

Present: Mike Feeley (MF) Chair, Sharon Wu (SW), Nancy Knight (NK),
Ian Burgess (IB), Prod Laquian (PL), Erica Frank (EF), Johannes Rebane (JR)

In Attendance: Jan Fialkowski (JF), *UNA Executive Director*
Katherine Xu (KX), *UNA Administrative Manager*
Ralph Wells (RW), *UNA Sustainability Manager*
Fred Pritchard, *Hawthorn Place resident*
Dave Woodson, *Managing Director Building Operations, UBC*
Pierre Ouillet, *Vice President – Finance, Resources and Operations, UBC*
John Metras, *Managing Director Infrastructure Development, UBC*
James Tansey, *UBC Sauder School of Business*
Brent Sauder, *Director of Strategic Initiatives, Office of the VP Research & International, UBC*
Steve Cockcroft, *UBC Department of Materials Engineering*
Dejan Sparica, *Vice President and Chief Engineer, Nexterra Systems Corp*
Charlie Ker, *Director of Marketing, Nexterra Systems Corp*
Joe Stott, *Director of Planning, Campus & Community Planning, UBC*
Andrew Parr, *Managing Director, Student Housing & Hospitality Services, UBC*
Laura Cottell, *Hawthorn Place Resident*
Christine Scaman, *Hawthorn Place Resident*

Meeting called to order at 5:02 pm.

Presentation: UBC Biomass Project, Dave Woodson
(*response to previous questions distributed: attachment 1*)

A UBC demonstration biomass project is being proposed on the UBC campus in conjunction with Nexterra Systems Corp. New technology, Nexterra's gasification technology, will be introduced to provide clean, versatile and a low cost means of converting wood and other solid fuels into syngas to produce heat and power at plant-scale applications. This project is designed to provide 12% of the heat and steam supply for the UBC Point Grey campus. The following issues were raised:

- the potential for immediate or long term safety or health concerns that could affect local residents
- the sustainability of transporting and burning wood waste
- monitoring and meeting governmental regulations related to air quality

NK indicated that the project will be reviewed by Metro Vancouver for permitting. Dave Woodson indicated that it is the intent of the project to exceed the standards required by Metro Vancouver.

Action by: Questions from the directors will be assembled and submitted to the project team for response.

Delegation: Fred Pritchard, Hawthorn Place resident (attachment 2)

Mr. Pritchard raised concerns about the planning process of various UBC development projects, specifically citing the Tennis Centre Expansion Project. Sufficient time is not provided between the public open house and the approval process by the UBC Board of Governors to affect any changes to the project. Mr. Pritchard thanked MF for ensuring that another evening public open house was added to review this project; however he emphasized that UBC has not responded very well to its residential constituency.

MF responded that the UNA has a unique relationship with the university which requires trust between both parties. There is an expectation by the UNA that the impact on the neighbourhoods will be considered by the university and this is the basis of the governance relationship between the UNA and UBC. The UNA expects that all concerns expressed by the residents will be considered by the university.

Presentation: Totem Park Student Residences Development, Joe Stott, UBC Director of Campus & Community Planning & Andrew Parr, UBC Managing Director of Housing and Student Hospitality Services (attachment 3)

The Totem Park Student Residence Expansion Project involves the addition of 567 new student dormitory-style beds in two buildings on the Totem Park Residences site at the intersection of West Mall and Thunderbird Blvd. It is designated for first and second year students.

The Board expressed concerns about noise generated by student parties. AP presented the following strategies to eliminate the noise impact on the neighbourhoods:

- Professional staff will live on site and there will be a residence advisor (RA) assigned for every 20 students
- Strict noise rules will be in place; students violating the rules may eventually lead to eviction.

MF suggested creating a code of conduct; applying different rules for rooms on the street side of the building; and setting extended quiet time for certain part of the residence. JR suggested having students and residents meeting face to face and proposed creating a UNA / Student Resident Liaison Group following a model he has proposed for a UNA /Greek Community Liaison Group (see attachment 4).

