# **CITY OF KELOWNA**

# **MEMORANDUM**

**SCHEDULE** 

This forms part of application # Z18-0026

Planner Initials

LK



A

Date:

March 15, 2018

File No.:

Z18-0026

To:

Community Planning (LK)

From:

Development Engineering Manager (JK)

Subject:

1929-1933 Pasnak St. & 1211-1237 Pacific Ave

RU6 to RM5

The Development Engineering Department has the following comments and requirements associated with this rezoning application. The road and utility upgrading requirements outlined in this report will be a requirement of this development. The Development Engineering Technologist for this project is Jason Angus

## 1. Domestic Water and Fire Protection

- a. These properties are currently serviced with a 13mm-diameter 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. 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.
- 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
- c. 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.

# 2. Sanitary Sewer

a. Our records indicate that these properties are currently serviced with a 100mm-diameter sanitary sewer service. 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 developer must engage a consulting civil engineer to provide a storm water management plan for this site which meets the requirements of the City Subdivision Development and Servicing Bylaw 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. Pacific Ave must be upgraded to an urban standard along the full frontage of this proposed development, including curb and gutter, street lights, 1.5m 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. Road cross section to be used is a SS-R5
- b. Pasnak Street must be upgraded to an urban standard along the full frontage of this proposed development, including curb and gutter, 1.5m 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.

## 5. 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.
- c. Provide 6m corner rounding at intersection of Pacific Ave and Pasnak Street.
- d. Provide curb extensions at the intersection of Pacific Ave and Pasnak Street
- e. Dedicate 2.5m width along the full frontage of Pacific Ave.
- f. If any road dedication affects lands encumbered by a Utility right-of-way (such as BC Hydro Gas, 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

## 6. Development Permit and Site Related Issues

- a. Direct the roof drains into on-site rock pits or splash pads.
- b. The vehicle access to this site must be from Pasnak Street.

#### 7. Electric Power and Telecommunication Services

a. 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.

b. Street lights along Pacific Ave and Pasnak Street must be installed.

#### 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 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 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.

#### 10. Administration Charge

a. 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 (3.5% of Total Off-Site Construction Cost plus GST).

#### 11. Survey, Monument and Iron Pins

a. 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.

#### 12. Geotechnical Report

a. 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:

- b. Area ground water characteristics.
- c. Site suitability for development, unstable soils, etc.
- d. 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.
- e. List extraordinary requirements that may be required to accommodate construction of roads and underground utilities as well as building foundation designs.
- f. Additional geotechnical survey may be necessary for building foundations, etc.

James Kay, P. Eng.

Development Engineering Manager





January 15, 2018

City of Kelowna 1435 Water Street Kelowna BC V1Y 1J4

To Whom It May Concern:

Re: Stormwater Management Strategy Proposed Residential Development

1211, 1221-1223, 1237, 1239 Pacifice Avenue and 1929, 1933 Pasnak Street

Kelowna BC

**New Town Architecture & Engineering Inc.** submits this report to you for your consideration. We have reviewed and assessed the proposed development site and have outlined the stormwater management strategy. The strategy is based on the proposed site design as well as site conditions including a geotechnical assessment performed by Interior Testing Services Ltd.

It is our intent to utilize a wide range of Best Management Practices pertaining to stormwater management. These will focus on the three areas of practice; peak flow attenuation, volume reduction, and storm water quality. Based on our understanding of the soils and groundwater in the region, as well as preferences regarding ownership and maintenance of various practices, it is proposed that the storm water management strategy include:

- Communal detention facility/facilities to provide peak flow attenuation for the
  protection of downstream watercourse and surrounding storm water catchment
  areas. Communal facility/facilities allow for efficient use of land, access,
  inspection, maintenance, and operation by private or municipal crews.
- Lot-level retention and detention on each lot through cisterns, underground chambers, bio swales, drywell lawn basins etc. may be most valuable at attenuating peak flows and returning the water back to the ground. These will be owned and maintained privately.
- Water quality will be a priority, both through aggressive erosion and sediment controls during construction, and permanent measures post construction. These may include oil/grit separators, bio swales, rain gardens, or other settling and filtering measures. As per the bylaw all flows up to 50% of the 2-year (1hr duration) post development flow will be treated for total suspended solids and floatables.

