

MEMORANDUM

Date: March 07, 2019

File No.: Z19-0055

To: Community Planning (JB)

From: Development Engineering Manager (JK)

Subject: 2959-2963 Richter Street & 710-720 KLO Rd RU6 & RM1 to RM5

Development Engineering has the following comments and requirements associated with this application to rezone the subject property from RU6 – Two Dwelling Housing and RM1 – Four Dwelling Housing to RM5 – Medium Density Multiple Housing to facilitate the development of micro-suite housing.

The road and utility upgrading requirements outlined in this report will be a requirement of this application. All servicing and Road requirements will be address in this Rezoning memo.

Technologist for this project is Jason Angus.

The following Works & Services are required for this Rezoning:

.1) General

- a) This proposed development may require the installation of centralized mail delivery equipment. Please contact the Delivery Planning Officer, Canada Post Corporation, 530 Gaston Avenue, Kelowna, BC V1Y 2K0 to obtain further information and to determine suitable location(s) within the development.
- b) Where there is a possibility of a high water table or surcharging of storm drains during major storm events, non-basement homes may be required. This must be determined by the engineer and detailed on the Lot Grading Plan required in the drainage section.
- c) The Fire Department requirements and comments are addressed separately by them.

.2) Geotechnical Report

- 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.**

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) Suitability of on-site disposal of storm water and sanitary waste, including effects upon adjoining lands.
- vi) Slope stability, rock fall hazard and slippage including the effects of drainage and septic tank effluent on the site.
- vii) Identify slopes greater than 30%.
- viii) Top of bank assessment and location including recommendations for property line locations, septic field locations, building setbacks, and ground water disposal locations.
- ix) Recommendations for items that should be included in a Restrictive Covenant.
- x) Any special requirements that the proposed subdivision should undertake so that it will not impact the bank(s). The report must consider erosion and structural requirements.
- xi) Any items required in other sections of this document.
- xii) Recommendations for erosion and sedimentation controls for water and wind.
- xiii) Recommendations for roof drains and perimeter drains.

.3) Domestic Water and Fire Protection

- a) Provide an adequately sized domestic water and fire protection system complete with individual lot connections. The water system must be capable of supplying domestic and fire flow demands of the project in accordance with the Subdivision, Development & Servicing Bylaw. Provide water calculations for this property to confirm this. Ensure every building site is located at an elevation that ensures water pressure is within the bylaw pressure limits.
- b) The property is located within the City of Kelowna service area. Only one service will be permitted to the site or per property. The applicant, at his cost, will arrange for the removal of the existing service and the installation of one new larger metered water service
- c) An approved backflow protection device must also be installed on site as required by the City Plumbing Regulation and Water Regulation bylaws.
- 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.

.4) Sanitary Sewer

- a) Our records indicate that these properties are currently serviced with a 100mm-diameter sanitary sewer service. The applicant's consulting mechanical engineer will determine the requirements of the proposed development and establish the service needs. Only one service will be permitted for this development. If required, the applicant will arrange for the removal and disconnection of the existing service and the installation of one new service at the applicant's cost.

.5) Drainage

- a) Provide a detailed Storm Water Management Plan for this development as per the Subdivision, Development and Servicing Bylaw #7900.
- b) The developer must engage a consulting civil engineer to provide a storm water management plan for the site, which meets the requirements of the City Storm Water Management Policy and Design Manual. The storm water management plan must also include provision of lot grading plan, minimum basement elevation (MBE), if applicable, and recommendations for onsite drainage containment and disposal systems
- 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

.6) Roads

- a) Richter St must be upgraded to an arterial standard along the full frontage of this proposed development, including curb & gutter, separate sidewalk, pavement removal and replacement, storm drainage, boulevard landscaping c/w irrigation, street lighting and re-location or adjustment of utility appurtenances if required to accommodate the upgrading construction. The road cross section to be used is a modified SS-R12. No road side parking will be permitted for this development on Richter Street.
- b) KLO Road must be upgraded to an arterial standard along the full frontage of the proposed development, including re-location or adjustment of utility appurtenances if required to accommodate the upgrading construction.
- c) The laneways fronting this development needs to be upgraded to a laneway standard. Standard drawings to be used is SS-R2 for the full construction of the laneway and SS-C7 for the laneway driveway let down. The limits of construction of the lane will be the west-east portion and the entire north-south section. A storm drainage system will be needed within the laneways. The north-south portion will connect to the KLO storm system.
- d) Re-locate existing poles and utilities, where necessary.

.7) Development Permit and Site Related Issues

- a) By Registered plan to provide the following
 - i) Grant statutory rights-of-way or dedicate lands if required for utility services and/or pedestrian access
 - ii) Dedication of Corner Rounding in the south west corner of the property

- iii) Road reserve of 2.5m along the KLO Road frontage is needed for the future cross section of KLO Road.
- b) All vehicle access to this development will be via laneway. No access will be granted from KLO Road or Richter Street.
- c) Lot consolidation is needed.

.8) Power and Telecommunication Services and Street Lights

- a) All proposed distribution and service connections are to be installed underground. Existing distribution and service connections, on that portion of a road immediately adjacent to the site, are to be relocated and installed underground
- b) Street lights must be installed on all roads.
- c) Make servicing applications to the respective Power and Telecommunication utility companies. The utility companies are required to obtain the City's approval before commencing construction.

.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 Agreements for Works and Services

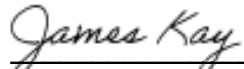
- a) A Servicing Agreement is required for all works and services on City lands in accordance with the Subdivision, Development & Servicing Bylaw No. 7900. **The applicant's Engineer, prior to preparation of Servicing Agreements, must provide adequate drawings and estimates for the required works.** 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) Other Engineering Comments

- a) Provide all necessary Statutory Rights-of-Way for any utility corridors required, including those on proposed or existing City Lands.
- b) If any road dedication affects lands encumbered by a Utility right-of-way (such as FortisGas, etc.) please obtain the approval of the utility prior to application for final subdivision approval. Any works required by the utility as a consequence of the road dedication must be incorporated in the construction drawings submitted to the City's Development Manager.

.12) Charges and Fees

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



James Kay, P. Eng.
Development Engineering Manager
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