FOR APPROVAL **PUBLIC** **OPEN SESSION**

TO: Governing Council

SPONSOR: Professor Scott Mabury, Vice President, University Operations
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PRESENTER: As above
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DATE: October 19, 2017 for October 26, 2017

AGENDA ITEM: 5(a)

ITEM IDENTIFICATION:

Capital Project: Report of the Project Planning Committee for the W.G. Davis Building Renovation – Phase 2 (Meeting Place) at the University of Toronto Mississauga

JURISDICTIONAL INFORMATION:

Section 5.6.2 of the Campus Affairs Committee Terms of Reference states that the Committee "considers reports of project planning committees and recommends to the UTM Campus Council approval in principle of projects (i.e. site, space plan, overall cost and sources of funds) with a capital cost as specified in the *Policy on Capital Planning and Capital Projects*."

The *Policy on Capital Planning and Capital Projects* provides that capital projects exceeding $20 million (Approval Level 3), at UTM will first be considered by the UTM Campus Affairs Committee and the UTM Campus Council, which shall recommend approval to Academic Board. The *Policy* further states that "If a project will require financing as part of the funding, the project proposal must be considered by the Business Board." Following consideration and approval by the Academic Board, such proposals are then brought forward to the Executive Committee for endorsement and forwarding, before being considered by the Governing Council for approval.

Separate from the approval of the Project Planning Report, the *Policy* also requires that "Execution of such projects is approved by the Business Board."

GOVERNANCE PATH:

A. Project Planning Report: Project Planning Report, Total Project Cost, and Sources of Funding

1. Campus Affairs Committee [for recommendation] (September 14, 2017)
2. Campus Council [for recommendation] (October 4, 2017)
3. Academic Board [for recommendation] (October 5, 2017)
4. Executive Committee [for endorsement and forwarding] (October 12, 2017)
5. **Governing Council [for approval] (October 26, 2017)**

B. Execution of the Project:

1. Business Board [for approval] (October 10, 2017)

PREVIOUS ACTION TAKEN:

None.

HIGHLIGHTS:

The William G. Davis Building, formerly known as the South Building, is the largest building at UTM and central to the original campus master plan, accommodating the majority of research laboratories, several large lecture halls, Student Services, academic departments and the main administrative functions. The Meeting Place, a key feature of the building since its construction, serves as a gathering space for student activities, social interaction, informal study and dining space related to adjacent food services. The Meeting Place continues to be thought of as the "living room" for the campus. The space remains largely unchanged since 1972 and is in urgent need of expansion and modernization.

UTM has experienced remarkable growth over the past 15 years, from about 6,000 students in 2001 to almost 15,000 in 2016 (head count). While enrolment growth at UTM has presented opportunities for expansion of academic and research programs, it also continues to present significant challenges for campus infrastructure and the physical space needed for teaching, research and student amenities. The project (in conjunction with North Building Phase B under construction) will complete the campuses' *Food Service Master Plan*. UTM has set a target of 0.45 nasm food service space per FTE. The new space allocation will increase to 0.44 nasm per FTE (currently 0.36 nasm per student) with the completion of both projects. For comparison, the range across Ontario institutions is 0.14 nasm to 0.58 nasm per FTE, with UTM falling within this range.

Redevelopment of the Meeting Place was first proposed in 2006 as part of the *South Building Master Plan* once the main occupant of adjacent spaces moved to the new library. Only the first phase of the plan was realized in 2008/09: renovation of the second floor library space to accommodate academic departments and UTM's administrative offices. While the other portions of the 2006 plan were approved in principle, the remaining elements were deferred as UTM focused on expansion of teaching and office space to accommodate fast-paced enrolment growth.

Revitalization of the Meeting Place and adjacent spaces is long overdue and will represent a major contribution toward the kind of quality amenity spaces needed to enhance the UTM experience. The scope includes the renovation of 1,922 net assignable square metres (2,814 gross square metres (gsm) of existing space, expansion into the former Registrar's space, and construction of three small additions totaling 568 net assignable square metres (nasm) or 804 gross square metres (gsm). The project totalling 2,490 net assignable square metres (nasm) or 3,618 gross square metres (gsm) will:

- Provide a new "living room" for the campus community with increased seating capacity for up to 1,000, which is approximately double the current capacity.
- Update the main building entry to address accessibility and operational shortfalls: The
- *2011 Master Plan* emphasises the building's main entrance, which directly links to the space, as a front door to campus. In response, this project includes an exterior element that will provide as enclosed vestibule and canopy to serve as landmark at both a pedestrian and vehicular scale.
- Revitalize the back terraces and enclose a portion of that area to create expanded gathering and seating space.
- Incorporate the former location of the Office of the Registrar into the main Meeting Place to increase seating capacity.
- Enclose the small green roof between the W.G. Davis Building and the adjacent Recreation, Athletics and Wellness Centre (RAWC) to accommodate back-of-house food services functions while maintaining unobstructed window views from the majority of the main seating areas.
- Upgrade/replace existing mechanical and electrical systems.
- Expand adjacent food service capabilities to a minimum of ten outlets delivering healthy choices that reflect campus demand.
- Provide an efficient and attractive interface between the revitalized Meeting Place and the next, final phase of the Davis Building renovation: the Student Services Plaza, including outdoor seating.

