# CITY OF KELOWNA Planne Initials

Planner Initials LK

# **MEMORANDUM**

Date: December 6, 2021

**File No.:** Z21-0066 (Rev 1)

**To:** Planning and Development Officer (LK)

From: Development Engineering Manager (RO)

**Subject:** 631, 647, 657, 677 Clement Ave RU2 to C7

The Development Engineering Branch has the following comments and requirements associated with this application to rezone the property from from RU2 – Medium Lot Housing to C7 – Central Business Commercial to facilitate the development of multiple dwelling housing.

### 1. GENERAL

- a. The following requirements are valid for two (2) years from the reference date of this memo, or until the application has been closed, whichever occurs first. The City of Kelowna reserves the rights to update/change some or all items in this memo once these time limits have been reached.
- b. This proposed development may require the installation of centralized mail delivery equipment. Please contact Arif Bhatia, Delivery Planning Officer, Canada Post Corporation, 530 Gaston Avenue, Kelowna, BC, V1Y 2K0, (250) 859-0198, arif.bhatia@canadapost.ca to obtain further information and to determine suitable location(s) within the development.
- c. There is a possibility of a high water table or surcharging of storm drains during major storm events. This should be considered in the design of the onsite system.

## 2. DOMESTIC WATER AND FIRE PROTECTION

- a. The subject lots are located within the City of Kelowna water supply area. Three of the existing lots are each serviced with a 13-mm diameter water service and one lot (677 Clement Ave) is serviced with a 19-mm diameter water service. Only one service will be permitted per legal lot. The Applicant, at their cost, will arrange for the removal of the existing services and the installation of one new larger metered water service.
- b. The Developer's Consulting Engineer will determine the domestic and fire protection requirements of this proposed development and establish hydrant requirements and service needs. The bylaw requirement for this development is 150 L/s. If it is determined that upgrades to any existing water distribution system must be made to achieve the required fire flows, additional bonding will be required.

- c. All fire flow calculations are to be shared with the Development Engineering Branch upon submittal of off-site civil engineering drawings.
- d. A Water meter is mandatory for this development and must be installed inside a building on the water service inlet as required by the City Plumbing Regulation and Water Regulation bylaws. The Developer or Building Contractor must purchase the meter from the City at the time of application for a building permit from the Inspection Services Department and prepare the meter setter at their cost.

# 3. **SANITARY SEWER SYSTEM**

- a. Our records indicate that the subject lots are currently each serviced with a 100-mm diameter sanitary sewer service. The Applicant's Consulting Mechanical Engineer will determine the requirements of the proposed development and establish the service needs.
- b. Only one service will be permitted for this development, the applicant will arrange for the removal and disconnection of the existing services and the installation of one new larger service at the applicants cost.
- c. If one of the existing service connections are to be utilized it must be completed with an inspection chamber (c/w Brooks Box) as per SS-S7 & SS-S9.

#### 4. STORM DRAINAGE

- a. The property is located within the City of Kelowna drainage service area. A storm service connection, complete with onsite detention and flow control will be required. A hydrogeotechnical report will be required complete with a design for the disposal method. The Lot Grading Plan must show the design and location of these systems.
- b. Provide the following drawings:
  - i. A detailed Lot Grading Plan (indicate on the Lot Grading Plan any slopes that are steeper than 30% and areas that have greater than 1.0 m of fill);
  - ii. A detailed Stormwater Management Plan for this subdivision; and,
  - iii. An Erosion and Sediment Control Plan is to be prepared by a Professional Engineer proficient in the field of erosion and sediment control. The plan is to be prepared as per section 3.14 of Schedule 4 of Bylaw 7900. If a line item for ESC is not included in the Engineer's cost estimate for off-site work, then an additional 3% will be added to the performance security based on the total off-site construction estimate.
- c. On-site detention systems are to be compliant with Bylaw 7900, Schedule 4, Section 3.11.1 *Detention Storage*.
- d. As per Bylaw 7900, Schedule 4, Section 3.1.3 *Climate Change*, the capacity of storm works will include an additional 15 percent (15%) upward adjustment, and applied to the rainfall intensity curve stage (IDF) in Section 3.7.2.
- e. Show details of dedications, rights-of-way, setbacks and non-disturbance areas on the lot Grading Plan.
- f. Register right of ways on private properties for all the storm water infrastructure carrying, conveying, detaining and/or retaining storm water that is generated from the public properties, public road right of ways, and golf course lands.

g. Where structures are designed or constructed below the proven high groundwater table, permanent groundwater pumping will not be permitted to discharge to the storm system. The City will approve designs that include provisions for eliminating groundwater penetration into the structure, while addressing buoyancy concerns. These design aspects must be reviewed and approved by the City Engineer.

