

Memo



Date: May 4, 2011
To: City Manager
From: Land Use Management, Community Sustainability (AB)
Application: Z11-0015 & TA11-0002 **Owner:** Interior Health Authority
Address: 2268 Pandosy Street **Applicant:** Interior Health Authority
Subject: Rezoning, Text Amendment

Existing OCP Designation: Educational/Major Institutional

Existing Zone: P1 - Major Institutional
Proposed Zone: HD1 - Kelowna General Hospital

1.0 Recommendation

THAT Text Amendment No. TA11-0002 to amend City of Kelowna Zoning Bylaw No. 8000, by creating the new HD1 - Kelowna General Hospital zone as outlined in Schedules 1 & 2 of the report of the Land Use Management Department dated May 4, 2011 be considered by Council;

AND THAT Rezoning Application No. Z11-0015 to amend the City of Kelowna Zoning Bylaw No. 8000, by changing the zoning classification of Lot A District Lot 14 ODYD Plan KAP91782, Except Air Space Plan KAP91784 addressed civically at 2268 Pandosy Street, Kelowna, BC from the P1 - Major Institutional zone to the HD1 - Kelowna General Hospital zone, be considered by Council;

AND THAT the amending bylaws be forwarded to a Public Hearing for further consideration;

AND FURTHER THAT final adoption of the zone amending bylaw be considered subsequent to the requirements of the Development Engineering Branch being completed to their satisfaction.

2.0 Purpose

The applicant is proposing to rezone the subject property from the P1 - Major Institutional zone to the new proposed HD1 - Kelowna General Hospital zone in order to facilitate the phased, long range redevelopment and expansion of Kelowna General Hospital.

3.0 Land Use Management

2.1 Interior Health Authority program requirements

Thirty-seven service programs were identified in the Interior Health master plan for the Kelowna General Hospital campus, including programs such as Adult Inpatient Units, Clinical Nutrition, Psychiatric / Mental Health, and Women's Health and Children's Health. Provincial direction to establish facilities such as the Interior Heart and Surgical Centre have also contributed to the demand for space on the Kelowna General Hospital campus. The Interior Health Authority has a responsibility to provide a broader range and capacity of services on site to meet the demand for health care in the region.

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2.2 Neighbourhood impact and transition goals

Staff have worked with the applicant over the course of several months to refine initial land use ideas and expectations into a concrete proposal which endeavors to balance the interests of the public who reside and/or own property in close proximity to the hospital, the general public who will utilize the facility, the City, and the Interior Health Authority. While a hospital is a public good which provides benefits to everyone, it is inevitable that it will impose land use impacts such as traffic, noise, and shadowing on those persons residing nearby.

In consideration of this, City staff sought to ensure that the redevelopment and expansion intended for the campus was fundamentally necessary to the operation of the hospital. Site coverage, floor area ratio, setbacks, and building heights have all been adjusted downward from original proposals and represent a balanced approach toward hospital redevelopment and neighbourhood impacts.

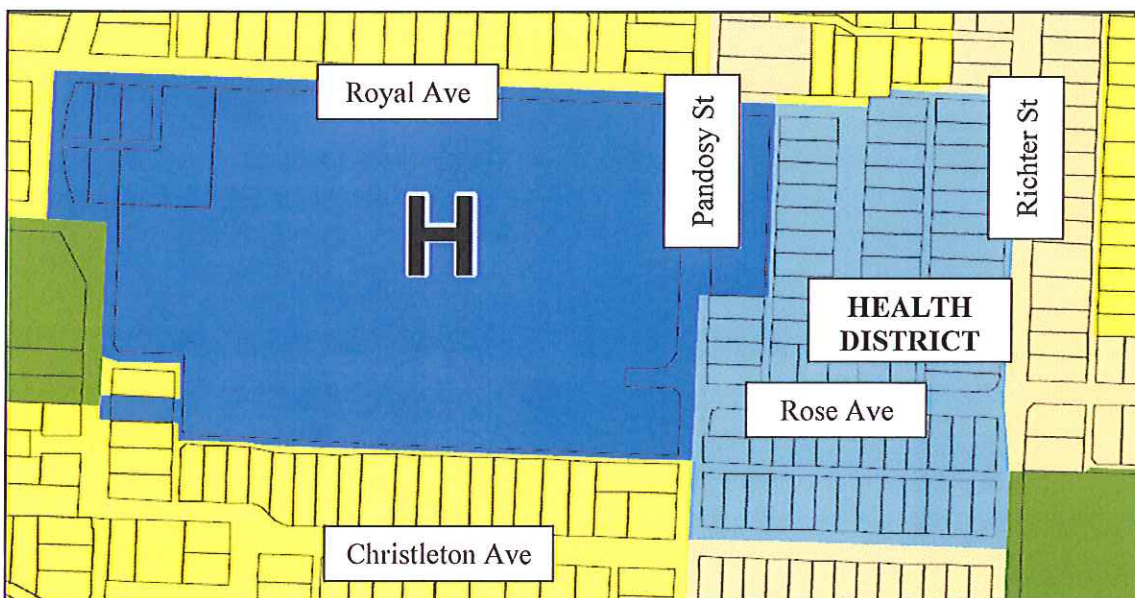
Proposed principal and secondary permitted uses have also been significantly vetted to ensure only those necessary uses are present; optional or “nice to have” uses such as private clinics, research businesses, or other commercial enterprises would be intended to locate in the adjacent Health District (see 2.3 below) or elsewhere in the City. Ancillary uses such as these have not been the driving force behind planned hospital expansions - rather, patient care and the growth of medical programming (such as the proposed Interior Heart and Surgical Centre) have directed the necessity of hospital redevelopment and expansion.

2.3 Health District introduction and intent

The Health District extending east from the hospital to Richter Street is intended to provide a location for supportive, ancillary uses. It is described in the 2030 OCP as:

Development that supports the operations of the Kelowna General Hospital or other health administration, health education, patient services or care facility operation. Other uses may include multiple unit residential uses consistent with the RM3, RM4 or RM5 zones of the Zoning Bylaw. Limited health and service related commercial uses as defined by the Zoning Bylaw may be supported.

An excerpt of the 2030 OCP Future Land Use map is provided below, where the Health District can be seen in light blue to the east of the hospital.



2.4 Design guidelines

Attached to the zone is an 18-page design guidelines document which has been produced by CTQ Consultants and Cannon Design. As the design guidelines are part of the Zoning Bylaw, they will be applicable to any building permit for new structures and additions on this campus. Following adoption of the 2030 Official Community Plan and designation of the campus as a Development Permit Area, the design guidelines will be further utilized as a component of a form and character Development Permit for any new structures or additions.

2.5 Concluding comments

In summary, the HD1 - Kelowna General Hospital zone is intended to allow for the vision of the hospital campus to be realized, recognizing the importance of a regional medical facility to a growing population with increasingly complex health care needs. However, the future supportive role of the adjacent Health District will be critical to ensure the availability of land for supportive businesses and uses.

4.0 Proposal

4.1 Background - Zoning

At present the Kelowna General Hospital site is zoned P1 - Major Institutional, which is an institutional zone utilized across the City for a variety of uses including recreation centres, arenas, sport complexes, Kelowna City Hall, the RCMP detachment and Provincial courthouse, libraries, hospices, and other similar uses. Until recently this zone has been suitable for the hospital site, however future hospital expansion plans now include development which is anticipated to exceed some of the regulations (e.g. site coverage) of the current P1 - Major Institutional zone. As a result, new land use regulations applicable to this site are required in order to facilitate future hospital expansion.

4.2 Background - Hospital Expansion

Construction of the new six-storey, 33,500 m² (360,000 ft²) Ambulatory Care Centre commenced in 2008 with \$215 million of provincial capital funding. Principal construction is complete and interior finishing continues this year toward an anticipated move in date of May 2012. Also complete is the Clinical Academic Campus, the two- and three-storey, 3,200 m² (34,000 ft²) home for the UBC Southern Interior medical school, built fronting Pandosy Street at the south end of the site with \$14 million of provincial funding.

Site preparation and foundation work is now underway for the three-storey, 7,850 m² (85,000 ft²) Clinical Support Building, located on the east side of Pandosy Street directly across from the new Ambulatory Care Centre, made possible with \$47 million of provincial funding. The next planned expansion is the 13,000 m² (140,000 ft²) Interior Heart and Surgical Centre. It will replace the aging Pandosy Building and is made possible with \$448 million of provincial funding. Further expansion phases are anticipated post-2016 however it is the Interior Heart and Surgical Centre structure which triggers the need for a change in land use regulation to accommodate site coverage and floor area ratio on site.

4.3 Project Description

The Interior Health Authority, in conjunction with CTQ Consultants and Cannon Design, has proposed a new regulating zone and integrated design guidelines for the Kelowna General Hospital site. A visual impact assessment has been completed and submitted as a component of the application, the results of which helped inform the content of the design guidelines.

Existing site conditions compare with the criteria of the proposed HD1 - Kelowna General Hospital zone as follows:

Criteria	HD1 Zone Proposed	Existing Conditions	P1 Zone Existing
Lot Area	7,500 m ² (min)	85,791 m ²	460 m ² (min)
Lot Width	30 m (min)	~ 234 m (max extent)	13.0 m (min)
Lot Depth	30 m (min)	~ 380 m (max extent)	30.0 m (min)
Floor Area Ratio	2.2 (max)	1.20	2.0 (max)
Site Coverage	75 % (max)	50.2 %	50 % (max)
Height	Varies: 25.0 to 36.5 m (max)	Varies: 8.5 to 36.5 m	22.0 m or 6 storeys (max)
Pandosy St setback	6.0 m (min)	6.0 to 28.51 m	6.0 m (min)
Royal Ave setback	6.0 m for up to 10.0 m in height; 9.0 m for up to 18.0 m in height; and 12.0 m for up to 25.0 m in height (min)	6.32 to 18.24 m	6.0 m (min)
Abbott St setback	12.0 m for up to 10.0 m in height; 15.0 m for up to 15.0 m in height; and 18.0 m for up to 25.0 m in height (min)	60.66 m	7.5 m (min)
Christleton Ave lane setback	4.5 m (min)	4.74 m	4.5 m (min)

A package of Design Guidelines have been produced by the applicant's consultants and, as an attachment to the HD1 - Kelowna General Hospital zone, they will form part of the body of applicable regulation contained within the Zoning Bylaw. At 18-pages in length the Design Guidelines cover considerable ground, including topics such as height, bulk, and scale, setbacks, building articulation and character, entrances, form, material, colour, human scale, landscaping, signage, lighting, screening, garbage and recycling, and a myriad other aspects of building design and impact mitigation.

For reference and review these proposed Design Guidelines can be found attached to this report.

Similar design guidelines within or attached to Comprehensive Development zones were pursued successfully by the respective local governments having jurisdiction over Vancouver General Hospital and Surrey Memorial Hospital.

4.4 Interior Health Authority Public Consultation

The Interior Health Authority conducted additional public consultation on April 26, 2011 from 4:30 to 7:30 pm, in an open house format which allowed for drop-in visits for the convenience of residents. Advertisements were placed in both the *Capital News* and *Kelowna Daily Courier*, and approximately 500 notices were hand delivered to nearby residences. Despite (or perhaps because of) the good practices employed by IHA in public consultation thus far, attendance at the open house was limited.

A full summary of feedback received at the open house by IHA is attached to this report; however, comments received indicated a general level of support for the rezoning and a history of good faith consultation on the part of IHA. Some concerns were noted in the survey results from the open house, and these are elaborated below:

- Provision of adequate parking for future facility expansions - It is important to note that the rezoning does not directly trigger the provision of additional parking, as the rezoning process is a regulatory framework that does not have an associated Development Permit at this time. Subsequent construction of new facilities will trigger additional parking requirements on site utilizing current Zoning Bylaw parking standards. In sum, parking will have to be provided in future commensurate with facility expansion.
- Traffic circulation in and around the hospital entrance on Pandosy Street - Development Engineering has worked with IHA and their consultants to review a Traffic Impact Study which has recommended various improvements to the area road network. Future improvements include a widening of Rose Avenue, intersection and turn lane improvements at Pandosy Street and Cadder Avenue, intersection improvements at Pandosy Street and Royal Avenue, and sidewalk installation along Royal Avenue.

4.5 Site Context

The subject property is located between the City Centre Urban Centre and the South Pandosy Urban Centre and has frontage on Pandosy Street, Royal Avenue, Abbott Street, Rose Avenue, and the laneway north of Christleton Avenue. Land uses in the surrounding neighbourhood are predominantly residential. Specifically, the adjacent zones and land uses are:

Direction	Zone(s)	Land Use(s)
North	RU1 - Large Lot Housing	Detached dwellings
South	RU1 - Large Lot Housing RU1s - Large Lot Housing with Secondary Suite RU2s - Medium Lot Housing with Secondary Suite	Detached dwellings and secondary suites
East	RU1 - Large Lot Housing P3 - Parks and Open Space	Detached dwellings Strathcona Park
West	RU6 - Two Dwelling Housing	Single detached dwellings, secondary suite, and duplexes (detached and attached)



5.0 Current Development Policies

5.1 Current Kelowna Official Community Plan (OCP)

The subject property is designated as Educational/Major Institutional for future land use; relevant policies are noted on the following page.

Institutional Policies:

Urban Centre Focus. Encourage an Urban Centre focus for health care and social services.

KGH Expansion. Support the extension of services and appropriate building expansions of the Kelowna General Hospital. Once the 550-bed capacity of KGH has been reached at the existing site, further expansions should take place elsewhere in the City or Regional District so as to minimize impact on the residential communities presently surrounding those facilities. The form and character of future expansions should be compatible with the surrounding neighbourhood context.

Helicopter Access to KGH. Support the provision of a helicopter landing pad that would provide convenient access to the Kelowna General Hospital.

5.2 Kelowna 2030 Official Community Plan (OCP)

The subject property is designated as Educational/Major Institutional for future land use; relevant policies are noted below.

Policy 5.32.9 - Health Care Facilities. Support the extension of services and appropriate building expansions of the Kelowna General Hospital and other health care facilities, as provided for on the Generalized Future Land Use Map 4.1. The form and character of future expansions should be compatible with the surrounding neighbourhood context.

Policy 5.32.10 - Helicopter Access to Hospital. Support the provision of a helicopter landing pad that would provide convenient access to Kelowna General Hospital.

Chapter 14 - Urban Design Development Permit Areas - Revitalization Design Guidelines

Following adoption of the new OCP, the Health District Development Permit area shall be established and will require the submission of a form and character Development Permit for new construction or additions to existing structures within the Kelowna General Hospital campus.

6.0 Technical Comments

Building & Permitting Branch. To be evaluated at the time of Building Permit submission.

Development Engineering Branch. See attached memorandum.

Fire Department. Comments will relate to individual BP applications.

Policy & Planning Department. The subject property is designated as Institutional in the current OCP and this proposed new zone is considered consistent with the existing OCP and the draft OCP. Therefore it is recommended that this application be supported.

Real Estate & Building Services. Please contact the Manager, Real Estate Services, for road dedications over 20 metres in width, land dedications and land transfers to or from the City of Kelowna, road closures and road reserves. Depending on the type of land transaction being contemplated, the processing time can vary from 3 weeks to 3 months.

Ministry of Transportation. Referred for bylaw approval.

Interior Health Authority - Health Protection. See attached memorandum.

FortisBC, Terasen, Shaw Cable, Telus. No comments received.

7.0 Application Chronology

Pre-application Consultation	November 2010 - February 2011
Date Application Received	February 28, 2011
Advisory Planning Commission	March 15, 2011

The proposal was reviewed by the Advisory Planning Commission and it was resolved:

THAT the Advisory Planning Commission support Rezoning Application No. Z11-0015, for 2268 Pandosy Street, to rezone the subject properties from the P1 - Major Institutional zone to the HD1 - Kelowna General Hospital zone.

THAT the Advisory Planning Commission support Text Amendment Application No. TA11-0002, for 2268 Pandosy Street, to create the comprehensively planned HD1 - Kelowna General Hospital zone.

The following anecdotal comments were noted in the minutes:

The Advisory Planning Commission supported this Application and noted it is a suitable zone for the subject property and suggested that enough Health District areas be added in the Official Community Plan for future needs. The current massing that's provided is an initial stage and the Advisory Planning Commission look forward to seeing more detail based on design guidelines that are provided, and future Development Permit applications. Furthermore, prior to finalizing the HD1 zone, consideration should be given to improving open space outcomes by decreasing site coverage in exchange for additional height at the centre of the site, in conjunction with an enhanced open space/green space plan for the site.

Staff note the following in response to APC's comments:

The matter of granting additional height as a means to reduce site coverage and enhance site open space was explored with IHA, however the geotechnical characteristics of the site already limits the effective height able to be achieved without causing damage to existing structures. Staff look forward to the receipt of more detailed landscaping plans alongside future Development Permits for new construction.

