

# City of Kelowna

## Regular Council Meeting

### AGENDA



Tuesday, December 8, 2020

7:20 pm

Council Chamber

City Hall, 1435 Water Street

Pages

1. **Call to Order**

2. **Reaffirmation of Oath of Office**

The Oath of Office will be read by Councillor Given.

3. **Confirmation of Minutes**

Public Hearing - November 17 2020

Regular Meeting - November 17, 2020

4. **Development Permit and Development Variance Permit Reports**

**Mayor to invite anyone in the public gallery who deems themselves affected by the required variance(s) to come forward for each item.**

4.1. **START TIME - 7:20 PM - Mugford Rd 595 - BL12088 (Z19-0143) - Corey Knorr Construction Ltd., Inc. No. BC0380398**

1 - 1

To adopt Bylaw No. 12088 in order to rezone the subject property from the RU1 – Large Lot Housing zone to the RU2 – Medium Lot Housing zone to facilitate a future 2-lot subdivision.

4.2. **START TIME - 7:20 PM - Mugford Rd 595 - DVP19-0243 - Corey Knorr Construction Ltd., Inc. No. BC0380398**

2 - 20

To vary lot width from 13.0 m required to 12.85 m for proposed Lot A to facilitate a 2-lot infill subdivision.

4.3. **START TIME 7:20 PM - Tataryn Rd 916 - BL12105 (Z20-0056) - Tomasius Floire Phoebus**

21 - 21

To adopt Bylaw No. 12105 in order to rezone the subject property from the RU1 – Large Lot Housing zone to the RU1c – Large Lot Housing with Carriage House zone.

- 4.4. START TIME - 7:20 PM - Tataryn Rd 916 - DVP20-0143 - Tomasius Floire Phoebus** 22 - 40
- To vary the required minimum front yard setback for a carriage house on the subject property.
- 4.5. START TIME - 7:20 PM - Applebrooke Cres 154 - DVP20-0172 - John and Cynthia Smit and Isaac Smit** 41 - 58
- To vary the minimum lot width, maximum site coverage and minimum rear yard setback on the subject property to facilitate a two lot subdivision.
- 4.6. START TIME - 7:45 PM - St. Paul St 1193 - BL12080 (Z18-0011) - Evergreen Lands Ltd, Inc. No. BC0382754** 59 - 59
- To adopt Bylaw No. 12080 in order to rezone the subject property from the I4 - Central Industrial zone to the C7 - Central Business Commercial zone.
- 4.7. START TIME - 7:45 PM - St Paul St 1193 - DP19-0218 DVP18-0029 - Evergreen Lands Ltd, Inc. No. BC0382754** 60 - 104
- To consider the form and character Development Permit of a proposed five storey hotel with one variance to increase the maximum building height before a setback is required.
- 4.8. START TIME - 8:30 PM - Leon Ave 234-278 and Water St 1620-1660 - DP20-0011 DVP20-0013 - 1157695 BC Ltd., Inc.No.BC1157695** 105 - 242
- To consider a form and character Development Permit for a mixed used development consisting of three residential towers, commercial office space in the podium of Tower 'C', and ground floor commercial retail and to consider a development variance permit to increase the maximum tower height and to reduce the minimum short-term bicycle parking stalls and to increase the proportion of small vehicle stall spaces.

**5. Reminders**

**6. Termination**



**CITY OF KELOWNA**  
**BYLAW NO. 12088**  
**Z19-0143 – 595 Mugford Road**

---

A bylaw to amend the "City of Kelowna Zoning Bylaw No. 8000".

The Municipal Council of the City of Kelowna, in open meeting assembled, enacts as follows:

1. THAT City of Kelowna Zoning Bylaw No. 8000 be amended by changing the zoning classification of Lot 1 Section 26 Township 26 ODYD Plan 17500 located on Mugford Road, Kelowna, BC from the RU1 – Large Lot Housing zone to the RU2 – Medium Lot Housing zone.
2. This bylaw shall come into full force and effect and is binding on all persons as and from the date of adoption.

Read a first time by the Municipal Council this 10<sup>th</sup> day of August, 2020.

Considered at a Public Hearing on the 25<sup>th</sup> day of August, 2020.

Read a second and third time by the Municipal Council this 25<sup>th</sup> day of August, 2020.

Approved under the Transportation Act this 26<sup>th</sup> day of August, 2020.

Audrie Henry  
\_\_\_\_\_  
(Approving Officer – Ministry of Transportation)

Adopted by the Municipal Council of the City of Kelowna this

\_\_\_\_\_  
Mayor

\_\_\_\_\_  
City Clerk

# REPORT TO COUNCIL



**Date:** December 8, 2020

**To:** Council

**From:** City Manager

**Department:** Development Planning

**Application:** DVP19-0243

**Owner:** Corey Knorr Construction Ltd.,  
Inc. No. BC0380398

**Address:** 595 Mugford Road

**Applicant:** Ryan Knorr

**Subject:** Development Variance Permit Application

**Existing OCP Designation:** S2RES – Single / Two Unit Residential

**Existing Zone:** RU1 – Large Lot Housing

**Proposed Zone:** RU2 – Medium Lot Housing

---

## 1.0 Recommendation

THAT final adoption of Rezoning Bylaw No. 12088 be considered by Council;

AND THAT Council authorizes the issuance of Development Variance Permit No. DVP19-0243 for Lot 1 Section 26 Township 26 ODYD Plan 17560, located at 595 Mugford Road, Kelowna, BC;

AND THAT a variance to the following section of Zoning Bylaw No. 8000 be granted:

**Section 13.2.5(a): RU2 – Medium Lot Housing Subdivision Regulations**

To vary the minimum lot width from 13.0 m required to 12.85 m proposed for Lot A

AND FURTHER THAT this Development Variance Permit is valid for two (2) years from the date of Council approval, with no opportunity to extend.

## 2.0 Purpose

To vary lot width from 13.0 m required to 12.85 m for proposed Lot A to facilitate a 2-lot infill subdivision.

## 3.0 Development Planning

Development Planning Staff are recommending support for the proposed variance to reduce the minimum lot width from 13.0 m required to 12.85 m for one of the two lots proposed to facilitate a 2-lot subdivision.

Staff are recommending the application be supported as it is consistent with Official Community Plan (OCP) policies related to infill development.

The proposal is consistent with the OCP policy related to compact urban form as the proposal would result in an increase in density and allow for infill development in an existing neighborhood close to amenities. The subject property is located just east of the Rutland Urban Centre and is near several schools including; South Rutland Elementary, Rutland Elementary, Rutland Middle and Rutland Senior Secondary. The site is also in close proximity to transit bus routes located along Merrifield Rd with an existing bus stop situated adjacent to the property on the east side of Merrifield Rd.

The subject property currently contains a single family dwelling, which if removed, could facilitate two conforming RU2 lots, however, the applicant is proposing to keep the existing house and vary one of the proposed lots by 0.15m which is considered a minor variance to lot width. Both proposed lots would exceed the minimum lot depth and lot area required for a typical RU2 lot which will lessen the impact of the proposed variance for Lot A. Should Council support the variance, it would allow the property to be subdivided while maintaining the existing home on-site and creating a new infill lot fronting onto Mugford Rd.

#### **4.0 Proposal**

##### **4.1 Background**

The variance application is related to a proposed rezoning application to rezone the subject site from RU1 to RU2. In August of 2020 Council gave the rezoning bylaw (BL12088) 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> readings and passed a resolution that final adoption of the rezoning bylaw be considered in conjunction with Council's consideration of a Development Variance Permit for the subject site.

##### **4.2 Project Description**

The applicant intends to rezone and subdivide the property and construct a new single-family dwelling on the western most lot (Lot A). A subdivision plan has been provided showing the location of the existing home and garage on-site and what the lot configuration would look like should Rezoning, DVP and Subdivision applications be supported.

##### **4.3 Site Context**

The subject property is located in the Rutland City Sector at the intersection of Mugford Road and Merrifield Road, just west of Mugford Park. The surrounding neighbourhood is largely comprised of single-family properties predominantly zoned RU1 – Large Lot Housing with some RU2 – Medium Lot Housing and RU6 – Two Dwelling Housing zoned sites. Other surrounding zones include P3 – Parks and Open Space, A1 – Agriculture 1 and RU4 – Low Density Cluster Housing. Surrounding Future Land Use designations include predominantly S2RES – Single / Two Unit Residential with some MRL – Multiple Unit Residential (Low Density), PARK – Major Park / Open Space (Public), REP – Resource Protection Area and EDINST – Educational / Major Institutional. The subject property has a walk score of 31 meaning most errands require a vehicle.

Specifically, adjacent land uses are as follows:

Orientation	Zoning	Land Use
North	RU1 – Large Lot Housing	Single Dwelling Housing
East	RU1 – Large Lot Housing	Single Dwelling Housing
South	RU2 – Medium Lot Housing	Single Dwelling Housing
West	RU1 – Large Lot Housing	Single Dwelling Housing

**Subject Property Map: 595 Mugford Road****4.4 Subdivision Regulations Table**

Subdivision Regulations			
CRITERIA	RU2 ZONE REQUIREMENTS	Proposed Lot A	Proposed Lot B
Min. Lot Area	400 m <sup>2</sup>	449.9 m <sup>2</sup>	629.4 m <sup>2</sup>
Min. Lot Width	13.0 m	12.85 m <span style="color: red;">❶</span>	17.23 m
Min. Lot Depth	30.0 m	36.56 m	36.56 m
<span style="color: red;">❶</span> Indicates a requested variance to Section 13.2.5(a) of Zoning Bylaw No. 8000			

**5.0 Current Development Policies****5.1 Kelowna Official Community Plan (OCP)***Objective 5.3 Focus development to designated growth areas*

*Policy.2 Compact Urban Form.* Develop a compact urban form that maximizes the use of existing infrastructure and contributes to energy efficient settlement patterns. This will be done by increasing densities (approximately 75 – 100 people and/or jobs per ha located within a 400 metre walking distance of transit stops is required to support the level of transit service) through development, conversion, and re-development within Urban Centres (see Map 5.3) in particular and existing areas as per the provisions of the Generalized Future Land Use Map 4.1.

## Chapter 5: Development Process

*Objective 5.22 Ensure context sensitive housing development.*

*Policy .6 Sensitive Infill.* Encourage new development or re-development in existing residential areas to be sensitive to or reflect the character of the neighbourhood with respect to building design, height and siting.

### **6.o Application Chronology**

Date of Application Received: December 19, 2019  
Date Public Consultation Completed: September 14, 2020

**Report prepared by:** Andrew Ferguson, Planner II

**Reviewed by:** Jocelyn Black, Urban Planning Manager

**Approved for Inclusion:** Terry Barton, Development Planning Department Manager

### **Attachments:**

Attachment A: Draft Development Variance Permit DVP19-0243

Schedule A: Subdivision Plan

# Development Variance Permit

## DVP19-0243



This permit relates to land in the City of Kelowna municipally known as

**595 Mugford Road**

and legally known as

**Lot 1 Section 26 Township 26 ODYD Plan 17560**

and permits the land to be used for the following development:

**Residential**

The present owner and any subsequent owner of the above described land must comply with any attached terms and conditions.

Date of Council Decision                      December 8, 2020

Decision By:                                      Council

Development Permit Area:                      N/A

**This permit will not be valid if development has not commenced by December 8, 2022.**

Existing Zone:    RU2 – Medium Lot Housing

Future Land Use Designation: S2RES – Single / Two Unit Residential

**This is NOT a Building Permit.**

In addition to your Development Permit, a Building Permit may be required prior to any work commencing. For further information, contact the City of Kelowna, Development Services Branch.

### NOTICE

This permit does not relieve the owner or the owner's authorized agent from full compliance with the requirements of any federal, provincial or other municipal legislation, or the terms and conditions of any easement, covenant, building scheme or agreement affecting the building or land.

Owner: Corey Knorr Construction Ltd., Inc. No. BCo380398

Applicant: Ryan Knorr

---

Terry Barton  
Development Planning Department Manager  
Development Planning Department

---

Date

## 1. SCOPE OF APPROVAL

This Development Permit applies to and only to those lands within the Municipality as described above, and any and all buildings, structures and other development thereon.

This Development Permit is issued subject to compliance with all of the Bylaws of the Municipality applicable thereto, except as specifically varied or supplemented by this permit, noted in the Terms and Conditions below.

The issuance of a permit limits the permit holder to be in strict compliance with regulations of the Zoning Bylaw and all other Bylaws unless specific variances have been authorized by the Development Permit. No implied variances from bylaw provisions shall be granted by virtue of drawing notations that are inconsistent with bylaw provisions and that may not have been identified as required Variances by the applicant or Municipal staff.

## 2. CONDITIONS OF APPROVAL

That variance to the following section of Zoning Bylaw No. 8000 be granted in accordance with Schedule "A";

**Section 13.2.5(a): RU2 - Medium Lot Housing Subdivision Regulations**

To vary the minimum lot width from 13.0 m required to 12.85 m proposed for Lot A.

This Development Permit is valid for two (2) years **from the date of Council approval**, with no opportunity to extend.

## 3. PERFORMANCE SECURITY

As a condition of the issuance of this Permit, Council is holding the security set out below to ensure that development is carried out in accordance with the terms and conditions of this Permit. Should any interest be earned upon the security, it shall accrue to the Developer and be paid to the Developer or his or her designate if the security is returned. The condition of the posting of the security is that should the Developer fail to carry out the development hereby authorized, according to the terms and conditions of this Permit within the time provided, the Municipality may use enter into an agreement with the property owner of the day to have the work carried out, and any surplus shall be paid over to the property own of the day. Should the Developer carry out the development permitted by this Permit within the time set out above, the security shall be returned to the Developer or his or her designate. There is filed accordingly:

- a) None required.

## 4. INDEMNIFICATION

Upon commencement of the works authorized by this Permit the Developer covenants and agrees to save harmless and effectually indemnify the Municipality against:

- a) All actions and proceedings, costs, damages, expenses, claims, and demands whatsoever and by whomsoever brought, by reason of the Municipality said Permit.

All costs, expenses, claims that may be incurred by the Municipality where the construction, engineering or other types of works as called for by the Permit results in damages to any property owned in whole or in part by the Municipality or which the Municipality by duty or custom is obliged, directly or indirectly in any way or to any degree, to construct, repair, or maintain.

**The PERMIT HOLDER is the CURRENT LAND OWNER.  
Security shall ONLY be returned to the signatory of the  
Landscape Agreement or their designates.**

PID: 008-391-246  
CIVIC ADDRESS: 595 MUGFORD ROAD, KELOWNA  
CLIENT: COREY KNORR

Proposed lot sizes based on RU2 zoning.



City of  
**Kelowna**  
COMMUNITY PLANNING







# DVP19-0243

# 595 Mugford Road

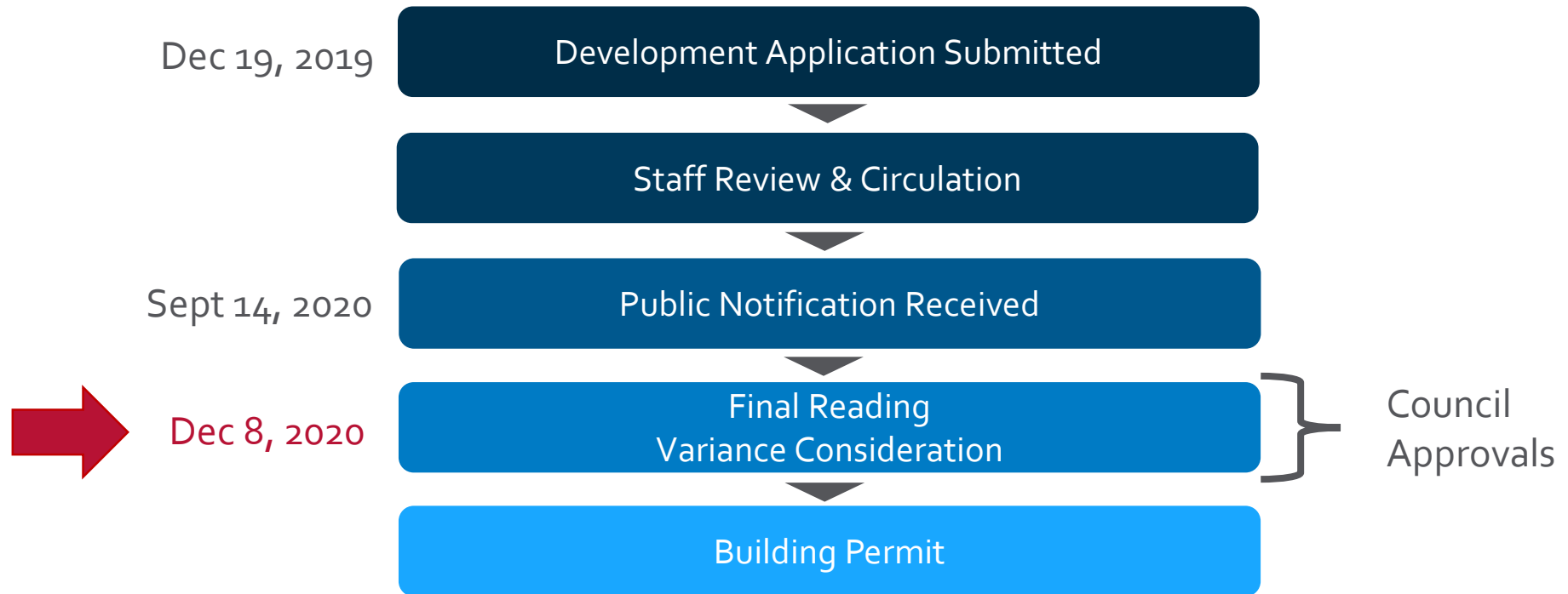
Development Variance Permit Application



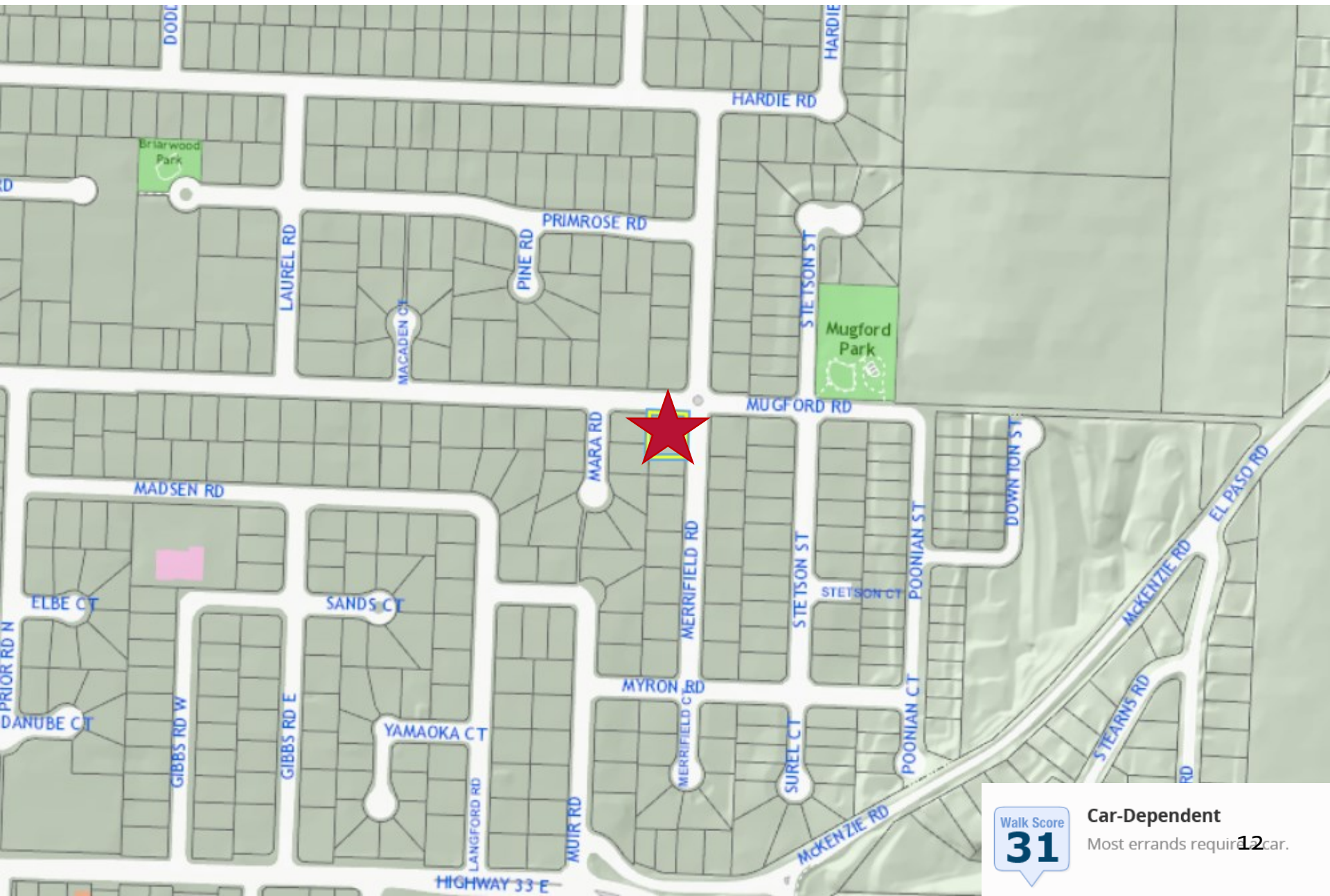
# Proposal

- ▶ To vary lot width from 13.0 m required to 12.85 m for proposed Lot A to facilitate a 2-lot infill subdivision.

# Development Process



# Context Map



Walk Score

**31**

**Car-Dependent**

Most errands require a car.



# Subject Property Map





# Street View Image

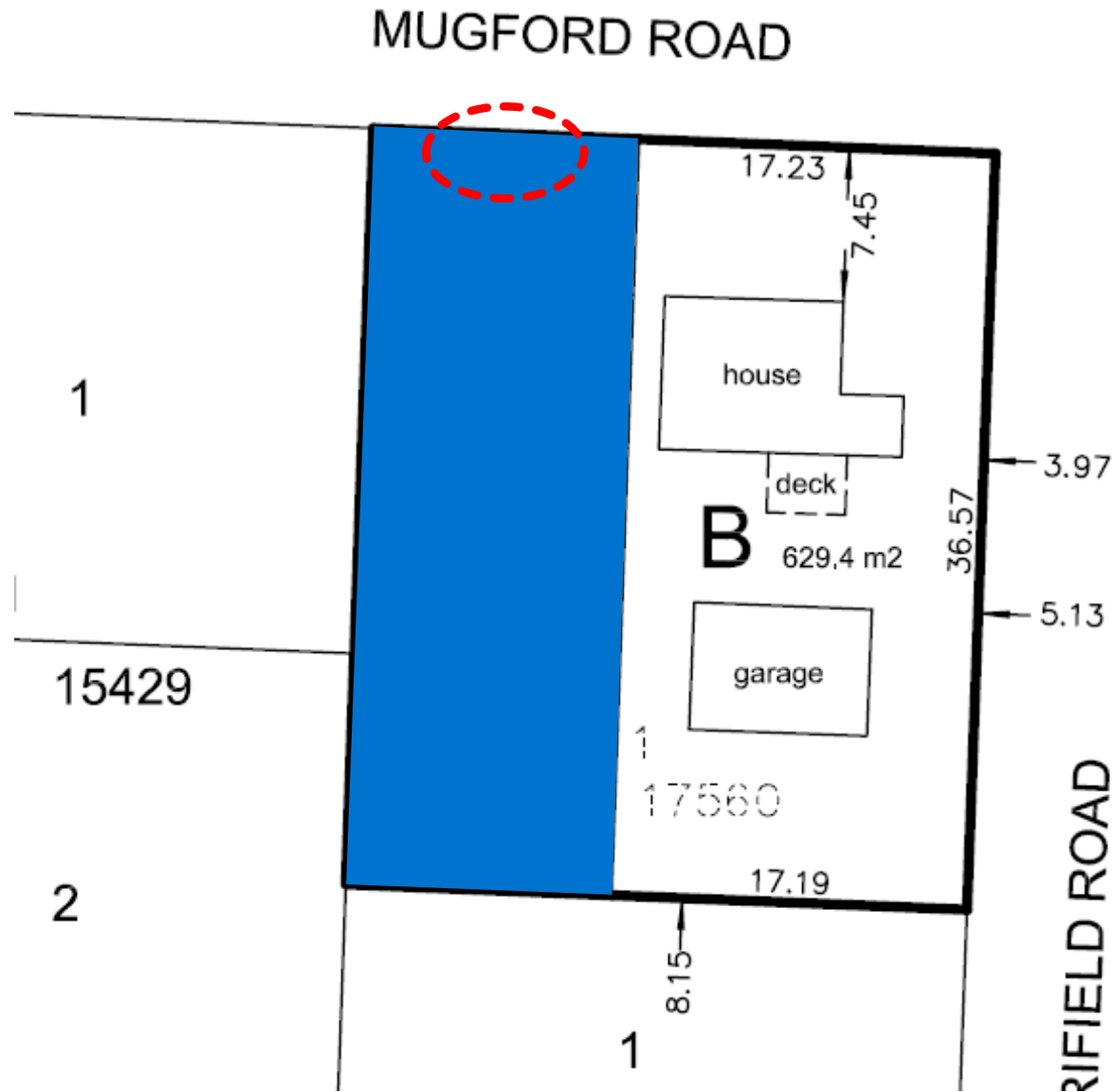


# Street View Image





# Conceptual Site Plan





# Development Policy

- ▶ Meets the intent of Official Community Plan Urban Infill Policies:
  - ▶ Within Permanent Growth Boundary
  - ▶ Sensitive Infill
  - ▶ Compact Urban Form
- ▶ Consistent with Future Land Use of S2RES.

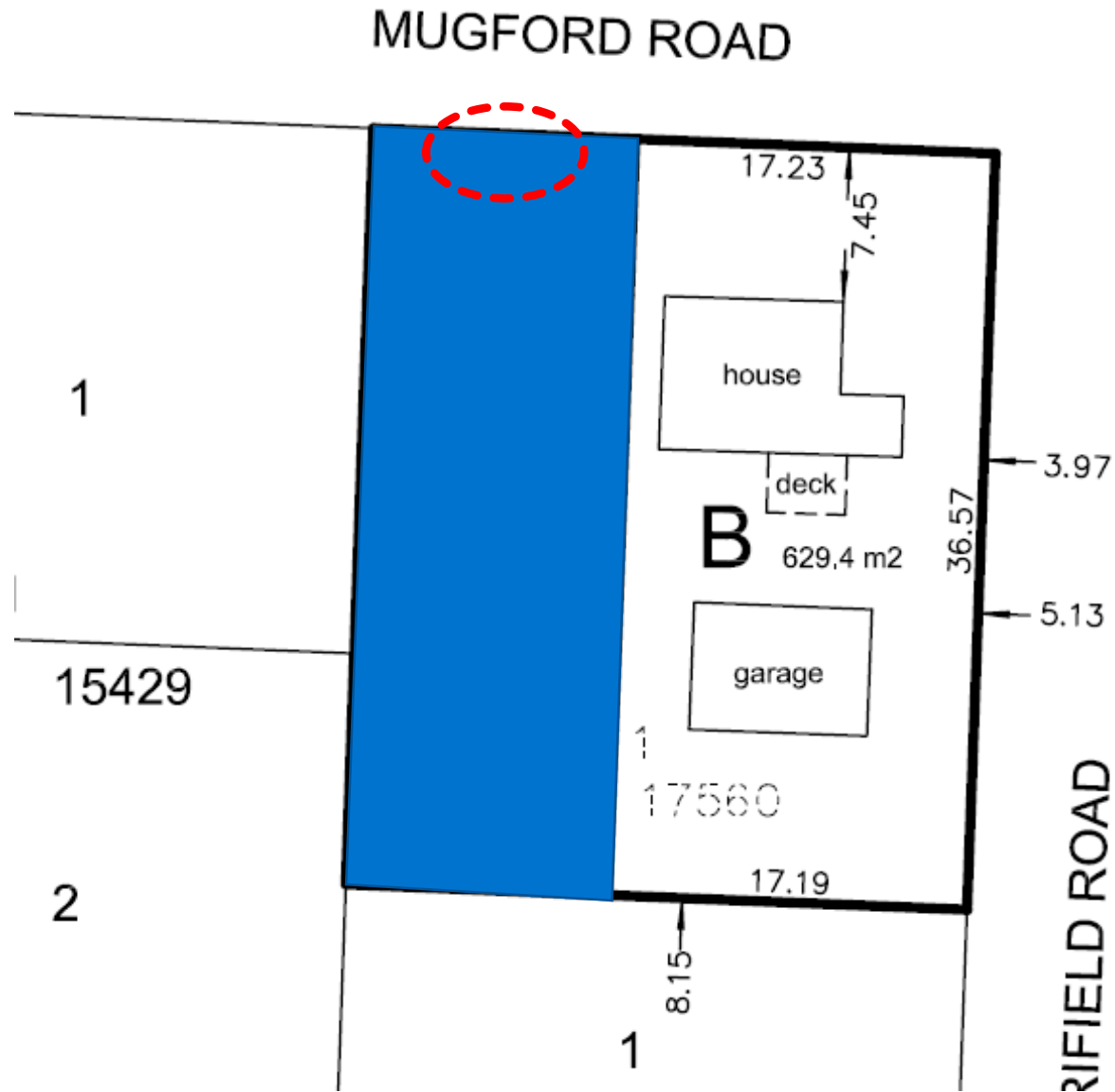
# Staff Recommendation

- ▶ Staff recommend **support** for the proposed DVP application
  - ▶ Meets the intent of the Official Community Plan
    - ▶ Urban Infill Policies
    - ▶ Appropriate location for adding residential density
    - ▶ Proposed lots exceed min. area and depth requirements for RU<sub>2</sub>



## *Conclusion of Staff Remarks*

# Conceptual Site Plan



**CITY OF KELOWNA**  
**BYLAW NO. 12105**  
**Z20-0056 – 916 Tataryn Road**

---

A bylaw to amend the "City of Kelowna Zoning Bylaw No. 8000".

The Municipal Council of the City of Kelowna, in open meeting assembled, enacts as follows:

1. THAT City of Kelowna Zoning Bylaw No. 8000 be amended by changing the zoning classification of Lot 6 District Lot 137 ODYD Plan 17047 located at Tataryn Road, Kelowna, BC from the RU1 – Large Lot Housing zone to the RU1c – Large Lot Housing with Carriage House zone.
2. This bylaw shall come into full force and effect and is binding on all persons as and from the date of adoption.

Read a first time by the Municipal Council this 28<sup>th</sup> day of September, 2020.

Considered at a Public Hearing on the 27<sup>th</sup> day of October, 2020.

Read a second and third time by the Municipal Council this 27<sup>th</sup> day of October, 2020.

Approved under the Transportation Act this 4<sup>th</sup> day of November, 2020.

Audrie Henry  
\_\_\_\_\_  
(Approving Officer – Ministry of Transportation)

Adopted by the Municipal Council of the City of Kelowna this

\_\_\_\_\_  
Mayor

\_\_\_\_\_  
City Clerk

# REPORT TO COUNCIL



**Date:** December 8, 2020

**To:** Council

**From:** City Manager

**Department:** Development Planning

**Application:** DVP20-0143

**Owner:** Tomasius Floire Phoebus

**Address:** 916 Tataryn Road

**Applicant:** Tomasius Floire Phoebus

**Subject:** Development Variance Permit

**Existing OCP Designation:** S2RES – Single / Two Unit Residential

**Existing Zone:** RU1c – Large Lot Housing with Carriage House

---

## 1.0 Recommendation

THAT final adoption of Rezoning Bylaw No. 12105 be considered by Council;

AND THAT Council authorizes the issuance of Development Variance Permit No. DVP20-0143 for Lot 6 District Lot 137 Osoyoos Division Yale District Plan 17047, located at 916 Tataryn Road, Kelowna, BC;

AND THAT a variance to the following section of Zoning Bylaw No. 8000 be granted in accordance with Schedule A:

**Section 9.5b.1(h): Carriage House Regulations - Development Regulations in Residential, Health District and Comprehensive Development Zones**

To vary the required minimum front yard from 9.0 m required to 5.92 m proposed.

AND FURTHER THAT this Development Variance Permit is valid for two (2) years from the date of Council approval, with no opportunity to extend.

## 2.0 Purpose

To vary the required minimum front yard setback for a carriage house on the subject property.

## 3.0 Development Planning

Development Planning Staff support the application for a Development Variance Permit. To convert the existing single storey dwelling into a carriage house, a variance to the minimum front yard is required.

Although the dwelling is currently existing, the setback regulations in the City's Zoning Bylaw are different for carriage houses and principal dwellings. The front of the existing dwelling is set back 7.34 m, however there is a covered front porch that is in excess of the Zoning Bylaw exemption for projections, so the variance being requested is from 9.0 m required to 5.92 m proposed. A photograph, showing this covered porch area, is shown in Image 1 under Project Description below. This front yard setback distance is consistent with the neighbouring properties on Tataryn Road, so Development Planning believes by supporting this variance the desired streetscape rhythm would be maintained.

The concept of the carriage house is aligned with the Official Community Plan Policies of Compact Urban Form – increasing density where infrastructure already exists, and of Carriage Houses & Accessory Apartments. Further, converting an existing dwelling to a carriage house prevents a useable building from being demolished.

#### **4.0 Proposal**

##### **4.1 Background**

There is an existing single family dwelling on the subject property that is proposed to be converted to a carriage house. For this to occur, the applicant has rezoned the subject property to the RU1c – Large Lot Housing with Carriage House zone and is now asking for Council consideration for a Development Variance Permit to the minimum required front yard for a carriage house.

##### **4.2 Project Description**

The applicant currently has an open building permit application for the existing dwelling, and it has undergone substantial renovations in 2020, including to the roof and exterior materials. A 3.0 m wide drive aisle on the east side of the property will provide access to the proposed new dwelling, as well as provide access to the required on-site parking stalls. This is shown on the Landscape Plan in Attachment A.

**Image 1:** Existing Single Family Dwelling at 916 Tataryn Road



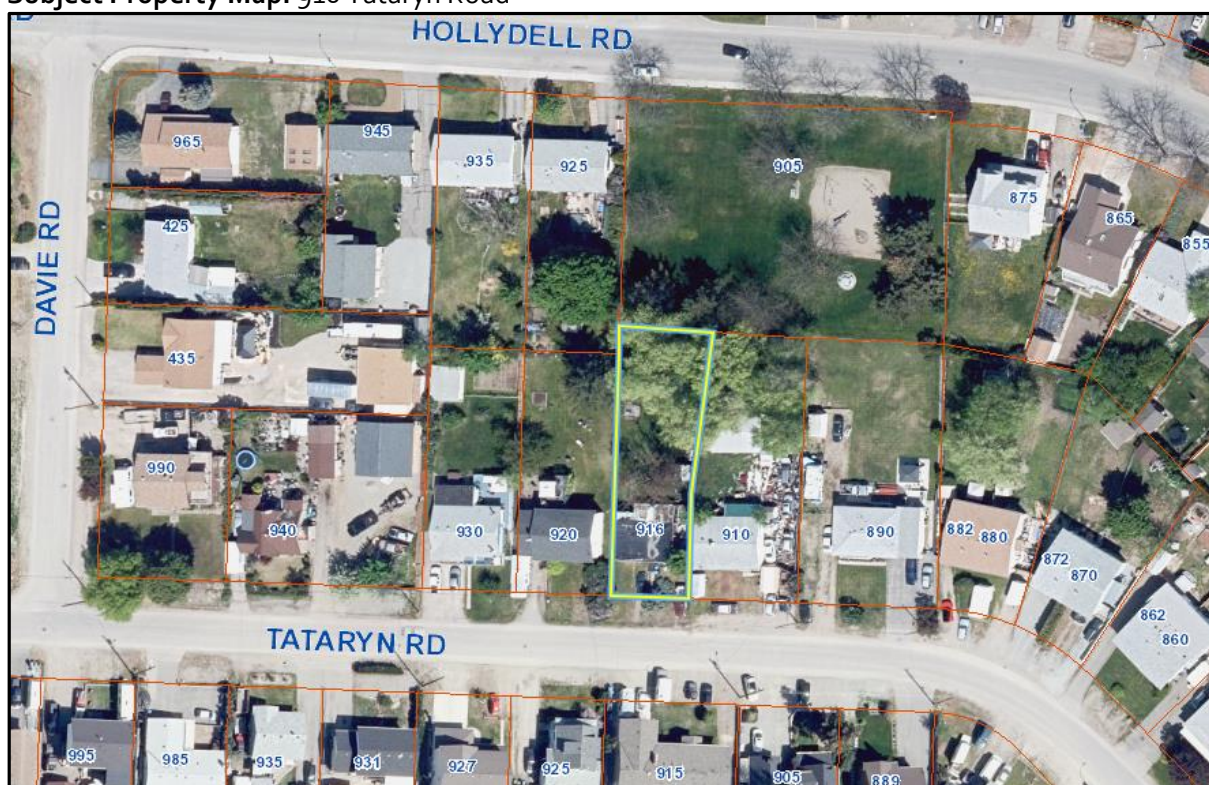
#### 4.3 Site Context

The subject property is located mid-block on the north side of Tataryn Road, between Davie Road and Stirling Road. The surrounding area is characterized by single and two dwelling housing and the rear property line is adjacent to Hollydell Park. It is within the City's Permanent Growth Boundary and the walk score is 30, indicating that most errands require a car.

Specifically, adjacent land uses are as follows:

Orientation	Zoning	Land Use
North	P3 – Parks and Open Spaces	Public Parks
East	RU1 – Large Lot Housing	Single Dwelling Housing
South	RU1 – Large Lot Housing	Single Dwelling Housing
West	RU1 – Large Lot Housing	Single Dwelling Housing

#### Subject Property Map: 916 Tataryn Road



#### 4.4 Zoning Analysis Table

Zoning Analysis Table		
CRITERIA	RU1c ZONE REQUIREMENTS	PROPOSAL
Development Regulations		
Min. Front Yard	9.0 m	5.92 m <span style="color: red;">❶</span>
<span style="color: red;">❶</span> Indicates a requested variance to the minimum front yard		



## 5.0 Technical Comments

### 5.1 Development Engineering Department

This Development Variance Permit does not compromise any municipal infrastructure.

## 6.0 Application Chronology

Date of Application Received:	July 8, 2020
Date Public Consultation Completed:	July 25, 2020
Date of Rezoning Bylaw Initial Consideration:	September 28, 2020
Date of Rezoning Bylaw Public Hearing:	October 27, 2020

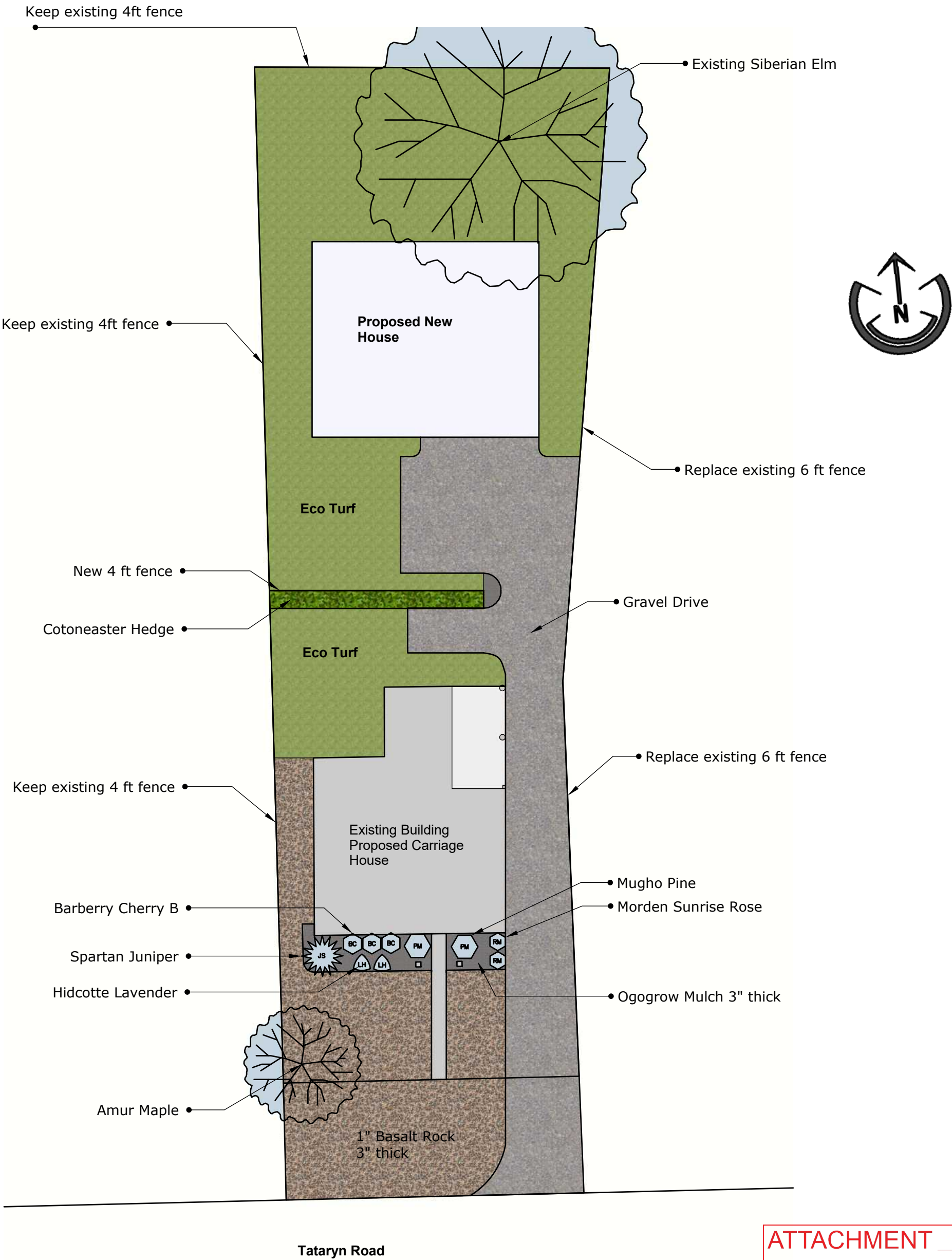
<b>Report prepared by:</b>	Kimberly Brunet, Planner II
<b>Reviewed by:</b>	Jocelyn Black, Urban Planning Manager
<b>Approved for Inclusion:</b>	Terry Barton, Development Planning Department Manager

### Attachments:

Attachment A: Landscape Plan

Attachment B: Draft Development Permit No. DVP20-0143

Schedule A: Site Plan



**ATTACHMENT**

A

This forms part of application  
# DVP20-0143

Planner Initials **KB**

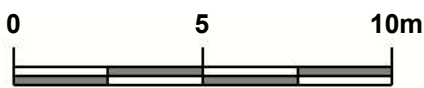
**City of Kelowna**  
DEVELOPMENT PLANNING



**Great Outdoor Designs**

778-363-1455  
greatoutdoordesigns.ca

**Landscape Plan**



Scale: 1:200

**Title:** Rezone Proposal

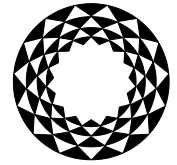
**Drawn by:** Mark Godlewski

**Date:** September 3, 2020

**Customer Name and Address:**

Tom Phoebus  
916 Tataryn Road  
Kelowna, BC

26



City of  
**Kelowna**

# Development Variance Permit

## DVP20-0143

This permit relates to land in the City of Kelowna municipally known as

**916 Tataryn Road**

and legally known as

**Lot 6 District Lot 137 Osoyoos Division Yale District Plan 17047**

and permits the land to be used for the following development:

**Single Dwelling Housing with Carriage House**

With variances to the following section of Zoning Bylaw No. 8000 in accordance with Schedule A:

**Section 9.5b.1(h): Carriage House Regulations - Development Regulations in Residential, Health District and Comprehensive Development Zones**

To vary the required minimum front yard from 9.0 m required to 5.92 m proposed.

The present owner and any subsequent owner of the above described land must comply with any attached terms and conditions.

Date of Council Decision December 8, 2020

Decision By: COUNCIL

Development Permit Area: N/A

Existing Zone: RU1c – Large Lot Housing with Carriage House

Future Land Use Designation: S2RES – Single / Two Unit Residential

**This is NOT a Building Permit.**

In addition to your Development Permit, a Building Permit may be required prior to any work commencing. For further information, contact the City of Kelowna, Development Services Branch.

## NOTICE

This permit does not relieve the owner or the owner's authorized agent from full compliance with the requirements of any federal, provincial or other municipal legislation, or the terms and conditions of any easement, covenant, building scheme or agreement affecting the building or land.

Owner: Tomasius Floire Phoebus

Applicant: Tomasius Floire Phoebus

Planner: K. Brunet

Terry Barton  
Community Planning Department Manager  
Planning & Development Services

Date

1. SCOPE OF APPROVAL

This Development Permit applies to and only to those lands within the Municipality as described above, and any and all buildings, structures and other development thereon.

This Development Permit is issued subject to compliance with all of the Bylaws of the Municipality applicable thereto, except as specifically varied or supplemented by this permit, noted in the Terms and Conditions below.

The issuance of a permit limits the permit holder to be in strict compliance with regulations of the Zoning Bylaw and all other Bylaws unless specific variances have been authorized by the Development Permit. No implied variances from bylaw provisions shall be granted by virtue of drawing notations that are inconsistent with bylaw provisions and that may not have been identified as required Variances by the applicant or Municipal staff.

2. CONDITIONS OF APPROVAL

- a) The dimensions and siting of the building to be constructed on the land be in accordance with Schedule "A";

This Development Permit is valid for two (2) years from the date of approval, with no opportunity to extend.

3. PERFORMANCE SECURITY

None Required

5. INDEMNIFICATION

Upon commencement of the works authorized by this Permit the Developer covenants and agrees to save harmless and effectually indemnify the Municipality against:

- a) All actions and proceedings, costs, damages, expenses, claims, and demands whatsoever and by whomsoever brought, by reason of the Municipality said Permit.

All costs, expenses, claims that may be incurred by the Municipality where the construction, engineering or other types of works as called for by the Permit results in damages to any property owned in whole or in part by the Municipality or which the Municipality by duty or custom is obliged, directly or indirectly in any way or to any degree, to construct, repair, or maintain.

The PERMIT HOLDER is the CURRENT LAND OWNER.  
Security shall ONLY be returned to the signatory of the  
Landscape Agreement or their designates.

# BRITISH COLUMBIA LAND SURVEYOR'S CERTIFICATE OF LOCATION OF A FOUNDATION ON LOT B, SECTION 22, TOWNSHIP 26, ODYD, PLAN 25630.

PID: 005-384-761

CIVIC ADDRESS: 916 TATARYN ROAD

CLIENT: PHOEBUS

This document shows the relative location of improvement(s) named above with respect to the boundaries of the described parcel.

This document was prepared for the exclusive use of the client named herein, for building inspection purposes.

Lot dimensions shown are derived from Land Title Office records.

This document shall not be used to define property lines or corners.

AllTerra Land Surveying Ltd. and the signatory accept no responsibility for, and hereby disclaim all obligations and liabilities for:

- any damages arising out of any direct or indirect use or reliance upon this document beyond its intended use,
- any damages suffered by a third party as a result of actions taken or decisions made based upon this document.

All rights reserved. No person may copy, reproduce, transmit or alter this document in whole or in part, without the express written consent of AllTerra Land Surveying Ltd.

Scale 1:500 Metric.

Distances shown are in metres and decimals thereof.

Notes:

- Unregistered interests have not been included or considered.

Charges on Title:

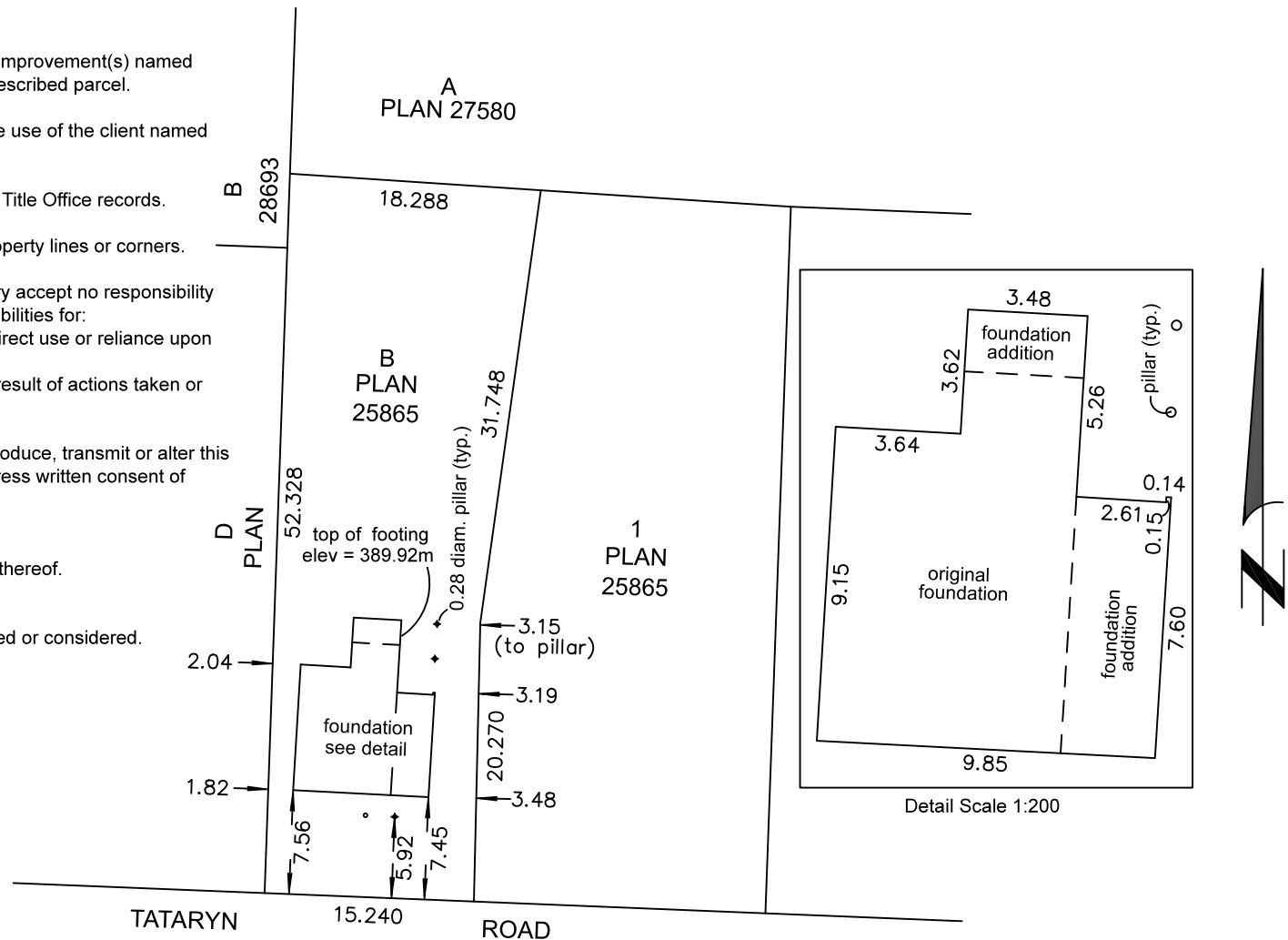
Judgement LC530533

**AllTerra**  
Land Surveying Ltd.

www.AllTerraSurvey.ca

Ph: 250.762.0122 File: 320028-CO2

© AllTerra Land Surveying Ltd, 2020.



Certified correct this 8th day of July, 2020.

British Columbia Land Surveyor  
This document is not valid unless originally signed and sealed.





DVP20-0143

916 Tataryn Rd

Development Variance Permit Application



# Proposal

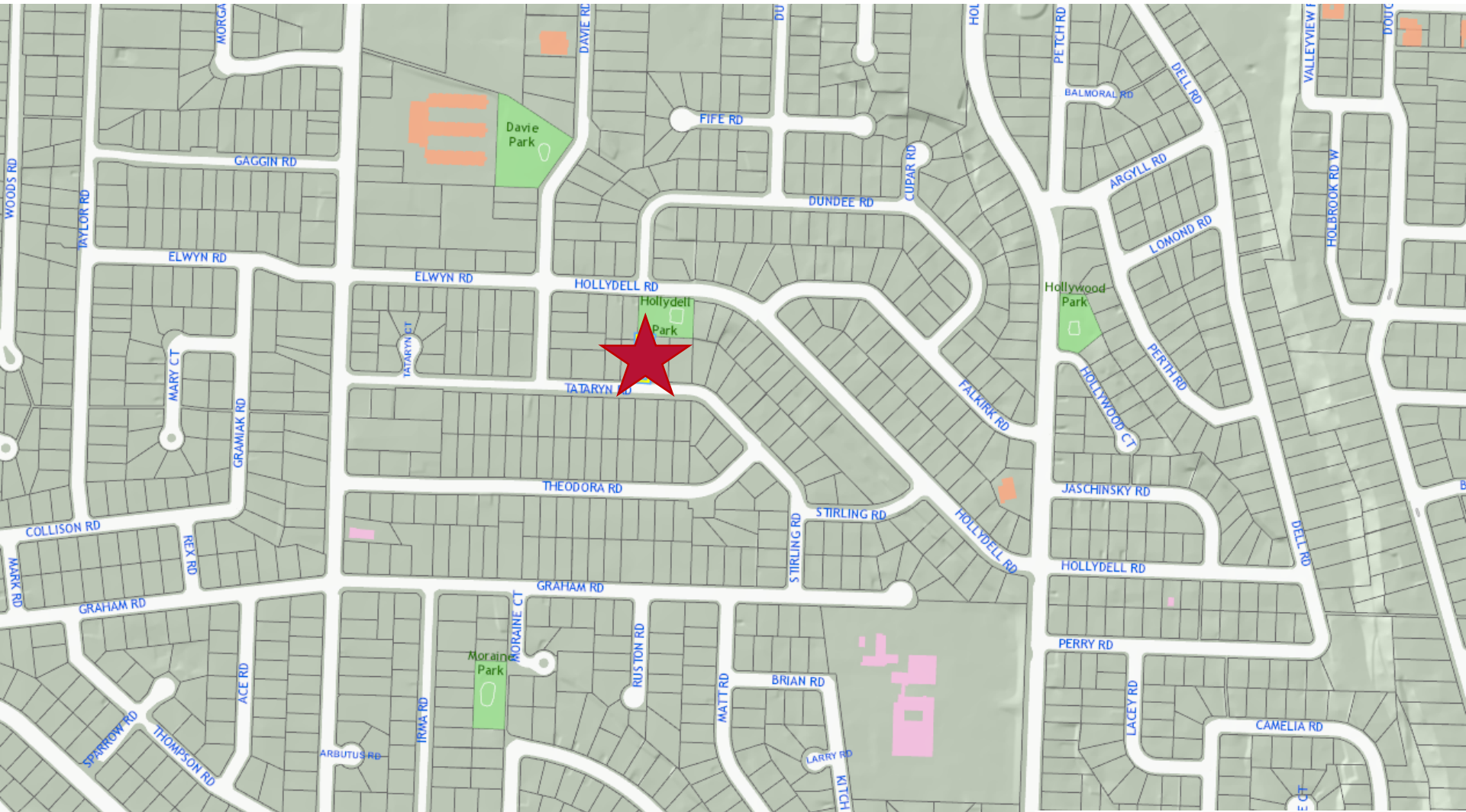
- ▶ To vary the required minimum front yard for a carriage house on the subject property.

# Development Process





# Context Map

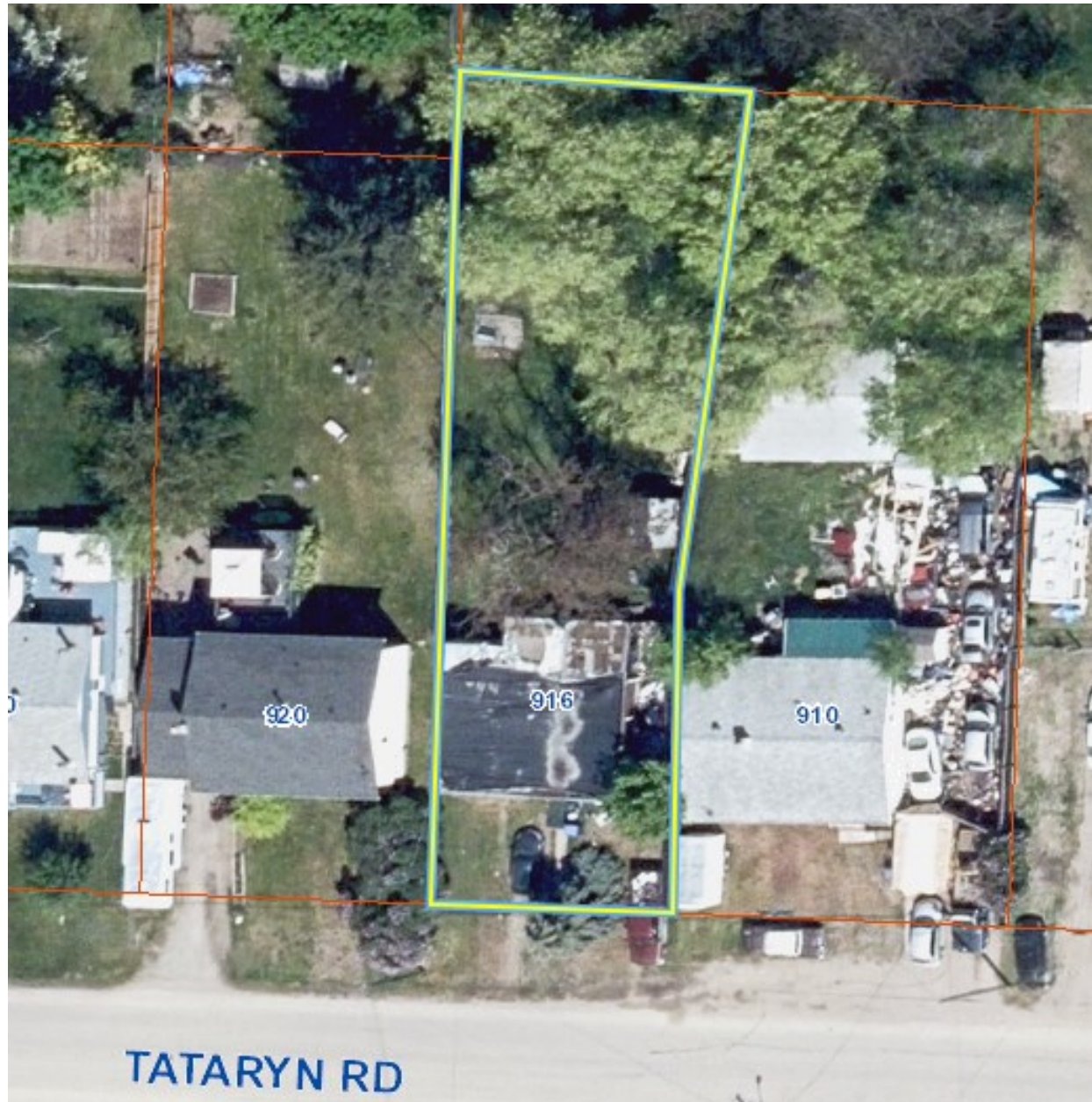


City of Kelowna



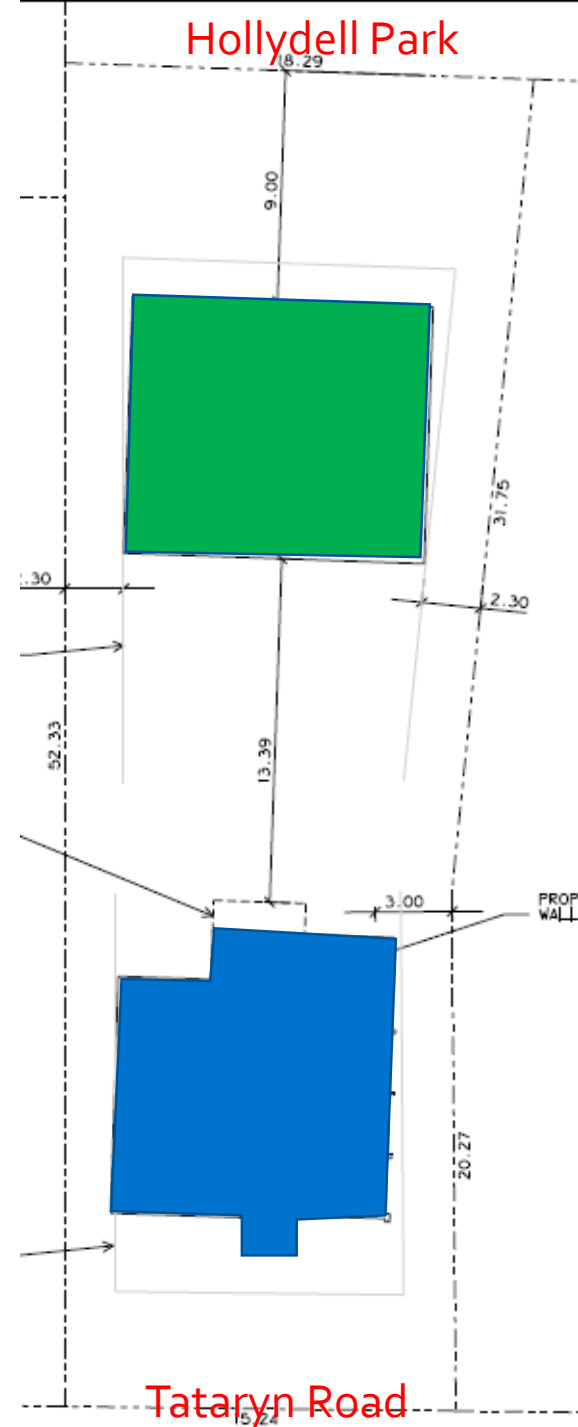
**Car-Dependent**  
Most errands require a car.

# Subject Property Map



# Proposal Details

- Existing single storey dwelling would become a carriage house
  - **Variance for minimum front yard setback**
    - 9.0 m required
    - 5.92 m proposed
- New dwelling would be constructed in the rear
  - Demonstrated this can occur without any variances





# Existing Dwelling/Proposed Carriage House



# Development Planning

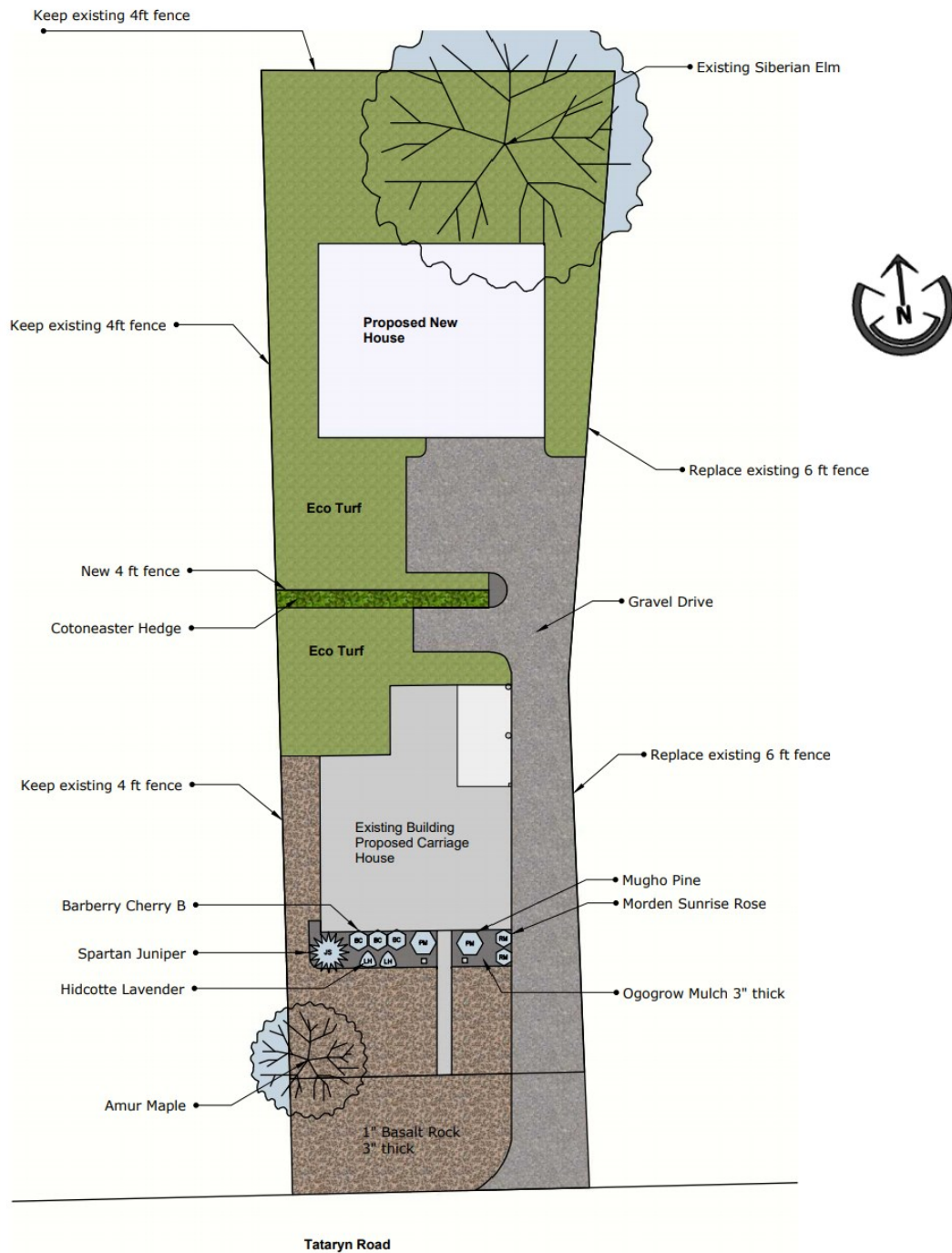
- ▶ Meets the intent of Official Community Plan Urban Infill Policies:
  - ▶ Compact Urban Form
  - ▶ Sensitive Infill
  - ▶ Carriage Houses and Accessory Apartments
- ▶ Building is already existing
  - ▶ Setback distance is consistent with other dwellings on Tataryn Road
  - ▶ Maintains desired streetscape rhythm

# Staff Recommendation

- ▶ Staff recommend **support** for the development variance permit to facilitate the conversion of the existing dwelling into a carriage house
  - ▶ Meets the intent of the Official Community Plan
    - ▶ Urban Infill & Carriage House Policies
  - ▶ Existing building
    - ▶ setback distance is consistent with neighbouring properties



## *Conclusion of Staff Remarks*





# REPORT TO COUNCIL



**Date:** December 8, 2020

**To:** Council

**From:** City Manager

**Department:** Development Planning – Suburban

**Application:** DVP20-0172

**Owner:** John Smit, Cynthia Smit & Isaac Smit

**Address:** 154 Applebrooke Crescent

**Applicant:** McElhanney Ltd.

**Subject:** Development Variance Permit

**Existing OCP Designation:** S2RES- Single/Two Unit Residential

**Existing Zone:** RU2-Medium Lot Housing

---

## 1.0 Recommendation

That Council authorizes the issuance of Development Variance Permit No. DVP20-0172 for Lot 46, Section 5, Township 23, ODYD, Plan KAP47769, located at 154 Applebrooke Crescent, Kelowna, BC;

AND THAT variances to the following sections of Zoning bylaw No. 8000 be granted, as shown on Schedule "A":

### **Section 13.2.5(a): RU2- Medium Lot Housing Subdivision Regulations**

To vary the required minimum lot width from 13.0m permitted to 11.52m proposed for the proposed Lot A.

### **Section 13.2.6(a): RU2- Medium Lot Housing Development Regulations**

To vary the required maximum site coverage from 50% permitted to 57% proposed for the remainder Lot 46.

### **Section 13.2.6(e): RU2- Medium Lot Housing Development Regulations**

To vary the required minimum rear yard setback from 7.5m permitted to 4.34m proposed for the remainder Lot 46 on the existing dwelling.

AND FURTHER THAT this Development Variance Permit is valid for two (2) years from the date of Council approval, with no opportunity to extend.

## **2.0 Purpose**

To vary the minimum lot width, maximum site coverage and minimum rear yard setback on the subject property to facilitate a two lot subdivision.

## **3.0 Development Planning**

Staff support the requested variances to lot width from 13.0m to 11.52m for the proposed Lot A, site coverage from 50% to 57% and the rear yard setback from 7.5m to 4.43m for the proposed remainder Lot 46. The variances are being requested due to the irregular shape of the lot and topographic constraints for access to Applecrest Court which has created an extended driveway length and increased site coverage. Staff do not anticipate any impacts of the variances outside the subject subdivision.

The proposed remainder Lot 46 meets the minimum lot width, depth and substantially exceeds the minimum lot area required. The proposed Lot A meets the minimum lot depth and exceeds the minimum lot area required for the RU2 zone.

Overall, the proposed subdivision meets Kelowna's Official Community Plan goals of containing urban growth and sensitive infill housing development. If the requested variances are approved, a Preliminary Layout Review (PLR) will be created to address the conditions and requirements of the proposed two lot subdivision.

## **4.0 Proposal**

### **4.1 Project Description**

The attached Site Plan identifies the proposed subdivision of the subject property into two lots. The applicant is proposing to create two RU2 zoned single dwelling residential lots, accessed off Applebrooke Crescent.

No specific development plans have been submitted for the proposed Lot A, however the lot would meet the minimum lot area and depth requirements of the RU2 zone if the variance to reduce the minimum lot width is approved. The proposed Lot A can be developed with a single residential dwelling that meets the RU2 zone regulations.

The remainder Lot 46 has an existing dwelling to be maintained and would meet the minimum lot area, lot width and depth requirements of the RU2 zone, if the variances to reduce the rear yard setback and increase the site coverage is approved.

In fulfillment of Council Policy No. 367 respecting public consultation, the applicant undertook neighbor consultation by individually contacting the neighbors within a 50 metre radius. Staff has received objections or correspondence from the neighbors with the main concerns being street parking and increase in traffic.

#### 4.2 Site Context

The subject property is located in the Glenmore – Clifton – Dilworth City Sector on Applebrooke Crescent with frontage on Applecrest Court. The property is within the permanent growth boundary and currently has a single detached house and attached garage. The neighborhood predominantly consists of single-family dwelling housing. Specifically, adjacent land uses are as follows:

Orientation	Zoning	Land Use
North	RU2 – Medium Lot Housing	Single Dwelling Residential
East	RU2 – Medium Lot Housing	Single Dwelling Residential
South	RU2 – Medium Lot Housing	Single Dwelling Residential
West	RU2 – Medium Lot Housing	Single Dwelling Residential

**Subject Property Map: 154 Applebrooke Crescent**



#### 4.3 Zoning Analysis Table

Zoning Analysis Table			
CRITERIA	RU <sub>2</sub> ZONE REQUIREMENTS	PROP. LOT A	PROP. LOT 46
Subdivision Regulations			
Min. Lot Area	400 m <sup>2</sup>	539.2m <sup>2</sup>	1746.6m <sup>2</sup>
Min. Lot Width	13.0 m	11.52m <sup>①</sup>	15.0m
Min. Lot Depth	30.0 m	30.16m	53.0m
Development Regulations			
Max. Site Coverage (buildings, parking, driveways)	50%	TBD	57% <sup>②</sup>
Min. Front Yard	4.5m or 6m from garage/carport	TBD	13.62m
Min. Side Yard (south)	1.8m	TBD	2.68m
Min. Side Yard (north)	1.8m	TBD	4.9m
Min. Rear Yard	7.5m	TBD	4.34m <sup>③</sup>
① Indicates a requested variance to required Lot Width			
② Indicates a requested variance to required Max. Site coverage			
③ Indicates a requested variance to required Min. Rear Yard			

### 5.0 Current Development Policies

#### 5.1 Kelowna Official Community Plan (OCP)

#### Chapter 5: Development Process

##### Objective 5.3 Focus development to designated growth areas

*Policy .2 Compact Urban Form.*<sup>1</sup> Develop a compact urban form that maximizes the use of existing infrastructure and contributes to energy efficient settlement patterns. This will be done by increasing densities (approximately 75 - 100 people and/or jobs located within a 400 metre walking distance of transit stops is required to support the level of transit service) through development, conversion, and re-development within Urban Centres (see Map 5.3) in particular and existing areas as per the provisions of the Generalized Future Land Use Map 4.1.

##### Objective 5.22 Ensure context sensitive housing development

*Policy .6 Sensitive Infill.*<sup>2</sup> Encourage new development or redevelopment in existing residential areas to be sensitive to or reflect the character of the neighbourhood with respect to building design, height and siting.

### 6.0 Technical Comments

#### 6.1 Development Engineering Department

This application does not compromise any City of Kelowna municipal infrastructure. All Development Engineering requirements regarding the two-lot subdivision are to be addressed in the Preliminary Layout Review Agreement.

<sup>1</sup> City of Kelowna Official Community Plan, Policy 5.2.3 (Development Process Chapter).

<sup>2</sup> City of Kelowna Official Community Plan, Policy 5.22.6 (Development Process Chapter).

## **7.0 Application Chronology**

Date of Application Received: September 9, 2020

Date Public Consultation Completed: October 19, 2020

**Report prepared by:** Sergio Sartori, Development Technician

**Reviewed by:** Dean Strachan, Community Planning & Development Manager

**Approved for Inclusion:** Terry Barton, Development Planning Department Manager

### **Attachments**

Schedule A: Proposed Site Plan

Attachment A: Draft Development Variance Permit DVP20-0172

# Development Variance Permit DVP20-0172

ATTACHMENT A

This forms part of application

# DVP20-0172

Planner  
Initials

SS

City of  
**Kelowna**  
DEVELOPMENT PLANNING



This permit relates to land in the City of Kelowna municipally known as

**154 Applebrooke Cres**

and legally known as

Lot 46 Section 5 Township 23 ODYD Plan KAP47769

and permits the land to be used for the development with variances to the following sections of the Zoning Bylaw 8000,  
as shown on Schedule "A":

## **Section 13.2.5(a): RU2- Medium Lot Housing Subdivision Regulations**

To vary the required minimum lot width from 13.0m permitted to 11.52m proposed for the proposed Lot A.

