

June 17, 2015

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EMERGENT ARCHITECTURE

## RESPONSE TO REZONING CONDITIONS

Project Name: **201 W 2<sup>nd</sup> Ave**  
Project Address: 201 W 2<sup>nd</sup> Ave  
Type of Development: Multifamily Residential Development  
Architect: GBL Architects  
Client: Concord Pacific Development Inc.

### **PROPOSED CONDITIONS OF APPROVAL**

#### **Design Development**

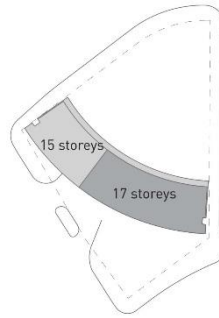
- (i) design development to the overall building to refine the massing and detailing and to further break down and slim the building scale;

Note to Applicant: This may be achieved by offsetting the slab forms on each side of the atrium. Consideration may also be given to hinging or angling the north from the south form

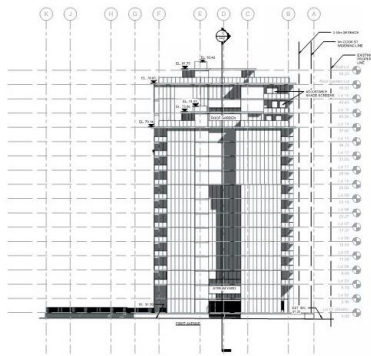
**Response:** The revised form proposes a slimmer building scale by eliminating the interior courtyard and having shallow units to the west. The refined detail on the elevation and the carving on several portions of the building provide additional quality to the elevations and help break down the massing. The building depth has decreased from 96ft to 67ft.



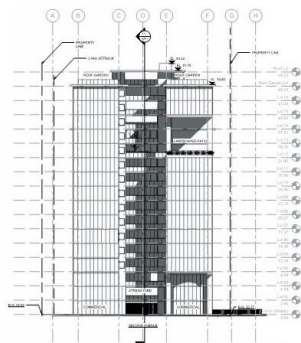
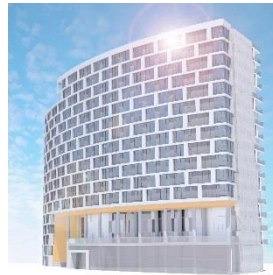
REZONING SCHEME



CURRENT SCHEME



North Elevation



REZONING SCHEME NORTH-SOUTH ELEVATIONS.



CURRENT SCHEME NORTH-SOUTH VIEWS

- (ii) design development to the atrium to provide: more openness; a glass roof to allow more light; and an analysis of natural ventilation and air flows;

**Response:** The atrium is no longer proposed in the current scheme.

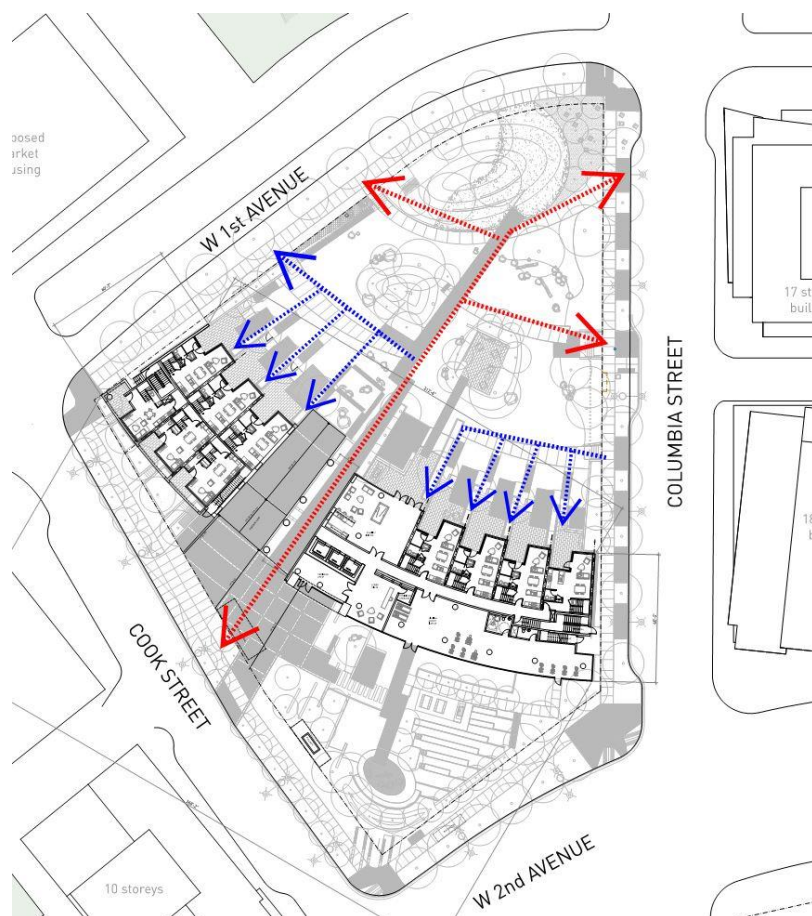
- (iii) provide a pedestrian mews along the east side of the building for use by the building residents;

