunities to sit, view or take part in walking or active recreation.
- (c) Bus stop and transit station landscaping treatment of sites adjoining SkyTrain stations should be coordinated with TransLink.
- (d) The required landscaped setbacks on Grandview Highway, Broadway/Lougheed, Boundary Road and the Central Valley Greenway provide good opportunities for public art and historical references.
- (e) Crime Prevention Through Environmental Design (CPTED) principles should be followed.
 - (i) Maximize opportunities for natural surveillance;
 - (ii) Provide unobstructed and transparent sightlines to exits and destinations;
 - (iii) Foster territoriality and a sense of ownership;
 - (iv) No hiding places; and
 - (v) Lighting of public places.



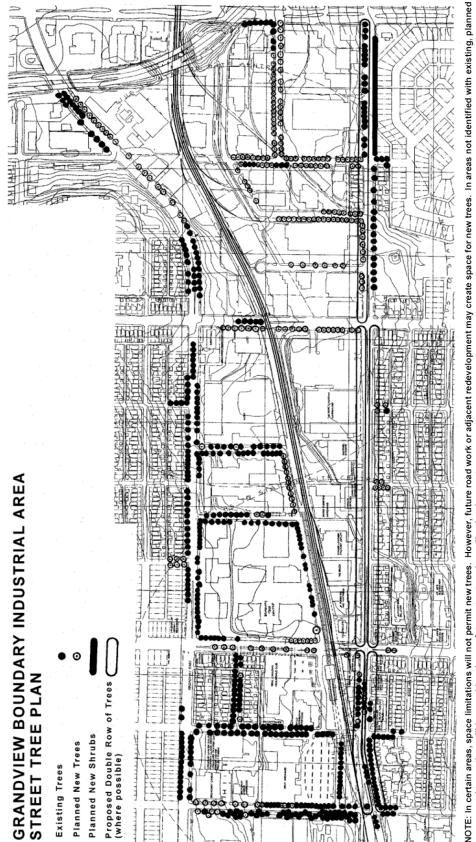


8.2 Public Realm Landscaping and Street Trees

8.2.1 Street Tree Plan

The existing street trees in the GBIA vary in size, species, age and form. On most streets there are either no street trees or there are major gaps. The street tree plan objectives are to:

- (i) Be a major element in developing visual continuity along streets and an attractive urban environment.
- (ii) Increase the awareness of the presence of nature in the urban environment.
- (iii) Provide a "natural" or ecological link to neighbourhood open spaces such as Falaise Park. Still Creek, the Greenways and public open spaces.





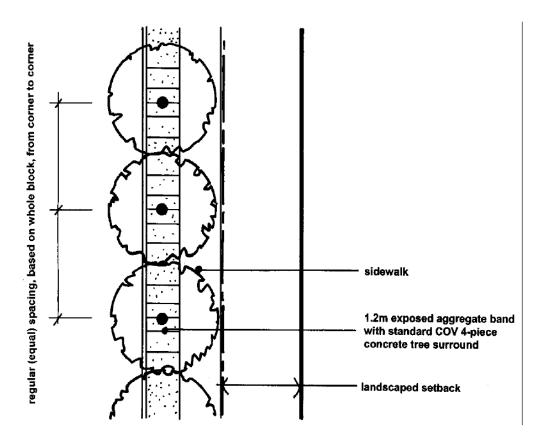
8.2.2 Tree Selection and Spacing Criteria

The following criteria have been established to assist in determining appropriate tree species, variety and spacing for the GBIA. The street trees shall:

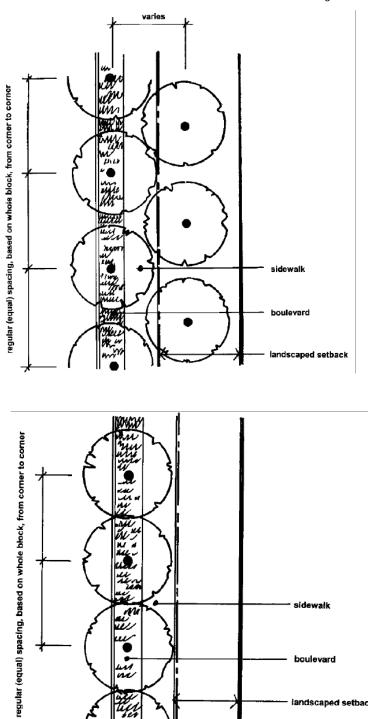
- (a) have reasonable root containment habits;
- (b) have a maximum mature size appropriate for its site, given the constraints of overhead wires, boulevard width, views and other visibility concerns;
- (c) have a long leaf life and predominately green leaf colour but provide seasonal colour change, and variable leaf size to create diversity in texture and canopy widths where possible;
- (d) be capable, with pruning, of maintaining a 2 m (7ft) minimum clearance from sidewalk level to the underside of branches; and
- (e) have longevity, be a species less prone to disease, as well as being clean and generally easy to maintain;
- (f) be spaced as close as physically possible (ideally 7-9m [23-30ft], subject to meeting all relevant technical criteria. Spacing will vary depending on whether the planting zone is hard-surfaced or grass.

Some of the plan will be carried out through the Park Board Street Tree Infill Program and the remainder will occur as part of the redevelopment of adjacent sites. Engineering Services should be contacted for further information on tree location and the Board of Parks and Recreation, Arboriculture for the approval of tree species. Applicants should also refer to the Streetscape Design Standards for more detailed street tree requirements.

See illustrations below for general streetscape characteristics and locations:



Rupert and Renfrew Streets



uga ta

Major Streets

Secondary Streets

landscaped setback

8.2.3 Still Creek Landscaping

Still

- (a) A landscape plan is required for all developments adjacent Still Creek. The plan should be prepared by a certified landscape architect or a professional landscape designer who has prior experience with landscape design and remediation near water courses. The plan should show existing and proposed plant materials, and all other landscape elements.
- (b) Existing Still Creek landscape character should be preserved and incorporated into new development by using plants native to Still Creek in areas adjacent the Creek. Native plants should be incorporated throughout sites adjacent Still Creek in order that the use of fertilizers, herbicides and pesticides can be avoided.



Introduction of Stream Complexity

- (c) Existing mature trees provide shade, stabilize stream banks and add significantly to the natural beauty of the Creek and their preservation is of primary importance.
- (d) Landscape design and planting adjacent the Creek should discourage direct contact with the Creek due to health and safety concerns and impacts to the creek.
- (e) Only non-toxic materials should be used for Creek area development. For example, hogfuel, commonly used for path surfaces, could leach toxic chemicals into the Creek.
- 8.2.4 Grandview Highway, Broadway/Lougheed Highway and Boundary Road
 - (a) Where a landscape setback is required, lower understorey shrubs and other accent plantings should be used to enhance the green border and highlight entries and features on the site. Pedestrian level lighting should be incorporated. The treatment of the landscape setback should form part of the landscape plan.
 - (b) Street trees on these streets should be planted in double rows to provide a parkway experience suitable for a major gateway to Vancouver. One row of trees may be in the public space in the outside boulevard where there is one, and the other row in the landscape setback. The Park Board and Engineering Department should be consulted for advice on tree species and location.
 - (c) Pedestrian oriented intersections should be provided at all Grandview Highway and Broadway/Lougheed intersections between Boundary Road and Slocan Street.

