

# LATE DISTRIBUTION FOR COUNCIL - JUNE 27, 2006

# P1



CITY OF VANCOUVER

POLICY REPORT  
DEVELOPMENT AND BUILDING

Report Date: June 22, 2006  
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VanRIMS No.: 11-3600-03  
Meeting Date: June 27, 2006

TO: Vancouver City Council  
FROM: Director of Current Planning  
SUBJECT: CD-1 Rezoning - 360 West 1st Avenue

## RECOMMENDATION

- A. THAT the application by Polygon Homes Ltd. to rezone 360 West 1<sup>st</sup> Avenue (Lots 4, 5, 6, 7, and 8 Block 3 District Lot 302 Plan 5832) from M-2 to CD-1, to permit a 13 storey residential building with a total density of 3.5 Floor Space Ratio, be referred to a Public Hearing, together with:
- (i) plans received March 16, 2006;
  - (ii) draft CD-1 By-law provisions, generally as presented in Appendix A; and
  - (iii) the recommendation of the Director of Current Planning to approve the application, subject to conditions contained in Appendix B.

FURTHER THAT the Director of Legal Services be instructed to prepare the necessary CD-1 By-law generally in accordance with Appendix A for consideration at the Public Hearing.

FURTHER THAT the Director of Legal Services be instructed to prepare a consequential amendment to the Sign By-law to establish regulations for this CD-1 in accordance with Schedule B (DD) as set out in Appendix C for consideration at the Public Hearing.

- B. THAT, subject to approval of the rezoning at the Public Hearing, the Noise Control By-law be amended to include this Comprehensive District in Schedule B as set out in Appendix C.

FURTHER THAT the Director of Legal Services be instructed to bring forward the amendment to the Noise Control By-law at the time of enactment of the CD-1 by-law.

- C. THAT Recommendations A to C be adopted on the following conditions:
- (i) THAT the passage of the above resolutions creates no legal rights for the applicant or any other person, or obligation on the part of the City; any expenditure of funds or incurring of costs is at the risk of the person making the expenditure or incurring the cost;
  - (ii) THAT any approval that may be granted following the public hearing shall not obligate the City to enact a by-law rezoning the property, and any costs incurred in fulfilling requirements imposed as a condition of rezoning are at the risk of the property owner; and
  - (iii) THAT the City and all its officials, including the Approving Officer, shall not in any way be limited or directed in the exercise of their authority or discretion, regardless of when they are called upon to exercise such authority or discretion.

#### GENERAL MANAGER'S COMMENTS

The General Manager of Community Service RECOMMENDS approval of the foregoing.

#### COUNCIL POLICY

Relevant Council Policies for this site include:

- Central Area Plan  
adopted by Council on December 31, 1991
- South East False Creek Policy Statement  
adopted by Council on October 5, 1999 and amended on July 8, 2004.
- South East False Creek Official Development Plan (SEFC ODP)  
enacted on July 19, 2005 and amended on March 21, 2006.
- South East False Creek Financial Plan and Strategy  
adopted by Council on March 1, 2005.
- South East False Creek Green Building Strategy  
adopted by Council on July 8, 2004.
- Live-work Use Guidelines  
adopted by Council on March 21, 2006.
- High-Density Housing for Families with Children Guidelines  
adopted by Council on March 24, 1992.
- Financing Growth (Community Amenity Contributions)  
adopted by Council on June 24, 2003 and amended on February 12, 2004
- Neighbourhood Energy Utility  
adopted by Council on March 2, 2006

## PURPOSE AND SUMMARY

This report presents the staff assessment of an application by Polygon Homes Ltd., to rezone 360 West 1<sup>st</sup> Avenue from M-2 Industrial to CD-1 (Comprehensive Development District). The application proposes a residential development which would include:

- 105 market dwelling units in one 13 storey mid-rise building with a maximum height of 38.1 m and one 3 storey townhouse building with a maximum height of 10 m;
- representing 9 818 m<sup>2</sup> (105,678 sq. ft.) of residential floor area;
- 84 m<sup>2</sup> (904 sq. ft.) of amenity space; and
- A total floor area of 10 770 m<sup>2</sup> (115,925 sq. ft.) equating to a total of 3.5 FSR.

Staff have assessed the application and finds that it generally meets the intent of the South East False Creek (SEFC) Official Development Plan (ODP) and are generally supportive of the proposed land uses, density, and form of development subject to the design development conditions outlined in Appendix B being met at the development permit stage.

Staff have reported to Council on a comprehensive Public Benefits Strategy which outlined the proposed funding and delivery of new public amenities and infrastructure in SEFC. The Strategy aims to ensure that new development pays a fair share towards public benefits to meet the demands created by the new population. The approach includes the use of the city-wide DCL, and an area-specific DCL. In addition, it outlines objectives for possible Community Amenity Contributions (CACs). Staff are currently in discussions with the applicant regarding a possible Community Amenity Contribution (CAC). The proposed contributions will be reported to Council prior to the Public Hearing for this rezoning application.

Staff recommend that the application be referred to a Public Hearing, together with a draft CD-1 By-law with provisions generally as shown in Appendix A and the recommendation of the Director of Current Planning that the application be approved, subject to conditions listed in Appendix B, including approval in principle of the form of development as shown in plans stamped "Received March 16, 2006" and are included in Appendix G.

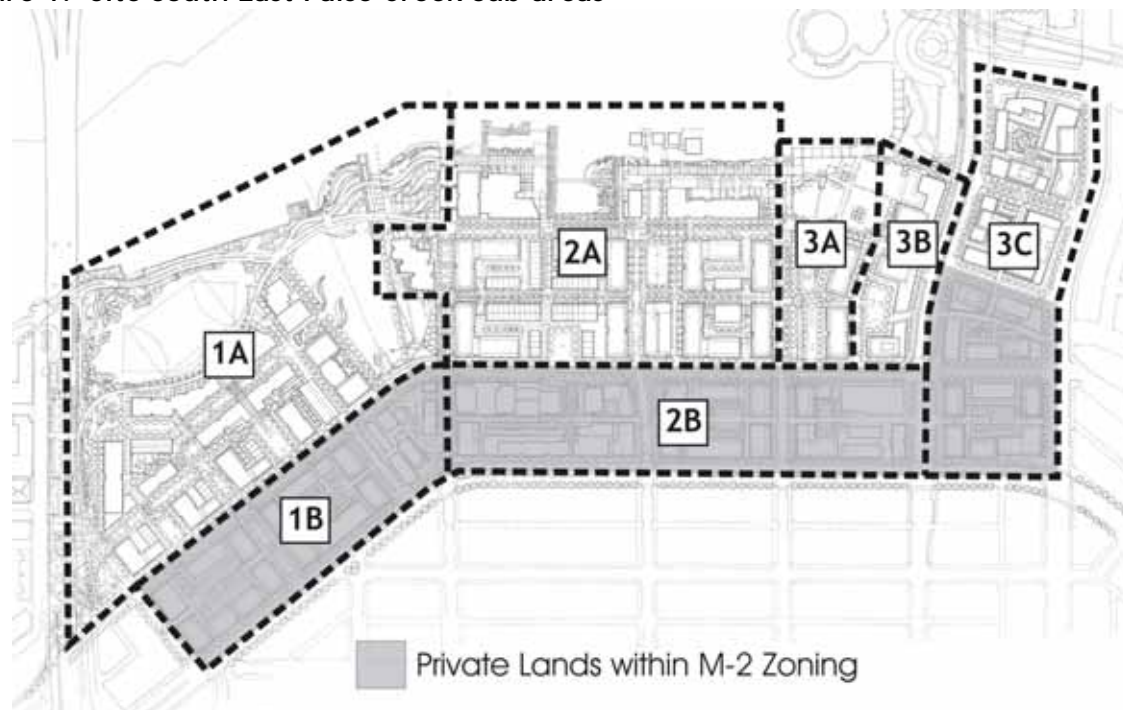
## BACKGROUND

The South East False Creek area is currently occupied by a variety of industrial uses including warehousing, manufacturing, auto repair shops and wholesalers. A number of sites are vacant or underutilized.

The future of South East False Creek is envisioned as a predominantly high density residential neighbourhood intended to move significantly towards more sustainable development practices and in doing so, provide a learning experience which can be applied across the city. The SEFC ODP provides the framework to create a complete community where goods and services are within walking distance and housing linked by transit to nearby jobs. This is to be achieved incrementally by way of site-specific CD-1 rezonings.

Out of the 80 acres covered by the SEFC ODP, approximately 30 acres are in private ownership. Sub-areas 1B, 2B and the M-2 portion of 3C are shown in grey on the map below.

Figure 1: Site South East False Creek Sub-areas



Most of the owners of these properties have been involved in the SEFC planning process since the outset leading to some participating in a coordinated cost recovery process to deal with CD-1 rezonings for private properties within the SEFC ODP. The subject site was included in this process.

The level of community involvement in the development of the SEFC ODP has been extensive, and as part of the coordinated cost recovery process for private land rezonings two well attended open houses were held, where this application was largely supported by the public. The application has also been reviewed by the Urban Design Panel, which voted 7-1 in support. The detailed Public and Design Panel commentary are included in Appendix D.

## DISCUSSION

### 1. Site:

The proposed development consists of a single parcel which is currently zoned M-2. The parcel is located in a former industrial area which was designated by Council as a “let go” area to allow for the creation of a model sustainable community.

The site is located on the southwest corner of West 1<sup>st</sup> Avenue and Crowe Street consisting of approximately 248 ft. of frontage on 1<sup>st</sup> Avenue and 122 ft. on Crowe Street. The site is currently occupied by surface parking.

Figure 2: Site and Surround Zoning



## 2. Context:

The South East False Creek area is currently occupied by a variety of industrial uses including warehousing, manufacturing, auto repair shops and wholesalers. A number of sites are vacant or underutilized. The parcel included in this rezoning application is currently being used for surface parking.

1<sup>st</sup> Avenue forms the boundary between the private and city-owned lands and is to be redesigned to accommodate the downtown Streetcar. Two blocks to the west of the subject site is the future 2<sup>nd</sup> Avenue Station for the Canada Line rapid transit system. Also to the west is the Cambie Bridge, under which the SEFC ODP calls for an assortment of outdoor, covered recreational facilities. Three blocks to the east is Manitoba Street, which has been identified as the commercial “high” street which will be the focus for the emerging community. To the south, 2<sup>nd</sup> Avenue forms the boundary of the SEFC ODP area and will continue to serve as an arterial route to relieve vehicular traffic along 1st Avenue. There is a 20-foot wide lane that serves development between 1st and 2nd Avenues.

## 3. Use:

The proposed rezoning calls for residential uses only, which includes dwelling units and associated amenity space. The total number of units will be 105, including 16 townhouses. Staff supports the proposed land uses as they are consistent with the mix of uses that were contemplated in the South East False Creek ODP.

## 4. Density:

The proposed total density of 3.5 FSR is consistent with the SEFC ODP. The SEFC ODP allocates 81 655 m<sup>2</sup> residential floor area for sub-area 1B. This equates to 3.5 FSR for each

individual development site. The total proposed floor area is 10 770 m<sup>2</sup> (115,925 sq. ft.), which includes the uses described above as well as FSR exclusions (services, storage, balconies). Total residential floor area is 9 818 m<sup>2</sup> (105,678 sq. ft.).

To facilitate the preservation and restoration of heritage resources throughout SEFC, the purchase and allocation of up to 10 percent additional heritage density from donor sites within South East False Creek may be considered on this site subject to urban design assessment. Preliminary urban design evaluation suggests that additional floor space may be accommodated within this development.

#### 5. Form of Development:

(Note Plans: Appendix G) The SEFC ODP provides clear direction for built form. The ODP form intends to create a lower, rectilinear form (mid-rise rather than tower up to 125 ft. in height) recalling the industrial character in this area. Blocks are book-ended with these mid-rise forms with lower mid-block buildings of 3 - 5 storeys in between. In this proposal, the height of the mid-rise building proposed is 13 storeys, forming the higher massing on the corner. The mid-block massing is 3 storeys and provides individual townhouse frontage on 1<sup>st</sup> Avenue.

The proposed form of development generally follows the ODP in use, form and density. The mid-rise provides a strong form at the end of the block. However, at the south-west corner of the mid-rise, the form extends to the west which presents an extra-wide massing on the south façade adjacent to the proposed mid-rise across the lane to the south. This can be improved by re-massing the mid-rise to minimize the width of the south façade.

The proposal differs from the SEFC ODP by proposing a pedestrian walkway between the corner mid-rise and the mid-block forms for use primarily by the development, as opposed to the mid-block public pedestrian link illustrated in Figure 12 of the SEFC ODP. The walkway will provide a visual link which carries through both the subject development and the proposed development to the south allowing views from 2<sup>nd</sup> Avenue into the neighbourhood to 1<sup>st</sup> Avenue. Staff support this approach considering that this is a regular length block and does not need an additional public pedestrian link.

