
CITY OF KELOWNA

MEMORANDUM

Date: January 13, 2022
File No.: Z21-0109
To: Urban Planning Management (KB)
From: Development Engineering Manager (RO)
Subject: 2175 Benvoulin Ct. A1 to RM5

The Development Engineering Department has the following comments and requirements associated with this rezoning application to rezone the subject property from A1 to RM5. The Development Engineering Technologist for this project is Aaron Sangster.

1. General

- a) Where there is a possibility of a high-water table or surcharging of storm drains during major storm events, non-basement buildings may be required. This must be determined by the engineer and detailed on the Lot Grading Plan required in the drainage section.
- 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) The proposed development may require the installation of centralized mail delivery equipment. Please contact Delivery Planning Officer, Canada Post Corporation, 530 Gaston Avenue, Kelowna, BC, V1Y 2K0 (250-763-3558 ext. 2008) to obtain further information and to determine suitable location(s) within the development.
- d) These Development Engineering comments and requirements and are subject to review and or revision for approval by the Ministry of Transportation (MOTI) Infrastructure.

2. Domestic Water and Fire Protection

- a) 2175 Benvoulin Ct. is currently serviced with a 200mm water services. The developer's consulting mechanical engineer will determine the domestic, fire protection requirements of this proposed development and establish hydrant requirements and service needs. Only one service per property is permitted for this development. The applicant will arrange for the removal and disconnection of the existing services and the installation of one new larger service at the applicants cost, if required.
- b) 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

Our records indicate that this property is currently serviced with two a 150mm and 200mm sanitary sewer services. The applicant's consulting mechanical engineer will determine the requirements of the proposed development and establish the service needs. Only one service will be permitted for this development. If required, the applicant will arrange for the removal and disconnection of the existing service and the installation of one new larger service at the applicants cost.

3. Storm Drainage

- a) The property is located within the City of Kelowna drainage service area. For on-site disposal of drainage water, a geotechnical 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.

4. Road Improvements

- a) Benvoulin Rd. must be upgraded to current standards along the full frontage of this proposed development, including curb and gutter, landscaped boulevard c/w irrigation, separated sidewalk, drainage system including catch basins, manholes and pavement removal and replacement and re-location or adjustment of utility appurtenances if required to accommodate the upgrading construction.
- b) Benvoulin Ct. must be upgraded to current standards along the full frontage of this proposed development, including curb and gutter, landscaped boulevard c/w irrigation, separated sidewalk, drainage system including catch basins, manholes and pavement removal and replacement and re-location or adjustment of utility appurtenances if required to accommodate the upgrading construction.

4. Road Dedication and Subdivision Requirements

- a) Grant Statutory Rights of Way if required for utility services.
- b) 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.

5. Development Permit and Site Related Issues

- a) Mayer Rd connection from Benvoulin Ct to Benvoulin Rd must be designed and built to a modified SS-R4 urban collector along the south property line of this development including curb and gutter, sidewalk, street lights, landscaped & irrigated boulevard, drainage system including catch basins, and replacement and re-location or adjustment of utility appurtenances if required to accommodate the upgrading construction. Road-cross section to be used is from WATT Consulting Group design.
- b) A TIA will be required for this development. Additional requirement may come out of this process.
- c) Hwy 97N and Leckie Rd. cost recovery:
 - a. Residential - 187 units x 0.7 = 130.9 EDU
 - b. Total = 130.9 EDU @ \$1,000.00 = **\$130,900.00**
- d) An MSU standard size vehicle must be able to manoeuvre onto and off the site without requiring a reverse movement onto public roadways. If the development plan intends to accommodate larger vehicles movements should also be illustrated on the site plan.

6. Electric Power and Telecommunication Services

The electrical and telecommunication services to this building must be installed in an underground duct system, and the building must be connected by an underground service. 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. 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.

8. Servicing Agreement 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.

9. Survey, Monument and Iron Pins

If any legal survey monuments or property iron pins are removed or disturbed during construction, the developer will be invoiced a flat sum of \$1,200.00 per incident to cover the cost of replacement and legal registration. Security bonding will not be released until restitution is made.

10. Geotechnical Report

- 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.**

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) Site suitability for development.
 - (vi) Suitability of on-site disposal of storm water and sanitary waste, including effects upon adjoining lands.
- ii) Site soil characteristics (i.e. fill areas, sulphate content, unsuitable soils such as organic material, etc.).

- iii) Recommendations for items that should be included in a Restrictive Covenant.
- iv) Any special requirements for construction of roads, utilities, and building structures.
- 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) Any items required in other sections of this document.

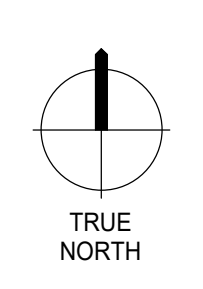
11. **Charges and Fees**

- a) Development Cost Charges (DCC's) are payable.
- b) Fees per the "Development Application Fees Bylaw" include:
 - i. Street/Traffic Sign Fees: at cost if required (to be determined after design).
 - ii. Survey Monument, Replacement Fee: \$1,200.00 (GST exempt) – only if disturbed.
- c) Engineering and Inspection Fee: 3.5% of construction value (plus GST).



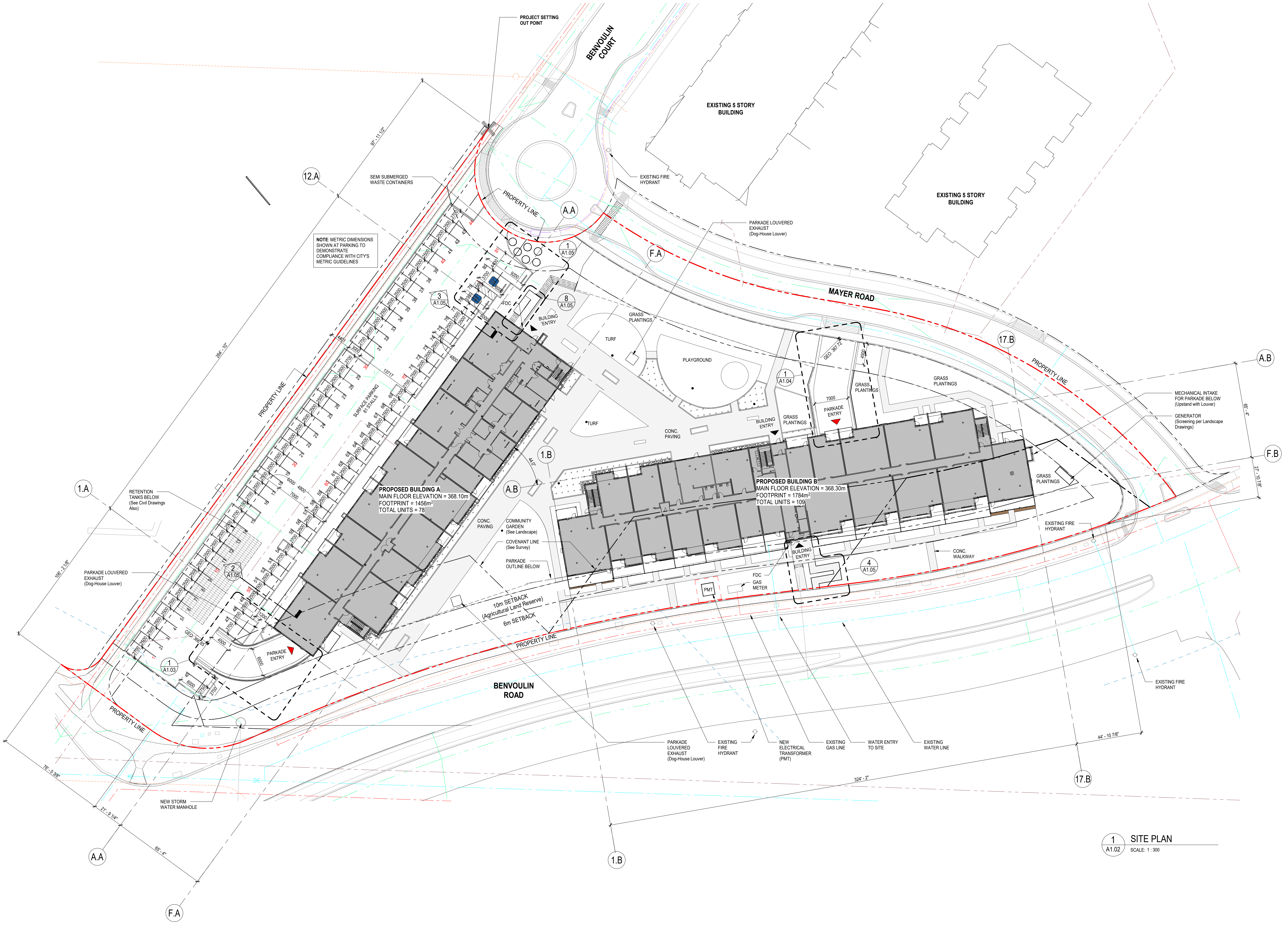
Ryan O'Sullivan
Development Engineering Manager

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NOTE
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 CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS ON THE JOB. ANY DISCREPANCY OR CONTRADICTORY INFORMATION WITHIN THIS SET OF DRAWINGS AND / OR OTHER CONSULTANTS' DRAWINGS MUST BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BEFORE PROCEEDING.

KEY PLAN



NOTE: METRIC DIMENSIONS SHOWN AT PARKING TO DEMONSTRATE COMPLIANCE WITH CITY'S METRIC GUIDELINES

2	ISSUED FOR BP REVIEW	2022-04-22
1	ISSUED FOR 60% REVIEW	2022-03-18
NO.	ISSUE/ REVISION	DATE

NOT FOR CONSTRUCTION

PROJECT
TRAIINE - BENVOULIN

PROJECT ADDRESS
 3175 BENVOULIN COURT,
 KELOWNA, BC V1W 2C7

TITLE
SITE PLAN

1 SITE PLAN
 A1.02 SCALE: 1:300

PROJECT NO.	DRAWN	CHECKED
Z21-124	Author	Checker
DRAWING NO.	REVISION NO.	

A1.02 2

Autodesk Docs://Traine - Benvoulin R01AR_201-124_Traine-Benvoulin_R02.rvt

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