8.2.5 Renfrew and Rupert Streets

(a) Properties fronting on Renfrew and Rupert Streets are recommended to provide a 3.6 m (12 ft.) landscape setback. Lower understorey shrubs and other accent plantings should be used to enhance the green border and highlight entries and features on the site. Pedestrian level lighting should be incorporated. The treatment of the landscape setback should form part of the landscape plan.

8.6 Central Valley Greenway

(a) Properties bordering the Central Valley Greenway will be required to provide a 3.6m (12ft) landscape setback. The landscape design within the setback should employ Crime Prevention Through Environmental Design (CPTED) principles.

8.7 Outdoor Storage and Display Areas

- (a) Outdoor storage areas should be limited to the rear yard areas, screened from main entrances, streets, Still Creek, and City Greenways.
- (b) Screening should include fencing, planting and earth berms that filter undesirable views.

9 Public Services

9.1 Water and Sewer Services

Current water and sanitary sewer services are at capacity and will require upgrading to accommodate additional development. Please refer to the Grandview Boundary Area Plan for further information.

9.2 Storm Water and Flood Risks

Still Creek conveys stormwater for the GBIA and surrounding area. With increased development and associated impervious surfaces in the Still Creek water basin, the volume of stormwater during rain events has continued to increase with attendant increases in flooding risk and impacts to the ecology of the Creek itself.

- (a) New development in GBIA should reduce the amount of stormwater that is channelled directly into the stormwater system and Still Creek by applying the methods outlined in Section 10.1.1.
- (b) For the portions of the GBIA identified on flood plain maps to be within the 200 year flood area, the grade of new development must be raised to mitigate flooding risks in consultation with the City Engineer. The City's Floodproofing Policies should be consulted for general information on flood proofing.

9.2.2 GVSDD Requirements

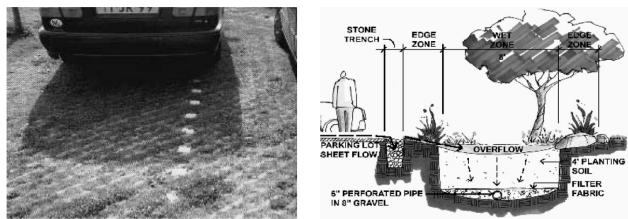
The Greater Vancouver Sewer and Drainage District (GVSDD) has authority over stormwater in Still Creek.

- **Still** (a) The GVSDD requires property owners to maintain all landscape elements in the easement area. The GVSDD undertakes brush cutting as required within the hydraulic channel as part of its maintenance program.
 - (b) Bridges, crossings and any proposals having potential impact on the hydraulic requirements, require approval of the GVSDD prior to submission of a Development Permit Application. Bridges should span the Creek without support columns being located in the channel. The design of these structures is subject to the approval of the Director of Planning.
 - (c) Physical access to the Creek must be provided on at least one side of the channel for GVSDD maintenance. These areas could be used as viewing or seating areas where appropriate.

10 Environmental Considerations

10.1 Still Creek Watershed: Protection and Enhancement

Still Creek was once an important natural feature and remains a visible reminder of the environmental systems upon which urban life is based. Through urbanization large sections are now buried and above ground sections have been straightened and channelized in order to better convey stormwater. Still Creek suffers from extremes of high and low flows, flooding potential for adjacent properties and poor water quality from direct hard-surface run-off which carries vehicle pollutants and other contaminants into the Creek. Contribution to enhancing Still Creek will be a key criteria in assessing proposed developments throughout the GBIA, and particularly for those sites adjacent the Creek.



Example of Permeable Parking Surface

Typical Parking Area Swale Cross-Section

10.1.1 Creek Sensitive Development Practises

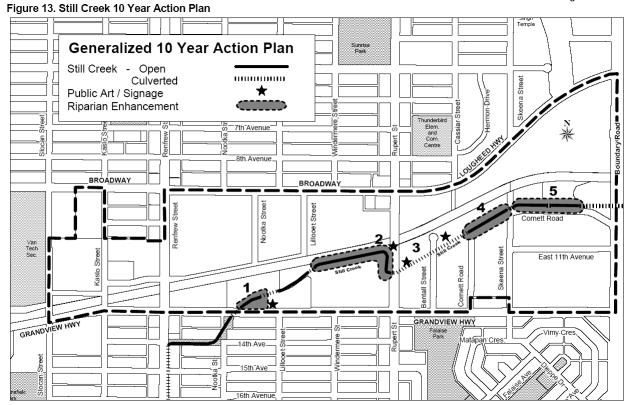
The objective for all new development should be first to maximize the infiltration of stormwater and secondly, to delay its release into the stormwater system and Still Creek. To achieve these objectives the following guidelines should be incorporated as far as practical into all new GBIA development:

- (a) Permeable surfaces should be maximized to reduce stormwater runoff and recharge groundwater. Soil preparation and introduction of appropriate soil type layering is critical to effective functioning of all permeable surfaces, and should be an integral part of design and construction.
- (b) On-site stormwater storage and treatment should be provided through under pavement storage, ponds, wetlands, landscaping or similar features that have dual functions of slowing rainwater release to Still Creek and providing a visual or recreational amenity for employees.
- (c) Ditches or swales should be created adjacent to hard surfaces, to carry, filter and reduce surface runoff as well as minimize the need for underground pipes. Parking areas adjacent the Creek should incorporate swales as standard practise.
- (d) Oil interceptors should be used in all parking lot catch basins and other drainage structures and cleaned out regularly according to manufacturers instructions.
- (e) New development should maximize the number of trees planted.
- (f) For new buildings green roofs should be investigated and employed to store and evapo-transpirate storage and to provide a recreational amenity for employees. Alternatively, roofs should be designed to store rainwater for delayed release into the stormwater system.
- (g) Consideration should be given to recycling grey water on site, if possible, for irrigation purposes to reduce water use, waste water and runoff.
- (h) Any changes to the Creek alignment should introduce more natural conditions such as gentle meanders. Except for efforts to daylight the Creek, further straightening and channelization is not supported.

On-going study is occurring to determine the most effective of these approaches to reducing stormwater run-off in the Still Creek Basin and elsewhere. Applicants should request this information from the GVRD and the City as it becomes available to develop an approach that strives for a significant reduction in the runoff compared to that which would normally occur using standard practises.

10.1.2 Still Creek Enhancement Study

The Still Creek Enhancement Study was undertaken to review enhancement options and recommend measures to protect the remaining portions of the Creek. The goals were to improve stormwater management and water quality, create recreational opportunities for area workers, provide educational experience of natural systems and recover the Creek's natural and aesthetic appeal through day lighting and other means. The Study advances a series of Creek enhancement projects that could occur in the short and long-term toward achieving these goals. The more immediate actions are illustrated in Figure 13. These actions would lay the ground work for the more extensive longer-term improvements. These more complex stream enhancements are shown as proposed in the study and will be reviewed in more detail as part of an Integrated Stormwater Management Plan for Still Creek.