# 5. ROAD IMPROVEMENTS

- a. Clement Ave must be upgraded to a full urban standard (modified SS-R9) along the full frontage of the subject property with extension to the Clement Ave and Richter St intersection. Upgrades required include; center median within Clement Ave, curb and gutter, sidewalk, LED street lighting, burial of overhead wires and removal of poles, landscaped and irrigated boulevard, storm drainage system, pavement removal and replacement and re-location or adjustment of utility appurtenances if required to accommodate the upgrading construction. Road cross section will be provided to consulting engineer, upon request, at time of detailed offsite design.
- b. East-west lane fronting this development to the south must be upgraded to a SS-R2 commercial lane standard including; road fillet paving, storm drainage, burial of overhead wiring and removal of poles, and relocation or adjustment of existing utility appurtenances if required to accommodate the upgrading construction.
- c. A portion of the North-south lane fronting this development to the east, which is proposed to be closed, must be retained as laneway to provide for a turnaround area. Turning movements must be provided with wheel paths contained entirely in lane ROW, no tracking onto private property is permitted.
- d. All Landscape and Irrigation plans require design and inspection by a Qualified Professional registered with the BCSLA and the IIABC, are to be included as a line item in the estimate for the Servicing Agreement performance security. Landscape and irrigation plans require approval by the Development Engineering Branch at the same time as other "issued for construction" drawings.
- e. All furnishings, including bike racks, must be contained on private property and are not permitted within the boulevard.
- f. Streetlights must be installed on all public roads. All streetlighting plans are to include photometric calculations demonstrating Bylaw 7900 requirements are met and approval by the Development Engineering Branch at the same time as other "issued for construction" drawings.

## 6. POWER AND TELECOMMUNICATION SERVICES

- a. All proposed distribution and service connections are to be installed underground. It is the developer's responsibility to make a servicing application with the respective electric power, telephone and cable transmission companies to arrange for these services, which would be at the applicant's cost.
- b. If any road dedication or closure affects lands encumbered by a Utility right-of-way (such as Hydro, Telus, Gas, etc.) please obtain the approval of the utility. Any works required by the utility as a consequence of the road dedication or closure must be incorporated in the construction drawings submitted to the City's Development Manager.
- c. Re-locate existing poles and utilities, where necessary including within lanes. Remove aerial trespass(es).

## 7. GEOTECHNICAL STUDY

a. Provide a comprehensive geotechnical report (3 copies), prepared by a Professional Engineer competent in the field of hydro-geotechnical engineering to address the items below:

NOTE: The City is relying on the Geotechnical Engineer's report to prevent any damage to property and/or injury to persons from occurring as a result of problems with soil slippage or soil instability related to this proposed subdivision.

- b. The Geotechnical reports must be submitted to the Planning and Development Services Department (Planning & Development Officer) for distribution to the Works & Utilities Department and Inspection Services Division prior to submission of Engineering drawings or application for subdivision approval.
  - i. Area ground water characteristics, including any springs and overland surface drainage courses traversing the property. Identify any monitoring required.
  - ii. Site suitability for development.
  - iii. Site soil characteristics (i.e. fill areas, sulphate content, unsuitable soils such as organic material, etc.).
  - iv. Any special requirements for construction of roads, utilities, and building structures.
  - v. Recommendations for items that should be included in a Restrictive Covenant.
  - vi. Recommendations for roof drains and perimeter drains.
  - vii. Recommendations for erosion and sedimentation controls for water and wind.
  - viii. Any items required in other sections of this document.
- c. Should any on-site retaining walls surpass the following limits, an Over Height Retaining Wall Permit will be required:

"Retaining walls on all lots, except those required as a condition of subdivision approval, must not exceed a height of 1.2 m measured from natural grade on the lower side, and must be constructed so that any retaining walls are spaced to provide a 1.2 m horizontal separation between tiers. The maximum number of tiers is two with a maximum total height of 2.4 m. Any multi-tier structure more than 2 tiers must be designed and constructed under the direction of a qualified professional engineer."

