CITY OF VANCOUVER
COMMUNITY SERVICES GROUP

DEVELOPMENT PERMIT STAFF COMMITTEE REPORT
MARCH 26, 2014

FOR THE DEVELOPMENT PERMIT BOARD
APRIL 22, 2014

880 WEST 28TH AVENUE (COMPLETE APPLICATION)
DE417576 - ZONE CD-1

SDB/JMB/LEB/MA/LH

DEVELOPMENT PERMIT STAFF COMMITTEE MEMBERS

Present:
D. Autiero (Chair), Development Services
M. Holm, Engineering Services
D. Naundorf, Social Infrastructure

Also Present:
S. Black, Urban Design & Development Planning
J. Bosnjak, Development Services
M. Au, Development Services

APPLICANT:
Ledcor Design Build BC Inc.
Attention: Jennifer Gladdy
1200-1067 West Cordova Street
Vancouver, BC
V6C 1C7

PROPERTY OWNER:
Children's and Women's Health Care Centre of BC
4500 Oak Street
Vancouver, BC
V6H 3N1

EXECUTIVE SUMMARY

- **Proposal:** To develop the site with a new eight storey Acute Care Centre Hospital accessed by the Ring Road, at the BC Children's and Women's Hospital campus site. The hospital will include in-patient units, an emergency department, medical imaging and procedural suites, hematology/oncology, pediatric intensive care, high-risk labour and delivery suite, and neo-natal intensive care unit for the BC Children's and Women's Hospital.

See Appendix A Standard Conditions
Appendix B Standard Notes and Conditions of Development Permit
Appendix C Plans and Elevations
Appendix D Applicant's Design Rationale
Appendix E Urban Design Panel Minutes, January 29, 2014
Appendix F Additional staff commentary in Response to Rezoning Condition 6

- **Issues:**

1. Design of outdoor spaces
2. Visual clarity of new building entries

- **Urban Design Panel: Support**

DEVELOPMENT PERMIT STAFF COMMITTEE RECOMMENDATION: APPROVE

THAT the Board APPROVE Development Application No. DE417576 submitted, the plans and information forming a part thereof, thereby permitting the development of a new eight storey Acute Care Centre Hospital accessed by the Ring Road, at the BC Children's and Women's Hospital campus site, subject to the following conditions:

1.0 Prior to the issuance of the development permit, revised drawings and information shall be submitted to the satisfaction of the Director of Planning, clearly indicating:

1.1 design development to create more visually distinctive emergency and main building entries;

Note to Applicant: Development should include the use of more prominent building features to mark each entry in distinctive ways, in combination with the design of landscaping and pedestrian and vehicle pathways. Response should incorporate the improvements shown in the drawings provided for Urban Design Panel (UDP) review on March 12, 2014.

1.2 design development to provide separated pedestrian pathways from new and existing parking stalls to the new building entries;

Note to Applicant: Coordinated adjustments to both the subject application and overall campus work are required to create the optimal routes for pedestrians in balance with other design goals, such as tree retention. Response should address the items noted in the response to Rezoning Condition 6 and in Appendix F.

1.3 design development to maximize the number of new and retained trees on the campus;

Note to Applicant: Staff are seeking tree retention at the perimeter of parking areas, adjacent the building and the zones that provide screening for adjacent neighbors. An arborist report and tree management plan are required. Staff note that removals related to underground access decommissioning and utilities are to be determined. In addition, there are proposed interventions within parking areas, such as the addition of pedestrian walkways and related grading that will require further analysis. Staff will need to weigh the benefits of more pathways with the loss of individual trees and the overall goal of maximizing tree retention. Existing trees that serve to as a buffer for adjacent neighbors should be retained, wherever possible. Further work is needed to ensure that necessary tree removals are replaced with a substantial quantity and variety of replacement trees, including larger canopied tree species, that are strategically located as neighborhood screening and to maximize canopy cover throughout the site.

1.4 exploration of more direct pedestrian connections between Willow Street to the north, the Acute Care Building, and pedestrian routes to the south;

Note to Applicant: In particular, a more direct route should be created through the future Family Commons or Triangle Park in the north east parking area. Improved landscaping beside pathways may also be used to support large retained trees. Where feasible, improvements should be incorporated into the revised drawings.

2.0 That the conditions set out in Appendix A be met prior to the issuance of the Development Permit.

3.0 That the Notes to Applicant and Conditions of the Development Permit set out in Appendix B be approved by the Board.

- **Technical Analysis:**

	PERMITTED (MAXIMUM)	REQUIRED	PROPOSED
Site Size			Irregular
Site Area[1]			186954 m^2
Floor Area[2]	**196302 m^2**		Proposed 53,035 m^2 Existing 136,420 m^2 Total 189,455 m^2
FSR[2]	**1.05**		Proposed 0.28 Existing 0.73 Total 1.01
Site Coverage[3]	**61695 m^2 (33%)**		-
Height[4]	**45 m**		Top of Elevator Shaft 46.20 m Top of Stair (North) 43.96 m Top of Screen 42.56 m
Parking[5]	**Small Car** ***61 (25% max.)** ***ACC Only**	Hospital Campus: 1830 Spaces ***Disability Spaces 22** ***ACC Only**	Hospital Campus: 1897 Spaces ***ACC** U/G / Surface Standard 142 / 88 Small Car 31 / 29 Disability 11 / 8 Total 184 / 135 Standard spaces 230 Small Car spaces 60 Disability spaces 19 Total 309
Bicycle Parking[6]		Class A / Class B Total 48 / 18	Class A / Class B Total tbd / tbd
Loading[7]		Class A / Class B / Class C Total tbd / tbd / tbd	Class A / Class B / Class C Total tbd / tbd / tbd
Use			**Hospital**

[1] **Note on Site Area:** The proposed site area is based on information provided under Section 3.1 of CD-1 (126), and has been verified with Survey plan.

[2] **Note on Floor Area/FSR:** Existing floor area/FSR numbers was based on statistics noted from City of Vancouver records.

[3] **Note on Site Coverage:** Standard Condition A1.10 seeks confirmation that Site Coverage does not exceed the maximum permitted as per the CD-1 (126) Bylaw.

[4] **Note on Height:** The overall height of the building is below the maximum permitted in the CD-1 (126) Bylaw. The elevator shaft is over the maximum permitted of 45 m however, it does meet the exclusion noted under Section 4.1 of the CD-1 (126) Bylaw. Top of stairwell at the north side is considered to be the overall height of the building. As per the design standard, height is measured from geodetic elevation of the entry level at 70.6 m, and therefore the geodetic elevation of the proposed building is at 114.56 m and could be no greater than 115.6 m.

[5] **Note on Parking:** As per Appendix C of the Rezoning report dated November 2, 2012, a total of 1830 spaces will be required for the entire campus site. To date, 1830 parking spaces are met within the overall campus site, with 309 parking spaces allocated in this Acute Care Centre proposal and supported by staff.

[6] **Note on Bicycle Parking:** Standard Conditions A1.14, A1.15, A2.12 seeks clarification with Bicycle Parking.

[7] **Note on Loading:** The applicant has indicated that 3 Class B loading spaces will address the operational requirement for the Acute Care Centre in conjunction with shared campus wide loading. Standard Conditions A2.3, A2.4, A2.5 seeks clarification of this with a detailed loading operation plan.

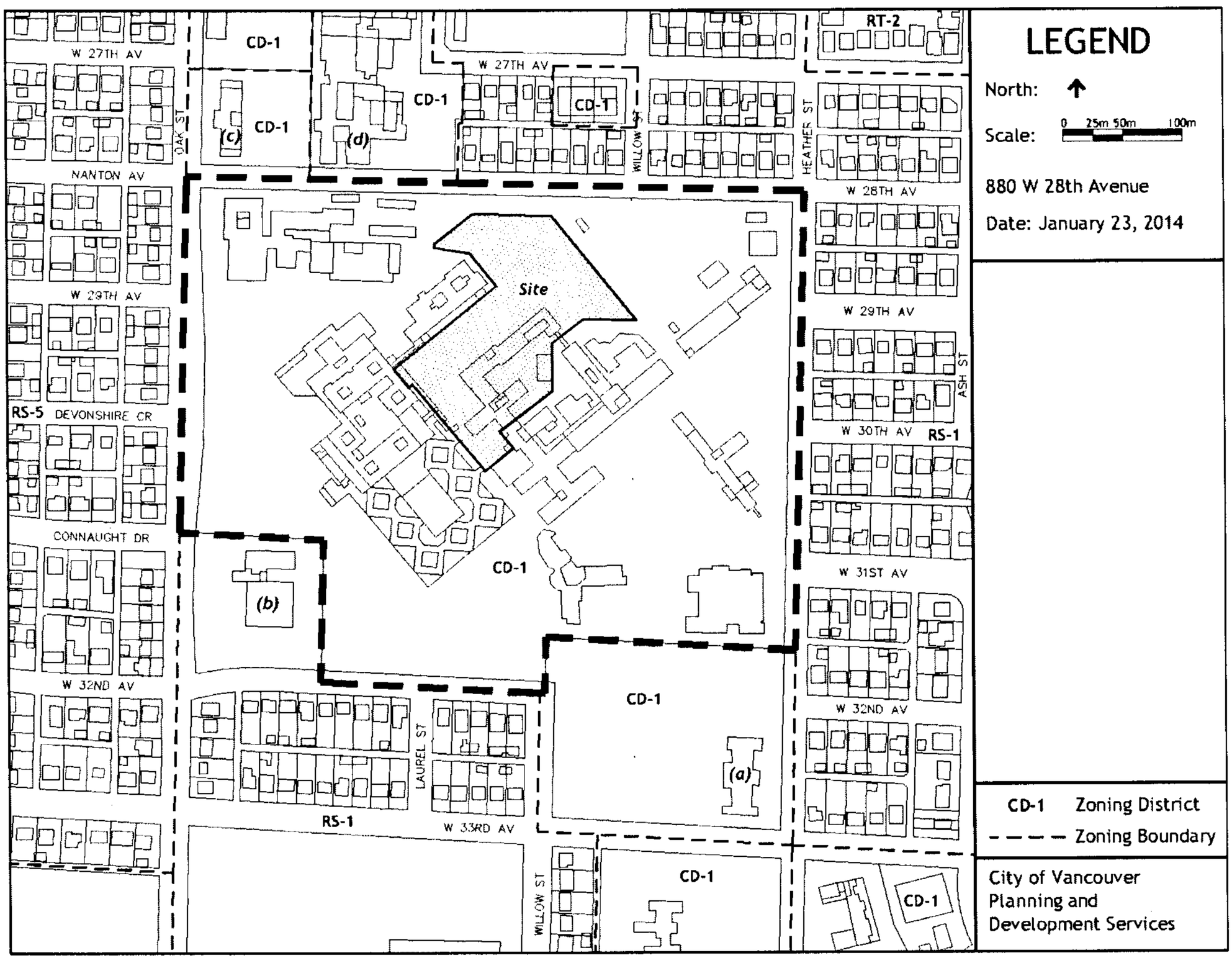
- **Legal Description**
  Block: 1009
  District Lot: 526
  Plan: 10359

- **History of Application:**
  14 01 09 Complete DE submitted
  14 01 29 Urban Design Panel
  14 03 12 Urban Design Panel
  14 03 26 Development Permit Staff Committee

- **Site:** The site is located within the 46 acre (18.6 hectare) campus of the BC Children and Women's Health Centre, which is bounded by Oak Street, Heather Street, 28th Avenue and 32nd Avenue. The campus is surrounded by a mix of single-family residential and institutional uses. Significant sites in the immediate area are indicated below. Other significant sites in the wider area include Van Dusen Gardens and Eric Hamber Secondary School which are located to the southwest and south.

- **Context:** Significant adjacent development includes:

  (a) St. Vincent's Heather Campus of Care
  (b) Canadian Blood Services
  (c) Beth Israel Synagogue
  (d) GF Strong Rehab Centre



- **Background:**

On December 13th, 2012, a rezoning amendment was approved in principle by City Council at Public Hearing to permit the development of a new Acute Care Centre building, together with associated Master Plan guidelines and Design Standards. The amended CD-1 (126) By-law permitted a height envelope in the centre of the site to 45m (148ft) with limited exclusions such as elevators and stairs. The overall site density was increased to 1.05 FSR. Significant conditions of approval recommended for the Acute Care Centre building and surrounding site works included tree replacement at a 1.6:1 ratio, a limit to shadowing at the equinoxes to be at least 138 ft. from 28th Avenue, and the provision of open spaces for respite and repose.

On April 30th, 2013, the hospital applied for a development permit for the surrounding site works which reflects development of the site to meet the objectives of the proposed Master Plan. This included completion of the Wellness Walkway for the campus, closure of Heather Street access, opening of Willow Street access, new drop off area at Oak Street entry, associated landscape to provide screening to the surrounding community and improved wayfinding. The overall Master Plan and design standards were updated to guide future phases of development. Approval in principle and associated updates were required conditions of rezoning enactment.

On January 9th, 2014 this development application for the Acute Care Centre hospital was submitted. Items identified as needing further work include breaking up the upper floor massing, improving visibility of the entry sequence, and improving the clarity and uses of the different open spaces.

Subsequently, on March 11th, 2014, Council enacted the amended CD-1 By-law, together with an updated Master Plan guidelines and Design Standards.

- **Applicable By-laws and Guidelines:**

1. CD-1(126) By-law No. 5091, enacted March, 2014
2. 4500 Oak Street - Children's and Women's Health Centre of BC - Master Plan Guidelines
3. 4500 Oak Street - Children's and Women's Health Centre of BC - Acute Care Centre Design Standards

- **Response to Applicable By-laws and Guidelines:**

1.CD-1(126) By-law No. 5091, enacted March, 2014

The application meets the regulations set out in the CD-1 By-law, as noted in the Technical Analysis. The proposed height of 43.96 m (144.2 ft.) is below the permitted height of 45.0 m (147.6 ft.). The proposed floor area on the hospital campus that would result from the addition of this building is less than the permitted amount, which staff expect will continue to vary as new buildings are constructed and older ones demolished over time. Site coverage, a new regulation added by Council in the 2012 rezoning, is expected to remain below 33% as old buildings on the campus are demolished and the new Acute Care centre is established.

A detailed response to the major conditions of approval from the rezoning is provided below.

2. 4500 Oak Street - Children's and Women's Health Centre of BC - Master Plan Guidelines

Staff have reviewed the application and feel that development of this portion of the campus site is generally consistent with the overall intents of the Master Plan Guidelines, especially in focusing significant new development toward the centre of the site to allow the perimeter to develop a greener and more open character over time. Commentary on specific provisions of the Guidelines is noted in the Response to Rezoning Conditions section that follows.

3. 4500 Oak Street - Children's and Women's Health Centre of BC - Acute Care Centre Design Standards

Staff have reviewed the application and feel that it responds well to the Design Standards, especially in terms of its exterior form and composition. The building successfully breaks up the major massing elements, which are significant in scale relative to this low-density neighbourhood, while creating a unified architectural character. High-quality materials are in evidence throughout, including the use of especially durable cladding choices such as zinc panels and the use of exposed wood in location protected from the weather and where they can be most appreciated. Rooftop spaces have been employed for a variety of outdoor spaces ranging from intensive and active areas to internalized shaded areas that provide visual access to nature.

- **Response to Rezoning Conditions of Approval:**

Urban Design Conditions:

Condition 1	Provision of substantial tree planting to the northeast of the Acute Care building to replace removed trees at a ratio of 1.6:1.0. **Note to Applicant:** Intent is to replace the trees lost during construction; to create a green buffer with prominent vertical height between the new, taller Acute Care building and the nearby residential neighbourhood; to add to the urban forest in an open location which offers the best chance for substantial growth of the trees; and to lay down the structural planting of future park space in this location. If space does not permit location on the site, trees may also be located nearby in coordination with Engineering and Parks staff. See also the related Master Plan condition.

Applicants Response: This condition has been fully complied with, and the Affinity Tree Removal and Retention Plan is provided both in Sub-Section 4.7 and by Landscape Drawing L-002 provided in Section 7.0.

Staff Assessment: Staff acknowledge the efforts to retain trees throughout the site and comply with tree replacement quantities. Further verification is needed to ensure successful tree retention during construction, particularly in the parking lot area and tree(s) that may provide screening to adjacent neighbors. Arborist reporting, site supervision and detailed design will be required. Staff support the addition of a full network of walkways to the perimeter of the parking areas that will significantly improve pedestrian safety and wayfinding, noting that this may result in the loss of a limited number of mature trees. Pending review of further documentation, there may be a need for further for design development to protect trees, or provide significant replacement trees. (see Recommended Condition 1.3)

The tree replacement list should be expanded to include a variety of: (i) larger, long lived species such as oak trees that have the potential to become legacy trees; (ii) species that are same or similar to the trees removed, especially if the replacement trees are deleted from an existing tree row; (iii) strategically placed taller species trees or rows of columnar trees that will specifically serve for neighbor screening purposes; and, (iv) larger trees that can help mitigate heat island in the parking lot areas. (see Standard Condition A.1.23)

Condition 2	Design development to the Acute Care building to limit shadowing to extend no further than a 42m setback line from 28th Avenue, especially to the northeast;

Note to Applicant: Intent is to limit shadowing onto the open space beside 28th Avenue to be no greater than as indicated in the rezoning application between 10 am and 2 pm during the equinoxes, especially in relation to future park space, while still allowing a range of forms to be explored in other areas of the site.

Applicants Response: Conformance to this condition is confirmed by shadow analyses contained in Sub-Section 4.4 (Massing) and in Appendix 8.5 (Shadow Studies). The shadow analyses for the proposed building include profiles taken at 10 AM and 2 PM on the Spring and Fall Equinoxes, both of which address the conditions expressed in the design guidelines. The analyses clearly indicate that shadows do not extend beyond the 42 m setback line established in relation to the 28th Avenue right of way.

Staff Assessment: Shadow studies provided indicate that the proximity of the new building shadow to West 28th Avenue will be less than of the existing Ambulatory Care Building, which exceeds the requirement. The overall building massing has been designed to step down in height towards the residential portion of West 28th Avenue, which is intended to mitigate some of the visual impact of the new building for nearby residents. Updated shadow studies should be provided to reflect any revised design (see Standard Condition A.1.2).

Condition 3 Design development to the Acute Care building to limit view impacts to residential properties to be comparable to the effect indicated in the rezoning application.

Note to Applicant: Intent is to allow a wide range of forms while limiting the impact of this specific effect for residential neighbours. The General Manager of Planning and Development Services may consider built forms that increase portions of the view effect so long as these are balanced by reductions in other areas.

Applicants Response: Sub-Section 4.4 (Massing) provides a visual analysis of view impacts to the residential properties along W. 28th Ave. by comparing impacts of the Acute Care Centre building mass as foreseen by the Master Plan versus the impacts attributed to the design proposal by the Affinity team. The comparison confirms that the Affinity design improves on view impacts on neighbouring residential properties by reducing the apparent mass of the building as seen from different surrounding perspectives.

Staff Assessment: Staff have compared the view impacts depicted in the rezoning application approved by Council, especially those drawings in the view analysis providing perspective drawings from nearby streets. Based on the material, application appears to reduce the view impact for residential properties along West 28th Avenue, approximately 90 m to the north, as the new building massing has been moved closer to the centre of the campus. The application also appears to propose a larger building than in the rezoning studies as seen from the properties on West 32nd Avenue, approximately 220 m to the south, similarly because the proposed building has more mass in the centre of the campus than the rezoning study. Staff feel that the potential increase in view impacts for farther neighbours is likely to be balanced by the reductions for closer neighbours. Updated drawings are required to conclude this item, and further changes may be sought based on that material (see Standard Condition A.1.2).

Condition 4	Identify and locate specific noise abatement measures to be constructed as a part of the development, including where appropriate the use of sound absorbing surfaces. **Note to Applicant:** Intent is to reduce the general noise from required mechanical equipment and other sources, for the benefit of patients, staff and neighbours. Abatement should address noise sources such as high-pitched motors that are significant for perceived impact, as well as meeting the minimum requirements of the Noise Control By-law.

Applicants Response: To confirm compliance to City of Vancouver Noise Bylaw 6555, the BKL Consultants in Acoustics considered noise from air intake and exhaust louvers, chillers and cooling towers, since these are expected to be the most significant sources of exterior noise. Rooftop equipment will be surrounded by a noise barrier and outside air intakes and exhausts for air handling units will be provided with silencing to reduce emission of noise to the exterior. The following provisions have been incorporated in the new facility's design:

- 250mm thick concrete slabs above and below the mechanical and electrical equipment on the main mechanical floor
- All air handling units will be mounted on spring isolators to prevent vibration transmission through the building structure
- There are no direct openings between the air handling units and the mechanical rooms
- There are silencers between all air handling units and the exterior louvers
- The 1.5m deep plenums shown inside each set of louvers will be internally lined with 50mm thick acoustic duct liner
- The emergency generator is set on a 600mm thick concrete slab isolated from the rest of the building structure to prevent vibration transmission through the building structure
- The generator room has a resiliently suspended and insulated ceiling supported by vibration isolation hangers with a significant air gap between the insulation and the concrete structure above. The underside of the ceiling will be covered with a sound absorbing treatment where it will have the greatest effect
- The walls of the generator room consist of an independent, insulated stud wall with two layers of gypsum wall board. The interior face of these walls will be covered with a sound absorbing treatment where it will have the greatest effect
- 2.1m long silencers on each of the emergency generator exhausts

Our predictions indicate that noise levels at all neighbouring residential property lines will be below the nighttime limit of 45 dBA. These predictions were based on preliminary equipment selections and other design details, which could change as the project progresses. However, we will be carrying out ongoing reviews throughout the detailed design and construction stages of the project to identify any further noise control measures that may be necessary to ensure that the bylaw requirement will be satisfied. Based on the above provision, the acoustic engineer has determined the noise levels at the nearest property line would be 5dB lower than the City's requirement for a "Quiet" zone.

A copy of the BKL letter confirming compliance to the City's Noise Bylaw is provided in Appendix 8.9.

Staff Assessment: Staff note that in addition to the specific noise mitigation features listed above, the applicants have designed the building to devote significant amounts of floor space for mechanical equipment at level 5, rather than on the rooftop, which will assist in reducing noise to nearby open spaces, to other hospital buildings and their patients, and to residential neighbours nearby. More work is recommended to address other aspects of noise, and information on the drawings is recommended to note the acoustic measures on all levels (see Standard Conditions A.1.5, A1.17 and A1.18).

Condition 5	Provision of a permeable surface for any new or rebuilt surface parking stalls; **Note to Applicant:** Intent is to reduce the environmental effect of these required hard surfaces. Drainage to a storm water retention system may be considered as an alternative. Where possible, a light-coloured surface should be evaluated to reduce the urban heat-island effect.

Applicants Response: Sub-section 4.7 (Landscape Rationale) and Section 7.0 Landscape Drawing L-004 addresses surface treatment in the landscaped and paved areas of the site under the jurisdiction of the Affinity team. The need for permeable surfaces for new or rebuilt surface parking has been fully addressed and complied with, by incorporating vehicle rated and ADA approved permeable paving with a continuous granular infiltration base. The west perimeter edge of the parking area features an infiltration rain garden bioswale with filter soil media.

Staff Assessment: Further information and detailing will be needed in coordination with the Rainwater Management Plan to address the efficacy of the sustainable systems used in relation to an ecosystems approach that includes natural systems, tree canopy, water retention and reuse. (see Standard Conditions A.1.24 and A.2.10)

Condition 6	Provision of a design rationale showing how the proposed design responds to the updated Master Plan and the approved Design Standards, with reference to each relevant section and specific built features **Note to Applicant:** Where the application does not meet the goals or principles of the Plan or Standards, further design development may be required.

Applicants Response: Section 4.0 provides a broad, yet comprehensive series of sub-sections dedicated to the Affinity team's design rationale and response to all the design guidelines established by the Provincial Health Authority and the City of Vancouver. As the design standards are extensive in scope the sub-sections cover the range of topics involved from site organization through building massing and architectural treatment to landscape design, way finding and CPTED.

Staff Assessment: Staff have reviewed the rationale provided and concur it presents a comprehensive response to the Master Plan, especially for that portion around the new building, and to the Design Standards, especially in terms of the overall massing.

Further work on the design of the building exterior and the landscape design, as noted elsewhere in this section and in the recommended conditions of approval, is needed to fulfil the intended goals of these documents in detail. For example, the Design Standards note the need for distinctively designed building entries, and the applicants continue to develop this aspect (see Recommended Condition 1.1).

The interface between the broader master plan areas of the campus and the more limited scope of the building project will require adjustment to optimize pedestrian and other active transportation pathways. For example, some locations in the application have inadequate sidewalks from parking to the entries (see Recommended Condition 1.2). Site circulation diagrams provided in the rationale note number of pedestrian routes around the site, not all of which are carried through to the public realm (see Recommended Condition 1.4).

In section 2.2 City of Vancouver Rezoning Process, the proponent describes the new building as providing 'functional, easily intelligible, warm and welcoming space and character to all users and visitors'. The site planning criteria includes 'site access and circulation for convenient and safe vehicular flows for emergency traffic as well as visiting vehicles, bicycles and pedestrians'. The City of Vancouver's transportation priorities as outlined in the Transportation 2040 Plan in order to importance are people walking, cycling and driving, with the emphasis on 'people'. Staff have some concerns that parts of the application may put walking third in line behind other modes, as noted in Appendix F. While the design must prioritize those particular vehicles bound for the emergency department, not all arrivals to the campus fit this category. More work is recommended so that other arrivals better respond to City priorities (see Standard Condition A.1.2).

Condition 7	Provision of an open space for respite and repose, dedicated to patient and family use, directly accessed from the Acute Care building; **Note to Applicant:** Noting future plans for expansion, the location may be an interim condition.

Applicants Response: The design of the new facility incorporates many locations dedicated to patient, staff and visitor respite and repose. These are located at grade within the pedestrian zones of the "Main Street" and "Campus Way" and in courtyard and green roof locations at various levels within the building. The reader is referred to Landscape Plans illustrated for both within Sub-section 4.7, as well as the following specific Landscape Plans by sheet number in Section 7.0:

- L-003 and L-004 illustrating the variety of grade level spaces included;
- L-005 and L-006 illustrating locations for different users on roof tops; and
- L-008 and L-010 providing additional related information.

Staff Assessment: Since the development application submission, the applicant has been working with staff to improve these open spaces. Designs presented at the Urban Design Panel on March 12th, 2014 showed a variety of themed spaces that are thoughtful to the needs of users in a caregiving environment (for example, the "forest floor" walk on the southwest side of the new building). Proposed plans include outdoor furniture, signage, lighting, planting and the labelling of identifiable outdoor spaces. Additional drawings of the wider campus help to place the site in a larger context that

includes present and future healing gardens, commons, and park spaces. Further attention will be needed at the pedestrian scale to maximize connections across the site, to the campus and the community. Way finding and safety measures will need to be reviewed in detail, particularly in the parking lot and near secondary entrances/doors.

Condition 8	Notation on the elevation drawings of finish, colour, and materials; **Note to Applicant**: Include, where relevant, coursing, texture and spacing of materials. Attach colour samples to the drawings and note colours on a legend.

Applicants Response: Section 4.5 (Architectural Rationale) provides an overview of the approach take with respect to materiality and colour. This includes a representation of the palette of exterior materials and colours as well, and these are referenced in the building elevations by location and extent in Section 6.0 (Architectural Drawings). The reader is also referred to the renderings of the building included in this document for a more photo-accurate representation of material selection and placement.

Staff Assessment: The applicants have provided a comprehensive evaluation of the use of colour, materials, and finishes appropriate to a new health care facility, and continued to improve the approach in response to commentary provided during the review process. Ongoing refinement in this area, as presented at the Urban Design Panel on March 12th, 2014 should help to enliven the building exterior while providing a unified design expression. Recommended conditions of approval are intended to ensure that this work is reflected on the approved drawings (see Standard Condition A.1.6).

Condition 9	Provision of enlarged drawings at ½" = 1'-0" scale or better for exterior building and landscape features; **Note to Applicant**: Include building trim, soffits, windows and steps.

Applicants Response: Again, Sections 6.0 and Section 7.0 provide, as part of the sets of Architectural and Landscape Design Drawings, a full complement of elevational details at the requested scale, with materials and colours specified in accordance with the rendered images included in the design submission.