Area 1	-	using the green triangle on the site at 3003 Grandview, widen the creek, enhance riparian area and install public art;
Area 2	-	enhance the stream side vegetation and add riffle weirs, boulders etc. to increase stream complexity. install public art and educational kiosk in the existing park space at the northeast corner of the Superstore parking lot;
Area 3	-	represent the underground portion of Still Creek through painting the Creek alignment, mosaics or other public art;
Area 4	-	remove on-street parking from the north side of Cornett Road and expand the stream side area to add meanders and riffle weirs;
Area 5	-	replant the stream side areas with native plants.

Figure 14. Proposed 10 to 50 Year Actions



Area 1	-	when the United Furniture site redevelops, relocate and daylight the Creek on the south side of the BNSF tracks and extend the Greenway; acquire the parking area in the northwest corner of the Superstore site and construct a passive recreation area, stormwater retention pond and wetland;
Area 2	-	acquire additional land to expand the stream side area, add stream meanders, pedestrian view points;
Area 3	-	relocate and daylight the Creek on the south side of the BNSF rail corridor and extend the Greenway;
Area 4	-	acquire 3445 Cornett Road and 2525 Skeena Street and construct a passive recreational area, stormwater retention pond and wetland;
Area 5	-	widen stream side areas to add meanders, seating areas and other pedestrian amenities either in current location or after relocation to the south side of the BNSF line and extend the Greenway.
	_	

10.2 Trees and Vegetation: Retention, Relocation and Replacement

- (a) Existing trees and vegetation should be retained and incorporated into site planning. New trees should be added wherever possible.
- (b) Groups of trees should be retained to protect against potential isolated tree hazard situations and preserve the associated understorey vegetation for minimum disturbance of existing conditions.
- (c) If tree retention is not possible, the trees should be relocated to other parts of the site, and if relocation is not possible, trees should be replaced with appropriate species.
- (d) A variety of native trees and vegetation should be provided to minimize maintenance, water use and integrate the planting design into the traditional landscape character. Trees and vegetation planted near Still Creek should be native species appropriate to the riparian zone.
- (e) Existing planting patterns and connections to adjoining properties should be extended and reinforced.

10.3 Soils: Retention, Cleansing and Replacement

- (a) Topsoil should be retained and soil quality improved where necessary by remediation on site or addition of new soil to provide a rich basis for site planting and landscape development.
- (b) Contaminated soils should be replaced with quality soils to enhance plant growth and ground water quality.

10.4 Air Quality and Transportation: Proximity and Land Use

- (a) Walking and bicycling should be encouraged by providing secure bike storage areas and employee change facilities with showers.
- (b) Convenient, safe and accessible pedestrian and bicycle connections should be provided to major bus routes and SkyTrain Stations.

10.5 Energy: Conservation and Efficiency

- (a) Buildings should be oriented to maximize solar orientation, taking into consideration building placement and planting design.
- (b) Building materials, systems and construction methods should be used to conserve energy and reduce long-term operating costs.

10.6 Solid Waste: Reuse and Recycle

- (a) A solid waste disposal and recycling area should be designated for each building. This area should be of sufficient size to meet the needs of the proposed development and should be at ground level to facilitate container emptying.
- (b) A comprehensive waste management plan is encouraged among land owners to provide recycling and reuse in close proximity by different industrial, retail or high technology uses.



GRANDVIEW BOUNDARY INDUSTRIAL AREA PLAN

Adopted by City Council by July 25, 2002 Amended September 12, 2006



Contents

Page

1 1.1 1.2 1.3	Future Vision Area History Existing Zoning and Uses Implementation	3
2.0	Land Use Directions	5
3.0	Circulation and Parking	
3.1	Vehicular Traffic	6
3.2	Pedestrians and Bicycles	7
3.3	Transit	8
3.4	Parking	9
3.5	Recommended Road Modifications	
4.0	Character and Image	12
4.1	General Built Form and Character	
4.2	Development in Station Areas	13
4.3	Public Realm Improvements	
5.0	Public Benefits and Services	22
5.1	Underground Utilities - Sewer and Water	
5.2	Childcare Requirements	23
5.3	Total Public Benefit Demands	23
5.4	Public Benefits and Service Funding	

1 Future Vision

The GBIA will remain primarily an industrial area but one that accommodates a variety of uses and activities. These will include Large Format Uses on Grandview Highway (including large format retail, institutional, cultural and recreational uses) and a gradual transition to new industrial uses such as film studios and, high-tech industrial office buildings like the Broadway Tech Center, and general office uses concentrated near the SkyTrain stations. These new industries are much more worker intensive than current uses, and worker population will increase from 4,000 workers today, up to 14,000 depending on the extent to which new industrial uses enter the area. The new SkyTrain stations will become centers of neighbourhood pedestrian activity with small shops and other services for transit users and area workers. Area infrastructure and amenities will be improved to accommodate the increased worker demands on roads, water, sewer services and park space. As the only natural amenity in the area, Still Creek will be enhanced to provide expanded natural areas and recreational space for workers, a continuous pedestrian pathway and improvements to the Creek ecology. To support these Creek improvements, new approaches to handling storm water will be introduced for new development. The transition may take 20 or more years and the change will be gradual, allowing area owners and operators time to consider and adapt their role in the area's future.

1.1 Area History

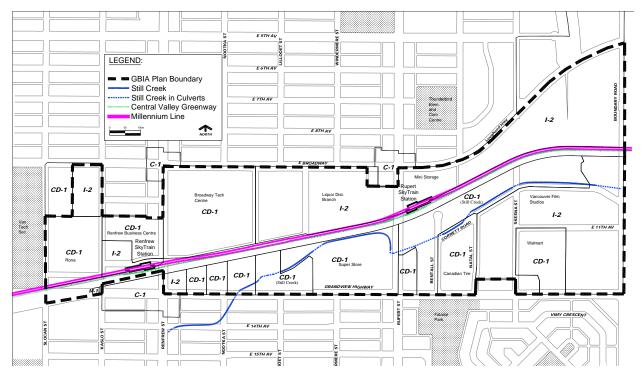
GBIA developed in the 1950s as an industrial park with rail service and convenient access to Highway 1 and surrounding arterial streets. Beginning in the 1980s, large manufacturing and warehouse uses such as Wire Rope Industries, Molson's and Simmons Mattresses vacated the area making way for new uses such as Superstore, and Paramount Studios and Costco Wholesale Club. In 1995 the Industrial Land Strategy led to new I-2 zoning in the area to encourage industrial, service and high-technology uses and identified Grandview Highway as a location for large format non-industrial uses. After the Province announced the new SkyTrain line in 1998, the GBIA and the False Creek Flats were identified by the City as suitable for high-tech industry. When the demand for high-tech space declined, Council approved the consideration of General Office uses on sites near the SkyTrain stations. Council rezoned the 6.9 hectare (17 acre) former Eaton's warehouse site to I-3 High Tech, and approved interim guidelines for The GBIA Rezoning & Development Policies and Guidelines provide direction for privately initiated rezonings for high-tech and office uses, and for large format uses on Grandview Highway.

