CITY OF VANCOUVER COMMUNITY SERVICES GROUP

FOR THE DEVELOPMENT PERMIT BOARD APRIL 23, 2007

1598 COLUMBIA STREET (SEFC) - PARCEL 4 (COMPLETE APPLICATION) DE411068 - ZONE CD-1

SH/DR/JG/BB/LH

STAFF REVIEW TEAM

- B. Boons, Development Services
- M. Thomson, Engineering Services
- K. Mulji, Engineering
- V. Morris, Social Planning
- D. Naundorf, Housing Centre
- R. Whitlock, Housing Centre
- M. Naylor, Planning
- T. Driessen, Vancouver Park Board
- D. Jantzen, Vancouver Coastal Health Authority
- R. Cheung, Building

- S. Hein, Urban Design & Development Planning
- J. Greer, Development Services
- D. Robinson, Development Services
- C. Tapp, Social Planning
- L. Beaulieu, Landscape
- K. Hiebert, Planning
- D. Ramslie, Planning
- M. Rondeau, CPTED
- N. McCreedy, Environmental Protection

PROJECT OFFICE SOUTHEAST FALSE CREEK AND OLYMPIC VILLAGE

- J. Andrews, Project Manager
- I. Smith, Manager of Development
- K. Robinson, Project Planner

APPLICANT:

Nick Milkovich Architects Inc. 1672 West 1st Avenue Vancouver, BC V6J 1G1

PROPERTY OWNER:

City of Vancouver (until end of exclusive use period) 453 West 12th Avenue Vancouver, BC V5Y 1V4

Millennium SEFC Properties Ltd. (at end of exclusive use period) Main Floor, 198 West Hastings Street Vancouver, BC V6B 1H2

EXECUTIVE SUMMARY

• **Proposal:** To construct two residential multiple dwelling buildings of 7 storeys (East Tower) and 12 storeys (West Tower) with 60 units over two levels of secure underground parking.

See Appendix A Standard Conditions

- Appendix B Standard Notes and Conditions of Development Permit
- Appendix C Processing Centre Building comments
- Appendix D Plans and Elevations
- Appendix E Rezoning Prior to Response
- Appendix F Preliminary LEED Scorecard
- Appendix G Safer Home Checklist

• Issues:

1. Anticipated quality of building enclosure systems

• Urban Design Panel: Support (7-0)

DEVELOPMENT PERMIT STAFF RECOMMENDATION: APPROVE

THAT the Board APPROVE Development Application No. DE411068 as submitted, subject to Enactment of the CD-1 By-law text amendment and approval of the final form of development, the plans and information forming a part thereof, thereby permitting the development of two residential multiple dwelling buildings of 7 storeys (East Tower) and 12 storeys (West Tower) with 60 units over two levels of secure underground parking, subject to the following conditions:

1.0 Prior to the issuance of the development permit, revised drawings and information shall be submitted to the satisfaction of the Director of Planning, clearly indicating:

1.1 design development to further clarify building envelope design intent to ensure a high quality, substantive and integrated approach to enclosure, materiality, detailing and passive features while meeting the intent of passive floor area exclusions and the Council approved Balcony Enclosure Guidelines;

Note to applicant: Further clarification of passive features associated with special excluded floor areas, requires documentation. Adjustments to suite planning and passive aspects of the façade concept to ensure solar performance while achieving compliance with the balcony enclosure guidelines are required.

- 1.2 design development to pursue use of light, water and colour including confirmation of the building's colour strategy in response to the waterfront setting and village precinct;
- 1.3 design development to better integrate the overall ground plane, including suite access, with private site treatment and anticipated public realm infrastructure to ensure a seamless, high quality and friendly interface with the public realm; (See also Condition 1.10)

Note to Applicant: Further design clarity in the transition between public and private uses and activities, including attention to site edge conditions, noting that public infrastructure has been tendered, is required. Clarification of courtyard design intent that anticipates limited pedestrian activity is encouraged. Further documentation at a large scale to better understand entry related construction and landscape design intent at edges is required.

1.4 provision of an overall lighting strategy in accordance with Council's approved rezoning precinct condition viii (See Appendix E, page 6 of 30, condition viii);

Note to applicant: An overall exterior lighting strategy that properly reinforces precinct design character for buildings and public realm is anticipated. Specific attention to courtyard/parkade lighting strategies for Parcel 4 that provide public amenity through the creative use of light, water and colour is required.