Delegation: Laura Cottle and Christine Scamon, Hawthorn Place residents, regarding the Tennis Centre Expansion Project

LC and CS expressed concerns about the Tennis Centre Development Project on East Mall, and proposed the following suggestions:

- To reroute garbage truck pick up /drop off and the entrance on East Mall to Thunderbird Blvd
- To clad the building in a different material (such as wood) especially the East Mall facade.

A. AGENDA AND MINUTES

1. Approval of Agenda

Defer C.3, E.1, E.2.

Moved by IB, seconded by JR, carried.

2. Approval of Minutes

Moved by IB, seconded by SW, carried.

3. Items Arising from the Minutes - received.

B. REPORTS

1. Standing Committees

a) **Governance - Prod Laquian**

i. **Report – received**

ii. With the successful campaign to obtain funding and approval for both the elementary and high schools in the UNA communities, the UNA Schools Committee has essentially accomplished its mission. Charles Menzies, the Schools Committee Chair has recommended disbanding the committee and has tendered his resignation as Chair.

Moved by PL, seconded by MF, the Board approves the disbanding of the UNA Schools Committee. Carried.

b) **Operations & Sustainability – deferred until February**

2. Executive Director's Report – received

3. Campus & Community Planning Report – no report this month

4. Alma Mater Society Report – Johannes Rebane

The AMS annual election is underway. JR's term will end in February.

The AMS submitted a draft Terms of Reference for a proposed UNA / Greek Community Liaison Group. (attachment 4)

Action: T of R to be reviewed and considered by the UNA Standing Committee on Governance.

5. **Metro Vancouver Report** – no report this month

C. NEW BUSINESS

1. **Improvements to Nobel Park Community Garden**, Mike Feeley

Moved by MF, seconded by PL, that the Board supports the proposed reconfiguration of the Nobel Park Community Gardens and asks Campus and Community Planning to proceed with a public consultation before amending the development permit. Carried.

2. **Recommendation to participate in the UBC Waste Audit**, Ralph Wells

Moved by EF, seconded by JR, that the UNA Board approves in principle participation in the UBC Waste Audit to a maximum of \$30,000. Final approval upon review of UNA component of successful applicant to RFP. Carried.

D. Old Business

1. **Status Report on Order in Council** – Nancy Knight

The provincial government has requested further clarification which the university has provided.

E. Financials – deferred until February

F. For Information

1. **Residents responses to the UNA Christmas Concert**
2. **Childcare expansion final report**

Meeting adjourned at 7:05 pm.

Next Meeting: Tuesday February 9, 2009 from 5:00 pm to 7:00 pm at
The Old Barn Community Centre

Jan 12, 2010

Specifics on how will UBC will monitor for pollutants of note. Is there a plan to include several baseline and periodic levels for dioxins, furans, particulates, Mercury (both elemental and non-), sulfur, PFOA, GHGs, water vapor, and any equivalent 'new' toxins going forward?

UBC will be monitoring stack emissions continuously as part of the ongoing performance evaluation and various research programs oriented toward system optimization. To meet the Metro Vancouver air permit requirements, the sampling will be conducted by an independent third party testing organization. In addition to mandatory stack emission testing, Nexterra and UBC will adopt an extensive emission testing program as part of the R&D program. This will include continuous monitoring of the internal combustion engine stack emissions, daily particulate matter (PM) emission sampling and periodic base line testing of dioxins, furans, PFOA and Acroleins. UBC fully recognizes the heightened sensitivities regarding emissions from any type of bio-mass facility. As such, we are not only committed to monitoring those emissions, but we are very excited about the opportunity for continuous optimization that would drive the emissions down to levels far below Metro Vancouver and other world-class standards.

