REPORT TO COUNCIL

Date:	September 20, 2022		
To:	Council		
From:	City Manager		
Department:	Development Planning		
Application:	DP21-0285	**Owner:**	Doyle Street Properties. Ltd., Inc.No. BC1248370 1247752 B.C. Ltd., Inc.No. BC1247752 1267320 B.C. Ltd., Inc.No. BC1267320
Address:	550 Doyle Ave	**Applicant:**	UBC Properties Trust
Subject:	Development Permit		
Existing OCP Designation:	UC – Urban Centre		
Existing Zone:	C7 – Central Business Commercial		
Propozed Zone:	CD28 – University of British Columbia Downtown Campus Zone		

1.0 Recommendation

THAT final adoption of Text Amending Bylaw No. 12415 be considered by Council;

AND THAT final adoption of Rezoning Bylaw No. 12416 be considered by Council;

AND THAT Council authorizes the issuance of Development Permit No. DP21-0285 for PARCEL A (KK73272) DL 139 ODYD PLAN KAP45917, located at 550 Doyle 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. Landscaping to be provided on the land be in accordance with Schedule "C";
4. The applicant be required to post with the City a Landscape Performance Security deposit in the form of a "Letter of Credit" in the amount of 125% of the estimated value of the landscaping, as determined by a Registered Landscape Architect;

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

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

Purpose

To issue a Development Permit for the form and character of a University (University of British Columbia) with Apartment Housing.

2.0 Development Planning

Staff recommend support for the Development Permit for the form and character of the University of British Columbia's downtown vertical campus. The proposed project represents visionary design inclusive of creative expression, high-quality materials, sustainability concepts, and innovation. With its ambitious height, the tower will be the tallest in Kelowna and represents a bold and striking contribution to the downtown skyline. As an effective counter-measure to urban sprawl, the tall building will encourage a healthy, pedestrian-oriented mixed-use living and learning environment. It meets many of the City's urban design guidelines for tall buildings as well as furthers OCP policies related to urban center development, delivering significant public benefit, and sustainability objectives.

3.0 Proposal

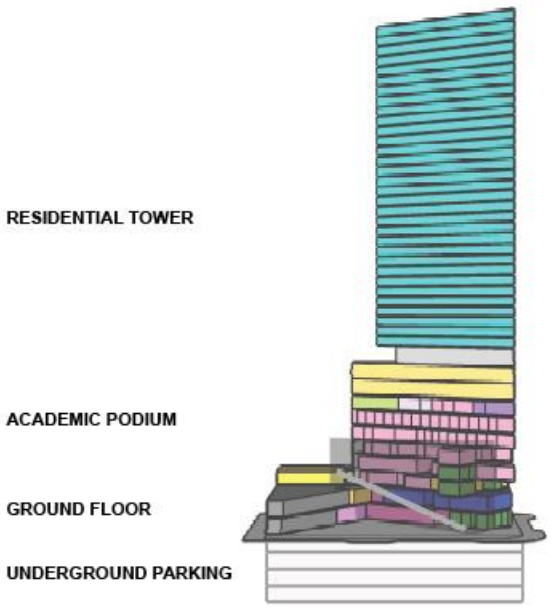
3.1 Background

The proposed project requires a Comprehensive Development zone to facilitate the unique project features of a downtown vertical campus for UBC. Features of the zone include increased Floor Area Ratio, increased floor plate size, increased height, and decreased parking requirements. Staff worked collaboratively with UBC to create the CD28 – University of British Columbia Downtown Campus Zone in order to accommodate the proposed project.

The text amendment and rezoning to CD28 received 2nd and 3rd readings by Council on July 26, 2022, and can be adopted with consideration of the Development Permit. There are no variances to the zone proposed.