- 1.5 design development to improve overall roof form by integrating penthouse massing and careful attention to the edge/parapet detail;
- 1.6 design development to all loading zone, utility enclosure and underground parking ramp opening locations to ensure optimal integration, high quality visual screening, ground surface/public realm quality and public safety;

Note to Applicant: Careful attention to ramp opening bulkhead design and related parking garage ceiling treatment is required. Consideration should be given to the use of water at the ramp entry opening. Visual treatment for ground surface and screening should creatively reflect the Shipyards Precinct. (See also Standard condition A.1.7)

- 1.7 design development to maximize privacy between residential suites, including careful attention towards entry door locations, window openings and the provision of properly located, and visually effective, privacy screening;
- 1.8 design development to minimize the size, carefully integrate and screen all mechanical equipment including Vista boxes, and related aspects such as intake/exhaust grills, that do not visually convey sustainable principles into the overall massing, form and architectural response for each building;

Note to Applicant: Screen and grill design should reflect the Shipyards Precinct character.

1.9 design development to ground floor amenity spaces and exposed stairways/elevators to ensure maximum transparency;

Note to Applicant: Confirmation of interior lighting strategies for these spaces to contribute ambient light while not presenting glare to residents and pedestrians is required.

1.10 design development to clarify opportunities to integrate the design intent of the Council-approved SEFC Public Realm Plan;

Note to Applicant: Further design development, in consultation with the SEFC/OV Project Office and their consultants, to ensure a seamless, innovative and expressive public realm is required.

- 1.11 provision of a Green Roof Management Strategy to clarify requirements that will ensure usage, maintenance, longevity and integrity of the building envelope;
- 1.12 arrangements for the achievement of the SEFC Green Building Strategy and meet a minimum LEED[™] Gold Canada Certified standard to the satisfaction of the Director of Planning;

Note to Applicant: achievement of a target of no less than 42 points, including City of Vancouver prerequisites (with full LEED[™] registration and documentation) or equivalency. Registration with the Canada Green Building Council (CaGBC) is required for all buildings. The applicant must submit full documentation, including initial certified design credits, required for LEED[™] certification to the City for verification prior to issuance of a long-term occupancy permit.

Note to applicant: The City encourages the applicant to complete full LEED^M certification for LEED Gold with the CaGBC.

- 2.0 That the conditions set out in Appendix A be met prior to the issuance of the Development Permit.
- 3.0 That the Notes to Applicant and Conditions of the Development Permit set out in Appendix B be approved by the Board.

• Technical Analysis: CD-1: SEFC Area 2A (Sub Areas 2-6 - Olympic Village) - Parcel 4 Specific

	PERMITTED (MAXIMUM)		REQUIRED (Par	cel 4)	PROPOSED (Parcel 4)		
Site Size					Irregular		
Site Area					40,813 sq.ft		
Floor Area	Dwelling uses				Dwelling Uses		
	All Sub-Areas 1,179,881.5 sf (109, 611 m2)				Market:	153	3,426 sq.ft.
¹ Height	Sub area 4	132.9 ft (40.5 m)			West Tower East Tower		133.5 ft (40.6m) 78.0 ft
² Parking	Market	119	Market	60	Market		119
	Visitor	12	Visitor	6	Visitor		4
	Со-ор		Со-ор	2	Со-ор		0
	Total	131	Total	68	Total		123
	Small Car (25% max.)	30	Disability Space	es 3	Small Car Spaces Disability Spaces		8 4
Bicycle Parking	-		<u>CI A</u> Resid. 75	<u>CI B</u> 6	Resid.	<u>Class A</u> 120	<u>Class B</u> 6
Loading	-		n/a				
Amenity	75,350 sf. (7,000 m2) tot			5,483 sq.ft.			
Unit Type					One Bedroom Two Bedroom Three Bedroom Total:		2 39 19 60
Unit Count					Total Units:		60
					Family units		58

Note: The technical review represents a "snapshot" of the proposal to date and the numbers in the table will change as the plans evolve throughout the process up to Development Permit issuance. Staff are confident with the methodology that has been used and that <u>the final numbers for floor area</u>, height, parking and unit count will comply with the CD-1 by-law.

¹ **Note on Height:** Council approved at public hearing the text amendment to the CD-1 By-law for SEFC - Area 2A to increase the building height on Parcel 4 to 132.9 feet (40.5 m) on April 17, 2007. Enactment of the text amendment is to be approved at a future date once the enactment conditions have been satisfied. The applicant has proposed a building height of 133.5 feet (40.6m) on the development application. Condition A.1.1 requires the applicant to reduce the height of the buildings on the site to a maximum of 132.9 feet (40.5m).

²Notes to Parking: Applicant has counted 4 disability spaces as visitor spaces. Additional visitor parking spaces are required in order to meet the minimum required 6 spaces for this project. (See Standard condition A.1.1 & A.2.16). Clarification is required on the provision of car sharing spaces for the site in relation to the overall project in Area 2A. (See Standard condition A.2.15)

• Technical Analysis: CD-1: SEFC Area 2 (Sub Areas 2-6 - Olympic Village) - Overall Running Total Including Parcels 2, 3, 6, 9, 10 & 4.