1.2 Existing Zoning and Uses

GBIA zoning and land use consists of:

- (a) **I-2 light Industrial and Still Creek CD-1 zones** permit a range of manufacturing, including software, service, transportation and storage uses as outright approvals, and other institutional and service uses as conditional approvals. Existing uses include Vancouver Film Studios, Paramount Studios as well as warehousing, wholesaling and distribution.
- (b) **LFA CD-1 zones** these are custom zoning schedules written to fit existing buildings and uses including Revy, *Rona*, Superstore and Petcetera.the Canadian Tire Centre.
- (c) **I-3 High-Tech Industrial zone** permits outright uses including information technology office and software manufacturing, and conditional uses such as manufacturing and other traditional light industry. The Broadway High Tech Centre is the area's only I-3 site.
- (d) General Office CD-1 zone these are custom zoning schedules which permit general office uses on sites close to a SkyTrain station.
- (d-e) C-1 Commercial zone permits local serving retail and service uses with potential for residential above.

Figure 1: Existing Zoning and Major Uses, 2011



1.3 Implementation

Implementation will occur through redevelopment or reuse of buildings under the I-2 and Still Creek CD-1 zonings (similar to I-2 with additional guidelines for Still Creek) and owner initiated site specific rezonings. While current zoning supports many future directions for the area, rezoning will be required for high-tech industrial offices, *general office uses*, new large format uses on Grandview Highway and retail/service uses near SkyTrain stations.

To facilitate new development, the Plan calls for improvements to area streets and infrastructure, enhancement of Still Creek and the public realm, and the extension of Greenways through the GBIA. An area-specific DCL By-law will be adopted to help pay for these improvements. In addition, the City-wide DCL will continue to be collected and used for services that benefit a wider area. DCLs will not be sufficient to pay for all required services. Additional funding from the Still Creek Greenway Enhancement Fund and other City sources will augment provision of area services and amenities as detailed later in this Plan.

2.0 Land Use Directions

Land use policies provide for choice of use in GBIA as described below and shown in Figure 2.

High Tech (I-3) Industry/General Office - software manufacturing, and information technology and general office uses is are more worker intensive than traditional industry and is are preferred closer to the SkyTrain Stations. Rezoning applications for high-tech or general office elsewhere in GBIA will be considered where safe and convenient walking (5-10 minutes) to SkyTrain Stations is possible.

Traditional (I-2) Industry - warehousing, wholesaling and storage uses can locate anywhere in the area, but are preferred in locations more distant from the station areas to reserve station areas for uses that generate more transit riders and pedestrian activity. Film studios and other more worker intensive uses are encouraged near stations.

Large Format Non-Industrial Uses (LFA) - rezoning applications for stand alone, large format retail, institutional, cultural and recreational uses will be considered only on sites fronting Grandview Highway as shown in Figure 2. Institutional, cultural and recreational uses such as schools (elementary, secondary, university, college, business, arts or self-improvement), churches, billiard halls, bingo halls, bowling alleys, casinos, clubs, halls, fitness centres, rinks and swimming pools could be considered. Rezoning to allow educational facilities outside the LFA may be considered when they relate directly to high-tech industrial development. Please refer to the GBIA Rezoning and Development Policies and Guidelines for more details.

Station Areas - Retail/Service - station oriented uses such as convenience stores, green grocers, insurance agents and drycleaners are encouraged adjacent to the SkyTrain Stations.

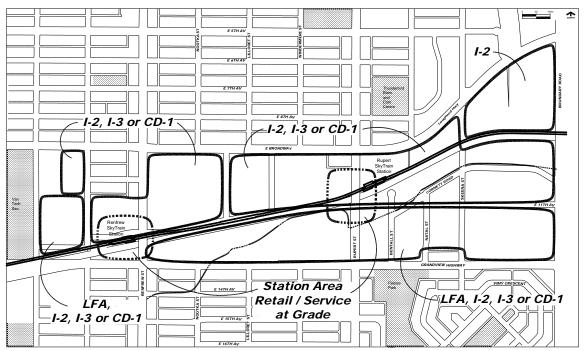


Figure 2: Future Land Use and Large Format Area HOR Boundary

3.0 Circulation and Parking

GBIA is bordered by three regional arterials - Grandview Highway, Boundary Road and Broadway/Lougheed. As a typical 1950s industrial area, the road pattern was developed for vehicular access and circulation. Sidewalks are generally absent on internal streets and direct pedestrian connections to key area destinations are missing.

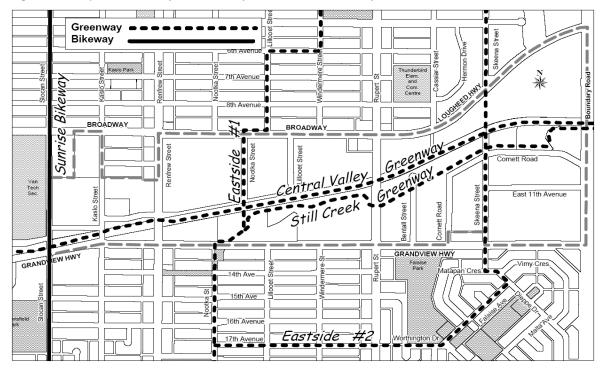
The Rupert and Renfrew SkyTrain stations will-greatly enhance accessibility for workers and nearby residents. With the potential for workers to rely less on vehicle travel, there is an opportunity to focus on alternatives to the single occupant vehicle. This will require creation of safe, convenient routes for pedestrians and cyclists, appropriate parking standards and promotion of alternative commuting modes by area employers.

3.1 Vehicular Traffic

The area traffic study concludes that improved vehicular and pedestrian routes are required to accommodate new high-tech industrial *and general office* development. Currently, intersections along Grandview Highway, Broadway and Boundary Road are operating at or near capacity in the afternoon rush hour. Circulation within the south-east portion (east of Rupert and south of the Skytrain line) of the GBIA is poor, where links to surrounding arterials are discontinuous. In order to encourage alternative travel modes, recommended road changes will focus on enhancing area safety and accessibility, rather than adding road capacity.

3.2 Pedestrians and Bicycles

As employee population increases, there will be increasing need for pedestrian routes linking key area destinations. Several greenways (specific enhanced streets and pathways for pedestrians and recreational cyclists) and bikeways (designated routes on city streets for commuter cyclists) are planned to bisect the GBIA, improving accessibility and making non-vehicular travel more attractive.





The routes planned for the area, shown in Figure 3, are:

- (a) **Central Valley Greenway** this planned route generally follows the Millennium Line SkyTrain alignment in the GBIA and will eventually connects False Creek to Burnaby.
- (b) **Sunrise Bikeway** this route runs along Slocan Street and is the major north-south bike route in the easternmost part of Vancouver.
- (c) **Still Creek Greenway** this route will parallel Still Creek and eventually link to the residential area to the south at the Nootka Street alignment.
- (d) **Eastside Crosscut Greenway** this planned greenway is one of 14 routes endorsed by Council and will eventually link Burrard Inlet to the Fraser River. It will connect with the Central Valley Greenway and other important destinations within the area. There are currently 4 potential routes - two routes through the GBIA on Nootka or Skeena Streets are shown in Figure 3. Both would require a new crossing of the BNSF tracks, either at grade or via an underpass. In the short-term, existing crossings of the BNSF at one of two alternate route locations along Slocan or Kaslo Streets may be required. Additionally, the Skeena route may be required for a vehicular connection in the long term to improve north/south access for the area. Actual route alignment would be determined after public consultation and technical review.

