



P4

POLICY REPORT
DEVELOPMENT AND BUILDING

Report Date: February 3, 2011
Contact: Kent Munro
Contact No.: 604-873-7135
RTS No.: 09077
VanRIMS No.: 08-2000-20
Meeting Date: February 15, 2011

TO: Vancouver City Council
FROM: Director of Planning
SUBJECT: CD-1 Text Amendment - 2803 West 41st Avenue (Crofton Manor)

RECOMMENDATION

- A. THAT the application by Neale Staniszkis Doll Adams Architects, on behalf of Revera Inc., to amend CD-1 (Comprehensive Development) District By-law No. 4674 for 2803 West 41st Avenue (PID: 007-752-202, Lot 1, Block 9, DL 2027, Plan 14745.), to increase the maximum density from 0.6 to 1.12 FSR and the maximum height from 10.1 m (33.0 ft.) to 24.3 m (79.7 ft.), to permit additions to the existing seniors facility, be referred to a public hearing, together with:
- (i) plans received March 2, 2010;
 - (ii) draft CD-1 By-law provisions, generally as presented in Appendix A; and
 - (iii) the recommendation of the Director of Planning to approve, subject to conditions contained in Appendix B;

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

- B. THAT Recommendation A 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.

CITY MANAGER'S COMMENTS

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

COUNCIL POLICY

Relevant Council Policies for this site include:

- CD-1 By-law No. 4674 (reference no. 83) for 2803 West 41st Avenue (December 19, 1972, last amended April 6, 2004)
- ARKS (Arbutus Ridge/Kerrisdale/Shaugnessy) Community Vision (November 1, 2005)
- Seniors Supportive and Assisted Housing Guidelines (February 19, 2002; last amended May 4, 2004)
- Green Building Rezoning Policy (February 4, 2010; applies to rezoning applications received between March 1, 2010 and July 30, 2010)
- Rezoning Policy for Greener Larger Sites (June 10, 2008)
- Community Amenity Contributions through Rezoning (January 20, 1999; last amended June 15, 2006)

SUMMARY & PURPOSE

This report assesses an application to amend the CD-1 (Comprehensive Development) District zoning for 2803 West 41st Avenue (Crofton Manor), existing seniors' rental residence and care facility. The proposal seeks to increase the overall maximum density from a floor space ratio (FSR) of 0.60 to 1.12 (an increase in the maximum permitted floor area of 11 787 m² (126,871 sq. ft.), and to increase the maximum height from 10.1 m (33 ft.) to 24.3 m (79.7 ft.). If approved, the rezoning application would allow for the following, noting that the existing buildings on the remainder of the site would be retained:

- construction of a six-storey building, fronting onto 41st Avenue, with lobby and amenity space at grade and five storeys of seniors assisted housing units above (replacing an existing one-storey administrative and amenity building);
- construction of a three-storey building along the western portion of the site providing seniors assisted housing units (replacing an existing one-storey building); and
- construction of a two-storey building along the south-east portion of the site, providing a seniors care centre (replacing an existing one-storey care centre).

Concerns have been expressed by the neighbourhood about the height of the six-storey building fronting onto 41st Avenue (see Figure 2 for site plan). Urban design assessment has concluded that the height, in the proposed location, is supportable within the context of this large site, and does not unduly impact the neighbouring houses. Further, with its existing

infrastructure, convenient location and accessible services and amenities, this site is ideally suited for additional seniors' housing in the area. Urban design staff conclude that the proposal is generally supported by Council policy and provides a public benefit in that it allows seniors to stay within their community as their housing needs change. Staff support the proposal and recommend that the application be referred to public hearing and, subject to public hearing, be approved subject to conditions outlined in Appendix B.

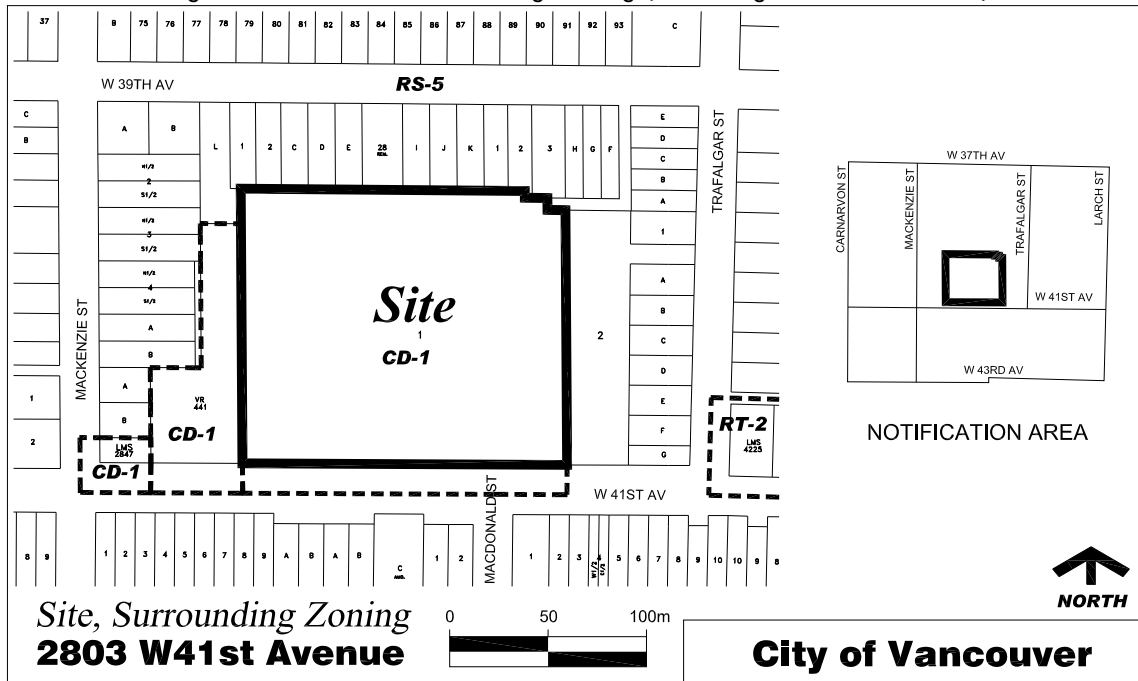
DISCUSSION

1. Site and Context

This 5.645 acre site has a 165 m (541 ft.) frontage along the north side of West 41st Avenue, and a depth of 475 feet. The site was rezoned to CD-1 (Comprehensive Development) District in 1971. The existing seniors residential and care complex is made up of multiple single-storey sections with the exception of one three-storey residential portion added in 1989 and a small two-storey building located at the rear of the care building.

Most of the surrounding properties are zoned RS-5 (Single-family) and are developed with one-family dwellings. The RS-5 zoning permits a density of up to 0.70 FSR and a maximum height of 10.7 m (35 ft.). The Kerrisdale Presbyterian Church is located immediately east of the site. The site immediately west of Crofton Manor was zoned to CD-1 in 1976 and is developed with a 19-unit three-storey multiple dwelling, limited to a maximum density of 0.60 FSR and a height of 7.3 m (24 ft.). Two blocks to the east is the Kerrisdale shopping area, providing a broad array of neighbourhood shops, services and amenities. RM-3 (multiple residential) zoning is found north and south of this commercial area. The site is located within the ARKS Community Vision area.

Figure 1: Site and Surrounding Zoning (including notification area)



With its location in the Kerrisdale area, the site is an exceptional location for seniors. The area provides a broad array of neighbourhood amenities and services and its location on West 41st Avenue provides convenient access to eastbound and westbound regular bus service.

2. Relevant Policy

Arbutus Ridge/Kerrisdale/Shaghnessy (ARKS) Community Vision – Council approved the ARKS Community Vision in November 2005. The rezoning policy for existing CD-1 zoned sites, such as Crofton Manor, requires a rezoning process to be undertaken to allow for community consultation and to provide the City with the ability to deny or impose conditions on a proposed development. While existing CD-1 regulations inherently differ from the surrounding zoning, in considering amendments to the zoning staff look at not only the needs of the project but also at how it relates to its existing surroundings and to the future of the areas as described in the Community Vision.

The importance of seniors housing is recognized in the ARKS Community Vision, where Direction 15.11 was strongly supported. That direction states, “Some small developments designed for seniors should be considered near parks, shopping, transit, and services to allow seniors to stay in the community as their housing needs change”. This Vision Direction notes that seniors housing can be considered for site-specific rezonings in advance of further area planning, because such proposals would further an adopted Vision Direction and because they would address broader city-wide policies for seniors housing. City policies and objectives generally seek to facilitate a broad range of housing types and choices for Vancouver’s senior population, particularly in locations that are strategically well-located for its aging residents.

The application is proposing three new buildings. Two of the proposed buildings would have heights of two- and three-storeys while the third centrally located building is proposed at six-storeys. The proposal, if approved, will provide additional seniors assisted housing and care facility housing units. The proposed form of seniors housing is supportable given the site’s location and because it will augment opportunities for seniors to “age in place” as their needs and circumstances change. Although the ARKS Community Vision expresses reservations about six-storey forms in general (Direction 15.8), the larger Crofton Manor site presents a unique opportunity to increase housing opportunities for seniors in a setting that is especially well-suited to this demographic.

Seniors Supportive and Assisted Housing Guidelines – Council’s guidelines for seniors supportive and assisted housing provide direction primarily related to the livability and usability of the development. The Guidelines include general design considerations regarding neighbourhood compatibility, site selection, building characteristics, open space, parking and loading, and pedestrian and vehicle access. As well, the Guidelines include considerations regarding unit size and design, common areas, storage areas, circulation areas, and safety features. The proposal generally meets the Guidelines.

3. Land Use

The zoning for this site allows for two uses: Seniors Supportive and Assisted Housing and Community Care Facility. “Seniors supportive and assisted housing” provides for individual residential units and common areas for dining, activities and socializing. Such facilities are designed to meet the needs of an elderly population, and to accommodate aging in place. They include a number of non-medical services, typically including meals, housekeeping,

laundry and activities. City policy recognizes that seniors supportive and assisted housing is an important component of the continuum of housing choice for seniors, one which allows seniors to maintain and maximize their independence.

“Community Care Facilities” are residential buildings licensed under the Provincial Community Care and Assisted Living Act, including buildings commonly referred to as ‘nursing homes’ or ‘care facilities’ for frail seniors. These facilities provide a significant degree of care or rehabilitative programs for people who have severe physical or mental illnesses or disabilities.

The amendment to the existing zoning proposes to replace portions of the complex to increase the number of both seniors housing and care units. Three areas of the site will be affected:

- The existing one-storey administrative and amenity building, fronting 41st Avenue, is proposed to be replaced by a six-storey building. The new building, the “Main Lodge”, is intended to be the focal point of the complex, providing the main arrival point and the activity hub for residents’ activities and social interaction, as well as administrative space. The upper five levels would provide seniors housing units.
- A one-storey residential building on the western side of the site is proposed to be replaced by a three-storey building providing seniors housing units.
- The one-storey care facility, located on the eastern side of the site, is proposed to be replaced with a new two-storey care facility, with a new main entry and reception area.

The existing and proposed units are shown in Table 1. The location of where the units will be located is shown in Figure 2.

Table 1: Seniors Housing and Care Units

	Existing	New	Proposed
Seniors Assisted Housing Units			
Main Lodge	0	86	86
West Wing	32	40	72
Remainder of Site	75	0	75
Total	107	126	233
Care Facility Units			
East Wing	21	20	41
Remainder of Site	65	0	65
Total	86	20	106

Figure 2: Site Plan showing location of Seniors Housing and Care Units



The property owner intends to undertake the proposed development in three phases, over a period of approximately ten years, as follows:

- Phase 1 – six-storey “Main Lodge”
- Phase 2 – two-storey “East Wing”
- Phase 3 – three-storey “West Wing”.

To ensure that residents are not displaced during this process, when construction commences, residents will be offered another apartment at Crofton Manor, and they will be assisted in their move.

Seniors Advisory Committee – The Seniors Advisory Committee reviewed this proposal on September 17, 2010 and generally supported the rezoning application. While the provision of additional seniors housing at this location was supported, the Committee noted some concerns about the change in tower height of the Main Lodge from four-storeys to six-storeys (see Appendix E).

4. Density

Under the existing zoning, the overall density permitted on the property is 0.6 FSR or 13 707 m² (147,544 sq. ft.). The site is currently developed at 0.58, approximately 13 348 m² (143,700 sq. ft.). This application proposes an increase in density to 1.12 FSR, a total floor area of 25 494 m² (274,415 sq. ft.). As the site size allows for a wide range of forms at the proposed density, staff evaluation of the proposed density was based on consideration of the form of development, as discussed below.

5. Form of Development

The most notable change proposed to the existing zoning is the increase in maximum height to 24.3 m (79.7 ft.) and six storeys to allow for the Main Lodge. In the interest of brevity this

section therefore focuses on the height of the Main Lodge. A summary table of other development statistics appears in Appendix G. A detailed account of the various considerations that led to the proposed building height and location can be found in Appendix C.

Main Lodge — Under the existing zoning the maximum height is 10.1 m (33 ft.) or three storeys. Viewed within the context of 41st Avenue, this proposal would create a six-storey residential building in the middle of the existing streetscape on the north side of 2800 block West 41st Avenue, taller than the adjacent two and three storey buildings, but comparable in scale to the six-storey building two blocks to the east at 2480 West 41st Avenue. District schedules in the area vary widely in height, from the RM-3 district three blocks to the east which allows buildings up to 36.6 m (120 ft.) tall, down to the RS-5 zoning immediately east and north of the subject site which limits height to 10.7 m (35.1 ft.). The existing line of street trees will be retained along 41st Avenue, which will partially screen the proposed Main Lodge from the street (see renderings and landscape plan in Appendix F). Staff support the proposed height within this context.

When considered in relation to its adjacent neighbours, the main mitigating factor to the proposed height of the Main Lodge is a horizontal separation of at least 42.0 m (137.8 ft.) between the Main Lodge and any adjacent property line, and up to 87 m (284 ft.) when measured to the RS-5 houses to the north. Because of this horizontal separation and its position at the south end of the site, the Main Lodge will not shadow any neighbours at the spring or fall equinox. The shadow diagrams are attached at the end of Appendix C. Trees along the site perimeter will also serve to mediate the visual impression of height. Taking the above into account, staff accept the proposed height relative to the adjacent context, subject to further work to ensure the retention of existing landscaping as noted in the Landscape conditions (Appendix B).

Neighbourhood responses indicate a concern about view impact from private property immediately to the north of the site. These impacts will be reduced but not eliminated by the horizontal distance involved. For RS-5 sites to the north, there will be approximately 87 m (284 ft.) between the rear windows of the houses and the proposed Main Lodge, which is approximately the same distance from north to south as two RS-5 lots and an intervening lane.

Planning staff considered whether the height of the Main Lodge could be reduced by redistributing some of the floor area elsewhere on the site, and requested the applicants to provide a summary of alternative locations (see Appendix C). Based on a review of this summary, which notes the constraints of adding to an existing campus providing a mix of care and residential facilities using phased construction, staff accept the proposed distribution of floor area on the site and support the proposed height and location of the Main Lodge building, within the limitations recommended in the draft by-law (see Appendix A).

West Wing — Neighbourhood responses also indicated a concern with the proposed height of the new west residential wing [a maximum of 14.3 m (47 ft.) or three storeys], especially in relation to the existing building to the west of the site. While both buildings are three-storey multiple dwellings, the floor to floor heights and roof shape of the residential wing means that the maximum height at the ridge of the new sloped roof is higher than the existing neighbour, which will have some effect on existing views, light and privacy. After considering the side effects of significant changes to the proposed massing, such as moving the top floor

to another part of the site or removing the sloped roof, staff feel that the proposed form represents an acceptable balance between the various constraints and goals on the site, subject to fulfillment of condition (b) 11 in Appendix B to ensure adequate landscape screening. However, further work is recommended on the exterior of the building facing the neighbours to improve privacy and reduce overlook for the existing neighbours (see condition (b) 5 in Appendix B).

Urban Design Panel – The Urban Design Panel reviewed this proposal on April 7, 2010, and supported (8-0) the proposed form of development (see Appendix E). The Panel also recommended simplification of the massing, consideration of alternate roof forms and tower position, and design development to the exterior expression. Staff have incorporated these suggestions into design development conditions (see conditions (b) 1, 2, and 3 in Appendix B).

