
CITY OF KELOWNA

MEMORANDUM

Date: November 20, 2015
File No.: DP15-0248

To: Community Planning (RR)

From: Development Engineering Manager

Subject: 1102 Cameron Ave, 1091 Guisachan Rd Multi Family Development

Development Engineering 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.

1. Domestic Water and Fire Protection

- a) The developer's consulting mechanical engineer will determine the domestic and fire protection requirements of this proposed development and establish hydrant requirements and service needs.
- b) The subject property (1102 Cameron Ave) is currently serviced with a 150mm water service. The developer's consulting mechanical engineer will determine the domestic and fire protection requirements of this proposed development and establish hydrant requirements and service needs. Only one service will be permitted for this development. The applicant, at his cost, will arrange for the disconnection of existing services and the installation of a new service if required.
- c) A water meter is mandatory for this development 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.

2. Sanitary Sewer

- a) Our records indicate the subject property (1102 Cameron Ave) is currently serviced with a 200mm sewer service. The developer's consulting mechanical engineer will confirm the development requirements of this proposed development and establish the service needs. The service should be adequate for the proposed application. Service changes, if required, will be at the developer's cost.

3. Storm Drainage

- a) It will be necessary for the developer to construct storm drainage facilities to accommodate road drainage on Gordon Drive and Guisachan Road fronting the proposed development.
- b) The developer must engage a consulting civil engineer to provide a storm water management plan for these sites which meets the requirements of the City

Subdivision Development and Servicing Bylaw 7900. The storm water management plan must also include provision of lot grading plans, minimum basement elevations (MBE), if applicable, and provision of a storm drainage service and recommendations for onsite drainage containment and disposal systems.

- c) The on-site drainage system may be connected to the existing overflow service from the storm sewer system on Cameron Rd.

4. Road Improvements

- a) Gordon Drive fronting this development must be upgraded to a full urban standard including curb and gutter, separate sidewalk adjustments if required, storm drainage facilities including catch basins, manholes / drywells, pavement widening, landscaped boulevard complete with underground irrigation system, street lights as required and re-location or adjustment of existing utility appurtenances if required to accommodate the upgrading construction.
- b) Cameron Road fronting this development has been upgraded to an urban standard but requires the construction of a separate sidewalk and landscaped boulevard complete with underground irrigation system. The proposed access driveways to Cameron Road will require curb and gutter removal and replacement. Re-locate utility appurtenances if required to accommodate this construction.
- c) Guisachan Road fronting this development must be upgraded to a full urban standard including concrete curb and gutter, separate sidewalk, storm drainage facilities including catch basins, manholes / drywells, fillet pavement, underground irrigation system, and re-location or adjustment of existing utility appurtenances if required to accommodate the upgrading construction.

5. Transportation & Mobility Improvements

- a) Cameron Ave/ Gordon pedestrian-activated signal with coordination with Guisachan signal (both Legs).
- b) Prohibition of left turn movements from Guisachan Rd into the site (requires a raised centre median on Guisachan Rd from Gordon Dr to 10m west of access).
- c) Prohibition of eastbound left turn from Cameron Ave onto Gordon Dr (requires raised centre medians on Gordon Dr and Cameron Ave).
- d) Rose Avenue buffered bike lanes or cycle tracks.
- e) Additional concrete corner waiting area for pedestrians at Guisachan/Gordon NW corner.
- f) Bus Stop on Gordon, sidewalk widening to min of 2.5m with bike lane ramps on Gordon to sidewalks to accommodate cyclist around the bus stop.

6. Road Dedication and Subdivision Requirements

- a) The tree alley and Gordon Dr/Guisachan Rd southwest corner land swap will be dealt with by Real Estate Services Branch.
- b) Lot consolidation.

- c) If any road dedication or closer affects lands encumbered by a Utility right-of-way (such as Gas, 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 or closer must be incorporated in the construction drawings submitted to the City's Development Manager.
- d) Provide all necessary Statutory Rights-of-Way for any utility corridors required, including those on proposed or existing City Lands.

7. Electric Power and Telecommunication Services

- a) All proposed distribution and service connections are to be installed underground.
- b) Streetlights 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.
- d) Re-locate existing utilities, where necessary.

8. 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 Works & Utilities 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.

9. 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.

10. Geotechnical Report

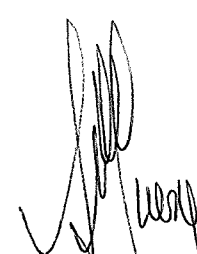
As a requirement of this application and building permit approval the applicant must provide a comprehensive geotechnical report prepared by a Professional Engineer qualified in the field of hydro-geotechnical survey to address the following:

- a) Area ground water characteristics, including water sources on the site.
- b) Site suitability for development; i.e. unstable soils, foundation requirements etc.
- c) Drill and/or excavate test holes on the site and install piezometers if necessary. Log test hole data to identify soil characteristics, identify areas of fill if any. Identify unacceptable fill material, analyse soil sulphate content, identify unsuitable underlying soils such as peat, etc. and make recommendations for remediation if necessary.
- d) List extraordinary requirements that may be required to accommodate construction of roads and underground utilities as well as building foundation designs.
- e) Additional geotechnical survey may be necessary for building foundations, etc.

11. Development Permit and Site Related Issues

Access and Manoeuvrability

- (i) Site Access: from Guisachan Rd and also Cameron Ave both connected via a north-south internal road.
- (ii) The proposed driveway access design for Cameron Road must recognize the location of existing access on the south side of Cameron Road. If a gated entrance is proposed, the entrance area before the gate must allow for a vehicle (who has been denied gate access) to turn around and re-enter the public street in a forward direction. The area must allow for an "SU-9" vehicle turning radius and the gate must open into the site.
- (iii) An SU-9 standard size vehicle must be able to manoeuvre onto and off the site without requiring a reverse movement onto public roadways.
- (iv) Indicate on the site, the locations of loading bays as well as the garbage and recycle bins.



Steve Muenz, P. Eng.
Development Engineering Manager

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