Application Refinement	March 2011 - April 2011
IHA Public Open House	April 26, 2011
All Technical Comments Rec'd	May 5, 2011

Report prepared by:


Andrew Browne, Planner II

Reviewed by:



Danielle Noble, Manager, Urban Land Use Branch

Approved for inclusion:



Shelley Gambacort, Director, Land Use Management

Attachments:

Subject property and zoning map

Development Engineering Branch technical comments (2 pages)

Applicant's letter of rationale and background submission (9 pages)

Community consultation summary of survey results (2 pages)

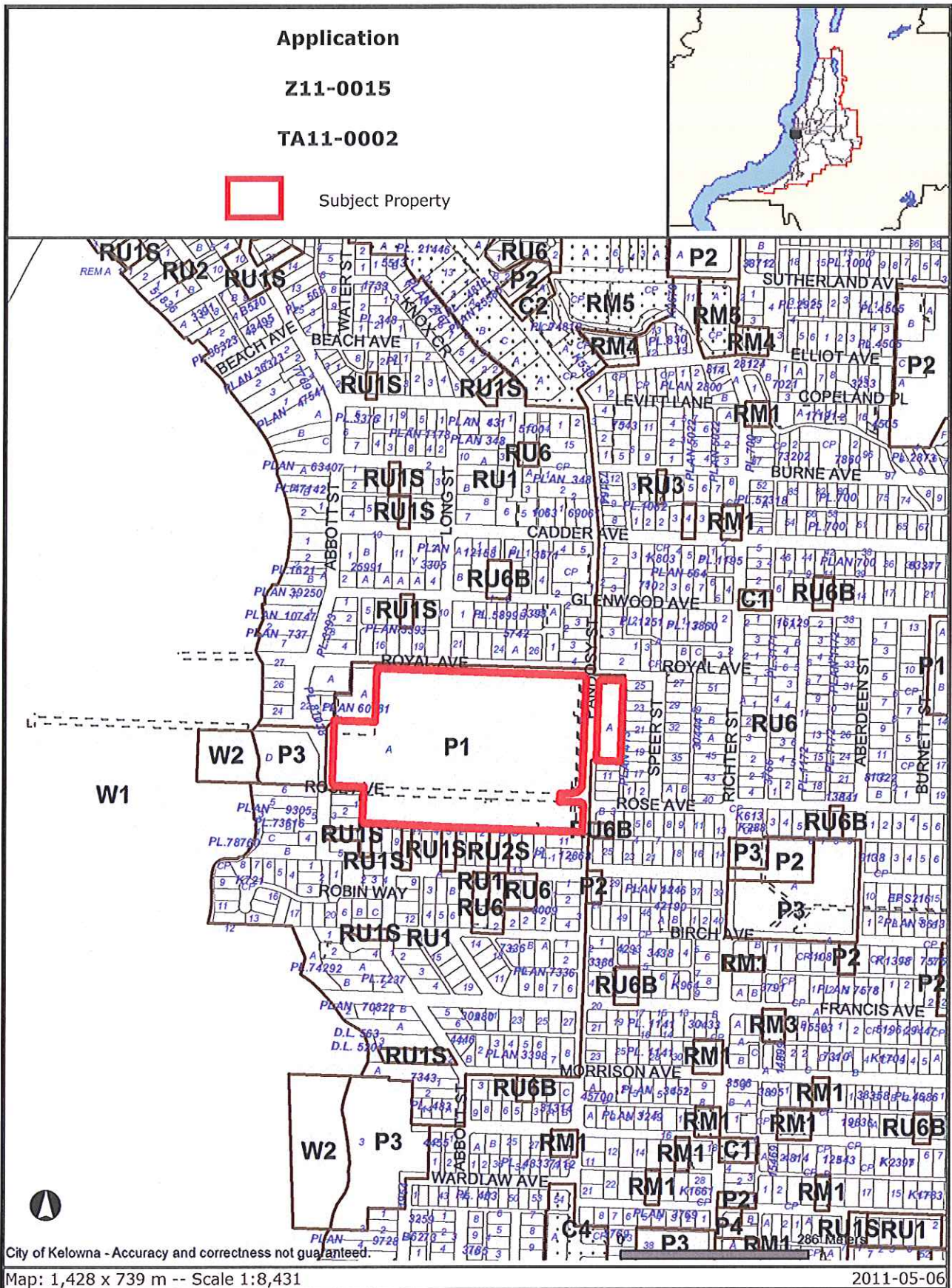
Schedule "1" - Proposed definition changes and supportive text amendments (1 page)

Schedule "2" - Cover page

Proposed HD1 - Kelowna General Hospital zone (2 pages)

Proposed HD1 - Kelowna General Hospital design guidelines (18 pages)

Excerpts from the Visual Impact Assessment (17 pages)



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.

CITY OF KELOWNA
MEMORANDUM

Date: May 5, 2011
File No.: Z11-0015

To: Land Use Management Department (AB)

From: Development Engineering Manager (**Revised 2 Comments**)

Subject: Hospital District Rezoning 2268 Pandosy Street, Rose Ave, Royal Ave

Development Engineering has the following initial comments associated with Transportation Issues (TIS) pertaining to this application.

1. Rose Avenue

- (a) The City would like KGH to contribute **\$1,100,000** towards road upgrades.
 - (i) The contribution is for improvements to Rose Avenue, between Pandosy Street and Richter Street (\$949,515) and the required intersection improvements at Cadder Ave and Pandosy St (\$150,485).
 - (ii) This contribution would be used towards the estimated \$2,000,000 in land acquisition costs and \$700,000 in construction costs.

- (b) The justification for this as follows:
 - (i) The City's original DCC road network showed an improvement of Cadder Ave to 4 lanes. After reviewing the KGH traffic impact study, it was concluded that Pandosy St is at capacity and that upgrading Pandosy St is too costly for the time being. It was decided that the City would utilize Richter St by upgrading it to 2 lanes plus a center turning lane and upgrade Rose Ave to encourage hospital traffic to travel along Rose Ave to connect to more north-south routes.
 - (ii) The City, in good faith, allocated the DCC road program to Rose Ave instead of Cadder Ave to help alleviate any congestion caused, primarily, by KGH. If the City kept Cadder Ave instead of Rose Ave, KGH would solely be responsible for the entire upgrade of Rose Ave. The cost to upgrade Cadder Avenue is \$1,600,000 versus the Rose Avenue upgrade of \$ 8,100,000

2. Royal Avenue Upgrade

- (a) A form of an intelligent display for public parking on the KGH site instructing visitors of the best location on site to park to reduce confusion and congestion caused by drivers circling the block looking for a parking spot.
- (b) The City may recommend that IHA perform a site wide parking study for the public parking to ensure ease of use and optimal location of parking areas for public use. This will be an ongoing measure that will be reassessed when the final building is occupied and fully functional for one year.
- (c) Intersection improvements at Pandosy St & Royal Ave. Specifically, sidewalk let downs. Should be addressed with the upgrade of sidewalks as part of the Centennial building along hospital frontage.
- (d) Continuous TDM measures for staff to encourage all modes of transportation. The City's Regional Services Department is currently working with staff to help develop some initiatives.
- (e) Review the western parking lot configuration and the access to Abbott Street. It may be necessary to make modifications to encourage vehicles to access the parking area from Rose Ave due to possible pedestrian crosswalk conflicts at the existing Abbott Street entrance.
- (f) Onsite pedestrian/cycle facility review and upgrade, with improved disabled access, way finding, cycle park facility signage, and traffic calming features.
- (g) If the hospital would like an emergency pre-emptive signal at Pandosy / Royal, they would have to pay for the upgrade from a pedestrian signal and all of the communications involved.
- (h) Construct a concrete curb, gutter and sidewalk on the north side of Royal Ave., from Pandosy St to Abbott St. The estimated cost of construction with an asphalt overlay is \$275,000. This improvement will be done by IHA and was triggered as a result of increased traffic generated by the Hospital on Royal Avenue.

3. DDC Credits

As part of this agreement the City is prepared to offer DCC Credits for existing buildings that have been or will be demolished.

CSB	\$ 98,736.00
IHSC	\$362,523.57

4. Subdivision

Based on the 2010 – 2030 Official Community Plan, the 10.0 meter widening of Pandosy Street which is protected by a road reserve is not required. However, the City will retain 5.0 meters of this reserve for a future right-hand turn. The remaining 5.0 meters can be released back to KGH with a statutory right-of-way to protect existing and future Fortis electrical facilities.

 Steve Muenz, P. Eng.
 Development Engineering Manager
 JF/jf
 Cc Director - Development Services Department

 (Print name)
 IHA

RATIONALE OUTLINE

- Purpose and Intent
- Current Policy
- Kelowna General Hospital Master Plan
- Existing Versus Projected Uses
- Description of Main Site
- Rezone Issues for Consideration
- Supporting Studies and Guidelines
- Design Guidelines

1. Purpose & Intent

The Interior Health Authority (IHA) is the responsible agency for the planning and development of the Kelowna General Hospital (KGH) and associated uses at their South Pandosy Street site in Kelowna. IHA has recognized the pivotal role that KGH will play in providing health care service for the Kelowna community and other parts of the BC interior region. As such, IHA began a process of defining its vision and future development of the existing site in the early 1990s, and more definitively in 1999 with the preparation of the “Kelowna General Hospital Development Plan”. By 2008, IHA had produced the “KGH Master Plan Report” that helped further define a master program of future health care need and the supporting facilities that would be required for a modern hospital or health care campus. In recent years, along with the benefit of several other planning studies and building design analysis, IHA has begun to augment its stock of buildings and facilities. The footprint of the former hospital site is also being expanded with plans for an additional building to be located on the east side of Pandosy Street.

The main impetus for the rezoning request in this current application is the need to replace the “Pandosy” building with the new Interior Heart and Surgical Centre. This and other associated uses, including parking, has prompted a need to create a new zone that will permit proper control and ability for future growth and development of the site. The Pandosy structure was constructed in 1939, with some expansion in 1973. It has become very clear that the Pandosy building is physically and functionally obsolete, and offers no opportunities for long term financial return on capital renewal investment. It was therefore considered a high priority candidate for demolition. (Some of the other buildings are also considered for near-future demolition.)

The current Zone (P1) respects hospital related uses but may be deficient in permitting the future program of health care as envisioned in the Master Plan for KGH. Some of the issues or expected needs to be addressed will be coverage of the site, height of buildings, parking, new principal uses such as education/teaching facility associated with the University of BC Medical School, retail and other ancillary uses, and design implications. The new Zone must respect the needs of KGH, the City of Kelowna, the surrounding residents and the community in general. The purpose and intent of this application will address the projected program of building and redevelopment at least 25 years into the future; however, continued planning and forecasting of needs for health care in Kelowna may determine changes in the projected program and potentially have implications for the KGH site and the greater Health Care District.



2. Current Policy

The proposed City of Kelowna Official Community Plan has recognized the merits of the location of the existing hospital site on South Pandosy, its continued expansion, and the potential need to designate a larger health care district or precinct that would stretch from Abbott Street on the west to Ethel Street on the east where the Cottonwoods facility is now located. Although further planning of this district will be required in coming years, it is implicit that some of the land use may transition into health care/hospital related use and function, as has occurred in many other health care/hospital areas in other communities in North America. The policy defines a compact pattern of development with increased use of the current site, higher density, on-site parking, and the inclusion of supporting uses (education, retail, related office, etc.).

Important policy issues that influence development on this site will be the residential zone/uses along the perimeter and near the hospital site; potential for commercial activity within the site; visual impact of new structures, access and parking, and the potential for future expansion beyond the site.

3. Kelowna General Hospital Master Plan

The 2008 Master Plan suggests a preferred option to accommodate the intended health care needs into approximately 2024/2025. Although IHA will be updating this plan forecast in 2011, many of their needs are currently being addressed with new construction and expansion plans for the immediate future.

The following figures depict some of the key components of the projected buildout:

Recent Components Constructed:

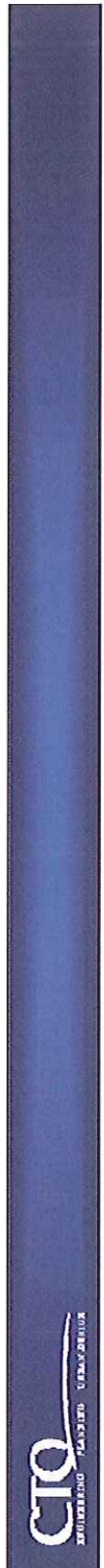
- Clinical Academic Campus (Teaching)
- 5 Level Parking structure
- Centennial Building (Pandosy and Royal)

Immediate Future

- 3 Storey Lab and Clinical Services Building (East side of Pandosy Street)
- Additional Parking structure and plant services
- Interior Heart and Surgical Centre (Replace Pandosy Building)

Future

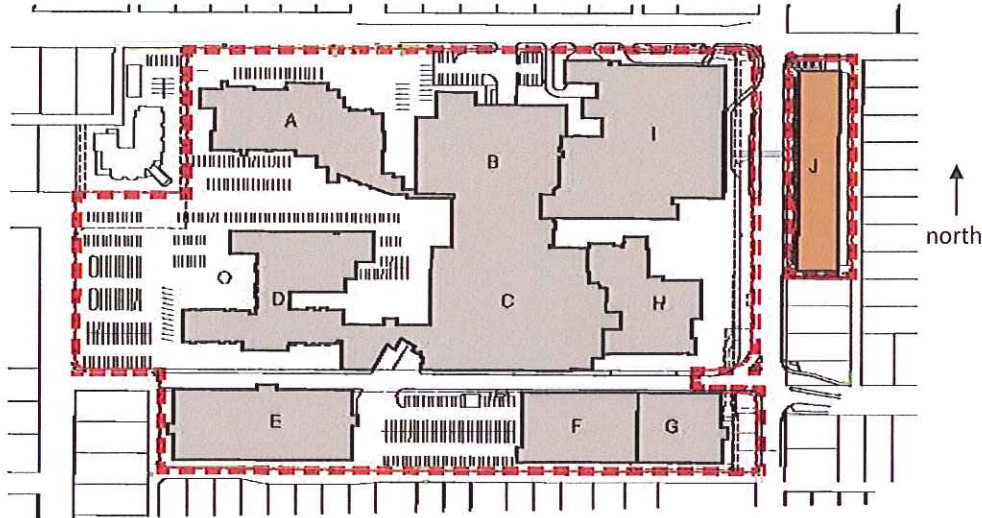
- Future Clinical/Additional Programs Wing
- 4 Storey Ancillary Services (East side of Pandosy St @ Rose)
- 5 Storey Clinical/IPU/Rehab
- Cancer Centre Expansion
- Other on site ancillary and circulation



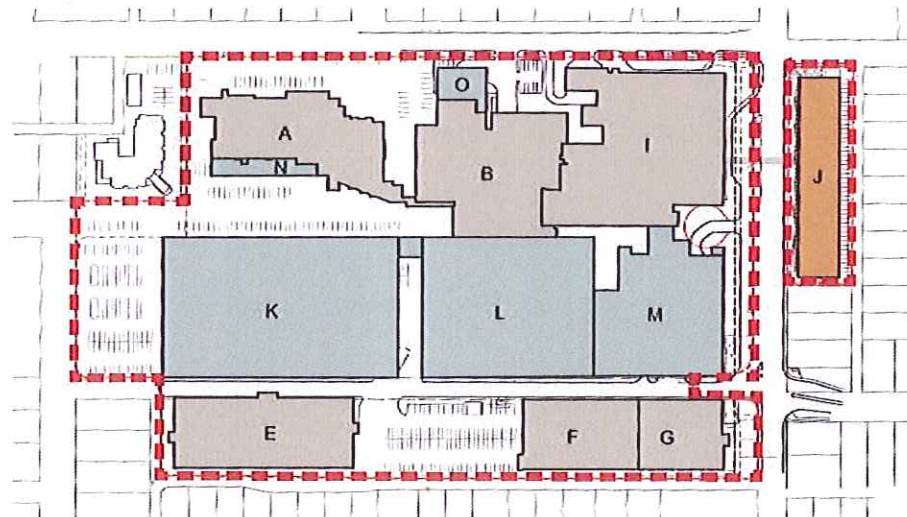
Rationale for Text Amendment Application
HD1 - Kelowna Hospital District Zone

KEY	BUILDING	STATUS
A	Cancer Centre	Existing
B	Royal Building	Existing
C	Strathcona Building	Existing
D	Abbott Building	Existing
E	Staff Parkade	Existing
F	Visitor Parkade	Existing
G	Clinical Academic Campus	Existing
H	Pandosy Building	Existing
I	Centennial Building	Existing
J	Clinical Support Building	Under Construction
K	Future Inpatient Wing	Assumes 5 storey footprint
L	Future Clinical/IPU/Rehab Wing	Assumes 5 storey footprint
M	Future Heart and Surgical Centre	Assumes 5 storey footprint
N	Future Cancer Centre Expansion	Assumes 1 storey footprint
O	Future Diagnostic Imaging Wing	Assumes 1 storey footprint

Existing (2011)



Projected Buildout



4. Existing Versus Projected Uses

Planning for the Hospital site has defined potential development gain by demolishing obsolete buildings and using land more efficiently. The Kelowna General Hospital Master Plan addressed 37 functional areas that compared existing size(s) with projected changes at least up to 2025. The difference in space requirements has confirmed the need for additional development. Consequently this zoning amendment is required to accommodate the expansion projected for the future.

The key functional areas are as follows:

Access (Admissions)	Infection Control (all to be consolidated at KGH)
Acute Respiratory therapy	Foundation, Auxiliary, Volunteers
Administration	Laundry
Adult Inpatient Units	Logistics
Biomedical Engineering	Main Lobby
Accounts Receivable/Cashiers	Retail
Chaplaincy/Religious/Spiritual Care	Medical staff Offices
Clinical Lab/Morgue and Autopsy	Pharmacy
Nutrition	Plant Engineering
Critical Care	Protection and Parking
Diagnostic Imaging	Psychiatric / Mental Health
Education/Student Placement (will include expansion of Nursing, Occ therapy, Physiotherapy, Dietetics Programs affiliated with UBCO)	Rehabilitation Centre
Eye Centre	Social Work
Food Services	Adolescent Psychiatry
Records	Transportation
Housekeeping	UBC Medical (Clinical Academic Campus)
Human Resources	Women's Health and Child's Health
Information management (IMIT)	

The estimated new gross floor area required for the above noted functional areas will be approximately 96,700 square meters.

Parking, retail needs and other ancillary uses are also projected to increase.