Staff Assessment: The proposed drawings will need to be expanded to include more detailed and dimensioned cross sections, especially in terms of the entry canopies, special tree protection areas, rain gardens, landscapes on slab, green roofs, permeable surfaces, outdoor paving (pedestrian and vehicular), parking area, road design, sloped areas and retaining walls that are visible to the public (see Standard Conditions A.1.7 and A.1.25).

- **Conclusion:**

The application presents a built solution to a large, complex and technically-driven program of critical value to Vancouver and the Province of British Columbia, and a comprehensive response to the conditions of rezoning, regulations, design standards, and the master plan for the campus. Ongoing refinement is expected as the applicants and owner continue the transition from programmatic requirements to detailed design. Staff support the application, subject to the conditions noted.

URBAN DESIGN PANEL

This application was also reviewed on January 29, 2014 and received non-support. See Appendix E for the approved minutes from this meeting.

The Urban Design Panel reviewed this application on March 12, 2014, and provided the following comments:

EVALUATION: SUPPORT (5-1)

- **Introduction:** Mr. Black, Development Planner, introduced the proposal for a hospital site bounded by West 32nd Avenue, Oak and Heather Streets and West 28th Avenue. It is a 46 acre site with a slope from the southeast corner to the northeast corner. Mr. Black noted the context for the area that includes single-family homes to the west, east and south and the St. Vincent's site to the southeast. He reminded the members that the Panel had reviewed and supported the rezoning proposal in November 2010. In May 2012 the Panel reviewed and supported the overall Master Plan that will guide the future phases of the development. He mentioned that there were some items the Panel felt needed to be improved including breaking up the upper floor massing, improving the visibility of the entry sequence and improving the clarity of the open spaces. In November 2012 Council approved the amended CD-1 bylaw and associated Master Plan guidelines and design standards for the development. In January 2014, the Panel again reviewed the proposal as a development application however they did not support the proposal. They found that the applicant needed to improve the wayfinding around the site, more clearly mark the entrances, improve the quality of the courtyards and open spaces and that the colour palette needed to be lighter.

  Advice from the Panel on this application was sought on the proposed landscape and architectural design of this complete development permit application in general, and in particular:

  1. Has the revised application addressed the Panel's consensus on key aspects of the design needing improvement noted on January 29, 2014?
  2. Are the entryways and paths clear and inviting for the range of needs, from everyday visitors to urgent care?
  3. Is the materials palette, composition, colour and detailing well resolved and appropriate to the range of users and this context?
  4. Does the exterior design strike the right balance between a variety of expressions and break up of scale, and overall cohesion of design?
  5. Are the open spaces beside and on the building successful for their intended uses?

  Mr. Black took questions from the Panel.

- **Applicant's Introductory Comments:** Eleanor Lee gave an overview of the long term plans for the hospital. She mentioned that there are seven phases to the development of which the Acute Care Centre is part of Phase 2. The first phase involves the relocations and renovation of various spaces on site to enable the demolition of three buildings located in the centre of the site. Once Phase 1 is complete (April 28, 2014) it will allow for the construction of the Acute Care Centre. Ms. Lee mentioned that part of the plan was to create continuous green spaces and reduce the amount of surface parking. Phase 3 will be repurposing of the 1982 building, as the existing programs will move into the Acute Care Centre building and Sunny Hill Health Centre for Kids will move onto the site. Ms. Lee said that when they were developing the Master Plan, they wanted to construct community benefits such as the Wellness Walk. It is intended to be a multi-sensory experience with the planting of over 10,000 new trees, shrubs and plants as well as integrating public art. Ms. Lee mentioned that they have developed a comprehensive wayfinding strategy involving maps, banners, building signage using universal symbols.

Allyn Stellmacher, Architect, described the architecture for the proposal and mentioned that the principle access is off Oak Street with signage to help people find their way to the arrival points. He said that they have moved away from the flat canopy with angled canopies that are split in three pieces. There is a larger component that wraps two sides of the building clearly identifying the emergency entrance. As well he noted that signage is integrated into the building. The architecture has been simplified on the building and they have used nature to make up the colour palette for the wayfinding as well as the building.

Ken Larsson, Landscape Architect, described the landscaping plans and mentioned that they wanted purposeful outdoor spaces for patients and visitors. There is covered seating, open seating and outdoor gardens to strengthen the connections to the existing buildings. They have also included active play for children. The pedestrian stream links the internal lobby of the building to the existing café's outdoor patio.

The applicant team took questions from the Panel.

- **Panel's Consensus on Key Aspects Needing Improvement:**

  - Design development to the entry canopy;
  - Consider reducing the brown in the colour palette;
  - Consider further refinement to improve the courtyard space.

- **Related Commentary:** The Panel supported the proposal and thought their concerns from the previous review had been addressed.

  The Panel thought the pathways were more inviting and that the emergency entrance was well-articulated. However a number of Panel members thought the hierarchy of the canopies could be improved. They noted that before it had a singular expression and now was rather fragmented and they thought it could have two levels rather than three.

  In terms of the material and colour, some Panel members thought the applicant had done a good job on simplifying the palette and they particularly liked the introduction of the nurse log idea on the tower. Some panel members thought a greater relationship between the colour palette and the wayfinding should be achieved. A couple of Panel members however, thought it could go a little bit further as they felt there was too much dark brown on the building.

  Some Panel members thought the general movement through the lobby spaces and entries was well improved but felt the entrance could be more strongly presented. One Panel member wondered if it was possible to have the glazed walkways run from the lobby to the emergency area.

  The Panel supported the general use of the courtyard space and their adjacency to the lobby. One Panel member suggested engaging in a lighting study to improve the light in the courtyard spaces. The Panel also liked the idea of the triangle parks and the landscape treatment that extends down to the cafeteria.

  The Panel agreed that the public art plan was an exciting part of the proposal and thought artists would have a real opportunity to participate in the healing process.

  The Panel appreciated the applicant describing the context regarding the master planning effort and how the phasing strategy will work.

- **Applicant's Response:** Ms. Lee thanked the Panel for their comments. Mr. Stellmacher said he appreciated the Panel's comments regarding colour. Regarding the internal gardens, he mentioned that they see them as view gardens with the glazing coming down to the floor. They are more of a

zen garden experience. Mr. Scott noted that the windows in the courtyard are a modest size with an accent panel of glass below and above the window.

ENGINEERING SERVICES

Pursuant to the recent rezoning of the Campus, a servicing agreement was entered into that obligates the Hospital to deliver engineering works along with improvements contemplated under this application. The works include several measures that respond to the existing and future traffic demands on the road network and adjoining neigbourhoods including intersection improvements at Willow and 33rd, and Oak and 33rd, closing the Heather Street vehicle entrance, and traffic calming should it be required due to subsequent analysis.

The recommendations of Engineering Services are contained in the prior-to conditions noted in Appendix A attached to this report.

CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN (CPTED)

Recommendations to improve CPTED performance are contained in the prior-to conditions noted in Appendix A attached to this report. (See Standard Condition A.1.33)

PROCESSING CENTRE - BUILDING

This Development Application submission has not been fully reviewed for compliance with the Building By-law. The applicant is responsible for ensuring that the design of the building meets the Building By-law requirements. The options available to assure Building By-law compliance at an early stage of development should be considered by the applicant in consultation with Processing Centre-Building staff.

To ensure that the project does not conflict in any substantial manner with the Building By-law, the designer should know and take into account, at the Development Application stage, the Building By-law requirements which may affect the building design and internal layout. These would generally include: spatial separation, fire separation, exiting, access for physically disabled persons, type of construction materials used, fire fighting access and energy utilization requirements.

NOTIFICATION

On February 7th, 2014, 549 notification postcards were sent to neighbouring property owners advising them of the application and offering additional information on the city's website. An Open House was held on March 4th, 2014 from 6:00 pm to 8:30 pm at the VanDusen Botanical Garden, Great Hall, 5251 Oak Street. 5 people signed in and 5 comment sheets were received. In addition, 4 email responses were received. The comments are summarized below:

<u>Building:</u>

- Building form is essentially a box, the form and design could have been better.
- The height, setback and the 14 ft floor to floor heights of the proposed building will make the building more visible to the adjacent properties.
- The mechanical units and elevator shafts are beyond the permitted height.
- Roof gardens area is a good addition to the project and will benefit hospital users and the public that accesses them.
- Hospital to consider alternatives to WiFi installation, allocation of Wi-Fi Free Zones and a system that can be turned off for those who experience adverse effects.

- Given the surrounding residential area, the building should reduce excess exterior lighting which may disrupt the livability of residents in the area.
- Any mechanical noise created should not disrupt neighboring properties.

Traffic:

- Traffic from the hospital still negatively impacts the surrounding neighborhood despite discussion since the 1998 Master Planning.
- Concerns over the 28th Avenue Entrance, traffic diversion was meant to traffic calm and prevent inbound and outbound traffic from the hospital site, and is not working.
- Free off-street parking along West 28th Avenue, Heather St. and 32nd Avenue has been an ongoing issue for many years and the streetscape should be considered a buffer from the hospital and not as spill off acting as an additional parking lot. Smaller cars are parking between the Resident Parking signs, street and lane intersections.
- Issues with ambulances using Heather Street Entrance
- Ronald McDonald House Construction disruption
- This site doesn't contain enough parking for the doctors and staff, the proposal should contain two levels of underground parking.
- Construction traffic related to the subject application should be kept out of the neighborhood.
- The proposed new access off Willow will generate a large amount of traffic on 33rd and Willow, adding to traffic on existing lanes. The specifics of the traffic situation need to be assessed before, during and after the buildings are constructed. The City should commit to:

  - Undertaking regular traffic monitoring on 33rd, on Willow and the adjacent lanes and provide annual updates.
  - Work with local residents to develop a plan that will ensure that the lanes are only used for local resident and City vehicles.
  - Develop an overall traffic management strategy for the area given the redevelopment of W&C hospital, Brock Fharni, Canadian Blood services facility, St. Vincent's care centre, the likely redevelopment of the RCMP property, and the changing Eric Hamber school traffic demands. The study needs to look at all modes 10, 20 and 30 years into the future.
  - Have working meetings with local residents to review the best option for managing the traffic.

Hospital Response:

BC Children's and BC Women's Hospital & Health Centre have undertaken numerous initiatives to reduce the volume of single occupancy vehicular traffic to the site. A new offsite staff lot at Heather and 37th with 239 stalls, was added as was a free staff shuttle service. The C&W free staff shuttle service travels from the King Edward Canada Line station to BC Women's Hospital to the Heather and 37th offsite lot. The new C&W shuttle service is now averaging over 350 riders per day.

In the last year, a parking lot at 33rd and Heather, with 50 parking stalls, was leased from Providence Health for the use of contractors working on site. For the new build, it is stated explicitly in the contracts that contractors will not be permitted to park within 1km of the site. C&W Hospital is actively trying to secure an expanded area for contractors with the construction of the new Acute Care Centre.

These initiatives have helped reduce the amount of staff traffic coming to the campus.

It is likely that the proponent will use the 28th Avenue Entrance to enter the site during construction of the new Acute Care Centre. Patients and families would have to primarily come in through either the

Oak Street Entrance or the Willow Street Entrance (when it's open) to enter the site. There is a hospital parking and transportation committee which meets regularly and the hospital is aware of the challenges with this entrance.

Staff Response:

Several measures will be implemented as requirements of the rezoning that approved the Master Plan. Staff have reviewed the requirements and feel they are adequate for the proposed Acute Care Centre. The requirements include an ambulance response plan, an updated Traffic Management Plan, and road network changes.

Concerns have been raised about the use of the nearby neighbourhood for parking. The site parking strategy is intended to take advantage of the new building by implementing underground parking, while recognizing the campus nature of the site. Through rezoning, a transportation study was completed that looked at parking and found the site would require 1830 parking spaces with this development. Staff recognize that some people driving to the hospital will still seek parking in the adjoining neighbourhoods. Most of the adjoining neighbourhood within three blocks of the hospital is already reserved for residents only. Car-share vehicles may still use these spaces however several designated spaces have been implemented both in the neighbourhood and on-site.

In addition to existing the parking strategy, several intersection improvements as well as neighbourhood traffic calming will be delivered with this phase of work. The Heather Street entry will be closed and 32nd will be closed at the new Willow Street entry. Funding for future traffic calming is also available should issues arise after the occupancy of the Acute Care Centre.

DEVELOPMENT PERMIT STAFF COMMITTEE COMMENTS:

The Staff Committee has considered the approval sought by this application and concluded that with respect to the Zoning and Development By-law it requires decisions by both the Development Permit Board and the Director of Planning.

With respect to the decision by the Development Permit Board, the application requires the Development Permit Board to exercise discretionary authority as delegated to the Board by Council.

The Staff Committee has considered the proposal, taking into consideration the intended use of the site as a hospital campus serving the needs of both Vancouver and the Province of British Columbia. The proposed development meets the objectives of the Master Plan and CD-1 By-Law (126). The Staff Committee support this proposal subject to the conditions contained in this report.

For J. Greer
Chair, Development Permit Staff Committee

S. Black, Architect AIBC
Senior Planner

J. Bosnjak
Project Coordinator

Project Facilitator: D. Autiero / M. Au

DEVELOPMENT PERMIT STAFF COMMITTEE RECOMMENDATIONS

The following is a list of conditions that must also be met prior to issuance of the Development Permit.

A.1 Standard Conditions

A.1.1 approval of the final form of development by City Council;

A.1.2 provision of updated drawings to reflect the improvements noted by staff in the design supported at the Urban Design Panel on March 12th, 2014;

Note to Applicant: In general, the conditions of approval reflect the application made on January 19, 2014. The intent of this condition is to ensure that the improvements noted by staff and the Urban Design Panel in March are incorporated into the response to the conditions of approval. Shadow and view studies, landscape drawings, and exterior architectural drawings should be revised for any changes made.

A.1.3 provision of more complete sidewalks to provide a warm, welcoming and safe arrival for all users and visitors;

Note to Applicant: Response should address the items noted in Appendix F.

A.1.4 provision of an updated design rationale that addresses the Design Standards in detail;

Note to Applicant: In particular, the response should provide data to address each section and refer to relevant pages. Response should include Sections 6.7 to 6.13 of the Design Standards.

A.1.5 notation on the plans and elevations of acoustic mitigation features related to noise reduction to nearby open spaces and buildings, also refer to A1.17 and A1.18;

A.1.6 notation on the elevation drawings to specify colour, finish, and materials for all visible surfaces;

Note to Applicant: Intent is to maintain the quality and long-term durability of building proposed in recent designs, including the material palette of wood and zinc panel. Where applicable, notes should specify dimensions, coursing, and texture. Notation should cover soffits and wall returns.

A.1.7 provision of enlarged building details, at ½" = 1'-0" scale or better, for significant exterior features;

Note to Applicant: Intent is to show how the quality and variety of the exterior design will be achieved in detail. Drawings should be in plan and section. Note exterior finishes for all surfaces. Please ensure that details referenced from small scale drawings are included in the set.

A.1.8 complete and fully-dimensioned floor plans;

Note to Applicant: Dimensions are measured from exterior wall to exterior wall;

A.1.9 provision of accurate and consistent scale on each drawing;

A.1.10 confirmation that Site Coverage of the CD-1 (126) By-law, does not exceed the maximum permitted;

Note to Applicant: Submission of detailed Site Coverage plan is required to confirm this number.

A.1.11 compliance with Sections 4.8.1 and 4.8.4 - Disability Spaces, of the Parking By-law, to the satisfaction of the General Manager of Engineering Services;

Note to Applicant: Provision of an additional 3 spaces to make a total of 22 disability spaces required for the Acute Care Centre.

A.1.12 clarification of roof screening and whether it is open or enclosed;

Note to Applicant: If enclosed, that area will be counted into the floor area.

A.1.13 detailed floor and roof elevations for each floor and roof level in the building, as related to the existing grades on site;

Note to Applicant: Top of guard, top of roof slab, elevator shaft elevations to be provided.

A.1.14 provision of bicycle parking, in accordance with Section 6 of the Parking By-law;

Note to Applicant: A total of 48 Class A and 18 Class B bicycle spaces are required. Also refer to Standard Conditions A1.15 and A.2.12.

A.1.15 details of bicycle rooms (label on plans), in accordance with Section 6 of the Parking By-law, the following:

- a minimum of 20 percent of the bicycle spaces to be secured via lockers;
- a maximum of 30 percent of the bicycle spaces to be vertical spaces;
- a provision of one electrical receptacle per two bicycle spaces for the charging of electric bicycles;
- notation (on the plans) that "construction of the bicycle rooms to be in accordance with Section 6.3 of the Parking By-law".

A.1.16 city building grades, existing and finished grades to be shown on the site plan including around the perimeter of all principal and accessory buildings;

A.1.17 design development to locate, integrate and fully screen any emergency generator, exhaust or intake ventilation, electrical substation and gas meters in a manner that minimizes their visual and acoustic impacts on the building's open space and the Public Realm;

A.1.18 provision of an acoustic report to address the issues identified at rezoning and in the Design Standards, including motor noise and sound reflection;

Note to Applicant: Additional building features may be required to address these issues.

Written confirmation shall be submitted by the applicant that:

- the acoustical measures will be incorporated into the final design and construction, based on the consultant's recommendations;
- adequate and effective acoustic separation will be provided between the commercial and residential portions of the building; and

- mechanical (ventilators, generators, compactors and exhaust systems) will be designed and located to minimize the noise impact on the neighbourhood and to comply with Noise By-law #6555;

A.1.19 deletion of all references to the proposed signage, or notation on plans confirming that: "All signage is shown for reference only and is not approved under this Development Permit. Signage is regulated by the Sign By-law and requires separate approvals. The owner assumes responsibility to achieve compliance with the Sign By-law and to obtain the required sign permits.";

Note to Applicant: The Sign By-law Coordinator should be contacted at 604.871.6714 for further information.

Standard Landscape Conditions

A.1.20 design development to ensure that access paths between doors at outdoor spaces are visually open and identifiable;

Note to applicant: For example, in the south west forest floor area, pedestrians may desire a more direct access route to and from the stairway structure located in the middle of the corridor.

A1.21 provision of detailed Landscape Plan(s) illustrating details of all soft and hard landscaping;

Note to Applicant: The plans should be at 1/8": 1 ft. scale at a minimum. Where the level of detail is too great to fit on one sheet, the depiction of the site may be done in smaller areas at a larger scale. The Plant list should include the common and botanical name, size and quantity of all existing/ proposed plant material and trees. Plant material should be clearly illustrated on the Landscape Plan and keyed to the Plant List. The landscape plan should include the roads, walkways, existing or proposed trees, adjoining walkways, surface materials, utilities, lamp posts, hydro poles, fire hydrants and site furniture. All existing or new permanent site fencing should be labelled and high quality. Identify all underground utility corridors, grade access utility doors, maintenance access elements, electrical kiosk with emphasis on construction related work that could impact the overall landscape scheme. Where existing trees, plants, walkways are impacted by construction activity ensure that the plan and specifications specify timing, method and jurisdictional responsibility for mitigation work, including arborist services, storage, site access, tree protection, temporary pedestrian pathway construction and overall Master Plan phasing.

A1.22 provision of landscape grading plan(s);

A1.23 provision of an expanded tree replacement list and plan(s) to include a variety of:

i) larger canopied, long lived species such as oak trees that have the potential to become legacy trees;

Note to Applicant: There are a number of open spaces that currently propose a grouping of smaller trees. Where substitutions of smaller trees are necessary, for tree counting purposes, staff will give reasonable quantity in lieu. These areas should be explored and identified on a plan.

ii) species that are same or similar to the trees removed (if the trees are removed are large, and in good health, and removed from an existing tree row);

iii) strategically placed taller species trees or rows of columnar trees that will specifically

serve for neighbor screening purposes;

Note to Applicant: The applicant may submit photos or documents to demonstrate that neighbor screening has been satisfied. It is recommended that the applicant work with landscape staff on site to identify view corridors where additional screening can occur.

iv) larger trees that can help mitigate heat island in the parking lot areas;

Note to Applicant: Where new trees are planted adjacent paved roads and parking areas, replacement tree species should be chosen to maximize canopy cover shading area in the summer.

A.1.24 provision of data and drawings showing how the application will address how the proposal satisfies the performance requirements in the Rainwater Management Plan the efficacy of the sustainable systems used in relation to an ecosystems approach that includes natural systems, tree canopy, water retention/reuse. See also Condition A.2.10.

Note to Applicant: Staff note that the submission have included rainwater management plan documents. However, the response should update the status in terms of the degree that sustainable features satisfy the expectation.

A.1.25 provision of typical, detailed large scale (1/4" or 1:50) sections and elevations of:

i) special tree protection areas. Sections 1 & 2 (sheet L-010) should be more detailed to include any and all relevant arborist recommendations, including, but not limited to, limits of excavation, special construction methods, hard surface construction, schematic illustration of the soil/roots/root ball, aerial and root pruning, mitigation methods, watering and re-landscaping;

ii) rain gardens. Include underground drainage/retention methods, special technologies grading and planting;

iii) landscapes on slab. Include the root ball, necessary voiding, soil and the slab structure;

iv) permeable surfaces. Include all outdoor paved areas and the special paving proposed in vehicular areas with detailed labelling to demonstrate how the system functions;

v) retaining walls visible to the public;

Note to Applicant: For example, the retaining wall adjacent and parallel to the emergency/ambulatory entry.

A.1.26 improvements to the "Tree Removal/Protection/Replacement Plan" to be coordinated with the arborist report (including the assessment of existing trees, retention value rating, retention feasibility, remediation recommendations, site supervision and letters of undertaking);

Note to Applicant: In reference to sheet L-015, the symbols to denote trees removed and trees retained should be more clearly presented. Consider using cross hatching or darker shading in the symbols for trees to be removed. Provide a quantity list of trees removed that are sized at 20 cm diameter or greater and less than 20 cm diameter.

A.1.27 provision of larger scale tree protection plans;

Note to Applicant: in coordination with the arborist report, provide detailed, labelled plans for any area that anticipates construction encroachment or notable disturbance (re-landscaping and walkways) within the critical root zone.

A.1.28 a "Construction Management Plan" outlining methods for the retention of existing trees during construction;

Note to Applicant: The Plan should include, but not limited to, the location of construction materials, temporary structures, utilities, site access, development phasing, neighbor impact reduction methods, to the satisfaction of staff. The applicant team should liaise with all related contractors, including civil/electrical/plumbing contractors to proactively identify any conflicts or constraints to tree protection.

A.1.29 provision of a detailed arborist report;

Note to Applicant: The purpose is to ensure tree retention success. Critical root zone dimensions and the related methodology and industry critical root zone calculation methods will be required. The discussion should include a tree assessment for all trees (sized 20 cm or greater) located outside the building envelope (not including street/parking construction), the existing growing condition, all demolition and excavation work in proximity to trees, construction methods and phasing, including re-landscaping. The plans should clearly illustrate and dimension the limits of excavation and any necessary tree canopy pruning. Consider "phased" tree barrier protection strategies. Refer to protection of Trees Bylaw, Section 7, for further guidance about protection of trees during construction and arborist report requirements.

A.1.30 provision of a letter of assurance that a certified arborist has been hired to oversee any work in proximity to retained trees, as necessary;

Note to Applicant: the letter should include at least four "trigger points" or specific work when the arborist should be notified to attend the site and signed by the arborist, owner and contractor.

A.1.31 consideration to apply additional sustainable landscape design principles, by:

- the reduction of lawn cover (to reduce chemical use and energy inputs associated with maintenance);
- the creation of habitat (access to nature) by adding pockets of native and adapted plants that specifically attract birds and insects.

Sustainability

A.1.32 notation on the plans and elevations that identify the built elements contributing to the building's sustainability performance in achieving LEED® Gold as required by the Green Buildings Policy for Rezonings, including a minimum of 63 points in total, six optimize energy performance points, one water efficiency point, and one storm water point;

Note to Applicant: Provide an updated LEED® checklist confirming the above; a detailed written description of how the above-noted points have been achieved with reference to specific building features in the development, and notation of the features on the plans and elevations. A key or legend listing the relevant features should be provided on the plans. The checklist and description should be incorporated into the drawing set. Registration and application for Certification of the project are also required under the policy.

Provision of a lighting design that eliminates light spillage is required under the Design Standards. Consideration should be given to the relevant LEED credits as well.

Crime Prevention Through Environmental Design (CPTED)

A.1.33 design development to respond to CPTED principles, having particular regards for theft in the underground parking and the potential for mischief or vandalism, such as graffiti;

A.2 Standard Engineering Conditions

A.2.1 clarify, if and where, the 10 electric charging stations are to be installed;

A.2.2 provision of wheel stops in the parking spaces to ensure that parked vehicles do not protrude into the adjacent sidewalks;

A.2.3 provision of a detailed loading operations plan for the new Acute Care Centre which, at a minimum, details the largest truck expected to serve the building, the access route(s) for such trucks, elevation and section drawings detailing the proposed loading interface at the building wall, and truck turning swaths which demonstrate independent operation and access into and out of each of the loading spaces;

A.2.4 demonstrate that the patient transfer vehicle can access the designated space at the side of the building when the Class C loading space is occupied;

Note to Applicant: refer to drawing A-051 for clarification of this condition.

A.2.5 clarify if loading functions are intended to take place at the northwest corner of the Acute Care Centre, and the type and size of vehicle which is expected to occupy the space;

Note to Applicant: This loading activity is not shown on other drawing pages.

A.2.6 ensure that the longitudinal slope and cross fall within the parking areas does not exceed 5%;

Note to Applicant: The slope between elevations 72.4 and 73 in the parking lot east of the building calculates higher. Provide a notation of the slope on the plans.

A.2.7 provision of an updated Traffic Demand Management plan outlining specific actions, goals, monitoring and a proposed reporting schedule all to the satisfaction of the General Manager of Engineering Services;

Note to Applicant: A letter outlining mechanisms for reducing vehicular travel to the site, including measures to increase cycling, walking, transit use, and carpooling to date is required.

A.2.8 provision of a traffic control plan for 28th Avenue access during construction to the satisfaction of the General Manager of Engineering Services;

Note to Applicant: The expectation is that traffic on the 28th Ave bikeway will not be increased during the construction period. Where, in the judgment of the General Manager of Engineering Services, any increases in traffic or heavy vehicles may occur, separated facilities will need to be provided and maintained for cyclists. Traffic control may also need to be provided where heavy vehicles cross the cycling facility.

A.2.9 provision of an ambulance response plan for the site and the hospital precinct as a whole;

Note to Applicant: The plan should provide rationale for all proposed entrances and consider reducing entrances to only those necessary.

A.2.10 provision to develop the specifics of the Rainwater Management Plan to be consistent with the sites overall Plan that utilizes sustainable strategies allowing for infiltration, retention, treatment and utilization of rainwater where applicable and appropriate on site;

A.2.11 provision of a development specific Solid Waste Diversion Strategy consistent with sites' overall strategy that addresses waste diversion in all solid waste generating activities within the complex;

A.2.12 provision of the following items in regards to the Class A and Class B bicycle parking:

i) Provide detailed information of the number, type and location of all Class A and Class B bicycle parking and associated shower and change facilities for the new Acute Care Centre, and as expected from outstanding rezoning conditions, for the all buildings on this hospital site.

Note to Applicant: The Acute Care Centre rezoning required that on-site bicycle parking (short-term and long-term) should be reviewed and improved to the satisfaction of the General Manager of Engineering Services.

ii) Clarify on the plans the location of Class A bicycle storage for 2/3 of full time employed (FTE) staff, including the location of their personal lockers and if it is intended for FTE staff in the proposed Acute Care Centre or campus wide.

iii) Clarify and identify on plans where the bicycle storage for 5% of the transients identified in the program will be provided, and the definition of the term "transients."

iv) Provision of a fully enclosed room and secure Class A bicycle storage area on Level 0.

Note to Applicant: While the proponent mentions this in their discussion of bicycle facilities on page 17 of the application, this is lacking in the development of the plans on Level 0.

A.2.13 consideration of the following items:

i) A minimum 1.2 m concrete sidewalk between the side aisle parking next to phase 2 building and the infiltration swale/post disaster storage unit.

Note to Applicant: A passenger needs to be able to enter or exit the vehicle comfortably and safely once parked next to the swale. (See drawings L-009 and 010, section one and section one blow-up)

ii) Provision of a cast in place concrete drive aisle and traffic table in the proposed drop off paved court and disabled parking area.

Note to Applicant: The proposed permeable paving is not a comfortable walking environment for persons with disabilities.

iii) Provision of minimum 1.8 m wide sidewalks except those adjacent to parking which could be 1.5 m wide and next to the parking in the side aisle which could be 1.2 m wide.