**Response:** There are new pedestrian connections proposed in this scheme. The first one is a strong linear path through the building that runs diagonally from the west towards the north-east corner of the site. This path then diverts into two, connecting 1<sup>st</sup> Ave and Columbia Street.



Rezoning Scheme with no public connections.

-----Pedestrian connections for residents only



Current Scheme

-----Public pedestrian connections

-----Pedestrian connections for residents only

(iv) provide a feature on both the east and west facades of the building and landscape to respond to the axial view from the lanes;

**Response:** The views are no longer limited to east – west. The connections have been developed into more complex relationships that are generated from the several public walkways through the site. This idea is the site as well as the building become a hinge point in the neighbourhood connecting all streets and lanes.

(v) provide high quality, durable architectural materials and detailing including rain protection overhangs;

**Response:** High quality, durable architectural materials and detailing are applied through the building and landscape treatment. Refer to landscape and architectural drawings.

(vi) design development to the roof mechanical penthouse/roof access to provide a form and material treatment as an extension of the building architecture and to minimize the scale of the penthouse;

**Response:** Mechanical room is now provided underground.

(vii) design development to provide improved daylight access and privacy for residential;

Note to Applicant: The objective is to maintain approximately 24.4 m separation between main living spaces facing each other above the 2nd floor across Cook Street.

**Response:** More than 25 ft of separation is provided across Cook Street between living spaces facing each other.

(viii) provide details of sliding screens, overhangs and other visible responses to solar orientation and weather protection and consider the use of colour for these features;

**Response:** At the south-west façade a punched window configuration limits the sun exposure. Details of this wall assemblies are provided.

#### **CPTED (Crime Prevention Through Environmental Design)**

(ix) design development to take into consideration the principles of CPTED, having

particular regard for reducing opportunities for;

- theft in the underground parking;
- residential break and enter;
- mail theft;
- vandalism such as graffiti.

**Response:** The design of the Ground Floor and Parkade areas take into consideration CPTED principles. Refer to Ground floor and U/G parking plans.

## 201 W 2<sup>ND</sup> Avenue

### PWL Partnership Response to City of Vancouver Rezoning conditions.

*(x) final coordination of the public realm treatment to be consistent with the SEFC Public Realm Plan;*

**PWL Response:** This project follows the SEFC public realm plan

*(xi) ensure the open space on the east side allows visibility through from 2<sup>nd</sup> Avenue to achieve a water view of False Creek;*

**PWL Response:** Due to the building's current configuration, the best views to the north will be found at the north side of the building.

*(xii) provide an enhanced open space on 2nd Avenue at Columbia Street where the boulevard widens;*

**PWL Response:** An enhanced open space has been provided with planting, seating opportunities and high quality paving at this location.

*(xiii) provision of semi public and semi private spaces that complement the design of the public realm. Aspects to consider at time of Development Permit Application include special paving, lighting, planting, driveway crossings, pedestrian entrances and safety, walkways, permanent site furniture, weather protection, garbage storage, recycling and loading facilities;*

**PWL Response:** A range of spaces have been provided at the ground level of the site that complement the public realm and offer common space within the property line to the public. Public spaces and paths are a key element of the design, allowing for pedestrian permeability through the site to access the surrounding neighborhood.

*(xiv) provision of maximum 40 percent effective impervious area;*

**PWL Response:** The entire property boundary of the site is utilized for underground parking, and as such is capped with an impervious concrete slab. The maximum 40% impervious area is therefore not attainable. To address this condition, 43% of the site is planted/vegetated, and therefore will assist with the reduction peak storm flow discharge.