	PERMITTED (MAXIMUM)			EXISTING TO DATE			
¹ Floor Area	Dwelling/Live Work	1,179,881.5 sq.ft		Dwelling/Live Wk.	1,	1,146,220 sq.ft	
	Retail/Serv/Office			Retail/Serv/Office			
	Sub Area 2	13,993.5 sq.ft		Sub-Area 2		0 sq.ft	
	Sub Area 3 26,501.6 sq.ft		Sub-Area 3		0 sq.ft		
	<u>Sub Area 4, 5, 6</u>	63,638.3 sq.ft		Sub-Area 4,5,6	Ę	59,678 sq.ft	
	Total Retail/Serv/Office			Total Retail/Sev/Office	59,678 sq.ft		
Amenity	75, 350 sq.ft			15,530 sq.ft			
Unit	Market (min)	Family	213	Market (min)	Family	355	
Count -		Total	750		Total	691	
Area 2	Modest Market (min)	Family	47	Modest Market (min)	Family	44	
	Affordable (min)	Total	100	Affordable (min)	Total	121	
	Affordable (min)	Family Total	125 250	Affordable (min)	Family Total	86 153	

¹ **Note on Floor Area:** The tracking of overall floor area is on-going and confirmation of floor area from the applicant for permit issuance will be required. (See Standard Condition A.1.1). Preliminary evaluation of the total FSR for Area 2A indicates that the proposed FSR is very close to the total FSR permitted. It is requested that the applicant prepare and submit an accurate tabulation of FSR including exclusions for all the sites in Area 2A to determine that the total proposed FSR complies with the CD-1 By-law.

• BACKGROUND:

Development Permit Board and Advisory Panel members have a Briefing Binder distributed prior to the first development permit application which provides history and background information on SEFC Area 2A. The CD-1 zoning by-law for SEFC – Area 2A was enacted by Council on April 17, 2007. The text amendment to the by-law to increase the building height for Parcel 4 was approved at public hearing on April 17, 2007. The by-law enactment for the text amendment requires Council approval once the conditions of approval have been satisfied.

URBAN DESIGN PANEL

The Urban Design Panel reviewed this application on February 14, 2007. The project received nonsupport from the Panel. The Panel held a workshop with the applicant on February 28/07. The applicant received advice on form of development and, in particular, building height. Staff sought clarity from the Panel in order to prepare a report to Council for a rezoning text amendment on building height. Design development advice provided by the Urban Design Panel has been integrated into the plans. These improvements are based on the Panel's advice and as presented to the Panel on March 28, 2007 where the proposal received support. The minutes of all three meetings are attached for inclusion in your Briefing Binder. Note: Staff review and conditions are based on plans and materials date stamped on April 1, 2007 which are the same as reviewed by the Urban Design Panel on March 28, 2007.

URBAN DESIGN AND DEVELOPMENT PLANNING:

General Commentary

General Compliance with Council Approved Design Intent Established under the Re-zoning

This development permit application generally complies with the Council approved CD-1 text amendment of April 17, 2007 with respect to use and form of development noting that there are no design guidelines. Staff believes that the form of development will meet expectations for a signature development that complements other prominent sites in the False Creek context while reinforcing building form and character evident in the village precinct. Good progress has been achieved on all applicable design development conditions approved under the re-zoning. The building, landscape and sustainable design development conditions presented in this report typically seek further refinement to design intent already established and supported by Council. (See conditions 1.1 through 1.12)

Form and Massing

The proposed form of development presented under this application is consistent with general and individual building massing and height recently approved by Council under the CD-1 text amendment as noted above. The proposed design offers a unique waterfront design response that will distinguish the Olympic Village Precinct while more specifically announcing the inlet and public plaza location through its innovative architecture. Parcel 4, in this context, is considered as one component of an "ensemble" of waterfront buildings and related structures including the SEFC Community Centre (parcel 11) and the post 2010 pavilion building (parcel 8). The proposed form of development improves shadowing impacts on the seawall from that anticipated in the original CD-1 while offering more public views through the site and a related courtyard/water feature amenity. The Urban Design Panel, and staff, has encouraged the applicant to pursue the architectural response presented noting that its success will depend upon proper execution. (See conditions 1.1, 1.2, & 1.5)

Public Realm

This application requires further design development to integrate and reinforce overall public realm design intent at site edges and to ensure a seamless integration with the SEFC Public Realm Plan. The visual conveyance of storm water through special courtyard water features is strongly supported as a strategy to announce sustainability values to pedestrians and residents. Further design development to

courtyard features to pursue innovative use of light, water and colour is strongly encouraged and will reinforce larger precinct strategies to distinguish the waterfront setting at night. (See condition 1.3 & 1.9)