The facility will be permitted to use clean wood (in the form of chips, course grindings or pellets) as fuel¹. Initially fuel samples will be analyzed weekly to verify the consistency of supplier – then, based on our confidence, on a random once per month basis. There will be no use of alternative fuels without fully testing, at a facility outside of the lower mainland, the associated affect on system performance including emissions to ensure compliance with Metro Vancouver requirements. According to the EPA document on Wood Residue Combustion 5th ed. AP-42, Section 1.6, the main criteria pollutants that are emitted from wood fired boilers, which are applicable to the proposed facility, are PM, NO_x and CO with lesser amounts of SO₂ and various organic compounds. The main Green Houses Gases (GHG's) include CO₂, NO_x and CH₄, the dominant one by far being CO₂. But, because the facility will use a renewable source of carbon, the net CO₂ emissions are zero. There are also trace elements of various metals present in the wood. Perfluorooctanic acid (PFOA) is not normally found, even in trace amounts, in wood fuel or combustion products. The amounts of criteria pollutants and GHG's emitted will be dependent on the fuel and the system operating conditions. Under nominal operating conditions, the emissions will be better than the current regulatory requirements. It is our intent that the UBC air shed (accounting for existing levels) will continue to better the most stringent of the Federal, Provincial or Metro Vancouver air quality objectives.

Will there be a need to have some type of evacuation communication process in case of emergency?

The system neither produces nor uses any "noxious" materials at a level that would stimulate an area evacuation. Any non-system emergency would be dealt with under UBC's Standard Operating Procedures for Emergency Situations.

¹ See TYPICAL WOOD FUEL SPECIFICATIONS Attached

Jan 12, 2010

Would there be anything explosive within the plant?

There are no explosive chemicals used at the plant and all process vessels apart from the boiler are atmospheric vessels and operating at slightly positive or negative pressure.

The syngas produced from wood in the gasification process is a combustible gas with calorific value significantly lower than natural gas (order of magnitude of 120 BTU/scf and 1,000 BTU/scf for syngas and natural gas, respectively). All the safety features required by Canadian Gas Code will be incorporated and the syngas piping system will be inspected and approved by BC Safety Authority.

The heat recovery units (hot water heater and steam boiler) will be designed and built in accordance with ASME code and standard for operating pressure and temperatures. This system will be also be designed in accordance with BC Safety Act and inspected and approved by BC Safety Authority.

Who are the harshest critics of this method, and what have they said about it generally, and about doing it here?

Feedback for the project from the two previously held open houses has been positive and supportive.

In December the Wreck Beach Preservation Society voiced their concerns for truck traffic and cliff erosion. Based on the fuel requirement of 2-3 truckloads per day, truck traffic associated with the project will be less than 1% of current campus truck traffic. A commissioned geo-technical report confirms that the site proposed is stable and the Project will NOT cause cliff erosion or sloughing.

Not so much a criticism but rather a misunderstanding/confusion with other bio-mass technologies - it is common to confuse incineration (direct burning) with gasification (heating wood in oxygen starved environment to generate syngas) – the technology for the UBC system. The system will burn syngas in an oxidizer where temperature, turbulence and retention time are tightly controlled allowing for complete combustion of volatiles (which is very distinct from direct burning / incineration) thus allowing the system to meet and exceed some of the natural gas combustion emissions, such as CO, VOC and THC.

What has UBC has committed about the waste stream? We have heard that only 2 truckloads of wood waste and only tree trimmings from UBC are sufficient to make this work. Does UBC trim enough biomass to make this worthwhile? What happens when that source dries up because UBC Composting needs more 'brown' in its compost, or there is some other higher use?

Campus-sourced biomass (clean surplus solid wood and trimmings) will not be sufficient to fuel the facility. The majority of the fuel supply will come from non-campus sources. Interest to supply UBC with clean biomass has been received from Prince George (wood-fuel pellets), BC Southern Interior (beetle killed and non-marketable whole-tree chips/chipped mill residues) and

A.2 Attachment 1

UBC Bio Energy Research and Demonstration Project
Response to Questions posed by University Neighbourhood Association

Jan 12, 2010

locally (surplus clean wood). Supply agreements will be such that UBC will realize a long-term economic supply of fuel meeting the UBC standards. Note the system is NOT a waste incinerator and will not consume "waste" or contaminated fuel.

If UBC says yes to this project, what door does it open (new partnerships), and which does it close (how much is UBC investing and does it preclude other waste-to-energy efforts)?