B.1 Standard Notes to Applicant

B.1.1 The applicant is advised to note the comments of the Processing Centre-Building, Vancouver Coastal Health Authority and Fire and Rescue Services Departments contained in the Staff Committee Report dated March 26, 2014. Further, confirmation that these comments have been acknowledged and understood, is required to be submitted in writing as part of the "prior-to" response.

B.1.2 It should be noted that if conditions 1.0 and 2.0 have not been complied with on or before **October 22, 2014**, this Development Application shall be deemed to be refused, unless the date for compliance is first extended by the Director of Planning.

B.1.3 This approval is subject to any change in the Official Development Plan and the Zoning and Development Bylaw or other regulations affecting the development that occurs before the permit is issuable. No permit that contravenes the bylaw or regulations can be issued.

B.1.4 Revised drawings will not be accepted unless they fulfill all conditions noted above. Further, written explanation describing point-by-point how conditions have been met, must accompany revised drawings. An appointment should be made with the Project Facilitator when the revised drawings are ready for submission.

B.1.5 A new development application will be required for any significant changes other than those required by the above-noted conditions.

B.2 Conditions of Development Permit:

B.2.1 Noise emanating from roof-top mechanical equipment is required to conform to Vancouver By-Law 6555 regulating Noise or Sound. Any noticeable impact in noise or sound to the surrounding community would require further mitigation measures as necessary to eliminate the impact.

B.2.2 The development shall comply with relevant Provincial and City By-laws with respect to air emission permit from Metro Vancouver as necessary.

B.2.3 Construction and installation of the low carbon heat plant for the Children and Women's Health Centre campus must be substantially complete prior to issuance of occupancy permit for the Acute Care Centre in accordance with Section 219 Covenants CA3566307 and CA3566309.

B.2.4 All approved off-street vehicle parking, loading and unloading spaces, and bicycle parking spaces shall be provided in accordance with the relevant requirements of the Parking By-law prior to the issuance of any required occupancy permit or any use or occupancy of the proposed development not requiring an occupancy permit and thereafter permanently maintained in good condition.

B.2.5 All landscaping and treatment of the open portions of the site shall be completed in accordance with the approved drawings prior to the issuance of any required occupancy permit or any use or occupancy of the proposed development not requiring an occupancy permit and thereafter permanently maintained in good condition.

B.2.6 Any phasing of the development, other than that specifically approved, that results in an interruption of continuous construction to completion of the development, will require application to amend the development to determine the interim treatment of the incomplete portions of the site to ensure that the phased development functions are as set out in the approved plans, all to the satisfaction of the Director of Planning.

B.2.7 The issuance of this permit does not warrant compliance with the relevant provisions of the Provincial Health and Community Care and Assisted Living Acts. The owner is responsible for obtaining any approvals required under the Health Acts. For more information on required approvals and how to obtain these, please contact Vancouver Coastal Health at 604-675-3800 or visit their offices located on the 12th floor of 601 West Broadway. Should compliance with the health Acts necessitate changes to this permit and/or approved plans, the owner is responsible for obtaining approval for the changes prior to commencement of any work under this permit. Additional fees may be required to change the plans.

B.2.8 This site is affected by a Development Cost Levy By-law and levies will be required to be paid prior to issuance of Building Permits.

3.0 Campus Context

3.1 ACC Site Location and Description

The existing Children's and Women's Campus is in the south Cambie neighbourhood adjoining the 'Cambie Transit Corridor'. The Shaughnessy neighbourhood is directly to the west and the Riley Park/Little Mountain neighbourhood is to the east. The major arterials serving this neighbourhood are King Edward Avenue to the north, Cambie Street to the east, 41st Avenue to the south, and Oak Street to the west. Major transit services are located on all these arterials. In particular, light rapid transit—the 'Canada Line' aligned with Cambie Street—has been in operation since August 2009.

The campus has been established at a 45 degree angle to the existing street grid. Subsequent additions and expansions of Shaughnessy Hospital and the existing Children's and Women's hospital align with this original planning offset. The only section that is parallel to the street grid are the research buildings fronting 28th Avenue and Oak Street.

The site has a significant grade change of approximately 18.75 m across the site, from 68.10 m at the north-west corner to 86.85m at the high point in the south-east corner of the site. The topography follows generally the same orientation as the existing buildings, at 45 degrees to the street grid, and may have been a reason that the original buildings on the site were oriented as such. One key exception to this trend is the berm that exists adjacent to 32nd Avenue. The berm runs roughly parallel to 32nd Avenue and has a maximum height of approximately 5 m. It has historically served as a buffer between residents and hospital functions and should be maintained where possible.

The Oak Street Campus is surrounded by residential as well as other institutional uses. The precinct is bounded by West 28th Avenue to the north, West 32nd Avenue to the south, Heather Street to the east and Oak Street to the west. The four boundaries have unique characters and communities. The character of the surrounding area is residential in nature with housing typical of suburban Vancouver residential development circa 1960 with some examples of newer renovations and additions. The streets are generous in dimension and populated with mature trees in most cases.

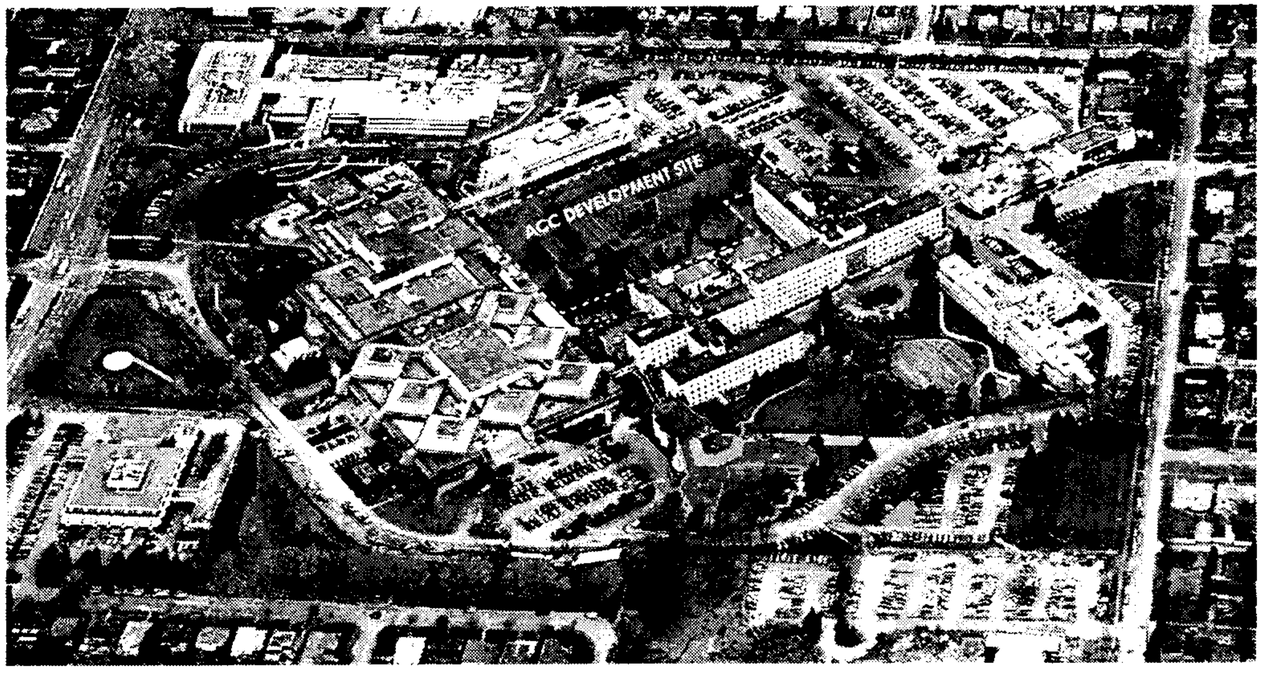
Queen Elizabeth Park can be found two blocks east and is a beautiful public garden as well as recreational mecca for the community and general public, with tennis courts, golfing and lawn bowling. Van Dusen Gardens to the south and west is a 22 hectare horticulturist's dream with an inspiring environment that accommodates all ages and abilities. Institutional uses exist on the north side of 28th Avenue in the GF Strong Rehabilitation Centre, and on the south side in the Child and Family Research Institute (CFRI) on campus facing that street, with adjacent single family residential making up the remainder of the street.

Along the east side of Heather Street are single family residential dwellings which face into 29th, 30th, 31st and 32nd Avenues presenting a side elevation onto Heather Street. Honora Conway at St. Vincent's, a residential care facility completed in August 2008, is at the corner of Heather Street and 33rd Avenue. This building houses the elderly and disabled. This building is the first phase of a project to develop an extensive 'Campus of Care' for the elderly in Vancouver. Youville Residence is on the south side of 33rd Avenue and contains a multi-level care facility for the elderly.

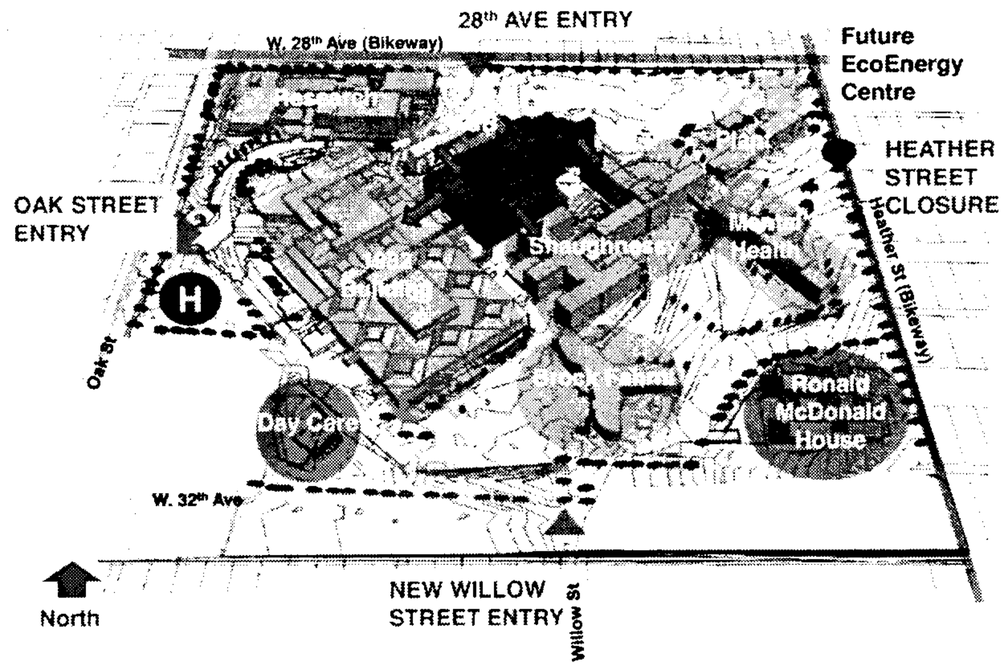
The RCMP 'E' Headquarters is currently housed south on 33rd Avenue and runs through to 37th Avenue further south. The Headquarters will soon be vacating and moving to Surrey, B.C. Eric Hamber Secondary School is on the corner of 33rd Avenue and Oak Street. This high school has several outdoor fields and is well used by the community.

The 25 year Master Plan places the main Children's and Women's Hospital in the centre of the site which supports purposeful green open spaces surrounding the building. Inevitably, a large institution such as this creates a significant building, but the massing is deliberately articulated to reduce the overall scale and then pulled to the center of the site to minimise the impact of the buildings on the lower scale residential neighbourhood that surrounds it. The resultant "green buffer zone" that encompasses the new ACC facility will provide a semi-public amenity that creates a soft transition between the new building and the neighbourhood.

This approach provides for a more "campus-like" site organization, rather than a massing where buildings are more directly oriented to the existing street patterns, common in a more traditional urban setting.



THE CHILDREN'S AND WOMEN'S HEALTH CAMPUS - EXISTING CONDITION



FUNCTIONAL INTEGRATION OF PROPOSED NEW ACC

3.2 Campus Access and Circulation

Overall Campus Circulation

Primary points of vehicular access into the campus will remain from Oak Street, West 28th Avenue and Willow Street, each of which connects directly into the perimeter ring road that links all parts of the campus including the new ACC site. Though access to all principal buildings on site will be afforded from the ring road, the Master Plan also anticipates the enhancement to Campus Way between the 1982 Building and both the ACC and future Women's complex. Campus Way is currently not foreseen as a through-way for vehicular traffic due to planned covered pedestrian connections crossing the right of way. It will, however provide stubs into the core of the campus for pedestrian drop-off and emergency access.

General Public & Patient Access to the ACC

The general public accessing the ACC will do so via the Oak Street entrance to the campus. Due in part to plans to link the 1982 building and the new ACC at grade effectively closing Campus Way to traffic, Children's patients best approach the new facility using West 28th Avenue with direct vehicular access to the building, underground parking and adjacent surface parking areas in the northeast corner of the campus. This shift in vehicular focus from the previously implied "Children's Entry" (which is illustrated in the circulation context plan, following) has been a challenge to resolve, and has ultimately created an opportunity to create a new pedestrian concourse leading to the northeast quadrant of the campus adjacent to the new ACC and perpendicular to Campus Way. This concourse in turn offers the opportunity to relocate the principal ACC entrance to a location along this route to serve both pedestrian and vehicular access to the new building in a more equitable manner.

With the concentration of vehicular access to the new facility to the NE of the building site, an entry court with a ramp to underground parking and some surface parking could be accessed via a new drive ways and lay-bys linked to the ring road but immediately adjacent to the building. Similarly, emergency access for both ambulatory patients and ambulance traffic must be coordinated in a similar manner.

Circulation flows are expected to be directed by prominent signage and architectural landmarks to separate emergency traffic, ambulatory care patients and visitors.

Emergency Department Access

With closest vehicular access provided off West 28th Avenue, the ACC Emergency Department is best located at the northeast end of the building podium with direct access, as noted above, from dedicated lanes and a marshalling area adjacent to the building at that point.

Service Vehicles & Patient Transfer Vehicles

Service access and patient transfer loading and unloading is best located off the ring road as well, but to the south of the high volume entry court and emergency access. A services marshalling area can be developed in the south-east quadrant of the new building site, with convenient access to the emergency department and much of the diagnostic and treatment podium main floor areas.

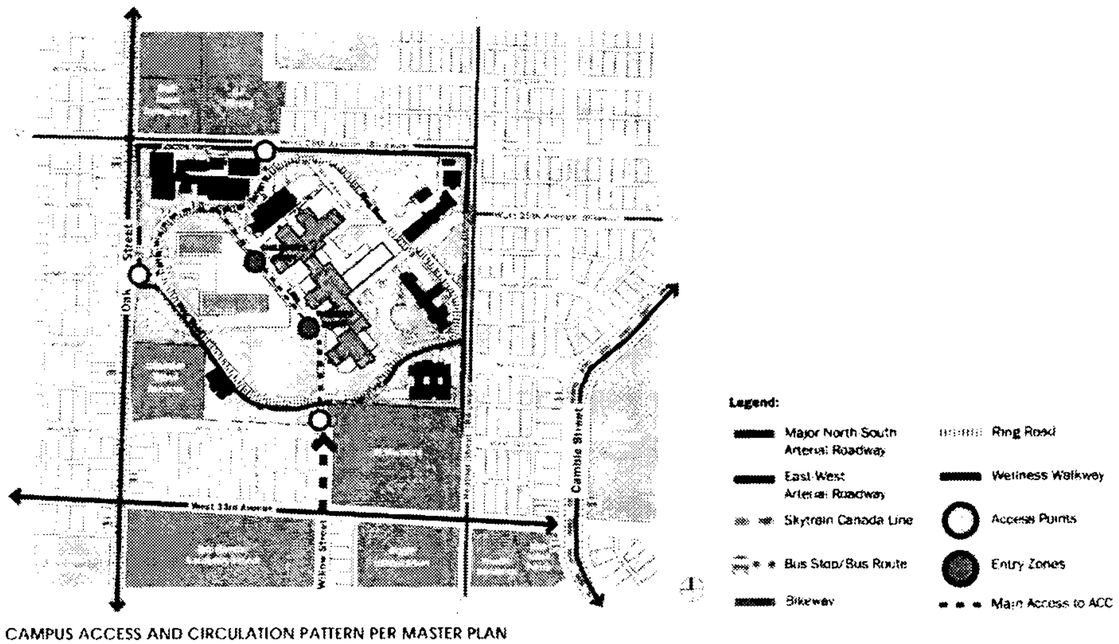
Principal Fire Access

Fire access to the ACC will also be provided by the West 28th Avenue entry point to the campus and use of the ring road to access a principal entrance to the building via the entry court at the north-east end of the building. Details to ensure full compliance with access requirements will be orchestrated in consultation with the Vancouver Fire Department.

Pedestrians, Cyclists and the Wellness Walk

A complete and fully integrated wayfinding system has been developed for the ACC precinct and specific signage and pavement markings will be provided for pedestrians departing their parked vehicles, guiding them to the main entrance of the ACC. Safe pedestrian paths and crossing locations are further enhanced by marked crosswalks with sufficient sight lines in areas of expected high vehicle volumes. Similarly, the established Wellness Walkway that virtually surrounds the campus utilizing a perimeter corridor and part of the ring road will be enhanced with improved routes and related signage to access the walk and additional planting to enhance the experience. Cyclists are increasing in numbers with the campus traffic mix. While they share the main vehicular routes, access to all the buildings for staff and visitors will be enhanced with related signage and safety measures to encourage further bike activity.

TRANSPORTATION NETWORK SERVING CAMPUS SITE



CAMPUS ACCESS AND CIRCULATION PATTERN PER MASTER PLAN

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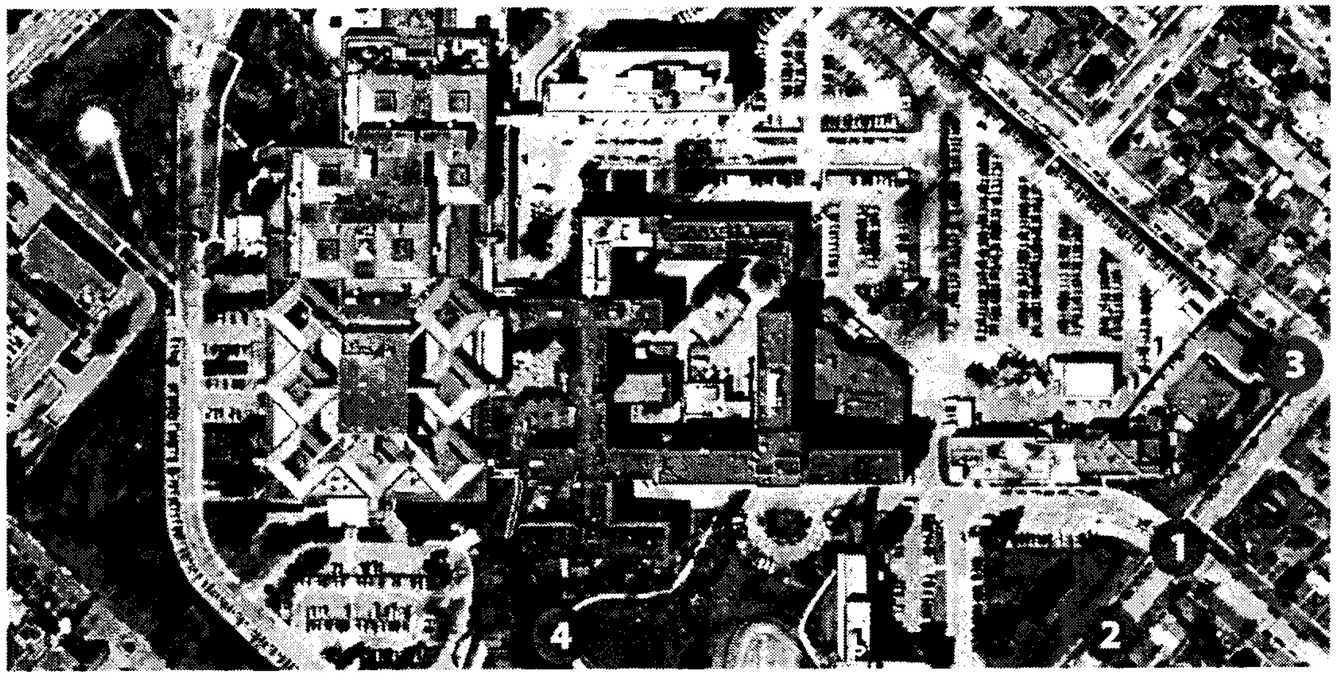
3.3 Views To and From the ACC Site

3.3.1 Views into ACC site from Surrounding Community

Sight lines across the site from key neighbouring locations have been examined and are illustrated herein both without the new building in place, and again with the ACC modeled as it was proposed by the amended Master Plan. While these images clearly indicate an increased visual presence of building mass on site with the development of the ACC, public views and some private views will not be substantively diminished. The proposed building from certain perspectives actually falls behind present structures that will remain on site and most of the new mass would be screened from neighbouring views. This is particularly true of views from Heather Street and 29th Avenue and from Heather Street and 31st Avenue where the diagonal grid of the campus in combination with existing buildings effectively block views deep into the site and thereby tends to hide the proposed development. These lines of sight should also benefit future residents of RCMP and Saint Vincent's development sites.

Residential neighbourhood views into the ACC site from single family lots along 28th Avenue and 32nd Avenue will be affected, particularly during winter months with the loss of deciduous tree cover. It is the intention of the development guidelines for the ACC that sensitive stepped massing with height, extensive articulation of the mass and exterior treatment, plus the addition of substantial additional tree planting along West 28th in combination with enhancing the Wellness Walk will together diminish the impact. The proposed development pays particular attention to these objectives.



LEGEND

1 Heather Street at W 29th Ave - Existing

2 Heather Street at W 29th Ave - Master Plan

3 Heather Street at W 31st Ave - Existing

4 Heather Street at W 31st Ave - Master Plan

5 W 28th Ave - Existing

6 W 28th Ave - Master Plan

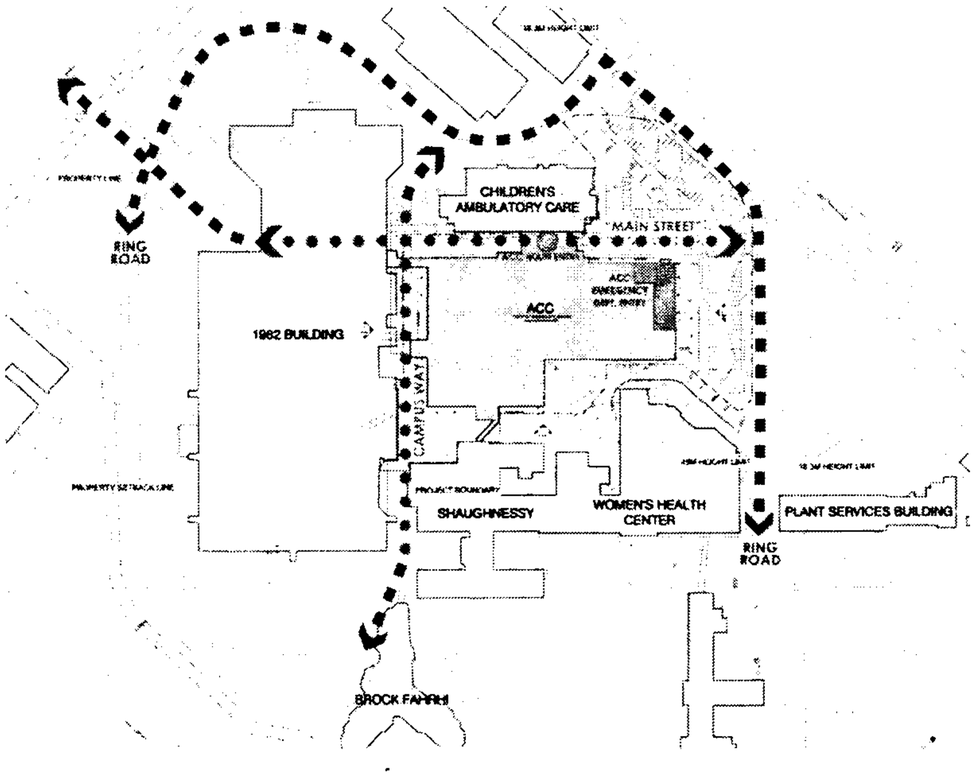
7 W 32nd Ave at Willow Street - Existing

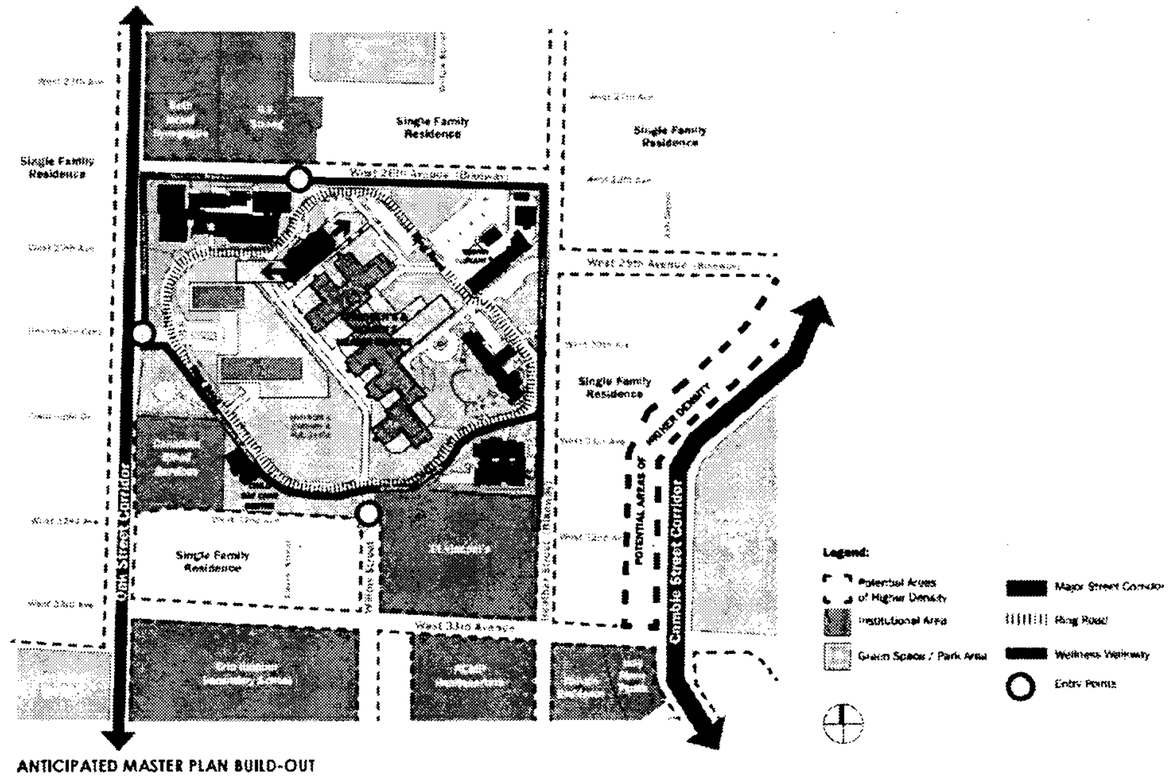
8 W 32nd Ave at Willow Street - Master Plan

4.0 Proposed Development

4.1 Proposed Site Organization

The new ACC is situated within the allowable zoning footprint near the center of the site as described in the Master Plan, with the building form stepping back as it increases in height.





ANTICIPATED MASTER PLAN BUILD-OUT

Site Organization

The ACC has been positioned on the site to utilize the spaces between the existing 1982 Building and the Ambulatory Care Building (ACB) to create a 'Main Street' or social core for the campus. The configuration presents a unifying east-west campus circulation route that links the existing Hospital entrance facing Oak Street through to the main ACC entrance at the northeast. The ACC is then organized with its major public circulation spine and elevator tower situated along this 'Main Street' to immediately reveal the main entry as well as the internal organization of the facility, which is set up to create pedestrian circulation for entry and intuitive wayfinding, with the added benefit of daylight and views.

This layout addresses the "Children's" identity and entrance, oriented to the main arrival route from Oak Street (and the north ring road and 28th Ave.), and the "Women's" identity and main entrance located to the south end of 1982 building (and future phases). Although this differs slightly from the Master Plan directions, it better responds to current as well as future site conditions and opportunities.

Affinity's approach to site organization was discussed at length with Authority and City representatives in a series of pre-submission collaborative meetings. It was agreed in principle that this solution was more appropriate and more functional given current context, though an alternate Phase 4 master plan solution would be required for expansion of the ACB. This is addressed in Subsection 4.10 but expansion options for the ACB are also indicated above.

