



April 17, 2019

Ms. Maria Cheng
Project Coordinator
Planning, Urban Design & Sustainability
453 W 12th Ave, Vancouver, BC V5Y 1V4

Dear Ms. Cheng

Re: Developed Permit Application for 8444 – 8480 Oak Street, Vancouver, BC

Following your email from April 10, 2019, per your request we have consolidated a review package including the following:

- Signed application form
- BC Hydro checklist
- Site profile
- Building grades
- Arborist report
- Design rationale
- Title search/charge summary
- Written explanation describing how you have addressed each condition from rezoning
- Survey plan
- Architectural drawings
- Landscape drawings
- FSR overlays

Please find below **DESIGN RATIONALE** followed by our written **SUMMARY OF PROPOSED PROJECT REVISIONS ADDRESSING REZONING COMMENTS.**

DESIGN RATIONALE

SUMMARY, VARIANCES AND RELAXATIONS

This application proposes to construct a six-storey residential building. The site is approximately 17,777 sq.ft. with a frontage of 107 ft. measured along Oak Street and a depth of approximately 80 ft. The proposed density is 2.5 FSR.

The site will be developed with a 37,943 sq.ft. multi-residential, mid-rise development, which will provide much needed alternate forms of residential accommodation to this Marpole neighbourhood. The size of the units varies from 547sq.ft to 12,016 sq.ft, however from the proposed 42 units 21 units, or 50%, are family units with two or three bedrooms.

The massing of the project follows the Marpole Community Plan policy with upper floors stepped back from Oak Street, and all other sides, to reduce visual impact and to minimize shadowing of adjacent single family lots. In addition to increased setbacks and a double row of trees the building face has been recessed slightly at the ground level to further enlarge public realm and to improve and diversify the proposed green zone. A similar setback treatment has been introduced at the back lane and the mid-block pedestrian connection. The main entrance to the building has been "carved out" of the North West building corner to enhance the mid-block connection public realm further.

This application seeks a Horizontal Angle of Daylight relaxation. Although not now, some units facing south may be affected by the bulk of future developments. The new, and already approved, development located north of the building is separated by a 30' mid-block connection space. In addition, the corners step back and the general form of the neighbouring development further enhances access to natural light.

LAND USE, FORM OF DEVELOPMENT AND PUBLIC REALM

The proposed project includes several features enhancing neighbourhood and quality of the project.

- Upper storeys have been recessed on all sides 8 ft. to reduce apparent building massing and to minimize shadowing of the at-grade open spaces and adjacent single family houses.
- The project took advantage of the 12 ft. wide mid-block pedestrian connection treating it as a part of building's surrounding landscape rather than a public thoroughfare. Proposed low hedging, deep patios, and a double row of trees with benches integrate visually public and private realm. 12 ft. high at-grade building recess, in combination with tree canopies and low planting, forms a courtyard-type intimate space.
- The south face of the building has been set back 10 ft. at level 2, 3, and 4 with additional 8 ft. at upper levels. The ground level face have been set back 4.5 ft. back from the upper face creating at-grade 14 ft. wide green transition between proposed development and the adjacent single family house. The building recess is 14 ft. high to assure compliance with Horizontal Angle of Daylight at the ground level units and to provide sufficient natural light for proposed planting.
- All units have access to the private outdoor spaces. All upper residential units have balconies and/or enclosed balconies with large sliding windows; level 5 and 6 have roof decks. All balconies are at minimum 6 ft. x 9 ft. The ground level units have extensive patios with the main and the secondary entry doors. End units take full advantage of their location enjoying over 90 degrees of daylight exposure and garden view.
- Following Marpole Community Plan the ground level patios follow the Oak street slope. Entry to each patio is at, or near the sidewalk grade. Parking configuration and the street only access to ground level units allowed for varying ground floor elevations.
- Indoor amenity as well as outdoor playground have been provided at the North East corner of the development. Both areas are adjacent to each other and the mid-block pedestrian walkway. The outdoor space has a designated toddler playground and a youth oriented space. All amenity spaces are secured but visually connected to assure safety and ease of supervision. In addition, an outdoor amenity space has been provided on the rooftop, including patio deck and garden area.

- Most of habitable rooms will comply with the standard Horizontal Angle of Daylight with all meeting the minimum discretionary 20' distance. With the exception of selected south facing rooms all other habitable spaces have unobstructed access to daylight.
- All units will have in-suite storage rooms compliant with the Bulk Storage and In-Suite Storage – Multifamily Residential Developments zoning by-law administrative bulletin.
- PMT is located at the South-East corner of the property. The parking structure has been modified accordingly; landscape design and protective measures have been considered too.
- Due to close proximity to Oak Street, several noise mitigation measures have been considered. Wall and window noise mitigation construction measures on all sides of the building will be incorporated into the final design as required by noise study conducted during the contract documents phase.

FAMILY HOUSING

This development proposes 13 two-bed and 8 three-bed units suitable for families. The proposed 50% of family units exceed the 35% requirement of the Family Room: Housing Policy for Rezoning Projects policy. Family units vary from 837 sq.ft to 1,217.sq.ft with average unit being over 1,000 sq.ft.

PUBLIC REALM

An improved public realm will be implemented on the Oak Street frontage and in the mid-block pedestrian connection including a double row of trees, landscaping, benches and bike racks.

- Minimum a 26 ft. overall setback measured from the curb to private patios is provided
- Minimum 16 ft. front private yard setback is provided for trees and landscaping
- An outer row of trees within the 6 ft. public boulevard with a second row of trees at the front property line, separated by an enhanced 8 ft. sidewalk is proposed.
- Active edges consisting of windows, and entrances facing Oak Street and mid-block pedestrian connection are implemented into the building design.
- Extensive landscape with several layers of vegetation is proposed
- Public realm amenities including benches, bike racks and pedestrian level lighting facing Oak Street and the mid-block pedestrian connection are proposed.