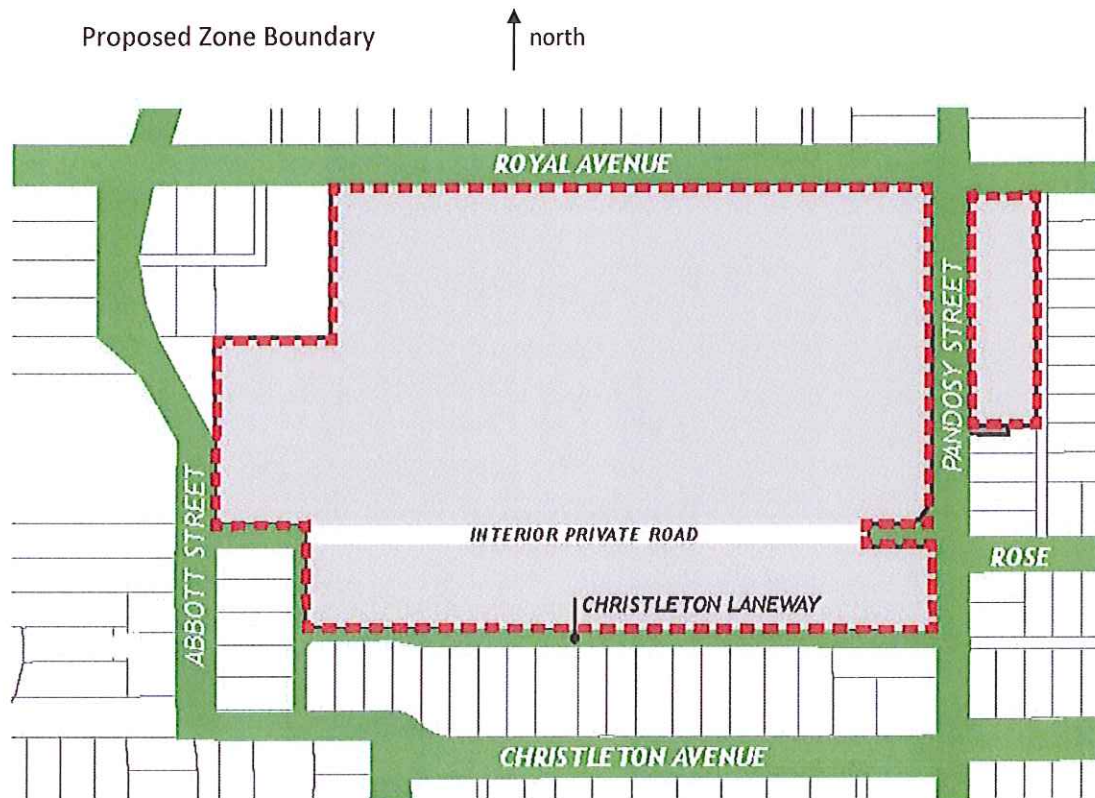


5. Description of Main Site

The overall site area is approximately 21.17 acres or a total area of 85, 673 Square Meters. This includes the main site between Abbott Street and Pandosy and the lands on the east side of Pandosy Street.

The main KGH site is bounded by Royal Avenue on the north, Pandosy Street to the east Rose Avenue to the south and Abbott Street on the west. KGH has been operational on the site since 1936. The current zoning is P1 Major Institutional. The surrounding lands are largely Residential (R-1a, with some R-2/R-6). The most proximate parkland is across Abbott Street and adjacent to the east shore of Okanagan Lake.

(See following figure)



6. Rezoning Issues For Consideration

Key zoning issues that have been addressed for this application include:

- Parking allocation per type of use
- Vertical and horizontal expansion
- Land use
- Definitions of land use (general)
- Definition for Public Education
- Definition for Retail
- Maximum site coverage and FAR
- Maximum sizes of secondary uses
- Implications of increased density on adjacent land use



7. Supporting Studies and Guidelines

Several documents were reviewed and prepared in support of this zoning amendment. Besides the KGH Master Plan Report, 2008, key studies that have informed the planning process have included the following:

- KGH Development Plan, 1999
- KGH Existing Site and Facilities Analysis, 1994
- Interior Health Authority Acute Care Roles Review Update, 2004
- Interior Health Parking Study, KGH, 2004
- Summary of Traffic Data for Ambulatory Care Centre, 2008
- KGH MRI Facility, Capital Plan Study, 2001
- KGH Strathcona Building, Detailed Assessment of Additional Storey and Geotechnical Information, 2005
- KGH Strathcona Building, Preliminary Structural Assessment of Additional Storey, 2005
- Land Ownership Study, 2008
- KGH Pandosy Street Full Hospital Development Traffic Impact Assessment, 2010
- Visual Impact Assessment, 2011 (In support of Rezoning Application)
- Design Guidelines, 2011 (In support of Rezoning Application)

Precedent studies have included the review of several bylaws and plans that pertain to hospital/health care precincts in other communities in North America. It should be noted the special approach to KGH that has resulted from the addition of the UBC Academic Campus has been noted at other hospitals/health districts where teaching has become an important adjunct to the typical hospital/health care services. The integrated health care model is now replacing the former medical services of the past. Education, research, and private enterprise are combining to provide quality and efficient service in the local health care industry.

Research on other hospital developments and associated municipal zoning implications included:

- Surrey Memorial
- Abbotsford
- Vancouver General Hospital
- Seattle Childrens Hospital
- Markham Hill, Portland, Oregon
- Denver, Colorado

Input was provided by other Health Authorities in BC including Fraser Health, Providence and Vancouver Coastal Health.

8. Design Guidelines

A set of design guidelines was also prepared to complement the proposed zone. The exercise started with a review of the existing conditions of the current hospital site and gaining a clear appreciation for the edge conditions or the surrounding neighbourhood that may be influenced by the proposed hospital expansion. Any public spaces and other specific neighbourhood characteristics were also noted. A full build out model was then developed based upon the current master plan. The modeling included an appreciation for various restrictions such as any geotechnical hazard that might limit loading and consequently the height of any buildings. Along with the guidelines, a Visual Impact Study assisted in formulating the specifics of design intent.





a place of mind
THE UNIVERSITY OF BRITISH COLUMBIA

The University of British Columbia
Faculty of Medicine
Dean's Office
2194 Health Sciences Mall, Unit 317
Vancouver, BC Canada V6T 1Z3

January 21st, 2011

Phone 604 822 2421
Fax 604 822 6061
www.med.ubc.ca

Ms. Tracy MacDonald
Health Service Administrator
Kelowna General Hospital
2268 Pandosy Street
Kelowna, BC V1Y 1T2

Dear Ms. MacDonald:

Physicians and staff at Kelowna General Hospital (KGH) have a successful history of participating in clinical education and research activities. As part of the University of British Columbia (UBC) Faculty of Medicine's distributed medical education program, KGH has been designated as a Clinical Academic Campus. This program, supported by the Province of British Columbia, is necessary to ensure students are trained throughout British Columbia where they will later locate their medical practices. Becoming a partner clinical teaching campus is a new and expanded role for KGH. KGH is now preparing to support clinical education and research activities for undergraduate medical students, postgraduate physician residents, and UBC physician faculty.

The purpose of this letter is to provide support for the rezoning application for KGH land use from "P1: Public and Institutional" to the designation of a "Comprehensive Development Zone". It is our understanding that this revision provides the opportunity for the City of Kelowna to consider an increase of density at site within current bylaws. In addition, we understand that complementary activities such as additional education and research activities can be accommodated at this campus. Both clinical education and clinical research are fundamental components of physician education because both apply to the creation and transfer of new knowledge into clinical practice.

As a UBC Clinical Academic Campus, KGH has a significant role in clinical teaching activities. In the UBC medical education programs, over 75% of instructional time is spent in supervised clinical teaching activities. The admission process into the Southern Medical Program (SMP) is now underway, and the first cohort of 32 SMP students will join their peers this fall. In January 2012, these 32 SMP students will be in Kelowna to continue their studies at UBC Okanagan and the Kelowna General Hospital Clinical Academic Campus. Within four years, the Southern Medical Program will have 128 medical undergraduate students, 32 in each year. KGH will be supporting the necessary instructional time for these medical undergraduates, plus supporting an added 40 physician postgraduate Residents and Fellows who will also be at KGH fulfilling requirements from the College of Family Practice of Canada and/or Royal College of Physicians and Surgeons of Canada.

As a Clinical Academic Campus, KGH is essential for the success of the UBC Faculty of Medicine's province-wide distributed medical education program, thus supporting postgraduate Residents trainees and Fellows who are completing their requirements to practice in the Okanagan. Together, our common purpose is to address both the shortage and uneven distribution of physicians within the province.

Please accept this letter in support of the application to change the zoning of the KGH property for the land use to become a "Comprehensive Development Zone".

Yours truly,

Mark Vernon
Chief Operating Officer

cc: Dr. R. Halpenny, CEO, Interior Health
Joanne Konner, VP Tertiary Services, Interior Health
Colleen McEachern, Director Tertiary Initiatives, Interior Health
Michelle Neilly, Director, Facilities Planning, UBC
Dr. Allan Jones, Regional Associate Dean Interior, UBCO

**KELOWNA GENERAL HOSPITAL ZONING
APPLICATION Z11-0015 & TA11-0002**

**COMMUNITY CONSULTATION
SUMMARY OF SURVEY RESULTS**

Consultation Date: April 26, 2011
 Number of Attendees: 12
 Comment Sheets completed: 7

Process:

Interior Health conducted a community consultation for its proposed rezoning of the KGH site. An open house format was used to allow the public to drop in at their convenience. The open house was held in the 2nd Floor Meeting Room at KGH, a location that has been used previously for similar community meetings.

Ten 24x26 inch poster boards were arranged throughout the room. Handout packages were also provided to attendees. Attendees were greeted when they arrived and asked to sign an attendance register. There were several IH representatives on hand (including staff from Capital Planning & Projects, Real Estate Services, Communications, and Hospital Administration) as well as two representatives from CTQ Consultants. Attendees were guided through the display boards and questions were addressed as needed.

The community consultation was advertised in both the Capital News (April 13th and 15th) and Kelowna Courier (April 13th and 15th). In addition 500 notices were hand delivered to residences in the vicinity of KGH, and emails notices were sent to the participants in the KGH Neighbourhood Liaison Group (neighbourhood consultation group that meets regularly with IH).

Results:

Questions	Strongly Support	Support	Neutral	Do Not Support	Strongly Do Not Support
1. Do you support the overall zoning changes for the subject property?	1	5			1
2. Do you support building heights for the subject property?		6	1		
3. Do you support the proposed setbacks for the subject property?		4	3		

Question 1 Comment:

- There is no consideration for parking or increased traffic flow.

Additional comments regarding the proposed application:

- In considering the design of new buildings, one should consider designing architecture that reflects and responds to the neighbourhood.
- I volunteered to be involved with the Heart & Surgical building. I have always supported the transition in the neighbourhood – hence my family’s medical related application. We felt additional services, accommodation, etc. complement the Hospital (UBC), etc.

- We support the height and density as you have demonstrated. We feel it is a good step to have the development process as it allows a voice to the neighbourhood.
- -Current bylaw does not provide for enough parking.
- -Just curious about turning into or out of the campus, without backing up traffic towards Royal, as Pandosy Street is already experiencing problems.
- In the “proposed zoning bylaws”, what exactly is meant by “utility services, minor impact” in section 1.3?
- -The application for rezoning is the right process!
- We need lights at Royal & Pandosy for the safety of all and for movement of ambulances!
- -I want to thank you for being so inclusive in this process. I’ve attended many of your neighbourhood liaison meetings so none of this is “surprising”. I’ve had a wonderful & thorough exploration of the presentation today.
- One of my major problems has been parking but as fines have gone up & ongoing enforcement has improved... it’s almost not a problem.
- Thank you for including the neighbours to such a great extent!

Attachments:

1. Newspaper advertisement
2. Delivery notice
3. Comments Sheets
4. Attendee Register

Zoning Bylaw No. 8000

No.	Section	Existing Text	Proposed Text
1	§2.3.3 General Definitions	nil	RETAIL STORE, HOSPITAL means premises (maximum 465 m ² overall and not more than 50 m ² for any individual tenant space) used for the retail sale of goods required by hospital patients, visitors, staff, and employees on a day-to-day basis but which are not intended to act as destination retail for the broader community. Typical goods offered for sale include prescription and non-prescription medications, medical goods, books and other media, flowers, cards, gifts, personal care items, and a limited selection of snacks, convenience food, and groceries.
2	§2.3.3 General Definitions	nil	HOSPITAL means a public institution providing health services for both in-patients and out-patients including room, board, emergency care, and the prevention and treatment of sickness, disease, or injury. This use is intended to include: standard administrative and operational support functions; small offices for health-related fundraising charities and research advocacy organizations; areas for staff wellness such as gyms and non-residential sleep rooms; provision for compassionate religious services (not to include a regular congregation); a lawfully operated helipad; and institutional cafeteria services. The secondary operation of private medical practices which accommodate patients for specialized procedures or services are permitted only if it is necessary for that procedure or service to be delivered in a hospital setting.
3	§7.0 Landscaping and Screening Table 7.1	nil	Add HD1 - Kelowna General Hospital with the following Minimum Landscape Buffer Treatment Levels: Abbott St, Pandosy St and Royal Ave – Level 2 Christleton Laneway – Level 3
4	§8.0 Parking and Loading Table 8.1	nil	Add "Hospital" use to list immediately below "Extended Medical Treatment Services" use.

CITY OF KELOWNA

FILE: TA11-0002

SCHEDULE "2" CONTENTS

1. PROPOSED HD1 – KELOWNA GENERAL HOSPITAL ZONE (2 PAGES)
2. PROPOSED HD1 – KELOWNA GENERAL HOSPITAL DESIGN GUIDELINES (18 PAGES)

##.1 HD1 – Kelowna General Hospital**##.1.1 Purpose**

To provide a zone for the comprehensive development of buildings that provide health services associated with the Kelowna General Hospital, Interior Health Authority, and the University of British Columbia Clinical Academic Campus. This zone will provide for a range of institutional uses, as well as a limited amount of hospital-related supportive commercial uses.

##.1.2 Principal Uses

- (a) Hospital

##.1.3 Secondary Uses

- a) Agriculture, urban
- b) Care centre, major
- c) Emergency and protective services
- d) Food primary establishment
- e) Public education services
- f) Public parks
- g) Retail store, hospital
- h) Utility services, minor impact

##.1.4 Subdivision Regulations

- a) The minimum lot width is 30.0 m.
- b) The minimum lot depth is 30.0 m.
- c) The minimum lot area is 7500 m².

##.1.5 Development Regulations

- a) The maximum floor area ratio is 2.2.
- b) The maximum site coverage is 75%.
- c) The maximum height is 25.0 m, except as otherwise noted in the attached height reference schedule in the annexed HD-1 Zone Design Guidelines.
- d) A minimum of 10% of the site area must be allocated for usable open space. This does not include area within the required setbacks.
- e) The minimum east/west yard setbacks facing Pandosy Street is 6.0 m.
- f) The minimum north yard setback facing Royal Avenue is 6.0 m for portions of structures up to 10.0 m in height, 9.0 m for portions of structures up to 18.0 m in height, and 12.0 m for portions of structures up to 25.0 m in height.
- g) The minimum west yard setback (Abbott Street) is 12.0 m for portions of structures up to 10.0 m in height, 15.0 m for portions of structures up to 15.0 m in height and 18.0 m for portions of structures up to 25.0m in height.
- h) The minimum south yard setback (Christleton Laneway) is 4.5 m.

- i) Existing setbacks and yards which do not comply with the above setback provisions shall be considered to be legally non-conforming until such time as the respective structure is demolished. Additions or alterations which would serve to reduce the dimension of existing, legally non-conforming yards and setbacks are not permitted.
- j) Development form and character shall be in compliance with the *HD1 – Kelowna General Hospital – Design Guidelines* document that is attached to and forms part of this Bylaw. Development Permits and Official Community Plan design guidelines may also apply.

##.1.6 Other Regulations

- a) In addition to the regulations listed above, other regulations may apply. These include the general development regulations of Section 6 (accessory development, yards, projections into yards, accessory development, lighting, stream protection, etc.), the landscaping and fencing provisions of Section 7, the parking and loading regulations of Section 8, and the specific use regulations of Section 9.
- b) Vehicle-oriented or drive through commercial services are not permitted in this zone.
- c) **Care centre, major** shall be limited to a **gross floor area** not greater than 150 m².
- d) **Food primary establishment** shall be limited to a **gross floor area** not greater than 465 m².
- e) **Retail Store, hospital** shall be limited to a **gross floor area** not greater than 465 m² overall and not more than 50 m² for any individual tenant space.
- f) Acoustics/Sound Control: Daytime sound levels at the property line shall not exceed 60 dBa. Night (after 22:00) sound levels shall not exceed 50 dBa. Helipad operations are excluded from this standard.
- g) The following uses shall be exempt from parking requirements:
 - i. **Care centres, major**
 - ii. **Food primary establishment**
 - iii. **Emergency and protective services**
 - iv. **Public parks**
 - v. **Retail store, hospital**

Kelowna General Hospital DESIGN GUIDELINES

Hospital District 1 Development Permit Area Design Guidelines
February 2011



Cannon Design Architecture Inc. | CTQ Consultants Ltd.