Provision of Pedestrian Access

Pedestrian access to the new ACC occurs at the following main campus entry points:

1. A new proposed drop off at the main entry to the 1982 building connects through the existing lobby to the new ACC by way of an internal link.
2. West 28th Avenue acts as a feeder route through the community for pedestrians approaching the campus from public transit. An accessible sidewalk provides a link from West 28th Avenue to the main entry of the ACC and the Emergency Department both of which are accessed by way of covered walkway.

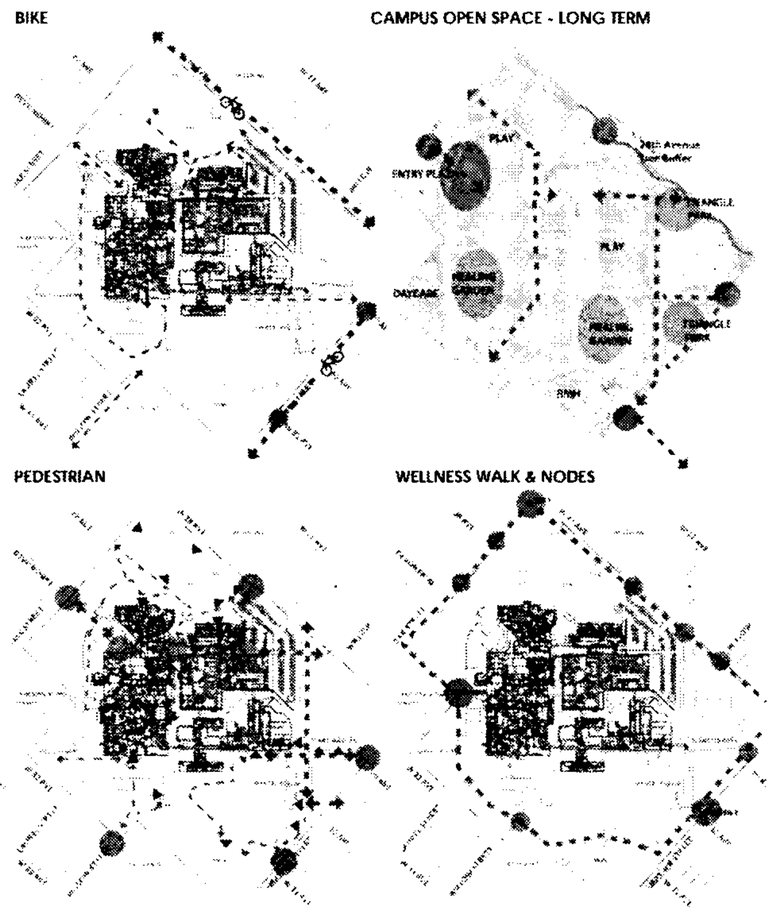
The design anticipates that the ACC will remain a strong core fixture at the heart of campus, and that future emphasis will shift to the west and the Oak Street entrance as the primary entrance in the future. This will be supplemented by the West 28th Street access and Willow Street access to the south.

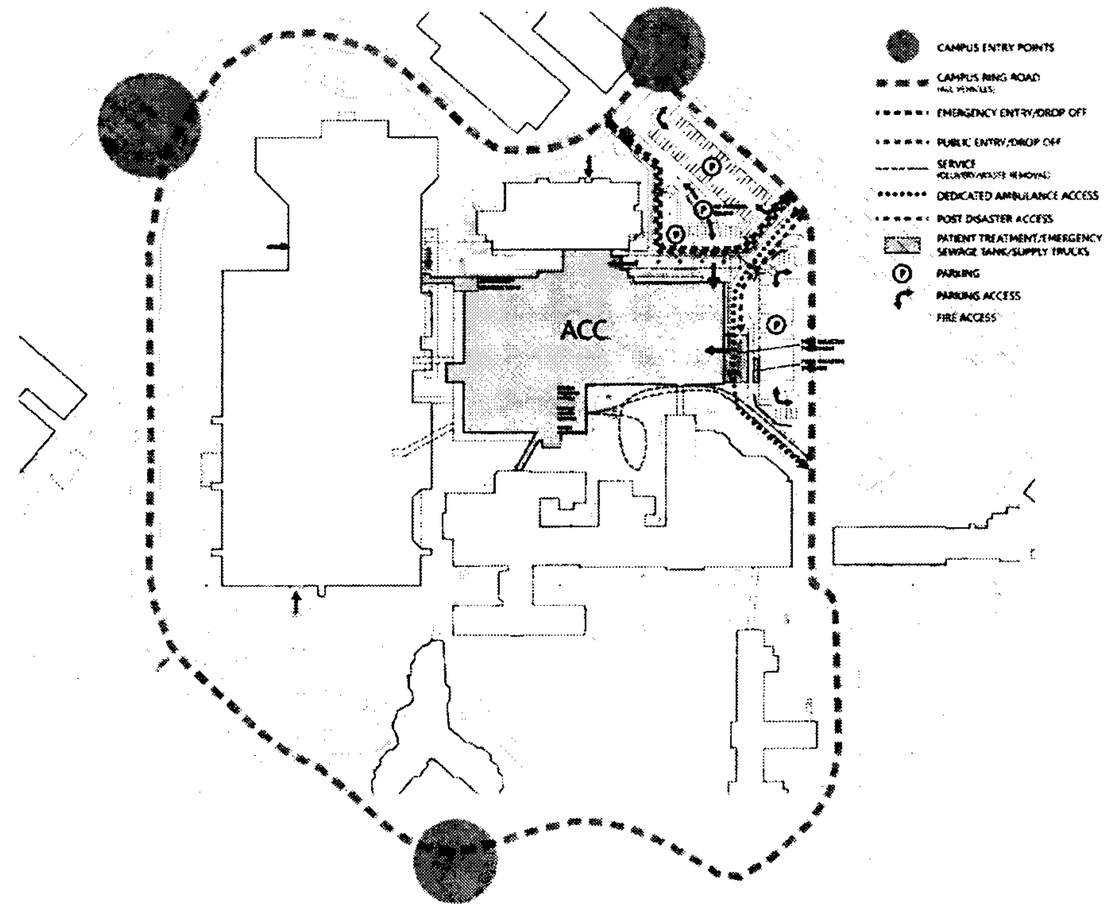
Key Entry Relationships

The main ACC entrance located midway along 'Main Street' is arranged so that a major covered drop-off area is directly adjacent to the east, readily visible from the campus loop drive and providing short-term space for four general and two emergency vehicles. The entry and canopy, along with the east face of the ACB, form a new campus entry court, that serves both the ACC and ACB and will do so for the future plans of the Master Plan.

This entry court becomes the northeast anchor to the campus circulation spine. A separate dedicated ambulance drive is provided from the campus ring road to the east side of the Emergency Department. Service vehicle access is provided along the southeast to a shared campus service/loading area between the ACC and the Shaughnessy Building.

4.2 Site Circulation and Access





Affinitity's proposed design underscores the importance of the perimeter ring road that links all parts of the campus as indicated in the Master Plan. The ring road will provide primary site circulation for the ACC as follows.

General Public and Visitors

The general public using the ACC will primarily use the Oak Street access. Children's visitors will primarily use West 28th Avenue and Women's visitors will use Willow Street. The circulation flow will be directed by signage and architectural landmarks to the ACC via the north portion of the ring road.

Signage near the ring road will direct visitors to the ACC entry court, surface parking options, and the parkade ramp at the northeast portion of the campus. The entry court and some surface parking will be accessed via a one-way laneway that loops by the main ACC public entrance/exit and back onto the ring road. Access to the entry court and underground parkade is expected to have high traffic volumes. The access to the underground parkade and intersection with the ring road will include a stop sign to enhance road safety.

Emergency Department

Emergency Department (ED) visitors will be directed by signage to the north portion of the ring road and the ACC entrance court. There will be prominent Emergency signage located on the building and canopy at the northeast end of the facility. Note that the Emergency Entry is separated from the Main ACC Entry by several meters and is architecturally distinguished in scale, colour and form, though connected by covered walkway.

Ambulances

Ambulances will be directed to the ring road from Oak Street and the West 28th Avenue access points, with ambulance-only signage along the ring road pointing to the dedicated ambulance entrance to the ED at the east end of the building.

Service Vehicles & Patient Transfer Vehicles

Service and patient transfer vehicles will be directed via the ring road to the ACC service court and entrance located at the southeast corner of the Facility.

Principal Fire Access

Fire access to the ACC will be from a code conforming "fire lane" linked to the vehicular drop-off area.

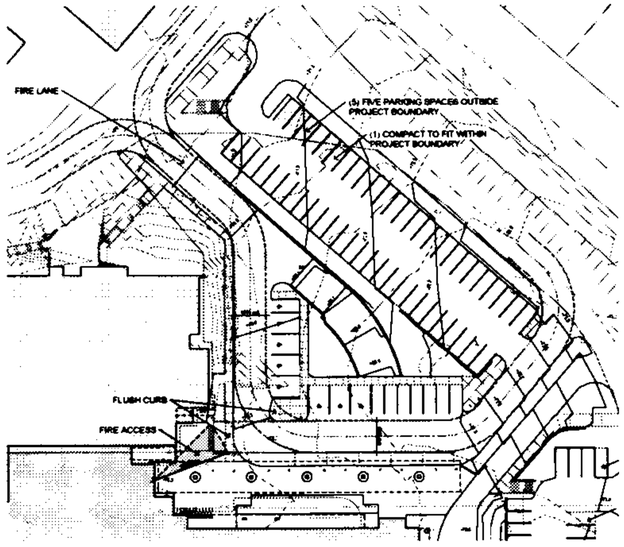
Pedestrians via Surface Parking

All drivers arriving to parking areas for the ACC will see the visually striking Wood Entrance Canopy signaling pedestrian approach to the ACC. In addition, signage and pavement markings will be provided for pedestrians departing their parked vehicles, guiding them to the main entrance. Safe pedestrian paths and crossing locations will be further enhanced by marked crosswalks with sufficient sight lines in areas of expected high vehicle volumes.

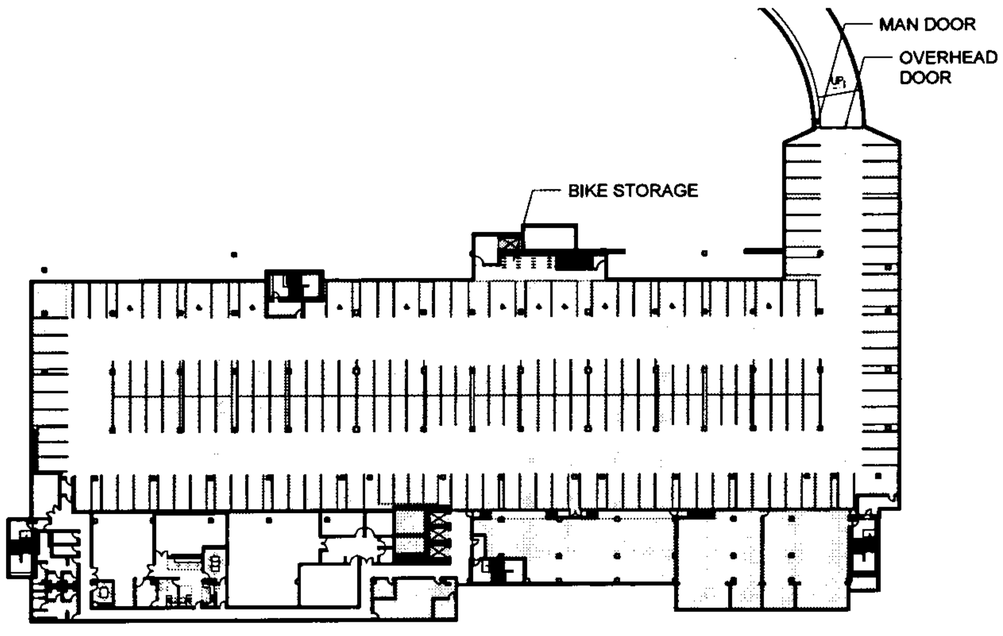
Bicycle Facilities

Our design provides bicycle facilities for the ACC as a stand-alone building as indicated in the Project Agreement, Schedule 3, Addendum 2. The number of bicycle stalls is calculated based on an assumption that the largest shift would be 50% of the 2025/26 staff requirement indicated in the Project Agreement, Appendix 3A. We have therefore provided 36 Class 'A' bike spaces in a well-lit, secure storage area in the parkade, adjacent to the passenger elevator.

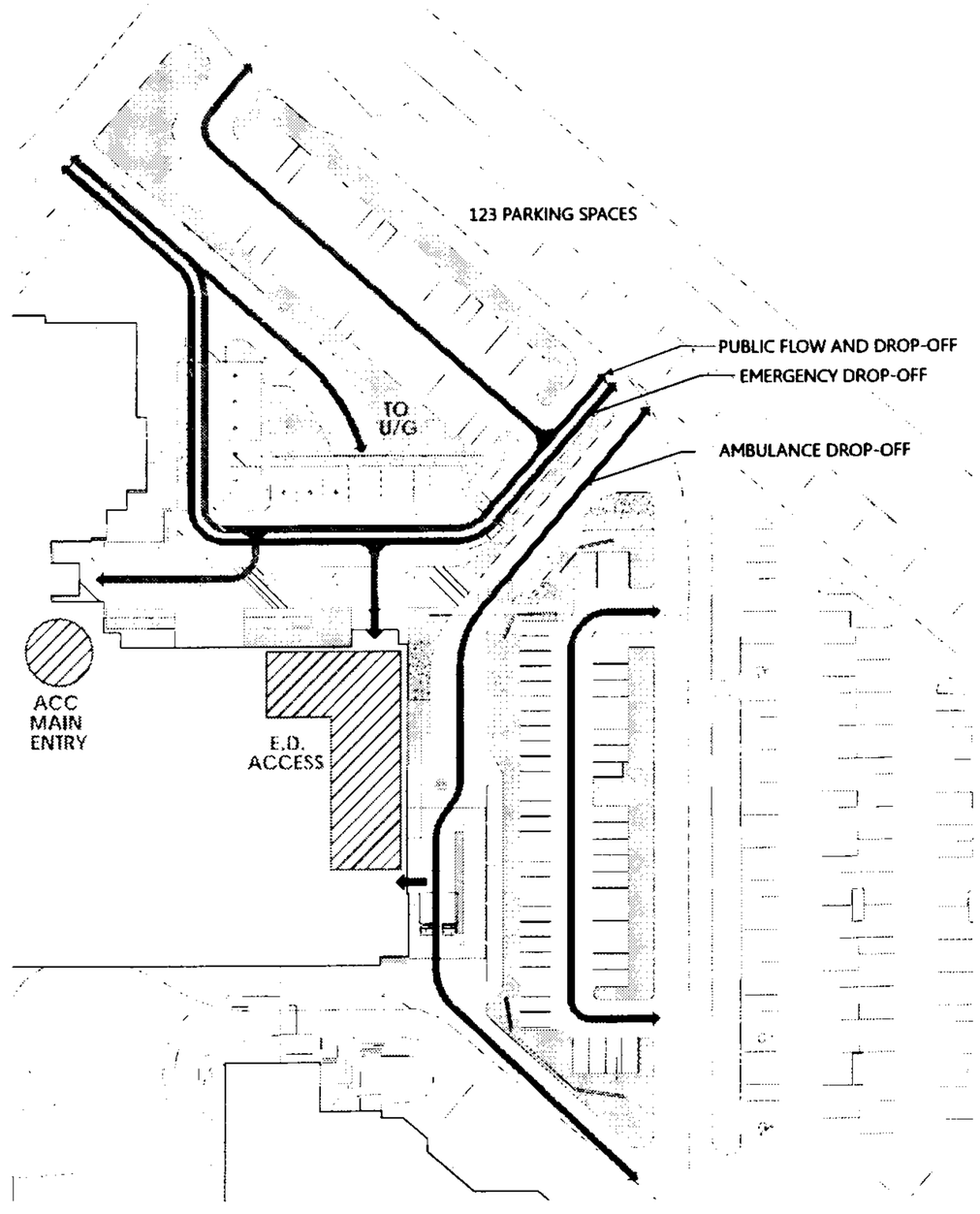
Additionally, 12 Class 'B' bicycle racks are located on the surface between the Main Entrance to the ACC and the ED walk-in entrance, covered by the building overhang above. The location of the bicycle facilities is shown below and can be seen within greater context on Drawings **A-050** and **L-004**.



PROPOSED ACC FIRE ACCESS ROUTE



UNDERGROUND PARKING PLAN



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BC CHILDREN'S & BC WOMEN'S REDEVELOPMENT PROJECT
PHASE 2 DRAWING LIST

ARCHITECTURE

Number	Drawing Title	Scale
A-000	DRAWING LIST AND PROJECT STATISTICS	NTS
A-002	SITE CONTEXT PLAN	1:1000
A-003	MASTER PLAN CONCEPT	1:500
A-005	SITE PLAN	1:500
A-006	SHADOW ANALYSIS STUDY	1:1000
A-007	STREETSCAPE DRAWINGS	1:500
A-050	PARKING PLANS	1:500
A-051	SITE CIRCULATION PLAN - Vehicle/Pedestrian	1:500
A-060	FSR CALCULATION - LEVEL 00	1:200
A-061	FSR CALCULATION - LEVEL 01	1:200
A-062	FSR CALCULATION - LEVEL 02	1:200
A-063	FSR CALCULATION - LEVEL 03	1:200
A-064	FSR CALCULATION - LEVEL 04	1:200
A-065	FSR CALCULATION - LEVEL 05	1:200
A-066	FSR CALCULATION - LEVEL 06	1:200
A-067	FSR CALCULATION - LEVEL 07	1:200
A-068	FSR CALCULATION - LEVEL 08	1:200
A-069	FSR CALCULATION - ROOF LEVEL	1:200
A-100	CAMPUS PLAN - LEVEL 0	1:500
A-101	CAMPUS PLAN - LEVEL 1	1:500
A-102	CAMPUS PLAN - LEVEL 2	1:500
A-103	CAMPUS PLAN - LEVEL 3	1:500
A-104	CAMPUS PLAN - LEVEL 4	1:500
A-105	CAMPUS PLAN - LEVEL 5	1:500
A-106	CAMPUS PLAN - LEVEL 6	1:500
A-107	CAMPUS PLAN - LEVEL 7	1:500
A-108	CAMPUS PLAN - LEVEL 8	1:500
A-210c	TECHNICAL PLAN - LEVEL 0	1:200
A-211c	TECHNICAL PLAN - LEVEL 1	1:200
A-212c	TECHNICAL PLAN - LEVEL 2	1:200
A-213c	TECHNICAL PLAN - LEVEL 3	1:200
A-214c	TECHNICAL PLAN - LEVEL 4	1:200
A-215c	TECHNICAL PLAN - LEVEL 5	1:200
A-216c	TECHNICAL PLAN - LEVEL 6	1:200
A-217c	TECHNICAL PLAN - LEVEL 7	1:200
A-218c	TECHNICAL PLAN - LEVEL 8	1:200
A-219c	TECHNICAL PLAN - PENTHOUSE LEVEL	1:200
A-220c	TECHNICAL PLAN - ROOF LEVEL	1:200
A-300	NORTH & EAST EXTERIOR ELEVATIONS (NORTH COLOURED)	1:100
A-301	SOUTH & WEST EXTERIOR ELEVATIONS (EAST COLOURED)	1:100
A-302	NORTH & EAST EXTERIOR ELEVATIONS (SOUTH COLOURED)	1:100
A-303	SOUTH & WEST EXTERIOR ELEVATIONS (WEST COLOURED)	1:100
A-304	EXTERIOR ELEVATIONS (COURTYARD COLOURED)	1:200
A-305	CONTEXT PHOTOS	NTS
A-400	OVERALL SITE SECTIONS/CROSS SECTIONAL DIAGRAMS	1:500
A-401	BUILDING SECTION E/W	1:200
A-402	BUILDING SECTION N/S	1:200
A-600	LEED SCORECARD	NTS

CIVIL

Number	Drawing Title	Scale
C-001	SITE SERVICING	1:250

LANDSCAPE

Number	Drawing Title	Scale
L-000	COVER SHEET AND CAMPUS CONTEXT SITE PLAN	1:750
L-001	CAMPUS ANALYSIS	NTS
L-002	PEDESTRIAN CIRCULATION PLAN	1:500
L-003	TREE REPLACEMENT PLAN	1:500
L-004	LANDSCAPE CONCEPT PLAN: WEST	1:250
L-005	LANDSCAPE CONCEPT PLAN: EAST	1:250
L-006	LANDSCAPE CONCEPT PLAN: LEVELS 2 AND 5	1:250
L-007	LANDSCAPE CONCEPT PLAN: LEVELS 6 AND 8	1:250
L-008	PLANT SCHEDULE	NTS
L-009	LANDSCAPE SECTIONS	1:100
L-010	LANDSCAPE SECTION ENLARGEMENTS	1:50

Site

LEGAL DESCRIPTION of Consolidated Site	Block 1009, Except those portions in plans 12393, 12719 and Reference Plan 14318, District lot 526 Group 1 New Westminster District Plan 10359.		
Civic Address	880 West 28th Street		
Total Site Area	186,954.6 SM (2,012, 362 sq ft) [18.696 ha]		
Setbacks	East - 17m (56ft) from property line along Heather Street		
	North - 8.5m (28ft) from property line along 28th Avenue		
	West - 18.2m (60ft) from property line along Oak Street		
	West - 3m (10ft) adjacent to the Blood Services property lines		
	South - 10m (33ft) from property line along St. Vincent's		
	South - 16m (52ft) from property line adjacent to 32nd Street		
	* Per CD-1(126) Re-zoning requirement		
FSR	Reference document Children's and Women's Health Centre of British Columbia Master Plan Guidelines, Appendix D document of April 29, 2013		
		Permitted (SM)	Provided (SM)
	Area	196,302.33	186,494.82
	Ratio	1.05	1.00

Building Area (SM)

Floor	CoV FSR Areas
Elevator Machine Room	687.0
Level 08	4,614.8
Level 07	4,917.7
Level 06	4,907.2
FM Storage	207.7
Level 05	5,734.6
Level 04	7,194.3
Level 03	7,213.6
Level 02	7,465.4
Level 01	8,438.4
Level 00	1,654.3
TOTAL	**53,035.0**

Building Height

Building height permitted	45.0m (147.6 feet) above base surface values
Building height provided	39.057m (128.1 feet)* (top of roof parapet)
Building height provided	46.956 m (154.0 feet)* (top of elevator machine room parapet)
* Refer to detailed grades shown on roof plan drawing and respective interpolated values at respective corners of roof plan and base surface.	

Parking

Allowable Parking Complement	Min 1 stall per 93sm	58,996.1/93 = 635 (*Authority Requirement is 305(+7)*)
Parking Levels	1	
Number of parking stalls permitted	305(+7)	
Number of parking stalls provided	305(+7)=312	
Percentage of small car parking stalls permitted	25%	
Accessible Parking Calculation	A minimum of 1 per 15 stalls will be disability parking spaces	(1/15)*305=20.3, therefore 21 needed
	Required	21
	Provided	21
Level Overall Summary*	Level 00	180
	Site Parking	125(+7)=132
	Total	305(+7)=312
	* For detailed summary see respective parking level drawing.	

Loading Bay Requirements

Service vehicle access to three garage style doors is provided along the southeast to a shared campus service/loading area between the ACC and the Shaughnessy Building.

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October 01, 2013
Request for Proposals for BC Children's and BC Women's Redevelopment Project Phase 2

PRESENTATION RENDERING

SCALE

BC CHILDREN'S and BC WOMEN'S REDEVELOPMENT PROJECT PHASE 2, VANCOUVER, B.C.

A-000a

PROPOSAL REFERENCE
1.2.5(a) - Presentation Renderings

AFFINITY

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October 01, 2013
Request for Proposals for BC Children's and BC Women's Redevelopment Project Phase 2

PRESENTATION RENDERING

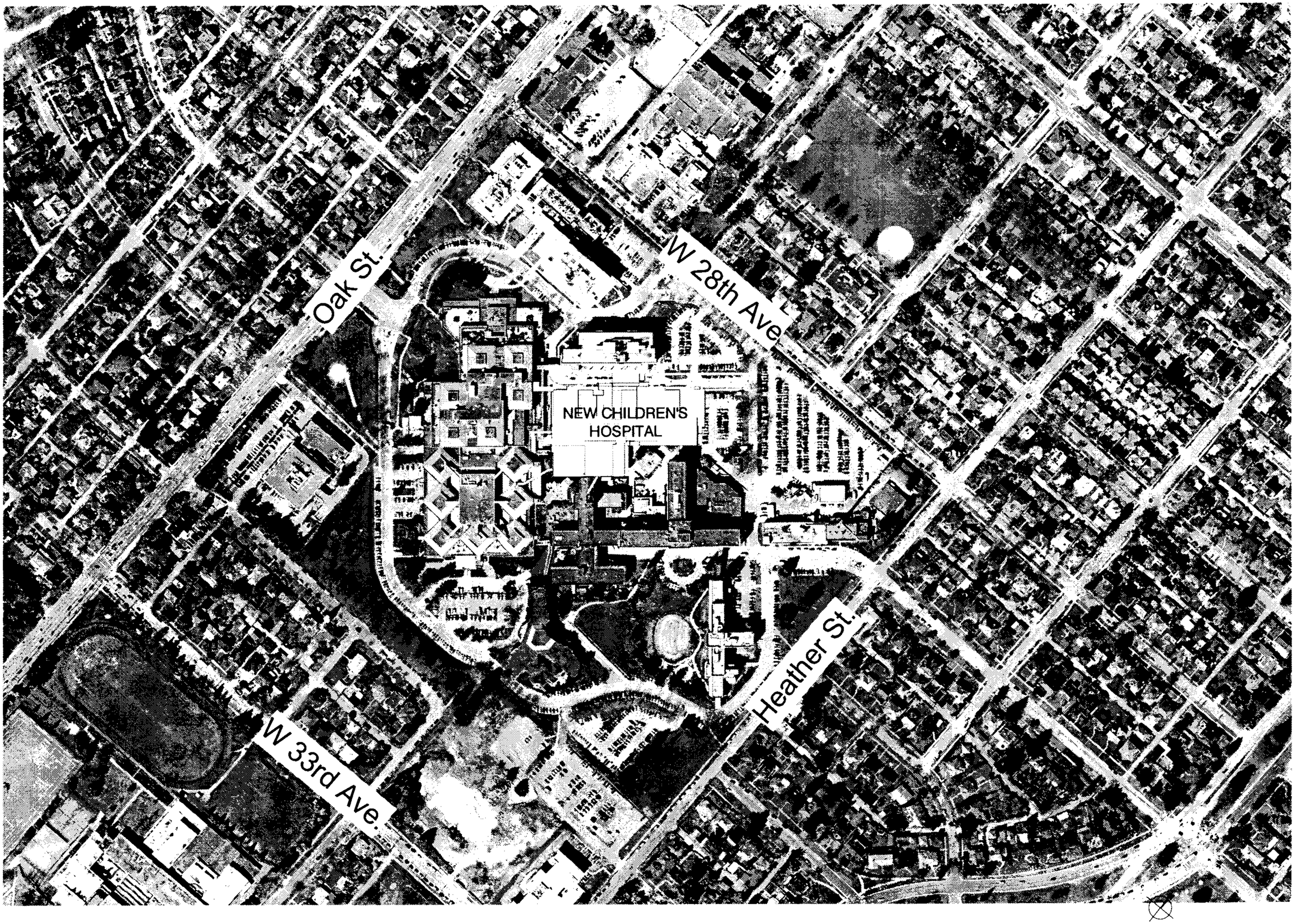
SCALE

BC CHILDREN'S and BC WOMEN'S REDEVELOPMENT PROJECT PHASE 2, VANCOUVER, B.C.