Architectural Expression and Character

This development permit applications approach to expression and character is supported by staff as an appropriate response to the waterfront setting and larger False Creek context. Execution of the innovative form will rely upon careful attention to building systems selection and detailing with adequate budgeting. The rezoning text amendment secured a public benefit of \$225,000 towards the design and construction of the adjacent triangle park identified in the related text amendment to the CD-1, staff understands that the owner has assigned the proper budget to implement the proposed design. Opportunities to introduce colour and lighting into the project are anticipated during further design development. Staff will re-visit the urban design panel in a non-voting session seeking further peer advice once further design development has been achieved. (See conditions 1.1 & 1.2).

SUSTAINABILITY:

Environmental sustainability is a key objective of the SEFC ODP and zoning for Area 2A. Council approved the SEFC Green Building Strategy on July 8, 2004 which sets out a minimum baseline of environmental performance in all facets of building design and construction. The Green Building Strategy is an evolving document which is intended to incorporate the current "best practices" and to constantly seek to improve environmental performance through incremental change.

The SEFC Green Building Strategy is secured by the Development Agreement between the City and Millennium SEFC Properties Ltd., the developer for the properties within Area 2A. The land will be transferred at the end of the exclusive use period for the 2010 Winter Games. The Agreement requires that all sites be certified to a minimum LEED-NC 1.0 (CaGBC) Silver level. In addition, it is a rezoning requirement that the Developer (owner) register and be eligible to achieve LEED-NC 1.0 (CaGBC) Gold certification. (See Appendix E - Rezoning Prior to Conditions Response Table, Condition [lxx]).

LEED is measured after project completion. Development Permit conditions of approval are designed to create the circumstances under which the project can reasonably be expected to achieve LEED Gold (See Appendix F - LEED Checklist). Staff are recommending several conditions under Standard Conditions A.5.1 to A.5.6).

There are a number of areas evaluated by staff to determine whether this project has the potential to meet the broader sustainability goals of the City. Upon our review of this application staff believe this project can meet the sustainability objectives established by the City with conditions in the following areas:

Energy:

Passive Design - There are five passive design approaches currently being considered by staff which are part of the strategy for the entire SEFC site and will inform City policy beyond the development of this precinct. To reduce energy consumption by this project, the applicant proposes to employ one of the passive design approaches. This approach will add floor area to the project and the applicant is requesting that the area be "excluded" from the total floor area in the interests of improved "passive" environmental performance:

1) To reduce solar heat gain on the west elevations of the East and West Towers, increased balcony depth combined with solar shading devices are proposed. The applicant has indicated that they are prepared to provide documentary evidence that these combined measures can reduce external solar heat gain. Combined with a low energy, radiant space heating system, it is intended that the

solar heat gain mitigation strategy will help contribute to energy savings, and achieve points in the Energy and Atmosphere (EA) credit category of LEED-NC 1.0 (CaGBC).

The design drawings submitted to date require further design development in order for staff to effectively evaluate whether the proposed passive design exclusions are acceptable. (See Condition 1.1. and Standard condition A.1.4)

Accordingly, staff are seeking further information on the areas to be excluded through passive design (See Standard Condition A.1.4) and evidence that the applicant can achieve a minimum of 2 LEED points for energy efficiency through these measures. (See Standard Condition A.5.3)

Water:

Rainwater - the applicant proposes to capture and store enough rainwater to eliminate potable water demand during a "design" 6-week summer drought period. To optimize water conservation and enhance water quality, the rainwater will be used throughout the year for toilet flushing and hard plumbed irrigation of traditional landscaped areas (not for urban agriculture which will be watered through hose bibs). The proposed "Rainwater Balance Model" is anticipated to produce substantial annual potable water savings. The strategy for water storage is (typically) to have storage cisterns in basement parking structures that will provide the reservoir water capacity. The applicant has proposed a cistern within the parking level. (See Standard condition A.1.13)

Staff are seeking confirmation on the plans regarding the location, access, size and capacity of the cistern (See Standard Condition A.1.13)

Potable Water - as outlined in the Green Buildings Strategy, the applicant proposes to use low flow sink and shower aerators where practical and dual flush toilets. The rainwater balance model for toilet flushing will result in a reduction of potable water by up to 40% over the LEED baseline. Staff are seeking a notation on the plans indicating the provision of appropriate plumbing fixtures for the project (See Standard Condition A.5.4)

Urban Agriculture:

All of the units in this project include balconies with areas that exceed 100 sq.ft. where individual strata owners have opportunities for customized intensive gardening and landscaping. There are no viable opportunities for communal garden plots in this project as the roof decks are inaccessible, the courtyard is primarily a water feature, and the lack of sunlight will compromise growing conditions. Accordingly, intensive green roofs (garden plots) are not recommended for this project. Staff note that the project is immediately adjacent to the community demonstration garden where residents could choose to participate in urban agriculture.