Due to the public nature of the Meeting Place and the prominence of the food service component, the Project Planning Committee included significant student participation in the development of the project with representation from UTMSU Executive (University of Mississauga Student Union), UTMAGS (University of Mississauga Association of Graduate Students) and UTM's Residence Dining Committee.

Secondary Effects

Once construction starts, the main area of the Meeting place, currently accommodating over 400 seats, will be taken out of service. Furthermore, the Subway and Booster Juice kiosks will also be closed. Those two outlets and limited seating capacity will be relocated to Spigel Hall. Spigel Hall will not be renovated and the size of the space will accommodate a small fraction of lost seating (40 if the one of the food kiosks are relocated; 90 if only seating is provided).

The Meeting place is the main living room of the campus and also a gateway for many arrivals. Both of these functions will be disrupted and cannot be replaced. The construction will be carefully staged to ensure that the main pedestrian connections are maintained and all fire exit requirements satisfied.

The proposed project anticipates changes to the grading and elevation of the Inner Circle Road, as well as the reconstruction of the main W.G. Davis Building entrance. This work will create disruptions to Mississauga and Brampton bus service, result in the loss of short term parking currently located in front of the Davis Building, and disrupt access to the Student Centre. The bus stops will be relocated to other locations on campus. This has been done in the past during other construction activities and the City will be engaged in developing detailed solutions. While the short term parking spaces will be lost during the construction period, the number of accessible parking spots will be maintained as per City of Mississauga requirements. Access to the Student Centre will be provided by reversing traffic flow of the end portion of inner circle road. This adjustment will also allow access to several fire routes in the heart of the campus.

Currently, the Temporary Food Court is closed during the December and April exam sessions to provide additional exam seating. This practice will cease when the re-construction of the Meeting Place starts. This loss of capacity will be ameliorated by renovating large classrooms to have continuous work surfaces and by the opening of the North Building Reconstruction Phase B in September 2018 which will have a large number of classrooms.

Schedule

Moriyama and Teshima Architects have been retained as project architects and the project has now advanced to the design development stage. The project schedule is as follows:

- Design Development — August, 2017
- Construction Documents — December, 2017
- Governing Council Approval — October 26, 2017
- Tender and Award — February, 2018
- Construction Start — March, 2018
- Substantial Completion — June, 2019
- Full operational occupancy — August, 2019

The schedule assumes all municipal approvals may be achieved within the timelines.

FINANCIAL AND PLANNING IMPLICATIONS:

Discussion of overall costs and funding sources can be found in the *in camera* document for this project.

RECOMMENDATIONS:

Be it Resolved

i. THAT the Project Planning Committee Report for the W.G. Davis Building Renovation – Phase 2 (Meeting Place) at the University of Toronto Mississauga dated August 25, 2017, be approved in principle; and,

ii. THAT the project scope for the W.G. Davis Building Renovation – Phase 2 (Meeting Place) totaling 2,490 net assignable square metres (nasm) or 3,618 gross square metres (gsm)) be approved in principle, to be funded by UTM Capital Reserves derived from Operating and the Food Services Ancillary.

DOCUMENTATION PROVIDED:

- Report of the Project Planning Committee for the W.G. Davis Building Renovation – Phase 2 (Meeting Place) at the University of Toronto Mississauga, dated August 25, 2017.

Report of the Project Planning Committee for the W.G. Davis Building Renovation – Phase 2 (Meeting Place) at the University of Toronto Mississauga

Table of Contents

I. Executive Summary

The University of Toronto Mississauga campus was established in 1967 as one of three campuses of the University of Toronto. The William G. Davis Building, built in 1972 and formerly known as the South Building, is the largest building at UTM, accommodating the majority of research laboratories, several large lecture halls, Student Services, academic departments and the main administrative functions.

A key feature of the Davis Building is the Meeting Place, which continues to function as the main multi-purpose space on campus. It is a gathering place for student activities, social interaction, and informal study and more recently, an overflow space for adjacent food services. The Meeting Place continues to be thought of as the "living room" for the campus. It also remains largely unchanged since 1972 and is in urgent need of expansion and modernization.

