CITY OF KELOWNA

MEMORANDUM

Date: October 29, 2015

File No.: Z15-0053

To: Urban Planning (RR)

From: Development Engineering Manager

Subject: 820 Finns Road Zone: A-1 to C-10

The Development Engineering Department has the following comments and requirements associated with this application. The road and utility upgrading requirements outlined in this report will be a requirement of this development.

These are Development Engineering comments/requirements and are subject to the review and requirements from the Ministry of Transportation (MOTI) Infrastructure Branch.

The Development Engineering Technologist for this project is Jason Ough

1. General

These are Development Engineering comments/requirements and are subject to the review and requirements from the Ministry of Transportation (MOTI) Infrastructure Branch.

2. <u>Domestic Water and Fire Protection</u>

- (a) The property is located within the Black Mountain Irrigation District (BMID) service area. The water system must be capable of supplying domestic and fire flow demands of the project in accordance with the Subdivision, Development & Servicing Bylaw
- (b) A water meter is mandatory for each property and must be installed inside the 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 his cost. Boulevard landscaping, complete with underground irrigation system, must be integrated with the on-site irrigation system.

3. <u>Sanitary Sewer</u>

The developer's consulting mechanical engineer will determine the development requirements of the proposed development and establish the service needs. The existing lot is serviced with a 150mm diameter sanitary service. Only one service per lot 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 larger service at the applicants cost.

4. Storm Drainage

The developer must engage a consulting civil engineer to provide a storm water management plan for the site, which meets the requirements of the Subdivision, Development and Servicing Bylaw No. 7900. The storm water management plan must also include provision of lot grading plan, minimum basement elevation (MBE), if applicable, and provision of a storm drainage service for the development and / or recommendations for onsite drainage containment and disposal systems.

5. Road Improvements and Dedication

- (a) There is a project identified in the 2010 2030 OCP to extend Fitzpatrick Road to the west and connect to Highway 97 N. The developer is required to provide a 15m road dedication area along the north property line of 820 Finns Road.
 - (i) The developer will submit an engineered design with the following dimensions measured from the existing property line:
 0.45m Curb, (2) 4.9m lanes, 0.45m curb, 2.5m Blvd, 1.5m sidewalk and 0.3m gap to the property line.
 - (ii) Design will include piped storm drainage system, fillet pavement, boulevard grading street lights, and adjustment and/or re-location of existing utility appurtenances, if required, to accommodate this construction.
 - (iii) Parallel right turn lane will be designed to BC MOTI standards and with required property corner rounding and island with crosswalk.
- (b) The Ministry of Transportation Hwy 97 widening project design is near completion. The developer is responsible for Highway 97 frontage improvements as per MOTI design and bonding is required for these works. Please contact Andrew Albiston for design details.
 - (i) Parallel right turn lane should be designed to BC MOT standards and with required property corner rounding and island with crosswalk;
- (c) Finns Road must be upgraded to a full urban standard (SS-R5)
 - (ii) Design will include separate sidewalk, landscaped boulevard complete with street trees, curb and gutter, piped storm drainage system, fillet pavement, boulevard grading street lights, and adjustment and/or relocation of existing utility appurtenances, if required, to accommodate this construction.
- (d) The estimated cost of required road improvment works, for bonding purpose, must be determined based upon a design provided by the developer to be reviewed by the City of Kelowna and MOTI.

6. <u>Electric Power and Telecommunication Services</u>

The electrical and telecommunication services to this building must be installed in an underground duct system, and the building must be connected by an underground service. 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.

7. <u>Design and Construction</u>

- (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.

8. 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.

9. 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 Terasen, 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.

10. Development Permit and Site Related Issues

- (a) Access and Manoeuvrability
 - (i) An SU-9 standard size vehicle must be able to manoeuvre onto and off the site without requiring a reverse movement onto public roadways. If the development plan intends to accommodate larger vehicles movements should also be illustrated on the site plan.

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. (ii)

Steve Muenz, P. Eng. Development Engineering Manager

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