

**UNIVERSITY COLLEGE RESIDENCE EXPANSION
REPORT OF THE PROJECT COMMITTEE
Revised Report | September 09, 2002**

Table of Contents

Executive Summary	III
Committee Membership.....	1
Terms of Reference.....	1
Background Information.....	2
Academic Plan	3
Space Program	4
Functional Plan	6
Environmental Impact.....	9
Special Considerations.....	9
Resource Implications.....	12
Other Related Costs	13
Funding Sources and Cash Flow Analysis.....	13
Schedule	13
Recommendations.....	14

EXECUTIVE SUMMARY

The demand for residence places at the University of Toronto, especially places for first year students, has grown steadily over the last few years. To cope with this growth, *Expanding Residence Capacity at the University of Toronto*, which was developed from the *Raising Our Sights* companion document *Student Housing: A Plan for the Next Phase*, called for the addition of 1935 places for undergraduate students at the colleges on the St. George campus.

University College is the founding college of the University of Toronto and as such plays a special role in the life of the University. It has a proud history of openness and diversity. UC alumni can be found among the leaders nationally and internationally in business, the arts, politics and academia. The development of additional residence spaces is a critical component of the current UC plan. In order to maintain its role as a leader in undergraduate education and attract and retain the best students, the College must have adequate housing facilities.

University College has the most critical need for student housing of all colleges on the St. George campus. It currently can only house 12% of its students. This compares unfavorably with similar colleges, Victoria (24%), St. Michael's (24%) and Trinity (36%), and consequences of this includes displacement of 2nd, 3rd and 4th year students, little housing for exchange, transfer or international students and most critically, diluting its ability to recruit and retain the best and brightest students.

University College's current residences – Whitney Hall and the Sir Daniel Wilson residence – together house approximately 450 students. Based on the guideline in *Student Housing: A Plan for the Next Phase* that the University should have the capacity to house ~25% of its student population, University College's residential capacity should be approximately 900 places. The Project Committee has recommended the construction of 282 new residence places for undergraduate students including two handicapped accessible/short stay rooms, a number which will bring the housing capacity at the College to approximately 20% of the College's full-time equivalent enrolment. In addition to student residence beds, the space program calls for five dons' suites and a Residence Life-Coordinator apartment. Thus, the expansion program calls for the addition of 288 places to the College's housing stock.

In January 2000, the Principal of University College brought together a Project Committee composed of students, faculty and staff. Key alumni have also formed an informal advisory group to the Principal. Over the past two and a half years the College has examined a number of potential building sites. These have included the western edge of the back campus, adding a north/south wing to complete the eastern edge of the Sir Daniel Wilson residence quadrangle and the current choice using an approved building site (Site 22). Because of the sensitive nature of the University College precinct lands, the College has been committed to examining all siting possibilities and feels the current choice best meets UC needs and recognizes the historically sensitive position the College plays on the St. George campus. Numerous town hall meetings have taken place. College Council has unanimously approved both the need for residence and the current location and the University College Alumni Association and University College Committee have both unanimously recognized the need for a residence and support the location.

The new residence will be built in a dormitory style, with washrooms and small common kitchens shared by houses of approximately 55 students. Two bedrooms will be fully accessible, and the layout of all spaces will incorporate the principles of universal design.

Students will be grouped into 5 “houses” of approximately 55 persons; each house will have a common room assigned to it. Two television rooms, a music room, a meeting room, two short-term stay rooms, and a laundry facility will be shared by all students. As much as possible, in order to reduce costs to students, common space will be designed to have multi-purpose use.

The new residence places will house a mix of first-year and upper-year students. Careful attention will be paid to security issues, especially in light of the expected lower age of direct-entry students as a result of the elimination of Grade 13 in Ontario.

The design and detailing of the new residence will be of a good quality, particularly in its exterior finishes; it will be compatible with the historic buildings that surround it and will reflect their collegiate character.

Site planning for the residence expansion program at University College anticipates the new residence will allow the creation of newly defined and improved green spaces within the University College precinct of the St. George campus.

The new residence will eliminate the surface parking from Site 22, but will allow for the creation of an improved east-west pedestrian walkway and sight lines connecting the Back Campus to St. George Street adjacent to the University College Union building. The existing sunken rose garden south of the UC Union will be revised in place or re-located and incorporated into the over-all University College landscape plan.

The space program for the residence expansion totals 4836 net assignable square meters (7406 gross square metres, including switchgear and mechanical room). There will be an increase in all residence fees to achieve this plan: 8% per year for 3 years and then adjusted annually to carry the cost of the construction and operation of the residence. This financial model has been reviewed by the Financial Services Department and conforms to University policy guidelines.

Based on preliminary approval in April 2002, the Sorbara Group was engaged to facilitate the design and construction of the University College residence. In order to best achieve an economical project, this firm – known for their recent experience with the particularly economical and recently completed St. Michael’s College residence - were hired to expedite the process.

Five architectural firms, with proven University residential experience, were asked to respond to a request for proposals to construct the residence. The Zeidler Grinnell Partnership were chosen to design the UC residence and have been working with Sorbara and the Project Committee since their hire in June 2002. Based on the collaborative work between Sorbara and the Zeidler Grinnell Partnership, the building program, building area and total project cost have been revised and are included herein.

UNIVERSITY COLLEGE RESIDENCE EXPANSION: REPORT OF THE PROJECT COMMITTEE

I COMMITTEE MEMBERSHIP

Professor Paul Perron, Principal University College, Chair of UC Users Committee
Ms. Katherine Anne Boyd, Chief Administrative Officer, University College
Ms. Lyndsey Andersen, President, University College Residence Council (2001-02)
Ms. Agata Durkalec, 3rd year biology, Peace and Conflict Studies, residence user member of SAC. (2001-02)
Ms. Jessie Thomson, 3rd year Peace and Conflict student, member of Lit. (2001-02)
Mr. Sean Mullin, 3rd year computer science student, Lit, SAC member. (2001-02)
Ms. Jana Luker, Dean of Students, University College
Professor Sylvia Bashvekin, University College (2001-02)
Ms. Tillie Shuster, Executive Director, Alumni & Development, University College
Mr. Juan Su, President, University College Literary and Athletic Society (2001-02)
Professor Ron Venter, Vice Provost, Space and Facilities Planning
Mr. Julian Binks, Manager, Project Planning, PMDC
Ms. Jennifer Adams, Campus and Facilities Planning
Ms. Eugenia Chalambalacis, Environmental Protection Advisory Committee
Mrs. Elizabeth Sisam, Director, Campus and Facilities Planning, Office of the Vice-Provost, Planning and Budget

Other participants over the term of the Committee include:

Mr. Ben Bathgate, President, University College Literary and Athletic Society (1999-2000);
Professor John Browne, Director of Residence Development (1999-2001); Mr. Ashish Kabir,
Student Representative, (1999-2000); Professor David Rayside, University College; Mr. Marty
Williams, Student Activities.

II TERMS OF REFERENCE

1. Identify the preferred type of accommodation and form of the residence.
2. Make recommendations about a detailed space plan or program indicating how space and facilities should be organized.
3. Identify secondary effects to existing intramural athletic facility.
4. Identify equipment and movable furnishings necessary to the project.
5. Identify requirements for networking and other electronic and data communications.
6. Identify a site for the proposed residence.
7. Identify any staging requirements and transitional costs which may be necessary during the period of construction.

8. Identify all resource implications, including a preliminary estimate of capital costs, and projected increases to the annual operating costs of the College.
9. Identify a funding plan for capital and operating costs.
10. Report by April 15, 2000.

III BACKGROUND INFORMATION

The demand for residence space at the University of Toronto, especially places for first year students, has grown steadily over the last few years. To cope with this growth, *Expanding Residence Capacity at the University of Toronto*, which was developed from the *Raising Our Sights* companion document *Student Housing: A Plan for the Next Phase*, called for the addition of 1935 places for undergraduate students at the colleges on the St. George campus. The College's pressing need for a additional residence capacity has been clearly identified in this process: "University College and Woodsworth College are the least well served in terms of capacity of any of the St. George Colleges" (*Expanding Residence Capacity*).

When the Sir Daniel Wilson residence was completed in 1954, 450 residence places became available at University College for the 1200 students who were members of the College at that time. Today there are ~3700 students at the College, but the number of residence places remains unchanged. In 1954, the College was able to house 37% of its students; today it can house only 12%. The College thus has very few places for 2nd, 3rd or 4th year UC students, students from the professional faculties, exchange, transfer or international students.

The pressure on residence space in recent years has required the establishment of off-site satellite residence clusters, for example at Tartu College Residence at 310 Bloor Street West. The experience of students physically removed from the College is clearly a more disconnected one, despite the considerable steps taken to tie them to the rest of the residence system. The dislocating impact of off-site location, even at relatively modest distances, is a considerable concern for the College. The committee firmly believes that students in residences not located within the existing University College precinct would feel only minimally connected to other residence houses, and would find their attachment to the College itself seriously diluted. In addition, geographic distance complicates staffing and the use of shared facilities, thereby creating diseconomies of scale and inefficiencies in the use of space and personnel. The existence of the University College precinct – along with other college precincts, each with its own social, intellectual, and architectural character – is an essential component of the physical and social structure of the St. George campus. Incorporating new residence facilities into the existing University College precinct retains the kind of social proximity and historical precinct integrity which is desirable on the St. George campus, and in this specific case, indispensable to the College community.

The Committee is unanimously of the view that all the new residence places must be located as close as possible to existing University College buildings. The Committee's view is supported by all of the students who have attended focus groups and other advisory meetings to discuss residence planning, and by the unanimous view of College Council and college alumni groups such as the University College Committee and UC Alumni Association. This collective view is

also reflected in the historical development of the Sir Daniel Wilson Residence and Whitney Hall, both in their day constructed as close as possible to the main University College building.

An approved building site (Site 22) is located immediately adjacent to the Sir Daniel Wilson residence. Even if this site were fully developed within its approved zoning capacity, the number of places which it could provide would fall well short of the number which the College needs for the growing number of undergraduates who are seeking housing at UC nor would it prove financially viable. However, discussions with the City of Toronto have provided advice directing the enlargement of the building envelope. The Committee, therefore, proposes that the new building be constructed on Site 22 within an enlarged, city advised, envelope. The residence is planned to contain 282 residence places, appropriate don's rooms, and a residence life coordinator space (an additional 6 beds) and shared and common spaces including a new servery to update dining facilities for the adjacent Howard Ferguson Hall. With this configuration, the College will begin to approach its housing goals.

Based on preliminary approval in April 2002, the Sorbara Group was engaged to facilitate the design and construction of the University College residence. In order to best achieve an economical project, this firm – known for their experience with the particularly economical and recently completed St. Michael's College residence - were hired to expedite the process.

Five architectural firms, with proven University residential experience, were asked to respond to a request for proposals to construct the residence. The Zeidler Grinnell Partnership were chosen to design the UC residence and have been working with Sorbara and the Project Committee since their hire in June 2002. Based on the collaborative work between Sorbarra and the Zeidler Grinnell Partnership, the building program, building area and total project cost have been revised and are included herein.

