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# CITY OF KELOWNA

## MEMORANDUM

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**SCHEDULE**

**A**

This forms part of application  
# Z19-0122

Planner  
Initials

HR

City of  
**Kelowna**  
DEVELOPMENT PLANNING



**Date:** January 14, 2020  
**File No.:** Z19-0122  
**To:** Urban Planning Management (HR)  
**From:** Development Engineering Manager (JK)  
**Subject:** 550 Mugford Rd RU1 to RU2

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The Development Engineering Department has the following comments and requirements associated with this application to rezone the subject property from RU1 to RU2. The road and utility upgrading requirements outlined in this report will be a requirement of this development. The Development Engineering Technician for this project is Jim Hager.

### 1. General

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

### 2. Domestic Water and Fire Protection

- a) The subject lot is within the Black Mountain Irrigation District (BMID) water service area. The developer is required to make satisfactory arrangements with BMID for all water and fire protection-related issues. All charges for service connection and upgrading costs, as well as any costs to decommission existing services, shall be the responsibility of the developer.
- b) 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. All fire flow calculations approved by BMID are to be shared with the Development Engineering Branch upon submittal of off-site civil engineering drawings.
- c) 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 No. 7900.

### 3. Sanitary Sewer

- a) This property is currently serviced with a 100-mm sanitary service. The developer's consulting mechanical engineer will determine the development requirements of this proposed development and establish the service needs. Only one service will be permitted for this development. The applicant, at their cost, will arrange for the removal and disconnection of the existing services and the installation of one new larger service, if necessary.

**4. Storm Drainage**

- a) 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. Only one service will be permitted for this development. The applicant, at his cost, will arrange the installation of one overflow service if required.
- 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; and
  - iii. An Erosion and Sediment Control Plan.

**5. Subdivision Requirements**

- a) Grant statutory rights-of-way if required for utility services.

**6. Electric Power and Telecommunication Services**

All proposed 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.

**7. Road Improvements**

- a) Mugford Rd must be upgraded to a collector standard along the full frontage of this proposed development, including sidewalk, curb and gutter, pavement removal and replacement, boulevard landscaping and re-location or adjustment of utility appurtenances if required to accommodate the upgrading construction. The existing catch basin is to be relocated to the new gutter line. The sidewalk is to tie in to the existing sidewalk to the east at 580 Mugford Rd. Driveway letdowns required for 550 / 580 Mugford Rd Only one 6.0m access to the property will be permitted. The road cross section to be used is a modified SS-R5 with the sidewalk located at 0.2m from property line.
- b) There is a speed hump in Mugford Rd fronting the subject lot. If this speed hump is disturbed during construction, it is to be replaced as per the City of Kelowna's requirements.
- c) The estimated cost of this construction, for performance security purposes, is to be submitted by the Developer's Consulting Engineer.

**8. Geotechnical Report**

- (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 subdivision.

- (b) The Geotechnical reports must be submitted to the Development Services Department (Subdivision Approving officer) for distribution to the Development Engineering Branch 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, perimeter drains and septic tank effluent on the site.
  - (vii) Any items required in other sections of this document.

## **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 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.

## **10. Site Requirements**

- (a) Provide turning movements showing ingress and egress of an MSU vehicle on the subject lot.

**11. 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.

**12. Charges and Fees**

- a) Development Cost Charges (DCC's) are payable.
- b) Fees per the "Development Application Fees Bylaw" include:
  - i) Engineering and Inspection Fee: 3.5% of construction value (plus GST).

*Ryan O'Sullivan for James Kay*

James Kay, P.Eng.  
Development Engineering Manager

JKH