Many internal roads currently have no sidewalks. To accommodate increased pedestrian traffic and enhance safety, new developments will be required to provide them as required. In order to ensure timely completion of the pedestrian network in the area, other funding sources such as local improvement initiatives may be used where redevelopment is unlikely to occur for some time. The map below illustrates areas where sidewalks are missing.

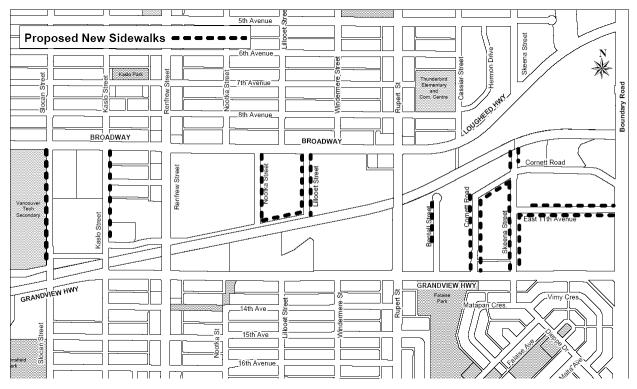
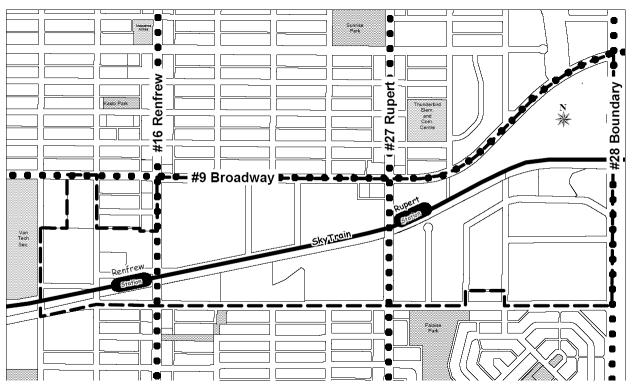


Figure 4: Proposed New Sidewalks

3.3 Transit

The GBIA is well served by transit the Millenium Line SkyTrain as well as regular bus service, as shown in Figure 5. and service will improve with the introduction of the Millennium Line SkyTrain service in 2002. The 99B bus currently operating on Broadway, will be discontinued in this area when SkyTrain begins with regular and frequent service. Existing bus service is shown in Figure 5.





3.4 Parking

A balanced parking strategy is required that supports alternate modes but also accommodates the needs of employees and visitors. For new I-3 *and general office* development, the GBIA guidelines require a traffic and parking analysis and transportation demand management measures. Large Format Area sites are similar to other retail sites and will have parking requirements which reflect those demands. New developments are also responsible for providing bicycle parking.

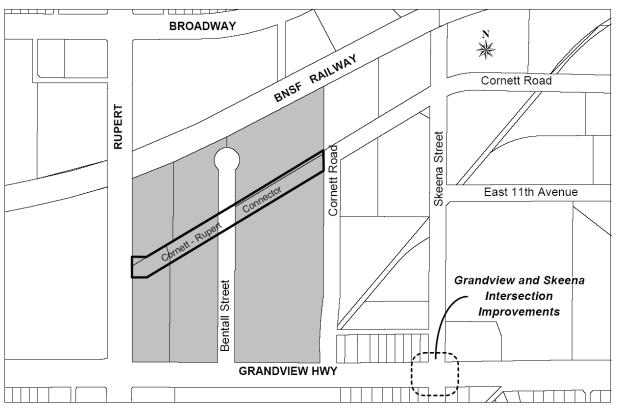
On-street parking on local streets is generally unrestricted. There is currently good availability of on-street parking in most of the area. With increased development and a shift toward more worker-intensive uses, on-street demand will increase. Adjustments to off-street parking standards and on-street parking regulations will be required to provide sufficient short-term parking. SkyTrain Station precincts, in particular, should enjoy reduced parking standards

3.5 Recommended Road Modifications

Rupert - Cornett Connection

The absence of direct access to Rupert Street and the SkyTrain Station from the south-east portion of the area impacts internal circulation and focuses additional traffic at various Grandview Highway intersections. The proposed extension of Cornett to Rupert Street is shown in Figure 6 below. Property for the required right-of-way would be acquired from adjacent property owners as their sites redevelop or as other opportunities emerge.





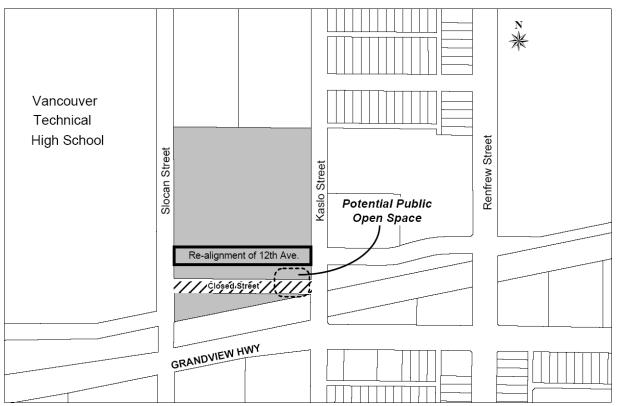
Grandview Highway and Skeena Intersection

The opening of Costco and the Vancouver Film Studio in the past ten years has increased traffic significantly and a potential safety issue has emerged at the Grandview Highway and Skeena intersection, particularly for eastbound and southbound traffic turning left (see Figure 6). Intersection improvements have been initiated which will see left turn bays, signals, enhanced lighting and improved crosswalks provided and the road lowered to correct a sight-line problem. Construction is anticipated in 2002.

12th Avenue Realignment

When the **Revy** *Rona* site redevelops, the revised road alignment shown in Figure 7 is recommended to assist traffic circulation and rationalize the road network. The existing 12th Avenue alignment could be closed and consolidated with adjacent parcels to create an amended development site and a small public space illustrated in Figure 7.

Figure 7: Realignment of 12th Ave and Affected Properties



Other Road Modifications

The traffic study recommended other smaller changes to area roads. The construction of a landscaped centre median along Grandview Highway was recommended to limit access from properties on Grandview Highway to right-in and right-out movements only. This would be a longer-term project that would occur as part of a major reconstruction of Grandview Highway at some future date. Construction of various right-turn only lanes and left-turn bays were recommended where they are absent on arterials in and around the area. These improvements will be considered with other similar traffic needs on a city-wide basis.

4.0 Character and Image

The streets have few street trees or other visual amenities and are not pedestrian-friendly. Unlike newer industrial parks, the GBIA lacks a coherent character or unifying theme to give it a sense of identity in the City. The landscaped setbacks on portions of Grandview Highway and Broadway, and the portions of Still Creek that are still uncovered provide the area's only visual relief.