3.2 Project Description

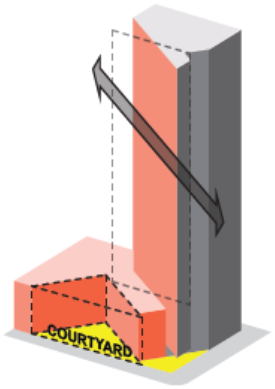
The proposed vertical campus was designed by internationally recognized architects Olson Kundig and HCMA, and includes 8 to 10 floors of academic use, 473 units of apartment housing, limited commercial uses, and underground parking. The academic floors on levels 1 through 8 account for nearly 8,500 m² of space, with an additional 1,840 m² available for academic expansion on levels 9 and 10. Level 11 is designed as indoor and outdoor amenity space, and Levels 12 through 43 are designated for residential use in the form of studio, 1-bedroom, and 2-bedroom apartments. Interspersed throughout the



project is ample amenity space both indoor and outdoor, and long term bicycle stalls are proposed within each bedroom for security and convenience.

3.3 Site Layout and Massing

The site is located in the middle of the downtown urban centre, at the corner of St Paul St. and Doyle Ave, in a block designated for taller buildings (OCP Policy 4.4.2. and 4.4.3.). All vehicular access is proposed from the commercial lane to the east of the site. Parking is provided completely underground, and therefore there is no parkade podium at street level.



Recognizing that Kelowna's downtown streets form a grid structure, the applicant has proposed two diagonal cuts within their massing to break up the grid. The first diagonal design gesture runs SW/NE and creates the main academic entrance at the corner of St Paul St. and Doyle Ave with a grand open air atritum. The second diagonal gesture runs NW/SE and creates a large covered courtyard adjacent to St Paul St. for public and private use.

The main building rises from the street in a triangular shape that mimics the diagonals of the entrance and amenity areas. The tower begins at street level and encompasses the wide variety of academic uses on the lower levels and the more uniform residential units in the middle and upper tower. Larger floor plates (varying between 1177 m^2 and 2143.3 m^2) are proposed for the lower levels with academic use in order to encompass varied research labs, classrooms, meeting rooms and services. Slightly narrower floor pates (1,094.4 m^2) are proposed for the residential floors from level 12 through 43.

3.4 Height

The proposed vertical campus tower stands at 43 storeys or 150.0 m in height. Should Council approve this Development Permit, it would become Kelowna's tallest building. While this represents a departure from the 2040 Official Community Plan Downtown Heights Map (Map 4.1) which suggests a height of 26 storeys, the OCP also has policy that supports the proposed height. OCP Policy 4.4.3 states that if a proposal contains significant benefit to Kelowna citizens, it should be considered for addition height. These include:

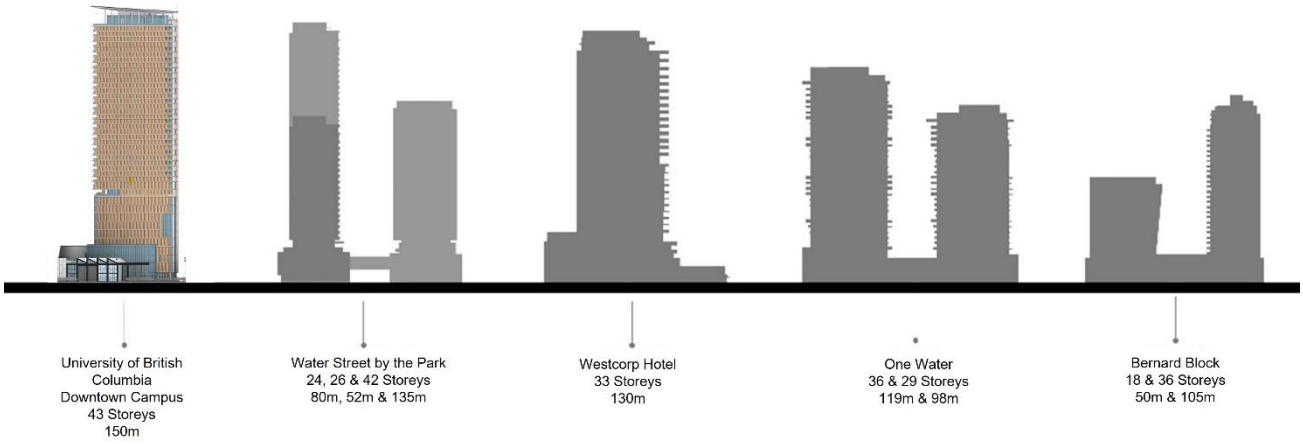
- An affordable, supportive and/or rental housing component that further advances Urban Centre housing objectives;
- A significant public amenity that supports the fostering of more inclusive and socially connected Urban Centres, such as parks, public spaces, schools, post-secondary institutions or childcare facilities;
- Offsite considerations, including enhanced streetscapes, provision of Active Transportation Corridors, tree canopy protection and enhancement, or green infrastructure within the road right of way;
- Smaller tower floorplates to mitigate the impact on views and shadowing; and/or
- Outstanding and extraordinary architectural design.