HD1 KELOWNA GENERAL HOSPITAL DESIGN GUIDELINES

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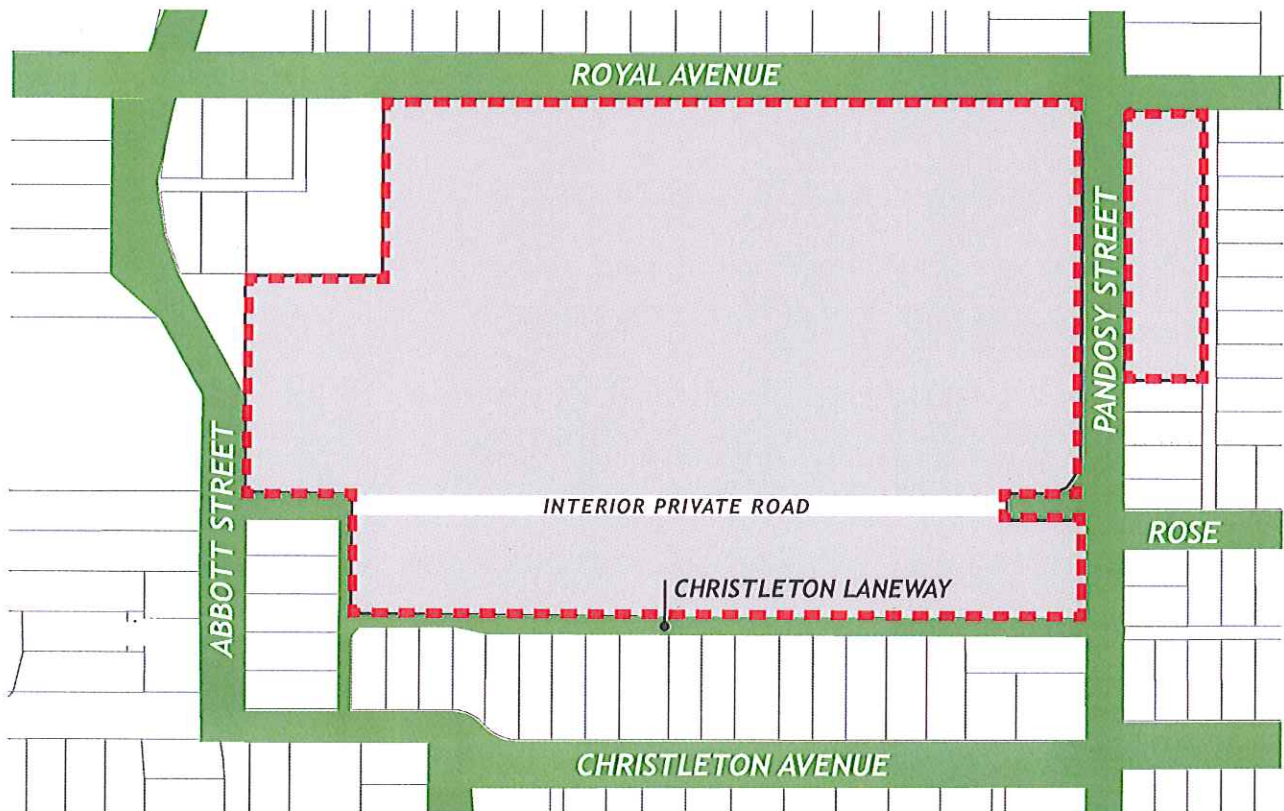
1.0 APPLICATION AND INTENT

These guidelines are to be used in conjunction with HD1 - Kelowna General Hospital Zone to guide future development of the hospital campus (see Figure 1).

As well as assisting the Development Permit applicant, the guidelines will be used by City staff in the evaluation of proposed developments. The guidelines will ensure that the design of individual developments on the Kelowna General Hospital (KGH) campus are compatible with the overall urban planning goals for the HD1 Zone, and the broader Health District as defined in the current Official Community Plan (OCP).

The site is bound by Royal to the north, Christleton (laneway) to the south, Abbott to the west and Pandosy to the east. One part of the site exists on the east side of Pandosy and is hooked to the main parcel.

Figure 1: Proposed Zone Boundary  



2.0 KELOWNA GENERAL HOSPITAL GOALS AND PRINCIPLES

Excerpt from the Kelowna General Hospital Master Plan Report, July 2008.

A Clear and Compelling Way Forward

The philosophy that drives the master plan assumes that KGH will not consider itself an island, isolated from its immediate community and instead it embraces its role as an integrated and vital civic resource offering both patient healing and community-based services at all levels – civic, social and spiritual.

Combining Imagination and Foresight

Imagine a hospital where you go to meet friends; a place you visit to hear lectures, or hold a reception; a place in which the elderly or aboriginal community gathers to discuss issues that will affect them. Imagine a place that blends with, and enhances its surrounding neighbourhood.

And imagine buildings designed in a responsive way to welcome natural light and the spectacular panoramic views to nature at every opportunity. Imagine a system of wayfinding that acts as an invisible hand that guides patients and visitors effortlessly from every entry to every destination. These are the important elements in a holistic healing community and must be considered at all stages if KGH is to have the spatial richness, cadence and delight of the best community-based environments.

Like the community that supports it, the role of KGH is changing in that community. Demographics are shifting such that almost one fifth of the population is considered elderly. There is also a large aboriginal population whose unique needs must be considered. Both are important aspects in the planning process. Additionally, moving from a Secondary to an increased Tertiary, program-based model of care, organizational survival can be enhanced through strategic partnerships with organizations that share similar values and aspirations (UBC, UBCO etc). Therefore, the need to establish strong organizational, programmatic and community infrastructure linkages is more important than ever before. These linkages, together with a comprehensive master plan of intelligent development options, will ultimately be the driving force that pushes KGH to a new role in the community. This new position assumes an increased responsibility for a broader definition of “community stewardship”.

Creating an Integrated Community Asset

If Kelowna General Hospital is to become further integrated with its community, it must also incorporate rational urban design principles that extend their influence beyond the limits of the site. The strategy must include options that offer both internal and external open spaces and various circulation routes that strengthen the relationship of the hospital with other neighbourhood services such as schools, parks, or transit nodes. Buildings as well must be capable of handling multiple programs that respond to site conditions and also to the people who occupy their spaces on a daily basis.

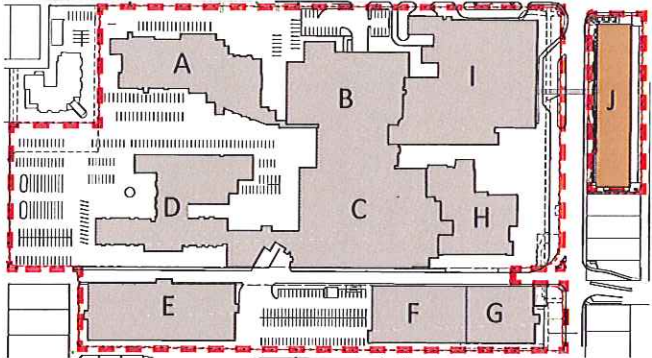
We believe, however, that this project is much more than a simple facility expansion plan. It is also about community building. This project has a huge symbolic implication for this community and its aspirations for the future. Ultimately, it is the culmination of a comprehensive collaborative effort by a large cross-section of committed stakeholders who have come together to ensure that the best possible health care is available for the community for years to come.

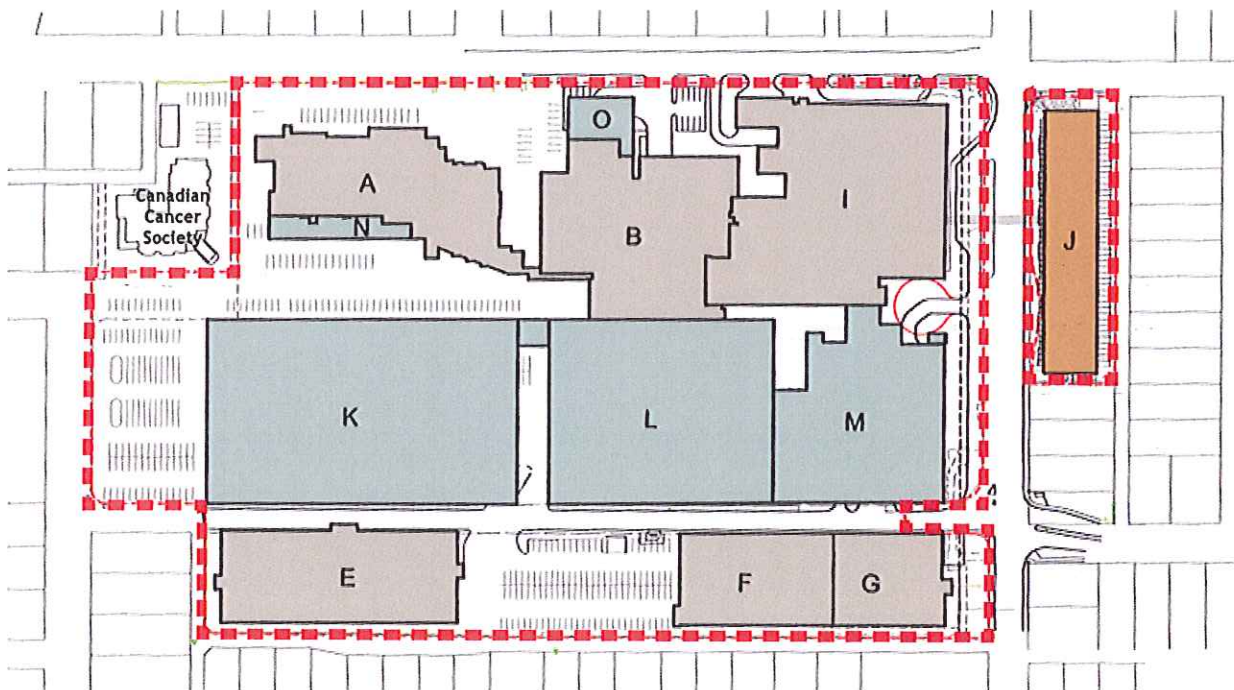
3.0 GENERAL GUIDELINES

3.1 BUILDING SITING

The location of interior streets, open spaces, and buildings should generally be as illustrated in the Preliminary KGH Expansion Plan included below and should be designed to respect existing and future development as well as adjacent outdoor space.

Figure 2: Preliminary KGH Expansion Plans - Lower Image 

KEY	BUILDING	STATUS	EXISTING SITE PLAN
A	Cancer Centre	Existing	
B	Royal Building	Existing	
C	Strathcona Building	Existing	
D	Abbott Building	Existing	
E	Staff Parkade	Existing	
F	Visitor Parkade	Existing	
G	Clinical Academic Campus	Existing	
H	Pandosy Building	Existing	
I	Centennial Building	Existing	
J	Clinical Support Building	Under Construction	
K	Future Inpatient Wing	Assumes 5 storey footprint	
L	Future Clinical/IPU/Rehab Wing	Assumes 5 storey footprint	
M	Future Heart and Surgical Centre	Assumes 5 storey footprint	
N	Future Cancer Centre Expansion	Assumes 1 storey footprint	
O	Future Diagnostic Imaging Wing	Assumes 1 storey footprint	



3.2 BUILDING ORIENTATION

- a. Buildings should generally be oriented to the adjacent orthogonal street grid.
- b. The foregoing notwithstanding, the building should be designed in relation to its orientation on the site. In particular it should be designed to capture sunlight appropriately. It should shelter people approaching it from the prevailing winds and poor weather. The way the building is orientated may also contribute to the potential for views out of the building.

3.3 VIEWS

Built form has been generally located to respect various public, semi-public and private views. Principal public views to be respected are shown on Figure 3 below and include:

- a. Views north/south on Pandosy Street.
- b. Views along the internal roadway.
- c. Views along Royal Avenue to the lake.

Figure 3: View Corridors



3.4 MASSING CONTROLS

3.4.1 HEIGHT, BULK AND SCALE



Building height and bulk should be designed with materials that help visually reduce the scale and form of the buildings into smaller scaled elements and that complement neighbouring structures within the same visual field. This can also be accomplished with landscaping to reduce the visible building area, and by changing finish materials to reduce large fields of like materials on building surfaces. Allowed building heights are 25m on the perimeter of the site and 30m on the interior of the site in accordance with the Figure 4 below.

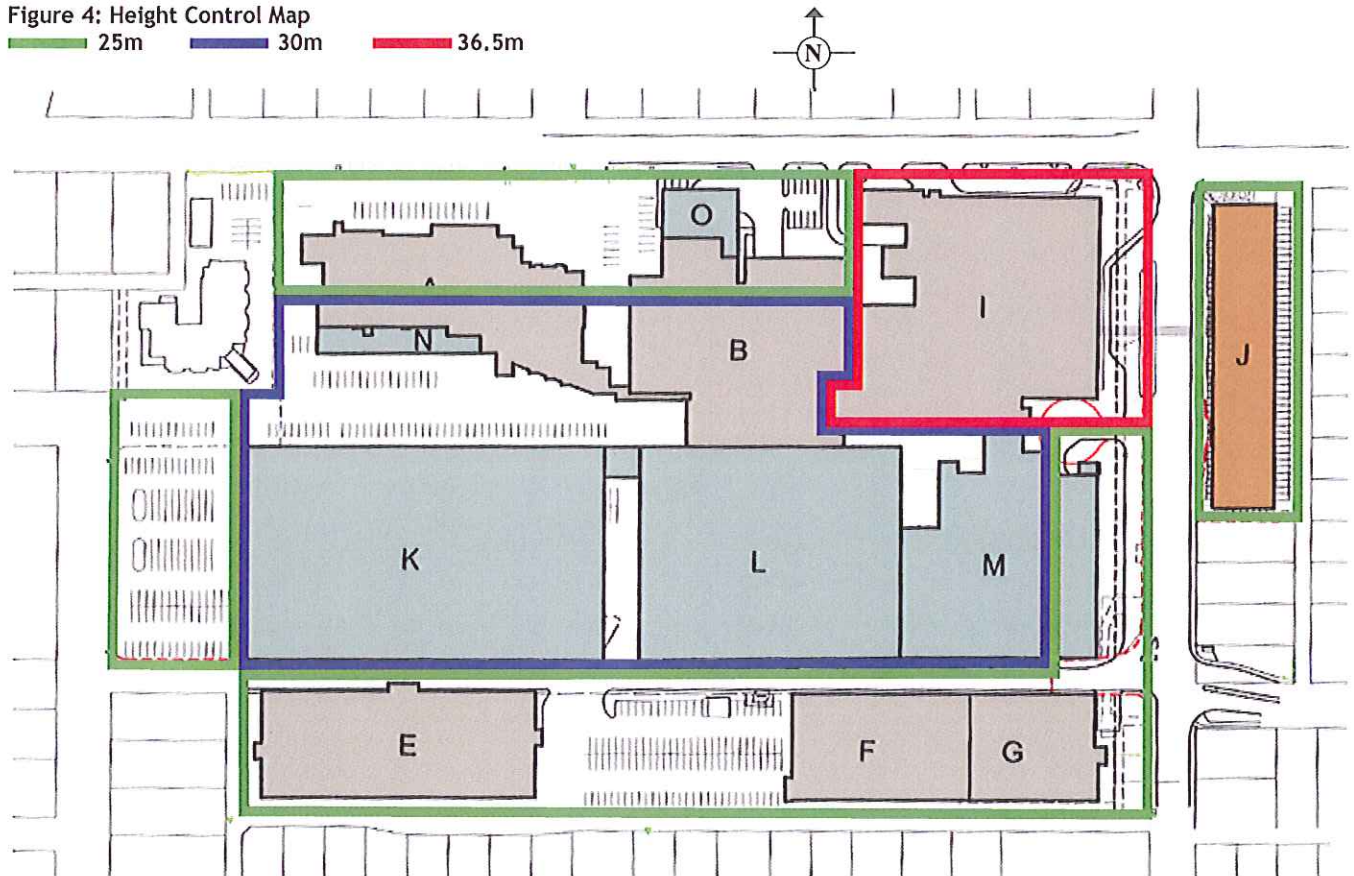
Consider use of:

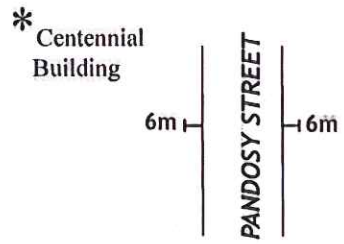
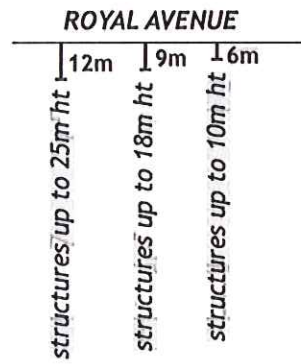
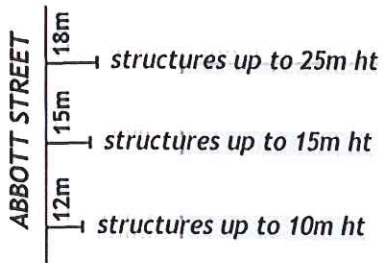


- A palette of compatible materials to divide areas of large forms into smaller shapes that are in scale with surrounding structures; including but not limited to windows, curtain walls, metal panels, retail frontages, glass and brick.
- Trellises, climbing vines or wall mounted planters to soften vertical walls.
- Building heights should be terraced to maximize sun penetration at the equinox particularly to pedestrian areas during the noon lunch time period.

Figure 4: Height Control Map

25m 30m 36.5m





4.5m
CHRISTLETON LANEWAY



3.4.3 BUILDING ARTICULATION AND CHARACTER

- a. Buildings should be highly articulated and transparent to break down their scale, utilizing such components as glazing, canopy and shading systems, as well as exposed structural elements.
- b. Articulate building volume by setting wall planes back or forward to create shadows or break up long expanses of building walls.
- c. Highly visible circulation, “breakout/gathering areas”, and building systems are encouraged.
- d. Vertical circulation elements, such as stairs and elevators, that are located to the perimeter of the building, should be emphasized and transparent to assist in articulation, as well as express their function.
- e. Large areas of exposed blank walls are not acceptable on prominent and visible facades.
- f. Views from the adjacent streets should not give the impression that the hospital has turned its back on the neighbourhood. Instead, one should encounter functional and pleasant spaces that provides privacy and peace for residents. It is particularly important that there be no disruption to adjoining houses. Use of vegetation to achieve these goals is highly encouraged.
- g. The design should have sufficient variety to create interest both in terms of the overall form and massing externally and the spaces internally. This should be achieved developing a design that embodies a clear and coherent idea or vision.
- h. A healthcare building should be about the people who work in it and are served by it. The design of the building overall should lift the spirits of those who work in it and are being treated in it as well as those who visit. It should communicate a strong positive image of KGH.
- i. The building should use and express current best practices in terms of form and technology. The building should clearly reflect new and appropriate

models of healthcare provision. It should be a building that clients, developers and designers would wish to visit to learn from when working on future projects.



