



# Corporate Report

NO: \_\_\_\_\_

COUNCIL DATE: \_\_\_\_\_

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## REGULAR COUNCIL

TO: **Mayor & Council** DATE: **October 20, 2008**  
FROM: **General Manager, Planning and Development** FILE: **3900-30**  
SUBJECT: **Proposed Zoning By-law Amendment - Lot Coverage in Business Park Zones**

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## RECOMMENDATION

It is recommended that Council:

1. Receive this report as information;
2. Approve amendments to Surrey Zoning By-law, 1993, No. 12000 (the "Zoning By-law") to increase the permitted maximum lot coverage in the Business Park (IB) and Business Park (1) (IB-1) Zones from 45% to 60%, as documented in Appendix I of this report; and
3. Authorize the City Clerk to bring forward the necessary amendment by-law for the required readings and set a date for the related public hearing.

## INTENT

The intent of this report is to obtain Council approval for amendments to the Zoning By-law, to increase the maximum permitted lot coverage in the Business Park (IB) and Business Park (1) (IB-1) Zones from 45% to 60%. This amendment is intended to ensure consistency across Surrey's "Business Park" Zones and maximize the utilization of industrial and employment lands and the efficiency of industrial business park developments.

## BACKGROUND

The Zoning By-law currently includes several zones that support the development of Industrial Business Parks:

- Industrial Business Park Zone (IB);
- Industrial Business Park (1) Zone (IB-1); and
- Industrial Business Park (2) Zone (IB-2).

The IB Zone was introduced in 1993 as part of the adoption of the Zoning By-law, as a conversion of the I-1, I-P(2) and I-G Zones of the previous Zoning By-law No. 5942, and has been employed effectively in business park sites in Surrey since that time.

The IB-1 and IB-2 Zones were developed in 2003, specifically as part of the approval of the Campbell Heights Business Park. The IB-1 Zone was modelled after the existing IB Zone, but included modifications intended to meet a higher standard of design and landscaping envisioned for Campbell Heights. The IB-2 Zone was similarly intended to accommodate a high quality of design, but also allows outdoor storage and display areas, to accommodate a slightly more intensive business park use with a light-industrial orientation. A general comparison of the three Business Park Zones is provided below:

	<b>IB</b>	<b>IB-1</b>	<b>IB-2</b>
<b>Intent</b>	<ul style="list-style-type: none"> <li>Comprehensive design.</li> <li>Light industrial uses, offices, and services uses with no nuisance apparent from outside</li> </ul>	<ul style="list-style-type: none"> <li>High standard of comprehensive design.</li> <li>Light impact ind uses, high tech, research and development, warehouse, office, and service uses in an enclosed building.</li> </ul>	<ul style="list-style-type: none"> <li>High standard of design.</li> <li>Light Impact industry, office, and limited service uses that are generally compatible with adjoining uses.</li> </ul>
<b>Permitted Uses</b>	<ul style="list-style-type: none"> <li>Light impact industry, wholesale/retail sales of goods produced on the lot or part of wholesale, limited Office and General service uses, Warehouse, Distribution centres.</li> </ul>	<ul style="list-style-type: none"> <li>Light impact industry, wholesale/retail sales of goods produced on the lot or part of the wholesale, Warehouse uses, Distribution centres, limited Office uses.</li> </ul>	<ul style="list-style-type: none"> <li>Light impact industry, wholesale/retail sales of goods produced within the business premises or as part of the wholesale, Warehouse uses, Distribution Centres, limited Office uses.</li> </ul>
<b>Subdivision</b>	2000 sq.m, 30 X 30	2000 sq.m, 30 X 30	1800 sq.m, 30 X 30
<b>Density</b>	0.75	1.00	1.00
<b>Lot Coverage</b>	45%	45%	60%
<b>Minimum Front Setbacks</b>	7.5 m	16/7.5 m	16/7.5 m
<b>Minimum Rear Setback</b>	7.5 m	7.5 m	7.5 m
<b>Minimum Side Setback</b>	7.5/0 m	7.5/3.6 m	7.5/0 m
<b>Minimum Flanking Street Setback</b>	7.5 m	9/7.5 m	9/7.5 m
<b>Height</b>	12 m	14 m	14 m

While the three zones are similar in many ways, there are several notable differences between them, including the maximum permitted lot coverage - the maximum percentage of the area of a lot that a building may occupy. The IB and IB-1 Zones permit a maximum lot coverage of 45%, while the IB-2 Zone permits a maximum lot coverage of 60%. The higher lot coverage permitted under the IB-2 Zone reflects the fact that the IB-2 Zone was partially modelled after the Light Impact Industrial (IL) Zone, which permits a maximum lot coverage of 60%. The lower lot coverage in the IB and the IB-1 Zones is related to the objective of ensuring a significant amount of landscaping in Business Park Zones.

## **Lot Coverage in IB and IB-1**

Recently, as part of discussions with representatives of the Beedie Group related to property that they own in the Campbell Heights Business Park, concerns were raised that the 45% lot coverage restriction in the IB-1 Zone is too restrictive and unnecessarily limits the amount of building area that can be developed on a lot. The Beedie Group has developed several sites and buildings in the Phase 1 area of the Campbell Heights Business Park, and holds further land in this area. The Beedie representatives noted that the 45% maximum lot coverage restriction in the IB-1 Zone is inconsistent with the 60% lot coverage permitted under IB-2 and is lower than other jurisdictions in the lower mainland. They advised that this restriction has the effect of penalizing efficient design. It was contended that an increase in site coverage will not compromise the fulfilment of other provisions in the IB and IB-1 Zones, such as minimum setbacks and the provision of a satisfactory level of landscaping.

While the 45% lot coverage provision under the IB Zone has been in place since 1993 and has not given rise to questions, the recent discussions indicate that this regulation in the IB and IB-1 Zones should be reconsidered.

On this basis, staff has worked with Beedie representatives and a consultant to study the lot coverage issue in Surrey's Business Park Zones (IB and IB-1), and review similar industrial zoning regulations and industrial projects in other jurisdictions in the lower mainland to determine what if any change should be made to the lot coverage threshold in Surrey's Business Park Zones.

## **DISCUSSION**

### **Lot Coverage Study**

The "Campbell Heights Business Park IB and IB-1 Zones Site Coverage Review" ('the Study') was prepared by Eric Vance and Associates ("the consultant"), and is attached as Appendix II. The Study included the following elements:

- A survey and comparison of the Business Park and Light Industrial zoning regulations of other key Lower Mainland Municipalities with the Surrey Zoning By-law;
- A review of the actual lot coverage being achieved in other municipalities; and
- An examination of the implications of increased lot coverage on:
  - Other zoning and site development requirements (overall aesthetics, site design and access, landscaping, bio swales, etc.);
  - Long-term leasing and building use/conversion options in terms of parking availability; and
  - Ability to establish/achieve sustainable developments, including green features.

The consultant reviewed Industrial and Business Park Zones in 10 municipal jurisdictions in the lower mainland, including Abbotsford, Burnaby, Coquitlam, Delta, Langley City, Langley Township, New Westminster, Port Coquitlam, Richmond and Vancouver. In addition, the consultant surveyed 58 existing industrial projects in these jurisdictions to confirm the actual lot coverage that was achieved. The Study compiled the following survey results:

- The maximum allowable lot coverage in other municipalities ranges between 50% and 70%;
- Some municipalities do not regulate lot coverage maximums, utilizing the setback regulations as the only site coverage control;
- The City of Surrey was found to be the only municipality amongst the 10 surveyed with a maximum lot coverage of under 50%;
- Despite higher lot coverage maximums in other municipalities, only 25% of 58 industrial projects surveyed actually achieved a lot coverage greater than 45%, and the majority of these achieved a lot coverage of between 45% and 50%; and
- Only seven of the 58 industrial projects achieved site coverage greater than 50%.

Staff also surveyed 16 industrial projects approved in the Campbell Heights Business Park under the IB-2 Zone that allows a lot coverage to 60%, and determined that:

- Only four projects achieved a lot coverage greater than 45%; and
- Only three projects achieved a lot coverage greater than 50%.