IV ACADEMIC PLAN

As the founding college of University of Toronto, University College plays a special role in the history and life of UofT. The College began as part of the great 19th century movement towards universal public education and has over the years become known for its history of openness and for the strength and diversity of its community. Today, University College continues to aspire to be an active, fully-integrated academic community in the University of Toronto, attracting and sustaining highly capable students and illustrious faculty, offering innovative programs of high quality, and benefiting from the support of dedicated staff and ever-widening circles of committed alumni and donors.

The College consolidated its five academic programs prior to *Planning for 2000*. The College now houses seven college programs, including new programs in Aboriginal Studies and in Health Studies, the new Humanities Centre for the Faculty of Arts and Science, and the University of Toronto Art Centre. In conjunction with its student groups, the College has increased the number and the quality of its student activities. The transition to full responsibility for ancillary operations has been completed and a large operational deficit has been eliminated in both the residence and the food service operations. The main College building is now completely wired for backbone connectivity, as are the Sir Daniel Wilson and Whitney Hall

residences. Thus, most of the objectives of previous planning exercises have been met and the College is now prepared to consolidate its progress and pursue new initiatives which are in accord with its geographical and historical place in the centre of the St. George Campus and with the 2000-2004 planning exercise.

Raising Our Sights articulated clear goals for student recruitment, enhancing the learning environment of students, student residences and student life. The College supports and shares these goals with the University and the Faculty of Arts and Science. Two major obstacles, however, stand in the way of greater recruiting success at University College: scholarships and residence places.

The College has identified admission scholarships as a development priority, not just for excellent applicants generally but especially for those beyond Ontario's borders. In support of this initiative, the College proposes to create an International Student Residence Program, using scholarships to attract international students to its residences.

Whitney Hall and the Sir Daniel Wilson residence are an integral part of University College's academic community. They are very attractive to students because of the healthy academic atmosphere, the availability of single rooms, the mix of first- and upper-year students, the flexible meal plans, the central location, and the active student life initiated by residents and coordinated by the dons and staff. However, as previously discussed, spaces are limited in these residences allowing only 12% of the current UC population entry. Expansion of residence capacity is, therefore, the highest priority in the College's 2000-2004 plan.

V SPACE PROGRAM

The Committee proposes to increase the residential capacity of University College by 282 places, a number which will bring the College's housing capacity to approximately 20% of its full-time equivalent enrolment. Six additional places will be created for five dons and one a residence life coordinator. The total residence expansion program will, therefore, add 288 bedrooms to the College's housing stock.

The current design for the University College residence is planned within 4836.5 net assignable meters (7406 gross square meters) of space, including the switchgear, mechanical room and new food preparation and serving facilities for the dining space. At 288 beds, this residence is being designed at under 26gsm/bed with a net to gross ratio of approximately 1.54.

Based on the current organisation of the existing University College residences and their crucial and successful contribution to the student experience at the College, the Committee formulated a number of principles that, within the parameters of the site and budget, it believes should govern the design and space program of the residence expansion as follows:

- Residence design should encourage the development of a community that reflects the values held by University College: diversity, equity, openness, interaction, self-governance.
- In order to create and extend a strong College community, any new residence building must be physically associated with the College.

- New structures should be high quality, respect the architecture of surrounding buildings, and their style should be compatible with the College, the streetscape and the surrounding milieu.
- Common rooms and other shared spaces should be physically located in the new residence in a manner which fosters the development of a strong residential community. With this goal in mind, the committee proposes a “layered” and multi-purpose approach to the lay-out and programming of common facilities: some will be unique to each house; some will be shared between several houses; some will be used by the entire residence and the College.
- To encourage and further the already strongly established link between College and residence life, social functions for students should be held in the College and amenity spaces shared among all University College residents, reducing the ratio of gross area per bed to below other residences on campus.
- A new residence building must be co-educational.
- First and upper year students should interact as much as possible.
- Dons must play an important role in residence life. A ratio of dons to students, similar to that in current residences, should pertain.
- Adequate privacy and security must be maintained.
- Residence design should minimise operating costs.

Residence design must make provision for students with disabilities. New construction should allow for retrofitting of selected spaces to increase the number of accessible areas/rooms/washrooms if the need arises.

Revised Space Program

(all areas in nasm)

Component	Number	Net Area	
		Per	Project
Dormitory Bedrooms			
Single Bedroom	280	10.6	2968.0
HC Bedroom	2	13.9	27.8
Closet	282	1.4	394.8
Shared Facilities			
Bath / Washroom	11	17.8	195.6
Single Stall WC	26	1.4	36.4
Single Stall Shower Room	26	1.4	36.4
Handicap WC	11	8.6	94.6
Kitchen / Common Room	5	52.6	263.0
TV Room	2	44.4	88.7
Dons' Suites			
Bedroom	5	7.4	37.0
Bath	5	4.2	21.0
Living Room/Kitchen	5	15.6	78.0
Storage Closet	5	1.4	7.0
Circulation space	5	7.9	39.5
Residence Life Coordinator Suite			
Bedroom	1	9.7	9.7
Bath	1	6.0	6.0

Living Room/Kitchen	1	21.3	21.3
Storage Closet	1	1.5	1.5
Circulation space	0		0.0
Administrative & Support Facilities			
Linen Closets	5	2.5	12.5
Central Linen Storage	1	12.5	12.5
Central Garbage Room	1	39.0	39.0
Storage Room	1	13.8	13.8
Janitor's Room / Closet	6	2.5	26.8
Garbage Room	11	2.5	27.5
General College Facilities			
Meeting / Multi-Purpose Room	1	50.1	50.1
Music Room	1	14.9	14.9
Laundry	1	26.2	26.2
TOTAL RESIDENTIAL NASM			4549.6

Dining Room and Support			
food access area	1	89.1	89.1
kitchen/food preparation	1	98.9	98.9
food service office	1	20.1	20.1
kitchen storage	1	62.1	62.1
staff WC	2	4.1	8.2
staff lockers	1	8.5	8.5
TOTAL DINING & SUPPORT NASM			286.9

TOTAL Project Net Assignable Sq. Meters	4836.5
TOTAL Project Gross Sq. Meters	7406.0
Net to Gross Ratio @ 1.53	
Gross Area Per Bed = 25.7gsm/bed	

VI FUNCTIONAL PLAN

The Committee envisions a “layered” functional relationship in the layout of the common spaces for the new residences. Some common spaces, such as shared bathrooms and kitchenettes and a common room will be directly associated with each house. Other common spaces, such as TV rooms, will be shared by a number of houses. Spaces such as the dining hall will be shared by the entire College. The committee recommends this layering in order to provide both small-scale spaces of a more intimate nature as well as spaces that can serve multi-purpose use, as well as provide for larger social interactions.

Student Residence Space

The new residence spaces will be constructed in a dormitory style, with washrooms common kitchens and common rooms shared by individual houses. Students will be grouped into houses of approximately 55 persons; design considerations may cause this number to vary, but houses should not be less than forty. Television rooms, a music room and a meeting room will be shared by all students. The placement of shared features should promote horizontal as well as vertical movement through the building.

Because of the close proximity to Sir Daniel Wilson Residence, the Committee felt it was important that common spaces already in Sir Dan's be examined to see if, with some minor renovations, they could accommodate additional student spaces. For example, the current laundry room is quite large and with some renovations and additional machines could accommodate extra traffic. The original plan, therefore, assumed renovated pre-existing laundry facilities would be made available to those students housed in the new residence. Similarly, one music room is already located in Sir Dan's, therefore, one additional small music room was expected to properly serve the expanded residence community. No formal linkage between buildings, however, is currently planned between residences. A dedicated laundry facility and one music room, instead, are planned within the new residence.

Each student will be accommodated in a single room. Bedrooms are planned to be approximately the same size as rooms in the current residences (12 nasm) with the smaller dimension of at least 2.74m (nine feet). Bedrooms should be well lit by both natural and artificial light, and designed and furnished to permit flexible use of the space. The committee suggests the College examine the use of modular (free standing) furniture to allow for maximum flexibility for residents.

Communications linkages to the campus are described more fully later in this report. In general, each bedroom should be equipped with individual telephone, internet and television connections. Separate electrical circuits should be provided for each bedroom.

Good soundproofing between rooms is necessary. To assist with soundproofing, all hallways should have appropriate sound proof, low maintenance material on the floors. Particular attention should be given to attenuating street noise.

Careful attention must be paid to corridor lengths and widths to diminish the "apartment" feeling of the residence, and as much natural light as possible must be allowed to enter the rooms, hallways and common spaces.

Two bedrooms are included for short-term/emergency residence use or by paying guests. These could be built below grade or in otherwise limited-use space.

The bathrooms should be designed to provide maximum privacy where possible. Shower and toilet stall walls are recommended to reach floor to ceiling. Fixtures should be chosen to reduce ongoing maintenance costs.

The small common kitchenettes are planned to incorporate eating, seating and preparation areas, a sink, a microwave, and a small stove. These kitchens are not meant to replace the need for cafeteria food service, but are included to allow flexibility particularly to upper year students with partial meal plans and for other students with particularly restricted diets.

The five Don units will be studios attached to each house with space provided for private counselling and washrooms (similar to current don units). Each don unit should be centrally located within each house. The studios will be furnished. One larger one-bedroom suite is included for a Residence Life Co-ordinator. All Dons' suites should be designed to permit accessibility.

All common spaces should be designed for maximum flexibility and to permit internet access. These rooms include house common rooms, shared TV rooms, the meeting room, the music room and the new dining room.

The Committee recommends two television rooms be distributed among the common space. Placement of these rooms should allow for maximum accessibility and ease of flow to ensure a feeling of inclusion for all students. Television rooms should be situated within equal proximity to the houses sharing them. One music room will be located sub-grade and will require proper soundproofing.

There will be one additional student common room/meeting room to serve as meeting space for all UC students during the day and for resident use in the evening. The room could be used for study by individual residents but could also be booked for such things as meetings or study groups. The room could be located in a public area, secure from the residence to allow unrestricted access to all University College students during the day.

An adequate amount of janitorial, storage space, a supplies room, linen closets for summer conference use, and public washrooms should be provided. A storage room for general residence use (e.g., for extra furniture) is necessary.

Careful consideration will need to be given to all entrances so that in-coming and out-going activity can be easily monitored to ensure security. The Committee envisions using the existing Porter's office in the Sir Daniel Wilson Residence as the central point of monitoring done with security cameras located in the new residence lobby. Student mailboxes will be located in or adjacent to this lobby space. The number of exits should be limited for security/safety reasons (such as the propping open of doors).

The Committee recommends a computerized/card-entry security system for the new residence. This system should be capable of also securing the existing Sir Daniel Wilson residence when updated in phase two of the plan. Doors to each of the bedrooms should be individually keyed. A card system might also be used for laundry machines in order to eliminate coin handling.

Additional capacity in the Sir Daniel Wilson bicycle storage space was originally thought to be sufficient to accommodate the needs of residents in the new residence spaces. However, the current plan does not assume a linkage between buildings and therefore requires an individual bicycle storage space for its residents.