UTM has experienced remarkable growth over the past 15 years, from about 6,000 students in 2001 to almost 15,000 in 2016 (head count). While enrolment growth at UTM has presented opportunities for expansion of academic and research programs, it also continues to present significant challenges for campus infrastructure and the physical space needed for teaching, research and student amenities.

Redevelopment of the Meeting Place was first proposed in 2006 as part of the *South Building Master Plan* once the main occupant of adjacent spaces moved to the new library. Only the first phase of the plan was realized in 2008/09: renovation of the second floor library space to accommodate academic departments and the main administrative offices (offices of the Vice-President and Principal, the Chief Administrative Officer, the Office of the Dean, and the Departments of Geography, Political Science and Sociology). While the other portions of the 2006 plan were approved in principle, the remaining elements were deferred as UTM focused on expansion of teaching and office space to accommodate fast-paced enrolment growth.

In 2012, a portion of the area adjacent to the Meeting Place, previously occupied by the library, was converted to a temporary food court (to replace the old cafeteria located in the basement of the building). This was done in anticipation of the proposed project now proposed and the "temporary" construction did not include major HVAC or electrical upgrades. That temporary renovation has served its original purpose, but is now inadequate.

Revitalization of the Meeting Place to include adjacent spaces is long overdue and will represent a major contribution toward the kind of quality amenity spaces needed to enhance the UTM experience. The combined renovation and new construction totals 2,490 net assignable square metres (nasm) or 3,618 gross square metres (gsm). Key project goals include:

- Provide a new "living room" for the campus community with increased seating capacity for up to 1,000, which is approximately double the current capacity.
- Update the main building entry to address accessibility and operational shortfalls.
- Revitalize the back terraces and enclose a portion of that area to create expanded gathering and seating space.
- Incorporate the former location of the Office of the Registrar into the main Meeting Place to increase seating capacity.
- Enclose the small green roof between the W.G. Davis Building and the adjacent Recreation, Athletics and Wellness Centre (RAWC) to accommodate back-of-house food services functions while maintaining unobstructed window views from the majority of the main seating areas.

- Upgrade/replace existing mechanical and electrical systems.
- Expand adjacent food service capabilities to a minimum of ten outlets delivering healthy choices that reflect campus demand.
- Provide an efficient and attractive interface between the revitalized Meeting Place and the next, final phase of the Davis Building renovation: the Student Services Plaza.

Due to the public nature of the Meeting Place and the prominence of the food service component, the Project Planning Committee included significant student participation in the development of the project with representation from UTMSU Executive (University of Mississauga Student Union), UTMAGS (University of Mississauga Association of Graduate Students) and UTM's Residence Dining Committee.

II. Project Background

a) Membership

Paul Donoghue	CAO (UTM) (Co-Chair)
Stepanka Elias	Director, Operations, Design & Construction (UTM) (Co-Chair)
Christine Burke	Director, Campus and Facilities Planning, UPDC
Sarah Hinves	Senior Planner, Campus and Facilities Planning, UPDC
George Phelps	Director, Project Development, University Planning, Design & Construction
Nour Alideeb	Undergraduate Student; President, UTMSU
Marise Hopkins	Undergraduate Student; VP External, UTMSU
Sasha Weiditch	President, UTMAGS
Emily Kim	Undergraduate Student, Student/Resident Student Dining Committee
Jessica Latocha	Undergraduate Student, Student/Resident Student Dining Committee
Pierre Desrochers	Faculty, Department of Geography (UTM)
Lee Bailey	Faculty, Department of Economics (UTM)
Vicky Jezierski	Director, Hospitality & Retail Operations (HRO) (UTM)
Andrea DeVito	Assistant Director, Retail Services & Administration, HRO (UTM)
Sabrina Coccagne	Assistant Director, Conference & Events Services, HRO (UTM)
Anuar Rodrigues	Research Analyst, Office of the Dean (UTM)
Beth Spilchuk	Administrator, Residence Operations, Student Housing & Residence Life
Mark Overton	Dean, Student Affairs (UTM)
Yan Tam-Seguin	Project Manager, Special Projects, Student Affairs (UTM)
Rob Messacar	Manager, Campus Police Services (UTM)
Luke Barber	Manager, IT Solutions & Risk Management, I&ITS (UTM)
Carmen Brown	Administrative Assistant, FMP (UTM) (Committee Secretary)
Gregory Karavelis	Senior Facilities Planner, FMP (UTM)
Paull Goldsmith	Executive Director, FMP (UTM)
William Yasui	Assistant Director, Planning, Design & Construction, FMP (UTM)

b) Terms of Reference

1. Prepare a space program for the revitalization of the Meeting Place that incorporates adjacent areas and a permanent location for food services.