Conclusion – Staff support the proposed form of development, subject to the recommended conditions of approval noted in Appendix B.

6. Parking, Loading and Circulation

Crofton Manor currently operates with 107 units of Seniors Assisted Housing units and 86 Care Facility units. The existing parking consists of 82 parking spaces, of which 73 stalls are in a single level of underground parking beneath the easternmost building, and nine are surface spaces. As there is no lane access to this site, the parking is accessed from West 41st Avenue. The site is located on a primary arterial road and is well served by transit, with several bus routes on 41st Avenue. In addition, the facility provides a shuttle service for its residents. Approximately 150 people are employed at Crofton Manor (based on a 24-hour shift schedule), of which about 59 are scheduled to work during a typical weekday and 49 are scheduled to work on weekend days.

The rezoning application proposes to increase the number of units on the site for a total of 233 Seniors Assisted Housing units and 106 Care Facility units. The proposal includes 102 underground parking spaces and 14 surface parking spaces, for a total of 116 parking spaces.

As part of the rezoning application, the applicant submitted a Transportation Impact Assessment report, dated February 3, 2010, completed by Bunt & Associates. The study concluded that the proposed on-site parking supply would be sufficient during the peak parking demand, and that the anticipated traffic impact of the redevelopment would be minimal.

Engineering Services staff have reviewed the rezoning application and the Transportation Impact Assessment report. As the proposed use is known to generate a low number of vehicle trips relative to other uses at similar densities, Engineering staff have recommended reduced Parking By-law requirements of 0.25 parking spaces per unit. This standard would require that a minimum of 85 parking spaces be provided.

Engineering Services staff have no objections to the proposed rezoning provided that the applicant satisfies the parking and loading conditions included in Appendix B (see conditions (b) 17-28).

7. Environmental Sustainability

The Green Building Rezoning Policy (adopted by Council on February 4, 2010) applies to rezoning applications received between March 1, 2010 and July 31, 2010, and requires that these rezoning applications achieve a minimum of LEED® Silver registration or equivalency with targeted points for energy performance, water efficiency and stormwater management. This project is targeting LEED® Silver. A LEED® checklist was submitted with the rezoning application, indicating that the project could attain 38 LEED® points and therefore be eligible for LEED® Silver (LEED® Gold requires a minimum of 39 points).

The site at 2803 West 41st Avenue is 5.65 acres, and is therefore subject to the Rezoning Policy for Greener Larger Sites. This policy is designed to achieve higher sustainability outcomes on large site developments through the exploration and implementation of: District and Renewable Energy opportunities; Sustainable Site Design; Green Mobility and Clean Vehicles strategies, Sustainable Rainwater Management; Solid Waste Diversion Strategies; and, Sustainable Housing Affordability & Housing Mix.

In support of the rezoning application, the applicant has provided a District and Renewable Energy Feasibility Screening Study, dated December 15, 2010, completed by Stantec Consulting Ltd. The study found on-site alternative energy options including a geothermal heat-pump system, and an air-source heat-pump system would deliver significant GHG reductions at costs competitive with the business-as-usual approach that would otherwise have been implemented for the development. In addition, a suite of demand-side management approaches including heat-recovery ventilation, enhanced temperature controls, and more efficient boilers will provide further GHG reduction benefits and energy savings. Conditions of rezoning have been incorporated that provide for implementation of these renewable energy technologies and energy conservation measures.

The remaining matters required by the Rezoning Policy for Greener Larger Sites have been addressed either through the design of the development, or will be provided for through required plans or strategies to be implemented through other items contained within the recommended Conditions of Approval. It should be noted that no conditions are included requiring additional studies regarding housing affordability and mix as the Housing Centre has determined the proposed project contributes to city-wide housing objectives.

Sustainability Group staff have no objections to the proposed rezoning provided that the applicant satisfies the conditions included in Appendix B (conditions (b)(30-39)).

PUBLIC INPUT

Pre-Application Public Consultation — On November 26, 2009, prior to submitting the rezoning application, the applicant held a public open house to discuss the proposed renewal plans for Crofton Manor with the neighbourhood. Approximately 28 people attended. The applicant also met with Crofton Manor residents and the neighbouring Kerrisdale Presbyterian Church.

Application Notification and Open House — A rezoning information sign was installed on the site on February 25, 2010 and a notification letter and invitation to a public information open house, dated March 5, 2010, was mailed to 570 surrounding property owners (the notification

area was bounded by Mackenzie Street, West 39th Avenue, Larch Street, and West 43rd Avenue). In addition, the City of Vancouver Rezoning Centre webpage provided notification and application information, and an on-line comment form. The public information open house was held on March 23, 2010 at St. Mary's Kerrisdale Church, with City staff and the applicant team in attendance. Approximately 17 people attended.

Public Response – A total of 13 responses were received from the public (8 non-support/ 3 support/2 uncertain). While there was general support for expansion of the seniors housing, the majority of comments expressed concern with the proposed height on the site (the six-storey building in the centre of the site on 41st Avenue and the three-storey building along the west property line), and associated issues such as view impacts, shadowing and visual intrusion, and that this would set a precedent for increased height in the neighbourhood. There were also concerns expressed about increased cars and traffic, particularly in the lane that abuts the south-east corner of the site (but does not extend westward along the rear property line), and changes to the character of the neighbourhood. A more detailed summary is provided in Appendix E.

The ARKS Vision Implementation Committee reviewed the proposal. The demand for increased seniors housing in the ARKS area was supported, and it was recognized that Crofton Manor is an existing senior's facility and that its expansion is consistent with Vision Directions regarding new housing locations. The Committee did, however, express significant concerns that the proposed height of six storeys is excessive in the context of the ARKS Vision. It was recommended that the height be reduced to four storeys or, if approved as six-storeys, that it not be seen as a precedent for future development (see Appendix E).

PUBLIC BENEFITS

In response to City policies which address changes in land use and density, the application offers the following public benefits:

Required Public Benefits

- **Development Cost Levies (DCLS):** Development Cost Levies (DCLs) are collected on new development prior to building permit issuance. The levies help pay for facilities made necessary by growth, including parks, childcare facilities, replacement housing (social/non-profit housing) and various engineering infrastructure. The subject site is in the City-wide DCL District where the current rate for residential uses developed at a density at or below 1.2 FSR is \$26.15/m² (\$2.43/sq. ft.) and the rate for institutional uses is \$112.16/m² (\$10.42/sq. ft.). As such, the additional density proposed would result in DCLs of approximately \$613,124.
- **Public Art Program:** The Public Art Program requires that rezonings involving a floor area of 9 290 m² (100,000 sq. ft.) or greater allocate a portion of their construction budgets (\$1.81 sq. ft.) to public art as a condition of rezoning. With an addition of 15 615 m² (168,078 sq. ft.) proposed in this rezoning, a public art budget of approximately \$304,221 would be anticipated.

Offered Public Benefits

- **Community Amenity Contribution (CAC):** In the context of Financing Growth Policy, the City anticipates the offer of a community amenity contribution from the owner of a rezoning site to address the impacts of rezoning. Contributions are negotiated and evaluated by staff in light of the increase in land value expected to result from rezoning approval. The increase in land value or land lift for this project is estimated to be in the region of \$570,000. The total value of the public benefits offering, \$432,000, represents approximately a 76% share of the land lift. Real Estate Services staff have reviewed the applicant's development proforma and recommend that this offer be accepted. It is further recommended that the CAC be allocated towards an affordable housing fund earmarked for but not limited to seniors' housing in the Kerrisdale area.

A summary of the public benefits is summarized in Appendix G.

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 rezoning application has concluded that the proposed land uses, density and height are supported. The proposed expansion of Crofton Manor meets the intent of providing additional seniors accommodation in the area. Neighbours have expressed concerns with the height of the six-storey building; however, the site's large size, its location on an arterial street, and the existing infrastructure, make this an ideal location for additional seniors housing. Further, the developer has responded well to the neighbourhood context by positioning the density in such a way as to minimize impacts an adjacent lower-density development.

The Director of Planning recommends that the application be referred to public hearing together with a draft CD-1 By-law as generally shown in Appendix A and with a recommendation of the Director of Planning that, subject to public hearing, these be approved, subject to the conditions of approval listed in Appendix B, including approval in principle of the form of development as shown in plans included as Appendix F.

* * * * *

2803 West 41st Avenue
DRAFT AMENDMENTS TO CD-1 BY-LAW No. 4674 (reference #83)

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

- Repeal Section 2(a) and (b), and Sections 3, 4 and 5, and replace with the following:

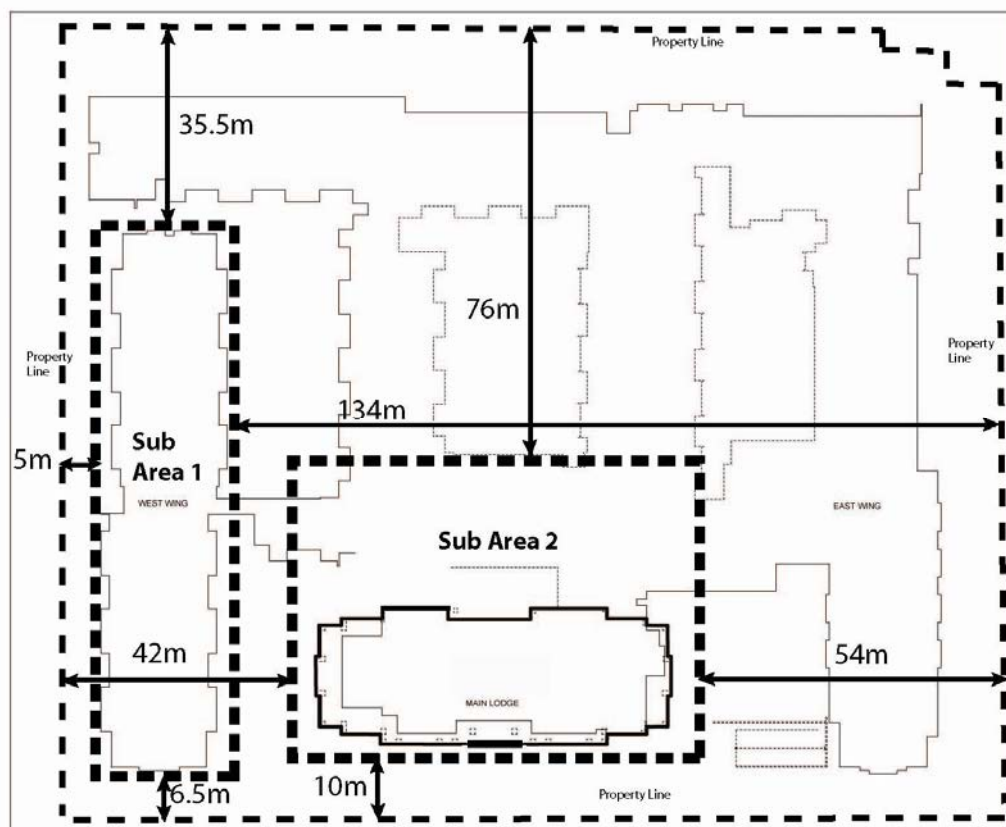
2 Uses

- Dwelling Use, limited to Seniors Supportive or Assisted Housing;
- Institutional Uses, limited to Community Care Facility – Class B and Adult Day Care Facility;
- Accessory uses customarily ancillary to the above uses.

3 Sub-Areas

- 3.1 Portions of the site are to consist of sub-areas 1 and 2, illustrated in Diagram 1 for the purpose only of determining building heights in those sub-areas and in the remainder of the site.

Diagram 1: Sub-areas



4 Density

4.1. The floor space ratio must not exceed 1.12.

4.2. The following shall be included in the computation of floor space ratio:

- (a) all floors of all buildings, both above and below ground level, to be measured to the extreme outer limits of the buildings; and
- (b) stairways, fire escapes, elevator shafts and other features which the Director of Planning considers similar, to be measured by their gross cross-sectional areas and included in the measurements for each floor at which they are located.

4.3. The following shall be excluded in the computation of floor space ratio:

- (a) open residential balconies or sundecks 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 eight 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) where floors are 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, those floors or portions thereof so used, which are at or below the base surface provided that the off-street parking spaces do not have a length of more than 7.3 m for the purpose of exclusion from floor space ratio computation;
- (d) day care facilities to a maximum floor area of 10 percent of the permitted floor area, provided the Director of Planning, on the advice of the Director of Social Planning, is satisfied that there is a need for a day care facility in the immediate neighbourhood;
- (e) amenity areas, including recreation facilities and meeting rooms provided that the total area being excluded for amenity areas shall not exceed 10 percent of the permitted floor space;
- (f) areas of undeveloped floors which are located i) above the highest storey or half-storey and to which there is no permanent means of access other than a hatch; or ii) adjacent to a storey or half-storey with a ceiling height of less than 1.2 m;
- (g) floors located at or below finished grade with a ceiling height of less than 1.2 m;
- (h) where exterior walls greater than 152 mm in thickness have been recommended by a Building Envelope Professional as defined in the Building By-law, the area of the walls exceeding 152 mm, but to a maximum exclusion of 152 mm thickness, except that this clause shall not apply to walls in existence prior to March 14, 2000; and

- (i) with respect to exterior:
 - i) wood frame construction walls greater than 152 mm thick that accommodate RSI 3.85 (R-22) insulation, or
 - ii) walls other than wood frame construction greater than 152 mm thick that meet the standard RSI 2.67 (R-15),the area of such walls that exceeds 152 mm to a maximum exclusion of 51 mm of thickness for wood frame construction walls and 127 mm of thickness for other walls, except that this clause is not to apply to walls in existence before January 20, 2009. A registered professional must verify that any exterior wall referred to in subsection (ii) of this section meets the standards set out therein.

5 Height

- 5.1 The maximum height of a building measured above base surface is the lesser of 10.7 m or three storeys except that:
- (a) in sub-area 1, the building height must not exceed 14.3 m or three storeys;
 - (b) in sub-area 2, the building height must not exceed 24.3 m or six storeys; and
 - (c) eaves, gutters, sills, chimneys or other similar projections as determined by the Director of Planning may project beyond the sub-area to a maximum of 750 mm measured horizontally.

6 Setbacks

- 6.1 The setbacks of buildings at or above grade must be at least:
- (a) 6.0 m from the south property line, except that a porte-cochere up to 7.0 m in height may be permitted in the required setback;
 - (b) 4 m from the west property line;
 - (c) 7.3 m from the east property line, and
 - (d) 10.7 m to the north property line.
- 6.2 In sub-area 2, the setbacks of buildings at or above grade must be at least:
- (a) 10.0 m from the south property line, except that a porte-cochere no greater than 7.0 m in height may be permitted in the required setback;
 - (b) 42.0 m from the west property line;
 - (c) 54.0 m from the east property line, and
 - (d) 76.0 m from the north property line.

7 Horizontal Angle of Daylight

- 7.1 Each habitable room must have at least one window on an exterior wall of a building.
- 7.2 The location of each such exterior window must allow a plane or planes extending from the window and formed by an angle of 50 degrees, or two angles with a sum of 70 degrees, to encounter no obstruction over a distance of 24.0 m.
- 7.3 Measurement of the plane or planes referred to in this section must be horizontally from the centre of the bottom of the window.
- 7.4 An obstruction referred to in this section means:
- (a) any part of the same building including permitted projects; or
 - (b) the largest building permitted under the zoning on any sites adjoining CD-1 (83).
- 7.5 A habitable room referred to in this section does not include:
- (a) a bathroom; or
 - (b) a kitchen whose floor area is the lesser of:
 - 10 percent of the total floor area of the dwelling unit, or
 - 9.3 m².

8 Parking, Loading and Bicycle Parking

- 8.1 Any development or use of the site requires the provision, development, and maintenance, in accordance with the requirements of, and relaxations, exemptions and mixed use reductions in the Parking By-law, of off-street parking, loading, bicycle, and passenger spaces.

* * * * *

2803 West 41st Avenue
DRAFT CONDITIONS OF APPROVAL

Note: Recommended approval conditions will be prepared generally in accordance with the draft conditions listed below, subject to change and refinement prior to finalization of the agenda for the public hearing.