*(xv) design development to ensure the integration of the underground parking structure into the overall open space design;*

**PWL Response:** The underground parking is completely covered by landscape features, with the exception of the parkade emergency exit stairway. This stairwell expresses vertically at the north end of the site and will be screened with trees and planting.

*(xvi) provision of best current practices for reducing potable water use and managing storm water conservation, including high efficiency irrigation, xeriscaping and the use of captured storm water for irrigation. Size and location of water storage cisterns should be noted on Plans. Where practical, water features are to use storm water or other non-potable alternatives. Detailed technical drawings of storm water recycling will be required at the time of development permit application;*

**PWL Response:** Potable water use has been reduced through the use of water collection for irrigation. Refer to mechanical drawings for the location of the water cistern, and detailed drawings of the storm water collection system.



*(xvii) provision at time of development permit application of a detailed rationale outlining intent for the specific programming of individual outdoor spaces and landscape structures, including overall use, pedestrian capacity, storage (for example, compost, gardening tools), access, security, sustainable design requirements (planting, water, waste, soil, habitat);*

**PWL Response:** Please refer to our detailed landscape design rationale for confirmation of the above.

*From APPENDIX B*

*PAGE 3 OF 11*

*(xviii) maximize opportunities for “green walls”, planted roofs and patios. Mitigate blank walls by locating continuous linear planters and climbing plants at their base;*

**PWL Response:** Due to the architectural expression of the building and the large proportion of glazing, climbing plants have not been incorporated.

*(xix) increase the planter sizes on private patios and maximize edible planting opportunities, including hose bibs and tool storage. Provide hose bibs for all patios that cannot be serviced using at grade non-potable water;*

**PWL Response:** Generous private patios have been provided where possible. Hose bibs will be provided at patios.

*(xx) design development to the inner boulevard “rain garden features” to explore the opportunity for the direct collection of water from the street as a “swale”, in coordination with Engineering and the public realm design;*

**PWL Response:** Due to the extents of the building parkade slab, and the landscape concept that is proposed, infiltration elements such as rain gardens have not been considered as practical for this project.

*(xxi) encourage native plant species for planted areas that are not utilized for urban agriculture;*

**PWL Response:** At areas not utilized for urban agriculture, a range of native species has been incorporated into the planting plan.

*Technical*

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

**PWL Response:** The above elements have been incorporated into the landscape drawings.

*(xxiii) Grades, retaining walls, walkways and structural elements, such as underground parking, to be designed to provide maximum plant growing depth (exceed BCLNA Landscape Standard). Where applicable, underground parking design to increase soil depth for planting. Planted areas adjacent to structures and on slab to contain continuous soil volumes. Underground parking to angle downward at the corner (3 feet across and 4 feet down) to increase planting depth for inner boulevard trees and planters;*

**PWL Response:** We have ensured that soil depths meeting or exceeding the BCNLA Standard will be provided. Soil will be raised within walls or bermed up above the slab to accommodate best practice tree-planting depths.

*(xxiv) Provision of large scale partial plans, elevations, sections, specifications illustrating the detailed treatment of the public realm interface at the streets and lanes; including planters, retaining walls, stairs, planting, soil depth, underground structures, semi private patios and privacy screens;*

**PWL Response:** Please refer to our drawings and sections for this information.

*(xxv) provision at time of development permit application of a lighting plan;*

**PWL Response:** Please refer to our materials plans for proposed conceptual lighting plan.

*Trees*

*(xxvi) additional street trees will be required and are to be clearly illustrated on the Landscape Plan;*

**PWL Response:** Please refer to planting plans for location of additional street trees.

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

**PWL Response:** Trees have generally been set back from proximity to vehicle conflicts.



## Universal Design

(xxviii) Applicant to work with a Universal Design consultant to achieve the objectives for Universal Design through implementation of “The Safer Home Certification Criteria.”

**Response:** Refer to Appendix A.

## Environmental Sustainability

(xxix) applicant to achieve the SEFC Green Building Strategy and meet a minimum LEED™ Silver Canada Certified standard (with a target of 36 points), including City of Vancouver prerequisites (with full LEED™ registration and documentation) or equivalency;

**Response:** The project sustainability goals are to provide a cost-effective high value development that meets or exceeds the Southeast False Creek Green Building Strategy.