3.5 BUILDING ENTRANCES

- a. Main building entries should be logically located in relation to likely points of arrival on site, clearly identifiable, visible, transparent and accessible from the street.
- b. The location of entries is especially important where there are more than one entrance or where there may be several routes onto the site. The form of the building should invite approach and entry and make the places where the public enter apparent, even if there were no signs. The design should respond to the major expected points of arrival. The entrances should be obvious from these angles.
- c. Main building entries should incorporate weather protection.

- d. Landscape elements such as seating and bike racks should be considered.

3.6 FORM, MATERIALS, COLOUR



New buildings should be designed and built with high-quality, attractive, durable materials aesthetically appropriate to the hospital and the neighbourhood.

Consider use of:

- a. The building should appear welcoming to staff, patients and visitors regardless of its size. The scale should be appropriate to a caring image. Scale is the result not just of the size of the building but of the way certain features are expressed. Windows, floor to floor heights and, in particular, doors and entrances all contribute significantly to our sense of the scale of a building.
- b. Materials should be chosen to enhance the building as a whole. The form and materials should be well detailed. The building should be one that will age gracefully rather than show unsightly staining or weathering.
- c. Colours and textures should articulate and enrich the building's form and enhance its enjoyment. What feels appropriate will to some extent depend on the type of building. However in the case of the exterior, colours and textures should also be chosen to relate positively to adjacent buildings and other aspects of the setting.
- d. Low reflective or glare-reducing materials to minimize visual impact on adjacent properties.
- e. Exterior building design should de-emphasize the institutional character of the precinct but should utilize appropriate, durable materials. Dominant materials should be architectural concrete, clear glass, brick masonry and stone or metal cladding. Generally, stucco should not be a principal building material. While a sense of connection between the buildings is desirable, there is no requirement to 'match' the material palette of the existing campus.
- f. Facade transparency and views into building activities should be provided, especially at grade levels; accordingly, use of mirrored or highly reflective glass is discouraged.



3.7 ROOFTOPS AND BALCONIES

Where rooftops may be viewed from locations within the KGH site, rooftops should be seen as a design element. Public views of rooftops from the adjacent neighborhoods should also be considered.

Consider use of:

- a. Landscaping and other "green" treatments of roof areas are encouraged. These should provide usable outdoor open spaces wherever possible.

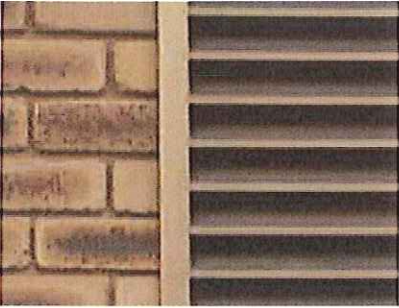
- b. Rooftop mechanical systems, elevator penthouses and other appurtenances should be integrated into the form and architecture of the building.
- c. Avoid large areas of undifferentiated grvels.



3.8 SOFFITS AND BUILDING OVERHANGS

- a. Any soffits, or the underside of any portion of a building, including the undersides of balconies, within 16m of grade and exposed to public view,

- b. should be treated to provide visual interest and show attention to detail. The use of wood in this application is encouraged.



3.9 VENTS AND ROOF FLASHING

- a. All roof flashing and vents exposed to public view should be painted to match adjacent surfaces or disguised in a manner consistent with the visual characteristics of the building.



3.10 HUMAN SCALE

Provide a streetscape that is inviting, safe, and accessible.

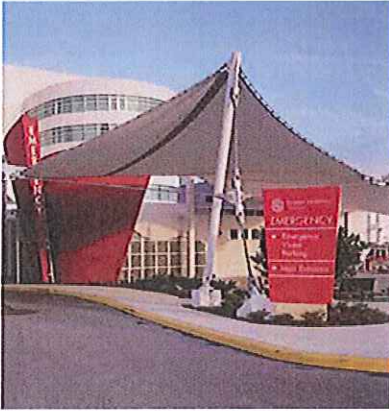
Consider use of:

- a. Building elevations to emphasize the ground floor and street façade of buildings with principal entries, windows, balconies and key internal uses at street level.
- b. Materials and details that provide additional visual interest through texture, shadowing and contrast.
- c. Landscape (hard and soft) the front yard to blend with surrounding front yards' landscaping patterns. The landscape treatment should complement

and enhance the continuity of uses along the street and create a significant green presence.

- d. Pedestrian amenities in prominent, active areas that are complementary to the adjacent building use or programmed open space, such as benches, drinking fountains, kiosks, lighting and bicycle racks.

3.11 PUBLIC ENTRANCES AND ACCESS POINTS



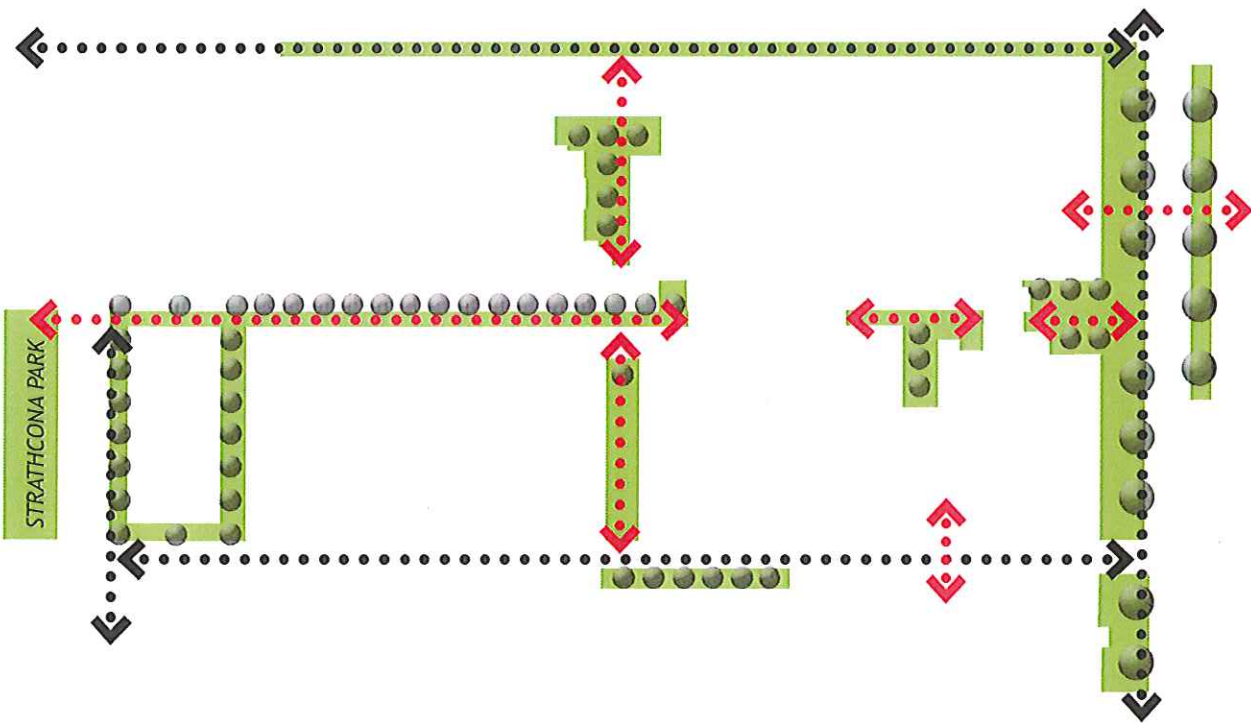
Primary entrances and access points can be defined through landscaping, artwork and detailing to create a sense of arrival and place. Primary access points are transition locations that identify entry or departure points to a neighborhood for pedestrians and vehicles. They may also identify public building entrances or the beginning of public pathways that cross the KGH site. Legible and visually permeable public entrances to the campus should provide intuitive destinations that are supported by, rather than reliant on, clear signage..

Consider use of:

- a) Distinctive architectural elements, landscaping and signage at primary public entrances and access points to provide visual emphasis and ease of identification.
- b) Wayfinding that clearly identifies building entries, parking, pathways, and public greenspace.
- c) Hierarchy of public entrances and access points to emphasize design appearance at building frontage locations where visible from single family residences.
- d) Identifiable KGH site access points to connect neighbourhood areas to hospital buildings and green spaces throughout hospital site and beyond.

Specific access points:

- a) Pandosy Street - People who approach the site from the north or south along Pandosy Street should feel a sense of arrival at the hospital precinct. In addition to the pedestrian bridge link reaching across the road, other elements on the building façades and in the public realm should help create a sense of a gateway to the campus and contribute to a precinct identity.
- b) Rose Avenue – The majority of on-site parking is accessed from Rose Avenue. Consideration for designs which ensure the safe coexistence of vehicles and pedestrians with varying degrees of mobility is essential.
- c) Royal Avenue - The primary challenge on the Royal Avenue edge of the campus is the organization of traffic flows into and out of the Emergency Department and Cancer Centre. New buildings should clearly indicate the location of the vehicle entrance, minimizing the amount of traffic searching for access from adjacent residential streets.



STRATHCONA PARK

- c. Continuity of treed walkways for consistent sun/shade protection when desired.



- d. Pedestrian scale and comfort in landscape and built form.
- e. Visually connected pathways and integrated plazas, steps and usable landscape features for the enjoyment of hospital workers, visitors and neighbouring residents.

3.13 DISABLED ACCESS

- a. Generally, the primary pedestrian systems, public open spaces, primary private walkways and principal entrances to all buildings should be accessible to the physically challenged.

landscape design.

- b. ~~Access routes should be easily identifiable and integrated into the building/~~ Appropriate signage, markers, or other levels of wayfinding should be used along access routes to indicate to the physically challenged the route terminus points or any required route changes to ensure convenient universal access throughout the KGH site.



3.14 LANDSCAPE

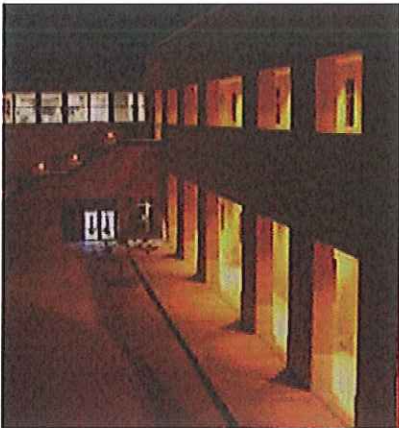
The landscape should contribute to the creation of a livable, healthy and environmentally responsive community. The landscape should extend the color, texture and pattern of the surrounding residential areas. Within the KGH site, the landscape program should be designed to provide access to restorative and therapeutic gardens with seasonal sun and shade to provide outdoor comfort for families, patients, caregivers and neighbours.

Consider use of:

- a. Large caliper trees - coniferous and deciduous.
- b. Use of indigenous flora should be considered a priority, both in terms of lowering maintenance needs and also in promoting natural habitat.
- c. A variety of plant material should be used to reflect seasonal change.
- d. On sites to be developed for open space, retention of existing trees should be maximized. On sites for development, opportunities for retention of significant trees should be considered.
- e. Open space should be fashioned to minimize water, chemical and fossil fuel use for routine maintenance and should promote a healthy local ecosystem.
- f. Permeable surface materials should be incorporated into open space development proposals, and opportunities for retention of surface storm water on site should be considered.
- g. Senses of sight, smell and touch should be stimulated by providing elements of healing gardens.



3.15 SIGNAGE



Develop a comprehensive and cohesive sign hierarchy for wayfinding.

- a. Hierarchy should include arrival signage, directional signage, and instructional signage.
- b. To limit the number of signs, vehicular and pedestrian signage should be integrated where possible.

3.16 LIGHTING

- a. All exterior lighting should follow the International Dark Sky Model code in order to limit light pollution and to conserve energy.
- b. Particular attention should be given to the lighting of public outdoor spaces and the adjacent private property to create an unobtrusive, human scale lighting concept, with a hierarchy of fixture types designed according to functional and security needs, and reflecting the hierarchy of pedestrian corridors.
- c. Light fixtures within the reach of pedestrians should be vandal proof.
- d. Lighting on pedestrian paths should illuminate not just the path but the surrounding area adjacent to the path, particularly en route to transit



connections.

- e. Shielded lighting to limit light effects on adjacent properties along driveways, surface parking and garage areas.
- f. Reduce the amount of light exiting through glazing between 11:00 PM

building.

3.17 PUBLIC ART

Opportunities for public art should be considered for major public open spaces, public lobbies, waiting areas within medical facilities, and strategic focal points within the site.



3.18 SCREENING

Landscaping, fencing and walls can serve as screens to block views of the hospital campus buildings, of loading and utility areas, lighting, parking and functional hospital components. Walls can be used to control sound. The appearance of walls should be

softened with plantings.

and 5:00 AM. The lighting must either be dimmed or shut off automatically during these hours. Consider automatic shades or blinds must be used to block light leaving the



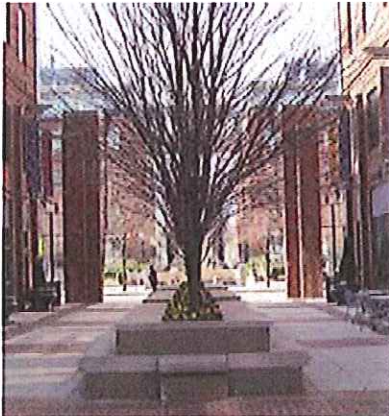
- a. Planted visual screens.
- b. Barrier walls to reduce noise impacts on adjacent residential neighbours.
- c. Plantings to screen areas of greater noise activity.
- d. Semi-transparent wall systems to minimize screen wall mass, in combination



with plantings.

3.19 GARBAGE AND RECYCLING

- a. Underground recycling and garbage containers should be provided for each development.
- b. Where underground storage is not possible, it should be screened and secured. The design of the enclosure should reflect the design aesthetic of the building.



3.20 SAFETY AND SECURITY

The principles of Crime Prevention Through Environmental Design (CPTED) should be followed for all aspects of design and planning. The design of the KGH site shall place high importance on public safety and security. The location of entrances and exits, fencing, lighting and landscape can be used to limit or encourage access or control use. The design of the landscape can help define public, semi-public and private spaces that can be visually monitored effectively by users.

Consider use of:

- a. Publicly accessible spaces designed with clear sight lines and visible from the street or primary bike or pedestrian pathways.
- b. Low shrubs and pruned trees for high visibility in landscaped areas. Design

structures to eliminate hiding places for predators by locating building windows or security cameras overlooking pathways, plazas and parking.

- c. Evenly distributed, glare-free lighting to increase security and reduce impacts on adjacent property.
- d. Lighting placed along pathways and other pedestrian-use areas at proper heights for lighting the faces of the people in the space for ease of identification.
- e. Landscape designs that promote surveillance needs, especially in proximity to designated and opportunistic points of entry.



3.21 PARKING, LOADING AND VEHICULAR ACCESS

Design of vehicular access and parking facilities provide opportunities to optimize operational functionality and contribute to desired hospital character. Street frontage edges would be designed to direct vehicle movements, mark access points to the KGH site, and promote safety for bike, pedestrian and transit users. Vehicle movement and storage should be minimized and facilities should be designed to complement the envisioned character of the campus.

- a. Parking and loading entrances should be integrated into the buildings or landscape, and exposed walls and soffits should be architecturally treated. Good visibility of signage for vehicles at access points should be provided.
- b. Drop-off areas should be provided on site, and may be located within the confines of a building, as long as it does not reduce usable, landscaped outdoor open space.
- c. Parking garages for staff should be fully secured during non-business hours. Doors leading from perimeter exit stairs should be integrated into the building face, preferably close to a main building entrance rather than isolated from the building. Visitor parking should be secure and separate from staff parking.

- d. For public parking, the number of pedestrian entry points should be reduced to a minimum and where possible, should be located at the vehicular entry points to maximize surveillance.
- e. Vines, hanging plants and other plantings on vertical surfaces of elevated parking structures to conceal parking.
- f. Garage interiors should be as visibly open as possible without circuitous paths to elevators and stairs.
- g. Where possible, loading areas should be securable with an overhead gate, with electronic communication to personnel that can open and close gates.

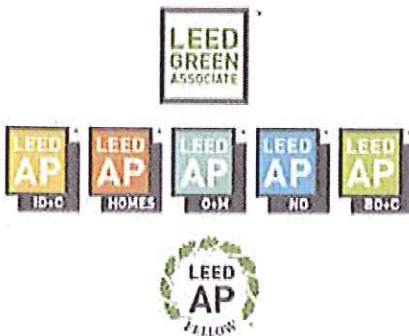
3.22 SOUND CONTROL

New buildings must employ all design criteria necessary to ensure the noise transfer from the building is kept and maintained at a minimum, while meeting the BC Building code. Exterior elements should not only break down the building mass but where possible, shield neighbours from sound spilling from the building and its mechanical equipment.

- a. Design mechanical systems located at or near the Building exterior to minimize sound transmission to the neighbouring residential community. Daytime sound levels at the property line shall not exceed 60 dBA. Nighttime (after 22:00) sound levels shall not exceed 50 dBA.
- b. Operations of heli-pad are excluded from this guideline.

3.23 SUSTAINABILITY PRINCIPLES

- a. Buildings will be designed and constructed following procedures and principles embodied in LEED, Green Guide for Healthcare (GGHC) and other relevant sustainability guidelines in order to create high performance healing environments.
- b. Utilize reusable and sustainable building materials where feasible, incorporated into the design and acquired from regional producers and manufacturers.
- c. Employ low impact and responsible construction management practices to minimize waste and prevent long-term adverse health impacts.



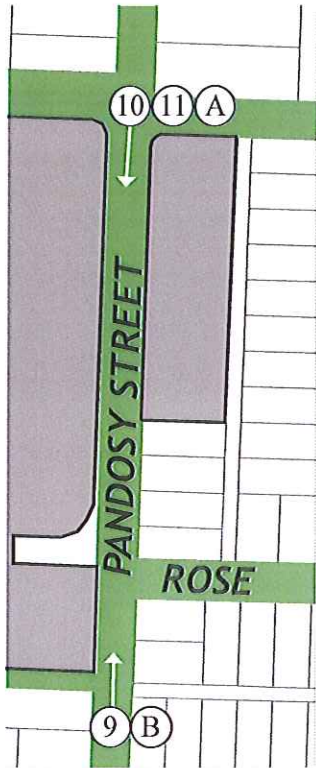
Kelowna General Hospital VISUAL IMPACT ASSESSMENT

In support of HD1 Zoning Bylaw Text Amendment Application
February 2011



Cannon Design Architecture Inc. | CTQ Consultants Ltd.





4.1.1 PANDOSY STREET

Pandosy is an arterial street that runs north-south through the project site. The massing and height of the new Centennial Building and the Clinical Academic Campus and the proposed Clinical Support Building and Heart and Surgical Centre will create a 'gateway' for traffic passing through the site. As part of the construction of these buildings, upgrades to the pedestrian experience will be enhanced and will likely include plantings, plaza areas, site furnishings and pedestrian access. Image 9 illustrates the view from Christleton looking north. Image 10 illustrates the view from Royal looking south prior to the construction of the Centennial Building. Image 11 shows the post construction view.



⑨



⑩

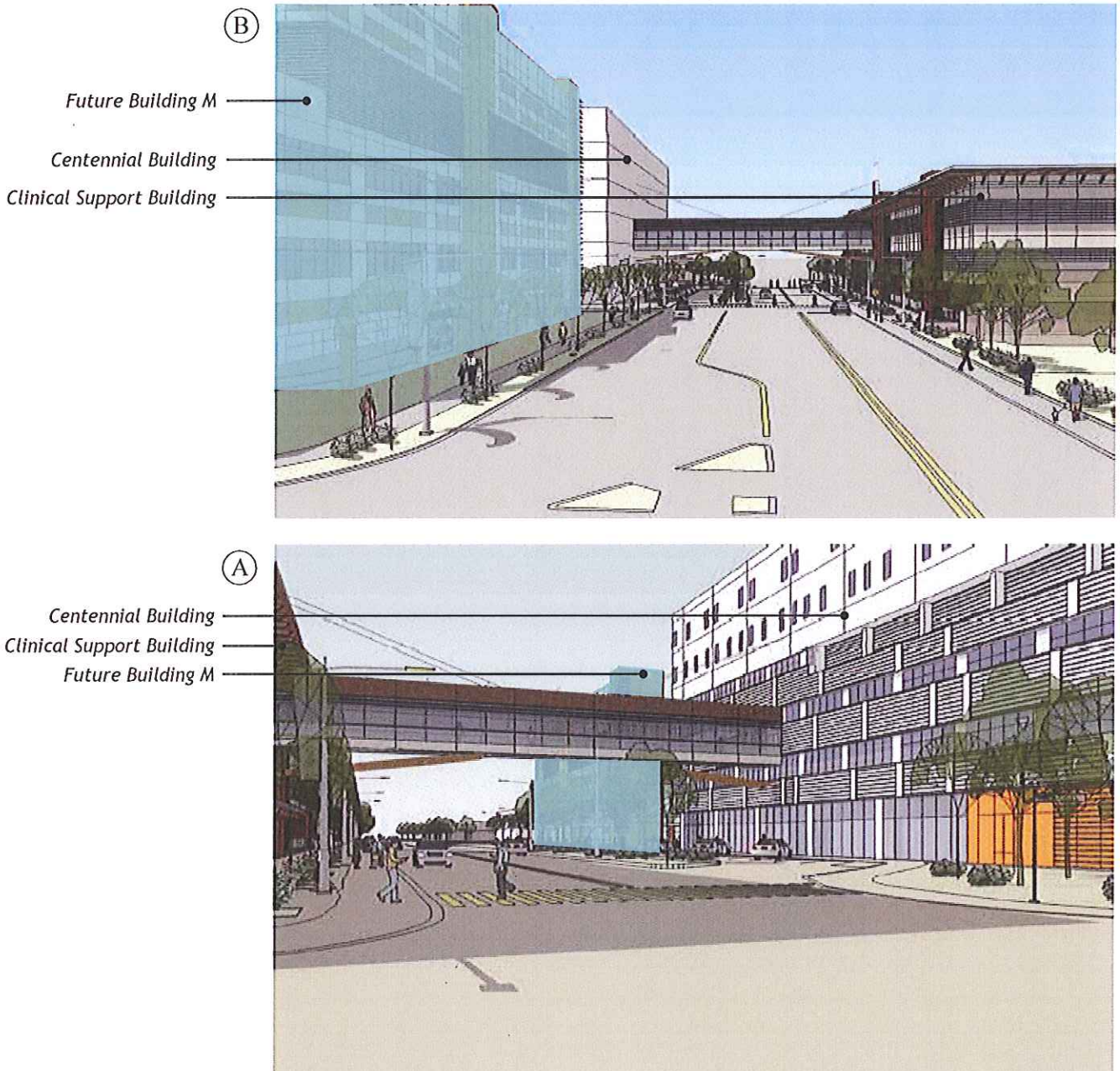


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Centennial Building

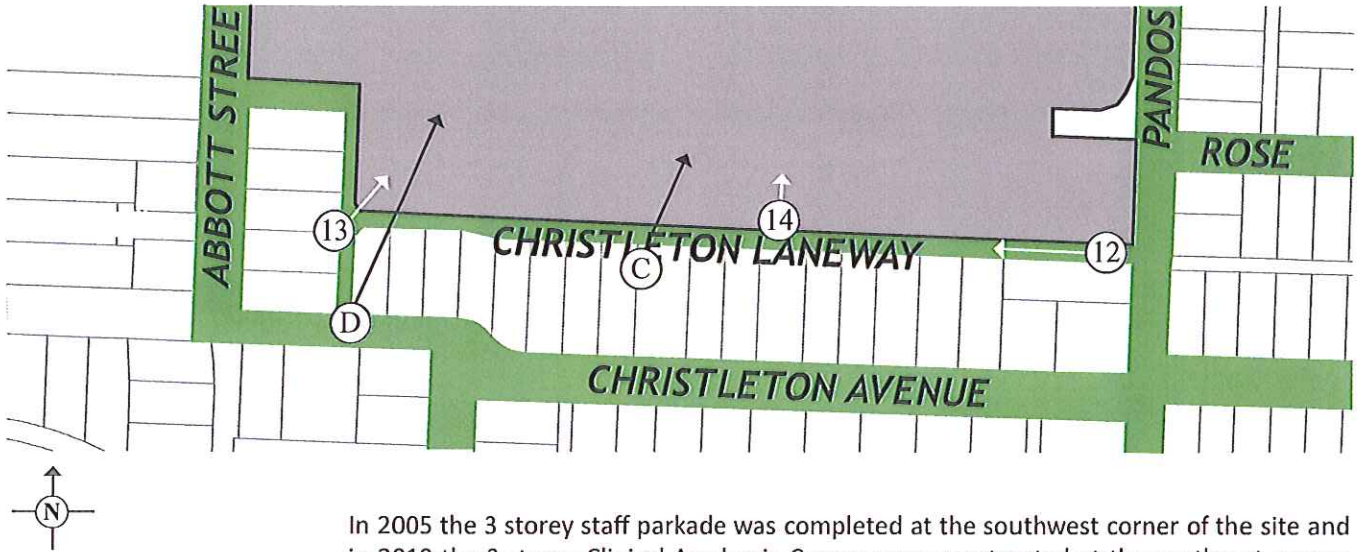
4.1.1 PANDOSY STREET CONTINUED

Computer modelling has been done to illustrate the final views along Pandosy once the Clinical Support Building and future Building M are completed. See Renderings A and B. **Note: The Clinical Support Building is considered to be constructed at the time this report was prepared.* From these images it is obvious to see that future development on the interior of the site will not be visible from Pandosy Street. The streetscape as illustrated is of a conceptual nature, but any design for Building M will meet City of Kelowna landscape standards and require the approval of the City. The generous setback on the west side of Pandosy (6m from road reserve, 16m from property line) will also allow for the design of a pedestrian friendly space, with street trees and seating areas including benches and plaza spaces. The Design Guidelines included in the new zone application further define the aesthetic of the streetscape along all roadways.



4.1.2 CHRISTLETON AVENUE

Christleton Avenue runs along the southern edge of the project site. A laneway separates the residential lots from the hospital property.



In 2005 the 3 storey staff parkade was completed at the southwest corner of the site and in 2010 the 3 storey Clinical Academic Campus was constructed at the southeast corner. Currently the only non-built parcel of land along the Christleton Laneway is a surface parking lot. Although no development is envisioned for this within the current Master Plan, should development occur on this lot it will be influenced by the Design Guidelines that will form a part of this application. This would include an increased setback to ensure adequate room for screen planting.

A solid 1.8m wood fence runs the entire length of southern property line. Screen plantings have been incorporated between the fence and the parkade, with additional planters incorporated along the roof of the staff parkade. See Images 14-15.

Based on the height of the existing parkade structures, the visual impact of proposed development on the interior of the lot would be minimal to most homes along Christleton. Design guidelines along the laneway for any development on the surface parking lot would include conditions such as setbacks, height restrictions, building articulation and sufficient screen planting. See Images 16a/b.

14

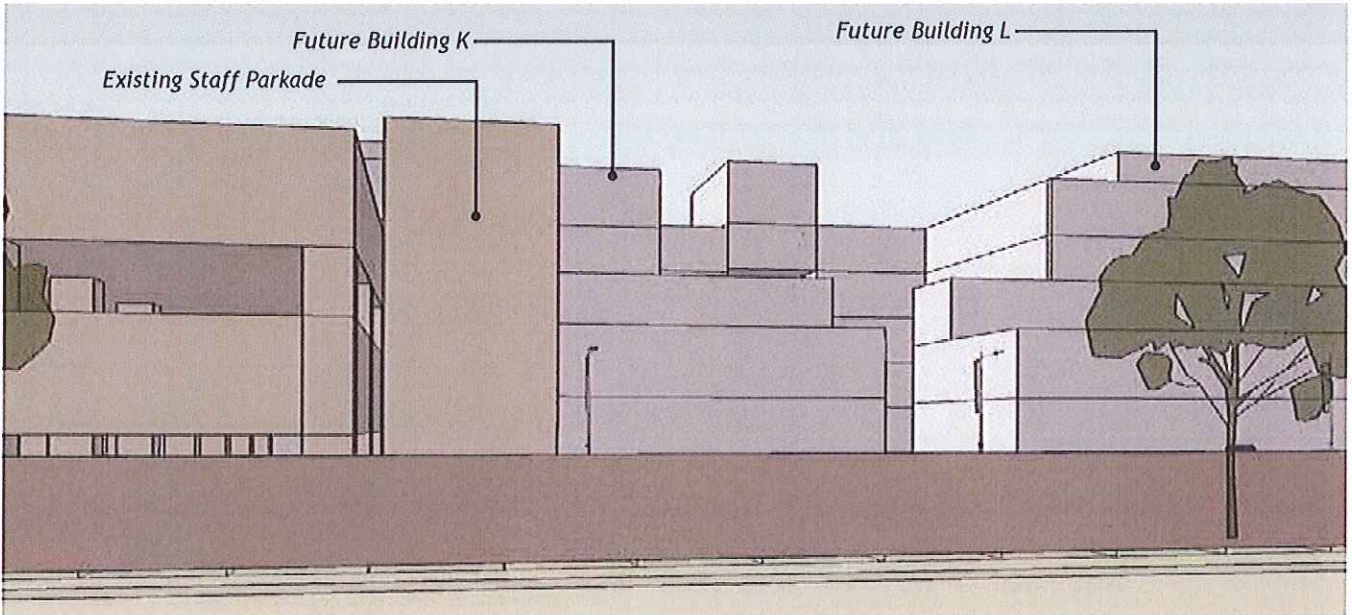


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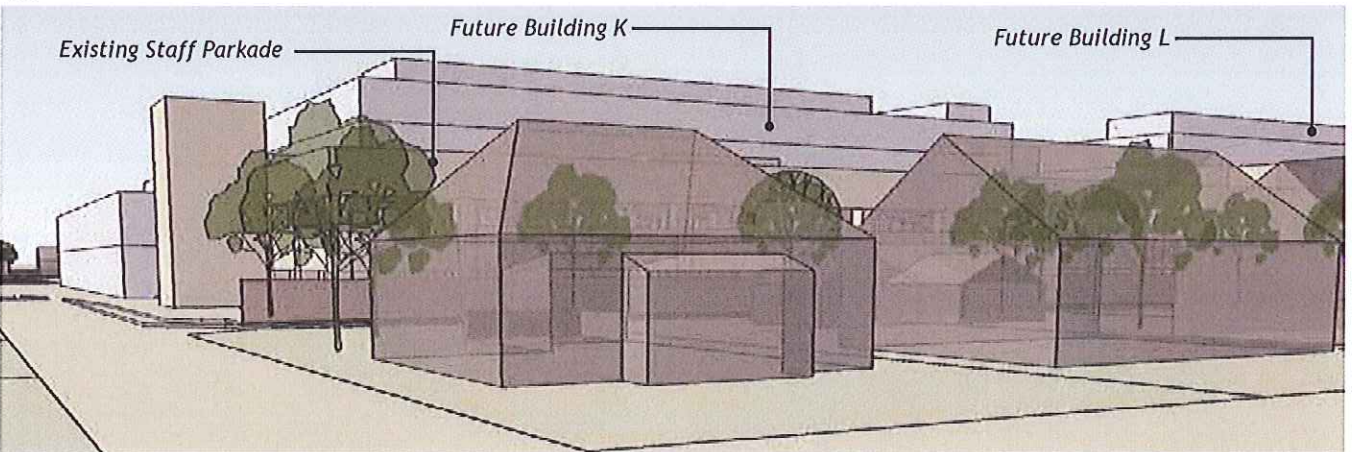


As evident from the modelling below, the existing staff parkade positioned along the south property line effectively limit most views to the interior of the site from both the laneway and Christleton. The Clinical Academic Campus and visitor parkade (located further east) has a similar impact on views to the interior of the site.

③



④

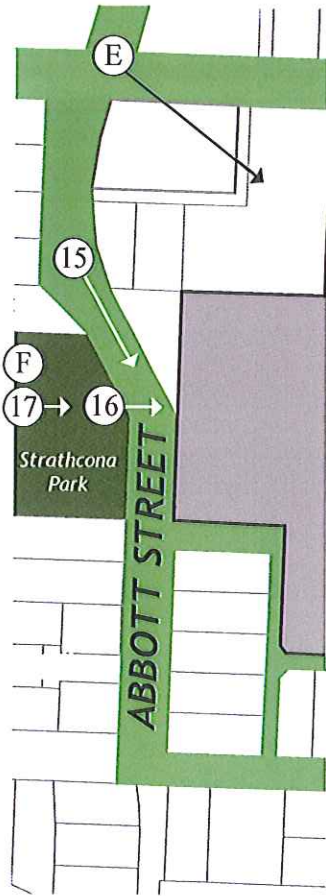


⑩ a



⑩ b





4.1.3 ABBOTT STREET

Any development occurring on the interior of the site will be most evident from Abbott Street as there is no residential to separate the hospital lands from the adjacent public park. A highly used multi-use recreational corridor also runs along the length of Abbott from the Hospital to Downtown and will eventually continue and tie into the Lakeshore Road system. Improvements to the Abbott Street Corridor over the summer of 2010 included the addition of street trees that will eventually offer increased screening of the hospital site from the park and street. The number and size of the existing mature trees along the back edge of the park also provides full screening of the hospital during the months when the park is most utilized. See Images 15-17.

It is important to note that the views along Abbott are focused towards Lake Okanagan, through Strathcona Park. Design guidelines along Abbott Street will include conditions such as setbacks, height restrictions, building articulation and sufficient screen planting.