### **Study Results and Conclusions**

Based on the survey and Study analysis, the consultant recommended that the maximum lot coverage be increased from 45% to a minimum of 50%. Staff further reviewed the Study results, including the implications of increasing the maximum lot coverage beyond 50%, and concluded that increasing the lot coverage in both the IB and the IB-1 Zone to 60% could be justified for the following reasons:

- At 60%, the IB and the IB-1 Zone lot coverage will be consistent with the IB-2 Zone, thus eliminating this existing zoning inconsistency. It should be noted that the IL (Light Impact Industrial) Zone and the IH (High Impact Industrial) Zone also have a maximum site coverage of 60%. Both zones allow outdoor storage;
- Few industrial projects can actually achieve a lot coverage greater than 45%, therefore increasing the lot coverage beyond 45% will have little if any impact on the utilization of most industrial sites;
- A higher lot coverage will allow only approximately 25% of new industrial projects to achieve a higher land utilization, as these sites have attributes that will allow a more efficient design to be achieved without bylaw variances. These attributes include such things as optimal parcel size and configuration, multiple street frontages, and shared vehicle drive aisles/parking arrangements with adjacent sites;

- A higher lot coverage should not be achieved through the use of variances to other Zoning By-law requirements, such as building setbacks or landscaping. As such variances that undermine the design and aesthetic quality of development on industrial sites will generally not be supported; and
- The 60% lot coverage will encourage increased land utilization and efficient site design in support of the City's economic development objectives, while not compromising the City's sustainability and industrial design objectives.

## CONCLUSION

Based on the above discussion, it is recommended that Council:

- Approve amendments to the Zoning By-law to increase the permitted maximum lot coverage in the Business Park (IB) and Business Park (1) (IB-1) Zones from 45% to 60%, as documented in Appendix I of this report; and
- Authorize the City Clerk to bring forward the necessary amendment by-law for the required readings and set a date for the related public hearing.

Jean Lamontagne  
General Manager  
Planning and Development

TW/kms/saw

### Attachments:

Appendix I Proposed Zoning By-law Amendments  
Appendix II Lot Coverage Study (Vance & Associates)

**Proposed Amendments to Surrey Zoning By-law, 1993, No. 12000**

The following amendments are proposed to the Surrey Zoning By-law, 1993, No. 12000, as amended:

1. In Part 47 Business Park Zone (IB) – Section E, Lot Coverage, delete the reference to "45%" and replace it with "60%"; and
2. In Part 47A Business Park 1 Zone (IB-1) – Section E, Lot Coverage, delete the reference to "45%" and replace it with "60%".

## **Campbell Heights Business Park IB and IB-1 Zones Site Coverage Review**

**Prepared for the City of Surrey**

**April 18, 2008**

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## 1. Introduction

Campbell Heights Business Park, which is partially developed, is intended as a high quality location for light industrial businesses in South Surrey. The vision and plan for the area are set out in the *Campbell Heights Local Area Plan Review*<sup>1</sup> and development is controlled through several Business Park (IB) zones, which include landscaping requirements, and the *Campbell Heights Business Park Development Design Guidelines*.<sup>2</sup>

Two zones are the subject of this study: Business Park IB and IB-1. The IB zone is intended for light impact industrial uses, offices and service uses. The IB-1 zone includes the same uses as the IB zone plus high technology industry, research and development activities, and warehouses. In both zones, the intent is to ensure comprehensive building designs and predominantly indoor activities and to discourage anything considered to be an outdoor nuisance (visual, noise, odours, etc.).

The maximum permitted site coverage in the two zones is currently set at 45%. The maximum density, if specified amenities are provided, is 0.75 (Floor Area Ratio) FAR in the IB zone and 1.0 FAR in the IB-1 zone. Maximum building heights are 40 and 45 feet respectively.

These provisions reflect the City's desire to have multi-storey buildings (two and possibly three floors) with high quality design and significant landscaping. The maximum densities as currently set are to be achieved by primarily building up rather than out.

However, the City has heard from at least one major industrial developer in Campbell Heights – the Beedie Group - that the maximum site coverage of 45% is too low to accommodate certain types of permitted uses and that site coverage of up to 60% is both desirable and possible.

Among the key issues for the City to consider is the impact of an increase in site coverage on other provisions of the two zones (e.g., parking, loading, drive aisle widths, landscaping) and whether or not greater site coverage can be appropriately achieved without requiring variances.

The City of Surrey issued a Request for Proposal on November 15, 2007 seeking consulting assistance in addressing the site coverage issue. Eric Vance & Associates was retained in mid-December, at which time there were five key questions that City Planning and Development Department staff wished to see addressed:

1. What are business park / light industrial zoning provisions of other key Lower Mainland municipalities?
2. How do the IB and IB-1 zones compare?
3. Can greater site coverage be achieved in the IB and IB-1 zones without triggering the need for variances to other regulations?

<sup>1</sup> Approved by City Council on December 11, 2000.

<sup>2</sup> Approved by City Council on January 26, 2004.

4. Can greater site coverage be achieved in the IB and IB-1 zones without sacrificing aesthetic objectives (landscaping)?
5. Would a change in site coverage in the two zones affect the attractiveness of the properties for future tenants?

At a meeting with the consultants on January 18, 2008, City staff asked that two additional issues also be addressed:

6. What site coverage is actually being achieved in similar light industrial parks in Metro Vancouver?
7. How can increased site coverage be reconciled with the desire for greener industrial development in subsequent phases of Campbell Heights (e.g., more tree retention, greater pervious surface area)?

It was also reaffirmed at this meeting that site coverage is the only provision of the IB and IB-1 zones that is being reviewed by the City at this time.

### **Approach**

The key activities that have been undertaken by the consultants as part of this site coverage review include:

- Review of the City's IB and IB-1 zones and related documents, including the local area plan and the design guidelines.
- Discussions and meetings with City staff.
- A site visit to Campbell Heights.
- Collection and organization of the zoning provisions for business park / light industrial areas in selected other Lower Mainland municipalities, including Abbotsford, Burnaby, Coquitlam, Delta, Langley City, Langley Township, New Westminster, Port Coquitlam, Richmond and Vancouver.
- Determination of which zones and business park areas in other municipalities are most applicable to Campbell Heights.
- Discussions with planners in some of the selected municipalities on how the zones are working and any potential changes that are being contemplated.
- Discussions with developers, consultants, real estate agents and others familiar with the IB and IB-1 zones in Campbell Heights to gain the market's perspective, with a focus on site coverage.
- Analysis of the implications of increasing site coverage in the zones above 45% to determine what might be reasonably achieved without requiring variances.
- Preparation of a draft report for review and discussion with City staff.

- Submission of the final report.

Assistance on this project was provided by David Taylor, who undertook data collection and a number of the interviews, and Janet Jokisch of McElhanney Consulting Services, who technically analyzed site coverage under several development scenarios.

A list of the individuals who provided information as part of this review is contained in Appendix 1.

## 2. Industrial Zones in Other Municipalities

This section summarizes the industrial site coverage findings for selected Metro Vancouver municipalities, including not only the permitted maximums but also what is actually being achieved in a number of developments. It also briefly comments on the relationship between land use and employment density.

### 2.1 Maximum Permitted Site Coverage in Industrial Zones

Table 1 shows the maximum site coverage permitted in industrial zones around Metro Vancouver. Further details on each of these zones are contained in Appendix 2.

**Table 1 - Maximum Permitted Site Coverage in Industrial Zones**

<b>Municipality</b>	<b>Maximum Permitted Site Coverage</b>
<b>Abbotsford</b>	
I1 - Light Industrial	None – Controlled by setbacks
I2 - General Industrial	None – Controlled by setbacks
I5 - Service Industrial	50%
I6 - Special Industrial	75%
<b>Burnaby</b>	
M1, M1r, M1L & M1k - Manufacturing	50%
M2, M2r, M2L & M2k - General Industrial	60%
M5, M5r & M5L - Light Industrial	50%
B - Business Centre	65%
<b>Coquitlam</b>	
M-1 - General Industrial	None – Controlled by setbacks
M-2 - Service Industrial	None – Controlled by setbacks
M-3 - Special (Light) Industrial	None – Controlled by setbacks
M-8 - Retail and Light Industrial	None – Controlled by setbacks
<b>Delta</b>	
I1 - Light Industrial	None – Controlled by setbacks
<b>Langley City</b>	
I1 - Light Industrial	None – Controlled by setbacks
I2 - Heavy Industrial	None – Controlled by setbacks
I3 - Special Industrial	50%
<b>Langley Township</b>	
M-1A & M1-B - Service Industrial	60%
M-2A - General Industrial	60%
M-6 - Limited Industrial	60%
M-11 - Business/Office Park	50%, except where at least 75% of required parking provided within building or underground, lot coverage may be increased to 75% maximum
<b>New Westminster</b>	
M-1 - Light Industrial	None – Controlled by setbacks
M-2 - Heavy Industrial	None – Controlled by setbacks
M-4 - Limited Industrial	None – Controlled by setbacks

Port Coquitlam	
M1 - General Industrial	60%
M2 - Heavy Industrial	60%
M3 - Clean Industrial	50%
M4 - Business Industrial Park	50%
M5 - Advanced Technology Business Park	50%
Richmond	
I1 - Industrial	None – Controlled by setbacks
I2 - Light Industrial	60%
I3 - Business Park	50%
I5 - Industrial Storage District	None – Controlled by setbacks
Surrey	
IB - Business Park	45%
IB-1 - Business Park	45%
IB-2 - Business Park	60%
Vancouver	
I1 - Light Industrial / Technology	None – Controlled by setbacks
I2 - Service Industrial	None – Controlled by setbacks
I3 - High Technology Industry	None – Controlled by setbacks
IC-1 & IC-2 - Light Industrial / Technology	None – Controlled by setbacks
M-1, M-1A & M-1B - Industrial	None – Controlled by setbacks
M-2 – Industrial	None – Controlled by setbacks

Source: Zoning Bylaws of each municipality as posted on-line.