PROPOSED CONDITIONS OF APPROVAL OF THE FORM OF DEVELOPMENT

- (a) That the proposed form of development be approved by Council in principle, generally as prepared by NSDA Architects, and stamped "Received City Planning Department, March 2, 2010", provided that the Director of Planning 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 approval by Council of the form of development, the applicant shall obtain approval of a development application by the Director of Planning, who shall have particular regard to the following:

Urban Design

- 1. design development to simplify the massing of the central lodge;

Note to Applicant: Where possible, the complexity of the building should be reduced, especially at the rooftop levels. Alternate roof forms should be explored in graphic form and reviewed with staff prior to a development permit application.

- 2. consideration of adjustments to the tower location to improve the quality of amenity spaces for seniors on-site, within the setbacks defined in the CD-1 by-law;

- 3. design development to reduce the shadowing impact of the West Wing building, especially at the south end;

Note to Applicant: This can be accomplished by removing the high gable form, replacing the cross ridge with a hip roof form.

- 4. consideration to provide more variety of expression, and a distinctive visual identity for each wing;

Note to Applicant: Variety should extend beyond changes in paint colour.

- 5. design development to reduce the potential for privacy and overlook to neighbouring properties, especially at the new west wing;

Note to Applicant: This can be accomplished by the judicious use of hedges, screens, translucent glazing and guard rails, raised window sills, and similar

features that improve privacy without undue impacts on shadowing or seniors' amenity.

6. notation on the elevation drawings of all colours, finishes, and materials;

Note to Applicant: Attach colour samples to the drawings.

7. provision of enlarged details at $\frac{1}{2}'' = 1'-0''$ scale or similar for significant exterior features;

Note to Applicant: Include beams, trim, rails, guards, stone work, wall caps, lighting, soffits and similar features. High quality materials such as quarried stone, brick and wood that are consistent with the recent exterior renovations should be employed.

LEED®

8. identification on the plans and elevations of the built elements contributing to the building's sustainable design;

Note to Applicant: Provide a detailed written description of how the LEED® credits identified in the checklist will be accomplished in this development with reference to specific building features. The checklist and description should be incorporated into the drawing set, and the building features located on the plans and elevations. Pursuit of LEED® certification and a Gold rating, rather than Silver equivalency is encouraged.

Crime Prevention Through Environmental Design (CPTED)

9. design development to consider the principles of CPTED, having particular regard for security in the underground parking;

Note to Applicant: Consider how lighting and glazing can be used to improve perceived safety in underground areas. Residents and operators should be consulted to determine whether any other issues exist on the site. Design features that address CPTED principles should be noted in the development permit application.

Landscape

10. design development to retain healthy trees located outside the building envelope;

Note to Applicant: Tree removal applications must be accompanied by an arborist report written by an ISA Certified Arborist and meet the provisions of the Protection of Trees By-law.

11. design development of the landscaping at the north and west property edges to ensure adequate screening of the proposed residential tower as viewed from the adjacent residential neighbourhood, with trees or other greenery;

Note to Applicant: Maintain existing healthy trees and replace unhealthy trees to maintain a continuous hedgerow. Consider covering bare walls of buildings with hardy vines, such as, Boston Ivy (*Parthenocissus tricuspidata*), to provide vertical greenery as a visual amenity for the neighbouring properties.

12. design development to the quality of the common outdoor amenity courtyards to provide access to sun for the residents;
13. provision of fully illustrated and detailed Landscape Plan;

Note to Applicant: The Landscape Plan should clearly note the landscape design illustrating existing landscaping to be retained including major planting and trees; proposed plant materials should be listed on a Plant List by common and botanical name, size and quantities, and keyed to the Landscape Plan; paving, walls, fences, light fixtures and other landscape elements; site grading; all existing street trees and public utilities such as lamp posts, hydro poles, fire hydrants, etc. Plans are to be at 1/8"=1'-0" minimum scale.

14. provision of a Construction Management Plan for the retention of trees (as noted on the Landscape Plan);

Note to Applicant: The plan should consider excavation and building materials storage, construction access and vehicle manoeuvring during the construction period. Tree location should be noted according to the legal survey submitted for the development permit application.

15. where applicable, provision of a comprehensive Arborist's Report, submitted by an ISA Certified Arborist, to assess existing trees and comment on retention requirements for healthy tree located outside building envelopes, including root zone protection, supervision or other construction design practices, to the satisfaction of the Director of Planning;

16. provision of a rainwater management strategy in writing outlining the alternative methods for reducing the use of potable water for the irrigation of landscaped areas;

Note to applicant: see also requirement for a Sustainable Rainwater Management Plan (condition 32).

Engineering

17. Provide parking, loading, bicycle and passenger spaces in accordance with the Parking By-law, noting that the Director of Planning in consultation with the General Manager of Engineering Services has concluded, after review of this

rezoning application, that the following relaxations from the By-law provisions are supported:

- (a) a minimum of 0.25 space per unit, serving residents, staff, and visitors;
- (b) a minimum of 0.1 Class A bicycle parking per unit;
- (c) a minimum of 6 spaces of Class B bicycle parking; and
- (d) a minimum of 1 Class B loading space;

- 18. provide a minimum of 0.25 handicap scooter parking spaces per bed;
- 19. number all parking stalls and label stalls as either standard, small car or disability;
- 20. clarify total number of parking spaces being provided;

Note to applicant: tech table states 140 spaces and count on drawing shows 114.

- 21. provide design elevations for all new proposed parking area (surface and underground), drive aisle and on both sides of the existing ramp and new access ramp at all breakpoints to be able to calculate slope and crossfall;

Note to applicant: the maximum slope or crossfall for the drive aisle and parking stalls is 5%.

- 22. provide a bicycle wheel ramp for the stairway from the parking level to the main floor;
- 23. provide an improved Ground Floor Plan (A 101) and overall Parking Floor Plan (A103) at 1:200 or 1/16":1' scale;

Note to applicant: drawings A-103 and L 1.1 are not printed at the specified scale.

- 24. provision of additional stall width for small car spaces located next to columns set back more than 1.2 m from the end of the stall;

Note to applicant: small car spaces west of loading bay require additional width.

- 25. provision of a minimum vertical clearance of 7' 6 ½ " from 41st Avenue to all required manoeuvring aisles and vehicle access routes serving disability parking spaces;

Note to applicant: it appears that there is a disability space in the new proposed parking area and vertical clearance at the transition from the existing parking to the proposed parking area measures 7' on section drawing A-401.

- 26. Evaluate the feasibility of relocating the exit driveway crossing onto 41st Avenue approximately 5 m to the west to facilitate vehicles exiting from the drop off area at the entrance to the building, having regard for the preservation of street trees and landscaped area on the site;

Note to applicant: With the current configuration, exiting vehicles cannot properly align their vehicle for a safe exit to 41st Avenue.

27. confirm that there are no support columns in the new proposed underground parking area and no building overhang to restrict the vertical clearance of the loading bay;
28. relocate the tree shown on plan L-1.2 next to the drive aisle accessing the loading bay as it is encroaching into the drive aisle and parking space;

Note to applicant: this tree should be a high branched tree to improve visibility at the loading bay.

29. clarify and or provide garbage storage and pick up areas for the development.

Sustainability

Greener Larger Sites

30. design development to include opportunities for urban agriculture/edible landscaping, with necessary infrastructure, such as tool storage, on-site composting, hosebibs and potting benches which support urban agricultural activity, and to make some garden plots universally accessible as per the "Urban Agriculture Guidelines for the Private Realm". Consideration should be given to a rainwater collection system to assist with irrigation;
31. provision of a Green Mobility and Clean Vehicles Strategy that includes the requisite infrastructure where appropriate to prioritize sustainable transportation modes including walking, cycling, public transit, and provisions for low carbon vehicles (e.g., electric vehicles), completed to the satisfaction of the General Manager of Engineering Services, and prior to Development Permit issuance the completion of any agreements required by this Strategy on terms and conditions acceptable to the General Manager of Engineering Services and the Director of Legal Services;

Note to Applicant: The Green Mobility and Clean Vehicles Strategy should be coordinated with the Transportation Study and Traffic Management Plan.

32. provision of a Sustainable Rainwater Management plan that utilizes sustainable strategies to allow for infiltration, retention, treatment and utilization of rainwater where applicable and appropriate on site;

Note to Applicant: The requirements of the Sustainable Rainwater Management Plan should be coordinated/integrated with the required Landscape Plan (see condition 13).

33. provision of a Solid Waste Diversion Strategy that addresses waste diversion in all solid waste generating activities within the complex;

Note to Applicant: The strategy must identify/provide space, infrastructure and an operational approach to divert organics and recyclables from the waste stream, and minimize the vehicle trips required for collection, to the satisfaction of the General Manager of Engineering Services, and prior to Development Permit issuance the completion of any agreements required by this Strategy on terms and conditions acceptable to the General Manager of Engineering Services and the Director of Legal Services.

Renewable Energy

34. revise *Crofton Manor Expansion - District and Renewable Energy Feasibility Screening Study* in accordance with comments provided to the applicant on January 21, 2011 (see Appendix E), all to the satisfaction of the General Manager of Engineering Services;
35. conduct additional analysis and revise *Crofton Manor Expansion - District and Renewable Energy Feasibility Screening Study* report to determine if the geothermal heat-pump option is also able to supply energy to the remaining buildings on site. If the analysis shows a geothermal heat-pump system is able to supply the site's entire energy demand (new and remaining buildings), the total energy demand will be provided for in accordance with condition 37;
36. geotechnical assessment and ground conductivity analysis is required and is to be conducted by a qualified professional to confirm viability of a geothermal heat-pump system, to the satisfaction of the General Manager of Engineering Services. If geotechnical assessment supports geothermal system development, such a system shall be required for the development. If a geotechnical assessment does not support geothermal system development, then the option of the Air-Source Heat Pump technology, or a suitable alternative with comparable low GHG performance, shall be implemented, all to the satisfaction of the General Manager of Engineering Services;
37. energy demand management measures described in the *Crofton Manor Expansion - District and Renewable Energy Feasibility Screening Study* shall be implemented in accordance with an Implementation Plan to be provided by the Applicant prior to the issuance of development permit(s), all to the satisfaction of the General Manager of Engineering Services;

Note to Applicant: if the geothermal heat-pump system is found to be viable to provide space conditioning and domestic hot water for the entire site (new and existing development, and domestic hot water loads), the boiler upgrades described in *Section 5.1 - Demand Side Management Opportunities in Existing Buildings* may not be required, at the discretion of the General Manager of Engineering Services.

38. space heating and ventilation make-up air shall be provided by hydronic systems, without electric resistance heat, distributed heat generating equipment gas fired make-up air heaters, etc.; and

Note to Applicant: On a case by case basis, the General Manager of Engineering Services may approve limited use of electric resistance heaters, or other distributed heat generating equipment to heat difficult to access parts the complex such as remote mechanical rooms or crawlspaces.

39. no natural gas fireplaces are to be installed within building(s).

Note to Applicant: All fireplaces are discouraged. A letter from a professional Engineering outlining any provision for ornamental fireplaces is to be submitted at the time of application for Building Permit to state that the fireplaces installed are not heat producing.

PROPOSED CONDITIONS OF BY-LAW ENACTMENT

- (c) That, prior to enactment of the CD-1 By-law, the registered owner shall on terms and conditions satisfactory to the Director of Legal Services and to the Director of Planning, the General Manager of Engineering Services, the Managing Director of Cultural Services and Approving Officer, as necessary, and at the sole cost and expense of the owner/developer, make arrangements for the following:

Engineering

1. Arrangements to the satisfaction of the General Manager of Engineering Services and the Director of Legal Services for the following:
 - (a) upgrading of the existing water main on 41st Avenue to serve this site. Please provide fire flow details to determine the extent of upgrading required;
 - (b) provision of a pedestrian signal at the intersection of Macdonald Street and W 41st Avenue, including all street/road/utility modifications necessary to accommodate the signal installation. The need for the signal is to be determined within five years of the final occupancy permit issued for the site and is to be preceded by an updated transportation study analysing changes to traffic as a result of this development;
 - (c) undergrounding of all 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;

Public Art

2. provide public art according to the provisions of the Public Art Policies and Guidelines;

Community Amenity Contribution (CAC)

3. pay to the City, prior to the enactment of the rezoning by-law, the Community Amenity Contribution of \$432,000 which is to be allocated towards an affordable housing fund earmarked for but not limited to seniors' housing in the Kerrisdale area; and

Soils

4. 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.

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.

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.

* * * * *

2803 West 41st Avenue
DESIGN RATIONALE

Proposed Density and Massing

The architects' rationale for the proposed density and massing distribution is relatively comprehensive and outlines the various considerations that led to the proposed form of development:

The residential and care components have distinct resident populations and differ in their operational and security requirements. This means that massing and density are not transferable between residential and care components of Crofton, i.e., additional residential density and massing can only be accommodated within the residential section of the complex.

The current layout of the facility, spread out over the entire site with remote wings connected by long corridors is operationally inefficient and leads to a sense of resident isolation and diminished level of participation in scheduled activities and spontaneous social interaction. Proposed higher concentration of density in the centre is intended to improve both the operational efficiency and the residents' wellbeing.

In the residential portion of Crofton additional density and massing can potentially be achieved by replacement of the central portion, the west wing and the northern section (the existing 3 storey middle section to remain).

Addition of residents, density, and massing along the north property boundary has been deemed undesirable due to its remoteness and potential impact on the only single family area directly adjacent to Crofton.

The height of the proposed replacement of the west wing has been limited to 3 storeys in response to the scale and orientation of the adjacent 3 storey apartment building and to minimize potential privacy and daylight access impacts from a taller 4 storey building.

The largest of the proposed new buildings is the Main Lodge (replacement of the central area), with 86 additional units and a total of 82,864 square feet. We believe that the increased resident population, density and massing in the Main Lodge building will help animate the central part of Crofton, facilitate social interaction and improve operational efficiency of the complex. The resulting 6 storey trades off height from the west, east and north portions of the site and places it in the centre reducing the impact on neighbours. It attempts to respond to the intent of the vision document by minimizing impact of height on immediate neighbours. The building's location along an arterial street with significant vegetation screening and in the centre of a 5.64 acre site will produce negligible neighbourhood impacts.

The proposed replacement of the southeast care wing is limited to two storeys and 18 additional care rooms for a total of 39 units. This height and the number of rooms are dictated by both operational consideration and the structural capacity of the parking structure below.

Evaluation of Alternate Locations for Floor Area

In order to explore the feasibility of reducing the height of the proposed six-storey building, the applicants evaluated two options for relocating floor area to other parts of the site and provided the following commentary:

Independent Living units added by adding additional floor to existing 3 storey building

- Demolition of 42 existing units to add 9 new units
- Adding an extra floor on top of the existing 3 storey building will require this entire section of building to be torn down to meet current building codes
- This will result in 3 levels of residents being displaced during construction and a significant amount of value of destruction
- The existing 3 storey building is the newest portion (1998) of the existing complex
- This scheme would require demolition of what is currently the section of the complex with the most service life remaining

Independent Living units added by adding additional floor over existing 1- storey care wing

- Splitting the centre wing with independent living on the top floor and care units on the bottom floor is not viable because this increases the distance staff have to travel and make the operation less efficient
- This is compounded when the upper floor has such a small floor plate
- Demolition of 28 Care units to add 9 new independent living units
- Addition of single storey of independent living will result in the demolition of existing section of care units to facilitate the construction
- This will result in displacement of 28 residents and a significant amount of value destruction
- Physical connection of the independent living units cannot trespass on the care centre
- Additional care units will be lost to facilitate this connection

Illustration of Alternate Massing

The applicants were asked to provide an illustration to show at least one alternate form of massing, which is included in this report and notes

The images illustrate an alternate proposal to demonstrate the effects of different massing on the site while maintaining the same number of units as the rezoning proposal. The main building is reduced in height from 6 storeys to 5 storeys. This results in 18 units being displaced. These have been relocated to the west wing which results in the addition of one storey to this building. The resulting 4 storey west elevation is shown with the neighbouring elevation reflected onto the drawing for reference. Both the proposed rezoning and the alternative massing described above are shown in reflected elevation and an overall site section for comparison.