To assist the area's transition to more intensive industrial uses, attractive public spaces and a higher level of streetscape quality are required. A tree plan is part of the Guidelines to help meet these objectives. Public realm improvements will be focussed initially on the SkyTrain Stations and Rupert and Renfrew Streets, the primary access and entryways to the stations. As the station areas transform into safe and attractive environments, they will become catalysts for the area's transition.



Still Creek on Super Store Site



Existing Section of Still Creek Greenway



Typical Warehouse



Internal Street with No Sidewalks

4.1 General Built Form and Character

The urban design challenge in the GBIA is to create a cohesive physical identity given the different uses and building types. Public realm improvements need to be complemented through higher standards of building design, incorporating greater building articulation, transparency, and quality materials, such as glass, steel and concrete. The Grandview Boundary Industrial Area Policies and Guidelines provide detailed guidance to better achieve these objectives.

4.2 Development in Station Areas

In February, 2000 Council adopted Station Area Precinct Plans to ensure that the stations were integrated into the surrounding community with safe and accessible pedestrian links. Many of the improvements including bus stops, sidewalks, lighting, crosswalks and signals will soon be *are* in place. The GBIA Plan calls for station areas to be intensely developed, concentrating future high-tech *and general office* uses and pedestrian oriented activity. Urban form should reflect this vision with heights up to a maximum 100 ft., street wall buildings, underground parking and pedestrian amenities. There are key private sites near each station where building design uses and new road and pedestrian connections will be important to achieve the Plan objectives. Generalized plans and illustrative drawings for these key sites are shown in Figures 8 through 11.

Renfrew Station Precinct - Key Sites

The Renfrew Station area concept shows potential redevelopment of the current Revy Rona site and the Real Canadian Wholesale Club and adjacent sites to the west east. The realigned 12th Avenue and small public space created through the road relocation are good opportunities for creating an active pedestrian environment. Transit-serving uses such as fast food outlets, small grocers, insurance agents and other local retail and service uses are encouraged at grade along 12th Avenue near the station. The south-facing orientation of these site adds to their appeal for outdoor restaurant seating and display of goods.

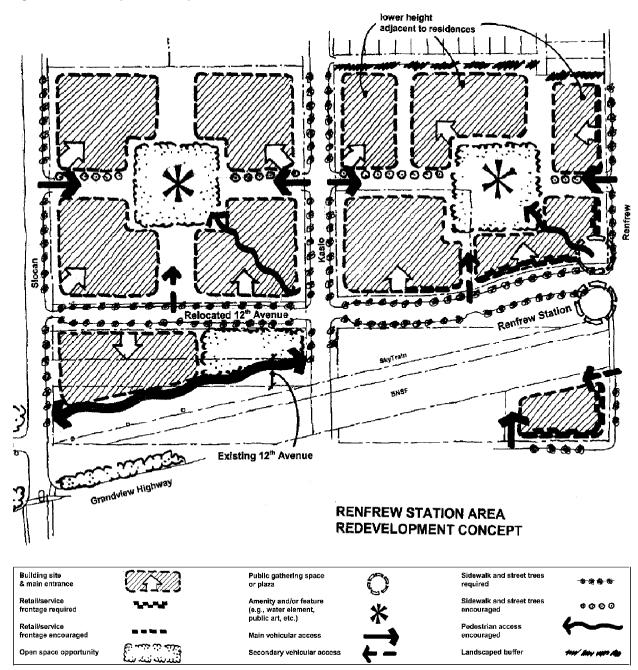
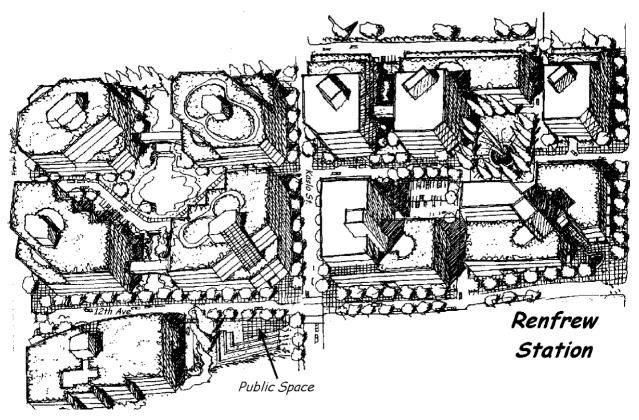


Figure 9: Illustrative Sketch of the Renfrew Station Precinct - looking north



Rupert Station Precinct - Key Sites

Creating a pedestrian focus is also the objective for redevelopment in the Rupert Station area. The concept shows redevelopment of the mini storage site facing Broadway, and Rupert Square just south of the station. The Central Valley Greenway and the proposed extension of Cornett along the Still Creek alignment will provide pedestrian and vehicular connections between Rupert Station and the film studio precinct to the east. A future relocation and day lighting of Still Creek along the southern boundary of the rail line is also contemplated.

Superstore Site

Additional commercial activity, set back from Still Creek in an underused portion of Great Canadian Superstore site, could further enhance the pedestrian environment and increase pedestrian activity.

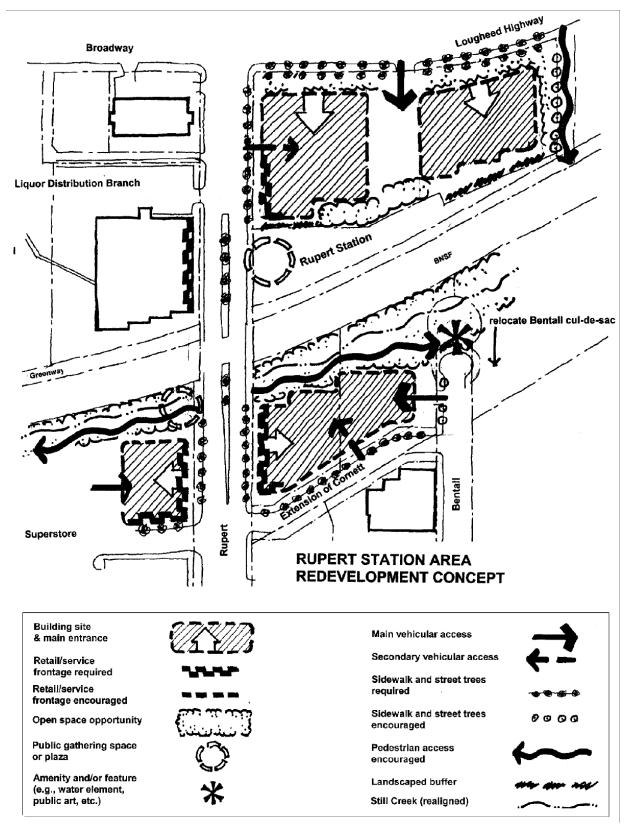
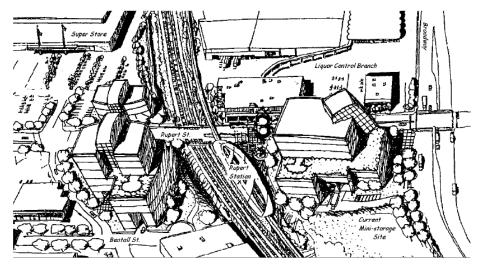


Figure 11: Illustrative Sketch of the Rupert Station Precinct - looking west



4.3 Public Realm Improvements

Streetscape

There is an opportunity to increase green space and provide a more unified appearance to the public realm through an area specific streetscape design and tree plan. In particular, Rupert and Renfrew Streets are key entry points to the SkyTrain stations and their treatment will be important in defining a new character for the area (see Figure 12). A street tree plan is part of the GBIA Guidelines to improve the physical environment and to introduce a unifying theme. The Guidelines should be referenced for building setbacks and overall design of the public realm throughout the area.