The proposed project meets *all* of the suggested public benefits. It is a rental building, with a post secondary institution, an ehanced streetscape, smaller floorplates on the residential component compared to the academic component, and is an outstanding and extraordinary architectural design.

When considering heights for high-rise buildings in a downtown core, there are several urban planning principles that help to create a visually interesting and pleasing skyline. One principle is to have varying heights and floorplates between buildings to provide visual interest. Another principle is to have the tallest buildings in the centre of the downtown, with tapering heights as you move away from the downtown and

into the Core Area. Staff are confident that this is the appropriate location for this height, floor plate size, and architectural design (refer to Attachment D for a Walkability Context Analysis Diagram).

In the figure below, Staff have created a comparison diagram of other recent tall buildings that have been approved in Kelowna. Given this context, it is appropriate that the proposed UBC Downtown Campus is taller than the others, given the institutional use and outstanding design.



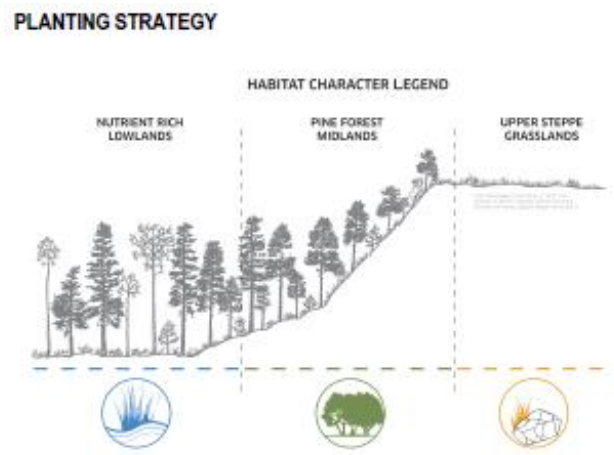
3.5 Street Level

Early on in the design process UBC and the City of Kelowna determined that interaction between the public and private uses at the street level would be integral in creating a community focused project with outstanding architectural design. The creation of the CD28 zone included a regulation for minimum of 80% active frontage on the primary street (St Paul St.) with 75% of active frontage on the secondary street (Doyle Ave). The design features a large covered courtyard that will be publically accessible along St Paul St. Wood elements reminiscent of a sail design create the roof structure, and large glass louvered walls are able to be opened and closed weather permitting. Within this space, UBC has proposed a café with seating areas for street level interaction, and next to this space is a proposed medical clinic.

At the intersection of St Paul St. and Doyle Ave., the grand main entrance to the academic spaces features a diagonal urban plaza along with bicycle racks and seating areas. This leads to the sizeable 3-storey atrium with gathering spaces at the main level.

Along Doyle Ave., the building features a studio makers space with large window walls to activate the street frontage, as well as the entrance to the secured residential portion of the project.

