
CITY OF KELOWNA

MEMORANDUM

Date: March 6, 2023
File No.: Z23-0009
To: Urban Planning Manager (LK)
From: Development Engineering Manager (NC)
Subject: 875 Graham Rd



RU2 to MF2

The Development Engineering Department has the following comments associated with this Rezoning Application for a townhouse development on the subject property. The following Works and Services will be required of this development prior to adoption of Zoning.

The Development Engineering Technician for this file is Chris Pedersen (cpedersen@kelowna.ca).

1. GENERAL

- a. The following comments and requirements are valid for a period of one (1) year 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 modify some or all items in this memo if an application for Building Permit is not made or if the Zoning is not adopted within this time.
- b. This proposed development may require the installation or modification 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 determine requirements.
- c. All City Trees must be protected as per Bylaw 8042 Schedule C – Tree Barrier and Installation Policy requirements. Removal of City Trees will require prior approval of the City's Urban Forestry Supervisor and may be subject to replacement, at a minimum two for one ratio, and compensation payment as per the City of Kelowna Equitable Compensation as defined in Section 8.2 of Bylaw 8042.

2. SITE-SPECIFIC REQUIREMENTS

- a. Only one driveway, of maximum 6.0m width, will be permitted. Driveway must access from Matt Rd. Letdowns to be constructed to SS-C7.
- b. The proposed driveway configuration appears consistent with this requirement.
- c. Indicate, on the site, the locations of the garbage and recycle bins. Provide turning movements for a HSU vehicle to confirm maneuverability on site without requiring a reverse movement onto public roads.
- d. A road dedication of 6.0 m radius at the corner of Graham Rd and Matt Rd is required to achieve adequate maneuverability to the site.

3. **DOMESTIC WATER AND FIRE PROTECTION**

- a. The subject property is located within the Rutland Waterworks District (RWD) Water Supply Area. The Developer's Consulting Engineer will determine the servicing and fire protection requirements of this proposed development. The Developer is required to make satisfactory arrangements with RWD for all water servicing and fire protection requirements.
- b. All fire flow calculations are to be provided to the City's Development Engineering Department prior to adoption of Zoning or off-site civil engineering drawings, as the case may be. Confirmation of adequate servicing and fire protection from RWD must be provided to the City Engineer prior to adoption of Zoning.

4. **SANITARY SEWER SYSTEM**

- a. Our records indicate that this property is currently serviced with a 150 mm diameter sanitary service off Matt Rd. Only one service connection will be permitted per lot.
- b. The Developer's Consulting Engineer will determine the sanitary sewer servicing requirements of this development. If upgrades are determined to be necessary to achieve adequate servicing, the Developer must complete any such upgrades at their cost. New service connections are to be completed as per SS-S7 with an inspection chamber and Brooks Box. Any obsolete services must be fully decommissioned at the main.

5. **STORM DRAINAGE**

- a. The subject property is located within the City of Kelowna drainage service area. 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. The Developer must engage a Consulting Engineer to provide a combined Lot Grading Plan, Stormwater Management Plan, and Erosion and Sediment Control Plan to meet the requirements of Bylaw 7900. Indicate on the plan the building elevations, finished grade slopes and elevations throughout the site, perimeter grades to match existing grades, overland flow routes, onsite stormwater retention if required, and erosion and sediment control measures.

6. **ROADWAY AND STREETScape**

- a. Graham Rd is classified in the 2040 OCP as a Core Area Collector and must be upgraded to an urban standard along the full frontage of the subject property to facilitate additional corridor density associated with this development. Required upgrades to include sidewalk, curb and gutter, LED street lighting, landscaped and irrigated boulevard, pavement removal and replacement and re-location or adjustment of utility appurtenances if required to accommodate the upgrading construction.

ATTACHMENT A	
This forms part of application # Z23-0009	
Planner Initials	TC
 City of Kelowna DEVELOPMENT PLANNING	

- b. Matt Rd is classified in the 2040 OCP as a Suburban Collector and must be upgraded to an urban standard along the full frontage of the subject property to facilitate additional corridor density associated with this development. Required upgrades to include sidewalk, curb and gutter, LED street lighting, landscaped and irrigated boulevard, pavement removal and replacement and re-location or adjustment of utility appurtenances if required to accommodate the upgrading construction.
- c. Bulbouts are to be installed at the intersection of Matt Rd and Graham Rd on both sides of the road to provide a safe pedestrian crossing at the intersection of these two collector roads.
- c. All Landscape and Irrigation plans require design and inspection by a Qualified Professional registered with the BCSLA and the IIABC, are to be included as a line item in the estimate for the Servicing Agreement performance security. Landscape and irrigation plans require approval by the Development Engineering Branch at the same time as other “issued for construction” drawings.
- d. Streetlights must be installed on all public roads. All streetlighting plans are to include photometric calculations demonstrating Bylaw 7900 requirements are met and require approval by the Development Engineering Branch at the same time as other “issued for construction” drawings.