The height of the mid-rise is proposed at 38.1 m. This building is shown in Figure 10 of the ODP as having 12 storeys. For all the rezoning applications, staff have utilized a 3.05 m (10 ft.) floor-to-floor multiplier to establish the optimum heights that the ODP illustrative plan represents. Based on this formula the optimum height for this building equates to 38 m. The applicant has chosen to reduce the floor-to-floor height to achieve a total of 13 storeys, while still fitting within the optimum height of 38m. Staff support this and consider that it meets the intent of the ODP.

The Urban Design Panel supported the application (see minutes in Appendix D).

#### 6. Parking, Loading, and Circulation:

The applicant proposes 149 vehicle parking spaces. Access will be from an entrance off the lane at the western property line. This location will provide an opportunity to share the ramp with a future development to the west reducing the number of vehicle ramps off the lane. 128 bicycle parking spaces will be provided within the parking garage.

Staff supports the parking and loading provisions which generally are consistent with the parking standards that are outlined in the SEFC Green Building Strategy (Appendix E). The parking and loading provisions outlined in the SEFC Green Building Strategy are intended to lead the City in achieving its sustainable transportation objectives while addressing basic parking demands. Amendments to the Parking By-law based on these standards are recommended to Council concurrently with the first SEFC CD-1 rezoning for a site at 311 West 2nd Avenue, and if adopted, will provide regulations for this and all other sites within SEFC.

The laneways between 1<sup>st</sup> and 2<sup>nd</sup> Avenue will continue to function as important utility corridors servicing infrastructure and utilities. In addition, lanes are intended to be more walkable while allowing for standard vehicle access and manoeuvring. The proposal includes specialty paving and bench seating at the lane edge where the walkways occur.

The 6.1 m (20 ft.) commercial lane servicing this block currently has major above grade utilities, including several large utility 'H' poles supporting electrical transformers. There will be a requirement for each development to pay a proportional share of the cost of undergrounding of these utilities and the public realm enhancement as either part of a local improvement process or other suitable arrangements. The improvements to the lane between 1st and 2nd Avenue are to be designed according to the SEFC Public Realm Plan.

#### 7. Sustainable Transportation Strategies:

There will be significant improvements to the transportation network within SEFC which will be designed to accommodate all forms of transportation with particular priority on more sustainable modes to encourage walking, cycling and transit. Details of the sustainable transportation strategies are outlined in Appendix D.

#### 8. Environmental Sustainability:

Environmental sustainability is a key objective of the SEFC Official Development Plan. City Council approved the Draft SEFC Green Building Strategy (GBS) on July 8, 2004 which sets out a minimum baseline of environmental performance in all facets of building design and construction. The SEFC Green Building Strategy is an evolving document which is intended to incorporate the most recent best practices. The current version of the SEFC Green Building Strategy is detailed in Appendix E. As part of the SEFC GBS, all new development within the SEFC Private Lands is required to meet LEED™ Silver equivalency (with a target of 36 points). New development is to comply with the mandatory requirements for Energy Performance, Water Conservation, Parking and Loading and Storm Water Management. In addition, the SEFC Green Building Strategy identifies benchmarks for achieving LEED™ Silver equivalency.

Sustainability is a core concept of the proposed development, and an integrated approach was taken in the design and development of the application. The applicant has submitted a LEED™ scorecard indicating that they intend to achieve 36 points which meets LEED™ Silver equivalency consistent with the objectives of the SEFC Green Building Strategy. More details on this application's sustainability strategy are provided in Appendix F. The proposal incorporates the following approaches to sustainability:

Key features include:

- reduced energy consumption and greenhouse gas emissions;
- stormwater management;
- green roofs (includes useable, intensive roofs and inaccessible, extensive roofs);
- water efficient irrigation and drought resistant planting;
- reduced use of potable water for irrigation;
- water use reduction for all household fixtures;
- urban agriculture;
- construction waste management; and
- three-stream waste management.

The applicant's detailed approaches to sustainability are displayed in Appendix F.

#### 9. Universal Design:

The ODP states that development in the South East False Creek area is subject to the principles for "universal design" to ensure that maximum access is provided for all persons with varying levels of mobility and sensory ability, noting that alternative solutions may be necessary for differing types of development.

Rezoning applicants have been working cooperatively with City staff to address these objectives through reference to "The Safer Home Certification Criteria". A copy of "The Safer Home Certification Criteria" which has been attached in Appendix F lists the items which the applicant intends to achieve through future stages of design development. In addition, staff will ensure that the transportation network and systems in South East False Creek are designed to address the City's recent "measure up" initiative for inclusiveness and accessibility for all members of society.

Council has supported the principle of enhanced accessibility and approved amendments to the Vancouver Building By-Law (VBBL) aimed at improving access to residential units. Apart from a few outstanding items, the VBBL regulates many of the items identified in "The Safer Home Certification Criteria". City staff have conducted a preliminary review of these outstanding items and consider them to be feasible from a cost and building safety perspective. However, compliance with aspects of "The Safer Home Certification Criteria" which are not regulated through the VBBL will be addressed voluntarily by the developer.

#### 10. Public Input:

A rezoning information sign was installed on the site on April 13, 2006 and a notification letter dated April 19, 2006 was mailed to the surrounding property owners in the area including residents of City Gate.

Approximately 150 attended two public open houses held on April 29, 2006 and May 1, 2006. A total of 49 people signed in at the two Public Open Houses and four comment forms were submitted, the majority of them generally supportive of the application.

The application has generated very little comment from surrounding property owners and other citizens, and no written communication has been sent to City staff.



## PUBLIC BENEFITS

Council has a long-standing policy in regard to financing growth that ensures that new development contributes to the cost of growth and its impacts.

On March 1, 2005, City Council approved the ODP that included a comprehensive public infrastructure and amenity package to serve the South East False Creek area. This includes parks, public realm and infrastructure improvements, childcare, community centre, library, and affordable housing. At that time, a Financial Plan and Strategy report was brought forward which outlined in a preliminary way the funding strategies to deliver the Plan through sharing of costs between the PEF and private lands. Staff was instructed to report back with further details in the context of the CD-1 rezonings.

Staff have reported to Council on a comprehensive Public Benefits Strategy which outlined the proposed funding and delivery of new public amenities and infrastructure in South East False Creek. The Strategy aims to ensure that new development pays a fair share towards public benefits to meet the demands created by the new population.

The approach includes the use of the city-wide DCL, and area-specific DCL. In addition, it outlines objectives for community amenity contributions (CACs).

Staff are currently in discussions with the applicant regarding a possible Community Amenity Contribution (CAC). The proposed contributions will be reported to Council prior to the Public Hearing for this rezoning application.

## FINANCIAL IMPLICATIONS

Approval of the report recommendations will have no financial implications with respect to the City's operating expenditures, fees, or staffing.

## CONCLUSION

Staff assessment of this application concluded that the proposed residential use, density, and height are supported. The form is supportable on the condition that the extra-wide massing on the south façade is improved by re-massing the mid-rise to minimize its width. The Director of Current Planning recommends that the application be referred to a public hearing, together with a draft CD-1 By-law generally as shown in Appendix A and a recommendation of the Director of Current Planning that it be approved, subject to the conditions of approval listed in Appendix B, including approval in principle of the form of development as shown in revised plans included here as Appendix G.

\* \* \* \* \*

360 West 1<sup>st</sup> Avenue  
DRAFT CD-1 BY-LAW PROVISIONS

Note: A By-law will be prepared generally in accordance with the provisions listed below, subject to change and refinement prior to posting.

1. Definitions

Words in this By-law shall have the meaning assigned to them in the Zoning and Development By-law, except as provided below:

“Base Surface” means base surface calculated from the official established building grades.

2. Uses

2.1 The description of the area shown within the heavy black outline on Schedule A is CD-1 (\*\*\*) .

2.2 Subject to approval by Council of the form of development, to all conditions, guidelines and policies adopted by Council, and to the conditions set out in this By-law or in a development permit, the only uses permitted within CD-1 (\*\*\*) and the only uses for which the Director of Planning or Development Permit Board will issue development permits are:

- (a) Dwelling Uses, limited to Multiple Dwelling;
- (b) Institutional Uses, limited to Child Day Care Facility, Social Service Centre, and Special Needs Residential Facility;
- (c) Live-Work Use;
- (d) Manufacturing Uses, limited to Bakery Products Manufacturing, Batteries Manufacturing, Clothing Manufacturing, Dairy Products Manufacturing, Electrical Products or Appliances Manufacturing, Food or Beverage Products Manufacturing - Class B, Furniture or Fixtures Manufacturing, Ice Manufacturing, Jewellery Manufacturing, Leather Products Manufacturing, Miscellaneous Products Manufacturing - Class B, Non-metallic Mineral Products Manufacturing - Class B, Plastic Products Manufacturing, Printing or Publishing, Rubber Products Manufacturing, Shoes or Boots Manufacturing, Software Manufacturing, Textiles or Knit Goods Manufacturing, Tobacco Products Manufacturing, and Wood Products Manufacturing - Class B;
- (e) Office Uses;
- (f) Parking Uses;
- (g) Retail Uses, excluding Gasoline Station - Full Service, Gasoline Station - Split Island, Liquor Store and Vehicle Dealer;

- (h) Service Uses, limited to Barber Shop or Beauty Salon, Bed and Breakfast Accommodation, Photofinishing or Photography Laboratory, Photofinishing or Photography Studio, Print Shop, Restaurant - Class 1, School - Arts or Self-Improvement, and School - Business;
- (i) Accessory Uses customarily ancillary to the above uses; and
- (j) Interim Uses not listed in this section 3, and accessory uses customarily ancillary to them, provided that:
  - (i) the Director of Planning or Development Permit Board considers that the interim use will be compatible with and not adversely affect adjacent development that either exists or that this By-law permits;
  - (ii) the Director of Planning or Development Permit Board is satisfied that the use can be easily removed and is of low intensity or low in capital investment;
  - (iii) the Director of Planning or Development Permit Board is satisfied that there is no risk to the public from contaminated soils either on or adjacent to the subject site; and
  - (iv) development permits are limited in time to periods not exceeding three years;

### 3. Conditions of Use

3.1 Dwelling units are in an "intermediate zone" as defined in the Noise Control By-law, and, as a result, are subject to the noise levels permitted in industrial and downtown districts.

3.2 The design and lay-out of at least 25% of the dwelling units must:

- (a) be suitable for family housing;
- (b) include two or more bedrooms; and
- (c) comply with Council's "High Density Housing for Families with Children Guidelines".

3.3 All uses except dwelling uses must have direct access to grade.

3.4 Any development permit issued for live-work use must stipulate as permitted uses:

- (a) dwelling unit;
- (b) general office, health care office, barber shop or beauty salon, photofinishing or photography studio, or artist studio - class A; and
- (c) dwelling unit combined with any use set out in subsection (b).

#### 4. Floor Area and Density

4.1 The floor area for all permitted uses must not exceed 3.5 FSR. For the purpose of computing floor space ratio, the site is deemed to be 2 805.7 m<sup>2</sup>, being the site size at time of application for rezoning, prior to any dedications.

4.2 Despite section 4.1, the Development Permit Board may permit an increase in floor space ratio where the increase results from a transfer of heritage floor area from a designated heritage property in SEFC in relation to which the increase was received as compensation for the reduction in market value at the time of designation, to a maximum of 10% over the total permitted floor space ratio.

4.3 Computation of floor space ratio must include all floors having a minimum ceiling height of 1.2 m, including earthen floor, both above and below ground level, to be measured to the extreme outer limits of the building.

4.4 Computation of floor area must exclude:

- (a) open residential balconies or sun decks and any other appurtenances which, in the opinion of the Director of Planning, are similar to the foregoing, provided that the total area of all exclusions does not exceed 8 percent of the residential floor area being provided;
- (b) patios and roof gardens, provided that the Director of Planning first approves the design of sunroofs and walls;
- (c) the floors or portions of floors used for off-street parking and loading, the taking on or discharging of passengers, bicycle storage, heating and mechanical equipment, or uses which, in the opinion of the Director of Planning, are similar to the foregoing, that, for each area, is at or below the base surface, provided that the maximum exclusion for a parking space shall not exceed 7.3 m in length;
- (d) undeveloped floor area located above the highest storey or half-storey with a ceiling height of less than 1.2 m and to which there is no permanent means of access other than a hatch;
- (e) residential storage space above or below base surface, except that if the residential storage space above base surface exceeds 3.7 m<sup>2</sup> per dwelling unit, there will be no exclusion for any of the residential storage space above base surface for that unit;
- (f) amenity areas, including day care facilities, recreation facilities, and meeting rooms, provided that the total area excluded does not exceed 1 000 m<sup>2</sup>; and
- (g) where a Building Envelope Professional as defined in the Building By-law has recommended exterior walls greater than 152 mm in thickness, the area of the walls exceeding 152 mm, but to a maximum exclusion of 152 mm thickness.