3.6 Landscape Plan



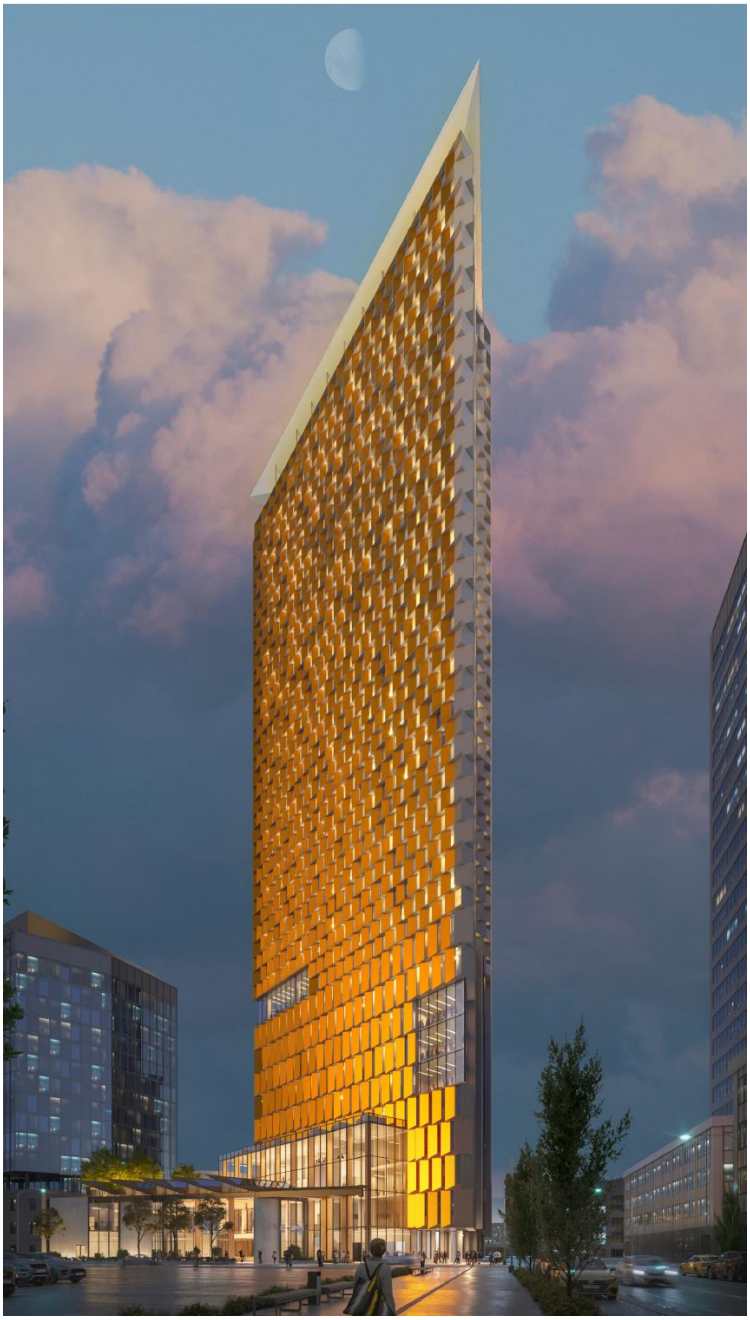
The planting strategy for the proposed vertical campus takes its cues from local vegetative habitats including nutrient rich lowlands, pine forest midlands, and upper steppe grasslands. Plants selected at street level were chosen to mimic the type of vegetation that is typical in the lowlands in and around Kelowna such as douglas maple trees, honeysucksle and dogwood shrubs, and perennial grasses. At level 3 of the building a rooftop amenity space is proposed with landscaping resembling that of a pine forest midland. Typical trees, shrubs, and grasses in a pine forest midland include limber pine, dwarf mountain pine, and fountain grass. The upper steppe grasslands are represented on the outdoor amenity area on level 11. The landscaping here includes trees such as shore pine, shrubs such as sagebush and lavender, and grasses such as sage and blue fescue.

While the site takes advantage of 0.0 m setbacks on all sides, landscaping has been proposed along the off-site streetscape as well as on outdoor rooftop amenity areas. The off-site streetscape detailed design will guide the final definitions of the boulevard, sidewalk, and vehicle pull-out areas. Preliminary landscape plans for the streetscape feature a pedestrian friendly environment with ample tree plantings. The trees are proposed to be grown in large soil cells under paving to form a continuous planting volume.

In order to achieve LEED Gold certification and meet water conservation strategies, green/blue rooftops are proposed. This includes collecting stormwater and rainwater for re-use for passive irrigation for the on-slab planted zones. Large stormwater cells will be incorporated into the slab buildup, creating large rainwater cisterns that can be wicked into planting zones.