2. Review current and future space opportunities for the Meeting Place including the redevelopment of the main building entry and the incorporation of the terraces on the east side of the Meeting Place.
3. Demonstrate that the proposed space program is consistent with the Council of Ontario Universities' (COU) and the University of Toronto space standards.
4. Develop a functional layout of the space and demonstrate its fit within the parameters of the UTM Food Service Master Plan.
5. Determine any secondary effects to the building project and related resource implications of these effects.
6. Identify all equipment and moveable furnishings necessary to the project and their related costs.
7. Identify phasing opportunities for the implementation of the W.G. Davis Building Meeting Place Renovations and associated total project costs for each phase.
8. Identify all resource implications of the proposal.
9. Identify the sources of funding for the project.
10. Report by February 2017.

c) Background Information

The University of Toronto Mississauga campus was established in 1967 as one of three campuses of the University of Toronto. Located just 33km west of St. George Campus, UTM is situated on 225 acres of beautiful land bound on the east side by protected banks of the Credit River and on the west side by scenic Mississauga Road.

UTM offers a unique teaching, research and work environment. An integral part of the City of Mississauga, UTM now has almost 15,000 students (head count) and over 38,000 alumni worldwide. With 15 distinct academic departments as well as an Institute of Communication, Culture Information and Technology, the Mississauga Academy of Medicine and the Institute for Management and Innovation, UTM continues to play a unique role within the University of Toronto's tradition of excellence in teaching and research.

The William G. Davis Building, built in 1972, the largest building at UTM, accommodates the majority of "wet" research laboratories and associated science departments, several large lecture halls, Student Services, the main administrative functions and the largest cluster of food services.

In 2008/09, UTM developed a Master Plan for the Davis Building (then named the South Building). That Plan called for several phases of redevelopment, enabled by the move of the library to the newly constructed Hazel McCallion Academic Centre. All phases of the Plan were approved in principle, but only the first phase, redevelopment of the second floor to house several academic departments and the offices of the Principal and the Dean were completed. The rest of the Plan was deferred while UTM focused on building new space for teaching, to house expanded academic departments and undertake major infrastructure upgrades across the campus.

Many of the almost 15,000 students and 2,000 staff and faculty travel through, work, study, socialize or dine in the Davis Building on a regular basis. The Meeting Place is a vital part of the campus. It acts as the entrance to UTM's complex of buildings and has traditionally served not only as a campus gateway, but as a prime social gathering place for the UTM community. However, with the exception of continual maintenance and the addition of a couple of food service kiosks, the Meeting Place has generally remained unaltered since the building's opening. It is in urgent need of redevelopment, expansion and modernization.

The proposed project will focus on the following elements:

- Update the main building entry to improve accessibility, to accommodate a larger flow of students, to address the deteriorating landscape, and to provide a more prominent architectural statement to the "front door" of the campus.
- Increase the overall capacity of all included spaces to approximately 1,000 seats.
- Revitalize the back terraces and enclose a portion of that area to create expanded seating capacity.
- Incorporate the former location of the Office of the Registrar into the main Meeting Place to increase seating capacity and provide outside exposure.
- Expand food service capabilities to a minimum of ten outlets to deliver healthy choices with options reflective of campus needs.
- Enclose the small green roof between the W.G. Davis Building and the adjacent Recreation, Athletics and Wellness Centre (RAWC) to accommodate back-of-house food services functions while maintaining unobstructed window views from the majority of the main seating areas. (See also, Functional Plan section, page 10.)

While not directly within the scope of this project, some consideration will need to be given to the next, final phase of the master plan, the creation of a Student Services Plaza in the area adjacent. This construction can commence once the North Building Phase B building is operational, scheduled to open in August, 2018.

To develop a practical vision for the renovation, UTM retained the services of Moriyama & Teshima Architects to conduct a Feasibility Study to explore optimal options for the space, develop a design to the level of Schematic Design, define the limitations of the existing infrastructure, and produce a Class 'D' (Order of Magnitude) cost estimate for the expansion & renovation, to inform the total project cost for the project.

d) Statement of Academic Plan

The University of Toronto Mississauga aspires to be a premier academic institution with exceptional educational opportunities that conducts research of international distinction and provides leadership as an essential partner in the success of our community. The principles that underline our vision include:

1. Well-educated students, with depth and breadth of knowledge, are critical to all aspects of Canadian society. UTM will strive towards an outstanding educational environment for our students, to facilitate learning and accomplishment, both in the classroom and in the broader community.
2. Bringing together the best scholars from around the world to address problems of global significance is essential to an internationally acclaimed research institution. UTM is committed to diversity in scholarship and supporting its faculty to engage in world-class research that bridges disciplines allowing national and international partnerships to flourish.
3. Knowledge and education are powerful forces that can be utilized to improve the wellbeing of communities. UTM will increase and strengthen its outreach and partnerships with local, municipal, regional, provincial, government and non-governmental organizations and agencies to the betterment of knowledge in service of the community.