4.5 Computation of area may exclude, at the discretion of the Director of Planning or Development Permit Board:

- (a) enclosed residential balconies, provided that the Director of Planning first considers all applicable policies and guidelines adopted by Council and approves the design of any balcony enclosure subject to the following:
  - (i) the total area of all open and enclosed balcony or sundeck exclusions does not exceed 8 percent of the residential floor area being provided; and
  - (ii) no more than 50 percent of the excluded balcony floor area may be enclosed;
- (b) windows recessed into the building face to a maximum depth of 160 mm, except that the Director of Planning may allow a greater depth in cases where it improves building character;
- (c) unenclosed outdoor areas at grade level underneath building overhangs, provided that the Director of Planning first considers all applicable policies and guidelines adopted by Council and approves the design of any overhangs, and provided that the total area of all overhang exclusions does not exceed 1 percent of the residential floor area being provided;
- (d) open to below spaces or double height volumes can be excluded on the second storey units where the first floor is located within 2 m of grade to a maximum of 15 percent of the floor area of the first floor of that unit for residential and live/work units;
- (e) features generally on the westerly facades of buildings, to reduce solar gain which maybe in the form of french balconies and horizontal extensions; and
- (f) trellises and other garden structures which support the use of intensive green roofs and or urban agriculture.

4.6 The use of floor space excluded under section 4.4 or 4.5 must not include any purpose other than that which justified the exclusion.

## 5. Height

5.1 The maximum building height, measured above base surface, must not exceed 38 m (124.7 ft.).

5.2 A mechanical penthouse, trellises and other garden structures which support the use of intensive green roofs and or urban agriculture are to be excluded from the maximum building height as provided by Section 10.11 of the Zoning and Development By-law.

## 6. Setbacks

6.1 Minimum building setback from the rear property line of 1.5 m.

## 7. Horizontal Angle of Daylight

7.1 All habitable rooms should have at least 1 window on an exterior wall which complies with the following:

- (a) the window shall be located so that a plane or planes extending from the window and formed by an angle of 50 degrees, or 2 angles with a sum of 70 degrees, shall be unobstructed over a distance of 80 feet; and
- (b) the plane or planes shall be measured horizontally from the centre of the bottom of the window.

7.2 The Development Permit Board or the Director of Planning, as the case may be, may relax the horizontal angle of daylight requirement of section 6.1 provided he first considers all the applicable policies and guidelines adopted by Council and providing that a minimum distance of 3.7 m of unobstructed view is maintained.

7.3 For the purpose of calculation of the horizontal angle of daylight, the following are considered as obstructions:

- (a) the largest building permitted under the zoning on any adjoining sites; and
- (b) part of the same building including permitted projections.

7.4 For the purpose of Section 7.1, the following should not be considered as habitable rooms:

- (a) bathrooms; and
- (b) kitchens, unless the floor area is greater than 10 percent of the total floor area of the dwelling unit, or 100 sq. ft., whichever is the greater.

## 8. Parking, Loading and Bicycle Parking

8.1 Off-street parking, loading and bicycle parking shall be provided, developed and maintained in accordance with the applicable provisions of the Parking By-law, including those for relaxation and exemptions.

## 9. Acoustics

9.1 All development permit applications require evidence in the form of a report and recommendations prepared by a person trained in acoustics and current techniques of noise measurement, demonstrating that the noise levels in those portions of dwelling units listed below do not exceed the noise level set opposite such portions. For the purposes of this section, the noise level is the A-weighted 24-hour equivalent ( $L_{eq}$ ) sound level and is defined simply as noise level in decibels.

Portions of dwelling units	Noise levels (Decibels)
Bedrooms	35
Living, dining, recreation rooms	40
Kitchen, bathrooms, hallways	45

360 West 1<sup>st</sup> Avenue  
PROPOSED CONDITIONS OF APPROVAL

Note: These are draft conditions which are subject to change and refinement by staff prior to the finalization of the agenda for the public hearing to the satisfaction of the Director of Legal Services.

FORM OF DEVELOPMENT

- (a) THAT the proposed form of development be approved by Council in principle, generally as prepared by Hancock Bruckner Architects, and stamped "Received Planning Department, March 16, 2006", provided that the Director of Planning or the Development Permit Board, as the case may be, may allow minor alterations to this form of development when approving the detailed scheme of development as outlined in (b) below.
- (b) THAT, prior to final approval by Council of the form of development, the applicant shall obtain approval of a development application by the Director of Planning, or Development Permit Board, who shall consider the following conditions:

Design Development

- (i) design development to the mid-rise form to improve the interface with the proposed mid-rise to the south across the lane;

Note to Applicant: This can be achieved by reducing the width of the southern portion of the mid-rise.

- (ii) design development to provide improved daylight access and privacy to residential units;

Note to Applicant: The objective is to maintain approximately 24.4 m separation between main living spaces facing each other above the 2<sup>nd</sup> floor across Crowe Street. Primary living spaces for units adjacent to the lane are to be oriented east or west.

- (iii) design development to provide improved interface between the ground level open space on site and the public lane;

Note to Applicant: A fully public setback is to be provided adjacent to the lane including walking area with specialty paving, bench seating, lighting and landscaping. The remainder of the open space should transition from public, semi-private to private open spaces striving not to use fencing or gating.

- (iv) provide high quality, durable architectural materials and detailing including rain protection overhangs;
- (v) provision of 50 percent roof coverage to be 'green roofs'. Intensive 'green roofs' and gardening uses are encouraged;



### Crime Prevention Through Environmental Design (CPTED)

- (vi) design development to take into consideration the principles of CPTED, having particular regard for reducing opportunities for;
- theft in the underground parking;
  - residential break and enter;
  - mail theft;
  - vandalism such as graffiti.

### Landscape Design

(vii) Public Realm Treatment:

- provision of semi-public and semi-private spaces that are consistent with the South East False Creek Public Realm Plan. Aspects to consider include special paving, lighting, planting, driveway crossings, pedestrian entrances, walkways, permanent site furniture, weather protection, garbage storage, recycling and loading facilities;

(viii) Open Space & Landscape Treatment:

- provision at time of development permit application of a detailed rationale outlining intent for the specific programming of individual outdoor spaces and landscape structures, including overall use, pedestrian capacity, storage (e.g., compost, gardening tools), access, security, sustainable design requirements (planting, water, waste, soil, habitat);
- provision of continuous soil trough to establish climbing plants on walls and structures;
- provision of durable landscape materials and structures such as plant specific soils, durable planters, wall trellis structures;

(ix) Technical:

- Grades, retaining walls, walkways and structural elements, such as underground parking, to be designed to provide maximum plant growing depth (exceed BCLNA Landscape Standard). Reconfigure underground parking design to increase soil depth for planting. Planted areas adjacent to structures and on slab to contain continuous soil volumes. Underground parking to angle downward at the corner (3 ft. across and 4 ft. down) to increase planting depth for inner boulevard trees and planters;
- provision of large scale partial plans, elevations and sections illustrating the detailed treatment of the public realm interface at the streets and lanes; including planters, retaining walls, stairs, planting, soil depth, underground structures, semi-private patios and privacy screens;
- provision at time of development permit application of a lighting plan;
- provision of hose bibs for all patios that cannot be serviced using at grade non-potable water;

- 
- provision at time of development permit application of a full Landscape Plan illustrating proposed plant materials (common and botanical names), sizes and quantities; notation of existing trees to be retained, paving, walls, fences, light fixtures and other landscape elements, including site grading. Proposed plant materials are to be clearly illustrated on the Landscape Plan. The Landscape Plan is to be at 1:100 (1/8" = 1'-0");

(x) Trees:

- protect lane edge trees and planting from vehicular impacts by providing metal tree surrounds, bollards or low curbs as needed;

**Bicycle Parking**

- (xi) design development to provide bicycle parking spaces meeting Parking By-law requirements;

**Universal Design**

- (xii) Applicant to work with a Universal Design consultant to achieve the objectives for Universal Design in reference to "The Safer Home Certification Criteria" as outlined in Appendix F;

**Environmental Sustainability**

- (xiii) applicant to work with staff through best efforts, to achieve the SEFC green building strategy and meet a minimum LEED™ Silver Canada Certified standard (with a target of 36 points), including City of Vancouver prerequisites (with full LEED™ registration and documentation) or equivalency;

**Energy**

- (xiv) provide energy efficient design and modelling results to meet or exceed the CBIP (Commercial Buildings Incentive Program) standard for energy efficiency;
- (xv) provide full building design to meet ASHRAE 90.1 2004 in its entirety (with the exception of outright energy efficiency, which is covered under provision "xiii", above) including:
- improved envelope options such as "continuous insulation", increased r-values, and thermal breaks for balconies and slab extensions
  - energy efficient lighting
  - air exchange effectiveness
  - full best practice building systems commissioning
  - daylighting
  - provision of vestibules where necessary;

**Note to Applicant:** A letter from a professional engineer trained in building commissioning outlining provision for this service is to be submitted at the time of application for Building Permit.

- (xvi) provide compatible, energy efficient design and details of the heating and domestic hot water for the referenced connection to the “district heating system” proposed for the area;
- (xvii) provide vertical glazing to a maximum of 40% or provide additional thermal measure such as low-e glass to compensate for the additional heat loss;
- (xviii) provide roughed-in capacity for future individual metering for energy and water supplies;
- (xix) provide climate zone control for residential and live-work units;
- (xx) provision of fireplaces listed as a heating appliance with a minimum combustion efficiency to meet or exceed ASHRAE/IESNA Standard 90.1 - 2001 heating appliance standards. No continuous pilot lights; interrupted power ignition is preferred.

**Note to Applicant:** A letter from a professional engineer outlining provision for these features is to be submitted at the time of application for Building Permit.

#### Stormwater Management and Green Roofs

- (xxi) provision of a green roof (including useable, intensive roof and/or inaccessible, extensive roof) on principle building roofs;
- (xxii) provision of effective impervious area of no more than 60 percent of total site area with 30 percent of useable intensive green roof area in soft landscape (this includes drop off areas, walkways rooftops and plazas);
- (xxiii) provision of best current practices for managing water conservation including high efficiency irrigation, aspects of xeriscaping including drought-tolerant plant selection and mulching;
- (xxiv) design development to reduce the use of potable water for irrigation through the provision of a stormwater retention system (i.e., cistern, on-site pond, infiltration galleries, etc.);

**Note to Applicant:** Provide a stormwater retention system separated from the potable water system (dual system) for the irrigation of the ground level semi-private open spaces and public realm landscaping is to be sized for the summer drought periods. In addition, water storage for the roof top shared open space is to be considered. All hose bibs are to be served with potable water unless clearly indicated otherwise. This system is to be designed in coordination with Building - Processing.

- (xxv) provide details and arrangements for connection and flow rates to meet the SEFC Stormwater Management Plan (see engineering condition (c) iv)

- 
- (xxvi) provision of green roof design to meet structural load, soil depths, and access & egress conditions necessary for an intensive green roof/urban agriculture (regardless of initial roof design - intensive or extensive);

**Note to Applicant:** A letter from a professional engineer outlining provision for these features is to be submitted at the time of application for Building Permit.

#### In-Building Water Efficiency

- (xxvii) provide low water use plumbing fixtures at or below 1.8gpm for faucets and showerheads and 6L/3L dual flush toilets;

**Note to Applicant:** A letter from a professional engineer outlining provision for these features is to be submitted at the time of application for Building Permit.

#### Urban Agriculture

- (xxviii) design development to incorporate the objectives of urban agriculture including provision of garden plots of an adequate size and number to be productive and viable. The total amount of gardening spaces to be appropriate for the size of development. Locate gardening plots to maximize sunlight and respond to programming requirements such as providing an area for composting, non-potable water/irrigation systems, and suitable soil volumes;

#### Building Durability

- (xxix) provide high quality, durable architectural materials and detailing including rain protection overhangs to meet or exceed CSA Guidelines on Durability in Buildings;

#### Waste Management

- (xxx) provide a Construction and Demolition Waste Management Plan at the time of application for Building Permit ensuring that a minimum of 75 percent landfill diversion through the construction process;

#### AGREEMENTS

- (c) THAT, prior to enactment of the CD-1 By-law, at no cost to the City and on terms and conditions satisfactory to the Director of Legal Services, the registered owner shall:

#### ENGINEERING

Make arrangements to the satisfaction of the General Manager of Engineering Services and the Director of Legal Services for the following:

- i) Consolidation of lots 4,5,6,7 and 8, Blk. 3, DL 302, Plan 5832 prior to any development permit being issued for the site.