Infrastructure:

Site Rainwater Management - the SEFC and Olympic Village Project Office is tasked with designing and building the public realm in area 2A. All rainwater falling on the public realm will be collected and transported to two treatment areas: the Hinge Park Wetland and the Ontario Street Bioswale where the water will be cleansed before its eventual release into False Creek.

Neighbourhood Energy Utility (NEU) - the City is currently exploring, as part of the SEFC NEU, sewer heat recovery with the goal of reducing GHG emissions. The developer, through the Development Agreement, is required to connect to and utilize the NEU for the project's space heating requirements. The NEU will provide domestic hot water and space heating to all residences in Area 2A. The applicant has proposed a radiant, hydronic system that will provide heat within the buildings via ceiling mounted "mats" of capillary tubes. (See Standard Conditions A.2.10, A.2.11 and A.5.2)

Construction Waste - the applicant has committed to the reduction of construction waste by 75% as outlined in the Green Building Strategy and LEED Checklist thereby reducing the amount of material sent to the landfill.

Residential Waste Collection - the applicant is proposing three streams of waste which are not illustrated on the plans. Staff are seeking confirmation of how the three streams of waste will be accommodated (See Standard Condition A.2.8)

Social Sustainability

The principles of universal design are expected to ensure 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. The project can be expected to meet the Enhanced Accessibility regulations under the City's Building Bylaw and the applicant has provided a list of SAFER Home Criteria items that they will voluntarily provide in the project. (See Appendix G - SAFER Home Checklist). Staff encourage the applicant to continue to work with a Universal Design consultant to achieve the objectives of Universal Design. (See Standard Condition A.5.6)

NOTIFICATION

One sign was erected on the site on February 15, 2007. On February 23, 2007, 1,872 letters were sent to neighbouring property owners advising them of the application. To date, there have been no responses to notification.

DEVELOPMENT STAFF TEAM SUMMARY:

The Staff Team has considered the approval sought by this application and concluded that with respect to the Zoning and Development By-law it requires decisions by the Development Permit Board. With respect to the decision by the Development Permit Board, the application requires the Development Permit Board to exercise discretionary authority as delegated to the Board by Council.

With respect to the Parking By-law, the By-law gives the Director of Planning the authority to consider relaxations of the Parking By-law with regard to the provision of off-street parking and loading spaces. The By-law also gives the authority to the Development Permit Board to act on behalf of the Director of Planning. This application does not seek any relaxations of the off-street parking or loading provisions of the Parking By-law.

DEVELOPMENT PERMIT STAFF TEAM RECOMMENDATIONS

The following is a list of conditions that must also be met prior to issuance of the Development Permit.

A.1 Standard Conditions

- A.1.1 design development to demonstrate compliance with the technical requirements of the CD-1 By-law for the following:
 - Floor Area;
 - Height;
 - Horizontal Angle of Daylight;
 - Parking and bicycle parking,
 - Unit count and unit type
- A.1.2 provision of details of balcony enclosures;

Note to Applicant: To qualify for an exclusion from floor space ratio [FSR] calculations, an enclosed balcony must be a distinct space separated from the remainder of the dwelling unit by walls, glass, and glazed doors [hinged or sliding], have an impervious floor surface, a flush threshold at the bottom of the door [for disabled access], large, operable windows for ventilation, and distinct exterior architectural expression. In addition, each dwelling unit should have no more than one enclosed balcony, and all balconies, open and enclosed, should be clearly identified on the floor plans. Notation should also be made on the plans stating: "All enclosed balconies shall be designed and constructed in accordance with the Council-approved Balcony Enclosure Guidelines." Limitations on the amount of exclusions and enclosures permitted are described within the regulations of the respective District Schedule or Official Development Plan that apply to the specific site. For further details and specifications on enclosure requirements, refer to the Council-approved Balcony Enclosure Guidelines.

- A.1.3 provision of complete and fully-dimensioned floor and site plans;
- A.1.4 submission of detailed FSR overlays indicating all spaces and uses included or excluded from FSR calculations;

Note to Applicant: The applicant is required to provide detailed illustrations of those areas proposed to be excluded from FSR for passive design along with an explanation on how the proposed passive design exclusions will perform to conserve energy.

Standard Landscape conditions

- A.1.5 provision of additional continuously spaced small species trees to the perimeter planters;
- A.1.6 provision of detailed elevations of patio privacy screens (typical) and railings;

Note to Applicant: Privacy screens/railings should be discreet and allow for passage of light and air, where possible. Materials to be high quality and consistent with the colour and materials palette of the building.