Sufficient and high-quality amenity spaces for the UTM community will contribute significantly to the realization of these aspirations.

e) Space Requirements

Existing Space

Currently, the main floor (Level 2) of this wing of the Davis Building is divided into two sections: the double-height sky-light Meeting Place and the Temporary Food Court (TFC). The Meeting Place contains seating for 200 people, a full-service Tim Hortons, a temporary Subway, a bank of vending machines, and access to a (crumbling) patio. Once the Davis Building Reconstruction Project is complete, the Tim Hortons and the bank of vending machines will remain in their current locations, with the Subway outlet re-located elsewhere or included as part of the new, permanent food court.

The Meeting Place

Adjacent to the Meeting Place, the Temporary Food Court (TFC) was built in the former library space to provide much needed food service capacity until a permanent Davis Building Food Court could be constructed. The TFC has a self-serve Tim Hortons along with a 7-concept servery and a dining area with just over 350 seats. Given that the TFC was to be temporary in nature, over half of the food service equipment in the TFC was brought over from other discontinued food service outlets on campus (Spigel Hall, North Building Cafeteria). In addition, some of the custom-fabricated millwork pieces in the TFC were designed to be used for other purposes – and possibly in the new Food Court – when the TFC was dismantled. Some of the food service concepts in the TFC may be considered for the new Food Court. Because of its temporary nature, the TFC was constructed without the HVAC/electrical infrastructure that would be needed for a permanent installation.

The Main Commissary Kitchen (Level 1) and Shipping/Receiving Area (Level 0) for UTM are also located in the Davis Building. Food supplies are transported from the Shipping/Receiving Area directly into the Main Commissary Kitchen by the existing elevator (Elevator 0134E) located adjacent to the loading dock. Once prepared, the food items are carted down the corridor to the existing (Elevator 1115E) across from the Bookstore, which accesses the Tim Hortons Service Space on Level 2 as well as the Faculty Club Prep Kitchen on Level 3. The relationship between the Main Commissary Kitchen and Shipping/Received Area, and the means by which food items are transported will remain unaltered for this proposed project.

The current inventory of food service areas is shown in the table below.

Building Name	Food Service Area [nasm]
Communication Culture & Technology	222
Deerfield Hall	398
Hazel McCallion Academic Learning Centre	93
Instructional Centre (UTM)	360
Kaneff Centre for Mgmt & Social Sciences	51
Oscar Peterson Hall (Phase VIII)	998
Recreation Athletics & Wellness	7
William G. Davis Building	2,381
Grand Total [nasm]	4,509

Occupant Profile

The total number of FTE students for 2016/17 and projected for 2018/19 were used as input measures in the Council of Ontario Universities Building Block space formula to generate a theoretical requirement for food service facilities.

	Head Count		FTE	
	2016-17 (Actual)	2018-19 (Projection)	2016-17 (Actual)	2018-19 (Projection)
Undergraduate	13,857	15,149	11,699	12,682
MAM	216		216	
Graduate	431	664	421	632
PhD/Masters	237		237	
TOTAL	**14,741**	**15,813**	**12,573**	**13,314**

COU input measures, defined within the Building Blocks, provide a range of values from 0.5nasm per FTE to 0.7nasm per FTE as being required for food service spaces.

Space Requirements

Using the COU standards, at the present time, the UTM enrollment of 12,573 FTE generates between 6,287nasm and 8,801nasm of food-service related space, and 6,657 nasm to 9,320 nasm based on 13,314 FTE projected in 2018/19.

The UTM space inventory for food services will grow to 4,592 nasm in 2018 when North Building Reconstruction Phase B opens, and this project will further increase the food services space by 1,311nasm for a total of 5,903nasm campus wide (Please see Appendix 2). Based on the student population in 2018/19, the new space allocation will increase to 0.44 nasm per FTE (currently 0.36 nasm per student). While still being below COU generated space, the system average is 0.29 and the range across Ontario institutions is 0.14 nasm to 0.58 nasm per FTE. UTM has set a target within the current Food Services Master Plan for its campus needs at 0.45 nasm per FTE.