## **Section 13.2.6(a): RU2- Medium Lot Housing Development Regulations**

To vary the required maximum site coverage from 50% permitted to 57% proposed for the remainder Lot 46.

## **Section 13.2.6(e): RU2- Medium Lot Housing Development Regulations**

To vary the required minimum rear yard setback from 7.5m permitted to 4.34m proposed for the remainder Lot 46 on the existing dwelling.

The development has been approved subject to any attached terms and conditions, and to full compliance with the approved plans bearing the stamp of approval and the above described development permit number.

The present owner and any subsequent owner of the above described land must comply with any attached terms and conditions.

Date of Decision: December 8th, 2020

Decision By: CITY COUNCIL

Issued Date: DATE

**This permit will not be valid if development has not commenced within 2 years of the council approved Date of Decision.**

Existing Zone: RU2 – Medium Lot Housing

Future Land Use Designation: S2RES – Single Two Unit Residential

## **This is NOT a Building Permit.**

In addition to your Development Permit, a Building Permit may be required prior to any work commencing. For further information, contact the City of Kelowna, Development Services Branch.

## **NOTICE**

This permit does not relieve the owner or the owner's authorized agent from full compliance with the requirements of any federal, provincial or other municipal legislation, or the terms and conditions of any easement, covenant, building scheme or agreement affecting the building or land.

Owner: John Smit, Cynthia Smit & Isaac Smit

Applicant: McElhanney Ltd, Jonathan Austin

\_\_\_\_\_  
Dean Strachan, Suburban and Rural Planning Manager  
Planning & Development Services

\_\_\_\_\_  
Date

### 1. SCOPE OF APPROVAL

This Development Permit applies to and only to those lands within the Municipality as described above, and any and all buildings, structures and other development thereon.

This Development Permit is issued subject to compliance with all of the Bylaws of the Municipality applicable thereto, except as specifically varied or supplemented by this permit, noted in the Terms and Conditions below.

The issuance of a permit limits the permit holder to be in strict compliance with regulations of the Zoning Bylaw and all other Bylaws unless specific variances have been authorized by the Development Permit. No implied variances from bylaw provisions shall be granted by virtue of drawing notations that are inconsistent with bylaw provisions and that may not have been identified as required Variances by the applicant or Municipal staff.

### 2. CONDITIONS OF APPROVAL

- a) The dimensions of the proposed lot layout be registered on the land be in accordance with Schedule "A";

This Development Permit is valid for two (2) years from the Council Date of Decision if applicable, or Community Planning Department Manager approval, with no opportunity to extend.

### 3. PERFORMANCE SECURITY

As a condition of the issuance of this Permit, Council is holding the security set out below to ensure that development is carried out in accordance with the terms and conditions of this Permit. Should any interest be earned upon the security, it shall accrue to the Developer and be paid to the Developer or his or her designate if the security is returned. The condition of the posting of the security is that should the Developer fail to carry out the development hereby authorized, according to the terms and conditions of this Permit within the time provided, the Municipality may use enter into an agreement with the property owner of the day to have the work carried out, and any surplus shall be paid over to the property own of the day. Should the Developer carry out the development permitted by this Permit within the time set out above, the security shall be returned to the Developer or his or her designate. There is filed accordingly:

- a) n/a

### 4. Indemnification

Upon commencement of the works authorized by this Permit the Developer covenants and agrees to save harmless and effectually indemnify the Municipality against:

- a) All actions and proceedings, costs, damages, expenses, claims, and demands whatsoever and by whomsoever brought, by reason of the Municipality said Permit.

All costs, expenses, claims that may be incurred by the Municipality where the construction, engineering or other types of works as called for by the Permit results in damages to any property owned in whole or in part by the Municipality or which the Municipality by duty or custom is obliged, directly or indirectly in any way or to any degree, to construct, repair, or maintain.

**The PERMIT HOLDER is the CURRENT LAND OWNER.  
Security shall ONLY be returned to the signatory of the  
Landscape Agreement or their designates.**



SCHEDULE

A

This forms part of application

# DVP20-0172

Planner

Initials

SS

City of Kelowna

DEVELOPMENT PLANNING

PROPOSED SUBDIVISION PLAN OF

LOT 46

SECTION 5 TOWNSHIP 23

OSOYOOS DIVISION YALE DISTRICT

PLAN KAP47769

BCGS 82E.093

CIVIC ADDRESS:

154 APPLEBROOKE CRESCENT, KELOWNA, BC

ZONING:

MEDIUM LOT HOUSING (RU2)

PROPOSED VARIANCES:

REAR-YARD SETBACK AND SITE COVERAGE (PROPOSED REMAINDER LOT 46) AND MINIMUM LOT WIDTH (PROPOSED LOT A)

APPLICANT:

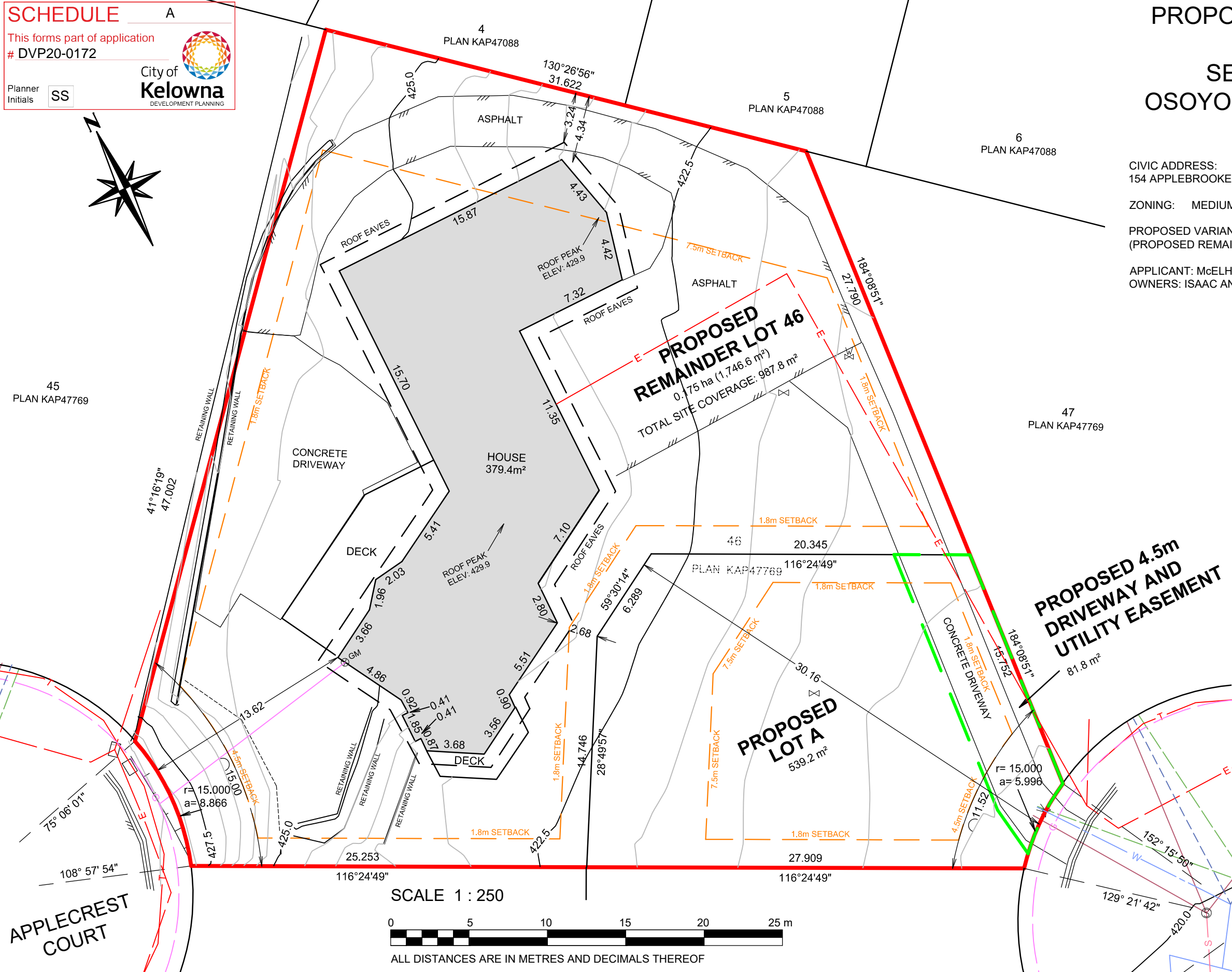
McELHANNEY LTD.

OWNERS:

ISAAC ANTHONY SMIT, JOHN ANTHONY SMIT, CYNTHIA JANETTE SMIT

EXISTING	
	EDGE OF PAVEMENT
	BOTTOM OF BANK
	TOP OF BANK
	MANHOLE - SANITARY
	MANHOLE - STORM
	METER - GAS
	VALVE - IRRIGATION
	VALVE - WATER
FIELD SURVEY COMPLETE AS OF JUNE 11, 2002.	
COMPILED (AS-BUILT DRAWINGS)	
	STORM SEWER
	STORM SERVICE
	SANITARY SEWER
	SANITARY SERVICE
	WATER MAIN
	WATER SERVICE
	GAS
	BURIED TEL
	BURIED ELEC

DIMENSIONS AND AREAS SUBJECT TO FINAL SURVEY.



McElhanney

McELHANNEY ASSOCIATES

LAND SURVEYING LTD.

290 Nanaimo Ave. W

Penticton BC

Canada V2A 1N5

Tel 250 492 7399

FILE NO.

2422-03773-00

DRAWING NO.

3773-00-V-SUBP.DWG





# DVP20-0172

# 154 Applebrooke Cres.

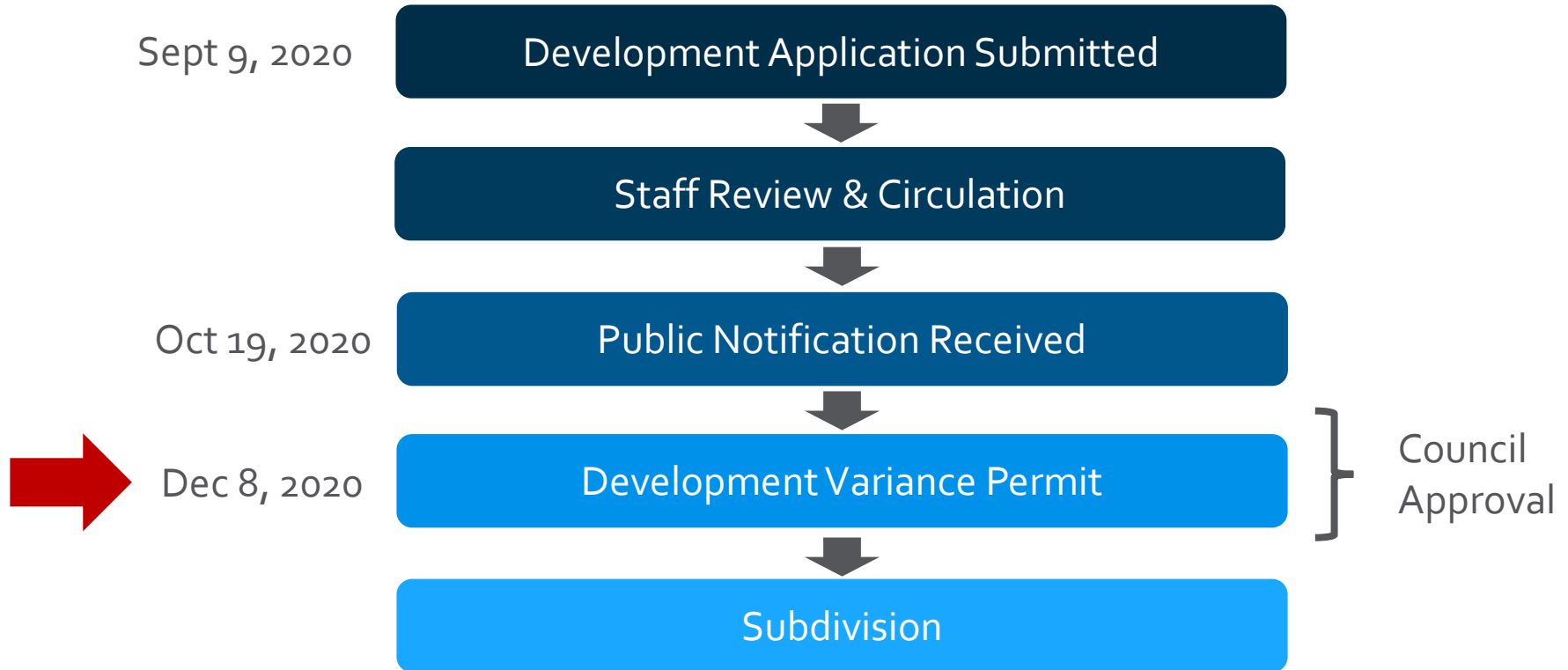
Development Variance Permit Application



# Proposal

- ▶ To consider a Staff recommendation to issue a Development Variance Permit to reduce the required lot width, maximum site coverage and minimum rear yard setback for a proposed 2 lot subdivision.

# Development Process

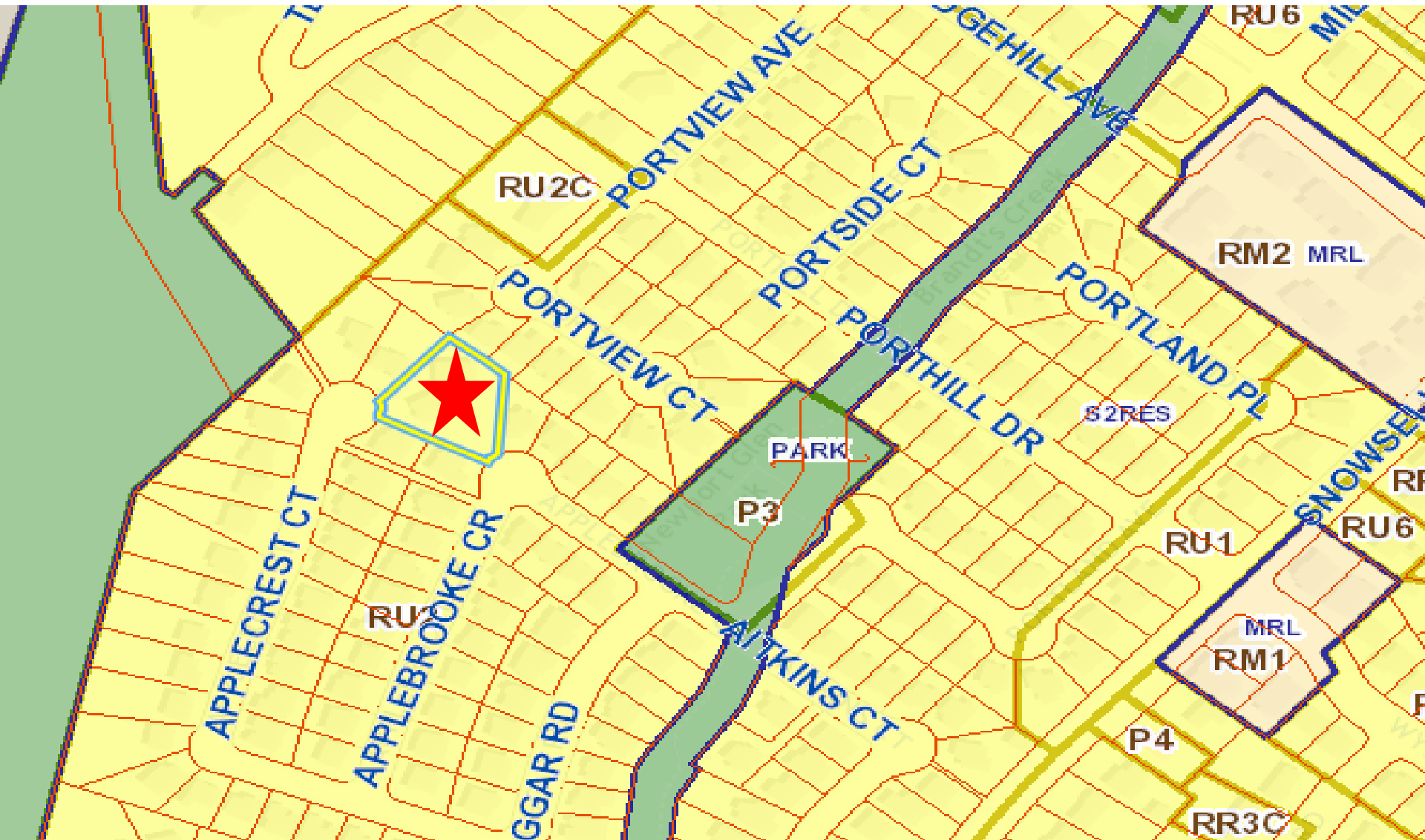


# Context Map





# OCP Future Land Use / Zoning



# Subject Property Map

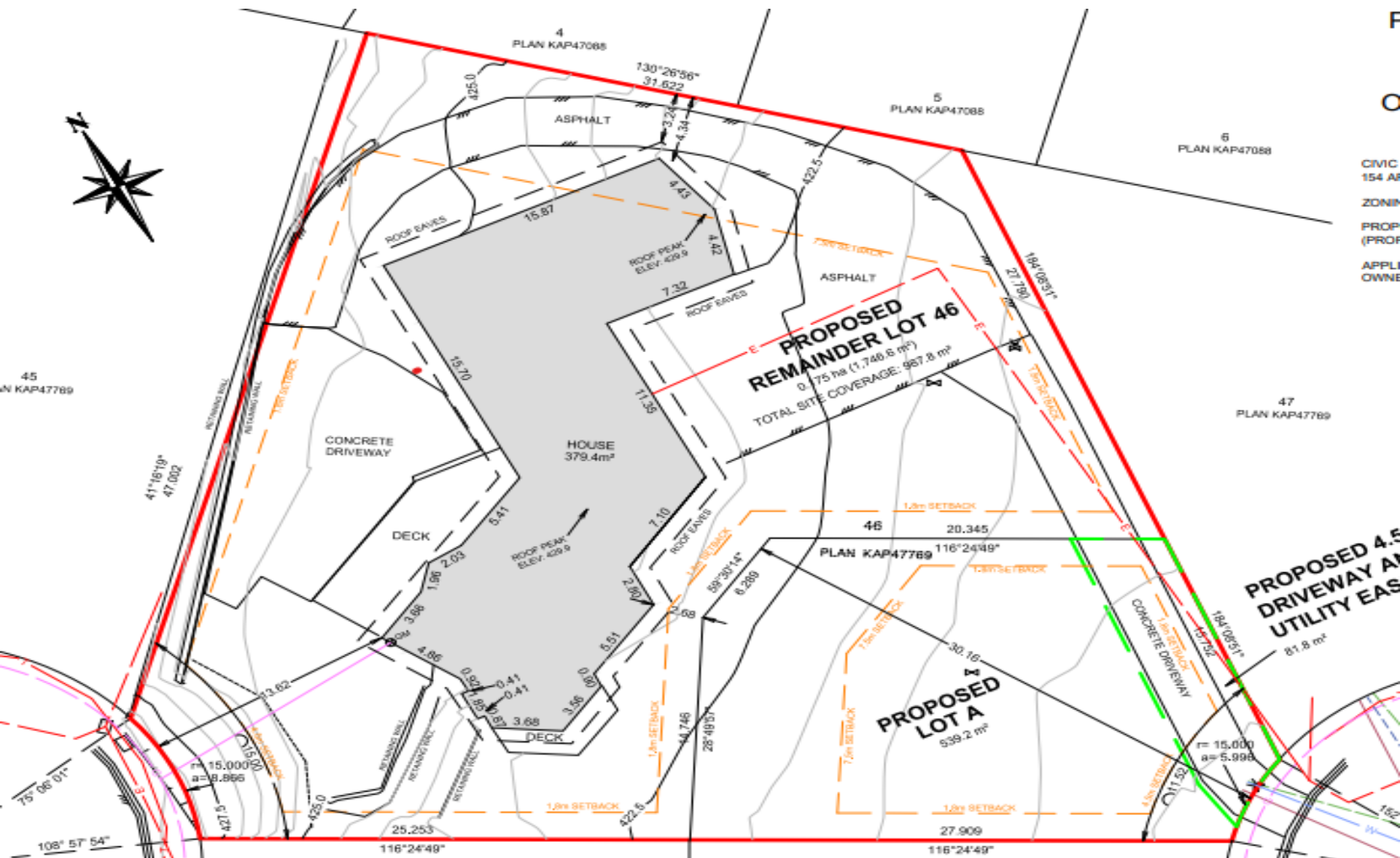




# Project Description

- ▶ Applicant proposes to create two RU2 zoned, single dwelling residential lots

## 56



# Staff Recommendation

- ▶ Staff recommend **support** of the proposed Development Variance Permit application
  - ▶ No negative impacts are anticipated by the variance
  - ▶ Meets the intent of the Official Community Plan
  - ▶ Meets the intent of the RU2 - Medium Lot Housing zone



## *Conclusion of Staff Remarks*

**CITY OF KELOWNA**  
**BYLAW NO. 12080**  
**Z18-0011 – 1193 St Paul Street**

---

A bylaw to amend the "City of Kelowna Zoning Bylaw No. 8000".

The Municipal Council of the City of Kelowna, in open meeting assembled, enacts as follows:

1. THAT City of Kelowna Zoning Bylaw No. 8000 be amended by changing the zoning classification of Lot 1 District Lot 139 ODYD Plan 54107 located on St Paul Street, Kelowna, BC from the I4 – Central Industrial zone to the C7 – Central Business Commercial zone.
2. This bylaw shall come into full force and effect and is binding on all persons as and from the date of adoption.

Read a first time by the Municipal Council this 24<sup>th</sup> day of August, 2020.

Considered at a Public Hearing on the 15<sup>th</sup> day of September, 2020.

Read a second and third time by the Municipal Council this 15<sup>th</sup> day of September, 2020.

Adopted by the Municipal Council of the City of Kelowna this

---

Mayor

---

City Clerk

# REPORT TO COUNCIL



**Date:** December 8, 2020

**To:** Council

**From:** City Manager

**Department:** Development Planning Department

**Application:** DP19-0218 / DVP18-0029

**Owner:** Evergreen Lands Ltd, Inc. No. BC0382754 (Ken Webster)

**Address:** 1193 St. Paul Street

**Applicant:** Meiklejohn Architects Inc, (Jim Meiklejohn)

**Subject:** Development Permit and Development Variance Permit

**Existing OCP Designation:** COMM - Commercial

**Existing Zone:** C7 – Central Business Commercial

---

## 1.0 Recommendation

THAT final adoption of Rezoning Bylaw No. 12080 (Z18-0011), be considered by Council;

AND THAT Council authorizes the issuance of Development Permit No. DP19-0218 for Lot 1, District Lot 139, ODYD, Plan EPP54107 located at 1193 St. Paul Street, Kelowna, BC, subject to the following:

1. The dimensions and siting of the building to be constructed on the land be in accordance with Schedule "A";
2. The exterior design and finish of the building to be constructed on the land, be in accordance with Schedule "B";
3. That a 3.0 metre no build restrictive covenant be registered on the adjacent parcel to ensure necessary fire separation and proposed openings to the building envelope.

AND THAT Council authorizes the issuance of Development Variance Permit No. DVP18-0029 for Lot 1, District Lot 139, ODYD, Plan EPP54107 located at 1193 St. Paul Street, Kelowna, BC;

AND THAT variances to the following section of Zoning Bylaw No. 8000 be granted:

**Section 14.7.5 (h) – C7 – Central Business Commercial - Development Regulations**

To vary the maximum height before a 3.0 metre setback is required from any property line abutting a street from 16.0 metres to 18.0 metres.



AND THAT the applicant be required to complete the above noted conditions of Council's approval of the Development Permit and Development Variance Permit Application for the permits to be issued;

AND FURTHER THAT this Development Permit and Development Variance Permit is valid for two (2) years from the date of Council approval, with no opportunity to extend.

## 2.0 Purpose

To consider the form and character Development Permit of a proposed five storey hotel with one variance to increase the maximum building height before a setback is required.

## 3.0 Development Planning

### 3.1 Development Permit

Staff are recommending support for the proposed Development Permit due to the proposal's consistency with the Official Community Plan's (OCP) design guidelines. The building form, character, and massing fit the OCP guidelines. The building materials used are stucco, white colour brick veneer, and corrugated metal siding. The project should complement the land uses and building forms of the recent developments along the Clement Avenue corridor as a gateway into the Downtown.



Fig. 1.1: Artistic Rendering from the corner of Clement Avenue & St. Paul St.

### 3.2 Development Variance Permit

There is one variance to maximum building height before a 3.0 metre setback is required. The applicant is requesting a variance to increase this height limit from 16.0 metres to 18.0 metres. Staff are recommending support for this variance as the intention of the regulation is to have a maximum podium height with tower projects in order to ensure enough sunlight on adjacent sidewalks and to ensure pedestrian / human scaled developments. In this case, the total height of the building is five storeys and the building is designed at a pedestrian and human-scale mainly due to the active hotel units through the building's upper floors.

### 3.3 Parking

Since this application was submitted prior to the new parking regulations taking effect in November of 2019, the applicant qualifies for being grandfathered into the old parking regulations and will be providing 37 parking stalls. The applicant submitted the following statements to staff regarding future parking management:

“We have been in communication with the City of Kelowna’s Parking Services specifically regarding parking related to our proposed development at 1193 St Paul. We believe downtown user transportation patterns are demanding less parking per hotel suite over time. However, if there is ever a need for additional parking, we have made arrangements with Parking Services to allocate overflow hotel parking within nearby and available City parking lots including the library parkade if necessary. Further, both we and Parking Services believe there are complimentary synergies with parking facilities as the peak demand for hotel users tends to be at night when the demand from other parking sources is typically low.”

## 4.0 Proposal

### 4.1 Project Description

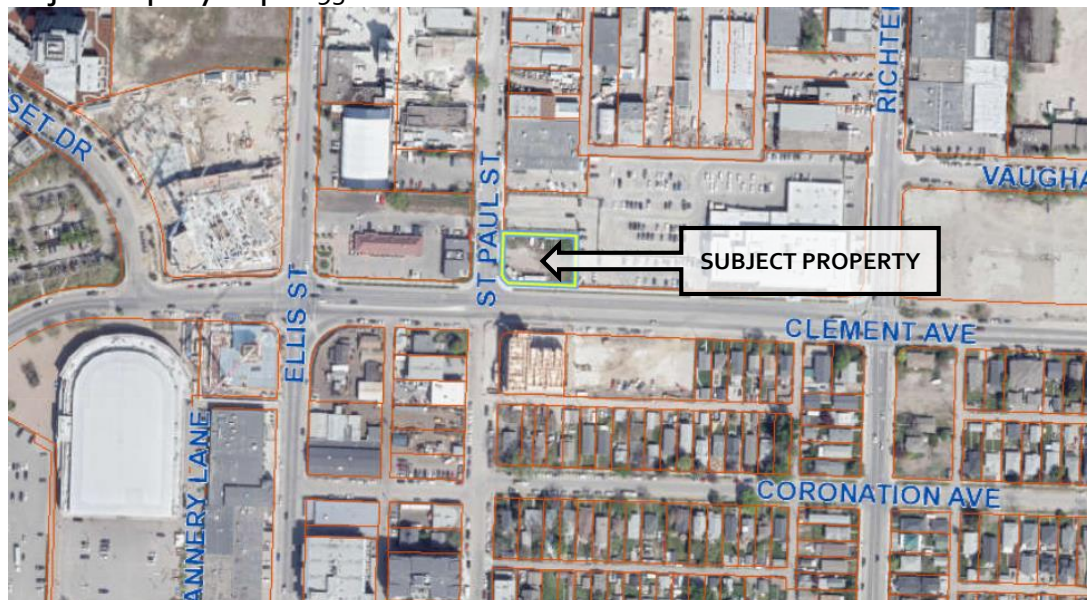
The development proposal is for 88 hotel units with 37 parking stalls, 10 bicycle parking stalls, a Floor Area Ratio of 2.04, and 18.0 metres in height with five total storeys. Staff are tracking one variance related height as the C7 zone has a maximum 16.0 metres podium height before a setback is required.

### 4.2 Site Context

Specifically, adjacent land uses are as follows:

Orientation	Zoning	Land Use
North	P1 – Major Institutional	Kelowna Police Services Building (RCMP)
East	P1 – Major Institutional	Kelowna Police Services Building (RCMP)
South	C7 – Central Business Commercial	Apartment Condos
West	I4 – Central Industrial	Train Station Pub and Liquor Store

### Subject Property Map: 1193 St. Paul Street



4.3 Zoning Analysis Table

Zoning Analysis Table		
CRITERIA	C7 ZONE REQUIREMENTS	PROPOSAL
Unit Calculation		
Hotel Units	n/a	88
Development Regulations		
Max. Floor Area Ratio	9.0	2.04
Max. Height	22.0 m	18.0 m / 5 storeys
Max. Podium Height before a 3.0 metre setback is required	16.0 m	18.0 m ❶
Min. Front Yard	0.0 m	0.0 m
Min. Flanking Side Yard	0.0 m	0.0 m
Min. Side Yard	0.0 m	0.0 m
Min. Rear Yard	0.0 m	0.0 m
Other Regulations		
Min. Parking Requirements	37	37
Min. Bicycle Parking	Class 1: 5 bikes Class 2: 5 bikes	Class 1: 5 bikes Class 2: 5 bikes
Min. Private Open Space	n/a	n/a
Min. Loading Space	0	0
❶ Indicates a requested variance to increase building height before a 3 metre setback is required.		

5.0 **Current Development Policies**5.1 Kelowna Official Community Plan (OCP)**Chapter 1: Introduction**

**Contain urban growth.** Reduce greenfield urban sprawl and focus growth in compact, connected and mixed-use (residential and commercial) urban and village centres.

**Chapter 4: Future Land Use**

**Mixed Use.** Integration of residential uses into commercial developments as mixed-use projects is encouraged in Urban Centres, provided that the ground floor use remains commercial.

**OCP Land Use Designation Massing and Height.**

- Mitigate the actual and perceived bulk of buildings by utilizing appropriate massing, including:
- Architectural elements (e.g. balconies, bay windows, cantilevered floors, cupolas, dormers);
- Visually-interesting rooflines (e.g. variations in cornice lines and roof slopes);
- Step back upper floors to reduce visual impact;
- Detailing that creates a rhythm and visual interest along the line of the building;
- Wall projections and indentations, windows and siding treatments as well as varied material textures should be utilized to create visual interest and to articulate building facades;
- Building frontages that vary architectural treatment in regular intervals in order to maintain diverse and aesthetically appealing streets.

## **Chapter 5: Development Process**

**Compact Urban Form.** (Policy 5.2.3) Develop a compact urban form that maximizes the use of existing infrastructure and contributes to energy efficient settlement patterns. This will be done by increasing densities (approximately 75 - 100 people and/or jobs located within a 400 metre walking distance of transit stops is required to support the level of transit service) through development, conversion, and re-development within Urban Centres (see Map 5.3) in particular and existing areas as per the provisions of the Generalized Future Land Use Map 4.1.

**Ensure appropriate and context sensitive built form** (OCP Objective 5.5).

**Building Height.** In determining appropriate building height, the City will take into account such factors as:

- Contextual fit into the surrounding neighbourhood;
- Shadowing of the public realm;
- View impacts;
- Overlook and privacy impact on neighbouring buildings;
- Impacts on the overall skyline;
- Impacts on adjacent or nearby heritage structures;

## **Chapter 14: OCP Urban Design Guidelines**

### **Amenities, ancillary Services and Utilities.**

- Locate loading, garbage, storage, utilities and other ancillary services away from public view. All such areas shall be screened and designed as an integral part of the building to minimize impact;
- Create attractive rear alley facades with high quality materials on buildings facing residential areas (e.g. rear building entrances, windows, balconies, plazas, and plantings).

## **6.o Application Chronology**

Date of Application Received:	Jan 23 <sup>rd</sup> 2018
Date Public Consultation Completed:	Feb 21 <sup>st</sup> 2020
Date of First Reading:	Aug 24 <sup>th</sup> 2020
Date Public Hearing:	Sept 15 <sup>th</sup> 2020

**Report prepared by:** Adam Cseke, Planner Specialist  
**Reviewed and Approved by:** Jocelyn Black, Urban Planning Manager  
 Terry Barton, Development Planning Department Manager  
 Ryan Smith, Divisional Director, Planning & Development Services

### **Attachments:**

Draft Development Permit

# DRAFT Development Permit & Development Variance Permit DP19-0218 / DVP18-0029



This permit relates to land in the City of Kelowna municipally known as

1193 St. Paul Street

and legally known as

Lot 1, District Lot 139, ODYD, Plan EPP54107

and permits the land to be used for an apartment building as described in Schedule 'A', 'B', and 'C' (if necessary).

The present owner and any subsequent owner of the above described land must comply with any attached terms and conditions.

Date of Council Decision Dec 8<sup>th</sup> 2020

Decision By: COUNCIL

Development Permit Area: Comprehensive

Existing Zone: C7 – Central Business Commercial

Future Land Use Designation: COMM - Commercial

## **This is NOT a Building Permit.**

In addition to your Development Permit, a Building Permit may be required prior to any work commencing. For further information, contact the City of Kelowna, Development Services Branch.

## **NOTICE**

This permit does not relieve the owner or the owner's authorized agent from full compliance with the requirements of any federal, provincial or other municipal legislation, or the terms and conditions of any easement, covenant, building scheme or agreement affecting the building or land.

Owner: Evergreen Lands Ltd (Ken Webster)

Applicant: Meiklejohn Architects Inc, (Jim Meiklejohn)

Planner: AC

---

Terry Barton  
Community Planning Department Manager  
Planning & Development Services

---

Date

## 1. SCOPE OF APPROVAL

This Development Permit applies to and only to those lands within the Municipality as described above, and any and all buildings, structures and other development thereon.

This Development Permit is issued subject to compliance with all of the Bylaws of the Municipality applicable thereto, except as specifically varied or supplemented by this permit, noted in the Terms and Conditions below.

The issuance of a permit limits the permit holder to be in strict compliance with regulations of the Zoning Bylaw and all other Bylaws unless specific variances have been authorized by the Development Permit. No implied variances from bylaw provisions shall be granted by virtue of drawing notations that are inconsistent with bylaw provisions and that may not have been identified as required Variances by the applicant or Municipal staff.

## 2. CONDITIONS OF APPROVAL

- a) The dimensions and siting of the building to be constructed on the land be in accordance with Schedule "A";
- b) The exterior design and finish of the building to be constructed on the land be in accordance with Schedule "B";

AND THAT the variances to the following sections of Zoning Bylaw No. 8000 be granted, as shown on Schedule "A & B":

### **Section 14.7.5 (h) – C7 – Central Business Commercial - Development Regulations**

To vary the maximum height before a 3.0 metre setback is required from any property line abutting a street from 16.0 metres to 18.0 metres

This Development Permit and Development Variance Permit is valid for two (2) years from the date of approval, with no opportunity to extend.

## 3. PERFORMANCE SECURITY

n/a

## 5. INDEMNIFICATION

Upon commencement of the works authorized by this Permit the Developer covenants and agrees to save harmless and effectually indemnify the Municipality against:

- a) All actions and proceedings, costs, damages, expenses, claims, and demands whatsoever and by whomsoever brought, by reason of the Municipality said Permit.

All costs, expenses, claims that may be incurred by the Municipality where the construction, engineering or other types of works as called for by the Permit results in damages to any property owned in whole or in part by the Municipality or which the Municipality by duty or custom is obliged, directly or indirectly in any way or to any degree, to construct, repair, or maintain.

**The PERMIT HOLDER is the CURRENT LAND OWNER.  
Security shall ONLY be returned to the signatory of the  
Landscape Agreement or their designates.**







BUILDING AND FLOOR AREAS:

		±sf	±sf	±sm	FOOTPRINT AREA FOR BUILDING CLASSIFICATION: 14,610 sf (1,357 sm)
L1 LOBBY			1,800	167.2	
UNIT TYPE	QUANTITY				
A	11	312	3,432		
A1	16	312	4,992		
A2	40	312	12,480		
A3	4	490	1,960		
A4	4	380	1,520		
A5	4	312	1,248		
A6	3	312	936		
A7	3	384	1,152		
A8	3	312	936		
Subtotal	88		28,656	2,662	
Total			30,456	2,829	

FIRE PROTECTION: 3.2.4./ 3.2.5./ 3.2.6.		
LOCATION OF HYDRANT TO SIAMESE CONNECTION	45 m MAX.	3.2.5.5.
STANDPIPE/HOSE	YES (IN EACH STAIR SHAFT)	3.2.5.8.
SPRINKLERED	YES (NFPA 13)	
FIRE ALARM SYSTEM	YES	3.2.4.1.(2)(f)
EXIT LIGHTS	YES	
EMERGENCY LIGHTING	YES	

OCCUPANT LOAD TABLE 3.1.17.1.		
L1 - LOBBY	1 person / 3.7 sm retail x 167.2 sm	45 person
L1 - OUTDOOR PARKING AREA	1 person / 46 sm garage x 966.2 sm	21 person
L2 HOTEL UNITS	2 person / sleeping room x 19 rooms	38 person
L3 HOTEL UNITS	2 person / sleeping room x 23 rooms	46 person
L4 HOTEL UNITS	2 person / sleeping room x 23 rooms	46 person
L5 HOTEL UNITS	2 person / sleeping room x 23 rooms	46 person

EXIT FACILITIES			3.1 TO 3.6
REQUIRED EXITS	2 MIN. PER FLOOR		
	min. 800mm door width as per 3.4.3.2.(A)		
	min. 1100mm stair width as per 3.4.3.2.(A)		
DOOR WIDTH	REQUIRED WIDTHS		PROVIDED WIDTHS
L1 LOBBY	6.1mm/person x 45 person	800 mm	MIN. 1 door @ 36" (914mm)
L1 OUTDOOR PARKING (10,400 SF)	6.1mm/person x 21 person	800 mm	2 doors @ 36" = 72" (1828mm)
L2 TO L5 HOTEL UNITS	6.1mm/person x 46 person per floor	800 mm	2 doors @ 36" = 72" (1828mm)
STAIR WIDTH	REQUIRED WIDTHS		PROVIDED WIDTHS
L2 TO L5 HOTEL UNITS	8.0mm/person x 46 person per floor	1100 mm	2 stairs @ 44" = 88" (2236mm)
UNITS	min. 1 door @ 800mm (each unit)		36" (914mm) door @ each unit
EXIT THROUGH LOBBY	yes		3.4.4.2.
PANIC HARDWARE REQ'D	yes (at exterior stair doors)		3.4.6.16.(2)
EXIT EXPOSURE	ok		3.2.3.13.
MAX. TRAVEL DISTANCE	45m		3.4.2.5.(1)
EXIT RATINGS REQUIRED:			
STAIR SHAFTS	1 HR (1.5 HR @ Parkade)		3.4.4.1.
CORRIDORS	1 HR		3.3.2.6.(4)

REQUIRED FIRE SEPARATIONS 3.1.3.1.		
TENANTS / MAJOR OCCUPANCIES		
GROUP C TO C	1 HR	3.3.1.1.
GROUP F3 TO C	1.5 HR	
SERVICES ROOMS	1 HR	3.6.2.
JANITOR ROOM	Non-Rated Fire Separation	

BUILDING CODE REVIEW			
OCCUPANCY	GROUP C	GROUP F3	GROUP E
ARTICLE	3.2.2.50	3.2.2.50 (5)	3.2.2.50 (5)
NO. OF STOREYS	5 STOREYS		
NO. OF STREETS FACING	2		
MAX. BUILDING AREA	PROPOSED	CODE MAX.	
	1357.3± sm	1,800 sm	
CONSTRUCTION TYPE	COMBUSTIBLE (NON-COMBUSTIBLE LEVEL 1)		
SPRINKLERED	YES		
ASSEMBLY RATINGS:			
FLOOR	1 HR (1.5 HR RATING ABOVE PARKADE)		
WALLS / BEARING STRUCTURE	1 HR (1.5 HR RATING FOR PARKADE)		
ROOFS	1 HR		

BUILDING FIRE SAFETY		
SOFFIT PROTECTION	N/A (SPRINKLERED)	3.2.3.16.
FLAME SPREAD RATINGS	COMPLY WITH	3.1.13.2
METAL DECK ASSEMBLIES	N/A	3.1.14.2.
ROOF COVERING CLASSIFICATION	CLASS "A"	3.1.15.2.
ATTIC FIRESTOPS	YES	3.1.11.
MAX. ATTIC AREA	300 sm	3.1.11.5.
MAX. CRAWLSPACE AREA	N/A	3.1.11.6.
CONCEALED FLOOR AREA	N/A	3.1.11.5.

ACCESSIBILITY REQUIREMENTS 3.8.		
	REQUIRED	PROVIDED
ACCESS TO MAIN ENTRANCES	YES	YES
ACCESS TO ALL FLOORS	YES	YES
ACCESSIBLE WASHROOM	YES	YES
1 PER 40 HOTEL ROOMS	YES	YES
1 PER 20 HOTEL ROOM VISIBLE WARNING SYSTEM	YES	YES

WASHROOM FIXTURES REQUIREMENTS	
LEVEL 1 - LOBBY	
1 REQ'D FOR PUBLIC ACCESS (CONFIRMED AT BP STAGE)	
MIN. 1 REQ'D / HOTEL UNIT	3.7.2.2.(11)

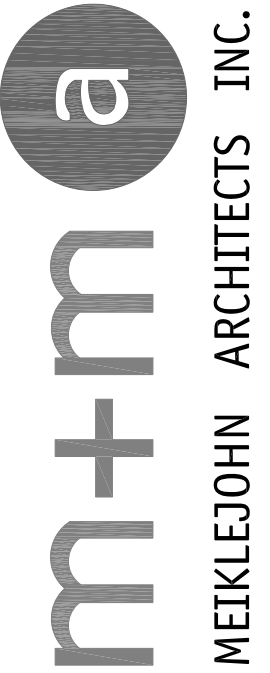
PARKING CALCULATIONS						
STALL SIZE	WIDTH (min)		LENGTH (min)		HEIGHT (min)	
FULL SIZE STALL	8'-3"	2.5m	19'-8"	6.0m	6'-6"	2.0m
MEDIUM SIZE STALL (40% max)	7'-7"	2.3m	15'-9"	4.8m		
COMPACT SIZE STALL (10% max)	6'-7"	2.0m	11'-2"	3.4m		
DISABLED STALL	12'-2"	3.7m	19'-8"	6.0m		
DRIVE AISLES (2-way 90° pkg)	23'-0"	7.0m				
PARKING SCHEDULE:						
COMMERCIAL USE	1.3 per 100 sm GFA					
	ZONING		REQUIRED STALL			
TOTAL GFA	2,829 sm		36.78			
TOTAL PARKING REQUIRED:			37 STALLS			
TOTAL PROVIDED			37 STALLS			
PARKING RATIO:			Required		Proposed	
FULL SIZE STALL	N/A		17	regular		
HC STALL	1		1	hc		
MEDIUM SIZE STALL (40% max)	15 max.		15	mc		
COMPACT SIZE STALL (10% max)	4 max.		4	cc		
NOTE: MEDIUM STALL LABELLED "COMPACT" FOR ZONING.						

SPATIAL SEPARATION: 3.2.3.1.D		
	SOUTH (FRONT) & WEST WALL	EAST / NORTH WALL
WALL AREA	WINDOW OPENINGS & WALL CONSTRUCTION UN-RESTRICTED. BLDG FACES A STREET IN ACCORDANCE WITH 3.2.3.10	NOTE: EQUIVALENCY TO BE PREPARED AT BP APPLICATION TO ADDRESS WINDOWS ADJACENT TO THE PROPERTY LINES.
OPENING AREA		
% PROVIDED		
LIMITING DISTANCE		
% PERMITTED		
CONSTRUCTION TYPE		
CLADDING MATERIAL		
REQUIRED RATINGS		

ZONING SUMMARY 1193 St Paul Street Kelowna V1Y 2C6 C7		
ADDRESS	1193 St Paul Street	
LEGAL DESCRIPTION	Lot 1 Plan EPP54107 DL 139	
DEVELOPMENT PERMIT AREA	Yes	
EXISTING ZONING	I-4 central industrial	
PROPOSED ZONING	C-7 central business commercial (HOTEL)	
EXISTING LEGAL USE	vacant	
GRADES	Existing Average- Level	Finish Average - Level
NUMBER OF BUILDINGS	5 storey mixed-use building	
CRITERIA FOR ALL TYPES OF APPLICATION:	C7 Central Business Commercial	
	ZONING STANDARD	PROPOSAL (±)
SITE AREA (sm)	200 sm	1,390 sm (0.139 ha)
SITE WIDTH (m)	6.0m	44.816m
SITE DEPTH (m)	30.0m	38.984m
OFF-STREET PARKING	37 stall min. (see parking calcs)	37 stall
PRIVATE OPEN SPACE	N/A	N/A
HEIGHT OF BUILDING (S)/# OF STOREYS	22.0m max.	17.6 m / 5 storey
SITE COVERAGE OF BUILDING(S) (%)	N.A.	N.A.
SITE COVERAGE INCLUDING BUILDINGS, DRIVEWAYS AND PARKING (%)	N.A.	N.A.
ADDITIONAL REQUIREMENTS FOR COMMERCIAL, INDUSTRIAL AND MULTIPLE UNIT / INTENSIVE RESIDENTIAL APPLICATIONS:	C7 Central Business Commercial	
	ZONING STANDARD	PROPOSAL (±)
NUMBER OF BICYCLE PARKING SPACES	Hotel	
Class I (secure parking)	Class I: 1 per 20 sleeping units x 88 units = 5 bikes	Class I: 5 bikes within parkade
Class II (visitor)	Class II: 1 per 20 sleeping units x 88 units = 5 bikes	Class II: 5 bikes (see Site Plan)
NUMBER OF LOADING SPACES	N.A.	1 temp loading
DRIVE AISLE WIDTH (m) (IF PROPOSED)	7.0m	7.0m
SETBACKS TO PARKING (m):		
NORTH (rear)	N.A.	N.A.
SOUTH (front)	N.A.	N.A.
WEST (side)	N.A.	N.A.
EAST (side)	N.A.	N.A.
FLOOR AREA NET	± 12,510 sm max.	2,829 sm
FLOOR AREA RATIO (F.A.R.)	FAR 9.0 max	2.04
BUILDING (S) SETBACKS (m):		
NORTH (rear)	0.0m	0.0m
SOUTH (front)	0.0m	0.0m
EAST (side)	0.0m	0.0m
WEST (side)	0.0m	0.0m
DAYLIGHT ANGLE (if a tower)	N.A.	N.A.
PODIUM HEIGHT (if proposed)	16.0m Max.	DVP-1 17.6m (variance requested)
FLOOR PLATE SIZE (if required)	N.A.	N.A.



233 BERNARD AVENUE  
KELOWNA, B.C.  
V1Y 6N2  
TEL: 250.762.3004  
FAX: 250.762.8707  
EMAIL: kel-mai@shaw.ca



2020-07-22  
REVISED  
DP

Copyright reserved. This plan and design is and at all times remains the exclusive property of Meiklejohn Architects Inc. and may not be used without the Architects' consent.

No.	Date	Revision
1	2017-12-20	Owner's Review
2	2018-1-16	Issue for Development Permit
3	2019-11-14	Issue for revised DP
4	2020-02-05	Revised DP to comply City comments
5	2020-07-22	Revised DP to comply City comments

Project Title

ST PAUL MIXED-USE  
BUILDING - 5 LEVEL

1193 St Paul Kelowna V1Y 2C6

Drawing Number

A1.01

DRAWINGS ARE NOT TO BE SCALED.  
ALL DIMENSIONS SHALL BE VERIFIED ON JOB

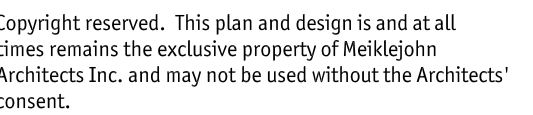
Drawing Title

ZONING SUMMARY

Date	2020-07-22
Job No.	16-1748
Scale	AS Shown
Drawn	SN/DS
Checked	JM



2020-07-22  
REVISED  
DP

[illegible]

Project Title

ST PAUL MIXED-USE  
BUILDING - 5 LEVEL

1193 St Paul Kelowna V1Y 2C6

Drawing Number

## A2.01

DRAWINGS ARE NOT TO BE SCALED.  
ALL DIMENSIONS SHALL BE VERIFIED ON JOB


Drawing Title

## SITE PLAN

scale: 1"=10'-0"

Date	2020-07-22
Job No.	16-1748
Scale	AS Shown
Drawn	SN/DS
Checked	JM

TRUE  
NORTH

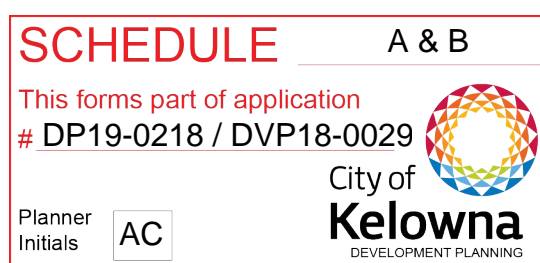


No.	Date	Revision
1	2017-12-20	Owner's Review
2	2018-1-16	Issue for Development Permit
3	2019-11-14	Issue for revised DP
4	2020-02-05	Revised DP to comply City comments
5	2020-07-22	Revised DP to comply City comments

ST PAUL MIXED-USE  
BUILDING - 5 LEVEL


## A3.01

Date	2020-07-22
Job No.	16-1748
Scale	AS Shown
Drawn	SN/DS
Checked	JM





TRUE  
NORTH




No.	Date	Revision
1	2017-12-20	Owner's Review
2	2018-1-16	Issue for Development Permit
3	2019-11-14	Issue for revised DP
4	2020-02-05	Revised DP to comply City comments
5	2020-07-22	Revised DP to comply City comments

## A3.02

Date	2020-07-22
Job No.	16-1748
Scale	AS Shown
Drawn	SN/DS
Checked	JM



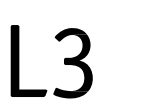
TRUE  
NORTH



No.	Date	Revision
1	2017-12-20	Owner's Review
2	2018-1-16	Issue for Development Permit
3	2019-11-14	Issue for revised DP
4	2020-02-05	Revised DP to comply City comments
5	2020-07-22	Revised DP to comply City comments


### A3.03

Date	2020-07-22
Job No.	16-1748
Scale	AS Shown
Drawn	SN/DS
Checked	JM





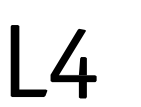
TRUE  
NORTH



No.	Date	Revision
1	2017-12-20	Owner's Review
2	2018-1-16	Issue for Development Permit
3	2019-11-14	Issue for revised DP
4	2020-02-05	Revised DP to comply City comments
5	2020-07-22	Revised DP to comply City comments

### A3.04

Date	2020-07-22
Job No.	16-1748
Scale	AS Shown
Drawn	SN/DS
Checked	JM





**SCHEDULE A & B**  
This forms part of application  
# DP19-0218 / DVP18-0029  
City of Kelowna  
Planner Initials AC

233 BERNARD AVENUE  
KELOWNA, B.C.  
V1Y 6N2  
TEL: 250.762.3004  
FAX: 250.762.8707  
EMAIL: kel-mat@shaw.ca

**m+m** MEIKLEJOHN ARCHITECTS INC.

2020-07-22  
REVISED  
DP

TRUE  
NORTH

Copyright reserved. This plan and design is and at all times remains the exclusive property of Meiklejohn Architects Inc. and may not be used without the Architects' consent.

No.	Date	Revision
1	2017-12-20	Owner's Review
2	2018-1-16	Issue for Development Permit
3	2019-11-14	Issue for revised DP
4	2020-02-05	Revised DP to comply City comments
5	2020-07-22	Revised DP to comply City comments

Project Title

**ST PAUL MIXED-USE  
BUILDING - 5 LEVEL**

1193 St Paul Kelowna V1Y 2C6

Drawing Number

**A3.05**

DRAWINGS ARE NOT TO BE SCALED.  
ALL DIMENSIONS SHALL BE VERIFIED ON JOB

Drawing Title

**LEVEL 5 PLAN**

scale: 1/8"=1'0"

Date	2020-07-22
Job No.	16-1748
Scale	AS SHOWN
Drawn	SN/DS
Checked	JM

**L5**

74

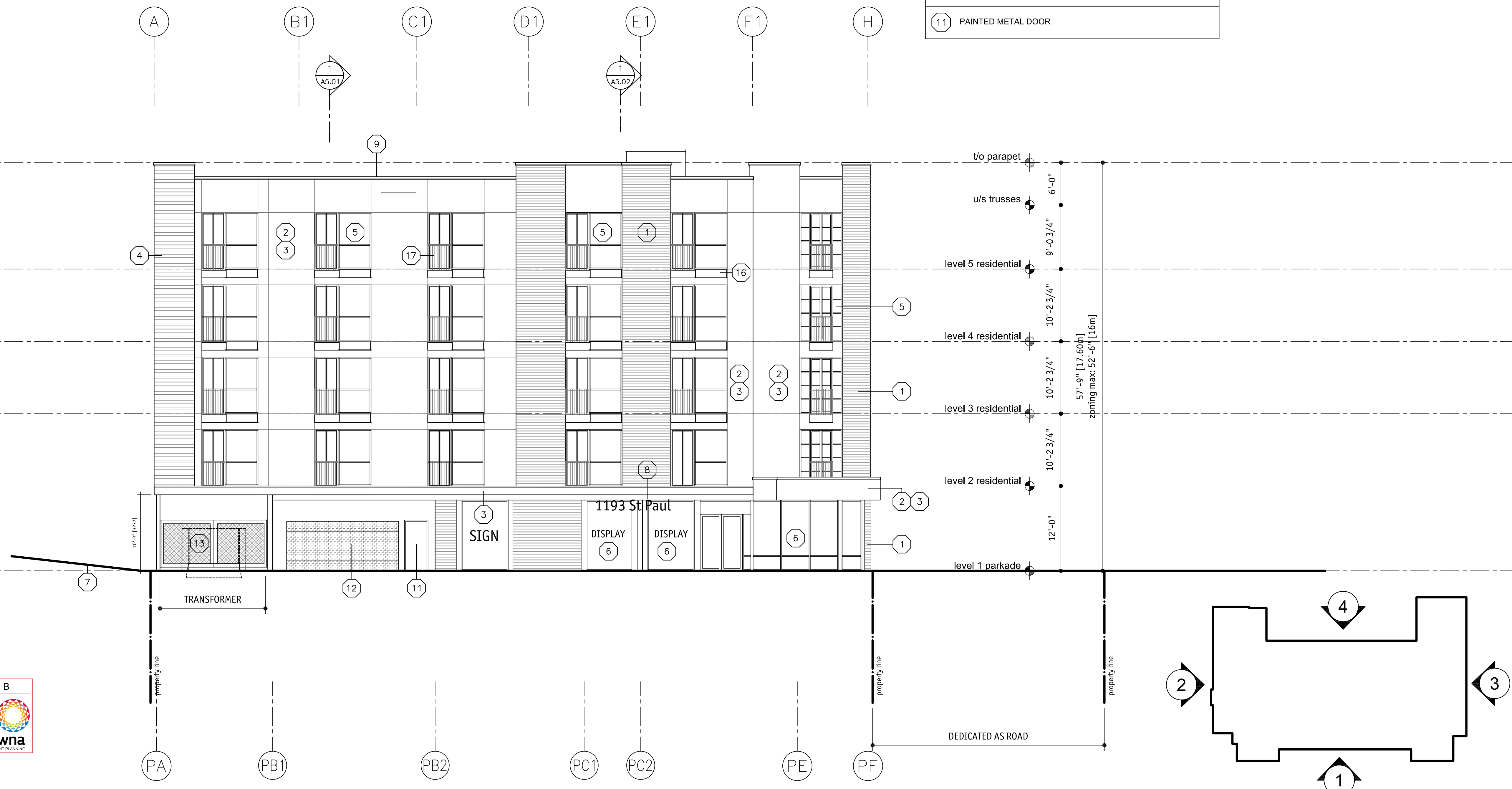
Copyright reserved. This plan and design is and at all times remains the exclusive property of Meiklejohn Architects Inc. and may not be used without the Architects' consent.


[illegible]ST PAUL MIXED-USE  
BUILDING - 5 LEVEL

## A4.01

Date	2020-07-22
Job No.	16-1748
Scale	AS Shown
Drawn	SN/DS
Checked	JM

ELEVATION KEY NOTES	12 PREFINISHED METAL O/H DOOR
ALL COLOURS TO BE CHOSEN BY ARCHITECT FROM APPROVED PRODUCT MANUF.'S STANDARD LINE OF COLOURS.	13 CHAIN LINK GATE
1 BRICK VENEER	14 ALUMINUM / GLASS RAILING
2 STUCCO CONTROL JOINT	15 LIGHT FIXTURE
3 STUCCO FINISH	16 WALL MOUNTED ALUMINUM CANOPY
4 CORRUGATED METAL SIDING	17 ALUM. PICKETS GUARDRAIL
5 VINYL FRAMED RESIDENTIAL WINDOWS / DOORS	18 EXPOSED CONCRETE BLOCK
6 ALUM. WINDOWS / DOORS	19 PERFORATED METAL CLADDING
7 FINISHED GRADES (SEE CIVIL/LANDSCAPE)	20 PREFINISHED RAIN WATER LEADER
8 SIGNAGE	
9 PREFINISHED SHEET METAL FLASHING	
10 EXPOSED ARCHITECTURAL CONCRETE FINISH	
11 PAINTED METAL DOOR	



<h1>SCHEDULE</h1>		<h1>A &amp; B</h1>	
<p>This forms part of application</p> <p># DP19-0218 / DVP18-0029</p>			
Planner Initials	AC	 <p>City of <b>Kelowna</b> DEVELOPMENT PLANNING</p>	



2020-07-22  
REVISED  
DP

NOTE:  
SEE A4.01 FOR ELEVATION KEY NOTE LEGEND  
& KEY PLAN



Copyright reserved. This plan and design is and at all times remains the exclusive property of Meiklejohn Architects Inc. and may not be used without the Architects' consent.

No.	Date	Revision
1	2017-12-20	Owner's Review
2	2018-1-16	Issue for Development Permit
3	2019-11-14	Issue for revised DP
4	2020-02-05	Revised DP to comply City comments
5	2020-07-22	Revised DP to comply City comments

Project Title  
**ST PAUL MIXED-USE  
BUILDING - 5 LEVEL**

1193 St Paul Kelowna V1Y 2C6  
Drawing Number

**A4.02**

DRAWINGS ARE NOT TO BE SCALED.  
ALL DIMENSIONS SHALL BE VERIFIED ON JOB

Drawing Title  
**BUILDING ELEVATION**

scale: 1/8"=1'0"

Date	2020-07-22
Job No.	16-1748
Scale	AS Shown
Drawn	SN/DS
Checked	JM

**SCHEDULE** A & B  
This forms part of application  
# DP19-0218 / DVP18-0029  
City of Kelowna  
DEVELOPMENT PLANNING  
Planner Initials AC

m+m  
MEIKLEJOHN ARCHITECTS INC.

2020-07-22  
REVISED  
DP


Architectural elevation drawing of a building facade. The drawing shows a multi-story building with a ground floor (level 1 parkade) and upper floors (level 2 residential to level 5 residential). The facade is divided into sections by vertical grid lines labeled A through H. Key features include a central entrance area, a large window on the right side, and a small structure on the left. Dimensions are provided for various sections, including a 4'-0" section and a 12'-0" section. A note indicates "DEDICATED AS ROAD" for a section on the left. The drawing is labeled "SCHEDULE A & E" and includes a reference to "DP19-0218 / DVP18-0028".

[illegible]ST PAUL MIXED-USE  
BUILDING - 5 LEVEL

## A4.03

## BUILDING ELEVATION

Date	2020-07-22
Job No.	16-1748
Scale	AS Shown
Drawn	SN/DS
Checked	JM

<b>SCHEDULE</b>		<b>A &amp; B</b>
This forms part of application		
# DP19-0218 / DVP18-0029		
Planner Initials	AC	 <b>City of Kelowna</b> DEVELOPMENT PLANNING



m+m  
MEIKLEJOHN ARCHITECTS INC.

2020-07-22  
REVISED  
DP

This architectural elevation drawing shows a building facade with various annotations. The drawing includes a grid of windows, some of which are labeled with circled numbers (1, 2, 3, 4, 5, 8, 9, 10, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100). The drawing also includes a section labeled 'tin box' and a section labeled 'level 1 parkade'. The drawing is oriented with a north arrow pointing towards the top right. The drawing is a technical drawing and should be used as such.

	Date	Revision
1	2017-12-20	Owner's Review
2	2018-1-16	Issue for Development Permit
3	2019-11-14	Issue for revised DP
4	2020-02-05	Revised DP to comply City comments
5	2020-07-22	Revised DP to comply City comments

ST PAUL MIXED-USE  
BUILDING - 5 LEVEL

193 St Paul Kelowna V1Y 2C6

A4.04

DRAWINGS ARE NOT TO BE SCALED.  
ALL DIMENSIONS SHALL BE VERIFIED ON JOB

## BUILDING ELEVATION

Scale: 1/8"=1'0"

Date	2020-07-22
Job No.	16-1748
Scale	AS Shown
Drawn	SM/DS
Checked	JM

**SCHEDULE** **A & B**

This forms part of application  
**# DP19-0218 / DVP18-0029**

Planner Initials

City of Kelowna  
 DEVELOPMENT PLANNING

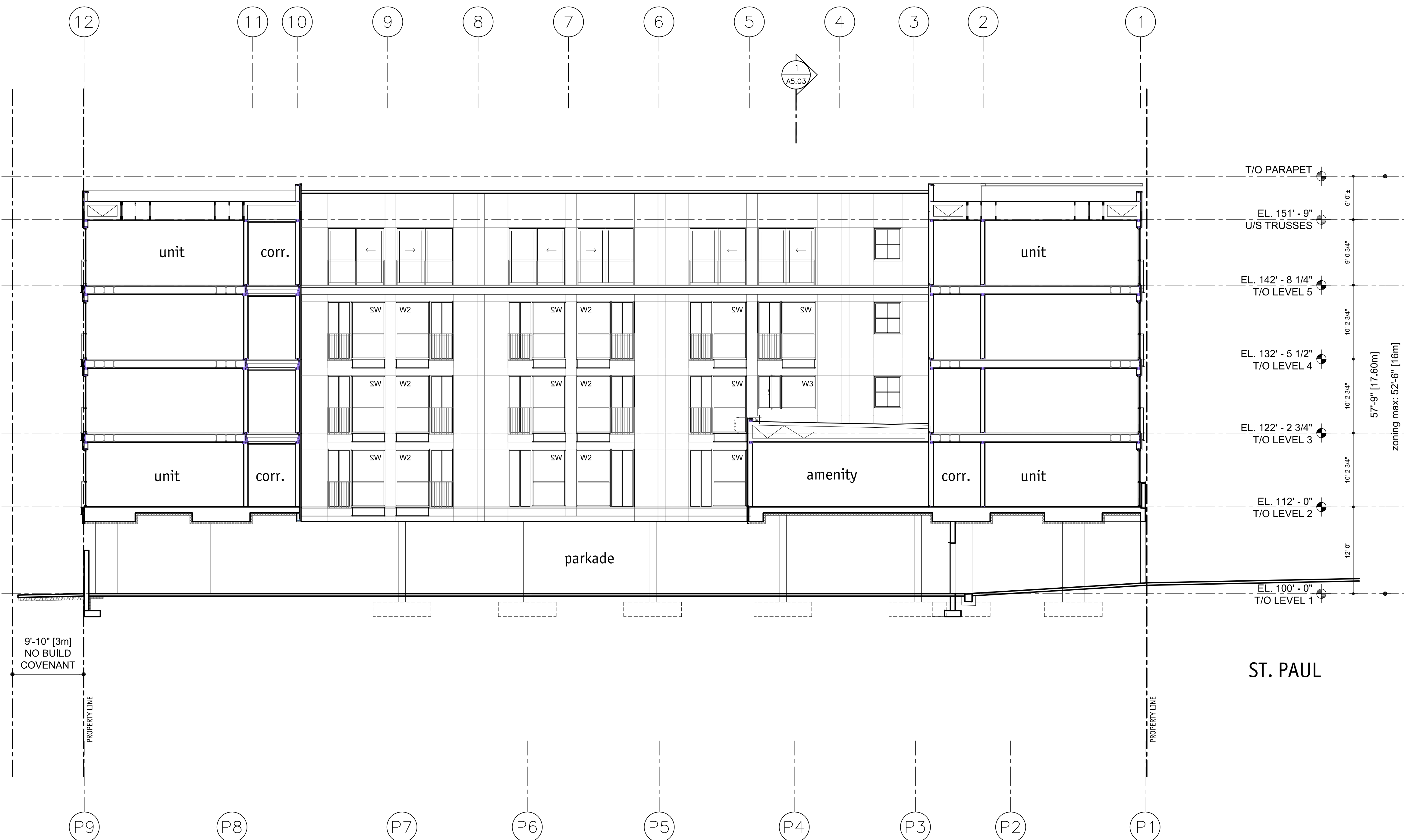
2020-07-22  
REVISED  
DP

[illegible]ST PAUL MIXED-USE  
BUILDING - 5 LEVEL

## A5.01

## BUILDING SECTION 1

Date	2020-07-22
Job No.	16-1748
Scale	AS Shown
Drawn	SN/DS
Checked	JM



**SCHEDULE** **A & B**

This forms part of application

# DP19-0218 / DVP18-0029

Planner Initials **AC**

City of Kelowna  
DEVELOPMENT PLANNING

2020-07-22  
REVISED  
DP

Copyright reserved. This plan and design is and at all times remains the exclusive property of Meiklejohn Architects Inc. and may not be used without the Architects' consent.

No.	Date	Revision
1	2017-12-20	Owner's Review
2	2018-1-16	Issue for Development Permit
3	2019-11-14	Issue for revised DP
4	2020-02-05	Revised DP to comply City comments
5	2020-07-22	Revised DP to comply City comments

Project Title

ST PAUL MIXED-USE  
BUILDING - 5 LEVEL

1193 St Paul Kelowna V1Y 2C6

Drawing Number

A5.02

DRAWINGS ARE NOT TO BE SCALED.  
ALL DIMENSIONS SHALL BE VERIFIED ON JOB

Drawing Title

BUILDING SECTION 2

scale: 1/8"=1'0"

Date	2020-07-22
Job No.	16-1748
Scale	AS Shown
Drawn	SN/DS
Checked	JM

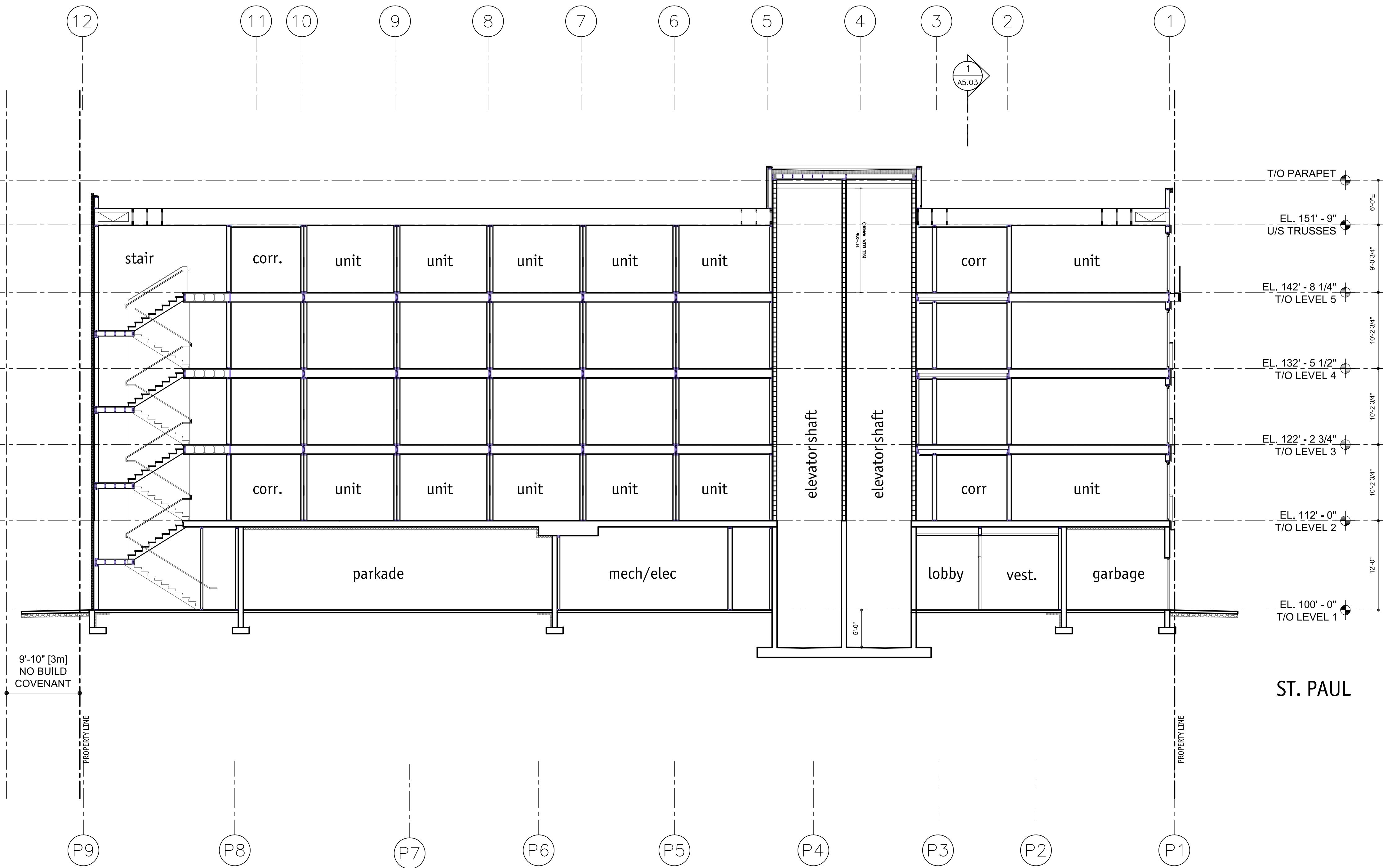
SCHEDULE

A & B

This forms part of application  
# DP19-0218 / DVP18-0029

City of Kelowna

DEVELOPMENT PLANNING



Copyright reserved. This plan and design is and at all times remains the exclusive property of Meiklejohn Architects Inc. and may not be used without the Architects' consent.

[illegible]

Project Title

1193 St Paul Kelowna V1Y 2C6

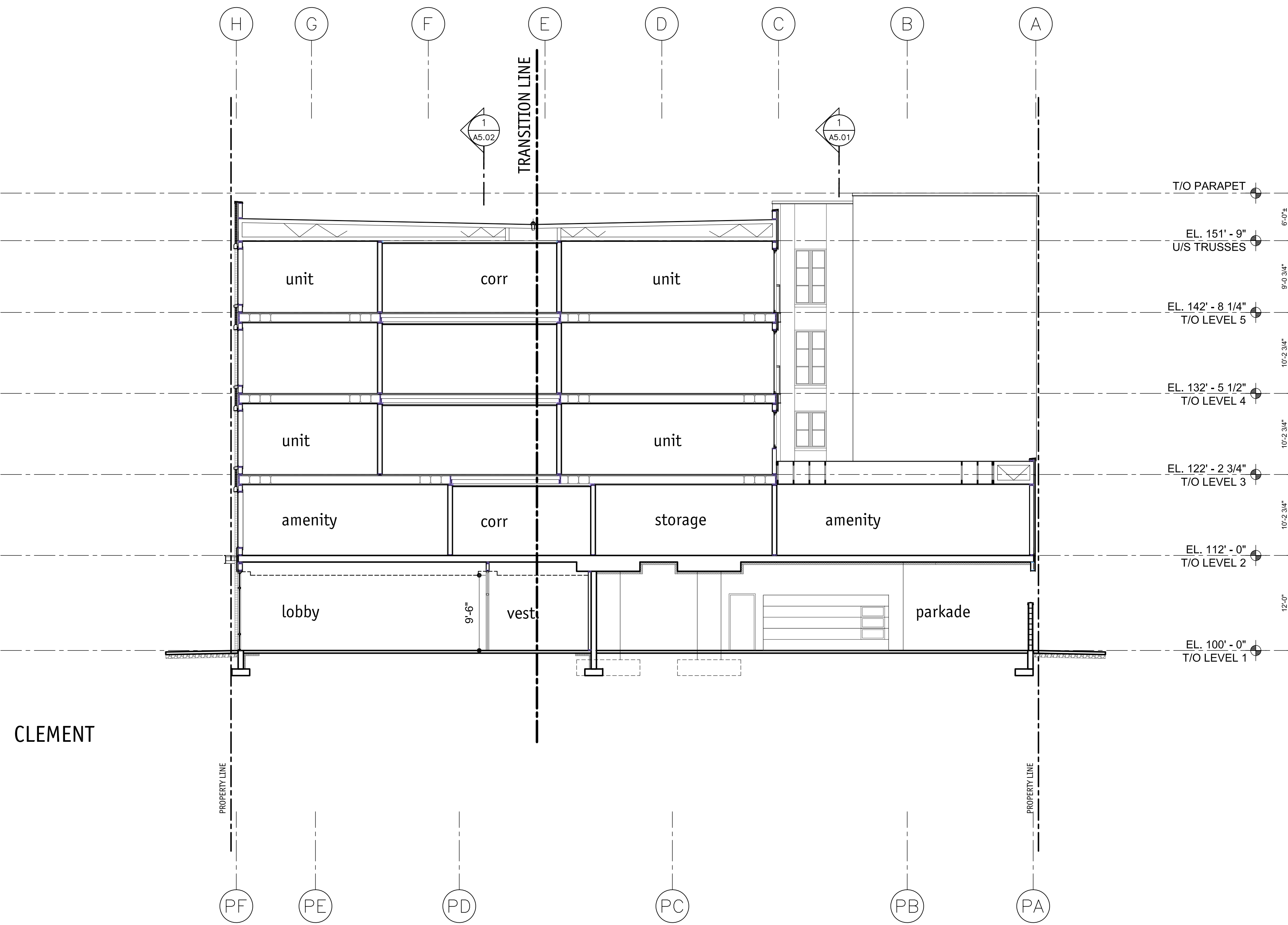
Drawing Number


DRAWINGS ARE NOT TO BE SCALED.  
ALL DIMENSIONS SHALL BE VERIFIED ON JOB

Drawing Title

### BUILDING SECTION 3

Date	2020-07-22
Job No.	16-1748
Scale	AS Shown
Drawn	SN/DS
Checked	JM



<b>SCHEDULE</b>		<b>A &amp; B</b>
This forms part of application		
# DP19-0218 / DVP18-0029		
Planner Initials	AC	 City of Kelowna DEVELOPMENT PLANNING























# DP19-0219 DVP18-0029 1193 St. Paul

Development Permit and Development Variance Permit  
Application





# Proposal

- ▶ To consider the form and character Development Permit of a proposed five storey hotel with one variance to increase the maximum building height before a setback is required.