3.7 Tower Top

The top of the tower is finished with a grand sail gesture to mimic the sailboats that frequent Okanagan Lake. Soft lighting will light up the sail through the evening to generate visual interest all the way to the top of the tower. The sail element is also used to screen the rooftop level mechanical equipment including the elevator overrun.



3.8 Upper Tower

The upper tower features homogeneous floor plates to accommodate the 500 units of rental housing. The diagonal angular shape that was initiated on the ground floor continues up for the duration of the tower with the widest façade facing NW. This is determined to have the least amount of shadowing impact due to the angular nature of the sun as it changes through the seasons. Small balconies are dotted throughout each floor plan, with the majority of the amenity space accommodated through common amenity areas.

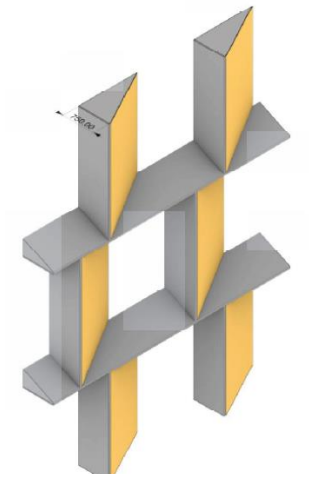
3.9 Lower Tower

The lower levels of the tower house the academic portions of the vertical campus. They feature larger floorplates to accommodate the wide range of classrooms, research areas, and laboratories. The applicant has proposed to house the Faculties of Nursing and Social Work among others within these spaces. Interspersed within the first 10 floors are various common amenity areas both indoor and outdoor. Casual indoor amenity spaces for informal gatherings are located in typically underutilized areas such as near stairways or in corners of floor plans. Large outdoor amenity spaces are provided on Levels 3, 11, and 43 and feature landscaping, tree plantings, tables and benches.

3.10 Materials

The architects have selected a material and colour palette to resemble the shimmer of Okanagan Lake during sunset. Olson Kundig has designed the skin of the building utilizing a pigmented concrete in a deep golden colour with a shimmer effect on the northwestern and eastern sides. The thickness of the material varies throughout the project and has been selected to provide visual interest as well as sustainability. Solar studies were completed by the architectss to determine the appropriate thickness of the façade to reduce heat radiation by 50% in the summer months. On the south elevation the same material has a range of grey pigment to create a gradient effect where the tower will seem to disappear into a cloudy sky.

The materials and colours have been selected to allow the building to reflect and change appearance depending on light conditions, weather, and seasonal change. Interior lights will reflect off the recessed windows creating further visual interest in low light hours.



Example of Material Proposed

3.11 Sustainability

UBC has committed to reduce emissions from buildings both from operations and up front construction in an effort to exemplify the principles of sustainable design. The design approach is rooted in passive principles to minimize the energy needed to heat and cool the building.

Eight design strategies have been proposed that work together to contribute to overall performance. These include: low carbon concrete, solar wall on the south façade, shower drain water heat recovery, greywater reuse, regenerative resource centre on level 11, ground source heat exchange, Step Code 3, and LEED Gold Certification (refer to Attachment C for supplemental information).

3.12 Shadow and Wind Study

The applicant has submitted a shadow study for the dates of March 21, June 21, and September 21 (refer to Attachment D). Due to the unique diagonal design of the project to be oriented along the NE/SW diagonal, some of the shadow impacts on surrounding properties are lessened. The Planning department accepts a minimum of 5 hours of sunlight on nearby parks, streets, public trees, active transportation corridors, and surrounding properties as a guideline for acceptable shadowing impacts. The attached shadow study confirms that this project meets minimum requirements.

3.13 Site Context

The subject property is located on the NE corner of St Paul St. and Doyle Ave. There are several other projects currently considered for this area including a mixed-use tower on the SE corner, and a mixed-use project on the NW corner of St Paul St and Doyle Ave. Interior Health's main offices are located on the SW corner. All these projects align with the OCP Future Land Use of Urban Centre, with varied heights proposed.