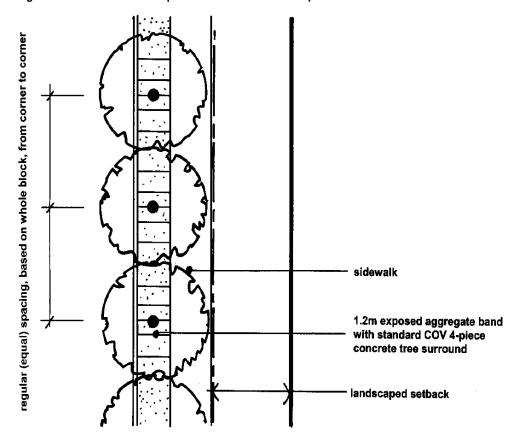


Figure 12: Schematics of Rupert and Renfrew Street scapes

Public Open Space

Grandview Boundary is fully built out with little opportunity to acquire large park space as part of subdivision or major redevelopment. Given this, new development on large sites will be requested to provide plazas and green space linked to pedestrian routes that would serve as amenity space for employees and the public. In addition, landscaping along local streets and Greenways will enhance the area's visual amenity. Figure 13 shows existing planned and potential public spaces. The spaces that are not numbered are potential places on major sites where small public spaces should be created when sites redevelop. These spaces will serve to provide passive recreational space for employees and Greenway users and visually augment the limited space available for the Greenway in this location.

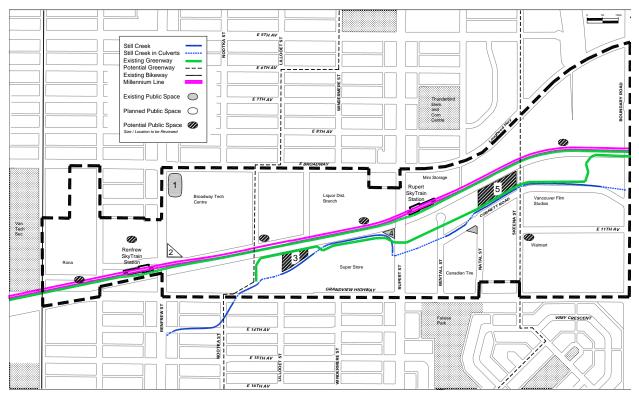


Figure 13: Existing and Proposed Public Space and Greenways/Bikeways

- **1. Broadway Tech Centre Northwest Plaza** planned public green space in the Broadway Tech Centre.
- 2. Broadway Tech Centre Southwest Plaza planned plaza at the corner of the in the Broadway Tech Centre facing the SkyTrain station.
- **3. Stormwater Retention Pond** part of the Still Creek Enhancement Study, this site is identified as a potential passive recreational area and stormwater retention pond.
- 4. **Superstore Public Open Space** as part of a future redevelopment of Superstore the existing green area would be expanded and redeveloped to be a more significant and usable public space.
- **5. Stormwater Retention Pond** This site is recommended in the Still Creek Enhancement Study, as a potential passive recreational area and stormwater retention pond.

Still Creek Improvements

Still Creek is part of the Brunette Basin which stretches across portions of 5 municipalities, emptying into Burnaby Lake and ultimately into the Fraser River. While the Creek is part of the region's stormwater system, it is also one of Vancouver's last remaining urban streams and a key opportunity to gain public amenity and recreation space and enhance the only natural feature in the GBIA.

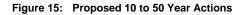
A consultant study has identified actions that could be carried out incrementally over the next 10 years and in the longer term to help enhance Still Creek. The actions would provide public amenities and recreation space, help address stormwater issues, and improve the Creek ecology. The ten year actions focus on improvements to the riparian area (the green areas bordering the creek), the creek bed, and on using interpretive signage and public art to raise awareness and educate the public on the importance of preserving and enhancing the Creek. Most of this work could occur using money from the Still Creek Enhancement Fund.

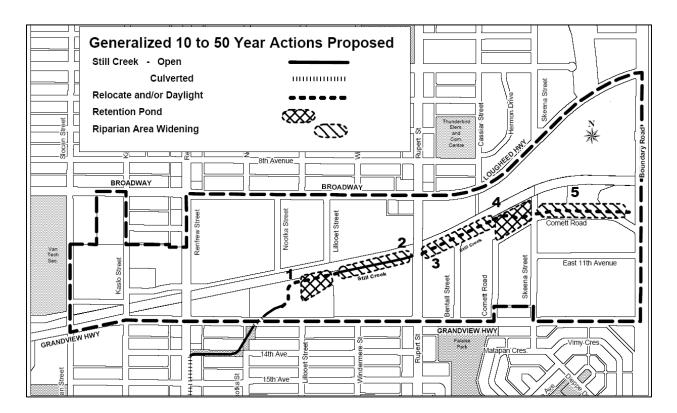
The longer term actions build on the ten year plan and recommend specific sites where redevelopment would provide opportunities for creek widening, stream relocation and day lighting, completion of the Greenway and construction of stormwater retention ponds/wetlands and recreational areas. These projects would require land acquisition and significant capital investment. A more detailed examination of their costs and benefits, size and location will occur as part of an Integrated Stormwater Management Plan for the Creek. Figures 14 and 15 summarize actions proposed for Still Creek by sub-area.

Temple **Generalized 10 Year Action Plan** Sunrise Park Still Creek - Open Culverted αοπαοιοια eena Street Public Art / Signage * Riparian Enhancement Thunderbird Elem. and Com Centre Boundary Road■ Cassiar-お 7th Avenue slocan Renfrew upert 8th Avenue BROADWAY BROADWAY 5 I Nootka Street யுய -illooet Street **Renfrew Street** Cornett Road ╈ Van Tech Sec. 3 Kaslo Street Skeena Street East 11th Avenue nett Road Bentall Street 1, GRANDVIEW HWY GRANDVIEW HWY Vimy. Falaise Park Jer | / Aatapa Cres 4th.Ave າຊ Slocan Street お 15th Ave Ŧ eid 16th Av

Area 1	-	using the green triangle on the site at 3003 Grandview, widen the creek, enhance riparian area and install public art;
Area 2	-	enhance the streamside vegetation and add riffle weirs, boulders etc. to increase stream complexity;
	-	install public art and educational kiosk in the existing park space at the northeast corner of the Superstore parking lot;
Area 3	-	represent the underground portion of Still Creek through painting the Creek alignment, mosaics and various forms of public art;
Area 4	-	remove on-street parking from the north side of Cornett Road and expand the streamside area to add meanders and riffle weirs;
Area 5	-	replant the streamside areas with native plants.