A.1.7 provision of a detailed landscape plan including plant list/symbols, gates, railings, trellis, hard surface treatment, pedestrian weather protection, spot elevations, exterior wall treatment, utilities, lighting, irrigation, planter depths, exterior furniture;

Note to Applicant: Plans should illustrate heights and materials for hard surfaces and landscape structures/railings/gates/grill work.

- A.1.8 provision of a detailed rationale outlining the programming of individual outdoor spaces and landscape elements, including: uses, access, security, sustainable design requirements, provision of adequate soil depth, vertical structures, including dimensions and materials;
- A.1.9 provide sections (min. scale ¼"=1'0) through all planters confirming minimum 36 inch soil depth for trees and 24 inch shrub planting in order to support healthy growth of plant material to intended mature size;

Note to Applicant: Illustrate proposed planter wall and guardrail heights for all deck areas.

- A.1.10 provision of an overlay of all roofs, in order to illustrate the amount of roof coverage by intensive and extensive green roofs;
- A.1.11 provision of hose bibs on all private on all private decks and patios;

Note to Applicant: Hose bibs should be installed in a location where irrigation can be undertaken conveniently to all planting beds.

- A.1.12 provision of a notation on the landscape plans regarding the methods to be used for reducing the use of potable water for irrigation (i.e.: high efficiency irrigation, use of drought resistant plants etc.) through the use of a storm water cistern;
- A.1.13 indication on the architectural drawings of the location, access, size and capacity of the cistern;
- A.1.14 provision of adequate soil volumes and planting depths for on-site trees;
- A.1.15 provision of a plant list on the landscape plan;

Note to Applicant: The plants should be drought shade tolerant (when planted in north facing areas). The plant list should be keyed to the landscape plan and contribute to the place making character of the precinct and the individual qualities of the site.

A.1.16 design development to the building entrances to provide paving materials that are substantive, reflect the robust character of the site and are tied to the colour and materials palate of the building;

Crime Prevention Through Environmental Design (CPTED)

A.1.17 design development to the underground parking to separate the elevators from the exit stairs once fire and safety issues have been addressed;

Social Planning/Housing Centre/ Cultural Affairs

A.1.18 design development to ensure the indoor amenity rooms comply with the High Density Housing for Families with Children Guidelines;

Note to applicant: Amenity rooms should include an accessible washroom. A kitchenette and storage area should be provided in the multi-purpose/lounge amenity rooms.

A.2 Standard Engineering Conditions

A.2.1 provision of the correct legal description on page AO.1;

Note to Applicant: Correct legal description is Lot 323, False Creek, Plan BCP27367.

A.2.2 provision of additional design grades at all entrances along the property lines, on both sides of the crossing at the property line and on both sides of all breakpoints on the ramps.

Note to Applicant: BG plan GE060256 has now been issued.

A.2.3 provision of a detailed drawing of a double parking space at a scale of 1/8" = 1' within the parking area;

Note to Applicant: Greater detail of the parking garages, including bicycle storage, is required. A minimum of 20' between the *inside* garage walls is necessary where bicycles are stored within the garage. A minimum of 1' clearance between the back of a standard parking space length of 18' and the garage door should be provided.

A.2.4 provision of numbering for all parking spaces;

Note to Applicant: Provide numbering for each residential parking space regardless if they share a garage.

A.2.5 provision of adequate 2-way flow at the top and bottom on the main parking entry ramp on P1 and P2 and at some intersections of manoeuvring aisles;

Note to Applicant: Turning swaths for standard vehicles should be applied to ensure adequate 2-way traffic flow is available at turn points.

A.2.6 clarification that a minimum 7'6¹/₂" vertical clearance is provided where disability spaces are located;

Note to Applicant: Drawing A3.4 Section AA shows a portion of the parkade with a height less than the minimum required.

- A.2.7 provide expected storm water flow rates to confirm that these meet the criteria outlined in the Integrated Site Servicing Plan (ISSP);
- A.2.8 provision of an additional space (5'x8') for future organics garbage collection;

Note to Applicant: The space is to be independently accessible by tenants and garbage operators and clearly noted on the plans.

- A.2.9 confirmation that the applicant's "best commercial efforts" will be employed to provide a single service provider that can access and pick up garbage from the locations shown on the plans is sought;
- A.2.10 clarification of how the building design includes provision for connections to the False Creek Neighbourhood Energy Utility and show the room, labelled "NEU Energy Transfer Station (ETS), which will house the system infrastructure on the plans;

Note to Applicant: The ETS room shall be located at the basement or ground level, preferably at or adjacent to an outside wall. Suitable space for the installation of the NEU system ETS equipment, with adequate provision for connection to outside NEU distribution piping and communications conduit is to be provided to the satisfaction of the General Manager of Engineering Services. The developer shall make available use of sewer and potable water piping in each ETS room. The ETS room shall be ventilated as required by the Vancouver Building Bylaw and heated during the winter to minimum 15°C. The developer must provide a dedicated 15 amp 120V, 60 Hz, single-phase electrical service for operation of the ETS, to the satisfaction of the GMES.