Dining Facilities

This residence expansion program will require the demolition of a portion of the kitchen facilities. This must be examined in detail when the concept is developed for expansion.

New public washrooms must be built immediately adjacent to the dining hall as they are within the area expected to be demolished. Similarly, a ramp or lift must be provided to make fully accessible the dining hall and food servery to all students.

The food service/access area should be designed to have multi-purpose food "stations" or "platforms" of a style employed by many "Marchés". This type of design promises to increase student satisfaction with the meal service offered by the College. There would be no single cafeteria line-up but a number of food stations serving both hot and cold selections, plus beverages. Subject to detailed consultation with food service consultants during the design phase, the Committee envisages several stations or platforms, each with food storage and "finishing" capabilities (grills, fryers, plate racks, etc.), and a beverage cooler having a walk-in access from behind (~2 X 4 metres). Because this format of food delivery must conform to an existing floor area, the nature and number of stations to be provided must be determined with the

aid of a kitchen consultant. Up to three cashier stations might be required between the food service area and the main dining hall so as to permit monitoring but not congesting traffic. A manager's office is needed, with sight lines to the food service area and the dining hall.

The general food preparation will be located next to the dining hall. An adequate delivery area at grade will need to be provided adjacent to this space. Staff change rooms, washrooms, storage areas, and dishwashing facilities should be located in close proximity to the food preparation area, but might be located below grade.

VII ENVIRONMENTAL IMPACT

Energy and water use in the new residence and in renovated or rebuilt spaces will be governed by the terms of the University of Toronto Environmental Protection Policy (see Appendix 3). Every effort will be made in the implementation phase to achieve efficiencies in utilities use in order to reduce operating costs. Other residences in the University have developed recycling and composting programs; these programs could form the basis for a similar program at University College. Thus, provision should be made for recycling areas on each floor of the new residence wings.

The Committee supports the inclusion of gardens/greenery and of landscaping the areas surrounding the new facilities, as well as other College quads to affect a complementary college-wide/campus look. This support does, of course, depend on the overall cost of such features and their design implications, as well as on practicalities such as long-term maintenance and access.

VIII SPECIAL CONSIDERATIONS

Standards of Construction and Quality

The UC community of students, alumni, staff and faculty all maintain a special attachment and bond to the UC campus. There is an overwhelming recognition of the importance of the new residence in ensuring UC continues to maintain a leadership role at the University. The new UC residence will be designed and built recognizing the historic importance and significance of surrounding UC and UofT buildings. Special attention will be paid to exterior finishes and to ensuring that UC "honours its past, while embracing its future". Interior furnishings and fittings will be consistent in quality to those residence projects currently underway on the University of Toronto campus.

Landscape Requirements

The existing pedestrian pathways leading north/south between Hoskin Avenue and King's College Circle must be preserved and enhanced. Particular attention will be paid to preservation of the view corridor from St. George Street leading to the back campus and Soldiers Tower in the distance.

The residence development envisaged in this report takes into account the importance of the UC Union, an integral part of the College's history. The Union, originally the Women's Union, played an important role in the incorporation of women into the University as a whole. In more recent years, the Union has served as a home for the UC Drama Program, and includes the Helen Gardiner Phelan Theatre as well as rehearsal and office space. The Union's common areas are

frequently used by UC students, and for receptions hosted by the College and other divisions on campus. The Union is also an important part of the St. George streetscape, contributing to the human scale of the east side. Therefore, an improved east-west pedestrian walkway connecting the Back Campus to St. George Street will be created between the Sir Daniel Wilson residence addition and the Union building.

The existing sunken garden adjacent to the Union will be re-planted in its current location or moved to an alternate location within the University College precinct and will remain a significant feature of the landscaping. There are some significant existing mature trees, of the same stand of trees along the western edge of the Back Campus, that will be removed by the current residence plan. University College is very sensitive to this matter. The architect will be directed to make every effort to maintain as many trees as possible within the residence expansion design and site access for construction must respect existing trees and protect them.

Accessibility and Personal Safety

The design of the residence, the dining facility and all other college facilities associated with this project must take into account accessibility by persons with disabilities. In addition to the requirements laid out in the Design Standards developed by Operations and Services, consultation with the University's Co-coordinator of Special Services for the Persons with Disabilities and a review by a barrier-free design consultant should be undertaken prior to finalization of the concept design. Two bedrooms on the main floor, and one set of common facilities (shared common room, shared kitchen, bathroom) should be fitted out to be completely wheel chair accessible. The design of several other bedrooms and bathrooms should permit the installation of appropriate assistive devices in the future.

Computing and Communications

Each bedroom will be equipped with internet, cable, and phone connections. The Committee recommends six duplex outlets in each room. There should be an internet connection and roughed-in cable outlet in each common room. As noted earlier, internet connections should also be available in each study area.

The Committee feels that computer connections should be through UTORnet, giving all students access to all the University information services this provides; however, the possibility of using Bell Sympatico or another provider which has an association with the University, will be explored during the implementation stage of the project.

The Committee recommends that the Provost's Advisor on Computing be consulted during the implementation phase on all matters affecting the networking of the residence. Issues of particular importance include the fibre optic capacity to the site and the design and management of firewalls and other security measures.

Waste Disposal and Site Servicing

Servicing for garbage and recycling pick-up is anticipated by this plan to occur off of St. George Street in a modified service bay to be located at the southern edge of the new residence building. An enclosed, refrigerated garbage room with compaction unit should be considered in order to allow for minimum release of odours. The design must minimize visual impact on St. George Street.

Campus Planning Issues

The University College building we know today opened its doors on 4 October 1859 – 6 years after the College's founding in 1853. Subsequent building occurred in the form of the Women's Union building (now the University College Union) in 1885, the Whitney Hall Residence (1931) and later the Sir Daniel Wilson Residence in 1954. With the addition of each building, the University College precinct within the St. George campus developed in an open quadrangle form with significant landscaped courtyards as their fabric.

For some time the Committee considered building a new residence adjacent to Whitney Hall along the western edge of the back campus. This option, paired with additional residence space built on Site 22 provided ~350 additional beds with appropriate amenity spaces and a new dining facility. Underground parking to replace spaces currently located around King's College Circle, underground servicing for the precinct and an improved playing field east of the new residence were considered to further the principles set out in *Investing in the Landscape*, the University's Open Space Master Plan, in this option. The site, zoned UOS by the City of Toronto, was perceived as being highly sensitive to scrutiny and was dropped after a great deal of consideration.

The Committee also examined the possibility of providing residence spaces on Site 22 and adding a four-storey north/south wing to the eastern edge of the Sir Daniel Wilson quad. Following the historical development of the UC precinct on the St. George campus, a new building in this orientation and completing the Sir Dan's quad was proposed as a solution sensitive to its historic surroundings. The Sir Daniel Wilson quadrangle – also designated UOS – was deemed similarly sensitive to development.

In reviewing this latter option with City planners it was concluded, therefore, that enlarging the building envelope on Site 22 to accommodate the required residence spaces would most appropriately accommodate the planned expansion within the University College precinct.

An approved building site (Site 22) located immediately adjacent to the Sir Daniel Wilson residence has been identified for residence development. The University College Residence program will be located here in an enlarged building envelope similar in height to Sidney Smith Hall directly west of Site 22. The residence is anticipated to reach 11 residential stories at its highest point, terracing down to the east to meet the lower scale of the back campus. The number of places that can be provided on Site 22 would fall well short of the number which the College needs for the growing number of undergraduates who are seeking housing at UC were the potential to enlarge the envelope not available. Although the City of Toronto has verbally suggested an increased envelope on this site would be permitted, formal municipal permissions will be required to allow construction on this site to the height and bulk anticipated.

The new building will be located directly adjacent to the Sir Daniel Wilson Residence and will respect a 15m setback from the UC Union building to the north to provide a generous pedestrian connection between buildings. The entrance to the dining hall will remain unchanged, but will have additional access from the north pedestrian walkway to encourage outside participation. The building will also stretch beyond the eastern zoning boundary requiring the relocation and landscaping of the existing pedestrian walkway connecting Hoskin Ave. to the north with the Sir

Daniel Wilson quad and the Front Campus. Servicing will occur off of St. George Street in an improved service bay at the south edge of the site.

IX RESOURCE IMPLICATIONS

A Total Project Cost has been estimated at \$21,500,000 for the current 7406gsm residence plan. The TPC includes \$16,197,470 estimated for construction costs including escalation to March 2003, commissioning, construction contingency and applicable GST. An additional \$5,302,530 has been estimated to include site preparation, services to site, secondary effects, demolition, landscaping, permits & insurance, professional fees, computer & telephone terminations and moves, furnishings and equipment, miscellaneous costs such as signage and security, donor recognition & events, and finance costs.

A breakdown of costs can be found in Table 1, Appendix p. ii.

Site Services

Both a University high voltage electrical service, and high-pressure steam service supply the area. Presently located in the basement of Ferguson Hall are a high voltage switch room, serviced from the U of T grid, feeding several adjacent buildings, and the main steam to hot water heating plant for Sir Daniel Wilson. There is sufficient capacity for the anticipated addition.

It is anticipated that the new structure will be served with water and gas from St. George Street. A stand alone chilled water system will be installed and rooms will be air conditioned to allow the College to make maximum use of the residence rooms for rental during summer months.

Infrastructure Upgrades in the Sector

It is believed that the existing steam and electrical infrastructure will support the building as presently conceived.

Donor Recognition

The new residence project will be transformational for the College and the most important project undertaken in more than 40 years. Alumni leadership fully support the plan and are anxious to proceed. Opportunities for naming and donor recognition will be developed once the design phase is underway and participation from all parts of the UC community will be included in developing policies for honouring past supporters, as well as new donors.

Moving and Staging

Dining facilities and drama practice rooms will require temporary space elsewhere during construction. Student meals may be taken during this time at the Hart House Arbor Room. The Drama facilities will be accommodated within existing University College spaces. The Senior

Common Room, currently located adjacent to the Howard Ferguson Dining Hall will be permanently relocated – likely to space within the University College Union.

No cost allowance has been allocated in the cost estimate to accommodate moving and staging.

X OTHER RELATED COSTS

25 parking spaces located on Site 22 will be lost from the University inventory due to the construction on this site. The annual income from this lot is ~\$48,000. It is anticipated that between 40 – 50% of the University’s parking customers will find other areas to park on campus, therefore it is estimated that parking ancillary revenues will be reduced by at most \$28,800 annually.

XI FUNDING SOURCES AND CASH FLOW ANALYSIS

The following financial parameters have been reviewed and reported on by Financial Services (full memo re: Risk Analysis included in Appendices):

- 1. The projected cost of the new residence is \$21,500,000. This project cost includes approximately \$500,000 for the construction of a kitchen, \$1,015,000 for new furniture and equipment and \$360,000 to maintain the current structural configuration of the drama facility.*
- 2. Current funding for the project has been identified as \$2,500,000 in donations, of which 60% has already been raised, and the assumption that another \$1,000,000 will be raised before the residence opening. Ancillary contributions consist of \$1,485,000 from the UC residence ancillary and \$800,000 for the UC food service ancillary. Academic Priorities Fund support of \$70,000 is available for the drama facility. The remaining \$16,645,000 will be funded externally.*
- 3. The proposed monthly bed rates for the new residence are set at \$597, with the existing residence at \$570. The combined blended rate would be \$580 per month.*

A revised cash flow analysis can be found in the Appendices.