An equivalent level of LEED Silver has been targeted with 56 points, and the project will be registered with the Canada Green Building Council under the LEED Canada NC 2009 Rating System.

## Energy

(xxx) provide energy efficient design and modelling results to meet or exceed the CBIP (Commercial Buildings Incentive Program) standard for energy efficiency;

**Response:** The project is targeting 6 energy points (33% better than the Model National Energy Code (MNECB)), which will be confirmed through a whole building energy model.

(xxxi) provide full building design to meet ASHRAE 90.1 2004 in its entirety (with the exception of outright energy efficiency, which is covered under provision “xxx”, above) including:

- improved envelope options such as “continuous insulation”, increased r-values, and thermal breaks for balconies and slab extensions;
- energy efficient lighting;
- air exchange effectiveness;
- full best practice building systems commissioning;
- daylighting; and
- provision of vestibules where necessary;

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

**Response:**

- 6 energy points (33% better than the Model National Energy Code (MNECB) will be confirmed through a whole building energy model.
- Energy efficient lighting to meet or exceed (i.e., lower than) the requirements of ASHRAE 90.1-2010.
- 
- Daylighting and views will be maximized for all residential units.
- Vestibule is provided at main lobby entrance.
- A letter from a professional engineer trained in building commissioning will be submitted at time of BU application.

(xxxii) provide compatible, energy efficient design and details of the heating and domestic hot water for the referenced connection to the False Creek Neighbourhood Energy Utility proposed for the area;

**Response:**

The project is "DEU" ready; that is, the project is capable to be connected to the Southeast False Creek Neighbourhood Energy Utility system when it becomes available. The NEU room is located at the parkade level in the corner of W. 1st Ave and Columbia Street. Details to be provided at BU application.

(xxxiii) provide vertical glazing to a maximum of 40 percent or provide additional thermal measure such as low-e glass to compensate for the additional heat loss;

**Response:** Low-e glass will be provided.

(xxxiv) provide roughed-in capacity for future individual metering for energy and water supplies;

BC hydro electrical meters will be provided to meter electrical consumption within individual suites, however, thermal energy and water meters will only be provided at the whole building level.

(xxxv) provide climate zone control for residential and live-work units that is compatible with the False Creek Neighbourhood Energy Utility;

**Response:** The four pipe fan coil hydronic heating system in the building will be designed to be compatible with the False Creek Neighbourhood Energy Utility. Details to be provided at the time of BU application

(xxxvi) provision of fireplaces listed as a heating appliance with a minimum combustion efficiency to meet or exceed ASHRAE/IESNA Standard 90.1 - 2001 heating appliance standards. No continuous pilot lights; interrupted power ignition is preferred;

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

**Response:** Details to be provided at the time of BU application

#### Stormwater Management and Green Roofs

(xxxvii) provision of a green roof (including useable, intensive roof and or inaccessible, extensive roof) on principal building roofs;

**Response:** Principal building roofs are provided with a combination of useable, intensive and extensive green roofs. Refer to Landscape drawings.

(xxxviii) provision of effective impervious area of no more than 60 percent of total site area with 30 percent of useable intensive green roof area in soft landscape (this includes drop off areas, walkways rooftops and plazas);

**Response:** effective impervious area of no more than 60 percent of total site area is provided with 30 percent of useable intensive green roof area in soft landscape. Refer to Landscape drawings.

(xxxix) provision of best current practices for managing water conservation including high efficiency irrigation, aspects of xeriscaping including drought-tolerant plant selection and mulching;

**Response:** Provision of high efficiency irrigation system, moisture sensors and drought tolerant native and non-invasive introduced plant species.

(xl) design development to provide a balanced stormwater management system that maximizes on site water quality/quantity (e.g., greenroofs, on-site ponds, infiltration galleries, etc.) and potable water conservation through reuse for irrigation, water features, and toilet flushing (e.g. cistern with dual piping, water treatment). Detailed technical drawings of stormwater reuse system will be required at the time of development permit application;

Note to Applicant: Provide a stormwater retention system separated from the potable water system (dual system) for the irrigation of the ground level semiprivate open spaces and public realm landscaping to be sized for the summer drought periods. In addition, water storage for the roof top shared open space to be considered. All hose bibs to be supplied with

potable water unless clearly indicated otherwise. This system is to be designed in coordination with Building – Processing.

