Fire Department Access Report

Part I

August 16, 2011 Z110309

Prepared for:
Kiwanis Village (Phase II)

Project Address:
2105 - 2165 Haywood Avenue
West Vancouver, B.C.

by
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Telephone: (604) 737-0333

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Appendix

FIRE DEPARTMENT ACCESS REPORT

1.0 Objective

The objective of this Fire Department Access Report is to describe the degree of conformity of the proposed Seniors' Housing Development to be constructed at 2105-2165 Haywood Avenue, West Vancouver, BC, hereinafter called "The Project," to current fire and life safety codes. This is a report on Fire Department access only.

The Project is designed by Via Architecture and Nielsen Design Consultants Ltd. This Fire Department Access Report is based on the architectural drawings dated March 21, 2011 and is for the purpose of re-zoning only. A detailed report will be available at a later date.

This report deals only with Division A, Division B, Part 3 and Division C of the 2006 British Columbia Building Code only. All other parts, including Division B, Part 5, "Environmental Separation," are the responsibility of others. Please note that Pioneer Engineering Consultants Ltd. does not design, review, inspect, nor verify any materials related to building envelope, waterproofing, finishes or other related materials. A separate building envelope consultant must be engaged to do the afore-mentioned work.

1.1 Jurisdiction

This Fire Department Access Report will be carried out in conjunction with construction of the subject building and will be submitted for acceptance by the Authority Having Jurisdiction, Planning, Lands & Permits Division, Permits and Licenses Department of the City of West Vancouver. This report represents our interpretation only; the contents must be reviewed and accepted by the Authority Having Jurisdiction.

The Fire Department Access Report is intended to establish the overall Building Code requirements for construction of the building and will be used as a basis for design/construction in terms of fire department access. It is anticipated that upon acceptance of this Fire Department Access Report by the Authority Having Jurisdiction, the design may further proceed.

1.2 Project Location and Description

The proposed development will be located at 2105-2165 Haywood Avenue, West Vancouver, BC. The site is bounded by Haywood Street to the south, 22nd Street to the west, and interior property lines to the north, south and east. Haywood Avenue changes to a fire department access. The access does not go through the property and is the subject of this report. The project site legal description is Lot A, D.L. 775, GP 1, New Westminster District, Plan BCP 11635.

1.3 Applicable Building Code

The applicable building code for this Project is the 2006 British Columbia Building Code, hereinafter referred to as the "Code." and the Independent Living BC Non-Profit Housing Design and Construction Standards, hereafter referred to as the "ILBC." This Fire Department Access will define the applicable fire protection and life safety requirements of the British Columbia Building Code 2006 relative to the design of the project and will present an approach to building code compliance. All references given refer to BCBC 2006, unless noted otherwise.

This report only deals with the Fire Department concerns listed in section 3.5

2.0 Description of the Proposed Project

The project has a site area of 6485 m² (69,804 ft²). The civic address will be 2105-2165 Haywood Avenue, West Vancouver, B.C. For the purpose of Subsection 3.2.2., Building Size and Construction Relative to Occupancy, the Project will be considered as two buildings comprised of one 4-storey residential building and a five storey on top of a 3.2.1.2 parkade, which is also considered as a separate building by Code. The proposed building will be fully sprinklered.

2.1 Number of Streets the Building is Facing

The Project will face 21st Street to the east. As less than 50% of the building perimeter will be located within 15 m of the streets, as per Sentence 3.2.2.10.(3), the Project is considered to face one street. As this is a fully

sprinklered building, the number of streets it faces will not affect the construction requirement.

3.0 Provisions for Fire Department

3.1 Access Routes

The building is required to have a fire department access route to the building face having a principal entrance. The principal entrance to the lobby of the east building is located on the south side off a private fire department access leading from 21st Street. The west building lobby will be located along the east face and is connected to the Fire Department access where it turns northward.

3.2.5.5. Location of Access Routes

(1) Access routes required by Article 3.2.5.4. shall be located so that the principal entrance and every access opening required by Articles 3.2.5.1. and 3.2.5.2. are located not less than 3 m and not more than 15 m from the closest portion of the access route required for fire department use, measured horizontally from the face of the building.

Both principal entrances of the East and West Building will be within 15 m from the closest portion of the access route.

(2) Access routes shall be provided to a building so that
(a) for a building provided with a fire department connection, a fire department pumper vehicle can be located adjacent to the hydrants referred to in Article 3.2.5.16., . . . and
(c) the unobstructed path of travel for the fire fighter from the vehicle to the building is not more than 45 m.

In this case, the fire hydrant located at the entry into underground parkade is well within 45 m to the building.