The table shows that many Metro Vancouver municipalities do not specify maximum permitted lot coverage, with coverage controlled instead by building setbacks. The issue of setbacks is further discussed in Section 3 of this report.

Of the municipalities other than Surrey that specify maximum site coverage in some or all of their industrial zones, the range is 50% to 75%, with most in the 50% to 60% range. The IB and IB-1 zones in Surrey were the only two found among the surveyed municipalities where the maximum site coverage is 45%.

Not all the zones presented in the table are directly comparable to the IB and IB-1 zones in Campbell Heights - some are of a more general industrial nature rather than targeted specifically at accommodating business park type uses. However, in some cases municipalities that are attracting uses similar to those desired in the IB and IB-1 zones have been using relatively standard industrial zones. In Richmond, for example, many of the technology companies are located in the I3 - Business Park Industrial zone (50% site coverage), which allows a broad range of industrial uses as long as they are enclosed.

There are other factors that should also be considered in reading the table. Burnaby, for example, makes extensive use of Comprehensive Development (CD) zones that are layered on top of many of its conventional zones, including industrial. These CD zones are often used to control both the form and character of development (as an alternative to a Development Permit process) and to customize and vary the provisions of the underlying zone. A prime example is the 54 ha (133 acre) Glenlyon Business Park in South Burnaby, which is all CD-zoned (with M2 and M5 as the underlying zoning - 60%

and 50% site coverage respectively). Tenants include Ballard Power Systems, Nokia, Telus and INEX Pharmaceuticals.

Discussions with planners in a number of the selected municipalities found that site coverage is typically not an issue with industrial developers. However, there is growing concern over the declining supply of industrial land in the region (as highlighted by Metro Vancouver's *Industrial Lands Inventory for Greater Vancouver – 2005* report) and some municipalities are considering and implementing strategies to make more efficient use of their industrial land bases.

Coquitlam, for example, completed an industrial land strategy in 2007 that recommended a comprehensive review and overhaul of the City's nine industrial zones. Work on this review has been authorized by Council, with the objective of reducing the number of industrial zones, broadening the permitted uses in some of the zones (including a larger office component) and increasing densities above 1.0 FAR. The City controls site coverage in its industrial zones through setbacks and it is not contemplated that site coverage maximums will be specified as part of changes to the zones.

Richmond is considering rezoning of selected industrial lands for higher intensity industrial uses. Specifically, it is looking at rezoning some I2 - Light Industrial lands in North Richmond to I3 - Business Park for high technology. Also under consideration is rezoning some I1 - Industrial lands on Mitchell Island to I2 for light industry. The overall objective is to enhance the City's attractiveness for high technology, specialized manufacturing and distribution. This is intended to further refine the Richmond's industrial strategy to create higher densities and attract further business to these zones.

## 2.2 Actual Site Coverage Achieved

Table 2 shows the site coverage actually achieved for a number of recent light industrial developments in Metro Vancouver, including some that are of a business park nature.

**Table 2 - Site Coverage Achieved in Selected Light Industrial Developments**

<i>Municipality</i>	<i>Address</i>	<i>Building Type / Use</i>	<i>Zone</i>	<i>Maximum Permitted Site Coverage</i>	<i>Site Coverage as Built</i>	<i>Date</i>
Abbotsford	34434 McConnell Rd	Multi-tenant Warehouse/ Office	I2	n/a	53.0%	Dec-07
Abbotsford	2140 Paramount Cres	Light Industrial	I1	n/a	53.7%	Dec-07
Burnaby	3811 North Fraser Way	Multi-tenant Warehouse/ Office	M-3	50%	34.0%	Feb-05
Burnaby	8255 North Fraser Way	Light Industrial	CD	n/a	40.8%	Dec-07
Burnaby	5628 Riverbend Dr.	Light Industrial	CD	n/a	45.0%	Dec-06
Burnaby	7635 North Fraser Way	Multi-tenant Warehouse/ Office	CD	n/a	36.0%	Sep-06

Burnaby	8055 North Fraser Way	Multi-tenant Warehouse/ Office	CD	n/a	45.7%	Jun-06
Burnaby	4250 Marine Dr	Light Industrial	CD	n/a	41.5%	Jan-06
Burnaby	8545 North Fraser Way	Manufacturing/ Warehousing	CD	n/a	39.8%	Mar-06
Burnaby	4200 Canada Way	Research/ Office	CD	n/a	39.0%	Jul-06
Burnaby	3880 Henning Dr	Manufacturing/ Studios/Office	CD	n/a	35.0%	Mar-06
Burnaby	8105 North Fraser Way	Manufacturing/ Warehousing	CD	n/a	49.0%	Jun-06
Burnaby	7955 North Fraser Way	Manufacturing/ Warehousing	CD	n/a	43.1%	Nov-05
Burnaby	8168 Glenwood Dr	Light Industrial	CD	n/a	45.0%	Jul-05
Burnaby	5888 Trapp Dr	Multi-tenant Warehouse/ Office	CD	n/a	37.0%	Feb-05
Burnaby	5389 & 5577 Byrne Dr	Multi-tenant Light Industrial /Office	CD	n/a	36.1%	Mar-05
Coquitlam	55 Brigantine Dr	Multi-tenant warehouse	M-9	n/a	41.0%	Aug-03
Coquitlam	58 Brigantine Dr	Ashley Warehouse	M-9	n/a	49.0%	Mar-06
Coquitlam	1400 Brigantine Dr	Distribution Centre + Addition	M-9	n/a	49.2%	Mar-04
Coquitlam	1500 Brigantine Dr	Intertek Testing Services	M-9	n/a	50.0%	Sep-04
Coquitlam	1505 Brigantine Dr	Stoney Creek Cabinets	M-9	n/a	44.1%	Feb-04
Coquitlam	1550 Brigantine Dr	Urban Barn Warehouse	M-9	n/a	53.0%	Jul-05
Coquitlam	1555 Brigantine Dr.	Distribution Facility	M-9	n/a	29.2%	Feb-04
Coquitlam	1580 Brigantine Dr	Classic Packaging	M-9	n/a	47.4%	Jan-05
Coquitlam	1650 Brigantine Dr	Multi-tenant Warehouse	M-9	n/a	49.6%	Aug-04
Coquitlam	1655 Brigantine Dr	Warehouse for Scan Designs	M-9	n/a	44.3%	Feb-05
Coquitlam	1851 Brigantine Dr	Two Tenant Warehouse	M-9	n/a	43.0%	Nov-03
Coquitlam	1900 Brigantine Dr	SKEANS warehouse	M-9	n/a	39.6%	Nov-03
Coquitlam	2075 Brigantine Dr	Multi-tenant Warehouse Buildings	M-9	n/a	45.4%	Apr-05
Coquitlam	1478 Hartley Ave	BC Mail Plus	M-9	n/a	31.9%	Mar-03
Coquitlam	2120 Hartley Ave	Manufacturing	M-1	n/a	42.0%	Oct-07

Coquitlam	2130 Hartley Ave	Mogil Distributors	M-1	n/a	41.2%	Oct-04
Langley Township	3078 - 275th St.	Wholesale Distribution	C3		39.0%	Jul-05
Langley Township	26868 56 Ave	Multi-tenant Warehouse/ Office	M-2A	60%	44.0%	Jan-05
Langley Township	26700 - 216th St	Multi-tenant Warehouse/ Office	M-2A	60%	48.0%	Jan-05
Langley Township	5400 271st St	Multi-tenant Warehouse/ Office	M-2A	60%	35.5%	Feb-05
Langley Township	27500 51A Ave.	Manufacturing/ Office	M-2A	60%	26.0%	Aug-04
Langley Township	27527 51A Ave	Manufacturing/ Office	M-2A	60%	32.5%	Apr-05
Langley Township	27400 52 Ave	Multi-tenant Warehouse/ Office	M-2A	60%	45.0%	May-05
Langley Township	27300 Gloucester Way	Multi-tenant Warehouse/ Office	M-2A	60%	44.0%	Jun-05
Langley Township	27090 Gloucester Way	Multi-tenant Industrial	M-2A	60%	41.0%	Jul-05
Langley Township	27515 56 Ave	Light Industrial	M-2A	60%	45.0%	Oct-05
Langley Township	27581 51A Ave	Industrial Warehouse	M-2A	60%	31.0%	Oct-05
Langley Township	5111 272nd Ave	Industrial Warehouse	M-2A	60%	45.0%	Jan-06
Langley Township	27200 Gloucester Way	Multi-tenant Warehouse/ Office	M-2A	60%	39.0%	Jan-06
Langley Township	5300 273A St	Multi-tenant Industrial	M-2	60%	44.0%	Jun-06
Langley Township	5000 275th St	Multi-tenant Warehouse/ Office	M-2A	60%	59.9%	Jul-06
Langley Township	SE Corner 5000 275th St	Multi-tenant Warehouse/ Office	M-2A	60%	46.2%	Jan-07
Langley Township	4900 Block 275th St.	Multi-tenant Warehouse/ Office	M-2A	60%	58.0%	May-07
Langley Township	27433 52nd Ave	Multi-tenant Warehouse/ Office	M-2A	60%	47.0%	May-07
Langley Township	4900 Block 275th S.	Multi-tenant Warehouse/ Office	M-2A	60%	44.0%	Jul-07
Langley Township	27575 50 Ave	Multi-tenant Warehouse/ Office	M-2A	60%	49.9%	Sep-07