Figure 14: 10 Year Action Plan





Area 1	-	when the United Furniture site redevelops, relocate and daylight the Creek on the south side of the BNSF tracks and extend the Greenway; acquire the parking area in the northwest corner of the Superstore site and construct a passive recreation area, stormwater retention pond and wetland;
Area 2	-	acquire additional land to expand the stream side area, add stream meanders, pedestrian view points;
Area 3	-	relocate and daylight the Creek on the south side of the BNSF rail corridor and extend the Greenway;
Area 4	-	acquire 3445 Cornett Road and 2525 Skeena Street and construct a passive recreational area, stormwater retention pond and wetland;
Area 5	-	widen stream side areas to add meanders, seating areas and other pedestrian amenities either in current location or after relocation to the south side of the BNSF line and extend the Greenway.

5.0 Public Benefits and Services

It is estimated that the GBIA will add approximately 2.0 million square feet of development and 10,000 additional employees over the next 30 years. This Plan identifies public amenities and service improvements that will be required to accommodate the increased worker population, traffic and new buildings. Road improvements, new pedestrian routes, Still Creek enhancements and public space have already been discussed. There will also be a need for upgrades to underground utilities and intersection lighting and crosswalks will be upgraded as shown in Figures 16 and 17.

5.1 Underground Utilities - Sewer and Water

Underground services in the area are currently at capacity for existing worker populations and land uses. Improvements to water service will be needed to maintain firefighting capability for any new significant developments. Improvements to sanitary sewer service including a new pump station are also required. These upgrades are shown below in Figure 16. As noted previously, storm sewer retention ponds and wetlands are proposed along Still Creek as part of the Still Creek enhancement to help provide storage capacity and provide passive recreational space for workers.

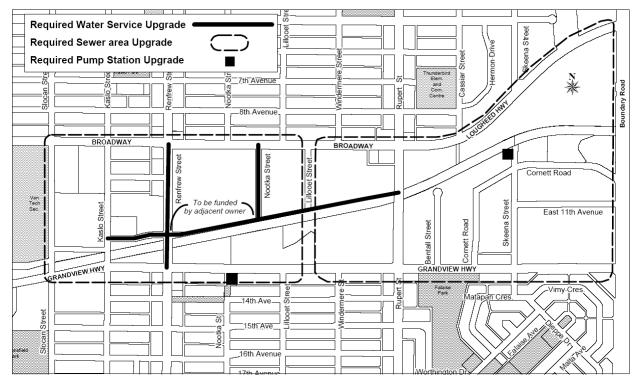


Figure 16: Underground Utilities - Sewer and Water

5.2 Childcare Requirements

Increasing area employment creates the need for childcare spaces. The demand projected in the GBIA at build-out is equivalent to a 60 space childcare centre. However, given that total DCL recoveries are anticipated at only about \$2.5 million, a 10% allocation would provide in the order of \$250,000 of the nearly \$2.5 million required to construct and start-up a 60 space daycare. Given the lack of any other funding sources for a childcare centre in the area that could make up the difference, and the projected 20 year plus time-frame before internal demand would justify a centre, no childcare centre is planned at this time.

5.3 Total Public Benefit Demands

The list of area improvements is summarized below with cost estimates in 2001 dollars.

1.	Underground Infrastructure Water - Sanitary Sewer -	\$1,200,000 \$2,275,000	
	Storm Sewer ¹ - Total	<u>\$1,250,000</u> \$4,725,000	\$ 4,725,000
2.	Roads and Pedestrian Routes ² Cornett-Rupert Connector -	\$2,125,000	
	12th Avenue Relocation -	\$300,000	
	Sidewalk construction Intersection Lighting Total	\$150,000 <u>\$80,000</u> \$2,655,000	\$ 2,655,000
3.		φ2,055,000	\$ 2,470,000
э.	Daycare		\$ 2,470,000
4.	Parks Still Creek Greenway ³ - Revy Site Pocket Park Construction -	GRAND TOTAL	\$ 300,000 \$ 150,000 \$ 10,300,000

¹ Storm water retention ponds benefit the GBIA and the larger Still Creek watershed. The ponds also will provide passive recreation space for area workers and environmental benefits. Two ponds are planned and the demand attributed to the GBIA is calculated at 25%.

³ A large portion of the Still Creek Greenway will be constructed as part of the stream enhancement work and construction of the storm water retention ponds.

² A Street Tree Plan is part of the GBIA Guidelines. Implementation of this Plan will require boulevard enhancement and tree planting. New development will be require to provide missing street trees. In addition, the Street Tree Infill Program managed by the Park Board will be used to provide trees where new development is not anticipated for some time.

5.4 Public Benefits and Service Funding

Service upgrades and public benefit improvements will occur incrementally over time as demand warrants and as funding becomes available through Development Cost Levies (DCLs) and other sources. A significant portion of the GBIA funding will comes from DCLs charged to new development on a per square foot basis. A GBIA DCL By law will be approved by Council as part of the adoption of this Plan. The By law and accompanying Council report will recommend a DCL rate, a boundary, and an overall funding approach for public benefits to be funded. Council approved an area specific DCL to provide funds for engineering infrastructure and parks needed within the GBIA. In addition to the area specific DCL, funding from the city-wide DCL, already approved by Council, could be used to pay for a portion of the service improvements judged to have a city-wide benefit.

Since DCLs cannot fund the entire portion of any of the improvements, other funding sources will be required. Enhancements to Still Creek will be paid for in part from the Still Creek Enhancement Fund. This Fund was established by Council in 2000 as part of the lease of a portion of Cornett Road to the Vancouver Film Studios.

Other infrastructure improvements that are required to service a specific development will be paid entirely or partly by the developer of the project, as has been City policy. Funding from future Capital Plans will also be required to pay for a portion of the costs of growth that cannot be paid for through DCLs and do not relate specifically to a single development. This funding will be requested as required through the normal City capital planning process to accommodate the major projects associated with growth.

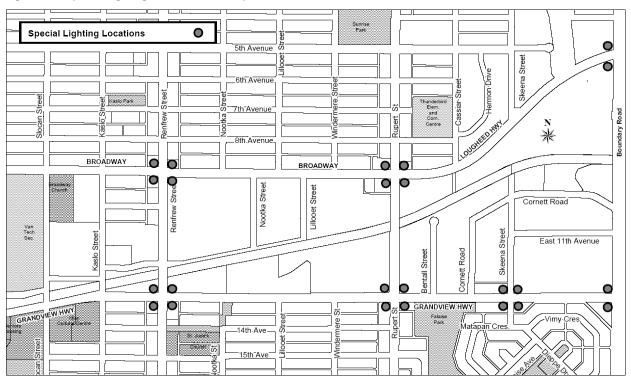


Figure 17: Special Lighting and Pedestrian Improvements