# Development Process

Jan 23<sup>rd</sup> 2018

Development Application Submitted

Staff Review & Circulation

Feb 21<sup>st</sup> 2020

Public Notification Received

Aug 24<sup>th</sup> 2020

Initial Consideration

Sept 15<sup>th</sup> 2020

Public Hearing  
Second & Third Readings

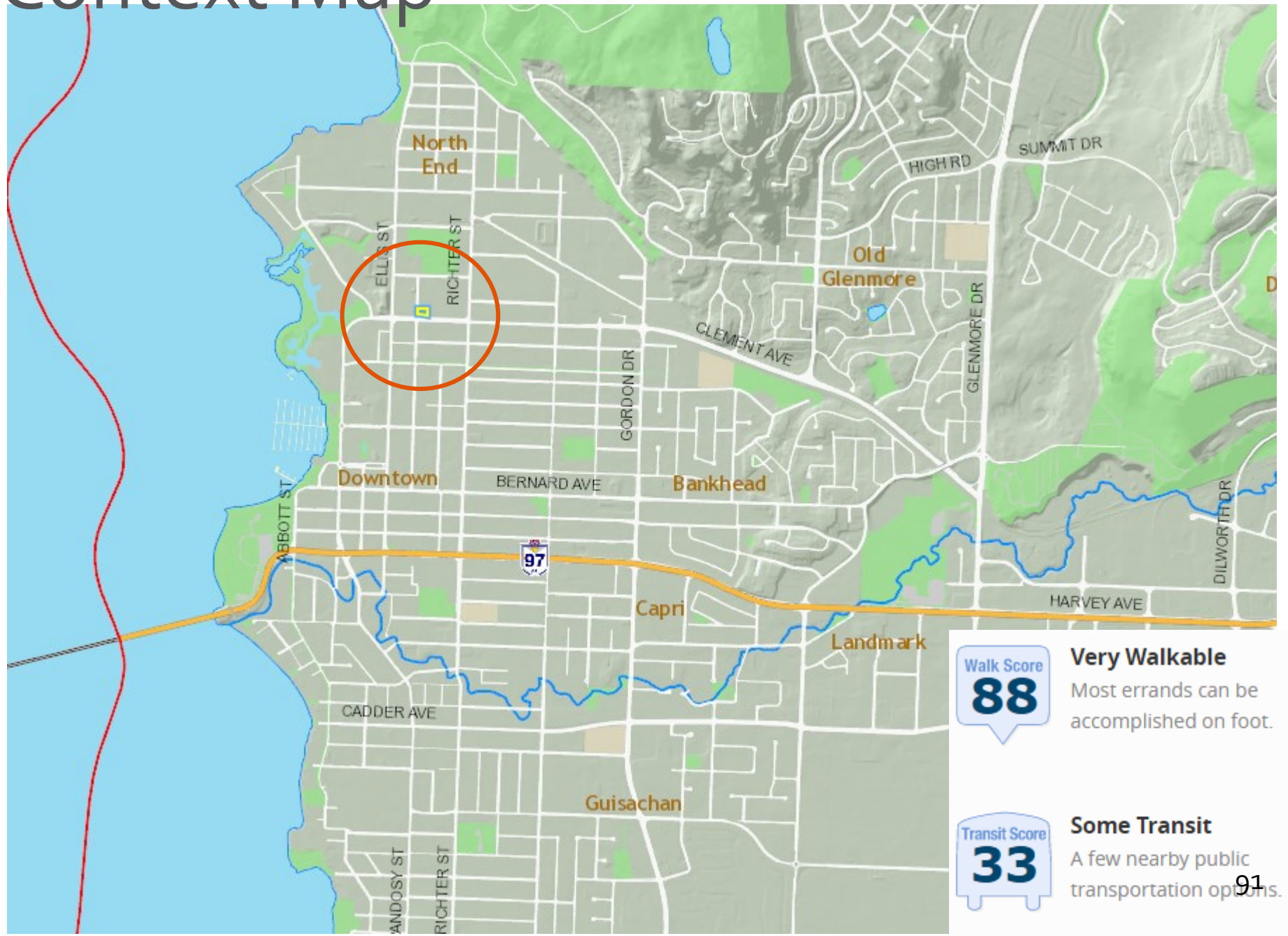
Dec 8<sup>th</sup> 2020

Final Reading, Development Permit, &  
Development Variance Permit

Building Permit

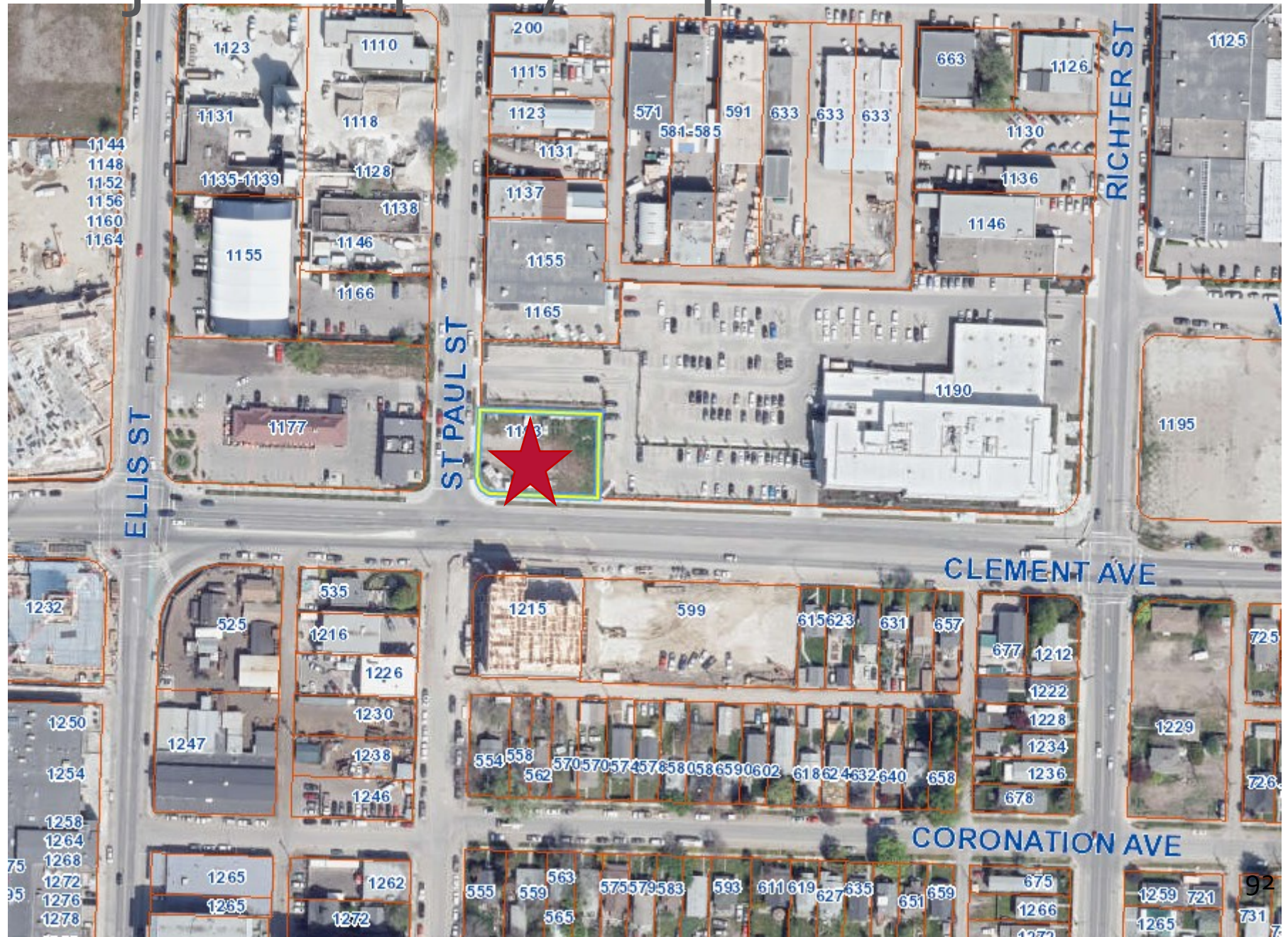
Council  
Approvals

# Context Map





# Subject Property Map





# Renderings



# Renderings



# Renderings



# Renderings





# Renderings



# Renderings



# Renderings



# Level 1 Plan





# Variance

- Tracking one variance to Podium Height from 16.0 metres to 18.0 metres



# Parking

- 33 stalls cash-in-lieu would be \$1,089,000

	Rate	Total Stalls Required	Total Stalls Provided
Previous Parking Regulation	1.3 stalls per 100 m <sup>2</sup>	37 stalls	37 stalls
Current Parking Regulation	0.8 stalls per Sleeping Unit	70 stalls	

**Table 1: Hotel Parking Rate Comparison**

<u>Location</u>	<u>Parking Regulation</u>
City of Kelowna	0.8 stalls per hotel unit (for downtown)
City of Vancouver	0.5 stalls per hotel unit
City of Richmond	0.5 stalls per hotel unit
City of Surrey	1.0 stalls per hotel unit
City of Abbotsford	1.0 stalls per hotel unit
City of Salmon Arm	1.0 stalls per hotel unit
City of West Kelowna	1.0 stalls per hotel unit
Applicant's Hotel	0.42 stalls per hotel unit

# Staff Recommendation

- ▶ Staff recommend **support** of the proposed Development Permit and Development Variance Permit
  - ▶ Meets the intent of the Official Community Plan
    - ▶ Hotel compatible with adjacent building forms and land uses



## *Conclusion of Staff Remarks*



# REPORT TO COUNCIL



**Date:** December 8<sup>th</sup> 2020

**To:** Council

**From:** City Manager

**Department:** Development Planning Department

**Application:** DP20-0011 / DVP20-0013

**Owner:** 1157695 B.C. LTD., INC.NO.  
BC1157695

**Address:** Leon Ave 234-278 and Water St  
1620-1660

**Applicant:** Anthony Beyrouiti

**Subject:** Development Permit and Development Variance Permit

**Existing OCP Designation:** MXR – Mixed Use (Residential / Commercial)

**Existing Zone:** C7 – Central Business Commercial

---

## 1.0 Recommendation

THAT Council authorizes the issuance of Development Permit No. DP20-0011 for:

- Lot 4, Block 10, District Lot 139, Osoyoos Division Yale District, Plan 462 located at 266 Leon Ave, Kelowna, BC;
- Lot 5, Block 10, District Lot 139, Osoyoos Division Yale District, Plan 462 located at 264 Leon Ave, Kelowna, BC;
- Lot A, District Lot 139, Osoyoos Division Yale District, Plan 22722 located at 1660 Water St, Kelowna, BC;
- North ½ Lot 2, Block 10, District Lot 139, Osoyoos Division Yale District, Plan 462 located at 1630 Water St, Kelowna, BC;
- South ½ Lot 2, Block 10, District Lot 139, Osoyoos Division Yale District, Plan 462 located at 1630 Water St, Kelowna, BC;
- North ½ Lot 1, Block 10, District Lot 139, Osoyoos Division Yale District, Plan 462 located at 1620 Water St, Kelowna, BC;
- South ½ Lot 1, Block 10, District Lot 139, Osoyoos Division Yale District, Plan 462 located at 1620 Water St, Kelowna, BC;
- Lot 3, Block 10, District Lot 139, Osoyoos Division Yale District, Plan 462 located at 278 Leon Ave, Kelowna, BC;
- Lot 6, Block 10, District Lot 139, Osoyoos Division Yale District, Plan 462 located at 248 Leon Ave, Kelowna, BC;
- Lot 7, Block 10, District Lot 139, Osoyoos Division Yale District, Plan 462 located at 238 Leon Ave, Kelowna, BC; and

- Lot 8, Block 10, District Lot 139, Osoyoos Division Yale District, Plan 462 located at 234-236 Leon Ave, Kelowna, BC;

subject to the following:

1. The dimensions and siting of the building to be constructed on the land be in accordance with Schedule "A";
2. The exterior design and finish of the building to be constructed on the land, be in accordance with Schedule "B";
3. That a Building Permit is not issued until the rear lane has a public statutory right-of-way registered on the northern 0.8 metres of the lot.
4. That the Development Permit is not issued until the City and the applicant has resolved the proposed air space parcel accommodating the bridge across Leon Avenue.
5. That a Building Permit is not issued until the modified compact stalls are labelled and signed as "small vehicle parking only".

AND THAT Council authorize the issuance of Development Variance Permit DVP20-0013 for:

- Lot 4, Block 10, District Lot 139, Osoyoos Division Yale District, Plan 462 located at 266 Leon Ave, Kelowna, BC;
- Lot 5, Block 10, District Lot 139, Osoyoos Division Yale District, Plan 462 located at 264 Leon Ave, Kelowna, BC;
- Lot A, District Lot 139, Osoyoos Division Yale District, Plan 22722 located at 1660 Water St, Kelowna, BC;
- North ½ Lot 2, Block 10, District Lot 139, Osoyoos Division Yale District, Plan 462 located at 1630 Water St, Kelowna, BC;
- South ½ Lot 2, Block 10, District Lot 139, Osoyoos Division Yale District, Plan 462 located at 1630 Water St, Kelowna, BC;
- North ½ Lot 1, Block 10, District Lot 139, Osoyoos Division Yale District, Plan 462 located at 1620 Water St, Kelowna, BC;
- South ½ Lot 1, Block 10, District Lot 139, Osoyoos Division Yale District, Plan 462 located at 1620 Water St, Kelowna, BC
- Lot 3, Block 10, District Lot 139, Osoyoos Division Yale District, Plan 462 located at 278 Leon Ave, Kelowna, BC;
- Lot 6, Block 10, District Lot 139, Osoyoos Division Yale District, Plan 462 located at 248 Leon Ave, Kelowna, BC;
- Lot 7, Block 10, District Lot 139, Osoyoos Division Yale District, Plan 462 located at 238 Leon Ave, Kelowna, BC; and
- Lot 8, Block 10, District Lot 139, Osoyoos Division Yale District, Plan 462 located at 234-236 Leon Ave, Kelowna, BC;

AND THAT the variances to the following sections of Zoning Bylaw No. 8000 be granted:

**Section 14.7.5 (b) – C7 – Central Business Commercial - Development Regulations**

To vary the maximum height from 76.5 metres (approx. 26 storeys) to 80 metres for Tower 'A' (24 storeys), 135.0 metres for Tower 'B' (42 storeys), and 92.0 metres for Tower 'C' (28 storeys).

**Section 8 – Parking and Loading - Table 8.2.7 (b) Ratio of Parking Space Sizes**

To vary the maximum small vehicle stall size from 0.0% to 3.3% (24 stalls).

**Section 8 – Parking and Loading - Table 8.5 Minimum Bicycle Parking Required**

To vary the minimum amount of short-term bicycle parking stalls from 122 stalls to 28 stalls.

AND THAT the Development Permit and Development Variance Permit is issued subsequent to the outstanding conditions set out in Attachment "A" attached to the Report from the Development Planning Department dated February 6<sup>th</sup> 2020.

AND THAT the applicant be required to complete the above noted conditions of Council's approval of the Development Permit and Development Variance Permit applications in order for the permits to be issued;

AND FURTHER THAT this Development Permit and Development Variance Permit is valid for two (2) years from the date of Council approval, with no opportunity to extend.

## 2.0 Purpose

To consider a form and character Development Permit for a mixed used development consisting of three residential towers, commercial office space in the podium of Tower 'C', and ground floor commercial retail and to consider a development variance permit to increase the maximum tower height and to reduce the minimum short-term bicycle parking stalls and to increase the proportion of small vehicle stall spaces.

## 3.0 Development Planning

Staff have reviewed the development proposal against the City's development permit guidelines, relevant zoning regulations, and best practices in urban design. Staff acknowledge the City's growth strategy that will result in tens of thousands of more residents arriving to Kelowna over the coming decades and a growth boundary that directs that development to urban centres and most prominently the Downtown. The development proposal has pros and cons. Staff have tried to consider the implications of the proposed trade-offs and are recommending an outcome that prioritizes achieving the most important planning principles.

The applicant is proposing a mixed-use project consisting of 650 residential condominiums with a variety of unit types including 50 three-bedroom units, ground floor commercial on all street frontages and a small component of commercial office space. The project is designed at the maximum land use density within the zoning bylaw with a 9.0 Floor Area Ratio (FAR).

The proposal includes three relatively slender towers that are situated on top of a larger five-storey parking podium at-grade that primarily provides the required parking stall numbers as per City regulations. The three proposed tower building footprints, known as *tower floorplates* range between 550 m<sup>2</sup> and 770 m<sup>2</sup> and are within acceptable range of the City's urban design guidelines and best practices in urban design. Coupled with meeting the *tower separation* regulation of 30.0 m, these two urban design metrics indicate that there should be acceptable light penetration levels, access to sky views and limited shadowing on the sidewalks and surrounding properties.



Fig 1.1 – Project rendering along Water Street elevation

The massing and public view of the five-storey parking podium is a concern to staff especially along the Leon Avenue elevation that extends approximately 125 metres in length without any significant break in the form. In order to maintain the parking numbers and attempt to address staff's issues, the applicant proposed several design strategies including:

- The inclusion of commercial retail spaces at-grade along all street frontages to help engage and animate the public spaces consistent with zoning regulations.
- To help mitigate the negative impact of a structured parkade on the second to fifth floors, the applicant is proposing an architectural treatment of a large polycarbonate screen that extends across the entire length of the parkade. While iconic in nature, the proposed treatment lacks human-scaled proportions and may further accentuate the long block length and overall mass creating a dominating and imposing experience for the pedestrian at-grade. The design of the Water Street elevation is stronger as the applicant has included a pedestrian overpass as an interesting sub-form breaking up the mass of the parkade. This elevation also benefits from shorter building lengths along Water Street and Leon Avenue forms an effective break in massing between the two sides of the project.
- The height of the parking podium meets the zoning regulations for maximum height before a *significant setback of 16.0m*.



Fig 1.2 – Leon Avenue Elevation showing the polycarbonate screen and overall mass of the parking podium

Overall, Staff are recommending support for the project due to its ability to deliver a significant amount of residential density to the Downtown including a mixture of residential unit types. The project should help lead revitalization efforts along the Leon Avenue corridor and hopefully will trigger further positive investment and redevelopment. The commercial spaces should act not only to provide an amenity and service to residents but also add to the overall vibrancy of the Downtown. While the podium design has some concerns and limitations for form and character, the higher-level sustainability objectives are recommended to be prioritized. Ultimately, the proposal delivers on the three key principles outlined in the City's Downtown Plan (2012): attract people to downtown, increase sense of safety and attract private sector investment.

### 3.1 Development Variance Permit



The proposal requires five variances to the Zoning Bylaw:

1. A variance to increase the maximum height from 76.5 m (approx. 26.0 storeys) to 80 m (24 storeys) for Tower 'A'.
2. A variance to increase the maximum height from 76.5 m (approx. 26.0 storeys) to 135 m (42 storeys) for Tower 'B'.
3. A variance to increase the maximum height from 76.5 m (approx. 26.0 storeys) to 92 m (28 storeys) for Tower 'C'.
4. A variance to increase the maximum modified compact car stalls size from 0.0% to 3.3% (24 stalls).
5. A variance to decrease the minimum short-term bicycle stalls from 122 stalls to 28 stalls.

The OCP encourages high density commercial and residential living in the downtown in order to limit growth on the periphery of the community, increase efficiency of municipal services and infrastructure, and increase downtown's vibrancy. The Official Community Plan and the Zoning Bylaw designate this site and surrounding area as the location in which the tallest buildings in the City of Kelowna are permitted. The merits of increasing the maximum height limit of the residential towers on the subject property is as follows:

1. The redevelopment proposal is located on a street that has declined over the years and could use revitalization;
2. The location is outside the cultural / historical sensitivities along the first three blocks of Bernard Avenue to Ellis Street and/or immediately adjacent to the waterfront.
3. The tall buildings will be a striking element to the downtown and will create more North / South height balance considering the tall buildings of One Water in the north.
4. Tower floorplates and separation distancing are appropriate in context; and
5. All the statistics derived from the total commercial floor area, office floor area, and number of residential units are within the maximums outlined within the Zoning Bylaw including the total number of vehicular parking spaces and number of bicycle parking spaces (except short term bicycle parking).

The short-term bicycle parking spaces has been varied with many other downtown tower projects. As Staff are currently working on a Zoning Bylaw rewrite, the short-term bicycle parking stalls will be proposed to be reduced for projects of these scale. Staff are comfortable with the total amount of bicycle parking for short-term stalls proposed for this project (28 stalls) and feel that it will meet the estimated demand generated by the project for short-term bicycles.

The original design proposals had parking variances to the total number of vehicle parking stalls and Staff would only recommend support if the variances were eliminated. The applicant revised the floor plans to reduce the number of dwelling units from 732 dwelling units to 650 dwelling units. This change allowed the proposed parking to align with the total number of residential units with the exception of the provision of 24 below sized parking stalls. Staff can accept this variance as the widths of the parking stalls are not being varied just the length. The reason the length had to be reduced is the Traffic Impact Assessment and Development Engineering requirement for functional lanes recommended 0.8 metres widening off the rear lane along the ground floor. This widening on the ground floor trigger the first-floor parking stalls to be shorter than minimum. Staff feel this can be accepted as long as the applicant labels the stalls 'small vehicle parking only' for public transparency.

#### 4.0 Proposal

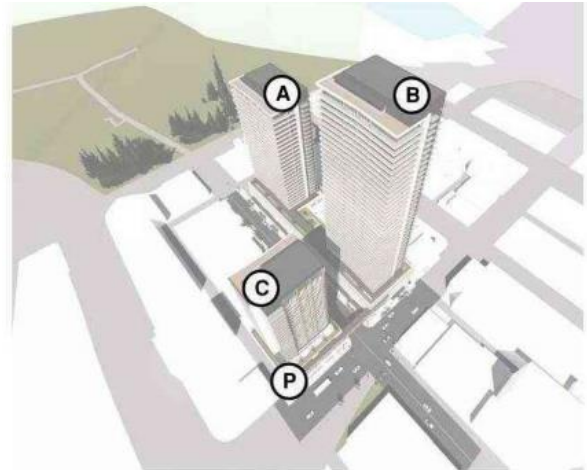
#### 4.1 Project Description

The proposal is to build a mixed-use development with 3 towers (650 market residential dwelling units, ground floor commercial retail space, and commercial office space within the podium of Tower 'C') at 234-278 Leon Ave, 1620-1630 Water Street and 1660 Water Street.

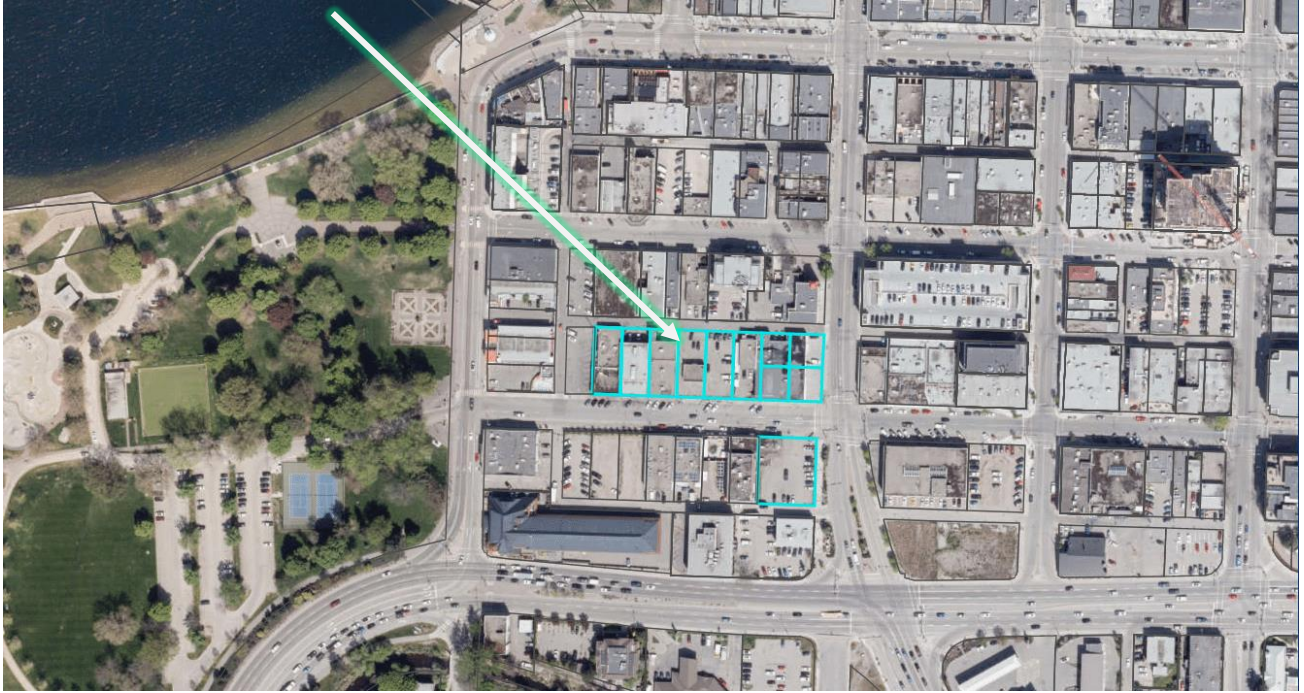
A new mass timber pedestrian bridge is proposed to connect both sites across Leon Avenue; providing joint access to parking. Parking (727 stalls) are provided for both sites on the north side of Leon Ave with one level underground and the remaining above grade in a 5-storey podium. The parking structure is concealed by a double height commercial retail space on the ground floor and a gently curving mass timber (glulam) and polycarbonate external screen. The open parking structure will allow light to wash through the mass timber supporting structure and polycarbonate screen; providing a glowing feature to the streetscape below.

Angled parking on the north side of Leon Avenue is replaced with parallel parking (similar to the south side of the street); this allows a more generous pedestrian-oriented streetscape with an additional bike lane. Greening of the street will act as a natural gateway to City Park and the waterfront. A continuous CLT (cross laminated timber) canopy at street level provides protection from the elements; activities within the building are visible through the glazed façade to activate the street (eyes on the street for security).

Towers 'A' and 'B' are oriented East West with a slight v shaped deck articulation to accentuate the slender form as seen from Harvey Avenue. The translucent glass guards on the tower balconies provide a sculptural aesthetic while minimizing the visual impact of one's possessions. This proposal will be a positive contribution to our community by allowing more housing and commercial opportunities and allowing densification in an area which is within the downtown core and its associated amenities. This project is close to bike and walking trails and a viable alternative to urban sprawl and hope for a reduction in vehicular reliance.



**Subject Property Map:** Leon Ave 234-278 and Water St 1620-1660



Zoning Analysis Table						
CRITERIA	C7 ZONE REQUIREMENTS		PROPOSAL			
For portion of building between 0.0 metres & 16.0 metres in height						
Front, Flanking, & Lane Setback	0.0 m		0.0 m			
For portion of building between 16.0 metres & above in height						
			Podium	Tower 'A'	Tower 'B'	Tower 'C'
Front Yard Setbacks (Leon Avenue)	3.0 m		n/a	6.4 m	6.4 m	3.0 m
Flanking Street Setbacks (Water Street)	3.0 m		n/a	n/a	3.0 m	3.0 m
West Side Yard Setbacks	4.0 m		n/a	4.0 m	n/a	4.0 m
Lane Setbacks	3.0 m		n/a	5.8 m	5.8 m	4.0 m
Floorplate	1,221 m²		n/a	Approx. 770 m²	Approx. 770 m²	Approx. 565 m²
Development Regulations						
Height	Podium	Tower	Podium	Tower 'A'	Tower 'B'	Tower 'C'
	16.0 m / approx. 4.5 stories (unless Bldg steps back)	76.5 m / approx. 26.0 storeys	16.0 m / 5 storeys	80 m (24 storeys) ❶	135 m (42 storeys) ❷	92 m (28 storeys) ❸
Corner Cut Setback	4.5 m		4.5 m			
FAR	9.0		9.0			
Parking Regulations						
Minimum Parking Requirements	RESIDENTIAL BASE PARKING REQUIRED: 0.9 PER 1 BR UNIT (316 UNITS) = 284 1.0 PER 2 BR OR MORE UNIT (334 UNITS) = 334 0.14 PER UNIT VISITOR (650 UNITS) = 91 SUB-TOTAL RESIDENTIAL REQUIRED = 709 (TOWER 1 = 170, TOWER 2 = 368, TOWER 3 = 171)  COMMERCIAL: 0.9 PER 100 SM GFA = 36 STALLS, HOWEVER, THESE STALLS GROUPED WITH VISTOR, THEREFORE NOT ADDED TOTAL PARKING REQUIRED = 709 STALLS		TOTAL PARKING PROVIDED REGULAR: 352 Stalls [6.0m X 2.5m or 6.0m X 2.7m next to columns] *REGULAR REDUCED*: 35 Stalls [5.2m X 2.5m or 5.2m x 2.7m next to columns] HC ACCESSIBLE STALLS: 16 Stalls [2.5m + 1.5m access X 6.0m] HC ACCESSIBLE VANS: 2 Stalls [3.3m + 1.5m access X 6.0m] SMALL CAR: 298 Stalls [4.8m X 2.3m or 4.8m X 2.5m next to columns] COMPACT (INCREASED WIDTH): 24 Stalls [3.4m X 2.5m]  TOTAL: 352+35+16+2+298+24 = 727 STALLS			
Ratio of Parking Stalls	Compact Size: 0% Max Small Size: 50% Max Regular Size: 50% Min		Compact Size: 3.3% (24 stalls) ❹ Small Size:45.8% (333 stalls) Regular Size: 50.9% (370 stalls)			



Zoning Analysis Table		
CRITERIA	C7 ZONE REQUIREMENTS	PROPOSAL
Minimum Bicycle Parking Requirements	<p><b><u>LONG TERM RESIDENTIAL:</u></b> 0.75 PER 2 BEDROOM OR LESS UNITS: <math>542 \times 0.75 = 407</math> 1.0 PER 3 BEDROOM OR MORE UNITS: <b>108</b> LONG TERM COMMERCIAL: 1 PER 500SM GLA = <math>4046SM / 500SM = 8</math> THEREFORE, <math>407 + 108 + 8 = 523</math> <b>LONG TERM STALLS REQUIRED</b></p> <p><b><u>SHORT TERM RESIDENTIAL:</u></b> <math>6 / ENTRY + 1/5</math> UNITS ABOVE 70 = <math>6 \times 3 = 18 + 650 - 70 = 580 / 5 = 116</math>, THEREFORE <math>18 + 116 = 134</math> SHORT TERM COMMERCIAL: <math>2 / ENTRY</math> (GREATER VALUE THAN <math>1/750SM</math>) = <math>2 \times 8 = 16</math> THEREFORE <math>134 + 16 = 150</math> <b>SHORT TERM STALLS REQUIRED</b></p>	<p><b><u>LONG TERM BIKE PARKING PROVIDED:</u></b> FLOOR MOUNTED: 199 STALLS (2 PER) = <b>398</b> WALL MOUNTED: 84 STALLS (2 PER) = <b>168</b> <math>398 + 168 = 566</math> <b>LONG TERM STALLS PROVIDED</b> EXCESS LONG TERM BIKE PARKING = <math>566 - 523 = 43</math></p> <p><b><u>SHORT TERM BIKE PARKING PROVIDED:</u></b> FLOOR MOUNTED: <b>28</b> SHORTFALL OF <b>122</b> SHORT TERM BIKE PARKING ⑤</p>
Other Regulations		
Minimum commercial / lobby	Min 90%	➤ 90%
<p>① A variance to increase the maximum height from 76.5 m (approx. 26.0 storeys) to 80 m (24 storeys) for Tower 'A'.</p> <p>② A variance to increase the maximum height from 76.5 m (approx. 26.0 storeys) to 135 m (42 storeys) for Tower 'B'.</p> <p>③ A variance to increase the maximum height from 76.5 m (approx. 26.0 storeys) to 92 m (28 storeys) for Tower 'C'.</p> <p>④ A variance to increase the maximum compact car stalls size from 0.0% to 3.3% (24 stalls).</p> <p>⑤ A variance to decrease the minimum short term bicycle stalls from 122 stalls to 28 stalls.</p>		

## 5.0 Current Development Policies

### 5.1 Kelowna Official Community Plan (OCP)

#### Chapter 14: Land Use Designation Massing and Height.<sup>1</sup>

- Mitigate the actual and perceived bulk of buildings by utilizing appropriate massing, including:
- Architectural elements (e.g. balconies, bay windows, cantilevered floors, cupolas, dormers);
- Visually interesting rooflines (e.g. variations in cornice lines and roof slopes);
- Step back upper floors to reduce visual impact;
- Detailing that creates a rhythm and visual interest along the line of the building;
- Wall projections and indentations, windows and siding treatments as well as varied material textures should be utilized to create visual interest and to articulate building facades;
- Building frontages that vary architectural treatment in regular intervals in order to maintain diverse and aesthetically appealing streets.

#### Chapter 14: Tower Design.<sup>2</sup>

- Design towers that are sited, shaped, and oriented along their longest axis in order to enhance the views to and through the skyline;
- Incorporate tower forms and the upper portions of buildings as integral yet distinct elements of the overall building design. Tower tops are encouraged to have trellising and roof projections that are fundamental expressions of the building structure and contain substantial landscaping;
- Evaluate tower buildings with respect to their compatibility with surrounding structures and contribution to the general skyline. Tower design should contemplate:
  - Colour, reflectivity, shape, materials, detailing, and ease of maintenance;
  - Generally, lighter-coloured buildings are preferred;
- Incorporate architecture that expresses a slender verticality, particularly in its upper elements. Design buildings greater than ten floors that are tall, slender towers rather than bulkier towers of the same floor space ratio;
- Design new buildings to take into account microclimatic effects, including shading of adjacent areas (i.e., reduce the casting of long shadows on high volume pedestrian areas) and wind tunneling;
- Integrate new developments with the established urban pattern through siting and building design by utilizing transitional structures, setbacks, landscaping, etc.;
- Enhance large, flat expanses of roof (whether actively used or not) with texture, colour, and/or landscaping where visible from above or adjacent properties;
- Enhance towers with elements such as gazebos, trellises, and pergolas providing visual interest and usability of rooftop spaces;
- Incorporate balconies into building design as outdoor rooms rather than as appendages to a building's mass. Recess balconies a minimum depth of 1m within the adjoining building face;
- Design podiums to provide an animated pedestrian environment with the use of street wall massing, articulation, and overall design. Podiums should highlight their active uses and disguise any parking or ancillary uses.

---

<sup>1</sup> City of Kelowna Official Community Plan, Chapter 14 Urban Design Development Permit Areas, Guidelines

<sup>2</sup> City of Kelowna Official Community Plan, Chapter 14 Urban Design Development Permit Areas, Guidelines

## **6.o Application Chronology**

Date of Application Received: March 4<sup>th</sup> 2019  
Date MOTI approved Traffic Study: March 5<sup>th</sup> 2020  
Date Public Consultation Completed: April 1<sup>st</sup> 2020

**Report prepared by:** Adam Cseke, Planner Specialist  
**Reviewed and Approved by:** Jocelyn Black, Urban Planning Manger  
Terry Barton, Development Planning Department Manager  
Ryan Smith, Divisional Director, Planning & Development Services

### **Attachments:**

Draft Development Permit and Development Variance Permit  
Attachment 'A' Development Engineering Memo  
Attachment 'B' Design Rationale  
Attachment 'C' Traffic Study

# DRAFT Development Permit & Development Variance Permit DP20-0011 / DVP20-0013



This permit relates to land in the City of Kelowna municipally known as

Leon Ave 234-278 and Water St 1620-1660

and legally known as

- Lot 4, Block 10, District Lot 139, Osoyoos Division Yale District, Plan 462 located at 266 Leon Ave, Kelowna, BC;
- Lot 5, Block 10, District Lot 139, Osoyoos Division Yale District, Plan 462 located at 264 Leon Ave, Kelowna, BC;
- Lot A, District Lot 139, Osoyoos Division Yale District, Plan 22722 located at 1660 Water St, Kelowna, BC;
- North ½ Lot 2, Block 10, District Lot 139, Osoyoos Division Yale District, Plan 462 located at 1630 Water St, Kelowna, BC;
- South ½ Lot 2, Block 10, District Lot 139, Osoyoos Division Yale District, Plan 462 located at 1630 Water St, Kelowna, BC;
- North ½ Lot 1, Block 10, District Lot 139, Osoyoos Division Yale District, Plan 462 located at 1620 Water St, Kelowna, BC;
- South ½ Lot 1, Block 10, District Lot 139, Osoyoos Division Yale District, Plan 462 located at 1620 Water St, Kelowna, BC;
- Lot 3, Block 10, District Lot 139, Osoyoos Division Yale District, Plan 462 located at 278 Leon Ave, Kelowna, BC;
- Lot 6, Block 10, District Lot 139, Osoyoos Division Yale District, Plan 462 located at 248 Leon Ave, Kelowna, BC;
- Lot 7, Block 10, District Lot 139, Osoyoos Division Yale District, Plan 462 located at 238 Leon Ave, Kelowna, BC; and
- Lot 8, Block 10, District Lot 139, Osoyoos Division Yale District, Plan 462 located at 234-236 Leon Ave, Kelowna, BC;

and permits the land to be used for an apartment building as described in Schedule 'A', 'B', and 'C'.

The present owner and any subsequent owner of the above described land must comply with any attached terms and conditions.

<u>Date of Council Decision</u>	November 17 <sup>th</sup> 2020
<u>Decision By:</u>	COUNCIL
<u>Development Permit Area:</u>	Comprehensive
<u>Existing Zone:</u>	C7 – Central Business Commercial
<u>Future Land Use Designation:</u>	MXR – Mixed Use (Residential / Commercial)

## **This is NOT a Building Permit.**

In addition to your Development Permit, a Building Permit may be required prior to any work commencing. For further information, contact the City of Kelowna, Development Services Branch.

## **NOTICE**

This permit does not relieve the owner or the owner's authorized agent from full compliance with the requirements of any federal, provincial or other municipal legislation, or the terms and conditions of any easement, covenant, building scheme or agreement affecting the building or land.

Owner: 1157695 B.C. LTD., INC.NO. BC1157695  
Applicant: Anthony Beyrouiti  
Planner: AC

---

Terry Barton  
Community Planning Department Manager  
Planning & Development Services

---

Date



## 1. SCOPE OF APPROVAL

This Development Permit applies to and only to those lands within the Municipality as described above, and any and all buildings, structures and other development thereon.

This Development Permit is issued subject to compliance with all of the Bylaws of the Municipality applicable thereto, except as specifically varied or supplemented by this permit, noted in the Terms and Conditions below.

The issuance of a permit limits the permit holder to be in strict compliance with regulations of the Zoning Bylaw and all other Bylaws unless specific variances have been authorized by the Development Permit. No implied variances from bylaw provisions shall be granted by virtue of drawing notations that are inconsistent with bylaw provisions and that may not have been identified as required Variances by the applicant or Municipal staff.

## 2. CONDITIONS OF APPROVAL

- a) The dimensions and siting of the building to be constructed on the land be in accordance with Schedule "A";
- b) The exterior design and finish of the building to be constructed on the land be in accordance with Schedule "B";
- c) That a Building Permit is not issued until the rear lane has a public statutory right-of-way registered on the northern 0.8 metres of the lot.
- d) That the Development Permit is not issued until the City and the applicant has resolved the proposed air space parcel accommodating the bridge across Leon Avenue.
- e) That a Building Permit is not issued until the modified compact stalls are labelled and signed as "small vehicle parking only".

AND THAT the variances to the following sections of Zoning Bylaw No. 8000 be granted, as shown on Schedule "A, B, & C":

### **Section 14.7.5 (b) – C7 – Central Business Commercial - Development Regulations**

To vary the maximum height from 76.5 metres (approx. 26 storeys) to 80 metres for Tower 'A' (24 storeys), 135 metres for Tower 'B' (42 storeys), and 92 metres for Tower 'C' (28 storeys).

### **Section 8 – Parking and Loading - Table 8.2.7 (b) Ratio of Parking Space Sizes**

To vary the maximum small vehicle stall size from 0.0% to 3.3% (24 stalls).

### **Section 8 – Parking and Loading - Table 8.5 Minimum Bicycle Parking Required**

To vary the minimum amount of short-term bicycle parking stalls from 122 stalls to 28 stalls.

This Development Permit and Development Variance Permit is valid for two (2) years from the date of approval, with no opportunity to extend.

### 3. PERFORMANCE SECURITY

As a condition of the issuance of this Permit, Council is holding the security set out below to ensure that development is carried out in accordance with the terms and conditions of this Permit. Should any interest be earned upon the security, it shall accrue to the Developer and be paid to the Developer or his or her designate if the security is returned. The condition of the posting of the security is that should the Developer fail to carry out the development hereby authorized, according to the terms and conditions of this Permit within the time provided, the Municipality may enter into an agreement with the property owner of the day to have the work carried out, and any surplus shall be paid over to the property owner of the day. Should the Developer carry out the development permitted by this Permit within the time set out above, the security shall be returned to the Developer or his or her designate. There is filed accordingly:

- a) An Irrevocable Letter of Credit **OR** certified cheque in the amount of **\$n/a**

Before any bond or security required under this Permit is reduced or released, the Developer will provide the City with a statutory declaration certifying that all labour, material, workers' compensation and other taxes and costs have been paid.

### 5. INDEMNIFICATION

Upon commencement of the works authorized by this Permit the Developer covenants and agrees to save harmless and effectually indemnify the Municipality against:

- a) All actions and proceedings, costs, damages, expenses, claims, and demands whatsoever and by whomsoever brought, by reason of the Municipality said Permit.

All costs, expenses, claims that may be incurred by the Municipality where the construction, engineering or other types of works as called for by the Permit results in damages to any property owned in whole or in part by the Municipality or which the Municipality by duty or custom is obliged, directly or indirectly in any way or to any degree, to construct, repair, or maintain.

**The PERMIT HOLDER is the CURRENT LAND OWNER.  
Security shall ONLY be returned to the signatory of the  
Landscape Agreement or their designates.**





# WATER STREET BY THE PARK

Client: Anthony Beyrouiti

Project No. 10141492

Project Address : 234-278 Leon Ave & 1620-1630 Water st,  
Kelowna, BC

DEVELOPMENT PERMIT

Issue Date: 20/12/2019

SCHEDULE

This forms part of application

# DP20-011 / DVP20-0013

Planner Initials

AC

A & B

City of Kelowna

DEVELOPMENT PLANNING

ARCHITECTURE DRAWINGS LIST	
A01	SITE ANALYSIS
A02	CONTEXT PHOTOS
A03	CONTEXT PHOTOS
A04	CONTEXT PHOTOS
A05	SITE ANALYSIS
A06	FUTURE DEVELOPMENT
A07	EXISTING DEVELOPMENT
A08	SITE PLAN
A09	SITE SURVEY
A10	PLAN - UNDERGROUND PARKING P0
A11	PLAN - MAIN FLOOR CRU + PARKING P1
A12	PLAN - MAIN FLOOR CRU + PARKING P1
A13	PLAN - SECOND FLOOR + PARKING P2
A14	PLAN - SECOND FLOOR + PARKING P2
A15	PLAN - THIRD FLOOR + PARKING P3
A16	PLAN - THIRD FLOOR + PARKING P3
A17	PLAN - FOURTH FLOOR + PARKING P4
A18	PLAN - FOURTH FLOOR + PARKING P4
A19	PLAN - FIFTH FLOOR + PARKING P5
A20	PLAN - FIFTH FLOOR + PARKING P5
A21	PLAN - SIXTH FLOOR - RESIDENTIAL AMENITY R1
A22	PLAN - SIXTH FLOOR - RESIDENTIAL AMENITY
A23	PLAN - SEVENTH FLOOR - RESIDENTIAL LIVING R2
A24	PLAN - SEVENTH FLOOR TOWER A - RESIDENTIAL R2A
A25	PLAN - SEVENTH FLOOR TOWER B - RESIDENTIAL R2B
A25.1	PLAN - TWENTY-NINTH FLOOR TOWER B - RESIDENTIAL R2B
A26	PLAN - SEVENTH FLOOR TOWER C - R2
A26.1	PLAN - PENTHOUSE FLOOR TOWER A + B - RESIDENTIAL R2A
A27	ELEVATIONS
A28	ELEVATIONS
A29	ELEVATIONS
A30	SECTION
A31	FUTURE CONTEXT
A32	SOLAR ANALYSIS
A33	SHADOW ANALYSIS
A34	MATERIALS & FINISHES
A35	PERSPECTIVE
A36	PERSPECTIVE

LANDSCAPE DRAWINGS LIST	
L1/4	CONCEPTUAL LANDSCAPE PLAN
L2/4	WATER CONSERVATION/IRRIGATION PLAN
L3/4	OFFSITE LANDSCAPE PLAN
L4/4	OFFSITE IRRIGATION PLAN

PROJECT DATA AND ZONING BYLAW SUMMARY			
SITE	LEGAL DESCRIPTION	CIVIC ADDRESS	ZONING
PROJECT LOT	LOTS 1-8, BLOCK 10, PLAN 462 & LOT A, PLAN 22722	234 - 278 LEON AVE & 1620-1630 WATER ST, KELOWNA, BC	C7 - CENTRAL BUSINESS COMMERCIAL
LOT AREA	4,567.4sm (49,163 SF) / 1,148.8 sm (12366 SF)		
PROJECT DESCRIPTION:		BICYCLE PARKING:	
CONSTRUCTION OF A MIXED USE DEVELOPMENT WITH RESIDENTIAL, COMMERCIAL AND PARKING COMPONENTS		PROPOSED: LONG TERM = 566 SHORT TERM = 28	
SITE AREA:		REQUIRED: LONG TERM: 0.75 PER 2 BEDROOM OR LESS + 1.0 PER 3 BEDROOM OR MORE + 1 PER 500sm GFA (COMMERCIAL) SHORT TERM: 6 PER ENTRANCE + 1/5 OVER 70 UNITS + 2 PER ENTRANCE (COMMERCIAL)	
49163SF + 12366SF ≈ 61529SF TOTAL			
MAX BUILDING HEIGHT:		SETBACKS:	
PROPOSED: APPROX. 134.72m (442'-0")		ALLOWABLE:	
ALLOWABLE: 76.5m (250'-11 3/4")		PROPOSED	
DIFFERENCE: 58.2m (191'-0")		0 TO 16m:	
PARKING:		MINIMUM FRONT YARD: 0.0m	
PROPOSED: 727 PARKING STALLS		MINIMUM SIDE YARD: 0.0m	
REQUIRED: RESIDENTIAL: 0.9 PER 1 BR UNIT, 1.0 PER 2-3 BR UNIT, 0.14 PER UNIT AS VISITOR, COMMERCIAL: 0.9 PER 100 SM GFA		MINIMUM REAR YARD: 0.0m	
		FIRST STOREY ONLY, TRIANGULAR SETBACK (SEE FIGURE 1): 4.5m	
		MAXIMUM FLOOR PLATE 4.5m	
		N/A 0000	
		16m AND ABOVE:	
		MINIMUM FROM ABUTTING STREET: 3.0m	
		MINIMUM FROM ANY PROPERTY LINE 4.0m	
		ABUTTING ANOTHER PROPERTY: 4.0m	
		MAXIMUM FLOOR PLATE (PER TOWER): 1,221sm	
		696sm	

Figure 1

DEVELOPMENT PERMIT - REVISED

Issue Date: 10/16/2020





- 1

PROPOSED MIXED USE DEVELOPMENT
- 2

DOWNTOWN MARINA
- 7

LEON AVE & SERVICE ROAD  
LOOKING EAST
- 3

KELOWNA CITY HALL
- 4

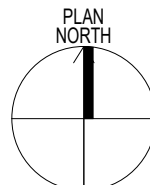
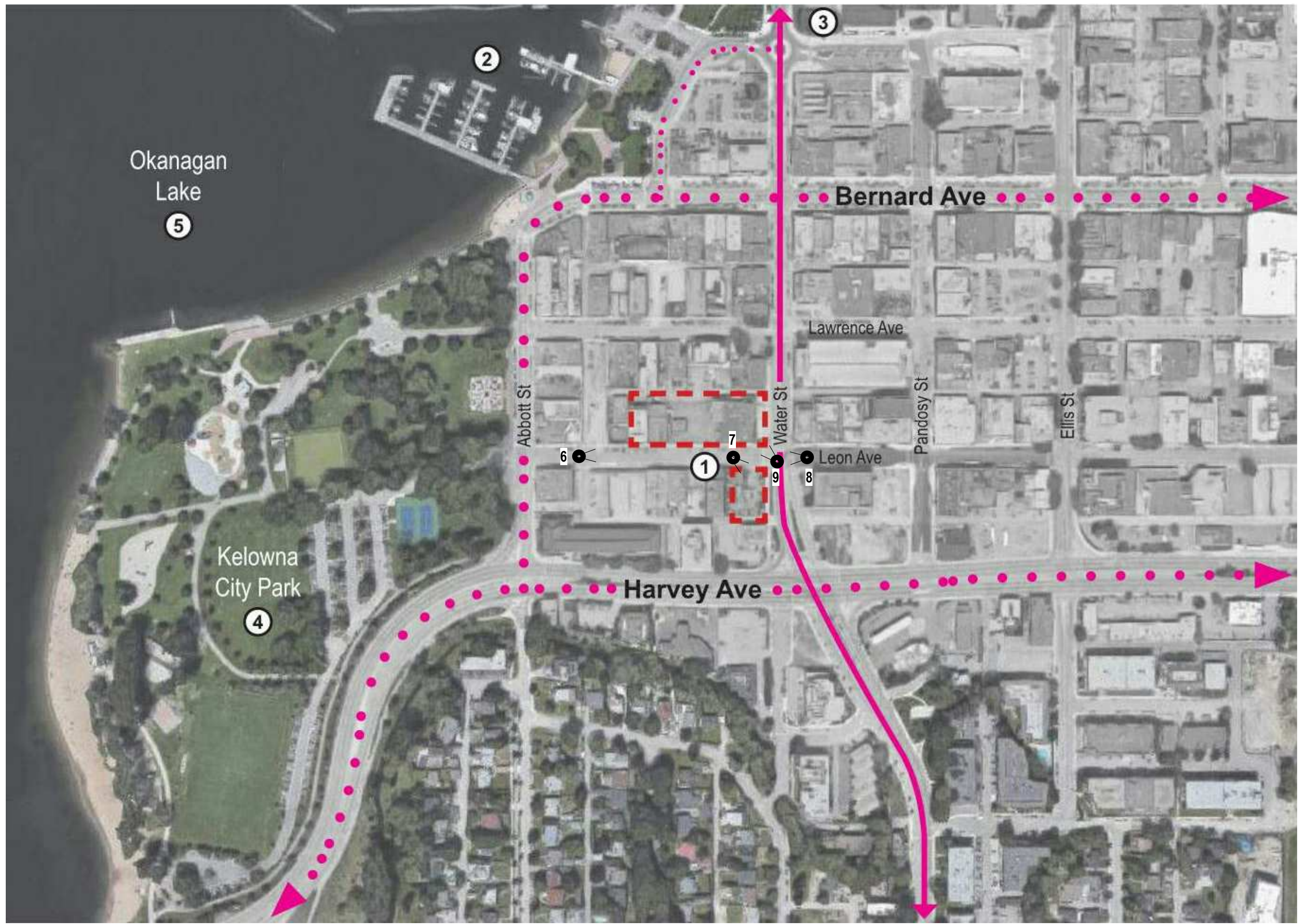
KELOWNA CITY PARK
- 8

WATER ST LOOKING NORTH
- 5

OKANAGAN LAKE
- 6

LEON & WATER  
INTERSECTION
- 9

LEON AVE LOOKING  
SOUTH



SCHEDULE

A & B

This forms part of application  
# DP20-011 / DVP20-0013

Planner  
Initials

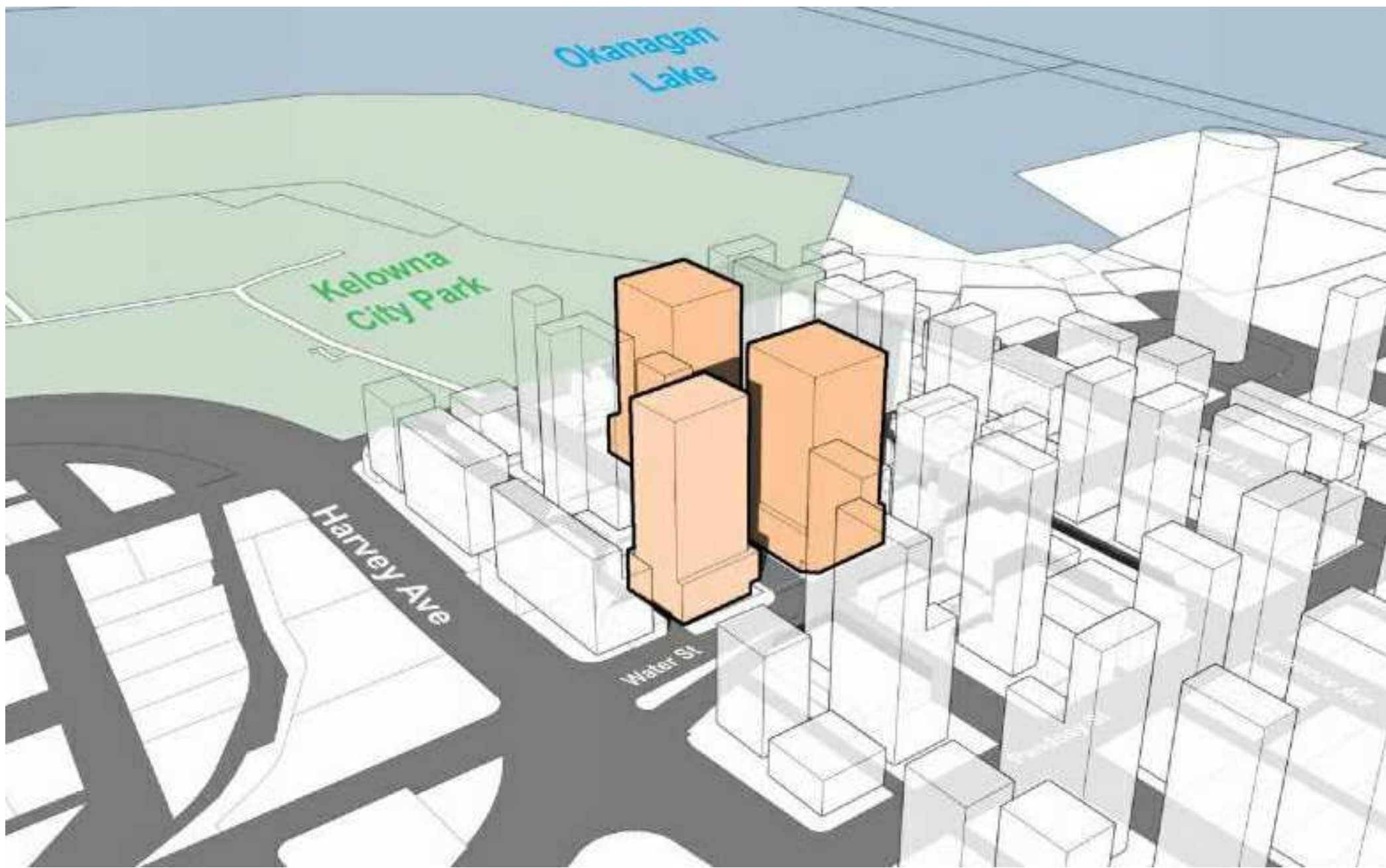
AC

City of  
Kelowna

DEVELOPMENT PLANNING

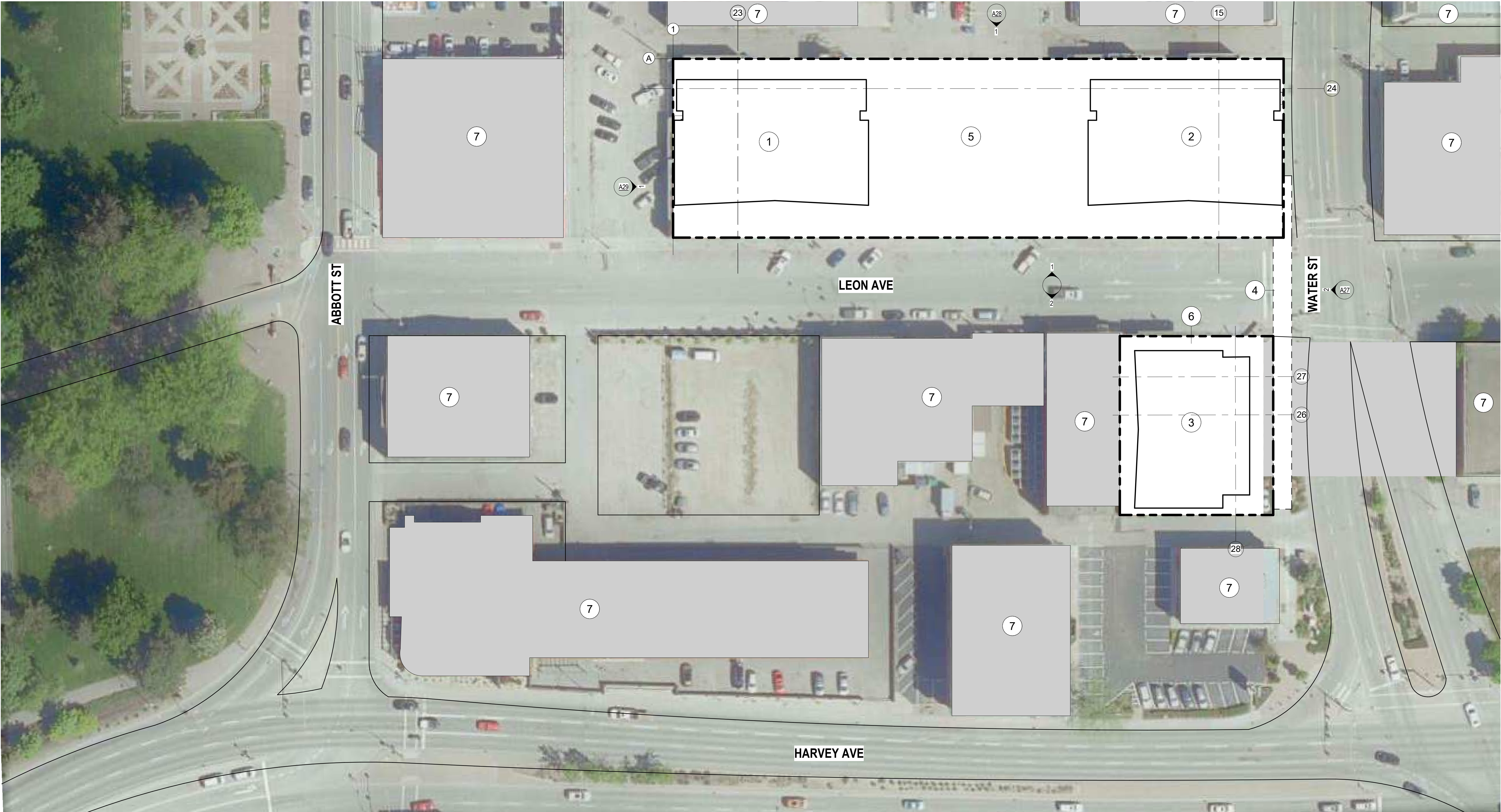


ALLOWABLE ZONING



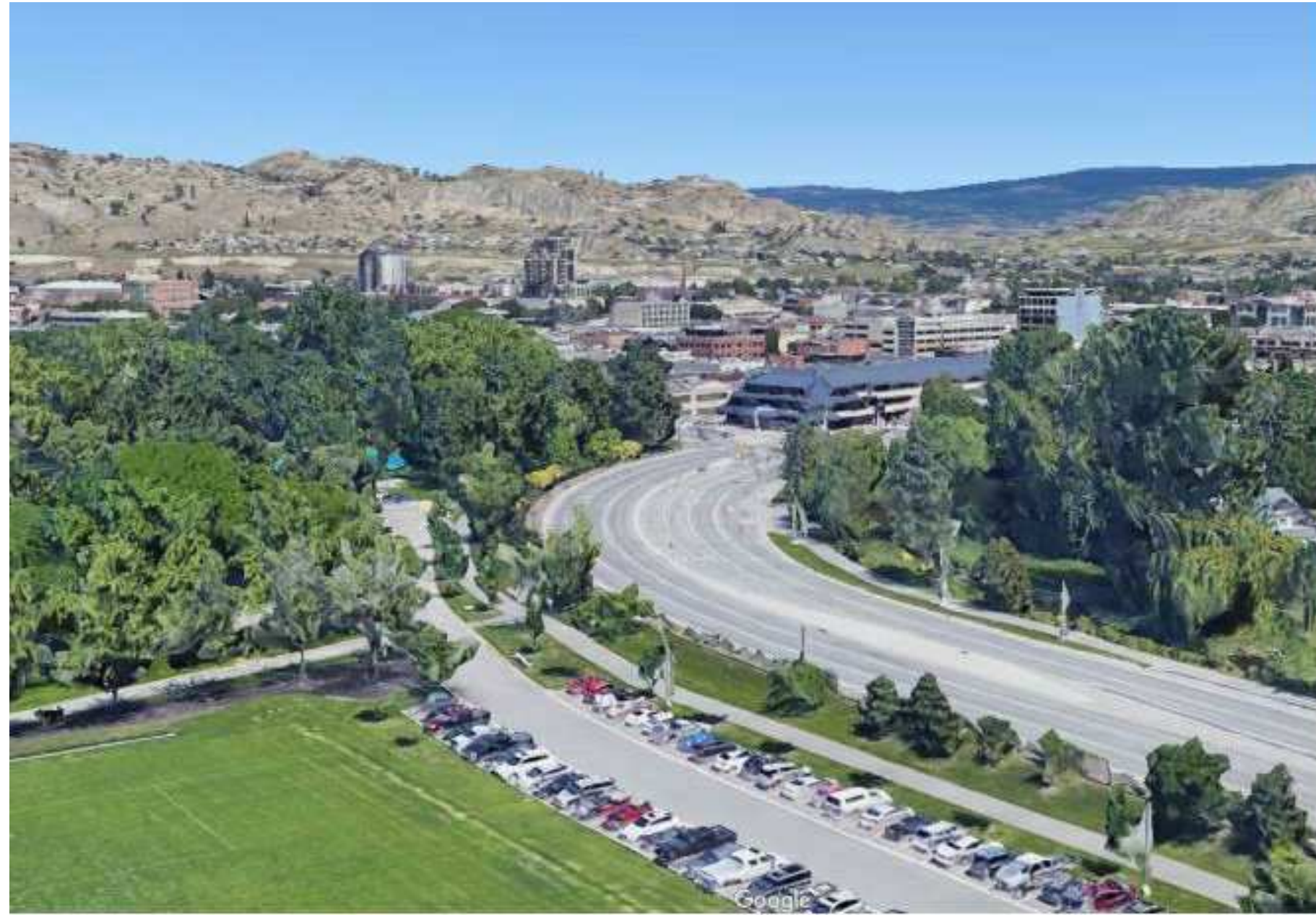
FUTURE ZONING





- ① PROPOSED TOWER A (24 STOREYS)  
(18 STOREYS MARKET RESIDENTIAL)
- ② PROPOSED TOWER B (42 STOREYS)  
(36 STOREYS MARKET RESIDENTIAL)
- ③ PROPOSED TOWER C (28 STOREYS)  
(22 STOREYS MARKET RESIDENTIAL)
- ④ PROPOSED CROSS OVER BRIDGE
- ⑤ PROPOSED PODIUM (TOWER A & B)
- ⑥ PROPOSED PODIUM (TOWER C)





1 - VIEW FROM BRIDGE / VIEW FROM NORTH OF WATER STREET



2 - VIEW FROM EAST HARVEY AVE



3 - VIEW LOOKING SOUTH ALONG WATER ST



4 - VIEW FROM NORTH OF OKANAGAN LAKE / VIEW FROM SOUTH OF WATER ST



5 - VIEW FROM WEST OF OKANAGAN LAKE



6 - VIEW LOOKING NORTH ALONG PANDOSY ST

SCHEDULE

A & B

This forms part of application

# DP20-011 / DVP20-0013

Planner

Initials

AC

City of

Kelowna

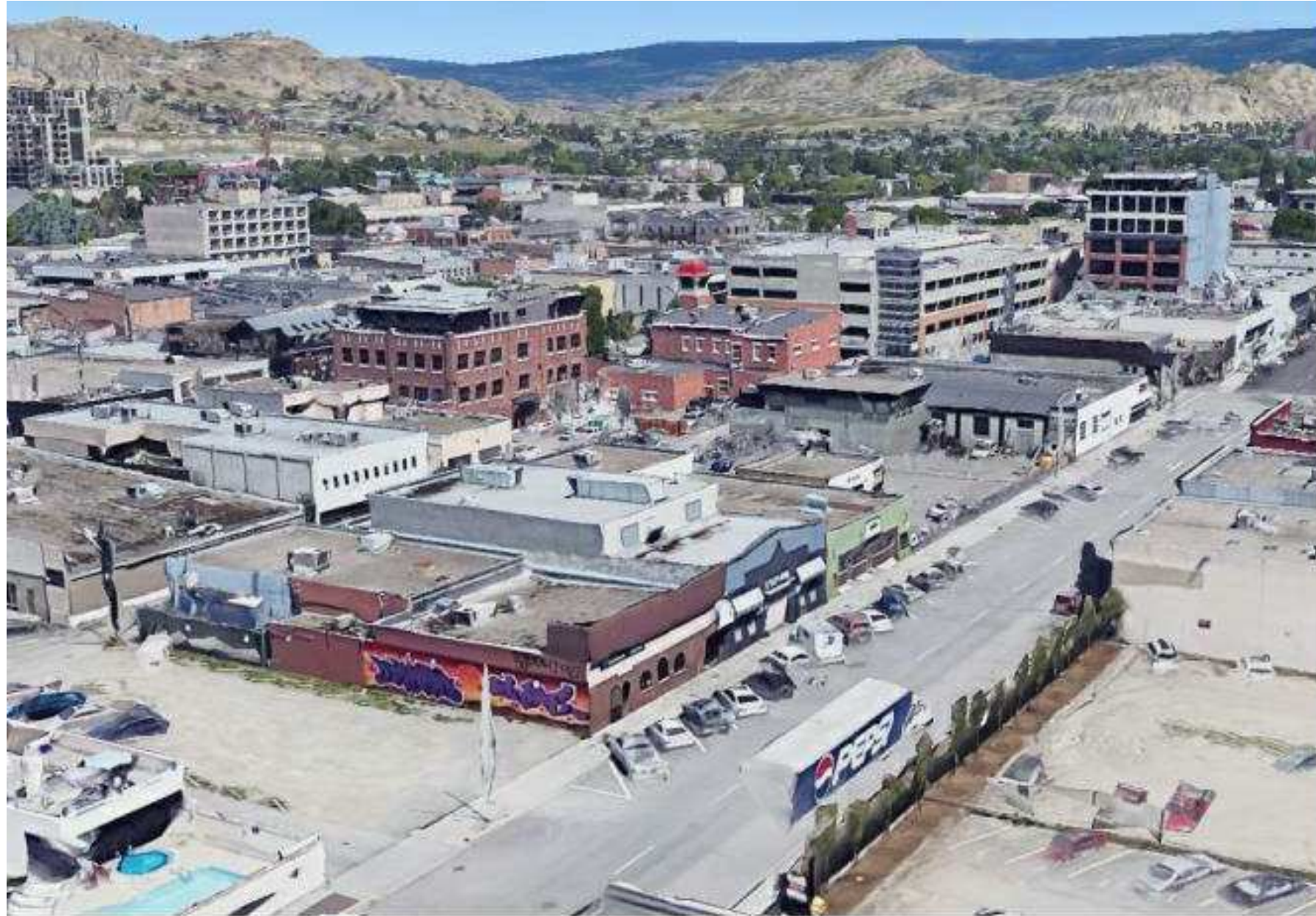
DEVELOPMENT PLANNING



DP Revised 10/16/2020

Development Permit 20/12/2019





1 - VIEW FROM SOUTH WEST LEON AVE / VIEW FROM EAST LEON AVE



2 - VIEW FROM EAST LEON AVE / VIEW FROM CITY PARK TOWARDS LEON AVE



3 - VIEW FROM NORTH WEST WATER ST / VIEW FROM WEST WATER ST



4 - VIEW FROM SOUTH WEST WATER ST / VIEW FROM WATER ST AT SOUTH TOWER



5 - VIEW FROM CITY PARK

**SCHEDULE**

A & B

This forms part of application  
# DP20-011 / DVP20-0013

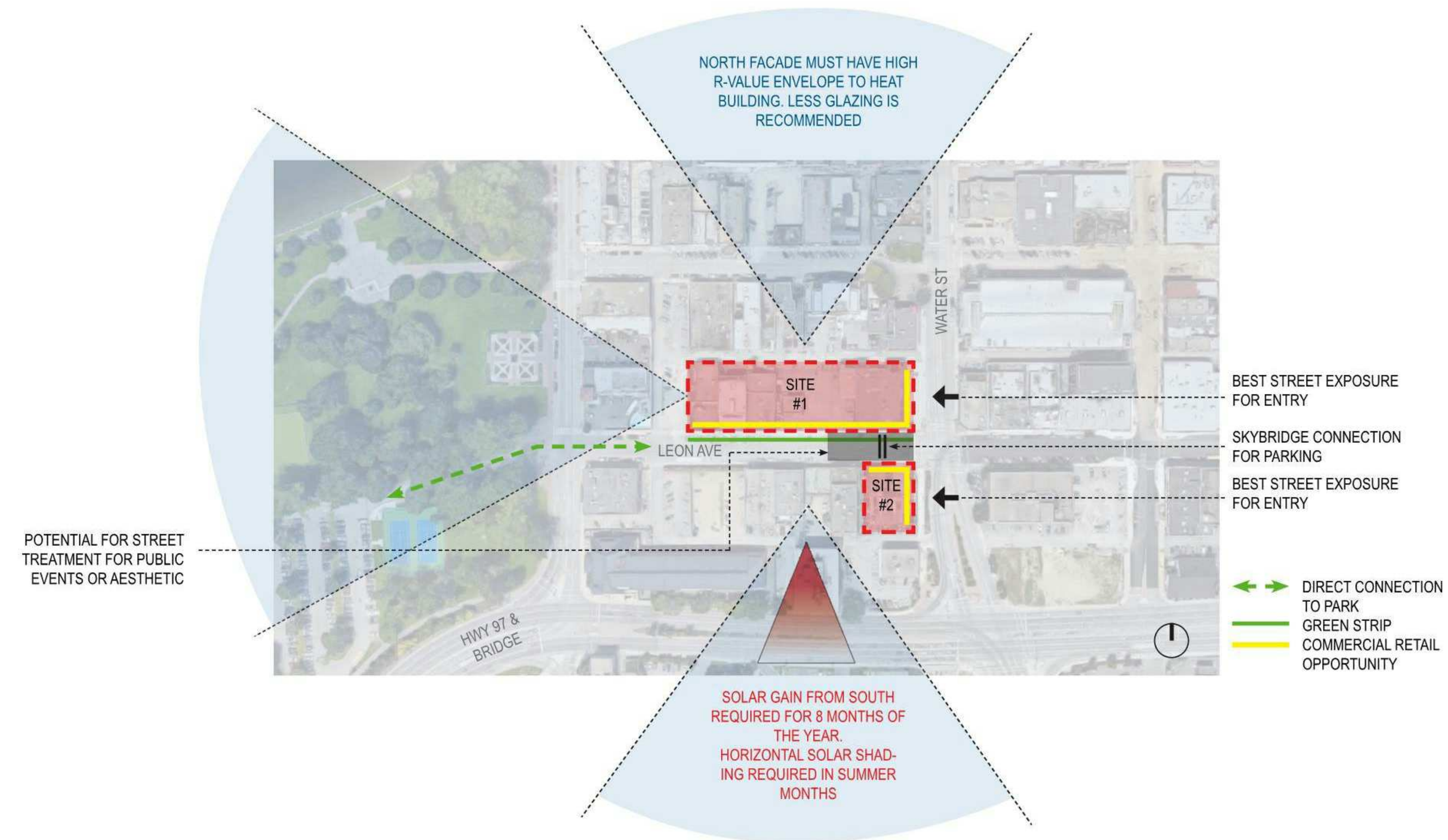
Planner Initials AC

  
City of  
**Kelowna**  
DEVELOPMENT PLANNING



DP Revised 10/16/2020  
Development Permit 20/12/2019



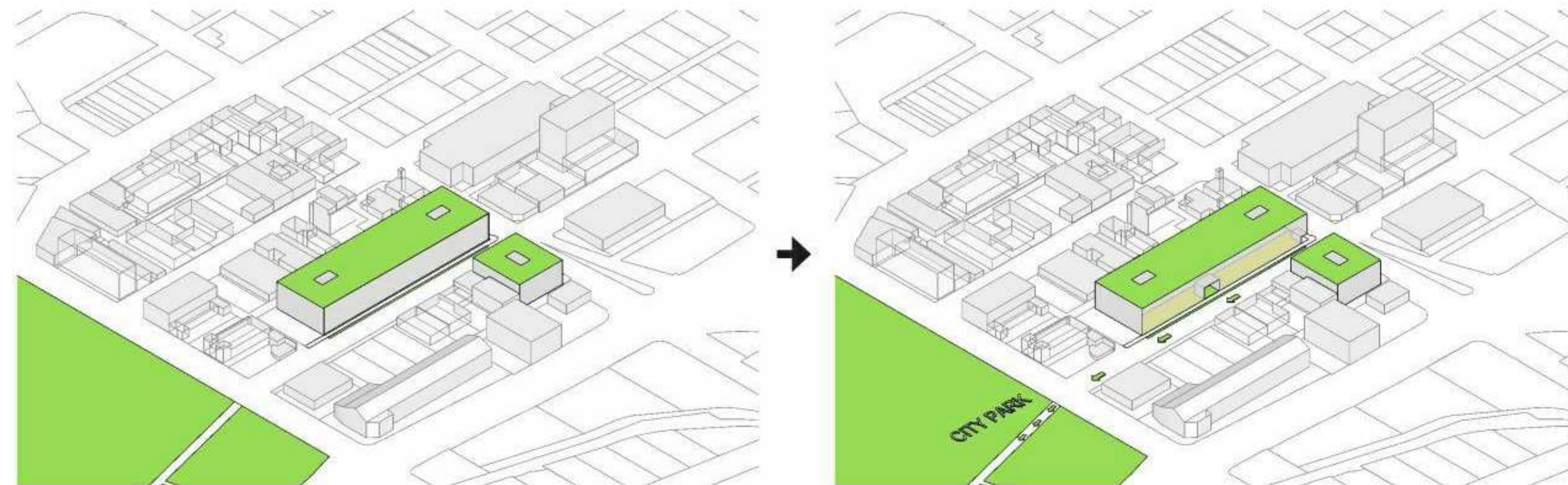


**SCHEDULE** A & B

This forms part of application  
# DP20-011 / DVP20-0013

Planner Initials **AC**

City of **Kelowna**  
DEVELOPMENT PLANNING



PROVIDING **AMENITIES** ON TOP OF THE PODIUM PROVIDES OUTDOOR SPACE FOR USERS OF THE BUILDING. BY BRINGING THE GROUND PLANE UP, IT TAKES ADVANTAGE OF PARK AND MOUNTAIN VIEWS.