The design of all retaining walls is to conform with Engineer & Geoscientists British Columbia's Professional Practice Guidelines for Retaining Wall Design. Submission requirements for the Over Height Retaining Wall Permit include Engineer of Record documents (Appendix A of Retaining Wall Design Guideline) and any necessary independent reviews (as per EGBC's Documented Independent Review of Structural Designs).

- d. Any modified slopes having a finished slope greater than 2H:V1 (50%) and an elevation change greater than 1.2 m must be installed under the direction of a qualified professional engineer.
- e. Any exposed natural rock surface on a lot that has the potential for materials to displace causing a hazardous condition, must be reviewed by a qualified professional engineer with the appropriate and measures undertaken as prescribed by the engineer. For adequate Rockfall Protection adjacent to walls and rock cuts, please consider BC MoTI Supplement to TAC Geometric Design Guide 440, page 440-8, which outlines a ditch bottom width depending on wall height. Sidewalks and utilities should be kept out of this protection area. Additional ROW may be required.

Where walls are on the high side, the City's preference is that the walls remain setback and on private property. Where the walls hold up a public road, the City's preference is that additional dedication be provided, and the walls be owned by the City. Please design any geogrids or tie-backs so that they do not encroach into the required road ROW.

### 8. ROAD DEDICATION/SUBDIVISION REQUIREMENTS

- a. A dedication of approximately 0.8 m along the south property lines of 631, 647, & 657 Clement Ave is required to achieve a future 7.6 m commercial laneway.
- b. No driveway access will be permitted to Clement Ave. The vehicular access to the development site is to be provided from the lane.
- c. Indicate on the site, the locations of the garbage and recycle bins. Provide turning movements for a MSU vehicle to confirm manoeuvrability.
- d. Perimeter access must comply with the BC Building Code. Fire Truck access designs and proposed hydrant locations will be reviewed by the Fire Protection Officer.

#### 9. DESIGN AND CONSTRUCTION

- a. Design, construction supervision and inspection of all off-site civil works and site servicing must be performed by a Consulting Civil Engineer and all such work is subject to the approval of the City Engineer. Drawings must conform to City standards and requirements.
- b. Engineering drawing submissions are to be in accordance with the City's "Engineering Drawing Submission Requirements" Policy. Please note the number of sets and drawings required for submissions.
- c. Quality Control and Assurance Plans must be provided in accordance with the Subdivision, Development & Servicing Bylaw No. 7900 (refer to Part 5 and Schedule 3).
- d. A "Consulting Engineering Confirmation Letter" (City document 'C') must be completed prior to submission of any designs.
- e. Before any construction related to the requirements of this subdivision application commences, design drawings prepared by a professional engineer must be submitted to the City's Development Engineering Department. The design drawings must first be "Issued for Construction" by the City Engineer. On examination of design drawings, it may be determined that rights-of-way are required for current or future needs.

## 10. SERVICING AGREEMENT FOR WORKS AND SERVICES

- a. A Servicing Agreement is required for all offsite works and services on City lands in accordance with the Subdivision, Development & Servicing Bylaw No. 7900. The applicant's Engineer, prior to preparation of Servicing Agreements, must provide adequate drawings and estimates for the required works. The Servicing Agreement must be in the form as described in Schedule 2 of the bylaw.
- b. Part 3, "Security for Works and Services", of the Bylaw, describes the Bonding and Insurance requirements of the Owner. The liability limit is not to be less than \$5,000,000 and the City is to be named on the insurance policy as an additional insured.

## 11. CHARGES AND FEES

- a. Development Cost Charges (DCC's) are payable.
- b. Fees per the "Development Application Fees Bylaw" include:
  - Street Marking/Traffic Sign Fees: at cost (to be determined after detailed design completed).
  - ii. Survey Monument Fee: \$50.00 per newly created lot (GST exempt).
  - iii. Survey Monument, Replacement Fee: \$1,200.00 (GST exempt) only if disturbed.
  - iv. Hydrant Levy Fee: \$250 per newly created lot (GST exempt).
  - v. Engineering and Inspection Fee: 3.5% of construction value (plus GST).