- A.2.11 arrangements to the satisfaction of the General Manager of Engineering Services and the Director of Legal Services for appropriate agreements for access to and operation of the NEU are required;
- A.2.12 design development to show a standard crossing for vehicle entry off of Athlete's Way and delete curb returns;

Note to Applicant: A standard driveway crossing is to be clearly indicated on the plans showing the approved locations for all sidewalk bulges.

Note to Applicant: Parking access must comply with the geometrics of the roadway and ensure there are no conflicts with street furniture, poles or other street infrastructure. The driveway must be configured to allow proper two-way flow into and out of the parking area and vehicles should not be required to cross over the centerline to complete their turn.

Note to Applicant: Illustrate on the drawings, including landscape drawings, the same location of the driveway, structures and landscaping as well as standard crossing designs.

A.2.13 provision of SEFC public realm treatments adjacent to the site;

Note to Applicant: Engineering will seek a copy of the landscape plan once it is further developed for final review and record purposes.

A.2.14 clarification of the road geometric included in the SEFC Public Realm Plan located in front of this site;

Note to Applicant: A crossing application is required.

- A.2.15 submission of a written strategy on the provision and use of the car-share spaces;
- A.2.16 provision of 3 disability spaces in privately secured parking garages;
- A.2.17 consideration to allow for charging of e-vehicles and e-scooters, the applicant shall consider provision for a minimum 3% of residential parking stalls with 120 V AC single phase outlets (per section 86 of the Canadian Electric Code) with provision for future expansion to 15% of all residential parking stalls.

A.3 Standard Vancouver Coastal Health Authority Conditions

- A.3.1 an acoustical consultant's report shall be submitted which assesses noise impacts on the site (by the development) and recommends noise mitigation measures in order to achieve noise criteria;
- A.3.2 confirmation shall be submitted by the applicant with a notation on the plans that the acoustical measures will be incorporated into the final design, based on the consultant's recommendations as concurred with or amended by the Medical Health Officer (Senior Environmental Health Officer);
- A.3.3 confirmation shall be submitted by the applicant with a notation on the plans that mechanical (ventilators, generators, compactors and exhaust systems) will be designed and located to minimize the noise impact on the neighbourhood and to comply with Noise By-law #6555
- A.3.4 submission of a report that describes the non-potable water storage and utilization system;

Note to Applicant: The report shall detail all the equipment, provide the maintenance plan/schedule and provide written assurance that the potable and non-potable water systems are kept separate.

A.4 Standard Licenses & Inspections (Environmental Protection Branch) Conditions:

A.4.1 provision of an erosion and sediment control plan for review and approval by the Environmental Protection Branch at the Building Permit application stage. A Waste Discharge Permit may be required.

A.5 Sustainability Conditions

A.5.1 design development to meet the LEED[™] Canada 1.0 storm water management credits (Sustainable Sites Credits 6.1 and 6.2). Storm water treatment/storage facilities (green roof, swales, cistern, etc) should be integral to the open space design;

Note to Applicant: detailed technical drawings to be submitted at time of building permit application.

A.5.2 provision for compatible, energy efficient design and details of the in-building heating and domestic hot water for the referenced connection to the False Creek Neighbourhood Energy Utility (FCNEU) proposed for the area; (See also Standard conditions A.2.10 and A.2.11)

Note to Applicant: provide a building line diagram schematic which shows compatibility with FCNEU.

A.5.3 provision of a letter of commitment to provide a rationale to achieve a minimum of 2 LEED points under the Energy & Atmosphere - optimize energy performance credits as defined by the LEED Canada- NC 1.0 Green Building rating system;

- A.5.4 notations on plans for the following:
 - installation of a premium green roof membrane with a proven technology where applicable;

Note to Applicant: provide technical details, sections and specifications and letter of commitment that a roofing consultant has been hired to oversee the roofing process at the time of Building Permit Application.

- installation of low-water-use plumbing fixtures at or below 1.8 gpm for faucets and showerheads and 6L/3L dual flush toilets. Specify in-suite water conserving appliances and building equipment (meet Energy Star requirements);
- installation of high quality, durable architectural materials and detailing to meet or exceed CSA Guidelines on Durability in Buildings;

Note to Applicant: Applicant is proposing to meet the LEED MR Credit 8 (LEED Canada Standard S 478).