The subject property is approximately 200 m from the nearest Transit Supported Corridor on Richter St and is approximately 250 m from the Queensway Transit Exchange. There is easy access to the Cawston Ave Recreational Corridor and the Ethel St Active Transportation Lanes. Parks in the neighbourhood include City

Park, Stuart Park, Kasugai Gardens, and Martin Park. Immediately adjacent to the east is the Royal Canadian Legion and School District 23 property.

Specifically, adjacent land uses are as follows:

Orientation	Land Use	Zoning (Bylaw 8000 to Bylaw 12375)
North	Mixed-Use	C7 (to UC1)
East	SD23 & Royal Canadian Legion	P2
South	Under Redevelopment Consideration	C4 (to UC1)
West	Under Redevelopment Consideration	C7 (to UC1)

Subject Property Map:

4.0 Zoning Analysis Table

Zoning Analysis Table		
CRITERIA	**CD28 ZONE REQUIREMENTS**	**PROPOSAL**
Development Regulations		
Max. Floor Area Ratio	14.0	12.66
Max. Site Coverage (buildings)	85 %	85 %
Min. Setbacks	0.0 m	0.0 m
Max. Height	160.0 m / 46 storeys	150 m / 43 storeys
Min. Frontage at Street Level	Provide minimum 80% of the principal frontage as an active commercial, cultural, educational, or civic space and minimum 75% on secondary street frontage.	Meets requirements
Urban Plaza	Provide an Urban Plaza at grade along one street frontage Min. 42.0 m^2	Meets requirements

Corner Treatment	Provide a predominant entrance lobby at the corner of the street intersection		Meets requirements	
Maximum Floor Plate				
Levels 1 – 3	2,350 m²		L1: 2,349.0 m² L2: 2,143.3 m² L3: 1,740.9 m²	
Levels 4 – 8	1,400 m²		L4: 1,317.7 m² L5: 1,215.3 m² L6:1,234.6 m² L7: 1,177.7 m² L8: 1,193.0 m²	
Levels 9 – 10	1,260 m²		L9: 1,234.3 m² L10: 1,234.3 m² Amenity L11: 1,251.3 m²	
Levels 12 – 46	1,110 m²		L12-42: 1,094.4 m² L43: 867.1 m² L44: 186.4 m²	
Vehicle Parking Regulations				
Min. Commercial	1.0 space / 100 m²		10	
Min. Education Services	1.8 spaces / 100 m²		129	
Min. Office	0.5 space / 100 m²		10	
Min. Residential	0.2 spaces / Studio unit 0.3 spaces / 1-bed unit 0.5 spaces / 2-bed unit		105	
Min. Visitor	0.14 spaces / unit		15	
Min. Regular Spaces Max. Small Spaces	50% 50%		66% 34%	
Min. Loading Spaces	3		9	
Bicycle Parking Regulations				
	Long Term	Short Term	Long Term	Short Term
Min. Commercial	n/a	2	n/a	2
Min. Education Services	n/a	46	n/a	46
Min. Office	n/a	2	n/a	2
Min. Residential	1 per bedroom	29	603	20

5.0 Current Development Policies

5.1 Kelowna 2040 Official Community Plan

Objective 4.1 Strengthen the Urban Centres as Kelowna's primary hubs of activity.	
Policy 4.1.2 Urban Centre Hierarchy	Focus the greatest intensity of uses and scale of development Downtown in recognition of its role as the largest Urban Centre.
	This project site is centrally located within the Downtown Urban Centre and represents the greatest intensity of uses of any development thus far in the Downtown Core.
Policy 4.1.5 Partnerships with	Consider creative partnerships to attract post-secondary institutions to Urban Centres and to promote economic and cultural growth in those neighbourhoods.