A-000b

PROPOSAL REFERENCE
1.2.5(a) - Presentation Renderings

AFFINITY



October 01, 2013
Request for Proposals for BC Children's and BC Women's Redevelopment Project Phase 2

SITE CONTEXT PLAN

SCALE 1:1000

BC CHILDREN'S and BC WOMEN'S REDEVELOPMENT PROJECT PHASE 2, VANCOUVER, BC

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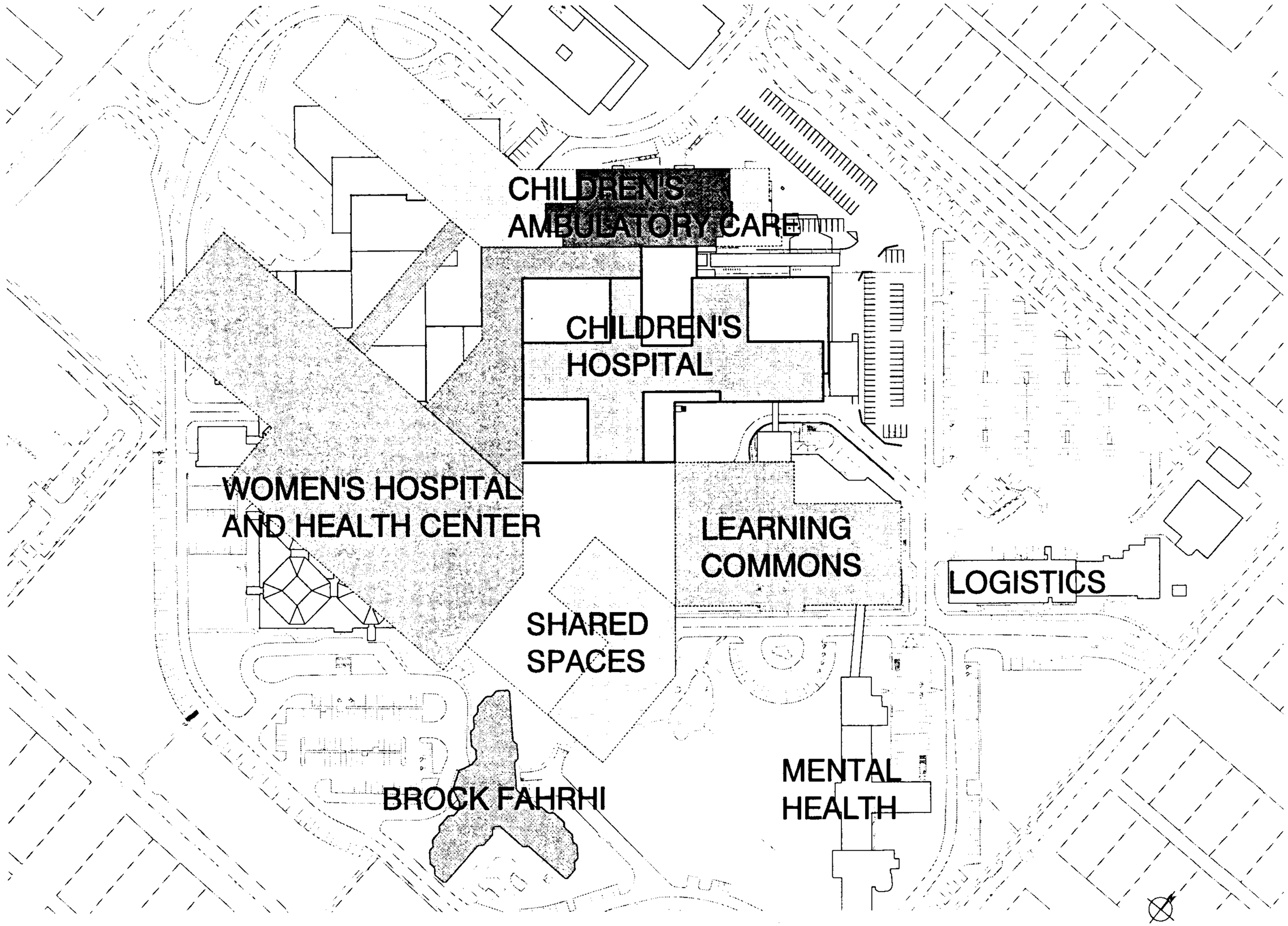
A-002

PROPOSAL REFERENCE
1.2.1(a)

AFFINITY



October 01, 2013
Request for Proposals for BC Children's and BC Women's Redevelopment Project Phase 2

MASTER PLAN CONCEPT

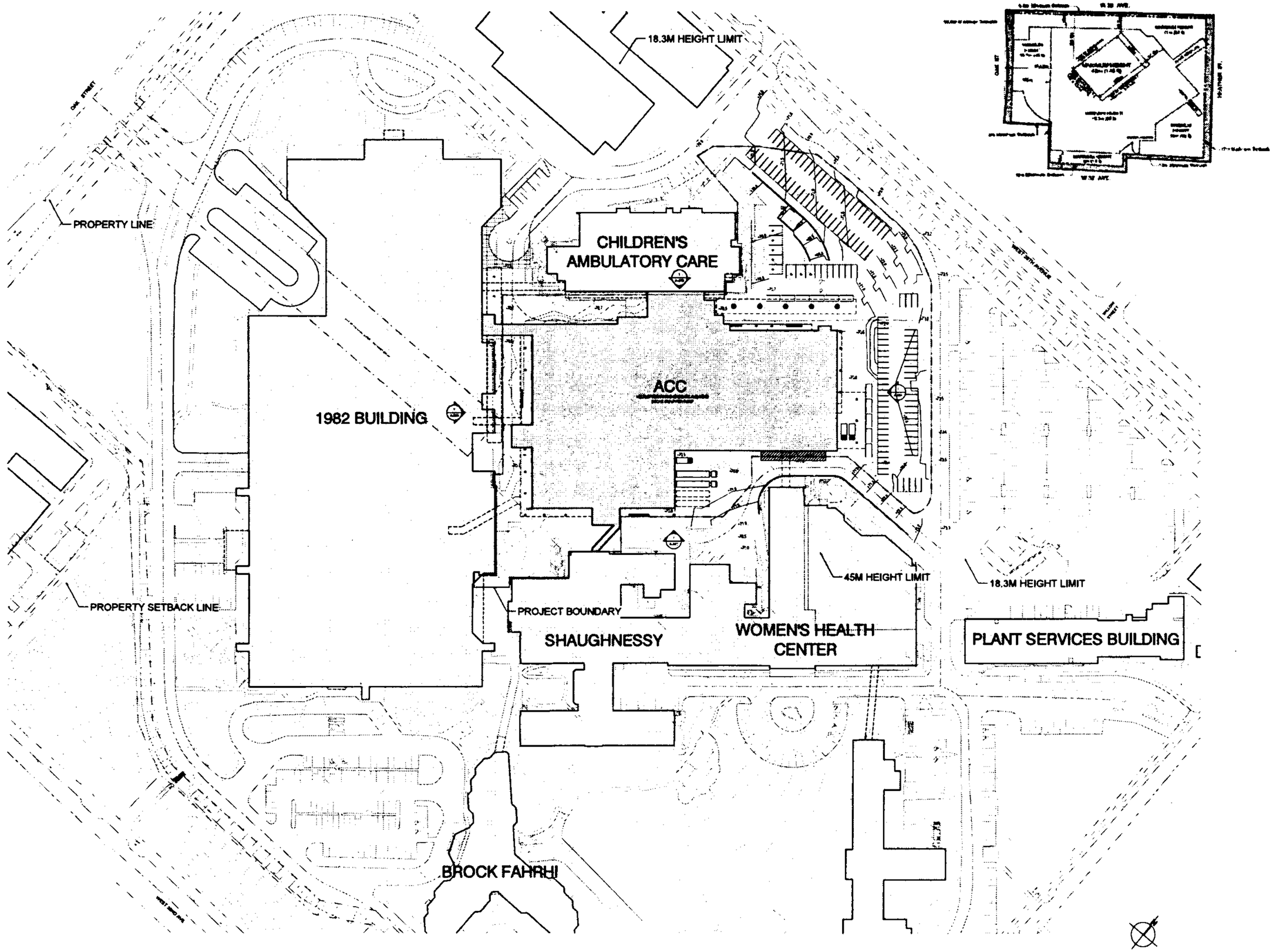
SCALE 1 : 500

BC CHILDREN'S and BC WOMEN'S REDEVELOPMENT PROJECT PHASE 2, VANCOUVER, B.C.

A-003

PROPOSAL REFERENCE
1.1.4(b)i, 1.2.1(b)

AFFINITY



October 01, 2013
Request for Proposals for BC Children's and BC Women's Redevelopment Project Phase 2

SITE PLAN

SCALE 1 : 500
BC CHILDREN'S and BC WOMEN'S REDEVELOPMENT PROJECT PHASE 2, VANCOUVER, BC

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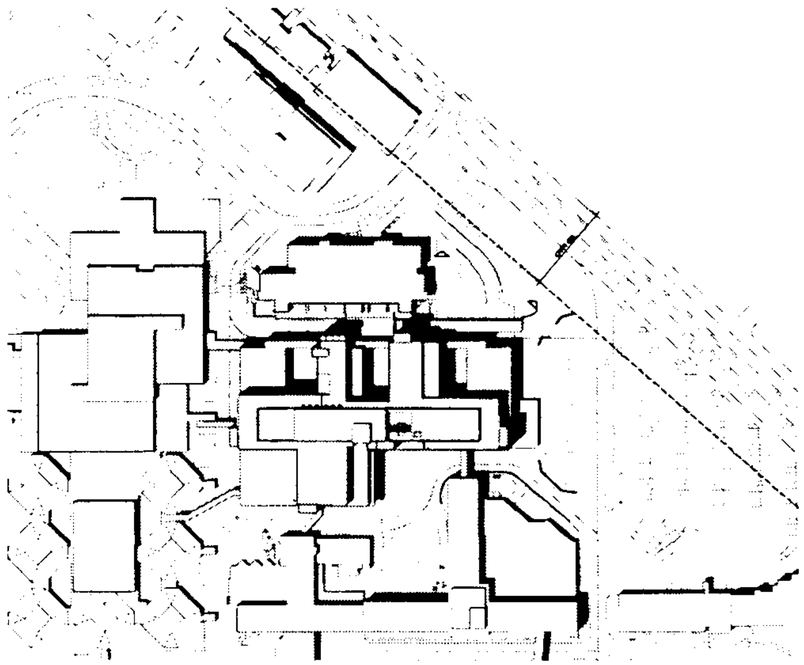
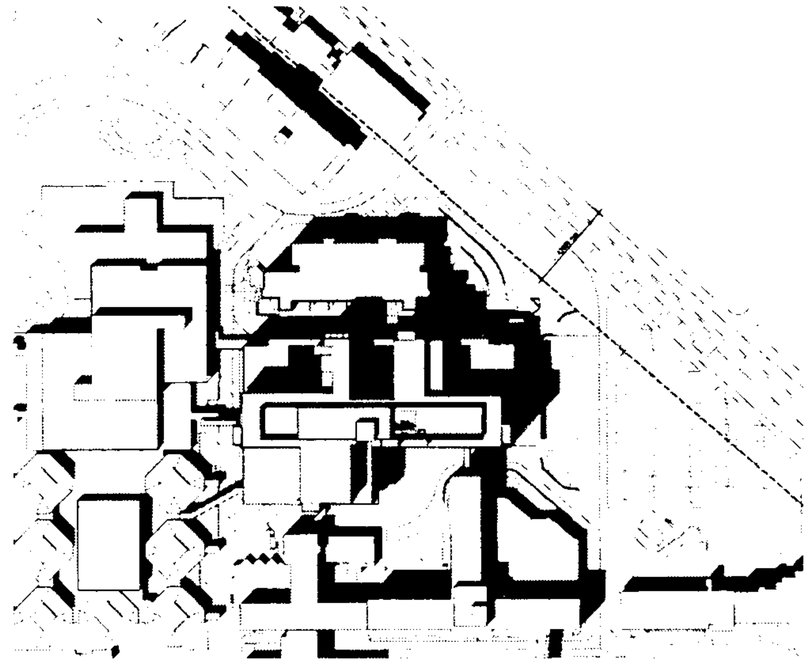
A-005

PROPOSAL REFERENCE
1.2.1(d)

AFFINITY

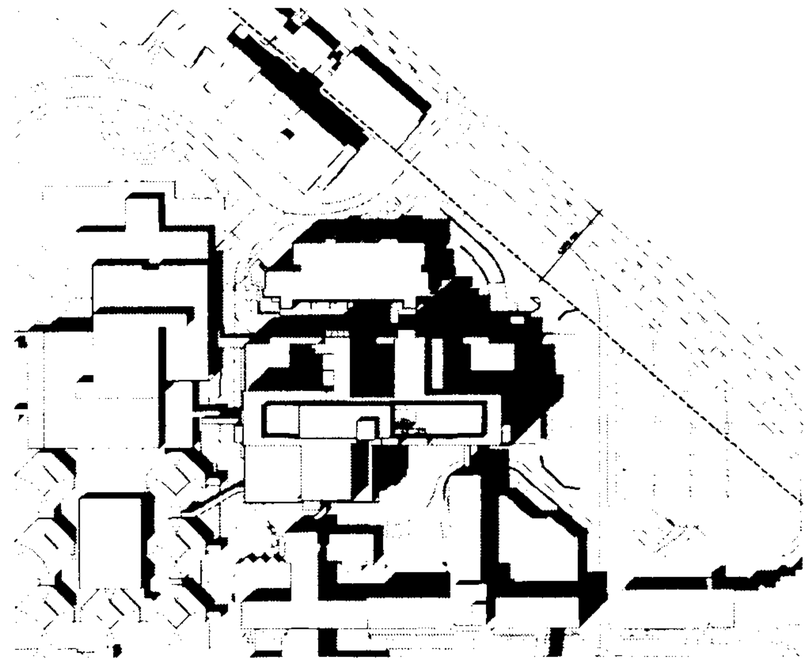


1 A-006 SHADOW STUDY, SUMMER SOLSTICE NOON
1 : 1000



2 A-006 SHADOW STUDY, SPRING EQUINOX NOON
1 : 1000

3 A-006 SHADOW STUDY, WINTER SOLSTICE NOON
1 : 1000



4 A-006 SHADOW STUDY, FALL EQUINOX NOON
1 : 1000

October 01, 2013
Request for Proposals for BC Children's and BC Women's Redevelopment Project Phase 2

SHADOW ANALYSIS STUDY

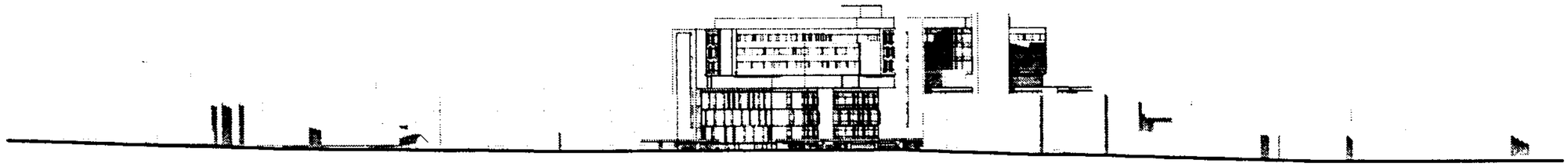
SCALE 1 : 1000

BC CHILDREN'S and BC WOMEN'S REDEVELOPMENT PROJECT PHASE 2, VANCOUVER, B.C.

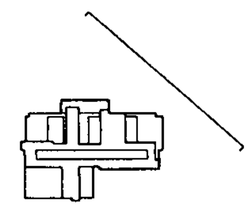
A-006

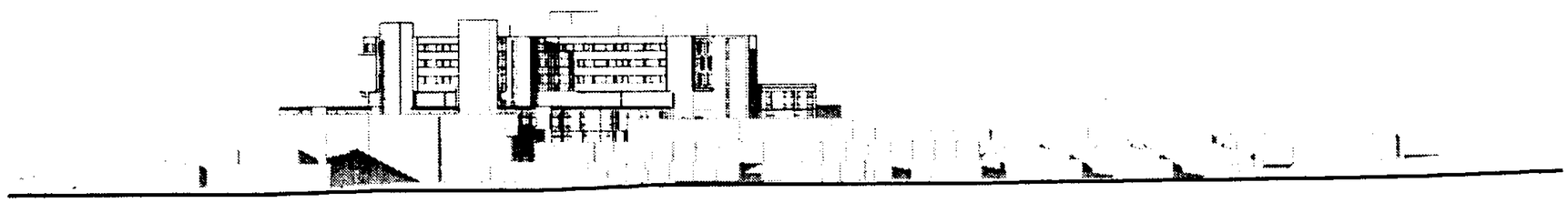
PROPOSAL REFERENCE
1.2.1(e)

AFFINITY

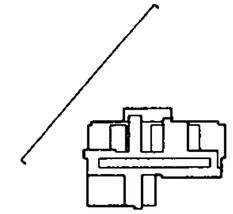


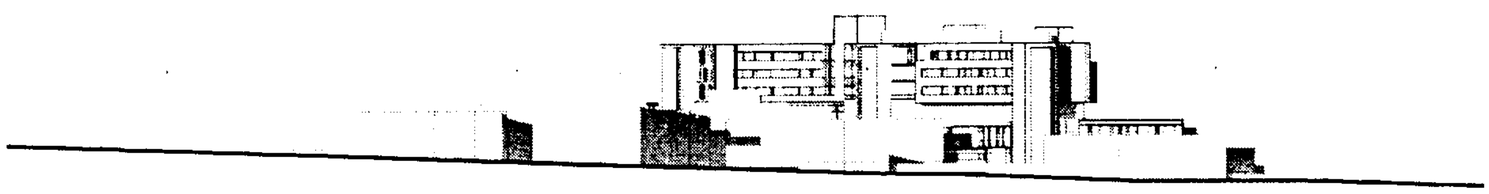
1 A-007 W 28TH AVE.



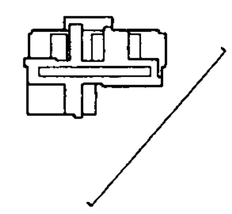


2 A-007 OAK ST.





3 A-007 HEATHER ST.



October 01, 2013
Request for Proposals for BC Children's and BC Women's Redevelopment Project Phase 2

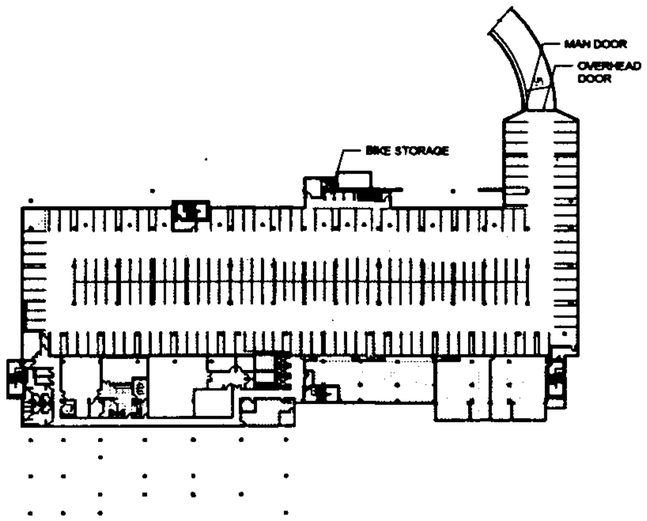
STREETSCAPE DRAWINGS

SCALE 1:[illegible]
BC CHILDREN'S and BC WOMEN'S REDEVELOPMENT PROJECT PHASE 2, VANCOUVER, B.C.

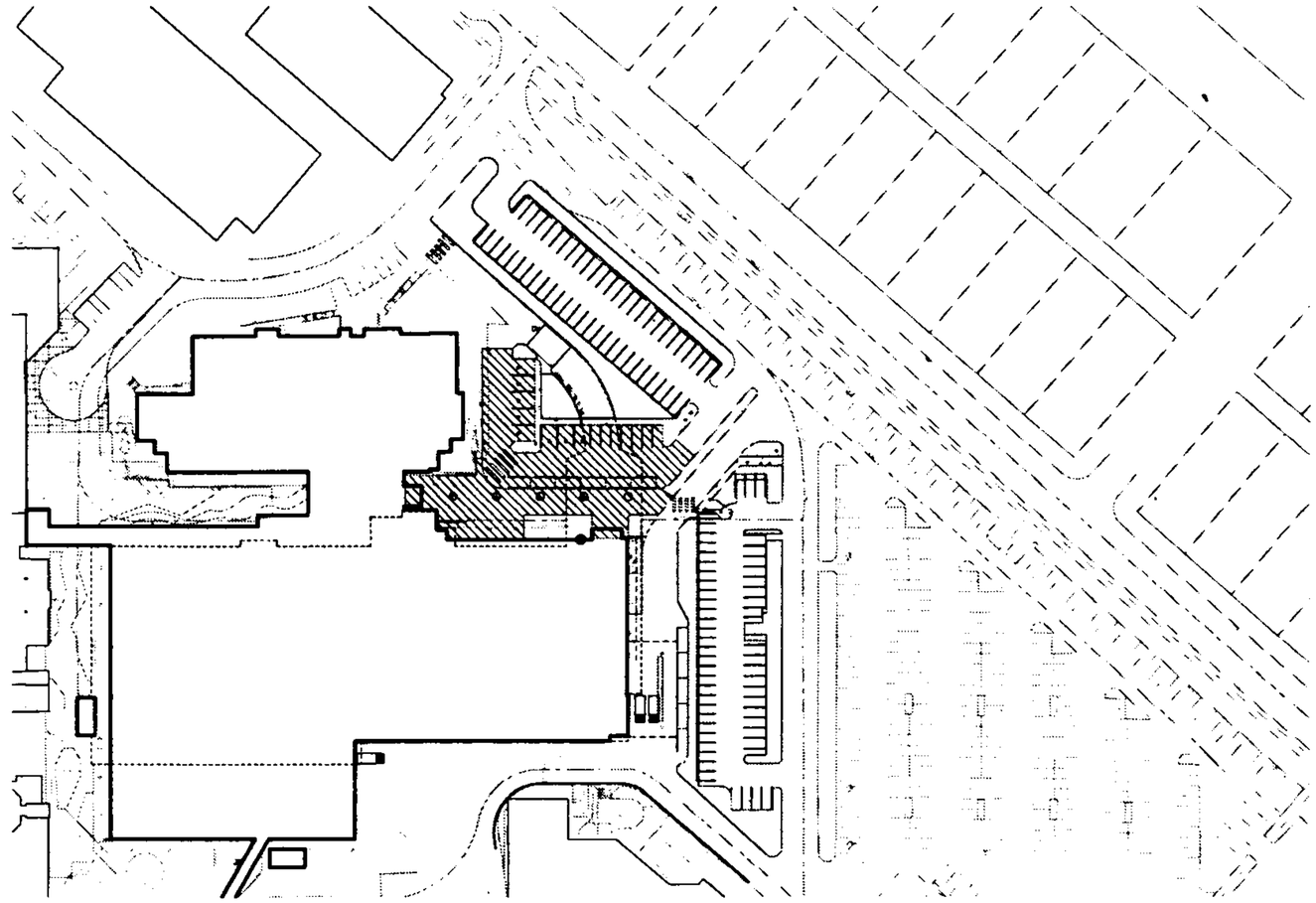
A-007

PROPOSAL REFERENCE
1.2.1(f)

AFFINITY



PARKING PLAN LEVEL - 0
1 : 500



PARKING COUNT TOTALS

Mark	Type	Count	Comments
Covered	Compact	31	Covered Level 0
Covered	Disability	11	Covered Level 0
Covered	Standard	88	Covered Level 0
Covered	Standard Wide	53	Covered Level 0
Surface	Compact	29	Exterior Surface
Surface	Disability	8	Exterior Surface
Surface	Standard	88	Exterior Surface
Grand total: 309		309	

- Please refer to L-004 for detail of surface parking
- Please refer to A-210 for detail of covered parking

October 01, 2013
Request for Proposals for BC Children's and BC Women's Redevelopment Project Phase 2

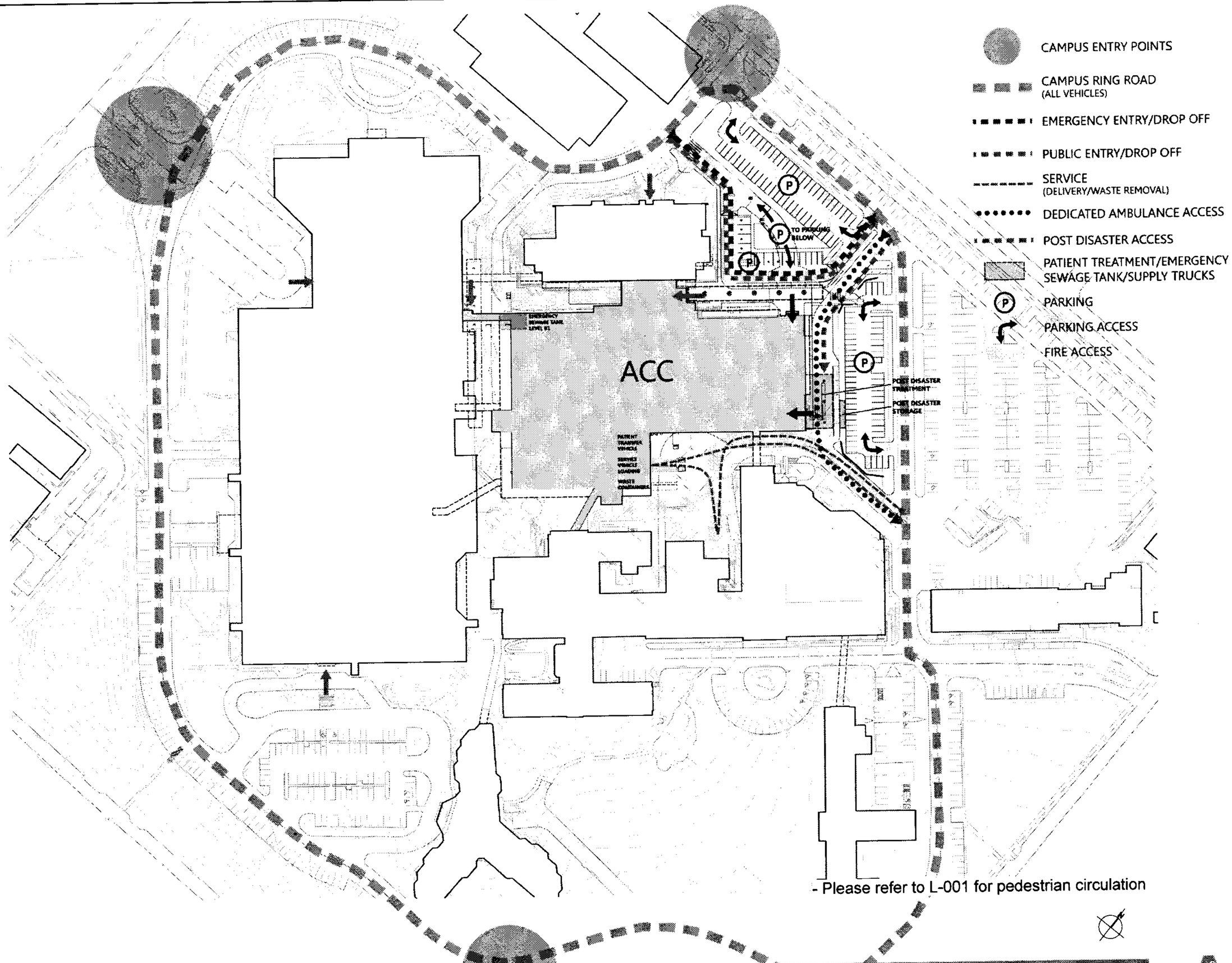
PARKING PLANS

SCALE 1 : 500
BC CHILDREN'S and BC WOMEN'S REDEVELOPMENT PROJECT PHASE 2, VANCOUVER, B.C.