XII SCHEDULE

The need for the new residence is urgent. The College has not been able to accommodate demand for students particularly since the promise to house all first year students was made, with the result that over 100 University College students are being housed in more remote, off-campus sites.

University College has, for the past two and a half years, given careful and considered attention to the selection of a site for additional residence beds. The goal is to be able to accommodate new residence students by September 2004. The project team will look at ways of achieving this, however, recent experience on campus suggests that such a deadline would only be achieved if the design phase were collapsed to 6 months and all permissions were attained without contest.

Schedule required in order to provide a September 2004 move-in date:

University College Residence Expansion Revised Report
September 09, 2002

- Preliminary Report to Planning and Budget – April 2002
- Architect Selection: June 2002
- Design Phase: July 2002 – May 2003
- Revised Report to Planning and Budget – September 2002
- Tender for relocation of services – January 2003
- Construction: to be complete September 2004

XIII RECOMMENDATIONS

That the Planning and Budget Committee recommend to the Academic Board:

1. THAT the Revised Project Planning Report for the University College Residence Expansion be approved.
2. THAT the project scope totaling some 7406 gross square metres, will allow for the addition on an approved building site (Site 22).
3. That Municipal Approvals be sought to gain permission to build outside the current zoning envelope on Site 22.

Appendix

TABLE 1: Total Project Cost Estimates ii
Furniture Budget iii
Cashflow Analysis v
Risk Analysis Memo (Financial Services)..... vi
Fianacial Models Appendix 1 viii
Site Plan Information ix
Environmental Impact..... xii
Room Specification Sheets xiv

TABLE 1: Total Project Cost Estimates

Project Title: University College Residence

TABLE 1: Total Project Cost Estimates

Column 1 will be completed with the Project Planning Report.
 Column 1-5 will be included in the Project Implementation Report.

Items	Project Planning Report	Concept Design	Design Devel't	Drawings @ 90%	Tender	100% Complete
Construction Cost	14,250,000	0	0	0	0	0
Escalation allowance to March 2003	156,750					
Construction Contingency	1,425,000					
Applicable GST	365,720					
Total Construction Costs, plus taxes	\$16,197,470	\$0	\$0	\$0	\$0	\$0
Site preparation	200,525					
Services to site	552,475					
Secondary Effects	na					
Demolition	189,275					
Landscaping,	255,775					
Permits & Insurance	265,530					
Professional Fees	1,558,510					
Computer & Telephone Terminations, moves	51,155					
Moving & Staging	na					
Furnishings & Equipment see schedule	1,013,890					
Miscellaneous Costs [signage,security..]	155,785					
Commissioning	inc. in constr					
Donor Recognition + events	35,800					
Finance Costs see cashflow	1,023,810					
Total Project Cost Estimate GST included	\$21,500,000	\$0	\$0	\$0	\$0	\$0

Notes: prepared August 29 2002.
 All as per Sorbarra estimate dated 29 August 2002.
 For a building of 7,406 GSM

Furniture Budget

Single	280
Residence Life Coordinator	1
Don's - Studio Unit	5
Guest	2
Total	288

Item	Unit Budget \$	#	Total
Bedrooms			
Captain's Bed (Single)	500	288	144,000
Desk (min.60wx30d) , keyboard,	500	286	143,000
Desk Chair	135	286	38,610
Bookshelf - 36w x 30H	200	286	57,200
Bedroom chair	40	288	11,520
Bulletin Board	24	288	6,912
Mattress	115	288	33,120
Mattress cover	14	288	4,032
Blinds / Drapes (in constr budget)	0	0	0
Shower Curtain RLC + Dons	30	6	180
Table (Don's Rm) (Guest room)	300	7	2,100
Extra casual chair (dons)	400	10	4,000
chairs (dons)	135	20	2,700
sofa (dons)	1,100	5	5,500
			=====
		Subtotal / Rooms	452,874
Kitchen			
Residence Life Coordinator/Dons		6	
Common Kitchen		10	
Total		16	
Compact Refrigerator (RLC + Dons)	200	6	1,200
24" Oven	580	11	6,380
Fan Hood - Base Building	0	11	0
.9cuft. Microwave (inc RLC + Dons)	180	16	2,880
Garbage can	20	16	320
Dish rack	10	16	160
Recycling Bin	20	16	320
36"x48" Rectangular Table	300	1	300
36"x72" Rectangular Table	450	10	4,500
Chairs	135	64	8,640
			=====
		Subtotal	24,700
Living Rooms			
Residence Life Coordinator, 1			
Common Room, TV room 5 + 2 seating 20 ea			
Lounge Arm Chair	400	42	16,800
Sofa 2-seat (1 RLC)	950	50	47,500
Sofa 3-seat (1 RLC)	1,100	1	1,100
Coffee Table 24x48 (1 RLC)	400	15	6,000
T.V.	600	2	1,200
Credenza	600	2	1,200

Area Rug	120	1	120
Floor Lamp	50	1	50
			=====
Subtotal /Shared Rooms/Living Room			73,970
Common Washrooms			
Garbage Can 1 in RLC	20	41	820
			=====
Subtotal			820
Multi Purpose Room			
Flex Boardroom Table for 12 (4 @ 60 * 30)	500	4	2,000
Boardroom Chairs	225	12	2,700
Credenza	600	1	600
			=====
Subtotal			5,300
Music Room			
Samick Piano with Bench (assume by others)	0	1	0
Music Stands	0	4	0
42" dia Table	320	1	320
Straight Back Chair	150	4	600
			=====
Subtotal			920
Linen/Storage Rooms			
Flexible Shelving Industrial 36wx4H	480	10	4,800
			=====
Subtotal			4,800
Dining Hall			
Custom Cabinets for Condiments etc.	2,000	1	2,000
Food Service Mgr. Office			
L-Shaped Desk Laminate with Keyboard Tray and one Lateral File	1,500	1	1,500
36w x 72h Laminate Bookcase	200	2	400
Task Chair	275	1	275
Visitor Side Chair	145	2	290
Side Table	200	1	200
Garbage Can	20	1	20
Recycling Bin	25	1	25
Allow for kitchen/servery equipment	250,000	1	250,000
Dining Hall total			254,710
Sub total			818,094
Contingency (5%)			40,905
escalation to mid 2004, 7%			60,130
PST (8%)			73,530
GST (2.31%)			21,232
Total Budget (Incl. taxes)			1,013,891
tpc			768,700

Date Aug-02

Risk Analysis Memo (Financial Services)

Date: August 19, 2002

To: Sheila Brown, Controller and Director of Financial Services

From: Lou Ranalli, Manager, Accounting Services

Copies: Prof. Ron Venter, Vice-Provost, Space and Facilities Planning
Prof. Paul Perron, Principal, University College
Katherine-Anne Boyd, Chief Administrative Officer, University College

Subject: Risk analysis of the University College residence expansion proposal

Scope of review:

The University College residence expansion proposal requires the construction of a, 275 bed, dormitory style residence with a newly constructed kitchen. The residence is scheduled to open in 2004/05 and will be operated by the UC residence ancillary.

The model submitted by University College includes the following financial parameters:

1. The projected cost of the new residence is \$21,500,000. This project cost includes approximately \$500,000 for the construction of a kitchen, \$1,015,000 for new furniture and equipment and \$360,000 to maintain the current structural configuration of the drama facility.
2. Current funding for the project has been identified as, \$2,500,000 in donations, of which, 60% has already been raised, and the assumption that another \$1,000,000 will be raised before the residence opening. Ancillary contributions consist of \$1,485,000 from the UC residence ancillary and \$800,000 from the UC food service ancillary. Academic Priorities Fund support of \$ 70,000 for the drama facility. The remaining \$16,645,000 funded externally.
3. The proposed monthly bed rates for the new residence are set at \$597, with the existing residence at \$570. The combined blended rate would be \$580 per month.

Financial Analysis:

The proposed UC residence is very similar in size and style to the New College residence and the expectation is that operationally, they would be similar. The revenue and expense projections contained within the UC financial model were compared to those submitted by the New College residence operation as part of their request for a Capital Project appropriation increase.

The UC model was found to contain expenditures levels that were on average \$252,000 lower than those contained within the New College submission. The difference mainly being attributed to lower staffing costs. The monthly bed rates were also compared and found to be slightly higher in the UC model than the NC model. The starting monthly bed rate at UC is \$597 as opposed to \$560 for New College. The rate difference of \$37 per month reflects a 7% premium over New College, with this premium increasing to 8% by year 10. The average capital renewal provision in UC model exceeds the New College model by approximately 670K per year. This mainly attributed to the difference in age of the two buildings.

Ancillary contributions of \$2,285,000 are comprised of \$1,485,000 from the UC residence ancillary and \$800,000 from the UC food ancillary. In both cases, these contributions will consume most of the unappropriated surplus anticipated in their current long-range plans. The residence ancillary expects to have \$534,000 remaining in its capital renewal reserve at the beginning of the 2004-05 fiscal year. The low capital renewal reserve represents a risk factor in this proposal, particularly when combined with annual break-even for the combined ancillary in year 5 and cumulative break-even in year 8 and the deferral of capital renewal contributions on the new residence until year 6.

The current financial model yields a per bed cost of \$73,964, based on the total project costs specifically related to the residence. The annual cost of external financing is \$1,541,626 based on the ancillary meeting its internal funding projections of \$4,855,000.

Identified Risk Factors:

1. Outstanding donations of \$1,000,000 will be raised by 2004.
2. Ancillary contributions totalling \$2,285,000 will be available for project funding.
3. Construction costs exceeding current project projections.

Sensitivity analysis:

Since the capital project contains multiple risk factors, a sensitivity analysis was prepared to account for the various possibilities. Medium-case and worst-case scenarios were modelled. The results of the financial analysis are summarized in Appendix 1.

Conclusion:

The financial plan submitted by University College will support the current level of construction costs and meet the required breakeven criteria of year 5 annually and year 8 cumulatively. However, this is contingent on three underlying risk factors. Firstly, the ancillary contributions, which are based on forecasted surpluses, actually materialize and are available in 2004. Secondly, the assumption that UC will be able to raise 1,000,000 in additional donations before the opening of the residence in 2004. Thirdly, construction costs do not exceed current project projections. The first risk factors is categorized as high, with the second and third categorized as low. Overall the project would be categorized as medium risk.