SUSTAINABILITY

This development will commit to achieving a minimum of 63 points (LEED Gold) with 1 water efficiency point, 1 storm water point and a 22% reduction in energy cost as compared with ASHRAE 90.1 2010. As well, this application will register with LEED program, or other equivalent program as permitted by City of Vancouver.

The proposed development has provision for a neighbourhood energy system connection. The parking structure has several extra parking spaces that can be easily converted into a heat exchange mechanical room. Specific allowances will be made during design development phase addressing requirements of the Neighbourhood Energy Connectivity Standards.

The Green Building Design noted in the Marpole Community Plan will be achieved through a combination of passive, active and hybrid design solutions. Passive will include daylighting and natural ventilation, "double skin" building envelope wherever possible, while active will focus on efficiency of heat pumps, radiant panels and electric lights. The hybrid strategies may include heat recovery ventilation, economizer ventilation, solar thermal systems, radiant facades and possibly ground source heat pumps.

PUBLIC BENEFITS

As previously mentioned, this development provides much needed alternate forms of residential accommodation to this Marpole neighbourhood. It delivers 21 suitable for families units and greatly enhances public realm through extensive landscape design.

The midblock connection incorporates several plant layers, paving patterns and sitting areas with an eye on good circulation and clarity of site. The plant pallet founded on the Biodiversity strategy and bird habitat guidelines on the city website includes indigenous, fruit bearing plants and shade trees in a layered and stepped pattern with ground covers at the front, shrubs in the middle and trees in the back. Islands of layered vegetation are also used at the base of the shade trees. Bird habitat is further enhanced by using seven bird friendly water bowls surrounded by shade plants and eatable berries.

The building entry is strategically located to further animate public space combining private and public sculptural landscaping, water feature with enhanced security.

Additional plant screening layers, private yards with gates and trees are incorporated along the back alley achieving appearance similar to the Oak Street.

CONCLUSION

We believe the enclosed material illustrates that the requested increase to density and height can be comfortable accommodated on this site while meeting neighbourhood urban design objectives. We also believe it addresses City comments and policies, adding a much needed enhancement to the rapidly growing Marpole community.

AVRP Architecture Inc.

A handwritten signature in blue ink, appearing to read 'Tomasz Anielski', with a stylized, overlapping initial 'A'.

Tomasz Anielski Dipl. Eng, M. Arch.
Partner

SUMMARY OF PROPOSED PROJECT REVISIONS ADDRESSING REZONING COMMENTS

8444 – 8480 Oak Street, Vancouver, BC

Urban Design

- Building underact has been greatly reduced.
- Building entry has been relocated the North West corners adding a distinct identity to the entrance.
- Retaining walls have been kept to the maximum of 2' providing steps and landscaping to mitigate the elevation difference between the main floor and the sloping down street.
- With few exceptions, all leaving spaces have unlimited access to the natural light. Due to the potential noise issue, some master bedrooms have been moved back away from Oak Street.
- Amenity space has been expanded at the roof level.
- The unit mix has been modified although the final count varies slightly from the rezoning. From the 42 units, 13 are two-bedroom (31%) and 8 are three-bedroom (19%). The total number of units suitable for families with children is 21 or 50%.
- The current landscape design follows the latest Bird-Friendly Design Guidelines.

Crime Prevention through Environmental Design

- The current design incorporated various CEPTED principles including glazed lobbies and door in the parking area, gated patios, very transparent ground level design with no hidden alcoves, open main entry lobby with a visual connection to mid-block pedestrian way, transparent fencing with enhanced visual openness.

Landscape Design

- The landscape design is based on the maximum retaining wall not exceeding 24". The parking structure, with the exception where hard paving is proposed, provides 48" soil depth on average. 24" soil depth may be provided in some half-sunken planters located at patios and the roof structure.
- It is a design intent to retain the #OS01 tree. The current building face appears to accommodate the tree canopy although roots require further investigation. The parking levels could accommodate recess at the south-west corner without a major impact on parking functionality.
- Based on the initial design development on intake and exhausts will be located at the lane side, incorporated into planter walls and will be fully screened with panting.
- The detailed design of all landscaped areas has been developed and included in the DP submission material. The design includes provision for new street trees per City's standards and house bibs to encourage patio and roof garden gardening.
- Outdoor lighting, due to a limited ground level area, will include building lighting. Mainly scones or downlights will be used. The midblock connection design is subject of ongoing coordination with the neighbouring development and the City of Vancouver.

Sustainability

- The Green Buildings Policy for Rezoning was addressed in great detail during the rezoning process. The project documentation has been updated to reflect all recent changes including provision for a Recycling and Reuse Plan for Green Demolition/Deconstruction.
- Engineering
- City of Vancouver excavation and construction standards will be followed.
- The Oak Street Statutory Right-of-Way has been corrected. It is now measured from the back of curb. Corrections included 4.27 m SRW labeling and dimensions.
- Bicycle parking provisions, including automatic door openers and the access route to the Class A bicycle spaces have been provided. The access will include the use of the parking ramp.
- Based on the provided information, the current design assumes no staging area for garbage containers.
- The landscape design drawings have been updated to reflect all off-site improvement sought during rezoning.
- Compliance with Parking and Loading Design Supplement has been addressed. This includes dimensioning, labeling, evidence of vertical clearances, elevations and cross-slope information.