Richmond	13951 Bridgeport Rd	Multi-tenant Warehouse/ Office	I2	50%	40.0%	Mar-07
Richmond	20499 Westminster Hwy	Industrial Warehouse	I3	50%	20.0%	Aug-06
Richmond	13900 Maycrest Way	Industrial Warehouse	I3	50%	49.4%	Jun-06
Richmond	23220 Fraserwood Way	Light Industrial	I3	50%	47.7%	Jun-05
Richmond	8880-8900 Beckwith Rd	Industrial Warehouse	I2	60%	58.0%	Apr-05
Richmond	8580-8680 Cambie Rd	Mixed Use - Light Industrial	CD	50%	34.0%	Mar-06

Source: Cities of Abbotsford, Burnaby, Coquitlam and Richmond and Township of Langley.

The average site coverage achieved for the 58 developments listed in Table 2 is 42.9%. This is not a statistically valid sampling but rather reflects the results for developments for which several municipalities were able to readily supply information.

The data shows that most of the developments do not achieve the maximum permitted site coverage (where there is one specified in the zoning), although there are a few that have come close. This includes seven developments out of the 58 that achieved 50% or higher site coverage (recognizing that not all the surveyed developments allow site coverage above 50%). Many of the developments above 50% site coverage appear to be either warehousing or mixed office and warehousing uses.

## 2.3 Employment and Land Use

Different types of industrial activity generate different levels of employment when measured on a land or floor area basis. There has been a considerable amount of research done on this topic for various regions of North America, including Metro Vancouver. In examining this information, it must be recognized that each industrial business, even those operating in the same sector, is different and can generate employment well above or below the norms. Geography also plays an important role, with regions that have a large supply of readily developable land and low land prices typically having more sprawled industrial development that makes less efficient use of land and therefore generates lower employment densities on average.

In recent work undertaken for the City of Coquitlam (not yet unpublished), Urban Futures examined employment density data from the 2003 Royal LePage report titled *Commercial and Industrial Real Estate Development Trends and Forecasts for the Greater Vancouver Region, 1991 – 2021*. Combining this data with information from other sources, Urban Futures estimated that a modern business park in Metro Vancouver supports one job per 44.1 – 53.4 sq. m. (475 – 575 sq. ft.) of floorspace (an average of 48.8 sq. m. / 525 sq. ft.). In comparison, more traditional light industrial areas are estimated to support one job per 83.6 – 167.2 sq. m. (900 – 1,800 sq. ft.) of floorspace (an average of 125.4 sq. m. / 1,350 sq. ft.).

So, on average, modern business parks in Metro Vancouver appear to support roughly 2.5 times the employment of traditional light industrial areas. That said, there is still an important role for light industry in the region as part of having a robust economy, even if

the number of jobs directly supported is less than for some other forms of business activity.

Employment densities on industrial lands are increasing over time and will continue to do so as land prices in Metro Vancouver rise and more efficient use is made of scarce supply, both on greenfield and redeveloping sites. For example, a 2005 study by the City of Coquitlam of its southwest industrial area, which is where the majority of its industrially zoned land is located, found that its older (20 or more years) industrial areas, such as Cape Horn and Mayfair, had an average of 22.3 – 34.1 employees per net hectare (9.0 – 13.8 employees per net acre). In comparison, the Pacific Reach industrial area, which is more recent and still under development (largely for combined warehouse / production space and office use), had an average of 51.2 employees per net hectare (20.7 employees per net acre).

Analysis undertaken by Urban Futures for the planned 33.2-hectare (82-acre) Fraser Mills development on the Coquitlam waterfront anticipates even higher floorspace densities for the approximately 4.9-hectare (12-acre) combined business park and light industrial component of the site than on the adjacent Pacific Reach lands, although plans are not yet finalized.

### 3. The Issues

The information gathered from other municipalities, the development community and City of Surrey staff revealed several issues that need to be considered in the IB and IB-1 site coverage matter.

#### 3.1 Efficiency of Land Use / Market Demand / Change in Use

Surrey's *Employment Lands Strategy Overview* notes that the City's Official Community Plan (OCP) targets are to:

- reach a balance of 60% residential to 40% industrial/commercial assessment by the year 2021, from the current 72% residential and 28% industrial/commercial; and
- provide one job per resident worker in Surrey, from the current 0.63 jobs per resident worker.

It will require 275,000 jobs by 2021 to match the projected size of the resident labour force by that point. The overview concludes that while a number of these jobs will be located in office or commercial space in commercially or residentially designated areas, a significant amount of employment will need to be accommodated on industrially designated lands.

Part of making more efficient use of Surrey's declining supply of industrial land means densification in the form of greater floorspace, which in turn will support more jobs. The IB and IB-1 zones allow FARs of 0.75 and 1.0 respectively, which is within the range typical of the FARs found in many industrial zones in the region where an FAR is explicitly stated (see Appendix 2). The exception is the City of Vancouver, where the maximum permitted FARs in some of its industrial zones as high as 3.0 and 5.0 under certain circumstances (including a residential component).

Achieving the maximum FARs in the IB and IB-1 zones requires multi-storey buildings. For the IB zone, it can be achieved with a two-storey building, but for the IB-1 zone it would require at least a partial third floor to hit the maximum FAR of 1.0 since site coverage is only 45%.

This configuration of floorspace makes sense when there is a significant office component in a development. However, most of what has been built to date in Campbell Height does not have a large office component, despite the City's desire to encourage this use in the IB and IB-1 zones. Rather, the majority of demand has been for single storey warehousing, production and similar floorspace. In the opinion of the development community, there will not be significant market demand for large office-oriented developments in Campbell Heights over the foreseeable future.

This is an important factor in the question of site coverage because if predominantly one and partial two story buildings continue to be the norm in the IB and IB-1 zones, the only way to actually achieve more efficient land use, including more employment, is through greater site coverage. In short, there is more interest from the market in building out rather than up.

The question has been raised by City staff about the long-term effect of increased site coverage on the ability of buildings to be converted to other uses over the long-term. Greater site coverage limits the amount of room available to expand parking in the future if there is more intense use made of a building, such as conversion of warehouse space to office use. The concern is that if employment increased as a result of more office use but there is no room to expand parking, either the business would be forced to relocate (or not chose the site in the first place) or else employees and visitors could begin to use public streets for parking that should typically be provided on site.

The developers and agents interviewed do not believe this is a concern since, in their opinion, there will not be significant demand in the future for large scale conversion to office or similar uses in Campbell Heights that require more parking. Moreover, the prevailing view is that the City's current parking standards in the two zones are high enough that, if there is more intensive use made of a building in the future, existing on-site parking could in many cases accommodate increased demand.<sup>3</sup>

Over time, it can also be expected that public transit in the Campbell Heights area will improve as the area builds out. Combined with Transportation Demand Management (TDM) measures being undertaken by the City of Surrey and senior levels of government, private automobile use should decline per employee and visitor over the long-run.

Maintaining relatively low site coverage primarily to accommodate a unproven need for more parking in the future can be argued to conflict with both what the market wants and also the objective of creating more sustainable development, including higher employment levels, in Surrey.

### 3.3 Setbacks

It is recognized that changes to the IB and IB-1 zone setbacks are not being considered by the City at this time. However, this issue was raised by almost all of the developers and agents contacted as part of this review. In their opinion, adjustments should be made to the setbacks, which they consider to be among the most stringent of Metro Vancouver industrial zones. It is their view that adjusting the setbacks, including allowing at least one zero lot-line, would lead to increased site coverage that comes closer to the current maximum of 45% and would make it easier to go even beyond that.