7. POWER AND TELECOMMUNICATION SERVICES

- a. 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. Utility companies are required to obtain the City’s approval before commencing construction.
- b. Provide all necessary Statutory Rights-of-Ways for any utility corridors as may be required.

8. GEOTECHNICAL STUDY

- a. Provide a Geotechnical Report prepared by a Professional Engineer competent in the field of geotechnical or hydrogeological engineering as applicable. The Geotechnical Report must be submitted to the Development Services Department prior to adoption of Zoning and prior to the City’s review of Engineering drawings. Geotechnical Report to address, at a minimum, any of the applicable items below:
 - i. Site suitability for development;
 - ii. Area ground water characteristics, including any springs and overland surface drainage courses traversing the property, as well as any monitoring required;
 - iii. Site soil characteristics (i.e., fill areas, 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 erosion and sedimentation controls for water and wind;
 - vii. Any items required in other sections of this memo;



viii. Recommendations for roof drains, perimeter drains, and septic tank effluent on the site;

9. **DESIGN AND CONSTRUCTION OF OFFSITE WORKS**

- a. Offsite Works and Services are required of this development as outlined above. The Developer must Design and enter into a Servicing Agreement and provide security for the Construction of the Works prior to adoption of Zoning.
- b. Design of all offsite works and site servicing must be completed in accordance with Subdivision, Development, and Servicing Bylaw No. 7900 and is subject to the approval of the City Engineer prior to construction or execution of a Servicing Agreement.
 - i. See Bylaw 7900 Sections 6.0, 7.0, and 9.0, as well as Schedule 4 for procedural guidance, approval requirements, and design standards.
 - ii. Design must be completed by a suitably qualified and experience Consulting Engineer.
 - iii. Engineering drawing submissions are to be in accordance with *Council Policy 265 – Engineering Drawing Submission Requirements*. Drawings must be submitted digitally in PDF format and sealed in accordance with EGBC Guidelines.
- c. A Servicing Agreement is required for all Works and Services on City lands (Offsite Works).
 - i. The Servicing Agreement must be in the form of Schedule 2 of Bylaw 7900.
 - ii. The Developer’s Consulting Engineer, prior to preparation of a Servicing Agreement, must provide adequate drawings and estimates for the Works to the City Engineer.
 - iii. Bylaw 7900, Part 3 – Security for Works and Services, Sections 7.1 - 7.2, describes the Security requirements of an Owner for entering into Servicing Agreements. Security must be in the form of an irrevocable letter-of-credit, bank draft, or certified cheque.
- d. Construction of the required Works and Services must be completed in accordance with Bylaw 7900 requirements and is subject to several approvals prior to work commencing. These include, but are not necessarily limited to, the following:
 - i. Before any construction of the Works commences, design drawings must be reviewed and approved for construction by the City Engineer.
 - ii. A “Consulting Engineering Confirmation Letter” (City template provided upon request) must be executed by the Owner and Consulting Engineer and provided to the City.
 - iii. The Developer’s Consulting Engineer must undertake adequate inspections during construction of the Work, as outlined in EGBC’s *Guide to the Standard for Documented Field Reviews During Implementation or Construction*. A Quality Control and Assurance Plan acceptable to the City Engineer must be submitted prior to construction approval. Refer to Bylaw 7900, Schedule 3.
 - iv. Insurance requirements are outlined in Bylaw 7900, Section 7.3. A compliant Certificate of Insurance must be provided prior to construction approval.
 - v. Contractor must provide a current WorkSafe BC Clearance Letter.
- e. Construction completion, maintenance period, and return of Performance Security requirements are outlined in Bylaw 7900, Sections 9.5 - 9.7 and Sections 10.0 - 10.4.

10. CHARGES, FEES, AND SECURITIES

a. Engineering and Inspection Fee:

3.5% of Construction Value	\$	TBC
GST (5%)	\$	TBC
TOTAL	\$	TBC

A Sangster on behalf of
 Nelson Chapman, P.Eng.
 Development Engineering Manager
 CP

ATTACHMENT	A
This forms part of application	
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 City of Kelowna <small>DEVELOPMENT PLANNING</small>	