Financial Models Appendix 1

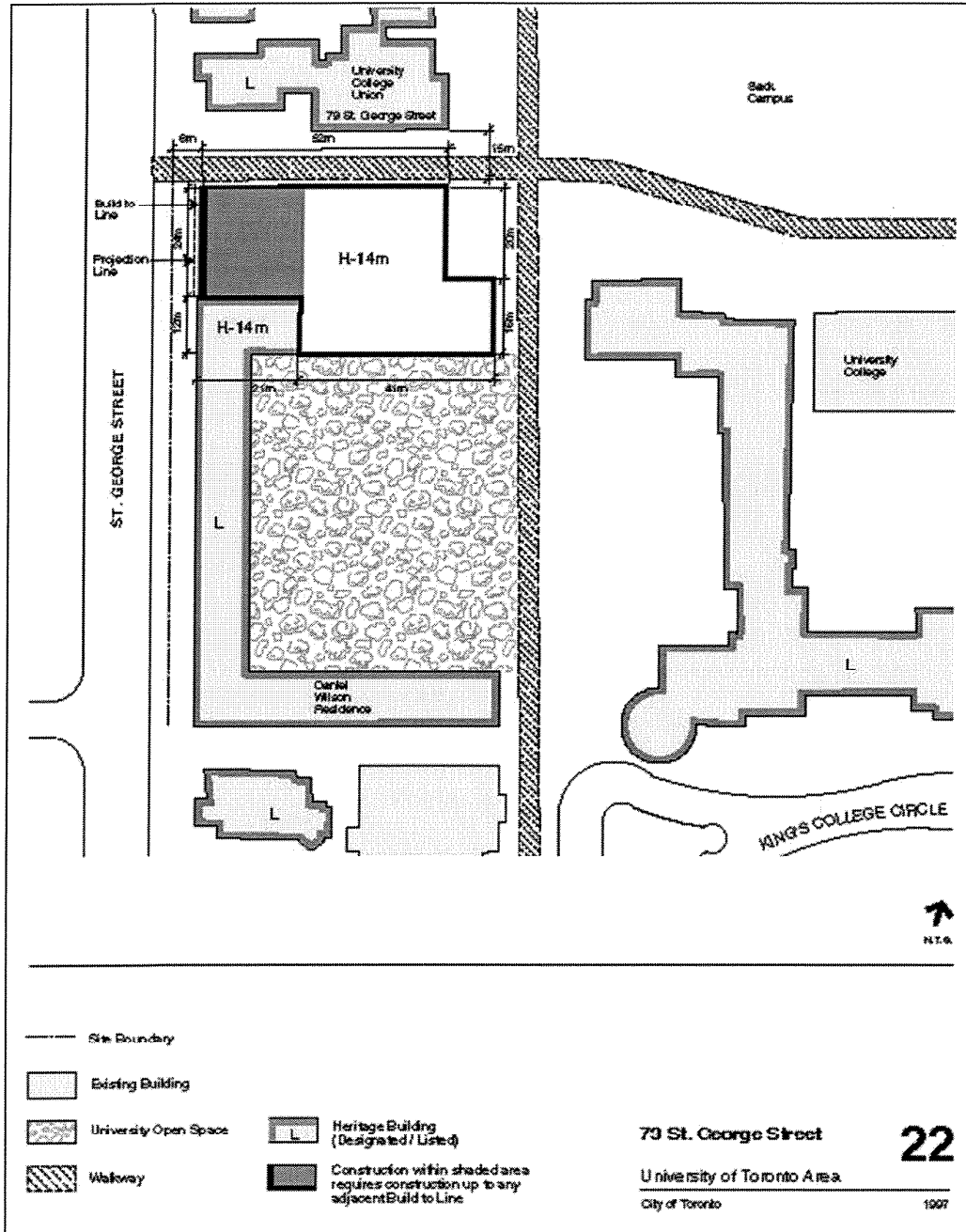
UC Residence Proposal - August 2002 Submission

Sensitivity Analysis on Opening Rates if Project Costs Increase and Funding Shortfall Occurs

	Model 1	Model 2	Model 3	Model 4
	UC Submission	Medium Case	Worst Case	Original Policies UC Submission
Project Cost Overrun of 10%	0	0	2,150,000	0
Donation Shortfall	0	0	1,000,000	0
Ancillary Contribution Shortfall	0	2,285,000	2,285,000	0
<u>Monthly Residence Rate Required</u>				
New Residence Opening Rate	597	605	640	682
Existing Residence Opening Rate	570	577	611	651
Blended Residence Opening Rate	580	588	622	663
<u>Monthly Rate Change from Submitted Model</u>				
New Residence	N/A	8	43	85
Existing Residence	N/A	7	41	81
<u>Percentage Change from Submitted Model</u>				
New Residence	N/A	1%	7%	14%
Existing Residence	N/A	1%	7%	14%
IRR - Combined Operations	8.81%	9.12%	9.46%	11.90%
IRR - New Residence	2.84%	3.04%	3.05%	4.75%
NPV - Combined Operations (Cashflows before financing costs and net of capital cost)	2,096,305	2,908,316	4,168,096	10,755,837

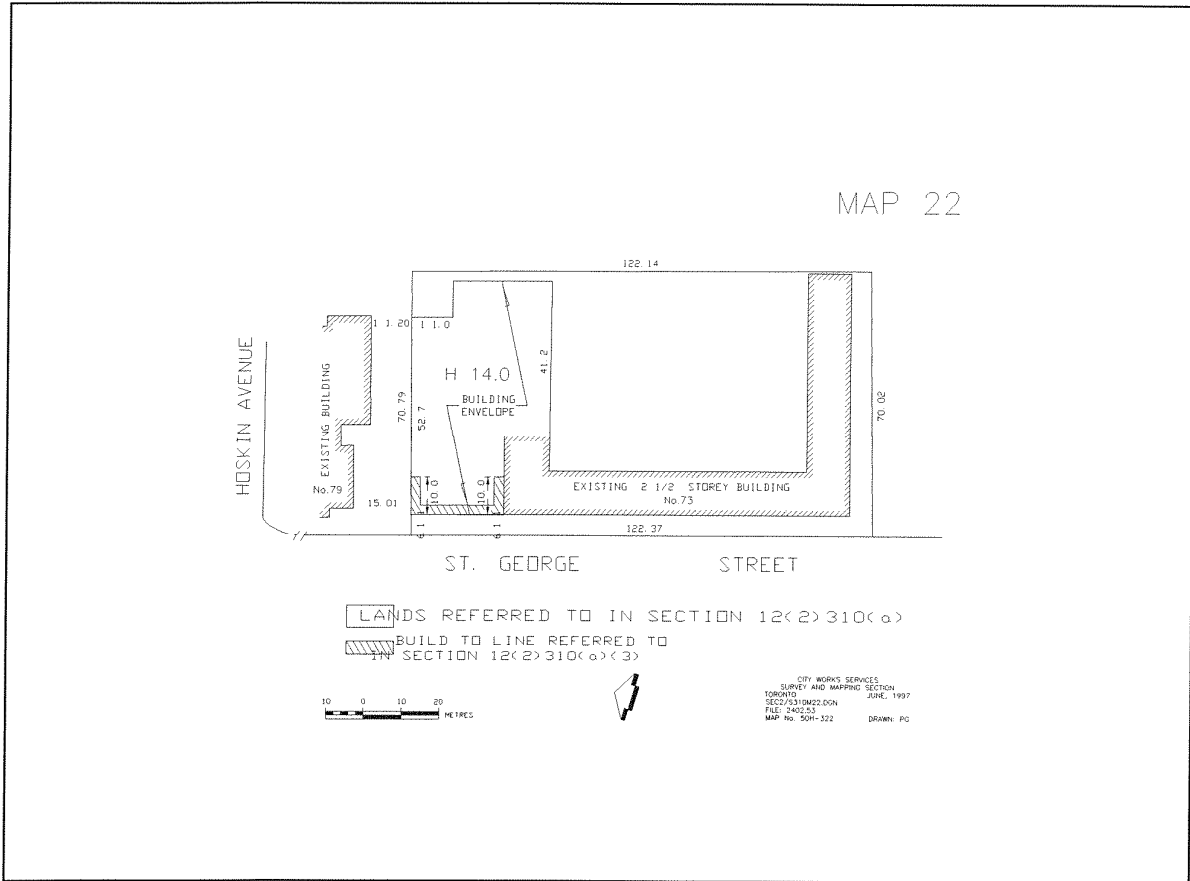
Site Plan Information

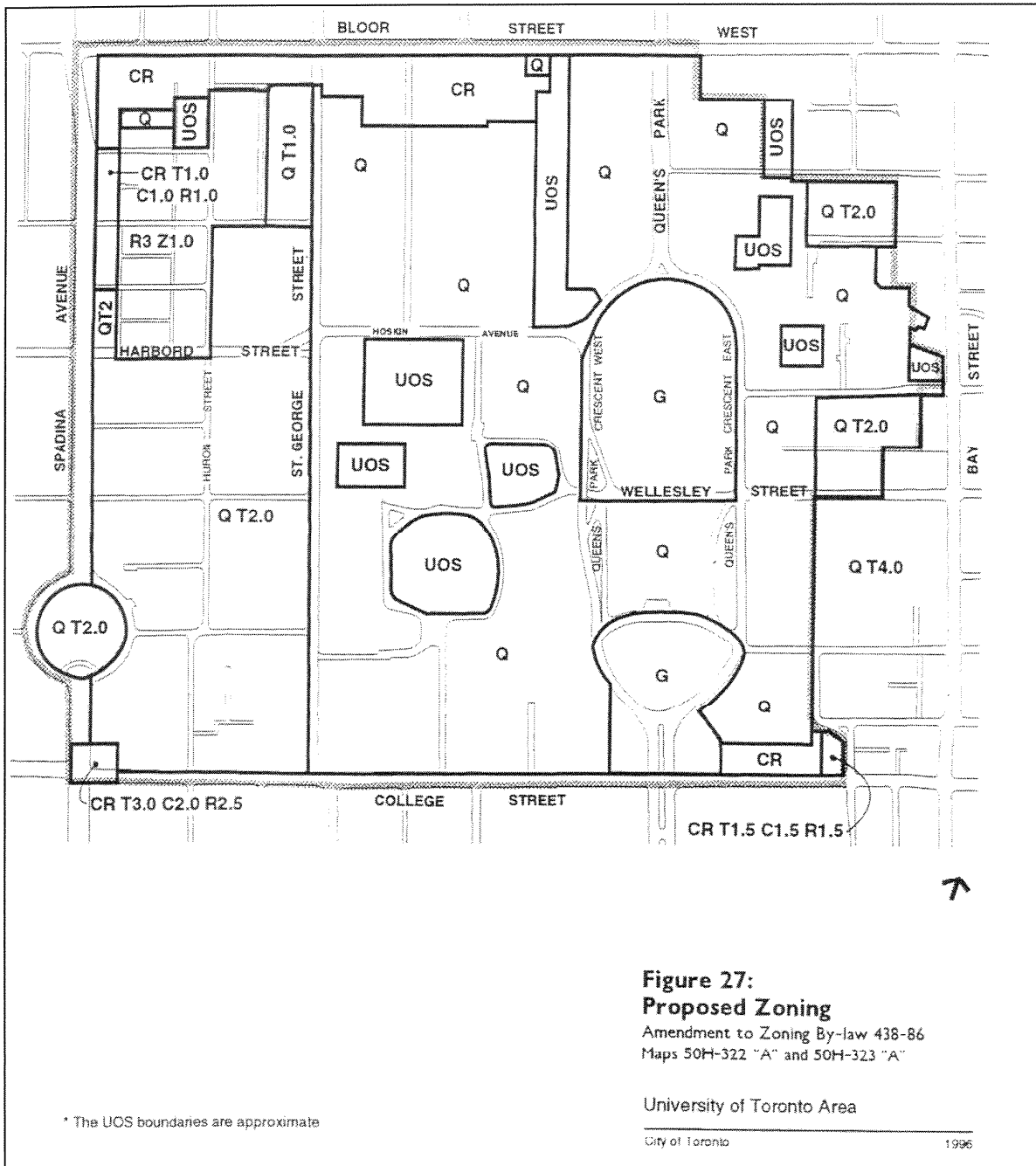
University of Toronto Development Sites



CITY OF TORONTO BY-LAW

No. 1997-0275





Environmental Impact

University of Toronto Environmental Protection Policy

PREAMBLE

The University of Toronto is committed to being a positive and creative force in the protection and enhancement of the local and global environment, through its teaching, research and administrative operations. Recognizing that some of its activities, because of their scale and scope, have significant effects on the environment, the University as an institution, and all members of the university community, have the responsibility to society to act in ways consistent with the following principles and objectives:

FUNDAMENTAL PRINCIPLES

- Minimization of negative impacts on the environment
- Conservation and wise use of natural resources
- Respect for bio-diversity

SPECIFIC OBJECTIVES

In adopting these fundamental principles, the University will be guided by ethical attitudes towards natural spaces, and will take all reasonable steps to meet the following objectives:

- Minimize energy use, through efficient management and practice
- Minimize water use, through efficient management and practice
- Minimize waste generation through reduction, reuse and recycling
- Minimize polluting effluent and emissions into air, land and water
- Minimize noise and odour pollution
- Minimize and where possible eliminate use of chemicals, including outdoor salt, pesticides herbicides and cleaning agents
- Include bio-diversity and environmental concerns in planning and landscape decisions
- Meet and where possible exceed environmental standards, regulations and guidelines

IMPLEMENTATION

To implement this Environmental Protection Policy:

- An Environmental Protection Advisory Committee (EPAC) will be established consisting of administrative staff, academic staff and student groups, to be chaired by a member of the University's academic staff. The Committee will provide advice to the Assistant Vice-President, Operations and Services, on programs to meet the environmental protection objectives. Membership of the committee will be made known to the community to ensure that new and existing initiatives are brought forward for consideration. The meetings of EPAC will be open.
- Facilities and Services, through the Waste Management Department will facilitate the development, implementation and evaluation of environmental protection programs, and will liaise with the EPAC and all three campuses on the programs.
- In this role Facilities and Services will:
 - Regularly review university policies to ensure consistency with this policy;
 - Carry out appropriate environmental audits and pilot projects;
 - Undertake education and training programs to inform the University Community about this and how its members, both personally and collectively, can best meet the objectives set forth in it;
 - Inform all contractors, service operations and users of University facilities that they must comply with the requirements of the policy;
 - Annually issue a report concerning the University's impact on the environment, summarizing initiatives undertaken and identifying matters which require particular attention.

Approved by Business Board of the Governing Council on March 7, 1994.

Environmental Checklist for Users Committees (5/99)

1. General planning principles: Consideration of alternatives, Life cycle approach
2. Minimize Energy Use
 - a) Thermal Energy: Heating, Cooling
 - b) Lighting/Use of Natural Light
 - c) Ventilation/Windows
 - d) Machinery/Equipment
 - e) Orientation of Building - effect on building energy needs
 - f) Roof Design
3. Minimize Water Use (Maximize Reuse)
 - a) Flushing
 - b) Washing - hands and body
 - c) Building Cleaning
 - d) Drinking
 - e) Experimental/Labs
 - f) Equipment Cooling
 - g) Outdoor Vegetation - choice and watering (see #4)
4. Utilization and Diversion of Rainwater
 - a) Use of Roof Water
 - b) Porous Pavements
5. Waste Management (offices, classrooms, food outlets, outdoors, construction/demolition)
 - a) Reduction
 - b) Reuse
 - c) Recycling
 - d) Treatment and Disposal - possible on campus
6. Effluent and Emissions (reduce, reuse, recycle, dispose)
 - a) Indoor (Air Toxicity, Noise, Odours, Ventilation)
 - b) Outdoor Air - laboratory emissions
 - c) Water - Hazardous Wastes
 - d) Land
7. Reduce Harmful Chemicals
 - a) Outdoor Salts
 - b) Pesticides/Herbicides
 - c) Cleaning Agents
8. Outdoor Environment
 - a) Encourage Biodiversity (encourage and protection of species)
 - b) Landscaping/Shading - effect on building energy needs in summer and winter
 - c) Use of outdoor space (e.g. rest areas, roof gardens)
9. Monitoring and Metering of Use of Resources and Wastes
 - a) Water
 - b) Electricity
 - c) Heat
 - d) Wastes
10. Visibility of Environmental Concerns
 - a) Pilot Projects
 - b) Posters/Displays
11. Material Choice (Use of endangered/exotic materials, off-gassing)
 - a) Building Fabric
 - b) Fixtures and Furnishings

Room Specification Sheets

SECTION A:

Dormitory – Bedroom (single)

Rooms Required: 282 student @ 12nasm

NASM Required: 12 nasm of useable space each; width to be no less than 2.74m (9')

SECTION B:

- A. Space purpose and type of activity:** students' private space for sleep and study
- B. Number of occupants, resident:** 1
- C. Number of occupants, transient:** 0
- D. Space relationship, proximity to other rooms/facilities:**
- E. Visual relationship, proximity to other rooms/facilities:**
- F. Furniture and equipment, fixed:**
coat hooks on inside face of door
bulletin board or white board fixed to exterior face of door
moulding or other hanging rail device placed for hanging of posters and pictures along one or more walls
- G. Furniture and equipment, moveable:**
single bed (Captain's bed model)
desk (minimum dim. 30"x60") with keyboard drawer
desk chair
casual chair
bookshelf (@ 3' wide, same height, depth and material as desk)
wardrobe, 60" with 4 drawers
bulletin board (2'x3' minimum)

SECTION C:

- H. Lighting:** large insulated window(s) with operable component(s), non-removable screens, and blinds or heavy, fire-resistant blackout curtains. centrally located overhead light fixture with durable rheostat designed to provide maximum brightness and energy efficiency (no fluorescent tube or halogen lighting)
- I. Power requirements:**
one telephone line
one data drop
cable outlet
6 duplex receptacles - using split circuits between rooms
telephone connection capacity to Porter's office
- J. Special systems:**
card-key door hardware (room number engraved) or other locking system
individually adjustable 2-pipe heat/cool fan-coil unit
- K. HVAC:**
- L. Plumbing:**
- M. Special finishes:** durable, low maintenance flooring (wood preferred, or durable tile in non-uniform, mid-tones)
strong, durable furniture (solid wood recommended)
drywall wall finish preferred over cinder block

SECTION A:

Living Space – Don's Living Quarters – Studio Unit

Rooms Required: 5

NASM Required: 22.5 including kitchenette (an additional 5nasm allocation for w/c within unit is described in following pages)

SECTION B:

- A. Space purpose and type of activity:** private space for sleep and study
- B. Number of occupants, resident:** 1
- C. Number of occupants, transient:** 0
- D. Space relationship, proximity to other rooms/facilities:**
- E. Visual relationship, proximity to other rooms/facilities:**
- F. Furniture and equipment, fixed:**
 - coat hooks fixed to inside face of door
 - white board or cork message board fixed to outside face of door
 - moulding or other hanging rail device placed for hanging of posters and pictures along one or more walls
 - kitchenette unit with cupboards above and below counter with sink, space for microwave and under counter bar fridge.
- G. Furniture and equipment, moveable:**
 - single bed (Captain's bed model)
 - desk (minimum dim. 30"x60") with keyboard drawer
 - desk chair
 - 2 casual chairs
 - bookshelf (@ 3' wide, same height, depth and material as desk)
 - wardrobe, 60" with 4 drawers
 - Table and chairs to seat 4 for meetings and/or counseling purposes
 - Sofa
 - bulletin board (2'x3' minimum)

SECTION C:

- H. Lighting:** large insulated window(s) with operable component(s), non-removable screens, and blinds or heavy, fire-resistant blackout curtains.
centrally located overhead light fixture with durable rheostat designed to fluorescent tube or halogen lighting)
- I. Power requirements:**
 - one telephone jack
 - one data drop
 - cable outlet
 - 6 duplex receptacle - using split circuits between rooms
 - telephone connection capacity to Porter's office
- J. Special systems:** card-key door hardware with room number engraved or other system
- K. HVAC:** individually adjustable 2-pipe heat/cool fan-coil unit
- L. Plumbing:**
- M. Special finishes:** durable, low maintenance flooring (wood preferred, or durable tile in non-uniform, mid-tones) strong, durable furniture (solid wood recommended) drywall wall finish preferred over cinder block

SECTION A:

Living Space – Residence Life Co-ordinator -- Kitchen

Rooms Required: 1 (coordinator of residence operations apt.)

NASM Required: included in nasm allocation for living space (following page)

SECTION B:

- A. Space purpose and type of activity:** individual food preparation
- B. Number of occupants, resident:** 0
- C. Number of occupants, transient:** 0
- D. Space relationship, proximity to other rooms/facilities:**
adjacent to main living space
- E. Visual relationship, proximity to other rooms/facilities:**
open visual relationship between kitchen and living room recommended
- F. Furniture and equipment, fixed:**
1 stainless steel double kitchen sink
counter space to fit (counter top surface durable, non-staining material/colour recommended)
cupboards with shelving above and below counter (durable, non-adjustable hinges, solid wood doors particularly at hinge points)
compact refrigerator
oven/stove with fan hood
- G. Furniture and equipment, moveable:**
microwave (size to be specified)
kitchen table
2-4 kitchen chairs
dish drainer
garbage and recycling bins

SECTION C:

- H. Lighting:** bright, energy efficient overhead light fixture
- I. Power requirements:**
6 duplex receptacles including one special receptacle for stove (recommend separate circuits split top & bottom)
- J. Special systems:**
- K. HVAC:**
- L. Plumbing:** as necessary to supply kitchen sink
- M. Special finishes:** durable, low maintenance finishes (tile flooring and splash back)
- N. Special Needs:** high contrast colours on counters/cabinetry

SECTION A:

Living Space – Residence Life Co-ordinator – Living Room

Rooms Required: 1 (coordinator of residence operations apt.)