Going ahead with this project does not close any doors or options. In fact, it will stimulate further *Living Lab* collaborations as it provides a template for how these types of collaborations are undertaken and managed. NSERC has identified that these types of collaboration projects will be an increasing portion of their Program portfolio going forward. The spinoff research/application opportunities for this project alone are significant. Because of the research and 1st demonstration components UBC is benefiting significantly from the funding opportunities these garner and, once operational will realize a "payback" from the reduced carbon emissions. UBC is investing ~20% of the capital cost of the overall project, which it will fully recover from reduced natural gas consumption, lower fuel costs and reduced carbon taxes.

Is this the right niche for UBC, and is this the right location? Should one not want to gasify the wood closer to where it's being felled?

This is absolutely the right niche for UBC in that it provides an opportunity to put the concept of the *Campus as a Living Lab* into practice. UBC Point Grey Campus is the best place to show that "YIMBE" Yes in my back yard is the responsible way to address Climate change. Placing this facility on the Point Grey Campus also makes sense from the standpoint of exploring how this technology can be integrated effectively into a diverse, largely encapsulated community. UBC is where the research expertise and facilities are available, and can be applied, to mitigate immediate technical problems and to advance the technology further. By participating in this project UBC and the UNA will play a significant role in making this technology solution available worldwide.

TYPICAL WOOD FUEL SPECIFICATIONS

The Nexterra Gasifier System is designed to operate on fuel having the following specifications:

A. Fuel Size

Wood residue must be sized to 3 in. minus in all dimensions. Long fibers or sticks that are longer than 3 in. in length are not acceptable. Residues sized less than 1/4 in. must be limited to 25 percent or less.

B. Fuel Composition

Wood residue must be a clean fresh mix free of substances foreign to natural composition of wood such as preserving chemicals, paint, processing chemicals, glues, sulphurous, phosphorous or nitrogenous chemicals that might be classified as hazardous or appear in flue gas or ash. The fuel should be free of nails or other metal strips. The wood fuel should be free of rotten material which evidences a state of decomposition. The wood fuel should be free of leafy greens or needles.

Fuel must be well mixed with a consistent moisture content level. The system will be able to accommodate seasonal fluctuations in moisture content.

C. Ultimate and Proximate Analysis

The proximate and ultimate analysis of the design fuel on a dry weight basis for performance calculations is as follows:

Proximate Analysis	
Component	
Moisture Content (wet basis)	10-60%
Volatile Content	70-85%
Fixed Carbon	15-25%
Ash	<10%
Higher Heating Value (HHV)	> 8500 btu/lb

Ultimate Analysis	
Component	
Carbon	48-52%
Hydrogen	5-6%
Oxygen	36-44%
Nitrogen	<0.35%
Sulphur	<0.025%
Chlorine	<0.025%
Total	100%

D. Ash Content

Wood fuel may contain less than 10% dry basis inorganic material including materials that are part of the normal composition of wood as well as materials that are not part of the makeup of natural wood. The initial deformation temperature (IDT) of ash must be greater than 2100 ° F.

The Planning Process, the UNA and the residents living at UBC

1. The recent introduction of the UBC Tennis Centre (an institutional development) to the residential community at UBC has identified the weakness in the planning process and lack of appropriate protections available to residents living at UBC.
2. Without exception residents of all municipalities and Regional Districts have clearly articulated legislation under the Community Charter and The Local Government Act that confirms the planning process and the requirements that must be met by municipalities and regional districts in preparing a plan, approving a subdivision or in the review and approval of zoning, rezoning or developments.
3. B.C. does not have a *Planning Act*. Most restrictions and controls on development are established by local governments under the Community Charter and the *Local Government Act*, which contains extensive land use regulations, zoning powers and subdivision powers. The Community Charter came into force on January 1, 2004 and operates in conjunction with the land use provisions of the Local Government Act.
4. The legislative regime enables local governments to adopt regional growth strategies and official community plans for the establishment of a framework for land use regulations and zoning by-laws. Local governments are not required to adopt either an official community plan or a zoning by-law. If no such by-laws have been enacted by a local government, land use is governed by generally applicable provincial laws, the common law and any restrictive covenants and building schemes that may be registered on title to properties.
5. While the B.C. Legislature has largely delegated its jurisdiction over land use and development control to local governments, the provincial government continues to control a number of areas including agricultural land, forest land, riparian land, heritage sites and highways. Additionally, a number of provisions in various statutes permit the provincial government to be involved in local government planning and zoning processes.
6. The University of British Columbia does not have any authority for land use planning or carrying out a review process to consider and approve land use plans or approvals of developments for any development on UBC lands.
7. The GVRD (Metro) is responsible for the overall planning of the UBC campus under the Local Government Act. UBC, which owns all of the campus lands, has administrative authority for the campus under the University Act. And while the GVRD and UBC have agreed to work cooperatively on future planning for the campus, the University Act does not convey any authority for planning to the university.
8. Although the UNA was established as a corporate entity under the Societies Act and intended to approximate a municipal council for the residents of UBC's residential neighborhoods, unlike every other municipal jurisdiction in BC, it has no responsibility or authority for land use planning, one of the fundamental responsibilities of every other municipal jurisdiction in BC. Rather, the UNA activities (not described as responsibilities) described under the Societies Act include such things as