15

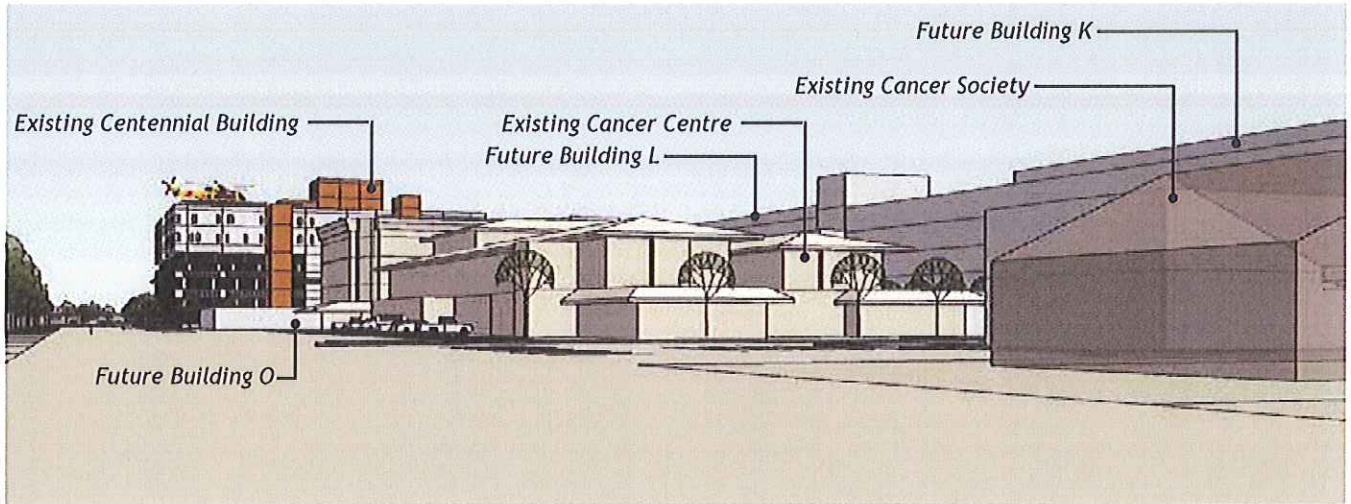


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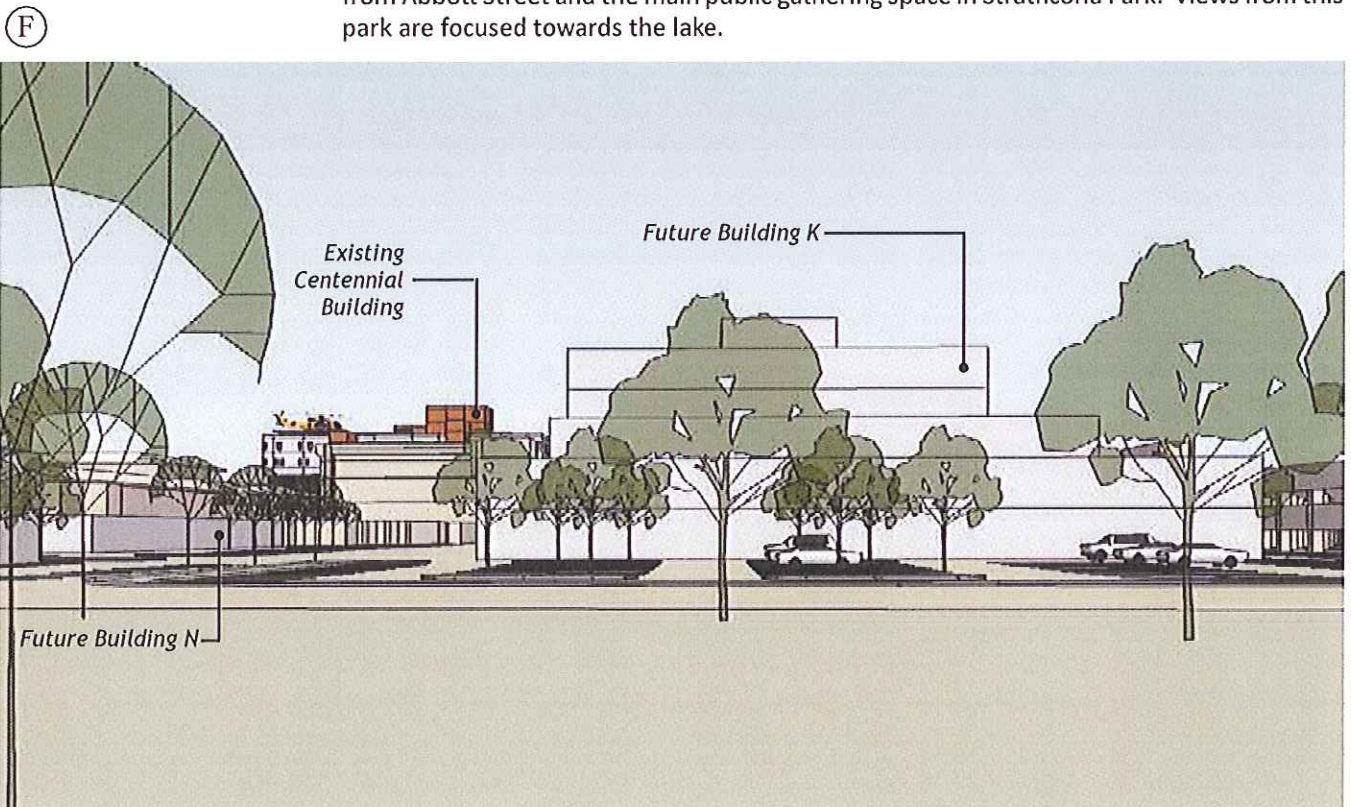
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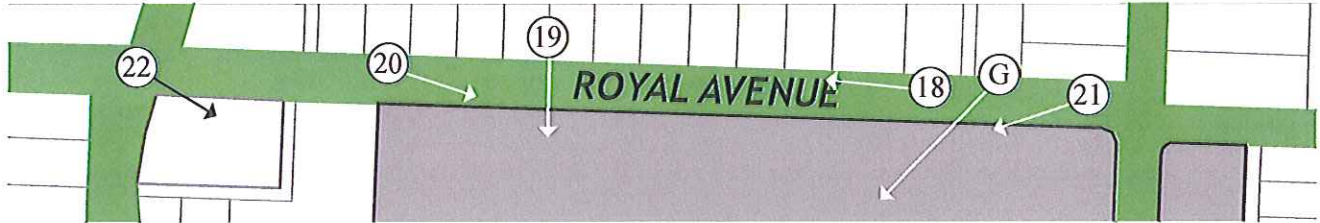
(E) From the corner of Abbott and Royal, the BC Cancer Society and the Cancer Centre buffer views to the interior of the site. Street planting, illustrated in Images 19 and 20, significantly increase the amount of screening to the KGH site.

This still is taken from approximately 10m inside Strathcona Park, looking directly east to the KGH site. Existing trees within the parking lot, the new street tree plantings along Abbott Street and the heavily treed eastern portion of the park will limit the visual impact from Abbott Street and the main public gathering space in Strathcona Park. Views from this park are focused towards the lake.



4.1.4 ROYAL AVENUE

Royal Avenue borders the site along the north perimeter. There are limited plans for future development along this side of the property. The Diagnostic Imaging Expansion shown on the master plan is forecast to be a one storey renovation. There are no plans to modify the Cancer Centre other than a small renovation on the interior side. It is important to note that the Cancer Centre building is owned by the Federal Government and the land is leased from the Province.



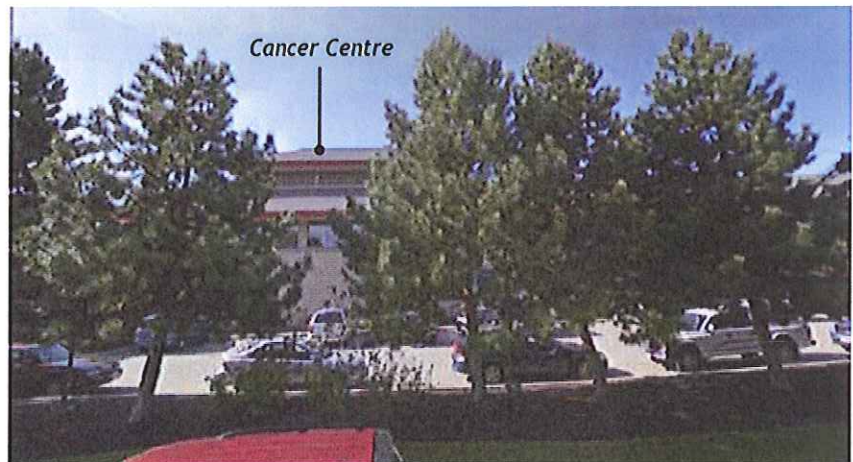
Mature pine trees and cedars line the south side of Royal Avenue between the parking lot of the Cancer Centre/Cancer Society and the sidewalk. This provides effective screening of the existing buildings year round. A majority of the residential properties along Royal Avenue also have mature coniferous and deciduous trees that further buffer views to the hospital. Images 18-22.

Design guidelines along Royal Avenue will include conditions such as setbacks, height restrictions, building articulation and screen planting.

18

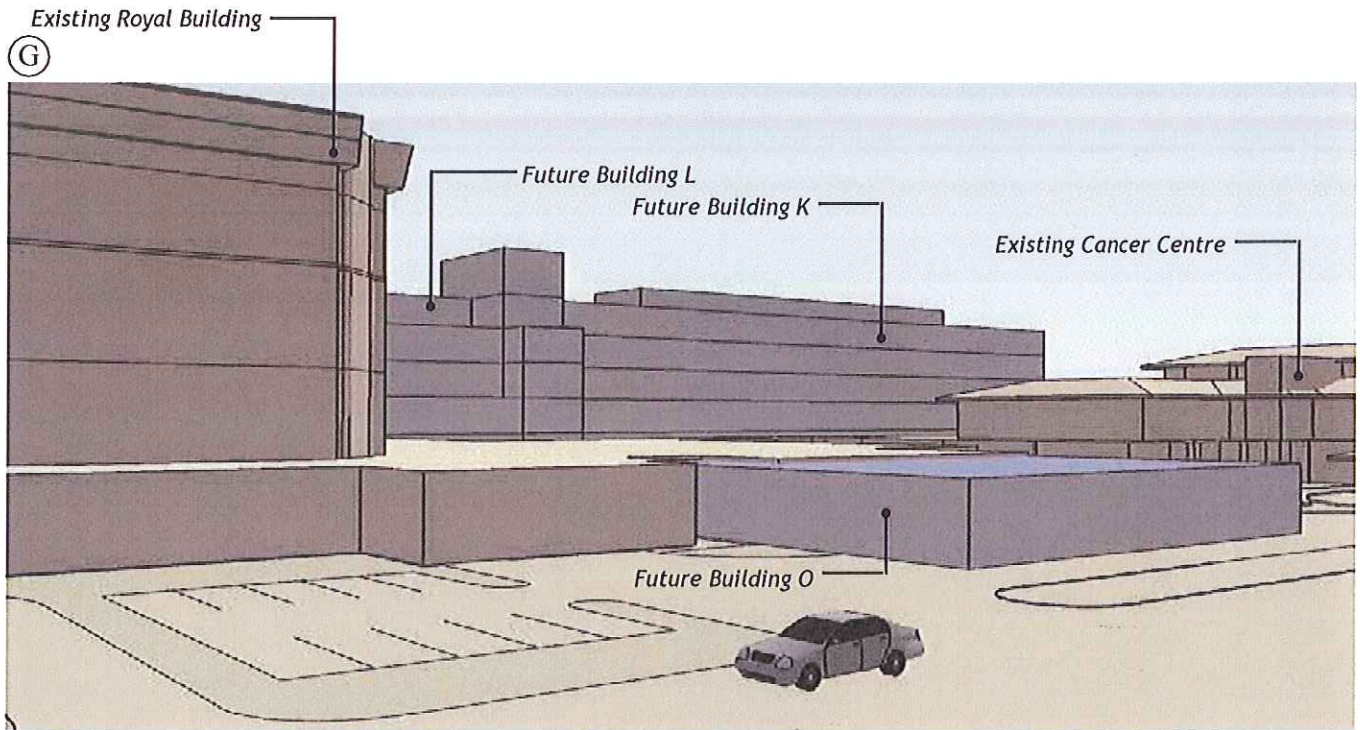


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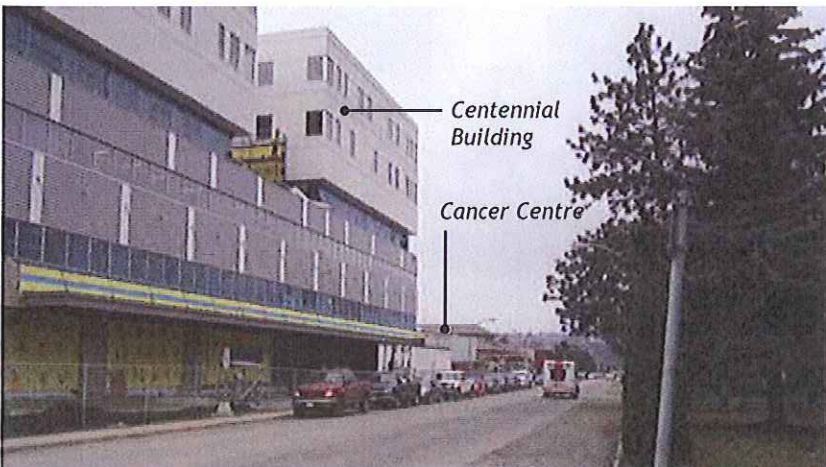


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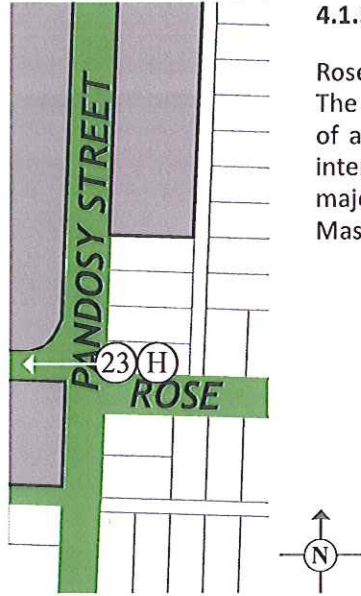
22) The Royal building will remain on the site and will buffer views to much of the interior of the site, including a majority of Building L as one drives west on Royal. Building O remains at 1 storey and reflects the scale of the existing neighbourhood. Once again, the Cancer Center and existing vegetation along Royal (both sides of the street) will further reduce any visual impact.



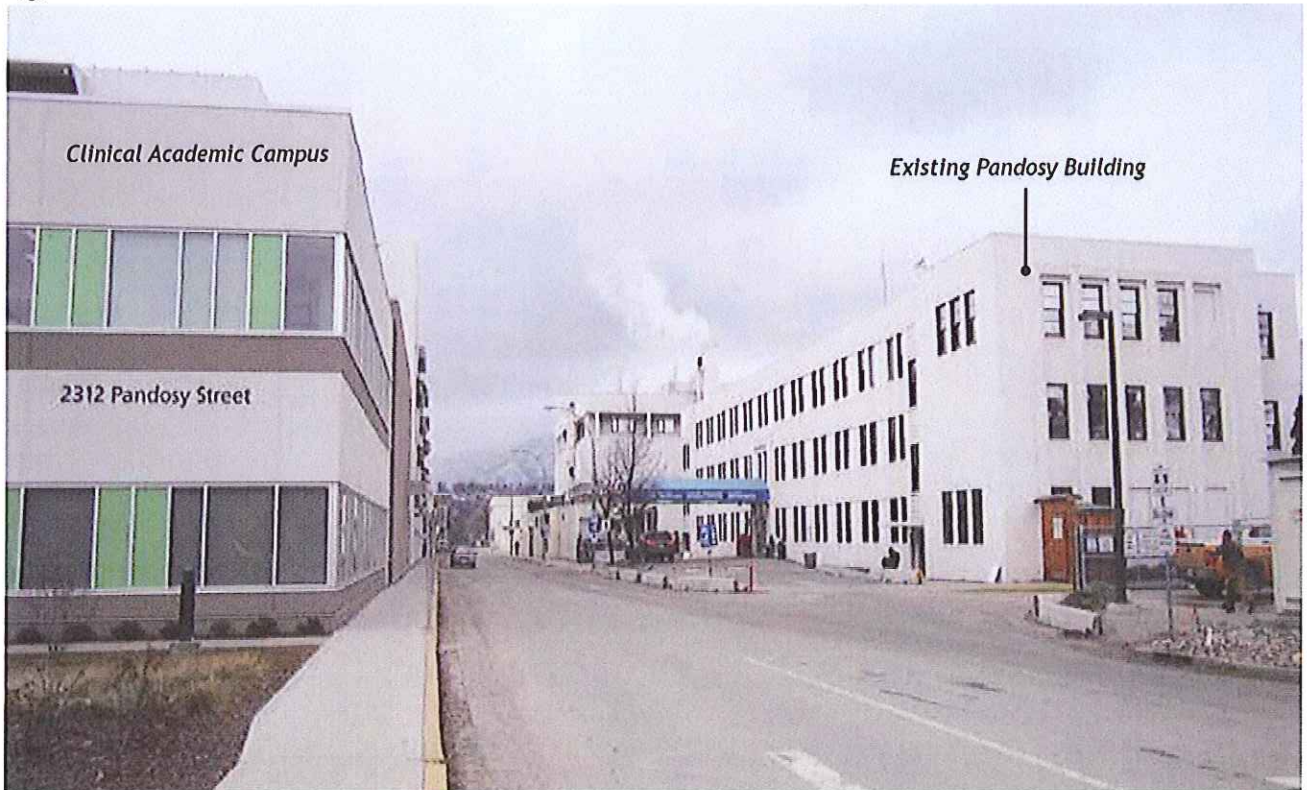
21)

4.1.5 ROSE AVENUE

Rose Avenue terminates at Pandosy Street and becomes a private hospital interior roadway. The alignment of Rose and the interior road is slightly offset, resulting in the disruption of a direct view to the mountains beyond from points further east along Rose. At the intersection the views through the hospital become visible. This interior roadway is the major entry into the hospital facility and will remain a main circulation route as part of the Master Plan.