Existing Area [nasm]	2018/19 Area w/ North Building B [nasm]	Proposed Area w/ Meeting Place Renovation [nasm]	2016/17 COU Generated Area [nasm]	2018/19 COU Generated Area [nasm]
4,509	4,592	5,903	6,287-8,801	6,657-9,320

III. Project Description

a) Vision Statement

The renewal of the Davis Building's core public space invites UTM community members to relax and interact in differentiated zones that are accessible and adaptable, supporting leisure, socializing, dining, and casual study by individuals and small gatherings of friends and acquaintances. This destination, with modern conveniences and smart finishes, processes and systems – mechanical, electrical, lighting, Wi-Fi connectivity, charging stations, etc. – will provide the kind of amenity space for the entire UTM community that is much needed and long overdue.

As identified in the original Davis Building Master Plan, this project will provide improved gathering and amenity space within the Davis Building for the UTM community and will include a major cluster of permanent food services outlets. When completed, the Davis Building will continue to house the largest food services facility on campus. The Food Service facilities outside of the Davis Building are, for the most part, of relatively modest sizes that have been included in other major capital construction projects (e.g. the Instructional Building, Deerfield Hall, and the Innovation Complex).

Space Program

The total space program for this project, as developed in the feasibility study, totals 3,618 gross square metres (804 gross square metres of new space and 2,814 gross square metres of renovated space), plus another 116 square metres of outdoor space for a total of 3,734 gross square metres. Formally, the Space Program is described in terms of "Net Assignable Square Metres", or NASM (does not include outdoor space) and that is shown in the table below. The difference between the total project area of 3,060 net square metres and 2,490 nasm is related to circulation space.

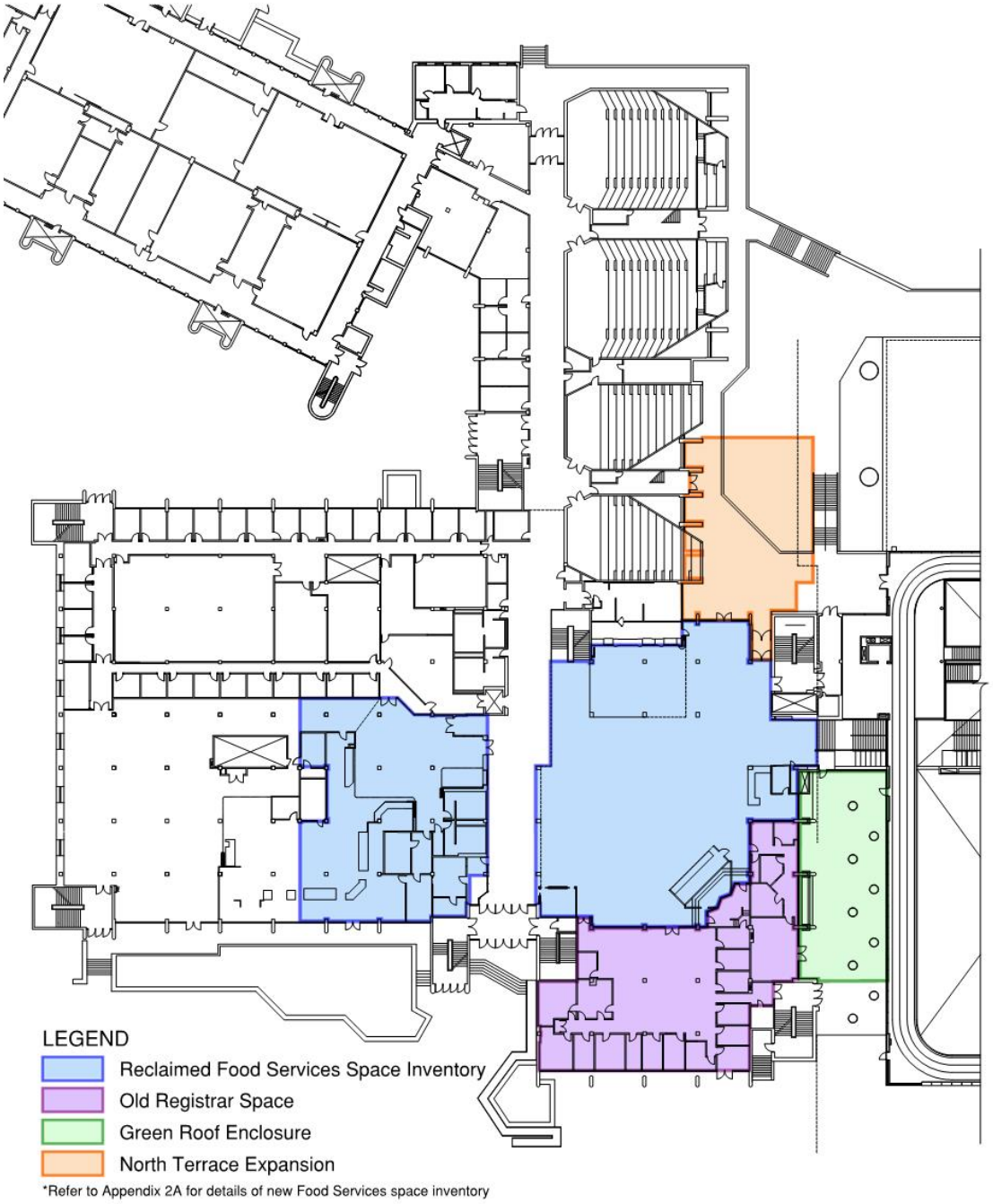
Davis Meeting Place Revitalization	# of Rooms	Area per Room (net sm)	Total Area (net sm)	Total Area (nasm)	Addition Area (nasm)
Main Building Entry*	1	125	125	25	25
Main Seating Area	1	839	839	661	
North Terrace Enclosure	1	313	313	240	240
(Tim Hortons) Kiosk Queuing and Seating Area	1	266	266	211	
South Seating Area	1	209	209	209	
Vending Machine Area	2	6	12	12	
Main Food Court					
Food Court Servery	1	611	611	611	303
Food Court Support Kitchen	1	103	103	103	
West Seating Area	1	495	495	330	
Stand-Alone Food Service Kiosks					
Subway Kiosk	1	35	35	35	
Booster Juice Kiosk	1	25	25	25	
Shared B.O.H. & Storage	1	22	22	22	
Vending Machine Area	1	6	6	6	
TOTAL**	**14**		**3,060**	**2,490**	**568**