PROVIDING **COMMERCIAL RETAIL UNITS** AND A **GREEN STRIP** ALONG SIDEWALK INVITES PUBLIC FROM CITY PARK TO THE SITE.





One Water Street - 36 & 29 Storeys



Westcorp - 33 Storeys



Brooklyn - 25 Storeys



Ella - 20 Storeys



Prospera Towers - 37 & 27 Storeys

**SCHEDULE A & B**  
This forms part of application  
# DP20-011 / DVP20-0013  
City of Kelowna  
Planner Initials AC

DP Revised 10/16/2020  
Development Permit 20/12/2019





Landmark VI - 17 Storeys



Skye - 26 Storeys



Discovery Point Resort - 22 Storeys



Park Place - 17 Storeys



Sopa Square - 14 Storeys



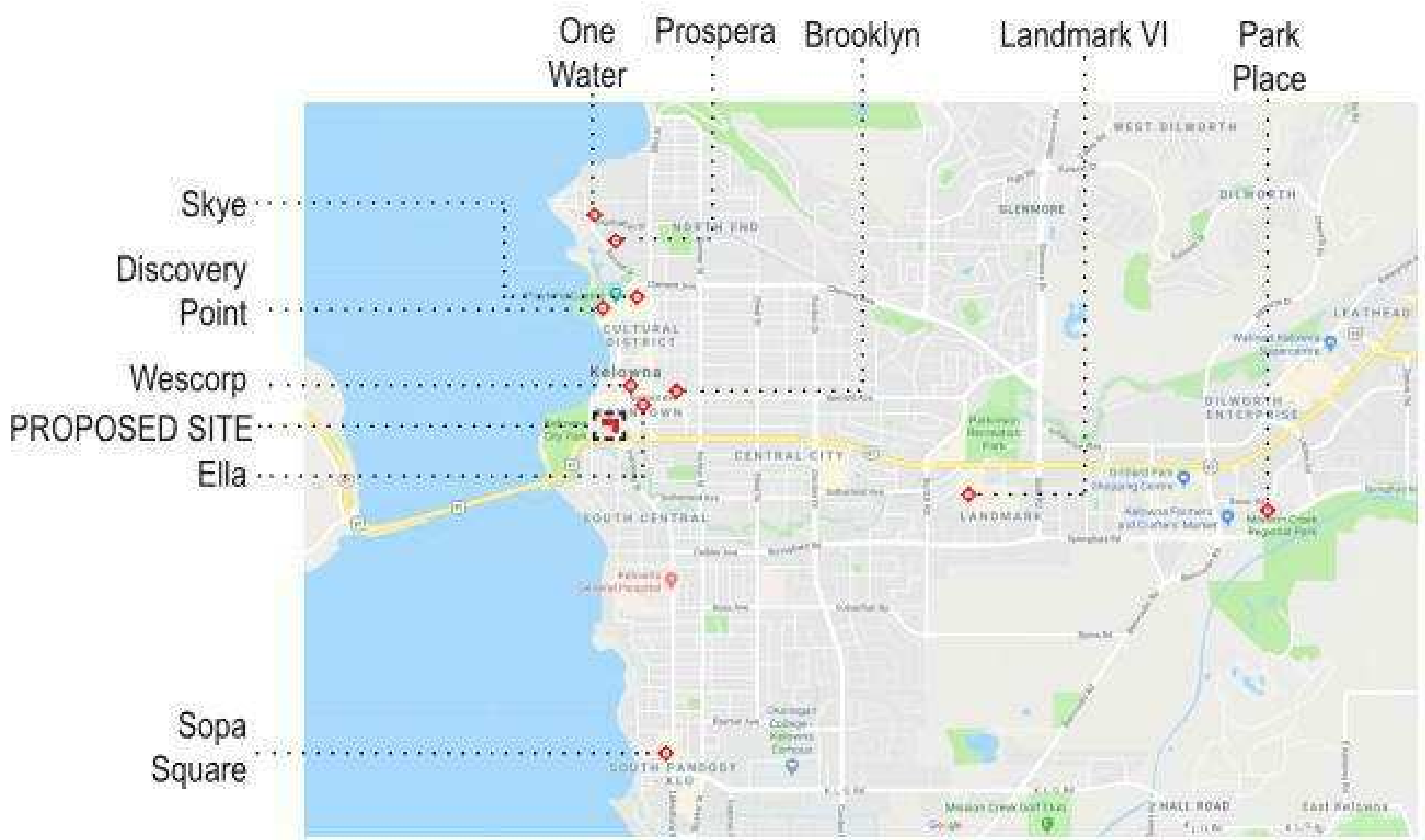
SCHEDULE

A & B

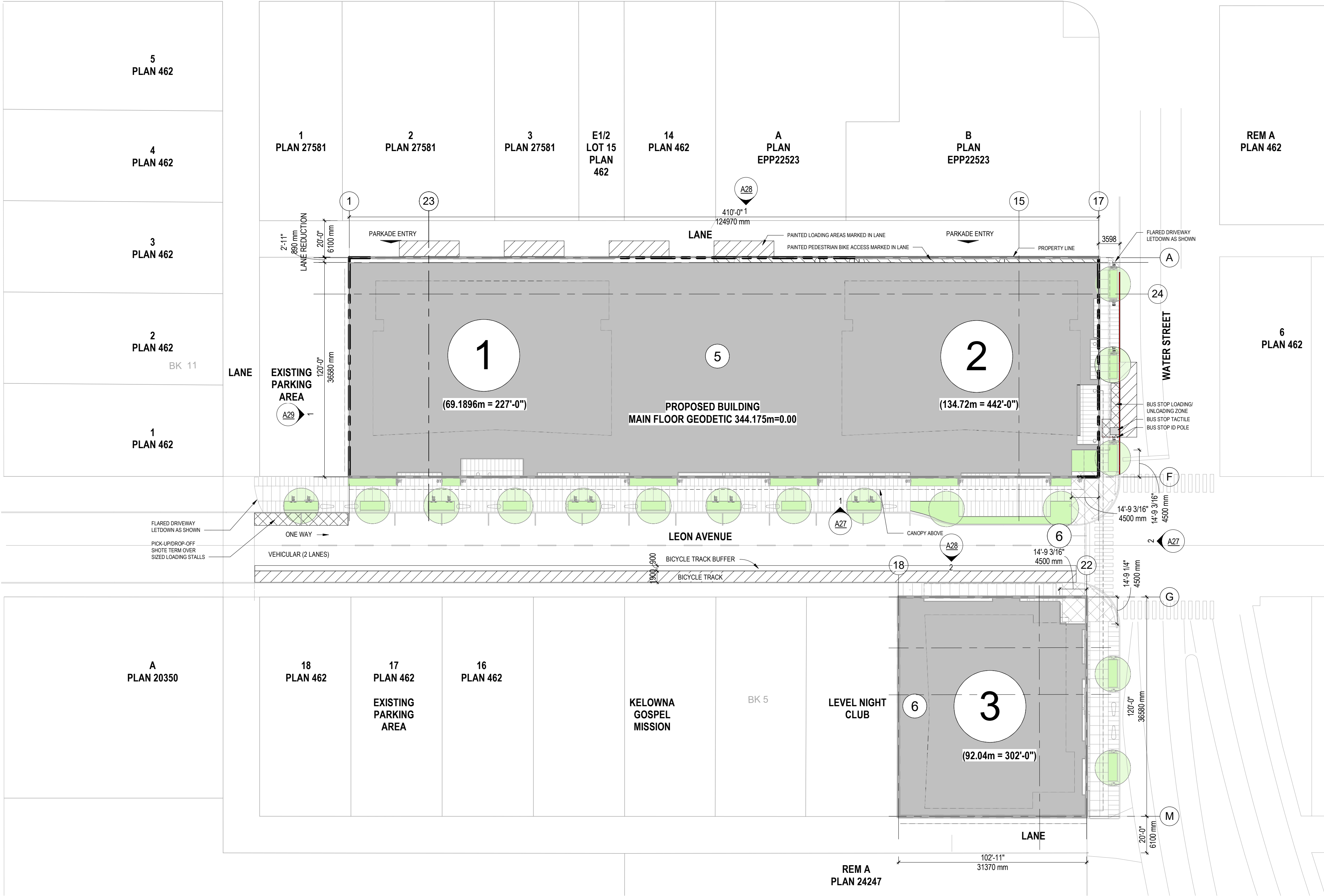
This forms part of application  
# DP20-011 / DVP20-0013

Planner Initials AC

City of Kelowna  
DEVELOPMENT PLANNING







ZONING BYLAW SUMMARY			
SITE	LEGAL DESCRIPTION	CIVIC ADDRESS	ZONING
PROJECT LOT	LOTS 1-8, BLOCK 10, PLAN 462 & LOT A, PLAN 22722	234 - 278 LEON AVE & 1620-1630 WATER ST, KELOWNA, BC	C7 - CENTRAL BUSINESS COMMERCIAL
LOT AREA	4,567.4 sm (49,163.1 SF) / 1,148.8 sm (12,365.6 SF)		

ZONING ANALYSIS TABLE		
CRITERIA	C7 ZONE REQUIREMENTS	PROPOSAL
DEVELOPMENT REGULATIONS		
	PRINCIPLE BLDGS	PRINCIPLE BLDGS
HEIGHT	76.5m (250'-11 3/4')	TOWER A = 79.9m (262'-0") = 3.4m VARIANCE TOWER B = 134.7m (442'-0") = 58.2m VARIANCE TOWER C = 92.04m (302'-0") = 15.54m VARIANCE
FRONT YARD	0 m	0 m
FRONT YARD	0 m	0 m
SIDE YARD	0 m	0 m
SETBACKS FOR PORTIONS OF HEIGHT >16 m ABUTTING A STREET	3m	3 m
SETBACK FOR PORTIONS OF HEIGHT >16 m ABUTTING A PROPERTY	4 m	4 m
SITE COVERAGE	N/A	100%
LOT AREA	N/A	5716.2m2 (61529sf)
NET AREA	N/A	51778.4m2 (557338.1sf)
FAR	9.0	9.0
OTHER REGULATIONS		
NUMBER OF RESIDENTIAL UNITS	N/A	650 UNITS
CRU AREA	N/A	4046 m2 (43554 sf)
MINIMUM PARKING REQUIREMENTS	RESIDENTIAL BASE PARKING REQUIRED: 0.9 PER 1 BR UNIT (316 UNITS) = 284 1.0 PER 2 BR OR MORE UNIT (334 UNITS) = 334 0.14 PER UNIT VISITOR (650 UNITS) = 91 SUB-TOTAL RESIDENTIAL REQUIRED = 709 (TOWER 1 = 170, TOWER 2 = 368, TOWER 3 = 171)  COMMERCIAL: 0.9 PER 100 SM GFA = 36 STALLS, HOWEVER, THESE STALLS GROUPED WITH VISITOR, THEREFORE NOT ADDED.  TOTAL PARKING REQUIRED = 709 STALLS	TOTAL PARKING PROVIDED  REGULAR: 352 STALLS @ 6.0m X 2.5m or 6.0m X 2.7m next to columns "REGULAR REDUCED": 35 STALLS @ 5.2m X 2.5m or 5.2m X 2.7m next to columns HC ACCESSIBLE STALLS: 16 STALLS @ 2.5m + 1.5m access X 6.0m 2 STALLS @ 3.3m + 1.5m access X 6.0m SMALL CAR: 298 STALLS @ 4.8m X 2.3m or 4.8m X 2.5m next to columns COMPACT (INCREASED WIDTH): 24 STALLS @ 3.4m X 2.5m  TOTAL: 352+35+16+2+298+24 = 727 STALLS  727 STALLS PROVIDED - 709 STALLS REQUIRED = 18 STALLS IN EXCESS
MINIMUM BICYCLE PARKING REQUIREMENTS	LONG TERM RESIDENTIAL : 0.75 PER 2 BEDROOM OR LESS UNITS: 542*0.75 = 407 1.0 PER 3 BEDROOM OR MORE UNITS: 108 LONG TERM COMMERCIAL: 1 PER 500SM CLA = 4046SM/500SM = 8 THEREFORE: 407+108+8 = 523 LONG TERM STALLS REQUIRED SHORT TERM RESIDENTIAL: 6/ENTRY+1/5 UNITS ABOVE 70 = 6*3 = 18 + 650*70 = 5805+116, THEREFORE 18+116 = 134 SHORT TERM COMMERCIAL: 2/ENTRY (GREATER VALUE THAN 1/750SM) = 2*8 = 16 THEREFORE 134+16 = 150 SHORT TERM STALLS REQUIRED	LONG TERM BIKE PARKING PROVIDED FLOOR MOUNTED: 199 STALLS (2 PER) = 398 WALL MOUNTED: 84 STALLS (2 PER) = 168 298+168 = 566 LONG TERM STALLS PROVIDED EXCESS LONG TERM BIKE PARKING = 566-523 = 43 SHORTFALL OF 93 WALL MOUNTED FOR 50:50 RATIO SHORT TERM BIKE PARKING PROVIDED FLOOR MOUNTED: 28 SHORTFALL OF 122 SHORT TERM BIKE PARKING
PRIVATE OPEN SPACE	10.0m² / 1BR DWELLING, AND 15.0 m² /2BR+ (10x316)+15(334) = 8170m² TOTAL REQD	16142.83m2 (173760sf)
SHARED AMENITY SPACE	N/A	4493.72m2 (48370sf)
1 - HEIGHT VARIANCE: THE DEVELOPMENT IS 58.2 M HIGHER THAN THE ZONE ALLOWS (76.5 M), HOWEVER THE TOWERS MATCH THE CITY'S VISION FOR THE FUTURE OF THIS ZONE (OCP). THE FAR IS COMPLIANT WITH THE ZONING BYLAW.  Tower A 79.9 M (3.4 M variance) Tower B 134.72 M (58.20 M variance) Tower C 92.04 M (15.54 M variance)  2 - PARKING VARIANCE: THE 727 PARKING STALLS PROVIDED MEETS (EXCEEDS) THE REQUIRED 709 STALLS, HOWEVER 24 OF THE STALLS ARE "MODIFIED COMPACT STALLS @ 3.4m x 2.5m", WHICH HAVE BEEN APPROVED FOR USE AS PER DISCUSSIONS WITH COK PLANNING DEPARTMENT.  3 - SHORT TERM BIKE PARKING: THE CALCULATIONS PROVIDED IN THE BYLAW ARE MEANT FOR SMALLER DEVELOPMENTS; THE 150 REQUIRED PER THE CURRENT BYLAW EXCEEDS ANY TEMPORARY USE IN THIS DEVELOPMENT. THUS A SHORTFALL OF 122.  LONG TERM BIKE PARKING: RATIO OF WALL MOUNTED BIKE SPACES; SHORTFALL OF 93, HOWEVER, WE HAVE AN EXCESS OF FLOOR MOUNTED LONG TERM STALLS OF 136. TOTAL 566 STALLS PROVIDED (EXCESS OF 43).  Tower A (24 storey total / 18 storey market housing) Tower B (42 storey total / 36 storey market housing) Tower C (28 storey total / 22 storey market housing)		

2 01-A-FLOOR PLAN - TOWERS A+B  
1:400

- 1

PROPOSED TOWER A (24 STOREYS)  
(18 STOREYS MARKET RESIDENTIAL)
- 2

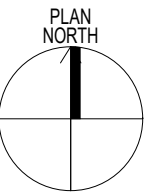
PROPOSED TOWER B (42 STOREYS)  
(36 STOREYS MARKET RESIDENTIAL)
- 3

PROPOSED TOWER C (28 STOREYS)  
(22 STOREYS MARKET RESIDENTIAL)
- 4

PROPOSED CROSS OVER BRIDGE
- 5

PROPOSED PODIUM (TOWER A & B)
- 6

PROPOSED PODIUM (TOWER C)



SCHEDULE A & B

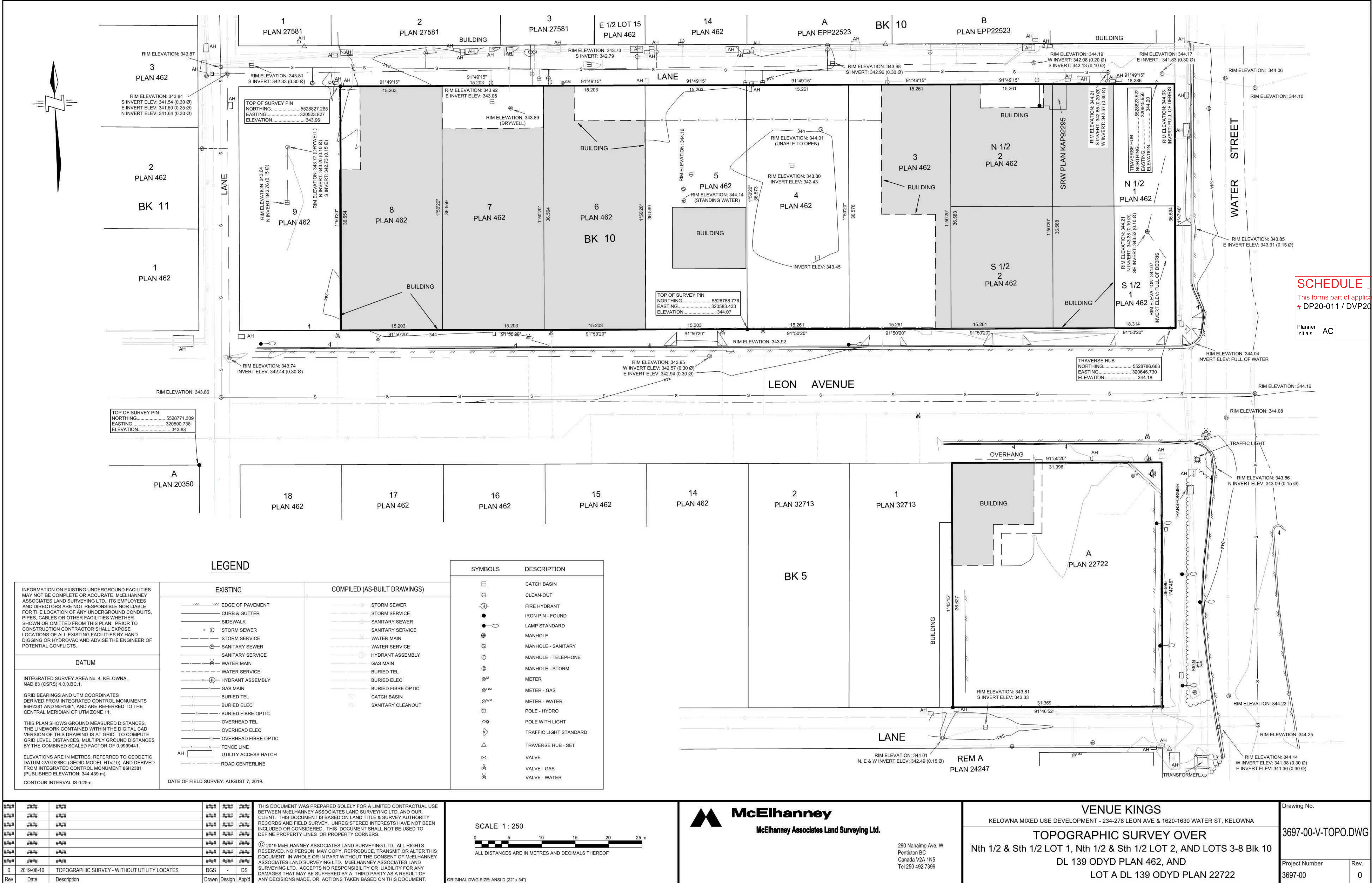
This forms part of application  
# DP20-011 / DVP20-0013

Planner Initials AC

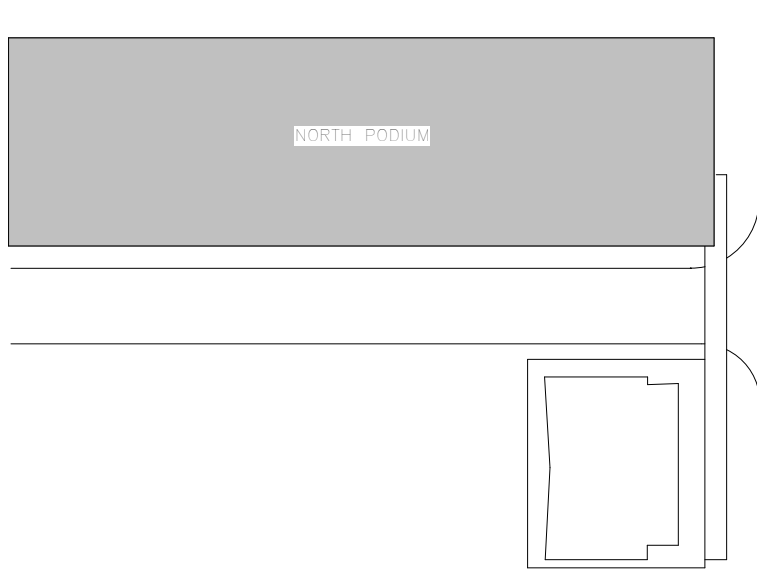
City of Kelowna  
DEVELOPMENT PLANNING











KEY PLAN

OVERALL PARKING SCHEDULE	
PARKING STALL TYPE	COUNT
Compact - 3.4m x 2.5m Wide Compact	24
	24
HC Parking Space - 2.5m x 6.0m or 3.3m x 6.0m (Van) + 1.5m access	18
	18
Regular - 6.0m x 2.5m or 6.0m x 2.7m at columns	387
	387
Small - 4.8m x 2.3m or 4.8m x 2.5m at columns	298
	298
Grand total: 727	727

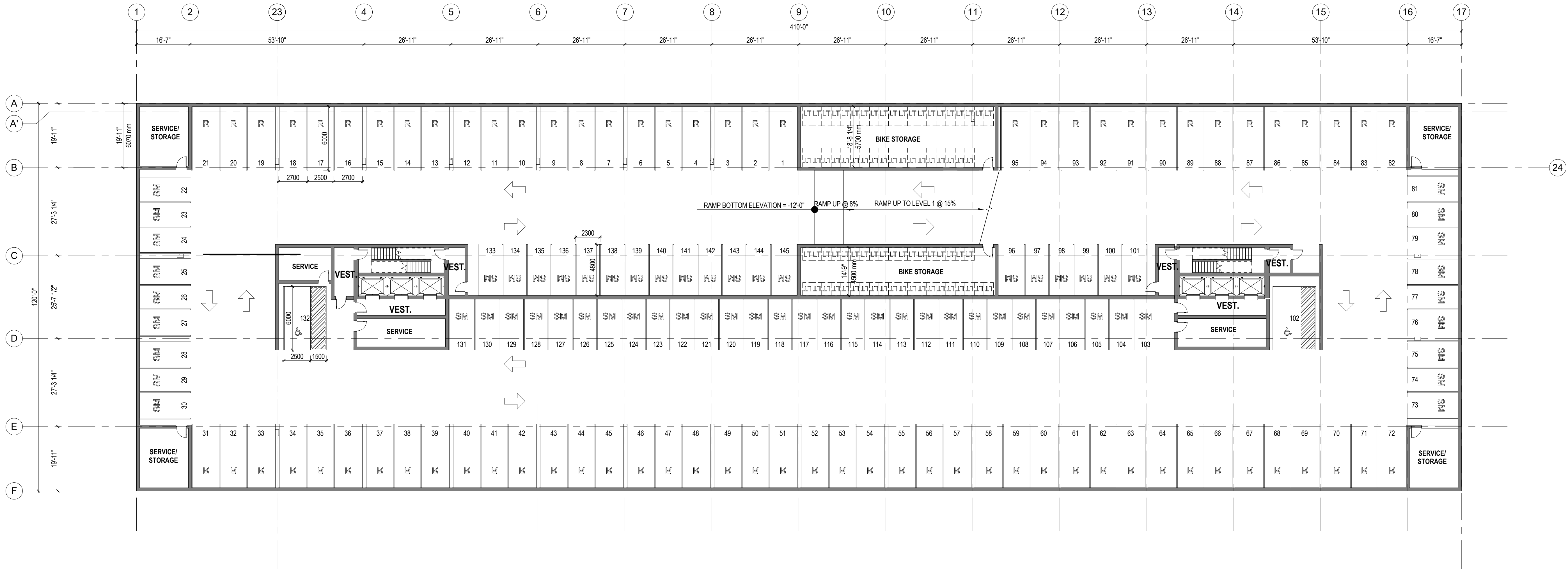
PARKING SCHEDULE - LEVEL 0		
PARKING STALL TYPE	LEVEL	COUNT
HC Parking Space - 2.5m x 6.0m or 3.3m x 6.0m (Van) + 1.5m access	LEVEL 0	2
		2
Regular - 6.0m x 2.5m or 6.0m x 2.7m at columns	LEVEL 0	77
		77
Small - 4.8m x 2.3m or 4.8m x 2.5m at columns	LEVEL 0	66
		66
Grand total: 145		145

SCHEDULEA & B

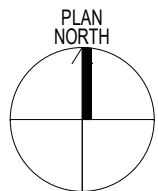
This forms part of application  
# DP20-011 / DVP20-0013

Planner  
InitialsAC

City of  
Kelowna  
DEVELOPMENT PLANNING



1 00-A-BASEMENT PLAN - TOWERS A+B  
1:200





KEY PLAN

PARKING SCHEDULE - LEVEL 1		
PARKING STALL TYPE	LEVEL	COUNT
Compact - 3.4m x 2.5m Wide Compact	LEVEL 1	24
HC Parking Space - 2.5m x 6.0m or 3.3m x 6.0m (Van) + 1.5m access	LEVEL 1	7
Regular - 6.0m x 2.5m or 6.0m x 2.7m at columns	LEVEL 1	34
Small - 4.8m x 2.3m or 4.8m x 2.5m at columns	LEVEL 1	27
Grand total: 92		92

SCHEDULE

A & B

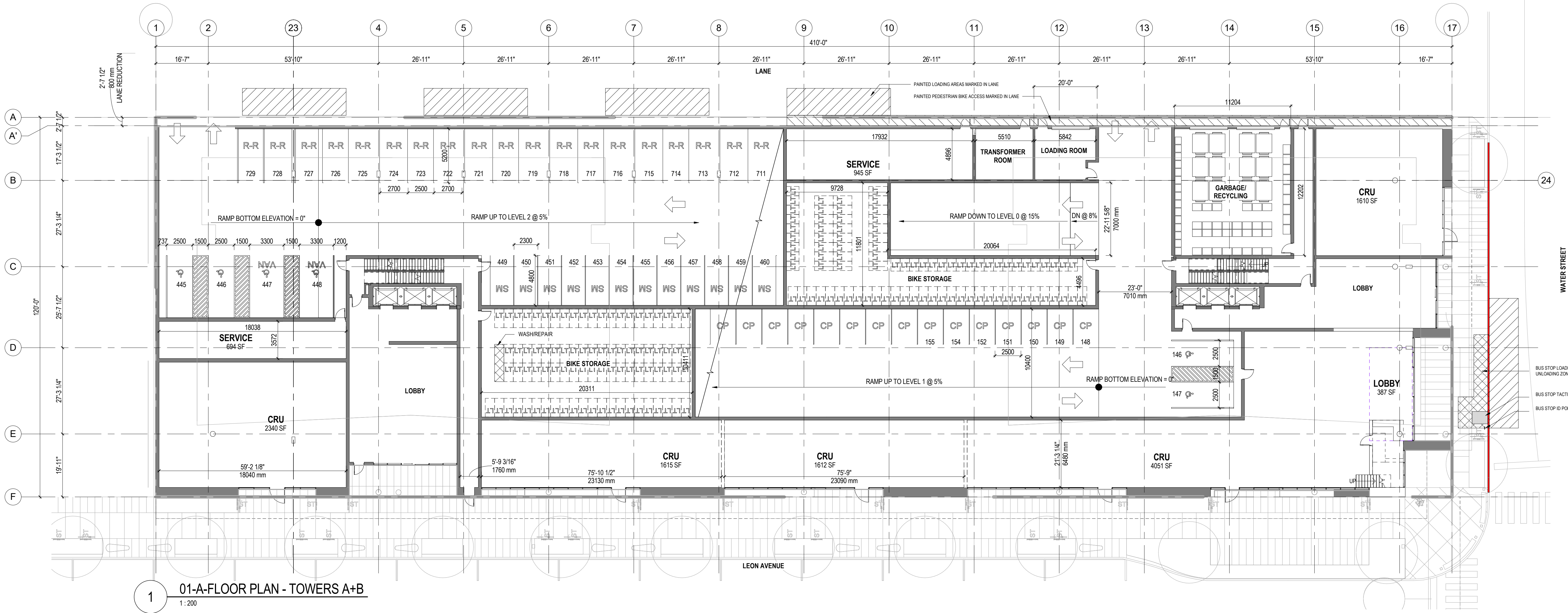
This forms part of application

# DP20-011 / DVP20-0013

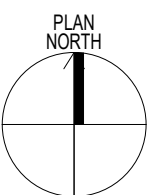
City of Kelowna

DEVELOPMENT PLANNING

Planner Initials AC



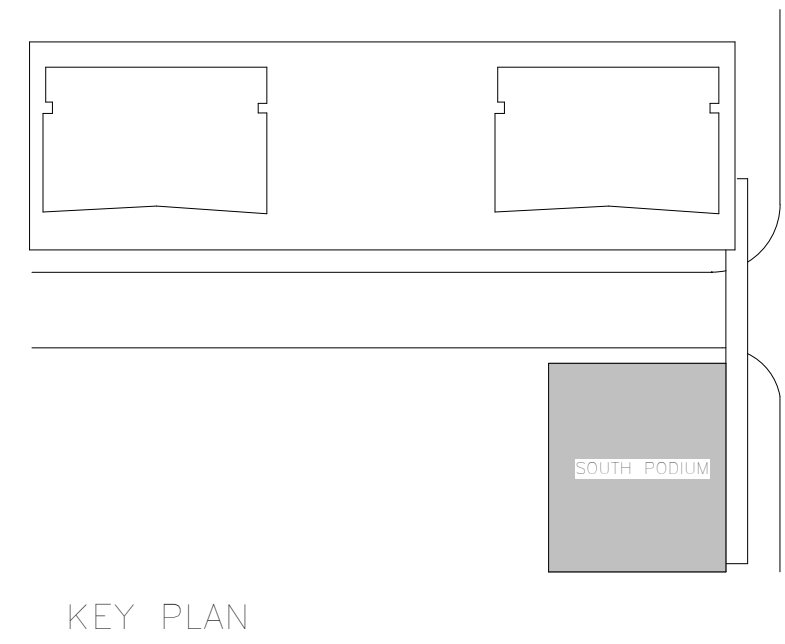
1 01-A-FLOOR PLAN - TOWERS A+B  
1:200



DP Revised 10/16/2020

Development Permit 20/12/2019



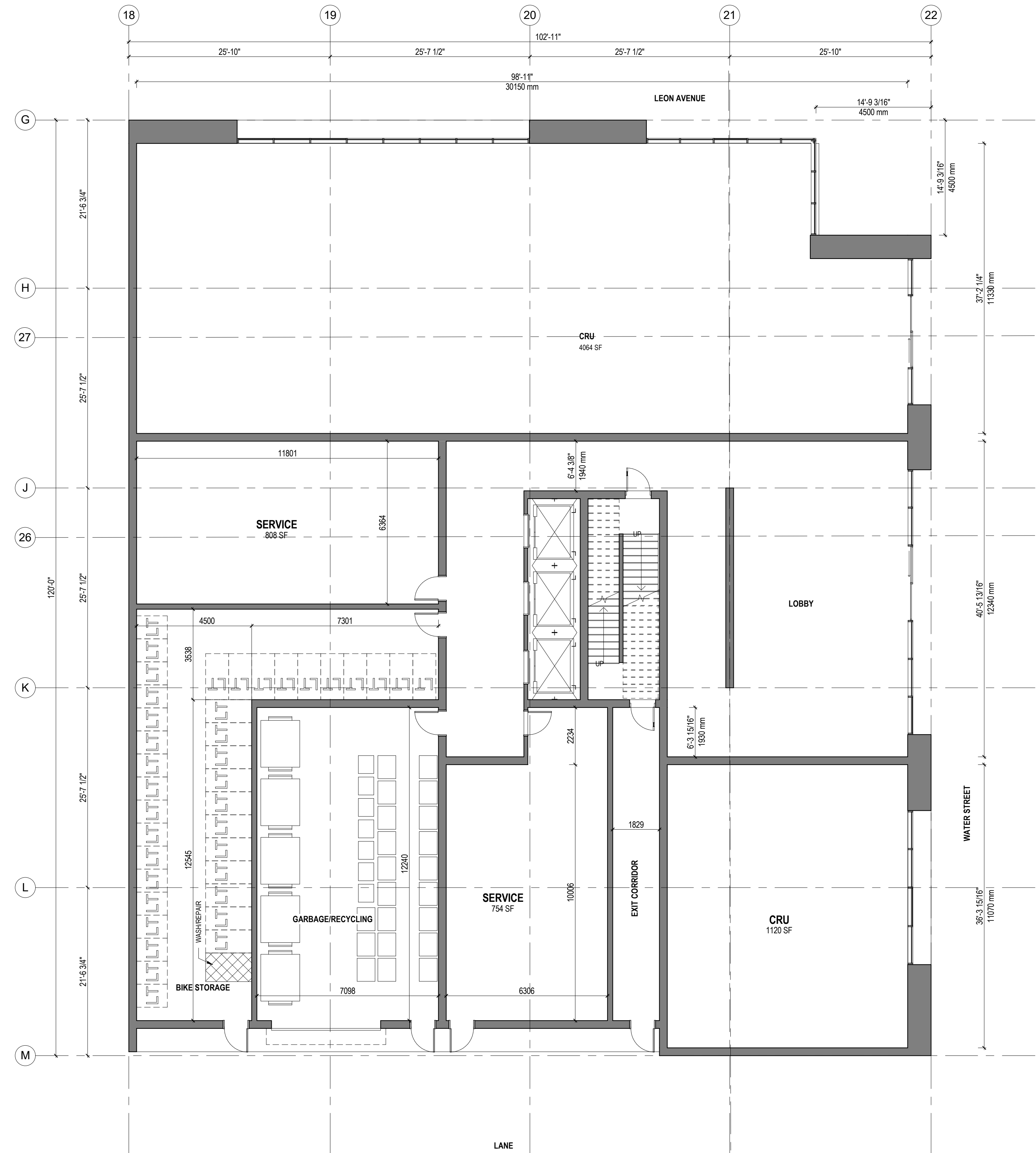


**SCHEDULE** A & B

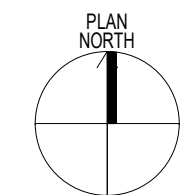
This forms part of application  
# DP20-011 / DVP20-0013

Planner Initials **AC**

City of Kelowna  
DEVELOPMENT PLANNING



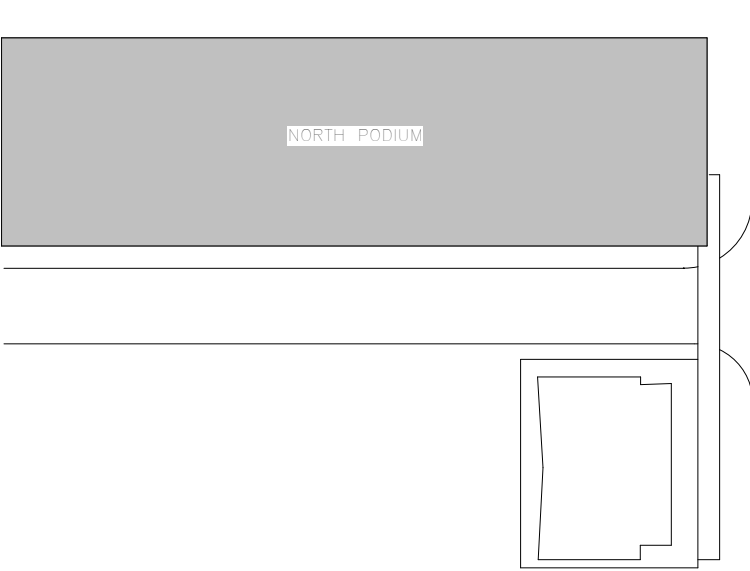
1 01-A-FLOOR PLAN - TOWER C  
1:100



DP Revised 10/16/2020  
Development Permit 20/12/2019







KEY PLAN

PARKING SCHEDULE - LEVEL 2		
PARKING STALL TYPE	LEVEL	COUNT
HC Parking Space - 2.5m x 6.0m or 3.3m x 6.0m (Van) + 1.5m access	LEVEL 2	4
Regular - 6.0m x 2.5m or 6.0m x 2.7m at columns	LEVEL 2	74
Small - 4.8m x 2.3m or 4.8m x 2.5m at columns	LEVEL 2	35
Grand total:		113

SCHEDULE

A & B

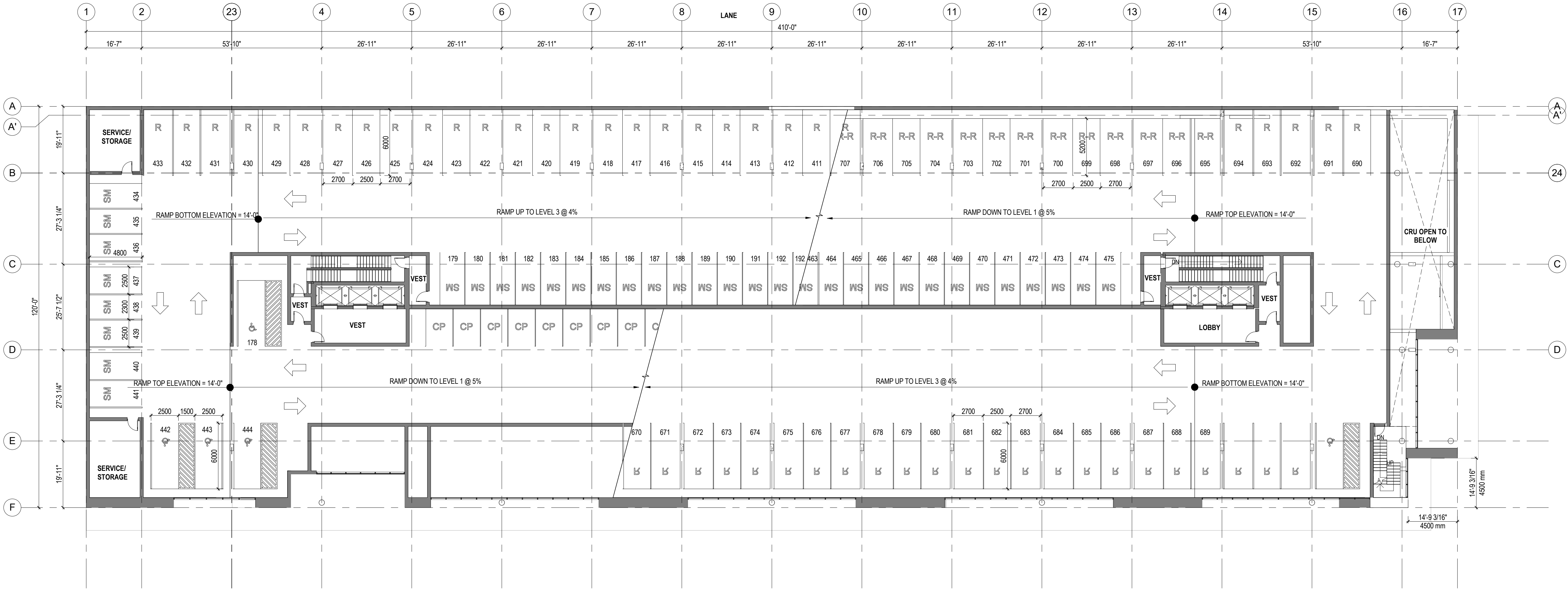
This forms part of application

# DP20-011 / DVP20-0013

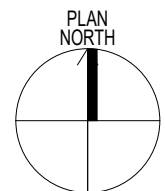
Planner Initials AC

City of Kelowna

DEVELOPMENT PLANNING



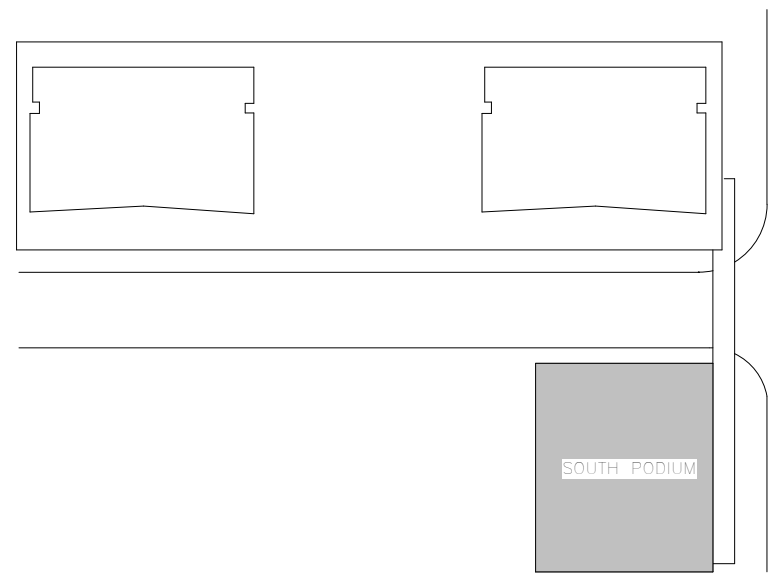
1 02-A-FLOOR PLAN  
1:200



DP Revised 10/16/2020  
Development Permit 20/12/2019



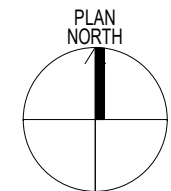
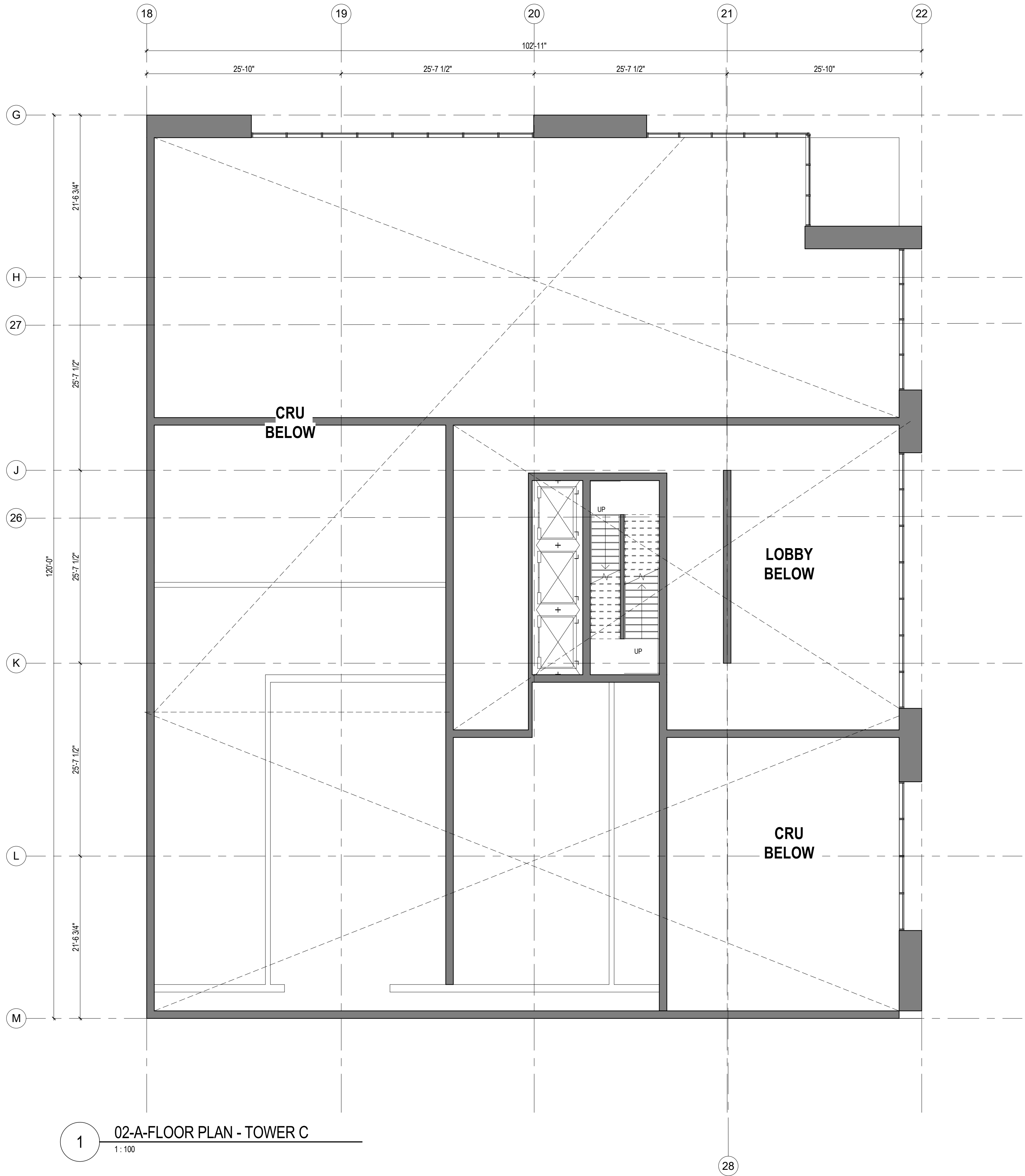




KEY PLAN

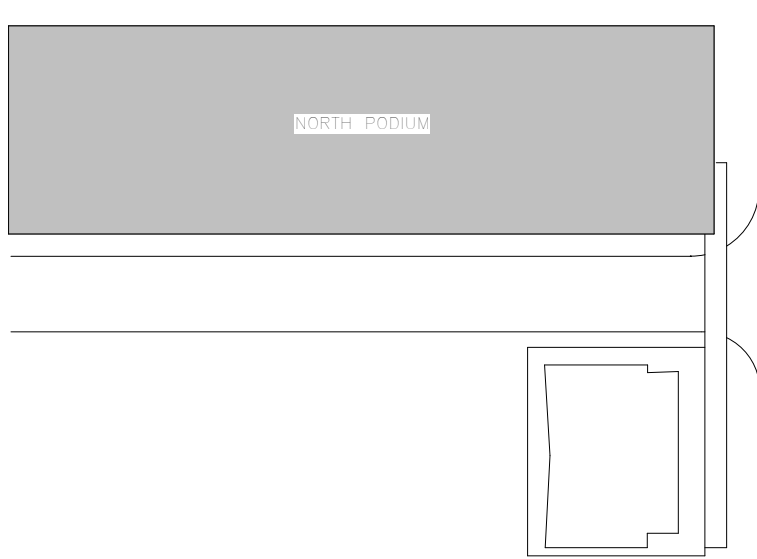
**SCHEDULE**  
This forms part of application  
# DP20-011 / DVP20-0013  
Planner Initials **AC**

**A & B**  
  
City of Kelowna  
DEVELOPMENT PLANNING



DP Revised 10/16/2020  
Development Permit 20/12/2019





KEY PLAN

PARKING SCHEDULE - LEVEL 3			
PARKING STALL TYPE	LEVEL	COUNT	
HC Parking Space - 2.5m x 6.0m or 3.3m x 6.0m (Van) + 1.5m access	LEVEL 3	2	
		2	
Regular - 6.0m x 2.5m or 6.0m x 2.7m at columns	LEVEL 3	83	
		83	
Small - 4.8m x 2.3m or 4.8m x 2.5m at columns	LEVEL 3	70	
		70	
Grand total: 155		155	

SCHEDULE

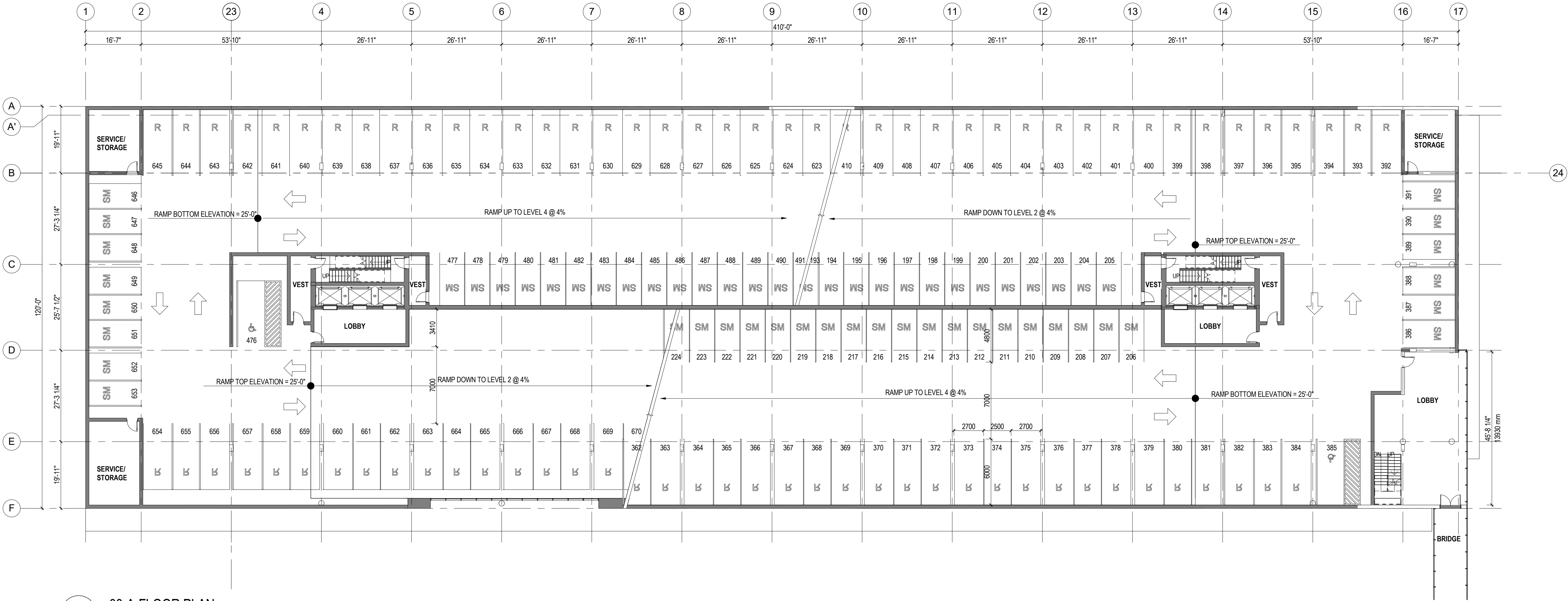
A & B

This forms part of application  
# DP20-011 / DVP20-0013

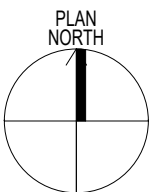
Planner Initials AC

City of Kelowna

DEVELOPMENT PLANNING

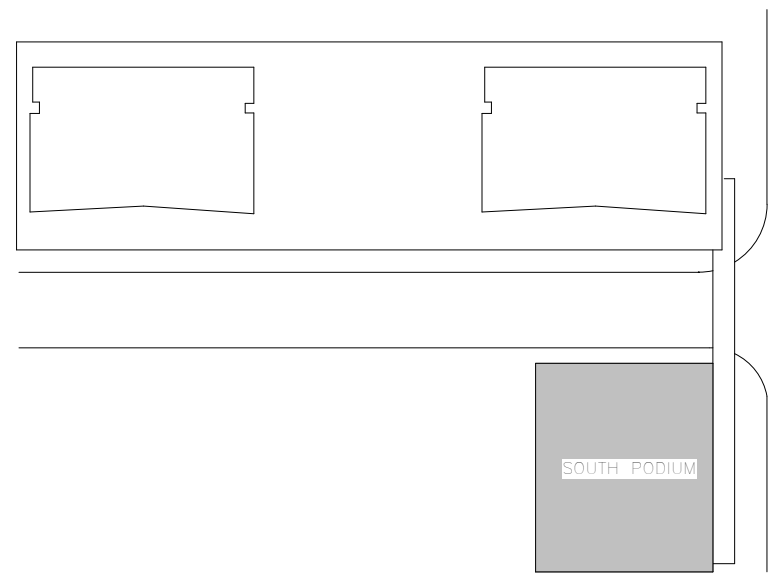


1 03-A-FLOOR PLAN  
1:200



DP Revised 10/16/2020  
Development Permit 20/12/2019





KEY PLAN

SCHEDULE

A & B

This forms part of application

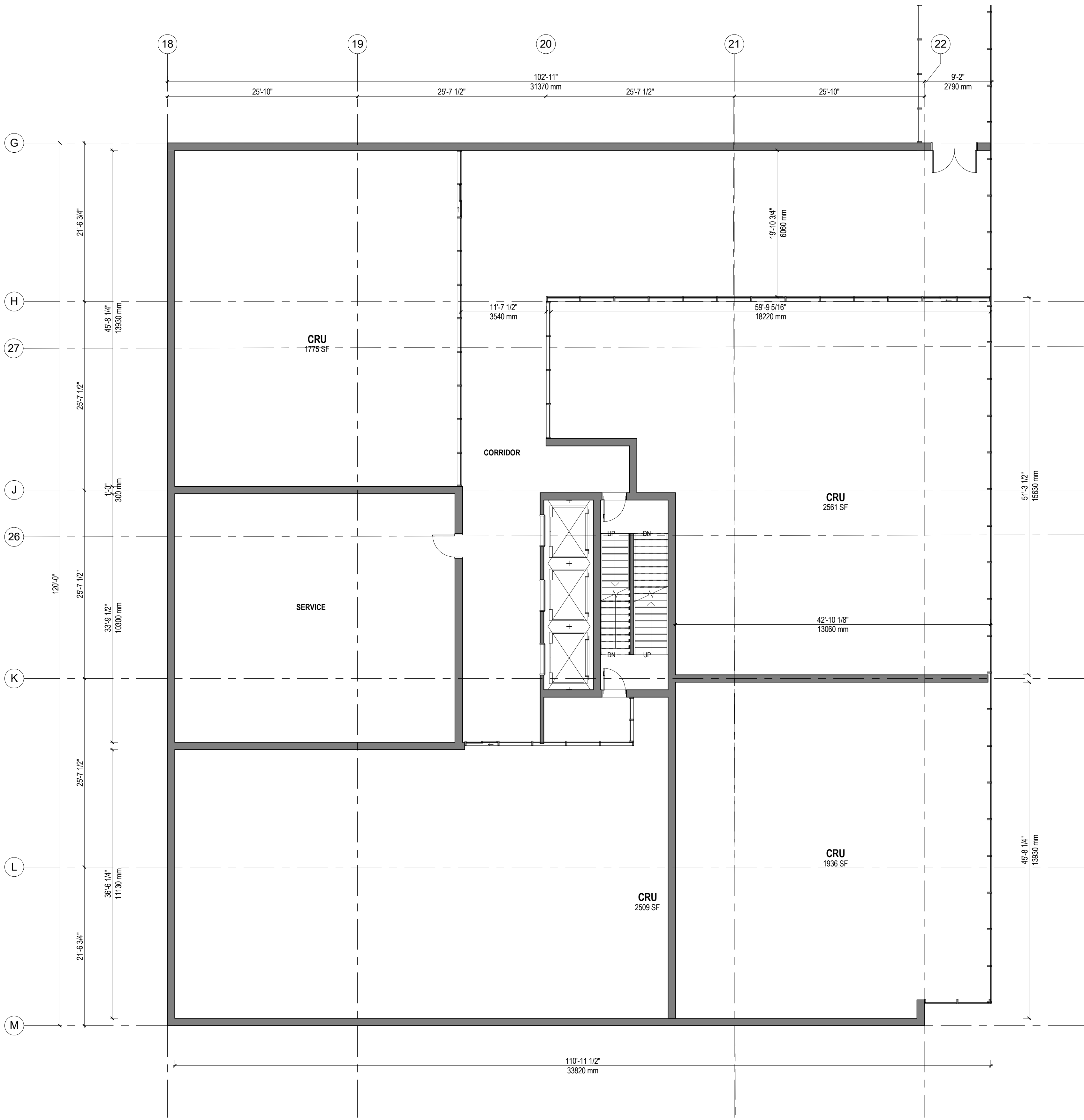
# DP20-011 / DVP20-0013

Planner Initials

AC

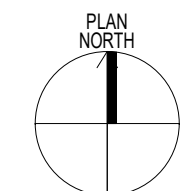
City of Kelowna

DEVELOPMENT PLANNING



1 03-A-FLOOR PLAN - TOWER C  
1:100

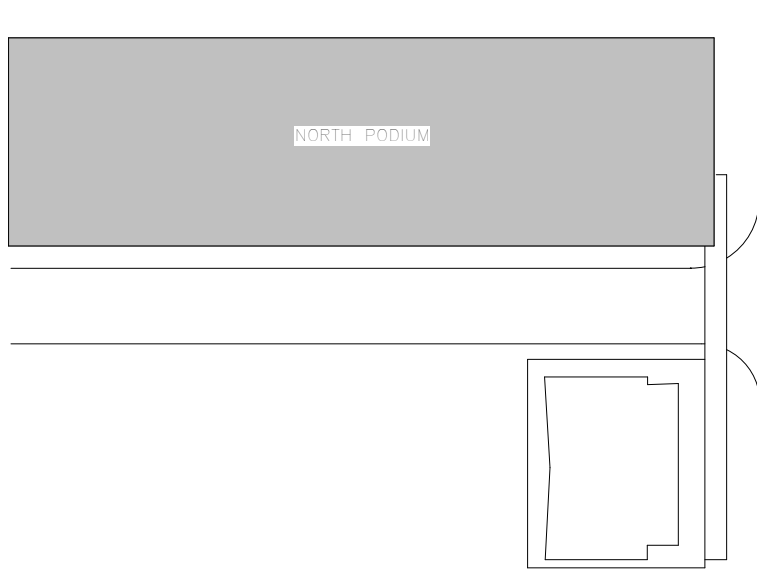
28



DP Revised 10/16/2020  
Development Permit 20/12/2019







KEY PLAN

PARKING SCHEDULE - LEVEL 4		
PARKING STALL TYPE	LEVEL	COUNT
HC Parking Space - 2.5m x 6.0m or 3.3m x 6.0m (Van) + 1.5m access	LEVEL 4	2
Regular - 6.0m x 2.5m or 6.0m x 2.7m at columns	LEVEL 4	81
Small - 4.8m x 2.3m or 4.8m x 2.5m at columns	LEVEL 4	71
Grand total: 154		154

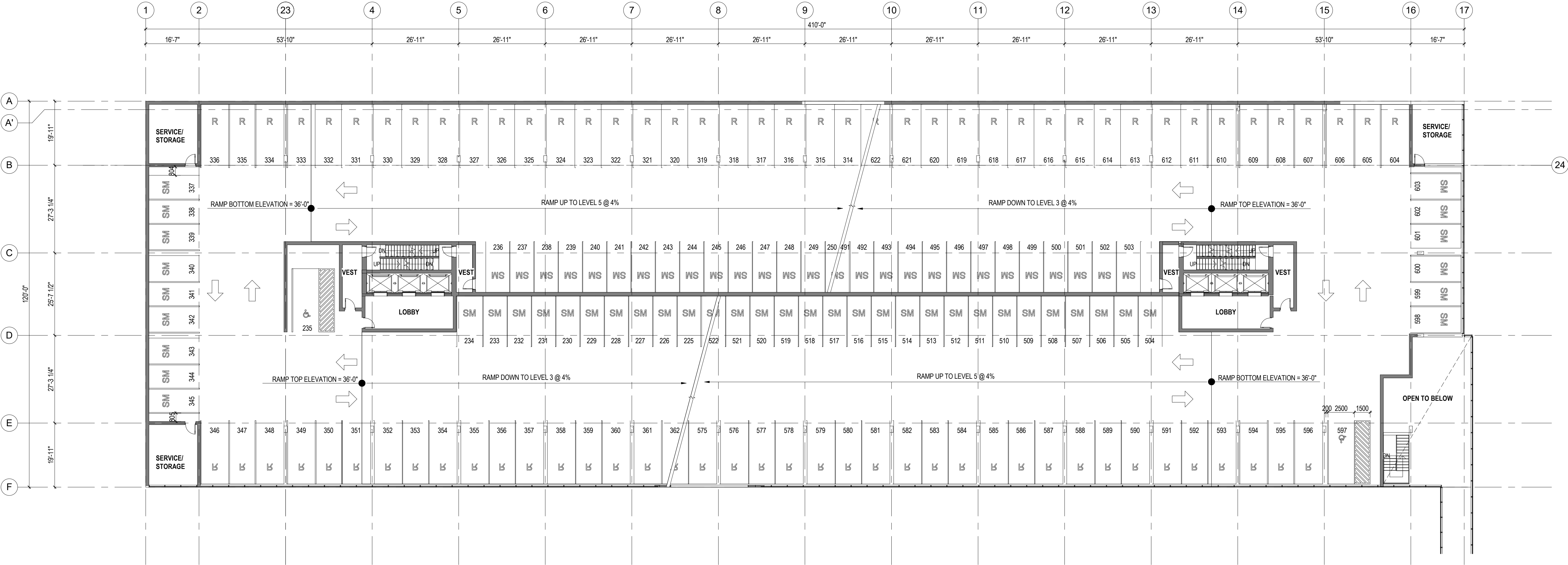
SCHEDULE

A & B

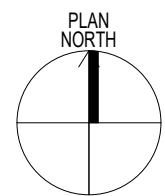
This forms part of application  
# DP20-011 / DVP20-0013

Planner  
Initials AC

City of  
Kelowna  
DEVELOPMENT PLANNING

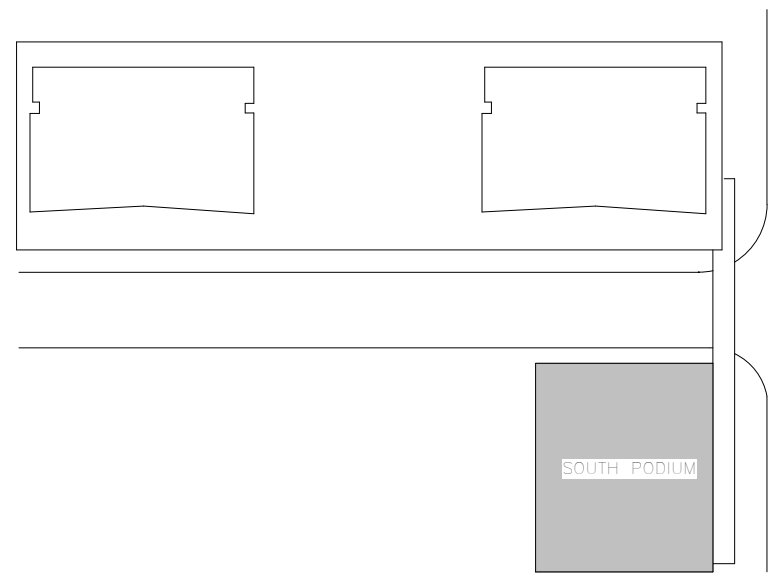


1 04-A-FLOOR PLAN  
1:200



DP Revised 10/16/2020  
Development Permit 20/12/2019

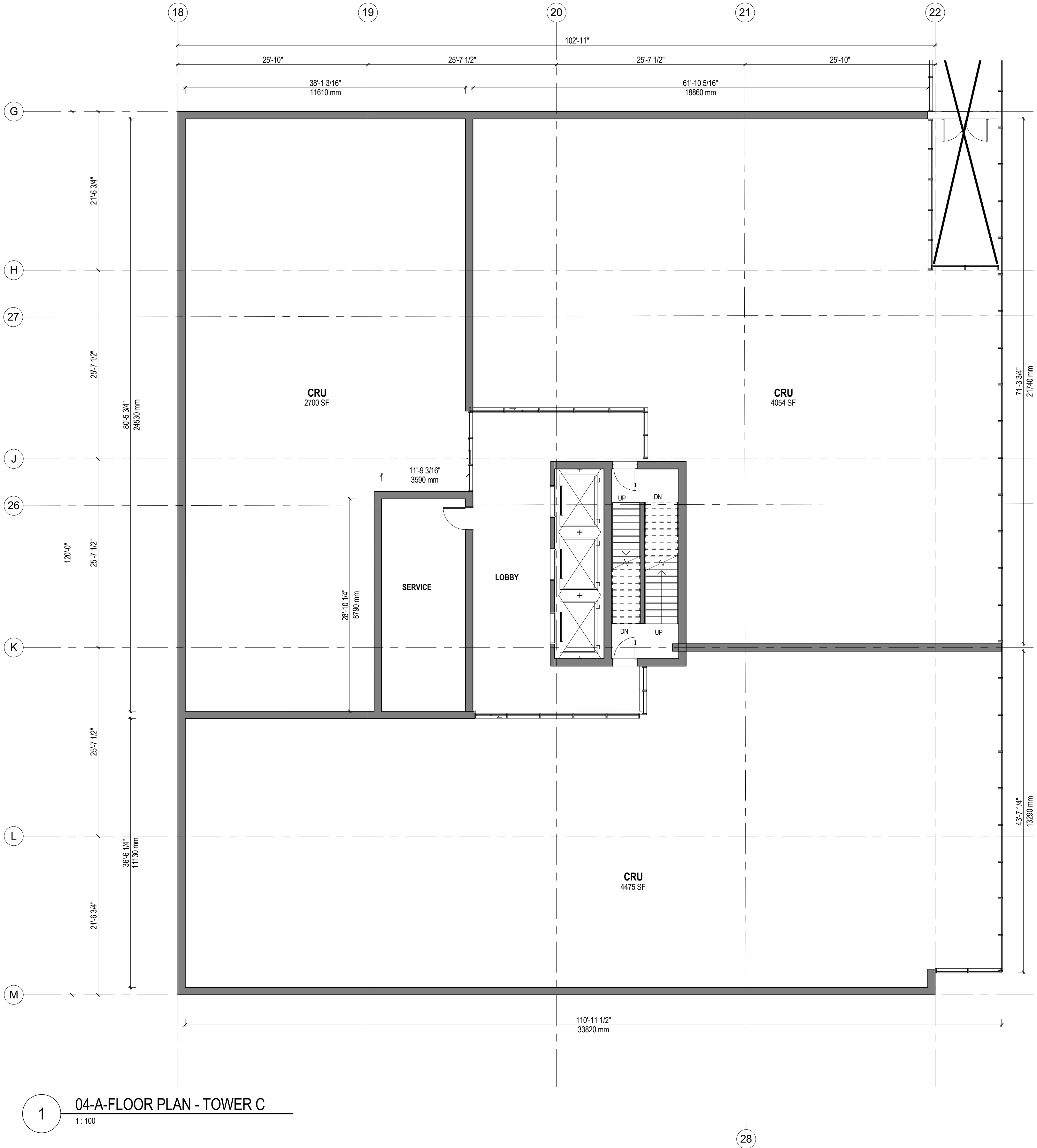




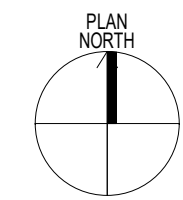
KEY PLAN

**SCHEDULE**  
This forms part of application  
# DP20-011 / DVP20-0013  
Planner Initials **AC**

**A & B**  
City of Kelowna  
DEVELOPMENT PLANNING



1 04-A-FLOOR PLAN - TOWER C  
1:100





KEY PLAN

PARKING SCHEDULE - LEVEL 5		
PARKING STALL TYPE	LEVEL	COUNT
HC Parking Space - 2.5m x 6.0m or 3.3m x 6.0m (Van) + 1.5m access	LEVEL 5	1
		1
Regular - 6.0m x 2.5m or 6.0m x 2.7m at columns	LEVEL 5	38
		38
Small - 4.8m x 2.3m or 4.8m x 2.5m at columns	LEVEL 5	29
		29
Grand total: 68		68