Figure 2: Alternate Massing Scheme

Crofton Manor Seniors' Residence Expansion
2880 West 41st Avenue

Alternative Massing

Per the City of Vancouver's request, the images below illustrate an alternate proposal to demonstrate the effect of different massing on the site while maintaining the same number of units as the existing proposal. The attached shows the main building reduced in height from 8 stories to 5 stories. This results in 18 units being displaced. These units are shown in the attached drawing as a separate building to the east of the main building. The attached also shows the proposed massing and alternative massing described above are shown in reduced elevation and an overall site plan for comparison.

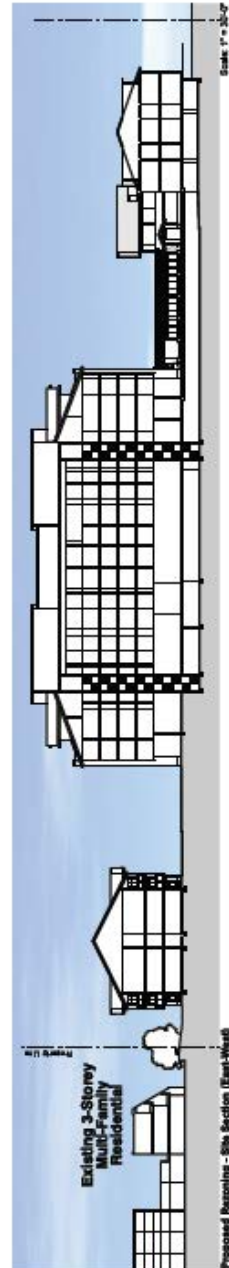
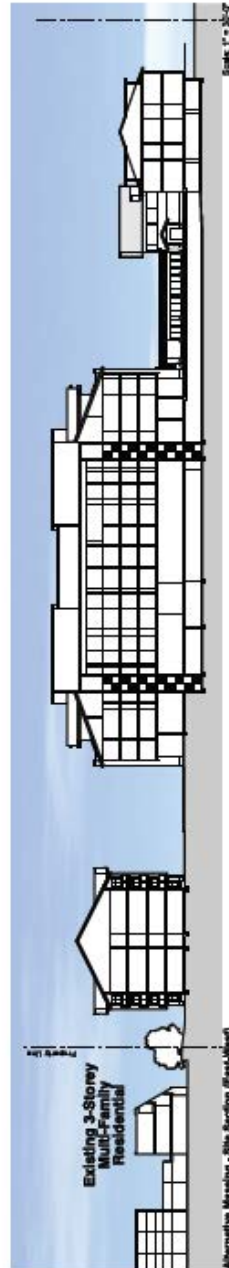
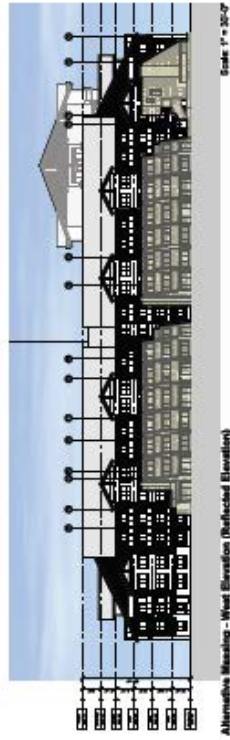
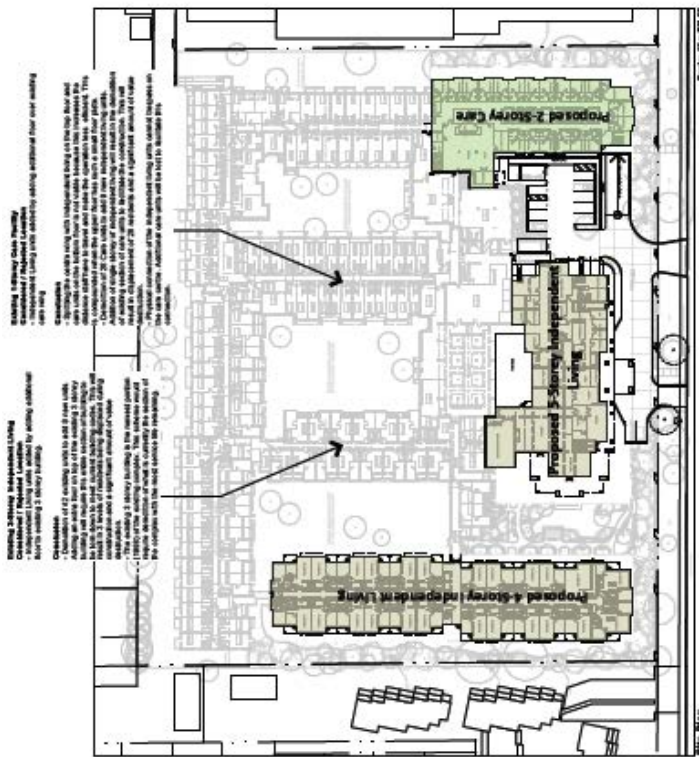
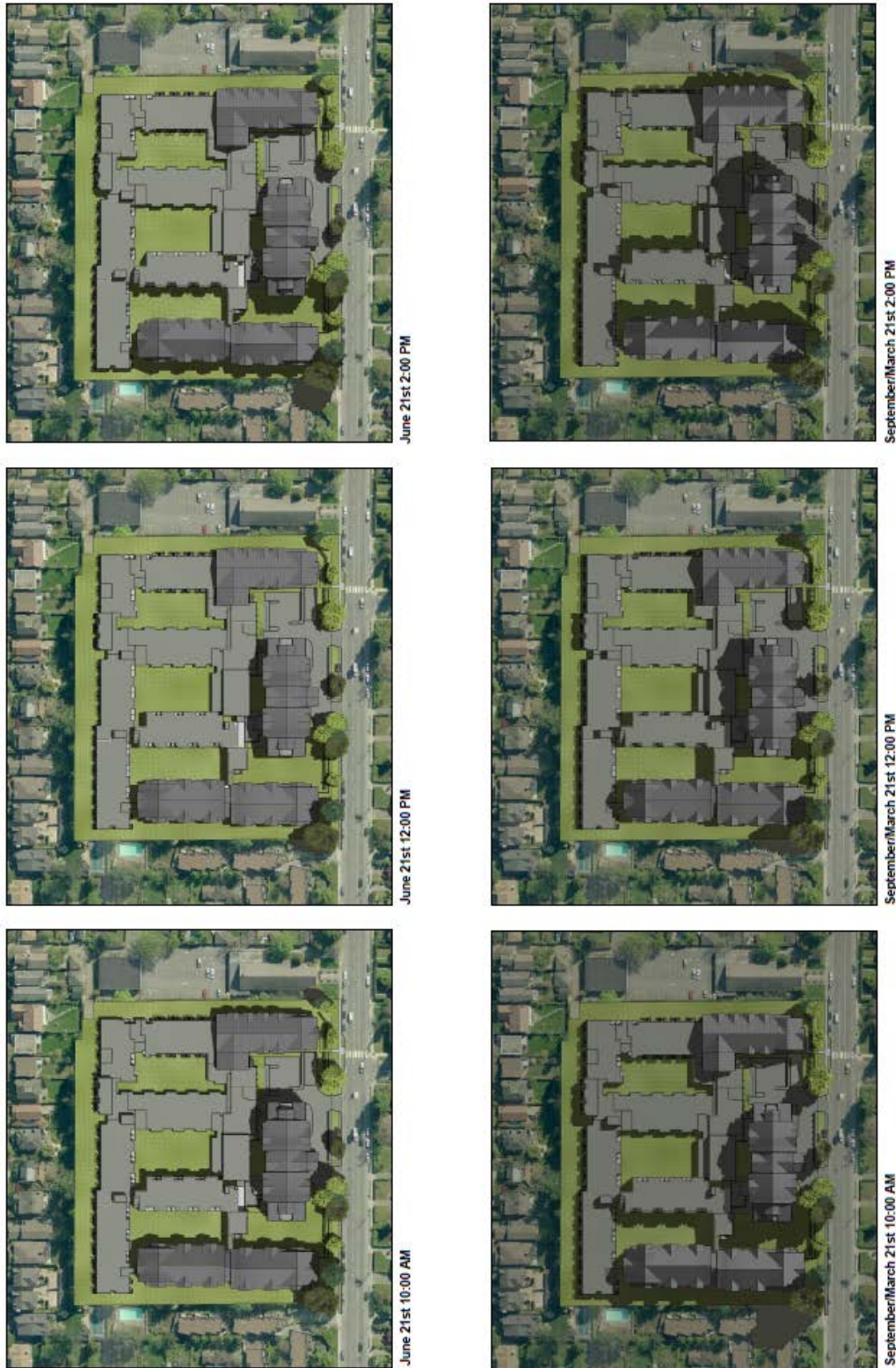


Figure 3: Shadowing Diagrams



2803 West 41st Avenue SUSTAINABILITY



LEED Canada-NC 1.0 Project Checklist

Crofton Manor, 2803 West 41st Avenue

	Yes	?	No				
9				5	Sustainable Sites	14 Points	
Y				Prereq 1	Erosion & Sedimentation Control	Required	
1				Credit 1	Site Selection	1	
1				Credit 2	Development Density	1	
1			1	Credit 3	Redevelopment of Contaminated Site	1	
1				Credit 4.1	Alternative Transportation, Public Transportation Access	1	
1				Credit 4.2	Alternative Transportation, Bicycle Storage & Changing Rooms	1	
1				Credit 4.3	Alternative Transportation, Alternative Fuel Vehicles	1	
1				Credit 4.4	Alternative Transportation, Parking Capacity	1	
1			1	Credit 5.1	Reduced Site Disturbance, Protect or Restore Open Space	1	
1			1	Credit 5.2	Reduced Site Disturbance, Development Footprint	1	
1			1	Credit 6.1	Stormwater Management, Rate and Quantity	1	
1				Credit 6.2	Stormwater Management, Treatment	1	
1			1	Credit 7.1	Heat Island Effect, Non-Roof	1	
1				Credit 7.2	Heat Island Effect, Roof	1	
1				Credit 8	Light Pollution Reduction	1	
3				2	Water Efficiency	5 Points	
1				Credit 1.1	Water Efficient Landscaping, Reduce by 50%	1	
1				Credit 1.2	Water Efficient Landscaping, No Potable Use or No Irrigation	1	
1				Credit 2	Innovative Wastewater Technologies	1	
1				Credit 3.1	Water Use Reduction, 20% Reduction	1	
1				Credit 3.2	Water Use Reduction, 30% Reduction	1	
5				4	1	Energy & Atmosphere	17 Points
Y				Prereq 1	Fundamental Building Systems Commissioning	Required	
Y				Prereq 2	Minimum Energy Performance	Required	
Y				Prereq 3	CFC Reduction in HVAC&R Equipment	Required	
3				Credit 1	Optimize Energy Performance	1 to 10	
1				Credit 2.1	Renewable Energy, 5%	1	
1				Credit 2.2	Renewable Energy, 10%	1	
1				Credit 2.3	Renewable Energy, 20%	1	
1				Credit 3	Best Practice Commissioning	1	
1				Credit 4	Ozone Protection	1	
1			1	Credit 5	Measurement & Verification	1	
1				Credit 6	Green Power	1	
5				2	Materials & Resources	14 Points	
Y				Prereq 1	Storage & Collection of Recyclables	Required	
1			1	Credit 1.1	Building Reuse: Maintain 75% of Existing Walls, Floors, and Roof	1	
1			1	Credit 1.2	Building Reuse: Maintain 95% of Existing Walls, Floors, and Roof	1	
1			1	Credit 1.3	Building Reuse: Maintain 50% of Interior Non-Structural Elements	1	
1				Credit 2.1	Construction Waste Management: Divert 50% from Landfill	1	
1				Credit 2.2	Construction Waste Management: Divert 75% from Landfill	1	
1			1	Credit 3.1	Resource Reuse: 5%	1	
1			1	Credit 3.2	Resource Reuse: 10%	1	
1				Credit 4.1	Recycled Content: 7.5% (post-consumer + 1/2 post-industrial)	1	
1				Credit 4.2	Recycled Content: 15% (post-consumer + 1/2 post-industrial)	1	
1				Credit 5.1	Regional Materials: 10% Extracted and Manufactured Regionally	1	
1				Credit 5.2	Regional Materials: 20% Extracted and Manufactured Regionally	1	
1			1	Credit 6	Rapidly Renewable Materials	1	
1			1	Credit 7	Certified Wood	1	
1				Credit 8	Durable Building	1	
13				2	Indoor Environmental Quality	15 Points	
Y				Prereq 1	Minimum IAQ Performance	Required	
Y				Prereq 2	Environmental Tobacco Smoke (ETS) Control	Required	
1				Credit 1	Carbon Dioxide (CO ₂) Monitoring	1	
1				Credit 2	Ventilation Effectiveness	1	
1				Credit 3.1	Construction IAQ Management Plan: During Construction	1	
1				Credit 3.2	Construction IAQ Management Plan: Testing Before Occupancy	1	
1				Credit 4.1	Low-Emitting Materials: Adhesives & Sealants	1	
1				Credit 4.2	Low-Emitting Materials: Paints and Coating	1	
1				Credit 4.3	Low-Emitting Materials: Carpet	1	
1				Credit 4.4	Low-Emitting Materials: Composite Wood and Laminate Adhesives	1	
1				Credit 5	Indoor Chemical & Pollutant Source Control	1	
1				Credit 6.1	Controllability of Systems: Perimeter Spaces	1	
1				Credit 6.2	Controllability of Systems: Non-Perimeter Spaces	1	
1				Credit 7.1	Thermal Comfort: Compliance	1	
1			1	Credit 7.2	Thermal Comfort: Monitoring	1	
1				Credit 8.1	Daylight & Views: Daylight 75% of Spaces	1	
1				Credit 8.2	Daylight & Views: Views 90% of Spaces	1	
3				2	Innovation & Design Process	5 Points	
1				Credit 1.1	Innovation in Design : Green Housekeeping	1	
1				Credit 1.2	Innovation in Design : Education and Awareness	1	
1				Credit 1.3	Innovation in Design	1	
1				Credit 1.4	Innovation in Design	1	
1				Credit 2	LEED® Accredited Professional	1	
38				10	6	Project Totals (pre-certification estimates)	70 Points

Stantec

Executive Summary

Neale Staniszki Doll Adams (NSDA) Architects engaged Stantec Consulting Ltd. to identify and evaluate energy efficiency and alternative energy options for the Crofton Manor Site, consistent with EcoDensity Requirements in the City of Vancouver. The scope of this assignment includes:

1. Conducting a site overview
2. Developing an energy demand forecast
3. Identifying a business as usual energy strategy
4. Evaluating energy efficiency, alternative energy and district energy concepts applicable to the site
5. Screening of energy alternatives
6. Presentation of analysis and results

Currently Crofton Manor spends approximately \$270,000 dollars per year for electricity and natural gas. A comparison of Crofton Manor to other senior care facilities suggests that Crofton Manor is using about 65% more energy for space heat and domestic hot water than comparable facilities.

Currently Crofton Manor has 13,400 square meters of floor area. The phase 1 expansion will increase the floor area to 20,000 square meters while build out (phase 3) will increase the floor area to 25,000 square meters.

Based on this analysis, the following conclusions and next steps are submitted for consideration:

1. Expansion of the Crofton Manor can be completed with little or no increase of energy use and GHG emissions, through implementation of cost effective demand side management strategies for both existing and new buildings.
2. Due to the low density of the adjacent buildings, a neighbourhood scale energy system is not financially viable.
3. Investment in energy efficiency of the new portions of the development can achieve the energy performance requirements of the City. In addition, the owners of Crofton Manor are undertaking upgrades that will result in significant improvements to the energy performance of the existing facility.

On site alternative energy options with positive present value include a biomass boiler and a ground source heat pump.

* * * * *

2803 West 41st Avenue
ADDITIONAL INFORMATION

1. Urban Design Panel

The Urban Design Panel reviewed this proposal on April 7, 2010, and supported the proposed use, density and form of development.