- no natural gas fireplaces are to be installed within dwelling units. Ornamental noncombustion fireplaces are permitted if they are not heat producing;
- installation of climate zone control for residential and live-work units shall be compatible with the False Creek Neighbourhood Energy Utility;
- installation of roughed-in capacity for future monitoring of individual suite metering for energy and water use;
- A.5.5 provision of a point-by-point plan, including energy modeling, for compliance with ASHRAE 90.1 2004 up to and including Addendum G;
- A.5.6 commitment 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 the zoning conditions (See Appendix G, Page 1 of 1).

Note to Applicant: Applicant to give consideration for the provision of 36" door widths for all doorways and access/egress points in the project.

B.1 Standard Notes to Applicant

- B.1.1 The applicant is advised to note the comments of the Processing Centre-Building, Vancouver Coastal Health Authority and Fire and Rescue Services Departments. Further, confirmation that these comments have been acknowledged and understood, is required to be submitted in writing as part of the "prior-to" response.
- B.1.2 It should be noted that if conditions 1.0 and 2.0 have not been complied with on or before **October 23, 2007**, this Development Application shall be deemed to be refused, unless the date for compliance is first extended by the Director of Planning.
- B.1.3 This approval is subject to any change in the Official Development Plan and the Zoning and Development Bylaw or other regulations affecting the development that occurs before the permit is issuable. No permit that contravenes the bylaw or regulations can be issued.
- B.1.4 Revised drawings will not be accepted unless they fulfill all conditions noted above. Further, written explanation describing point-by-point how conditions have been met, must accompany revised drawings. An appointment should be made with the Project Facilitator when the revised drawings are ready for submission.
- B.1.5 A new development application will be required for any significant changes other than those required by the above-noted conditions.
- B.1.6 The garbage storage area to be designed to minimize nuisances;
- B.1.7 The underground parking is to be adequately ventilated to prevent the build-up of noxious gases;
- B.1.8 All fresh-air intake portals are to be located away from driveways and parking/loading areas in order to prevent vehicle exhaust from being drawn into the building;

B.2 Conditions of Development Permit:

- B.2.1 All approved off-street vehicle parking, loading and unloading spaces, and bicycle parking spaces shall be provided in accordance with the relevant requirements of the Parking By-law within 60 days of the date of issuance of any required occupancy permit or any use or occupancy of the proposed development not requiring an occupancy permit and thereafter permanently maintained in good condition.
- B.2.2 All landscaping and treatment of the open portions of the site shall be completed in accordance with the approved drawings within six (6) months of the date of issuance of any required occupancy permit or any use or occupancy of the proposed development not requiring an occupancy permit and thereafter permanently maintained in good condition.

B.2.3 This site is affected by the Development Cost Levy By-law No. 8149 and No. 9418. Levies will be required to be paid prior to issuance of Building Permits.

- B.2.4 All services, including telephone, television cables and electricity, shall be completely underground;
- B.2.5 No exposed ductwork shall be permitted on the roof or on the exterior face of the building without first receiving approval of the Director of Planning;

- B.2.6 Amenity areas/common residential storage spaces, excluded from the computation of floor space ratio, shall not be put to any other use, except as described in the approved application for the exclusion, Access and availability of the use of all amenity facilities located in this project shall be made to all residents, occupants and/or commercial tenants of the building;
- B.2.7 The enclosed balconies are to be maintained at all times in accordance with the balcony enclosure details on the approved plans and area not to be used as an integral part of the interior space of the building;
- B.2.8 In accordance with Private Property Tree By-law No. 7347, all trees are to be planted prior to issuance of any required occupancy permit, or use or occupancy of the proposed development not requiring an occupancy permit, and thereafter permanently maintained in good condition.

Processing Centre - Building and Fire Comments

The following comments are based on the preliminary drawings prepared by Nick Milkovich Architects Inc and Arthur Erickson and Lawrence Doyle Young and Wright dated Feb. 1, 2007 for the proposed development permit. This is a preliminary review in order to identify issues which do not comply with the VBBL #8057. The review includes subsection 3.2.5."Provisions for Fire Fighting".

- 1. Highrise building and VBBL 3.2.6. requirements for high buildings apply to the entire buildings over a common basement parkade.
- 2. The building is required to provide access to persons with disabilities to all common areas, storage, amenity, meeting rooms, etc.
- 3. The building is required to meet Enhanced Accessibility provisions.
- 4. * Additional exit may be required from storage garage where security gate is provided.
- 5. Storage garage security shall conform to 3.3.6.7.
- 6. Where access is provided between the storage garage and adjacent occupancies through elevators and stairshafts, vestibules are required at the level of the storage garage.
- 7. Garbage/recycle room to have accessible path of travel from the residential floors.
- 8. Firefighters elevators are required to access all floor areas from the entrance for firefighters.

*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.