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- ii) Dedication of the north 0.8m of the site for road purposes. (The plans are to be amended to reflect dedication not a Statutory Right of Way as currently shown.)
  - iii) Upgrading or extension of the storm sewer system to meet the SEFC stormwater management plan. (Note: the application does not currently contain enough detail to determine this, further clarification is required).
  - iv) Provision of new sidewalks, curb, pavement, concrete lane crossings, lamp standards, street trees and street furniture adjacent the site in keeping with the final SEFC Public Realm Plan.
  - v) Improvements to the lane south of 1<sup>st</sup> Ave from Crowe Street to the west property line of the site in keeping with the final SEFC Public Realm Plan.
  - vi) Release of indemnity agreement 30778M prior to occupancy of the building.
  - vii) Undergrounding of all *existing* and *new* utility services from the closest existing suitable service point. All services, and in particular electrical transformers to accommodate a primary service, must be located on private property. The development site is not to rely on secondary voltage from the existing overhead network. Any alterations to the existing underground / overhead utility network to accommodate the development will require review and approval by the Utilities Management Branch. Early contact with the Utilities Management Branch is encouraged.
  - viii) Provision of 3 streams of waste removal for the development (regular garbage, recyclable materials and organics). The development site is to provide adequate space to accommodate 3 streams of waste removal include fully outfitted areas that can be made active upon implementation of organics collection system.
  - ix) Building design is to include provision for connections to and be compatible with the “district heating system” proposed for the area.
  - x) Provide a shared vehicle ramp with knock-out panel for future access to underground parking and services for adjacent site.
  - xi) make arrangements to the satisfaction of the General Manager of Engineering Services, in consultation with the Director of Planning, for:
    - (A) the provision, operation, and maintenance of one cooperative vehicle and the provision and maintenance of one parking space for use exclusively by such cooperative vehicle, such parking space is to be in addition to the minimum parking spaces required by the Parking bylaw, and;
    - (B) designation of one visitor or surplus parking space which is publicly accessible for future use by a cooperative vehicle.

## SOILS

- xii) the property owner shall, as required by the Manager of Environmental Protection and the Director of Legal Services in their discretion, do all things and/or enter into such agreements deemed necessary to fulfill the requirements of Section 571(B) of the Vancouver Charter.
- xiii) execute a Section 219 Covenant, as required by the Manager of Environmental Protection and the Director of Legal Services in their discretion, that there will be no occupancy of any buildings or improvements on the site constructed

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pursuant to this rezoning, until a Certificate of Compliance have been provided to the City by the Ministry of Water, Land and Air Protection.

#### OLYMPIC SECURITY REQUIREMENTS

- xiv) Prior to enactment of the CD-1 By-law, the registered owner of the Lands (the "Owner") shall:
- enter into a legal agreement, on terms and conditions acceptable to the City's Director of Legal Services and the City's General Manager of Olympic Operations (the "Security Agreement") which shall, inter alia, provide for the following:
    - (A) the Owner may make application for all applicable permits to construct and occupy the improvements permitted pursuant to the Rezoning (the "Improvements") at any time and may construct and occupy the Improvements in accordance with any development permits, building permits and occupancy permits issued in respect of the Improvements. However, if all construction of the Improvements is not fully completed on or before January 12, 2010, the Owner shall, during the period between January 12, 2010 and March 12, 2010:
      - i. cease, or cause to cease, all servicing and/or construction activities on the Lands; and
      - ii. not access or use the Lands for any purpose other than for maintenance of and security for the Improvements. The Owner and the Owner's personnel shall comply with any security protocols established by the City during such access or use;
    - (B) the Owner shall, during the period January 12, 2010 through March 12, 2010, permit the City and any permittee or licensee of the City including, without limitation, VANOC, access to the Lands and any buildings and improvements located thereon, to erect any fences, security barriers, screens, drapes or other security or pageantry materials or equipment on the Lands deemed necessary by the City or any permittee or licensee for the purpose of facilitating the security and decoration of the Vancouver Olympic Athlete's Village (the "Security Fencing"). The Security Fencing will be at the cost of the City, or its permittee or licensee, as the case may be, and shall be at no cost to the Owner;
    - (C) the Owner acknowledges and agrees that vehicular and/or pedestrian access to the Lands from Quebec Street may be restricted or unavailable for a period of time before, during and after the 2010 Olympic Winter Games, at the sole discretion of the City Engineer; and
    - (D) the Owner shall release the City and its officials, officers, employees, contractors and agents ("City Personnel") from any costs, damages (including special, indirect and consequential damages), injuries or

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liabilities of any kind suffered or incurred by the Owner and/or the Owner's officers, employees, contractors and agents ("Owner's Personnel") which arise due to the use or occupation of the Lands by the City and/or City Personnel and/or any restrictions placed on the Owner's use, occupation and development of the Lands, as set out in the Security Agreement. The Owner shall indemnify and hold harmless the City and City Personnel for any costs, damages (including special, indirect and consequential damages), injuries or liabilities of any kind suffered or incurred by the City or City Personnel due to the breach of any term or condition of the Security Agreement by the Owner and/or the Owner's Personnel;

- (E) the Owner shall release the City and its officials, officers, employees, contractors and agents ("City Personnel") from any costs, damages (including special, indirect and consequential damages), injuries or liabilities of any kind suffered or incurred by the Owner and/or the Owner's officers, employees, contractors and agents ("Owner's Personnel") which arise due to the use or occupation of the Lands by the City and/or City Personnel and/or any restrictions placed on the Owner's use, occupation and development of the Lands, as set out in the Security Agreement. The Owner shall indemnify and hold harmless the City and City Personnel for any costs, damages (including special, indirect and consequential damages), injuries or liabilities of any kind suffered or incurred by the City or City Personnel due to the breach of any term or condition of the Security Agreement by the Owner and/or the Owner's Personnel;

the Security Agreement shall be fully registered in the applicable Land Title Office, to the satisfaction of the Director of Legal Services, prior to the enactment of the CD-1 By-law.

Note: Where the Director of Legal Services deems appropriate, the preceding agreements are to be drawn, not only as personal covenants of the property owners, but also as Covenants pursuant to Section 219 of the Land Title Act.

The preceding agreements are to be registered in the appropriate Land Title Office, with priority over such other liens, charges and encumbrances affecting the subject site as is considered advisable by the Director of Legal Services, and otherwise to the satisfaction of the Director of Legal Services prior to enactment of the by-law; provided however the Director of Legal Services may, in her sole discretion and on terms she considers advisable, accept tendering of the preceding agreements for registration in the appropriate Land Title Office, to the satisfaction of the Director of Legal Services, prior to enactment of the by-law.

The preceding agreements shall provide security to the City including indemnities, warranties, equitable charges, letters of credit and withholding of permits, as deemed necessary by and in a form satisfactory to the Director of Legal Services. The timing of all required payments, if any, shall be determined by the appropriate City official having responsibility for each particular agreement, who may consult other City officials and City Council.

360 West 1<sup>st</sup> Avenue  
DRAFT CONSEQUENTIAL AMMENDMENTS

DRAFT AMENDMENTS TO THE SIGN BY-LAW NO. 6510

Amend Schedule E (Comprehensive Development Areas) by adding the following:

“360 West 1<sup>st</sup> Avenue [CD-1 #] [By-law #] B (DD)”

DRAFT AMENDMENTS TO THE NOISE BY-LAW NO. 6555

Amend Schedule B (Intermediate Zone) by adding the following:

“[CD-1 #] [By-law #] 360 West 1<sup>st</sup> Avenue”.



360 West 1<sup>st</sup> Avenue  
ADDITIONAL INFORMATION

1. Integrated Site Servicing

The SEFC Project Office, staff, and a team of consultants are working to finalize the Integrated Site Servicing plans for the Olympic Village Site and 1<sup>st</sup> Avenue between Wylie Street and Ontario Street. This work includes the design and construction of utilities, roads, waterfront, a portion of Hinge Park, and the Neighbourhood Energy Utility (NEU). Some of this work has already been tendered for construction. The proposed utility and NEU work along 1<sup>st</sup> Avenue, and the development of the waterfront and a portion of Hinge Park will be important amenities for the Private Lands in the SEFC ODP area, including this site.

As reported to Council previously, the NEU is a district energy system that will provide space heating and domestic hot water to all buildings in the SEFC ODP area. The first phase of the NEU will include a central plant, underground pipes supplying hot water, and energy transfer stations to provide thermal heat to the Olympic Village and Private Lands. The central plant is expected to use sewer heat recovery as its primary base heat source. It has not yet been determined if the City of Vancouver or a private utility will own and operate the NEU.

As the NEU provides reduced energy costs and fossil fuel and electricity consumption by incorporating a renewable energy source and high efficiency equipment, it will be easier for developers to design buildings that meet the SEFC Green Building Strategy. In addition, the NEU is safer and more reliable than traditional mechanical systems and will save space in the buildings by eliminating the need for hot-water boilers.

2. Comments - Processing Centre - Building Code Specialist

The following comments are based on the preliminary drawings prepared by IBI/HB Architects dated March 16, 2006 for the proposed REZONING application. This is a preliminary review in order to identify issues which do not comply with the VBBL #8057.

- i. Building construction of the tower is required to be noncombustible.
- ii. Highrise building and VBBL 3.2.6. requirements for high buildings apply to the entire building.
- iii. \*The building is required to provide access to persons with disabilities to all common areas, storage, amenity, meeting rooms, etc.
- iv. \*The building is required to meet Enhanced Accessibility provisions.
- v. \*Additional exits may be required from storage garage where security gate is provided.
- vi. Storage garage security shall conform to 3.3.6.7.
- vii. Exit doors from dwelling units on the ground floor of the tower opening onto an exit corridor must swing in the direction of exit travel. Adequate clearance of the exit corridor must be maintained with the door in its swing.
- viii. The exit stairway serving storeys below the ground floor must be separate from the stair serving storeys above.
- ix. The height of the vehicle driveway to accessible parking stalls shall be at least 2.3 m clear.

\*Items marked with an asterisk have been identified as serious non-conforming Building By-law issues.

Written confirmation that the applicant has read and has understood the implications of the above noted comments is required and shall be submitted as part of the "prior to" response.

The applicant may wish to retain the services of a qualified Building Code consultant in case of difficulty in comprehending the comments and their potential impact on the proposal. Failure to address these issues may jeopardize the ability to obtain a Building Permit or delay the issuance of a Building Permit for the proposal.

### 3. Comments - Fire Protection Services

- a. Rezoning for 13 storey residential tower and ten 3 storey Townhouse Units with 2 levels of underground parking.
- b. This is a high building located on SW corner of Crowe St and 1st Avenue.
- c. The principal entrance to the residential tower is ~22' from Crowe St and the 10 townhouse units face 1st Avenue.
- d. At the Building Permit Application stage, the applicant will have to review the Fire Department response to these townhouse units.

### 4. Comments - Environmental Health

The Environmental Health Division has reviewed this rezoning application and provides the following comments:

- a. If a Community Care Facility (adult or child care) is proposed, plans will be submitted for approval to Community Care Facilities Licensing.
- b. The City's acoustical criteria shall form part of the Zoning By-Law, and an Acoustical Consultant's report shall be required which assess noise impacts on the site and recommends noise mitigating measures.
- c. The Noise Control By-Law requires amendment at time of enactment of Zoning By-Law to include this CD-1 or new zoning district in Schedule B.

### 5. Comments - Development Services

The following is a review of the submitted plans submitted and stamped on March 16, 2006, for the 360 West 1<sup>st</sup> Avenue Rezoning Review as based on certain pages of the existing Downtown ODP By-laws. Due to the preliminary nature of the submission, the technical check is also very preliminary. The following is a list of issues and additional information that is required to perform a technical check on this residential use application. Additional items may become an issue once more detailed plans are submitted, FSR overlays are submitted and the submitted plans are reviewed based on an Official Draft CD-1 By-law.

#### 5.1. Required Additional Information

- a. Detailed overlays (no overlays were submitted with the rezoning application. Please refer to requirements in the 'Area Calculation and Tracing Overlay Requirements' Administration Bulletins.);
- b. Complete and fully dimensioned floor plans;

- c. Clarification of the proposed amenity use located on the first floor plan; (Note: Furnishing and a clear indication of the proposed amenity use is required. If the room is used as a Multi-purpose room, it to be clearly labelled as such, etc.)
- d. Clarification if storage rooms in individual dwelling units are seeking FSR exclusions. If so, please fully dimension and ensure that it meets the requirements as indicated in the Bulk Storage Administration Bulletin.
- e. Provide detailed cross-section clearly indicating the overall clearance height of the proposed lobby area. (As per MB Rondeau, all areas that exceed in 14 ft. or higher in height would be counted twice) --- to be verified.
- f. Additional height information, other than the Floor-to-floor height, will be required to determine the overall building height.
- g. Balconies (open & enclosed) floor area can not be determined due to insufficient information provided.
- h. All setback and side yard requirements must be provided to determine if the proposal complies with the proposed CD-1 requirement.

## 5.2. Issues

- a. Verification of the proposed floor area and FSR are impossible due to un-dimensioned floor plans and the absence FSR overlays submission.
- b. Verification of the proposed balcony and amenity floor area are impossible due to un-dimensioned floor plans and the absence FSR overlays submission.
- c. Basing on the handout that MB Rondeau forwarded to us, the Floor-to-floor Height of the building is (13 storeys x 10 ft) 130 ft. maximum. The purposed, as based on sheet #RZ2.2 of the submitted plans is 122.92 ft. --- therefore, the proposed floor-to-floor height of the building is ok.
- d. Parking calculations, based on the numbers as provided by the application on the Stats page of the drawing submission on page RZ0.1, seem to be ok. Verification of the numbers must be done once detailed information is received.
- e. Parking information i.e., number of disabled, small and standard parking spaces will have to be reassessed once all dimensions are received to determine if it satisfies the minimum parking requirements.
- f. Plans do not indicate location of required loading spaces. Additional information must be provided.
- g. Insufficient numbers of Bicycle Class A & B spaces are provided (as based on the Parking By-law requirement).