Ryan O'Sullivan

Ryan O'Sullivan

Development Engineering Manager

SK



**ATTACHMENT** 

# Z21-0066

This forms part of application



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CONCEPTUAL LANDSCAPE PLAN





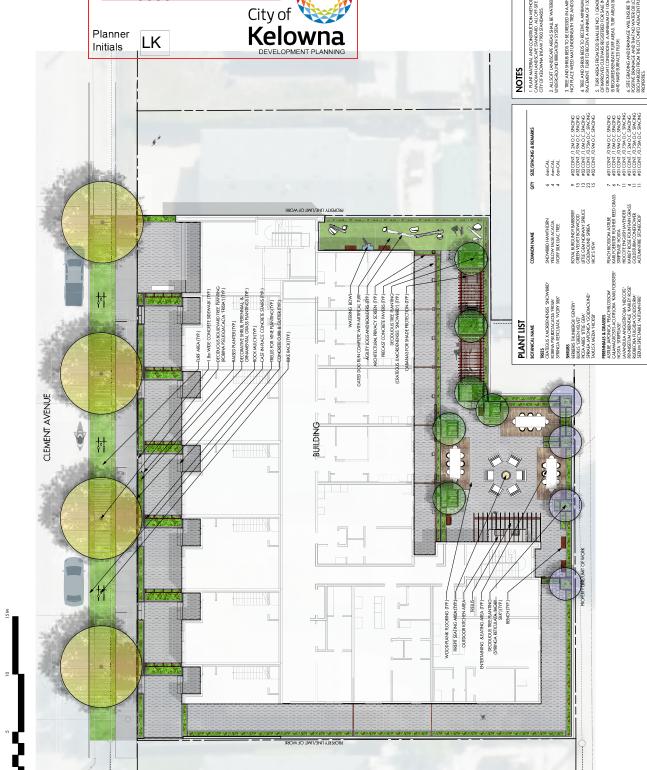








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ATTACHMENT B

This forms part of application
# Z21-0066

City of

Planner Initials

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Kelowna

DEVELOPMENT PLANNING

November 08, 2021

Prepared for: Development Permit & Rezoning Application

Project: Savoy on Clement

Re: Design Rationale

#### **PROJECT DESCRIPTION**

The building site is located in the transitioning "North End" of Kelowna along Clement Avenue, one of the City's key transportation arteries. The project is a mid-block site located on the South side of Clement with the nearest intersection being Richter Street. The proposal is to build a 66-unit, 6 level condominium building with street accessed townhomes. The upper 5 storeys of wood-frame construction sit on a double level, partially buried, concrete parking structure accessed off the rear lane and masked behind ground-oriented, street accessed, townhomes and lobby.

The building is designed to reflect the history of the once industrial area while progressing the transition into a more dense, residential, modern neighborhood. This is achieved between both the material pallet selected as well the building form. The material palette is largely industrial, a throwback to the history of the neighborhood, and applied over a modern form. The concrete, steel corrugated cladding, and brick are offset by rich detail and pattern and softened further by incorporation of warm wood and lush green landscaping. The form is sensitive to the neighboring projects, both present and future, while also creating opportunities for intimate, outdoor spaces. The building step backs incrementally to the west to provide opportunities for views, outdoor space, and will serve as a great neighbor to the future project directly West which will likely be 4-5 stories. To the East the building is partially setback while also allowing for a potential future connection and abutment to a future 6 storey, large footprint, building along Richter Street. Our client is keenly interested in these lots and we are leaving the door open to a future connection. The abutting wall has been incorporated as an architectural feature of the building and is designed to stand on its own without the future connection or at the very least the short interim between developments. Further to the form, careful attention has been taken to provide appropriate pedestrian scaled design along the busy Clement corridor. The townhomes at grade are buffered by large setbacks and landscaping creating opportunities for vibrant front yards. Floors 2-5 above are pulled towards the street while providing deep, inset, balconies which will provide the private intimacy desired facing a bustling street. By pulling these floors towards the street we are allowing for a greater amenity deck area at the rear or "back yard" as we call it. This area will promote diverse opportunities for social interaction, community gardens and even a dog run.