(3) The unobstructed path of travel for the fire fighter required by Sentence (2) from the vehicle to the building shall be measured

from the vehicle to the fire department connection provided for the building, except that if no fire department connection is provided, the path of travel shall be measured to the principal entrance of the building.

(4) If a portion of a building is completely cut off from the remainder of the building so that there is no access to the remainder of the building, the access routes required by Sentence (2) shall be located so that the unobstructed path of travel from the vehicle to one entrance of each portion of the building is not more than 45 m.

Sentence 4 is not applicable as all portions of the building can be accessed from the main floor public corridor. The amenity room is also directly accessible from the fire department access.

The design of the access route shall conform to Article 3.2.5.6.:

(1) A portion of a roadway or yard provided as a required access route for fire department use shall
- *(a) have a clear width not less than 6 m, unless it can be shown that lesser widths are satisfactory*
- *(b) have a centerline radius not less than 12 m,*
- *(c) have an overhead clearance not less than 5 m,*
- *(d) have a change of gradient not more than 1 in 12.5 over a minimum distance of 15 m,*
- *(e) be designed to support the expected loads imposed by fire fighting equipment and be surfaced with concrete, asphalt or other material designed to permit accessibility under all climatic conditions,*
- *(f) have turnaround facilities for any dead-end portion of the access route more than 90 m long, and*
- *(g) be connected with a public thoroughfare.*

The proposed fire department access complies with the above. The design of the road has been performed by Bunt & Associates. The construction of the road will meet City Engineering Standards as it will be designed by a qualified Civil Engineer. “Fire Lane No Parking” signs will be posted along the fire department access.

3.2 Requirements for the Fire Department at the Principal Entrance

The principal entrance at each of the buildings will be located no less than 3 m nor more than 15 m from the nearest portion of the fire department access route to the building. The equipment required at the principal entrance will include:

a. An annunciator panel for the building fire alarm system with visual and audible trouble signal devices and means to actuate the auxiliary equipment where such equipment is provided.
b. A recessed lock box for fire department access to building.
c. Fire Department connections.
d. Schematic diagram showing the entire Ground Floor layout with all the stair numbers, elevators, and access to fire safety equipment and electrical room uniquely identified.
e. Fire safety plan for occupancy.
f. A master reset button to reset the electromagnetic lock after an fire alarm event where one is provided.

Submit fire safety plans to the fire department for review prior to occupancy inspections. An annunciator will be located inside each residential lobby. Each building will have its own principal entrance and therefore provided with their own address.

Two sets of fire department siamese connections (pumper) will be provided, one set will be located near the principal entrance of the West Building and the other set at East Building. Both sets of siamese connections will be interconnected. Both siamese connections will be located within 15 m from the street. The path of travel from the pumper connection to the nearest hydrant will not exceed 45 m. The siamese connections must face a street[1]. The siamese connections must be mounted at not less than 18" but not more

[1] NFPA 14, 2003 Edition 4-3.5.1 states, "*Fire department connections shall be on the street side of buildings, fully visible and recognizable from the street or nearest point of fire department apparatus accessibility, and shall be located and arranged so that hose lines can be attached to the inlets without interference from nearby objects, including buildings, fences, posts, or other fire department connections.*"

than 48" from the ground[2], measured from the underside of the connections, and to allow for the swing of a wrench. The address of the building served by the fire department connection is required to be engraved in close proximity. The escutcheon plate around the connection shall also indicate the type of connection, that is, standpipes and automatic sprinklers or standpipes only.

From the principal entrance, access to the above grade and below grade portions of the project will be provided.

3.3 Sprinkler Systems

The parkade levels and above ground levels will be fully sprinklered in accordance with NFPA 13, "Standard for the Installation of Sprinkler Systems", 1999 Edition. The 4 storey east building will be sprinklered to NFPA 13R.

In conclusion, this Fire Department Access Report illustrates the method by which this building complies with the minimum life safety requirements prescribed by the 2006 B.C. Building Code.

Prepared by:

PIONEER ENGINEERING CONSULTANTS LTD.