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<sup>3</sup> Review of the industrial parking standards for several other municipalities found that they are generally similar to those of Surrey, which requires one parking space for every 100 sq. m. (1,075 sq. ft.) of gross floor area. The standard in Richmond is exactly the same and the standard in Coquitlam is also exactly the same for buildings on industrial lots 2,020 sq. m. (21,745 sq. ft.) and larger in area. In Burnaby, the standard for manufacturing and industrial buildings is one parking space for each three employees or each 93 sq. m. (1,001 sq. ft.) of gross floor area, whichever is greater. However, for warehousing in Burnaby, the standard is one parking space for each three employees or each 186 sq. m. (2,002 sq. ft.) of gross floor area, whichever is greater. In our opinion, using number of employees as a measurement tool for parking requirements is not effective. Employment levels change over time and it is also difficult for a municipality to accurately track the number of jobs at each business, even if the information is required annually as part of business licensing.

Comparison of the setbacks in the IB and IB-1 zones with those of the industrial zones in other municipalities, as set out in Appendix 2, does suggest that the setbacks are larger than the norm. In Burnaby's Glenlyon Business Park, for example, the typical setbacks are 9 m. (29.5 ft.) front, 3 m. (9.8 ft.) side and 6 m. (19.7 ft.) rear, with site coverage typically in the 40% to 50% range according to the developer - Canada Lands Company.

### **3.4 Environmental Impact**

Surrey City staff have indicated that one of the concerns with increased site coverage in the IB and IB-1 zones is the potential environmental impact. Two issues have been specifically raised:

- There is a desire to encourage more tree preservation on parcels of land not yet cleared for development in Campbell Heights.
- Increased site coverage could reduce the opportunities to create pervious surfaces for stormwater management purposes and allow meaningful landscaping to replace vegetation loss.

With respect to tree preservation, there is scepticism amongst developers and agents that this can reasonably be achieved in Campbell Heights (or in most industrial areas for that matter) given the re-grading and disruption to root systems and natural drainage that typically occurs during site preparation. Their view is that replanting continues to be the best option.

If, however, tree preservation is a viable approach on at least some development parcels in the two zones, it is not necessarily the case that increased site coverage automatically precludes leaving some trees. It is very much a site-specific issue and even at 45% site coverage, plus parking and other requirements, the opportunities for tree preservation will be relatively constrained.

The issue of maintaining and perhaps even enhancing pervious surfaces as part of development is one that not only Surrey but many municipalities are attempting to address. Port Coquitlam has responded by amending its Zoning Bylaw in 2007 to require green roofs for all buildings with a footprint larger than 5,000 sq. m. (53,821 sq. ft.), with a green roof defined as an engineered roofing system planted with vegetation to obtain environmental benefits, including stormwater retention.

A variation on this approach that might be considered in the case of the IB and IB-1 zones, if pervious surface is one of City staff's key concerns, is requiring a green roof component where site coverage exceeds 45%. This is further discussed as one of the options in Section 4 of this report.

### **3.5 Ability to Achieve Greater Site Coverage without Other Variances**

Most of the developments to date in the Campbell Heights IB and IB-1 zones have not been achieving 45% site coverage. Discussions with developers and agents suggest that many will continue to come in below the maximum over at least the shorter-term, especially without a change in building setbacks, because of the particular products they are presently bringing onto the market.

Nevertheless, if there is the potential for site coverage to be increased beyond 45% to meet the demand from at least some developers, the issue is what kind of site coverage might be achieved while still adhering to all other provisions of the IB and IB-1 zones.

Generally speaking, greater site coverage is likely to be achieved on larger lots because of opportunities for more efficient layout. However, not all developments are capable of achieving greater than 45% site coverage even on larger lots, with factors such as lot shape and topography and exact building use (e.g. number of truck loading bays) affecting what can be done. Hence, there is no exact site size that acts as a precise threshold above which site coverage greater than 45% may be achieved or below which it cannot be achieved.

Two scenarios have been developed here:

- Site coverage of 60%, with an FAR of 0.6, in a plan prepared by the Beedie Group and reviewed by the consultants.
- An FAR of 1.0 (the maximum permitted in the IB-1 zone), with site coverage of 50%, in a plan prepared by the consultants using the Beedie plan as a template.

The two scenarios, which are shown in diagram form in Appendix 3, show that site coverage can be increased and still meet the other provisions of the IB-1 zone for the particular site that has been analyzed. It may not work on all sites, particularly smaller ones or parcels that have an irregular shape (e.g., pie shaped).

Since the key difference (besides permitted uses and some aspects of setbacks ) in the IB zone is the maximum FAR being 0.75 instead of 1.0, site coverage of up to 60% should also be achievable in the IB zone in many circumstances.

Numerous variations on these two scenarios can be created. For example, a greater or lesser number of loading bays could be planned, which might make it possible to increase site coverage even beyond 60% or, alternatively, push it below 60%. It all depends on the specific user and site.

## 4. The Options

There are three options for how the City might approach increasing site coverage beyond 45% in the Campbell Heights IB and IB-1 zones:

- An outright change to the zones to allow greater site coverage, be it 60% or a lower number determined by the City as more appropriate.
- Using a development variance approach on a case-by-case basis that considers site conditions and the merits of the particular development proposal.
- Using a “bonus site coverage” approach in exchange of certain conditions being met that have an environment benefit.

Each option is discussed below.

### 4.1 Outright Change to Site Coverage Provisions

This option is the most straight forward one to implement and administer and would apply equally to all development sites in the two zones. It is also the option that is preferred by the Campbell Heights development community.

However, this option does not in itself address City staff’s concerns about the environmental implications of increasing site coverage.

### 4.2 Development Variance Approach to Site Coverage

This option is already available to developers but is not favoured by them. The reasons include the time, cost and uncertainty associated with the development variance process. In their view, what they would be requesting is something that should be a “given” rather than perceived as out of the ordinary. Based on the industrial zone site coverages being permitted in other municipalities, it is the 45% maximum site coverage that appears to be out of the ordinary.

From the City’s perspective, however, the development variance approach continues to give it strong control over what is built and to determine if the variance is appropriate in the circumstances.

### 4.3 Bonus Site Coverage

This option is an attempt to find a reasonable compromise to the site coverage issue if environmental concerns, especially stormwater management, are a key issue for the City.

This option would see the base maximum site coverage remain at 45% (although there is an argument that it should at the very least be set at 50% to be in the range of that of most other municipalities) and any additional site coverage up to 60% be compensated for by an equal amount of green roof area (ie, one square metre of green roof for each square metre of additional building footprint between 45% / 50% and 60%).

Alternatively, there may be other methods of managing stormwater that would have the same benefit as a green roof that might be considered. Examples of possible approaches that may have a similar effect, either on their own or in combination, include hard surface infiltration in parking and other areas, green walls, and rain water re-use.

There is a significant additional capital cost to developers of this approach<sup>4</sup>, but green roof requirements are being applied with more frequency in Metro Vancouver, as per the Port Coquitlam example discussed earlier.

There is also precedent for the concept of creating a range in permitted site coverage in, for example, Langley Township's M-11 Business / Office zone, where the maximum is 50%, except where at least 75% of required parking is provided within a building or underground, in which case lot coverage may be increased to a maximum of 75%.

While an exception rather than the rule given the current economics of industrial development, Surrey might also consider allowing greater site coverage in exchange for roof top parking, which would free up more ground plane area. As industrial land becomes scarcer and more valuable over time, this option will become more viable.

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<sup>4</sup> The additional capital cost of a green roof compared to a standard roof on an industrial building varies by location, building design, roof size, the specific green roof technology employed and other factors. According to the Beedie Group, a green roof adds an estimated 20 – 25% to the overall cost of a standard industrial building, including for structural upgrades, based on analysis recently undertaken for a proposed large wholesale distribution facility in Port Coquitlam. This is for a green roof that would cover about 75% of the total roof area. A smaller green roof area would reduce this extra cost.



## 5. Conclusion

Review of the industrial zones in ten other Metro Vancouver municipalities found that, where site coverage is explicitly specified rather than relying simply on setbacks, the range is 50% to 75%, with most zones in the 50% to 60% range. This includes some zones that are of a general industrial nature and some that are more specifically targeted at business park type development. The Campbell Heights IB and IB-1 zones in Surrey were the only two industrial zones of any type found among the surveyed municipalities where the maximum site coverage is 45%.

Site coverage of greater than 45% is technically possible, up to as much as about 60% depending on parcel size, shape and topography, in the Campbell Heights IB and IB-1 zones without requiring variances to other provisions of the two zones.

As part of encouraging more efficient use of Surrey and region's declining industrial land base, the City should consider increasing the maximum permitted site coverage to 60%. Recognizing, however, the environmental concerns expressed by City staff, one option that might be pursued is keeping the base maximum site coverage at 45% (although there is an argument that it should at the very least be set at 50% to be in the range of that of most other municipalities) and any additional site coverage up to 60% be compensated for by an equal amount of green roof area or other features appropriate for the building that would have similar stormwater management benefits.