SCHEDULE

A & B

This forms part of application  
# DP20-011 / DVP20-0013

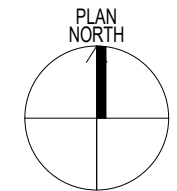
Planner Initials AC

City of Kelowna

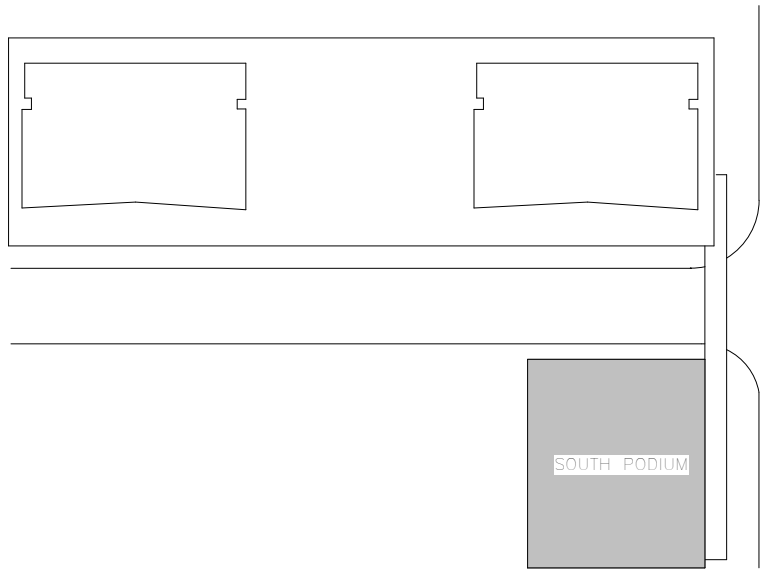
DEVELOPMENT PLANNING



1 05-A-FLOOR PLAN  
1:200







KEY PLAN

SCHEDULE

This forms part of application

# DP20-011 / DVP20-0013

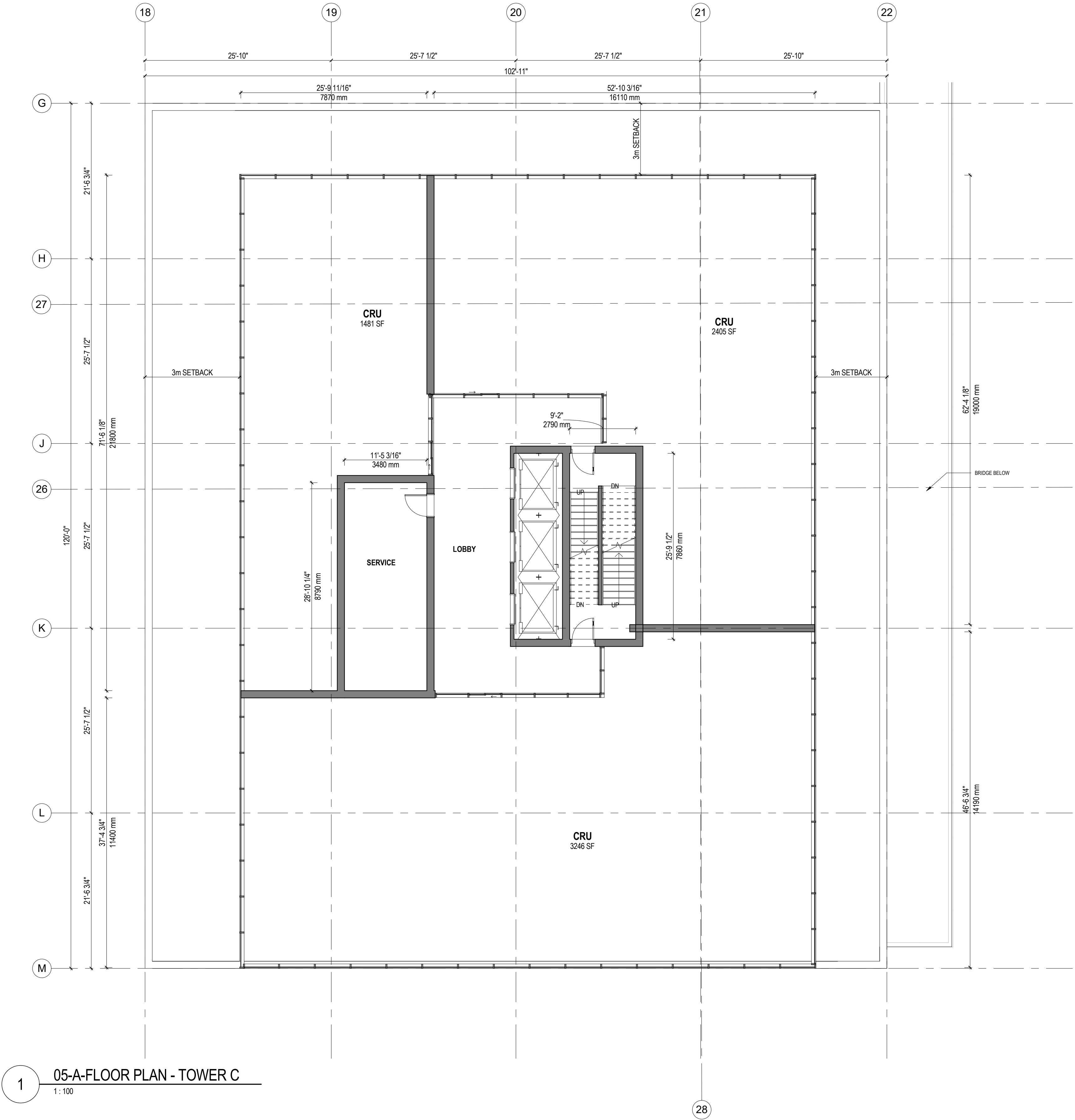
Planner Initials AC

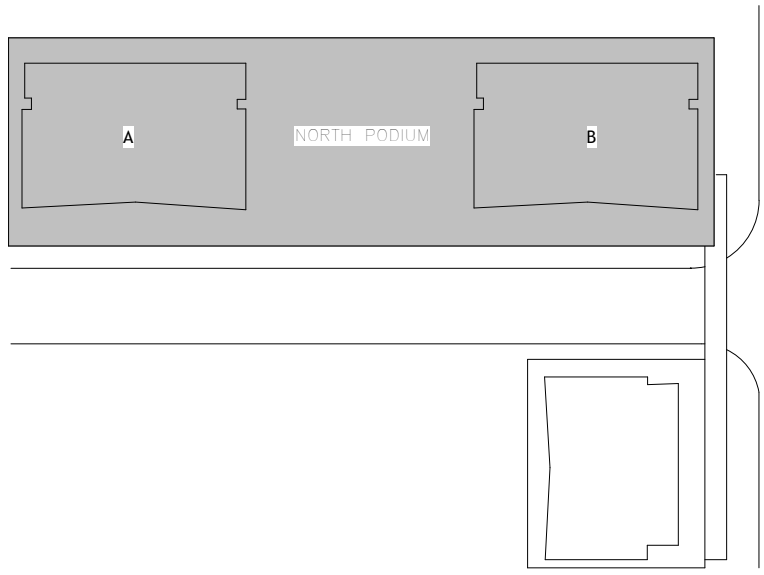
A & B



City of Kelowna

DEVELOPMENT PLANNING

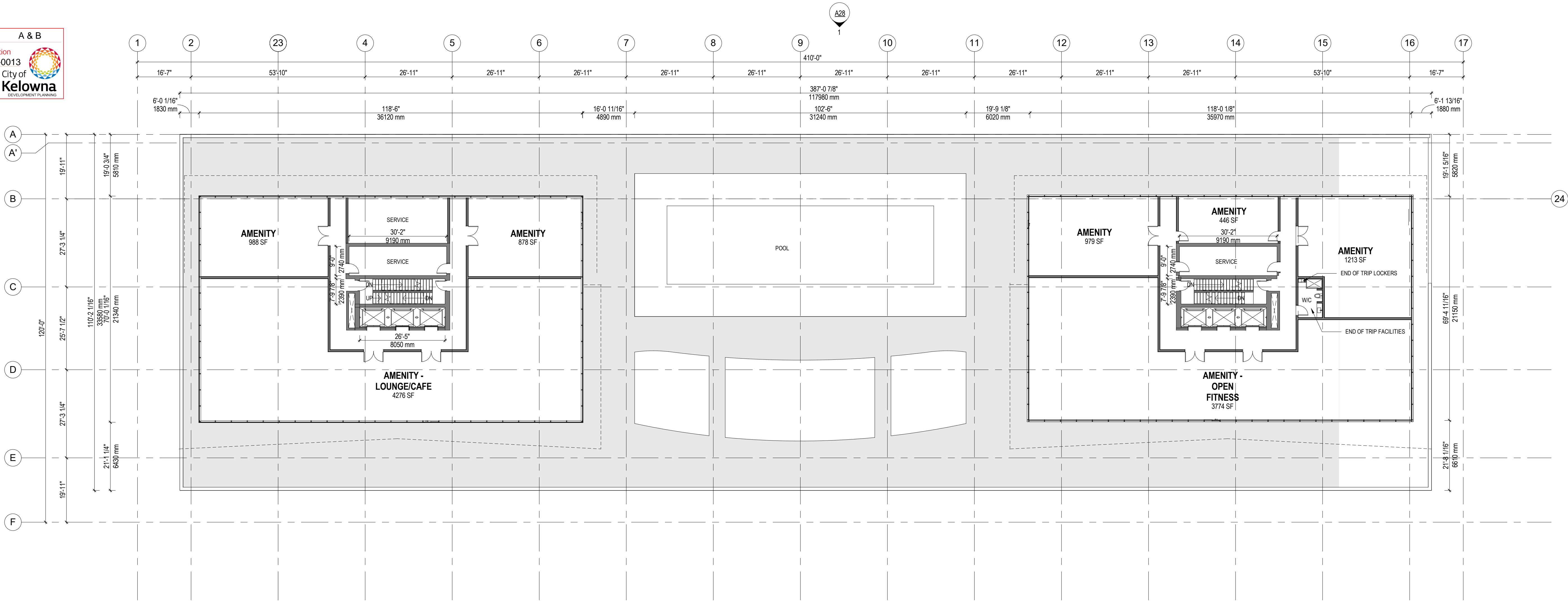




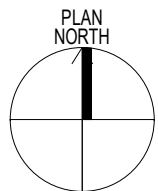
KEY PLAN

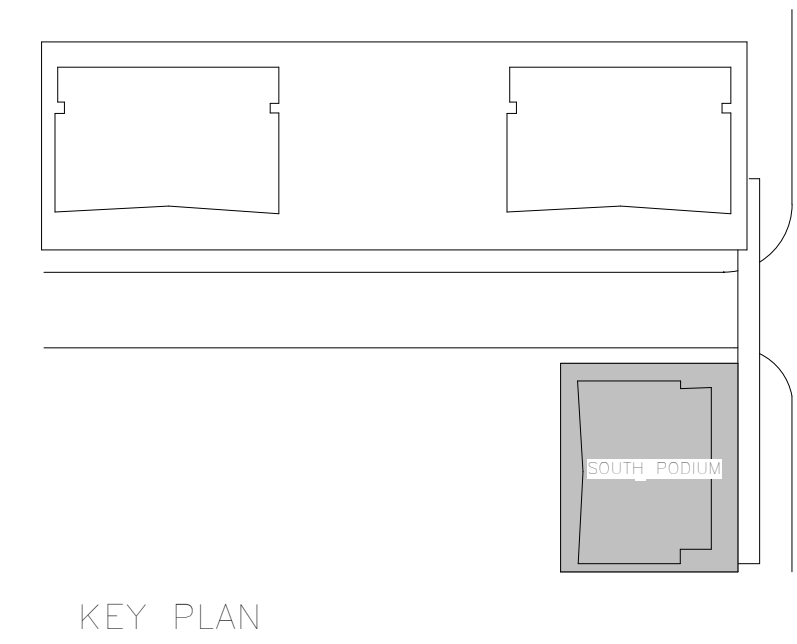
**SCHEDULE**  
This forms part of application  
# DP20-011 / DVP20-0013  
Planner Initials **AC**

**A & B**  
  
City of Kelowna  
DEVELOPMENT PLANNING



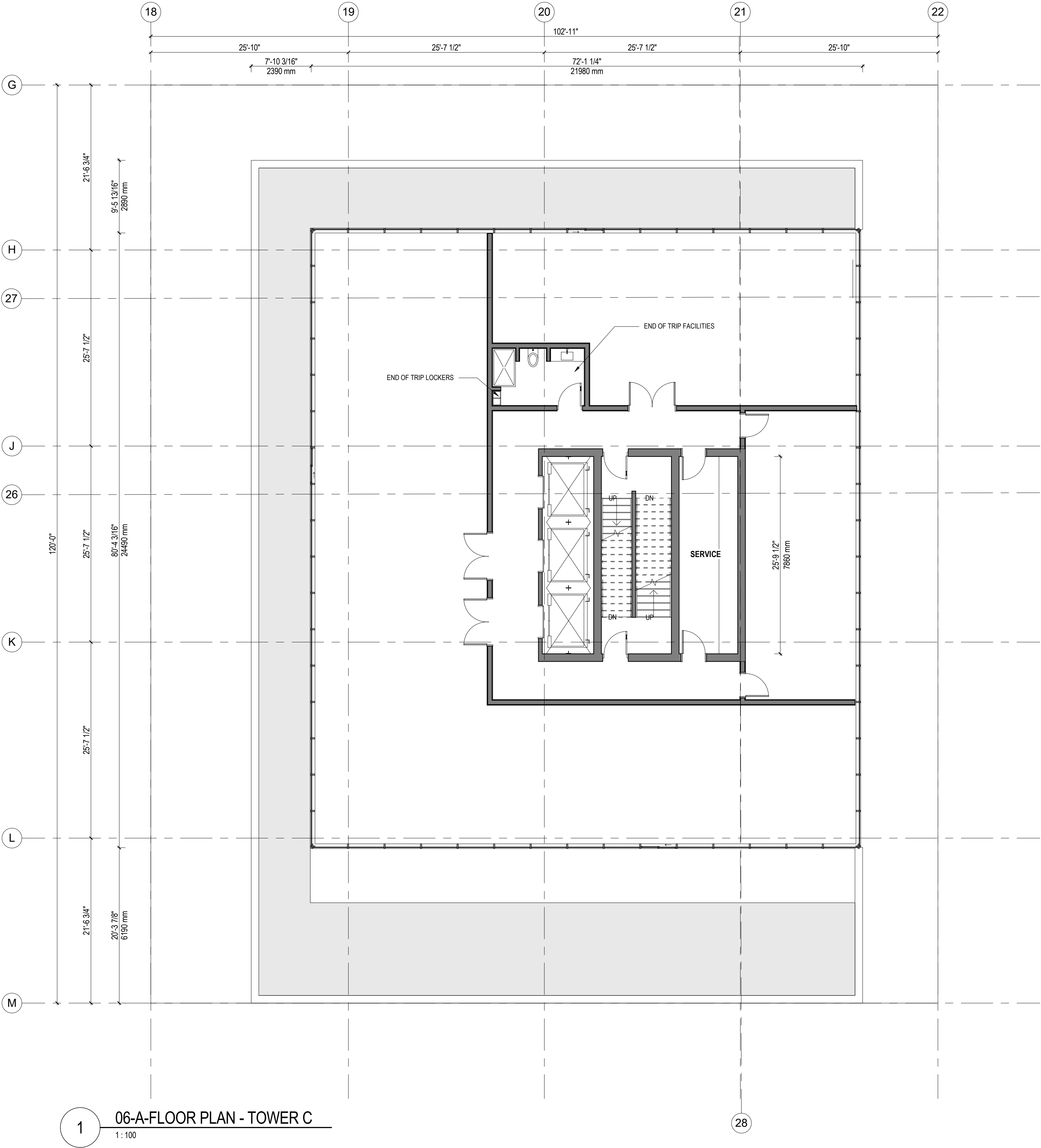
1 06-A-FLOOR PLAN  
1:200



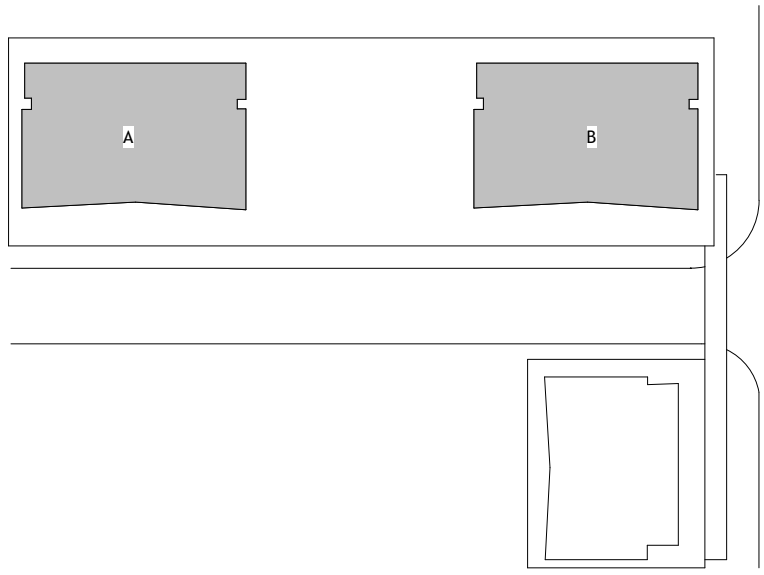


**SCHEDULE**  
This forms part of application  
# DP20-011 / DVP20-0013  
Planner Initials **AC**

City of Kelowna  
DEVELOPMENT PLANNING







KEY PLAN

UNIT TYPE SUMMARY			
UNIT TYPE	TOWER A (24 STOREYS) MARKET HOUSING	TOWER B (42 STOREYS) MARKET HOUSING	TOWER C (28 STOREYS) MARKET HOUSING
1 BEDROOM A (485SF)	N/A	N/A	44
1 BEDROOM B (530SF)	32	68	N/A
1 BEDROOM C (535SF)	32	68	N/A
1 BEDROOM D (620SF)	16	56	N/A
2 BEDROOM E (700SF)	N/A	N/A	44
2 BEDROOM A (780SF)	N/A	N/A	22
2 BEDROOM B (885SF)	32	68	N/A
2 BEDROOM C (975SF)	N/A	44	N/A
3 BEDROOM D (1125SF)	N/A	N/A	44
2 BEDROOM E (1075SF)	2	2	N/A
2 BEDROOM F (1090SF)	2	2	N/A
2 BEDROOM G (1260SF)	4	4	N/A
3 BEDROOM H (1420SF)	36	28	N/A
TOTAL UNIT TYPES	156	340	154
TOTAL UNITS		650	

SCHEDULE

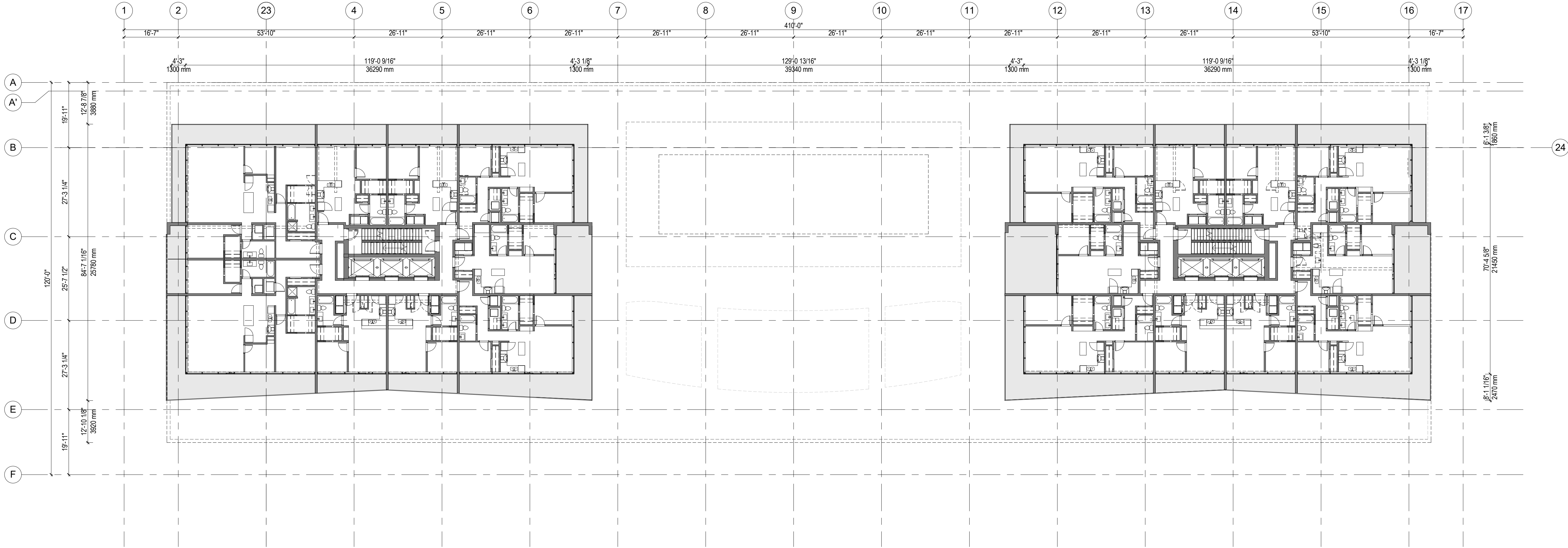
A & B

This forms part of application  
# DP20-011 / DVP20-0013

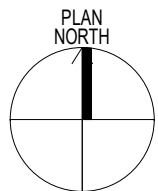
Planner Initials AC

City of Kelowna

DEVELOPMENT PLANNING



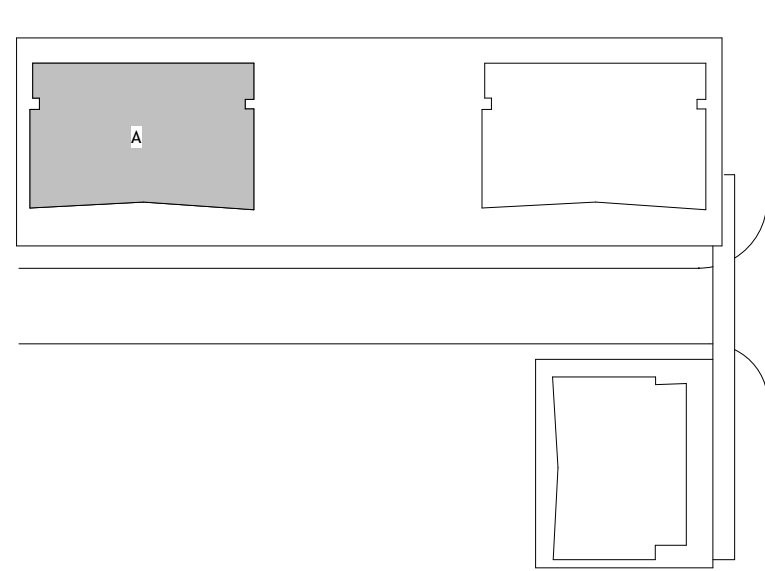
1 07-A-FLOOR PLAN  
1:200



DP Revised 10/16/2020

Development Permit 20/12/2019





SCHEDULE

A & B

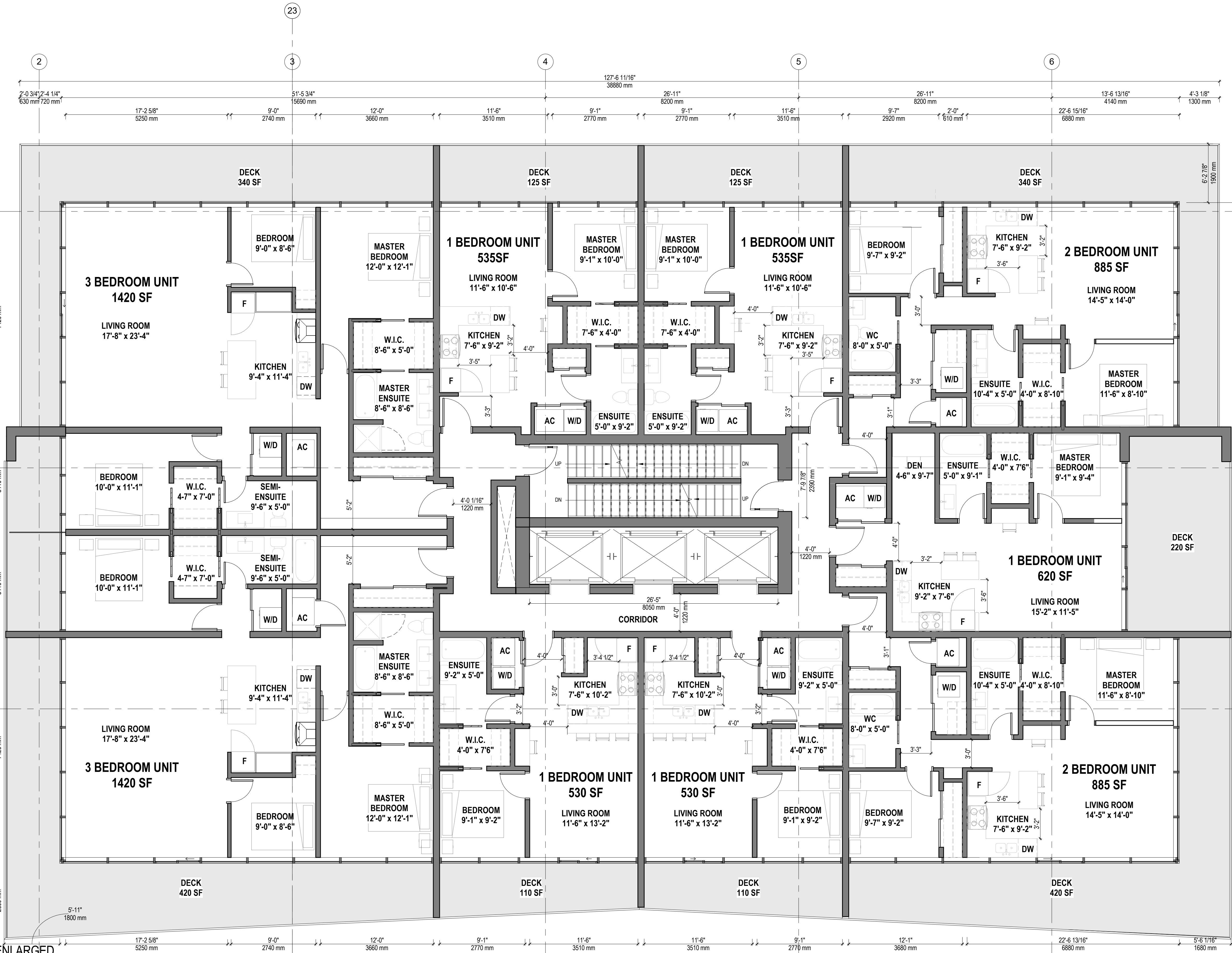
This forms part of application

# DP20-011 / DVP20-0013

City of Kelowna

DEVELOPMENT PLANNING

Planner Initials AC



LEVELS 7-22 - (16 FLOORS):

1 BEDROOM: 5 UNITS / LEVEL  
2 BEDROOM: 2 UNITS / LEVEL  
3 BEDROOM: 2 UNITS / LEVEL

TOTAL: 9 UNITS / LEVEL

LEVELS 23-24 (PH) - (2 FLOORS):

2 BEDROOM: 4 UNITS / LEVEL  
3 BEDROOM: 2 UNITS / LEVEL

TOTAL: 6 UNITS / LEVEL

TOTAL NUMBER OF UNITS (18 FLOORS):

1 BEDROOM: 80 UNITS  
2 BEDROOM: 40 UNITS  
3 BEDROOM: 36 UNITS

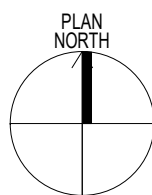
TOTAL: 156 UNITS

SUITE MATRIX

1 BEDROOM: 530 SF  
1 BEDROOM: 535 SF  
1 BEDROOM: 620 SF

2 BEDROOM: 885 SF  
3 BEDROOM: 1420 SF

PH 2 BEDROOM  
+ DEN: 1075 SF  
PH 2 BEDROOM  
+ DEN: 1090 SF  
PH 2 BEDROOM  
+ DEN: 1260 SF  
PH 3 BEDROOM: 1420 SF

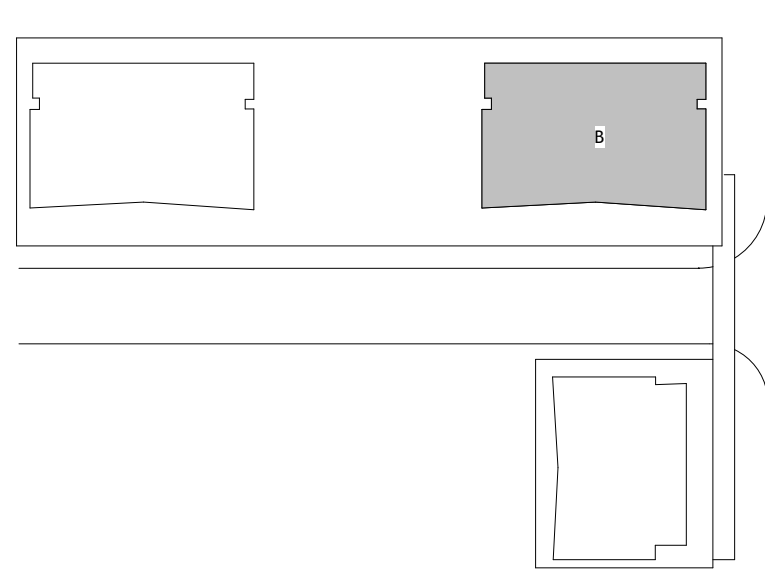


07-A-FLOOR PLAN - TOWER A - ENLARGED

DP Revised 10/16/2020

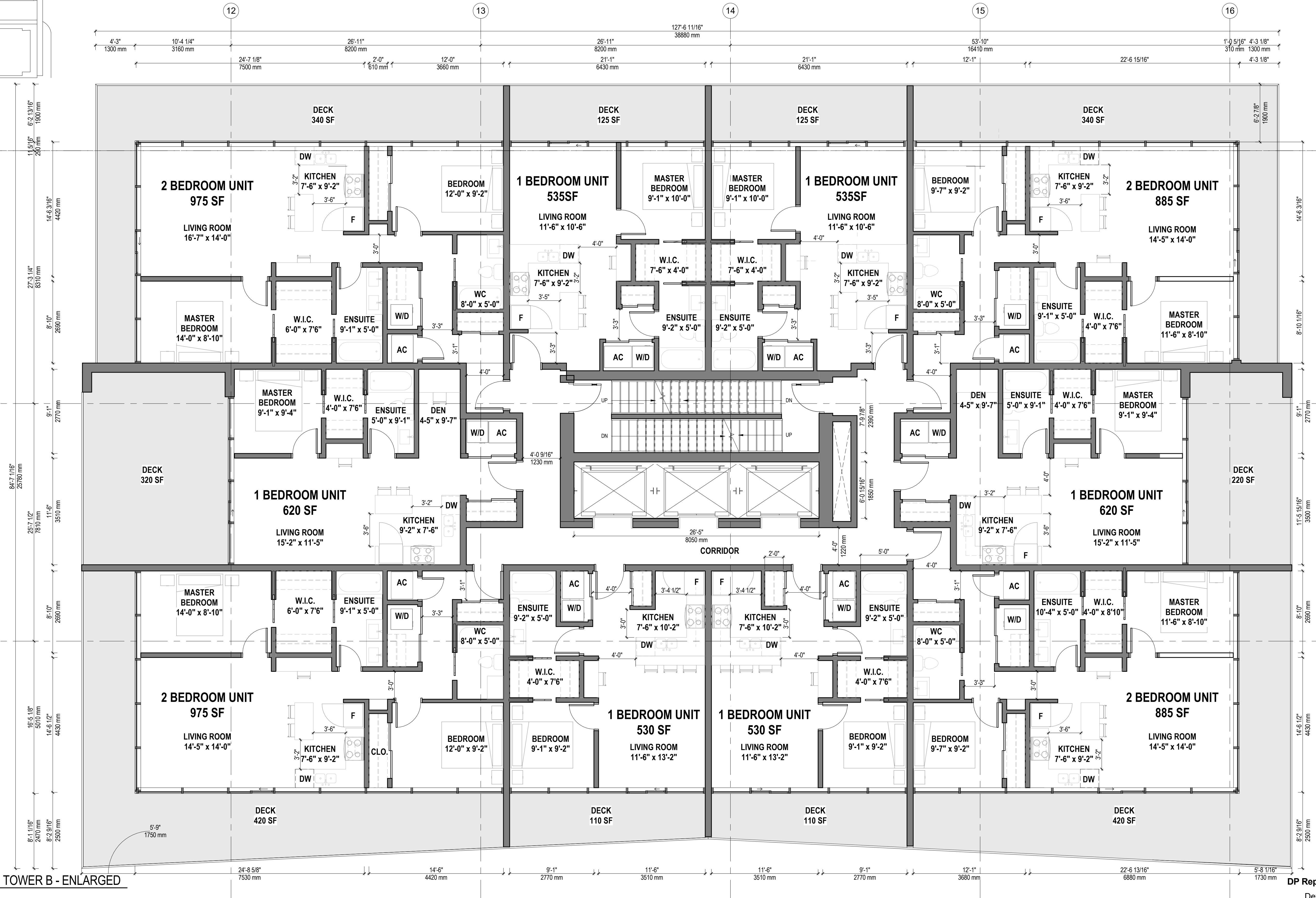
Development Permit 20/12/2019





KEY PLAN

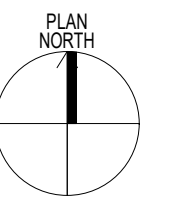
**SCHEDULE A & B**  
This forms part of application  
# DP20-011 / DVP20-0013  
City of Kelowna  
Planner Initials AC



LEVELS 7-28 - (22 FLOORS):	
1 BEDROOM:	6 UNITS / LEVEL
2 BEDROOM:	4 UNITS / LEVEL
TOTAL: 10 UNITS / LEVEL	
LEVELS 29-40 - (12 FLOORS):	
1 BEDROOM:	5 UNITS / LEVEL
2 BEDROOM:	2 UNITS / LEVEL
3 BEDROOM:	2 UNITS / LEVEL
TOTAL: 9 UNITS / LEVEL	
LEVELS 23-24 (PH) - (2 FLOORS):	
2 BEDROOM:	4 UNITS / LEVEL
3 BEDROOM:	2 UNITS / LEVEL
TOTAL: 6 UNITS / LEVEL	
TOTAL NUMBER OF UNITS (36 FLOORS):	
1 BEDROOM:	192 UNITS
2 BEDROOM:	120 UNITS
3 BEDROOM:	28 UNITS
TOTAL: 340 UNITS	

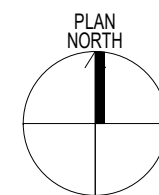
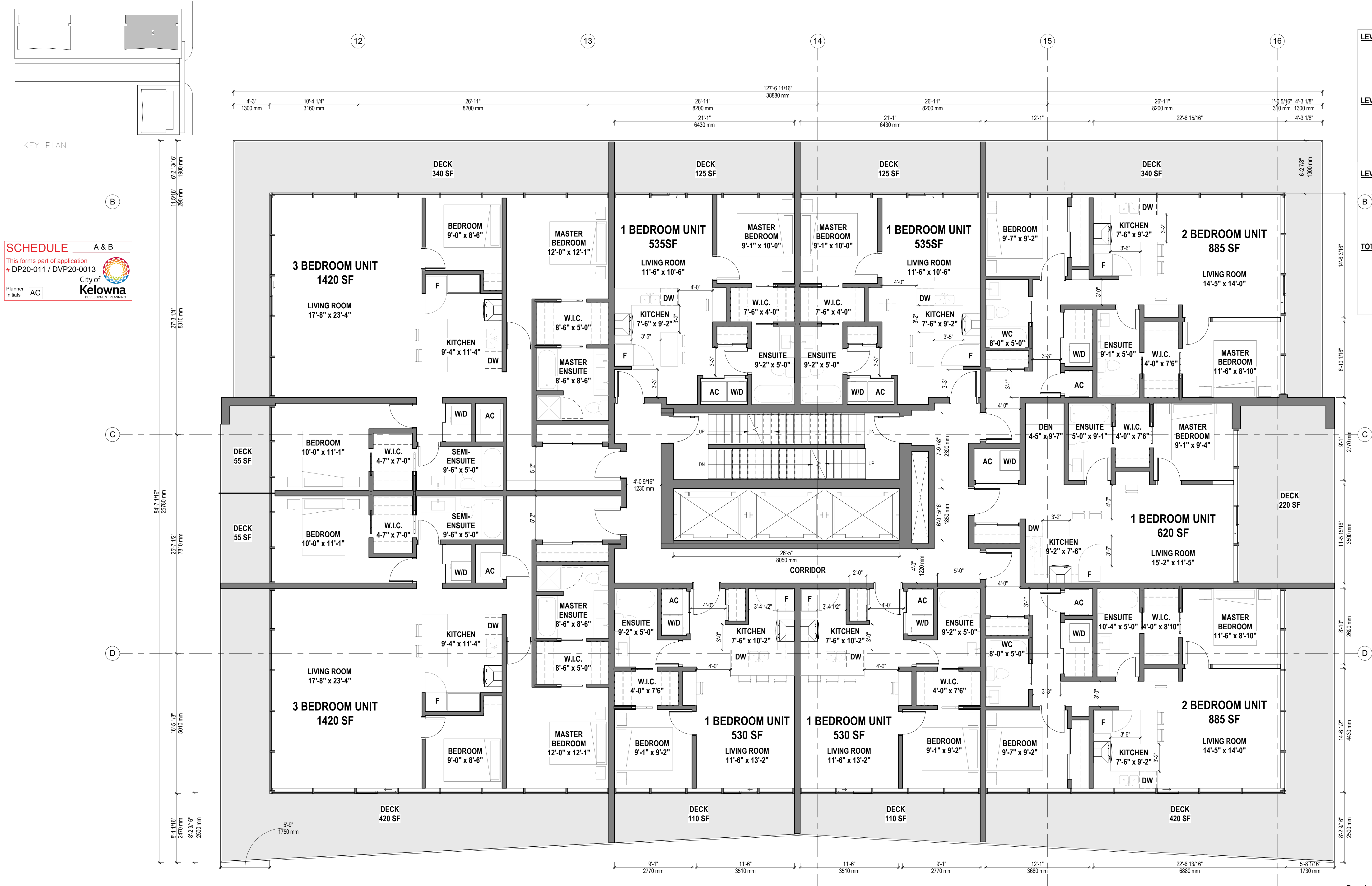
SUITE MATRIX	
1 BEDROOM:	530 SF
1 BEDROOM:	535 SF
1 BEDROOM:	620 SF
2 BEDROOM:	885 SF
2 BEDROOM:	975 SF
3 BEDROOM:	1420 SF
PH 2 BEDROOM	
+ DEN:	1075 SF
PH 2 BEDROOM	
+ DEN:	1090 SF
PH 2 BEDROOM	
+ DEN:	1260 SF
PH 3 BEDROOM:	1420 SF

1 07-A-FLOOR PLAN - TOWER B - ENLARGED  
3/16" = 1'-0"



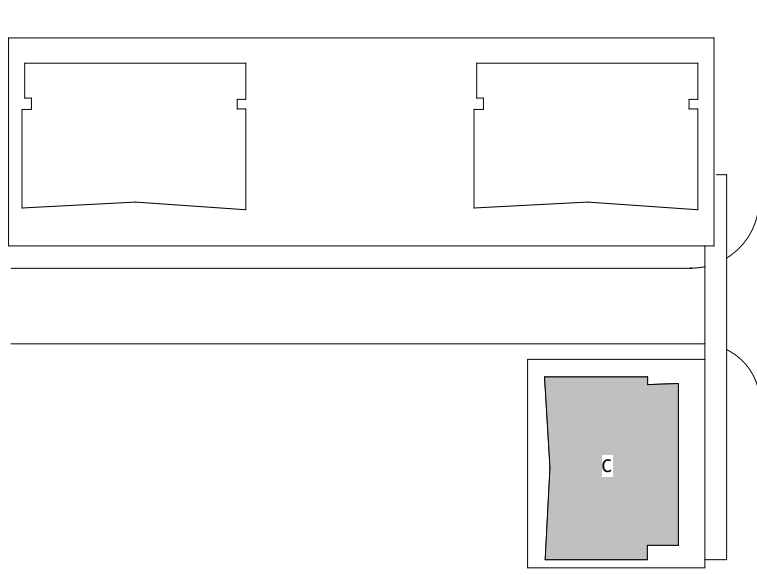
DP Replacement Sheets 30/03/2020  
Development Permit 20/12/2019





DP Revised 10/16/2020

Development Permit 20/12/2019



KEY PLAN

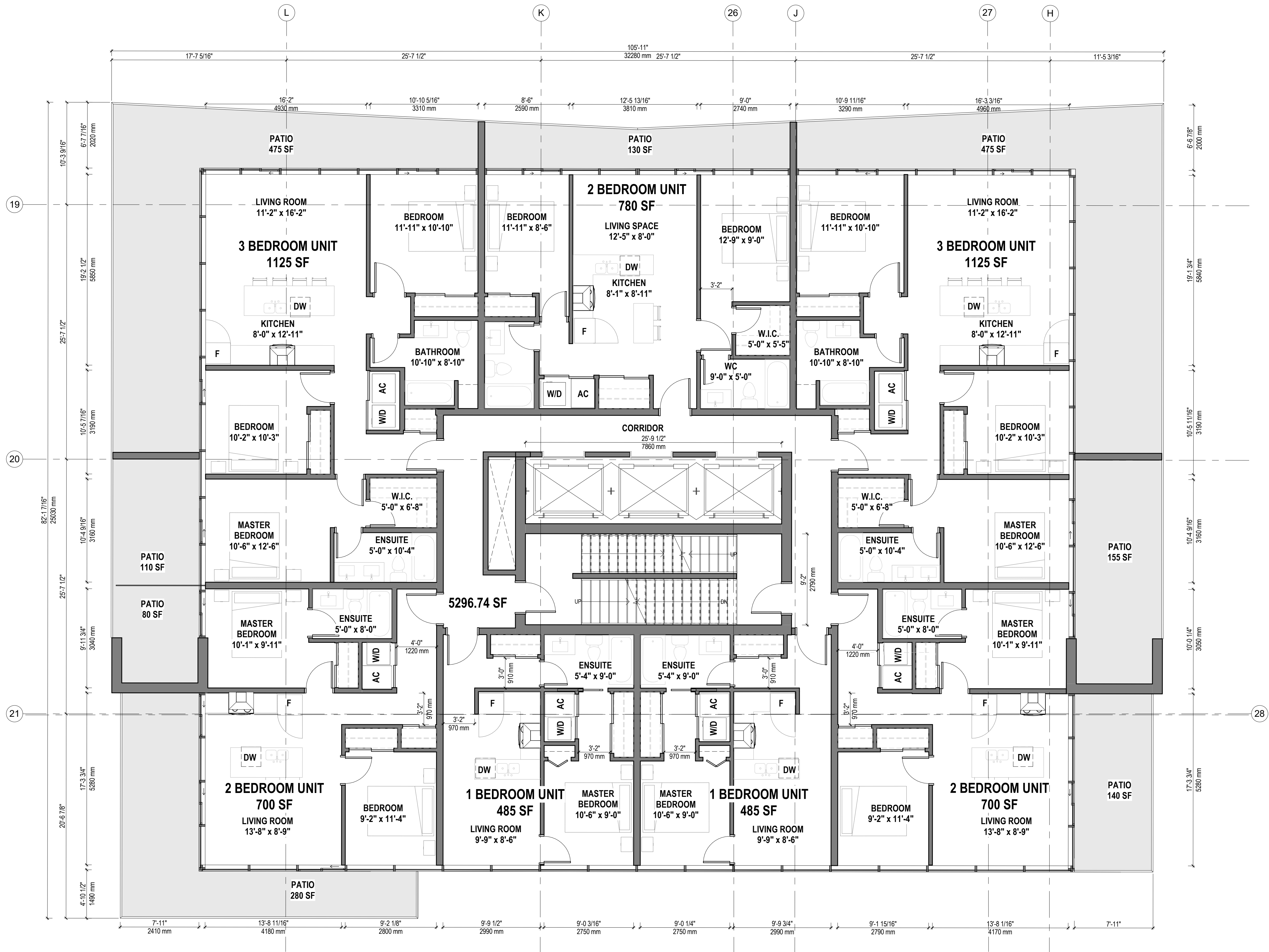
SCHEDULE

A & B

This forms part of application  
# DP20-011 / DVP20-0013

Planner Initials AC

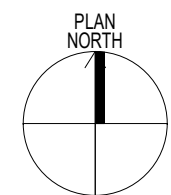
City of Kelowna  
DEVELOPMENT PLANNING



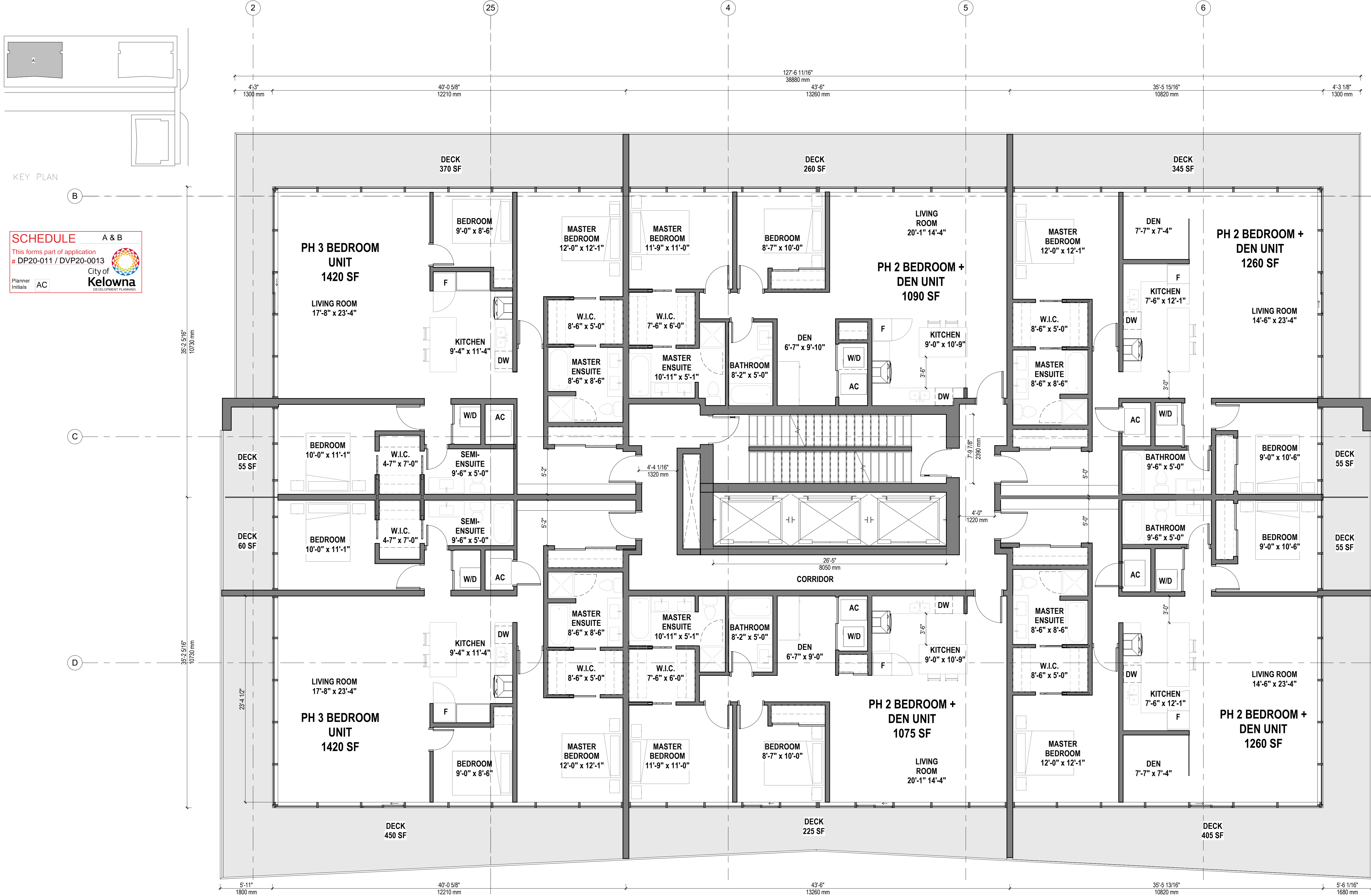
1 07-A-FLOOR PLAN - TOWER C - ENLARGED  
3/16" = 1'-0"

LEVELS 7-28 - (22 FLOORS)	
1 BEDROOM:	2 UNITS / LEVEL
2 BEDROOM:	3 UNITS / LEVEL
3 BEDROOM:	2 UNITS / LEVEL
TOTAL:	7 UNITS / LEVEL
TOTAL NUMBER OF UNITS (22 FLOORS)	
1 BEDROOM:	44 UNITS
2 BEDROOM:	66 UNITS
3 BEDROOM:	44 UNITS
TOTAL:	154 UNITS

SUITE MATRIX	
1 BEDROOM:	485 SF
2 BEDROOM:	700 SF
2 BEDROOM:	780 SF
3 BEDROOM:	1125 SF







A26.1

LEVELS 7-22 - (16 FLOORS):	
1 BEDROOM:	5 UNITS / LEVEL
2 BEDROOM:	2 UNITS / LEVEL
3 BEDROOM:	2 UNITS / LEVEL
TOTAL:	9 UNITS / LEVEL
LEVELS 23-24 (PH) - (2 FLOORS):	
2 BEDROOM:	4 UNITS / LEVEL
3 BEDROOM:	2 UNITS / LEVEL
TOTAL:	6 UNITS / LEVEL
TOTAL NUMBER OF UNITS (18 FLOORS):	
1 BEDROOM:	80 UNITS
2 BEDROOM:	40 UNITS
3 BEDROOM:	36 UNITS
TOTAL:	156 UNITS

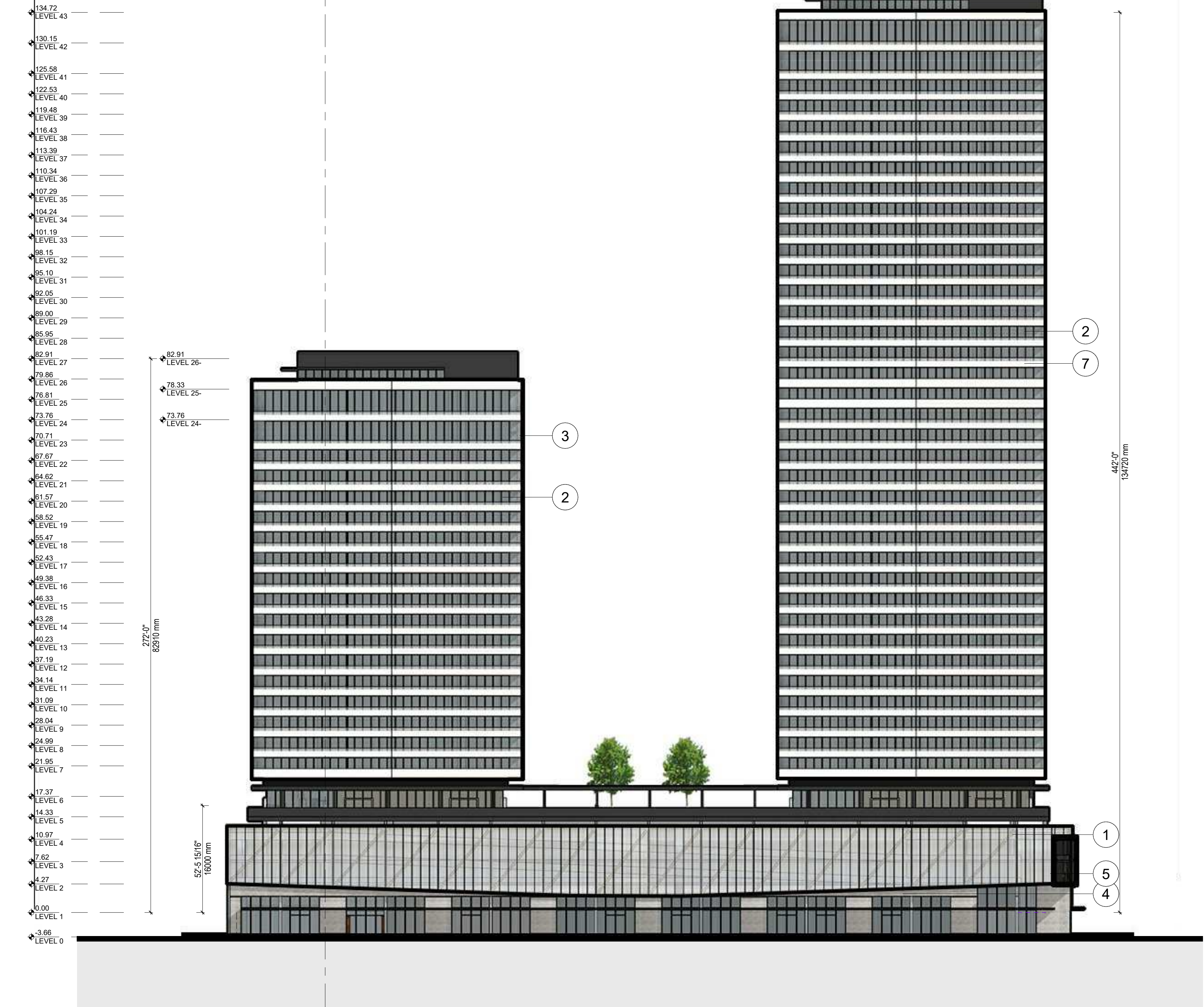
SUITE MATRIX	
1 BEDROOM:	530 SF
1 BEDROOM:	535 SF
1 BEDROOM:	620 SF
2 BEDROOM:	885 SF
3 BEDROOM:	1420 SF
PH 2 BEDROOM + DEN:	1075 SF
PH 2 BEDROOM + DEN:	1090 SF
PH 2 BEDROOM + DEN:	1260 SF
PH 3 BEDROOM:	1420 SF

1 45-A-FLOOR PLAN - TOWER A - ENLARGED  
3/16" = 1'-0"

DP Revised 10/16/2020

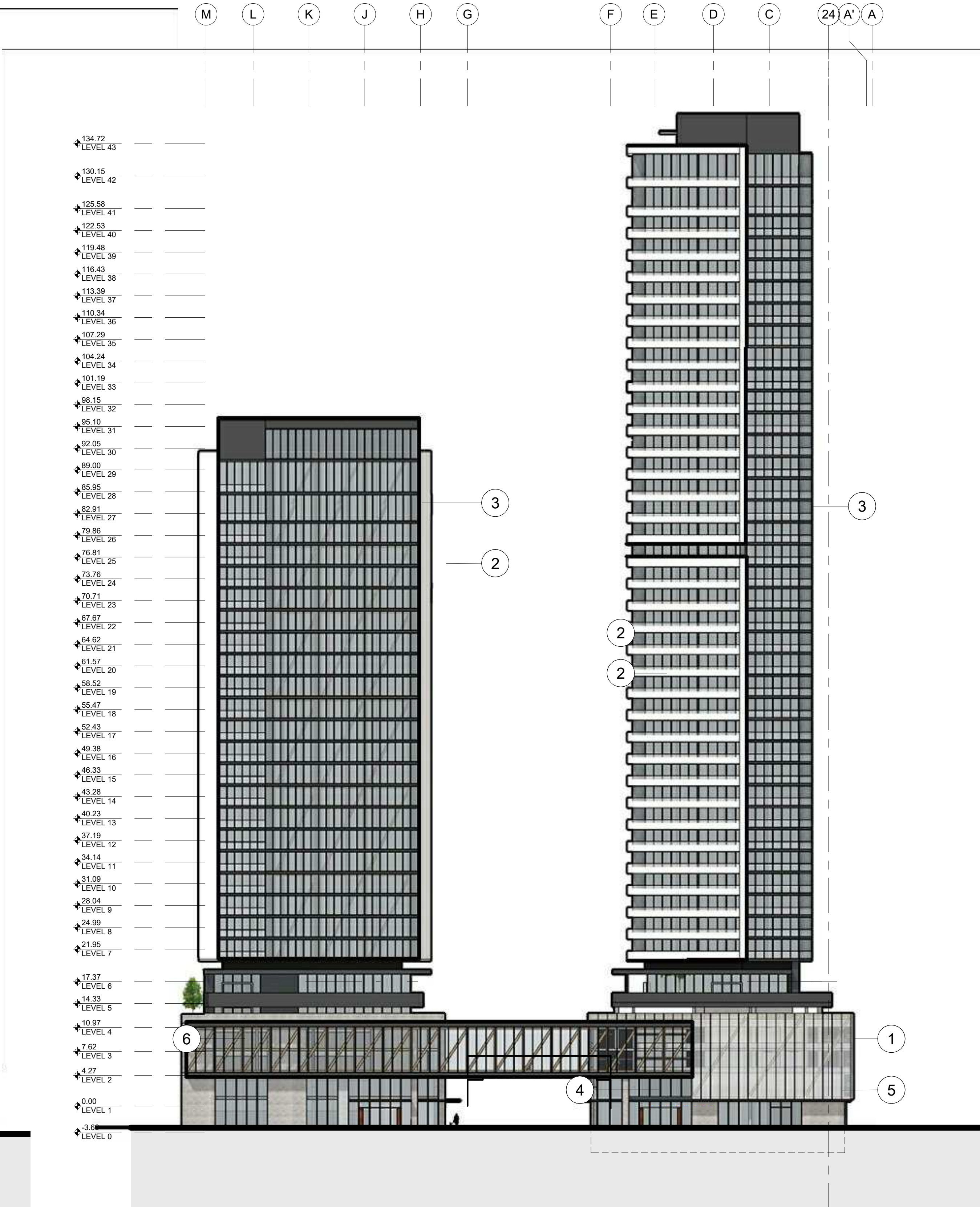


- 1 POLYCARBONATE TRANSLUCENT PANELS
- 2 PREFINISHED WHITE METAL CLADDING
- 3 PREFINISHED GREY METAL CLADDING
- 4 CORTEN
- 5 GREY BRICK VENEER
- 6 WOOD / CLT
- 7 FROSTED GLASS
- 8 NATURAL CONCRETE



1 LEON AVE SOUTH ELEVATION  
1/32" = 1'-0"

**SCHEDULE** A & B  
This forms part of application  
# DP20-011 / DVP20-0013  
Planner Initials **AC**  
City of Kelowna  
DEVELOPMENT PLANNING



2 WATER STREET EAST ELEVATION  
1/32" = 1'-0"

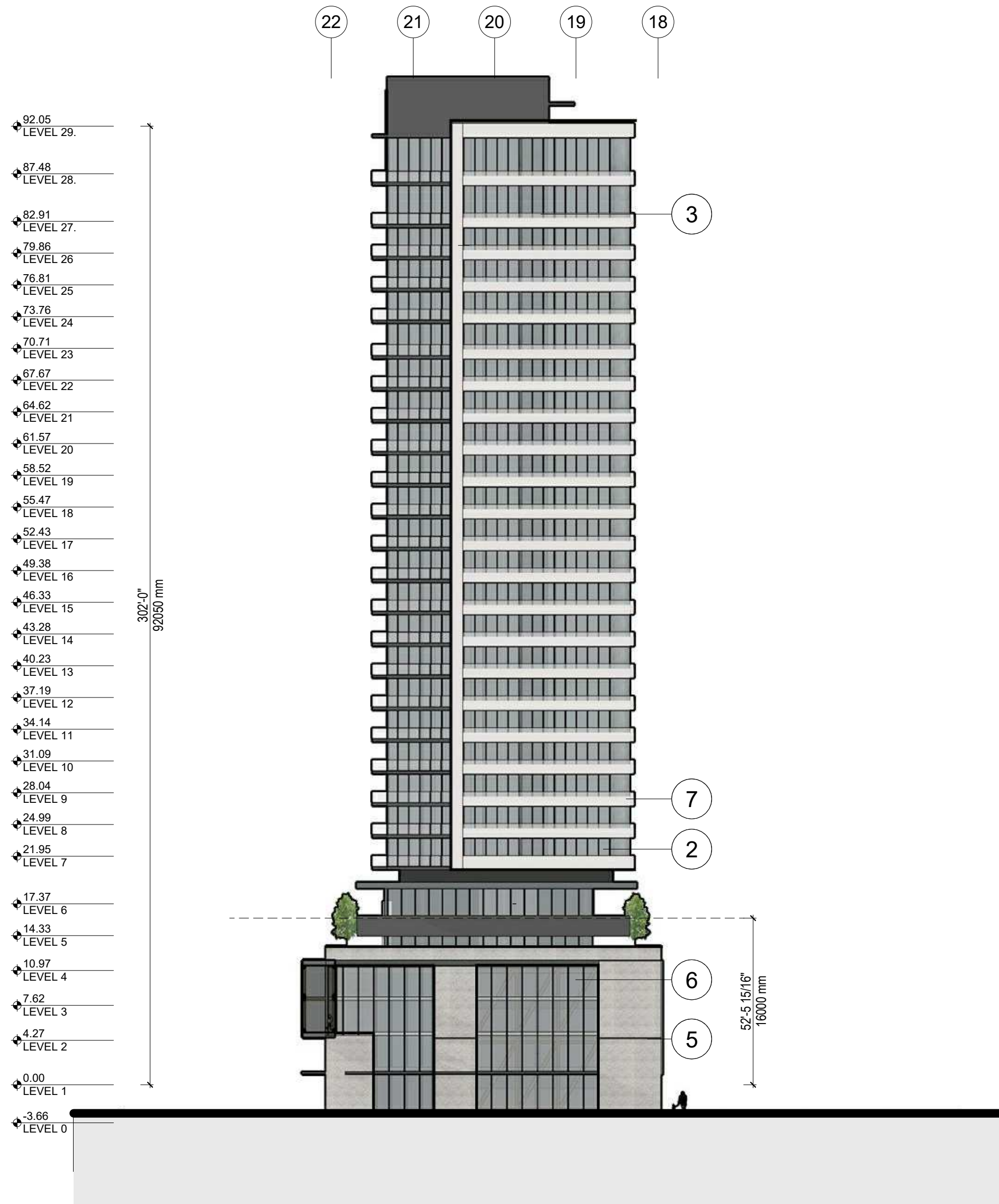


- 1 POLYCARBONATE TRANSLUCENT PANELS
- 2 PREFINISHED WHITE METAL CLADDING
- 3 PREFINISHED GREY METAL CLADDING
- 4 CORTEN
- 5 GREY BRICK VENEER
- 6 WOOD / CLT
- 7 FROSTED GLASS
- 8 NATURAL CONCRETE



1 NORTH ELEVATION  
1/32" = 1'-0"

**SCHEDULE A & B**  
This forms part of application  
# DP20-011 / DVP20-0013  
City of Kelowna  
DEVELOPMENT PLANNING  
Planner Initials AC



2 LEON AVE NORTH ELEVATION  
1/32" = 1'-0"



- ① POLYCARBONATE TRANSLUCENT PANELS
- ② PREFINISHED WHITE METAL CLADDING
- ③ PREFINISHED GREY METAL CLADDING
- ④ CORTEN
- ⑤ GREY BRICK VENEER
- ⑥ WOOD / CLT
- ⑦ FROSTED GLASS
- ⑧ NATURAL CONCRETE

SCHEDULE

A & B

This forms part of application

# DP20-011 / DVP20-0013

Planner

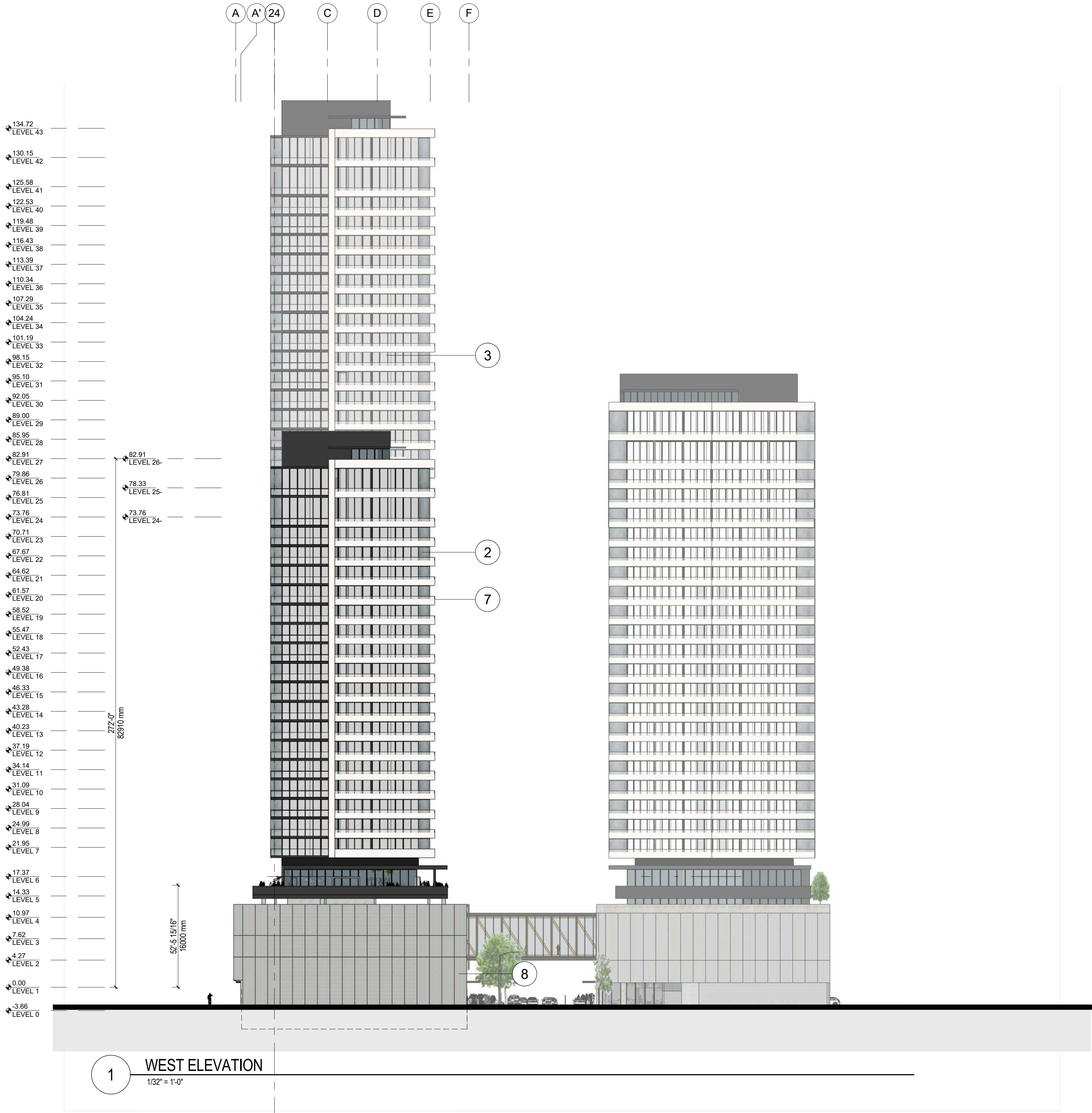
Initials

AC

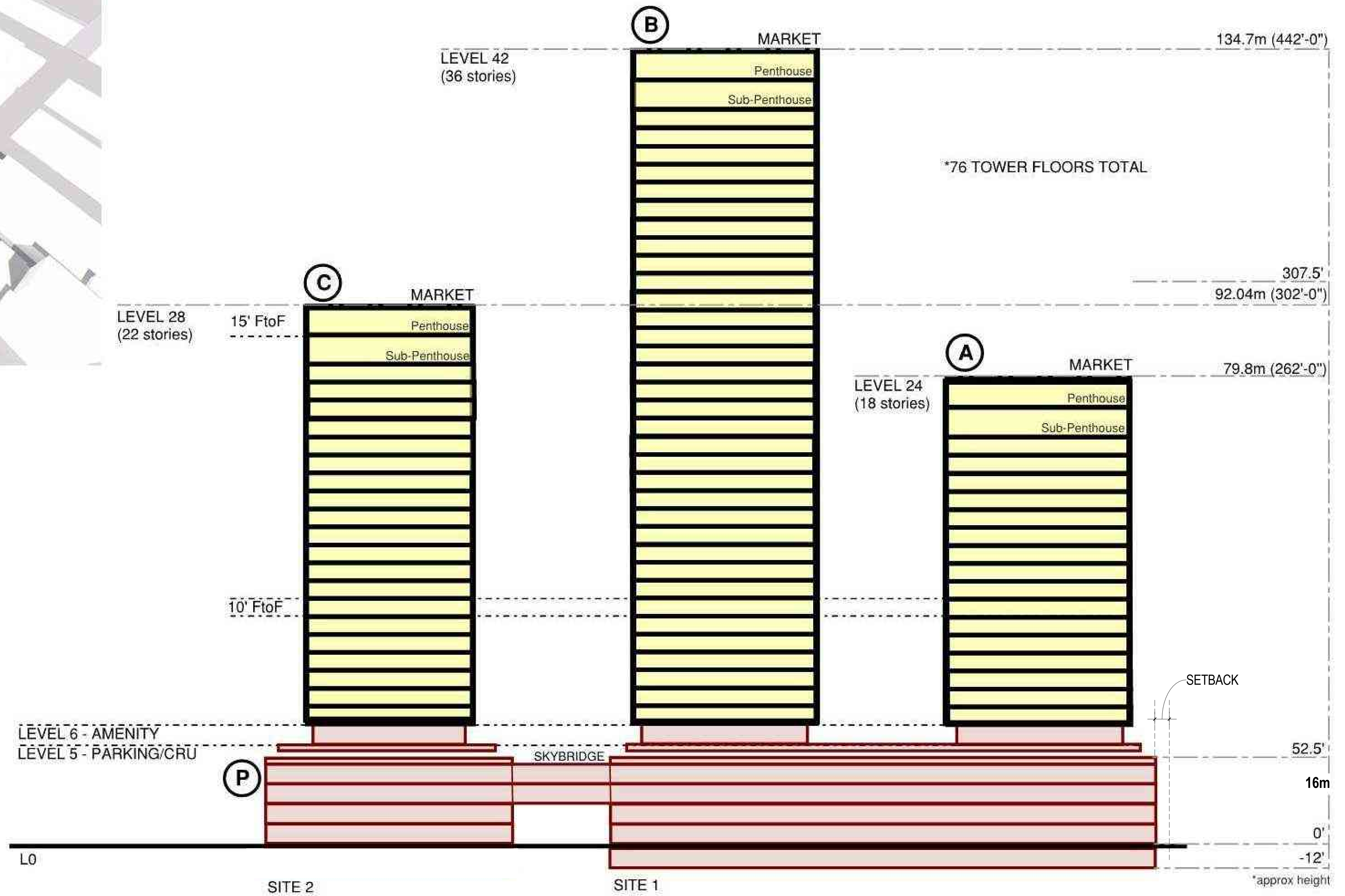
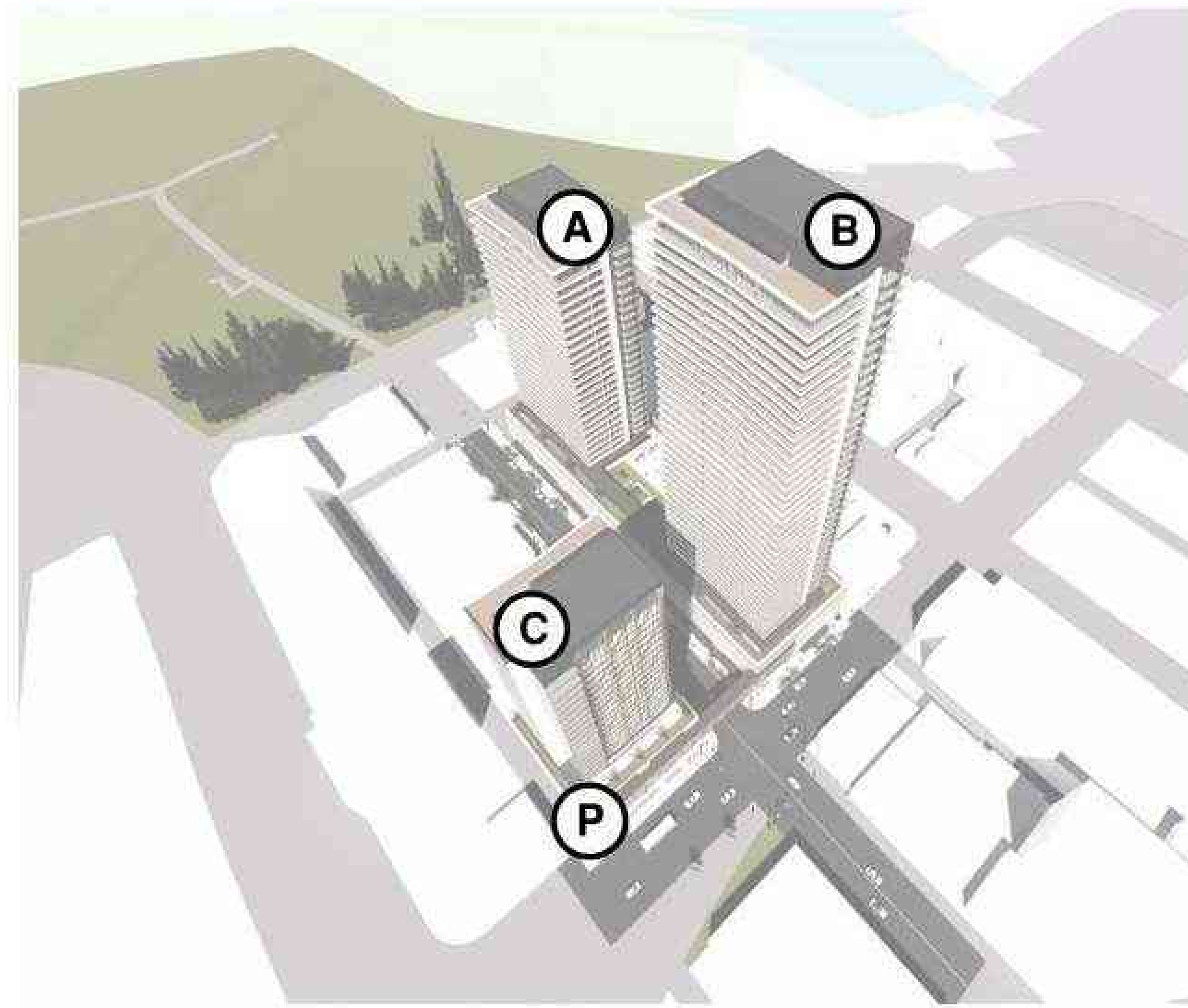
City of

**Kelowna**

DEVELOPMENT PLANNING







**SCHEDULE A & B**

This forms part of application  
# DP20-011 / DVP20-0013

Planner Initials AC

City of Kelowna  
DEVELOPMENT PLANNING





NORTH EAST VIEW (CURRENT)



NORTH EAST VIEW (FUTURE)