NASM Required: 30 (includes space for kitchen as described on previous page)

SECTION B:

A. Space purpose and type of activity: living/entertaining space

B. Number of occupants, resident:

C. Number of occupants, transient:

D. Space relationship, proximity to other rooms/facilities:

adjacent to kitchen

E. Visual relationship, proximity to other rooms/facilities:

open visual relationship between kitchen and living room recommended

F. Furniture and equipment, fixed:

G. Furniture and equipment, moveable:

1 sofa

1 two person love-seat

1 coffee table

area rug

floor lamp

SECTION C:

H. Lighting:

large window with operable compartment and non-moveable screen durable window blinds or durable, fire-resistant black-out curtains
bright, energy efficient overhead light fixture

I. Power requirements:

6 duplex receptacles

telephone jack

cable outlet

data drop

J. Special systems:

telephone connection to front desk, if budget allows.

K. HVAC:

individually adjustable 2-pipe heat/cool fan-coil unit

L. Plumbing:

M. Special finishes:

durable, low-maintenance flooring (wood flooring with tile at entrance and in kitchen/dining area preferred)

N. Special Needs:

SECTION A:

Living Space – Don's & RLC Living Quarters -- Bathroom

Rooms Required: 6

NASM Required: 5 nasm each

SECTION B:

- A. Space purpose and type of activity:**
- B. Number of occupants, resident:** 0
- C. Number of occupants, transient:** 1-4
- D. Space relationship, proximity to other rooms/facilities:**
- E. Visual relationship, proximity to other rooms/facilities:**
- F. Furniture and equipment, fixed:**
 - bath/shower stall
 - standard toilet
 - hand wash basin in cabinet
 - one large mirror mounted above sink
 - towel and toilet paper fixtures
- G. Furniture and equipment, moveable:**
 - shower curtain
 - garbage can

SECTION C:

- H. Lighting:** natural light and ventilation desirable through operable window with blind
centrally located overhead light fixture
- I. Power requirements:** 1 GFI receptacle
- J. Special systems:**
- K. HVAC:** exhaust fan leading to exterior or as required by code
- L. Plumbing:** as necessary for shower, toilet and sink
- M. Special finishes:** durable, low maintenance (ceramic tile flooring and baseboard with waterproof sealant, cement board walls, water-resistant cabinetry recommended).
- N. Special Needs:**

SECTION A:

Shared Facilities – Common Kitchen

Rooms Required: 10

NASM Required: 24 each

SECTION B:

- A. Space purpose and type of activity:** casual food preparation
- B. Number of occupants, resident:** 0
- C. Number of occupants, transient:** 28
- D. Space relationship, proximity to other rooms/facilities:**
 - located centrally on each floor of each house (2 per house)
 - adjacent to or near garbage chutes and recycling if possible
- E. Visual relationship, proximity to other rooms/facilities:**
- F. Furniture and equipment, fixed:**
 - 1 stainless steel double basin kitchen sink
 - counter space to fit (counter top surface durable, non-staining material/dark colour recommended)
 - cupboards above and below counters (durable, non-adjustable hinges, solid wood doors particularly at hinge points)
 - 24" oven/stove with fan hood
- G. Furniture and equipment, moveable:**
 - microwave (size to be specified)
 - dining table (3' x 6' minimum or equivalent round version)
 - 6 dining chairs
 - garbage can
 - dish drainer

SECTION C:

- H. Lighting:**
 - bright, energy-efficient overhead light fixture
- I. Power requirements:**
 - 4 duplex receptacles including one special for stove
- J. Special systems:**
- K. HVAC:**
- L. Plumbing:** as necessary to supply kitchen sink
- M. Special finishes:**
 - durable, low maintenance finishes
 - tile flooring and tile splash-back along all counter space
- N. Special Needs:**

SECTION A:

Shared Facilities – Common Washroom

Rooms Required: 20

NASM Required: 24 each

SECTION B:

A. Space purpose and type of activity:

B. Number of occupants, resident: 0

C. Number of occupants, transient: 14

D. Space relationship, proximity to other rooms/facilities:

central to cluster of bedrooms off residence corridor

E. Visual relationship, proximity to other rooms/facilities:

F. Furniture and equipment, fixed:

3 toilet stalls each with floor-to-ceiling lockable doors (one handicapped accessible per floor)

3 individual shower stalls each with floor-to ceiling enclosures and locking doors (one roll-in handicapped accessible unit per floor)

4 pedestal sinks

large mirror mounted full length of wall above sinks

1 hand dryer

ample hooks for clothing and toiletry items

G. Furniture and equipment, moveable:

2 garbage cans

SECTION C:

H. Lighting: overhead florescent
operable window desirable to provide natural light and ventilation

I. Power requirements:
4 GFI receptacles (1 at each sink)

J. Special systems:

K. HVAC:

L. Plumbing:

as necessary for above

easy access to plumbing for maintenance desired

M. Special finishes:

durable, low maintenance finishes (ceramic tile flooring and baseboard with waterproof sealant, cement board walls and water-resistant cabinetry recommended)

N. Special Needs:

SECTION A:

Shared Facilities – Common Room

Rooms Required: 5

NASM Required: 40 each

SECTION B:

- A. Space purpose and type of activity:** common social activities
- B. Number of occupants, resident:** 0
- C. Number of occupants, transient:** 56
- D. Space relationship, proximity to other rooms/facilities:**
- E. Visual relationship, proximity to other rooms/facilities:**
visual access from primary corridor or entry space to facilitate interaction and promote safety (windows from corridor into space, double-hung doors recommended)
- F. Furniture and equipment, fixed:**
Bulletin board mounted on outside of door
- G. Furniture and equipment, moveable:**
lounge and straight back chairs (to seat, in combination with sofas, 15-20 students)
sofa(s)
2 coffee table(s)

SECTION C:

- H. Lighting:** large windows with operable component and non-removable screens
durable window blinds or fire resistant, black out curtains
overhead fixture(s)
- I. Power requirements:** cable outlet(s) roughed in
one data drop
telephone connection capacity to Porter's office
four 120V duplex receptacles
- J. Special systems:**
- K. HVAC:** individually adjustable 2-pipe heat/cool fan-coil unit
- L. Plumbing:**
- M. Special finishes:** durable, low maintenance finishes (ceramic tile or low maintenance carpet recommended for flooring)
- N. Special Needs:** handicap accessible

SECTION A:

Shared Facilities – Television Room

Rooms Required: 2

NASM Required: 34 each

SECTION B:

- A. Space purpose and type of activity:** common social activities
- B. Number of occupants, resident:** 0
- C. Number of occupants, transient:** 140
- D. Space relationship, proximity to other rooms/facilities:**
- E. Visual relationship, proximity to other rooms/facilities:**
visual access from primary corridor or entry space to facilitate interaction and promote safety (windows from corridor into space, double-hung doors recommended)
- F. Furniture and equipment, fixed:**
- G. Furniture and equipment, moveable:**
lounge and straight back chairs (to seat, in combination with sofas, 15-20 students)
sofa(s)
coffee table(s)
large screen television and VCR
credenza for television and VCR

SECTION C:

- H. Lighting:** large windows with operable component and non-removable screens
durable window blinds or fire resistant, black out curtains
overhead fixture(s)
- I. Power requirements:** cable outlet(s) - roughed in
two duplex receptacles
one data drop
- J. Special systems:**
- K. HVAC:** individually adjustable 2-pipe heat/cool fan-coil unit
- L. Plumbing:**
- M. Special finishes:** durable, low maintenance finishes (ceramic tile or low maintenance carpet recommended for flooring)
- N. Special Needs:** handicapped accessible

SECTION A:

Shared Facilities – Meeting/Multi-Purpose Room

Rooms Required: 1

NASM Required: 24

SECTION B:

- A. Space purpose and type of activity:**
bookable space for group study or meetings
- B. Number of occupants, resident:** 0
- C. Number of occupants, transient:** 12
- D. Space relationship, proximity to other rooms/facilities:**
adjacent to public corridor, near public areas such as the main lobby
- E. Visual relationship, proximity to other rooms/facilities:**
- F. Furniture and equipment, fixed:**
white board
coat hooks adjacent to entry
- G. Furniture and equipment, moveable:**
Flexible meeting table to seat 12
12 meeting room chairs

SECTION C:

- H. Lighting:** large window where possible with operable component, durable blinds
bright, energy-efficient overhead light fixtures with parabolic reflectors on
separate switches for sections of room
- I. Power requirements:**
two duplex receptacles
one data drop
telephone connection capacity to Porter's office
- J. Special systems:**
- K. HVAC:** individually adjustable 2-pipe heat/cool fan-coil unit
- L. Plumbing:**
- M. Special finishes:**
wood or durable carpet (for increased sound absorption) on floors
- N. Special Needs:**
acoustic isolation from adjacent rooms/corridors

SECTION A:

Shared Facilities – Music Room

Rooms Required: 1

NASM Required: 18 nasm

SECTION B:

- A. Space purpose and type of activity:**
Sound-proof room for music practice
- B. Number of occupants, resident:** 0
- C. Number of occupants, transient:** 4
- D. Space relationship, proximity to other rooms/facilities:**
adjacent to public corridor, removed from television/common room
- E. Visual relationship, proximity to other rooms/facilities:**
- F. Furniture and equipment, fixed:**
black board or white board
coat hooks
- G. Furniture and equipment, moveable:**
4 straight back chairs
small table

SECTION C:

- H. Lighting:** large window where possible with operable component, durable blinds
bright, energy-efficient overhead light fixtures with parabolic reflectors
- I. Power requirements:**
2 duplex receptacles
intercom connection or telephone connection capacity to Porter's office
- J. Special systems:**
- K. HVAC:** individually adjustable 2-pipe heat/cool fan-coil unit
- L. Plumbing:**
- M. Special finishes:**
wood or durable carpet (for increased sound absorption) on floors
- N. Special Needs:**
acoustic isolation from adjacent rooms/corridors

SECTION A:

Miscellaneous – Guest/Short-term Room

Rooms Required: 2

NASM Required: 11 nasm of useable space each; width to be no less than 2.74m (9')

SECTION B:

- A. Space purpose and type of activity:** temporary space for sleep and study
- B. Number of occupants, resident:** 1
- C. Number of occupants, transient:** 0
- D. Space relationship, proximity to other rooms/facilities:**
- E. Visual relationship, proximity to other rooms/facilities:**
- F. Furniture and equipment, fixed:**
 - coat hooks on inside face of door
 - bulletin board fixed to outside of door
- G. Furniture and equipment, moveable:**
 - single bed (Captain's bed model)
 - wardrobe, 60" with 4 drawers
 - Simple table to be used as desk
 - desk chair
 - bulletin board (2'x3'minimum)

SECTION C:

- H. Lighting:** insulated window(s) with operable component(s), non-removable screens, and blinds or heavy, fire-resistant blackout curtains. centrally located overhead light fixture with durable rheostat designed to provide maximum brightness and energy efficiency (no fluorescent tube or halogen lighting)
- I. Power requirements:**
 - telephone jack
 - data drop
 - duplex receptacle on each wall
 - telephone connection capacity to Porter's office
- J. Special systems:**
 - card-key door hardware with room number engraved or other locking system
- K. HVAC:** individually adjustable 2-pipe heat/cool fan-coil unit
- L. Plumbing:**
- M. Special finishes:**
 - durable, low maintenance flooring (wood preferred, or durable tile in non-uniform, mid-tones)
 - strong, durable furniture (solid wood recommended)
 - Wall construction in drywall preferred over cinder block
- N. Special Needs:**

SECTION A:

Miscellaneous – Storage Room

Rooms Required: 1

NASM Required: 50 nasm

SECTION B:

- A. Space purpose and type of activity:**
storage of extra mattresses and miscellaneous house supplies, furniture, bedding, etc.
- B. Number of occupants, resident: 0**
- C. Number of occupants, transient: 2**
- D. Space relationship, proximity to other rooms/facilities:**
adjacent to or near freight elevator
- E. Visual relationship, proximity to other rooms/facilities:**
- F. Furniture and equipment, fixed:**
flexible shelving
- G. Furniture and equipment, moveable:**

SECTION C:

- H. Lighting:**
overhead incandescent lighting fixture(s)
- I. Power requirements:**
1 duplex receptacle
- J. Special systems:**
- K. HVAC:**
- L. Plumbing:**
- M. Special finishes:** durable, low-maintenance flooring, tile recommended.
- N. Special Needs:**
- O.**

SECTION A:

Basement – Bicycle Storage Room

Rooms Required: to be accommodated in existing space below grade within Sir Daniel Wilson Hall

NASM Required: tbd. Because dormitory style units, bicycle parking requirements may lessen. Note: The maximum required as per by-law is as follows: "bicycle parking". 0.75 spaces per unit. If more than 2000 GSM non-residential, then 6 bike parking spots. Of all these 80% occupant and 20% visitor, not more than 50% of occupant shall be parked in vertical position, not within dwelling, the occupant parking located in a secure room or area.