**Appendix 1. List of Contacts**

Raul Allueva, Planning Manager, City of Surrey

Doug Avis, Canada Lands Company

Ryan Beedie, Beedie Group

Rob Blackwell, Anthem Properties

Terence Brunette, Planner, City of Richmond

Val Caskey, City of Surrey

Paul Crawford, Township of Langley

Kim Fowler, Director of Development Services, City of Port Coquitlam

Andrew Green, Cushman Wakefield

Beverly Grieve, Planning Manager, New Westminster

Geoff Hew, GWL Realty Advisors

Bill Hobbs, Cushman Wakefield

Carl Johanssen, Planner, City of Abbotsford

Kirk Kuester, Colliers International

Nicholas Lai, Planning Manager, City of Surrey

Chris MacCauley, Colliers International

Ron Marr, Progressive Construction

Jim McIntyre, General Manager, Planning & Development, City of Coquitlam

Gary Pooni, Brook + Associates (consultants to the Beedie Group)

Tony Virgini, Cushman Wakefield

Kevin Voltz, Cushman Wakefield

Tamara Wallace, Planner, City of Surrey

## Appendix 2. Industrial Zoning Provisions for Other Municipalities

<b>City of Abbotsford</b>				
<b>Zone</b>	<b>I1 Light Industrial Zone</b>	<b>I2 General Industrial</b>	<b>I5 Service Industrial Zone</b>	<b>I6 Special Industrial Zone</b>
<b>Site Coverage</b>	n/a	n/a	max. 50%	max. 75%
<b>Minimum Lot Area</b>	n/a	n/a	n/a	n/a
<b>Density</b>	n/a	n/a	n/a	n/a
<b>Front Setback</b>				7.5m (24.6ft.) Any building or structure shall have a minimum setback of 7.5 m from all lot lines, except where the lot line is parallel and adjacent to a railroad, in which case the setback shall be 0.0 m.
<b>Rear Setback</b>				7.5m (24.6ft.) Any building or structure shall have a minimum setback of 7.5 m from all lot lines, except where the lot line is parallel and adjacent to a railroad, in which case the setback shall be 0.0 m.
<b>Side Setback</b>				7.5m (24.6ft.) Any building or structure shall have a minimum setback of 7.5 m from all lot lines, except where the lot line is parallel and adjacent to a railroad, in which case the setback shall be 0.0 m.
<b>Other Setback</b>	Exterior Lot Line 3.0m (9.8ft.)  Interior Lot Line 0.0m, except 3.0m (9.8ft.) where abutting an R or RM zone	Exterior Lot Line 3.0m (9.8ft.)  Interior Lot Line 0.0m, except 3.0m (9.8ft.) where abutting an R or RM zone	Exterior Lot Line 3.0m (9.8ft.)  Interior Lot Line 0.0m, except 3.0m (9.8ft.) where abutting an R or RM zone	Setbacks Between Buildings: Where an accessory one unit residential use dwelling unit is contained within a separate building, it shall be sited at least 3.0 m (9.8ft.) from a principal building or structure.

<b>Maximum Building Height</b>	12.2 m	12.2 m	6.0 m or one storey, whichever is less	Principal Building: 20.0 m Accessory Structure: 8.0 m
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<b>City of Burnaby</b>				
<b>Zone</b>	<b>M1, M1r, M1L &amp; M1k Manufacturing District</b>	<b>M2, M2r, M2L &amp; M2k General Industrial District</b>	<b>M5, M5r &amp; M5L Light Industrial District</b>	<b>B Business Centre District</b>
<b>Site Coverage</b>	max. 50%	max. 60%	max. 50%	max. 65%
<b>Minimum Lot Area</b>	n/a	930m <sup>2</sup> , width not less than 30m	not less than 930 m <sup>2</sup> / width not less than 30m (98.43 ft)	n/a
<b>Density</b>	n/a	n/a	n/a	FAR 1.00
<b>Front Setback</b>	A front yard shall be provided of not less than 6.0 m (19.69 ft.) in depth, except where a lot is separated from a lot in an R or RM District by a street, such front yard shall be not less than 9.0 m (29.53 ft.) in depth.	A front yard shall be provided of not less than 6.0 m (19.69 ft.) in depth, except where a lot is separated from a lot in an R or RM District by a street, such front yard shall be not less than 9.0 m (29.53 ft.) in depth.	9.0 m (29.53 ft.)	9.0 m (29.53 ft.)
<b>Rear Setback</b>	A rear yard shall be provided of not less than 3.0 m (9.84 ft.) in depth, except where a lot abuts a lot in an A, R or RM District, or is separated by a lane therefrom, such rear yard shall be not less than 9.0 m (29.53 ft.) in depth.	A rear yard shall be provided of not less than 3.0 m (9.84 ft.) in depth, except where a lot abuts a lot in an A, R or RM District, or is separated by a lane therefrom, such rear yard shall be not less than 9.0 m (29.53 ft.) in depth.	A rear yard shall be provided of not less than 6.0 m (19.69 ft.) in depth, except where a lot abuts a lot in an A, R or RM District, or is separated by a lane therefrom, such rear yard shall be not less than 9.0 m (29.53 ft.) in depth.	9.0 m (29.53 ft.)

<b>Side Setback</b>	<p>A side yard shall be provided on each side of the building of not less than 3.0 m (9.84 ft.) in width, except that:</p> <p>(1) A side yard not flanked by a street, lane or an A, R or RM District may be reduced to nil, provided that the other side yard has a width of not less than 6.0 m (19.69 ft.).</p> <p>(2) In the case of a corner lot, the side yard adjoining the flanking street shall be not less than 4.5 m (14.76 ft.) in width.</p> <p>(3) Where a lot abuts a lot in an A, R or RM District, or is separated by a street or lane therefrom, a side yard shall be provided of not less than 6.0 m (19.69 ft.) in width.</p>	<p>A side yard shall be provided on each side of the building of not less than 3.0 m (9.84 ft.) in width, except that:</p> <p>(1) A side yard not flanked by a street, lane or an A, R or RM District may be reduced to nil, provided that the other side yard has a width of not less than 6.0 m (19.69 ft.).</p> <p>(2) In the case of a corner lot, the side yard adjoining the flanking street shall be not less than 4.5 m (14.76 ft.) in width.</p> <p>(3) Where a lot abuts a lot in an A, R or RM District, or is separated by a street or lane therefrom, a side yard shall be provided of not less than 6.0 m (19.69 ft.) in width.</p>	<p>A side yard shall be provided on each side of the building of not less than 6.0 m (19.69 ft.) in width, except that a side yard not flanked by a street, lane or an A, R or RM District may be reduced to nil, provided that the other side yard has a width of not less than 6.0 m (19.69 ft.).</p>	<p>6.0 m (19.69 ft.)</p>
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<b>City of Coquitlam</b>				
<b>Zone</b>	<b>M-1 General Industrial</b>	<b>M-2 Service Industrial</b>	<b>M-3 Special (Light) Industrial</b>	<b>M-8 Retail and Light Industrial</b>
<b>Site Coverage</b>	Not applicable in this zone.	Not applicable in this zone.	Not applicable in this zone.	Not applicable in this zone.
<b>Minimum Lot Area</b>	n/a	n/a	n/a	n/a
<b>Density</b>	shall not exceed a gross floor area of 1.0 times the lot area.	All buildings and structures together shall not exceed a gross floor area of 0.6 times the lot area.	All buildings and structures together shall not exceed a gross floor area of 0.6 times the lot area.	All buildings and structures together shall not exceed a gross floor area of 0.65 times the lot area.
<b>Front Setback</b>	7.6m (24.9ft.) All buildings and structures and accessory unenclosed storage use	7.6m (24.9ft.) All buildings and structures and accessory unenclosed storage use	7.6m (24.9ft.)	7.6m (24.9ft.)
<b>Rear Setback</b>	0m (Accessory unenclosed storage use 7.6m) Rear Lot Line Abutting a Zone Other Than an Industrial Zone 7.6m (24.9ft.) (Accessory buildings 0m)	0m (Accessory unenclosed storage use 7.6m) Rear Lot Line Abutting a Zone Other Than an Industrial Zone 7.6m (24.9ft.) (Accessory buildings 0m)	7.6m (24.9ft.)	7.6m (24.9ft.) Rear Lot Line Abutting a Zone Other Than an Industrial Zone

