

Memo



Date: October 21, 2011

To: City Manager

From: Land Use Management, Community Sustainability (AW)

Application: DP10-0107

Owner: Watermark Developments Ltd.,
Inc. No. 642787

Address: 899 Academy Way
285 Arab Road & (N OF) Arab Road

Applicant: Watermark Developments Ltd.

Subject: Development Permit

Existing OCP Designations: Multiple Unit Residential - Medium Density / Multiple Unit Residential - Low Density / Single Two Unit Residential / Major Park & Open Space / Education & Minor Institutional / Commercial

Proposed OCP Designations: Multiple Unit Residential - Medium Density / Multiple Unit Residential - Low Density / Single Two Unit Residential / Major Park & Open Space / Education & Minor Institutional / Commercial

Existing Zone: A1 - Agriculture 1

Proposed Zones: C3 - Community Commercial, RM3 - Low Density Multiple Housing, RM4 - Transitional Low Density Housing, RM5 - Medium Density Multiple Housing, P2 - Education and Minor Institutional and P3 - Parks and Open Space.

1.0 Recommendation

THAT Final Adoption of the OCP Amending Bylaw No. 10492 and Zone Amending Bylaw No. 10493 be considered by Council;

THAT Council authorize the issuance of Development Permit No. DP10-0131 for Lot 2, Section 10, Twp. 23, ODYD, Plan KAP86356, located at 899 Academy Way, the North East $\frac{1}{4}$ of Section 3, Twp. 23, ODYD, located N of Arab Road and the North $\frac{1}{2}$ of the South East $\frac{1}{4}$ of Section 3, Twp. 23, ODYD , Except Plan KAP88257, located at 285 Arab Road, Kelowna B.C., subject to the following:

- 1) The design of the University South development shall be phased over time and designed in accordance with pages 1-61 of the University Village Master Plan Design Guidelines attached as Schedule "A";

2.0 Purpose

To approve an overall Form and Character Development Permit that establishes overarching planning and design principles and additional landscaping, open space and architectural

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guidelines to ensure that development proceeds in a cohesive and integrated manner. Once the parent parcels have been subdivided and rezoned a Form and Character Development Permit will be required for each phase of the development process.

3.0 Land Use Management

The proposal as submitted meets the intent of the existing OCP in the types of development and provision of a Village Centre in proximity to UBC Okanagan as well as the proposed density and number of housing units. The Master Plan Design Guidelines were created to provide a blueprint for development within the University South area.

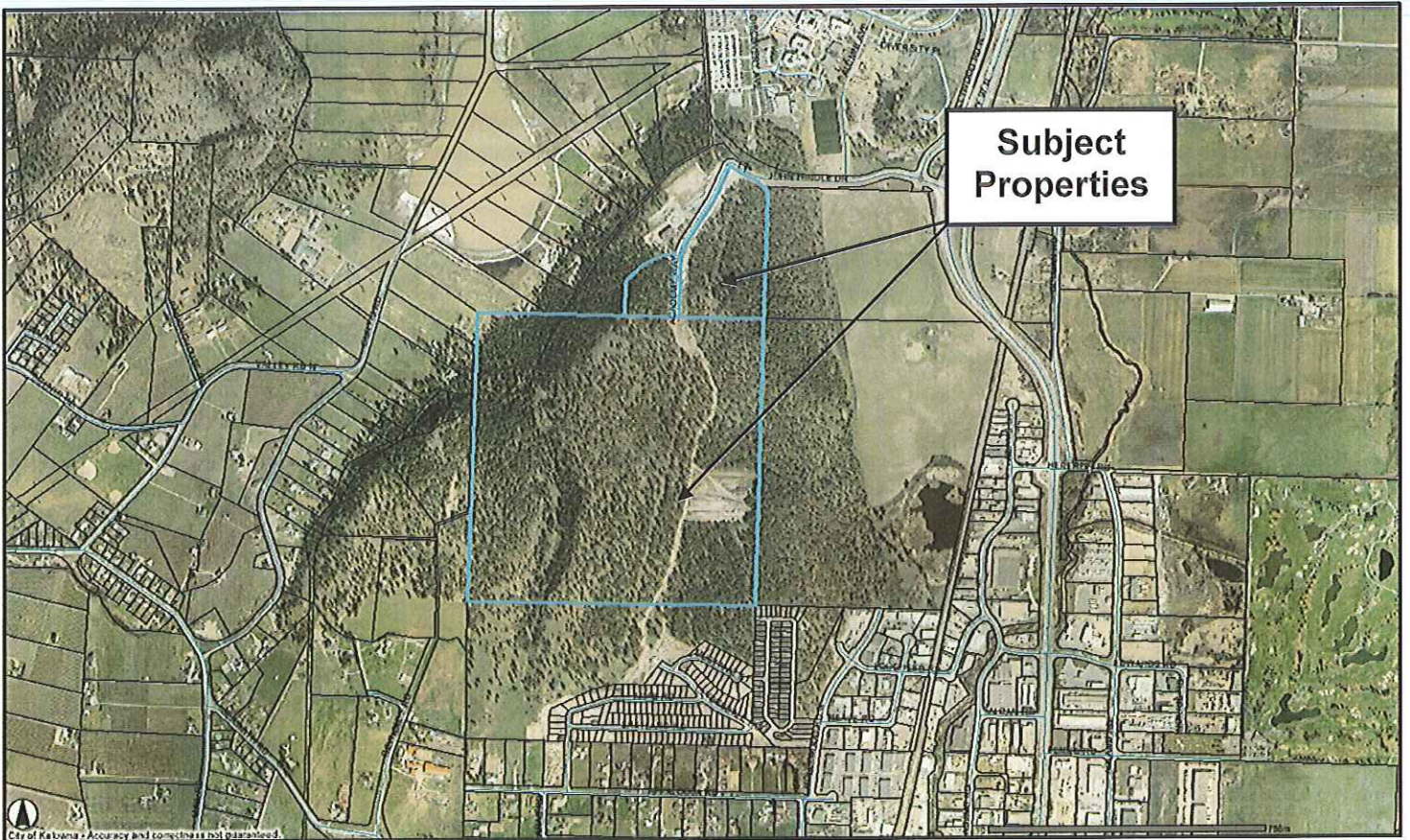
The majority of the projects within the University South development area will be by different developers through separate detailed Development Permits phased over time. Therefore, the objective of the broad DP is to provide the community and developers with certainty regarding the main objectives and principles such as land use, density, design guidelines and community amenities while also allowing flexibility that will permit viable, innovative development proposals. The design guidelines are meant to synthesize physical site assessments, public consultation, and relationships to existing and anticipated land uses. The guidelines will help to ensure that both the private and public realms offer high quality open and green space and will help execute the vision for the University Village Master Plan. They will also establish a unifying architectural theme to ensure a comprehensive and consistent design approach will provide continuity and cohesiveness throughout the site.

4.0 Proposal

Site Context

The subject property is located just south of UBC Okanagan in an area known as University South. The adjacent land uses are as follows:

<i>Direction</i>	<i>Zoning Designation</i>	<i>Land Use</i>
North	P2 - Educational & Minor Institutional	UBC Okanagan
East	A1 - Agriculture 1 RU5 - Bareland Strata Housing	Agriculture / Vacant Residential
South	RU2s - Medium Lot Housing with Secondary Suite A1 - Agriculture 1	Residential Residential
West	A1 - Agriculture 1	Agriculture



Project Description

The overarching Form and Character Development Permit for Phase I of the University Village Master Plan is under consideration. These overarching planning and design principles and additional landscaping, open space and architectural guidelines have been provided to ensure that development proceeds in a cohesive manner as the property will be subdivided and sold to a number of developers. Once the parent parcels have been subdivided and rezoned, a Form and Character Development Permit will be required for each phase of the development process.

5.0 City of Kelowna Official Community Plan (2030)

5.1 Urban Design Development Permit Areas (Chapter 14) - Comprehensive Design Guidelines

Objectives

- Convey a strong sense of authenticity through urban design that is distinctive for Kelowna;
- Promote a high urban design standard and quality of construction for future development that is coordinated with existing structures;
- Integrate new development with existing site conditions and preserve the character amenities of the surrounding area;
- Promote interesting, pedestrian friendly streetscape design and pedestrian linkages;
- Provide for a scale and massing of commercial buildings that promotes a safe, enjoyable living, pedestrian, working, shopping and service experience;

- Incorporate architectural features and detailing of buildings and landscapes that define an area's character;
- Promote alternative transportation with enhanced streetscapes and multimodal linkages;
- Highlight the significance of community institutional and heritage buildings; and
- Protect and restore the urban ecology (i.e. architectural and site consideration with respect to the ecological impact on urban design).
- Moderate urban water demand in the City so that adequate water supply is reserved for agriculture and for natural ecosystem processes.
- Reduce outdoor water use in new or renovated landscape areas in the City by a target of 30%, when compared to 2007.

Guidelines

Authenticity and regional expression

- Incorporate landscaping and building form and character that is distinct to Kelowna and the Central Okanagan and conveys a sense of authenticity;
- Incorporate forms and images that relate to the region's natural and cultural landscapes (e.g. incorporate winery or orchard inspired trellises or rooflines that reflect those found on barns and older homes located on/around agricultural lands);
- Respond architecturally to summer sun with buildings that have overhangs and recesses of sufficient depth to provide comfort and shade;
- Incorporate materials that relate to the character of the region and the context of the surrounding neighbourhood;
- Use colours found in the region's natural and cultural landscape;
- Provide generous outdoor spaces, including rooftops, balconies, patios and courtyards, to allow residents to benefit from the favourable Okanagan weather;
- Incorporate techniques and treatments that emphasize the transition between inside and outside (e.g. operable windows, overhead rolling doors, canopies, trellises, recessed entrances, and extended building planes).

Context

- Emulate desirable form and character of nearby buildings;
- Address phasing when the area is designated for more intensive development and the development proposes to deviate from existing form and character (e.g. blank firewalls should be adequately detailed to provide visual interest in the interim);
- Design new multi-storey buildings to transition in height where the OCP land use designation provides for smaller structures on adjoining lots;
- Align architectural features (e.g. window rhythm, cornice lines) to create visual continuity with neighbouring buildings;
- Respect and enhance the original character of an existing building when modifying its exterior;
- Allow eclecticism within the streetscape as long as buildings do not visually dominate neighbouring buildings;
- Design developments with multiple buildings such that there is a sense of architectural unity or cohesiveness.

Relationship to the street

- Locate buildings to provide an effective street edge while respecting the established, desired streetscape rhythm;

- Develop visual and physical connections between the public street and private buildings (e.g. patios and spill-out activity, views to and from active interior spaces, awnings and canopies);
- Avoid split level, raised or sunken parkade entrances;
- Design buildings with multiple street frontages to give equal emphasis to each frontage with respect to building massing, materials, details, and landscaping.

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.
 - 4.2 Ensure developments are sensitive to and compatible with the massing of the established and/or future streetscape;
- Design developments with multiple, separate buildings such that individual buildings are of different but compatible shapes, masses, and exterior finishes;
- Utilize landscaping treatments to further soften the mass of building form (e.g. strategic placement of trees, shades and vines, trellis and arbours, along with surface materials such as pavers);
- Design with consideration for the effect of building height on shading and views.

Human Scale

- Design for human scale and visual interest in all building elevations. This can be achieved principally by giving emphasis to doors and windows and other signs of human habitation relative to walls and building structure;
- Articulate facades by means of indentations and projections of elements (e.g. windows and doors, cornice lines, pilasters, balconies, and other detailing);
- Distinguish key building elements through the use of setbacks, projections, textures, materials, and detailing:
- Base: Within the first few storeys, a base should be clearly defined and positively contribute to the quality of the pedestrian environment;
- Middle: The body of the building above the base should contribute to, but not dominate, the physical and visual quality of the overall streetscape;
- Top: The roof should be distinguished from the rest of the building and designed to contribute to the visual quality of the skyline;
- Design building facades with a balance of vertical and horizontal proportions (e.g. vertical elements at regular intervals to strengthen the pedestrian-scale of otherwise horizontal buildings);
- Incorporate windows with vertical proportions. Horizontal glazed areas should be divided into vertically proportioned windows separated by mullions or building structure;
- Incorporate roof overhangs, and the use of awnings, louvers, canopies and other window screening techniques;

- Incorporate windows within enclosed stairwells to exhibit human scale, reduce their visual bulk, and enhance safety;
- Reduce the visual impact and massing of enclosed elevator shafts with architectural treatments.

Exterior elevations and materials

- Exterior building materials should be selected for their functional and aesthetic quality, and should exhibit qualities of workmanship, durability, longevity and ease of maintenance;
- Provide visually prominent, accessible, and recognizable entrances through attention to location, details, proportions, materials, and lighting that act to personalize or lend identity to a building;
- Continue higher quality materials used on the principal façade around any building corner or edge which is visible to the public;
- Use materials in combination to create contrast, enhance human scale, and reduce the apparent bulk of a building;
- Colour should not be used as the predominant feature of a building.

Public and private open space

- Design varied and interesting public open space to promote social interaction, ensure continuity of pedestrian movement through the site, and accommodate a range of uses and activities year-round;
- Orient public and private open spaces to take advantage of sunlight with the provision of shade and protection from wind and other climatic elements (design for microclimate);
- Provide an appropriate transition between public and private open space (e.g. landscaping, gathering places, architectural elements, varied building line) and orient building elements such as entrances, lobbies, windows, and balconies to face public parks, plazas and open spaces;
- Provide amenities such as benches, garbage receptacles, bicycle stands, bollards, and community notice boards;
- Design industrial developments to include outdoor break areas, green space, bicycle racks, skylights and windows in work areas, and linkages to recreational opportunities (e.g. linear parks).

Pedestrian access, provision for cyclists, circulation, vehicles and loading

- Prioritize the safe and convenient movement of pedestrians above all other modes of transportation;
- Promote the use of alternative modes of transportation in site design (e.g. prominent bicycle racks for convenience and security, orient building entrances to pedestrian areas);
- Provide public access through sites to maintain or enhance the pattern of active transportation within the neighbourhood (e.g. mid-block crossings);
- Provide an identifiable and well-lit pathway to the front entrance of every building from all adjoining public sidewalks and all on-site parking areas;
- Ensure pedestrian circulation is convenient, safe, and clearly identifiable to drivers and pedestrians;
- Design vehicular drop-off/pick-up areas so that pedestrians have priority;
- Provide paved surfaces with visual interest (e.g. eliminate curbs and/or use bollards, stamped concrete, unit pavers, etc.);
- Locate parking areas to the rear of buildings, internal to the building, or below grade;
- Avoid large expanses of parking;

- Ensure vehicular and service access has minimal impact on the streetscape;
- Do not terminate public street views with garage doors and vehicle accesses;
- Incorporate visible and secure bicycle parking in a priority location with the construction of all new parkades and parking lots;
- Parking lots should have shade trees planted at 1 tree per 4 parking stalls.

Environmental design and green building

- Minimize the impacts of adverse weather on buildings and the streetlevel microclimate (e.g. excessive heat, cold and wind);
- Minimize solar gain through building orientation and façade elements and/or utilize measures to capitalize on solar exposure (e.g. passive solar water heating, solar mass wall, passive solar heating of intake air);
- Include green walls and trees that provide effective, generous shade;
- Minimize exposure to noise and pollution, especially for those projects located along busy roads (e.g. triple-pane glazing, orient courtyards, playgrounds, open spaces, and building air intakes away from the road);
- Reduce the amount of storm water that leaves the site through the sewer (e.g. cistern and gray water systems, permeable paving, bio-swales, green roofs, retention ponds and other landscape techniques);
- Utilize sustainable construction methods and materials, including the reuse, rehabilitation, restoration, and recycling of buildings and/or building elements;
- Indicate measures taken to enhance building performance and consider designing new buildings to a green building standard (e.g. LEED);
- Incorporate other green building strategies that enhance building and occupant performance, such as:
 - Green energy supply (e.g. wind, solar PV);
 - Reduced energy consumption for HVAC and building systems;
 - Solar oriented design;
 - Green roofs;
 - Improved indoor air quality;
 - Reduced water consumption;
 - Mitigation of heat-island effects.

Decks, balconies, rooftops, and common outdoor amenity space

- Incorporate decks, balconies and common outdoor amenity spaces into developments;
- Provide elements such as constructed planters, gazebos, trellises, pergolas and other forms of hard and soft landscaping, including opportunities for urban agriculture, to enhance the usability of decks, balconies, and outdoor amenity spaces;
- Integrate vents, mechanical rooms and equipment, and elevator penthouses with the architectural treatment of the roof, and/or screen these elements with materials and finishes compatible with the building's design;
- Enhance large, flat expanses of roof (whether actively used or not) with texture, colour, and/or landscaping.

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).