local regulation for noise, animal control, construction of community facilities, elections, etc. Authority of the UNA is limited with regard to elections as UBC appoints two Board members and the AMS appoints one board member. These appointments are without reference to or consultation with UNA residents.

9. The UNA can be involved in public hearings or public meetings held with respect to both institutional and non- institutional development on the UBC Campus, in the same way as any resident can make representation. To date the UNA has not made any representation at a public meeting for a development permit. There was no UNA representation at public meetings held regarding the proposed UBC Tennis Centre, although the UNA was made aware of resident concerns in late November/early December when residents first learned of the proposed development. However, the Board did communicate one concern to UBC Campus Planning regarding the planning process dealing with the limited 2 hour mid day time scheduled for a public open house.

10. In general, the institutional Development Permit approval process (UBC Tennis Centre) has the following steps:

1. Project initiated in the context of University priorities and requirements
2. Development Permit application submitted
3. Advisory Urban Design Panel and Development Review Committee review proposal and hold public meeting
4. Project is amended as necessary
5. Board of Governors approval
6. Permit issued with or without conditions

Note: the university's process for review of non institutional development includes the requirement that a letter be sent to all residents within 100 meters of the development. No such requirement for institutional development regardless that the institutional development affects residents of neighbourhoods.

11. The university has not followed its process fully for the proposed Tennis Centre. While the UBC Board of Governors report Of June 3, 2009 (Board 1) requested approval for project inception/project in principle, etc., the UBC Board of Governors gave its approval/authorization to issue a Development Permit as well as authority to proceed to working drawings and tender.

12. Plans were prepared and submitted to the university's Urban advisory Design Panel and plans were reviewed at the AUDP meeting held September 3, 2009. The panel requested a revised design for review at its next meeting. Minutes of the AUDP do not reference revised plans.

13. December 3, 2009 scheduled for a public open house. A sign was posted on East Mall noting the date of the proposed Tennis Centre together public meeting. No information on location or time was provided. The December 3, 2009 Open House was cancelled and a second sign was posted indicating that a public open house was to be held for 2 hours from 12:30pm to 2:30pm at the existing Tennis Center.....and that construction was scheduled to commence April 1, 2010.

14. UBC Campus Planning in its report on Capital Projects Update (December 3, 2009) to the Board of Governors indicated that it intended to provide a Board 2 report on January 10, 2010 (includes summary of public input, which would include "public" institutional constituency and other "public" comment likely from the 2 hour public open house) and that construction would commence April 10, 2010 (posted sign indicates construction start April 1, 2010)

15. A second site sign was posted at the corner of University Boulevard and East Mall advertising the proposed Tennis centre and the date of the second public open house.

16. The planning process for the Tennis centre is inadequate and flawed. Public notice and invitation to participate should be at the earliest possible moment to allow for a full and meaningful engagement between proponents and those who will be affected by the proposed development. This concept is not unusual and is something most competent developers undertake without prompting from local authorities. UBC engages its institutional constituency fully but much less so with its residential community.

The planning process with regard to the resident "public" at UBC is less than satisfactory. Misinformation, lack of consultation and an apparent lack of transparency and proper process. It is not satisfactory for UBC (as applicant and developer and approving authority) and would certainly not be satisfactory for any municipality.

Review of planning documents shows that there are errors in information and errors in material prepared for plans currently being prepared.

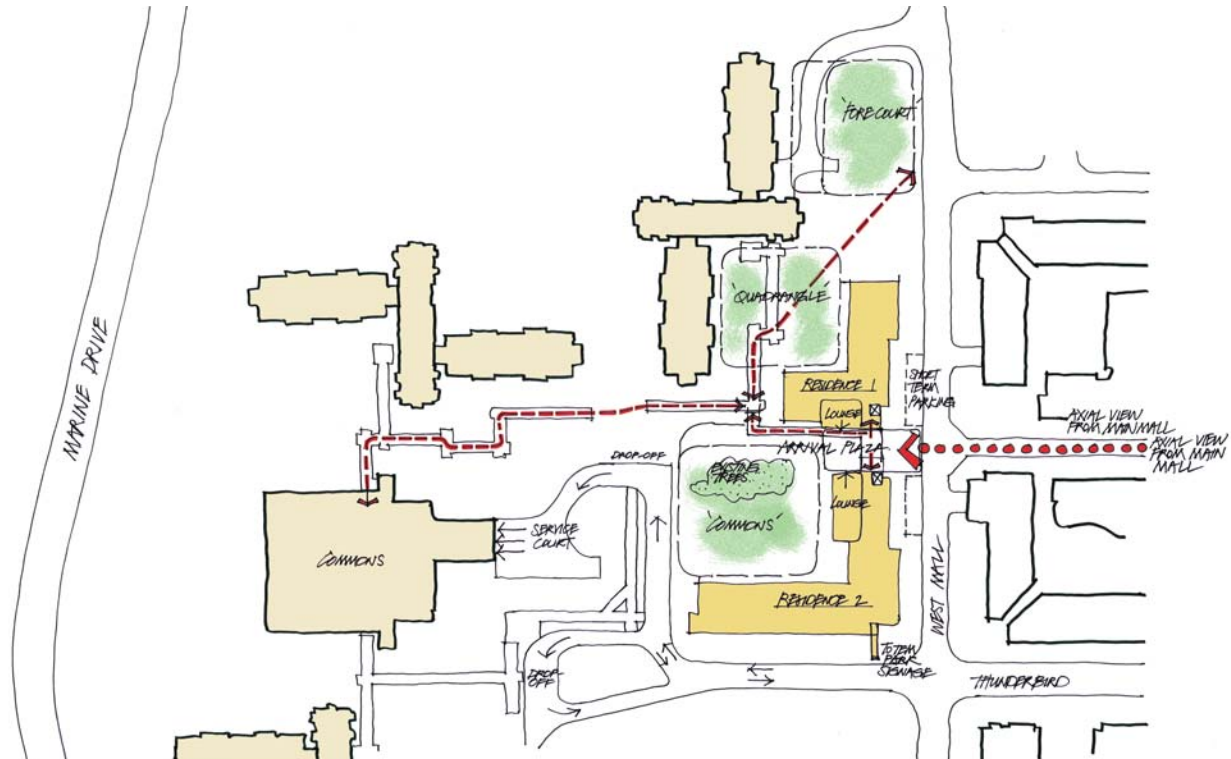
As an example, at one time UBC intended changing East Mall to change the east lane on East Mall to a parking lot with diagonal parking...and to make all vehicles travel on the remaining lane next to the residents at UBC. The matter concluded with Joe Stott, Director of Campus Planning and Paul Young of UBC Properties Trust providing written confirmation that the university had no intention to place diagonal parking at the east side of east Mall or ever change the traffic arrangement on East Mall.

The October 2009 draft "UBC Vancouver Campus Plan to 2030" prepared by Campus and Community Planning shows the existing condition at East Mall to include a parking lot with diagonal parking along the east lane of East Mall. The plan goes on to show that the university plans to relocate traffic to the west side of east Mall.

Finally, UBC has no public consultation for a planning process involving the review and approval of subdivisions. As a matter of history, the subdivision of land was not initially viewed as a matter of public interest and, accordingly, early land registration statutes did not require subdivisions be approved by governmental authority. In 1906, the legislature intervened with the *Land Registry Act* which provided for the first municipal controls affecting subdivisions. Presently in B.C., subdivisions must comply with Part 7 of the Land Title Act. Subdivision (which includes land assembly) is granted by the approving officer of a municipality and, in rural areas, has historically been subject to approval by an approving officer employed by the Minister of Transportation. UBC falls under the latter and is a process that is managed by UBC Properties Trust.

DP 09029: Totem Park Residence Infill Project

This is a proposal for a new undergraduate student residence for 567 beds within two 6-7 storey buildings on at the northwest corner of West Mall and Thunderbird Boulevard.



Project description

The Totem Park Infill Student Residences project involves the addition of 567 new student beds in two buildings as part of the Totem Park Residence (1157 beds) site. The student residences will occupy the open grassed area located at the intersection of West Mall and Thunderbird Road which is part of the Totem Residence complex. The architectural goal is to complement the existing buildings of Totem Park, designed by Ron Thom in the 1960's, when he was a member of the architectural firm Thomson Berwick Pratt and Partners. The proposed buildings are a combination of six and seven storeys in height, constructed of concrete, and clad in the same Norman Titan brick as Totem Park. The residence will cater to first and second year students with individual rooms sharing a semi-private bathroom.

The site plan assures that the new buildings are not only carefully integrated into the existing Totem Park campus, but that they also set up a clearly-defined urban structure that reinforces the notions of gateway, pedestrian circulation and useable outdoor space. At the heart of the project is a "commons" with adjacent social plaza. This outdoor assemblage of spaces will be utilized by all of the students living in Totem Park. The commons is a large, grassed area that will support a multitude of activities from tanning to touch football. Social places within the residential complex, including two large lounges and laundry areas, are strategically located to take advantage of the outdoor plaza. The architectural character of the project keys off of the 1960s six-storey buildings, displaying a more modern interpretation of materials and detailing.



Project data

Street address:	2525 West Mall
Site area:	2 Acres (includes building footprint and open commons)
Building height:	6 / 7 Storeys
Site Coverage:	31.9 % Building footprint
Number of Units:	567
Unit Breakdown:	
Student Units:	528
Barrier Free Units:	15
Residence Advisor Units:	20
Residence Coordinator Units:	3
Residence Life Manager:	1
Gross area:	16,820 m2 (181,053 ft2)
Net area:	13,148 m2 (141,521 ft2)
Basement area:	693 m2 (7,464 ft2)
Bike parking:	86 - Based on 15% of suites (567 x 15% = 85.05)

DP 09029: Totem Park Residence Infill Project

Timeline

Capital Project Approval

May 12, 2009	Executive Approval
August 4, 2009	Property and Planning Advisory Committee
September 24, 2009	Board of Governors' Board 1 Approval and Architect Selection

Design Development

Oct - Dec 2009	Site Planning and architectural development by applicants
December 23, 2009	Development Permit Application received by Campus + Community Planning

Development Review

Jan - Feb 2010	Public Consultation and input from campus advisory bodies
January 12, 2010	Public Open House
January 14, 2010	Presentation to Advisory Urban Design Panel
January 14, 2010	Presentation to Development Review Committee

Board 2 approval

February 4, 2010	Consideration by Board of Governors for Board 2 approval
February	Development Permit Issued

UNA-Greek-Community Liaison Group

Purpose

To create an informal channel of communication between the various community groups. The meetings of this group will be used to:

- Communicate concerns around community activities
- Inform parties about upcoming events
- Maintain a personal connection between different members of the neighbourhood

Proposed Membership:

- Janet Teasdale (Co-Chair)
- AMS VP Academic and University Affairs (Co-Chair)
- IFC President
- 3 Presidents of Fraternities
- One President of Rez Hall
- 4-5 Community Members (UNA + UEL)

Meetings

Meetings shall be held monthly and for a duration of 1.5 hours each