Post-Secondary Institutions	*The City has creatively worked with University of British Columbia on the creation of the CD28 Comprehensive Development Zone to encourage the location within the Downtown Urban Centre.*
Objective 4.4 Reinforce Downtown as the Urban Centre with the greatest diversity and intensity of uses in the City.	
Policy 4.4.2 Downtown Skyline	Support development Downtown that is generally consistent with Map 4.1 to accomplish the following: • Tapering of heights from taller buildings in the centre of Downtown to lower buildings towards Okanagan Lake and adjacent Core Area Neighbourhoods; • Preservation of the existing form and character of historic Bernard Avenue and other heritage sites; • Consistency with the objectives of the *Civic Precinct Plan*; and • The development of taller buildings that incorporate distinct architectural features in strategic locations near Okanagan Lake
	While this project represents a departure from the height map in the 2040 Official Community Plan, it aligns with Policy 4.4.2 by proposing the City's tallest building in the centre of the Downtown Core.
Policy 4.4.3 Taller Downtown Buildings	With due consideration of the objectives of Policy 4.4.2, consider support for development that is higher than the heights outlined in Map 4.1 where the proposal contains significant benefit to Kelowna citizens, including some or a combination of the following: • An affordable, supportive and/or rental housing component that further advances Urban Centre housing objectives; • A significant public amenity that supports the fostering of more inclusive and socially connected Urban Centres, such as parks, public spaces, schools, post-secondary institutions or childcare facilities; • Offsite considerations, including enhanced streetscapes, provision of Active Transportation Corridors, tree canopy protection and enhancement, or green infrastructure within the road right of way; • Smaller tower floorplates to mitigate the impact on views and shadowing; and/or • Outstanding and extraordinary architectural design.
	Due consideration for the additional height is supported through the proposed benefits to Kelowna citizens including a significant public amenity, off-site considerations, and extraordinary architectural design.
Objective 4.12 Increase the diversity of housing types and tenures to create inclusive, affordable and complete Urban Centres.	
Policy 4.12.1 Diverse Housing Forms	Ensure a diverse mix of medium density and high density housing forms that support a variety of households, income levels and life stages.
	The project supports student rental housing in a compact tower form, which is a diverse type of housing compared to some other areas of the City.
Objective 4.15 Make Urban Centres safe and enjoyable for walking, biking, transit and shared mobility.	
Policy 4.15.6 Walkable Urban Centres	Design streets and sidewalks to promote safety and comfort of pedestrians through enhanced public realm treatments, such as curb extensions, median refuge islands, street tree planting, adequate clear space for pedestrians, street furniture, curb-side parking and parkettes.

	Off-site road improvement requirements for the subject property are for a modified SS-R5 with enhanced public realm elements such as adequate tree planting, street furniture, and curb side parking.
Objective 9.1 Incorporate equity into planning decisions and resource allocation in our community.	
Policy 9.11 Equity in Planning Decisions	Incorporate an equity lens into land-use planning decisions and resource allocation in our community.
	Equity refers to fair distribution of opportunities, power, and resources to meet the needs of all people, regardless of age, ability, gender, culture, or background. A university development provides opportunities for further education to all people.
Objective 12.4 Improve energy efficiency and reduce greenhouse gas emissions of new buildings.	
Policy 12.4.2 Energy Efficient Design	Encourage the use of passive design to reduce energy demand as described in Chapter 18: Form and Character Development Permit Area.
	The building is proposed to be constructed to a LEED Gold certification level.

5.2 Imagine Kelowna

1. Grow vibrant urban centres and limit sprawl.
2. Build a fair and equitable community.
3. Take action in the face of climate change.
4. Create great public spaces.
5. Support innovation.
6. Protect land, water, and air.

6.0 Application Chronology

Date of Application Accepted: December 23, 2021
Date Public Consultation Completed: May 30, 2022

Report prepared by: Trisa Atwood, Planner II
Reviewed by: Lydia Korolchuk, Urban Planning Manager
Reviewed by: Terry Barton, Development Planning Department Manager
Approved for Inclusion: Ryan Smith, Divisional Director, Planning & Development Services

Attachments:
Attachment A: Draft Development Permit DP21-0285
Schedule A: Site Plan and Floor Plans
Schedule B: Elevations
Schedule C: Landscape Plan
Attachment B: OCP Form and Character Development Permit Guidelines
Attachment C: Sustainability Initiatives
Attachment D: Walkability Context Analysis Diagram
Attachment E: Shadow Study