Introduction: Karen Hoese, Rezoning Planner, introduced the proposal for a rezoning to amend the CD-1 zoning to allow additions to the existing seniors' facility. The proposal is for a 6-storey "Main Lodge" including a new lobby/amenity area with housing above, adding 86 senior assisted housing units; a 3-storey "West Wing" to replace a 1-storey building and adding 72 senior assisted housing units; and a 2-storey "East Wing" to replace a 1-storey building and adding 39 care units. This rezoning is needed to accommodate additional density and height beyond that permitted under the current zoning. Ms. Hoese noted that the site is within the Arbutus Ridge/Kerrisdale/Shaugnessy Community Vision (ARKS) area. The Vision provides guidance in evaluating proposed rezonings. It identifies types of projects that can be considered without additional area planning. While these are assessed on their own merits, the Vision further provides direction regarding accepted "new housing types" and "locations". With regard to new housing types the Vision indicates 6-storey apartments are not a supported housing type and the "Main Lodge" that proposes a height of 6-storeys, does not fully comply with this Vision direction. The Vision also contains directions regarding a preferred location for new housing types which include arterial streets like West 41st Avenue. Ms. Hoese noted that the Seniors Supportive and Assisted Housing Guidelines include recommendations about site location and building characteristics. Regarding the Green Rezoning Policy, rezoning applications must achieve a minimum of LEED® Silver equivalency, which is being proposed in this application. The rezoning Policy for Greener Larger Sites applies to rezonings involving sites greater than 2 acres and this site is 5.85 acres. It requires consideration of strategies to address DES, energy needs, sustainable transportation, rainwater management and solid waste diversion.

Sailen Black, Development Planner, further introduced the proposal. He noted that the change in FSR and height is conditional on showing compatibility with the existing neighbours. There are single family houses on all sides except for the Kerrisdale Presbyterian Church on the east side of the site. Mr. Black described the context noting other zones in the surrounding area. The existing facility has a 3-storey central residential block and was built in 1989 while the rest of the facility was built in 1973.

Panel comments are sought on the overall landscape and architectural design of this rezoning proposal, and in particular:

- Distribution of massing across the site.
- Height of the new six and three storey buildings.
- Massing of buildings, including pitched roofs and stepped sides.

Ms. Hoese and Mr. Black took questions from the Panel.

Applicant's Introductory Comments: Tom Staniszki, Architect, further described the proposal noting the facility has been around for many years and is dated and requires major upgrades. The complex actually has two facilities: residential and care. Mr. Staniszki

described the architectural plans for the facility. The existing three storey building will not be upgraded at this time. The main lodge will replace four existing units and the current main entrance, administrative and amenity areas. The new west and east care wings will be connected the main amenity area by an existing enclosed walkway.

Molly Chan, Architect, described the sustainability features in the project noting the points on the LEED® Checklist. The energy performance is being considered using heat recovery systems. This energy will be used to heat the makeup air for the building. As well they are exploring the use of geo thermal. The building envelope will exceed the ASHRAE requirements.

Rob Barnes, Landscape Architecture, described the landscape plans for the project. He noted that there are a lot of existing trees on the site and will lose very few trees with the construction. A new patio is proposed off the dining room with other programmed amenity spots with direct connections from the courtyard to the rooms. A new pedestrian link is planned to the front door with some plantings. There will be new perimeter landscape upgrades at the lower levels. Currently some upgrading of the existing building is going on so there will be some improvements to the three courtyards.

The applicant team took questions from the Panel.

Panel's Consensus on Key Aspects Needing Improvement:

- Further investigation in terms of the massing in response to some operational issues;
- Simplify the massing to reduce the complexity in the buildings;
- Explore alternate roof forms in addition to the sloped expression;
- Design development to improve the expression and reduce the uniformity.

Related Commentary: The Panel supported the proposal and commended the applicant on the project.

The Panel supported the height and the proposed materials and noted that there was a strong rationale for the placement of density on the site. Most of the Panel had some concerns regarding the 6-storey massing being so close to the street and thought it should slide back so the care facility was closer to the amenity spaces, although a couple of other Panel members thought it made sense to have the large mass on the arterial road. A couple of Panel members thought the massing didn't fit the scale of the building and thought the sloping roof made it appear larger. Several Panel members suggested changing the roof line. They also thought it should be more distinctive to fit the west coast style or blend better into the neighbourhood as it looked more institutional than residential. One Panel member noted that it had a Whistler hotel vernacular and thought the massing should be more central on the site to give more access to the amenity spaces. Several Panel members agreed that the stepping of the larger building was appropriate so that it comes down to the lower buildings around it.

The Panel thought it made sense that there was a medium and long term plan to build out the site. However, they noted that the new scheme didn't address the distance the residents will need to travel to get to the amenities.

Several Panel members thought the courtyard on the north side of the 6-storey massing wouldn't get any sun and suggested moving the mass to the back of the dining hall. They also suggested that the landscaping needs to be remarkable. Several Panel members thought the porte-cochere area needed to be grander. This is where a lot of the residents will sit to watch the comings and goings along the street and into the facility.

Regarding sustainability, there was support for the sloped roofs because of the west coast climate. Also being that it is a care facility, there are going to be heavy building systems concentrated on the roof and the roof line would provide an element to hide them. One Panel member suggested the applicant target LEED® Silver certification and include an analysis for a neighbourhood utility.

Applicant's Response: Mr. Staniszki thanked the Panel for their comments. He noted that the location of the 6-storey building has to be mindful of dealing with a facility that needs to continue functioning during construction. He said he would like to move the building back as much as possible but it would mean they would have to demolish the entire facility because the dining rooms and amenity spaces would be taken out. Mr. Staniszki said he would take the comments into consideration and try to give a little more room in front. The project is to be phased over several years. He added that they are proposing real timber construction but would explore other massing options and would try to address the relentlessness of the façade.

2. Comments—Seniors Advisory Committee

The Seniors Advisory Committee reviewed this proposal on September 17, 2010. The following motion was carried unanimously.

"THAT the Seniors Advisory Committee generally supports the rezoning application for 2803 West 41st Avenue (Crofton Manor), as presented at the September 17, 2010, meeting, noting some objections to the change in tower height from 4 storeys to 6 storeys."

3. Comments—ARKS Vision Implementation Committee

The ARKS Vision Implementation Committee reviewed the proposal and visited the site. In a letter dated May 4, 2010, the Committee provided the following commentary and recommendations.

"The Arbutus Ridge/Kerrisdale/Shaghnessy Vision Implementation Committee has reviewed and considered this proposal for redevelopment of the Crofton Manor property, and finds little question that future demand for seniors housing in the ARKS area will expand significantly across the housing spectrum.

The ARKS Community Vision document, Section 15.11: Seniors Housing (P.37) advocates that "Some small developments designed for seniors should be considered near parks, shopping, transit, and services to allow seniors to stay in the community as their housing needs change". While the Crofton Manor proposal is not small, it is on the site of an existing seniors' facility, and does fulfil the other tenets of 15.11. The proposed expansion is on an identified arterial with excellent transportation links, and with shopping, amenities and support for seniors within walking distance.

However, ARKS retains significant concerns, supported by expressed area resident concerns, that the proposed six stories are excessive in the context of the ARKS Community Vision document. The objection is not to the proposed expansion of floor space or suites, but strictly to height. We note that were you to expand to a level of four stories across the space available to you on the site, the additional floor space would be vastly larger than is being proposed.

However, in the significant surveys conducted during the development of the ARKS Community Vision, only 28% of respondents approved of six-storey buildings, and six storeys is therefore classed as Unapproved within the Vision document that City Council endorsed along with the statement "*Six storey apartments will not be brought forward for consideration when additional housing planning occurs in the community*". In point of fact, four storey apartments achieved community support of only 42% in these same surveys, and are classed as Uncertain.

We further question the absence of any timeframe or plan for construction of the proposed west and east wings, and especially in light of assurances that the owners wish to build these wings, wonder why these are projected to be so many years out as to be vague at this time.

ARKS supports the proposal of further seniors' housing in the community, and in order to endorse this project, ARKS makes the following recommendations:

- (a) The design for this excellent project be re-envisioned to reduce the height to four stories, perhaps through lateral expansion to make up desired floor space.
- (b) Should the proposal be approved at six storeys:
 - (i) This approval be made conditional upon recognition of the special type of housing and care facility being proposed, and be explicitly defined as not a precedent for the height of further market housing in the area.
 - (ii) Area resident sentiment to a 55% approval level be carefully determined by thorough sampling among the surrounding area that will be visually affected by the 6-storey height. This is not a recreation of the original ARKS surveys, but rather, a survey of the specific area residents around Crofton Manor that ARKS believes should accompany every significant development proposal that exceeds ARKS guidelines. ARKS is prepared to assist the City in ensuring that such a survey is completed expeditiously.
 - (iii) A follow-up review for the area impact of any approved height in excess of four stories be conducted."

4. Public Consultation Summary

Pre-Application Public Consultation – prior to submitting the rezoning application, the applicant held several key area stakeholder meetings and conversations to discuss the proposed renewal plans for Crofton Manor, including the following:

- On November 10, representatives from Crofton Manor and NSDA Architects met with residents of Crofton Manor and their families.
- On November 26, 2009, a public open house was held at St. Mary's Kerrisdale church. Approximately 28 people attended.
- On December 17, 2009, the applicant met with representatives of the neighbouring Kerrisdale Presbyterian Church.

The applicant received the following comments:

- Glad to hear of the renewal in general.
- I like this project! The Manor needs to be upgraded. I think it will fit into the neighbourhood.
- Project seems to be an asset to the community. Any concern would be to parking.
- The proposal looks like a sensitive approach to densify the existing site for additional capacity. Quality senior housing is urgently needed in the city and this proposal is a step in the right direction.
- Nice scheme - interesting landscaping and land use. Density and flatness at 45 might be softened or/and stepped. More consideration to parking and traffic impact.
- Massing looks good - no impact on SFR to north, lower buildings on east and west, major massing on 41st compatible with ARKS Vision direction to allow more density on arterials.
- Would like to see view analysis as seen by neighbours on south side of 41st (is there a loss of view of mountains?)
- It would be nice if the excursion bus could be parked off 41st Avenue rather than in the back as it is now. We look down the lane into the Crofton property, and the drivers are very kind to park it out of our view, but I'm sure they would find it much easier to park in front.
- We prefer that excursion buses had parking spots off of 41st Avenue and not in back. That way lane traffic would be reduced. Buses backing up can be very noisy also. My (only) view over the kitchen sink looks right down the lane.
- Would like to see more 'exit or entrances' to allow emergency vehicles to get close if residents in distress, e.g. earthquake, fire etc. Parking. Enough elevators and elevators to accommodate wheel chairs.
- The presenters were very helpful and open about the plans. My criticism would be the height of the addition - 6 storeys - could have ramifications - future developments along 41st and precedent setting. How does this affect the Church? I've been told that the residents wouldn't be impacted during the reconstruction.
- Rezoning to a 5 storey building puts the whole of 41st in danger of becoming a street of apartment buildings. At the moment it is a mixed neighbourhood of single storey, institutional (church e.g.) and two storey multi-family buildings. I am against the rezoning. Should it go through anyway, staff parking can become an issue. Currently we have some staff parking on the street and car doors opening and closing at 7 a.m. and 3 a.m. create an annoyance.
- ARKS Housing supports senior' housing. ARKS Vision supports 4-storeys, will discuss your proposal of 6-storeys. Would like to know City's position whether planning would like an urban edge or have the buildings stepped back from the sidewalk? A condo owner on the west property identified that a block of condos have balconies facing Crofton Manor and wondered about their privacy if the 6-storey tower would have windows on the west side? What comes next?

Application Notification and Open House— A rezoning information sign was installed on the site on February 25, 2010 and a notification letter and invitation to a public information open house, dated March 5, 2010, was mailed to 570 surrounding property owners (the notification area was bounded by Mackenzie Street, West 39th Avenue, Larch Street, and West 43rd Avenue). In addition, the City of Vancouver Rezoning Centre webpage provided notification and application information, and an on-line comment form. The public information open house was held on March 23, 2010 at St. Mary's Kerrisdale Church, with staff and the applicant team in attendance. Approximately seventeen people attended.

Public Response — In response to the notification regarding this application, the Rezoning Centre received three comment sheets from the March Open House and 10 emails. Of these, eight were opposed to the application, three were in support, and two were uncertain. The comments received are summarized below.

Height of the "Main Lodge" (6-storey building) — Concerns were expressed that the building will be higher than any of the surrounding structures, making it out of place in what is essentially a single attached dwelling residential neighbourhood. It was felt, that as the buildings surrounding the site are a maximum of 3-storeys, that six storeys was excessive, and it was suggested that the new building should not exceed 3 or 4 storeys. It was noted that 6-storey buildings were not approved by the ARKS Community Vision.

Several residents on West 39th Avenue objected to the 6-storey building indicating that it would impact the view and block out the sky from their house, back yards, and/or sundecks. Questions of compatibility were raised with regard to higher densities along major street arteries where they adjoin established single family housing, with the possibility of higher structures overshadowing adjoining houses in terms of both of daylight and visual intrusion, increased traffic and parking activity, etc.

Some respondents were not opposed to the six-storey building.

Height of "West Wing" (3-storey building) — Residents of the townhouse immediately west of Crofton Manor expressed concerns about the proposed addition of two storeys (plus peaked roof) to the west wing and the impact on their quality of life in terms of light and privacy as well as property values. It was noted that virtually all their windows are on the east side of the building and the effect of the addition would be to almost totally block their light. Alternatives were suggested such as the addition of a single storey to the west wing and changing the pitch of the roof.

Most of the respondents were supportive of the three storey building along the west side of the site, and the two-storey building along the east side of the site.

Precedent — A number of people expressed concerns that the height of the building might set a precedent for future development in the area or be used to justify a line of six-storey buildings along 41st Avenue. It was suggested that if this particular six-storey building will be a one-off (the result of an internal trade-off), that this would be ok, noting that the unique nature of the site allows the height without shadowing other properties in the neighbourhood.

Traffic — There were concerns that the rear lane, used regularly by children and pedestrians, will be used for construction vehicles and then as an institutional supply route. It was noted

that there are three schools nearby and that it's not safe for kids if there are too many cars on the streets.

Note: There is not lane at the rear of this site. The east-west portion of the lane noted above ends at the north-east corner of the site and does not extend westward along the rear property line.

Parking – There were concerns that 140 parking spaces may be too many for a seniors facility and that less parking would be a more compatible, particularly as the location is well served by transit.

Note: A lower parking standard is proposed for seniors assisted housing and care facility; it is anticipated that approximately 85 parking spaces will be required for the development.

Use – There was general support for the increase in seniors housing.

Landscaping –Landscaping was seen to be a critical element in making the proposal more compatible with the neighbourhood.

5. Comments – General Manager of Engineering Services

Engineering Services reviewed the application and, in a memo dated June 21, 2010, the Project Engineer stated that Engineering Services has no objection to the proposed rezoning provided that specific conditions are met. In the memo, a number of rezoning conditions were listed for inclusion in the staff report (See Appendix B, conditions (b) 15- 27 and (c) 1-3).

6. Comments – Social Infrastructure

Social Infrastructure reviewed the application and, in a memo dated June 29, 2010, it was noted that the Director of Social Development is supportive of the proposed amendments to the zoning on this site which would allow for an additional 126 units of seniors supportive and assisted housing and 18 units to the community care facility. This type of housing and associated care services are presently provided by Crofton Manor. The expansion proposal increases the supply of housing unit types which facilitate "aging-in-place" within the local community.

7. Comments – Landscape Design:

The rezoning application was reviewed by Landscape Development Specialist and the following comments were provided on June 10, 2010.

There is a building envelope repair in progress on this site. A tree removal permit TR420413 has already been issued to facilitate building repair work. Replacement trees are to be incorporated in the Landscape Plan submitted at the Development Permit stage.

Existing landscaping is to be retained and new landscaping installed. There are existing trees that need to be maintained and protected during construction. Arborist supervision will be required to ensure that the proper standard of arboricultural care is given to maintaining existing trees.

For the rezoning, the most important landscape issues are for the front yard landscaping to visually fit into the existing streetscape pattern of this RS-5 District, and to protect existing mature trees on the site especially where they border residential properties at the north and west property edges. The healthy trees at the north and west property edges should be maintained and replacement trees provided where existing trees are unhealthy and to fill in gaps.

