CITY OF KELOWNA

Planner Initials LK

MEMORANDUM

Date:

September 28, 2016

File No.:

Z15-0013

To:

Community Planning (LK)

From:

Development Engineering Technologist (SS)

Subject:

4653 Raymer Road REVISED

RU1 to RU4

Kelow

Development Engineering has the following requirements associated with this application. The road and utility upgrading requirements outlined in this report will be a requirement of this development.

.1) Domestic Water and Fire Protection

- (a) The development site is presently serviced with a small diameter (19-mm PVC) water service. 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 will be permitted for this development. The estimated cost of this construction for bonding purposes is \$12,000.00
- (b) The developer must obtain the necessary permits and have all existing utility services disconnected prior to removing or demolishing the existing structures. The City of Kelowna water meter contractor must salvage existing water meters, prior to building demolition. If water meters are not salvaged, the developer will be invoiced for the meters. The new water meter will need to be installed in an above grade building.

.2) Sanitary Sewer

- (a) The development site is presently serviced with a 100mm-diameter sanitary sewer service. The developer must engage a consulting mechanical engineer to determine the requirements of this development. Only one service will be permitted for this development.
- (b) The applicant, at his cost, will arrange for the capping of unused services at the main and the installation of one larger service. The estimated cost of this construction for bonding purposes is \$6,000.00

.3) Storm Drainage

(a) The developer must engage a consulting civil engineer to provide a storm water management plan for these sites 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 plans, minimum basement elevations (MBE), if applicable, and provision of a storm drainage service and recommendations for onsite drainage containment and disposal systems.

.4) Road Improvements

(a) Raymer Road fronting this development must be upgraded to an urban standard to include a barrier curb and gutter, concrete sidewalk, pavement fillet, landscaped boulevard and street lighting and relocation or adjustment of existing utility appurtenances if required to accommodate the upgrading construction.

.5) Road Dedication and Subdivision Requirements

By registered plan to provide the following:

- (a) Grant a 4.5m statutory right-of-way for the North arm of Bellevue creek.
- (b) Grant statutory rights-of-way if required for utility services.

.6) Electric Power and Telecommunication Services

The electrical and telecommunication services to the site as well as the local distribution wiring must be installed in an underground duct system, and the buildings must be connected by underground ducting. 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) Engineering

Road and utility construction design, construction supervision, and quality control supervision of all off-site and site services including on-site ground recharge drainage collection and disposal systems, must be performed by an approved consulting civil engineer. Designs must be submitted to the City Engineering Department for review and marked "issued for construction" by the City Engineer before construction may begin.

.8) <u>Design and Construction</u>

- (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.

.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

.10) Geotechnical Report

As a requirement of this application the owner must provide a geotechnical report prepared by a Professional Engineer qualified in the field of hydro-geotechnical survey to address the following:

- (a) Area ground water characteristics.
- (b) Site suitability for development, unstable soils, etc.
- (c) Drill and / or excavate test holes on the site and install pisometers if necessary. Log test hole data to identify soil characteristics, identify areas of fill if any. Identify unacceptable fill material, analyse soil sulphate content, identify unsuitable underlying soils such as peat, etc. and make recommendations for remediation if necessary.
- (d) List extraordinary requirements that may be required to accommodate construction of roads and underground utilities as well as building foundation designs.
- (e) Additional geotechnical survey may be necessary for building foundations, etc.

.11) Bonding and Levy Summary

(a) Bonding

Sanitary services upgrade Water services upgrade

\$ 6,000.00 \$12,000.00

Total Bonding

\$18,000.00

<u>NOTE</u>: The bonding amounts shown above are comprised of estimated construction costs escalated by 140% to include engineering design and contingency protection and are provided for information purposes only. The owner should engage a consulting civil engineer to provide detailed designs and obtain actual tendered construction costs if he wishes to do so. Bonding for required off-site construction must be provided, and may be in the form of cash or an irrevocable letter of credit, in an approved format. The owner must also enter into a servicing agreement in a form provided by the City.

Only the service upgrades must be completed at this time. The City wishes to defer the frontage upgrades to Raymer Road fronting this development. Therefore, cash-in-lieu of immediate construction is required and the City will initiate the work later, on its own construction schedule.