<b>Side Setback</b>	0m Interior Side Lot Line Abutting a Zone Other Than an M-1, M-2 M-4, M- 5 or M-6 Zone (Accessory unenclosed storage use: 3.0m)	0m Interior Side Lot Line Abutting a Zone Other Than an M-1, M-2 M-4, M-5 or M-6 Zone (Accessory unenclosed storage use: 3.0m)		
	3.0m (9.8ft.) Interior Side Lot Line Abutting a Zone other than an Industrial Zone (Accessory unenclosed storage use 0m)	3.0m (9.8ft.) Interior Side Lot Line Abutting a Zone other than an Industrial Zone (Accessory unenclosed storage use 0m)	7.6m (24.9ft.) Interior and Exterior Side Lot Line	3.0m (9.8ft.) Interior Side Lot Line Abutting a Zone other than an Industrial Zone
	7.6m (24.9ft.) Exterior Side Lot Line - All buildings and structures & Accessory unenclosed storage use	7.6m (24.9ft.) Exterior Side Lot Line - All buildings and structures & Accessory unenclosed storage use		7.6m (24.9ft.) Exterior Side Lot Line

<b>Corporation of Delta</b>	
<b>Zone</b>	<b>I1 Light Industrial</b>
<b>Site Coverage</b>	n/a
<b>Minimum Lot Area</b>	n/a
<b>Density</b>	n/a
<b>Front Setback</b>	7.5m (24.6ft.)
<b>Rear Setback</b>	1.50m (4.9ft.) All buildings and structures backing an adjoining side yard shall have a rear yard setback of not less than 3.5 metres.
<b>Side Setback</b>	Side on a Flanking Street 4.5 m (14.8ft.) All buildings and structures adjoining any Single Family Residential Zone, Multiple Family Residential Zone or Personal Care Zone shall have a front setback of 7.5 metres and rear and side setbacks equal to the height of the building or structure, but not less than 7.5 metres.
	Where no access by a "Highway" to the rear of the lot exists, one PART VIII:I1 223 minimum 7.5 m side setback will be required. In the case where a paved roadway at least 9.0 m wide provides vehicular access to the rear of the lot, no minimum side setback shall be required.

<b>Maximum Building Height</b>	10.0 m* *15 m if setback amount over 10m (see bylaw)
	Off-street loading spaces shall be required as per Part IV, Sections 409 and 411, as per Part IX, Section 902.
<b>Parking Requirement</b>	<b>409</b> Owners or occupiers of buildings in all zones shall provide sufficient loading space for the building so that all loading and unloading may be conducted on the lot on which the building is located. <b>411</b> Where a person uses land for any "Permitted Use" without a building he shall provide, on the lot on which the "Permitted Use" is located, loading spaces to the extent that all loading and unloading operations may be conducted on the lot.
	Off-street parking spaces shall be required as per Part IX.

<b>City of Langley</b>			
<b>Zone</b>	<b>I1 Light Industrial</b>	<b>I2 Heavy Industrial</b>	<b>I3 Special Industrial</b>
<b>Site Coverage</b>	n/a	n/a	50%
<b>Minimum Lot Area</b>	929m <sup>2</sup>	929m <sup>2</sup>	929m <sup>2</sup>
<b>Density</b>			
<b>Front Setback</b>	4.5m	4.5	4.5m
<b>Rear Setback</b>	0m	0m	0m
<b>Side Setback</b>	n/a	n/a	3.0 m next to residential
<b>Other Setback</b>			
<b>Maximum Building Height</b>	15.0m	15.0m	15.0m and 2 storeys

<b>Township of Langley</b>				
<b>Zone</b>	<b>M-1A &amp; M1-B Service Industrial Zone</b>	<b>M-2A General Industrial Zone</b>	<b>M-6 Limited Industrial Zone</b>	<b>M-11 Business/Office Park Zone</b>
<b>Site Coverage</b>	max. 60%	max. 60%	max. 60%	Buildings and structures shall not cover more than 50% of the lot area, except that where at least 75% of the required parking spaces are provided within the building or underground, lot coverage may be increased to a maximum of 75%.
<b>Minimum Lot Area</b>	n/a	n/a	n/a	n/a
<b>Density</b>	n/a	n/a	n/a	n/a

<b>Front Setback</b>	10m (32.8 ft.) 5m (16.4ft.) no setback is required from an interior rear lot line abutting an M or C zone	10m (32.8 ft.) 5m (16.4ft.) no setback is required from an interior rear lot line abutting an M or C zone	15m (49.2 ft.)	7.5m (24.6ft.)
<b>Rear Setback</b>	5.0 m (16.4ft.) where the side lot line abuts a flanking street no setback is required from an interior side lot line abutting an M or C zone	5.0 m (16.4ft.) where the side lot line abuts a flanking street no setback is required from an interior side lot line abutting an M or C zone	10m (32.8ft.)	0m
<b>Side Setback</b>	10.0 m (32.8ft.) from a lot line abutting an SR, R, RM, MH-1 or P zone	10.0 m (32.8ft.) from a lot line abutting an SR, R, RM, MH-1 or P zone	10.0 m (32.8ft.) from a lot line abutting an SR, R, RM, MH-1 or P zone	7.5m (25ft.) where the side lot line abuts a flanking street no setback is required for an interior side lot line abutting an RU, M, C or CD zone
<b>Other Setback</b>	12.0 m	12.0 m	12.0 m	12.0 m
<b>Maximum Building Height</b>	107 - Parking and Loading Requirements	107 - Parking and Loading Requirements	107 - Parking and Loading Requirements	107 - Parking and Loading Requirements
<b>Parking Requirement</b>				

<b>New Westminster</b>				
<b>Zone</b>	<b>M-1 Light Industrial District</b>	<b>M-2 Heavy Industrial District</b>	<b>M-4 Limited Industrial District</b>	
<b>Site Coverage</b>	n/a	n/a	n/a	
<b>Minimum Lot Area</b>	n/a	n/a	n/a	
<b>Density</b>	n/a	n/a	n/a	
<b>Front Setback</b>	0m	0m	6.1m (20ft.)	
<b>Rear Setback</b>	0m	0m	No rear yard shall be required except where a site abuts a lot in an (R) District or is separated therefrom by a street or lane in which case: a) such rear yard shall be not less than twenty percent (20%) of the depth of the site but need not exceed 25 feet (7.62 metres), and b) an 8 foot (2.44 metre) fence or solid evergreen hedge shall be constructed and maintained on the rear property line.	



<b>Side Setback</b>	0m	0m	No side yard shall be required except where a site abuts a lot in an (R) District or is separated therefrom by a street or lane in which case: a) a side yard shall be provided of not less than 5 feet (1.52 metres); b) an 8 foot (2.44 metre) fence or solid evergreen hedge shall be constructed and maintained on the side property line.
<b>Maximum Building Height</b>	9.14 m (30 feet) and two storeys	Shall not conflict with bylaws	9.14 m (30 feet) and two storeys
<b>Parking Requirement</b>	Off-Street parking shall be provided in accordance with the provisions of Section 150.  Off-Street loading shall be provided and maintained as required by and in accordance with the provisions of Section 160.	Off-Street parking shall be provided in accordance with the provisions of Section 150.  Off-Street loading shall be provided and maintained as required by and in accordance with the provisions of Section 160.	Off-Street parking shall be provided in accordance with the provisions of Section 150.  Off-Street loading shall be provided and maintained as required by and in accordance with the provisions of Section 160.

<b>City of Port Coquitlam</b>					
<b>Zone</b>	<b>M1 General Industrial</b>	<b>M2 Heavy Industrial</b>	<b>M3 Clean Industrial</b>	<b>M4 Business Industrial Park</b>	<b>M5 Advanced Technology Business Park</b>
<b>Site Coverage</b>	60%	60%	50%	50%	50%
<b>Minimum Lot Area</b>	n/a	n/a	n/a	n/a	n/a
<b>Density</b>	n/a	n/a	1.0 FAR (1.6 FAR parking)	n/a	1.0 FAR (1.6 FAR parking)
<b>Front Setback</b>	6.0 m (9.0 m abutting a provincial highway)	6.0 m (9.0 m abutting a provincial highway)	6.0 m (9.0 m abutting a provincial highway)	6.0 m (9.0 m abutting a provincial highway)	6.0 m (9.0 m abutting a provincial highway)
<b>Rear Setback</b>	3.0 m (6.0 m adjacent residential use, 9.0 m abutting highway)	3.0 m (6.0 m adjacent residential use, 9.0 m abutting highway)	3.0 m (6.0 m adjacent residential use, 9.0 m abutting highway)	3.0 m (6.0 m adjacent residential use, 9.0 m abutting highway)	3.0 m (6.0 m adjacent residential use, 9.0 m abutting highway)

<b>Side Setback</b>	3.0 m (6.0 m adjacent residential use, 9.0 m abutting highway)	3.0 m (6.0 m adjacent residential use, 9.0 m abutting highway)	3.0 m (6.0 m adjacent residential use, 9.0 m abutting highway)	3.0 m (6.0 m adjacent residential use, 9.0 m abutting highway)	3.0 m (6.0 m adjacent residential use, 9.0 m abutting highway)
<b>Other Setback</b>					
<b>Maximum Building Height</b>	n/a	n/a	12.0 m, accessory buildings 6.0m	30.0 m (98.4 ft)	30.0 m (98.4 ft)

<b>City of Richmond</b>				
<b>Zone</b>	<b>I1 Industrial District</b>	<b>I2 Light Industrial</b>	<b>I3 Business Park Industrial</b>	<b>I5 Industrial Storage District</b>
<b>Site Coverage</b>	n/a	max. 60%	max. 50%	n/a
<b>Minimum Lot Area</b>				
<b>Density</b>	n/a	FAR 1.0	FAR 1.0	n/a
<b>Front Setback</b>				
<b>Rear Setback</b>				
<b>Side Setback</b>				
<b>Other Setback</b>	Road Setbacks: 6 m (19.685 ft.).	Road Setbacks: 6 m (19.685 ft.).	Road Setbacks: 6 m (19.685 ft.).	Road Setbacks: 6 m (19.685 ft.).