**Response:**

A storm water collection cistern is being included in the project. This cistern will collect storm water thereby reducing storm water runoff and providing irrigation water for the ground level semiprivate landscaping.

(xli) provide details and arrangements for connection and flow rates to meet the SEFC Stormwater Management Plan (see engineering condition “follow-up with Engineering”);

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

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

**Response:** Refer to landscape drawings. Details to be provided at the time of BU application

#### In-Building Water Efficiency

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

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

**Response:** Water efficient plumbing fixtures: dual flush water closets, low-flow showerheads and kitchen faucets and ultra low-flow lavatory faucets.

#### Urban Agriculture

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

**Response:** Garden plots have been designed to meet garden plot provisions and are located on the portion of the site that has the most sunlight exposure. Refer to landscape drawings

## Building Durability

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

**Response:** High quality and durable architectural materials are applied to the building envelope as well as the hard surfaces on landscaped areas.

## Waste Management

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

**Response:** A Construction and Demolition Waste Management Plan will be submitted at time of BU application.

gbl

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## APPENDIX A

### SAFER HOME CRITERIA

#### COMMENTARY ON CITY'S RECOMMENDATIONS:

#### **All exterior thresholds to be flush**

- Achievable: Yes/No
- Stage- BP: Thresholds to public areas and areas required to accessible to be flush. Thresholds to exterior private areas to be appropriate with respect to access and building envelope considerations.

#### **Interior thresholds meet minimal code constraints**

- Achievable: Yes
- Stage- BP: General note included in drawings and details.

#### **Bath and shower controls from centre**

- Achievable: “?” Mechanical Consultant/Owner at BP stage.

#### **Pressure/temperature control valves on all show faucets**

- Achievable: “?” Mechanical Consultant/Owner at BP stage.

#### **2”x12” blocking lumber in all washroom tub, shower, and toilet locations**

- Achievable: Yes
- Stage- BP: General note included in drawings and details.

#### **Waste pipes brought in at 12” to the centre of the pipe from floor level**

- Achievable: “?” Mechanical Consultant/Owner at BP stage.

#### **Cabinets underneath sinks easily removable**

- Achievable: Yes. Subject to Owner’s procurement policy of building fit-out.

#### **Doors a minimum of 34” wide but should be 36”**

- Achievable: Yes
- Stage- DP: Suite entry doors to be 36” and suite interior doors to be 34” as per new VBBL requirements.

#### **Hallways and stairways a minimum of 40” wide but should ideally be 42” wide**

- Achievable: Yes/No
- Stage- DP: VBBL requirements drive minimum widths of hallways and stairways- typically align with this request.

**Light switches 42" floor to the centre of the electrical box from the finished floor**

- Achievable: "?" Electrical/Interiors Consultant/Owner at BP stage.

**Receptacles 18" floor to the centre of the electrical box from the finished floor**

- Achievable: "?" Electrical/Interiors Consultant/Owner at BP stage.

**Electrical receptacles placed as follows:**

- Beside windows, especially where draperies may be installed
- Top and bottom of stairways
- Beside the water closet
- Above external doors (outside and inside)
- On front face of kitchen counter
- At node Zero Location
- Achievable: "?" Electrical/Interiors Consultant/Owner at BP stage.

**Larger grey electrical boxes utilized**

- Achievable: "?" Electrical/Interiors Consultant/Owner at BP stage.

**Four-plex receptacles in master bedroom, home office, garage and rec room**

- Achievable: "?" Electrical/Interiors Consultant/Owner at BP stage.

**Level 5 (4 pair) telephone pre-wire to all areas returning to central area**

- Achievable: "?" Electrical/Interiors Consultant/Owner at BP stage.

**RG-6 coaxial cable runs returning to one central area**

- Achievable: "?" Electrical/Interiors Consultant/Owner at BP stage.

**All low-voltage run returning to one central area**

- Achievable: "?" Electrical/Interiors Consultant/Owner at BP stage.

**Walls at the top of stairs reinforced with 2"x12" at 36" to centre**

- Achievable: "?" Intent unclear.



**Either allowance made for elevator in stacked closets, or staircase 42” wide**

- Achievable: “?” Concrete frame construction is proposed to enable easier renovation to cut openings within suites to link floor levels. This can include provision for wider stairs (to accommodate chair rail lifts etc). However, interconnected floor openings in townhouse live/work illustrated as minimum width stairs die to cost of floor space.

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