Landscape Development and Irrigation Water Conservation

- Incorporate landscaping that:
 - Compliments and softens the architectural features and edges of buildings;
 - Considers the context of surrounding properties where there is a dominant pattern along the street (i.e., provide street trees and landscaping consistent with the established or emerging standards on the street or adjacent neighbourhood);
 - Enhances the pedestrian experience (e.g. aesthetics, relief from weather);
 - Adds texture and three dimensional components to the site (e.g. vegetated canopy);
 - Helps screen parking areas, mechanical functions, and garbage and recycling areas;
 - Respects required sightlines from roadways and enhances public views;
 - Contributes towards a sense of personal safety and security;
 - Retains existing healthy, mature trees and vegetation (including those with special character or historical and cultural significance);
 - Utilizes native plants that are drought tolerant;
 - Mitigates undesirable architectural elements (e.g. blank walls can be covered with trellis and trained with vines);
 - Defines distinct private outdoor space for all ground-level dwellings.
- Provide fences and retaining walls with visual interest (e.g. high quality fencing, stone or rock walls) and human scale (e.g. punctuate at regular intervals with vertical elements such as piers or landscaping);
- Provide opportunities for urban agriculture in all development;
- Provide 1 shade tree per 4 parking stalls on new surface parking lots;

Universal accessible design

- Design to a high standard of accessible and adaptable design with the goal of accommodating the functional needs of all individuals including children, adults, and seniors, and those with visual, mobility or cognitive challenges;

Lighting

- Design lighting to enhance public safety (see City of Kelowna Crime Prevention Through Environmental Design Guidelines) and not to draw attention to a development;
- Ensure that “light trespass” onto adjacent residential areas is minimized;
- Consider lighting a key element in façade design and plan early for it, with consideration to the effect on the façade and on neighbouring buildings and open spaces;
- Provide pathway lighting at a human scale (e.g. light standards of appropriate height for pedestrians). Pedestrian lights should address pedestrian safety, be vandal proof and easy/inexpensive to maintain;
- Provide exterior street lighting that follows the International Dark Sky Model code in order to limit light pollution and save energy.

Signs

- Integrate signage that contributes to the overall quality and unique character of a development (e.g. coordinate proportion, materials, and colour);
- Do not compromise the scale and visual qualities of a building with the size and number of signs;
- Locate, size, and format signs such that they can be easily read by pedestrians.

6.0 Application Chronology

Date of Application Received: November 17th, 2009

Advisory Planning Commission August 3rd, 2010

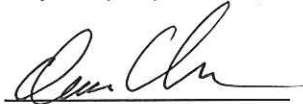
The proposed development was reviewed by the Advisory Planning Commission at the meeting on August 3rd, 2010 and the following recommendations were passed:

THAT the Advisory Planning Commission support Development Permit Application No. DP10-0107 for 800 Academy Way; N or Arab Road for the development's overarching planning and design principles and additional landscaping, open space and architectural guidelines for Phase I of the University Village Master Plan.

APC/ANEC DOTAL COMMENT:

The Advisory Planning Commission supports the Development Permit Application, however, there should be an attempt to lessen the visual impact of the upper Knoll and to try and retain forest cover with this highest residential Knoll.

Report prepared by:



Alec Warrender, Urban Land Use Planner

Reviewed by:



Danielle Noble Manager, Urban Land Use Management

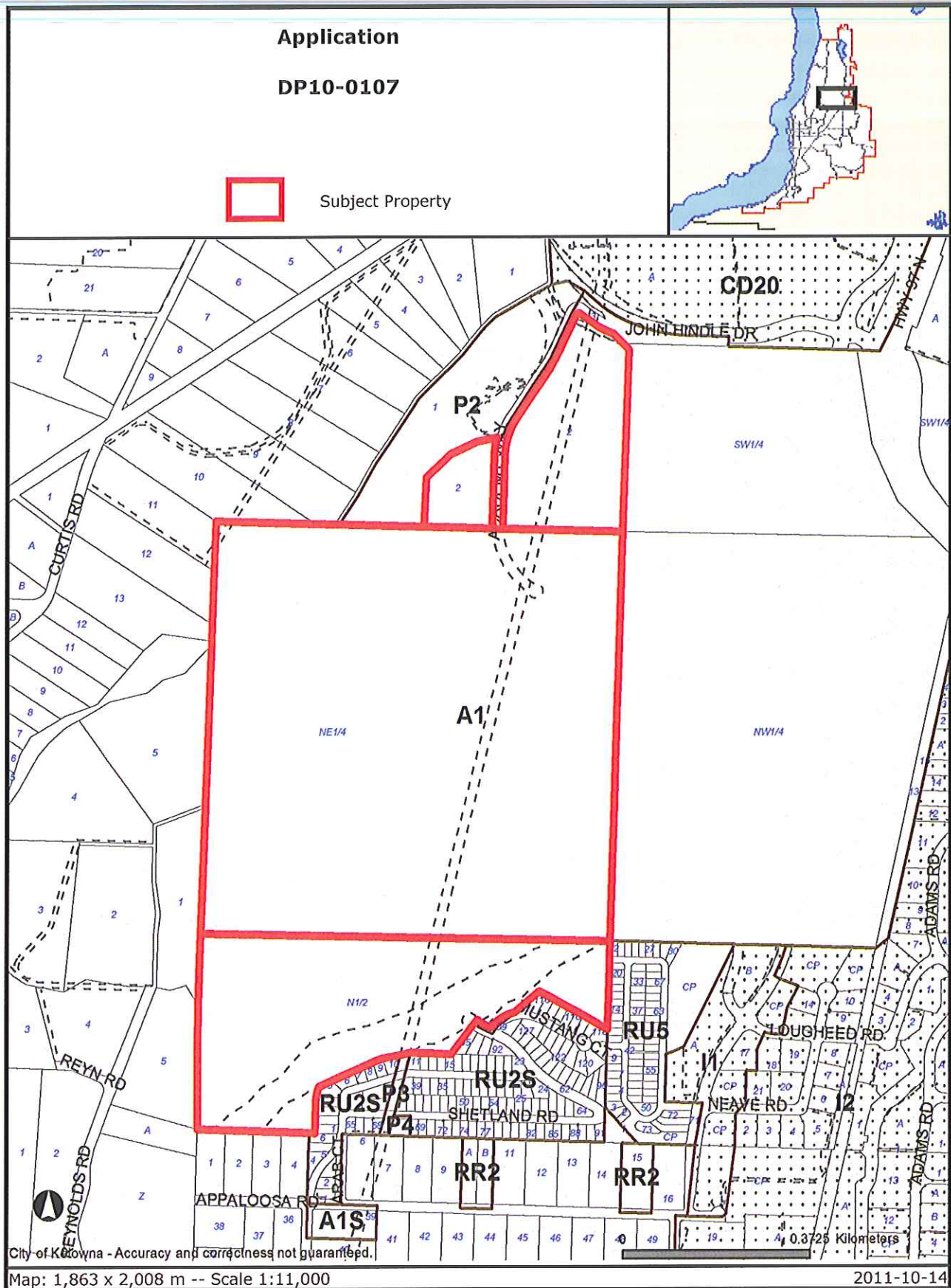
Approved for Inclusion:



Shelley Gambacort, Director, Land Use Management

Attachments:

Subject Property Map
Design Guidelines



Certain layers such as lots, zoning and dp areas are updated bi-weekly. This map is for general information only.
The City of Kelowna does not guarantee its accuracy. All information should be verified.

UNIVERSITY VILLAGE MASTER PLAN

DESIGN GUIDELINES FOR PHASE 1

SCHEDULE A
This forms part of development
Permit # DP10-0107



1 Overview

1.1

University Village has been conceived by Watermark Developments Ltd. of Kelowna, BC. Located immediately southwest of the University of BC-Okanagan (UBCO) campus, it will be the most proximate neighbourhood to the university and likely the only nearby residential area to service UBCO for the immediate future. The Village forms an integral part of the University South Area that will eventually become an entire new development sector of the City.



University Village has been planned and designed on the premise that although not located directly on UBCO lands, it will form an integral part of the campus community. The vision incorporated a symbiotic relationship between the growing institutional precinct and the Village by offering residential homes, commercial services, public and private schools and parks that university students, staff, local residents and visitors can

*all enjoy. The physical proximity to the university and the site terrain facilitates pedestrian movement, cycling and enhanced mobility between the Village and campus, and throughout the Village. Furthermore, the *University Village* calls for relatively high residential density with a concentration of apartment style condominiums that will support close to 2,000 people with a diverse demographic cross section. The Village character will be further enhanced by commercial retail and offices to add life to the streets and a true complete community lifestyle.*

University Village will consist of approximately 700-950 residential units (depending on type of home/unit size), approximately 35,000 square feet of commercial, (retail and office), a private school, a public elementary school, parks, open space/trails network, community gardens and a wildlife corridor. This higher density residential area will be complemented by new single family residential and townhouse neighbourhoods in the future ("University Heights"). The Village itself will be composed of three or four "mini-neighbourhoods" with three and four storey apartment and townhouse buildings integrated with commercial in two prime locations. The commercial retail is planned to service university users and visitors as well as local residents.



The entire Village precinct will be accessed by a new North-South Collector road named Academy Way. Clusters of eight blocks of buildings (3 to 4 each) will be oriented to maximize views and protect the integrity of the landscape along this roadway. The streetscape of Academy Way will be enhanced by creating significant median and boulevard treatment made possible by the Gas Line relocation along the road right-of-way. This streetscape will contain walking and cycling trails as well as create gateways into each of the residential neighbourhoods via laneways and small local roads.



The entire *University Village* promotes a sustainable philosophy that captures the developer's goals, reflects market values and desires, and the association with an academic institution (UBCO) that caters to a young professional population that demands a sustainable lifestyle. Sustainable

and environmentally conscious features will be incorporated wherever feasible, be they in building design, public places, transportation, streets, trails and infrastructure. Furthermore, the Village can support a cross-section of housing type allowing for a mix of resident ages and lifestyle. This lifestyle can be further complemented by ease of a work-live environment, incubator spaces for entrepreneurs, commercial spaces for artisans, research and development offices and other opportunities.

This MASTER PLAN provides a comprehensive vision for development of *University Village* and a concise plan for how various components are expected to unfold to ensure the vision is respected for the long term. Besides this overview, the Master Plan addresses the following: Strategic Location of the Village; Planning and Design Principles;



**WATERMARK
DEVELOPMENTS**

*UNIVERSITY VILLAGE
Master Plan*

Sustainability Features; the Land Use Concept and Zoning Scheme; Transportation and Mobility; Parks, Trails and Open Space Plan; Architectural Guidelines; Landscape Guidelines; Servicing and Utilities; and Implementation.

The Master Plan has been prepared by CTQ Consultants Ltd. (Engineering, Planning and Urban Design) with specialist input and advisory services from Meiklejohn Architects, Versa Design Group and Holland Barrs.

3 Planning and Design Principles

This section describes a series of community planning and design principles that have set the tone for the Village. These principles will be encouraged through every phase and area of the Village to ensure the overall goal of achieving the intended character is achieved.

3.1 Village Character

The “Village” character in this development concept has envisioned the following important attributes:

- Compact neighbourhood form – efficient use of lands;
- A medium density residential housing style – Townhouse and apartment condominiums up to four stories in height will prevail;
- Ability to walk or cycle to convenience commercial, school and University or work – Sidewalks, grand boulevard, trails, parks and open space along with cycling path network will facilitate non-vehicle movement throughout the Village and between the Village and the University Campus;
- Entire Village works as a cohesive whole – Residential component will be complemented by schools, convenience commercial, coffee shops, office and recreational and passive park space, all with convenient connections;
- Mixture and clustered uses – Residential uses will be mixed with commercial activity in two key locations, and wherever commercial retail and office space is located, opportunities for higher density clusters should be accommodated to encourage a collegiate lifestyle and enhanced mobility;
- Pedestrian friendly – Only one main road permeates the Village allowing for unobstructed pedestrian access to sidewalks, trails and cycle paths from homes on either side of the road;



- Public places – Gathering spots for people will be accommodated with parks, squares and plazas immediately adjacent to commercial uses, allowing for neighbourhood gatherings, students, faculty and resident socializing, and play and recreation in and outside of schools.

3.2 Housing

It is the expressed intent of the *University Village Plan* to contain a mixture of residential unit types and sizes, largely within multi-family residential apartment and row or stacked townhouse complexes. The goal is to achieve the following:

- Small (market entry level) units for young families, and students, faculty or staff affiliated with the University;
- Larger units with associated amenities that will cater to more discerning buyers;
- Housing for a mix of age demographics;
- Flexible space that can be used by owners as living space, or rented out as office, studio or storefront in some cases and locations;
- Residential Units above the businesses (commercial space) near the university and in the upper knoll;
- Associate the smaller, more affordable housing stock on the north slope, close to the university campus;
- Allow for larger town house and apartment units on the south slope;
- Encourage a mixture of unit sizes on the upper knoll.
- Single Family residential opportunities will be located in the nearby future “University Heights” neighbourhood.

3.3 A Sustainable Neighbourhood

Every opportunity will be taken to incorporate sustainable features into *University Village*. The Master Plan calls for reflecting the City of Kelowna’s Sustainability Checklist and the key pillars of a sustainable community:

- Mixed Use and compact Community with a diversity of choice in medium density housing, commercial and schools;



- Low impact transportation system to provide as many alternatives to the automobile as possible;
- Multi-tasked open space to accommodate both community and ecological needs, including environmental preservation, ecologically driven design, recreation and opportunities to grow food;
- Inclusion of food supply through incorporating a food store, restaurant, on-site food production, and markets/festival areas so that residents do not have to drive for basic shopping and eating;
- A village with homes and shopping for the university students, staff and users;
- Job opportunities in commercial and offices, and potentially linked to the university;
- Integration with natural green space and revegetation where feasible;
- Water efficient landscaping and site design;
- Green building architecture, where feasible.

Watermark Developments is committed to increasing the sustainability performance of this neighborhood above that of conventional development in Kelowna. By doing so, it intends to not only increase the performance of itself as a neighbourhood, but also that of the larger community, which includes UBC Okanagan.

Using this framework of pillars of a sustainable community, a wide range of sustainable development directions can be promoted, and thereby respond to the distinct leadership that the City of Kelowna is showing in promoting more sustainable development.

3.4 Retail and Office

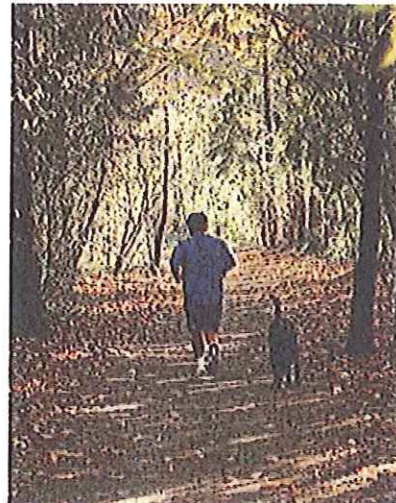
A small commercial retail and office component is included in the village with the expressed intent to achieve the following:

- Supply convenience grocery needs to UBCO, the village and ultimately residents of the entire *University South Sector*;
- Minimize need to drive any distance for food supply;
- Provide job opportunities;
- Create a lifestyle that embodies opportunities for residents to socialize throughout the day;
- Provide linkages and support to the UBCO regarding office space, studios, R&D facilities;
- Provide boutique service and retail businesses;
- Enhance the mixed use community character.

3.5 Roads and Mobility

In keeping with the village character, mobility will be oriented to pedestrian and bicycle facilities and minimize impact of the automobile.

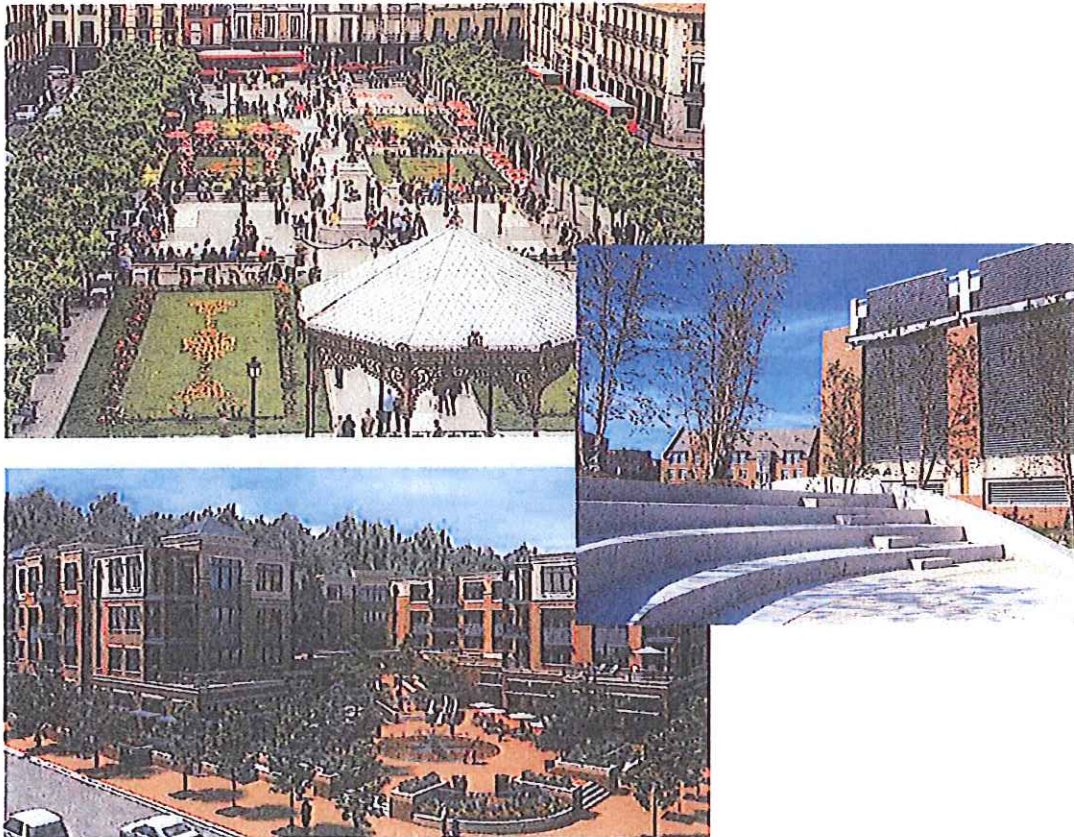
- Only one major road (Academy Way) will service the Village;
- One strata road or lane (driveway) will provide access to each residential parcel;
- Pedestrian links to the UBCO campus will be via sidewalks, the grand boulevard and trails (including along the BC Gas R/W);
- A pedestrian bridge may be considered to allow for movement between UBCO Campus and the Village; (Partnership with UBCO would be required);
- Bicycle paths will be dedicated along the main road boulevard and connecting all building sites;
- Parking will be focused to understructure or structured facilities to avoid extensive surface parking lots;
- Laneways/strata roads will be sensitive to the hillside environment;
- The trails will be integrated with the Kelowna Trail System including the Flume Walkway;
- Transit stops will be conveniently located to the service the Village and the University users.