<b>City of Surrey</b>			
<b>Zone</b>	<b>IB Business Park</b>	<b>IB-1 Business Park</b>	<b>IB-2 Business Park</b>
<b>Site Coverage</b>	max. 45%	max. 45%	max. 60%
<b>Minimum Lot Area</b>	10 acres	10 acres	
<b>Density</b>	FAR 0.75	FAR 1.00	FAR 1.00

<b>Front Setback</b>	7.5m (24.6ft.)	16m (52.4ft.)* *The front yard setback may be reduced to 7.5 m. [25 ft.] if the area between the front face of any building or structure and a highway is not used for parking and is landscaped.	16m (52.4ft.)* *The front yard setback may be reduced to 7.5 m. [25 ft.] if the area between the front face of any building or structure and a highway is not used for parking and is landscaped.
<b>Rear Setback</b>	7.5m (24.6ft.)	7.5m (24.6ft.)	7.5m (24.6ft.)
<b>Side Setback</b>	7.5m (24.6ft.)* *One side yard setback may be reduced to 3.6 metres [12 ft.] if the side yard abuts land which is commercial or industrial.	7.5m (24.6ft.)** ** One side yard setback may be reduced to 3.6 metres [12 ft.] if the side yard abuts land which is commercial or industrial.  Side yard on flanking street 9.0m (29.5ft.)*** *** The side yard setback on a flanking street may be reduced to 7.5 m. [25 ft.] if the area between the flanking street face of any building or structure and a highway is not used for parking and is landscaped.	7.5m (24.6ft.)** ** One side yard setback shall be 7.5 metres [25 ft.] or 0.0 metre if the said side yard abuts land which is commercial or industrial.  Side yard on flanking street 9.0m (29.5ft.)*** *** The side yard setback on a flanking street may be reduced to 7.5 m. [25 ft.] if the area between the flanking street face of any building or structure and a highway is not used for parking and is landscaped.

<b>City of Vancouver</b>								
<b>Zone</b>	<b>I1</b>	<b>I2</b>	<b>I3</b>	<b>IC-1 and IC-2</b>	<b>M-1</b>	<b>M1-a/M2-a</b>	<b>M1-B</b>	<b>M-2</b>
<b>Site Coverage</b>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Minimum Lot Area</b>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Density</b>	FSR shall not exceed 3.0 (1.0 for service uses)	FSR shall not exceed 3.0 (1.0 for service uses)	FSR shall not exceed 3.0 (1.0 for service uses)	FSR shall not exceed 3.0 (1.0 for service uses)	FSR shall not exceed 5.0 (1.0 for non ind uses)	FSR shall not exceed 5.0 (sq ft limit on acc. uses)	FSR shall not exceed 1.5 (plus acc limits)	FSR shall not exceed 5.0 (1.0 for non manufacturing uses)
<b>Front Setback</b>						Front yard minimum 3.0m in an R district		
<b>Rear Setback</b>	3.1m	3.1m	3.1m	3.1m	3.1m	3.1m	3.1m	3.1m

<b>Side Setback</b>	Side yard of 1.5 m where site adjoins R district	Side yard of 1.5 m where site adjoins R district	Side yard of 1.5 m where site adjoins RM district	Side yard minimum 1.5 m where adjoining RM	Side yard minimum 1.5 m where adjoining RM	Side yard 1.5m where adjoining RM	Side yard min. 10% of frontage in R district	Side yard 1.5m where adjoining RM, Side yard 0.9m in all other cases
<b>Other Setback</b>	Exterior Lot Line 3.0m (9.8ft.)	Exterior Lot Line 3.0m (9.8ft.)	Exterior Lot Line 3.0m (9.8ft.)	Setbacks Between Buildings: Where an accessory one unit residential use dwelling unit is contained within a separate building, it shall be sited at least 3.0 m (9.8ft.) from a principal building or structure.	Exterior Lot Line 3.0m (9.8ft.)	Exterior Lot Line 3.0m (9.8ft.)	Exterior Lot Line 3.0m (9.8ft.)	Setbacks Between Buildings: Where an accessory one unit residential use dwelling unit is contained within a separate building, it shall be sited at least 3.0 m (9.8ft.) from a principal building or structure.
	Interior Lot Line 0.0m, except 3.0m (9.8ft.) where abutting an R or RM zone	Interior Lot Line 0.0m, except 3.0m (9.8ft.) where abutting an R or RM zone	Interior Lot Line 0.0m, except 3.0m (9.8ft.) where abutting an R or RM zone		Interior Lot Line 0.0m, except 3.0m (9.8ft.) where abutting an R or RM zone	Interior Lot Line 0.0m, except 3.0m (9.8ft.) where abutting an R or RM zone	Interior Lot Line 0.0m, except 3.0m (9.8ft.) where abutting an R or RM zone	
<b>Maximum Building Height</b>	max 18.3 m	max 18.3 m (increase up to 30.5m)	max 18.3 m (increase up to 30.5m)	max 18.3 m	max 30.5 m	max 18.3m	max 12.2m	max 30.5m

### **Appendix 3. Plans with Site Coverage Greater Than 45% in IB-1 Zone**



# DEVELOPMENT DATA SHEET

DATE: FEB.7.08

PROJECT ADDRESS: LOT 63 TO 65 192nd STREET, CAMPBELL HEIGHTS

ZONE: I-B1

REQUIRED DEVELOPMENT DATA	MIN. REQ'D/MAX. ALLOWED	PROPOSED
LOT AREA (IN SQUARE METRES)	2 000 M2	56 820 M2
GROSS TOTAL		
ROAD WIDENING AREA		N/A
UNDEVELOPABLE AREA		N/A
NET TOTAL	2 000 M2	56 820 M2
LOT COVERAGE (IN% OF NET LOT AREA)	45 %	60 %
SETBACKS (IN METRES)		
FRONT (WEST)	16 M	25.4 M
REAR (EAST)	7.5 M	9.0 M
SIDE FLANKING STREET (SOUTH)	9.0 M OR 7.5 M	24.0 M / 7.5 M
SIDE #2 (NORTH)	7.5 M	22.8 M
BUILDING HEIGHT (IN METRES/ STOREYS)		
PRINCIPAL	14 M	13 M
ACCESSORY	6 M	N/A
NUMBER OF RESIDENTIAL UNITS	N/A	—
BACHELOR		—
ONE BED		—
TWO BEDROOM		—
THREE BEDROOM +		—
TOTAL		—
FLOOR AREA: RESIDENTIAL	N/A	—
FLOOR AREA: COMMERCIAL	N/A	—
RETAIL		—
OFFICE		—
TOTAL		—
FLOOR AREA: INDUSTRIAL		367,500 s.f. + 6,500 s.f. = 34 744 m2
FLOOR AREA: INSTITUTIONAL/ ASSEMBLY		
TOTAL BUILDING FLOOR AREA		34 744 m2
DENSITY		
# OF UNITS/ HA / # UNITS/ ACRE (GROSS)	1.00	34 744 / 56 820 = .611
# OF UNITS/ HA / # UNITS/ ACRE (NET)		
FAR (GROSS)		
FAR (NET)	1.00	34 744 / 56 820 = .611
AMENITY SPACE (AREA IN SQUARE METRES)		
INDOOR	N/A	—
OUTDOOR	N/A	—
PARKING (NUMBER OF STALLS)		
COMMERCIAL/ INDUSTRIAL CUSTOMERS	1 PER 100 M2 = 348	355
COMMERCIAL/ INDUSTRIAL EMPLOYEE	N/A	—
RESIDENTIAL BACHELOR + 1 BEDROOM	N/A	—
2- BED	N/A	—
3- BED	N/A	—
RESIDENTIAL VISITORS	N/A	—
INSTITUTIONAL	N/A	—
NUMBER OF DISABLED STALLS	4	4
NUMBER OF SMALL CARS	25 %	24 %
TOTAL	348	355