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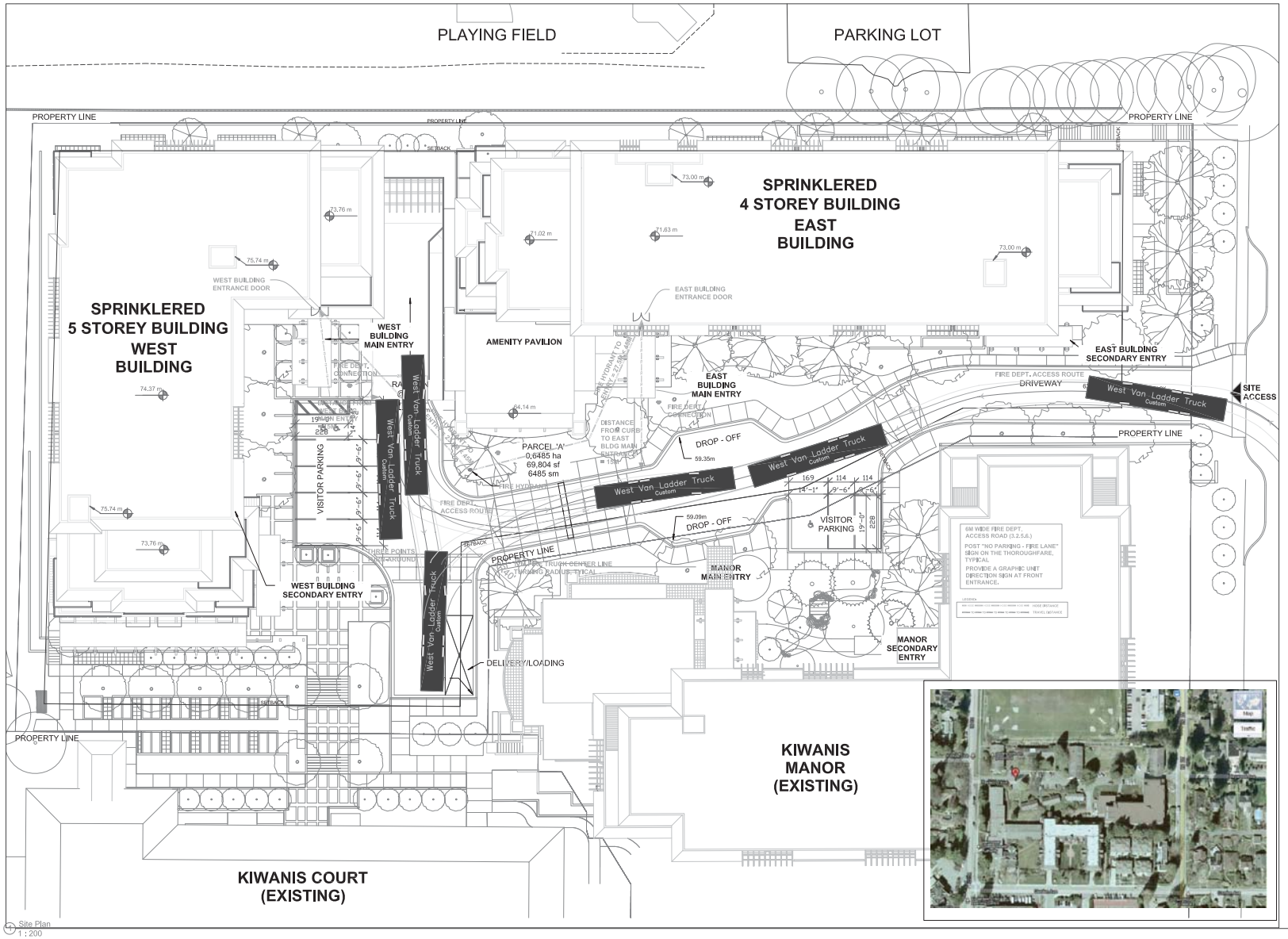
[2] As per Sentence 4-3.6 of NFPA 14, 2003 Edition.



Site Plan
1 : 200

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Revision Schedule

No.	Date	Description
1	19 Nov 2010	Preliminary Rezoning set issue for review
2	02 Dec 2010	Preliminary Rezoning set for review
3	03 Dec 2010	Preliminary Rezoning set issue for review
4	07 Dec 2010	GFA Revision
5	08 Dec 2010	Updated Civil Underlay
6	15 Dec 2010	Updated Civil Underlay
7	17 Dec 2010	Updated Civil Underlay and GFA
8	20 Dec 2010	Updated Floor Plans, GFA
10	21 Jan 2011	Current floor plans issued for information
11	1 Feb 2011	Issued for RFP reference
13	14 Feb 2011	Issued for Rezoning Application
14	10 Mar 2011	Re-Issued for Rezoning Application
15	21 Mar 2011	Re-Issued for Rezoning Application
16	24 May 2011	Issued for Information
17	18 August 2011	Re-Issued for Rezoning Application

KIWANIS WEST VANCOUVER -
KIWANIS GARDEN VILLAGE
West Vancouver, BC

PROJECT NO. 61109

SITE LAYOUT

DATE 21 March 2011
SCALE AT 22x34 SHEET SIZE 1 : 200
REV.
DRAWING NO. A100