Areas are based on Feasibility Study. Final area may vary pending Consultant's proposed design.
* A portion of the vestibule is anticipated as student space/waiting area. Operating Cost for the vestibule is based on 125 net sm.
** The total excludes exterior Terrace Space of 116 sm

Functional Plan

The proposed layout of the area as shown below maximizes the seating capacity while maintaining access to natural light, providing main pedestrian pathways, and accommodating a minimum of 10 food outlets.

It is anticipated that detailed development of the concept below will refine the food servery layout and seating arrangements. The corresponding areas (as per the above space program) will alter slightly.



It should be noted that by expanding the space onto the small area of green roof between the W.G. Davis Building and the adjacent Recreation, Athletics and Wellness Centre (RAWC), 7 of the 9

existing translucent bubble skylights will be eliminated that serve the Weight Training Area and the Aerobic Studio below. This should have very little impact to these spaces since the green roof is flanked on either side by two relatively large buildings and is in shadow for most of the day. Only a minimal amount of (diffused) natural light gets through the skylights into these spaces. The primary source of light for the Weight Training Area and the Aerobic Studio are from artificial sources and the adjacent double-height gym space from which they also receive borrowed natural light.

This project may consider the inclusion of "false" skylights in the Aerobic Studio when its ceiling need to be restored after the new construction above has been completed.

Space Program Elements:

Davis Building Main Entry

The main entry is original to the building (1972) and both the approach and the façade are in urgent need of repair. The concrete stairs are delaminated and the long, winding ramp does not provide inviting or even easy access to those with accessibility needs.

This project will raise the elevation of the Inner Circle Road, thereby decreasing the grade between the road and the main floor of the W.G. Davis Building. This will reduce the number of stairs and the length of the accessibility ramp that are required to reach the main floor. This change, in addition to the possibility of including in the final design a large canopy, will make the entry more accessible to all who use it, more visually pleasing and easier to maintain.

Main Seating Area

As the most prominent location on campus where members of the UTM community come to meet with friends and colleagues, study, lounge during breaks, or dine, the redesign of the Meeting Place will create a new lively, vibrant hub, for the campus.

The Meeting Place will be furnished with an assortment of furniture types (fixed and loose, high and low, hard and soft seating) and a variety of activity zones (group and individual work, active and quiet zones) as defined by the custom millwork and furniture layout. Custom millwork microwave stations, waste/recycling receptacles and extensive power outlets/charging locations shall also be provided.

With the large existing skylight overhead, the space will be open, light-filled and inviting.

An area for student organization event promotions shall be incorporated along the main circulation pathway next to the Meeting Place. This will require space for five stations, each fitting a 6-foot table and two chairs. Digital monitors will be utilized as the backdrop for two of the five stations, where standard campus communications and signage can be displayed when not being used for student-related promotions. The remaining three stations will use wall-mounted whiteboards as their backdrop, using integrated tack strips along the top edge for pinning up promotional material. Each station will also be equipped with power and data.

Main Food Court

The Main Food Court shall be comprised of two areas – the Servery and the Support Kitchen.