Z15-0013 - 4653 Raymer Rd - RU4 REVISED II - SS.doc

Total	\$24,985.00
Road Fillet	\$ 4,469.00
Landscape Boulevard	\$ 2,660.00
Street Lighting	\$ 1,436.00
Drainage	\$ 6,844.00
Sidewalk	\$ 5,320.00
Curb &Gutter	\$ 4,256.00
Item	Cost

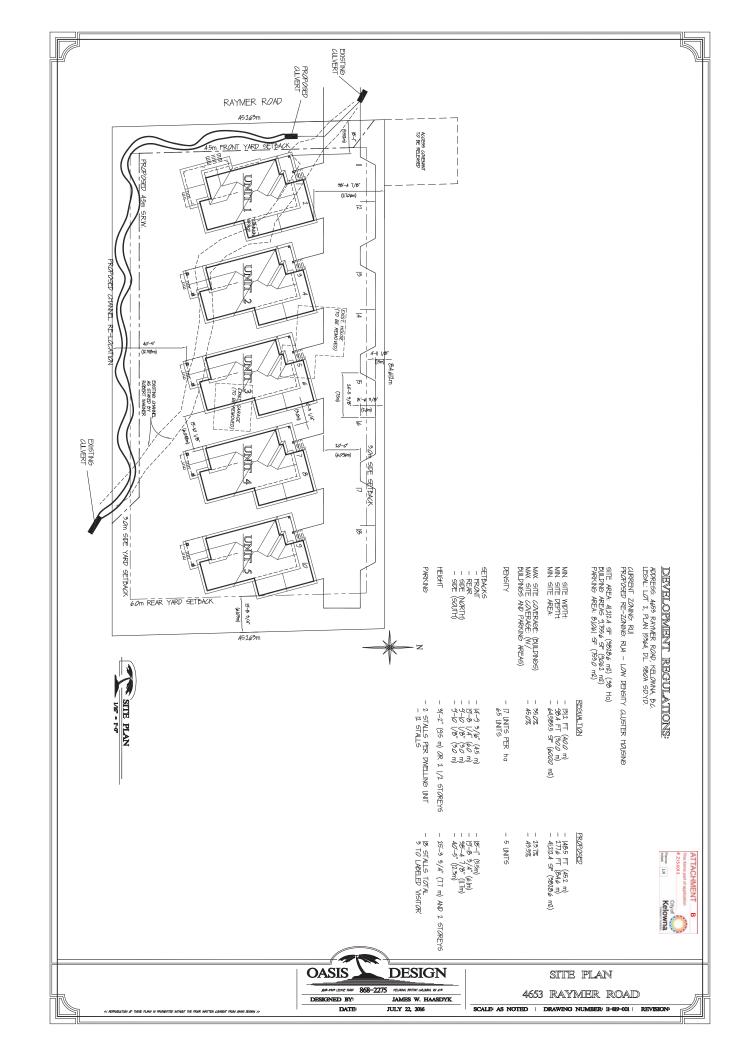
.12) Administration Charge

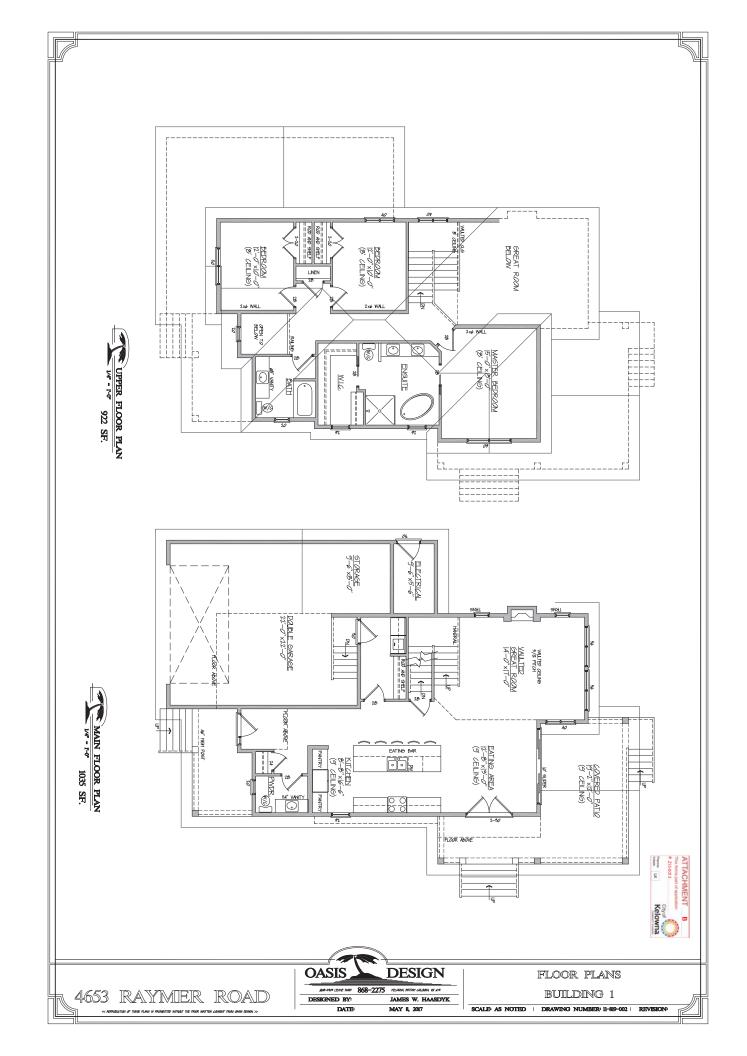
An administration charge will be assessed for processing of this application, review and approval of engineering designs and construction inspection. The administration charge is calculated as (3% of Total Off-Site Construction Cost plus GST).

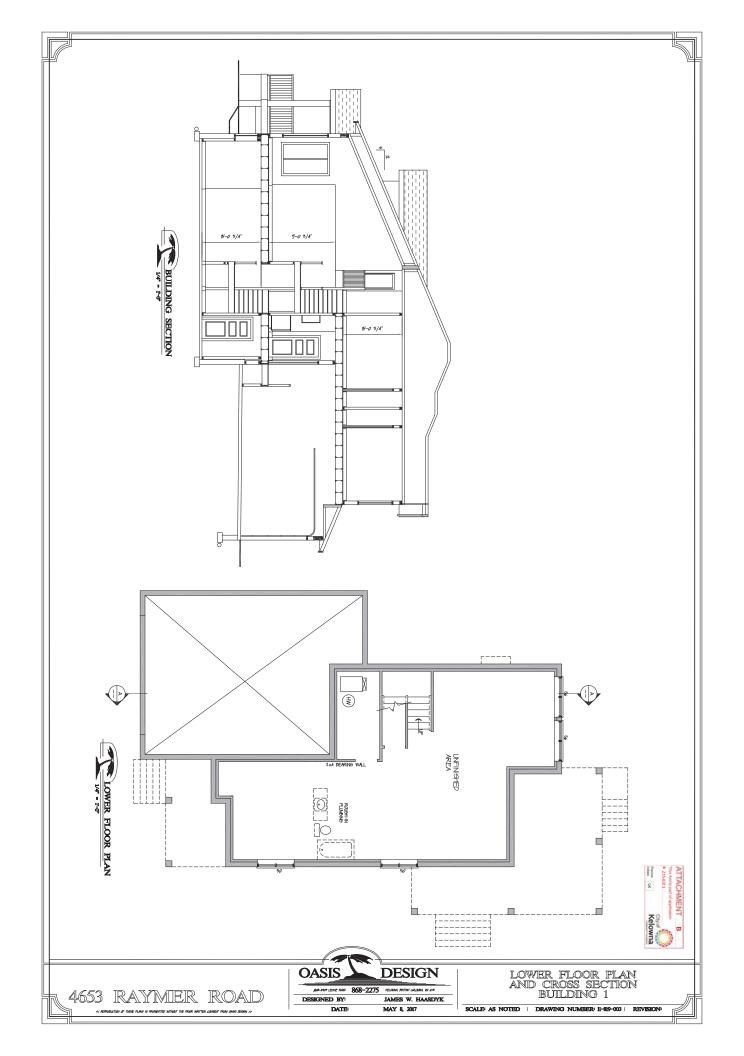
Sergio Sartori

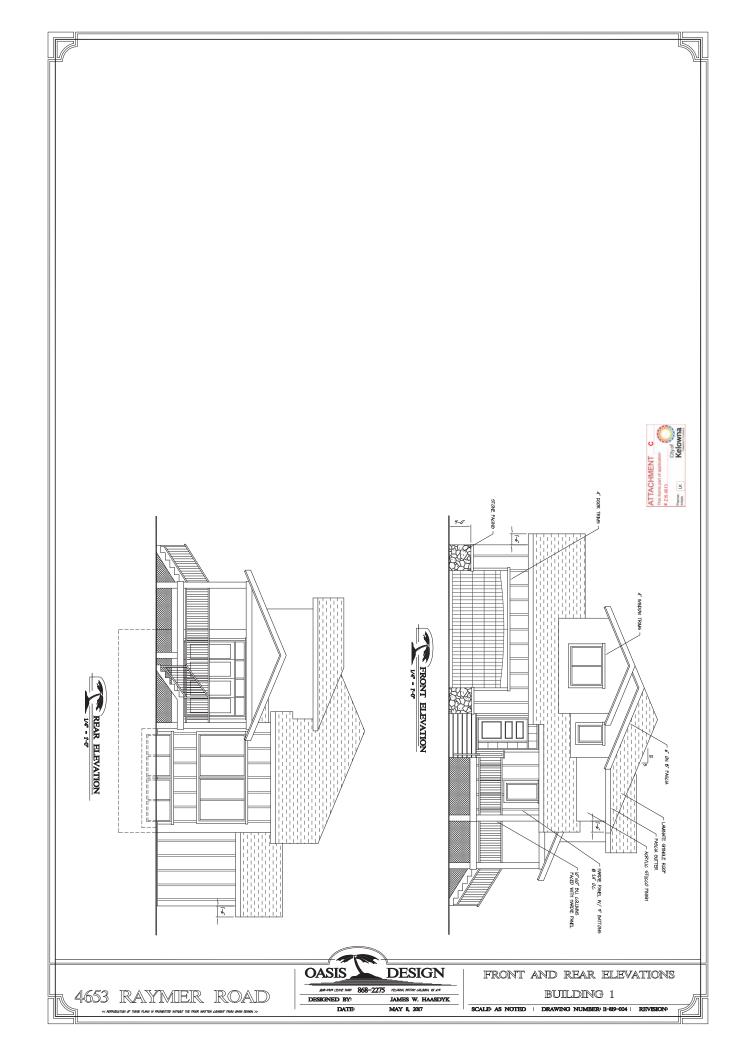
Development Engineering Technologist

Development Engineering Manager (initials)



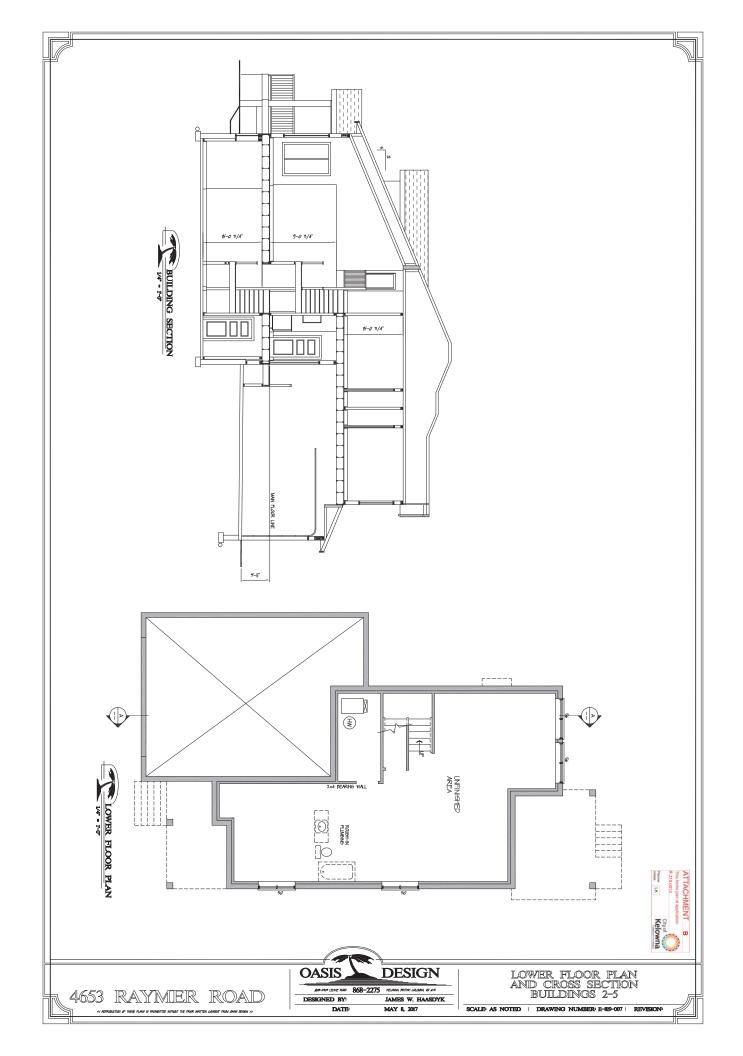


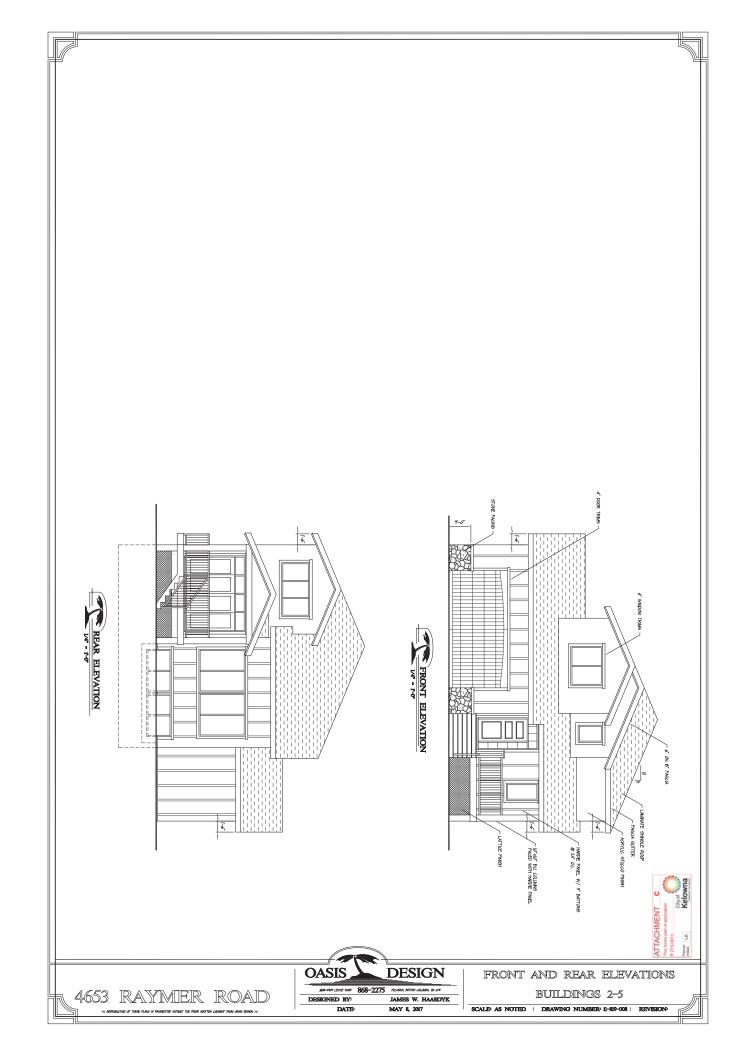


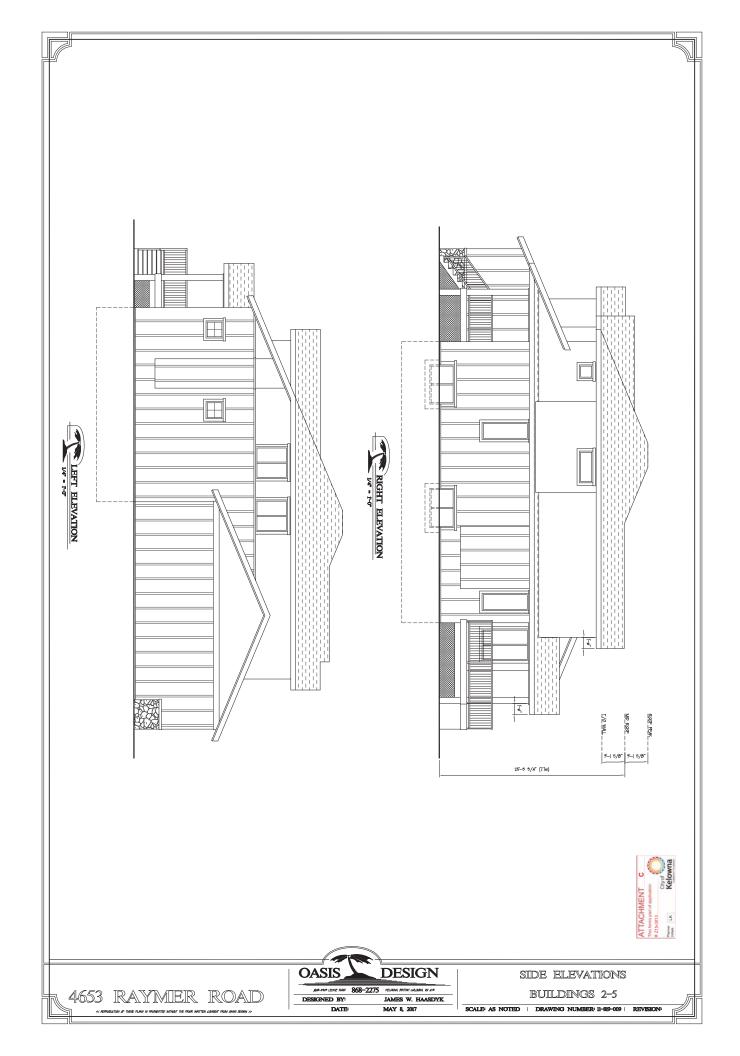




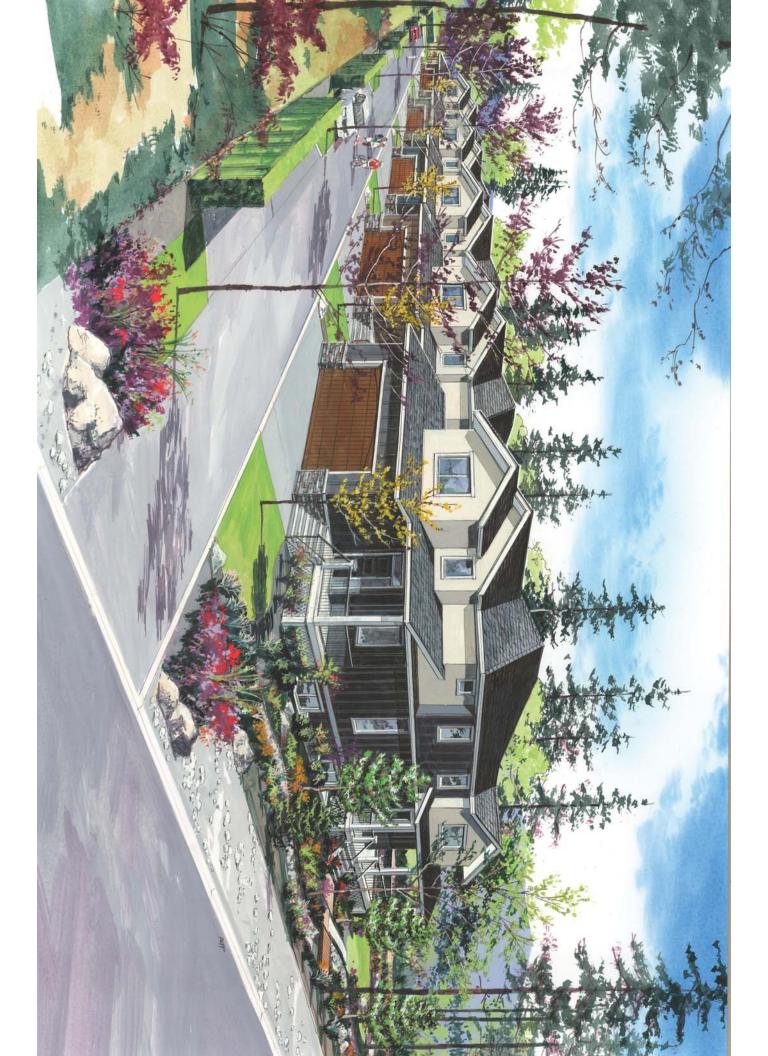






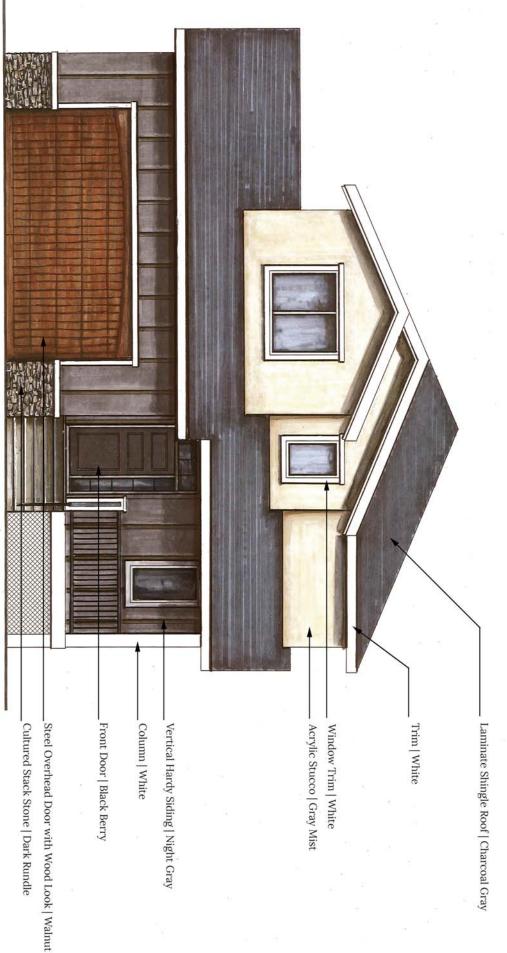
















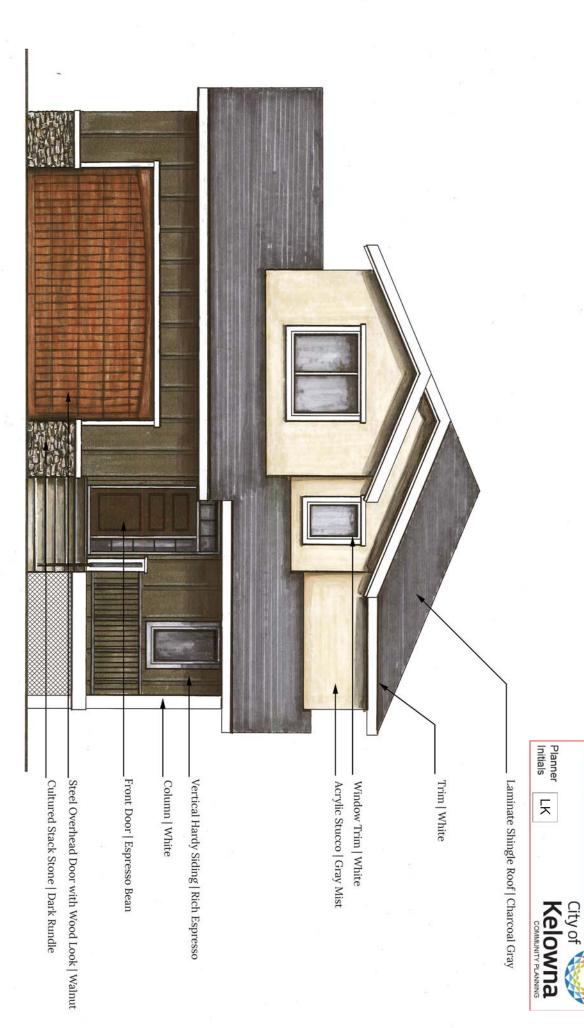


Z15-0013

This forms part of application

ATTACHMENT

C



Z15-0013

This forms part of application

ATTACHMENT

C