A-050

PROPOSAL REFERENCE
1.2.2(a), 1.2.2(c)

AFFINITY



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SITE CIRCULATION PLAN - Vehicle

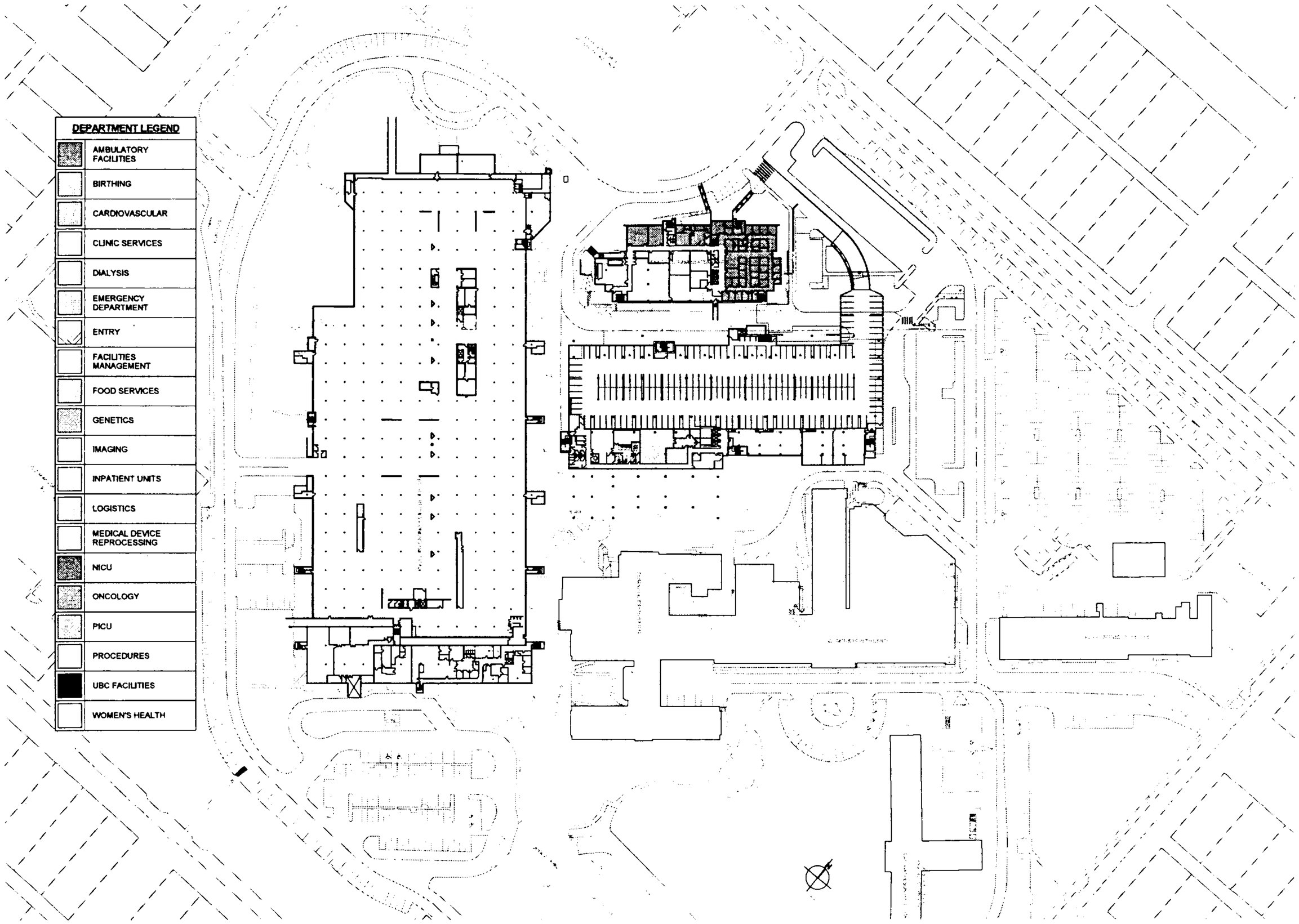
SCALE 1:500

BC CHILDREN'S and BC WOMEN'S REDEVELOPMENT PROJECT PHASE 2, VANCOUVER, B.C.

A-051

PROPOSAL REFERENCE
1.2.2(b)

AFFINITY



October 01, 2013
Request for Proposals for BC Children's and BC Women's Redevelopment Project Phase 2

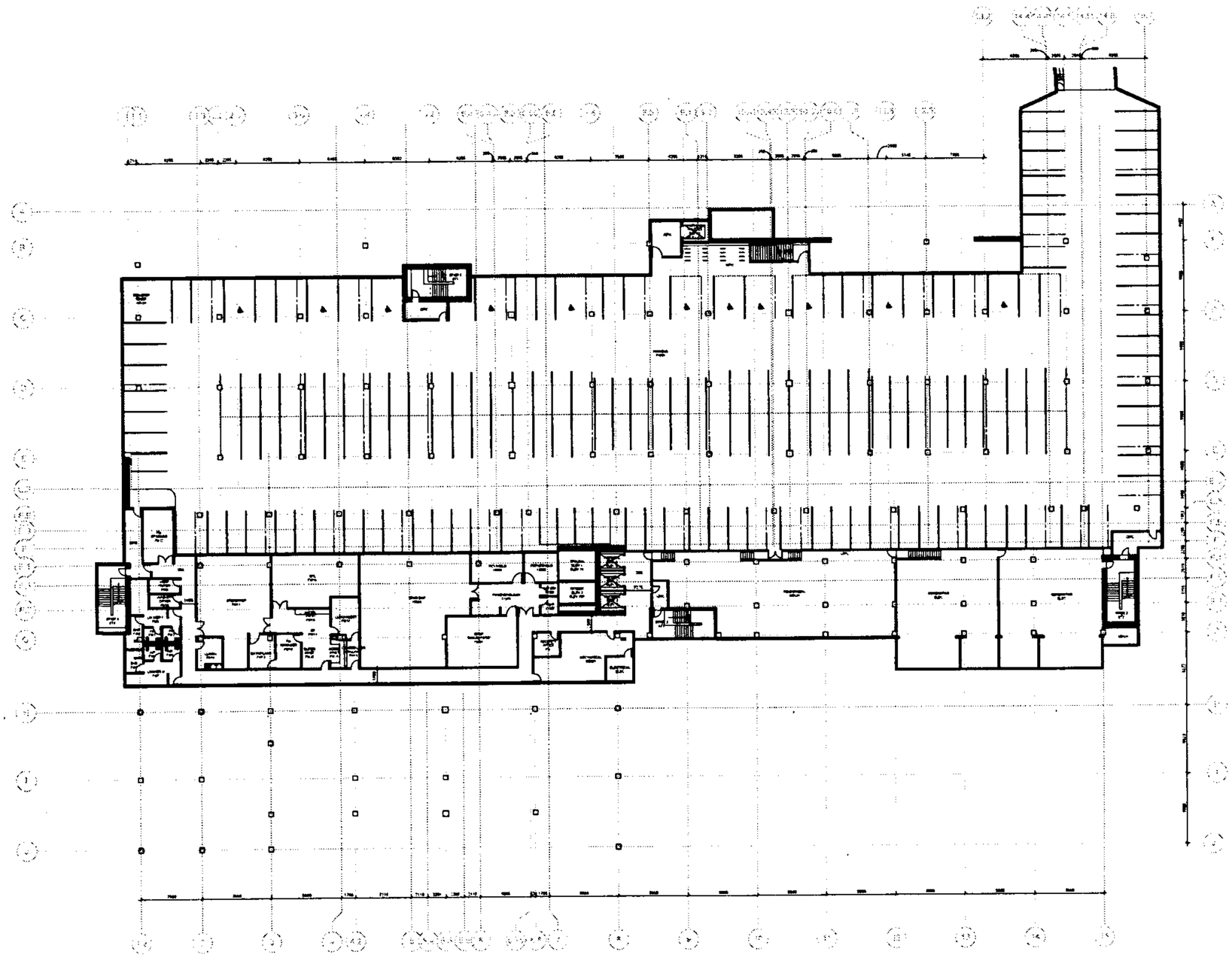
CAMPUS PLAN - LEVEL 0

SCALE As indicated
BC CHILDREN'S and BC WOMEN'S REDEVELOPMENT PROJECT PHASE 2, VANCOUVER, B.C.

A-100

PROPOSAL REFERENCE
1.2.3(b)i

AFFINITY



January 17, 2014
Request for Proposals for BC Children's and BC Women's Redevelopment Project Phase 2

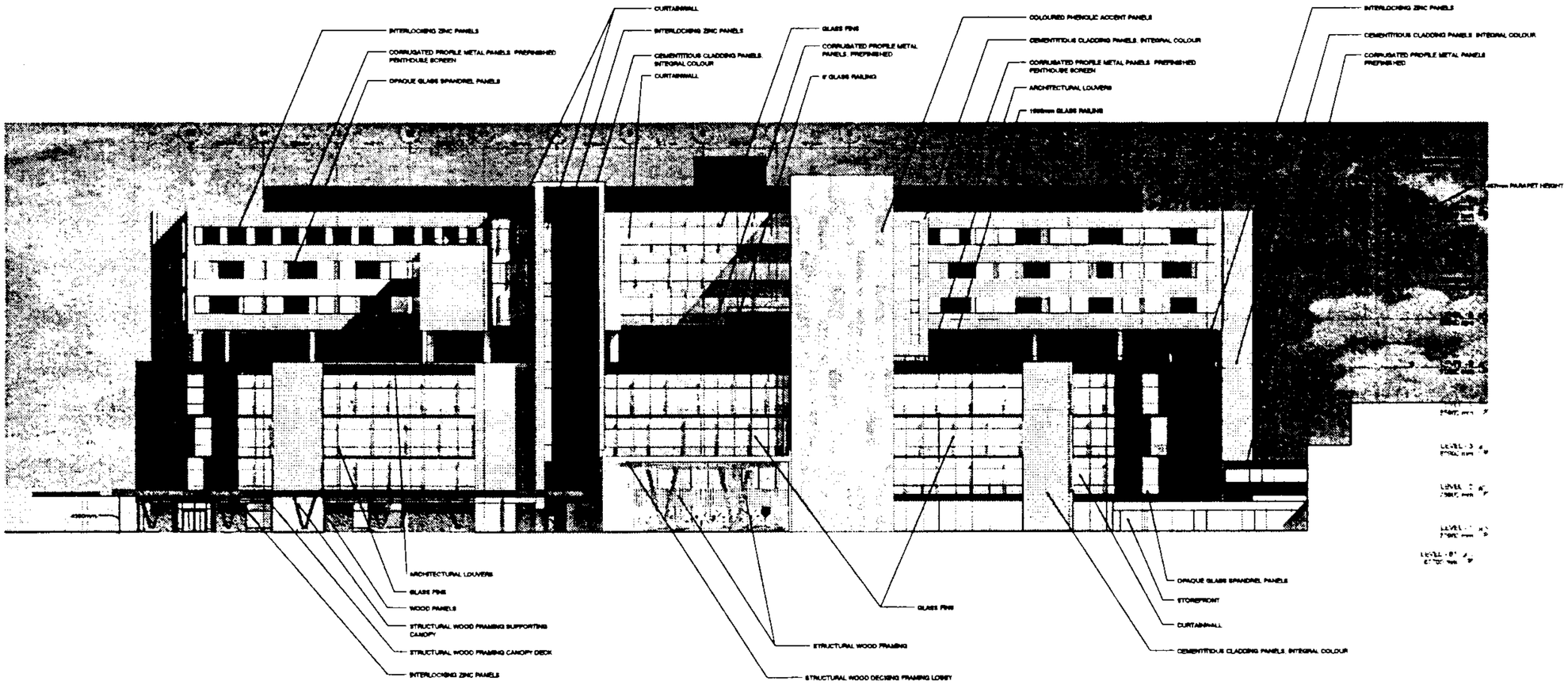
TECHNICAL PLAN - LEVEL 0

SCALE 1 : 200
BC CHILDREN'S and BC WOMEN'S REDEVELOPMENT PROJECT PHASE 2, VANCOUVER, B.C.

A-210c

PROPOSAL REFERENCE
1.2.2(d) - Bicycle Facilities
1.2.5(d) - Construction Floor Plans

AFFINITY



January 17, 2014
Request for Proposals for BC Children's and BC Women's Redevelopment Project Phase 2

EXTERIOR ELEVATIONS (NORTH COLOURED)

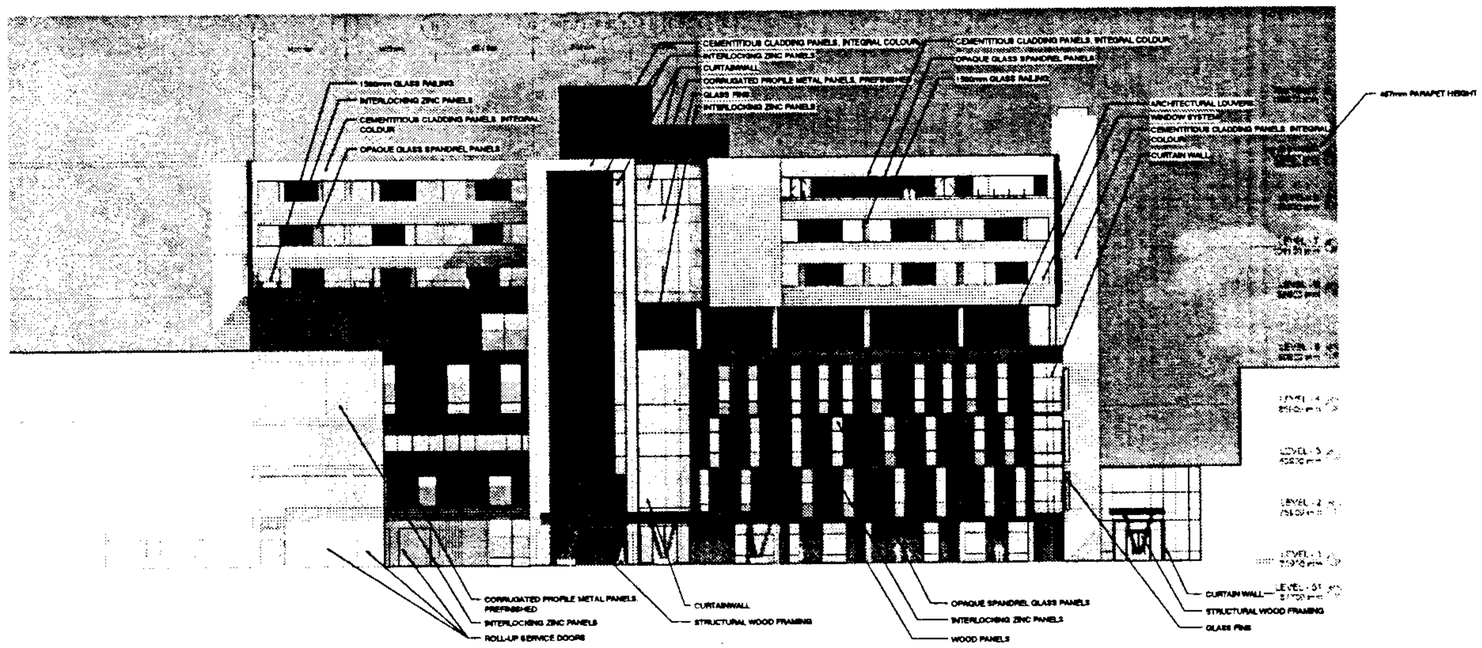
SCALE

BC CHILDREN'S and BC WOMEN'S REDEVELOPMENT PROJECT PHASE 2, VANCOUVER, B.C.

A-300

PROPOSAL REFERENCE
1.2.5(c)

AFFINITY



January 17, 2014
Request for Proposals for BC Children's and BC Women's Redevelopment Project Phase 2

EXTERIOR ELEVATIONS (EAST COLOURED)

SCALE

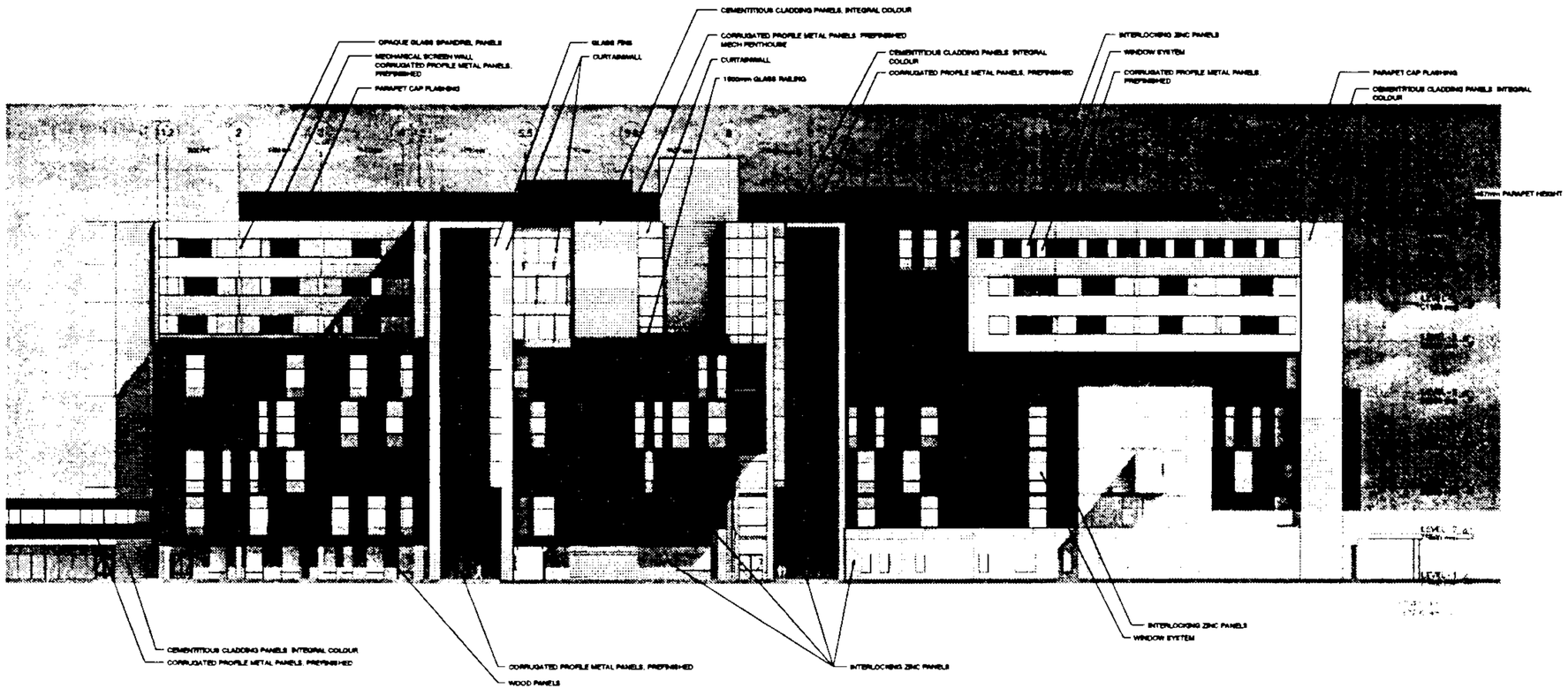
BC CHILDREN'S and BC WOMEN'S REDEVELOPMENT PROJECT PHASE 2, VANCOUVER, B.C.

A-301

PROPOSAL REFERENCE
1.2.5(c)

AFFINITY

Appendix C, page 20 of 28



January 17, 2014
Request for Proposals for BC Children's and BC Women's Redevelopment Project Phase 2

EXTERIOR ELEVATIONS (SOUTH COLOURED)

SCALE

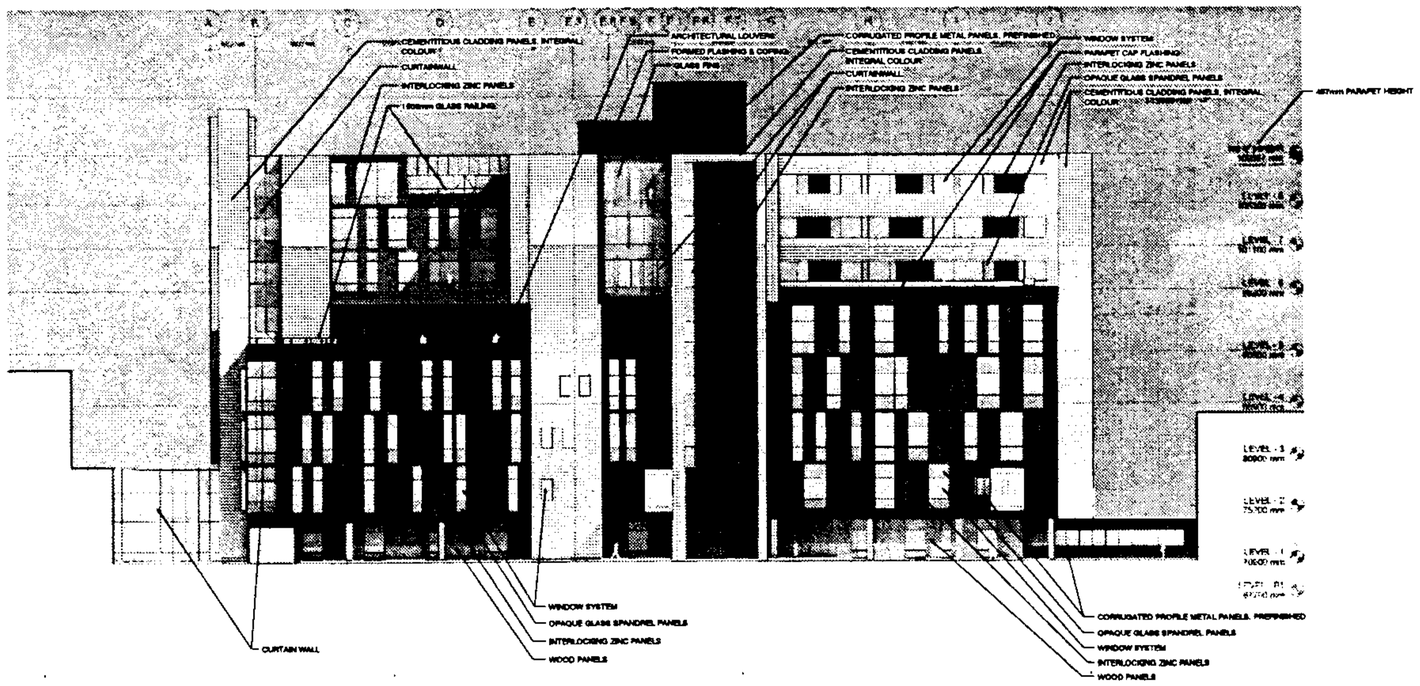
BC CHILDREN'S and BC WOMEN'S REDEVELOPMENT PROJECT PHASE 2, VANCOUVER, B.C.

A-302

PROPOSAL REFERENCE
1.2.5(c)

AFFINITY

Appendix C; page 21 of 38



January 17, 2014
Request for Proposals for BC Children's and BC Women's Redevelopment Project Phase 2

EXTERIOR ELEVATIONS (WEST COLOURED)

SCALE

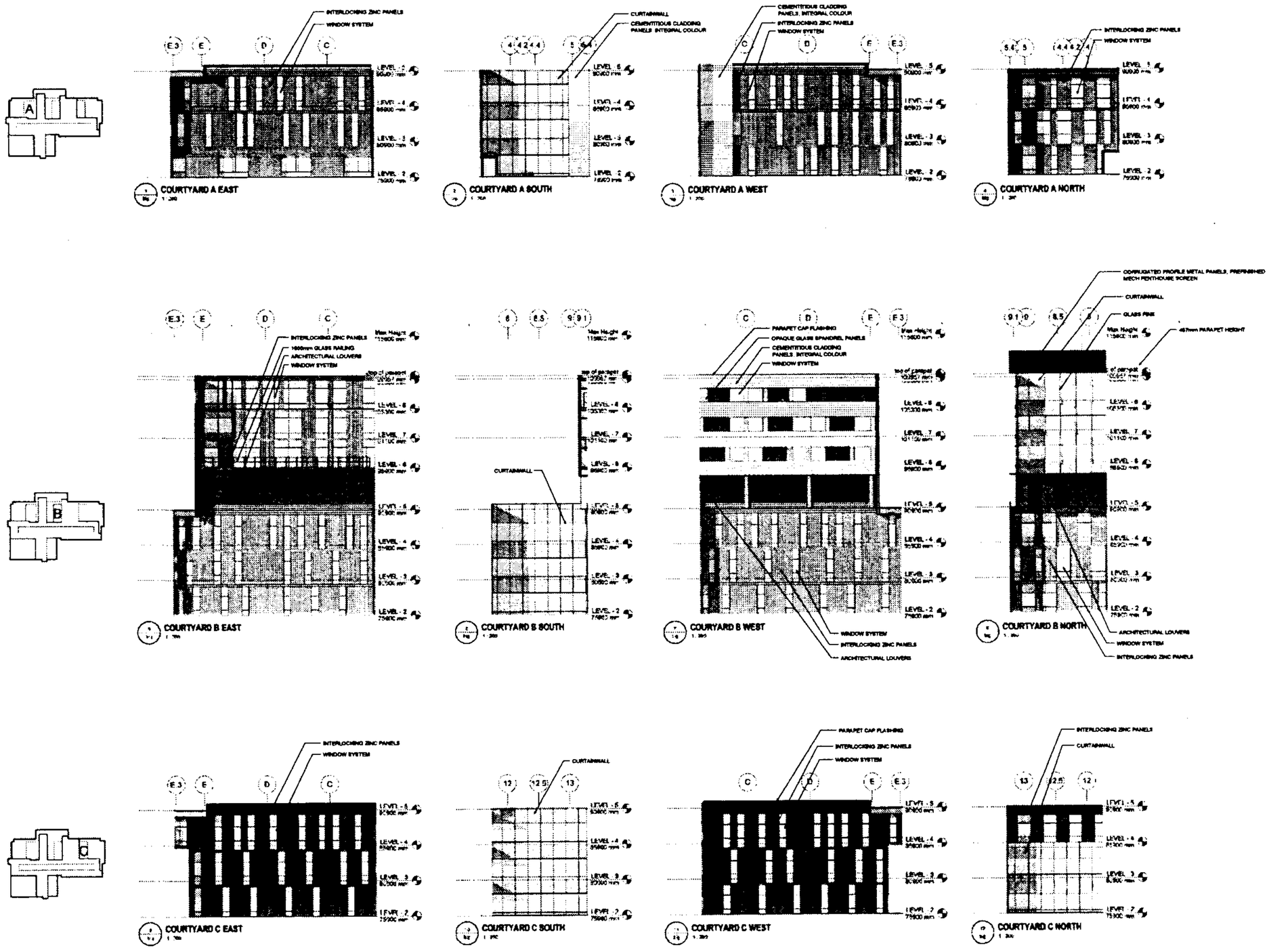
BC CHILDREN'S and BC WOMEN'S REDEVELOPMENT PROJECT PHASE 2, VANCOUVER, B.C.

Appendix C, page 22 of 28

A-303

PROPOSAL REFERENCE
1.2.5(c)

AFFINITY



January 17, 2014

Request for Proposals for BC Children's and BC Women's Redevelopment Project Phase 2

EXTERIOR ELEVATIONS (COURTYARD COLOURED)

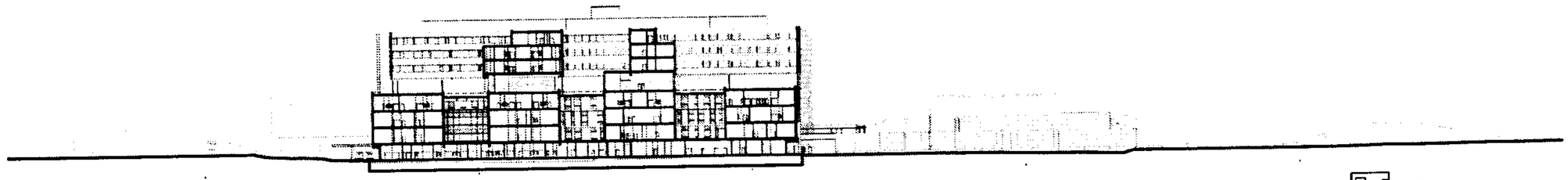
SCALE

BC CHILDREN'S and BC WOMEN'S REDEVELOPMENT PROJECT PHASE 2, VANCOUVER, B.C.

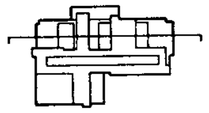
A-304

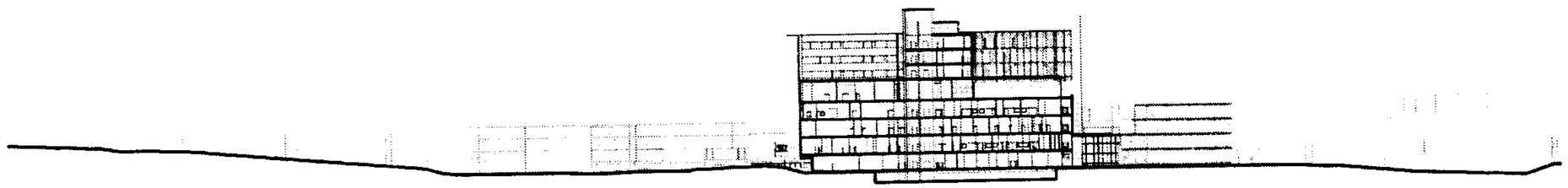
PROPOSAL REFERENCE
1.2.5(c)

AFFINITY

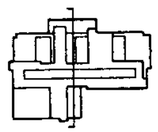


1 / A-400 Section East/West
1 : 500





2 / A-400 Section North/South
1 : 500



October 01, 2013
Request for Proposals for BC Children's and BC Women's Redevelopment Project Phase 2

OVERALL SITE SECTIONS/CROSS SECTIONAL DIAGRAMS

SCALE 1 : 500
BC CHILDREN'S and BC WOMEN'S REDEVELOPMENT PROJECT PHASE 2, VANCOUVER, B.C.

A-400

PROPOSAL REFERENCE
1.2.5(c)

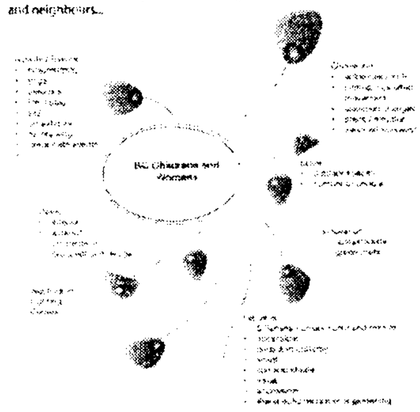
AFFINITY

VISION

Oasis in the City...rooted in west coast seasons

Healing, functional, and beautiful environment for mind and spirit.

Meaningful connected spaces and urban gardens for patients, visitors, employees, and neighbours...



HEALING...WELCOMING...NURTURING

INTEGRATED...FAMILY...COMMUNITY

EXISTING TREE RETENTION, TREE REPLACEMENT

PARKING

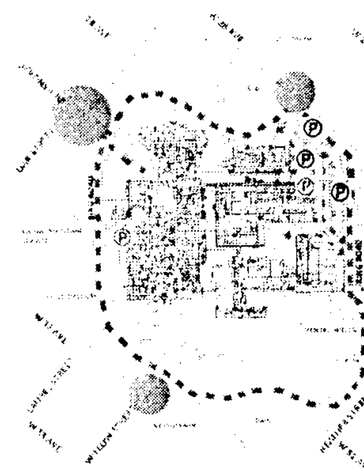
EXPERIENCES...SUSTAINABILITY

ATRIUM, ENTRY, ARRIVAL EXPERIENCE

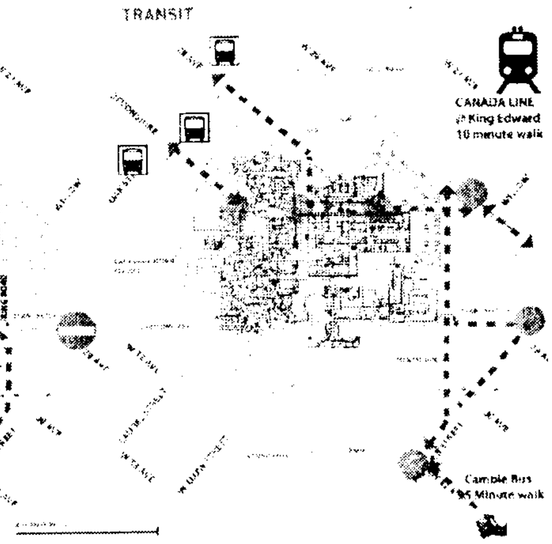
ELEVATED GARDENS

PLAY...LEARNING...EDUCATE

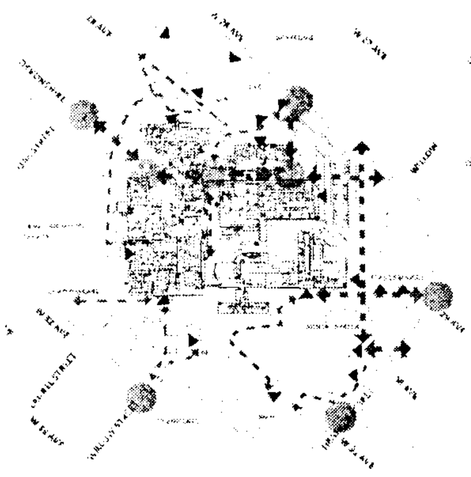
VEHICLE



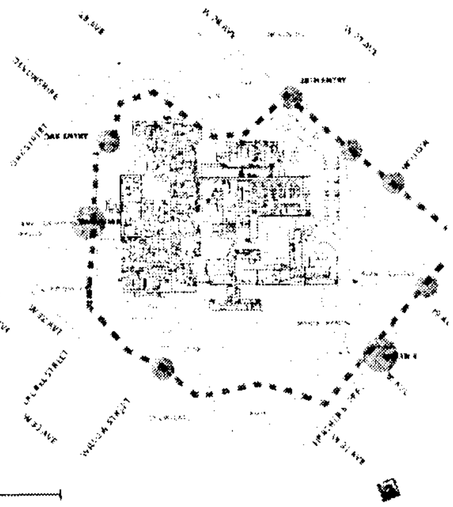
TRANSIT



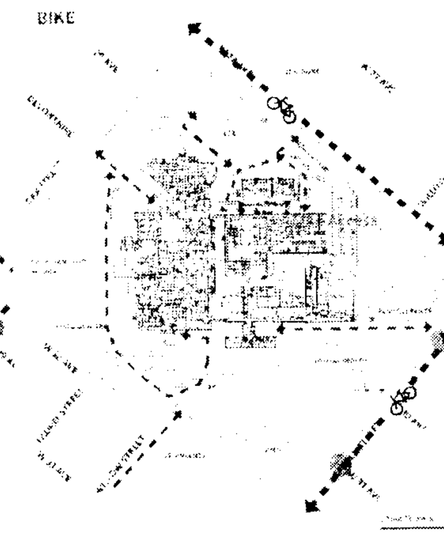
PEDESTRIAN



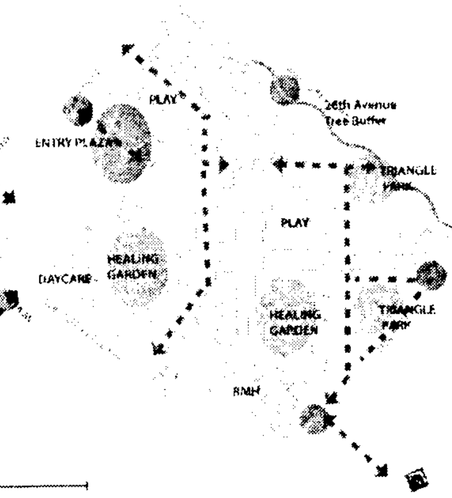
WELLNESS WALK



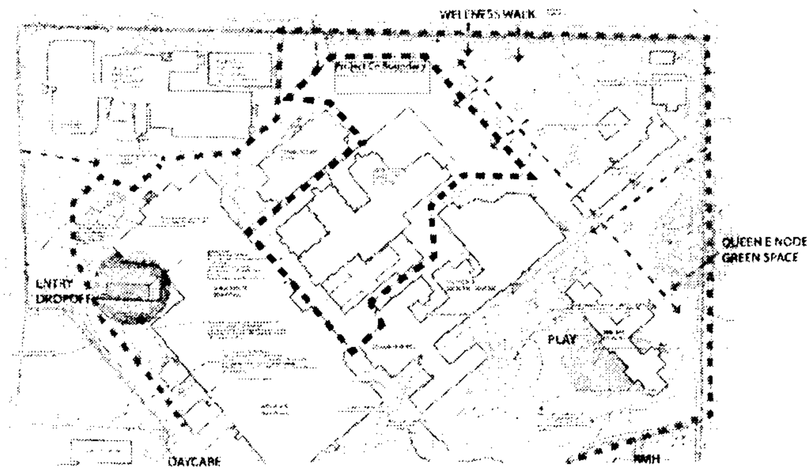
BIKE



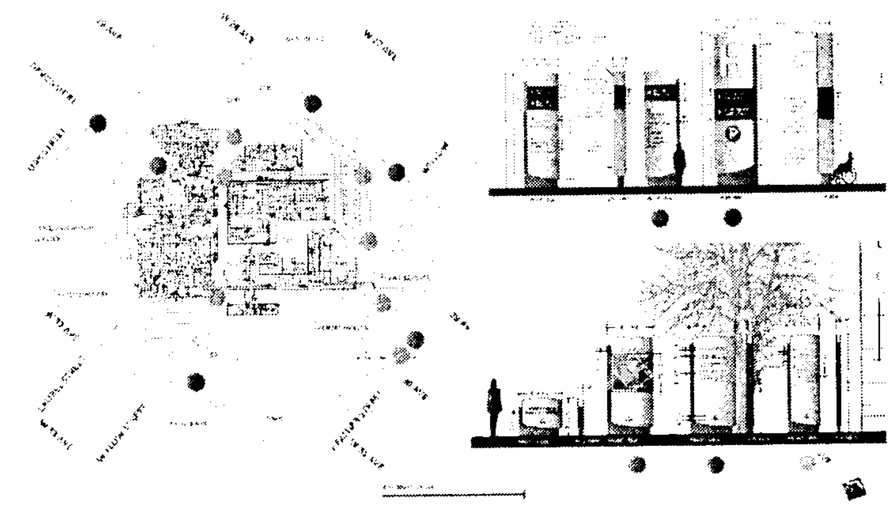
CAMPUS OPEN SPACE - LONG TERM



OPEN SPACE - PHASE 2 AND 3



WAYFINDING



GOOD PUBLIC SPACE

Feeds living people

A landmark in a place

Appropriate fit, space between lingering individuals or groups

Visible activity (i.e. eating, performances, public and secure and safe, visually and physically accessible

Weather protection: sun vs. shade, warm vs. cold, for all ages,

Outcomes for people - to stay, leave, mingle, be, stand, locate in visible areas and along edges

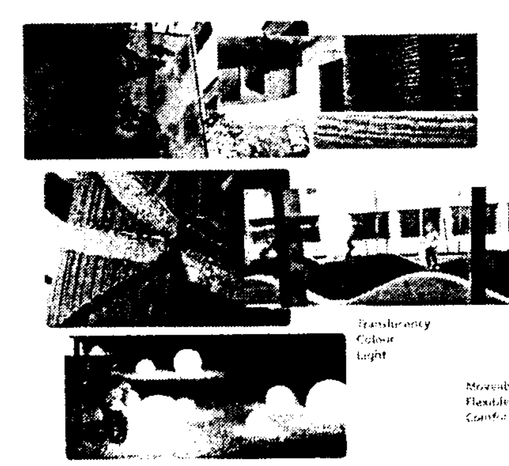
Prospect and Refuge: People love events and activity - audience vs. actors: to watch or be watched

Make it accessible

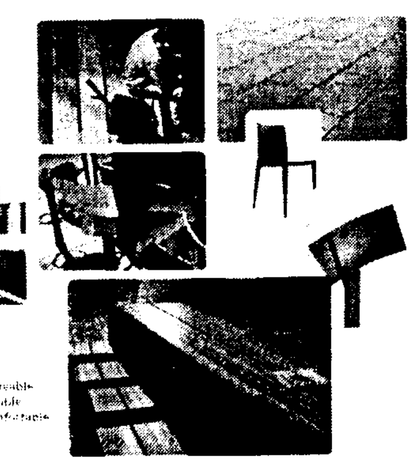
Animate the edges, seating, activity, warm and cool, transparency

make places for people...

LIGHTNESS...PLAYFULNESS



GROUNDED



*ALL IMAGES PROVIDED FOR PRE-DESIGN DISCUSSION ONLY

DP PROGRESS DRAWING

December 4, 2013
Request for Proposals for BC Children's and BC Women's Redevelopment Project Phase 2

CAMPUS ANALYSIS

SCALE 1 : 200

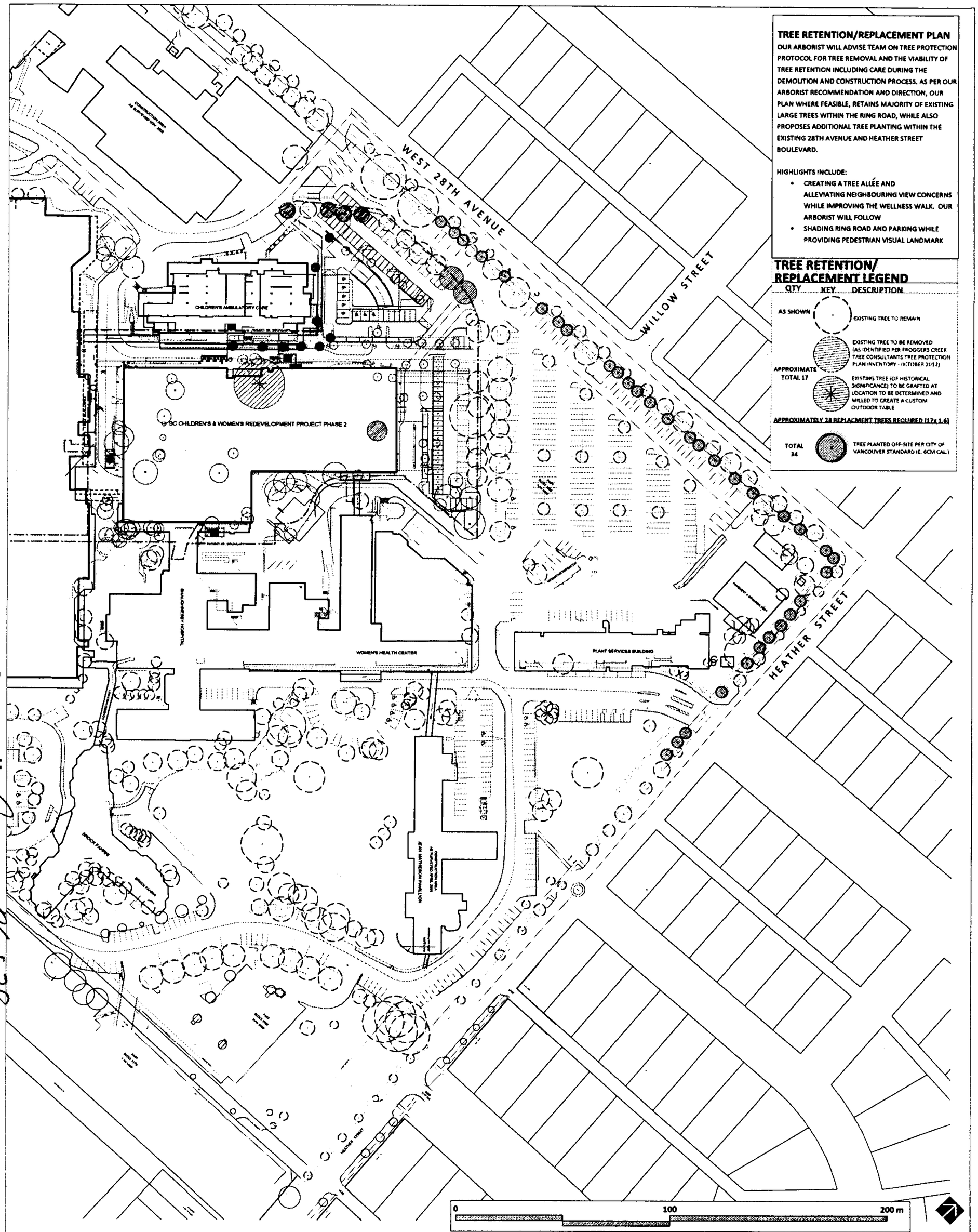
BC CHILDREN'S and BC WOMEN'S REDEVELOPMENT PROJECT PHASE 2, VANCOUVER, B.C.

L-000

PROPOSAL REFERENCE 1.2.1

AFFINITY

Appendix C page 25 of 28



TREE RETENTION/REPLACEMENT PLAN

OUR ARBORIST WILL ADVISE TEAM ON TREE PROTECTION PROTOCOL FOR TREE REMOVAL AND THE VIABILITY OF TREE RETENTION INCLUDING CARE DURING THE DEMOLITION AND CONSTRUCTION PROCESS. AS PER OUR ARBORIST RECOMMENDATION AND DIRECTION, OUR PLAN WHERE FEASIBLE, RETAINS MAJORITY OF EXISTING LARGE TREES WITHIN THE RING ROAD, WHILE ALSO PROPOSES ADDITIONAL TREE PLANTING WITHIN THE EXISTING 28TH AVENUE AND HEATHER STREET BOULEVARD.

HIGHLIGHTS INCLUDE:

- CREATING A TREE ALLÉE AND ALLEVIATING NEIGHBOURING VIEW CONCERNS WHILE IMPROVING THE WELLNESS WALK. OUR ARBORIST WILL FOLLOW
- SHADING RING ROAD AND PARKING WHILE PROVIDING PEDESTRIAN VISUAL LANDMARK

TREE RETENTION/ REPLACEMENT LEGEND

QTY	KEY	DESCRIPTION
AS SHOWN		EXISTING TREE TO REMAIN
APPROXIMATE TOTAL 17		EXISTING TREE TO BE REMOVED (AS IDENTIFIED PER FROGGERS CREEK TREE CONSULTANTS TREE PROTECTION PLAN INVENTORY - OCTOBER 2012)
		EXISTING TREE (OF HISTORICAL SIGNIFICANCE) TO BE GRAFTED AT LOCATION TO BE DETERMINED AND MILLED TO CREATE A CUSTOM OUTDOOR TABLE

APPROXIMATELY 28 REPLACMENT TREES REQUIRED (17x 1.6)

TOTAL 34		TREE PLANTED OFF-SITE PER CITY OF VANCOUVER STANDARD (E. 6CM CAL.)

DP PROGRESS DRAWING

December 4, 2013
Request for Proposals for BC Children's and BC Women's Redevelopment Project Phase 2

TREE RETENTION/REPLACEMENT PLAN

SCALE 1 : 500
BC CHILDREN'S and BC WOMEN'S REDEVELOPMENT PROJECT PHASE 2, VANCOUVER, B.C.

L-002

PROPOSAL REFERENCE 1.2.1

AFFINITY

Appendix C, page 26 of 28

LANDSCAPE PLAN EAST

'MAIN STREET'
THE COURTYARD CONCEPT BETWEEN ACB AND 1982 IS THAT OF A 'PEDESTRIAN MAIN STREET'.

- MEANDERING WALK WILL FEEL LIKE A COURTYARD, SHELTERED, AND PROTECTED.
- GENTLY MOUNDING GARDENS EMPHASIZE TEXTURE, ENCOURAGE PAUSE AND REFLECTION WHILE ALSO ALLOWING FLEXIBILITY FOR GATHERINGS AND MOVEMENT BETWEEN BUILDINGS

OVERALL GROUND-LEVEL MATERIALS LEGEND

KEY DESCRIPTION

HARDSCAPE

- PEDESTRIAN SIDEWALK (scored cip concrete sidewalk pattern type I)
- VEHICULAR PERMEABLE PAVING (ADA approved pavers or permeable asphalt)
- CENTRAL PEDESTRIAN WALK (scored and tinted cip concrete)
- MARKED PEDESTRIAN CROSSWALK (standard asphalt markings)
- STAIRS (cip concrete; with railings)
- RETAINING WALLS (approx. 1.5m tall, cip concrete; metal guard)
- PLANTED SLOPED WALL

FURNISHINGS

- FREESTANDING BENCH
- BIKE RACKS
- TRASH/RECYCLING RECEPTACLES
- PEDESTRIAN LIGHTING
- FEATURE LIGHTING
- EXISTING PARKING LOT LIGHT STANDARD
- PEDESTRIAN BOLLARD
- PEDESTRIAN SIGNAGE (per hospital standard)

SOFTSCAPE

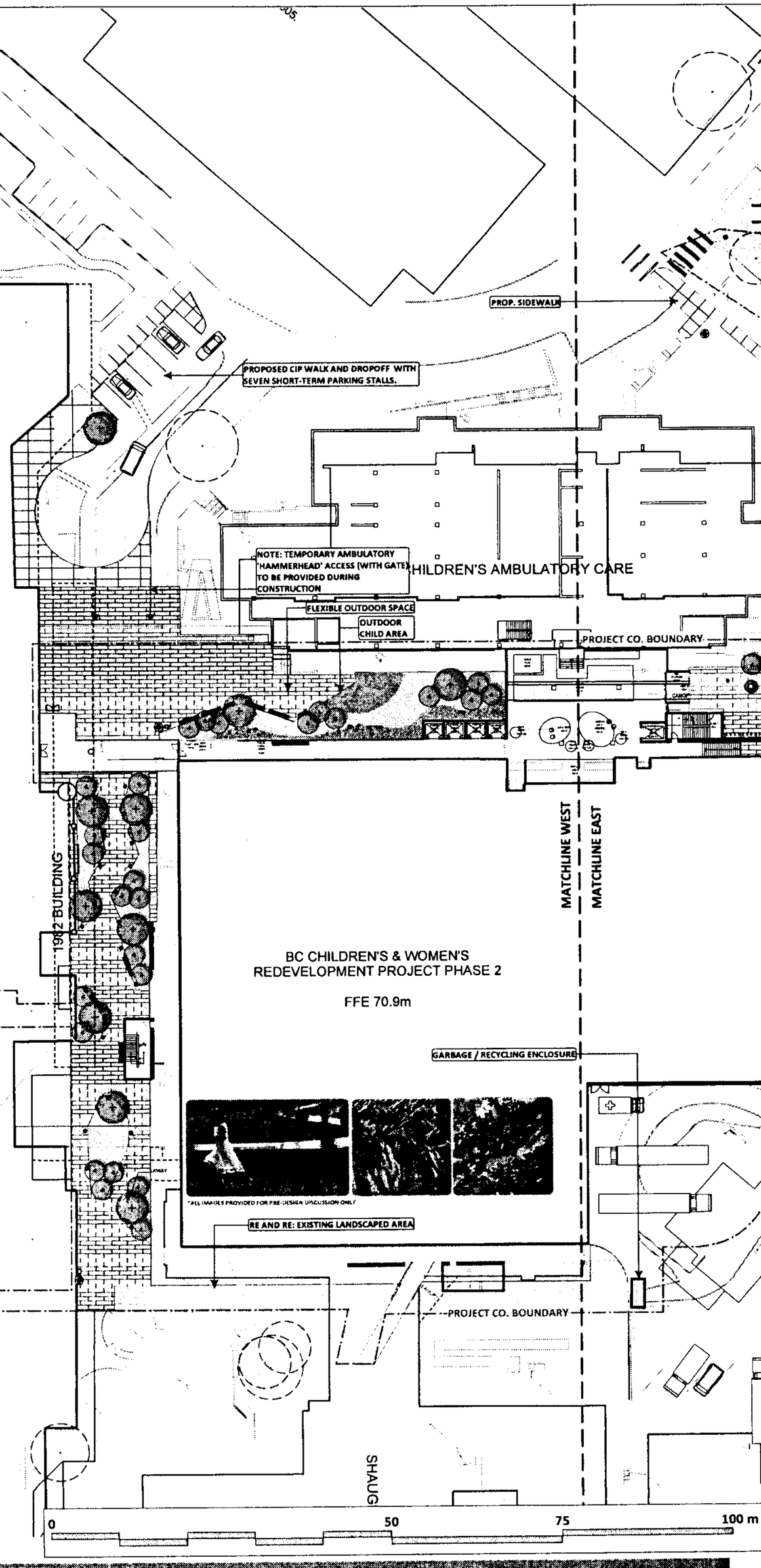
- PLANTING AREA (shrubs, groundcovers, grasses)
- RAIN GARDEN (infiltration zone)
- ON-SITE TREES (min. 6cm caliper with uplighting)
- EXISTING TREE TO REMAIN (per tree retention and replacement plan)

*NO CHANGES OUTSIDE OF CONSTRUCTION ZONE, EXCEPT AS NOTED

EXTERIOR LIGHTING
ALL NEW LIGHT FIXTURES (POLE MOUNT, WALL PACKS, IN-GROUND, AND BOLLARDS) WILL BE AESTHETIC, VANDAL RESISTANT, AND COMPLIANT LED LIGHTING TO CONTRIBUTE TO THE SAFETY AND SECURITY OF THE PEDESTRIAN AND VEHICULAR ENVIRONMENT.

WATER EFFICIENT LANDSCAPE PLANTINGS
PLANTING WILL BE LOCALLY SOURCED AND APPROPRIATE TO THE PACIFIC NORTHWEST, SITE MICROCLIMATE (SHADE, SUN) CONDITIONS, AND DESIRED PLANT EXPERIENCE AND WATER REQUIREMENTS. EMPHASIS WILL BE ON LONG TERM DURABILITY, TEXTURE, SENSORY EXPERIENCE, BEAUTY, EASE OF MAINTENANCE.
EXTENSIVE PLANTINGS WILL BE COMBINATION OF PREGROWN SEDUM MATS, WITH DRIFTS OF IN-SITU PLUG AND CONTAINER PLANTINGS

TREE ROOT BALL DEPTH WILL BE ACCOMMODATED PRIMARILY BY GENTLE MOUNDING AND IN SOME CONDITIONS SPACE LIMITING LOW STONE WALLS. STYROFOAM VOIDING TO REDUCE WEIGHT LOAD.



DRAFT PROGRESS DRAWING

December 4, 2013
Request for Proposals for BC Children's and BC Women's Redevelopment Project Phase 2

LANDSCAPE PLAN (WEST)

SCALE 1 : 200
BC CHILDREN'S and BC WOMEN'S REDEVELOPMENT PROJECT PHASE 2, VANCOUVER, B.C.

L-003

PROPOSAL REFERENCE 1.2.1(h)

AFFINITY

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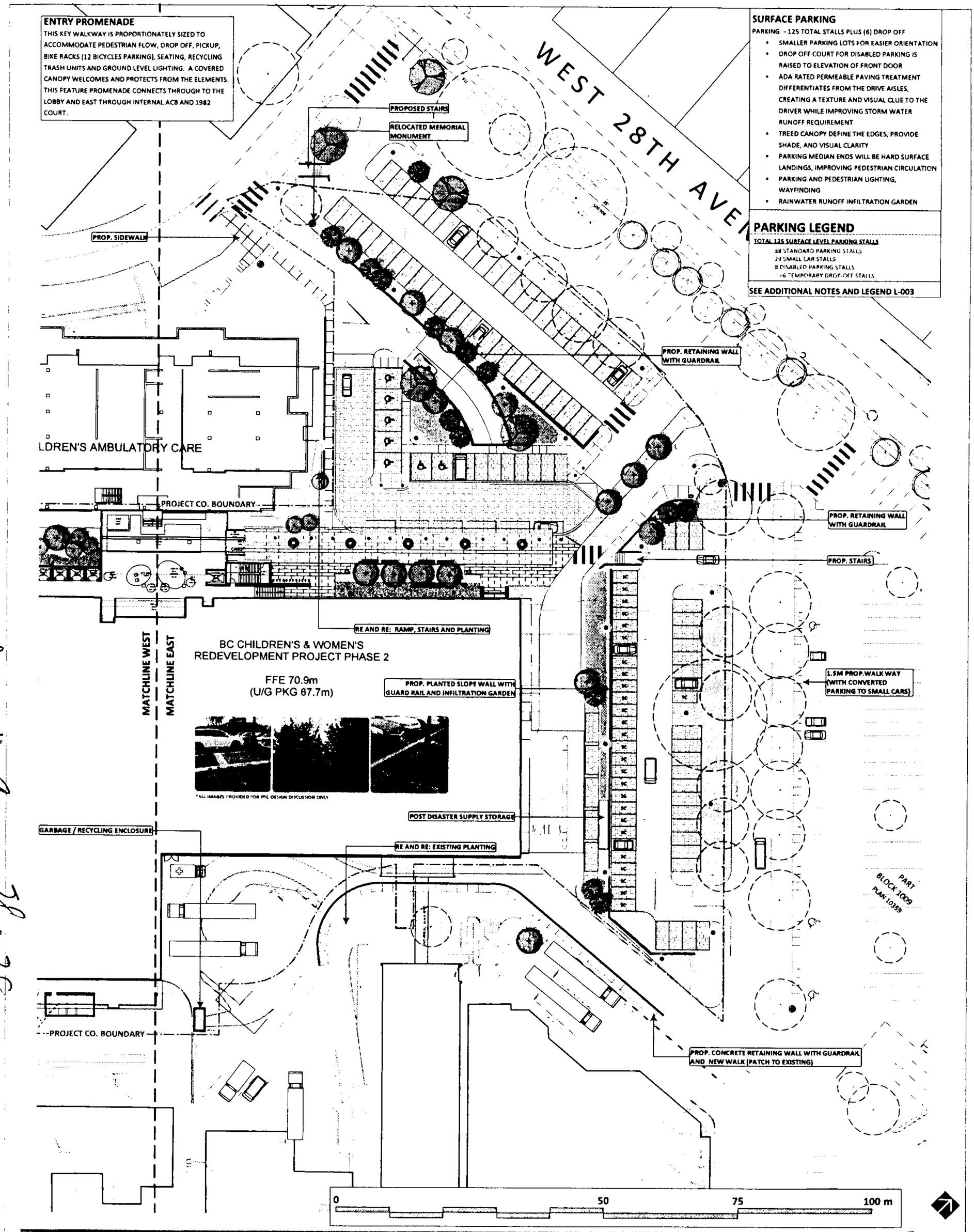

DP PROGRESS DRAWING

December 4, 2013
Request for Proposals for BC Children's and BC Women's Redevelopment Project Phase 2

LANDSCAPE PLAN (EAST)

SCALE 1 : 200

BC CHILDREN'S and BC WOMEN'S REDEVELOPMENT PROJECT PHASE 2, VANCOUVER, B.C.

L-004

PROPOSAL REFERENCE 1.2.1(h) - 1.2.2(a)

AFFINITY

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4.5 Architectural Design Rationale

Our vision for the new BC Children's and BC Women's Redevelopment Project Phase 2 is to create a hospital that:

- Is a place of discovery from entry and at final destination
- Provides nourishment – physical, emotional and spiritual
- Is a building that proclaims "I care about you"
- Emphasizes that everyone is deserving of equal attention
- Belongs on the site
- Has striking forms and finishes
- Has beautiful and durable materials

We each experience buildings in a highly personal and individual way. Healthcare is mysterious, highly personal, intrusive and impossible to evaluate for those without the experience. We all seek subtle signs and signals in the environment to predict what we might expect. What is the experience like for children, their caregivers and families? The principles of understanding the experience of a hospital from the perspective of a child and their caregivers are the generating ideas that shape design.

Our design methodology is based on meeting the goals and objectives of the Authority and optimizing the P-3 delivery method to benefit the Acute Care Centre (ACC).

Our focus is on delivering value through an integrated approach, providing an overall design solution that meets the P-3 Project Agreement (Schedule 3) requirements, maximizes the scored elements and achieves the clinical design objectives that are primary to our collective purpose.

The design includes a patient and family-centered healing environment that incorporates evidence based design and LEAN principles to provide a flexible, operationally-efficient, and sustainable care environment.

Key Functional Planning Considerations

The Affinity design has successfully separated front-of-house from back-of-house. This is demonstrated by the public entry elevators placing entry to all levels from the north side of the building. The elevator core for patients and services are at the heart of the building to separate activities central to the value stream from the support activities.

The functional planning of the ACC defines public, patient, and staff flows, separating each with few crossovers. The public flows originate at the north side of the facility at the Main Entrance, to support the vehicular approach off the campus ring road. This flow also supports the relationship between the ACC and the Ambulatory Care Building (ACB), and the link from the 1982 Building. Staff and service flows originate at the south side of the ACC, near loading and logistics as well as the ground level link to Shaughnessy for the delivery and removal of materials, supplies, waste and food services.

Designing a Wellness Environment

Affinity has focused on creating a warm, welcoming, and healing space for patients, families, and staff.

Our design reflects several evidence based design features:

- Access to direct natural light and views of the outdoors; the public elevator lobby on the inpatient floors and the public corridor that accesses the NICU/PICU/Dialysis and Outpatient Surgery has views to the north, east, and west
- Access to daylight and borrowed light
- Energy efficient LED lighting, where permitted, which minimizes glare and is warm and welcoming
- Acoustic treatments which minimize noise and create a soothing healing environment
- Clear organization and wayfinding strategies, enhanced by visual connection to the outdoors, which reduce confusion and stress
- Direct access to outdoor spaces: roof gardens have been located on Levels 5, 6, and 8
- Warm and welcoming public spaces which utilize natural wood as accent material throughout the building.

Exterior Expression

The exterior design of the ACC is driven by texture, colour, and contrast to blend with the campus context and adjacent residential neighbourhood. The textured cladding at the base of the ACC provides visual interest and captures the changing light and seasonal variability of the sun. Punctuated by glass and a wood clad canopy, the transparent entrance lobby provides a strong connection to the campus "Main Street" and a welcoming front door for patients and visitors. Levels 2, 3, and 4 are clad in a warm coloured vertical metal cladding system to provide a varied texture. The public circulation spine on the north face is largely clear vision glass with metal spandrel bands similar to those punctuating the ACB, and accented by playful coloured glass fins. The vertical circulation core is clad in warm toned cement fibre panel board and brightly coloured accent panels. This strong vertical element serves as a 'campanile' at the core of campus. Three courtyards are clad in three different coloured metal panels to provide a sense of variety and playfulness, and assist with wayfinding. The Level 5 mechanical floor is clad in metal louvres and corrugated metal panels matching the colour of the base, which temper the design of the base with the upper floors. Levels 6, 7, and 8 are clad in light coloured cement fibre panel. Glazing is accented with coloured panels to add visual interest and playfulness. Glass fins along the glazing of the public concourse are repeated on the upper floors. Rooftop elements are clad in profile metal siding in a horizontal rib pattern.

Innovative Use of Wood

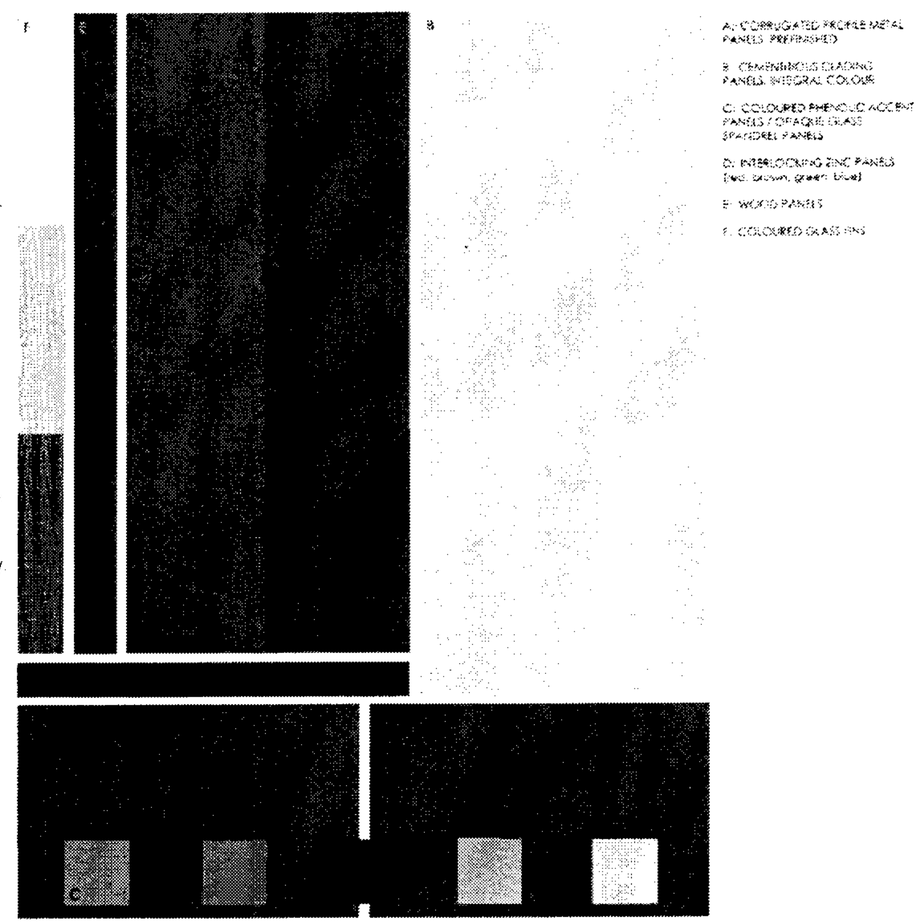
Affinity recognizes the importance of promoting the use of wood in the construction of buildings in British Columbia. We have developed a design that reflects the intent of BC's Wood First Act by embracing the innovative and appropriate use of wood, both internally and externally.

General Approach to the Use of Wood

Wood is featured in areas that do not pose a concern related to maintenance, resistance to weather and UV damage, infection control, or compliance with the BC Building Code related to flame spread and combustibility. We have used the P-3 Project Agreement (Schedule 3), as a guide to determine the optimal locations to feature wood.

Exterior Architectural Expression

The rendering shows that the structural use of wood at the ACC Main Entrance will be significant. This will be achieved through the use of glued-laminated timber to construct the entry canopy at the main visitor / patient drop-off area, reinforced by the use of wood wall panels at level one recesses beyond.



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Interior Architectural Expression

In addition to the prominent exterior use of wood elements, natural wood will be used extensively in the interior of the new facility. As a natural wayfinding element it will be featured in the lobby, public spaces, reception area, elevator lobbies, waiting areas, family areas and team care stations. Wood will be used as an accent ceiling finish material in main public spaces, which will reinforce the warm and natural character of the space.

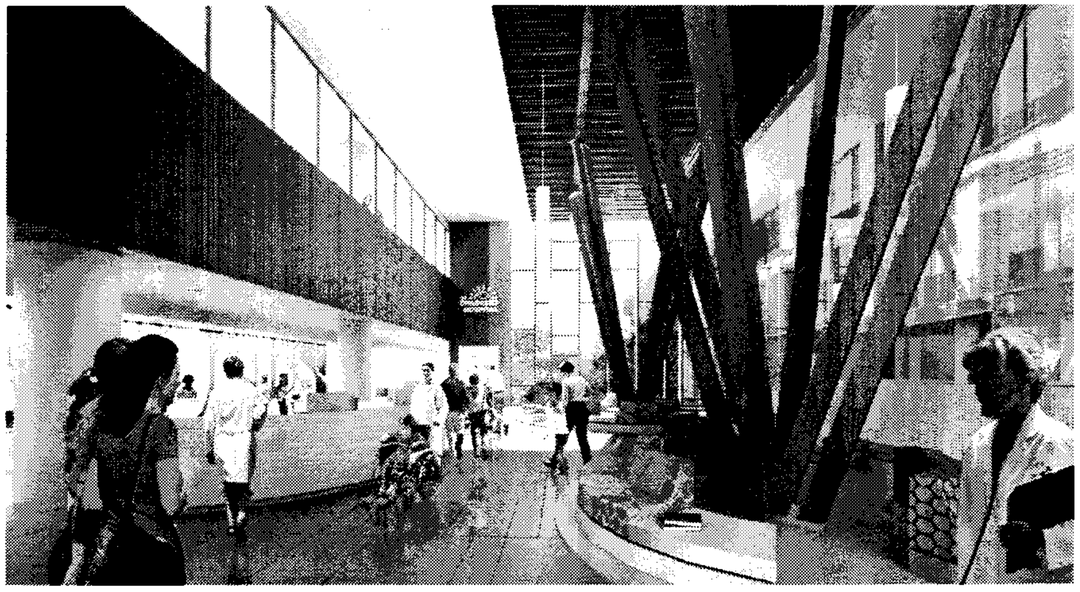
Wood will continue onto wall surfaces above the reception desk and at the stair connection to the ambulatory care building, featuring its warmth and character in areas where users make connections.

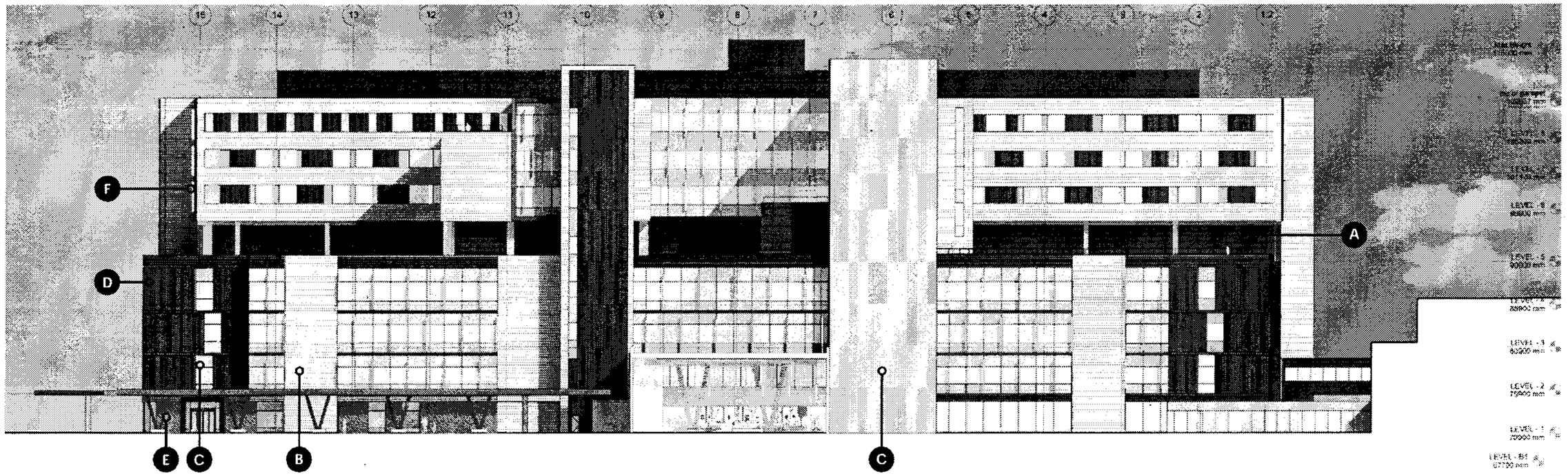
Wood Features in the Waiting Areas

The theme of long-lasting, durable wood carries through the main lobby nodes and into the Level 1 waiting areas. Wood has been emphasized in the waiting area by providing panel ceilings that appear to float above the space and differentiate the waiting zones from the adjacent corridor. The wood ceilings are composed of perforated wood acoustic ceiling tiles, which provide visual warmth and enhanced acoustics. The warm wood tones and textures help create a calm, quiet area for families and visitors. The ceiling will act as an intuitive wayfinding tool to connect different areas of the building.

Wood as a Wayfinding Feature

The wood feature walls will be important wayfinding elements on Level 1 and will be echoed in other public spaces in the Acute Care Centre. Wood will reappear in the waiting areas and at the public elevator lobbies on all levels in the ceilings, as a decorative frame element surrounding the elevator doors, and at significant way finding signage locations.





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4.7 Landscape Rationale

Our design takes into consideration the arborist report, October 2012; CWHC Campus Master Plan, July 2013; Wayfinding Guidelines; and the Wellness Walk Open Space Plan, April 2013.

Landscape Plan Outline

Our landscape design is centred on the theme of healing environments, as described in this section.

Circulation, Parking and Campus Connectivity

Our plan retains most of the existing tree-lined ring road, improves campus north/south movement, connects to the Wellness Walk access points, reinforces the 28th Avenue exit, and creates a strong identifiable route to the front door of the new Facility through internal ACC and 1982 courtyard spaces.

Parking Experience

The proposed parking creates a shared vehicle and pedestrian environment like a court rather than a parking lot. The large canopy trees define the edges, provide shade, and enhance visual clarity.

The parking bay's permeable paving treatment differentiates it from the drive aisles, creating a texture and visual clue to the driver while improving storm water runoff requirements.

To encourage slower traffic speed and improve accessibility for disabled parking, the drop-off area is designed as a paved court and raised to create a traffic table level with the front door elevation.

Parking median ends are hard surface landings, improving pedestrian circulation.

Walkways

The walkway and circulation routes are shown on Drawings L-001, L-003 and L-004. The City requested a north/south (NS) walkway located along the eastern edge of the existing London Plane treed boulevard. A 1.5 m wide concrete walk is provided adjacent to the existing parking stalls. The ends of this treed boulevard are paved to allow a transition connection to and from 28th Avenue Wellness Walk access points. An additional NS route walkway is proposed from the key entrance off 28th Avenue to the ACB and ACC.

East/west routes to the front door from the parking area are accommodated by accessible sidewalk connections. Primary access points feature orientation wayfinding signage. Trash/recycling units are provided at key access points All parking lot walkway surfacing is cast-in-place concrete with saw-cut jointing.

Entry Promenade

This key walkway is proportionately sized to accommodate pedestrian flow, drop-off, pick-up, bike racks (12 bicycles), seating, recycling trash units, and ground-level lighting. A covered canopy welcomes and protects from the elements. This feature promenade connects through to the lobby and east through internal ACB and 1982 Building courtyard spaces.

The courtyard concept between the ACB and 1982 Buildings is 'Pedestrian Main Street'. This meandering walk will feel like a courtyard, sheltered and protected. The gently mounding gardens emphasize texture, encourage pause and reflection, and also allow flexibility for gatherings and movement between buildings. Refer to Drawing A-303 and legend for furnishing and surface finishes.

Exterior Lighting

Where practical, the existing high-efficiency light poles and fixtures will be salvaged and reused. Additional parking lighting is to match existing poles.

All new light fixtures (pole mount, wall packs, in- ground, and bollards) will be aesthetic, vandal resistant, and compliant LED lighting to contribute to the safety and security of the pedestrian and vehicular environment.

Tree Retention & Relocation

Our arborist will review and advise on the viability of tree retention. We will retain the majority of existing large trees within the ring road. Our plan complies with the tree removal / replacement ratio. The new trees will be located within the new parking, hospital ground plane, courtyard and podium levels. The re-planting creates a desirable and meaningful outdoor space.

Unfortunately, the significant historic elm tree will be removed during construction. We propose grafting a live branch to cultivate a new tree and milling the existing tree into a feature custom outdoor table.

All trees to be removed as indicated by the adjacent plan will be removed in May 2014. Replanting will occur between September 2014 and Mar 2018.

Stormwater & Permeability

New parking stalls will be paved in vehicular-rated and ADA-approved permeable paving with a continuous granular infiltration base. The west perimeter edge features an infiltration rain garden (bioswale) complete with filter soil media. Visitors and employees will be introduced to the concept of water cleansing, slowing runoff and alleviating strain on piped and/or downstream conditions.

Roof top Podiums & Courtyards

Our design includes:

Level 2:

- Three Healing Garden Courtyards (inaccessible gardens), viewable from NICU, PICU and inpatient rooms, as well as internal corridor windows with an emphasis on calming and contemplation

Level 5: Mechanical Podium

- One patient and staff-accessible garden that is a play area for children with fall surfacing, seating for parents, and outdoor table chairs for staff. One inaccessible green roof
- Both gardens are designed based on the mountain meadow concept – multi-diverse sedum, bulbs, and seasonal ground textures with an emphasis on sensory, texture, bird, and butterfly gardens. Feature tree plantings for shade

Level 6

- One patient-accessible, one staff-accessible, and one inaccessible green roof
- These gardens are designed based on the rocky bluff concept– multi-diverse sedum, rock clusters, bulbs, and seasonal ground textures with an emphasis on sensory, texture, bird, and butterfly gardens. Tree plantings for shade
- Staff area includes outdoor table chairs and patient area includes seating and garden

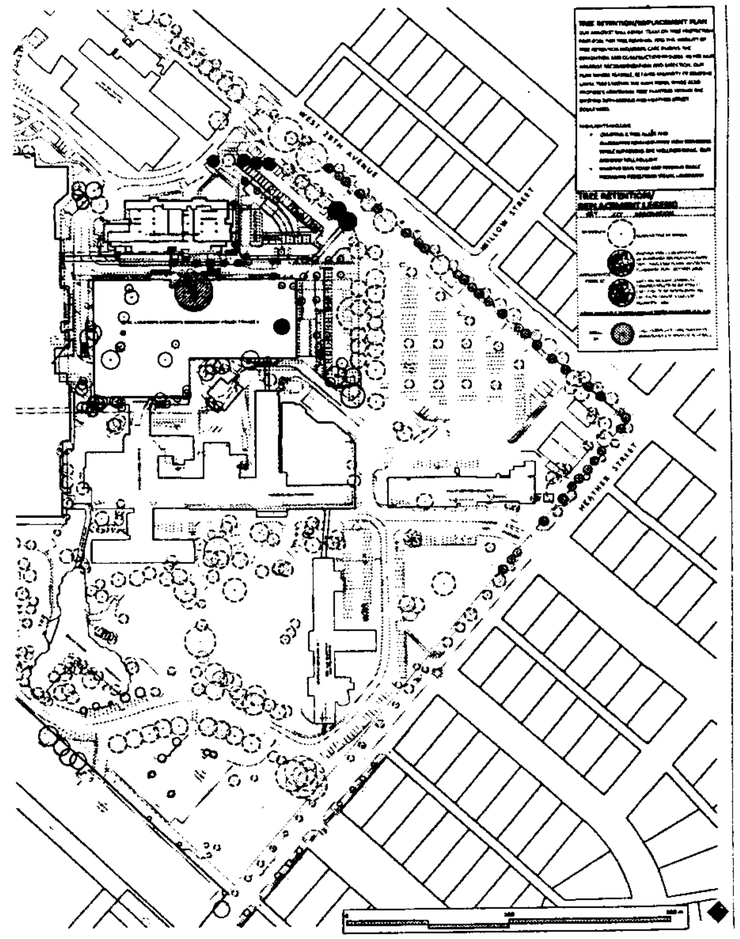
Level 8: Oncology Floor

- Two patient-accessible and one inaccessible green roof
- These gardens are designed based on the rocky bluff concept (see above). They are designed as natural play areas for children with all surfacing and seating for parents

Water Efficient Landscape Plantings

Planting will be locally-sourced and appropriate to the Pacific Northwest site microclimate. Emphasis will be on long-term durability, texture, sensory experience, beauty, and ease of maintenance.

Ground-level plantings have establishment irrigation only. Podium and rooftop gardens will have high-efficiency drip irrigation with rainwater sensors.



TREE RETENTION/REPLACEMENT PLAN

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URBAN DESIGN PANEL

The Urban Design Panel reviewed this application on January 29, 2014, and provided the following comments:

EVALUATION: NON-SUPPORT (1-9)

- **Introduction:** Sailen Black, Development Planner, introduced the proposal for a site bounded by West 32nd Avenue, Oak and Heather Streets as well as West 28th Avenue. It is a 46 acre site sloped from the southeast corner down to the northeast corner. He described the context for the area noting the single family homes to the west, east and south of the site. Mr. Black gave a brief history of the site noting that the Panel had seen the rezoning proposal in November 2010. In May 2012 the Panel reviewed the overall Master Plan. The CD-1 By-law was amended in November 2012 along with the associated Master Plan guidelines and design standards were approved in principle by Council. The By-law extended permitted height in the centre of the site to 148 feet with limited exclusions such as an elevator overrun. Mr. Black mentioned that the main Conditions of Approval recommended for the development permit of the building were tree replacement, limiting shadowing and providing open spaces for respite and repose.

  Mr. Black explained that the proposal is for an 8-storey Acute Care building which includes an Emergency Department, Radiology, inpatient beds, Oncology, Pediatrics, high risk labour and neo natal care.

  Advice from the Panel on this application was sought on the proposed landscape and architectural design of this complete development permit application in general, and in particular:

  - Has the application addressed the Panel's concerns on key aspects of the design needing improvement noted in 2012?
  - Are the entryways and paths clear and inviting for the range of needs from everyday visitors to urgent care?
  - Is the materials palette, composition, colour and detailing well resolved and appropriate to the range of users and this context?
  - Dos the exterior design strike the right balance between a variety of expressions and break up of scale, and overall cohesion of design?
  - Are the open spaces beside and on the building successful for their intended uses?

  Mr. Black took questions from the Panel.

- **Applicant's Introductory Comments:** Allyn Stellmacher, Architect, further described the proposal and noted that relative to the master plan there is a desire for a state of the art building that will service the community. The goal has to be efficiency, reducing the foot print on site and to increase the density of the centre campus with the objective of creating more open space. It is a high intensity use program for the building with every component designed for a wide diversity of needs within the building.

  Dan Simpson, Architect, explained that Oak Street is the primary point of access into the site as well as West 28th Avenue. Given the site location one of the goals was to provide density and consolidate the critical clinical component within the centre of the campus. The existing emergency access needs to be open during construction. A cover has been added over the entrance which has been extended for drop offs. There are 125 parking spaces at grade and a ramp to a below grade parkade for another 180 cars. A dedicated ambulance lane is provided and connected to the emergency department. In the centre of the campus is the loading dock. Pedestrian linkage and across the campus was something that was important. There is a Wellness Walk that is being developed around the perimeter. He mentioned that there will be a series of indoor and outdoor public spaces and they are trying to keep them green as much as possible.

Ken Larsson, Landscape Architect, described the landscaping plans and mentioned that the respite and repose is reflected in developing urban streetscape around the building which is connected to the Wellness Walk. There is a large glazed promenade at the front of the building. They have tried to pull the landscape up into the building with internal courtyards that are based around key program areas that provide visibility and views to nature. They also wanted to provide a large amount of sunlight to public spaces.

The applicant team took questions from the Panel.

- **Panel's Consensus on Key Aspects Needing Improvement:**

  - Design development to improve the wayfinding around the site;
  - Design development to clearly mark the entrance;
  - Consider a lighter colour palette;
  - Design development to improve the quality of the courtyard and open spaces.

- **Related Commentary:** The Panel did not support the proposal.

  The Panel agreed that the program for this proposal was complex and was the driver for a lot of the building form. They felt that the massing worked and was an improvement from the last review.

  The Panel had some concerns regarding wayfinding and thought it had not been addressed in the submission. They were concerned that people under emotional stress would find it very difficult to find the front entrance. It was suggested that a simple planning diagrammatic panels that show how the circulation worked would be helpful. The Panel agreed that the entryways and paths were not clear and inviting for the range of needs. The main road is fairly well defined but the wayfinding and entry is still confusing. The elements of the building that are meant to give location and signage are not as clear as they could be and still require work to be legible.

  The Panel thought the massing was successful in that it had good composition and complexity. As far as the massing goes there is a lot of clarity of elements, although the materials could unify it more.

  Most of the Panel supported the colour and material palette while some Panel members thought the materials went too far and made the building overly complex. There wasn't a lot of support for the dark brown. They wanted to see something more subtle. The other issue with the dark colour was that the courtyards in the north or northwest wouldn't get a lot of sunlight and the dark colour would contribute to making them difficult spaces.

  The Panel thought the open spaces needed a lot more attention. The main road spine and the building itself are strong and create a lot of outdoor spaces but they feel like leftover spaces. There was a lot of support from the Panel for the roof top spaces. They felt they had lots of light and were well integrated with the internal spaces.

  Several Panel members suggested looking at the program to integrate more of the active lounge spaces with the outdoor space, particularly around the entry.

- **Applicant's Response:** Ms. Lee thanked the Panel for their comments. She noted that it was a complex building and that parking was an issue and continues to be a challenge. She added that from a functional aspect they need the surface parking.

  Mr. Stellmacher said he understood the comments regarding the wayfinding and was something to be still worked out. Mr. Simpson said he heard the comments and they will work on solutions for the challenges.

Additional staff commentary in response to Rezoning Condition 6:

1. Pedestrian access via surface parking was described by the proponent at rezoning as intended to include 'safe pedestrian paths and crossing locations will be further enhanced by marked crosswalks with sufficient sight lines in areas of expected high vehicle volumes'. While there are marked crosswalks there is a noticeable lack of sidewalks to provide a warm, welcoming and safe arrival for all users and visitors. The primary concern is universal access from the upper surface parking to the building and the proposed grade differential (see Recommended Condition 1.2).

2. Under section 4.7 Landscape rationale, the proponent suggests that the 'proposed parking creates a shared vehicle and pedestrian environment like a court rather than a parking lot', presumably because they are using 'pavers' in the parking area and somehow this transforms the parking lot drive aisle into a safer place for people to walk. In the next section on Walkways they describe providing a 1.5 m wide concrete sidewalk adjacent to existing parking and they provide sidewalks adjacent to the lower lot next to the building but not in the new upper lot.

3. Clarify when the proposed changes to the parking, sidewalks and landscaping outside of the area of site- works denoted by the red dashed line are to occur, and if review of these changes is expected at part of this development application at this time.

4. Provision of a universally accessible connection between the new parking lots and the building in the form of sidewalks adjacent to the parking lots and ramps from the lot to the building. The proponent has sunk the building below existing grade and has proposed a series of stairs to connect the upper parking elevation to the lower building. Visitors or patients needing to access the building from the upper lot who do not want to use the stairs or cannot use the stairs must walk in the drive aisle, the drive entry and in some cases the ring road to access a sidewalk. (See page 64 landscape plan east).