## 6. Comments of the General Manager of Engineering Services

Engineering Services in a memo dated May 4, 2006 (on file), has reviewed the application and provides the following comments:

“Engineering Services has no objection to the proposed rezoning provided the following issues can be addressed prior to by-law enactment.”

## 7. Parking

Parking and loading provisions for SEFC have been designed to be functional, flexible, and sustainable. Staff believe that these provisions achieve an appropriate balance of achieving a leading edge sustainable transportation plan while still allowing developers to market their projects. Outlined below is an overview of standards proposed for SEFC which depart from the existing parking and loading standards of the Parking By-law.

*Residential Parking* - The starting point for parking standards was the level of vehicle ownership observed for dwelling units of various sizes in the surrounding precincts, namely City Gate, Brewery Creek, and False Creek South, just west of the Cambie Bridge. To ensure sustainability, i.e. prevention of excess parking provision, while allowing for developable projects, staff set the maximum permissible parking at the level observed in the surrounding areas. This would ensure that parking provision in SEFC would not support a level of vehicle ownership higher than observed nearby. At the low end of the size range, market units are to be allowed no more than one parking space, and at the high end no more than two spaces. The minimum required parking was set at a low level, as low as half a space per unit for small units and one space per unit for large units. For dwelling units in the middle of the spectrum, the requirement assumes that which Council recently adopted for transit-oriented areas of the city, such as Central Broadway, Marpole, the Canada Line Corridor and eastward to Boundary Road. To promote livability for residents and guests, a distinct visitor component is required, which may be allowed at centralized locations at another site if preferred. In unprecedented support of carsharing, co-operative vehicles and spaces are required [for sites with 50 or more dwelling units], and among visitor parking there must be spaces identified which would host additional co-op vehicles should parking for these become needed in future. To allow flexibility to drop beneath the minimum parking prescribed, the regulations include provisions for such in connection with working out a Transportation Management Plan (TMP) with staff on a site-specific basis. A typical TMP might include guaranteed unbundling of parking assignment [such that no parking space automatically is sold with a unit], subsidy of transit passes for residents, shared usage of parking on a mixed-use site, and/or other measures to reduce reliance on motor vehicles.

For non-market housing, minimum and maximum parking standards are tailored to the target resident group, whether it be for families, seniors, or others. Provisions for visitor parking, co-op vehicles, and loading would apply to these sites, same as for market sites.

*Transportation Management Plan* - A Transportation Management Plan [TMP] may be required, to the satisfaction of the Director of Planning and General Manager of Engineering Services, where a site is a centre of employment, and/or where a relaxation of the minimum amount of parking required is sought. The TMP should emphasize elements in the development of the site which can be incorporated or established prior to occupancy to reduce automobile dependency and facilitate other modes of transportation consistent with the objectives of the South East False Creek Official Development Plan. These elements may include share-use of parking, subsidized transit or ferry passes, bicycle facilities in excess of minimum requirements, loaner bikes, carpool and/or vanpool promotion, employee transportation allowance with pay parking, incentive and communication programs, full unbundling of residential parking (all dwelling unit owners must elect to purchase each and every parking space as a distinct option when buying the dwelling unit) and other measures. A professional transportation consultant's report may be required before the TMP is approved.

*Live-Work Parking and Loading* - Generally these standards are the same as for live-work developments in the recently-approved policies for live-work use in Historic Areas and Victory Square. For new developments, one space is required up to 250 square metres for SEFC, which allows for greater size in such units for a single space; however, should a live-work unit get very large [250 square metres or more], then it is to be treated as if it were “office use” to avoid a parking shortfall. To prevent excess provision, here a maximum permissible parking is proposed at 10% above the minimum requirement. Provisions for visitor parking, co-op vehicles, and loading would apply to live-work sites, same as for multiple residential use.

*Non-Residential Parking and Loading* - To allow for flexibility in changing use, while lowering the parking required similar to what was done in the Broadway Station Precinct, the minimum parking standard for office, retail [except grocery/liquor/drug store use], cultural/recreational, and small restaurant [under 250 square metres gfa] uses is proposed at 1 space per 100 square metres gfa up to 300 square metres gfa, then 1 space per 70 square metres gfa above 300 square metres gfa. This would net a reduction of nearly 30% in the parking required for floor space over the initial 300 square metres gfa compared with typical requirements elsewhere. Such discount is expected in consideration of the complete community being developed, with increased multi-purpose trip-making and use of modes other than cars. The maximum permitted parking would compare with the current minimum required elsewhere - 1 space per 50 square metres gfa being proposed. For destination restaurants [250 square metres gfa or greater] the normal By-law minimum standard is proposed to prevent a significant shortfall; however, to avoid excessive parking provision, a maximum is also recommended that is 10% greater than the minimum. For grocery, drug, or liquor stores, the By-law’s general retail requirement is proposed. This would result in a reduction in the minimum requirement of up to 50% or greater for a typically-sized store, and is consistent with observations of reduced vehicle reliance at urban stores in Downtown South and Yaletown, where there are large numbers of residents within convenient walking distance. Again, a maximum 10% above the minimum is proposed to constrain parking.

The loading requirements proposed are generally the same as for other areas in the city. The lone exception is that for theatre use, the first Class B loading space required would be increased in size to a Class C space in order to accommodate the semi-trailers typically serving theatres.

## 8. Sustainable Transportation Strategies

The transportation network in SEFC is designed to accommodate all modes but with a focus on higher priority sustainable transportation modes - walking, cycling and transit.

### 8.1 Pedestrians/Cyclists

- a. highly walkable streets and with pedestrian friendly sidewalks with trees and landscaping;
- b. many pedestrian routes and connections through parks and along the waterfront;
- c. minimal number of driveways interrupting pedestrian routes;
- d. off-street bicycle pathways along the waterfront street and the Ontario Greenway;
- e. dedicated bicycle lanes along 1st Avenue.

## 8.2 Transit

- a. SEFC is close to two regional rapid transit lines - the Main Street station at the Expo Line to the east and the future Olympic Village Station at the Canada Line;
- b. along 1st Avenue, the Downtown Streetcar will run along double-track segregated system in a permeable, greened centre median;
- c. as soon as feasible, the Downtown Streetcar will operate between Science World to Granville Island, linking the two rapid transit stations;
- d. a new ferry dock in the SEFC waterfront will provide ferry service between False Creek and downtown Vancouver;
- e. a new cross-town bus route is now operating along 2nd Avenue connecting the Millennium Line to UBC;
- f. transit priority improvements are being completed along the Main Street corridor.

## 8.3 Vehicles

- a. 2nd Avenue will be redesigned to improve the public realm and channel cross-town traffic away from 1st Avenue;
- b. neighbourhood streets will include traffic calming such as traffic circles and pedestrian bulges wherever possible.

## 9. Notification

A rezoning information sign was installed on the site on April 13, 2006 and notification letter dated April 19, 2006 was mailed to the surrounding property owners including residents of City Gate.

## 10. Public Input

Approximately 150 people signed in at over the course of two Public Open Houses held Saturday, April 29, 2006 and Monday, May 1, 2006 to review and discuss five rezoning applications that were being processed within the SEFC private lands. Four comment forms were submitted for this proposal, indicating a variety of opinions and levels of support on the proposal. Many of the attendees offered their opinions on the proposal verbally.

Generally, there is positive support for the rezoning proposal of 360 West 1<sup>st</sup> Avenue. The public is encouraged by the proposal's creative response to environmental sustainability, which includes good transit accessibility, both from the Downtown Streetcar and Canada Line, as well as energy efficiency, efforts to conserve potable water while maximizing the use of rainwater, the provision of green roofs, and opportunities for urban agriculture. Positive comments were received relating to the fact that this site and the proposal immediately across the lane to the south are designed in unison, especially their landscaped courtyards. There are however, some concerns about the potential semi-private nature of these spaces. The majority of the public is in support of the lower building height and smaller development parcel size. They feel that these features will provide a unique sense of place for this neighbourhood as well as good architectural variety within it, which many feel is lacking in the rest of downtown. Some however, had concern with the low building height found across

the South East False Creek area as a whole, feeling that greater heights would better reflect the community's proximity to downtown while presenting an opportunity to provide more park and recreation space. There is also concern with the trend across the city to build very small units. Many members of the public are urging the City to encourage larger, more liveable suites that bear in mind the needs of future occupants, especially families.

## 11. Urban Design Panel

The Urban Design Panel reviewed this proposal on April 26, 2006 and supported (7-1) the use, density and form of development and offered the following comments:

Evaluation: Support (7-1)

### 11.1 Panel's Consensus on Key Aspects Needing Improvement:

- a. General concerns regarding the massing on the southwest corner. There were differing opinions for redistributing the massing including adding another floor to the tower and increasing the townhouse massing;
- b. Design development to the indoor/outdoor relationship at grade;
- c. The north-south routes through the site should be reinforced.

### 11.2 Related Commentary:

The Panel strongly supported this application.

The Panel's main concern about the scheme related to the southwest corner of the tower. It was thought to be too bulky, overcrowding the adjacent development and detracting from the mews character. It was not unanimous, but some Panel members supported adding another floor to the tower if it allowed the corner to be chiselled back to be more sensitive to its neighbour. Several Panel members also recommended redistributing some of the massing to the townhouse element, while others liked the townhouse form as proposed and did not want to see its massing increased. There was also a suggestion for the applicant to explore creating some kind of tension between the low-rise and highrise components.

Most Panel members stressed the importance of avoiding gating in this development noting that there is very good overview provided which lessened concerns about CPTED issues.

A general concern was voiced by some Panel members that the ODP may be too rigid, stating it would be very unfortunate if strict adherence to the prescribed envelope fails to allow for adjustments to be made that produce better relationships and overall better development as each proposal comes forward. It was stressed there needs to be greater flexibility to achieve the unique character that is envisioned for South East False Creek. A comment was also made that consideration for views should not override the goal of providing the exceptional livability and sense of community that is sought for this neighbourhood.

One Panel member did not agree more height was needed to make the project work, nor that the ODP was too prescriptive, noting it has produced true ground-oriented 3 storey townhouses with a good streetscape, which is very positive. Rather, the onus for addressing proximity issues should be on the tower, which can be proven out at the next stage of development.

There was a recommendation to improve the indoor/outdoor relationship at ground level, in particular for there to be a better relationship between the indoor amenity and the outdoor space. Consideration should also be given to expressing the indoor/outdoor relationship through the lobby so that there is a sense of the courtyard from the street.

The applicant was commended for the sustainability measures shown on the landscape plan but it was noted that the architectural plans do not provide the same level of detail with respect to issues such as solar heat gain. It was stressed that personal comfort needs to be seriously considered, noting the number of buildings in the city that neglect solar control on their westerly facades, to the detriment of the residents who are forced to live with their blinds down. The applicant was encouraged to incorporate solar gain strategies into future submissions.

### 11.3 Applicant's Response:

Mr. Hancock thanked the Panel for its comments and noted they are already reconsidering the southwest corner.

### 12. Comments of the Applicant:

"We've read the rezoning report and with respect to the revised clause we believe our design as it currently stands meets the intent of that.

We believe averaging out the livability distance for separation between towers (considering our 8' setback at and above the Crowe Street City homes(the southeast corner of Crowe Street), as well as our setback balconies upwards and our penthouse level distances from the property line, up through the Crowe Street Façade) accomplishes this goal.

We are looking forward to proceeding with IBI's currently approved tower design intact and would be disappointed if asked to pull back the façade from Crowe Street.

That being said, we are satisfied with the report comments."



360 West 1<sup>st</sup> Avenue  
SOUTH EAST FALSE CREEK GREEN BUILDING STRATEGY

SEFC Private Lands Green Building Strategy

June 2006

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General:

A green building strategy for the privately owned lands in South East False Creek must achieve a minimum baseline of environmental performance in all facets of building design and construction. This strategy applies to all medium and high density residential, mixed-use, commercial, institutional, and industrial developments in the privately owned lands in SEFC. This strategy is founded on the principles of the LEED™ green building assessment program, which provides a robust tool to guide development of a variety of green building types. To ensure that City of Vancouver objectives are fully met, specific points are required, as well as elements not specifically included in LEED™. Each building must be designed and perform according to a minimum LEED™ Silver certification (36 or more points) including implementation of all the LEED™ prerequisites and City requirements listed below. While registration and completion of the LEED™ program is not mandatory at this time, the City encourages certification.

If a project is formally registered through the CAGBC to achieve a minimum LEED™ Silver level, and registration is submitted with the development permit application and approved as condition of the development permit, then Part 2 (the LEED™ based portion) of the City's green building strategy will be waived. Part 1, mandatory requirements, must still be met.