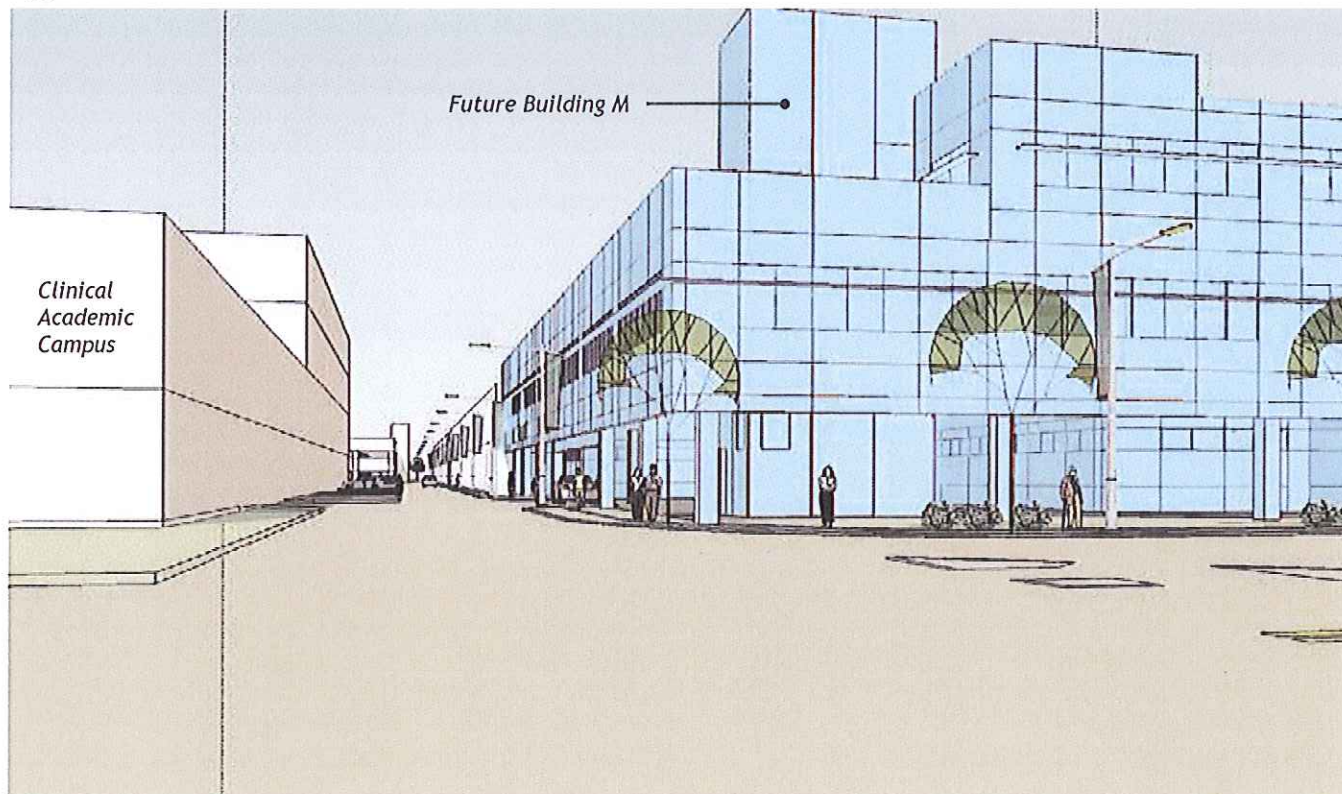


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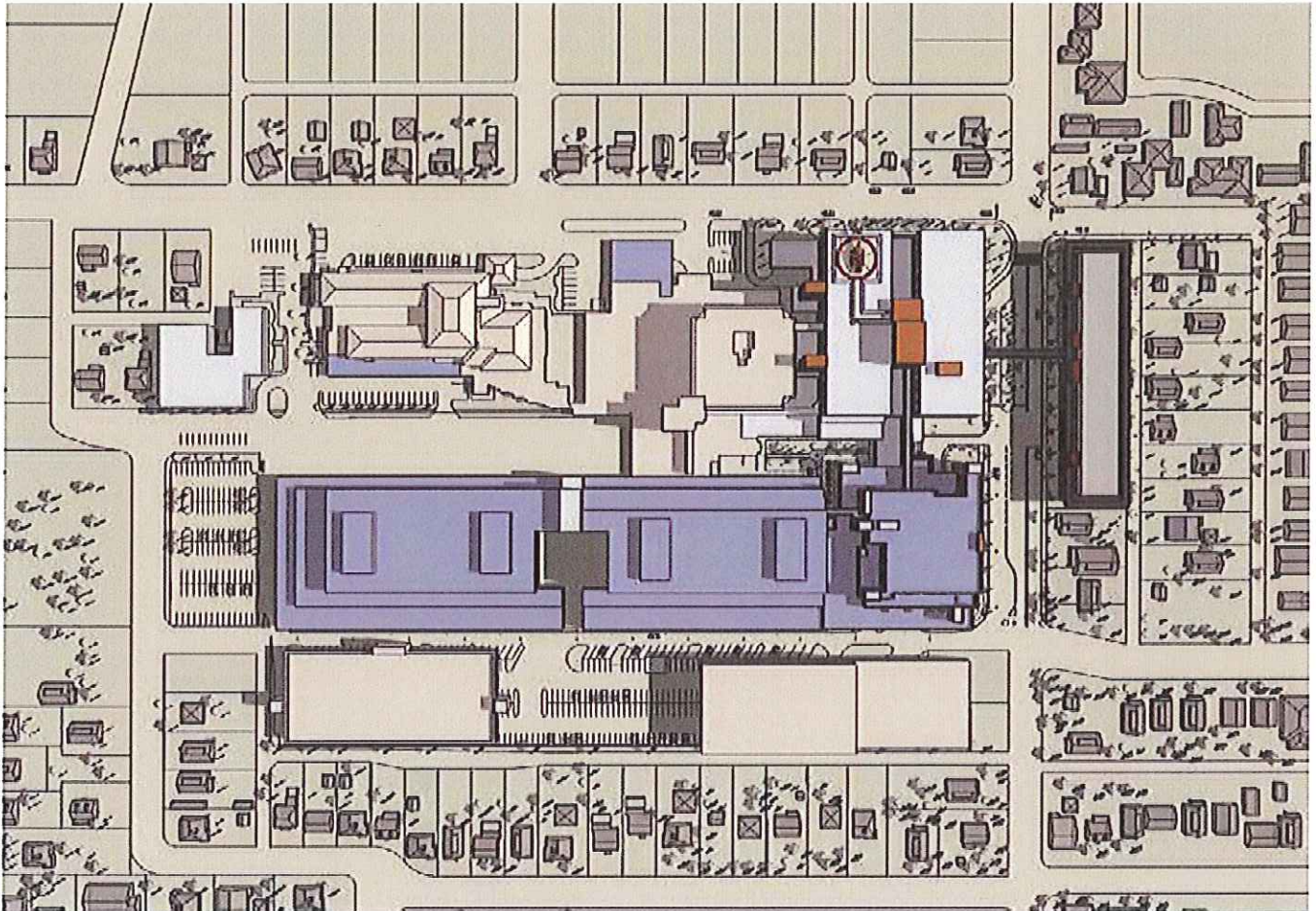
From the intersection of Rose and Pandosy, this image illustrates that the indicative design of the future Building M does not block of views through the site to the lake beyond. Future development of buildings L and K will be screened by this structure.

(H)



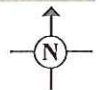
Future Conditions:

9am June 21 (summer solstice)



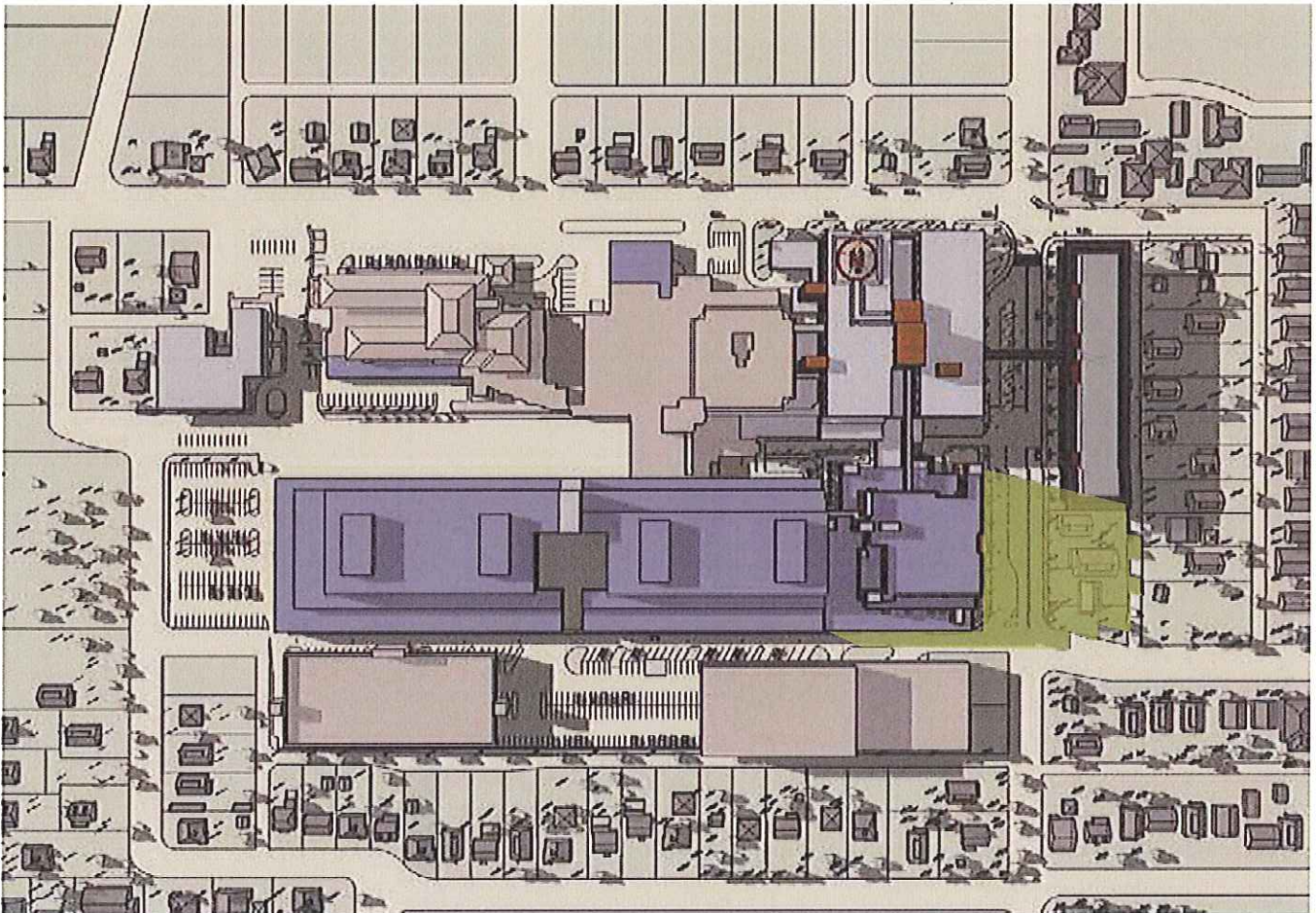
Conclusion:

Minimal effect on and off-site.



Future Conditions:

3pm June 21 (summer solstice)



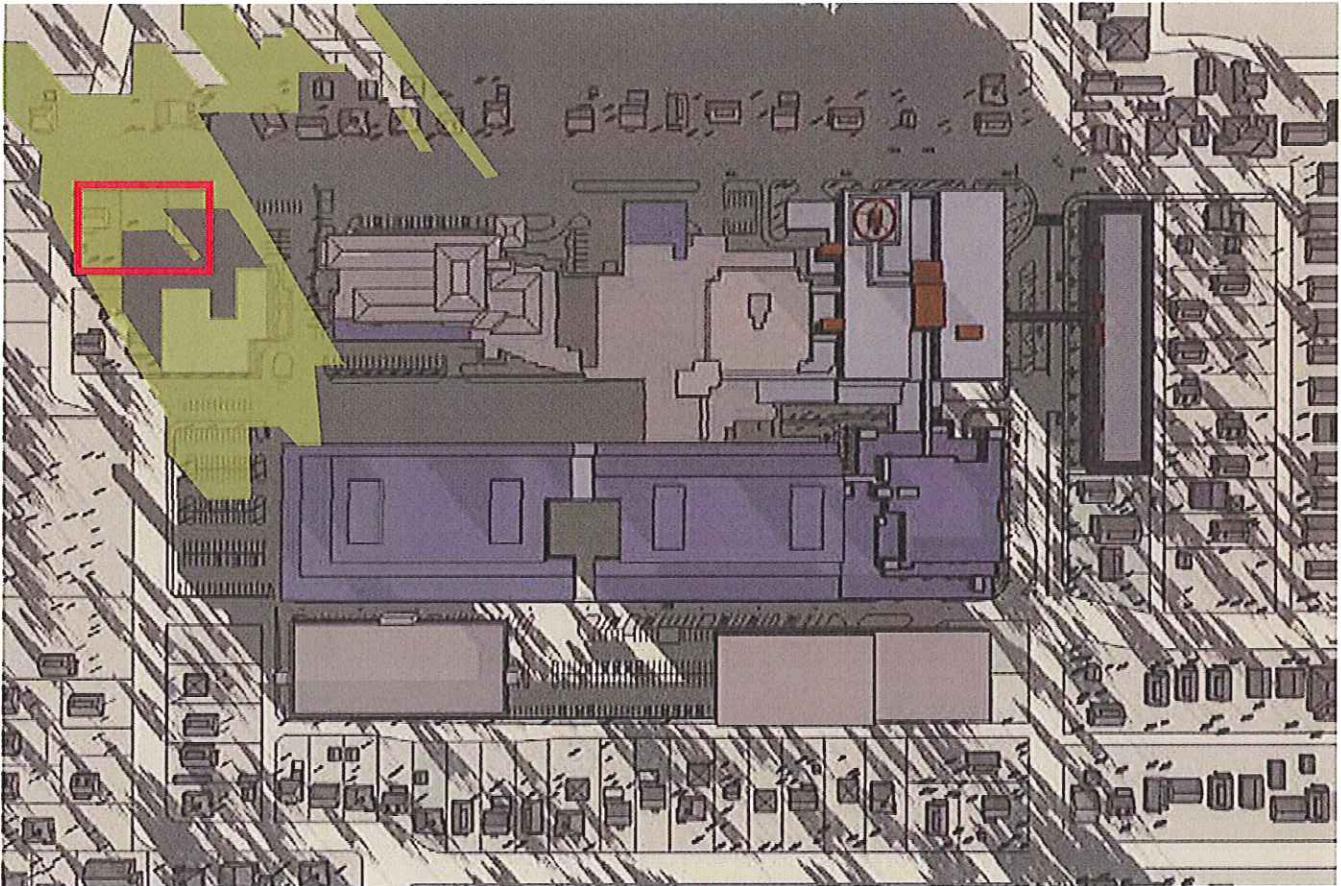
Conclusion:

Minimal effect on and off-site.



Future Conditions:

9am December 21 (winter solstice)

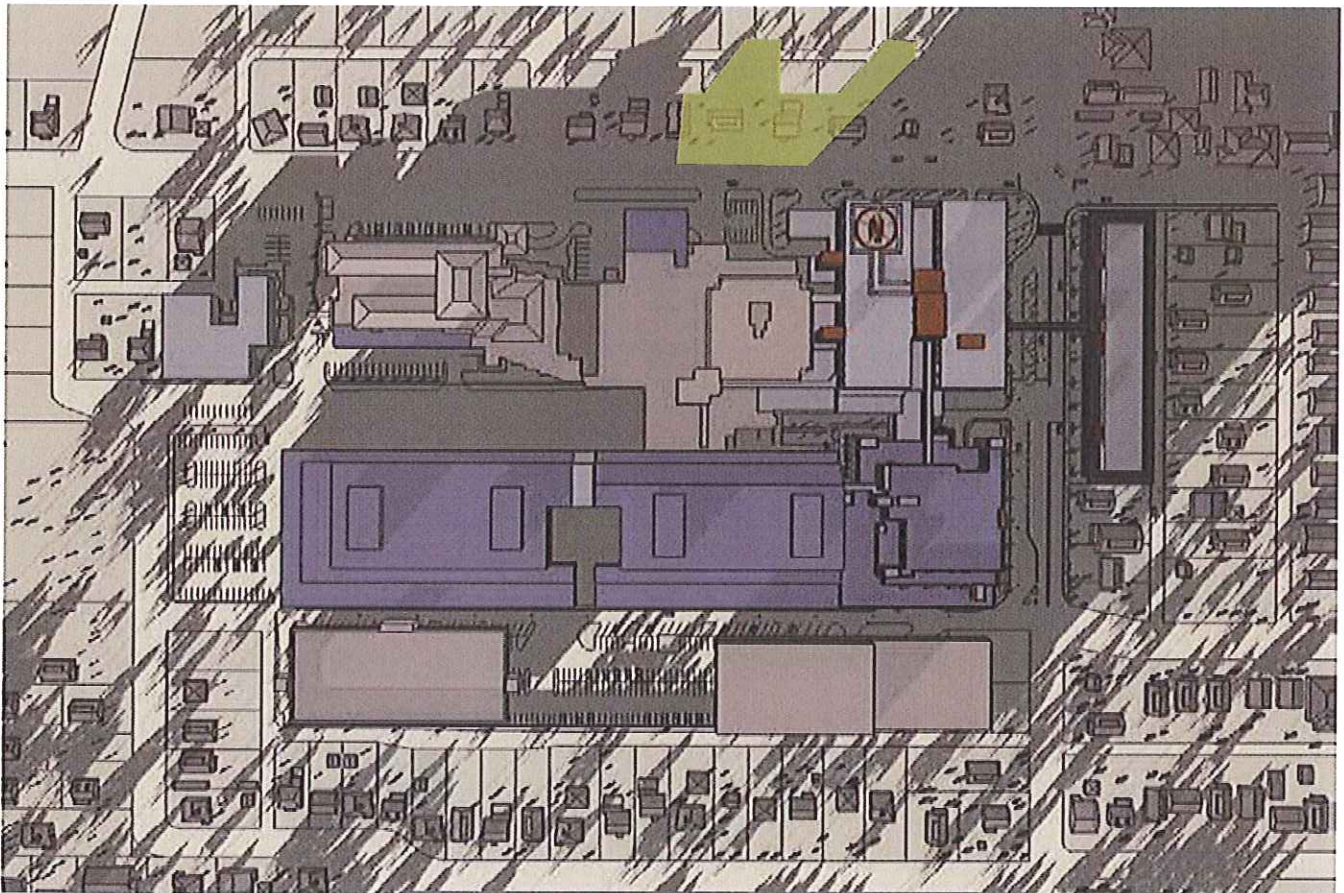


Conclusion:

Main impact from the new development on the interior of the site occurs at the northwest corner. IHA owns the three residential properties as illustrated in red above. Additional shadowing shown in yellow fill.

Future Conditions:

3pm December 21 (winter solstice)



Conclusion:

Minimal impact off-site. Additional shadowing shown in yellow fill.