Based on the requirements contained within the bylaw, that peak runoff must be limited to pre-development flows, it is reasonable to suggest that the downstream drainage systems will not be impacted by the development of this property.

The road infrastructure fronting the development property (Pacific Avenue & Pasnak Street) does not contain storm water infrastructure. Storm water infrastructure for this site will be dealt with on-site through the strategies discussed above and will adhere to the City of Kelowna Subdivision, Development & Servicing Bylaw No.7900 as well as best engineering practices.

Interior Testing Services Ltd (ITSL) have carried out a geotechnical investigation for the proposed residential project. Groundwater was observed at 3.0 to 3.7 m below surrounding grade within the test holes. ITSL suggests that the standard roof and perimeter drainage should be provided for the proposed building and be directed to rock pits set within permeable natural soils well away and below the foundation elevation. Roof drainage is to be directed to splash pads or drywells away from the building for gradual dissipation to the ground.

The strategy outlined above reflects best engineering practices and aligns with Schedule 4 of Bylaw 7900 City of Kelowna Design Standards. If there are any questions, comments, or concerns regarding the strategy outlined above please feel free to contact me at your convenience.

Yours truly,

NEW TOWN ARCHITECTURE & ENGINEERING INC.

Jacob Paul, EIT

Jacob Paul

Project Coordinator/Design Engineer





STREET VIEW - (PACIFIC)



STREET VIEW (PACIFIC)



VIEW FROM PACIFIC LOOKING WEST ALONG PACIFIC



OVERALL VIEW - PARKADE ENTRANCE ( PASNAK )





VIEW FROM PASNAK LOOKING NORTH ALONG PASNAK

ALL CONTRACTORS ARE REQUIRED TO PERFORM THEIR WORK AND SUPPLY THEIR PRODUCTS IN COMPLIANCE WITH ALL BUILDING CODES AND LAWS OF THE PROVINCE OF BRITISH COLUMBIA This drawing is an instrument of service and the property of New Town Services. The use of this drawing shall be restricted to the original site for which it was prepared and publication thereof is expressly limited to such use.

This drawing must not be scaled. Verify all dimensions and datums prior to commencement of work. Report all errors and omissions to the Architect.



URBAN PLANNING CIVIL ENGINEERING

www.newtownservices.ca

ATTACHMENT This forms part of application

# Z18-0026

City of Kélowna

SEAL

No Date Description 1 JAN 15/18 Issued for DP 2 FEB 15/18 Re-issued for DP 3 MAR 29/18 Re-Issued for