#### **REZONING REQUESTED - RU2 to C7**

This project has been designed to meet the intent of the future OCP guidelines and addresses the transition to the existing residential neighborhoods to the South by limiting the projects height to 6 storeys. The City mapping & zoning site identifies this area as RU2 but it has been transforming to the RM6R and C7 designations over the last 3 years. This project is applying for a rezoning application to the "C7" zone which permits a floor area ratio of up to 9 with building heights of up to 19 storeys. This is not our intent however, our project is seeking a maximum building height of only 6 storeys. The project manages the challenge of addressing the integration of building form and character of the street scape and acknowledges the existing and future built form & context of the surrounding buildings. We feel confident that we have presented a courteous architectural solution to the sites challenges and that we meet the full intent of OCP and C7 zoning.

#### MISSING MIDDLE

This project does not cater to one single demographic, rather it provides and encourages a mixture of unit types and pricing options. The ratio between studio, one bedroom, and 2 bedroom+ units is essentially equal and designed intentionally. Given the projects location and amenities provided both on-site and in the immediate neighborhood this project meets the demand for walkable/ livable neighborhoods, responds to changing demographics, and provides housing at various, attainable price points.

#### **URBAN CONNECTIVITY**

The project is located within a 3 minute bicycle commute to Downtown and the New Clement Business /Cultural District is located directly across the street. This proximity allows pedestrians and cyclists easy access to all the shopping, recreational opportunities, and cultural events without the need to take a vehicle. Transit is available on Clement Avenue and when going further from the immediate area and a car is your only option, Clement Avenue offer excellent connectivity to the rest of the City and the region. To soften the reliance on vehicular transportation, bike storage exceeds zoning requirements, and 2 car chare spaces have been provided at the rear lane and can be accessed by any member of the surrounding neighborhood.

#### **SUSTAINABILITY**

The use of naturally sourced materials is used to a large extent, and thereby reduces the carbon footprint as much as possible. Envelope details that prevent water and moisture ingress while still allowing the assemblies to dry are being incorporated. Minimizing thermal bridging combined with continuous, exterior insulation will reduce heating and cooling loads. South and west facing windows will be specified to have appropriate shading and glazing coefficients to utilize the summer sun by blocking the heat while still allowing the winter sun to penetrate, reducing cooling and heating loads in the summer and winter seasons respectively. Operable windows allow for natural ventilation, reducing the demand for mechanical ventilation to provide fresh air. Other sustainable measures will include drought resistant landscaping and smart climate management controls.

#### **CRIME PREVENTION**

The intentions of CPTED have been addressed with well-maintained entrances and frontages that promote pride in ownership amongst the residents, and with the reduced setback increasing the buildings presence. The sight lines of the occupants from decks and windows will discourage vandalism and crime. Site lighting along the side/drive isle, and pathways will be balanced to provide enough illumination to ensure there are no high contrast areas that could conceal potential offenders, but not so much that the site is excessively contributing to local light pollution.

#### **LANDSCAPING**

The Owner has selected Outland Landscape Architecture to create an interesting and aesthetically pleasing landscape solution that responds to the architectural style of the project. This will also compliment the character of the surrounding neighborhood. A number of annual and perennial shrubs have been selected for along the planters throughout the site, and in special groupings on the amenity deck. Trees will be planted in the front boulevard, and in all greenspaces. Given enough time to mature, the trees will help the project blend with the existing neighborhoods numerous trees lining streets and in back yards. The landscape concept for the setback areas, will provide a visually exciting and high volume of green space. If viewed from above, there would appear to be significantly more "green" than building.

#### **SUMMARY**

The team at Bluegreen Architectures feels that the architecture is strong for its sensitive design decisions to both it's neighbors and end users and hope it serves as a template to transition between RU2, RM6R and C7 zones. We look forward to your support for all this project brings to our community, and trust it well help further progress this transitioning neighborhood further.

Respectfully submitted,

Dane Lewis,

Project Designer & Associate

Dane Lewing

Bluegreen Architecture Inc.