All projects not formally registering with the CAGBC will follow the proposed green building strategy, with firm commitment taken through the City of Vancouver regulatory process. A draft working regulatory review and permitting process is being developed and will undergo continued refinement:

Submission on behalf of the proponent by a Green Building Consultant (LEED™ AP or demonstrated experience)

1. Rezoning Application: Green Building Consultant (GBC) submits overall rationale for achievement of Green Building Strategy objectives, including draft LEED™ scorecard.
2. Development Application: Green Building Consultant submits preliminary LEED™ scorecard - possible verification of formal CAGBC registration if pursued.
3. Development Permit: GBC submits detailed criteria of how Mandatory Measures will be achieved along with updated pre-development LEED™ scorecard as a condition of issuance.
4. Building Permit: GBC submits final building plans and final pre-development LEED™ scorecard as a condition of issuance.
5. Occupancy Permit: GBC provides final LEED™ scorecard and detailed report of specifications and contract for full best practice building commissioning as a condition of issuance.

The Strategy:

The strategy assumes that all prerequisites can be met and an integrated design process (IDP) with a LEED™ Accredited professional is undertaken from the outset.

Items *in italics* with a “\*\*\*” indicate preferred/exceptional strategies that provide additional points to any project for innovation and the encouragement of GHG reduction.

**PART 1: MANDATORY BASE LINE STRATEGY REQUIREMENTS**

**Energy**

- 1.0 Minimum energy efficiency to meet CBIP. *\*\*\*Participation in the False Creek Neighborhood Energy Utility is encouraged to be undertaken in order to facilitate achievement of this LEED™ intent.*
- 1.1 Full best practice building commissioning.
- 1.2 Specify energy efficient appliances -- EnergyStar rated appliances, except for laundry dryer.
- 1.3 Energy efficient lighting to follow ASHRAE 90.1 2001 including user metering, smart controls, and occupancy sensors for public spaces.
- 1.4 Specify fireplaces listed as a heating appliance with a minimum combustion efficiency to meet or exceed ASHRAE/IESNA Standard 90.1 - 2001 heating appliance standards. No continuous pilot lights; interrupted power ignition is preferred. *\*\*\*fireplaces are not encouraged, but where fireplaces are specified, the proponent is encouraged to work with the False Creek Neighborhood Energy Utility to properly balance the unit's space heating load.*
- 1.5 If supplemental heating of domestic hot water is necessary (e.g. in the case of the building not being hooked into the Neighbourhood Energy Utility) it is to be done with high efficiency condensing boilers *\*\*\*investigate opportunities for possible supplement by solar hot water where appropriate.*

**Parking**

*Parking, loading, and bicycle spaces shall be provided and maintained according to the provisions of the Parking By-law, including those concerning exemption, relaxation, and mixed-use reduction, except for the following:*

**Multiple Dwellings**

- The minimum required parking shall be as follows:

Total m <sup>2</sup> GFA	Number of spaces
<50 m <sup>2</sup>	0.5 space/dwelling unit
50-90 m <sup>2</sup>	0.25 space/dwelling unit, plus 1 space/120 m <sup>2</sup> GFA
>90 m <sup>2</sup>	1 space/dwelling unit

- The maximum permitted parking shall be as follows:

Total m <sup>2</sup> GFA	Number of spaces
<50 m <sup>2</sup>	1 space/dwelling unit
50-189 m <sup>2</sup>	0.65 space/dwelling unit, plus 1 space/140 m <sup>2</sup> GFA
>189 m <sup>2</sup>	2 spaces/dwelling unit

- Designated visitor parking shall be separately required at a minimum rate of 0.1 spaces per dwelling unit and a maximum rate of 0.2 spaces per dwelling unit.
  - *Required visitor parking may be permitted off-site at a suitable location to the satisfaction of the Director of Planning and the General Manager of Engineering Services.*
- Co-op vehicles and spaces shall be provided as follows: One vehicle and designated space should the site include 50 to 149 dwelling units, or two vehicles and designated spaces should the site include 150 or more dwelling units. For future car-sharing, at least one additional designated co-op parking space must be provided per 100 dwelling units (but no less than one for the site).

Co-op spaces must be provided in an area with 24-hour accessibility (e.g. within visitor parking or outside the building at the lane or 'mews').

- The provision of less than the minimum parking may occur, subject to approval by the General Manager of Engineering Services and Director of Planning of a site-specific Transportation Management Plan that emphasizes elements in the development of the site which can be incorporated or established prior to occupancy to reduce automobile dependency and facilitate other modes of transportation consistent with the objectives of the SEFC ODP. Guarantee of zero-based unbundled parking assignment (all dwelling unit owners must elect to purchase each and every parking space as a distinct option when buying the dwelling unit) shall result in a 10 percent reduction in the minimum requirement.

Cultural/recreational, *restaurant [under 250 m<sup>2</sup> GFA]*, office, and retail use

- The minimum required parking shall be 1 space for each 100 m<sup>2</sup> GFA up to 300 m<sup>2</sup> GFA, and one additional space for each additional 70 m<sup>2</sup> GFA. The maximum permitted parking shall be 1 space per 50 m<sup>2</sup> GFA.

*Note for: The Playhouse (theatre) site:*

- A minimum of one Class C loading space shall be required for theatre use in-lieu of the first Class B loading space required for that use.

Live-Work

- Required parking shall be as follows:

Total m <sup>2</sup> GFA	Minimum Number of spaces
<250 m <sup>2</sup>	1 space/unit
>=250 m <sup>2</sup>	A minimum of 1 space for each 100 m <sup>2</sup> GFA up to 300 m <sup>2</sup> GFA, and one additional space for each additional 70 m <sup>2</sup> GFA

- Maximum permitted parking shall be equal to the minimum required + 10 percent
- Loading is required as per Section 5.2.9 of the Parking By-law.

Note: The total number of Live-Work units is to be included in the total number of residential units when calculating co-op vehicle & vehicle space, visitor parking and loading requirements.

### Social Housing

*There are three categories for the number of required and permitted parking spaces:*

	Minimum	Maximum
1) Seniors	1/6units	1/3 units
2) Families	0.5/unit	1/unit
3) Other ( <i>calculated by total GFA</i> )		

#### Total m<sup>2</sup> GFA

<37 m <sup>2</sup>	none required	1/6 units
>=37 m <sup>2</sup>	1/6 units	1/3 units

Note: The total number of Social Housing units is to be included in the total number of residential units when calculating co-op vehicle & vehicle space, visitor parking and loading requirements.

### Restaurants >= 250 m<sup>2</sup>

Parking requirement:

As per Section 4.2.5.10 of Parking By-law -- Restaurant or Drive-in Restaurant:

A minimum of 1 space for each 50 m<sup>2</sup> GFA up to 100 m<sup>2</sup> GFA, one additional space for each additional 10 m<sup>2</sup> GFA up to 500 m<sup>2</sup>, and 1 additional space for each 20 m<sup>2</sup> of gross floor area over 500 m<sup>2</sup>. The maximum allowed = minimum + 10 percent

### GROCERY STORE OR DRUG STORE, excluding Neighbourhood Grocery Store (Equivalent to retail use):

As per Section 4.2.5.1 of Parking By-law -- Grocery Store or Drug Store, excluding Neighbourhood Grocery Store but including Small-scale Pharmacy, or Liquor Store:

A minimum of 1 space for each 100 m<sup>2</sup> GFA up to 300 m<sup>2</sup> GFA, and one additional space for each additional 50 m<sup>2</sup> GFA. The maximum allowed = minimum +10 percent

Here is the URL for easy COV website access to the Parking By-law, Parking and Loading Design Supplement and the Bicycle Parking Design Supplement:

<http://www.vancouver.ca/engsvcs/parking/admin/developers.htm>

### Landscape and Water

- 1.6 Dual flush toilets that meet or exceed 6/3 dual flush toilets.
- 1.7 Low flow faucets and showerheads to meet or exceed flow rates of 1.8gpm.

- 
- 1.8 Specify drought resistant and/or native indigenous planting species to ensure reduced irrigation demands; where ornamental landscapes are chosen for specific applications, specify high efficiency irrigation system (drip irrigation) or stormwater reuse. *\*\*pursue zero potable water for site irrigation in conjunction with rain water reuse. \*\*landscaped space designed for urban agriculture for building occupants is encouraged.*
  - 1.9 Green roof designed to meet structural load, soil depths, and access & egress conditions necessary for an intensive green roof/urban agriculture on a minimum of 50 percent of all roof surfaces. *\*\*full development of intensive green roofs for occupant use is encouraged, with urban agriculture being a priority.*
  - 1.10 Rain water beyond landscaping irrigation, green roof retention, and other on-site water management systems shall be transmitted to neighbouring off-site rain water management systems as specified at the time of development and in a rate and quantity to be determined by the City Engineer on a site by site basis.

#### Waste Management

- 1.11 Composting for on-site gardens and/or landscaping.
- 1.12 Provision for 3 streams of waste collection (on-site infrastructure should be provided for organic pick-up for future implementation if no organic pick-up is available at time of sub-area rezoning).
- 1.13 Management of construction and demolition waste, ensuring a minimum of 75 percent landfill diversion through construction process.

#### PART 2: THE STEPS TOWARDS A LEED™ CERTIFIABLE BUILDING

Submission and verification according to the prescribed City of Vancouver regulatory review process of LEED™ Silver with a minimum target of 36 points is necessary to ensure full compliance with the SEFC baseline green building strategy.

360 West 1<sup>st</sup> Avenue  
APPROACHES TO SUSTAINABILITY & UNIVERSAL DESIGN

South East False Creek is envisioned as a community in which people live, work, play and learn in a neighbourhood that has been designed to maintain and balance the highest possible levels of social equity, livability, ecological health and economic prosperity, so as to support their choices to live in a sustainable manner.

The development of South East False Creek presents a unique opportunity to explore new ideas about how we live in the city. The opportunity is considered to be an on-going experiment to achieve an optimal balance between environmental, social and economic needs. As such, new development is expected to challenge conventional thinking about sustainability while integrating sufficient flexibility to incorporate new ideas and systems later.

As part of their rezoning application, the Applicant was required to submit their approach towards meeting the principles of the Green Building Strategy, a LEED™ scorecard to indicate that they intend to achieve 36 points and thus meeting LEED™ Silver equivalency, as well as the Safer Homes Checklist that indicates their approaches to ensure maximum access is provided for all persons with varying levels of mobility and sensory ability. This Appendix includes the abovementioned submissions included in the Applicant's rezoning application.

#### I. SUSTAINABILITY INITIATIVES

Sustainable initiatives will be incorporated throughout the site where possible. The following are examples of these initiatives.

**Reduced site disturbance:** Neighbourhood open space is restore through the creation of a courtyard where no open space currently exists; the use of native or adaptive plants (able to flourish without irrigation or fertilizers) furthers this initiative.

**Heat island effect:** Reflective hardscape materials will be incorporated where possible and green roofs (both extensive and intensive) will be provided; deciduous trees will be planted to reduce summer heat gain.

**Stormwater management:** In-site detention and controlled release of stormwater will be realized through the use of cisterns (rain barrels), green roofs, and expressed surface drainage; limited storage and re-use of stormwater for hand irrigation where possible.

**Light pollution reduction:** The requirement for landscape lighting will be minimized and only sharp cut-off light sources will be utilized.

**Water-efficient landscaping:** The requirement for irrigation (following plant establishment) will be eliminated or minimized through the use of native and/or drought resistant plants.

**Collection of recyclables:** An on-site composting station will be provided.

**Water-use reduction:** Irrigation will be eliminated or minimized; efficient (drip) irrigation will be utilized where irrigation is required; hand irrigation will use a non-potable source.

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**Urban agriculture:** The provision of raised garden beds will encourage the production of food and the recycling of vegetable waste through composting.

**Social sustainability:** The provision of a hierarchy of semi-public and semi private outdoor spaces, a children’s play area, an urban agriculture area, and the ingredients for a vital residential streetscape will stimulate interaction and cooperation between residents and neighbours. CPTED principles of design including “eyes on the street” will contribute to a safer neighbourhood.

**Recycled content:** The project will incorporate high-content recycled or salvaged hard landscape materials and furnishings and will incorporate materials and furnishings that are highly recyclable. A local growing medium incorporating locally composted materials will be utilized.

**Regional materials:** Where possible the project will use locally produced materials and furnishings i.e. pavers, benches, etc. The use of native plant materials will minimize the requirement for synthetic chemicals for pest control.

**Durable building:** Building materials will be chosen for longevity.

## II. SUSTAINABLE STRATEGY

### Introduction

We have summarized below the areas of sustainability we are considering during the design of this project. We have created sustainability objectives for this project which are aligned with the City’s SEFC Private Lands Green Building Strategy (draft September 14, 2005). We are also considering the objectives of the SEFC ODP as far as they apply to this project. We have outlined the areas under consideration and have addressed how these will be mapped onto the LEED™ framework to meet the LEED™ score target. As this project is all residential, we have applied the terms of the LEED™ MURB Application Guide to certain credits. While we are using LEED™ as the “tool” or “guide” to this process we have used the headings from the GBS Mandatory Baseline Requirements for ease of reference and then added additional headings covering additional strategies cross referenced with LEED™.

### Energy

#### 1.0 Minimum energy efficiency to meet CBIP

Subject too review of the details of the proposed district energy system by our mechanical consultants we intend to connect to this system to meet building space heating domestic hot water needs. As such, it is intended that the hydronic baseboard heating will be installed. The building energy consumption has been modelled by Cobalt Engineering. This modelling process will continue through the design process to inform our design decisions to optimize energy efficiency. Other strategies include:

- Improved building envelope: including use of LowE glazing;
- Optimizing efficiency of building systems;
- Low flow plumbing fixtures to reduce DHW loads;
- Reduced lighting loads;
- Sensors on parkade lighting and infrequently used common areas.

Note: The final percentage below MNECB achieved by our project will however be greatly influenced by how the district energy system is treated by NRCan and CaGBC for modelling purposes.

**1.1 Full best practice building commissioning.**

A commissioning agent will be contracted, independent of our mechanical design team to review the design and undertake project commissioning work in accordance with the requirements of LEED™ EA Prerequisite 1 and Credit 3.

**1.2 Specify energy efficient appliances**

Energy Star rated fridges and dishwashers will be specified. If clothes washers are provided an Energy Star front loading washer will be specified.

**1.3 Energy efficient lighting to follow ASHRAE 90.1 2001**

The lighting design will meet or exceed ASHRAE 90.1 2001. Strategies under consideration to include:

- Compact fluorescent fixtures in common areas;
- Occupancy sensors for parkades, infrequently occupied common areas and selected public spaces;
- Suites will be separately metered for hydro.

**1.4 Specify fireplaces listed as a heating appliance with a minimum combustion efficiency to meet or exceed ASHRAE/IESNA Standard 90.1 2001 heating appliance standards**

Fireplaces will not be installed in this project.

**1.5 Supplementary heating of domestic hot water to be done with high efficiency condensing boilers**

As indicated we intend to connect to the district heating system which we understand will include installation of high efficiency condensing boilers within each building to “polish” hot water to required DHW temperatures. Consideration is being given to making the building “solar ready” by pre plumbing the building for a future solar hot water system.

**Parking**

**1.6/1.7 Minimum and Maximum Permitted Parking**

A total of 137 stalls will be provided to serve the residents of the 105 suites and townhouses in the building. This is equal to the maximum number of stalls as outlined in the GBS.

**1.8 Designated visitor parking**

An additional 10 visitor stalls shall be provided on site.

**1.9 Car-sharing or co-op vehicle spaces**

One car sharing or co-op car (and required parking stall) will be provided. Consideration is being given to the vehicle being high efficiency or hybrid.



- 1.10 Future car sharing space  
One additional stall for a future car share/co-op is provided.
- 1.11 Unbundling parking spaces  
This is not considered feasible in the current market.
- 1.12 Parking requirements for uses other than residential  
Not applicable - residential uses only.
- 1.13 Provision of less than the minimum parking  
See 1.8 and 1.9 above.

#### Landscape and Water

- 1.14 Dual flush toilets that meet or exceed 6/3 dual flush toilets  
Toilets to meet his requirement will be specified.
- 1.15 Low flow faucets and showerheads to meet or exceed flow rates of 1.8gpm  
Fixtures to meet this requirement will be specified.
- 1.16 Drought resistant planting, irrigation, urban agriculture  
The landscaping plan will specifically specify drought tolerant plant species. No potable water will be used for irrigation. Instead any required irrigation water will be provided from water detained on-site in rain barrels. Opportunities for resident food production will be provided.
- 1.17 Green roof design  
The landscape plan will incorporate a minimum of 50 percent green roof/landscape coverage. This area will include necessary hardscaping to provide access and ensure green roof space is liveable and useable.
- 1.18 Off-site rainwater management system  
This project will divert any excess stormwater runoff to the City rain water management system. A detailed calculation of rates and quantities will be completed with design review and agreed with City Engineering.

#### Waste Management

- 1.19 Composting for on-site gardens and/or landscaping  
Space will be designated for garden/landscape composting. Provision will be included in Resident/Strata Manual regarding the availability of this space for strata use.
- 1.20 Provision for 3 streams of waste collection  
Space has been provided in the garbage/recycling area for an organic pick up point.  
Note: no specifications are available from the City to confirm if this area will be sufficient.

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1.21 Management of construction and demolition waste (minimum diversion of 75 percent)

A construction waste management plan will be prepared and implemented on site. Polygon has worked in the past with the GVRD in waste management case studies and is confident these diversion rates can be achieved. In addition, the original industrial building on the site was deconstructed and a significant portion of the building was diverted from the landfill.

### LEED™ Target

We have attached a draft LEED™ scorecard which confirms we anticipate satisfying all LEED™ pre-requisites and achieving a LEED™ score of at least 36. Specific comment and strategies in addition to those outlined above are summarized below under the relevant LEED™ heading:

### Sustainable Sites

As a result of its location this project will meet the LEED™ requirements regarding Site Selection (SS 1). It will also be located conveniently for public transit including bus, skytrain, aqua bus, and future streetcar (SS 4.1). With the proposed density and the anticipated build out of community amenities we anticipate that the project will satisfy SS cr 2. The site is contaminated and will be clean to regulatory standards (SS 3). Substantial bike storage will be provided (SS 4.2). All exterior light fixtures will be selected to meet the IESNA standards for light pollution (SS 8).

### Materials and Resources

Materials which have high recycled content will be specified including: high content flyash concrete (with an emphasis on parkade and vertical structure); re-bar, structural steel; insulation; drywall; cabinetry etc. (MR 4.1/4.2). Similarly, emphasis will be placed on materials manufactured and extracted locally including concrete, glazing, cabinetry, and drywall (MR 5.1/5.2). We will investigate the use of FSC plywood for forming and other applications (MR 7). Utilizing our building technology expertise we are committed to designing and constructing a durable building (MR 8).

### Indoor Environmental Quality

The detailed design of the mechanical ventilation system is still in progress. It will however be designed to ensure sufficient air enters the suites to comply with the IAQ Prerequisites 1 and 2.

We will be specifying carbon monoxide detectors in suites to record air quality (IAQ 1 MURB). A detailed Construction IAQ Plan will be created and implemented on site to ensure spaces are not contaminated with construction dust etc. (IAQ 3.1). Consideration is being given to undertaking pre-occupancy air quality testing (IAQ 3.2). LEED™ compliant adhesives, sealants, paints and carpet systems will be specified (IAQ 4.1/4.2/4.3). Permanent entryway systems shall be installed at all high volume entryways and janitor sinks etc. shall be appropriately plumbed (IAQ 5).

## Innovation and Design

We are adopting an integrated design process which will be complimented by ongoing energy modelling. Many of the design team are LEED™ Accredited Professionals and we have contracted with reSource Rethinking Building Inc. as our green building advisors (ID 2). As the design process continues we will review and consider additional strategies to those outlined above. An emphasis will be placed on encouraging residents of this project (through information and education) to capitalize and build upon the innovative strategies we have adopted in the design and construction of the project. We will also be looking for opportunities to partner with groups wishing to participate in ongoing monitoring of the building performance.

## ODP Objectives

With the above strategies we consider that we have satisfied the Environmental Sustainability objectives as outlined in Section 3.1 of the ODP.

## LEED™ CHECKLIST

The application included the following LEED™ CANADA Checklist:

Polygon LEED Scorecard 15March06.xls		LEED™ Scorecard of 3/15/06																																																																																														
36 15 11 Total Project Score		Possible Points 70																																																																																														
Certified: 26 to 32 points Silver: 33 to 39 points Gold: 40 to 51 points Platinum: 52 or more points																																																																																																
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1	Prereq 2 Site Selection	1																																																																																														
1	Prereq 3 Development Density	1																																																																																														
1	Prereq 4 Redevelopment of Contaminated Sites	1																																																																																														
1	Prereq 5 Alternative Transportation, Public Transportation Access	1																																																																																														
1	Prereq 6 Alternative Transportation, Bicycle Storage & Changing Rooms	1																																																																																														
1	Prereq 7 Alternative Transportation, Alternative Fuel Refueling Stations	1																																																																																														
1	Prereq 8 Alternative Transportation, Parking Capacity	1																																																																																														
1	Prereq 9 Reduced Site Disturbance, Protect or Restore Open Space	1																																																																																														
1	Prereq 10 Reduced Site Disturbance, Development Footprint	1																																																																																														
1	Prereq 11 Stormwater Management, 25% Reduction in Rate and Quantity	1																																																																																														
1	Prereq 12 Stormwater Management, Treatment	1																																																																																														
1	Prereq 13 Landscape & Exterior Design to Reduce Heat Islands, Non-Roof	1																																																																																														
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1	Prereq 15 Light Pollution Reduction	1																																																																																														
Materials & Resources		Possible Points 14																																																																																														
Y	Prereq 1 Storage & Collection of Recyclables	1																																																																																														
1	Crereq 1.1 Building Reuse, Maintain 75% of Existing Shell	1																																																																																														
1	Crereq 1.2 Building Reuse, Maintain 100% of Existing Shell	1																																																																																														
1	Crereq 1.3 Building Reuse, Maintain 100% Shell & 50% Non-Shell	1																																																																																														
1	Crereq 2 Construction Waste Management, Divert 50%	1																																																																																														
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1	Crereq 4 Resource Reuse, Specify 10%	1																																																																																														
1	Crereq 5 Recycled Content, Specify 7.5%	1																																																																																														
1	Crereq 6 Recycled Content, Specify 15%	1																																																																																														
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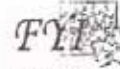
III. UNIVERSAL DESIGN

03/10/2008 09:27 AM THE FOUNDRY

REBIDDING SUBMISSION, 360 W. 1<sup>ST</sup> AVE. THE FOUNDRY.

Appendices

Appendix A



The next page gives you the same checklist laid out as a contract you can show to your builder to help ensure your new home is built the way you want it to be.

# The SAFER Home™ Certification Criteria

The next page gives you the same checklist laid out as a contract you can show to your builder. We recommend having all parties sign to help ensure your new home is built the way you want it to be — that's SAFER, of course.

- All exterior thresholds are flush (~~NOT APPLICABLE TO CONCRETE CONSTRUCTION~~)
- Interior thresholds meet minimal code constraints
- Bath and shower controls off set from centre
- Pressure/temperature control valves on all shower faucets
- 2"x12" blocking lumber in all washrooms tub, shower, and toilet locations
- Waste pipes brought in at 12" to the centre of the pipe from floor level
- Cabinets underneath sinks easily removable
- Doors a minimum of 34" wide but should ideally be 36" (~~SUITE ENTRY ONLY~~)
- Hallways ~~and stairways~~ a minimum of 40" wide ~~but should ideally be 42" wide~~
- Light switches 42" floor to the centre of the electrical box from the finished floor
- Receptacles 18" floor to the centre of the electrical box from the finished floor
- Electrical receptacles placed as follows:
  - Beside windows, especially where draperies may be installed
  - Top and bottom of stairways
  - Beside the watercloset (~~CODE PERMITTING~~)
  - Above external doors (~~outside and inside~~)
  - On front face of kitchen counter
  - At Node Zero Location (~~ENTRY CLOSET~~)
- Larger grey electrical boxes utilized (~~NEEDS CLARIFICATION~~)
- Four-plex receptacles in master bedroom, ~~home office, garage, and rec room~~
- Level 5 (4 pair) telephone pre-wire to all areas returning to one central area
- RG-6 coaxial cable runs returning to one central area
- All low-voltage runs returning to one central area
- Walls at the top of stairs reinforced with 2"x12" at 36" to centre
- Either: allowance made for elevator in stacked closets, or make the staircase 42" wide

120



# The SAFER Home™ Certification Check-List



This Certification Check List is an addendum to the existing contract dated N/A  
with the builder: Poligon Foundry Tower Ltd.  
and the home owner: same

The builder agrees to include this check list of criteria into the project being built at:  
THE FOUNDRY 340 WEST 1st AVE, VANCOUVER BC

The builder hereby agrees to prepare this home so that it will meet all the requirements of the SAFER Home Certification Program. The builder further agrees to be solely financially responsible for any renovations needed to the finished home if this check list is not included in full within this project.