**SCHEDULE**

A & B

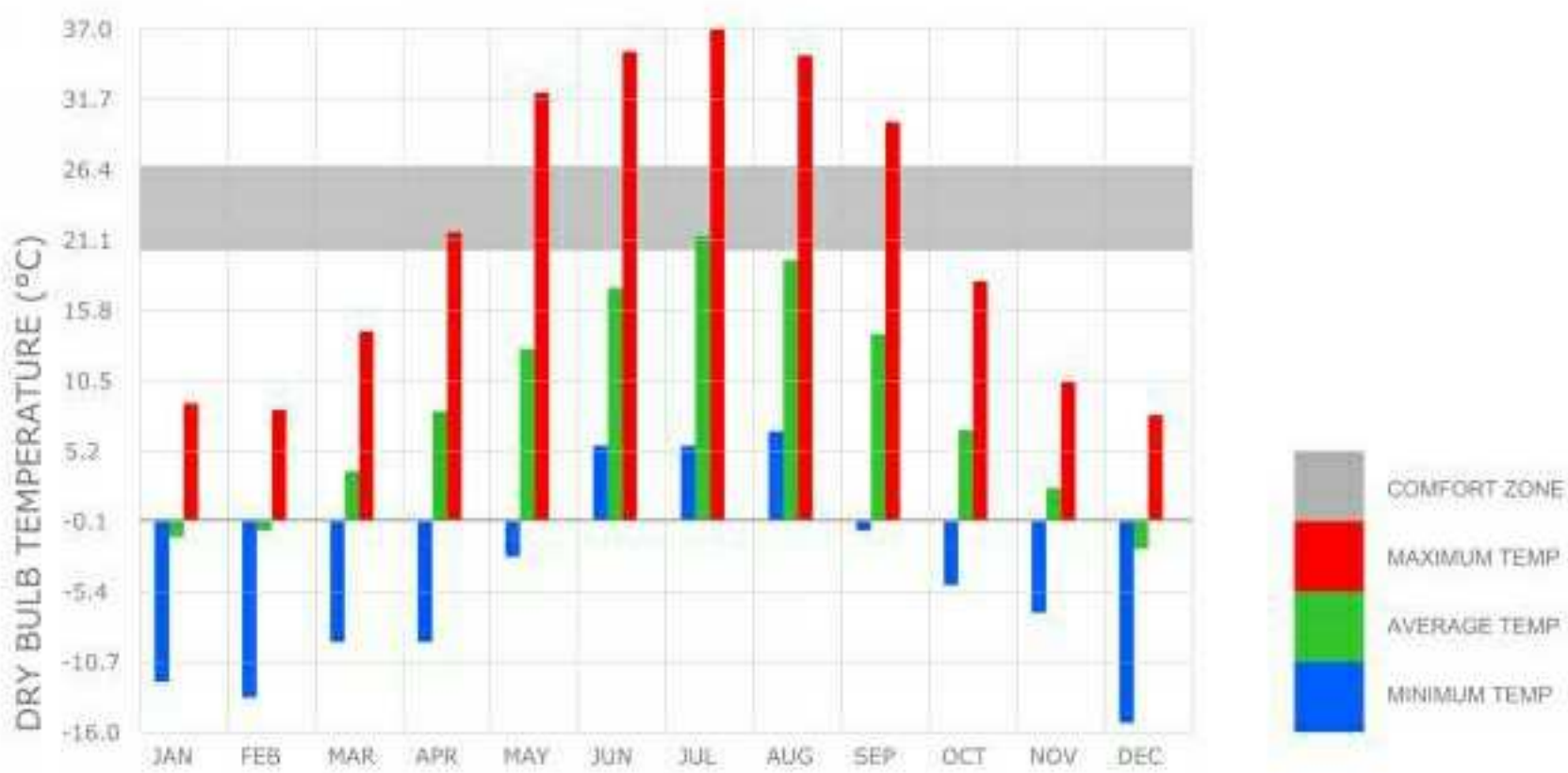
This forms part of application  
# DP20-011 / DVP20-0013

Planner  
Initials

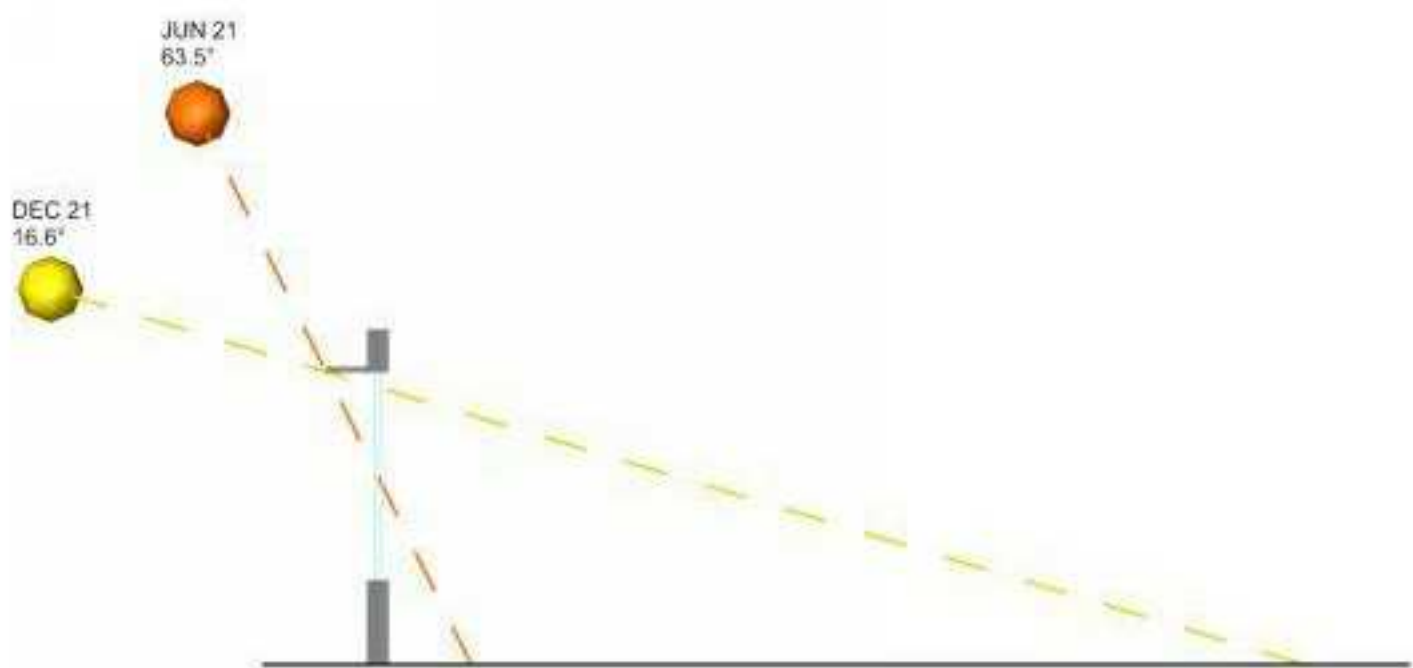
AC

City of  
**Kelowna**  
DEVELOPMENT PLANNING

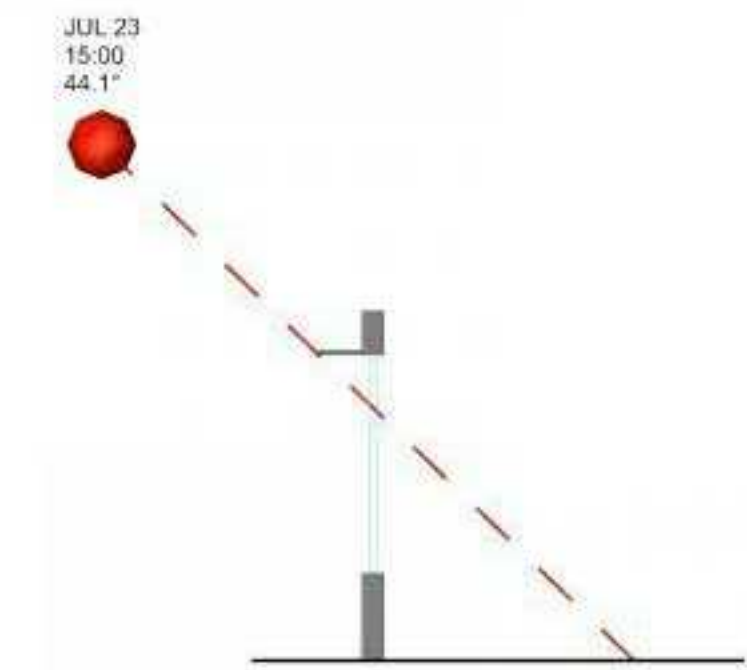




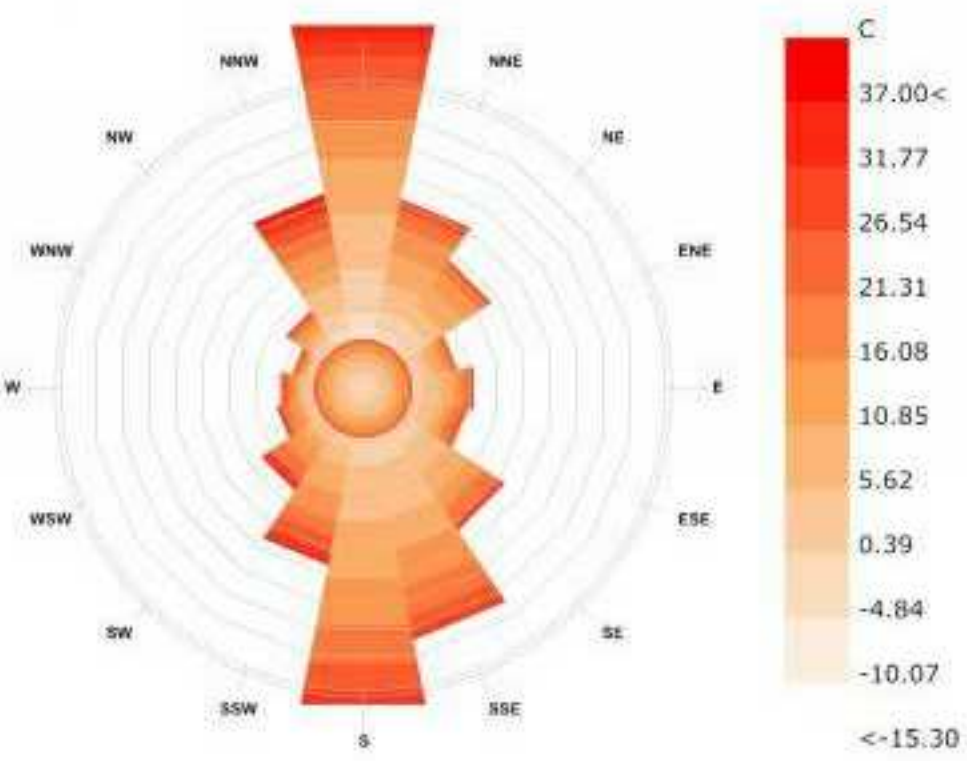
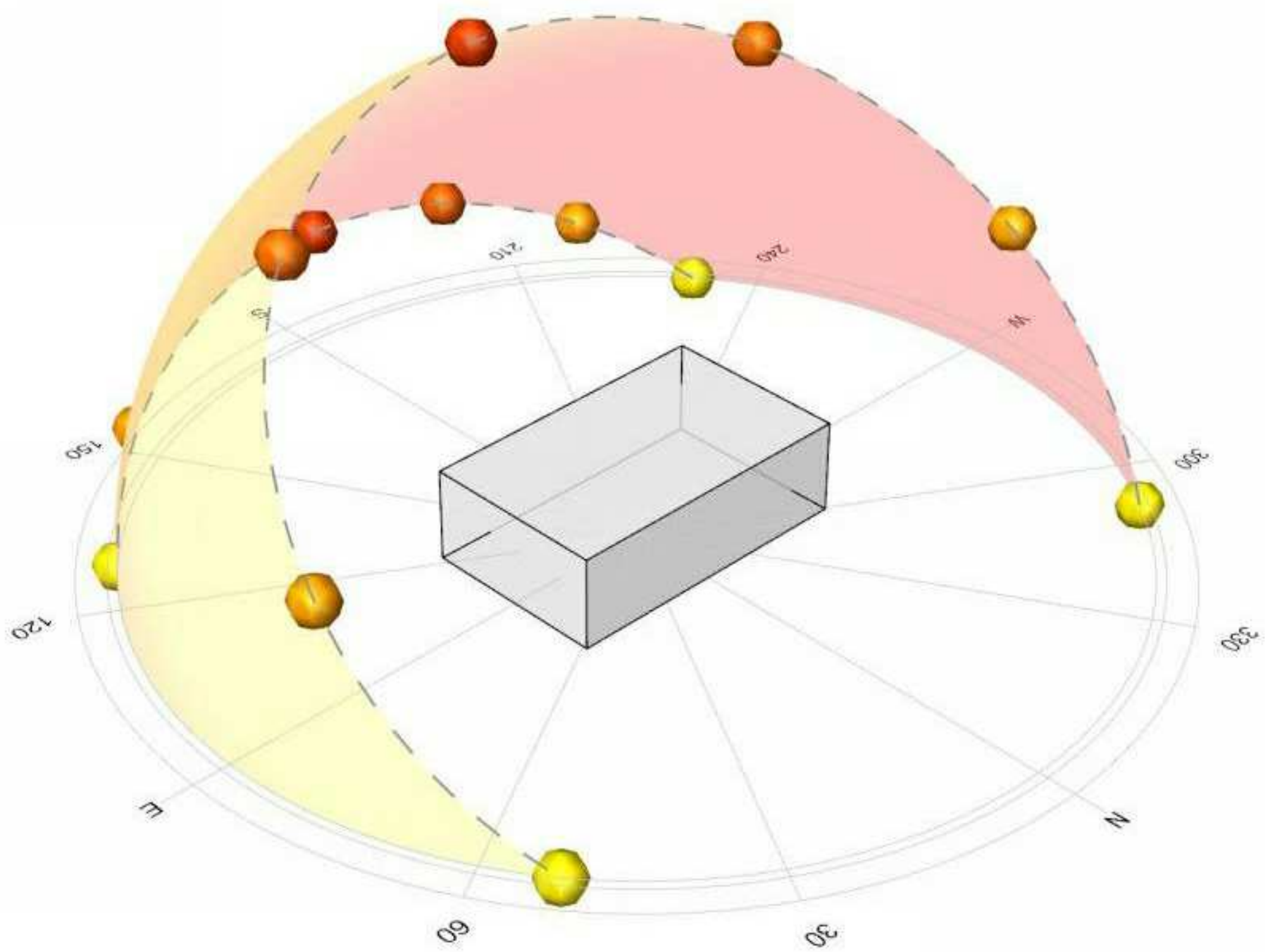
TEMPERATURE + COMFORT



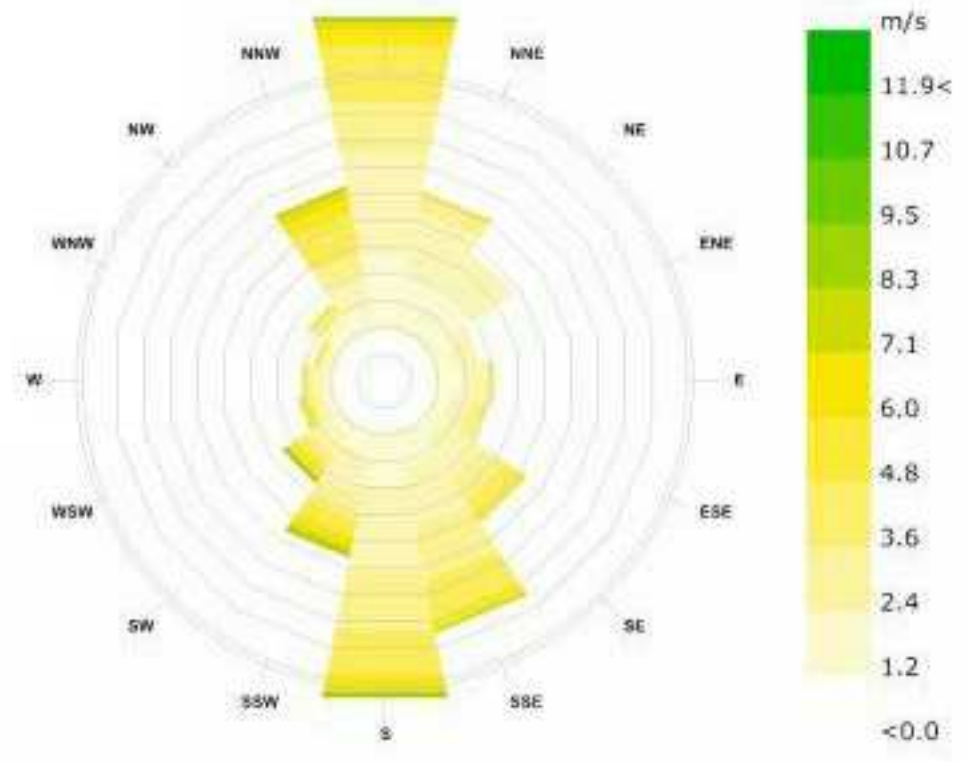
SUN ANGLES AT NOON ON WINTER AND SUMMER SOLSTICES (2' OVERHANG SHOWN)



SUNG ANGLE DURING HOTTEST TIME OF YEAR (2' OVERHANG SHOWN)



ANNUAL WIND ROSE - DRY BULB TEMPERATURE



ANNUAL WIND ROSE - WIND SPEED  
(Most Frequent Wind from the South for 10.37% of the Year)

SCHEDULE

A & B

This forms part of application  
# DP20-011 / DVP20-0013

Planner Initials AC

City of Kelowna  
DEVELOPMENT PLANNING



SCHEDULE

This forms part of application

# DP20-011 / DVP20-0013

Planner Initials AC

A & B



City of Kelowna

DEVELOPMENT PLANNING



MARCH 21 - 9:00AM



MARCH 21 - 12:00PM



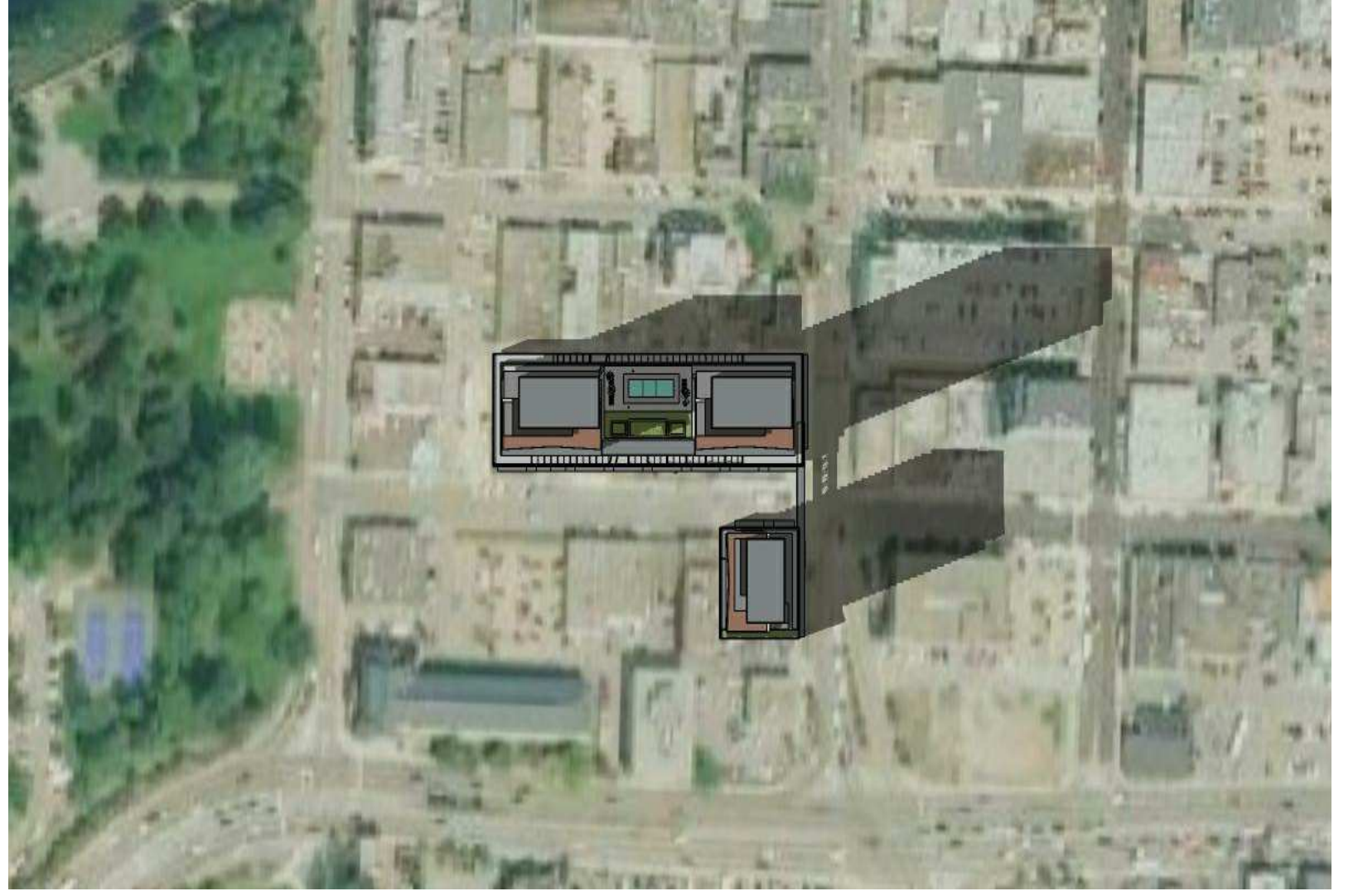
MARCH 21 - 3:00PM



JUNE 21 - 9:00AM



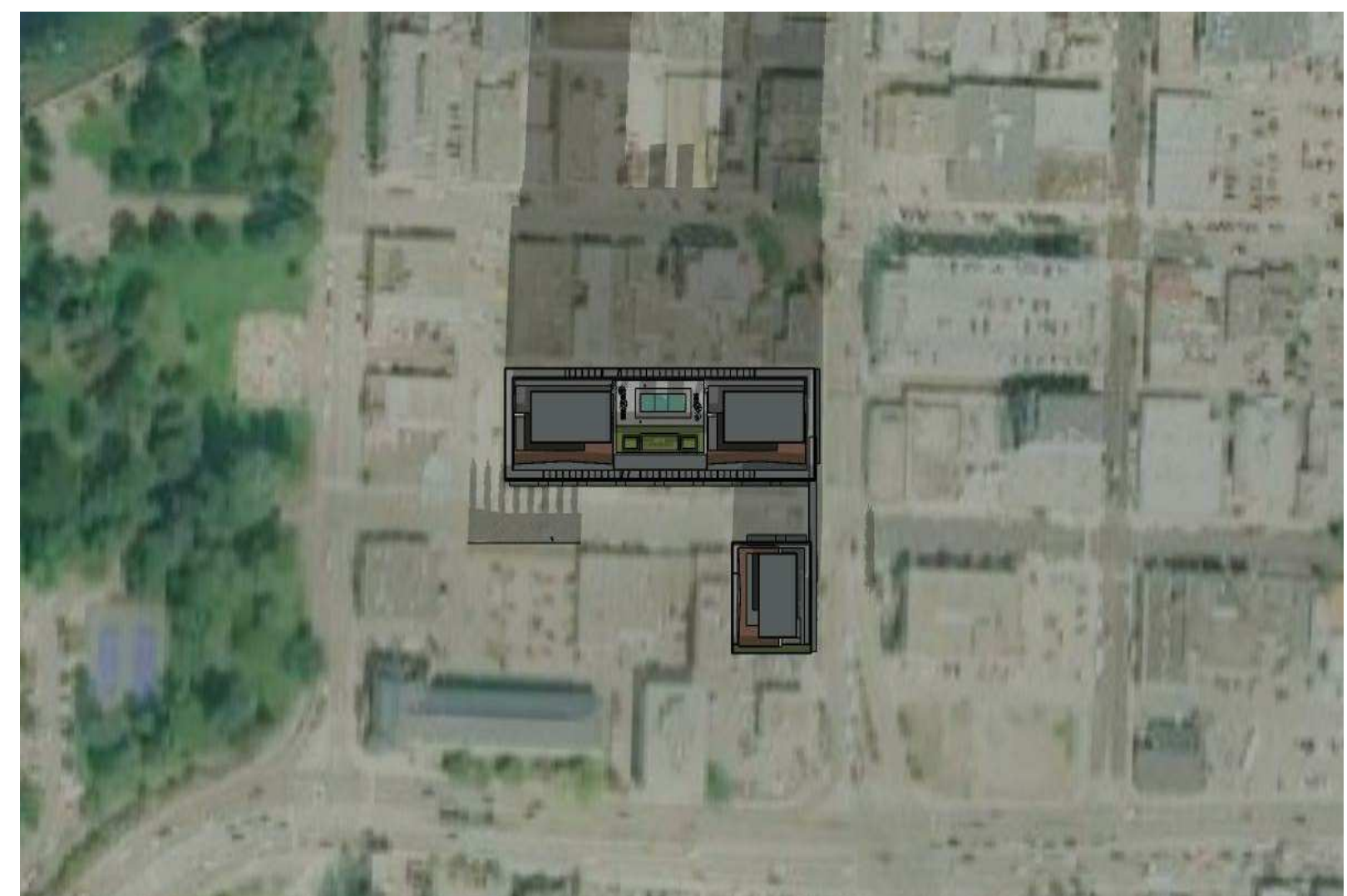
JUNE 21 - 12:00PM



JUNE 21 - 3:00PM



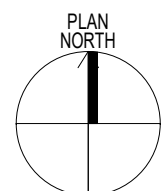
DECEMBER 21 - 9:00AM



DECEMBER 21 - 12:00PM

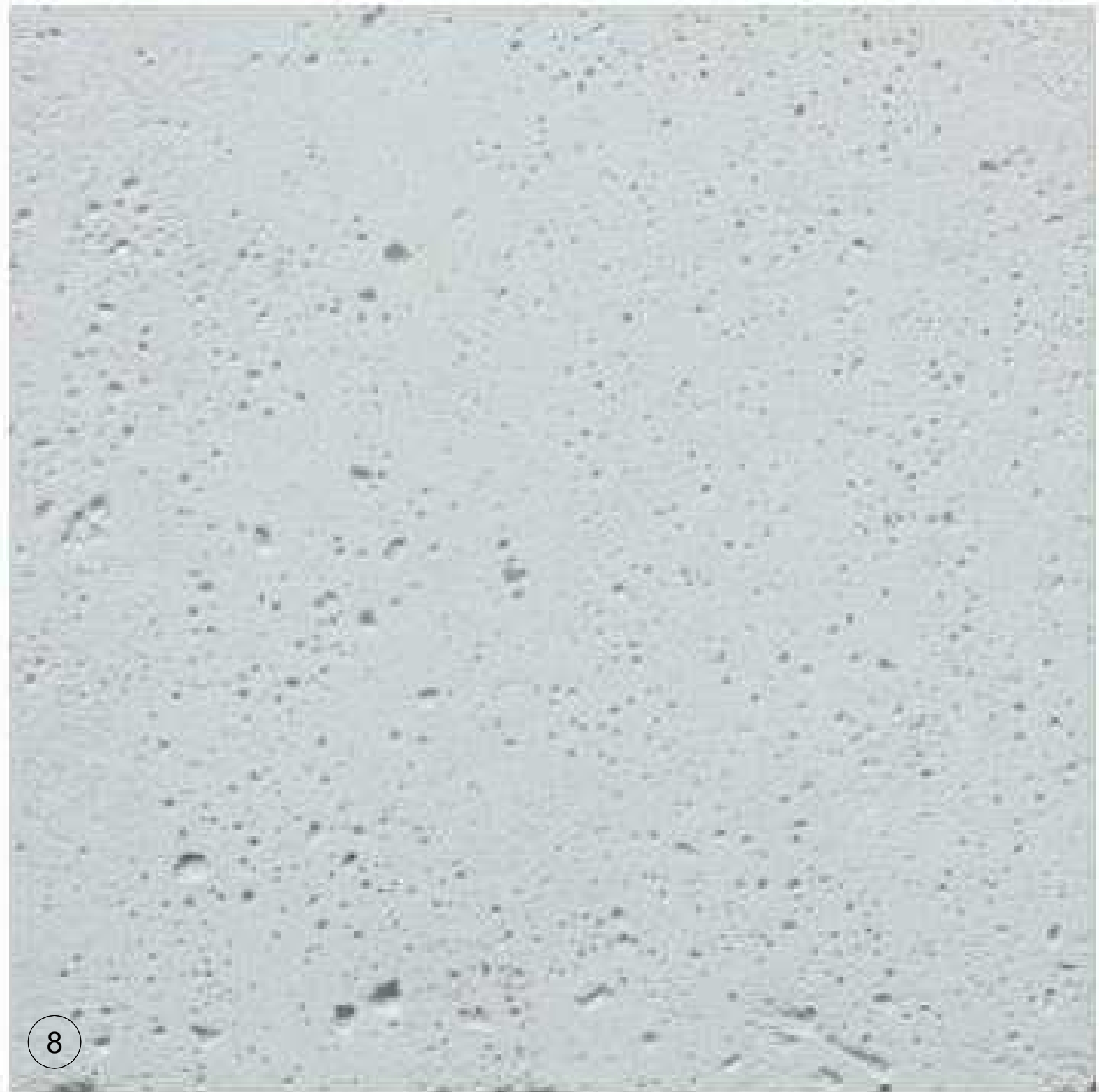
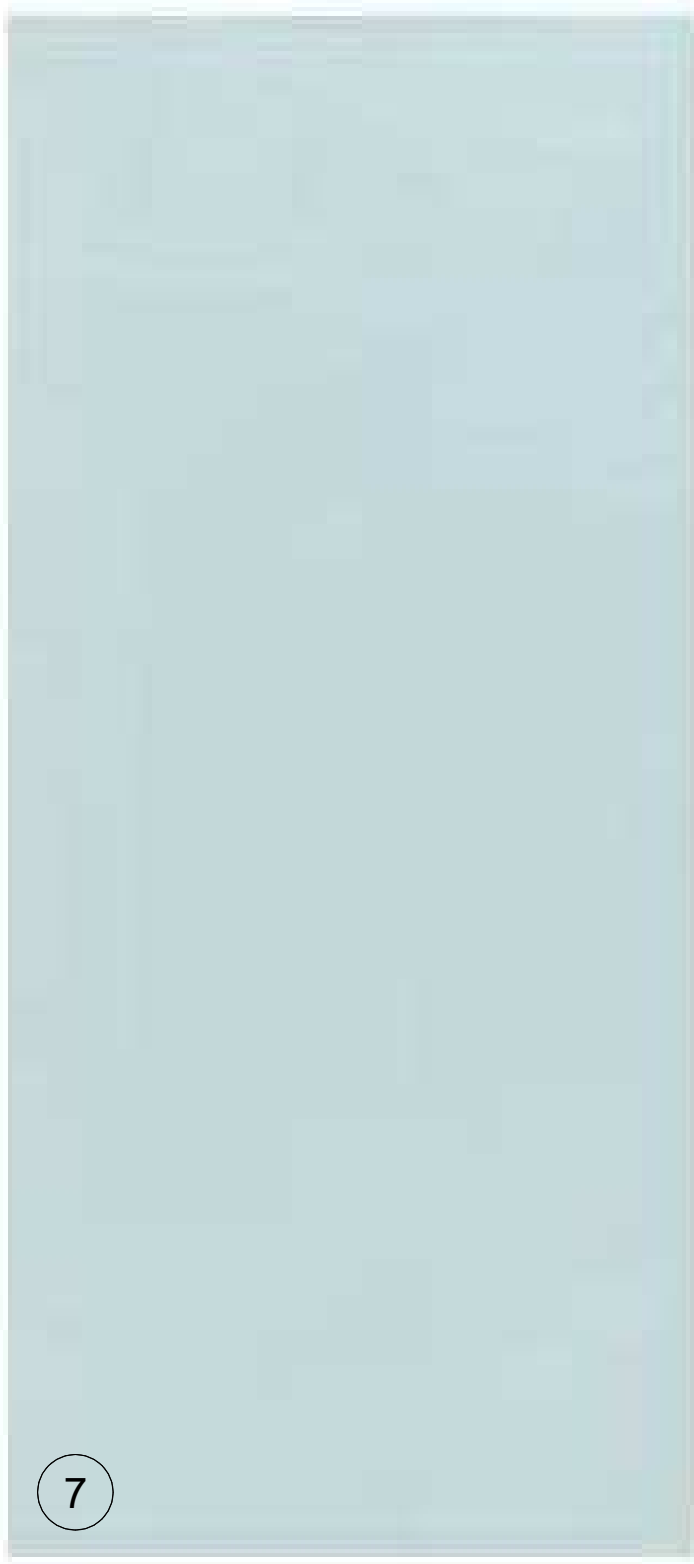
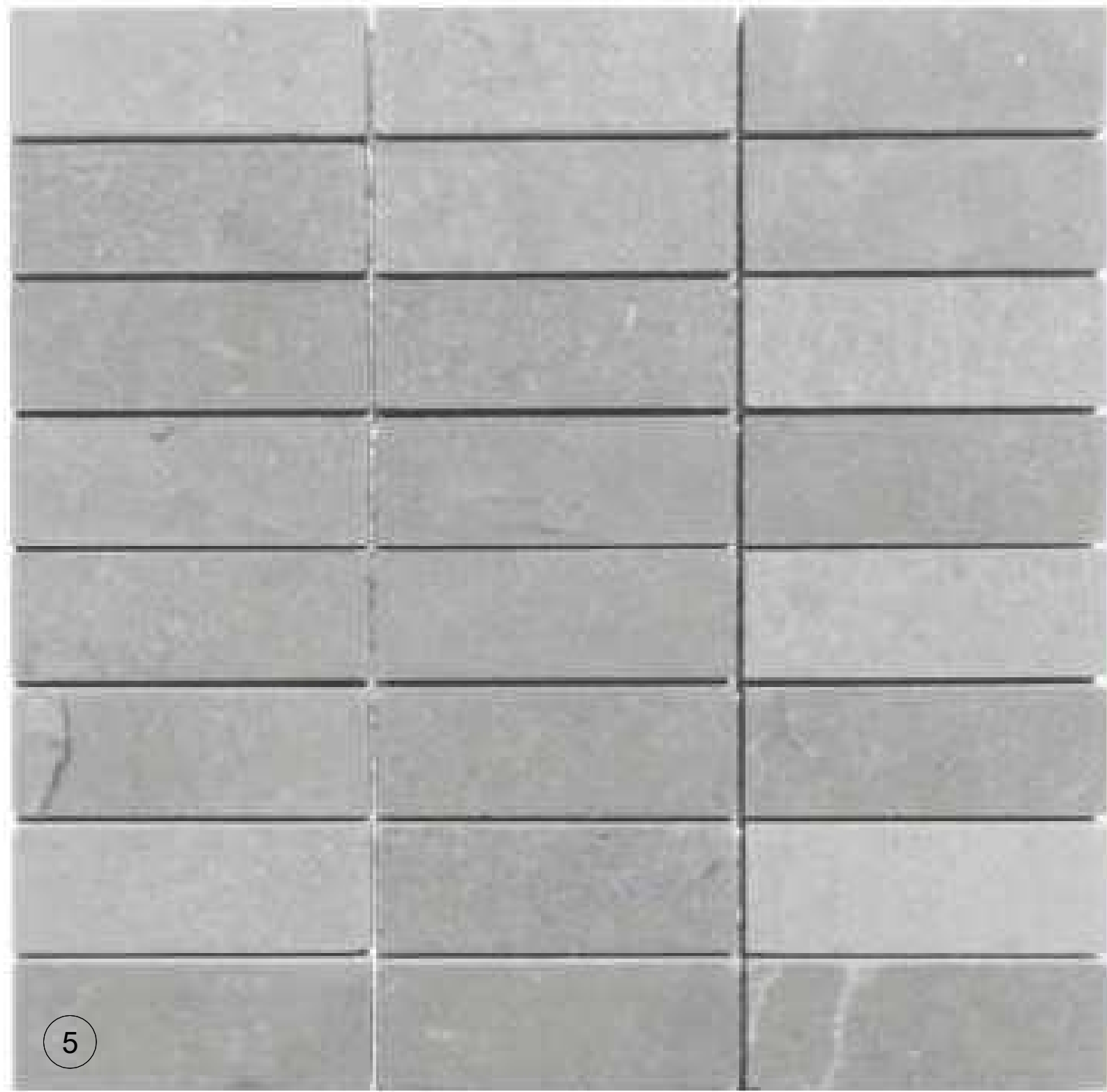
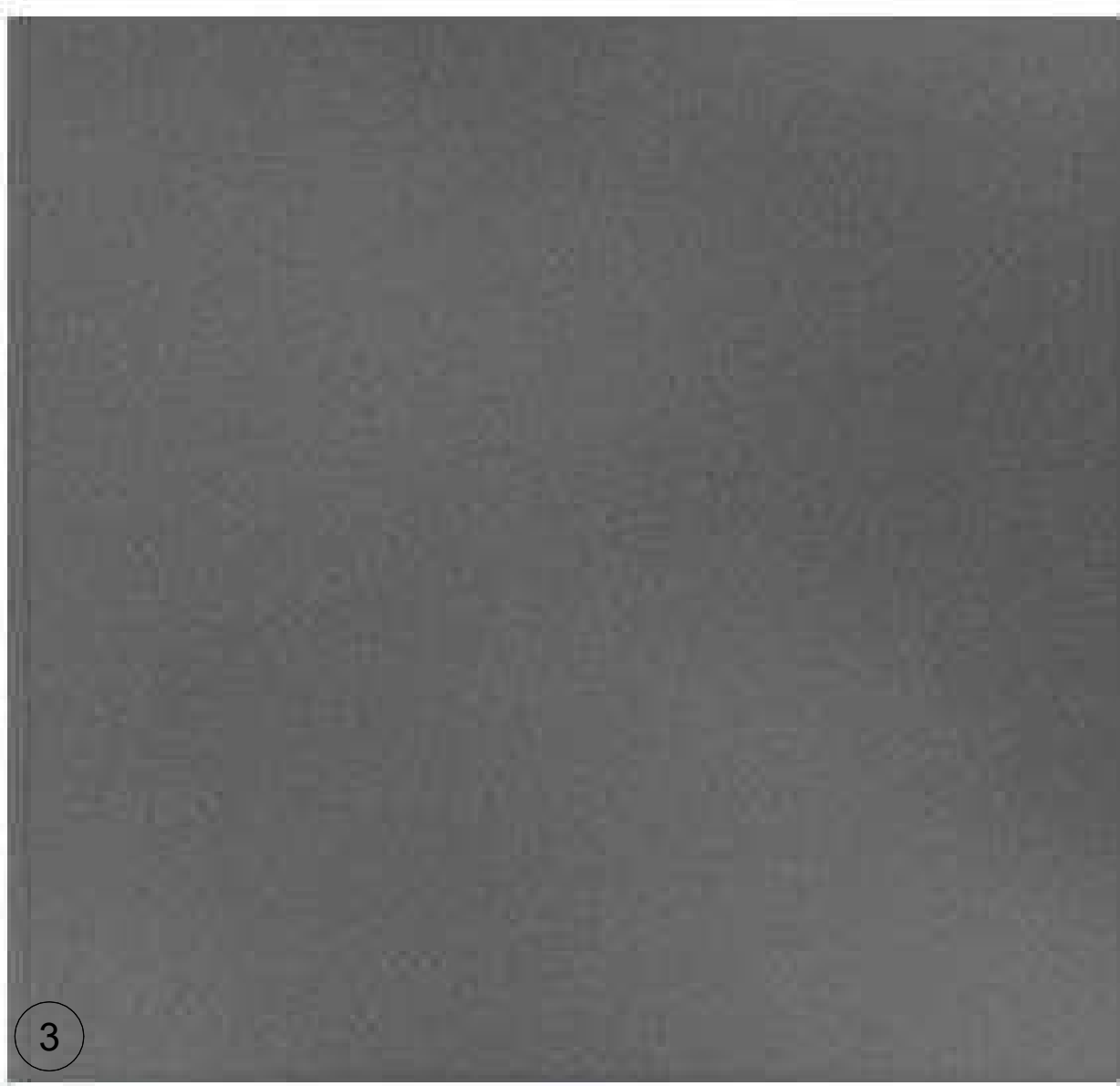
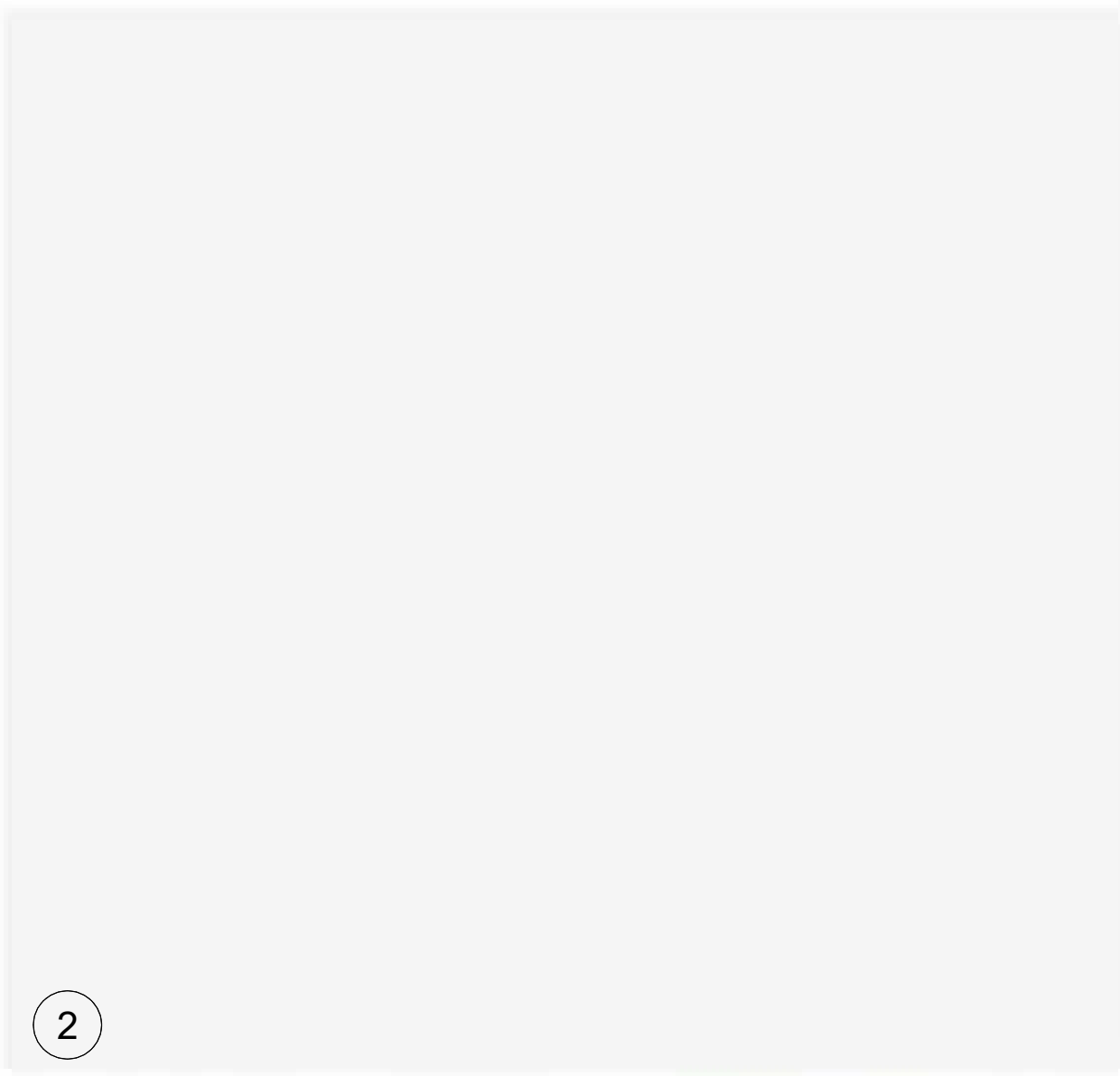


DECEMBER 21 - 3:00PM



DP Revised 10/16/2020  
Development Permit 20/12/2019





- ① POLYCARBONATE TRANSLUCENT PANELS
- ② PREFINISHED WHITE METAL CLADDING
- ③ PREFINISHED GREY METAL CLADDING
- ④ CORTEN
- ⑤ GREY BRICK VENEER
- ⑥ WOOD / CLT
- ⑦ FROSTED GLASS
- ⑧ NATURAL CONCRETE

SCHEDULE

A & B

This forms part of application  
# DP20-011 / DVP20-0013

Planner  
Initials

AC

City of  
Kelowna

DEVELOPMENT PLANNING







BIRDS' EYE VIEW LOOKING NORTH WEST



BIRDS' EYE VIEW LOOKING SOUTH WEST



BIRDS' EYE VIEW LOOKING SOUTH EAST



BIRDS' EYE VIEW LOOKING NORTH





LEON AVE VIEW LOOKING WEST



WATER STREET VIEW LOOKING NORTH WEST



KELOWNA PARK VIEW LOOKING EAST



BIRDS' EYE VIEW LOOKING NORTH EAST

WATER STREET BY THE PARK

<b>SCHEDULE</b>		A & B
This forms part of application # DP20-011 / DVP20-0013		
Planner Initials	AC	 City of <b>Kelowna</b> DEVELOPMENT PLANNING

DP Revised 10/16/2020  
Development Permit 20/12/2019

PERSPECTIVE 



---

# CITY OF KELOWNA

## MEMORANDUM

---

**Date:** February 6, 2020  
**File No.:** DP20-0011  
**To:** Community Planning (AC)  
**From:** Development Engineering Manager (JK)  
**Subject:** 278,264,266,248,238 234-236 Leon Ave, 1630, 1620 Water St. form and character



---

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 Ryan O'Sullivan

### **1. General**

- a. The proposed Development triggers a traffic impact assessment. The applicant's transportation engineer shall contact the City's Development Engineering group who will determine the terms of reference for the study. Recommendations from the Traffic Impact Analysis (TIA) will become requirements of Building Permit.
- b. Comments below will be required at Building Permit.

### **2. Domestic Water and Fire Protection**

- a. The subject property is not currently serviced. The developer's consulting mechanical engineer will determine the domestic and fire protection requirements of this proposed development. The City will model these flows to determine capacity/improvements. The applicant, at his cost, will arrange for the installation of a new service to this development.

### **3. Sanitary Sewer**

- a. City of Kelowna's records indicate that this property is not currently serviced. The developer's consulting mechanical engineer will determine the development requirements of this proposed development and establish the service needs. The City will model these flows to determine capacity/improvements. Only one service will be permitted for this development. The applicant, at his cost, will arrange for the installation of one new larger service to this development.

### **4. Storm Drainage**

- a. The developer must engage a consulting civil engineer to provide a storm water management plan for the site, which meets the requirements of the City Storm Water Management Policy and Design Manual. The storm water management plan must also include provision of lot grading plan, minimum basement elevation (MBE), if applicable, and recommendations for onsite drainage containment and disposal systems.

- b. On site storm drainage systems for the site will be reviewed and approved by Engineering when a site servicing design is submitted.
- c. 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. No permanent pumping of groundwater to storm will be permitted.

## **5. Road Improvements**

- a. Leon Ave fronting this development site is urbanized but the existing curb and sidewalk are in a deteriorated state. The existing driveways letdown will need to be removed and replaced with barrier curb and gutter and sidewalk. The upgrades to Leon Ave that are required are curb, gutter, boulevard street trees, driveway letdown and sidewalk removal and reconstruction, as well as the re-location or adjustment of any existing utility appurtenances if required to accommodate the upgrading construction.
- b. The laneways fronting this development will need to be upgraded with new pavement widening and a storm drainage system.
- c. Leon Ave will remain one way east bound way two lanes of traffic.
- d. Improvements and upgrades as per the Traffic Impact Assessment.

## **6. Road Dedication and Subdivision Requirements**

- a. By Registered plan to provide the following
  - i. Dedicate 0.8m width along the North-South full lane frontage
  - ii. Dedication of a south east corner rounding
  - iii. Grant statutory rights-of-way if required for utility services
  - iv. Lot consolidation is required
  - v. Turning lanes as per Traffic Impact Assessment.



## **7. Electric 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, which would be at the applicant's cost
- b. Re-locate existing utilities, where necessary

## **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 Development Engineering 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 offsite 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. Other Engineering Comments**

- a. Provide all necessary Statutory Rights-of-Way for any utility corridors as required.
- b. If any road dedication affects lands encumbered by a Utility right-of-way (such as Terasen, 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

## **11. Development Permit and Site Related Issues**

- a. Provide all necessary Statutory Rights-of-Way for any utility corridors as required.
- b. If any road dedication affects lands encumbered by a Utility right-of-way (such as Fortis, 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.
- c. Access to the development will be from the lane only but will be discussed at drawing review.

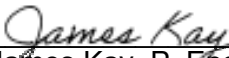
## **12. Geotechnical Study**

- (a) Provide a geotechnical report 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 Development Services Department for distribution to the Development Engineering Branch 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.

<b>ATTACHMENT</b>		<b>A</b>
This forms part of application		
# DP20-0011 / DVP20-0013		
Planner Initials		AC
		 <b>City of Kelowna</b> DEVELOPMENT PLANNING

- 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. Any items required in other sections of this document.
- vii. 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.

Additional geotechnical survey may be necessary for building foundations, etc

  
James Kay, P. Eng.  
Development Engineering Manager

RO







HDR Architecture Associates Inc.  
210 Hastings Avenue  
Penticton, BC  
V2A 2V6



December 20, 2019 (October 15 2020)

City of Kelowna Planning and Development Services  
1435 Water Street  
Kelowna BC, V1Y 1J4

**RE: WATER STREET by the Park, 234-278 Leon Ave & 1620-1630 Water Street**  
Design Rationale: Development Permit Submission

To whom it may concern,

Anthony Beyrouthi has commissioned our firm, HDR Architecture Associates, Inc., to provide architectural design services for the development permit application (development variance permit) for a new purpose built mixed use development (650 suites total + CRU) at 234-278 Leon Ave & 1620-1630 Water Street in Kelowna.

A new mass timber pedestrian bridge is proposed to connect both sites across Leon Avenue; providing joint access to parking and a new gateway to Kelowna City Park. Parking (727 stalls) are provided for both sites on the north side of Leon Ave with one level underground and the remaining above grade. The parking structure is concealed by a double height CRU space and a gently curving mass timber (glulam) and polycarbonate external screen. The open parking structure will allow light to wash through the mass timber supporting structure and polycarbonate screen; providing a warm glow to the streetscape below (refer to cover sheet).

The CRU space at grade will help rejuvenate and enliven the streetscape; the public realm modifications allow for soft and hard landscaping treatments (refer to L1). Angled parking on the north side of Leon Avenue is replaced with parallel parking (similar to the south side of the street); this allows a more generous pedestrian oriented streetscape with an additional bike lane. Greening of the street will act as a natural gateway to one of Kelowna's most precious resources (City Park and the waterfront). A continuous CLT (cross laminated timber) canopy at street level provides protection from the elements; activities within the building are visible through the glazed façade to activate the street (eyes on the street for security).

There are many good reasons to explore the full potential of wood, as a viable option to steel and concrete, but as architects, our primary interest is in the fact that wood sequesters carbon dioxide at a rate of 1-1.2 tons/m<sup>3</sup> of wood. In a world where the construction industry is responsible for 40-

[hdrinc.com/ca](http://hdrinc.com/ca)

210 Hastings Avenue, Vancouver, BC, CA V6G 2Z6A 2V6  
T (604) 687-1898

Registered Architects: Jim Aalders, Architect AIBC, AAA, MRAIC, LEED AP Veronica Gillies, Architect AIBC, FRAIC, LEED AP BD+C  
Troy Ransdell, Architect AIBC Rod Windjack, Architect AIBC, MRAIC, LEED AP

50% of CO2 emissions, renewable materials, such as wood, can mitigate the rate of global warming. With massive human migration occurring in developing countries, such as Asia and South America, triggering a massive building boom, new forms of construction for housing must be explored that are viable solutions to the traditional multi storey, concrete, apartment block that are commonly constructed in these areas. This development is proposing to use wood in strategic locations to maximize the benefits.

The current C7 (Central Business Commercial) zoning will accommodate the scheme presented except for the following variances (3) and text amendment:

**1 - HEIGHT VARIANCE:** THE DEVELOPMENT IS 58.2 M HIGHER THAN THE ZONE ALLOWS (76.5 M), HOWEVER THE TOWERS MATCH THE CITY'S VISION FOR THE FUTURE OF THIS ZONE (OCP), THE FAR IS COMPLIANT WITH THE ZONING BYLAW.

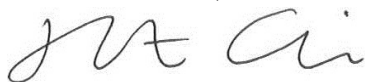
**2 - PARKING VARIANCE:** THE 727 PARKING STALLS PROVIDED MEETS (EXCEEDS) THE REQUIRED 709 STALLS, HOWEVER 24 OF THE STALLS ARE "MODIFIED COMPACT STALLS @ 3.4m x 2.5m", WHICH HAVE BEEN APPROVED FOR USE AS PER DISCUSSIONS WITH COK PLANNING DEPARTMENT.

**3 - SHORT TERM BIKE PARKING:** THE CALCULATIONS PROVIDED IN THE BYLAW ARE MEANT FOR SMALLER DEVELOPMENTS; THE 150 REQUIRED PER THE CURRENT BYLAW EXCEEDS ANY TEMPORARY USE IN THIS DEVELOPMENT. THUS A SHORTFALL OF 122.

**LONG TERM BIKE PARKING:** RATIO OF WALL MOUNTED BIKE SPACES; SHORTFALL OF 93, HOWEVER, WE HAVE AN EXCESS OF FLOOR MOUNTED LONG TERM STALLS OF 136. TOTAL 566 STALLS PROVIDED (EXCESS OF 43).

Towers A and B are oriented East West with a slight v shaped deck articulation to accentuate the slender form as seen from Harvey Avenue. The translucent glass guards on the tower balconies provide a sculptural aesthetic while minimizing the visual impact of ones possessions. This proposal will be a positive contribution to our community by allowing more housing and commercial opportunities and allowing densification in an area which is within the downtown core and its associated amenities. This project is in close proximity to bike and walking trails and a viable alternative to urban sprawl and hope for a reduction in vehicular reliance. The developer would like to work with the City of Kelowna to provide a public contribution for community benefit; to help combat the housing crisis.

Sincerely,  
HDR Architecture, Inc.



Robert Cesnik ARCHITECT AIBC, MRAIC, LEED AP BD+C  
Associate

<b>ATTACHMENT</b>		<b>B</b>
This forms part of application		
# DP20-0011 / DVP20-0013		
Planner Initials	AC	 <b>City of Kelowna</b> DEVELOPMENT PLANNING



<b>ATTACHMENT</b>		<b>C</b>
This forms part of application		
# DP20-0011 / DVP20-0013		
Planner Initials	AC	 <b>City of Kelowna</b> <small>DEVELOPMENT PLANNING</small>



# Water Street by the Park – Final

Version 2

Transportation Impact Assessment

Completed for Anthony Beyrouti

234-278 Leon Avenue & 1620-1630 Water Street, Kelowna, BC

August 18, 2020

The material in this report, “Water Street by the Park Transportation Impact Assessment”, reflects HDR's professional judgment considering the scope, schedule and other limitations stated in the document and in the contract between HDR and the client. The opinions in the document are based on conditions and information existing at the time the document was published and do not consider any subsequent changes. In preparing the document, HDR did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that HDR shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party resulting from decisions made or actions taken based on this document.

Version	Date Issued	Authored By	Quality Review
<b>FINAL</b>	June 15, 2020	Lynn Machacek	Stephen Power
<b>FINAL Version 2</b>	August 18, 2020	Lynn Machacek	Stephen Power




ATTACHMENT
C

This forms part of application

# DP20-0011 / DVP20-0013

Planner  
Initials

AC



**City of  
Kelowna**  
DEVELOPMENT PLANNING





## Table of Contents

1	Introduction .....	1
1.1	Scope of Work .....	1
2	Existing Conditions .....	2
2.1	Site Location & Context .....	2
2.2	Transportation Network.....	5
2.2.1	Active Transportation .....	5
2.2.2	Transit.....	5
2.3	Existing Traffic Volumes & Operation.....	8
2.3.1	Vehicle Network.....	8
2.3.2	Traffic Volumes.....	8
2.3.3	Intersection Analysis Methodology .....	8
2.3.4	Existing Traffic Operations .....	12
2.4	Future Background .....	14
3	Development Plan.....	18
3.1	Site Access & Street Reconfigurations.....	18
3.2	Land Use and Vehicle Trip Generation .....	18
3.3	Vehicle Distribution & Assignment .....	20
3.4	Transit Trip Generation .....	22
4	Post Development Traffic Operations.....	24
4.1	Opening Day Post Development.....	24
4.2	Future Post Development .....	27
5	Parking, Loading and Operational Details .....	32
5.1	Parking and Passenger Vehicle Operations.....	32
5.2	Garbage Operations .....	32
5.3	Loading Operations.....	32
5.4	Conclusion & Recommendations .....	33
5.5	Additional Operational Details.....	38
5.5.1	Public Lane Operations (A).....	39
5.5.2	Public Lane & Water Street (B) .....	39
5.5.3	Water Street Bus Stop #102868 Integration with Site (C).....	41
5.5.4	Reconfigured Leon Avenue (D).....	42
5.5.5	Leon Avenue Access – Sensitivity Analysis .....	43

5.5.6	Water Street / Lane – Northbound Left Turn Ban Analysis .....	46
6	Conclusion .....	48
	Appendix A – Scope and Correspondence.....	49
	Appendix B – Traffic Counts and Signal Timing .....	50
	Appendix C – Synchro Results.....	51

## Tables

Table 1: Transit Routes & Headways .....	6
Table 2: Turning Movement Count Dates.....	8
Table 3: Highway Capacity Manual Level of Service Definitions for Intersections .....	9
Table 4: Existing Traffic Operations – Street Intersections .....	12
Table 5: Existing Traffic Operations - Lane Intersections .....	13
Table 6: Future Background Traffic Operations – Street Intersections .....	14
Table 7: Future Background Traffic Operations – Street Intersections Continued .....	15
Table 8: Future Background Traffic Operations - Lane Intersections.....	15
Table 9: Future Background Intersection Operations - Mitigated.....	16
Table 10: Vehicle Trip Rate Comparison by Land Use .....	19
Table 11: Vehicle Trip Generation.....	19
Table 12: Trip Distribution .....	20
Table 13: Eastbound Assignment .....	20
Table 14: Transit Trip Generation.....	22
Table 15: Transit Trip Generation Distribution.....	22
Table 16: Transit Trips Compared to Service .....	23
Table 17: Opening Day Post Development Traffic Operations – Street Intersections .....	24
Table 18: Opening Day Post Development Traffic Operations - Street Intersections Continued	25
Table 19: Opening Day Post Development Traffic Operations - Lane Intersections .....	25
Table 20: Opening Day Post Development Traffic Operations – Street Intersections .....	26
Table 21: Future Post Development Traffic Operations – Street Intersections .....	27
Table 22: Future Post Development Traffic Operations - Street Intersections Continued .....	28
Table 23: Future Post Development Traffic Operations - Lane Intersections.....	28
Table 24: Parking and Loading Recommendations .....	33
Table 25: Site Plan Compliance with Bus Stop Installation Guide .....	41
Table 26: Proposed Leon Avenue Cross Section .....	42
Table 27: Leon Avenue Access - Sensitivity Analysis - Future Post Development .....	43
Table 28: Future Post Development Traffic Operations – Street Intersections .....	46
Table 29: Future Post Development Traffic Operations - Lane Intersections.....	47



## Figures

Figure 1: Site Location and Study Area Context.....	3
Figure 2: Site Plan .....	4
Figure 3: Curb Extension and Ramps on the NW corner of Water Street / Leon Avenue .....	5
Figure 4: Active Transportation and Transit.....	7
Figure 5: Laning Configurations and Traffic Control .....	10
Figure 6: Existing Balanced Traffic Volumes .....	11
Figure 7: Future Background Traffic Volumes .....	17
Figure 8: Site Trips.....	21
Figure 9: Opening Day Post Development Traffic Volumes.....	30
Figure 10: Future Post Development Traffic Volumes .....	31
Figure 11: Passenger Vehicle Access.....	34
Figure 12: Garbage Vehicle Access .....	35
Figure 13: MSU Loading and Access .....	36
Figure 14: Large Vehicle (WB-19) Loading and Access .....	37
Figure 15: Leon Avenue and Pandosy Streetscape Improvements .....	38
Figure 16: Water Street and Lane - Traffic Operations .....	40
Figure 17: Leon Avenue Access Analysis .....	45
Figure 18: Future Post Development Volumes - With Northbound Left Turn Ban at Water Street & Lane .....	46





# 1 Introduction

Anthony Beyrouti is proposing a mixed-use commercial and residential development on the northwest and southwest corners of the intersection of Leon Avenue and Water Street in downtown Kelowna. The City of Kelowna has requested a Transportation Impact Assessment (TIA) for the development, and HDR has been retained to conduct the study.

The proposed development will include 550 residential condo units, 198 short term rental units, and 44,201 ft<sup>2</sup> of commercial / retail space, and will be split into two sites. For the north site, pedestrian access will be from the building frontages on Leon Avenue and Water Street, and vehicle access will be from the lane north of the site (between Leon and Lawrence Avenues). Four loading spaces will be provided in the rear lane, and two on-street parking spaces on the north side of Leon Avenue will be reserved as short term pick-up drop-off, and will be able to be used by larger loading vehicles. The public lane can be accessed from Lawrence Avenue, Leon Avenue, or Water Street.

For the south site, pedestrian access will also be from the frontages on Leon Avenue and Water Street, and a loading area is provided south of the site off of the lane. All parking for the development will be accommodated with a parkade on the north site, and both sites will be connected with an overhead walkway over Leon Avenue. The development plan includes the reconfiguration of Leon Avenue. This includes changes from angled to parallel parking, the addition of an eastbound buffered cycle track, and wider sidewalks on the north side of the street.

## 1.1 Scope of Work

The following study follows the scope of work provided to HDR by the City of Kelowna. A high level summary of the scope is provided below, and the full scope can be found in Appendix A. This report has been updated based on comments received by the City of Kelowna, and a log of the comments and revisions are also included in Appendix A.

- Estimate future site trip generation for the site based on the proposed uses
- Distribute and assign the site generated traffic from the site onto the local street network
- Evaluate existing, background, and future vehicle operations at:
  - Water Street & Bernard Avenue
  - Water Street & Lawrence Avenue
  - Water Street & Leon Avenue
  - Water Street / Pandosy Street & Harvey Avenue
  - Abbott Street & Leon Avenue
  - Lane access on Lawrence Avenue, Water Street and Leon Avenue
- Confirm the future laning and traffic control on the study area network, and provide recommendations if deficient.
- Review active transportation and transit networks around the site.
- Review the site access and loading, including loading vehicle swept paths.
- Review the future operation of Leon Avenue.
- Conduct a sensitivity analysis of relocating a parkade entrance onto Leon Avenue



## 2 Existing Conditions

### 2.1 Site Location & Context

The proposed development site is located in downtown Kelowna, on the northwest and southwest corners of the intersection of Water Street and Leon Avenue. The proposed “site” consists of two separate locations, one rectangular site on the north side of Leon Avenue, and a square site on the south side. The two individual sites will be connected by an overhead pedestrian bridge, providing access to the southern site from the parkade within the north site. The site is one block north of Harvey Avenue / Highway 97, and one block east of Kelowna City Park and Abbott Street.

The downtown Kelowna area has a gridded block structure, with close spacing between avenues (~100 m), and longer spacing between streets (~200 m).

Notable destinations in the area include Kelowna City Hall, Arts District and Prospera Place a few blocks to the north, City Park to the west, and the Chapman Parkade and the Queensway Transit Exchange to the northeast.

Figure 1 shows the location of the site and the study area intersections.

Figure 2 shows the ground floor site plan. Vehicle access will be provided from two parkade accesses on the lane north of the north site.

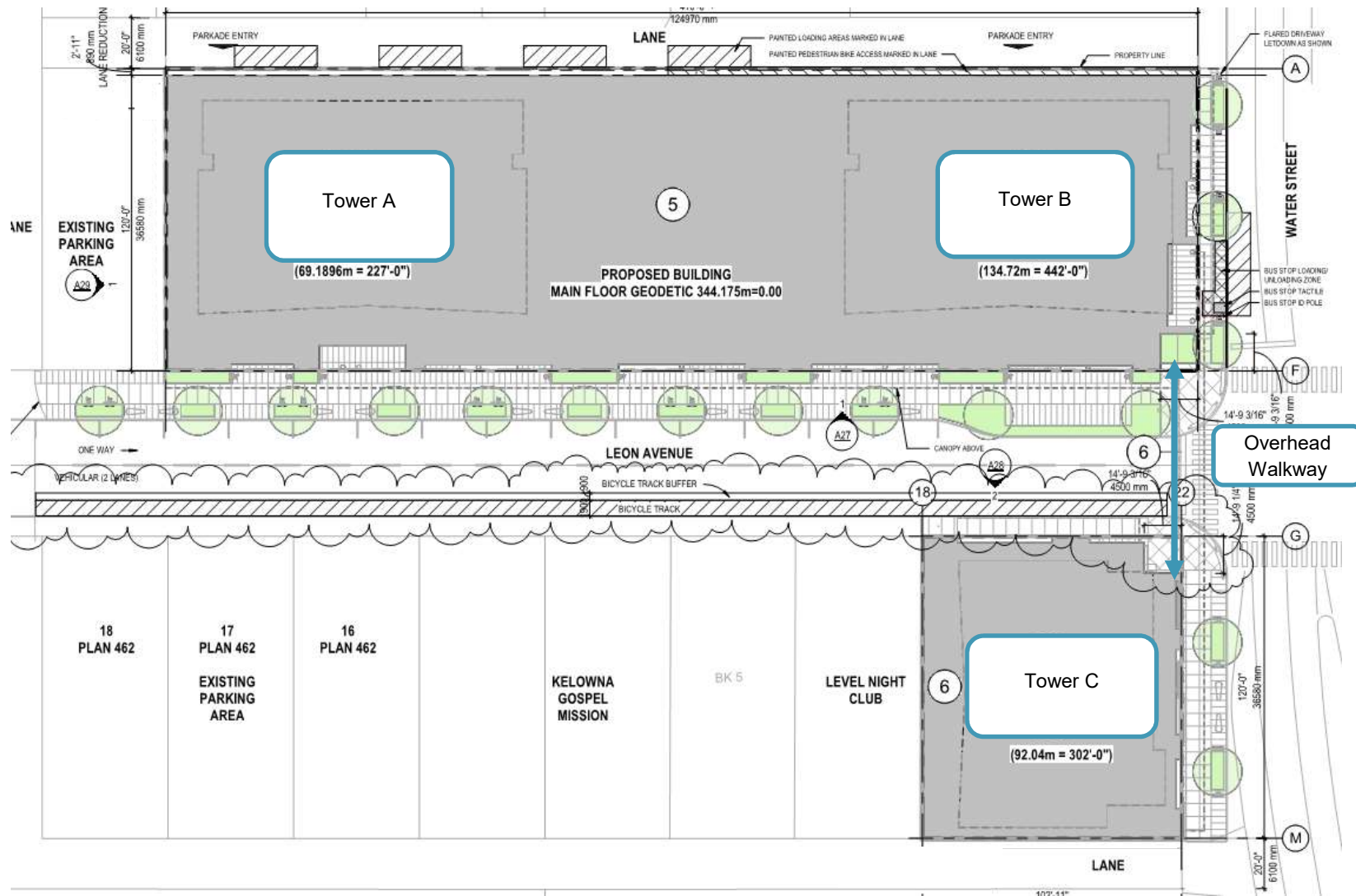


Figure 1: Site Location and Study Area Context





Figure 2: Site Plan



## 2.2 Transportation Network

### 2.2.1 Active Transportation

Figure 4 shows the existing walking and cycling facilities near the site, and includes the location of the nearby transit exchange and bus stops.

Sidewalks are provided on both sides of all streets near the study site, and crosswalks are provided on all legs of the study intersections, except on some legs at the intersections of Harvey Avenue / Water Street and Leon Avenue / Abbott Street. Curb ramps are provided at most of the corners of the study area intersections, and curb extensions are also provided at some intersection corners.

There are a variety of cycling facilities, including shared-use pathways, bicycle lanes, and cycle tracks in the study area. These facilities provide connections to the site from the north, south and west, but there are no close by facilities for travel to/from the east.

The City of Kelowna has identified future active transportation facilities near the development site in the Pedestrian and Bicycle Master Plan<sup>1</sup>, including a cycle track on Leon Avenue, from Abbott Street eastward, bicycle lanes on Water and Ellis Streets, and a shared-use pathway on Pandosy Street, north of Leon Avenue.



**Figure 3: Curb Extension and Ramps on the NW corner of Water Street / Leon Avenue**

Source: Google Maps

### 2.2.2 Transit

There are two bus stops near the development site. Bus stop #102868 is located on the east frontage of the site, and the northbound stop #102869 is southeast of the intersection of Leon Avenue and Water Street. Both stops serve Route 1 - Lakeshore. The Queensway Transit Exchange is located three blocks to the northeast of the study site, and is the terminus for a number of different bus routes. All routes near the site (including at the Queensway Exchange) are shown Table 1, and the headway of each route at certain times in the day is indicated.



<sup>1</sup> Pedestrian and Bicycle Master Plan, April 2016, City of Kelowna



**Table 1: Transit Routes & Headways**

Route			Headway (min)				
#	Name	Location	AM Peak	Mid-day	PM Peak	Evening	Saturday
1	Lakeshore	102868 / 102869	15	30	15	60	30
2	North End Shuttle	Queensway Exchange	30	30	30	60	30
5	Gordon		30	30	30	60	30
6	Glenmore / UBCO Exchange		70	70	70	-	60
9	Shopper Shuttle		Infrequent service throughout the day				
10	North Rutland		20	30	20	45	30
11	Rutland		15	30	30	60	30
18	Glenmore / Downtown		25	40	30	45	60
97	Okanagan		15	30	15	30	30

Source: BC Transit

Fall 2019 ridership data for the two bus stops near the site were obtained from the City of Kelowna. Out of a total of 964 bus stops in the region, bus stops 102868 and 102869 rank as the 144<sup>th</sup> and 248<sup>th</sup> busiest bus stops in the network, with stop 102868 being a popular stop for boarding and 102869 being a popular stop for alighting.

With the nearby Queensway Exchange, and the significant number of routes available, transit in the area is considered to be sufficient to accommodate the future transit trips from the site.



Figure 4: Active Transportation and Transit





## 2.3 Existing Traffic Volumes & Operation

### 2.3.1 Vehicle Network

Figure 5 shows the current laning configurations and traffic controls within the study area. The site is oriented around Leon Avenue, a two-lane one-way eastbound street, with angled parking on the north side and parallel parking on the south. Water Street bounds the east side of the site, and it is a two-way four-lane street that provides a north-south connection between downtown Kelowna, the waterfront, and Harvey Avenue. The speed limit in the study area is 50 km/h. There is T-shaped public lane configuration on the north side of the north site, and the lane connects to Lawrence Avenue, Leon Avenue, and Water Street.

### 2.3.2 Traffic Volumes

Existing traffic volumes and signal timing plans were provided to HDR by the City of Kelowna, and are included in Appendix B. A summary of the counts is provided in Table 2.

**Table 2: Turning Movement Count Dates**

Intersection	Count Date
Water Street & Bernard Avenue	Thursday May 24, 2018
Water Street & Lawrence Avenue	Tuesday November 3, 2015
Water Street & Leon Avenue	Wednesday May 1, 2019
Water Street / Pandosy Street & Harvey Avenue	Tuesday June 19, 2018
Abbott Street / Leon Avenue	Tuesday June 19, 2018

The existing traffic counts were balanced up to create a set of “Existing Balanced” volumes, and existing turning movement volumes were estimated at the public lanes accesses on Lawrence Avenue, Leon Avenue, and Water Street. The Existing Balanced volumes are shown in Figure 6.

### 2.3.3 Intersection Analysis Methodology

To assess the capacity and operation of the vehicle network, we conducted traffic analysis using Synchro 9, and provided results based on Highway Capacity Manual (HCM) 2010 methodology. Level of Service (LOS) definitions are shown in **Table 3**. The HCM defines LOS for signalized and unsignalized intersections as a function of the average vehicle control delay. LOS may be calculated per movement, approach or for the entire intersection.

**Table 3: Highway Capacity Manual Level of Service Definitions for Intersections**

LOS	Signalized Intersection Average Vehicle Control Delay	Unsignalized Intersection Average Vehicle Control Delay
A	≤10 sec	≤10 sec
B	10-20 sec	10-15 sec
C	20-35 sec	15-25 sec
D	35-55 sec	25-35 sec
E	55-80 sec	35-50 sec
F	≥80 sec	≥50 sec

The City of Kelowna did not provide specific performance thresholds for the study. Instead, HDR has indicated (highlighted) where movements are approaching typical performance thresholds (movements that exceed LOS D, a v/c ratio of 0.90, or a 95<sup>th</sup> percentile queue greater than available storage). We provide commentary on each instance where this occurs, and recommendations for monitoring or mitigation measures.

It is also noted that while loading will periodically occur in the lane south of the south site, no vehicle parking is provided directly on this site, and so the lane and accesses to it from the street network have not been modelled.





