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# CITY OF KELOWNA

## MEMORANDUM

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**Date:** May 12, 2022  
**File No.:** Z22-0033  
**To:** Subdivision Approving Officer (DS)  
**From:** Development Engineering Manager (NC)  
**Subject:** 2340 Glenmore Rd N A1 to P1

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Development Engineering has the following requirements associated with this application. A Rezoning Application to rezone the subject property from A1 – Agriculture 1 to P1 – Major Institutional for the future Glenmore Firehall.

### .1) General

- a) This proposed development may require the installation of centralized mail delivery equipment. Please contact Arif Bhatia, Delivery Planning Officer, Canada Post Corporation, 530 Gaston Avenue, Kelowna, BC, V1Y 2K0, (250) 859-0198, arif.bhatia@canadapost.ca to obtain further information and to determine suitable location(s) within the development.
- b) The Fire Department and Environment Division requirements are addressed separately by them.
- c) An Environmental Impact Assessment on the road layout will be required to determine the least impact on the natural features of the site.
- d) These Development Engineering comments/requirements are subject to the review and approval from the Agricultural Land Commission (ALC).
- e) 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.

### .2) Geotechnical Report

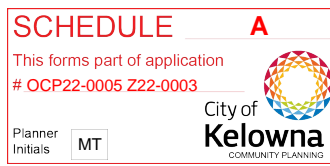
- a) Provide a comprehensive geotechnical report, prepared by a Professional Engineer competent in the field of hydro-geotechnical engineering to address the items below: **NOTE: The City is relying on the Geotechnical Engineer's report to prevent any damage to property and/or injury to persons from occurring as a result of problems with soil slippage or soil instability related to this proposed subdivision.**

The Geotechnical report must be submitted 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%.
  - ii) Top of bank assessment and location including recommendations for property line locations, septic field locations, building setbacks, and ground water disposal locations.
  - iii) Recommendations for items that should be included in a Restrictive Covenant.
  - iv) 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.
  - v) Any items required in other sections of this document.
  - vi) Recommendations for erosion and sedimentation controls for water and wind.
  - vii) Recommendations for roof drains and perimeter drains.
  - viii) Recommendations for construction of detention or infiltration ponds if applicable.

### **.3) Water**

- a) The property is located within the GEID service area.
- b) 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 subdivision to confirm this.
- c) Ensure every building site is located at an elevation that ensures water pressure is within the bylaw pressure limits. Note: Private pumps are not acceptable for addressing marginal pressure.



- d) Hydrants are to be spaced according to By-law 7900.
- e) Design drawings must be reviewed by GEID prior to the City issuing the drawings for construction. Confirmation of their review must be provided to the City.

#### **.4) Sanitary Sewer**

- a) The developer's consulting mechanical engineer will determine the development requirements of this proposed rezoning and establish the service needs. Only one service will be permitted per lot for this subdivision.
- b) Arrange for individual lot connection complete with an inspection chamber (as per SS-S7 & SS-S9), at the applicants cost.
- c) If the Applicant would like the City to complete the works they can sign a Third-Party Work Order for the cost of the water service upgrades. For estimate inquiries please contact Ryan O'Sullivan, by e-mail [rosullivan@kelowna.ca](mailto:rosullivan@kelowna.ca) or phone, 250-469-8519.

#### **.5) Drainage**

- a) Provide an adequately sized drainage system complete with individual lot connections. The Subdivision, Development and Servicing Bylaw requires that each lot be provided with an individual connection; however, the City Engineer may permit use of individual ground water disposal systems, where soils are suitable. For on-site disposal of drainage water, a hydrogeotechnical report will be required complete with a design for the disposal method (i.e. trench drain / rock pit). The Lot Grading Plan must show the design and location of these systems for each lot.
- 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 for this subdivision; and,
  - iii) An Erosion and Sediment Control Plan.
- c) Show details of dedications, rights-of-way, setbacks and non-disturbance areas on the lot Grading Plan.
- d) Significant banks are located on this site. The slopes appear to be sensitive to erosion; temporary and permanent measures must be taken to prevent erosion and sediment transport.
- e) Identify clearly on a contour map, or lot grading plan, the top of bank(s). Provide cross sections along the top of the bank at each property corner and at locations where there are significant changes in slope. Cross sections are to be perpendicular to the contour of the slope. Show the proposed property lines on the cross sections. Not

all areas have a clear top of bank; and therefore, field reconnaissance by City staff and the applicant may be needed to verify a suitable location for property lines.

- f) Where ditches are provided they must be adequately lined and protected for the design flows.
- g) The drainage gullies are to be protected by way of Statutory Rights-of-Way suitable to the Drainage Manager.

#### **.6) Roads**

- a) Glenmore rd. N access to proposed Fire Hall will need a right and left turn lanes into Fire hall.
- b) Provide pavement marking and traffic signs where required. The City will install all signs and traffic control devices at the developer's expense.
- c) Provide a Street Sign, Markings and Traffic Control Devices Drawing.
- d) Verify that physical driveway access will satisfy City requirements for all lots. For steeper lots (15%), show driveways on the lot grading plan with grades or profiles. Where lots are serviced by onsite sewage disposal systems, show limits of cut and fill lines.
- e) Re-locate existing poles and utilities, where necessary.

#### **.7) Power and Telecommunication Services and Street Lights**

- a) Overhead wiring is permitted for this subdivision although underground installation is recommended. Remove aerial trespass(es)
- b) Street lights must be installed on all roads.
- c) Before making application for approval of your subdivision plan, please make arrangements with Fortis BC for the pre-payment of applicable charges and tender a copy of their receipt with the subdivision application.
- d) 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.

#### **.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 rezoning and future 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.

**.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) 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.

**.11) Charges and Fees**

- a) Development Cost Charges (DCC's) are payable
- b) None of the Works & Services required are items included in the DCC calculations and therefore not eligible for DCC credits.
- c) Fees per the "Development Application Fees Bylaw" include:

- i) Survey Monument, Replacement Fee: \$1,200.00 (GST exempt) – only if disturbed.
- ii) Engineering and Inspection Fee: 3.5% of construction value (plus GST).
- iii) Street/Traffic Sign Fees: at cost if required (to be determined after design).

  
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Nelson Chapman P.Eng.  
Development Engineering Manager

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<b>SCHEDULE</b>		<b>A</b>
This forms part of application		
# OCP22-0005 Z22-0003		
Planner Initials	MT	 City of <b>Kelowna</b> COMMUNITY PLANNING