3.6 Plazas and courtyards

In keeping with the village character, plazas and courtyards are encouraged in both private and public realms.

- Areas near commercial outlets where coffee shops or restaurants can have outdoor seating;
- Areas devoted to outdoor rest and socializing near offices;
- Outdoor Courtyards within complexes where BBQs, festivities, amenities can be contained;
- Spaces to place public art;
- A major plaza square on the upper knoll for residents' events, relaxation and contemplation;
- Safe and secure public spaces in keeping with CPTED principles of urban design.



3.7 Parks, Open Space and Trails

A key principle of the Master Plan is to feature a relatively compact and densely populated neighbourhood that has easy and immediate access to parks, trails and open space/natural areas. These areas and facilities will encourage outdoor recreation and exercise, hiking, cycling, nature walks, and socializing, while protecting important natural landscape features and wildlife areas. Developing on a hillside also must respect the value of views (from the valley floor and from the site).



- A web of green will surround the building sites;
- Three parks (a major community park and neighbourhood parks) will provide active and passive recreation opportunities within the Village and in nearby University Heights;
- A trail system will be integrated throughout the village;
- A wildlife corridor will run through the site, with connections to major open space systems and the neighbourhood park;
- Students from the public and private schools as well as UBCO will have easy access to the parks and trails;
- A viewpoint park strategically located in the upper reaches of the neighborhood accessible from the Village and through nearby University Heights.

Note: It is expected that a significant amount (upwards of 80%) of the forest will be lost to pine beetle kill. Some forest restoration/naturalization will be undertaken to protect the integrity of the site.



3.8 Design

The overall urban design of *University Village* is predicated on the following principles:

- **Three key design themes for the building architecture**

Architectural design control on all multi-family residential development will respect the fact that there are three different aspects of the Village: the north slope near the University; the upper Knoll; and the south slope towards University Heights. The North Slope constitutes an area that will cater to buyers wanting smaller and less expensive (includes rental) units, especially related to the academic and student population. Buildings will take on a “funkier” design character that permits creative opportunities to relate to a younger demographic group. Mixed use buildings will further promote a design language that is in fitting with a “Village” concept; for example residential and small offices above or associated with, retail at ground level. The design of the mixed use buildings should also permit flexibility in the internal uses, e.g. residential units could ultimately be switched to commercial retail, small office or live/work units.

The upper knoll will accommodate the highest residential densities with a small amount of commercial space included in mixed use buildings. This area will respond to another market segment that can have choices in residential unit sizes but still in a “Village” setting, with commanding views and in a location of prominence on the hilltop. The design theme in this area will differ somewhat from the north slope, but common elements will find their way throughout both areas.

The south slope area design theme will relate to the University Heights neighbourhood and consequently take on a more contemporary architectural character. Adjacent *townhouse developments* proposed for the lower University Heights neighbourhood will also influence design. The south slope area will cater to a more discerning buyer.

All of the three areas in the Village will contain some common architectural design elements to “tie” the Village together. (See Section 9 of the Master Plan)

- **Sustainable Architecture**

All builders are encouraged to include green architecture features, from how the building is located on the site to heating and cooling systems to the built form. Although LEED accreditation is NOT mandatory, every effort should be made to include features of quality design and sustainability planning. Builders are encouraged to retain architects/designers and engineers that are qualified in LEED accredited design and construction of the building and all systems associated with the building (e.g. heating, ventilating, power smart, HVAC, etc.).

- **Xeriscape/Landscaping**

The site of *University Village* is located on a very dry, sparsely forested knoll with a mixture of small caliper firs and pine trees and associated grasslands. Furthermore, Pine Beetle kill is evident on this site as it has been in other areas of the city. Any irrigation water will be efficiently integrated. Xeriscape/natural landscape/native gardening, which is the use of indigenous plants/trees of our geographic area, is required in the place of groomed lawns and planted flower beds. Every opportunity should be used to blend new residential and commercial properties into the natural surroundings of the site area.

Academy Way is the formal tree lined gateway to *University Village* from the north, and the featured campus entry to UBCO from the south.

The concept envisions uniformly placed elm trees in centre boulevards and medians framing the street.

- **Four /Five Storey Maximum**

The building height and density will be mainly driven by current (2009) Zoning that will permit heights up to four (4) stories (16.5 Meters) with understructure parking. Considering the possibility of imminent changes to the BC Building Code, it is likely that 5 and 6 stories will soon be permitted. Some areas of the Village may lend themselves to these higher profile buildings in later stages of development. The maximum height of any structures at the Village will be subject to Transport Canada (Canadian Aviation) regulations, due to the proximity to Kelowna International Airport. The current regulations indicate that 30 meters is the permitted height, so six (6) stories is achievable. *City of Kelowna approvals would be required for changes to the RM5 or C3 Zones if more than four stories becomes the objective. (Transport Canada must provide ultimate approvals.)*

- **Flex Space Buildings**

Two Commercial areas (C3 Zone) will accommodate a mixture of residential and commercial uses. It is further expected that flexibility of uses in some of the buildings will be supported as demand and market requirements dictate. Buildings should be designed accordingly to allow for this dynamic setting and character within two of the key precincts of the Village: *Campus Gateway Centre* and *Hilltop Village Centre*. This implies that residential units can be changed into boutique shops, offices or live/work studios. Variance of the Zoning Bylaw Regulations (Section 14.3.6, Bylaw No. 8000) may be required but the City of Kelowna appreciates the need for such an approach to achieve this dynamic environment. (NOTE: City of Kelowna will require that commercial space be designed for commercial uses, even though initial uses may be “residential”.)



- ***Hilltop Village Centre***

Hilltop Village Centre is expected to accommodate four large condominium apartments with an associated “commons” or square/plaza within the centre and at one of the highest points in the Village.

The *Hilltop Village* plaza concept envisions a series of urban public amenity spaces integrated with a back drop remnant of the existing knoll feature which will replicate the natural Okanagan landscape. The small rock knoll will be cut down to the same grade as the proposed roadway.

- **Parking Structures**

All multiple family residential and mixed use buildings will contain understructure (beneath habitable or commercial space) in keeping with zoning requirements. Parking structures should be screened from views/wrapped by other uses, and entrances must be located to avoid pedestrian-vehicle conflicts.

Surface parking lots where permitted by the zoning must respect general pedestrian oriented design and be located adjacent to or in close enough proximity to the principal buildings/uses to allow for convenience shopping. Integrating quality landscaping with both visitor and service parking lots is key to the overall design objective. Parking on laneways should be avoided, unless integrated with a surface parking lot serving commercial uses.

- **Gateways/Portals**

University Village will achieve a sense of place through some common design of gateways and entrances along Academy Way. Primary entrances will be at both the south end near the Central Okanagan Bypass (COMMC) and at the north end near the university. Secondary entrances should be at each entry or portal to the residential or commercial lots off of Academy Way. Gateway structures should be constructed of the same material and represent a common design theme throughout the Village, likely reflecting some of the overall character of the buildings. Signage for each development will vary but common scale and appeal is paramount.

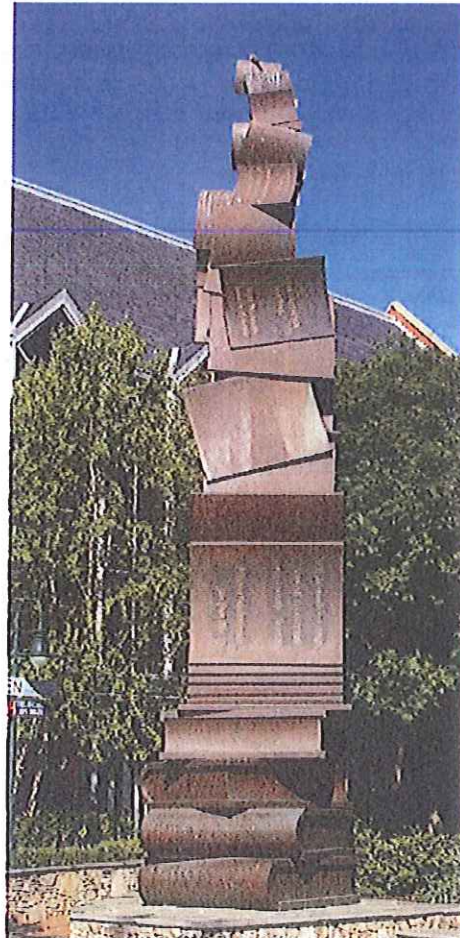
• **Signature Buildings/Structures**

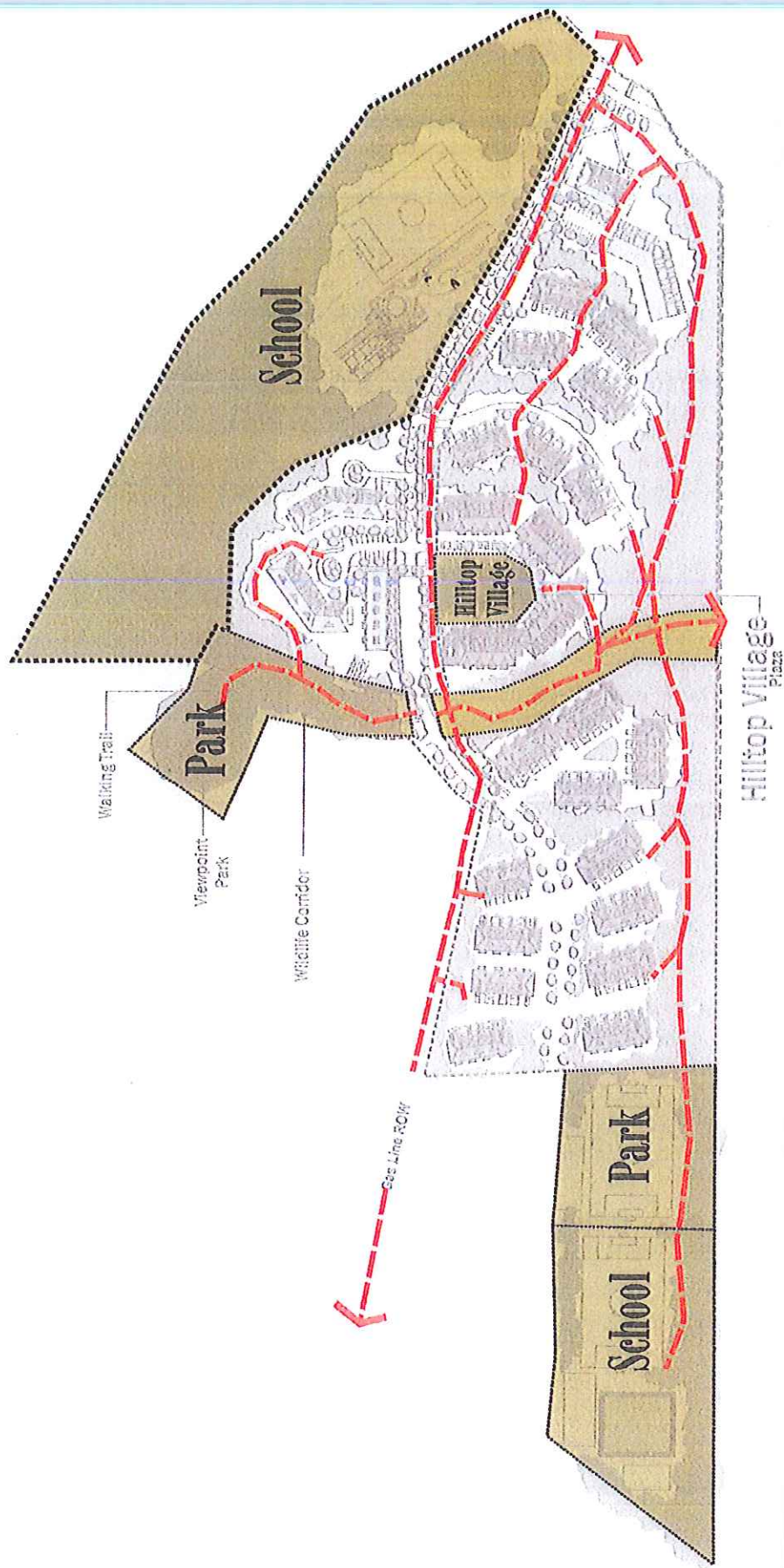
Although development is expected to follow three main design themes/design language, there is certainly latitude for some signature buildings and structures to add to the dynamics and appeal of the Village neighbourhood. Key locations where this opportunity will be promoted are as follows:

- *Campus Gateway* Mixed Use and Commercial Buildings (Galleria type building);
- *Hilltop Village Centre* Mixed Use Buildings;
- The Plaza at the *Hilltop Village Centre* (e.g. clock tower, public art, fountains, seating and gazebos);
- Transit/Bus Stop/Kiosk near the *Hilltop Village Centre*;
- Schools and associated facilities;
- Hilltop Park (Boardwalk, Overlook, Interpretive Kiosk or Plaque).

• **Public Art**

Placement of public art is strongly encouraged in both private and public spaces, including boulevards, parks and squares/plazas. Key locations, amount and design of art works will be in keeping with an overall theme of “Academia”, Learning, Education (the Arts and the Sciences) and direction provided by the City of Kelowna Public Art Program.





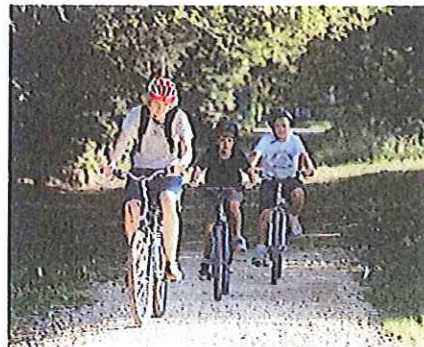
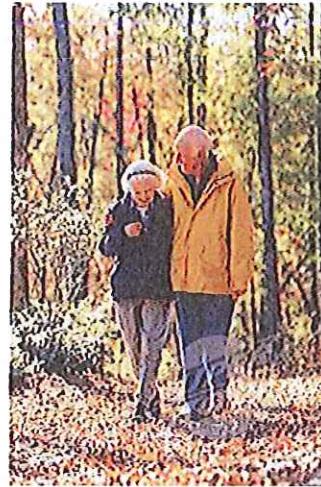


7 Parks, Trails and Open Space

7.1 The Parks Trails and Open Space System

This high density residential and compact village requires a comprehensive network of parks, trails and open space. Each component is integrated with the residential pods and allow for linkages throughout the village and with the UBCO campus. **Figure 10** further defines the system which can also be complemented by onsite features at the two schools (e.g. playfields), plazas, and in each residential cluster. The entire system will include the following:

- A community park to accommodate recreation/play fields.
- A hilltop neighbourhood park to accommodate viewing area and trails.
- A wildlife/linear park to accommodate a walking trail and to allow for wildlife movement through the Village.
- An open space system of protected steep slopes along the eastern perimeter with fingers of natural area projecting into the development nodes; where existing forest cover is deemed to be subject to inundation from beetle kill, naturalization is encouraged.
- Trails that allow for walking paths within the open space system and connections through to the UBCO campus.
- Connections of trails to the sidewalk system and the multi-use path along Academy Way (Gas R/W).
- Sidewalks along the individual residential lanes could further complement the trails system and support the intent of a healthy community lifestyle.
- (The University Heights neighbourhood will also contain a small park).