Figure 5: Laning Configurations and Traffic Control

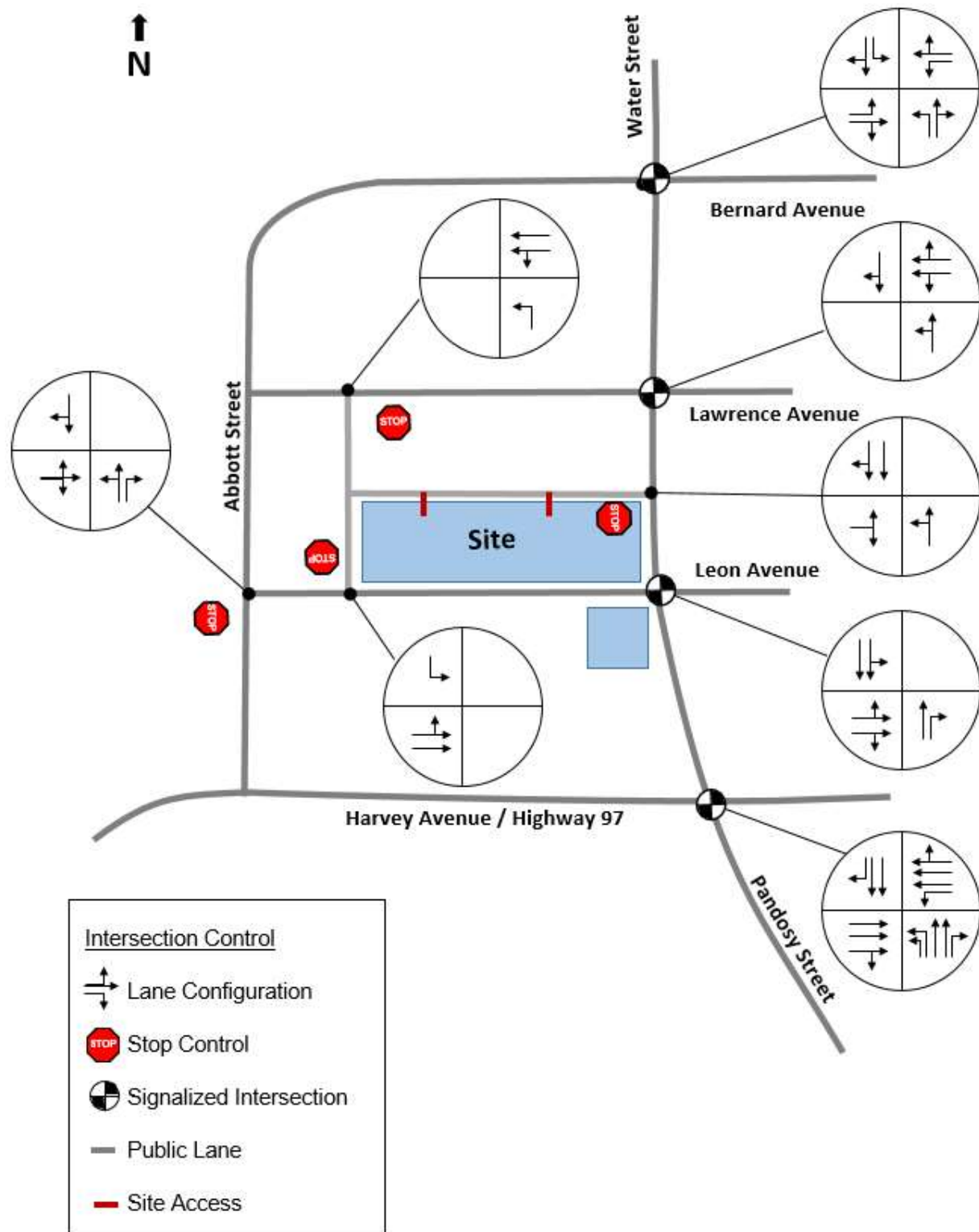
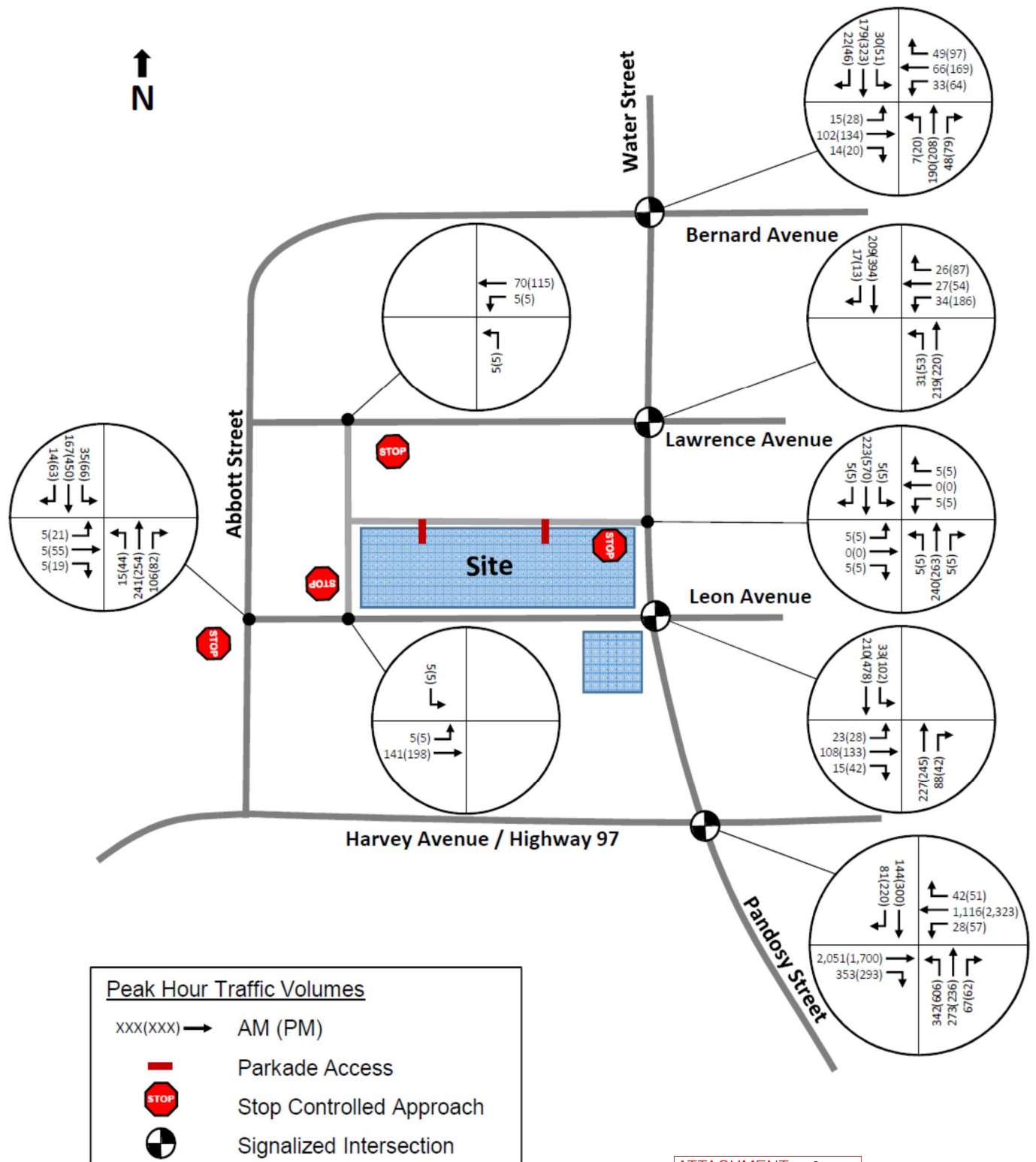


Figure 6: Existing Balanced Traffic Volumes





## 2.3.4 Existing Traffic Operations

Vehicle operations were assessed based on the existing road network and volumes. Existing traffic operations at the study area intersections are shown in Table 4 and Table 5.

**Table 4: Existing Traffic Operations – Street Intersections**

Intersection	Movement / Lanes		Weekday AM Peak Hour					Weekday PM Peak Hour				
			Vol.*	LOS	Delay (s)	v/c	95 <sup>th</sup> Q	Vol.	LOS	Delay (s)	v/c	95 <sup>th</sup> Q
Water Street & Bernard Avenue - Signal	EBL	1	15	B	19	0.05	3	28	C	30	0.14	8
	EBTR	1	102/14	B	18	0.29	23	134/20	B	19	0.34	36
	WBL	1	33	B	19	0.11	7	64	C	24	0.23	17
	WBTR	1	66/49	B	18	0.33	23	169/97	C	25	0.71	72
	NBL	1	7	B	15	0.01	2	20	A	2	0.05	2
	NBTR	1	190/48	B	16	0.31	54	208/79	A	2	0.40	5
	SBL	1	30	B	12	0.07	5	51	A	10	0.10	8
	SBTR	1	179/22	A	8	0.26	29	323/46	B	14	0.50	74
	Total		-	B	14	-	-	-	B	15	-	-
Water Street & Lawrence Avenue - Signal	WBLTR	2	34/27/26	C	21	0.16	10	186/54/87	C	28	0.55	53
	NBLT	2	31/219	A	0	0.23	2	53/220	A	1	0.27	2
	SBTR	1	209/17	B	11	0.21	48	394/13	A	1	0.37	4
	Total		-	A	8	-	-	-	A	10	-	-
Abbott Street & Leon Avenue – Stop Control	EBLTR	1	5/5/5	A	9	0.01	1	21/55/19	D	26	0.38	2
	NBLT	1	15/241	A	8	0.01	0	44/255	A	9	0.05	0
	NBR	1	106	A	0	0.01	0	82	A	0	0.00	0
	SB	1	35/167/14	A	8	0.03	0	66/450/63	A	1	0.06	0
	Total		-	A	1	-	-	-	A	3	-	-
Water Street & Leon Avenue - Signal	EBLTR	2	23/108/15	C	21	0.24	16	28/133/42	C	28	0.35	30
	NBT	1	227	A	6	0.22	26	245	A	5	0.21	30
	NBR	1	88	A	5	0.10	9	42	A	4	0.05	5
	SBLT	2	33/210	A	0	0.14	1	102/478	B	15	0.30	74
	Total		-	A	7	-	-	-	B	15	-	-
Harvey Avenue & Water Street /Pandosy Street - Signal	EBTR	3	2051/253	B	17	0.74	257	1700/293	C	28	0.77	249
	WBL	1	28	D	54	0.35	19	57	F	97	0.68	47
	WBTR	3	1116/42	B	10	0.37	93	2323/51	D	38	0.88	341
	NBL	2	342	F	84	0.89	105	606	F	102	1.02	233
	NBT	2	273	D	49	0.38	68	236	C	35	0.21	52
	NBR	1	67	A	0	0.00	0	62	A	0	0.00	0
	SBT	2	144	F	88	0.79	51	300	E	64	0.79	83
	SBR	1	81	A	0	0.00	0	220	A	0	0.00	0
	Total		-	C	25	-	-	-	D	42	-	-

Note: For lane groups with more than one movement, the volume for each movement is shown in the order indicated in the Movement / Lane column, and in the order left/through/right

**Table 5: Existing Traffic Operations - Lane Intersections**

Intersection	Movement / Lanes		Weekday AM Peak Hour					Weekday PM Peak Hour				
			Vol.	LOS	Delay (s)	v/c	95 <sup>th</sup> Q	Vol.	LOS	Delay (s)	v/c	95 <sup>th</sup> Q
<b>Lawrence Avenue &amp; Lane – Stop Control</b>	WBLT	2	5/70	A	1	0.00	0	5/115	A	0	0.00	0
	NBL	1	5	A	9	0.01	0	5	A	9	0.01	0
	Total		-	<b>A</b>	<b>1</b>	-	-	-	<b>A</b>	<b>1</b>	-	-
<b>Water Street &amp; Lane – Stop Control</b>	EB	1	5/0/5	B	12	0.02	0	5/0/5	C	17	0.04	0
	WB	1	5/0/5	B	11	0.02	0	5/0/5	B	13	0.02	0
	NB	2	5/240/5	A	0	0.00	0	5/263/5	A	0	0.01	0
	SB	2	5/223/5	A	0	0.00	0	5/570/5	A	0	0.01	0
	Total		-	<b>A</b>	<b>1</b>	-	-	-	<b>A</b>	<b>1</b>	-	-
<b>Leon Avenue &amp; Lane – Stop Control</b>	EBLT	2	5/141	A	0	0.00	0	5/198	A	0	0.00	0
	SBL	1	5	A	9	0.01	0	5	A	7	0.00	0
	Total		-	<b>A</b>	<b>1</b>	-	-	-	<b>A</b>	<b>0</b>	-	-

The intersection of Harvey Avenue and Water Street is the only intersection that will have movements operating beyond traditional performance thresholds. The City of Kelowna requested that no changes be made to this highway intersection, and so existing signal timings have been maintained for the rest of this study.



## 2.4 Future Background

To incorporate some future traffic growth on the network (representative of 5 to 10 years at a 1-2% growth rate), existing traffic volumes were grown at a blanket 10% to show what operations would be like if traffic grew in the area.<sup>2</sup> Figure 7 shows the future background traffic volumes, and Table 6 through Table 8 show the future background traffic operations. The analysis at the intersection of Highway 97 and Water Street / Pandosy includes a new eastbound right turn lane to be added in the near future.

**Table 6: Future Background Traffic Operations – Street Intersections**

Intersection	Movement / Lanes		Weekday AM Peak Hour					Weekday PM Peak Hour				
			Vol.	L O S	Delay (s)	v/c	95 <sup>th</sup> Q	Vol.	L O S	Delay (s)	v/c	95 <sup>th</sup> Q
Water Street & Bernard Avenue – Signal	EBL	1	17	B	20	0.06	3	31	C	30	0.16	9
	EBTR	1	112/15	B	18	0.31	25	147/22	B	19	0.35	40
	WBL	1	36	B	20	0.12	8	70	C	23	0.24	17
	WBTR	1	73/54	B	18	0.36	26	186/107	C	26	0.73	79
	NBL	1	8	B	16	0.02	2	22	A	4	0.07	3
	NBTR	1	209/53	B	17	0.34	59	229/87	A	2	0.46	5
	SBL	1	33	B	13	0.08	6	56	B	11	0.12	10
	SBTR	1	197/24	A	9	0.29	32	355	A	16	0.57	85
	Total		-	B	15	-	-	-	B	15	-	-
Water Street & Lawrence Avenue – Signal	WBLT	2	37/30/29	C	21	0.17	11	205/59/96	C	28	0.58	59
	NBLT	2	34/241	A	1	0.25	2	58/242	A	1	0.31	3
	SBTR	1	230/19	B	12	0.23	53	433/14	A	1	0.41	4
	Total		-	A	8	-	-	-	A	9	-	-
Abbott Street & Leon Avenue – Stop Control	EBLT	1	6/6/6	B	12	0.04	1	23/61/21	D	34	0.49	19
	NBTL	1	17/265	A	7	0.01	0	48/279	A	9	0.06	1
	NBR	1	117	A	0	0.00	0	90	A	0	0.00	0
	SBLT	1	39/184/15	A	8	0.04	1	73/495/69	A	8	0.07	1
	Total		-	A	1	-	-	-	A	4	-	-
Water Street & Leon Avenue - Signal	EBLT	2	25/119/17	C	21	0.26	18	31/146/46	C	28	0.39	33
	NBT	1	250	A	6	0.24	29	270	A	5	0.24	34
	NBR	1	97	A	5	0.11	11	46	A	4	0.05	5
	SBTL	2	36/231	A	0	0.15	2	112/526	B	16	0.34	81
	Total		-	A	7	-	-	-	B	15	-	-

<sup>2</sup> A 10% growth value was used based on discussion with the City of Kelowna.

Table 7: Future Background Traffic Operations – Street Intersections Continued

Intersection	Movement / Lanes		Weekday AM Peak Hour					Weekday PM Peak Hour				
			Vol.	L O S	Delay (s)	v/c	95 <sup>th</sup> Q	Vol.	L O S	Delay (s)	v/c	95 <sup>th</sup> Q
Harvey Avenue & Water Street/ Pandoso Street - Signal	EBT	3	2256	B	15	0.70	213	1870	C	25	0.72	214
	EBR	1	388	A	0	0.00	0	322	A	0	0.00	0
	WBL	1	31	D	46	0.34	19	63	F	87	0.66	49
	WBTR	3	1228/46	B	11	0.41	98	2555/56	D	45	0.98	440
	NBL	2	376	F	92	0.93	116	667	F	136	1.12	274
	NBT	2	300	D	50	0.41	74	260	C	35	0.23	57
	NBR	1	74	A	0	0.00	0	68	A	0	0.00	0
	SBT	2	158	F	100	0.86	59	330	E	67	0.84	91
	SBR	1	89	A	0	0.00	0	242	A	0	0.00	0
Total			-	C	26	-	-	-	D	52	-	-

Table 8: Future Background Traffic Operations - Lane Intersections

Intersection	Movement / Lanes		Weekday AM Peak Hour					Weekday PM Peak Hour				
			Vol.	L O S	Delay (s)	v/c	95 <sup>th</sup> Q	Vol.	L O S	Delay (s)	v/c	95 <sup>th</sup> Q
Lawrence Avenue & Lane – Stop Control	WBLTR	2	6/77	A	0	0.01	0	6/127	A	7	0.01	0
	NBL	1	6	A	7	0.01	0	6	A	9	0.01	0
	Total		-	A	1	-	-	-	A	1	-	-
Water Street & Lane – Stop Control	EB	1	6/0/6	B	12	0.03	1	6/0/6	C	19	0.05	1
	WB	1	6/0/6	B	12	0.02	1	6/0/6	B	14	0.03	1
	NB	2	6/264/6	A	0	0.01	0	6/289/6	A	0	0.01	0
	SB	2	6/256/6	A	0	0.01	0	6/627/6	A	0	0.01	0
	Total		-	A	1	-	-	-	A	1	-	-
Leon Avenue & Lane – Stop Control	EBLT	2	6/156	A	0	0.01	0	6/218	A	7	0.01	0
	SBL	1	6	A	7	0.01	0	6	A	0	0.01	0
	Total		-	A	1	-	-	-	-	0	-	-

If traffic volumes were to grow, the Harvey Avenue and Water Street would become more congested, with delays and queues for the critical movements worsening. However, the movements near capacity, such as northbound left turn, would naturally moderate traffic growth on these movements and at the intersection, and would encourage drivers to use different routes, and/or travel at a different time period, widening the PM peak period.

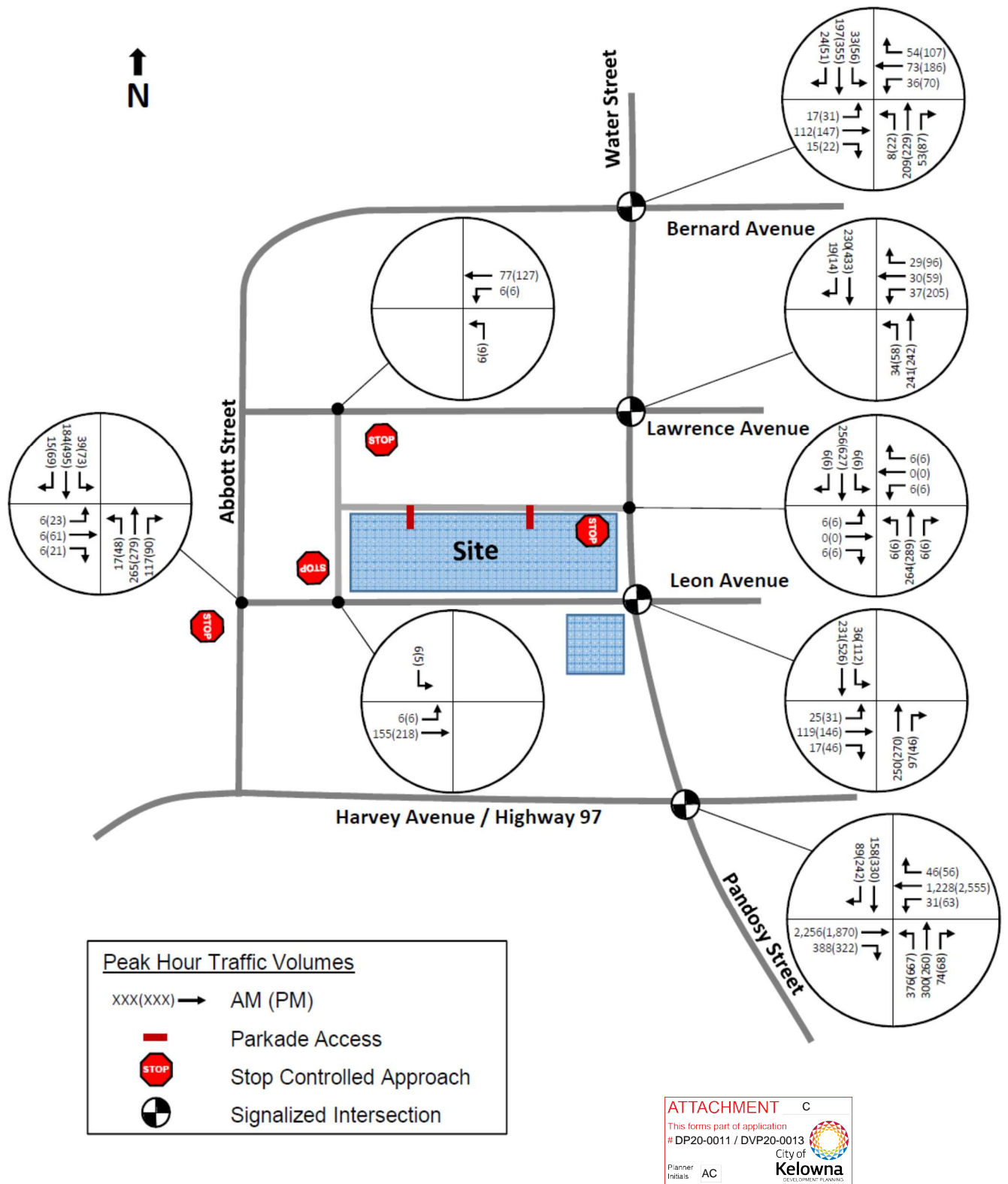


The PM southbound queue at the intersection of Water Street and Bernard Avenue would exceed the available intersection spacing of 80 metres by 5 meters, meaning that the queue could extend into the roundabout once or twice during the PM peak period. Adjusting the signal timing to provide more southbound green time would resolve the issue, as demonstrated in Table 9.

**Table 9: Future Background Intersection Operations - Mitigated**

Intersection	Movement / Lanes		Weekday AM Peak Hour					Weekday PM Peak Hour				
			Vol.	L O S	Delay (s)	v/c	95 <sup>th</sup> Q	Vol.	L O S	Delay (s)	v/c	95 <sup>th</sup> Q
<b>Water Street &amp; Bernard Avenue – Signal</b>	<b>EBL</b>	<b>1</b>	17	Unchanged				31	C	32	0.16	8
	<b>EBTR</b>	<b>1</b>	112/15					147/22	C	21	0.37	38
	<b>WBL</b>	<b>1</b>	36					70	C	25	0.25	17
	<b>WBTR</b>	<b>1</b>	73/54					186/107	C	31	0.77	78
	<b>NBL</b>	<b>1</b>	8					22	A	2	0.05	2
	<b>NBTR</b>	<b>1</b>	209/53					229/87	A	1	0.38	4
	<b>SBL</b>	<b>1</b>	33					56	A	9	0.10	8
	<b>SBTR</b>	<b>1</b>	197/24					355/51	B	13	0.48	71
	<b>Total</b>		-					-	<b>B</b>	<b>16</b>	-	-

Figure 7: Future Background Traffic Volumes





## 3 Development Plan

### 3.1 Site Access & Street Reconfigurations

Pedestrian access to the proposed development will be provided at ground level from Leon Avenue and Water Street. Vehicle access will be provide from two parkade entrances on the public lane north of the site. No vehicle parking will be provided for the south site, and an elevated pedestrian will connect the north and south sites, providing a route for people who park in the north building to travel to the south site.

The plan will remove six existing driveways and curb cuts, five on Leon Avenue and one on Water Street, and this will improve pedestrian comfort along these frontages. It is proposed that Leon Avenue is reconfigured along with the development, with the north side angled parking being replaced by parallel parking, and an on-street eastbound buffered cycle track being added to the south side of Leon Avenue, between Abbott Street and Water Street. This proposed cycle track was requested by the City.

Sidewalk extensions will be added on the west side of the intersection of Leon Avenue and Water Street to reduce pedestrian crossing distances.

### 3.2 Land Use and Vehicle Trip Generation

The proposed development site will consist of two separate podiums, one on the north side of Leon, and the other on the south. The north podium will have two towers, and the south podium will have one. Commercial retail units will be located in the bottom of both podiums, with a parkade on the bottom floors of the north site, and residential condo units on the remaining floors. The towers on the north podium (A and B) will be condo units, while the tower on the south podium (C) will be short term rental, such as AirBnB or Vrbo.

The 10<sup>th</sup> Generation of the Institute of Transportation Engineers (ITE) Trip Generation Manual does not provide a vehicle trip rate for the short term rental land use, and Hotel is considered to be the closest land use.

Table 10 compares the a number of land uses similar proposed short term rental for Tower C. Based on this comparison, and recommendations from the City of Kelowna (provided in Appendix A), we have created a modified hotel based vehicle trip rate, with a total AM vehicle trip generation rate of 0.40 per unit and a PM rate of 0.60 per unit.

This trip rate is considered a conservative (high) estimate of the trip generating capacity of the proposed land use, because it is on the higher end of the trip rates shown in Table 10, and because the proposed development will be located in the walkable, dense, mixed-use location of downtown Kelowna, where as many of the trip rates shown are for General Urban / Suburban locations.



**Table 10: Vehicle Trip Rate Comparison by Land Use**

ITE Land Use – (Land Use Code)	Setting / Location	Vehicle Trip Rates					
		AM Peak Hour			PM Peak Hour		
		% In	% Out	Rate	% In	% Out	Rate
Multifamily (High Rise) – (222)	Dense Multi-use Urban	12%	88%	0.21	70%	30%	0.19
Multifamily (High Rise) – (222)	General Urban / Suburban	24%	76%	0.31	61%	39%	0.36
Hotel – (310)	General Urban / Suburban	59%	41%	0.47	51%	49%	0.60
Timeshare – (265)	General Urban / Suburban	60%	40%	0.40	40%	60%	0.63
<b>**Modified** Hotel – (310)</b>	<b>Dense Multi-use Urban</b>	<b>59%</b>	<b>41%</b>	<b>0.40</b>	<b>51%</b>	<b>49%</b>	<b>0.60</b>

Based on the proposed land uses, vehicle trip generation for the site was conducted using the 10<sup>th</sup> Generation of the ITE Trip Generation Manual. The forecasted peak hour trip generation is shown in Table 11. To account for the mix of uses on the site, and the fact that some trips will both begin and end within the site, methodology from the National Cooperative Highway Research Program (NCHRP) Report 684 on internal trip capture was used to estimate internal trips between the site uses.

**Table 11: Vehicle Trip Generation**

Land Use	ITE Code	Units / Area (ft <sup>2</sup> )	Trip Rate per 1000 ft <sup>2</sup> or unit [Rate (In/Out)]		Vehicle Trips					
					AM Peak Hour			PM Peak Hour		
			AM	PM	In	Out	Total	In	Out	Total
Residential Condo	222	550	0.21 (12% / 88%)	0.19 (70% / 30%)	14	102	116	73	31	105
Short Term Rental	Modified 310	198	0.40 (59% / 41%)	0.60 (51% / 49%)	47	32	79	61	58	119
Ground Floor Commercial	820	44,201	0.94 (62% / 38%)	3.81 (48% / 52%)	26	16	42	81	88	168
<b>Sub Total</b>					<b>86</b>	<b>150</b>	<b>236</b>	<b>215</b>	<b>177</b>	<b>392</b>
Internal Capture Reduction (Based on NCHRP 684 procedure. Only 75% of the NCHRP estimate was used for the PM peak period)					2%	1%	-	13%	15%	-
					2	2	4	27	27	54
<b>Total</b>					<b>84</b>	<b>148</b>	<b>232</b>	<b>188</b>	<b>150</b>	<b>338</b>

The development is forecasted to generate a total of 232 vehicle trips in the AM peak hour, and 338 vehicle trips in the PM peak hour. The development will also generate walking, cycling and transit trips. However, the ability for the surrounding network to accommodate these trips is based primarily on facility availability (sidewalks, bicycle lanes, transit service, etc.), and not on the capacity of these facilities, as their physical capacity is generally much higher than actual use. Therefore, detailed trip generation has not been completed for these modes of transportation, and instead the provision of facilities for these modes is based on facility availability and quality surrounding the site, as assessed in Sections 2.2 and 5.3.



### 3.3 Vehicle Distribution & Assignment

Table 12 shows the anticipated vehicle trip distribution for the site. The distribution represents which direction / streets the vehicle trips will travel on to reach the site.

**Table 12: Trip Distribution**

Direction	AM Peak Hour		PM Peak Hour	
	In	Out	In	Out
To/from the west on Harvey Avenue	20%	20%	20%	20%
To/from the east on Harvey, Leon, Lawrence, and Bernard Avenues	60%	60%	60%	60%
To/from the south on Water/Pandosy Street	10%	10%	10%	10%
To/from the north on Water Street	10%	10%	10%	10%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Of the 60% of trips destined to/from the east, Table 13 shows the trip assignment used for eastbound travel on the main eastbound routes (Bernard, Leon, Lawrence, and Harvey Avenues).

**Table 13: Eastbound Assignment**

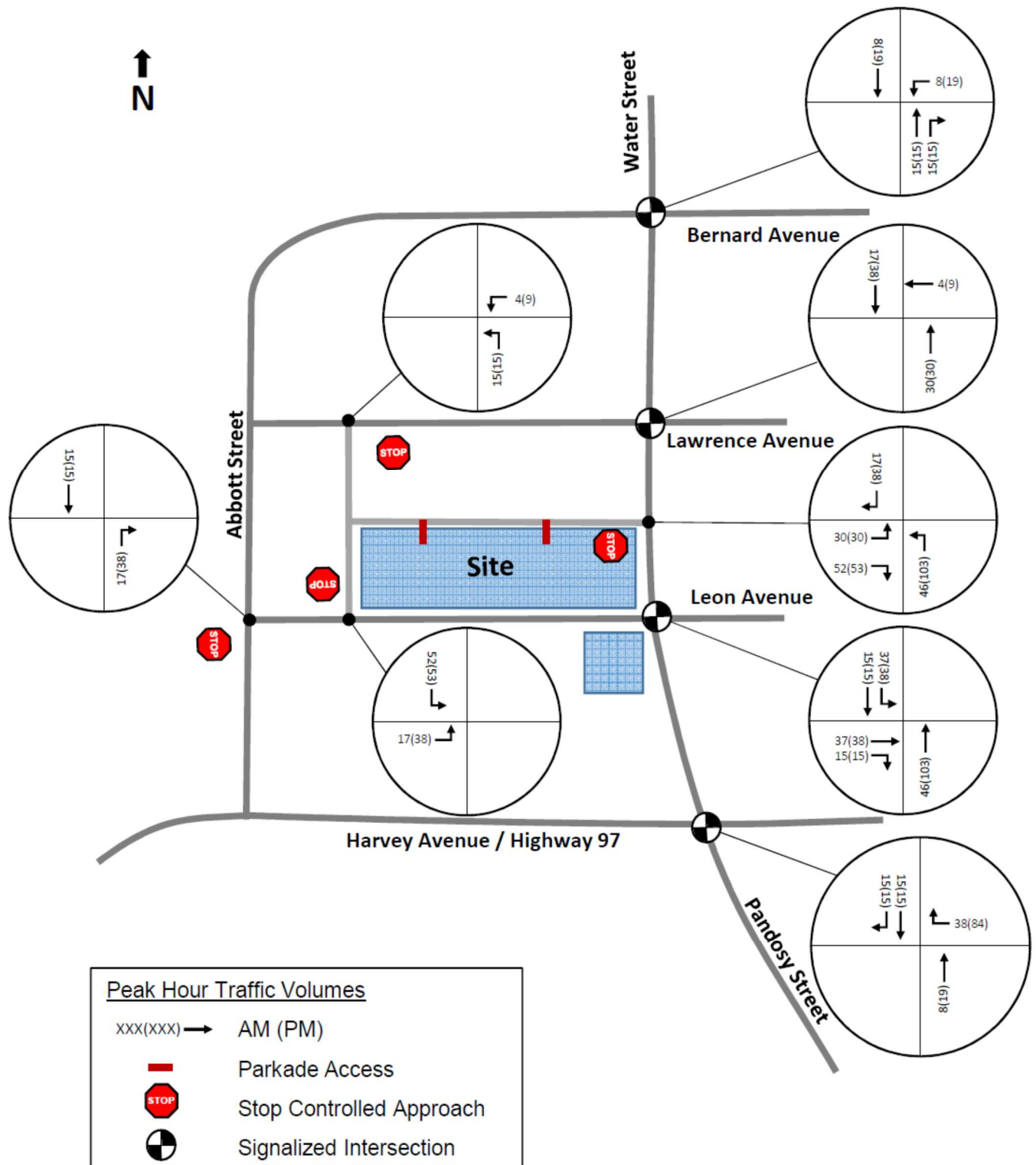
Eastbound Direction	AM Peak Hour		PM Peak Hour	
	In	Out	In	Out
Bernard Avenue	10%	10%	10%	10%
Leon / Lawrence Avenue	5%	5%	5%	5%
Harvey Avenue (via Leon Avenue to Ellis Street for outbound trips)	45%	45%	45%	45%
<b>Sub Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Vehicle trips were assigned based on the above trip distribution and available vehicle network. The majority of eastbound trips were assigned to Harvey Avenue, and all northbound trips were assigned to Water Street. Eastbound and southbound trips were assigned to Harvey Avenue and Water / Pandosy Street respectively.

Trips were assigned to the public lane accesses based on the trip destination (for example, trips to/from the east were assigned to the Water Street access, while trips to/from the west were assigned to the Leon Avenue access). Figure 8 shows the site-generated vehicle trips on the network.

The trip generation, distribution, and assignment were shared with the City of Kelowna and adjusted to incorporate comments from the City, prior to the traffic analysis being conducted. All correspondence is included in Appendix A.

Figure 8: Site Trips





### 3.4 Transit Trip Generation

The City of Kelowna requested an estimate of the transit trip generating capacity of the proposed development, and its potential effect on the transit routes in the area. Table 14 shows transit trip generation for the site based on the ITE trip generation and downtown Kelowna mode splits.

**Table 14: Transit Trip Generation**

Component	Trips					
	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
Vehicle Trip Generation Source: Table 12 – before Internal Capture	84	148	232	188	150	338
Existing Vehicle Mode Share (Auto Driver)*	59%					
Total Site Trip Estimate (all modes)	143	251	394	318	254	572
Transit Vehicle Mode Share*	8%					
Transit Trips	11	20	31	25	20	46

\* - Source: Kelowna TMP - Existing and Future Conditions Technical Report, Urban Centre, Travel Mode by Where People Live

Table 15 shows the transit trips distributed using the vehicle trip distribution presented in Table 12.

**Table 15: Transit Trip Generation Distribution**

Direction	Trips					
	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
To/from the west	2	4	6	5	4	9
To/from the east	7	12	19	15	12	27
To/from the south	1	2	3	3	2	5
To/from the north	1	2	3	3	2	5
<b>Total</b>	<b>11</b>	<b>20</b>	<b>31</b>	<b>25</b>	<b>20</b>	<b>46</b>

The trips (transit users) to/from the south are anticipated to use Route 1 and stops #102868 and #102869 adjacent to the site on Water Street. All other trips destined to/from the west, east and north are anticipated to walk approximately 5 minutes to the Queensway Exchange. Table 16 shows the number of trips assigned in each direction (to each route / route group), and the average number of new trips per bus in the peak hours by direction.



**Table 16: Transit Trips Compared to Service**

Item		AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
<b>Transit Trips by Direction (Table 15)</b>	To/from the south	1	2	3	3	2	5
	To/from the west, east, north	10	18	28	23	18	41
<b>Bus Trips by Route (Table 1)</b>	Route 1	4	4	8	4	4	8
	Queensway Exchange (Routes 2,5,6,9,10,11,18,79)	36	36	72	32	32	64
<b>Average Site Trips by Bus</b>	Route 1	0.25	0.50	0.38	0.75	0.50	0.63
	Queensway Exchange (Routes 2,5,6,9,10,11,18,79)	0.29	0.50	0.39	0.72	0.57	0.64

The proposed development will add between 0.25 to 0.75 transit trips to each bus in the peak hours, depending on the bus route and direction. This level of additional transit trips is minimal compared to the capacity of a typical bus (~40-50 persons each), and therefore service improvements will not be required to support to additional transit ridership generated by the proposed development.





## 4 Post Development Traffic Operations

### 4.1 Opening Day Post Development

Figure 9 shows the Opening Day Post Development Traffic volumes (Existing Volumes + Site Trips), and Table 17, Table 18, and Table 19 show the resulting operations.

**Table 17: Opening Day Post Development Traffic Operations – Street Intersections**

Intersection	Movement / Lanes		Weekday AM Peak Hour					Weekday PM Peak Hour				
			Vol.	L O S	Delay (s)	v/c	95 <sup>th</sup> Q	Vol.	L O S	Delay (s)	v/c	95 <sup>th</sup> Q
Water Street & Bernard Avenue – Signal	EBL	1	15	B	19	0.05	3	28	C	30	0.14	8
	EBTR	1	102/14	B	17	0.29	23	134	B	19	0.34	36
	WBL	1	41	B	20	0.14	8	83	C	24	0.29	22
	WBTR	1	66/49	B	18	0.32	23	169/97	C	25	0.70	72
	NBL	1	7	B	16	0.01	2	20	A	3	0.06	2
	NBTR	1	205/63	B	17	0.35	60	223/94	A	2	0.44	5
	SBL	1	30	B	13	0.07	5	51	A	10	0.10	8
	SBTR	1	187/22	A	8	0.27	30	342/46	B	14	0.52	79
	Total		-	B	15	-	-	-	B	15	-	-
Water Street & Lawrence Avenue – Signal	WBLTR	2	34/31/26	C	21	0.17	11	186/63/87	C	28	0.55	52
	NBLT	2	31/249	A	1	0.26	2	53/250	A	1	0.30	3
	SBTR	1	226/17	B	12	0.23	52	432/13	A	1	0.41	4
	Total		-	A	8	-	-	-	A	9	-	-
Abbott Street & Leon Avenue – Stop Control	EBLTR	1	5/5/5	B	12	0.03	1	21/55/19	D	27	0.39	14
	NBLT	1	15/241	A	8	0.01	0	44/254	A	9	0.05	2
	NBR	1	123	A	1	0.00	0	120	A	1	0.00	0
	SB	1	35/185/14	A	8	0.03	1	66/465/63	A	8	0.06	2
	Total		-	A	1	-	-	-	A	3	-	-
Water Street & Leon Avenue - Signal	EBLTR	2	23/145/30	C	21	0.32	23	28/171/57	C	28	0.42	39
	NBT	1	273	A	6	0.26	33	348	A	6	0.31	48
	NBR	1	88	A	5	0.10	9	42	A	5	0.05	5
	SBLT	2	70/225	A	1	0.19	4	140/493	B	18	0.36	84
	Total		-	A	8	-	-	-	B	16	-	-

**Table 18: Opening Day Post Development Traffic Operations - Street Intersections Continued**

Intersection	Movement / Lanes		Weekday AM Peak Hour					Weekday PM Peak Hour				
			Vol.	L O S	Delay (s)	v/c	95 <sup>th</sup> Q	Vol.	L O S	Delay (s)	v/c	95 <sup>th</sup> Q
Harvey Avenue & Water Street/Pandosy Street - Signal	EBTR	3	2051/353	B	17	0.74	257	1700/293	C	28	0.77	250
	WBL	1	28	D	54	0.35	19	57	F	98	0.69	47
	WBTR	3	116/80	B	10	0.39	96	2323/135	D	44	0.93	380
	NBL	2	342	F	84	0.89	103	606	F	102	1.02	233
	NBT	2	281	D	50	0.39	70	255	C	35	0.23	56
	NBR	1	67	A	0	0.00	0	62	A	0	0.00	0
	SBT	2	159	F	101	0.87	59	315	E	65	0.81	86
	SBR	1	96	A	0	0.00	0	235	A	0	0.00	0
	Total		-	C	26	-	-	-	D	44	-	-

**Table 19: Opening Day Post Development Traffic Operations - Lane Intersections**

Intersection	Movement / Lanes		Weekday AM Peak Hour					Weekday PM Peak Hour				
			Vol.	L O S	Delay (s)	v/c	95 <sup>th</sup> Q	Vol.	L O S	Delay (s)	v/c	95 <sup>th</sup> Q
Lawrence Avenue & Lane – Stop Control	WBLT	2	9/70	A	1	0.00	0	14/115	A	1	0.00	0
	NBL	1	20	A	7	0.01	0	20	A	7	0.01	0
	Total		-	A	3	-	-	-	A	2	-	-
Water Street & Lane – Stop Control	EB	1	35/5/57	B	14	0.21	6	35/0/58	D	29	0.41	14
	WB	1	5/0/5	B	13	0.02	1	5/0/5	C	18	0.04	1
	NB	2	51/240/5	A	8	0.04	1	108/263/5	A	10	0.13	4
	SB	2	5/233/22	A	8	0.01	0	5/570/43	A	8	0.00	1
	Total		-	A	3	-	-	-	A	4	-	-
Leon Avenue & Lane – Stop Control	EBLT	2	22/141	A	7	0.02	-	43/198	A	7	0.03	1
	SBL	1	57	A	9	0.07	0	58	A	1	0.00	0
	Total		-	A	3	-	-	-	A	3	-	-

The intersection of Harvey Avenue and Water Street will operate in a nearly identical fashion as it does today, except for westbound through / right queue increasing by approximately 40 metres, and the southbound delay and v/c ratio increasing slightly. Both of these movements already experience issues in the existing analysis, and the impact of the site traffic is negligible on total intersection operations.



The 86 metre PM peak hour queue at southbound approach at the intersection of Water Street and Leon Avenue will extend beyond the available intersection spacing of approximately 80 metres.

Adjusting the signal timing splits does not materially lower the queue, but reducing the cycle length from 75 seconds to 70 seconds significantly reduces the southbound queue, as shown in Table 17. However, this intersection is currently coordinated with the adjacent intersections on Water Street, and any changes in cycle length would need to take into account the pros / cons of the changes on the entire network. Therefore it is recommended that operations on Water Street are monitored once the site is built, and that signal timing is adjusted as need if the reported queuing does materialize.

**Table 20: Opening Day Post Development Traffic Operations – Street Intersections**

Intersection	Movement / Lanes		Weekday AM Peak Hour					Weekday PM Peak Hour				
			Vol.	LOS	Delay (s)	v/c	95 <sup>th</sup> Q	Vol.	LOS	Delay (s)	v/c	95 <sup>th</sup> Q
<b>Water Street &amp; Leon Avenue - Signal</b>	<b>EBLTR</b>	<b>2</b>	23/145/30	No change				28/171/57	B	17	0.31	36
	<b>NBT</b>	<b>1</b>	273					348	B	10	0.36	46
	<b>NBR</b>	<b>1</b>	88					42	A	3	0.06	5
	<b>SBLT</b>	<b>2</b>	70/225					140/493	B	12	0.48	48
	<b>Total</b>		-					-	A	12	-	-



## 4.2 Future Post Development

Figure 10 shows the Future Post Development Traffic volumes (Future Background Volumes + Site Trips), and Table 21, Table 22, and Table 23 show the traffic operations.

**Table 21: Future Post Development Traffic Operations – Street Intersections**

Intersection	Movement / Lanes		Weekday AM Peak Hour					Weekday PM Peak Hour				
			Vol.	L O S	Delay (s)	v/c	95 <sup>th</sup> Q	Vol.	L O S	Delay (s)	v/c	95 <sup>th</sup> Q
Water Street & Bernard Avenue – Signal	EBL	1	17	B	20	0.06	3	31	C	30	0.16	9
	EBTR	1	112/15	B	17	0.31	25	147/22	B	19	0.35	40
	WBL	1	43	B	20	0.15	9	89	C	24	0.31	24
	WBTR	1	73/54	B	18	0.35	25	186/107	C	25	0.72	78
	NBL	1	8	B	16	0.02	2	22	A	4	0.07	4
	NBTR	1	224/68	B	17	0.38	65	244/102	A	2	0.50	6
	SBL	1	33	B	13	0.08	6	56	B	11	0.12	10
	SBTR	1	205/24	A	9	0.30	34	374/51	A	17	0.60	90
	Total		-	B	15	-	-	-	B	16	-	-
Water Street & Lawrence Avenue – Signal	WBLTR	2	37/34/29	C	21	0.18	11	205/69/96	C	27	0.58	58
	NBLT	2	34/270	A	1	0.28	2	58/272	A	1	0.33	6
	SBTR	1	247/19	B	12	0.25	57	471/14	A	1	0.45	5
	Total		-	A	8	-	-	-	A	9	-	-
Abbott Street & Leon Avenue – Stop Control	EBLTR	1	6/6/6	B	12	0.04	1	23/61/21	E	38	0.50	16
	NBLT	1	17/265	A	8	0.01	0	48/279	A	9	0.06	2
	NBR	1	133	A	1	0.00	0	128	A	1	0.00	0
	SB	1	39/198/15	A	8	0.04	1	73/510/69	A	8	0.07	2
	Total		-	A	1	-	-	-	A	4	-	-
Water Street & Leon Avenue - Signal	EBLTR	2	25/156/31	C	21	0.34	24	31/184/61	C	27	0.45	42
	NBT	1	296	A	6	0.29	36	373	A	7	0.34	52
	NBR	1	97	A	5	0.11	11	46	A	5	0.05	5
	SBTL	2	73/246	A	1	0.20	4	150/541	B	20	0.41	92
	Total		-	A	8	-	-	-	B	17	-	-



**Table 22: Future Post Development Traffic Operations - Street Intersections Continued**

Intersection	Movement / Lanes		Weekday AM Peak Hour					Weekday PM Peak Hour				
			Vol.	L O S	Delay (s)	v/c	95 <sup>th</sup> Q	Vol.	L O S	Delay (s)	v/c	95 <sup>th</sup> Q
<b>Harvey Avenue &amp; Water Street/Pandosy Street - Signal</b>	<b>EBT</b>	<b>3</b>	2256	B	19	0.70	213	1870	C	25	0.72	217
	<b>EBR</b>	<b>1</b>	388	A	0	0.00	0	322	A	0	0.00	0
	<b>WBL</b>	<b>1</b>	31	D	46	0.50	19	63	F	88	0.66	50
	<b>WBTR</b>	<b>3</b>	1228/84	B	11	0.43	102	2555/141	F	69	1.01	706
	<b>NBL</b>	<b>2</b>	376	F	92	0.93	116	667	F	136	1.12	274
	<b>NBT</b>	<b>2</b>	308	D	50	0.42	75	278	C	35	0.24	60
	<b>NBR</b>	<b>1</b>	74	A	0	0.00	0	68	A	0	0.00	0
	<b>SBT</b>	<b>2</b>	173	F	117	0.94	68	345	F	68	0.86	95
	<b>SBR</b>	<b>1</b>	104	A	0	0.00	0	257	A	0	0.00	0
	<b>Total</b>		-	C	27	-	-	-	E	56	-	-

**Table 23: Future Post Development Traffic Operations - Lane Intersections**

Intersection	Movement / Lanes		Weekday AM Peak Hour					Weekday PM Peak Hour				
			Vol.	L O S	Delay (s)	v/c	95 <sup>th</sup> Q	Vol.	L O S	Delay (s)	v/c	95 <sup>th</sup> Q
<b>Lawrence Avenue &amp; Lane – Stop Control</b>	<b>WBLT</b>	<b>2</b>	10/77	A	0	0.00	0	15/127	A	1	0.00	0
	<b>NBL</b>	<b>1</b>	20	A	7	0.01	0	21	A	7	0.01	-
	<b>Total</b>		-	A	2	-	-	-	A	2	-	-
<b>Water Street &amp; Lane – Stop Control</b>	<b>EB</b>	<b>1</b>	35/0/51	B	15	0.20	5	36/0/58	F	38	0.50	17
	<b>WB</b>	<b>1</b>	6/0/6	A	8	0.05	1	6/0/6	C	19	0.05	2
	<b>NB</b>	<b>2</b>	52/264/6	A	1	0.00	1	109/289/6	A	10	0.14	4
	<b>SB</b>	<b>2</b>	6/256/22	A	7	0.05	1	6/627/43	A	8	0.01	0
	<b>Total</b>		-	A	3	-	-	-	A	4	-	-
<b>Leon Avenue &amp; Lane – Stop Control</b>	<b>EBLT</b>	<b>2</b>	22/156	A	7	0.02	0	44/218	A	7	0.03	1
	<b>SBL</b>	<b>1</b>	57	A	1	0.00	0	58	A	1	0.00	0
	<b>Total</b>		-	A	3	-	-	-	A	3	-	-

The operations at Water Street and Bernard / Leon Avenues have been shown using existing signal timings, and the queues for the southbound approaches at both intersections will continue to exceed available intersection spacing by 10, and 12 metres accordingly. As demonstrated earlier, adjusting the signal timing at the intersections can bring the queues within

the available intersection spacing, but will have network-wide impacts, and it is recommended that these movements be monitored to see if the queues actually materialize.

The eastbound approach at Abbott Street and Leon Avenue is at LOS E in the PM peak hour. SimTraffic shows eastbound delays of 31, 27 and 15 seconds for the eastbound left, through and right turn movements accordingly (LOS D, D, and C). The eastbound approach at the east-west lane and Water Street intersection will also be LOS E in the PM peak hour. However, the adjacent signalized intersections will create gaps in traffic, and this is substantiated by SimTraffic, which shows eastbound delays of 29 and 14 seconds for the eastbound left and right turn movements (LOS D and B). Therefore no measures are recommended at either location.

The intersection of Harvey Avenue and Water Street will operate similarly to the Future Background horizon, with the westbound through / right and southbound movements operating marginally worse. As noted for the background analysis, these movements will be self-regulating, and a detailed study of the corridor would be required to understand if changes to improve traffic operations on the minor approaches (such as the northbound approach, which provides access to the site) are warranted, or if existing operations prioritizing the highway should be maintained, and with the resulting excess traffic being pushed to different routes and/or times during the peak period.

A summary of the recommended traffic mitigation measures are provided in Section 6.





**Peak Hour Traffic Volumes**

xxx(xxx) → AM (PM)

Parkade Access

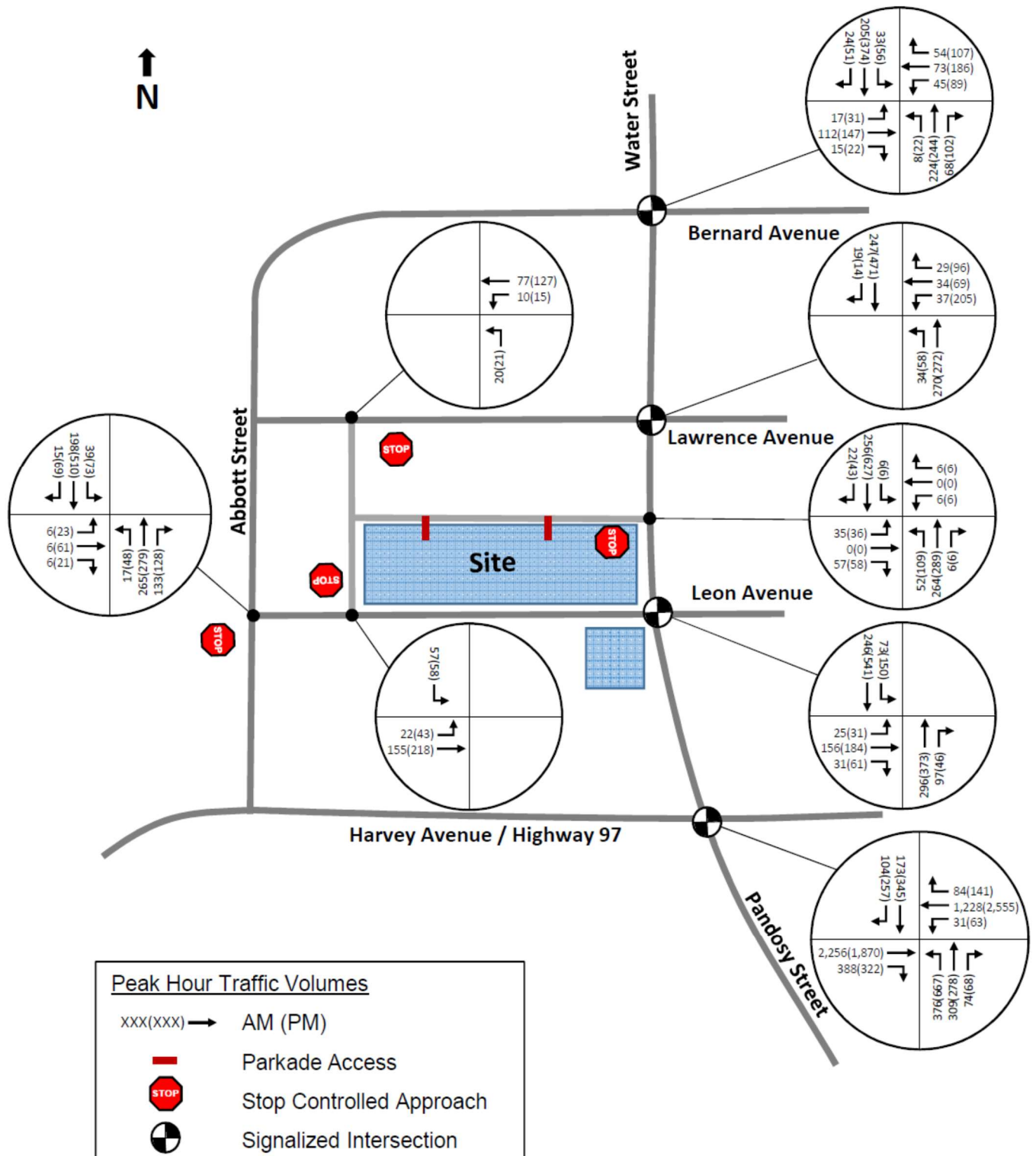
Stop Controlled Approach

Signalized Intersection

**Map Details:**

- North Arrow:** Points North (N).
- Central Site:** A blue rectangular area labeled "Site".
- Streets:**
  - Abbott Street (West side)
  - Water Street (North side)
  - Bernard Avenue
  - Lawrence Avenue
  - Leon Avenue
  - Harvey Avenue / Highway 97 (South side)
  - Pandosy Street (Southeast side)
- Intersections and Traffic Volumes (AM/PM):**
  - Abbott St & Harvey Ave:** 35(66) / 182(465) / 14(63) / 5(21) / 5(55) / 5(19) / 15(44) / 241(254) / 123(120)
  - Abbott St & Lawrence Ave:** 70(115) / 9(14) / 20(20)
  - Water St & Bernard Ave:** 30(51) / 187(342) / 22(46) / 49(97) / 66(169) / 41(83) / 15(28) / 102(134) / 14(20) / 7(20) / 205(223) / 63(96)
  - Water St & Lawrence Ave:** 236(432) / 17(13) / 26(87) / 31(63) / 34(186) / 31(53) / 104(250) / 24(47)
  - Water St & Leon Ave:** 5(5) / 0(0) / 5(5) / 233(570) / 22(43) / 35(35) / 0(0) / 57(58) / 51(108) / 240(263) / 11(5)
  - Water St & Harvey Ave:** 70(140) / 225(493) / 23(28) / 145(171) / 30(57) / 273(348) / 88(42) / 159(315) / 96(235) / 2,051(1,700) / 353(293) / 80(135) / 1,116(2,323) / 28(57) / 342(606) / 281(255) / 67(62)
  - Harvey Ave & Pandosy St:** 57(58) / 22(43) / 141(198)
- Other Features:**
  - Red rectangles on Abbott St and Lawrence Ave indicate parkade access.
  - Red octagons with "STOP" indicate stop-controlled approaches at Abbott St & Harvey Ave, Abbott St & Lawrence Ave, and Lawrence Ave & Harvey Ave.
  - Circle with black and white quadrants indicate signalized intersections at Water St & Bernard Ave, Water St & Lawrence Ave, Water St & Leon Ave, and Harvey Ave & Pandosy St.

Figure 10: Future Post Development Traffic Volumes





## 5 Parking, Loading and Operational Details

### 5.1 Parking and Passenger Vehicle Operations

Vehicle parking will be provided via a multi-story parkade in the north building, and accessed from the rear lane. Long term bicycle parking will be provided on the ground floor of the parkade, and the development will also provide end of trip facilities for cycling, including facilities such as showers and tools. Short term bicycle parking will be provided in front of the site on Water and Leon Streets.

The bylaw requires one loading bay, and the proposed development will provide 4 loading bays in the rear lane. The proposed vehicle and bicycle parking supplies are being negotiated between the City and the proponent.

AutoTURN has been used to show how access and loading operations will work, and passenger vehicle access is shown in Figure 11 based on a TAC P vehicle. Buffers of 0.3 metres have been shown on either side of the vehicle movement paths. Comments on the movement paths are labelled with “ID numbers”, and then discussed further in Table 24.

As shown, passenger vehicles are able to access the lane from Water and Leon Avenues, and two-way operation is possible at both parkade entrances. A passenger vehicle is also able to drive around loading vehicles stopped in the rear lane, as shown in the bottom image. These routes are to show how residents and visitors will access the site, including delivery vehicles such as taxis and food delivery drivers. A total of 105 visitor parking spaces are provided on the main floors of the parkade, and will be accessible to all visitors and pick-up drop-off users (not behind gates).

### 5.2 Garbage Operations

A garbage room is provided on the north side of the north building, immediately west of the east parkade access. Figure 12 shows garbage vehicle access to / from the site based on a 10.3m long front loading garbage truck. The garbage vehicle will be able to access the site, but with essentially no clearance at the corner between the two lanes. Recommended improvements to resolve this existing issue are summarized at the end of this section in Table 24.

### 5.3 Loading Operations

A loading room is also provided on the north side of the north building, adjacent to the garbage room. Figure 13 shows the turning paths for a 10 m long MSU truck. The loading vehicle will be able to enter and exit the lane from the public street network, and is also anticipated to barely be able to make the corner between the two lanes, without any margin for error.

As vehicles larger than an MSU will not be able to navigate the intersection between the north-south and east-west public lanes, an alternative loading strategy will be required.

Figure 14 shows how oversized vehicle loading could be accommodated by the on-street parking on Leon Avenue, either immediately adjacent to the north-south rear lane, or directly in front of the building lobby. The spaces would need to be reserved as pick-up drop-off loading

spaces with maximum time limits, servicing pick-up drop-off demand such as taxis and delivery drivers most of the time, and then being used for oversized loading vehicles as needed.

Loading for the south site is also shown in Figure 12 for an MSU. The MSU tracks slightly into the adjacent corner property, but the corner of the property is currently hatched to enable such overturns. All vehicles larger than an MSU will be able to service the south site from two more proposed on-street pick-up drop-off spaces Leon Avenue that could be used by oversized vehicles, as shown in Figure 13.

## 5.4 Conclusion & Recommendations

Based on this review of passenger, garbage and loading vehicle operations, all comments and recommendations are summarized in Table 24. The ID's in the table match the highlighted areas shown in Figure 11 through Figure 14.

**Table 24: Parking and Loading Recommendations**

Aspect	ID	Comment	Recommendation
<b>Passenger Operations</b>	-	No changes required.	-
<b>Garbage Operations</b>	1	Vehicle will be able to make turn, but without any clearance on either side.	Recommend City work with property owners to formalize over tracking on these sites. This tight corner is an existing situation, and loading operations for the adjacent sites current operate within this existing situation. The need for improvement is not specifically associated with the proposed development.
<b>Loading Operations</b>	2	MSU will over track over private adjacent site.	Corner of the site is currently hatched to enable over tracking. Recommend City work with property owner to formalize over tracking on this site.
	3	Loading spaces have been marked out in the lane to maximize the number of loading vehicles than can be accommodated, and to keep the lane passable for other vehicles.	-
	4	Vehicle will not be able to make turn without encroaching into private parking lot to south.	Same recommendation as ID 1.
	5	Vehicles larger than a MSU will not be able to travel through the lane.	Reserve 2 on-street parking spaces on the north side of Leon Avenue as short term pick-up drop-off / loading spaces with a maximum time restriction 10-20 minutes. This will enable larger vehicles (up to HSU) to use these spaces and service the north building.



Figure 11: Passenger Vehicle Access

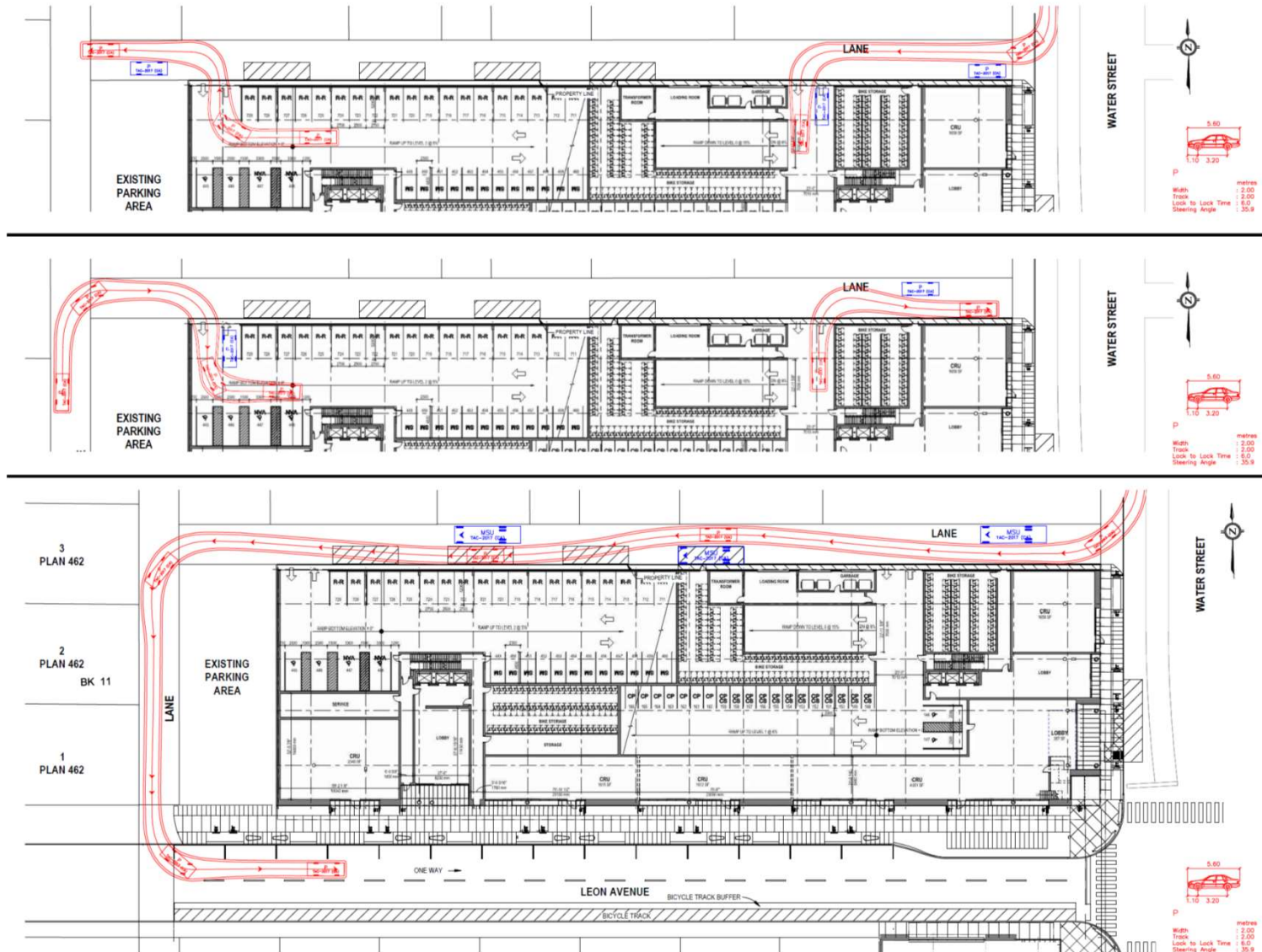


Figure 12: Garbage Vehicle Access & South Site Loading

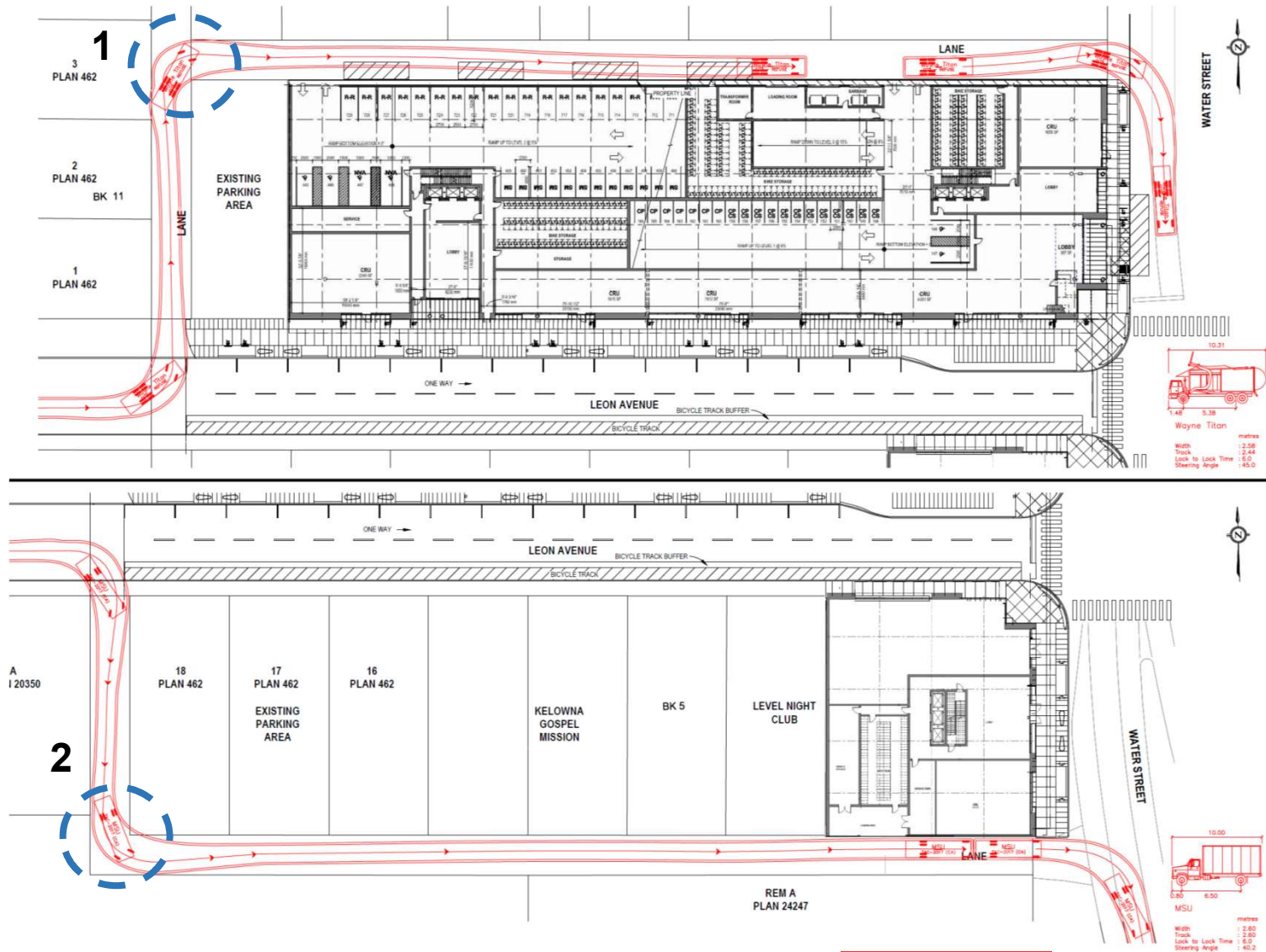




Figure 13: MSU Loading and Access

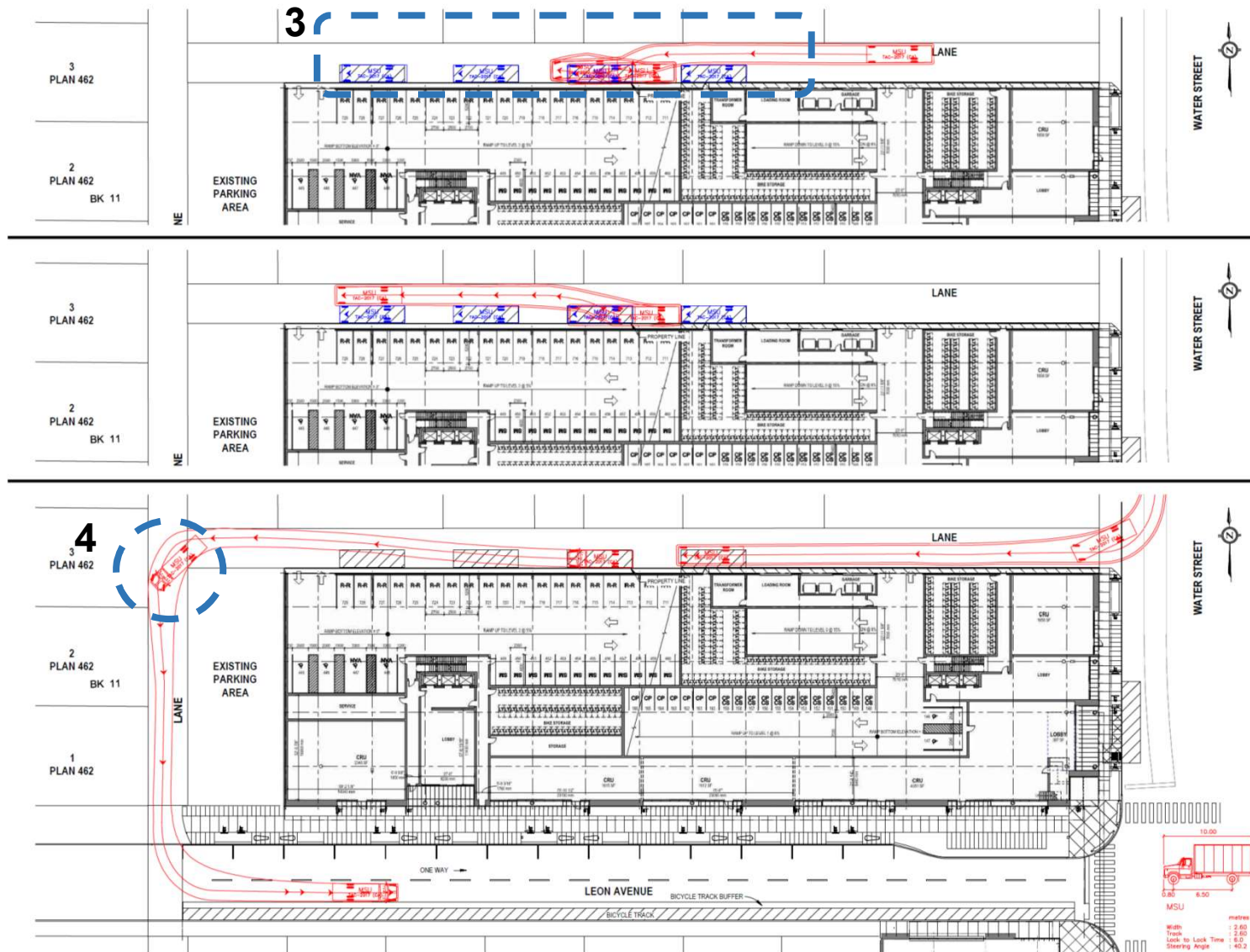
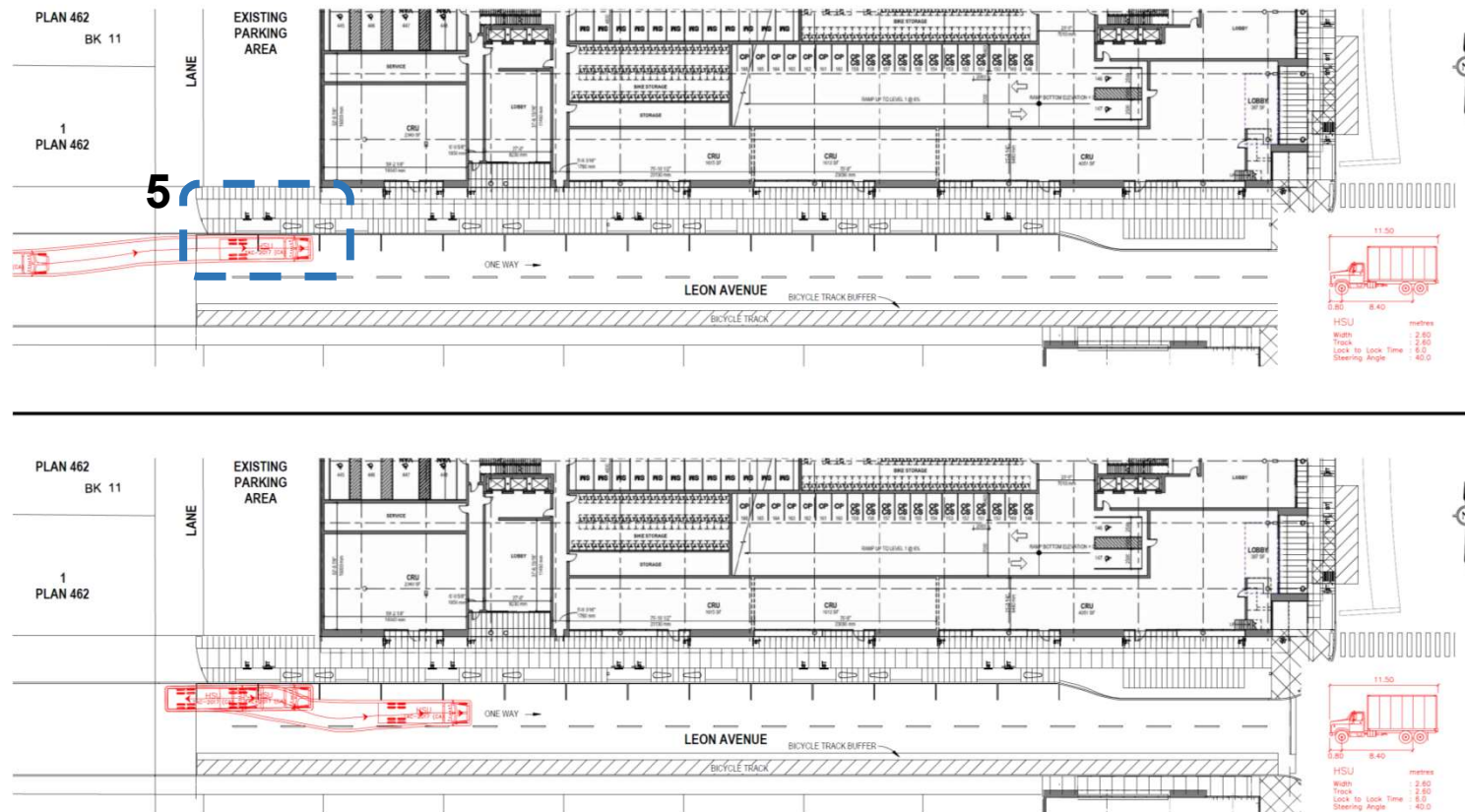


Figure 14: Large Vehicle (WB-19) Loading and Access

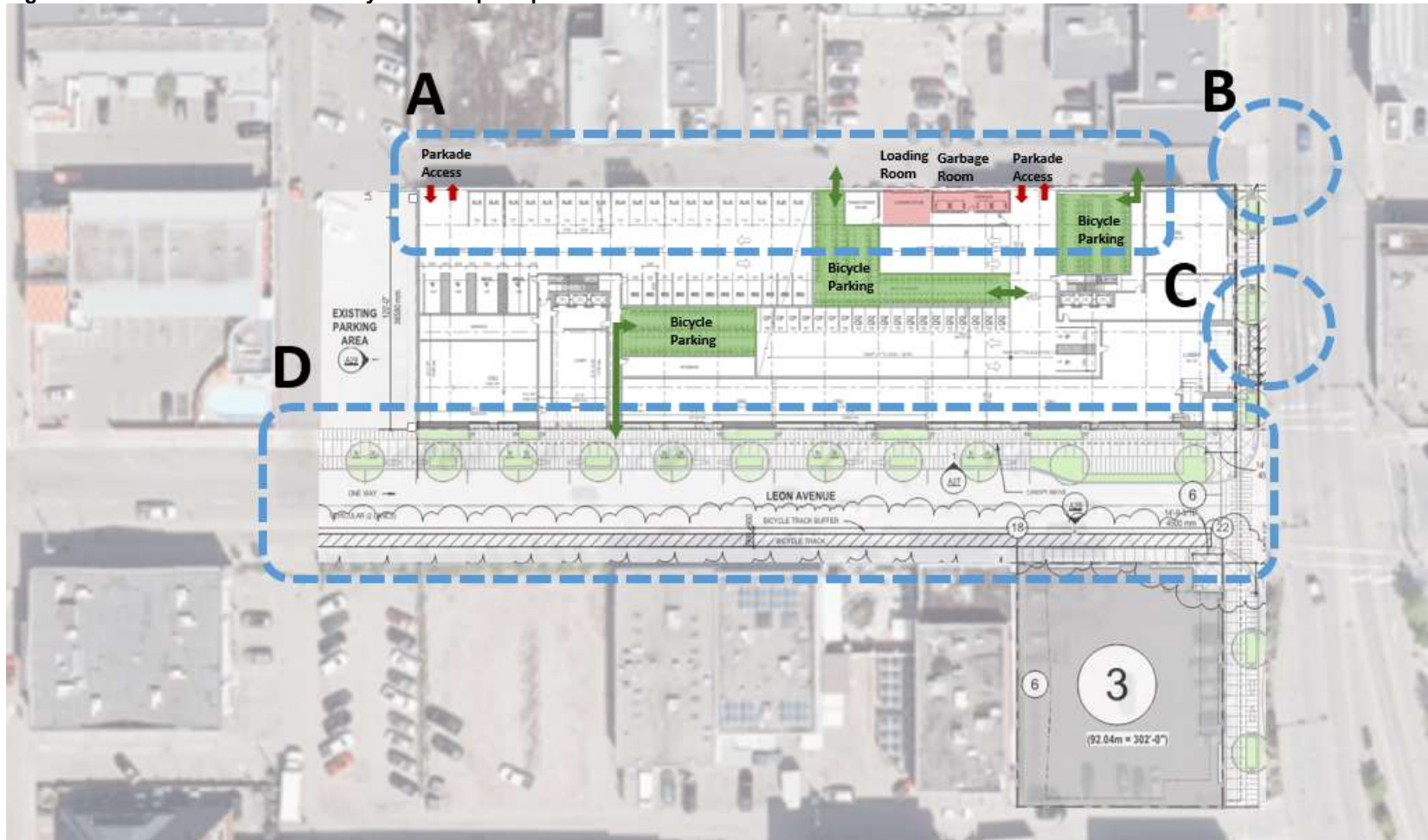




## 5.5 Additional Operational Details

In addition to the traffic analysis completed on the study area network, HDR conducted a detailed review of the anticipated future multi-modal transportation operations and changes immediately surrounding the site. Four primary areas were identified for detailed analysis. They are shown Figure 15, and are discussed in the following section. The following section also includes the Sensitivity Analysis requested by the City to review the implications of moving one of the parkade accesses from the lane to Leon Avenue.