This application provides green edges along the street edge and around the property edges in the form of existing and new tree plantings. Proposed stone and metal fencing at the front property line enhance the visual amenity of the streetscape and help to screen the entry drive as viewed from the street.

A number of rezoning conditions were listed for inclusion in the staff report (See Appendix B, conditions (b) 8-14).

8. Comments – Building Code Specialist

The following comments provided by Processing Department—Building, dated April 27, 2010, are based on the preliminary drawings prepared by NSDA Architects dated February 1, 2010, for the proposed Rezoning Application. This is a preliminary review in order to identify issues which do not comply with the Vancouver Building By-law #9419 as amended (VBBL), and includes a review of Subsection 3.2.5. "Provisions for Fire Fighting".

1. Building safety facilities such as central alarm and control facility, fire fighter's elevator, and stairwells equipped with standpipe connections shall be coordinated with the location of the firefighters' entrance.
2. Principal entrance is not within 15 m of the fire access route.
3. Building face is not within 3 to 15 m of the fire access route.
4. The building is required to provide access to persons with disabilities to all public areas, common areas, storage, amenity, meeting rooms, and to areas where work functions could reasonably be expected to be performed by persons with disabilities.
5. * Fire protection, structural capacity, and accessibility of the existing building are required to be upgraded per Part 10 of the VBBL. This is considered to be a Major Vertical Addition with a corresponding level of upgrade of F4, S4, and A4. This level of upgrade may require the installation of fire sprinklers throughout, seismic upgrading, elevators, etc.
6. * Building construction is required to be noncombustible or firewalls are required to subdivide the building into smaller buildings. (Main lodge, West wing, Care Wing).
7. * Alterations to the building shall not create nonconformity or increase the level of nonconformity of the existing building.
8. * All entrances, exits, drive aisles and other access to off-street disability parking spaces, and egress therefrom must have a minimum vertical clearance of 2.3 m, as required by the Parking By-law.
9. The residential building is required to meet Enhanced Accessibility provisions [3.8.2.27.].

10. Storage garage security shall conform to 3.3.6.7.
11. Floor areas for care occupancies shall be divided into not less than 2 fire compartments each not exceeding 1000 m² in area.
12. * Care Wing 2nd floor requires 2nd exit.
13. Exits serving Care Wings require a minimum width of 1 650 mm for stairs and 1 050 mm for doors.
14. Doors through which it will be necessary to move patients in bed shall be at least 1 050 mm in width.
15. Exterior exit paths of travel protected from exposure to a fire in the building, to be provided leading from exits to the streets.

*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. If a "prior to" letter is not being sent, the above comments should be sent directly to the applicant.

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.

9. Comments—Sustainability Group

The Sustainability Group reviewed the rezoning application and the report *Crofton Manor Expansion - District and Renewable Energy Feasibility Screening Study* prepared by Stantec and submitted on December 15, 2010, and provided the following comments.

While we commend the applicant and their consultants for producing a very good report, we have some comments, along with requirements for additional analysis and revisions.

1) Requirement for Comprehensive Approach - City of Vancouver comment

The City requires a comprehensive approach and analysis of energy use on the site. As such, energy analysis is required that comprehensively addresses energy efficiency and renewable energy opportunities in both the existing development and proposed new development. The City will be including conditions of rezoning that address opportunities for demand side management, and also for implementation of the renewable sources that consider the site as an integrated and comprehensive development.

2) Energy Demand Forecast - clarification required

The report uses City of Vancouver's energy intensity factors (EUIs) to assess energy demand from the new Phase 1 and 2 development. These EUI's are for residential development that is not specialized for any particular user group. The BC Hydro Commercial building survey referenced shows a far higher annual heat energy demand for care facilities. Please review and revise EUI's (if required) for Phase 1 and Phase 2

buildings as these generalized EUI's may not be appropriate given type of occupancy here (i.e., design demand may be higher for seniors population).

3) Ground Source Heat Pump Supply Options - additional analysis required

Recognizing #1 above, please conduct additional analysis on the ground-source heat-pump option to include a wider range of energy supply conditions. The report currently provides only an analysis of the ground source heat pump (GSHP) to supply heating and cooling to the new development and domestic hot-water loads for the entire site (new and existing). The analysis of the GSHP should also include options to supply the space conditioning to the floorspace of the existing development.

4) Air-Source Heat Pump (ASHP) - additional explanation required

Analysis has been conducted of ASHP technology and presented Table 12: Screening Analysis of Energy Options. Please include discussion of this technology in the body of the report.

5) Recommendations for Further Investigation and Implementation - additional clarification required

The report does not provide clear recommendations based on the findings. Though the analysis and methodology are sound, clear direction is not articulated in the report regarding next steps though one section of the report is titled, "Conclusions and Next Steps." As the screening of GSHP technology shows positive NPV, please revise the findings and recommendations to state clearly that groundsource hp for heating/cooling should be subject to further detailed investigation including a geotechnical assessment. The report findings and recommendations should also clearly identify the DSM opportunities for the existing buildings and provide recommendations for any further investigation required to support their implementation.

10. Comments – Applicant:

The applicant has been provided with a copy of this report and has provided no comments.

* * * * *

2803 West 41st Avenue
DRAWINGS



Figure 1: Renderings of Proposal from 41st Avenue



Existing 41st Avenue Streetscape Panorama (N.T.S.)



Proposed North Elevation - Vegetation Removed for Clarity (N.T.S.)



Proposed 41st Avenue Street Elevation with Site Vegetation (N.T.S.)

Figure 2: Renderings of 41st Avenue Streetscape – Existing and Proposed

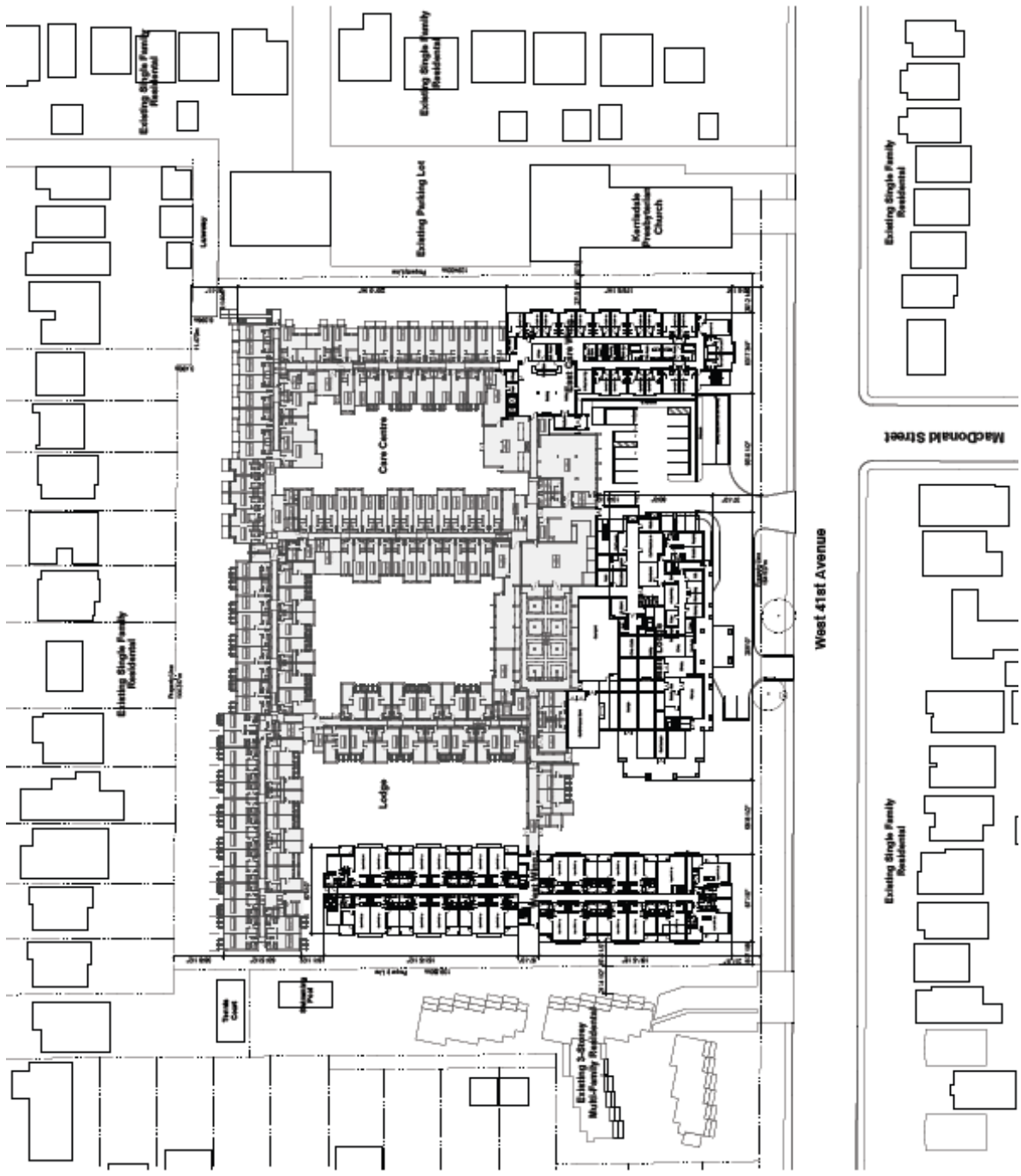


Figure 3: Overall Ground Floor and Site Plan (shaded area is existing)

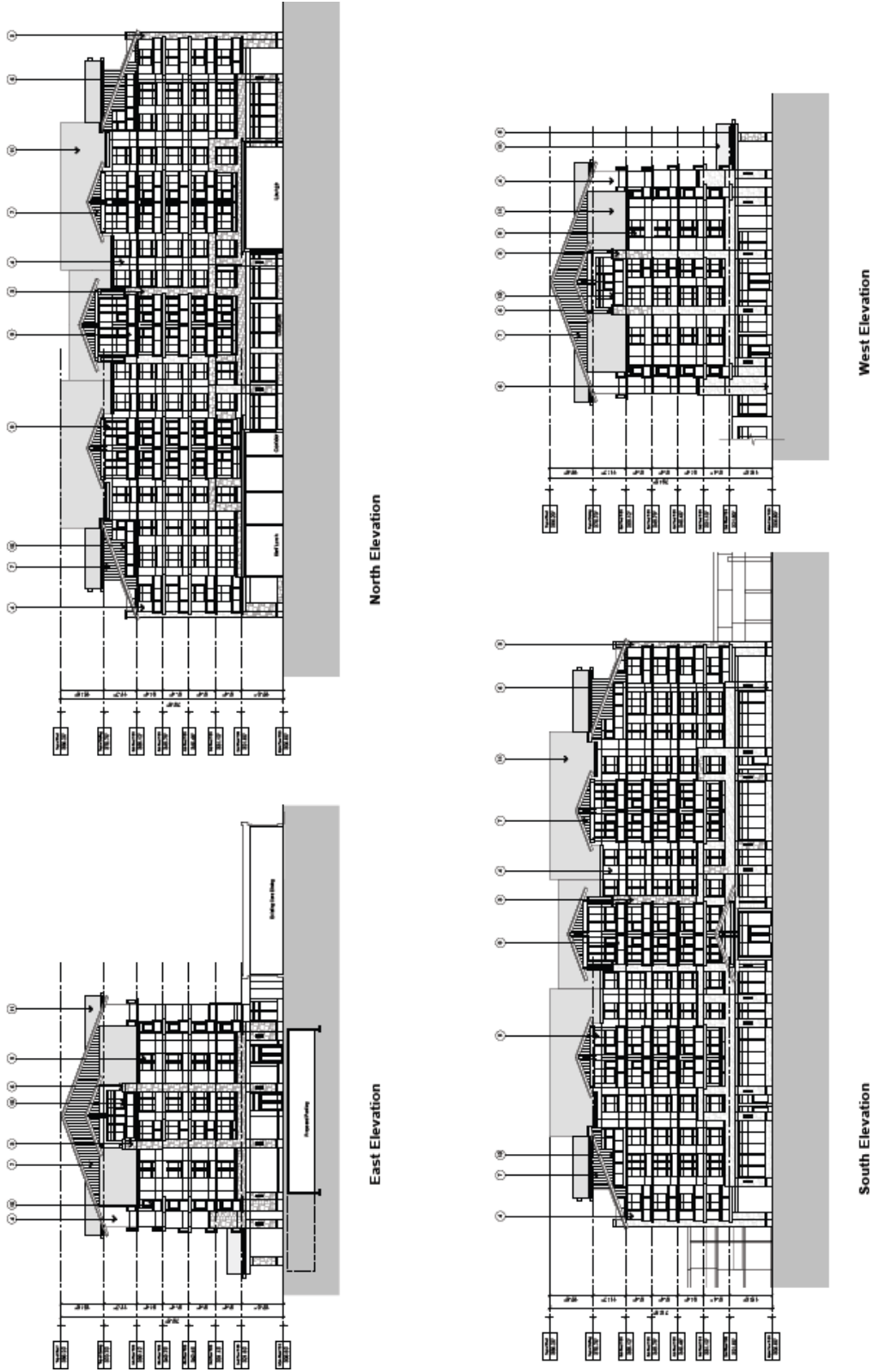


Figure 4: Elevation of Main Building

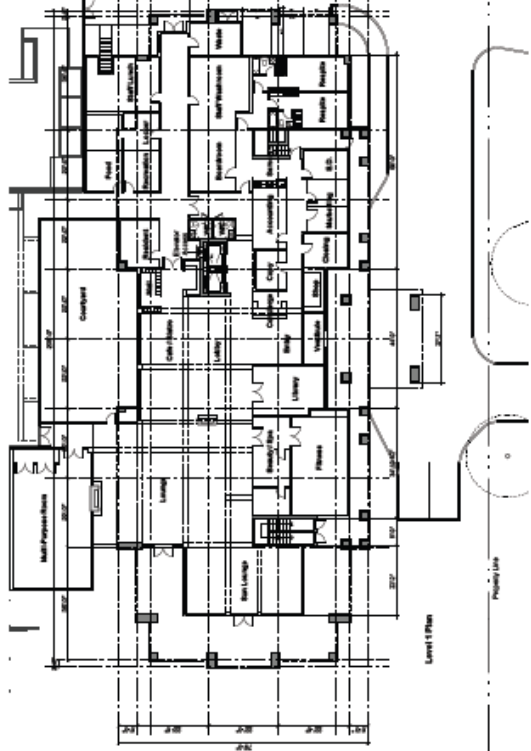
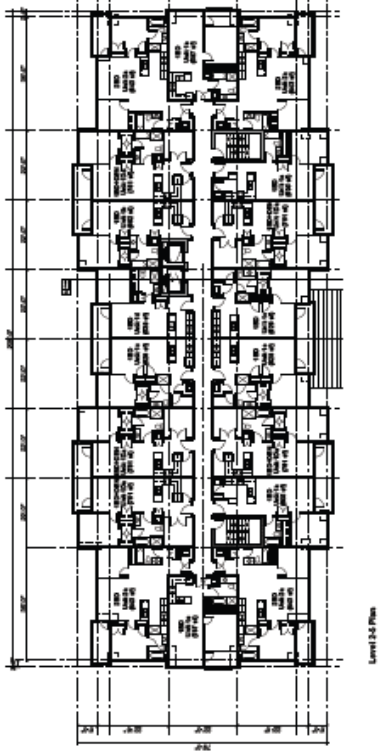
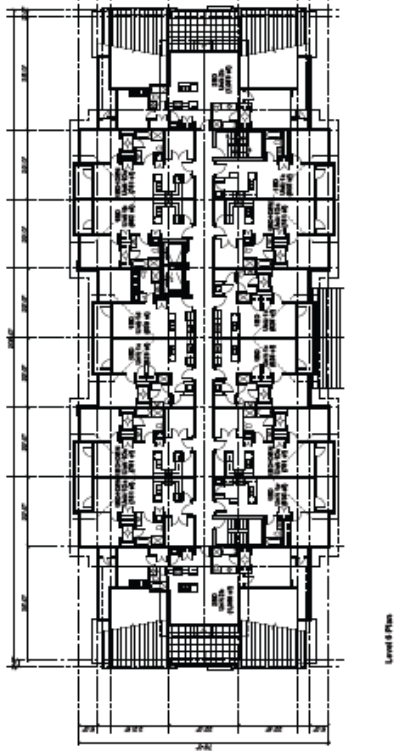
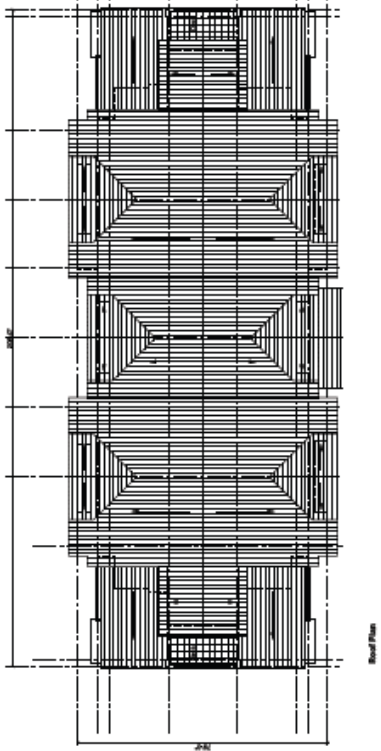