7.2 Squares and Plazas

Opportunities for a public square or plazas and courtyards may be integrated with both the *Campus Gateway Centre* and the *Hilltop Village Centre*. Although located within the private properties, they are in close proximity to commercial uses where the public can meet. Cafes, outdoor seating, public art, clock towers and small event venues or occasional farmers/vendors markets should at least be considered as candidates for these special places.

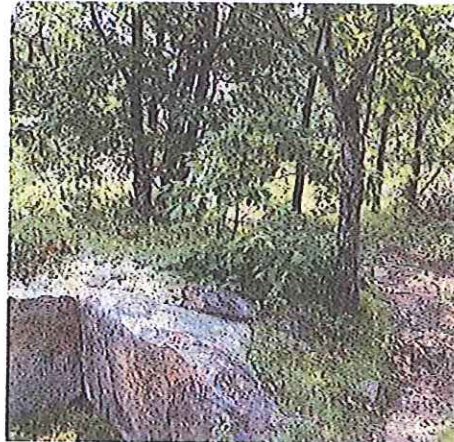
The following describes the main plaza that forms the heart of the *University Village*:

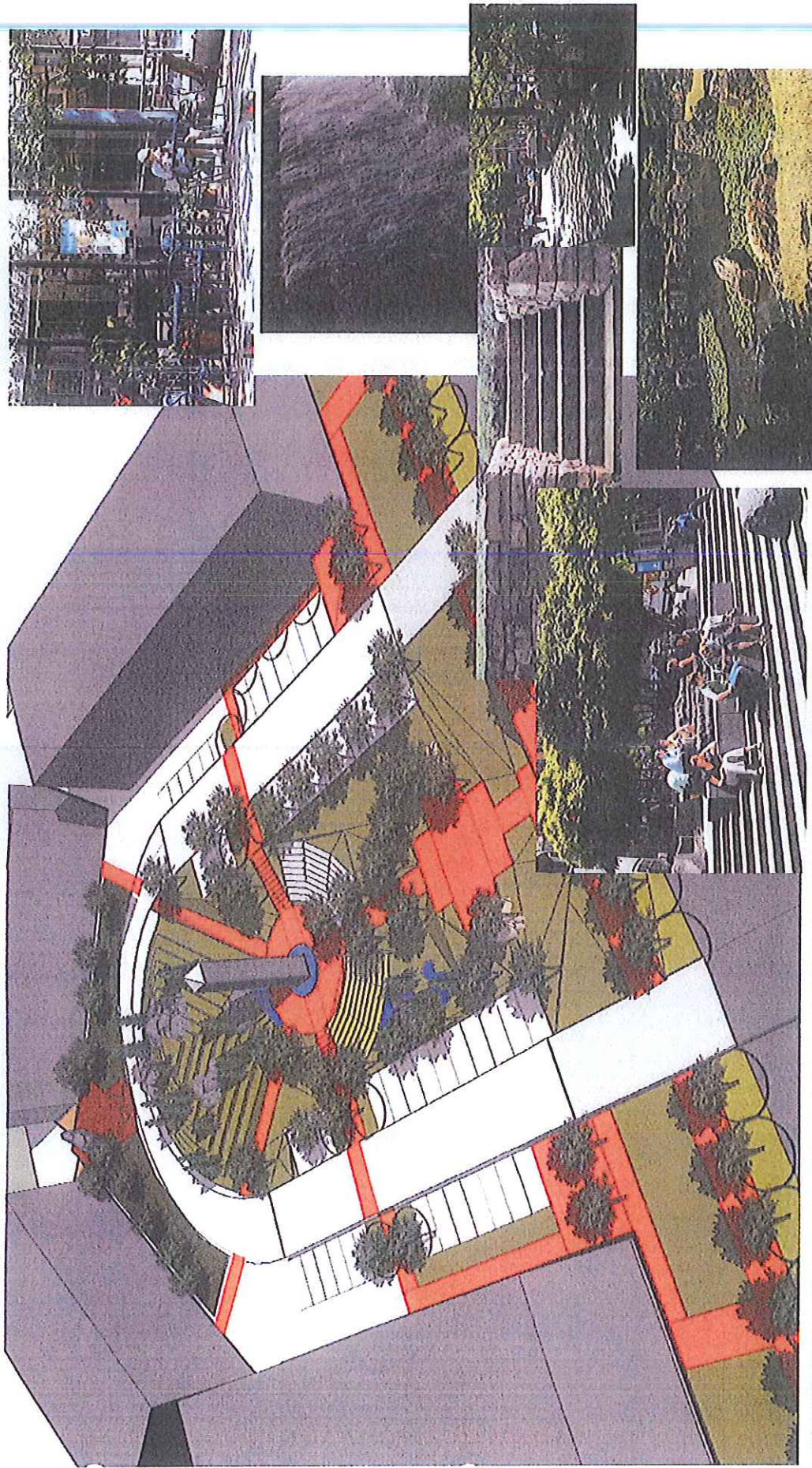
- The Hilltop Village Centre/Plaza

The Hilltop Village area (Lot 9) offers a superb opportunity to have a plaza complement the parks and other public places component of the *University Village*. The Hilltop Village Centre is located at a high point of the village where a series of four buildings will complement and frame a central space that will ultimately contain a plaza in combination with a natural landscaped knoll remnant. The intent is to retain some of the natural terrain feature as a gesture to the existing topography. A building scheme or other means will be used to ensure that the intent of the Master Plan is respected. (See Figure 11)

Key features of the Plaza/Centre Space design include the following:

- The knoll remnant will be replanted with indigenous plant material and will replicate an authentic Okanagan landscape experience.
- Exposed bedrock and/or placement of large boulders will be an integral part of the knoll.





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- The urban plaza is framed by tiered hard surface seating on the north facing slope, focused on the central water feature and a landmark piece of public art/ionic structure.

- The public art or iconic structure should be visible from various locations on campus and adjacent properties; a clock tower has been suggested but the architecture or art work must set the tone for a quality development at the Hilltop location and for the entire Village.



- Stairs and walkways will radiate from the landmark piece and reinforce its prominence and importance as a focal feature of the Centre Space and Hilltop Village Centre.



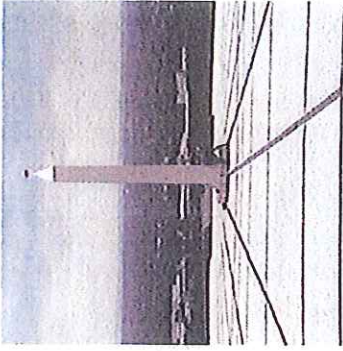
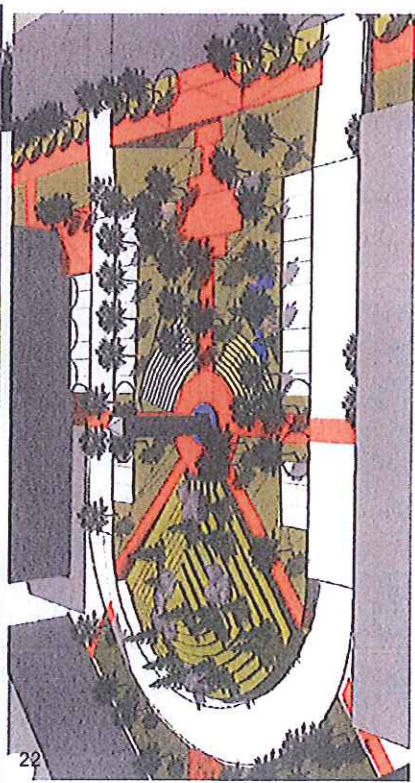
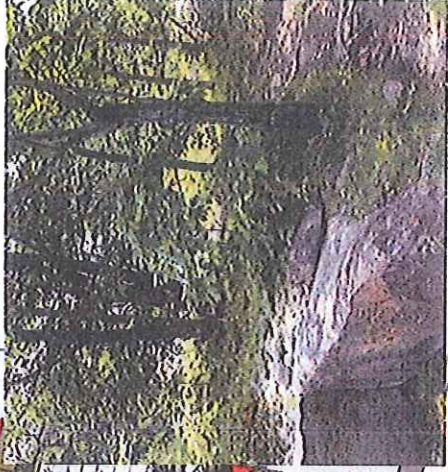
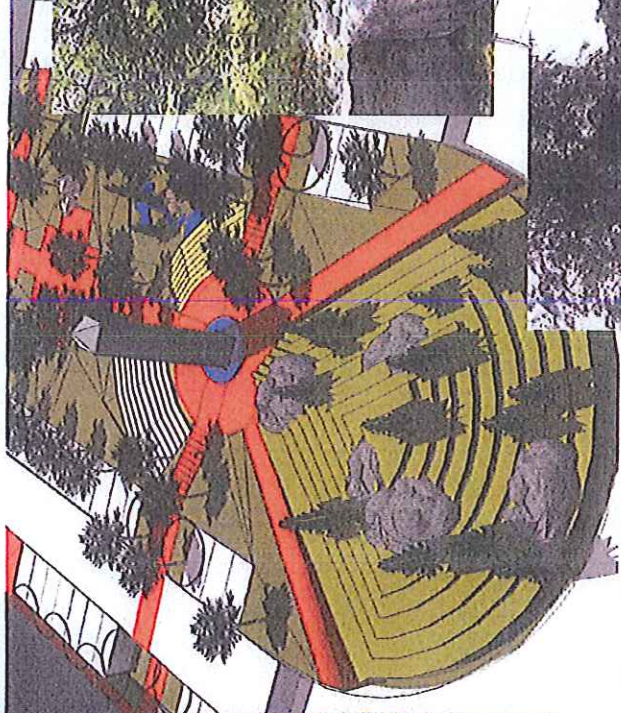
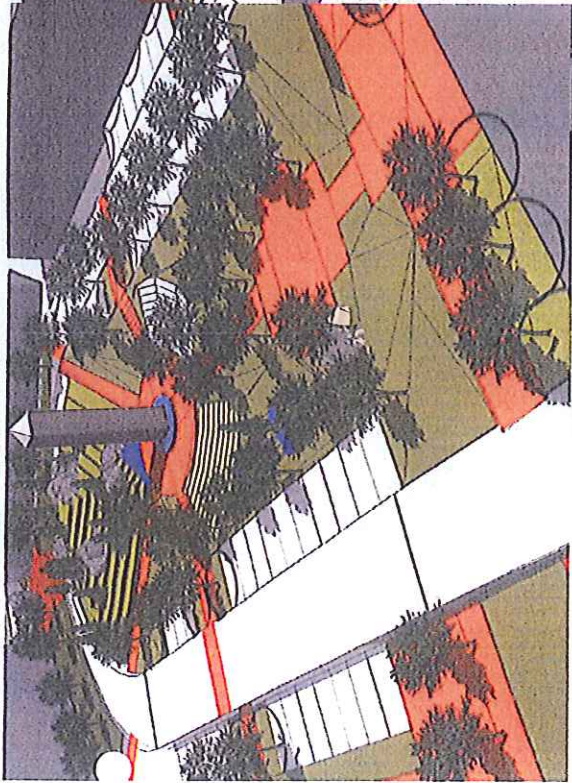
- Adjoining the plaza is another tier of seating, predominantly lawn with concrete walls focused on a naturalized water feature at the lower level.

- An exposed rock face along the urban plaza edge will present the opportunity to create a waterwall feature, feeding into other water features within the space.



(See Figure 11a)



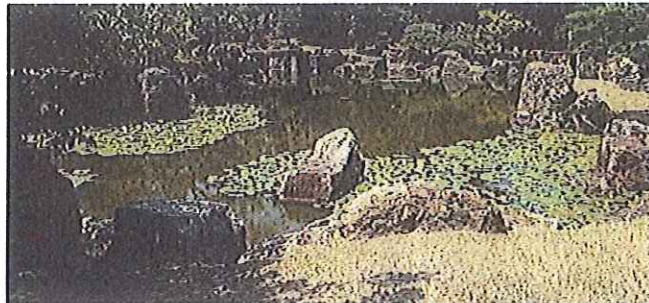


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Further design parameters include utilizing the natural slope of the site with a three meter grade variation from the south side to the north side of the space. This grade change offers opportunities to enhance the space with multi-level seating, walking, viewing and planting on varying levels.



The Centre Space design plan calls for large and medium scale deciduous trees to frame the entire space and complement the large scale trees envisioned within and along Academy Way. It is also intended that a portion of the green spaces have a lawn component which will allow for and encourage the use of the grass for passive park use. Massed shrub planting will adhere to City of Kelowna recommended plant material and be predominantly drought tolerant species.

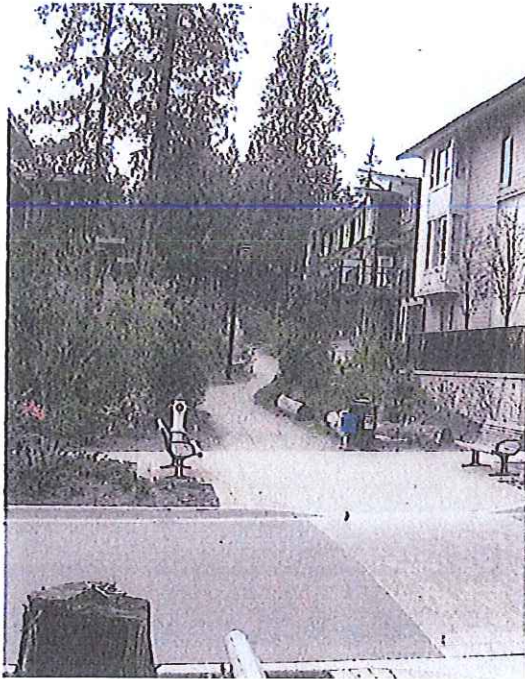
It is expected that the commercial tenants (e.g. coffee shops, restaurants/bistros, bakery, small convenience store, etc.) will be permitted to use outdoor seating areas/sidewalks adjacent to their buildings. These public spaces will complement the Central Plaza area and be “tied”



together across the drive lanes by appropriately designed curb flares, landscape and street pavers for cross walks where safe and convenient. Similarly, connections to the Central Plaza from Academy Way must allow for easy access by pedestrians. This will be accomplished by entry features, signage, street pavers and a clear way finding program from the bus stop along Academy Way. Connections through to the buildings from the Centre Space will be accomplished with visual cues of similar plant material/rocks and hard landscaping near the buildings, and with paver stones/curb flares where safe and convenient.

Lastly, and as with all landscaping at *University Village*, CPTED principles must apply to the design of the Centre Space/Plaza.

7.3 Naturalization and Protection of Trees



Kelowna contains several areas of dry open Pine forest lands that characterize the Okanagan Valley. The subject properties are part of this ecosystem but are largely located up on a gentle slope where the forest contains small caliper trees and limited soils on bedrock beneath. The south slope is mainly Pine trees while the north slope contains some small Fir trees mixed with Pine. The understory contains grasses and shrubs, again restricted in growth due to dryness and limited soil structure on bedrock.

The threat of Pine Beetle kill in the Okanagan Valley implies that most of that forest will not survive beyond a two to five year time frame. Nevertheless, attempts to protect a forest cover, either through naturalization or enhancing the

existing tree cover, should be made on the eastern perimeter where slopes are oriented towards Highway 97. Wildfire mitigation must be practiced in concert with any naturalization program.

Appropriate trees and ground cover for the Okanagan landscape and climate must be chosen for any naturalization program. A list of plant materials is included in the Appendix.



7.4 Public Gardens

The Regional District of Central Okanagan and the City of Kelowna in the interest of achieving sustainable communities is promoting “community” or “public gardens” to allow local residents to grow their own crops either on public lands or on shared private sites. Considering that the Village will contain all multi-family residential homes, the interest for such gardens could be quite significant. There may also be an educational component affiliated with certain University faculties and the local public and private schools.

Such gardens will range in size and composition and will be located in two or three strategic locations, likely at least one on each side of Academy Way and in close proximity to residential uses, but within the parks/open space system.

8 Landscape Character and Guidelines

The overall landscape design intent of the *University Village Master Plan* is to respect and build on the indigenous character of the site.

The proposed landscape character should complement the existing native landscape character of the Glenmore Valley area and utilize principles of sustainable landscape design and development.



8.1 General Guidelines

Landscaping is seen as a positive and desired contribution to the community in the urban environment. Plants and trees fulfill a multitude of purposes such as visually improving and softening the impact of buildings and parking, screening, moderating the temperature, and improving air quality and are of great visual and environmental value.

The following general guidelines provide greater definition towards achieving this design intent:

- Native plant species and the use of drought tolerant plant material are encouraged.
- Providing historical and cultural interest by restoring and connecting residents to the original landscape of the area.





- Sustainable landscape opportunities should be incorporated including energy conservation (windbreaks/shading) and communal gardening areas and composting.
- Landscape should be designed for low requirements for watering, energy use for maintenance purposes, and herbicide and pesticide use.
- Informal planting should be used adjacent to environmental corridors, parks, gas line rights of way and neighbourhood streetscapes with naturalized planting schemes.
- Landscaping should consist of a variety of trees and shrubs in a cohesive design.
- A mix of deciduous and coniferous species should be utilized.
- Plant selection should consider food to support wildlife.
- Increasing regional biodiversity and decreasing the amounts of pests and diseases.
- Flowering plants are appropriate to add color.
- Integrated Pest Management (IPM) measures should be implemented for the maintenance of both public and private landscapes.