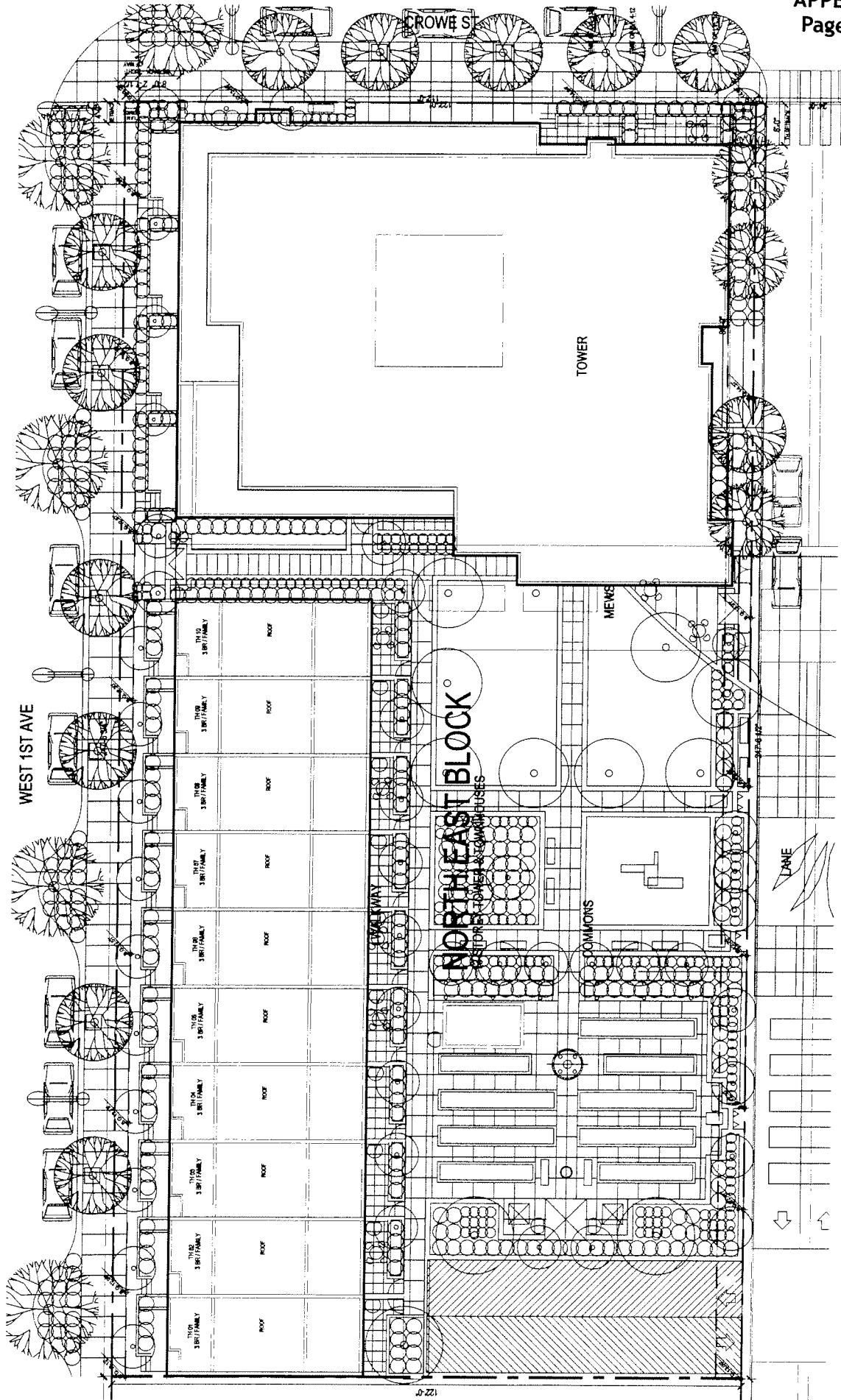
Builders Signature: [Signature] Date: MAY 16, 2006

Home Owner Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Witness Signature: [Signature] Date: May 17, 2006

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- Interior thresholds meet minimal code constraints
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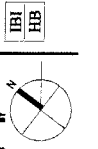
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THE FOUNDRY  
390 WEST 1ST AVE  
VANCOUVER, BC

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PROJECT TITLE:  
THE FOUNDRY  
390 WEST 1ST AVE  
VANCOUVER, BC



IBI  
HB



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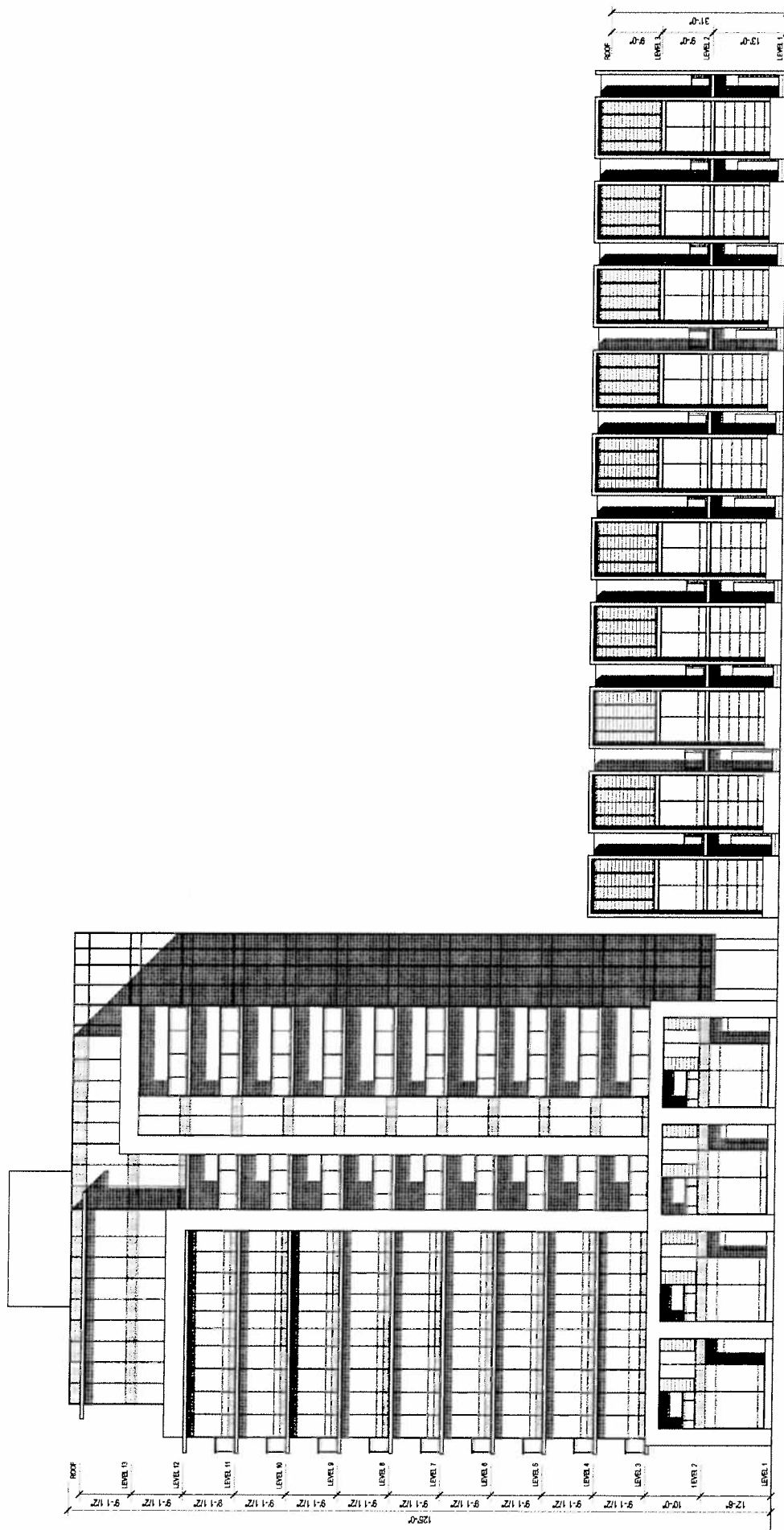
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REV. NO.:

**JOB NO.:**  
DATE: MAR 10 2009  
SCALE: 1/8" = 1'-0"  
CHECKED BY: [Signature]  
REV. NO.:

**SHEET TITLE:**  
NORTH ELEVATION

**PROJECT TITLE:**  
THE FOUNDRY  
300 WEST 1ST AVE  
VANCOUVER, BC



**IBI GROUP INC.**  
300-1000 Burrard Street  
Vancouver, BC V6Z 2T6 Canada  
604-681-2770 Fax  
604-681-2770 Tel

**IBI GROUP INC.**

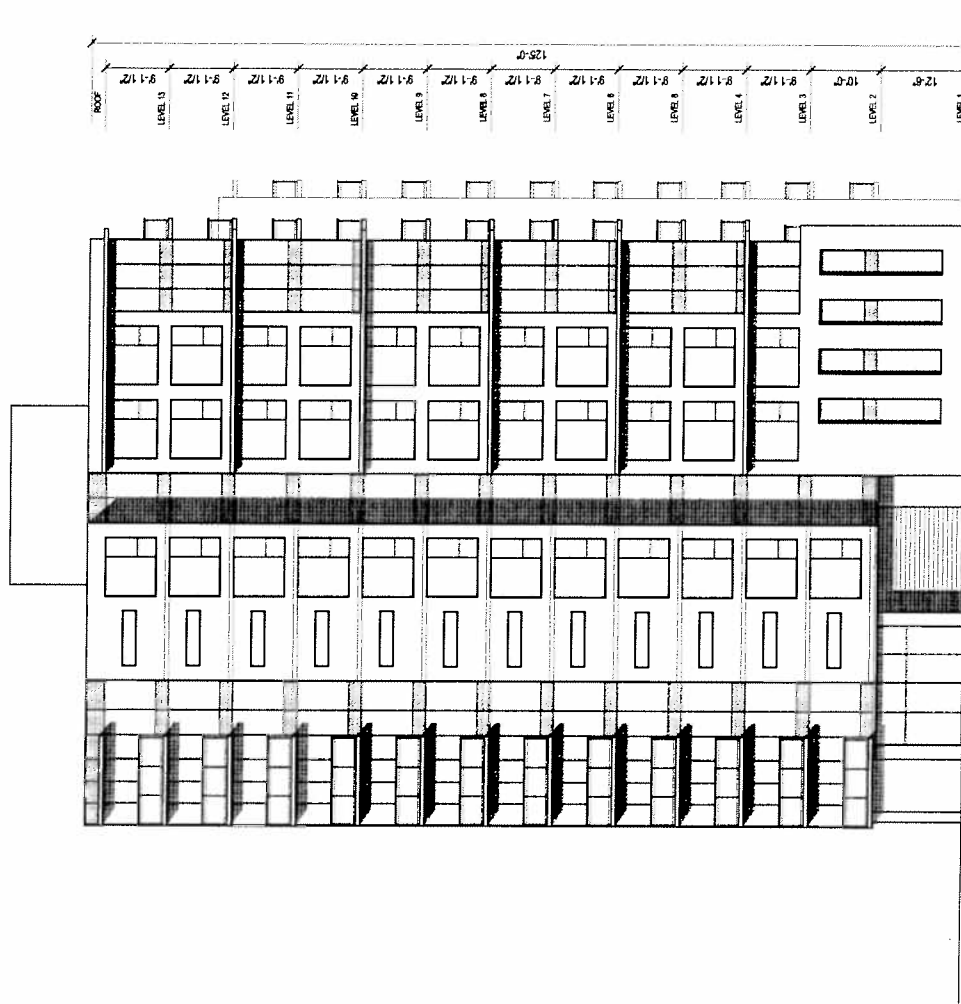
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CHECKED BY: [Name]  
REV. NO.: [Number]

JOB NO.: [Number]  
DATE: [Date]  
SCALE: [Scale]  
DRAWN BY: [Name]  
CHECKED BY: [Name]  
REV. NO.: [Number]

SHEET TITLE:  
SOUTH ELEVATION

PROJECT TITLE:  
THE FOUNDRY  
390 WEST 1ST AVE  
VANCOUVER, BC



IBI GROUP  
1000 West Broadway  
Vancouver, BC V6H 2T6 Canada  
Tel: 604 681 2772  
Fax: 604 681 2773



DATE: [Date] REVISIONS BY: [Name]

DATE: [Date] REVISIONS BY: [Name]

DATE: [Date] REVISIONS BY: [Name]

NOTES:  
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360 West 1<sup>st</sup> Avenue  
STATISTICS

APPLICANT, PROPERTY, AND DEVELOPMENT PROPOSAL INFORMATION

**APPLICANT AND PROPERTY INFORMATION**

Street Address	360 West 1st Avenue
Legal Description	Lots 4, 5, 6, 7, and 8 Block 3 District Lot 302 Plan 5832
Applicant	Scott Baldwin, Polygon Homes Ltd.
Architect	Jim Hancock, IBI Group - Hancock Bruckner Architects
Property Owner	Polygon Homes Ltd.
Developer	Polygon Homes Ltd.

**SITE STATISTICS**

	GROSS	DEDICATIONS	NET
<b>SITE AREA</b>	2 805.7 m <sup>2</sup> (30,201 sq. ft.)	Not applicable	

**DEVELOPMENT STATISTICS**

	DEVELOPMENT PERMITTED UNDER EXISTING ZONING	PROPOSED DEVELOPMENT	RECOMMENDED DEVELOPMENT (if different than proposed)
ZONING	M-2	CD-1	As proposed
USES	Manufacturing, Retail, Service, Transportation & Storage, Utility & Communication, Wholesale	Dwelling Uses, Office, Retail, and Service	As proposed
DWELLING UNITS	Not applicable	105	As proposed
MAX. FLOOR SPACE RATIO	5.0	3.5	As proposed
MAXIMUM HEIGHT	30.5 m	38.1 m	38.0 m
MAX. NO. OF STOREYS	n/a	13	As proposed
PARKING SPACES	Parking By-law	149	As proposed
1 <sup>ST</sup> AVENUE SETBACK	n/a	0.8 m (5.9 ft.) dedication 2.4 m (8 ft.) setback	As proposed
CROWE STREET SETBACK	n/a	2.4 m (8 ft.) & 1.2 m (4 ft.)	As proposed
LANE STREET SETBACK	n/a	1.5 m (5 ft.)	As proposed