Figure 5: Floor Plans Main Building

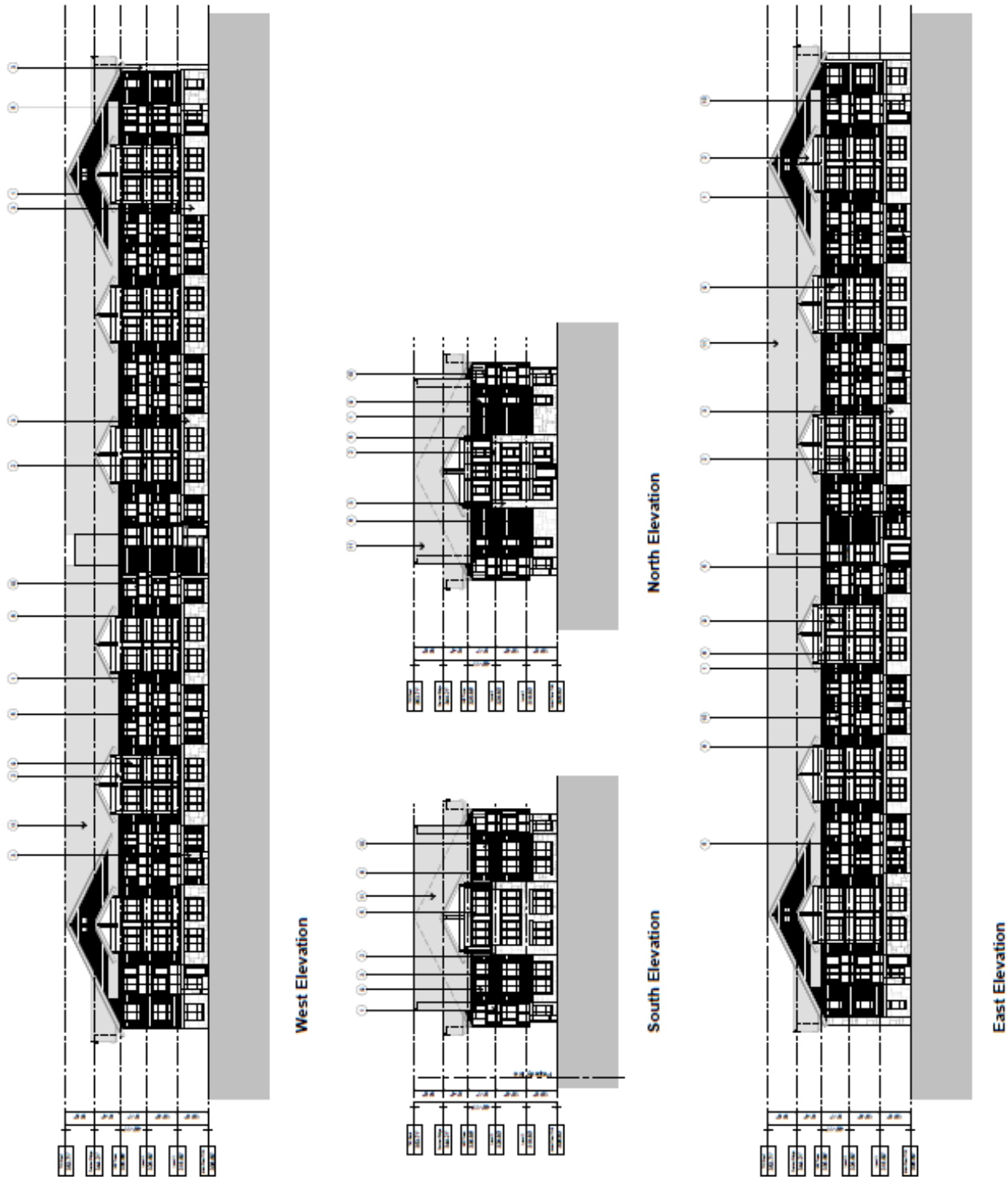


Figure 6: Elevations West Wing

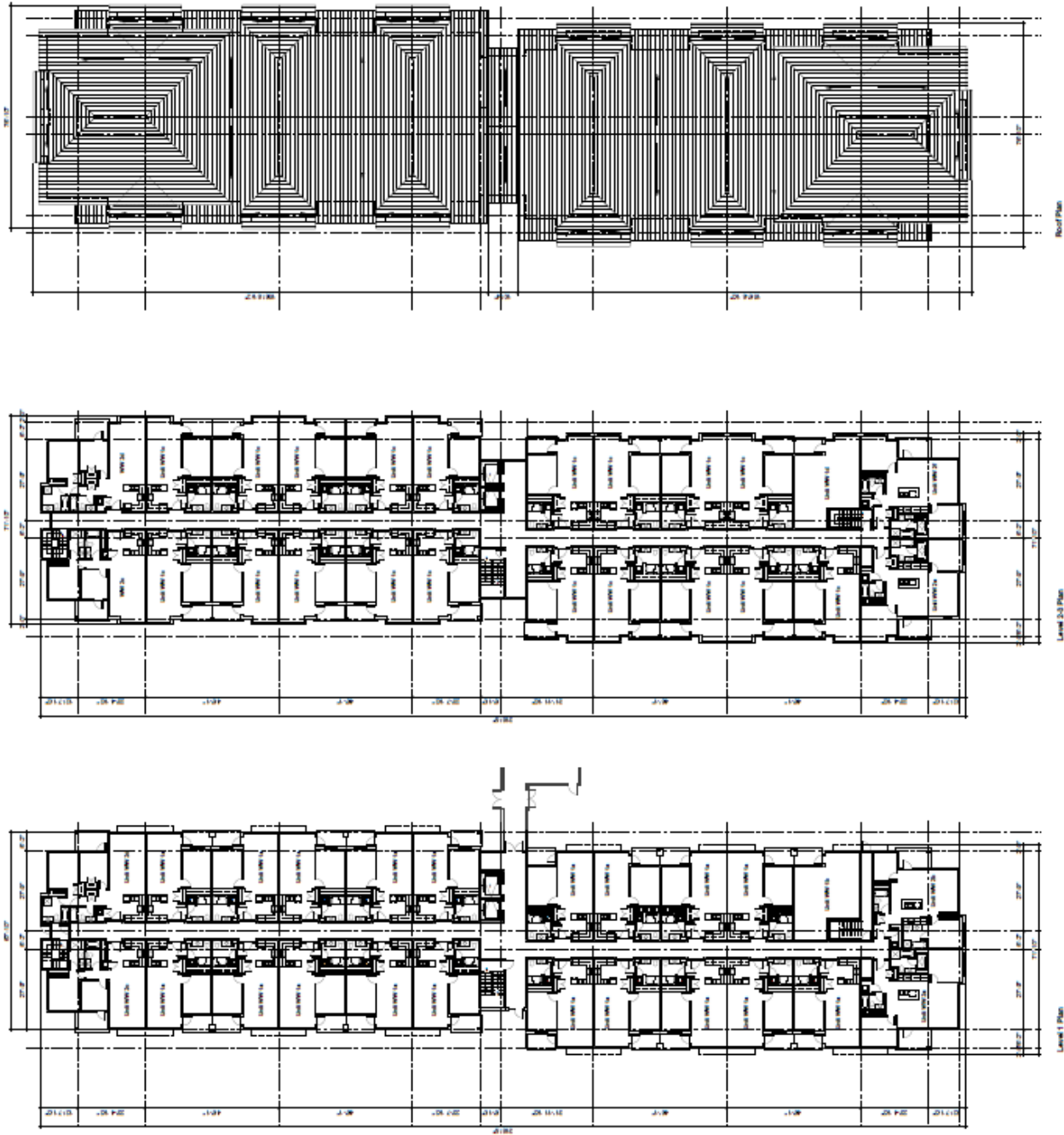


Figure 7: Floor Plans West Wing

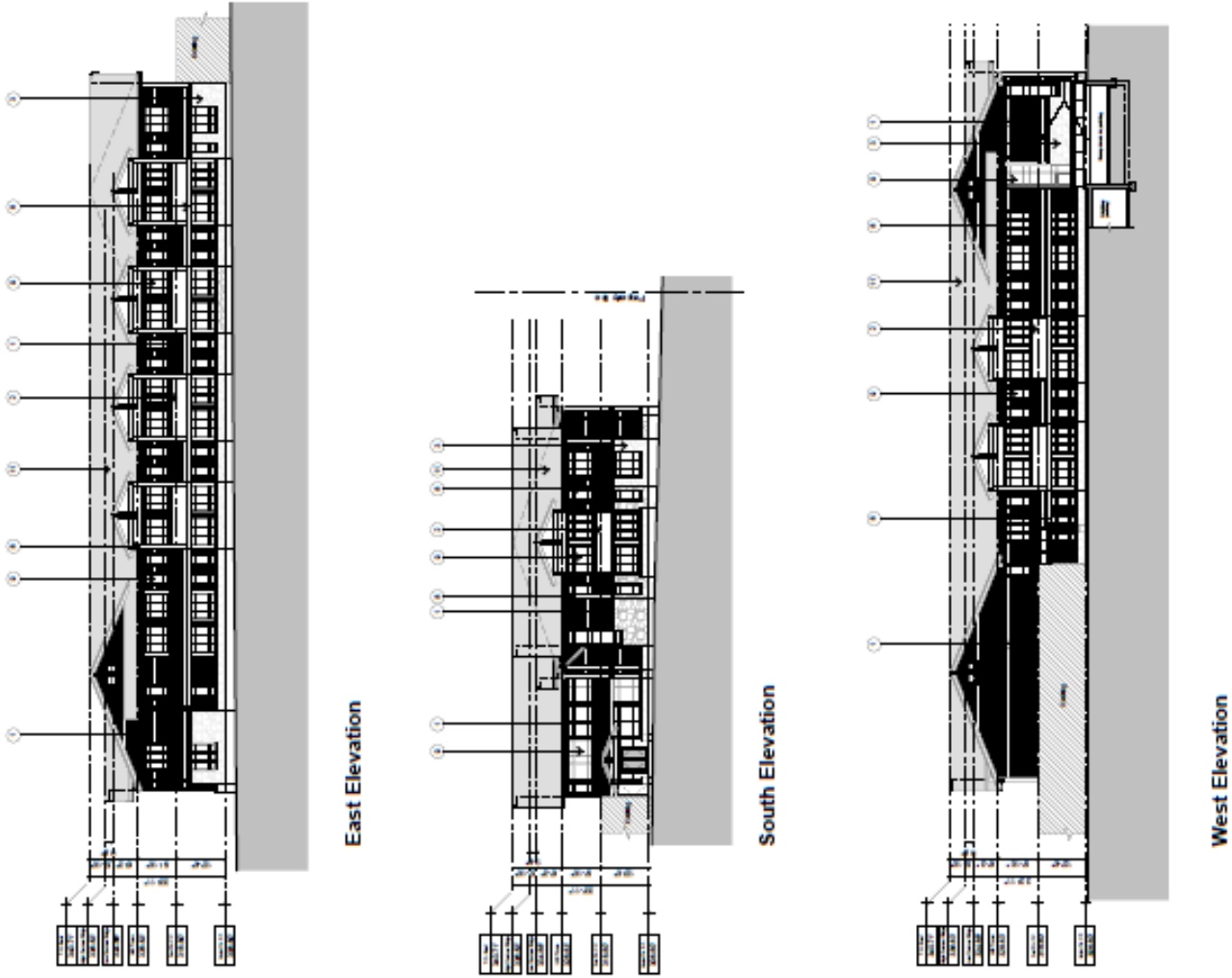
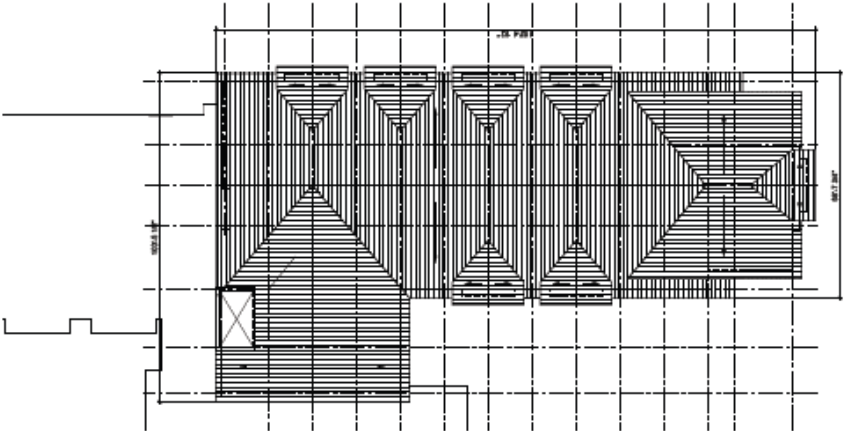
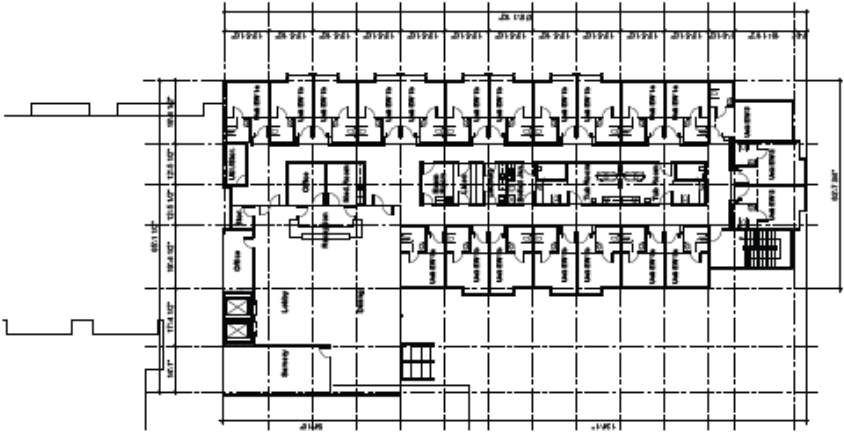


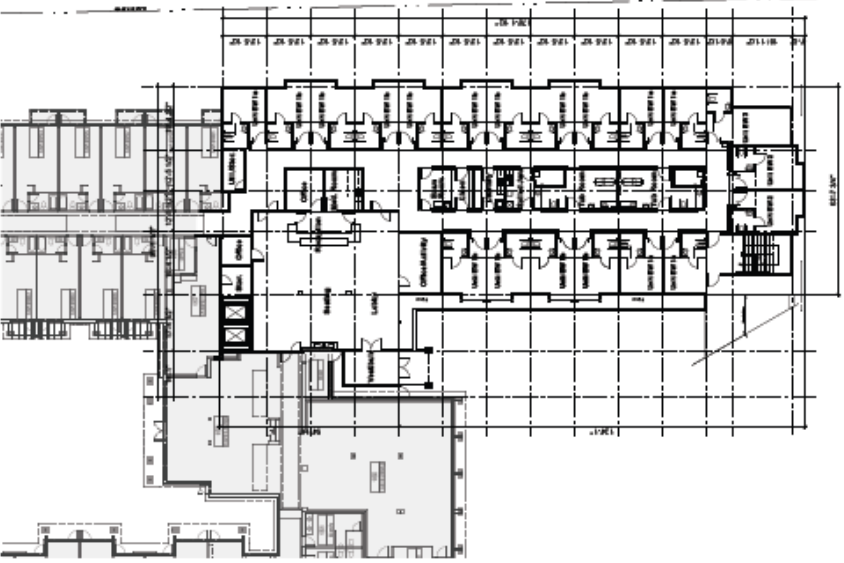
Figure 8: Elevations of East Wing (Care Facility)



Roof Plan



Level 2 Plan



Level 1 Plan

Figure 9: Floor Plans of East Wing (Care Facility)

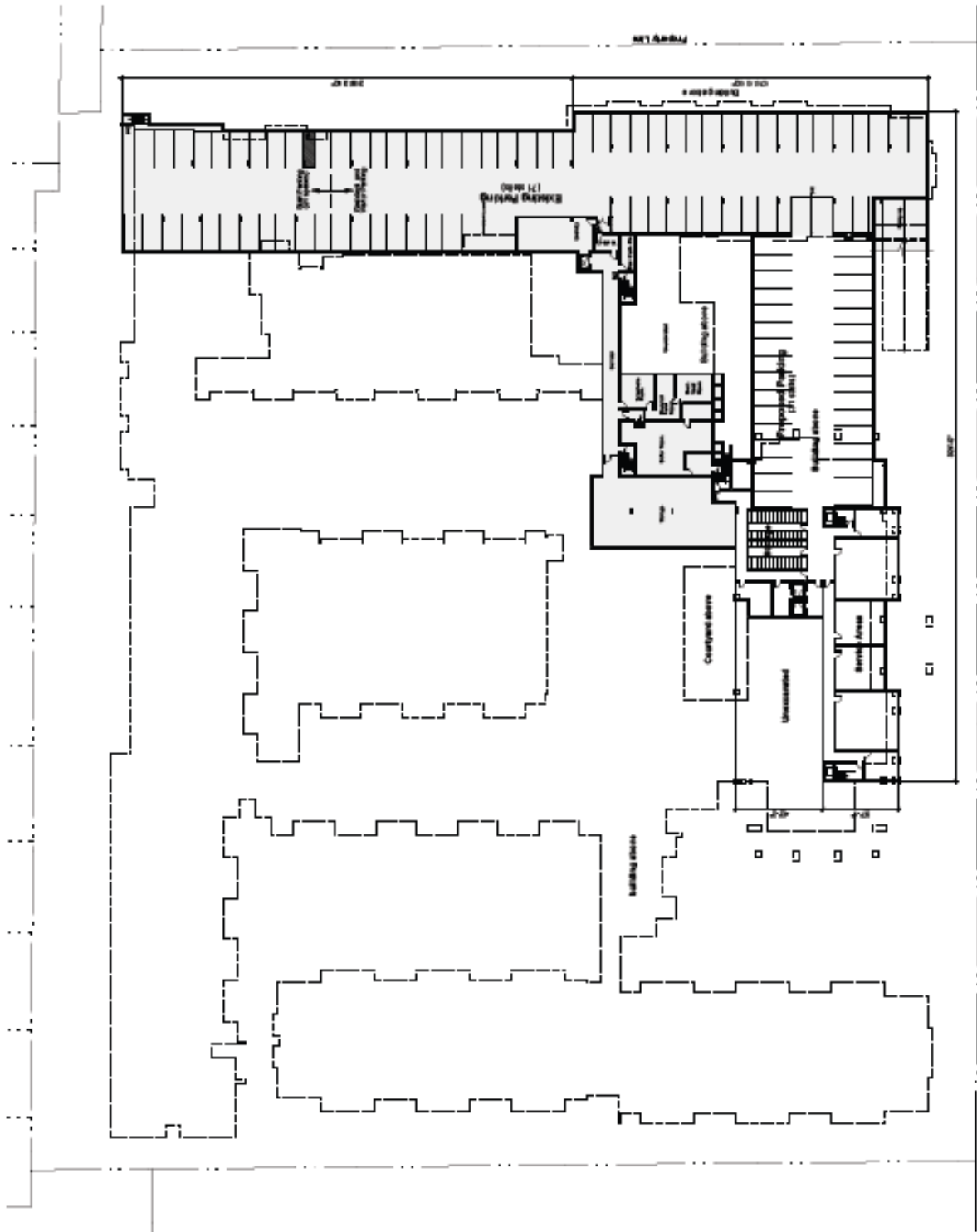


Figure 10: Parking

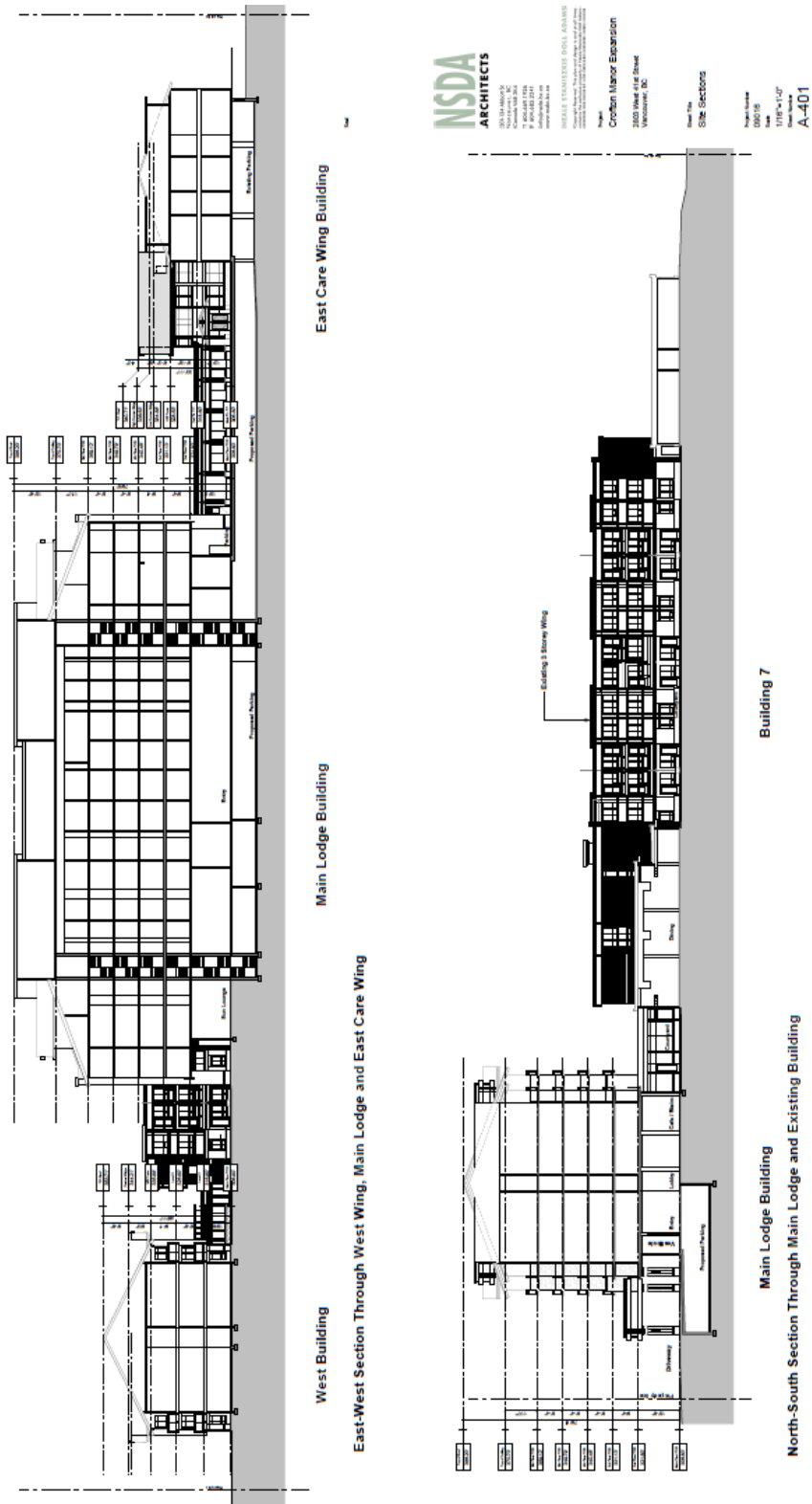


Figure 11: East-West Section (Top) and North-South (Bottom)

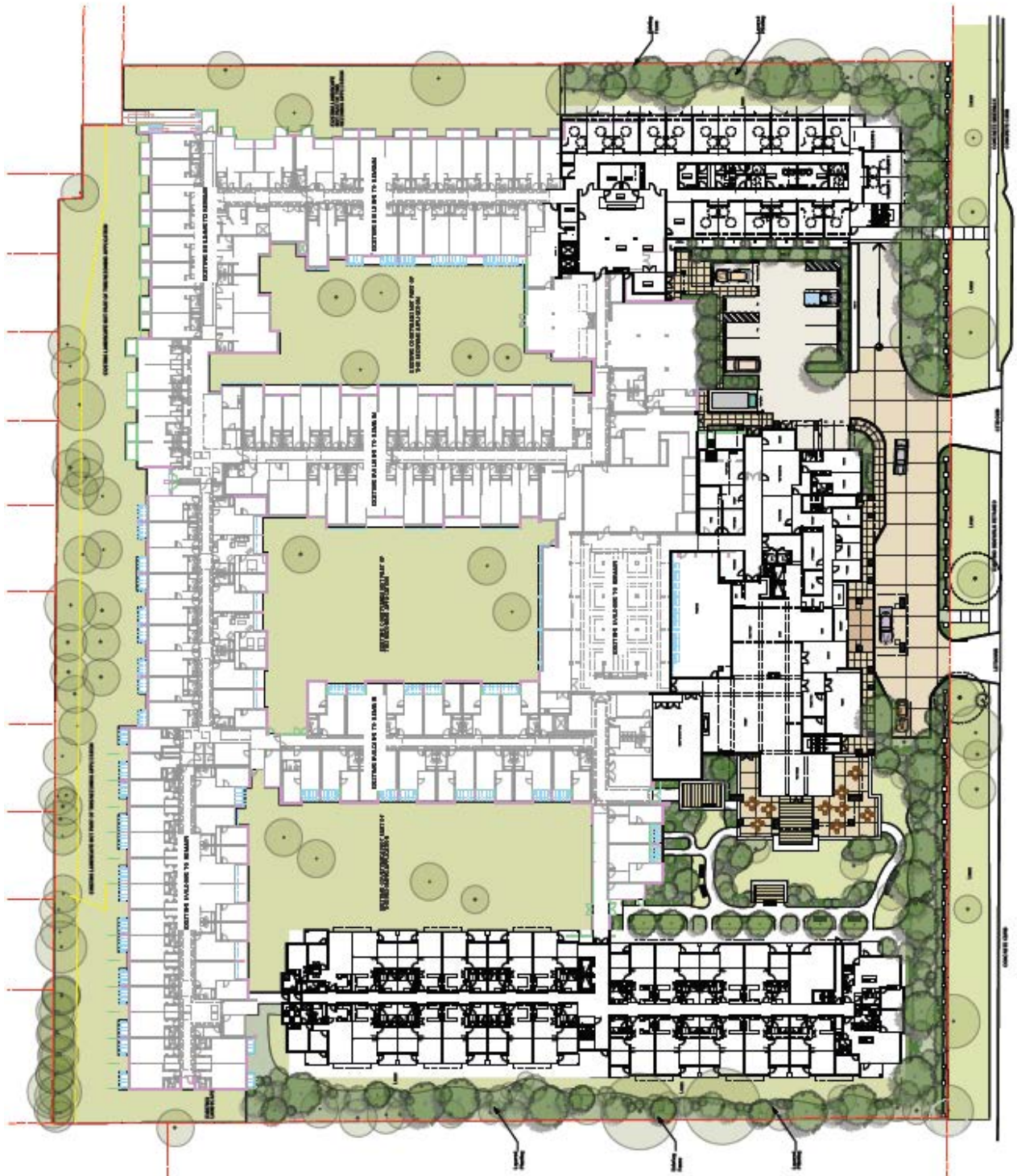


Figure 12: Landscape Plan

2803 West 41st Avenue
PUBLIC BENEFITS SUMMARY

Project Summary:

Addition of a 6-storey building and other structures to the site of the existing seniors (rental) residence and care facility.

Public Benefit Summary:

The proposal would generate DCL and public art contributions and a CAC offering to be allocated towards an affordable housing fund earmarked for, but not limited to, seniors housing in Kerrisdale.

	Current Zoning	Proposed Zoning
Zoning District	CD-1 (83)	CD-1 (83) amended
FSR (site area = 22,845 sq. m / 245,906 sq. ft.)	0.6	1.12
Buildable Floor Space (sq. ft.)	147,544	274,415
Land Use	Seniors housing/care	Seniors housing/care

Public Benefit Statistics		Value if built under Current Zoning (\$)	Value if built under Proposed Zoning (\$)
Required*	DCL (City-wide) (See Note 1)	9,397 - 40,294	613,124
	DCL (Area Specific)	0	0
	Public Art	0	304,221
	20% Social Housing	0	0
Offered (Community Amenity Contribution)	Childcare Facilities	N/A	
	Cultural Facilities		
	Green Transportation/Public Realm		
	Heritage (transfer of density receiver site)		
	Housing (e.g. supportive, seniors)		432,000
	Parks and Public Spaces		
	Social/Community Facilities		
	Unallocated		
	Other		
TOTAL VALUE OF PUBLIC BENEFITS		\$9,397 - 40,294	\$1,349,345

Other Benefits (non-market and/or STIR components):

* DCLs, Public Art and Social Housing may have exemptions and/or minimum thresholds for qualification. For the City-wide DCL, revenues are allocated into the following public benefit categories: Parks (41%); Replacement Housing (32%); Transportation (22%); and Childcare (5%). Revenue allocations differ for each of the Area Specific DCL Districts.

Note 1: The existing built FSR is approximately 0.58 (143,677 sq. ft.); therefore the site has 3,867 sq. ft. of existing development potential. DCLs vary depending on use (residential or institutional).

2803 West 41st Avenue
APPLICANT, PROPERTY AND DEVELOPMENT PROPOSAL INFORMATION

APPLICANT AND PROPERTY INFORMATION

Street Address	2803 West 41 st Avenue
Legal Description	Lot 1, Block 9, DL 2027, Plan 14745, PID: 007-752-202
Applicant/Architect	Neale Staniszkis Doll Adams Architects
Property Owner/Developer	Revera Incorporated

SITE STATISTICS

Site Area	22 845 m ² (245,906 sq. ft.)
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DEVELOPMENT STATISTICS

	Development Permitted Under Existing Zoning	Proposed Development	Recommended Development (if different than proposed)
Zoning	CD-1 (83)	CD-1 (83) Amended	
Uses	– Seniors Supportive or Assisted Housing – Community Care Facility-Class B	– Seniors Supportive or Assisted Housing – Community Care Facility-Class B	
Dwelling Units	– 107 seniors housing units – 86 Care units	– 233 seniors housing units – 106 care units	
Max. Floor Space Ratio	0.60	1.12	
Max. Height	10.06 m	Main Lodge – 24.3 m/79.4 ft. West Wing – 14.3 m/46.9 ft. East Wing – 10.3 m/33.9 ft. Retained buildings – 10 m/33 ft.	
Max. No. of Storeys	3 storeys	Main Lodge – 6 storeys Remainder of site – 3 storeys	
Front Yard Setback	7.3 m/24 ft.	Main Lodge – 10 m/36 ft. West Wing – 6.5 m/21.5 ft. East Wing – 6.5 m/21.5 ft.	
Side Yard Setback (W)	5 m/16.4 ft.	5 m/16.5 ft to West Wing	
Parking	Minimum of 79 spaces	140 spaces shown in statistics 114 shown on plans	85 spaces
Loading Spaces	1 Class B space	1 Class B space	
Passenger Loading			4 Class A 2 Class B
Bicycle Spaces		Class A – 169 spaces Class B – 34 spaces	Class A – 169 spaces Class B – 6 spaces
Scooter Parking			84 spaces