8.2 Tree Retention

Tree preservation is an integral part of site development and it is the intent that healthy trees are preserved to the greatest extent possible, protected during construction and that no unnecessary tree removals occur. This is a strategic effort considering the extent of the pine beetle kill that is expected to devastate much of the forest in the area.

Significant tree stands within the development and at the edges of the neighbourhood will be protected by covenants, wherever possible and with advice from a Professional Forester.

Other stands of trees have also been identified for protection and preservation both within development sites and public areas like the park and school site.

8.3 Tree Restoration and Forest Enhancement

There will be a need to thin dense stands of trees in order to address the pine beetle infestation and also to reduce the risk of wildfires.

Restoration treatments can lower fire danger while increasing the overall biological diversity and long-term health of treatment areas.

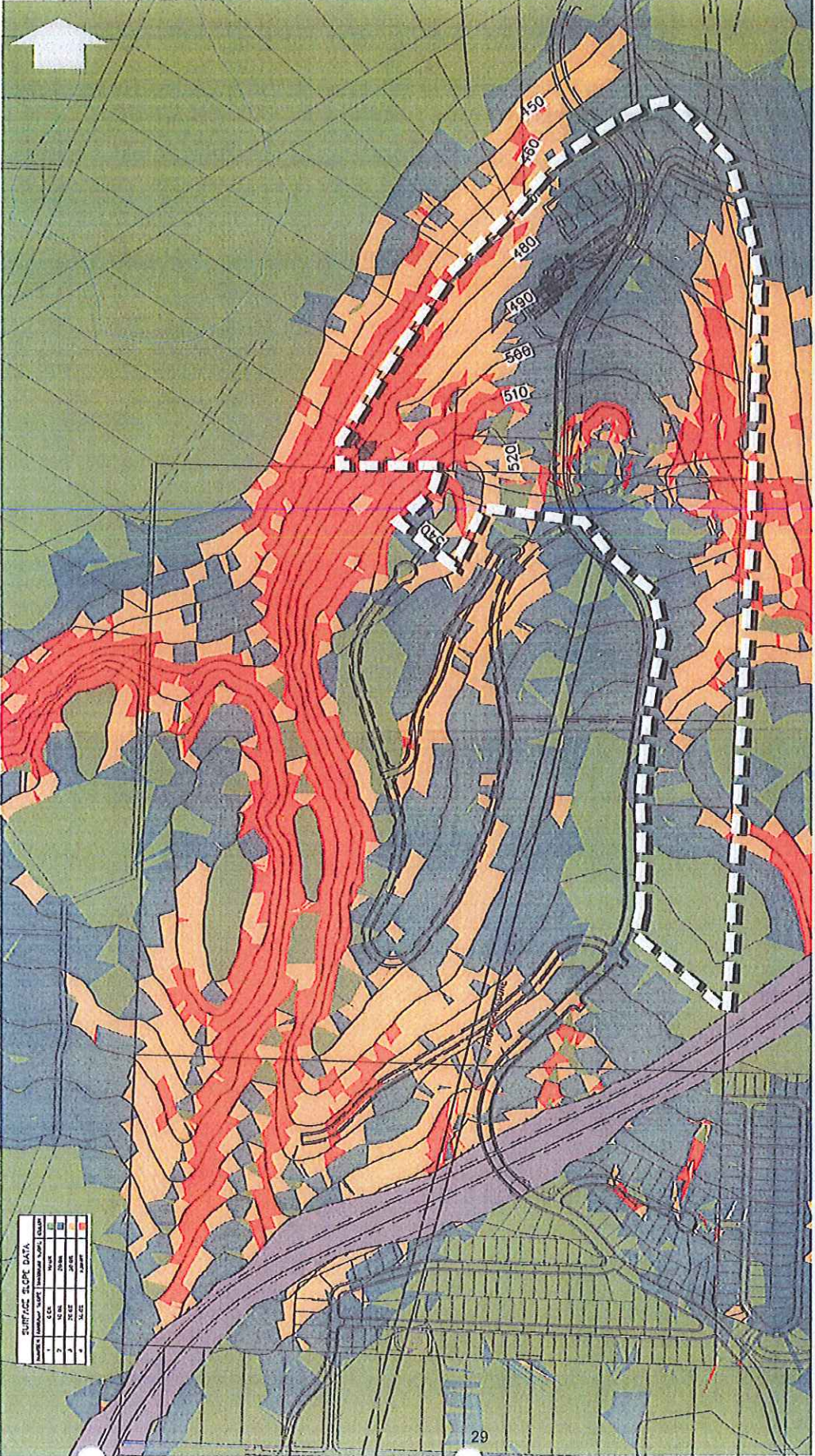


8.4 Grading

In many locations regrading of the site for road construction, buildings and understructure parking may result in significant changes from the existing topography. These variations should be addressed with terraced landscaping, stone or concrete walls with planted areas, or through the use of planted berms.

(See Figure 12)





SURFACE SLOPE DATA

CLASS	PERCENT SLOPE	MINIMUM SLOPE	MAXIMUM SLOPE
1	0-5%	0%	5%
2	5-10%	5%	10%
3	10-15%	10%	15%
4	15-20%	15%	20%

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8.5 Water Management/Irrigation

Water is a limited commodity. It is important that the development employs water conservation measures and water resources are used judiciously.

All landscaped areas should be irrigated to ensure healthy establishment of the plant material. Low volume irrigation methods are encouraged. Even a Xeriscape landscape design must still have an irrigation system to ensure establishment and survival during the initial years and to provide some water during prolonged periods of hot dry weather.

8.6 Development Site Landscaping

- Promote an attractive landscape treatment of the site to soften and improve the visual character of the development by designing a harmonious integration of new planting with existing vegetation, fencing, retaining walls, hard surfaces, signage, etc.
- Ensure soft landscape areas on the perimeters of the site to delineate boundaries, and establish streetscape appeal, separations, berming and snow storage areas.
- Provide additional soft landscape areas within the site and foundation planting to reduce the negative impact of continuous expanses of pavement, to help delineate vehicular and pedestrian circulation, and provide opportunities to layer the landscaping between the street and building in relation to facade design.
- Strategic landscape screening and/or fencing is encouraged for exposed parking, driveways, storage, services and garbage containment areas.
- Design landscaping to encourage positive functional relationships between the site uses and their surroundings.



8.7 Entry Features and Special Places

Landscape features should mark entry points and special places:

- Landscaping walls and entry features should make use of stone or brick accents as a finish surface.

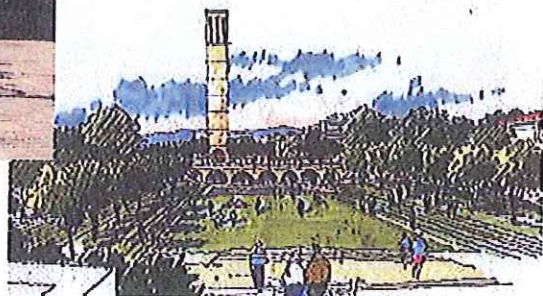


- Landscape structures and public art should be used to provide focal points within the public and private realm.
- Storm water collection areas should be designed as landscape features and integrated into the open space system and public rights-of-way where feasible.
- Select accent plants with fragrance, contrasting seasonal colors and textures for building entrances.
- Flowering plants should be used for emphasis within the overall native landscape context.



8.8 Public Spaces

- Shared outdoor areas should be programmed for use by residents and to promote social interaction among neighbours. Opportunities for small children's play, seating, and outdoor gathering should be considered.
- Both sunny and shaded areas should be provided for outdoor uses.
- Use deciduous trees in landscape locations where shade is desired during summer months and optimal light is desired during the winter months.
- Where appropriate, include the provision of appropriate site amenities and street furnishings consistent with the overall design "kit of parts".



8.9 Streetscape

- Streets should be part of the amenity space and a common area for the community, comparable to the park and trails systems.
- The following features make streets more 'liveable' – safer, cleaner and more attractive:
- A similarity of style that helps unify the street without being so similar as to lack interest.



- Trees that form a canopy in summer but drop their leaves and allow plenty of light in winter.



- Private garden landscapes that compliment the street planting.
- Fences and walls of an alignment, height and style consistent with others in the street.
- Pavements that are porous and modular where possible to encourage storm water infiltration.



- Driveway crossovers of minimum width.
- Regularly spaced tree planting on both sides of Academy Way and median planting give it identity and visually narrow the street. Academy Way is the entry boulevard to the neighbourhood and the gateway to UBC Okanagan.



- Streets that give pedestrians and cyclists priority and encourage decreased vehicular speeds.
- On street parking and curb flare extensions act as pinch points and traffic calming elements along the road causing traffic to slow down.

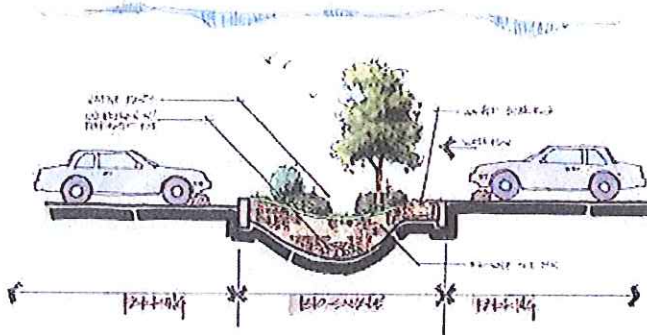
8.10 Safety

- Good landscape design can enhance the safety of both public areas and private property. It is important to ensure that the proposed landscape considers some key principles of safety.
- Public and semi-private outdoor spaces should be safe and secure and should have some degree of overlook from residential units and good visibility from the street.
- CPTED (Crime Prevention through Environmental Design) principles should be incorporated into site design and landscaping.
- Outdoor communal and amenity spaces shall be designed to be accessible to those persons impaired by vision, hearing or mobility.



8.11 Surfaces

As sites are developed within the Village, the amounts of impervious surfaces are increased considerably. When storm water lands on an impervious surface it becomes runoff and flows towards a lower point or detention basin. By incorporating Natural Landscaping into a



development, this runoff can be held and filtered better than it would be with turf grass or another type of landscaping. Natural landscaping can mitigate the adverse impacts development may have on the environment by maintaining and/or restoring the site's capacity to control storm water prior to development.

9 Architectural Guidelines

The following section generally describes the form and character of the building architecture that is envisioned for *University Village*. The intent is not to be overly prescriptive on design but to ensure that a sense of place is created and quality built form evolves. The Village is envisioned as a comprehensive neighbourhood that will cater to a diversity of residents and buyers of homes. In this regard, the plan calls for some diversity of product in three different areas of the Village, but unified by some common design elements. The North Slope (Campus Gateway and Residential) contains mixed use and residential forms that will reflect the proximity to the University and consequently cater to a more affordable market rate. The knoll or Hilltop Village area will offer another variation of form and character with predominantly condo apartment residential and a minor amount of commercial oriented toward ample sidewalk or plaza and a major square or commons. The South Slope will contain both apartments and townhouses that reflect the proximity to University Heights and consequently target a higher end product and market segment.

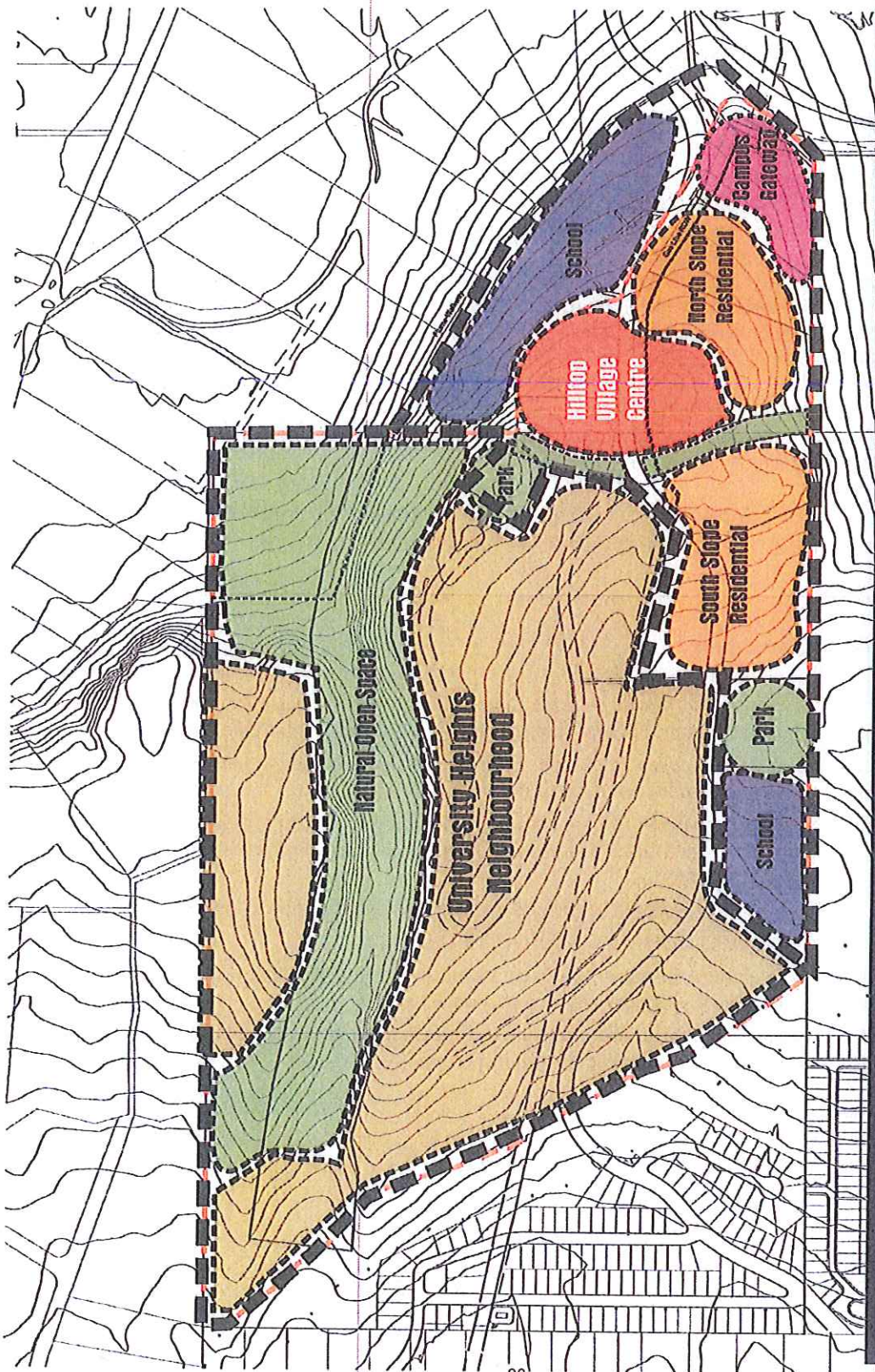
Watermark Developments is not intending to be the builder, but will protect the integrity of building design through these guidelines and a potential building scheme.

(See Figure 13)

9.1 Overall Guidelines

- Smaller residential units should be predominant in the North Slope areas and increase in size going south into the Hilltop Village Centre and into the South Slope lots.
- Building materials such as brick and stone should be a common material used throughout to create unified but not uniform exteriors.
- Signature buildings or treatments are encouraged for the commercial/mixed use areas, especially in the Campus Gateway Centre. (Materials may deviate from the common materials for the Village)
- Orientation of buildings should be predominantly as presented in the Concept Plan.
- Visual cues can be taken from buildings on UBCO campus.
- Use and the amount of glass must be carefully integrated where exposure is significant so to avoid glare and visual impact on the hillside.
- Brick and stone should be used as common material for signage and gateways for any residential, commercial or institutional developments.

(See Figure 14 for Character Images)



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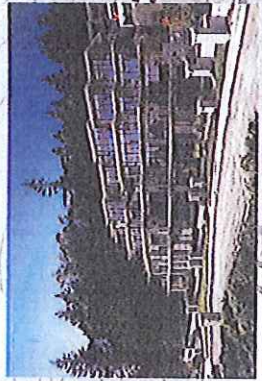
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University Heights Residential



Park



South Slope Residential



Hiltop Village Centre



North Slope Residential



School

Campus

Gateway



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CHARACTER IMAGES

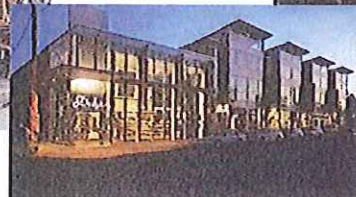
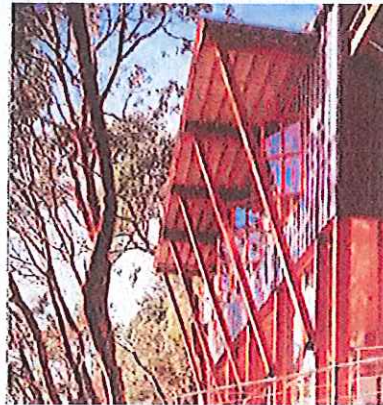
9.2 North Slope Guidelines

Mixed Use Building

- The ground floor of the main building shall be commercial, and be an active use for both the residents of the Village as well as the University
- Ample sidewalk (plaza) shall be provided that allows for commercial activity to come outside. Having the main entrance facing South would allow for a south facing plaza in front of the commercial.
- Retail shall be distinguished from housing above by creating a base to the building. This can be achieved by a larger percentage of glass, the use of brick or stone, delineating a base with the use of a belt course, or by stepping back the housing above the commercial use.
- The commercial element of the mixed use building has the potential to become the landmark/gateway element for the development. Developing the commercial element as a *glass pavilion* would create transparency and visually draw the indoor use with the outside.
- Creating a gateway building can also be achieved through expressive canopies or overhangs.