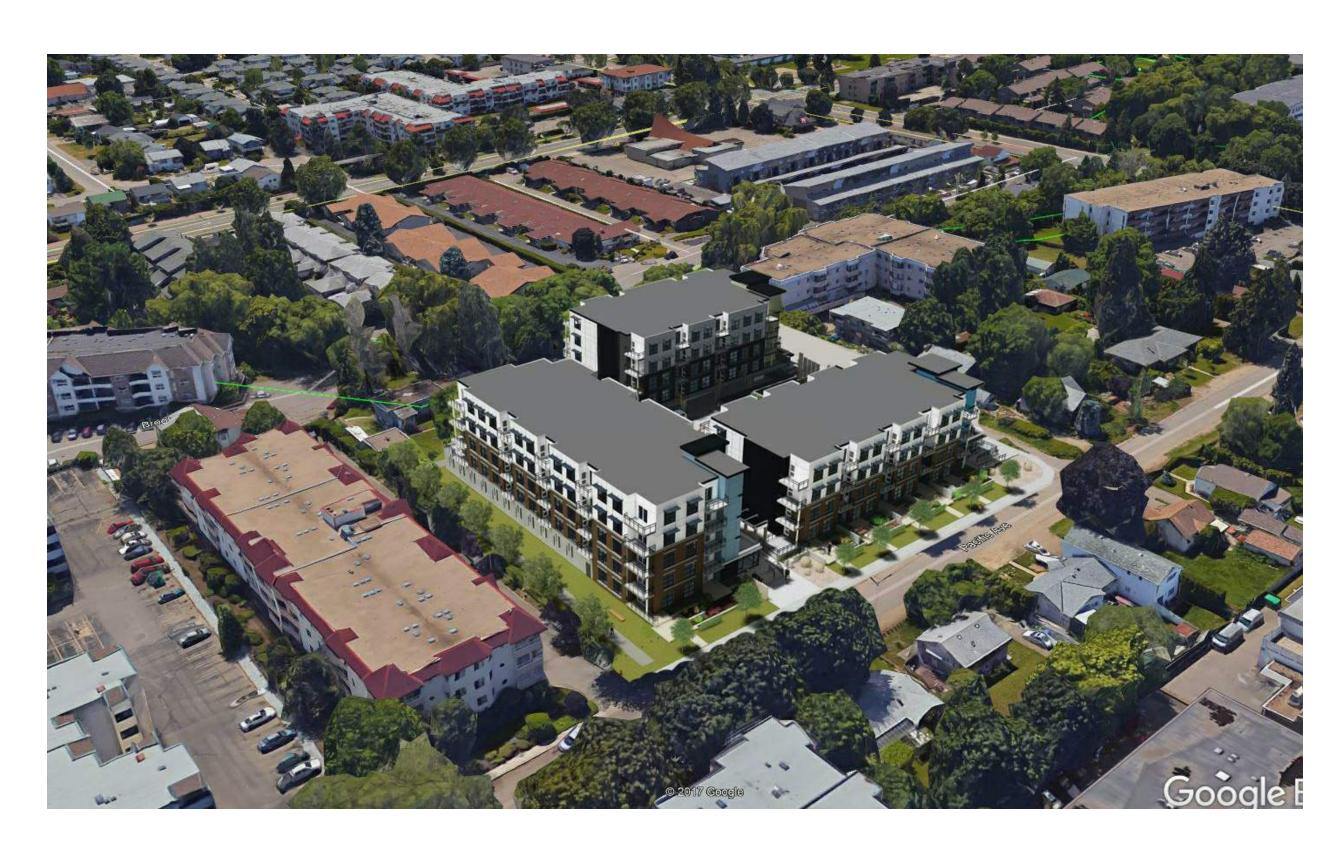
project title PACIFIC AVE CONDO COMPLEX

Pacific Ave, Kelowna, BC

drawing title



3D OVERHEAD VIEW LOOKING NOTHWEST (back lane)



3D OVERHEAD VIEW LOOKING SOUTHWEST (Pacific)



3D OVERHEAD VIEW LOOKING SOUTHEAST (corner Pacific / Paznak )



3D OVERHEAD VIEW LOOKING NOTHEAST (Paznak)

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NEW TOWN
ARCHITECTURE
URBAN PLANNING

CIVIL ENGINEERING www.newtownservices.ca

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City

City of Kelowna

SEAL

No Date Description

1 JAN 15/18 Issued for DP
2 FEB 15/18 Re-issued for DP
3 MAR 29/18 Re-Issued for DP
DP

project title

PACIFIC AVE CONDO
COMPLEX

project address

Pacific Ave, Kelowna, BC

project no. 40 file no.

conceptual 3D

drawing no.	_		
			R.Y.
checked			
			JK
drawn			
	R.Y./ JK		
designed		scale	

A0.04