
CITY OF KELOWNA

MEMORANDUM

Date: March 14, 2022
File No.: Z22-0019
To: Planning & Development Services Department (TC)
From: Development Engineer Manager (NC)
Subject: 2930 Sexsmith Rd., Lots 34, Plan KAP18861



A2 – I2

Development Engineering has the following comments and requirements associated with this rezoning application to rezone the subject property from A1 – Agriculture 1 to I6 – Low Impact Transitional for three industrial buildings.

1. General

- a) Sexsmith Road is designated as a 4 lane arterial and access will be restricted the subject property. Access is required to Arab Road under this condition.
- b) The following requirements are valid for two (2) years from the reference date of this memo, or until the application has been closed, whichever occurs first. The City of Kelowna reserves the rights to update/change some or all items in this memo once these time limits have been reached.
- c) 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.
- d) 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.

2. GEOTECHNICAL STUDY

- a. Provide a comprehensive geotechnical report (3 copies), 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 Planning and Development Services Department (Planning & Development Officer) for distribution to the Works & Utilities Department 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 and perimeter drains.
 - vii. Recommendations for erosion and sedimentation controls for water and wind.
 - viii. Any items required in other sections of this document.
- c. Should any on-site retaining walls surpass the following limits, an Over Height Retaining Wall Permit will be required:

“Retaining walls on all lots, except those required as a condition of subdivision approval, must not exceed a height of 1.2 m measured from natural grade on the lower side, and must be constructed so that any retaining walls are spaced to provide a 1.2 m horizontal separation between tiers. The maximum number of tiers is two with a maximum total height of 2.4 m. Any multi-tier structure more than 2 tiers must be designed and constructed under the direction of a qualified professional engineer.”

The design of all retaining walls is to conform with Engineer & Geoscientists British Columbia’s Professional Practice Guidelines for Retaining Wall Design. Submission requirements for the Over Height Retaining Wall Permit include Engineer of Record documents (Appendix A of Retaining Wall Design Guideline) and any necessary independent reviews (as per EGBC’s Documented Independent Review of Structural Designs).

- d. Any modified slopes having a finished slope greater than 2H:V1 (50%) and an elevation change greater than 1.2 m must be installed under the direction of a qualified professional engineer.
- e. Any exposed natural rock surface on a lot that has the potential for materials to displace causing a hazardous condition, must be reviewed by a qualified professional engineer with the appropriate and measures undertaken as prescribed by the engineer. For adequate Rockfall Protection adjacent to walls and rock cuts, please consider BC MoTI Supplement to TAC Geometric Design Guide 440, page 440-8, which outlines a ditch bottom width depending on wall height. Sidewalks and utilities should be kept out of this protection area. Additional ROW may be required.

Where walls are on the high side, the City’s preference is that the walls remain setback and on private property. Where the walls hold up a public road, the City’s preference is that additional dedication be provided, and the walls be owned by the City. Please design any geogrids or tie-backs so that they do not encroach into the required road ROW.

3. Sanitary Sewer System

- a) The developer’s consulting mechanical engineer will determine the development requirements of the proposed development and establish the service needs. Only one service per lot will be permitted for this development. There is an existing 100mm PVC sanitary service to lot.
- a) The Connection Area #35 charge is currently set by Bylaw at \$16,000 per industrial Equivalent (SFE). This Bylaw 3480 was reviewed for and accepted by Council in 2022.

The assessed value is **\$16,000.00**



4. Water Servicing Requirements

This development is within the service area of the Glenmore Ellison Irrigation District (GEID). The developer is required to make satisfactory arrangements with the GEID for these items. All charges for service connection and upgrading costs are to be paid directly to the GEID. The developer is required to provide a confirmation that the district is capable of supplying fire flow in accordance with the City of Kelowna current Bylaws and Policies.

5. Storm Drainage

- a. The property is located within the City of Kelowna drainage service area. 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.
- 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 is to be prepared by a Professional Engineer proficient in the field of erosion and sediment control. The plan is to be prepared as per section 3.14 of Schedule 4 of Bylaw 7900. If a line item for ESC is not included in the Engineer's cost estimate for off-site work, then an additional 3% will be added to the performance security based on the total off-site construction estimate.
- c. On-site detention systems are to be compliant with Bylaw 7900, Schedule 4, Section 3.11.1 *Detention Storage*.
- d. As per Bylaw 7900, Schedule 4, Section 3.1.3 *Climate Change*, the capacity of storm works will include an additional 15 percent (15%) upward adjustment, and applied to the rainfall intensity curve stage (IDF) in Section 3.7.2.
- e. Show details of dedications, rights-of-way, setbacks and non-disturbance areas on the lot Grading Plan.
- f. Register right of ways on private properties for all the storm water infrastructure carrying, conveying, detaining and/or retaining storm water that is generated from the public properties, public road right of ways, and golf course lands.
- g. Where structures are designed or constructed below the proven high groundwater table, permanent groundwater pumping will not be permitted to discharge to the storm system. The City will approve designs that include provisions for eliminating groundwater penetration into the structure, while addressing buoyancy concerns. These design aspects must be reviewed and approved by the City Engineer.

6. Road Improvements

- a.) The frontage of Sexsmith Road will be upgraded to a full 4 lane arterial urban standard (SS-R9) in accordance with Bylaw 7900, complete with curb and gutter, storm works, sidewalk, fillet paving, landscaped and irrigated boulevard, lane markings, street lighting, removal and/or relocation existing utilities as may be required, etc. This construction will be deferred until Sexsmith Road is upgraded to a 4 lane standard and a cash in lieu of construction payment of **\$114,668.75** is required for the combined frontage of the subject property.

b.) a) No further upgrades are required at this time along the Arab Rd frontage.

7. Road Dedication and Subdivision Requirements

- (a) The developer is required dedicate 5m of roadway fronting Sexsmith Road to achieve the 4 lane arterial urban standard width in accordance with Bylaw 7900
- (b) A 6.0 m radius corner rounding is required at the south east property corner.
- (c) Grant Statutory Rights Of Way if required for utility services.
- (d) If any road dedication or closure affects lands encumbered by a Utility right-of-way (such as Hydro, TELUS, Gas, etc.) please obtain the approval of the utility. Any works required by the utility as a consequence of the road dedication or closure must be incorporated in the construction drawings submitted to the City's Development Manager.

8. Power and Telecommunication Services

The services to this development are to be installed underground. It is the developer's responsibility to make a servicing application to the respective utility companies. The utility companies are then required to obtain the city's approval before commencing their works.

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. 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.

11. DCC Credits

None of the required improvements qualify for DCC credit consideration, as these levies are collected as cash in lieu.

12. Bonding and Levies Summary

Levies

Sexsmith Road upgrades	\$114,668.75
Development Engineering Fee 3.5% Connection. Area #35	\$2,500.98
	\$16,000.00
Total levies	<u>\$131,169.73</u>



Nelson Chapman, P. Eng.
Development Engineering Manager
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ATTACHMENT		A
This forms part of application		
# Z22-0019		
Planner Initials	TC	 City of Kelowna <small>DEVELOPMENT PLANNING</small>