SECTION B:

- A. Space purpose and type of activity:**
- B. Number of occupants, resident:** 0
- C. Number of occupants, transient:** 280
- D. Space relationship, proximity to other rooms/facilities:**
adjacent to or within close proximity to elevator(s)
- E. Visual relationship, proximity to other rooms/facilities:**
- F. Furniture and equipment, fixed:**
racks for bicycle locking fixed to floor (sizes horizontal 1.8M * 0.6M, vertical 0.6*1.2M.)
- G. Furniture and equipment, moveable:**

SECTION C:

- H. Lighting:** bright, energy efficient overhead florescent
- I. Power requirements:**
one duplex receptacle
- J. Special systems:**
- K. HVAC:**
- L. Plumbing:**
- M. Special finishes:**
durable finishes
- P. Special Needs:**

SECTION A:

Miscellaneous – Linen Room

Rooms Required: 4
NASM Required: 3 nasm each

SECTION B:

- A. Space purpose and type of activity:**
storage of linens for summer use
- B. Number of occupants, resident:** 0
- C. Number of occupants, transient:** 2
- D. Space relationship, proximity to other rooms/facilities:**
- E. Visual relationship, proximity to other rooms/facilities:**
- F. Furniture and equipment, fixed:**
- G. Furniture and equipment, moveable:**
flexible shelving

SECTION C:

- H. Lighting:** 1 overhead light fixture
- I. Power requirements:**
- J. Special systems:**
- K. HVAC:**
- L. Plumbing:**
- M. Special finishes:**
- N. Special Needs:**

SECTION A:

Non-Assignable – Utility Closet

Rooms Required: tbd

NASM Required: 2 nasm each

SECTION B:

- A. Space purpose and type of activity:**
storage of minimal cleaning equipment and supplies, access to water for cleaning purposes
- B. Number of occupants, resident:** 0
- C. Number of occupants, transient:** 2
- D. Space relationship, proximity to other rooms/facilities:**
- E. Visual relationship, proximity to other rooms/facilities:**
- F. Furniture and equipment, fixed:**
1 large sink/wash-basin
- G. Furniture and equipment, moveable:**
flexible shelving

SECTION C:

- H. Lighting:** 1 overhead light fixture
- I. Power requirements:**
1 duplex receptacle
- J. Special systems:**
- K. HVAC:**
- L. Plumbing:** adequate to serve wash-basin
floor drainage provided
- M. Special finishes:**
- N. Special Needs:**

SECTION A:

Miscellaneous – Custodial Storage Closet

Rooms Required: 1

NASM Required: 5 nasm total

SECTION B:

- A. Space purpose and type of activity:**
storage of linen and minimal cleaning equipment and supplies, access to water for cleaning purposes
- B. Number of occupants, resident:** 0
- C. Number of occupants, transient:** 2
- D. Space relationship, proximity to other rooms/facilities:**
sub-grade
- E. Visual relationship, proximity to other rooms/facilities:**
- F. Furniture and equipment, fixed:**
1 large sink/wash-basin
- G. Furniture and equipment, moveable:**
flexible shelving

SECTION C:

- H. Lighting:** 1 overhead light fixture
- I. Power requirements:**
1 duplex receptacle
- J. Special systems:**
- K. HVAC:**
- L. Plumbing:** adequate to serve wash-basin
floor drainage provided
- M. Special finishes:**
- N. Special Needs:**

SECTION A:

Central Linen Storage

Rooms Required: 1

NASM Required: 12 nasm

SECTION B:

- A. Space purpose and type of activity:** storage of linens for use during summer conferencing
- B. Number of occupants, resident:** 0
- C. Number of occupants, transient:** 3+/-
- D. Space relationship, proximity to other rooms/facilities:** sub-grade near elevator
- E. Visual relationship, proximity to other rooms/facilities:**
- F. Furniture and equipment, fixed:**
Metal shelving to fit along two long walls
- G. Furniture and equipment, moveable:**

SECTION C:

- H. Lighting:** centrally located overhead light fixture
- I. Power requirements:**
1 120V duplex receptacle
- J. Special systems:**
- K. HVAC:**
- L. Plumbing:**
- M. Special finishes:** durable finishes
- N. Special Needs:**

SECTION A:

SECTION A:

Food Access Area

Rooms Required: 1

NASM Required: 100 nasm (to be confirmed with food service provider)

SECTION B:

- A. Space purpose and type of activity:** Food stations – Marché-like – to be located here for student access to a variety of foods and preparation options
- B. Number of occupants, resident:** 0
- C. Number of occupants, transient:** 350
- D. Space relationship, proximity to other rooms/facilities:** Must be directly adjacent to the dining hall and adjacent or vertically connected with the kitchen/food preparation area.
- E. Visual relationship, proximity to other rooms/facilities:**
- F. Furniture and equipment, fixed:** approximately 6 food station platforms to be determined by food service consultant in consultation with the College – each with food storage and ‘finishing’ capabilities
one rear walk-in refrigerator for cold drinks and other food items requiring refrigeration
2-3 cash register stations
- G. Furniture and equipment, moveable:**

SECTION C:

- H. Lighting:** overhead fluorescent
- I. Power requirements:**
As required for food preparation equipment
- J. Special systems:**
- K. HVAC:** venting as necessary by code for food preparation area
- L. Plumbing:** minimum one dual basin kitchen sink
- M. Special finishes:** durable, non-slip flooring
- N. Special Needs:** all food preparation stations to be handicapped accessible

SECTION A:

Food Service Manager's Office

Rooms Required: 1

NASM Required: 12

SECTION B:

- A. Space purpose and type of activity:** office for administration of food facility
- B. Number of occupants, resident:** 1
- C. Number of occupants, transient:** 2
- D. Space relationship, proximity to other rooms/facilities:**
close to food preparation and dining facilities
- E. Visual relationship, proximity to other rooms/facilities:**
visual connection with food preparation area and dining facilities where possible.
- F. Furniture and equipment, fixed:**
One bulletin board approximately 2' x 3'
- G. Furniture and equipment, moveable:**
One L-shaped desk with computer station (minimum 6' x 6') and computer tray
one lateral filing cabinet
one three foot wide, full-height metal bookshelves with adjustable shelving
one ergonomic desk chair on castors
two visitors' chairs with arms
one side table
garbage and recycling bins

SECTION C:

- H. Lighting:** natural light is desirable
Bright, centrally located energy efficient overhead fluorescent lighting
with parabolic reflectors
- I. Power requirements:**
four 120V duplex receptacles
one telephone line
one data link
intercom connection or telephone connection capacity to porter's desk
- J. Special systems:**
- K. HVAC:** individually adjustable 2-pipe heat/cool fan-coil unit
- L. Plumbing:**
- M. Special finishes:** side vision panel at doorway fitted with blind for privacy
- N. Special Needs:**

SECTION A:

Kitchen/Food Preparation

Rooms Required: 1

NASM Required: 100

SECTION B:

- A. Space purpose and type of activity:** for cooking and some preparation of food for dining facility
- B. Number of occupants, resident:** 2-4
- C. Number of occupants, transient:** 4
- D. Space relationship, proximity to other rooms/facilities:** adjacent to or vertically connected through elevator or dumb-waiter system with Food Access Area
- E. Visual relationship, proximity to other rooms/facilities:**
- F. Furniture and equipment, fixed:** to be determined by food service consultant
- G. Furniture and equipment, moveable:**

SECTION C:

- H. Lighting:** overhead fluorescent
- I. Power requirements:**
As required for kitchen equipment to be determined by kitchen expert
- J. Special systems:**
- K. HVAC:** venting as required by code for kitchen
- L. Plumbing:** as required for kitchen sink and dishwashers
- M. Special finishes:**
- N. Special Needs:**

SECTION A:

Kitchen Staff Room

Rooms Required: 1

NASM Required: 20

SECTION B:

- A. Space purpose and type of activity:** for storing of kitchen staff belongings/ to be split into two area to serve both as changeroom and lounge
- B. Number of occupants, resident:** 0
- C. Number of occupants, transient:** 8
- D. Space relationship, proximity to other rooms/facilities:** near kitchen and food access area
- E. Visual relationship, proximity to other rooms/facilities:**
- F. Furniture and equipment, fixed:**
 - 10 full length lockers along one wall
 - one mirror affixed to wall
- G. Furniture and equipment, moveable:**
 - one table
 - 8 chairs
 - small kitchenette with space for bar fridge, microwave, coffee maker, kettle and some cabinetry

SECTION C:

- H. Lighting:** overhead fluorescent
- I. Power requirements:**
 - 3 duplex receptacles including one GFI
- J. Special systems:**
- K. HVAC:**
- L. Plumbing:** one kitchen sink
- M. Special finishes:**
- N. Special Needs:**

SECTION A:

Dining Hall Storage Room

Rooms Required: 1

NASM Required: 40

SECTION B:

- A. Space purpose and type of activity:** to provide room for storage of approximately half of all tables and chairs in dining hall when hall used for other functions
- B. Number of occupants, resident:** 0
- C. Number of occupants, transient:** 2
- D. Space relationship, proximity to other rooms/facilities:** adjacent to dining hall
- E. Visual relationship, proximity to other rooms/facilities:**
- F. Furniture and equipment, fixed:**
- G. Furniture and equipment, moveable:**

SECTION C:

- H. Lighting:** centrally located overhead fluorescent lighting
- I. Power requirements:**
One 120V duplex receptacle
- J. Special systems:**
- K. HVAC:**
- L. Plumbing:**
- M. Special finishes:**
- N. Special Needs:**

SECTION A:

