
CITY OF KELOWNA
MEMORANDUM

Date: February 16, 2021
File No.: Z21-0011
To: Community Planning (LK)
From: Development Engineering Manager (JK)
Subject: 1405 St. Paul St. C4 to C7

The Development Engineering Branch has the following comments and requirements associated with this rezoning application. The road and utility upgrading requirements outlined in this report will be a requirement of this development. The Development Engineering Technologist for this project is Ryan O'Sullivan

1. General.

- a) The following are requirements as laid out in this Engineering Memo for this rezoning application for a 41-storey residential tower.
- i. Frontage Improvements on St Paul Street
 - ii. Frontage improvements on Doyle Ave
 - iii. Laneway Improvements and dedication
 - iv. Water service upgrade
 - v. Sanitary service upgrade
 - vi. Sanitary down stream analysis from the development to the Raymer Road Treatment Plant
 - vii. Landscape requirements on Doyle Ave and St Paul St
 - viii. A Site Preparation Security Agreement needs to be completed and signed.
- b) Provide easements as may be required.
- c) The proposed development may require the installation of centralized mail delivery equipment. Please contact 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.
- d) The proposed development triggers a traffic impact assessment. The applicant's transportation engineer shall contact the City's Development Engineering group to determine the terms of reference for the study. Recommendations from the Traffic Impact Analysis (TIA) will become requirements of the building permit release.
- e) The proposed development is subject to the review and requirements from the Ministry of Transportation (MOT) Infrastructure Branch. Requirements from the Ministry will become requirements of the building permit release.

2. Geotechnical Study

ATTACHMENT		A
This forms part of application		
# Z21-0011		
Planner Initials	TA	 City of Kelowna DEVELOPMENT PLANNING

- a) Provide a geotechnical report 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 development. The Geotechnical reports must be submitted to the Development Services Department for distribution to the Development Engineering Branch and Inspection Services Division prior to submission of Engineering drawings or application for development 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 (e.g., fill areas, sulphate content, unsuitable soils such as organic material).
 - 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, perimeter drains and septic tank effluent on the site.
 - vii. Any items required in other sections of this document.

Additional geotechnical survey may be necessary for building foundations, etc.

3. Domestic Water and Fire Protection

- a. Provide an adequately sized domestic water and fire protection system. The water system must be capable of supplying domestic and fire flow demands for 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. The applicant, at his cost, will arrange for the removal of the existing services 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. The applicant will arrange for the removal and disconnection of the existing services and the installation of one new service at the applicant's cost.

5. Drainage

- a. Our records indicate that these properties are currently serviced with 2 -100mm-diameter storm sewer services. 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 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. Road Improvements

- a. St. Paul St. fronting this development site is urbanized but the existing curb and sidewalk are in a deteriorated state. The upgrades to St. Paul St. that are required are new sidewalk removal and reconstruction, repaving St. Paul from Center Line to Gutter line as well as the re-location or adjustment of any existing utility appurtenances if required to accommodate the upgrading construction. A modified SS-R5 cross section will be used and provided at the time of design. The design should include up to centreline of the St Paul Street ROW.
- b. Doyle Ave fronting this development site is fully urbanized Frontage improvements required repaving from Center line to Curb and gutter from St. Paul St to Laneway. Landscaped boulevard complete with underground irrigation system, street lights. A modified SS-R5 cross section will be used and provided at the time of design. The design should include up to centreline of the Doyle Ave ROW.
- c. The laneways fronting this development needs to be upgraded to a commercial laneway standard. Standard drawing to be used is SS-R2 as well as a 0.9m dedication is needed for the north south lane. The development will be responsible for the constructing the entire lane width, from PL to PL laneway. A driveway let down (SS-C7) will be required at the north end of the north-south laneway.

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. Lane dedication of 0.9m is needed along the frontage of the North South laneway. The standard SS-R2 drawing will need to be used in the design drawings.

iii. Lot Consolidation is required

- b. All vehicle access to the development will be via laneway. No access will be granted from St Paul Street, Doyle Ave.
- c. Truck turning movements are needed to show that a truck can access the loading bays along the laneway.

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 or laneway immediately adjacent to the site, are to be relocated and installed underground.
- b. 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 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. Bonding and Levy Summary

Z21-0011 1405 St. Paul Ave

a. Service Agreement Bonding

To be Determined



James Kay, P. Eng.
Development Engineering Manager

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