The mixed use village centre should act as a gateway and focal hub of the community. The retail building should act as a landmark element for the Village.





Multiple Family Residential Buildings

- The North Slope residential units are seen as being affordable to market rate units geared towards students of the University, and young first time buyers.
- The buildings should assume a “funkier” character that evokes the youth and energy of the target market.



The buildings may take on a more expressive color palette.

- While there will be a lower quality in materials and building systems to meet the target market, brick or stone should be incorporated in the building design. Brick and stone will be used throughout the development to visually tie the whole Village together.
- Views for the residential are towards the north and east.
- Housing units should be distinguished through the use of balconies.



Parking

- Required parking for the commercial will be located on an adjacent surface parking lot.
- Residential unit parking shall be hidden from view. Parking will be located either in a basement garage, or on the ground floor screened by townhomes or retail.
- Ground floor uses, wrapping surface parking garages, should be initially designed for commercial uses (retail or office), though the intent is for the ground floor to be flex space allowing for live/work units and townhomes.
- Parking garage entrances should be separate from the main building lobby.
- Blank walls from surface parking garages shall not be allowed along roads or pedestrian areas. Where there is a blank wall due to grades the wall must be heavily landscaped.



9.3 Upper Knoll/Hilltop Village Centre Guidelines

These guidelines address the buildings and not the central square/commons which will also become part of the development in the Hilltop Village Centre. (Details about the square are noted in Section 7.2).

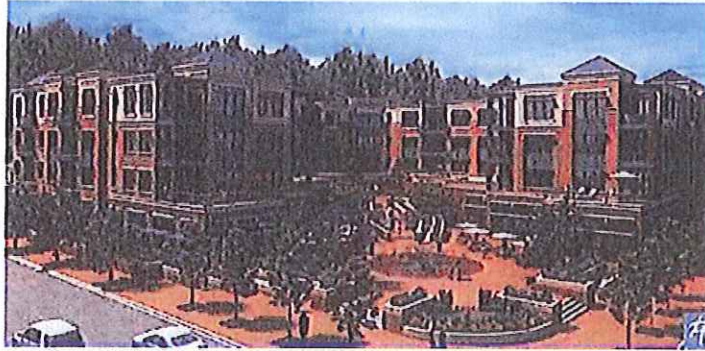
Multiple Family Residential

- The residential units are to be market rate units with a greater unit mix offering buyers a greater choice. The market for students, while still present, is smaller due to price point and the greater unit mix.
- Architecturally, the buildings are to be more permanent and conservative in nature. No more than three different materials (one being glass) shall be used on each building. One material shall be brick or stone to tie the buildings into the whole development.
- Buildings should feel residential through the use of pitched roofs and balconies or stepped back design.
- A priority should be made on developing a strong architectural fabric for this neighborhood, as opposed to each building standing out and drawing attention to itself.



Mixed Use Buildings

- The buildings shall be orientated around a central open space/park.
- The buildings should define the edges of the park.
- There is opportunity for ground floor commercial uses.




The buildings should create strong edges on the central square. This will help define and strengthen the square.

- The ground floor uses shall be distinguished architecturally by developing a strong base on the buildings. A greater use of glass is appropriate to distinguish a commercial use.
- Using a greater amount of glass (commercial buildings only) will visually tie the indoor use with outdoor activity.
- Ample sidewalk, or a plaza, shall be in front of the commercial uses facing the open space/park. The intent is for the ground floor activity to be focused towards the central open space/park.





Parking

- Most commercial parking shall be surface parking. The commercial parking shall be arranged as to help reinforce/define the edges of the park.
 - Residential unit parking shall be in a basement, or if on the ground floor screened from view with a commercial use or townhome.
- 
- Parking garage entrances should be separate from the main building lobby, and not be seen from the central open space/park.
 - Blank walls from surface parking garages shall not be allowed along roads or pedestrian areas. Where there is a blank wall due to grades the wall must be heavily landscaped.
 - Lots 7 & 8 have the opportunity for full basement parking garages due to the topography. Basement parking is encouraged here as these are prominent lots situated at the highest point of the development.

9.4 South Slope Guidelines

Multiple Family Residential

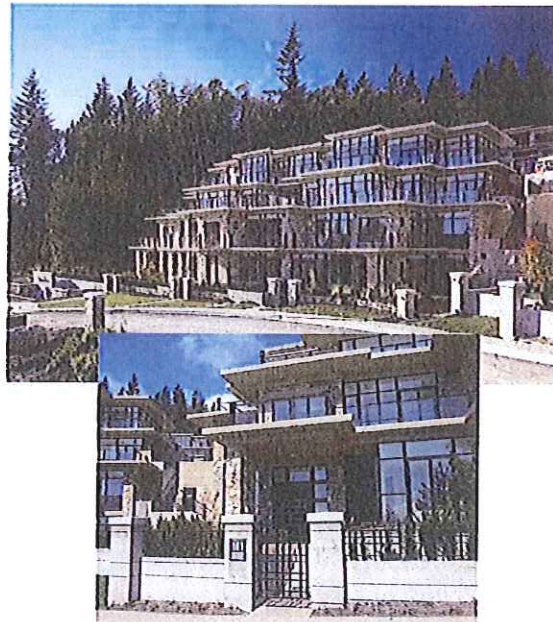
- The South Slope is a medium density residential community that targets the high end of the market. Buyers could range from retirees/empty nesters, to employees of the university or airport. The buyers are more discerning and expect a higher quality product. Both townhomes and 3-4 storey condos are permitted in this neighborhood.

- Architecturally, the buildings are to be permanent and conservative in nature. No more than three different materials (one being glass) shall be used on each building. One material shall be brick or stone to tie the buildings into the whole development.



- Buildings should feel residential through the use of pitched roofs and balconies or stepped back design.

- Further south from the South Slope neighborhood is University Heights. University Heights will be a mix of townhomes and single family detached homes. Attention should be paid to the buildings on lots 5 & 6, bordering University Heights, that they respect the scale and size of their neighbors. This can be achieved by stepping the height of a condo, or varying roofs heights along the property line.





Parking

- Parking for condos shall be in a basement. Blank walls from basement garages shall not be allowed along roads or pedestrian areas. Where there is a blank wall due to grades the wall must be heavily landscaped.
- Parking garage entrances should be separate from the main building lobby, and not be seen from pedestrian areas.
- Townhome parking shall be located within each unit directly off the access road.



9.5 Signage and Gateway Elements

- Stone and brick are to be used as the predominant material for signs and entryway features.
- Material and design must reflect the architecture of the building.
- The signs or pillars must be kept in low profile and not dominate an entrance.
- Landscape treatment at entryways should blend with natural site planting or boulevard treatment.
- Quality design of nameplates and ornamental features should reflect the overall Village theme; public art is also encouraged at the entries or associated with commercial signs.





9.6 Treatment of Building Elevation Fronting Academy Way

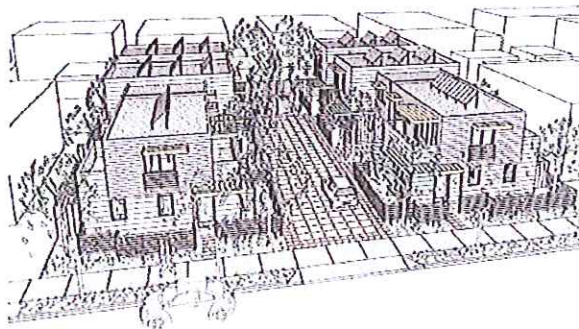
Intent

Due to the topography, many of the buildings in the University Village may be oriented where the short elevation will be facing Academy Way. A building's short elevation (or end elevation) shall be treated architecturally in the same manner as the front elevation. The vocabulary and spirit of the front elevation shall be brought around the sides to provide visual interest to Academy Way. Solid walls, or building ends with very little articulation are not satisfactory. The short elevation of the building should not look like an afterthought, rather the elevation should be integral to the overall design of the building.

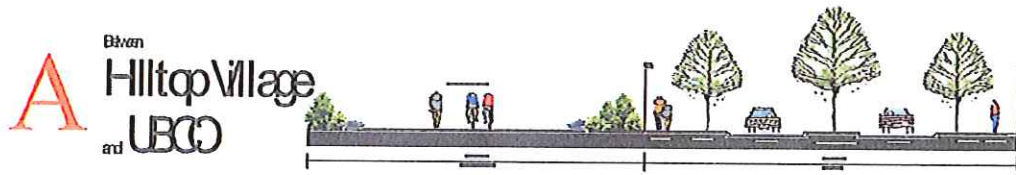


Techniques:

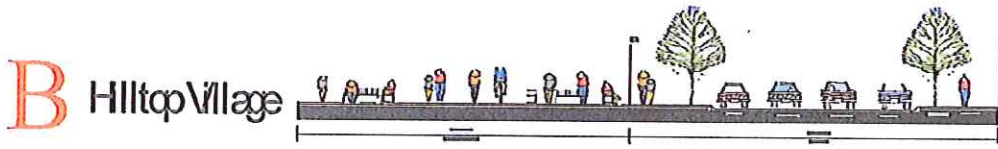
- The materials from the main elevation shall be used on the sides.
- Building details, such as brackets, and window trims shall be used on the sides.
- Balconies are encouraged to add visual relief and depth to the elevation.
- Windows are encouraged to enliven the elevation and give the elevation importance.
- Where the side of a building is a gable face, architectural details such as decorative roof vents may be used.



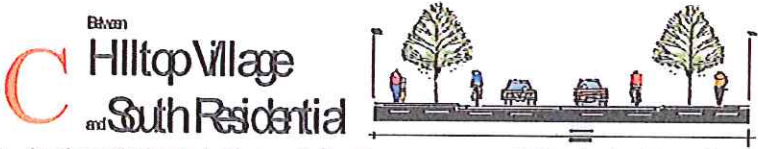
6.4 Streetscape



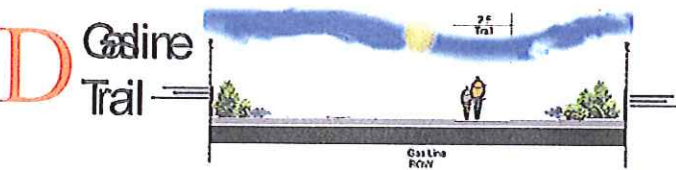
- One lane of vehicular traffic in each direction.
- No on-street parking.
- Uniformly planted trees in grass and boulevards.
- Tree planted medians.
- Sidewalks on both side of the street.
- Gas line right-of-way abuts roadway right-of-way.



- One lane of vehicular traffic in each direction.
- On-street parallel parking.
- Uniformly planted trees in tree grates (in hard surface boulevards or grass boulevard).
- Sidewalks on both side of the street.
- Gas line right-of-way includes hard surface urban treatment adjacent plaza.



- One lane of vehicular traffic in each direction.
- No on-street parking.
- Uniformly planted trees in grass and boulevards.
- Sidewalks on both side of the street.



- 2.5m wide compacted granular trail pedestrian/cycle.
- Mature plantings along edges.
- Trail features hard surface in area of Hilltop Village plaza.

10 Visual Impact Assessment

10.1 Scope and Intent

The area of the proposed development occurs on a gently sloping hill rising from approximately 470 meters ASL to a hilltop park at approximately 540 meters ASL. Out of approximately 100 acres that will contain the Village, only 44%+/- is allocated to development, and a mere 24% +/- will contain overall development footprint (e.g. building and surface parking); the remainder will contain landscaped area/yard and open space and other associated features. The average density per lot has been kept very high at 35-50 units per acre or a gross Neighbourhood Density of approximately 8.0 to 11.5 units per acre. This is considered to be a very efficient use of land to accommodate between 810 to almost 1,100 multiple family residential units.

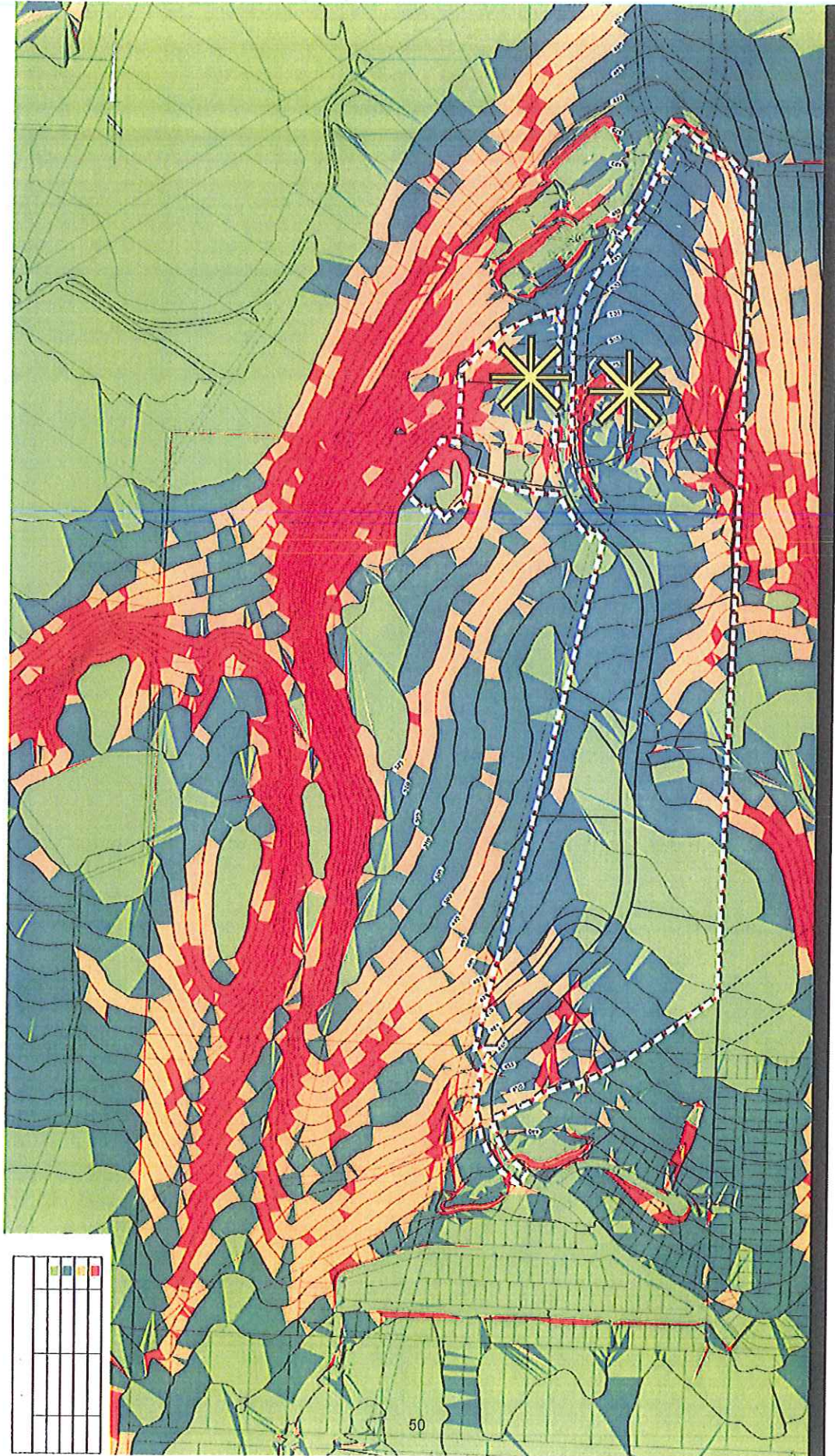
The Hilltop Village aspect of the proposed development occurs at approximately 520 meters ASL; this will be the only small knoll to be graded to allow for development on the site. All other buildings will largely occur on the more gentle slopes of 20% or less, rising from the north and the south towards the hilltop knoll. **(See Slope Analysis).**

10.2 Relationship to Adjacent Properties

A careful evaluation was undertaken to assess the visual relationship between the development site and the surrounding properties, especially how the site will be viewed from any existing or future development:

- East – From Hwy 97/ALR (Vacant lands)
- South – From Solterra/College Heights area (Minor but growing residential area)
- North – UBCO Campus /Looking up from both the south and north ends of campus
- West – From rural lands between Roberts Pond and Aberdeen Preparatory School

CTQ retained the services of Rise Above (Ground Based Aerial Photography) to help confirm where buildings would be within view AND the potential view corridors from top elevations of proposed buildings in various locations. It was confirmed that the only prominent visual relationship of new development on the subject lands will be to the north or the UBCO Campus. This is considered a direct land use relationship with the evolving UBCO urban development. Site lines are predominantly up along Academy Way, therefore buildings rising up the slope from the University will be in plain view. Most of these buildings will be oriented across the slope with both inward and outward views. The level of detailing on both sides of the building must reflect this orientation. There will also be a need to address the sides of buildings that actually front Academy Way so that there is a constant relationship with the “main” street (see Section 9). A very prominent development facing John Hindle Drive will be a mixed use building (commercial with residential above). Although part of the University Village, this building’s proximity to the UBCO Campus and more specifically, the adjacent higher profile university faculty buildings, will allow for ease of integration and transition.



Two minor steep slope areas to be graded to permit siting of buildings.
The westerly site will be partially integrated into building form.



The other view of the site development will occur southbound along Highway 97, but only for a short distance just south of the UBCO entrance at John Hindle Drive. Otherwise, views from the west and south are obstructed by the topographic relief.

(See Figures 15).

10.3 How Proposed Development will Impact Desired Outcomes

The total amount of multi-family residential units and commercial space account for significant building mass on the site. The intent is to break up the mass with a series of buildings and variation in heights ranging between two and four stories. Architectural design will be controlled to further enhance visual appeal and help diminish the mass. Except for small portions of steep rocky terrain near the top of the site, all buildings, parking and internal roadways/lanes will be constructed away from large contiguous areas of 30% or greater slopes. These steeper areas largely exist along the east side of the hill facing Highway 97 and are currently covered with pine and fir forest. Even though the pine trees are expected to continue to be subject to beetle kill, the intent is to protect the integrity of this steep slope as pure open space.

The Academy Way right of way and the relocation of the Terasen Gas right-of-way involves a significant alteration of the land form with a combined 38 meter wide swath through the middle of part of the site. Landscaped boulevard and median treatment will be used to soften the impact within the public space. Although tree cover on private properties located adjacent to the right-of-way will be affected by the new development, landscape treatment will complement remaining native trees and vegetation.

10.4 Impacts

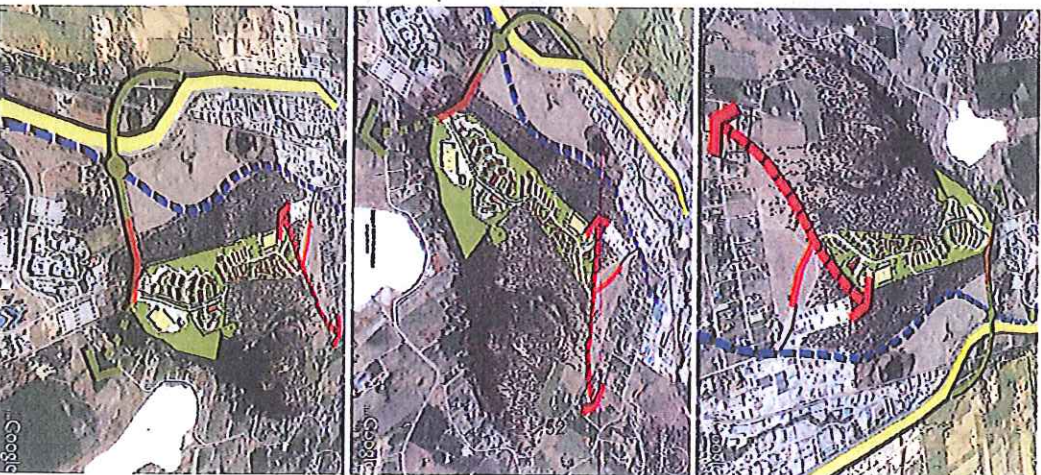
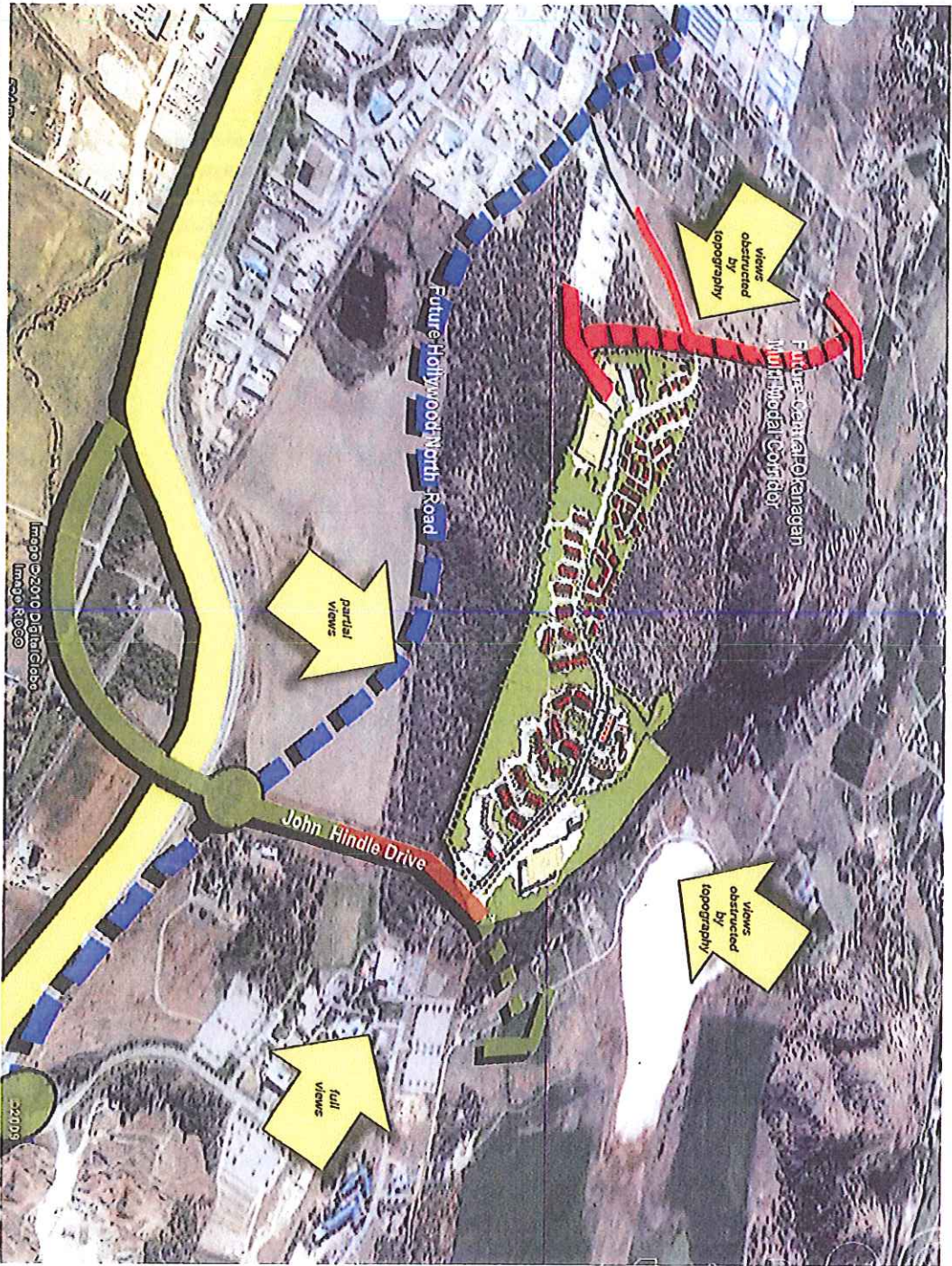
Through our modeling exercise of the proposed height and resulting visual impact, we have confirmed that there is minimal impact on residents and passersby. The greatest visibility of the proposed development will be from the north on UBCO campus. This is considered to be logical compatibility of the village setting, connected by urban form, roadways and physical context (See Figure 16).

10.5 Before and After Visual Assessments

The City of Kelowna was contacted to confirm the on and off-site viewpoints of concern before commissioning Rise Above to undertake all of the ground based aerial photography. Key strategic locations were chosen throughout the site where visual



Rise Above Special Equipment allowed for accurate photo representation of views into and from the site.



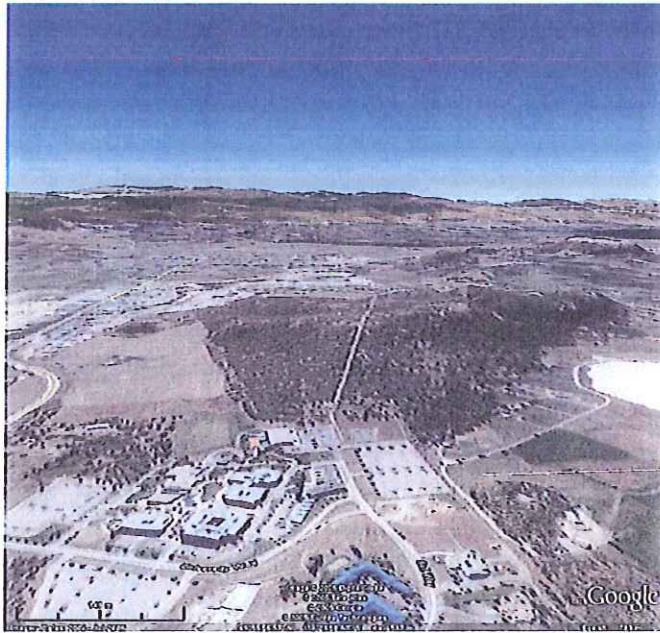
UNIVERSITY VILLAGE MASTER PLAN
UNIVERSITY SOUTH

VISUAL IMPACT MODEL



WATERMARK DEVELOPMENTS LTD

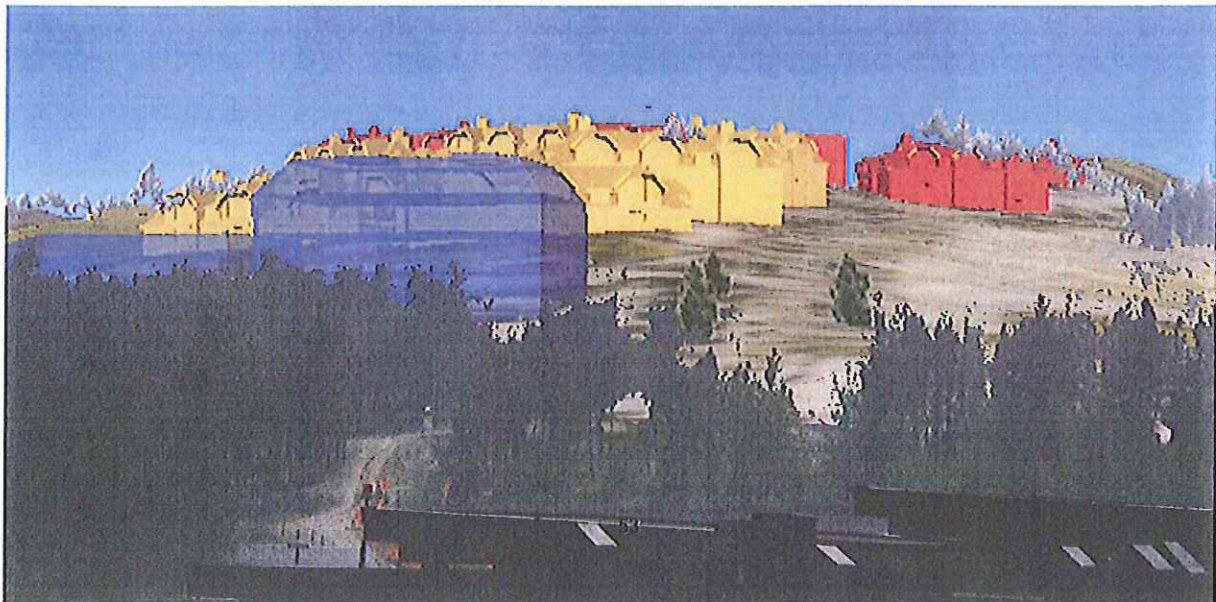




**Visual relationship
between
UBCO Campus
and
subject property.**



Fig.16





impact of new structures might be the greatest, and then visual vantage points from off-site were also chosen from where people could easily see the new structures on the site (See photos of equipment used).

Figure 17 depicts these various locations both on and off-site. We have also noted that new grades of the building locations will make most buildings less prominent in height, including at the very top of the Hilltop Village Centre.

**University Village
Building Elevations**

Lot	Original Ground	New Ground Elev.	Top of Bldg.	Max. Height (as per Zoning)
1	479-486 <i>(lower bldg.)</i>	479 <i>(parking)</i>	494.0	
	470-475	475	490.0	15.0
2	490-500	494	507.0	13.0
3	505-510	505	521.5	16.5
4	505-515	508	524.5	16.5
5	480-505	484-500	513.0	13.0
6	485-505	484-500	513.0	13.0
7	515-525	516	532.5	16.5
8	504-515	504	518.0	16.5
9	Top of Knoll 528 General 510-520	516-510	531.0	15.0
10	School N/A			
11	Park N/A			
12	School N/A			
13	Wildlife Corridor N/A			
14	Park N/A			
15	Road N/A			
16	480-490	481-485	494.5	9.5
17	475-482	480	489.5	9.5
18	465-472	468	477.5	9.5
19	466-494	470-490	503.0	13.0
20	445-460	455	464.5	9.5



Grading of sites will involve minor retaining walls. Where such retention is required, stepped back design, sloped and landscaped areas and architectural design of buildings will be used to avoid any long or high expansive wall treatments. Building pads will be graded to ensure integration with parking areas, roadways/lanes and adjacent developments.

10.6 3D Representation (Google Earth Fly through Simulation)

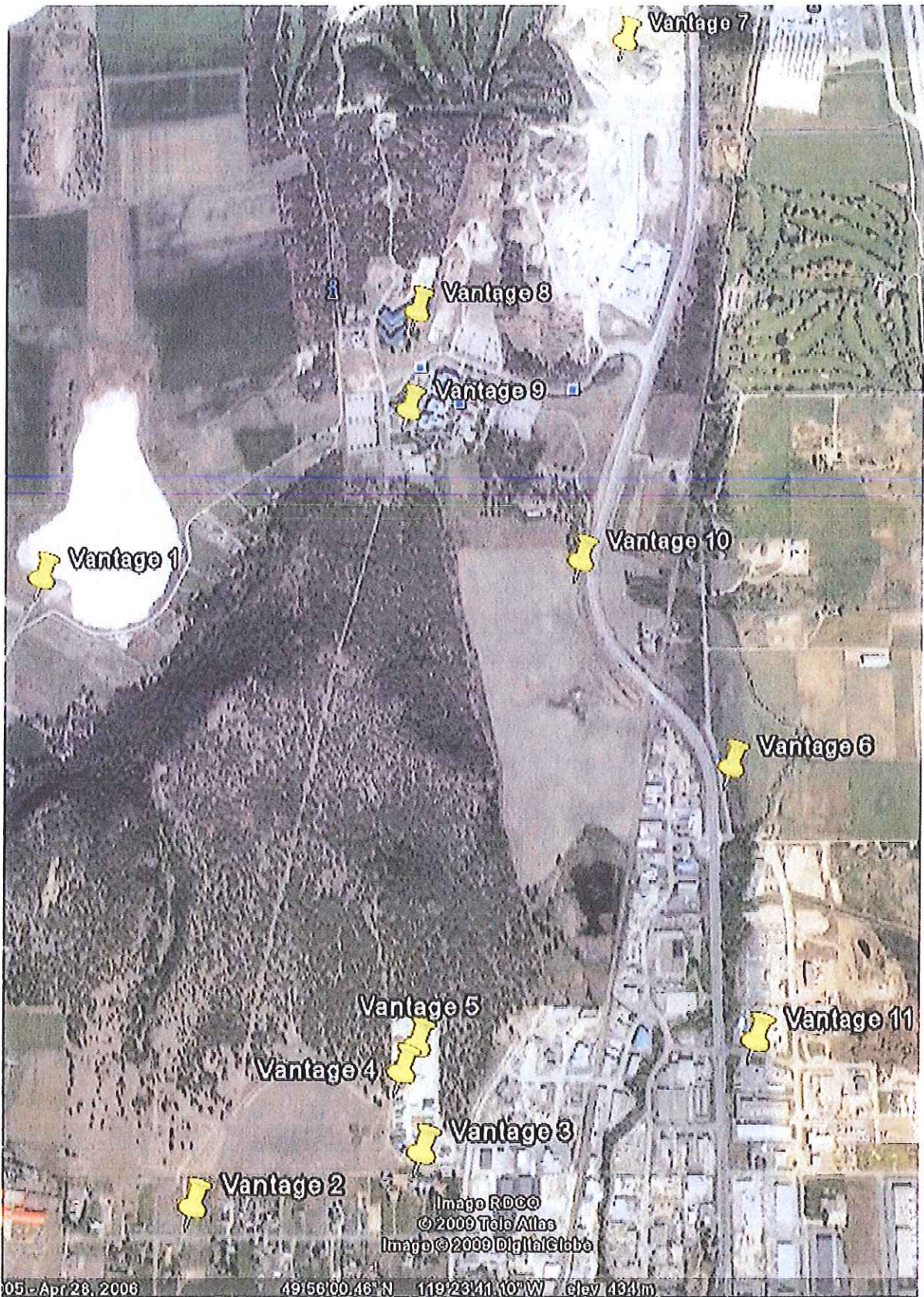
In order to further assess potential visual impact, we have modeled the proposed site development with a Google Earth Fly-through Simulation of the Concept Plan. The model demonstrates in 3D that proposed buildings on the site will be visible from the north (UBCO) and to a limited extent, from Hwy 97. If trees are maintained along the steep slopes and on adjacent property to the east of the subject lands, only the higher elevations of the apartment buildings will be visible from the highway. (It should be noted that ALR lands are located between the railway right-of-way and the toe of slope below the subject lands. The City of Kelowna OCP, however, designates part of this area as Industrial, Open Space and Residential). Any trees on the subject lands that are on steeper slopes should remain in this natural state, but will continue to be subject to beetle infestation (See Appendix).

10.7 Site Sections for Academy Way/Terasen Gas Right-of-Way

It is understood that the one feature to have the greatest visual impact on the site will be the extension of Academy Way, and the addition of the Terasen Gas right-of-way relocation alongside the road, extending north from the intersection of the R.O.W. and Academy Way. Some cuts and fills will be required (See Figures 17a and 17b). Slopes will be hydroseeded with native grass mix where appropriate, otherwise the natural exposed rock cuts will remain as features along the road edges.

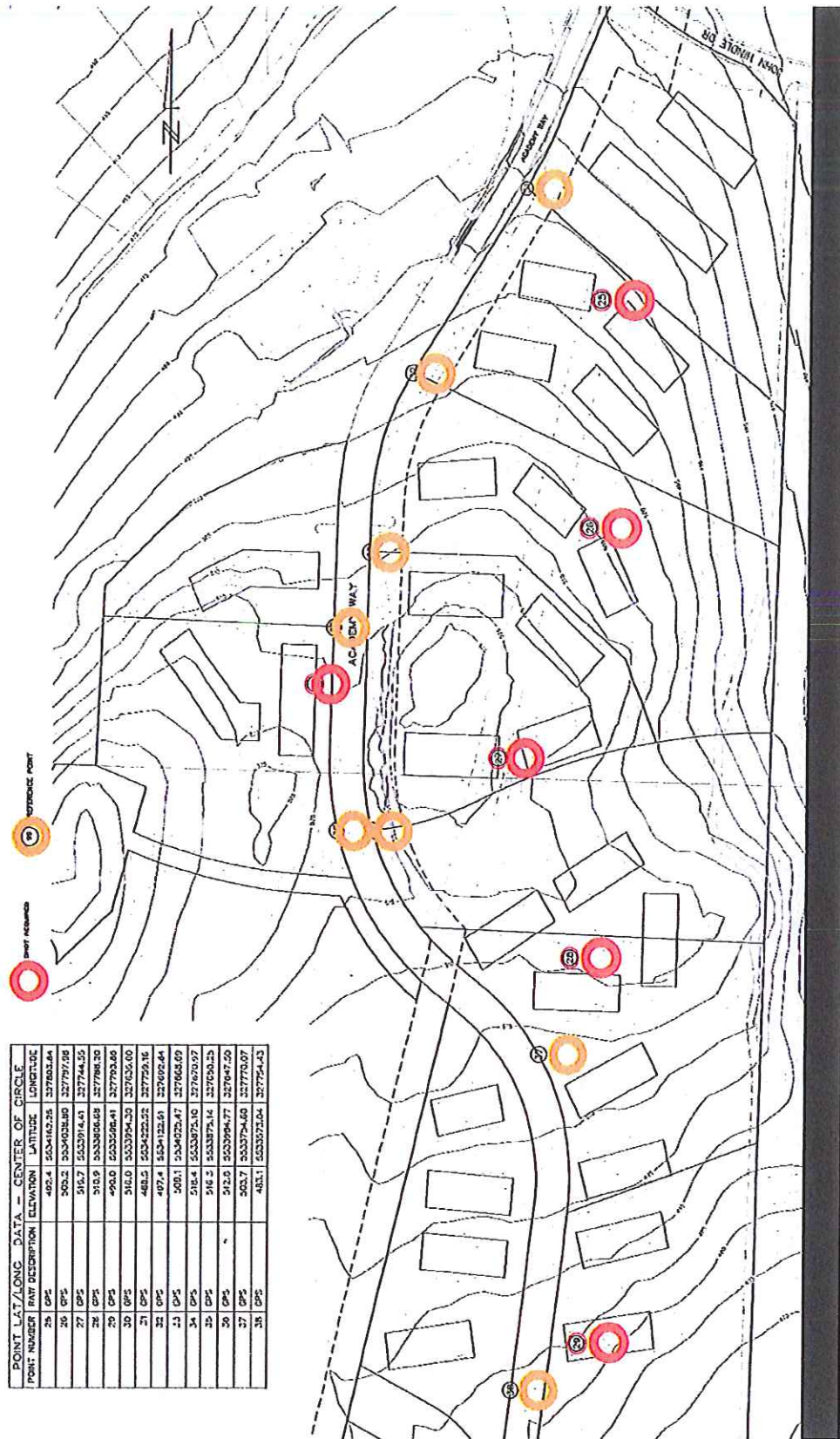
10.8 Changing Stages of Development (Streetscape)

The above-noted section describes the impact of the proposed Academy right-of-way on the site. Planting of street trees are proposed for the boulevards and centre median along much of the roadway. This will ensure that a significant part of the disturbed area for the road will be landscaped with vegetation that will be permitted to mature over time. The adjacent gas right-of-way will contain a multi-use path with complementary shrubs and ground plantings. Large trees are not permitted by Terasen on their right-of-way. (See Figure 18) depicts the evolution of the trees (modeled) over a 20-Year life span.



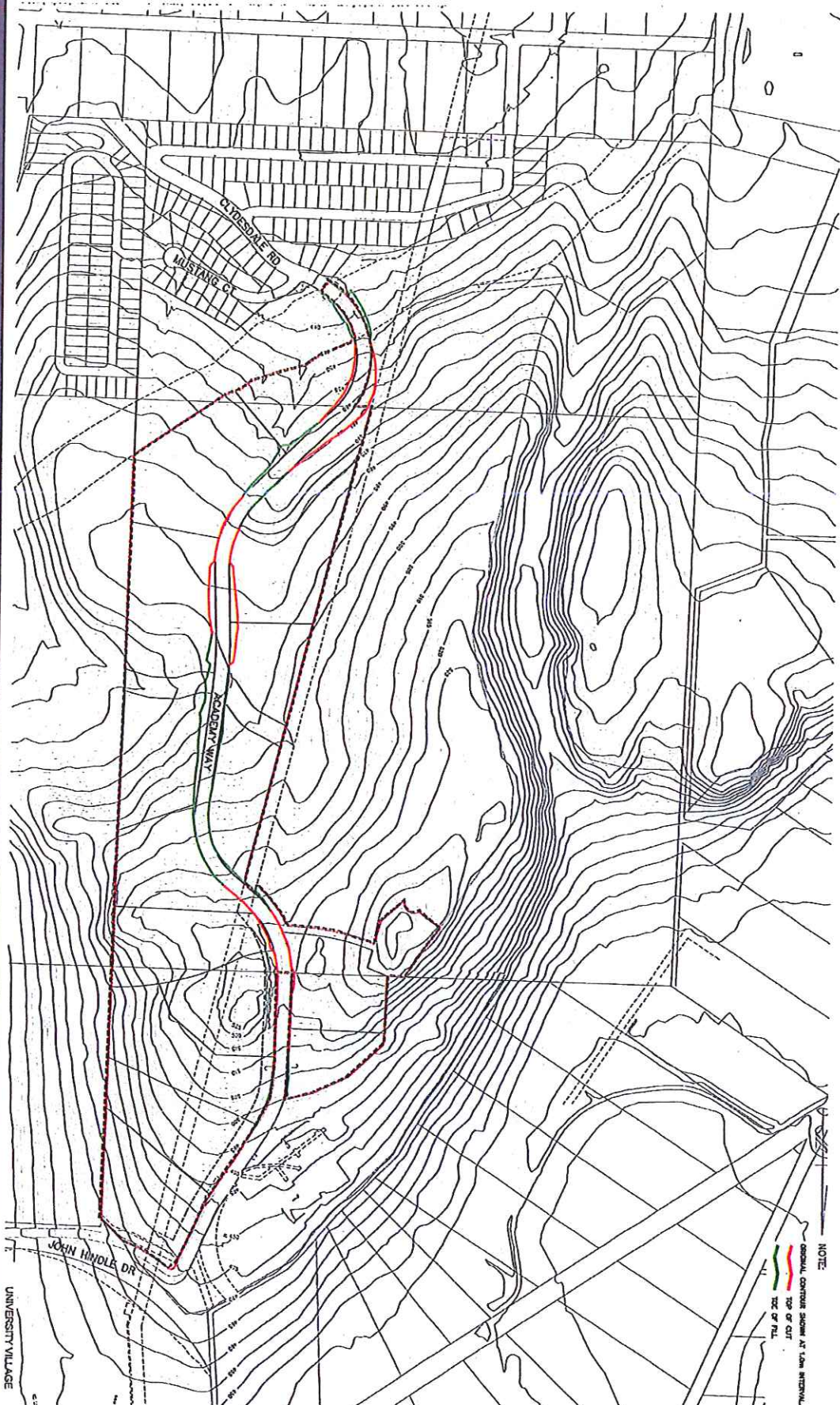
Sample vantage points where photos of the development site were taken to confirm potential visual impact

Fig.17a

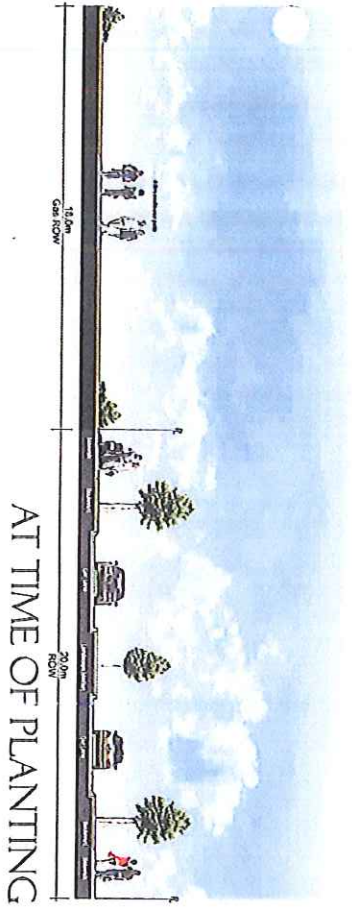


GPS reference points that were used to help confirm potential visual impact at areas of concern. on the development site. Photos taken from the equivalent height (at same GPS points) of top floors of proposed building (using a truck mounted camera boom) assisted in determining potential view corridors.

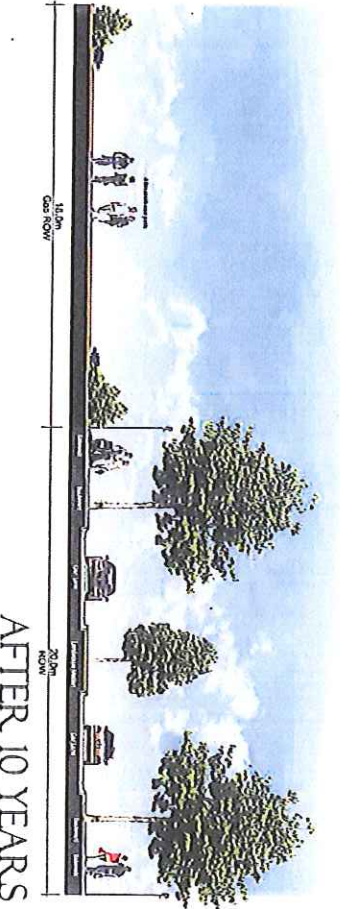
Fig.17b



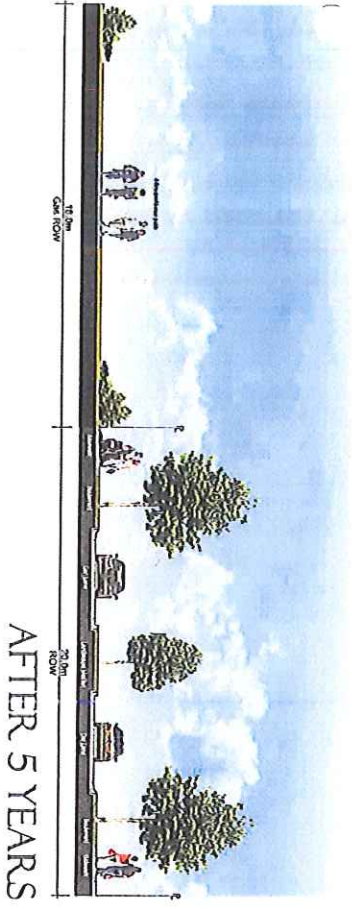
NOTE:
 ORIGINAL CONTOUR SHOWN AT 1:5M INTERVAL.
 TOP OF CUT
 TOE OF FILL



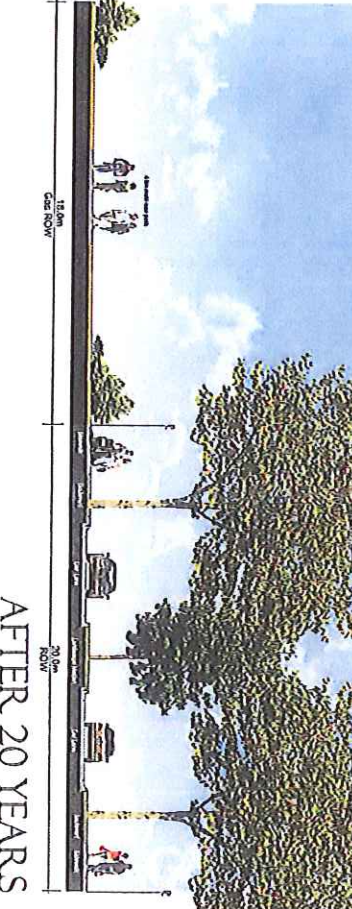
AT TIME OF PLANTING



AFTER 10 YEARS



AFTER 5 YEARS



AFTER 20 YEARS

UNIVERSITY VILLAGE MASTER PLAN
UNIVERSITY SOUTH

ACADEMY WAY STREETSCAPE





10.9 Views from the Property (Visitors and Residents)

As noted in Section 10.5, a series of locations were used as reference points to help determine visual impact as well as views (view corridors) from those locations. The boom camera was raised to equivalent heights of tops of buildings for the respective positions (e.g. Position 26 – Elevation 16.5m). Panoramic photos were taken in 6-8 directions (e.g. N, NE, S, etc.), (see Appendix). These photos illustrate both near and distant views and help confirm where there may be obstructions or where people (residents) may be living and potentially “impacted” by the proposed buildings. Again, it is confirmed that sight lines towards proposed buildings will be most significant from the UBCO campus and for a short distance, along Highway 97 (for pass-by traffic/visitors), southbound near the John Hindle Drive round-about.

10.10 Protection of Natural Attributes

Every effort has been made to plan the University Heights/University Village development with environmentally sensitive areas in mind. Summit Environmental Consultants Ltd. was retained on two separate occasions (before and after site planning) to provide direction and recommendation with regard to site development and mitigation of any impacts. All of the Environmental Site Assessments (ESA) 1 and 2 that are considered important for a “wide range of wildlife and contain a moderate diversity of plan species” have been protected by designating them as park or open space.

Conclusions of the Summit Environmental Report (p.30, October 5, 2009) clearly note that impacts are expected to be minor, but makes site specific recommendations as follows:

1. Clear only what is required for the project footprint;
2. Retain as many natural spaces and vegetation as possible;
3. Construct impermeable barrier between development and protection areas;
4. Retain an environmental monitor during all construction activities to occur in areas designated as ESA 1 and 2;
5. Rehab disturbed areas to avoid weeds from establishing;
6. Reduce current level of noxious weed within the project area by hand pulling weeds and seeding all disturbed areas.

* A Mitigation Summary (Table 5.1) addresses Vegetation and Ecological Communities, Wildlife/Terrestrial Habitat and Water Quality/Aquatic Habitat.



10.11 Implementation and Monitoring

It is the expressed intent that means to control both visual and environmental impact will be used in accordance to the guidelines and direction recommended herein and in the Overview Environmental Impact Assessment (Summit Environmental Consultants, October 2009). Those means will include use of: Development Permits (addressing form and character, includes siting), and hazard area and environmentally sensitive area); zoning regulations pursuant to Zoning Bylaw #8000 (Consolidated) of the City of Kelowna; and an Environmental Monitor during construction to ensure mitigation is being addressed. Specifics, for example, with respect to the use of snow fences to protect encroachment onto steep slopes or any environmentally sensitive features, will be adhered to as part of "Best Practices" conduct or included into DPs. Covenants may be used if necessary and through agreement with the City of Kelowna.

It is appreciated that a diverse development plan of this nature must evolve in a coordinated way, therefore a comprehensive set of implementation tools may be used over time.