Figure 15: Leon Avenue and Pandosy Streetscape Improvements



### 5.5.1 Public Lane Operations (A)

The lane on the north side of the site will provide access to the two parkade entrances, loading room, garbage room, and two of the secured bicycle parking rooms. To facilitate loading and smooth traffic operations in the lane, and based on recommendations by the City of Kelowna, the ground floor of the development has been set back approximately 0.9 m south, resulting in an overall future lane width of approximately 7.0 m.

The site will generate a total of 232 AM and 338 PM peak hour vehicles trips, equivalent to around 3-6 vehicle trips per minute, or one every 10-20 seconds. These trips will be split between the two parkade entrances, with some vehicles accessing the lane from the west, and the others from the east. The distribution and assignment used for this study has approximately 1/3 of the trips entering/exiting from the west end of the lane, and the other 2/3 of the trips entering/exiting from the east. The east side of the lane (the busier end) will experience between 2-4 trips each minute, or one trip every 15-30 seconds.

This level of activity is well within the capacity of a two-way lane, and is typical of many urban lanes during peak periods. In addition, because the lane can be accessed from both Water Street and Lawrence / Leon Avenues, residents and frequent visitors will be able to learn which route is quickest for them and naturally balance traffic on the lane and to/from the site. Businesses and delivery providers will also naturally adjust, as they generally try to schedule loading to off-peak times to reduce travel times for their vehicles. This means that when the lane is the busiest for passenger vehicle traffic (AM and PM peak periods), loading activity is likely to be lighter than during other times in the day (such as before the AM peak and around mid-day), and most if not all of the lane will be free for passenger vehicle use during the passenger vehicle peak periods.

Nevertheless, there are a couple of measures that have been incorporated to help the lane operate effectively and enable it to meet the needs of all users:

- Loading areas have been marked off in the lane to minimize the disruption of loading on general lane traffic, and keep the north side of the lane free vehicle travel at all times of the day.
- A 1.0m wide pedestrian area has been marked off immediately adjacent to the building to provide a place for people accessing the bicycle parking spaces to walk their bicycles to/from Water Street.

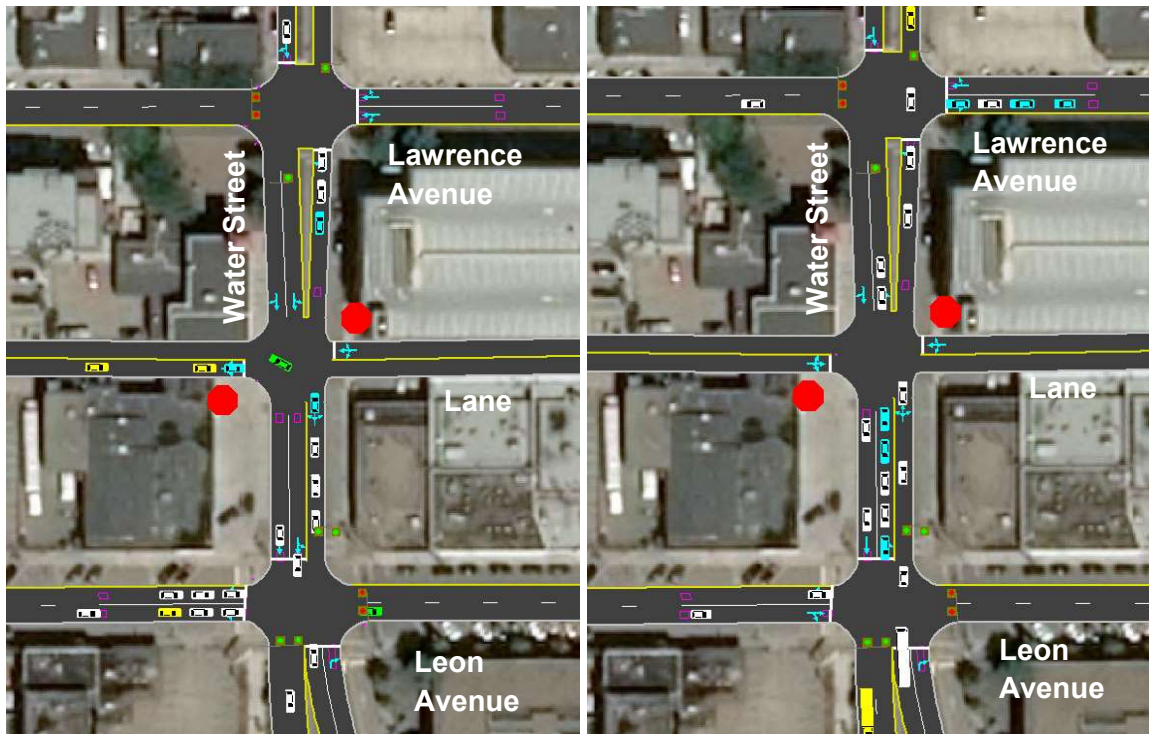
### 5.5.2 Public Lane & Water Street (B)

Much of the future site traffic will use the existing lane access on Water Street, and it is important to understand how it will operate.

The intersection was included in the traffic analysis, and as shown earlier in this study, is anticipated to generally operate within tradition traffic thresholds. SimTraffic was used to confirm the Synchro operation, and a screen shot of the SimTraffic operation is shown in Figure 16.



Figure 16: Water Street and Lane - Traffic Operations



The left side of the figure shows an instance where the westbound queue on the lane reaches the 95<sup>th</sup> percentile queue length of approximately 16 m or two cars, as reported in Future Post Development Section. The right side of the image shows an instance where the southbound approach at Leon Avenue temporarily extends beyond the lane. Both of these occurrences happened once or twice during the 1 hour SimTraffic simulation run, and dissipated within a short period of time. These occurrences can be expected to occur once the site is built on occasion during the peak hours, and are typical operations in a constrained urban environment.

In addition to vehicle operations, the proposed development will also impact pedestrian operations at this location. More traffic will be crossing the sidewalk on the west side of Water Street, and the northeast corner of the proposed development could impact vehicle – pedestrian sight lines at this location.

To slow vehicle traffic in the lane and increase the visibility of pedestrians on the sidewalk, the following mitigation measure will be provided:

- Eastbound stop sign and stop bar on the lane, immediately before the sidewalk.
- Convex mirror mounted on the proposed development and oriented to enable eastbound drivers to see pedestrians approaching the lane / sidewalk crossing from the south
- Painted or textured sidewalk to indicate a vehicle / pedestrian cross area

### 5.5.3 Water Street Bus Stop #102868 Integration with Site (C)

The City has asked for the proposed development to incorporate the existing bus stop located on the west side of Water Street (east development frontage), and the site has been designed accordingly.

Guidelines for the installation of urban bus stops are provided by BC Transit in the Bus Stop Installation Guide<sup>3</sup>. These guidelines are meant to ensure that bus stops are barrier free, easily accessible, and have amenities such as shelters, benches, and adequate lighting.

Table 25 summarizes the required / optional components in the Bus Stop Installation Guide with the proposed site plan.

**Table 25: Site Plan Compliance with Bus Stop Installation Guide**

Required / Optional Components and Amenities	Condition Met with Proposed Development Site Plan?
<b>Requirements</b>	
Bus Stop Location - Near side bus stop signage to be placed 15m north of downstream street (Leon Avenue)	Yes
Bus Stop Layout – A 42.5m bus stop to be provided, with 15m in front of the bus / bus sign, 12.5m for the bus, and 15m behind. The entire length of curb in this area is to be painted red to indicate a bus stop. No-stopping bus zone signage is to be placed at both ends of the bus area.	Yes
Clear space at bus doors – A 1.5m long and 1.2m wide clear space is required adjacent to the front bus door, and 1.5m long and 2.0m wide clear space is required at the rear bus door.	Yes
<b>Option Amenities – Local Transit</b>	
Transit Shelter	No – insufficient space to provide
3.0m wide sidewalk, with 1.5m clear pedestrian travel zone	Yes – sidewalk area is 3.0m wide, and includes a 1.5m wide pedestrian travel zone.
Bench	No - will not be provided
Illumination	No - will not be provided
Tactical Warning Strip	Yes



<sup>3</sup> BC Transit Bus Stop Installation Guide - <https://www.bctransit.com/documents/1507213895398>



#### 5.5.4 Reconfigured Leon Avenue (D)

The proposed project includes changes to Leon Avenue, including converting the existing angled parking on the north side to parallel parking, increasing the north sidewalk width to approximately 4.3 m, adding an eastbound buffered cycle track on the south side of the street, and a curb extension on the north side of the street at the intersection of Water Street and Leon Avenue. The proposed cross section element widths are shown in Table 26. The City of Kelowna does not have a road standard for this exact proposed situation (two lane one-way street with cycle track), but the proposed lane and sidewalk dimensions are consistent with standards for a 2 lane arterial street<sup>4</sup> with 3.35m wide lanes and 1.5m wide sidewalks. The proposed widths for the other facilities are typical for similar urban environments and are considered adequate.

**Table 26: Proposed Leon Avenue Cross Section**

Component	Proposed Dimension (m)
North Sidewalk	4.3
On-street Parking (Parallel)	2.1
Eastbound Lane	3.35
Eastbound Lane	3.35
Eastbound Cycle Track Median	0.9
Eastbound Cycle Track	1.9
South Sidewalk	2.4

Traffic operations on Leon Avenue were reviewed with SimTraffic, and interactions with on-street parking were included in the analysis. With around 14 parking spaces on the north side, and an assumed parking turnover time of 1 hour, this could result in 14 inbound and 14 outbound parking maneuvers on the street during peak parking periods. This is equivalent to one vehicle either arriving or leaving every two minutes. Based on observing SimTraffic operations, and comparable street sections with similar traffic and parking levels, such as on Bernard Avenue between Ellis and Bertram Street, Leon Avenue will operate sufficiently in this configuration.



<sup>4</sup> City of Kelowna Subdivision, Development & Servicing Bylaw, Schedule 5, Drawing Part 5c, Arterial Class 3 – 2 Lane.

### 5.5.5 Leon Avenue Access – Sensitivity Analysis

The City of Kelowna requested an analysis to show the impact of one of the parking entrances being moved to Leon Avenue. As the volume of traffic that would use this access is unknown, half of the site traffic at the Water Street / Lane intersection has been reassigned to the Leon Avenue access (which is equivalent to roughly 1/3 of all site traffic). Table 27 shows the traffic operations for this scenario at the new parkade entrance on Leon Avenue, and for the intersections between Water Street and the Lane and Leon Avenue in the Future Post Development Horizon.

The results can be compared with the results previously presented in Table 21 and Table 23. Shifting one of the parkade access will improve the performance of the eastbound Lane approach at Water Street from LOS E to D, and the remainder of the movements and intersections will operate within typical capacity thresholds and very similar to the original scenario.

**Table 27: Leon Avenue Access - Sensitivity Analysis - Future Post Development**

Intersection	Movement / Lanes		Weekday AM Peak Hour					Weekday PM Peak Hour				
			Vol.	L O S	Delay (s)	v/c	95 <sup>th</sup> Q	Vol.	L O S	Delay (s)	v/c	95 <sup>th</sup> Q
Water Street & Lane – Stop Control	EB	1	20/0/25	B	14	0.10	2	21/0/32	D	25	0.25	7
	WB	1	6/0/6	B	13	0.03	1	6/0/6	C	17	0.04	1
	NB	2	29/288/6	A	8	0.03	1	57/340/6	A	10	0.07	2
	SB	2	6/256/12	A	8	0.01	0	6/627/43	A	8	0.01	0
	Total		-	A	2	-	-	-	A	2	-	-
Water Street & Leon Avenue - Signalized	EBLTR	2	40/147/39	C	21	0.40	28	46/213/69	C	27	0.49	49
	NBT	1	296	A	6	0.29	35	373	A	7	0.34	56
	NBR	1	97	A	5	0.12	11	46	A	5	0.05	5
	SBLT	2	55/239	A	1	0.18	2	131/533	B	19	0.39	88
	Total		-	A	8	-	-	-	B	17	-	-
Leon Avenue & New Driveway – Stop Control	EBLT	2	32/212	A	7	0.02	1	71/286	A	7	0.05	1
	SBL	1	41	B	10	0.06	2	42	B	12	0.08	2
	Total		-	A	2	-	-	-	A	3	-	-

As this analysis does not significantly differentiate the two alternatives, we have also conducted a route-based analysis comparing the base case with the sensitivity analysis, as shown in Figure 17. The top half of the figure shows the existing access configuration and routes, and the bottom half shows only the routes for a Leon Avenue access. With the existing configuration, both parkade entrances are accessed from the rear lane, and drivers are able to choose the most direct path to the parkade and rear lane based on their inbound / outbound directions. For the Leon Avenue accesses alternative, all drivers required to use the access would have to use one-way Leon Avenue, based on the interior parking spot that they are destined to. This would result in longer

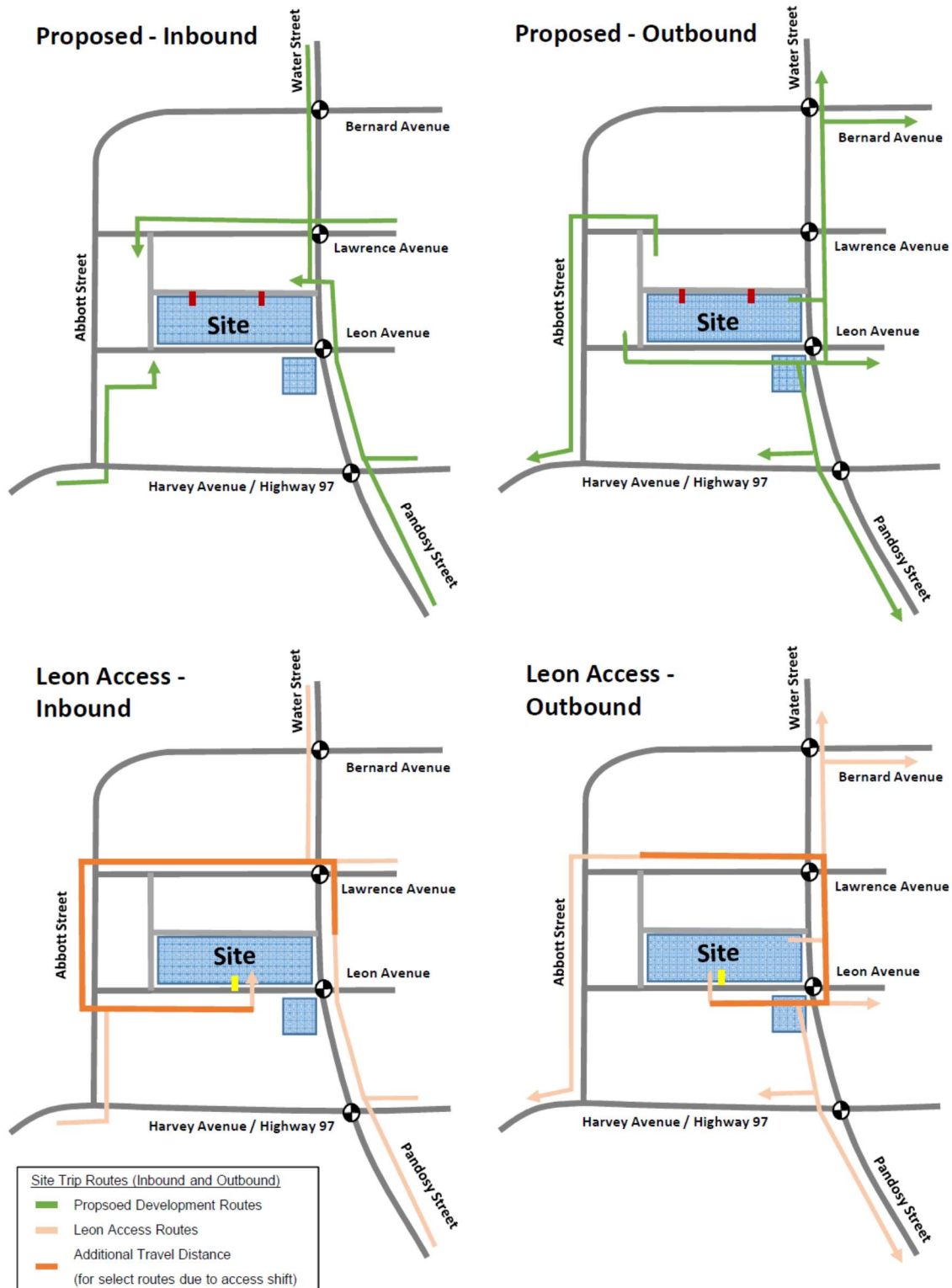


travel paths for certain trips and un-needed vehicular circulation around the site. The dark orange lines indicate the addition trip distances required for certain routes compared to the existing configuration (such as inbound vehicles approaching from the south, or exiting to the west). Therefore, while a proposed access on Leon Avenue would decrease traffic volumes on the rear lane, it would in fact result in an un-necessary increase in traffic volumes on the public road network.

In addition, by introducing a new driveway on Leon Avenue, this alternative would increase the number of driveways that pedestrians would have to cross. It would also segment the proposed commercial frontage of the site, and this could negatively impact the perceived walkability and attractiveness of the store fronts to pedestrians. The access would not have a material effect on the proposed cycle track on Leon Avenue, as the cycle track is on the south side of the street and will be protected by a median buffer. Best practices for redevelopment in urban areas are to use lanes for vehicle access where possible. In this case, because the proposed parkade access configuration and Lane / Water Street intersection will operate sufficiently, and because of the noted downsides of introducing a new driveway on Leon Avenue, it is recommended that the current parkade access scheme is maintained.



Figure 17: Leon Avenue Access Analysis





### 5.5.6 Water Street / Lane – Northbound Left Turn Ban Analysis

The City of Kelowna has indicated that they plan on banning the northbound left turn movement from Water Street into the rear lane. This section reviews the effect of this ban at the Water Street / rear lane intersection, and the other adjacent intersections that will be effected. The analysis has been completed for the AM and PM peak hours in the Future Post Development horizon, as this is horizon with the highest traffic volumes. Figure 18 shows the revised volumes, and Table 28 and Table 29 show the resulting traffic operations.

Figure 18: Future Post Development Volumes - With Northbound Left Turn Ban at Water Street & Lane

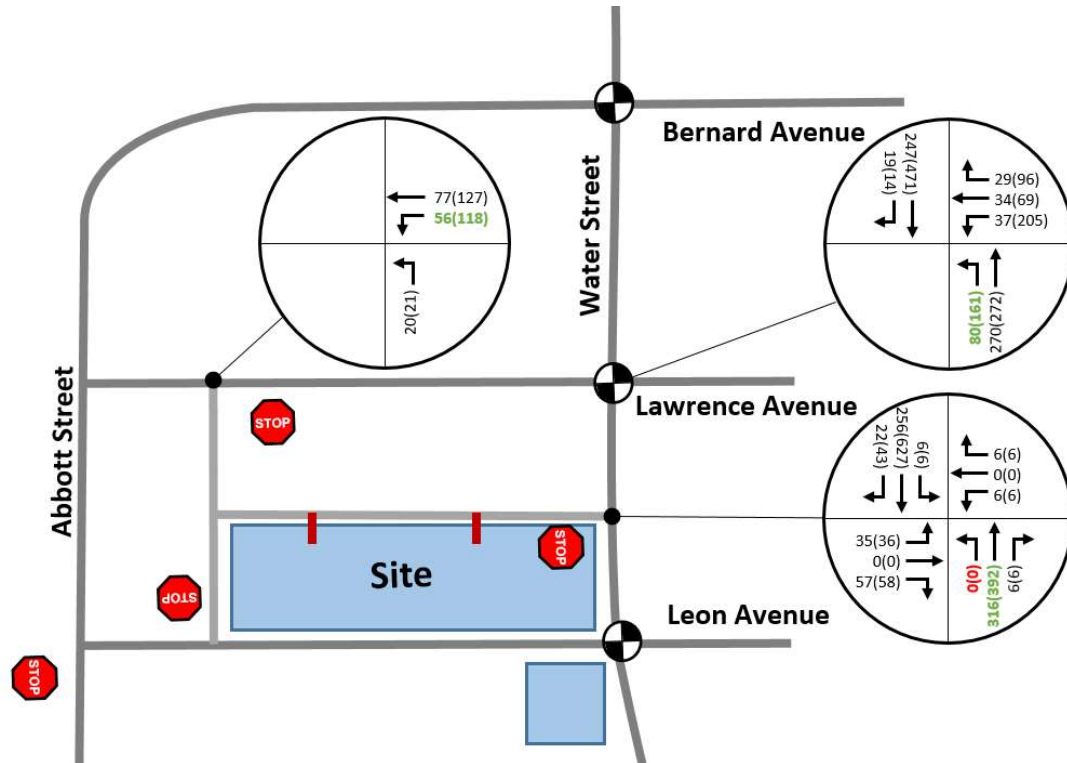


Table 28: Future Post Development Traffic Operations – Street Intersections

Intersection	Movement / Lanes		Weekday AM Peak Hour					Weekday PM Peak Hour				
			Vol.	L O S	Delay (s)	v/c	95 <sup>th</sup> Q	Vol.	L O S	Delay (s)	v/c	95 <sup>th</sup> Q
Water Street & Lawrence Avenue – Signal	WBLTR	2	37/34/29	C	21	0.18	11	205/69/96	C	27	0.58	58
	NBLT	2	80/270	A	1	0.36	4	161/272	A	2	0.52	7
	SBTR	1	247/19	B	12	0.25	57	471/14	A	1	0.45	5
	Total		-	A	8	-	-	-	A	9	-	-

**Table 29: Future Post Development Traffic Operations - Lane Intersections**

Intersection	Movement / Lanes		Weekday AM Peak Hour					Weekday PM Peak Hour				
			Vol.	LOS	Delay (s)	v/c	95 <sup>th</sup> Q	Vol.	LOS	Delay (s)	v/c	95 <sup>th</sup> Q
<b>Lawrence Avenue &amp; Lane – Stop Control</b>	<b>WBLT</b>	<b>2</b>	56/77	A	3	0.04	1	118/127	A	7	0.08	1
	<b>NBL</b>	<b>1</b>	20	A	10	0.03	1	21	B	12	0.04	2
	<b>Total</b>		-	<b>A</b>	<b>4</b>	-	-	-	<b>A</b>	<b>4</b>	-	-
<b>Water Street &amp; Lane – Stop Control</b>	<b>EB</b>	<b>1</b>	35/0/51	B	14	0.18	5	36/0/58	D	26	0.37	11
	<b>WB</b>	<b>1</b>	6/0/6	B	13	0.03	1	6/0/6	C	16	0.04	2
	<b>NB</b>	<b>2</b>	0/316/6	A	1	0.00	1	0/392/6	A	0	0.00	0
	<b>SB</b>	<b>2</b>	6/256/22	A	8	0.05	1	6/627/43	A	8	0.01	0
	<b>Total</b>		-	<b>A</b>	<b>2</b>	-	-	-	<b>A</b>	<b>2</b>	-	-

With the northbound left turn movement banned at the Water Street / Lane intersection, the previous northbound left turning vehicles were reassigned to turn left onto Lawrence Avenue, and then left from Lawrence Avenue into the rear lane to reach the site. This turn ban improved the eastbound approach operation at Water Street / Lane (lane exit onto Water Street) from LOS E to D, and had minimal effects on the other two intersections.

This analysis confirms that the proposed turn restriction will operate sufficiently.





## 6 Conclusion

Anthony Beyrouti is proposing a mixed-use commercial and residential development near the intersection of Leon Avenue and Water Street in downtown Kelowna. A review of the transportation impact of the proposed development was conducted, and all recommendations are summarized below:

### Active Transportation & Transit Networks

- The existing walking, cycling, and transit networks are sufficient to accommodate the proposed development.

### Vehicle Operations

- The forecasted traffic generated by the proposed development can be accommodated on the existing transportation network with minor changes to signal timing at existing intersections. The following is recommended:
  - Monitor southbound PM peak period queues at the intersections of Bernard Avenue and Leon Avenue with Water Street. If excessive queuing materializes, adjust the signal timing along Water Street to reduce southbound queuing.
  - Operations at Harvey Avenue and Water Street, and the impact of development on the highway corridor should be reviewed in the context of the entire highway corridor, and changes to signal timing and operation should be made to benefit overall corridor operation. If no changes are made, the site traffic can still be accommodated by the intersection, but some traffic on the constrained movements will shift to different routes or times within the peak period.

### Garbage and Loading Operations

- The City should pursue an agreement with property owners at the T lane intersection near the north site, and the lane to lane 90° intersection near the south site, to protect the ability of large vehicles to travel through these junctions. These are existing issues for all properties currently served by these lanes.
- It is recommended that the City mark off two parking spaces on the north side of Leon Avenue as pick-up drop-off / loading spaces to enable oversized loading vehicles to service both sites.

### Additional Operational Details

- The bus stop fronting the site (# 102868) has been incorporated into the development plans.
- The proposed Leon Avenue cross section is considered adequate.
- The proposed parkade access scheme is recommended over an alternative access scheme that would relocate one of the parkade accesses to Leon Avenue.





DP20-0011 & DVP20-0013

Leon Ave 234-278 & Water St  
1620-1660

Development Permit Application & Variances



# Purpose

- ▶ To consider a form and character Development Permit for a mixed used development consisting of three residential towers, commercial office space in the podium of Tower 'C', and ground floor commercial retail and to consider a development variance permit to increase the maximum tower height and to reduce the minimum short-term bicycle parking stalls and to increase the proportion of modified small vehicle stall spaces .

# Development Process

March 4<sup>th</sup> 2019

Development Application Submitted

Staff Review & Circulation

March 4, 2020

Public Notification Received

April 1, 2020

Public Notification Received

Nov 17<sup>th</sup> 2020

Development Permit, &  
Development Variance Permit

Council  
Approvals

Building Permit



# Subject Property





# Subject Property

Walk Score  
**95**

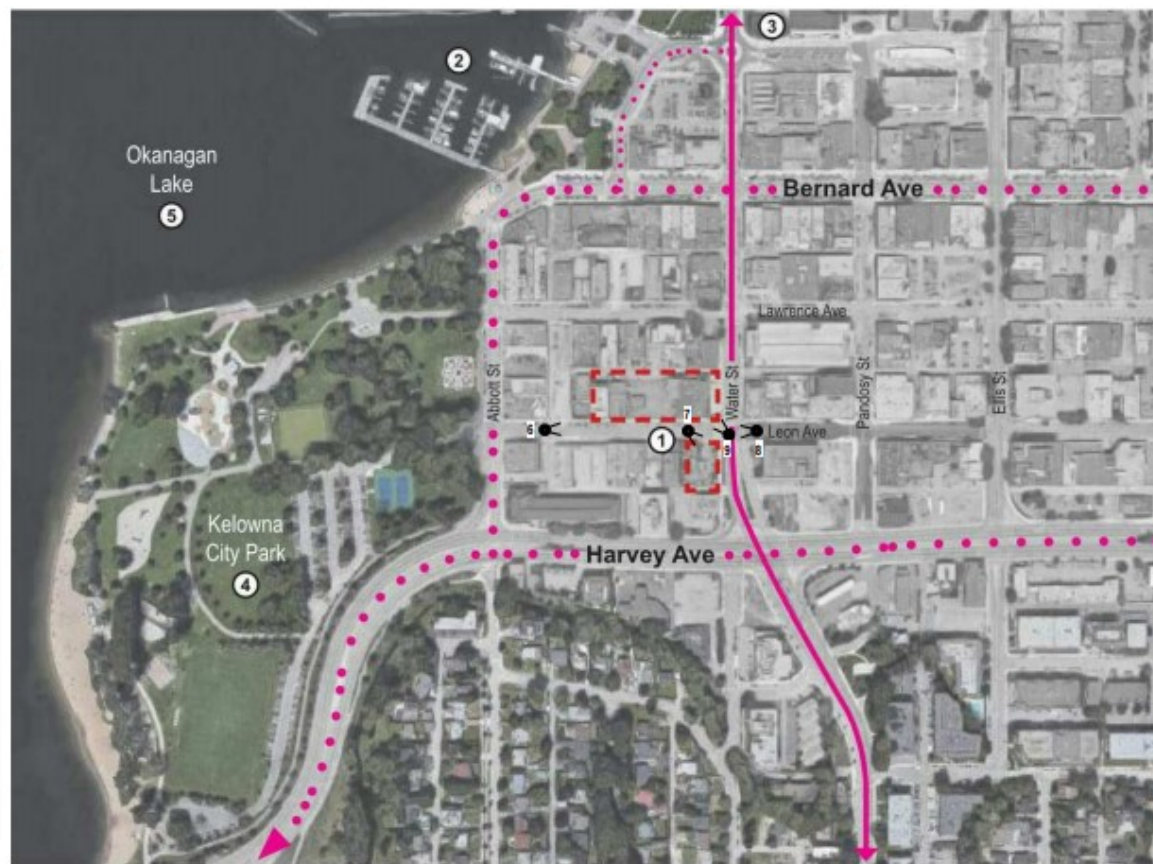
## Walker's Paradise

Daily errands do not require a car.

Transit Score  
**48**

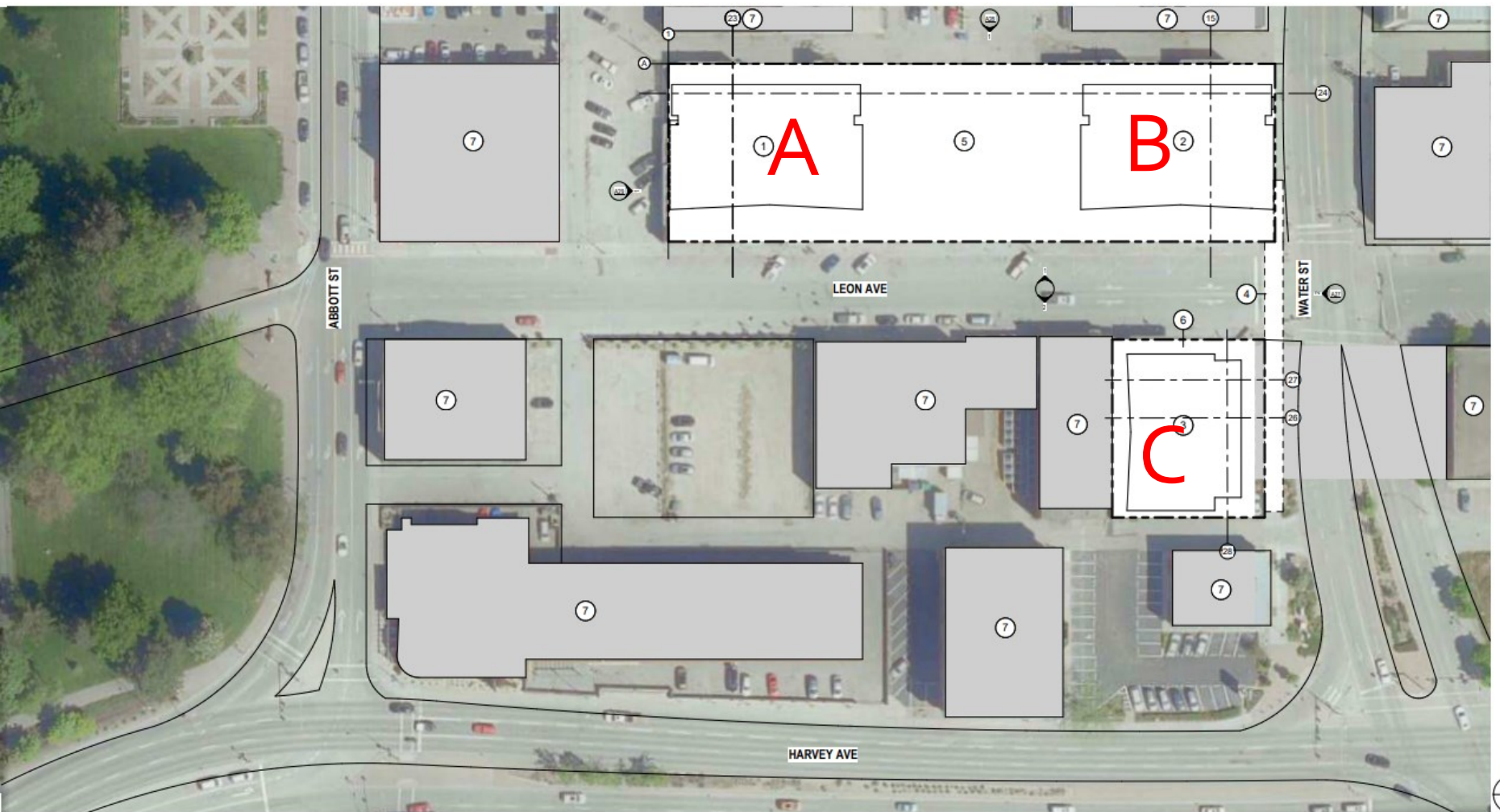
## Some Transit

A few nearby public transportation options.





# Context



1  
2  
3  
4  
5  
6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

201

202

203

204

205

206

207

208

209

210

211

212

213

214

215

216

217

218

219

220

221

222

223

224

225

226

227

228

229

230

231

232

233

234

235

236

237

238

239

240

241

242

243

244

245

246

247

248

249

250

251

252

253

254

255

256

257

258

259

260

261

262

263

264

265

266

267

268

269

270

271

272

273

274

275

276

277

278

279

280

281

282

283

284

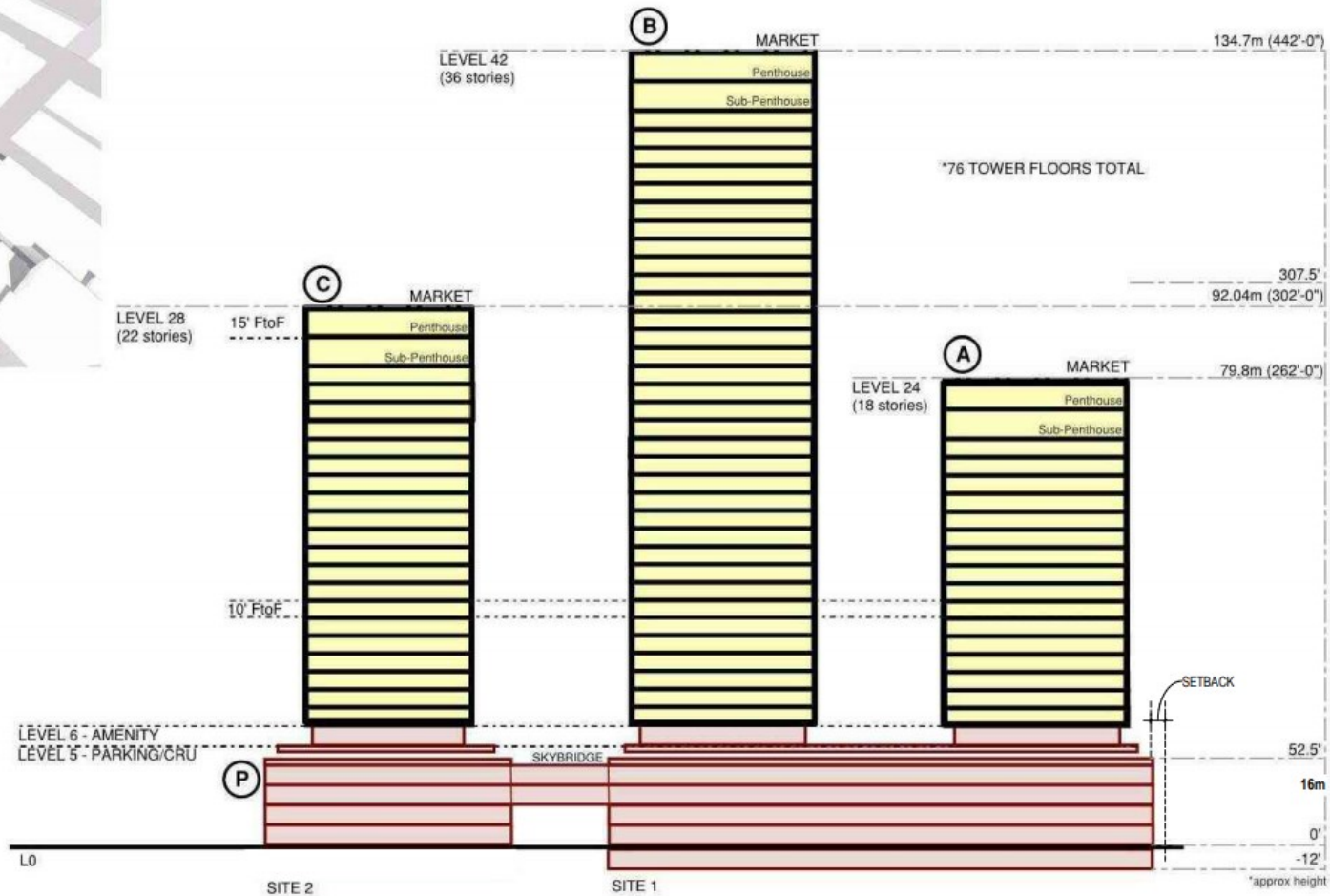
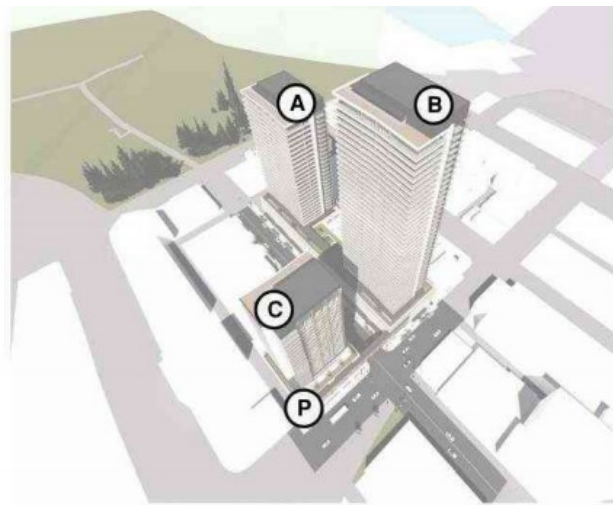
285

286

287

288

# Context





# Rendering



# Rendering





# Rendering

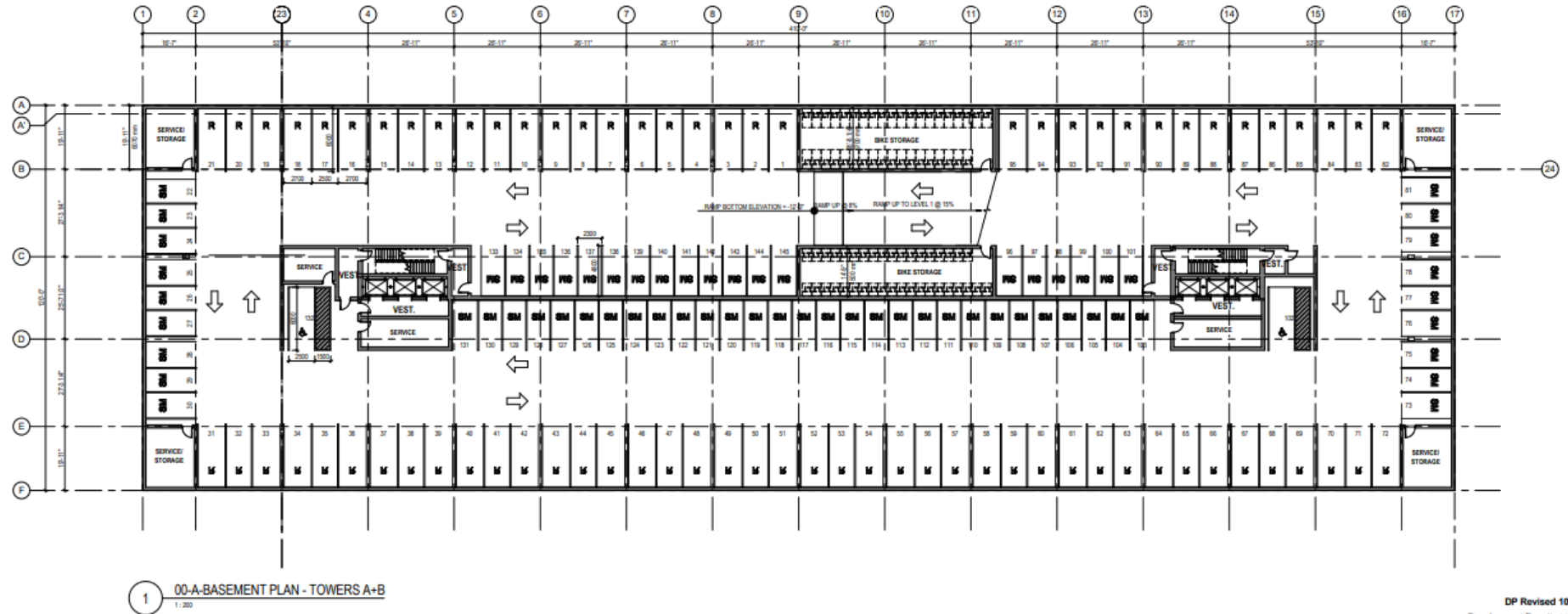


NORTH EAST VIEW (CURRENT)



NORTH EAST VIEW (FUTURE)

# Underground Parking





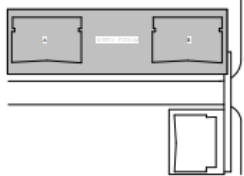
**01-A-FLOOR PLAN - TOWERS A+B**  
1-200

[illegible]

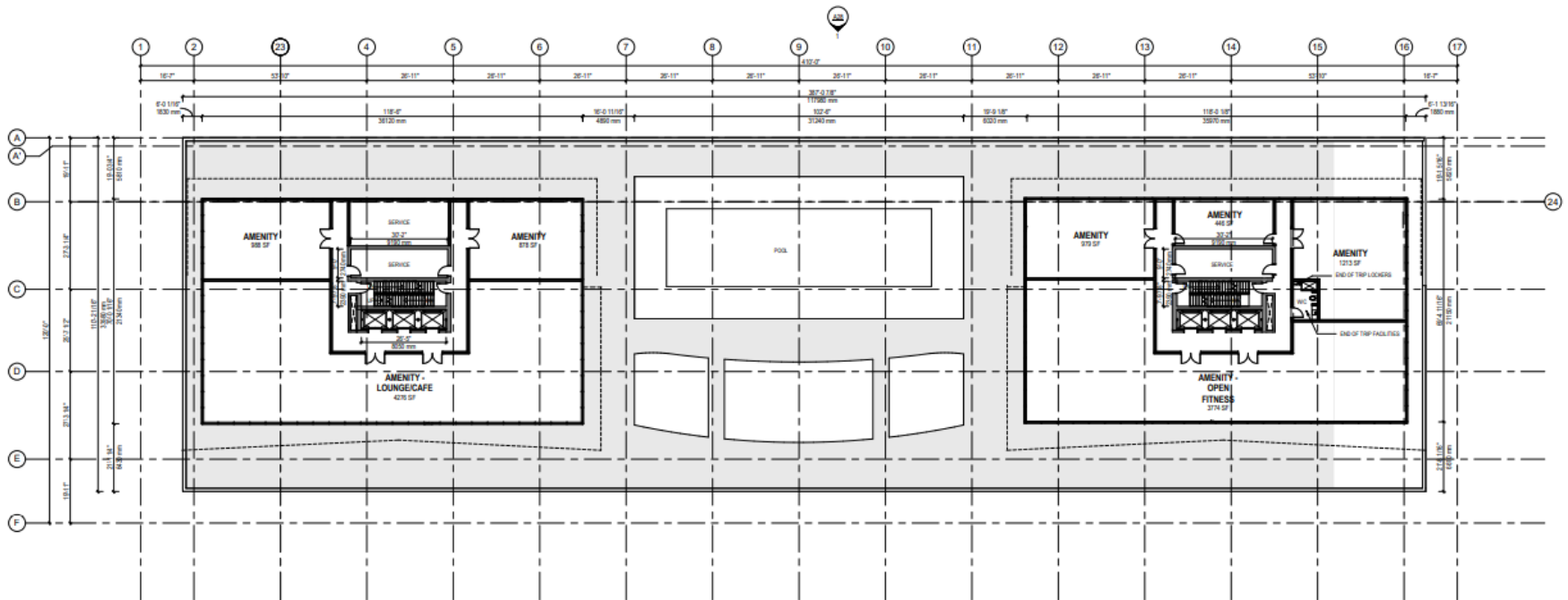


# Parkade Top Amenities

A21



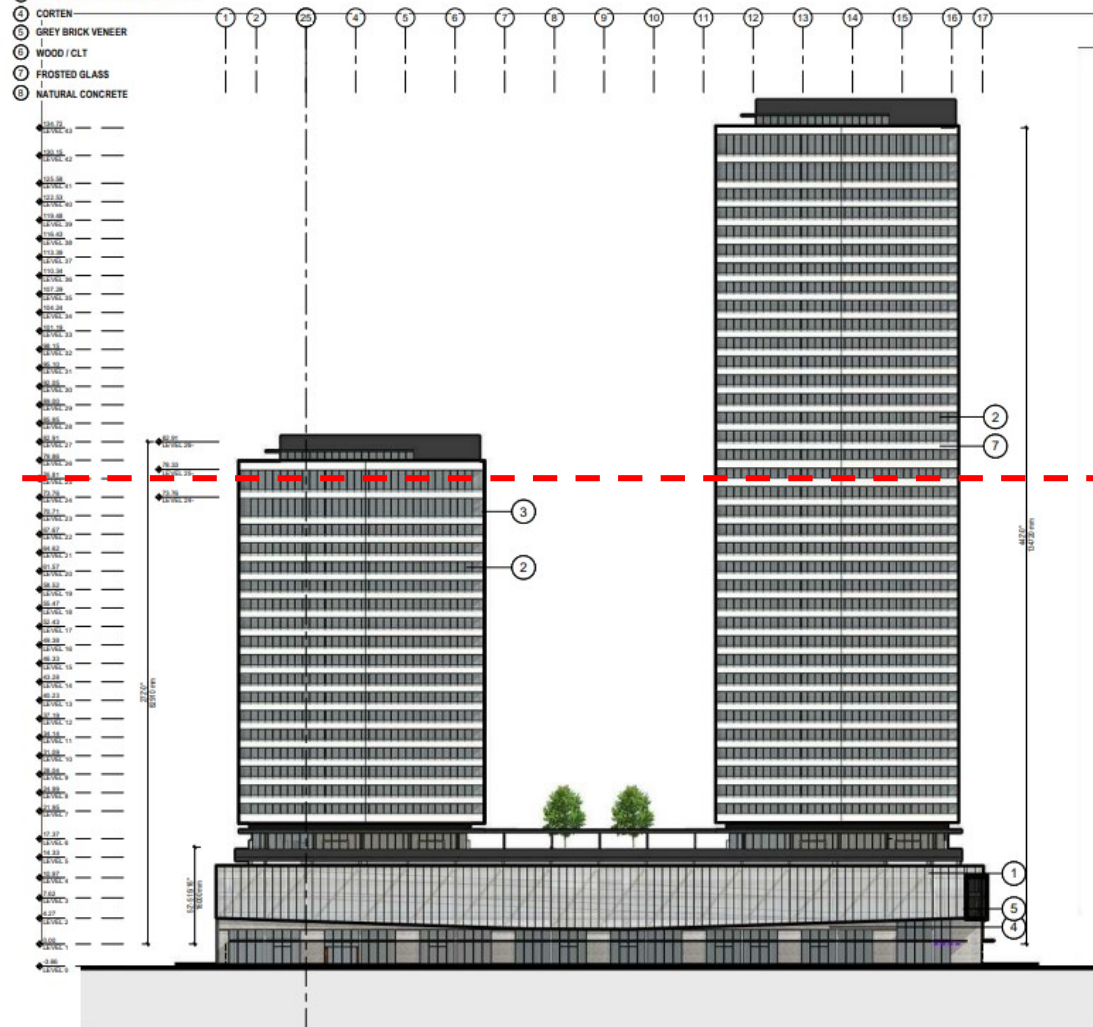
KEY PLAN



1 06-A FLOOR PLAN  
1:200

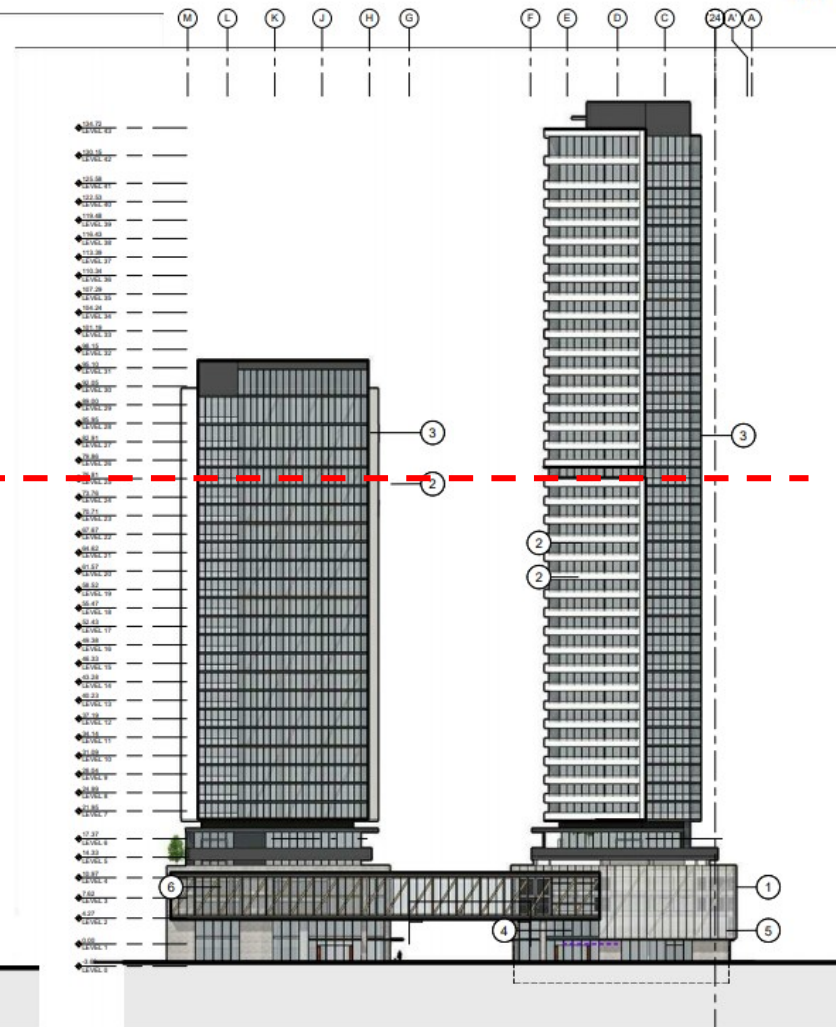
# Elevations

- 1 POLYCARBONATE TRANSLUCENT PANELS
- 2 PREFINISHED WHITE METAL CLADDING
- 3 PREFINISHED GREY METAL CLADDING
- 4 CORTEN
- 5 GREY BRICK VENEER
- 6 WOOD / CLT
- 7 FROSTED GLASS
- 8 NATURAL CONCRETE



1 LEON AVE SOUTH ELEVATION  
102' x 140'

- A27



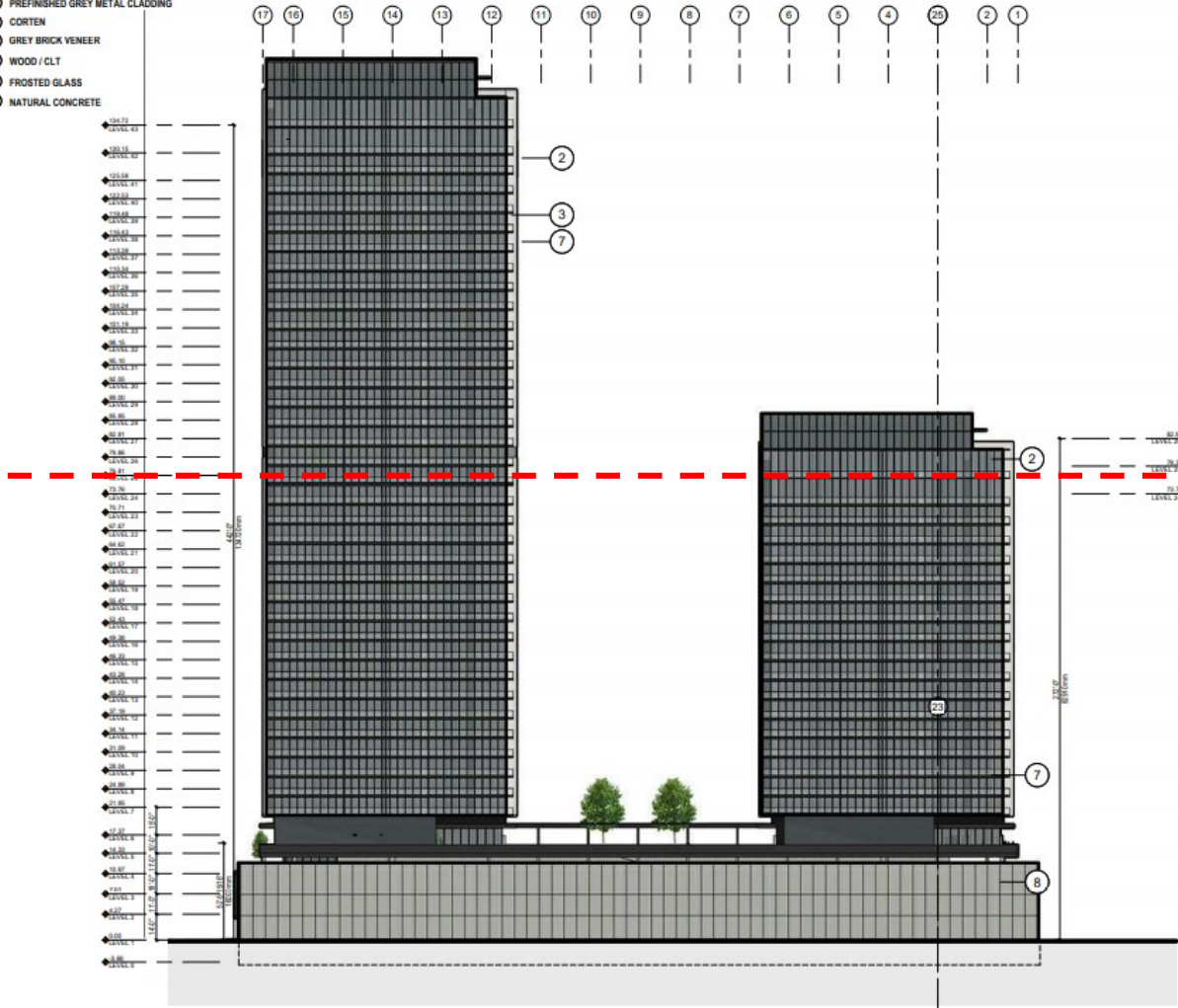
2 WATER STREET EAST ELEVATION  
1/32" = 1'-0"



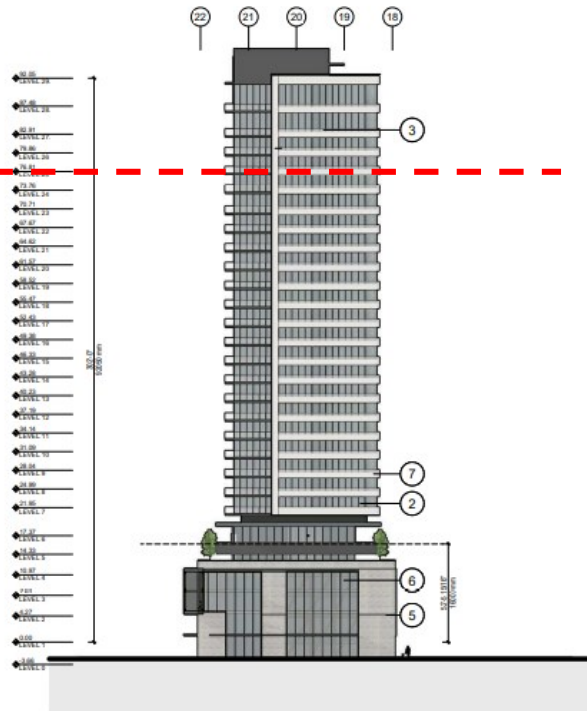
# Elevations

A28

- 1 POLYCARBONATE TRANSLUCENT PANELS
- 2 PREFINISHED WHITE METAL CLADDING
- 3 PREFINISHED GREY METAL CLADDING
- 4 CORTEN
- 5 GREY BRICK VENEER
- 6 WOOD / CLT
- 7 FROSTED GLASS
- 8 NATURAL CONCRETE

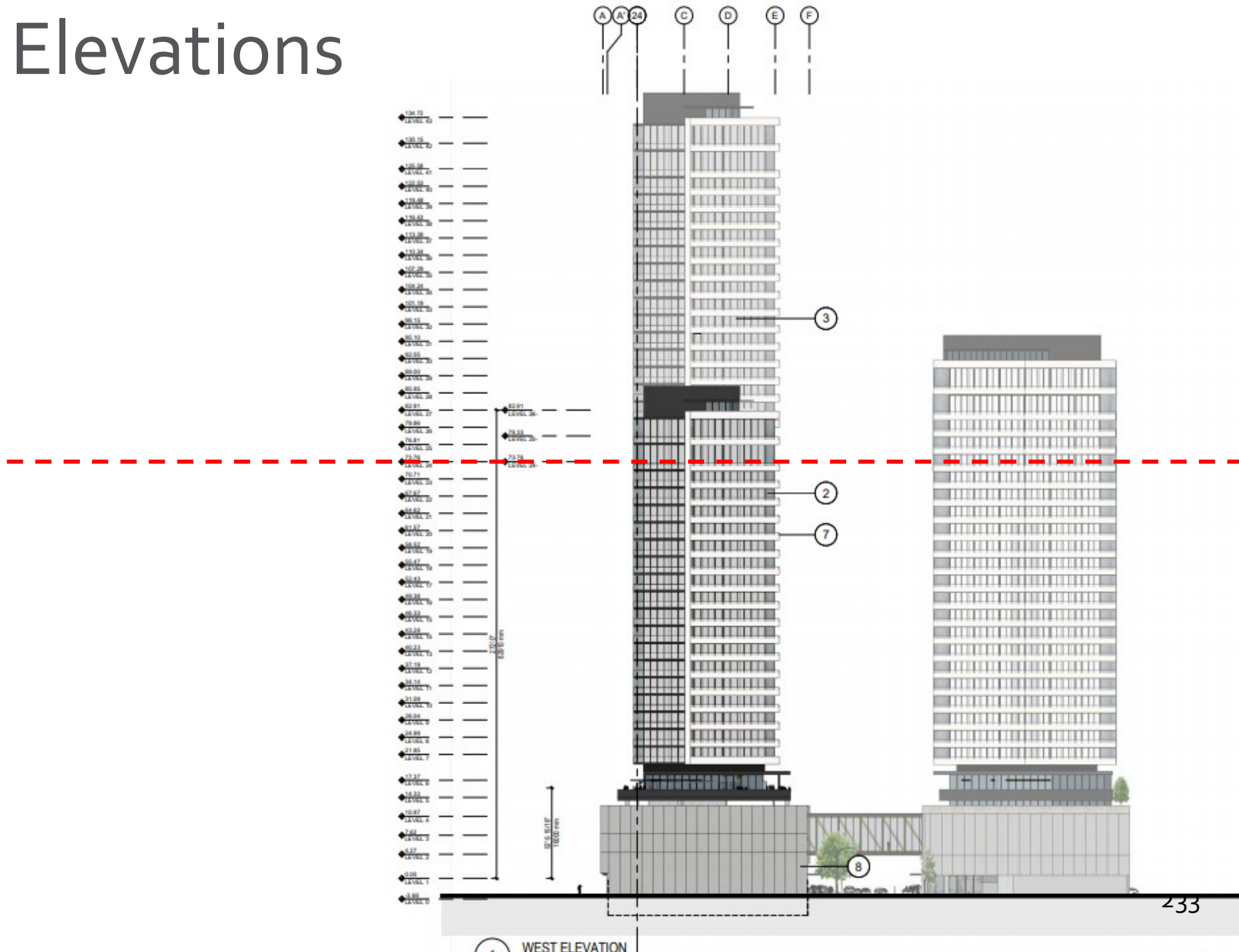


1 NORTH ELEVATION  
132' x 1'-0"



2 LEON AVE NORTH ELEVATION  
132' x 1'-0"

# Elevations





# Shadow Analysis



MARCH 21 - 9:00AM



MARCH 21 - 12:00PM



MARCH 21 - 3:00PM



JUNE 21 - 9:00AM



JUNE 21 - 12:00PM



JUNE 21 - 3:00PM



DECEMBER 21 - 9:00AM

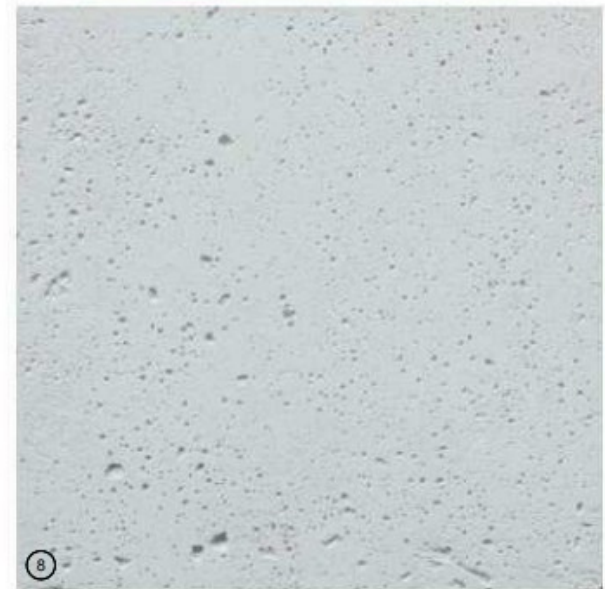
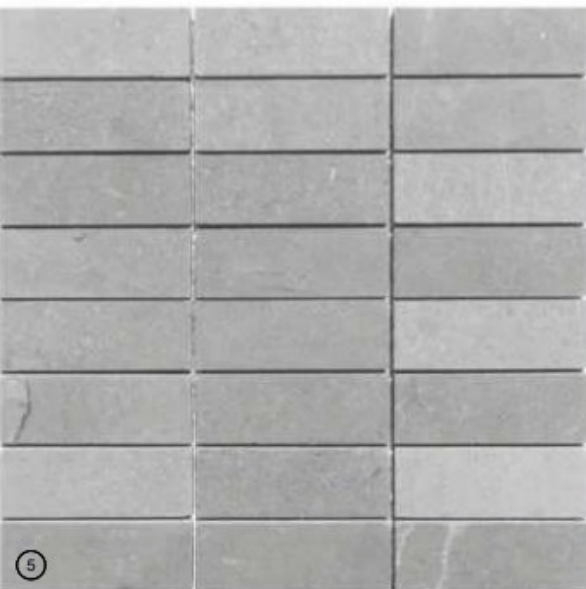
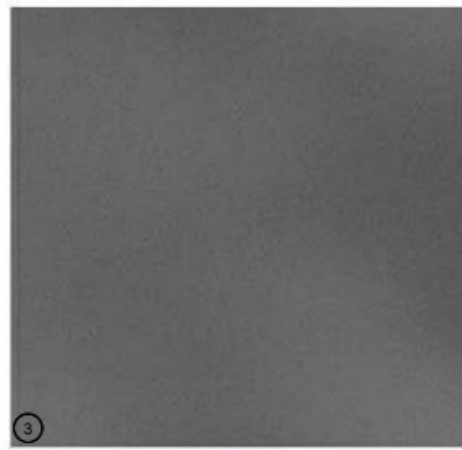


DECEMBER 21 - 12:00PM



DECEMBER 21 - 3:00PM

# Material Palette



- ① POLYCARBONATE TRANSLUCENT PANELS
- ② PREFINISHED WHITE METAL CLADDING
- ③ PREFINISHED GREY METAL CLADDING
- ④ CORTEN
- ⑤ GREY BRICK VENEER
- ⑥ WOOD / CLT
- ⑦ FROSTED GLASS
- ⑧ NATURAL CONCRETE



# Perspectives



BIRDS' EYE VIEW LOOKING NORTH WEST



BIRDS' EYE VIEW LOOKING SOUTH WEST



BIRDS' EYE VIEW LOOKING SOUTH EAST



BIRDS' EYE VIEW LOOKING NORTH

DP Revised 10/16/2020  
Development Permit 20/12/2019



# Perspectives



LEON AVE VIEW LOOKING WEST



WATER STREET VIEW LOOKING NORTH WEST



KELOWNA PARK VIEW LOOKING EAST



BIRDS' EYE VIEW LOOKING NORTH EAST

DP Revised 10/16/2020  
Development Permit 20/12/2019

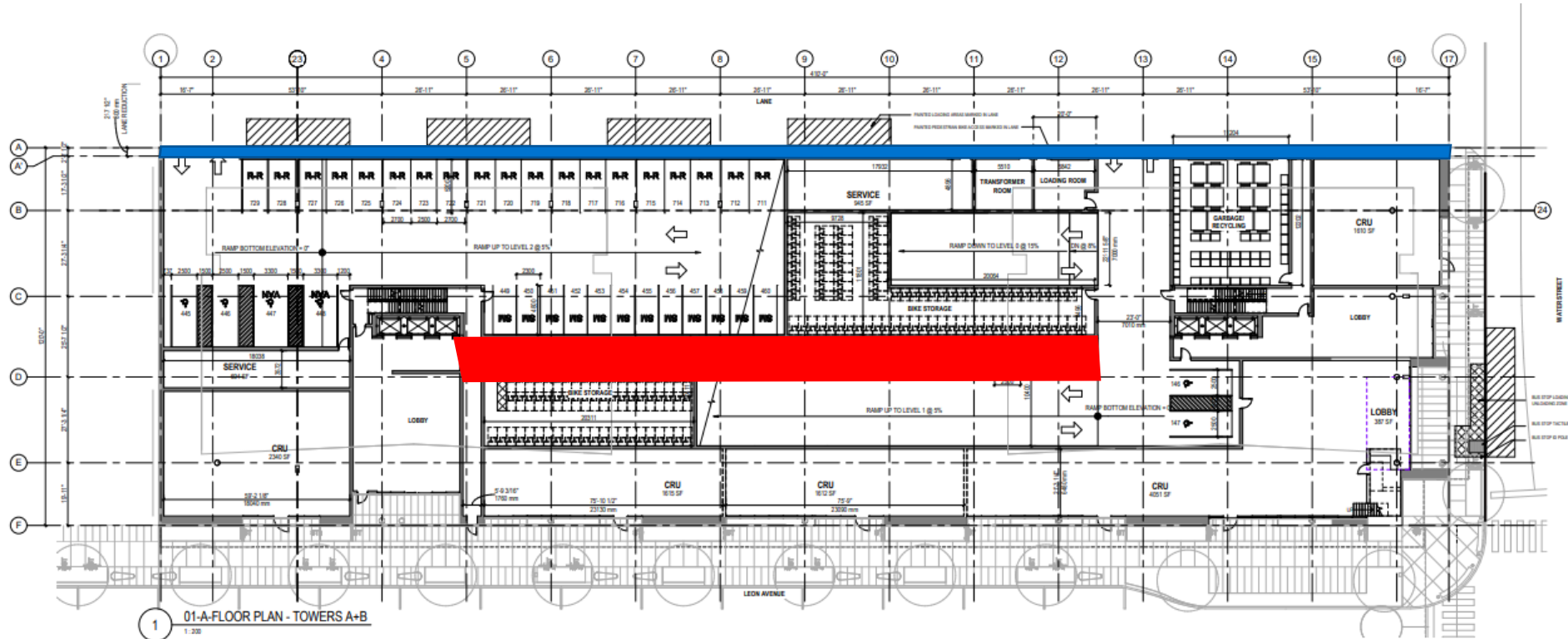


# Variances

The proposal requires two variances to the Zoning Bylaw:

1. A variance to increase the maximum height from 76.5 m (approx. 26.0 storeys) to 80 m (24 storeys) for Tower 'A'.
2. A variance to increase the maximum height from 76.5 m (approx. 26.0 storeys) to 135 m (42 storeys) for Tower 'B'.
3. A variance to increase the maximum height from 76.5 m (approx. 26.0 storeys) to 92 m (28 storeys) for Tower 'C'.
4. A variance to increase the maximum modified compact car stalls size from 0.0% to 3.3% (24 stalls).
5. A variance to decrease the minimum short-term bicycle stalls from 122 stalls to 28 stalls.

# Variances





# Development Policy

- ▶ Tall buildings: ensure appropriate and context sensitive built form.
- ▶ In determining appropriate building height, the City will take into account such factors as:
  - ▶ Contextual fit into the surrounding neighbourhood;
  - ▶ Shadowing of the public realm
  - ▶ View impacts
  - ▶ Overlook and privacy impact on neighbouring buildings
  - ▶ Impacts on skyline
  - ▶ Impacts on adjacent or nearby heritage structures

# Recommendation

- ▶ Support the proposed development permit application and associated variances:
  - ▶ To increase the maximum overall height
  - ▶ To increase the proportion of modified small vehicle spaces (add condition that must be labelled for small vehicle parking only)
  - ▶ To reduce the number of short term bicycle parking spaces





## *Conclusion of Staff Remarks*