Food Court Servery

Within the Meeting Place, the Food Court will accommodate at least 10 food service concepts as well as a "Grab and Go" and cold beverage section in a central cash environment. Primarily supported by the Spigel Commissary Kitchen located on the lower level of the W.G. Davis Building, the Food Court Servery will have its own food preparation/production and ware-washing facilities.

While the food service concepts included in the Food Court have yet to be finalized, based on the results of a recent campus-wide Food Service Survey and in keeping with the design elements of the renovated W.G. Davis Building, the Food Court will contain:

- A mixture of branded and non-branded concepts;
- A self-serve coffee concept;
- At least one branded Asian food service concept;
- A presentation cooking station;
- A salad bar;
- Menus that represent the ethnic diversity of the UTM Community;
- Menus that contain a wholesome selection of vegetarian, vegan, gluten-free, and Halal options.

The Food Court Servery should also include:

- Controlled entrance points;
- Visibility to front-line and backline cooking, preparation and assembly;
- Adequate queuing space for customers;
- Central cash locations; and
- Visibility into the space from the seating area.

Food Court Support Kitchen

The Food Court Support Kitchen will be used primarily as the preparation, food production, and ware washing for the Food Court Servery located in the Meeting Place. It shall store dry food ingredients and disposable service ware (i.e. cups, napkins, etc.) and shall contain or accommodate:

- Dry storage area
- Cold storage area
- Dishwashing space
- Hot & Cold Prep space to support servery
- Mobile Metro Max storage shelving
- Various counter & freestanding kitchen equipment
- A stainless steel service table with a double compartment utility sink
- A hand washing sink
- Under counter high speed, single rack dishwasher
- Back of House waste and recycling storage.

North Terrace Enclosure

Nestled between the W.G. Davis Building and the Recreation, Athletics and Wellness Centre (RAWC), the North Terrace Enclosure will repurpose an underutilized north terrace to create a new seating area. This area is to accommodate seating for about 180 people with a variety of furniture types (fixed and loose, high and low, hard and soft seating) and a selection of activity zones (group and individual work, active and quiet zones) as defined by the millwork and furniture layout. A microwave station and waste/recycling receptacles shall also be provided.

The space should be open, light-filled and inviting.

(Tim Hortons) Kiosk Queuing and Seating Area

To the north of the Meeting Place is an existing Tim Hortons kiosk that will remain in place and operational during the construction of this phase.

The area identified in this section relates to the area occupied by the customers in the queue leading to the service interface. This area does not include the area occupied by the service staff, and the support counters up to the front service interface.

The layout will enable customers to form a line at the service interface, place their order, select food items that will require a degree of customization and make their purchase at one of at least three point-of-sale devices (cash registers) located at the front service counter.

A seating area, accommodating up to 110 seats nearby the existing Tim Hortons kiosk, will be furnished with an assortment of furniture types (fixed and loose, high and low, hard and soft seating) and a variety of activity zones (group and individual work, active and quiet zones) as defined by the custom millwork and furniture layout. A custom millwork microwave station and waste/recycling receptacles shall also be provided.

South Seating Area

Overlooking Inner Circle Road, this will be a new seating area with a visual connection to the south campus (within the space formerly occupied by the Office of the Registrar). With the opportunity to be used as a flexible space, this area is to accommodate seating for about 120 people in an area that can open up to a new, exterior South Terrace Extension as well as expand internally, on the opposite side, into the Meeting Place seating area by use of sliding glass walls.

During day-to-day use, the South Seating Area will be furnished with an assortment of flexible loose furniture (high and low, hard and soft seating) and a variety of activity zones (group and individual work, active and quiet zones) as defined by the furniture layout. Custom millwork waste/recycling receptacles should also be provided.

As this space is along one of the more prominent stretches of glazing within the W.G. Davis Building, the space should be open, light-filled and inviting, complementing the heavy language of the existing building and providing an enhanced, vibrant spatial experience.

South Terrace Extension

Immediately adjacent to the South Seating Area described above, the South Terrace Extension will be a new, exterior seating area with a visual connection to the south campus and a direct view of Inner Circle Road and the new landscaped entrance to the W.G. Davis Building. In its typical setup, the area will accommodate seating for about 64 people outside. With the use of sliding glass walls, this area can be directly connected and opened up to the South Seating Area and will be furnished with robust, comfortable, loose outdoor café furniture.

Vending Machine Areas

The vending machine areas are small space allocations associated with larger facilities, such as the Meeting Place and major circulation spaces, and will accommodate up to four vending machines.

West Seating Area

Proposed in a portion of the space that once held UTM's first Library – currently occupied by the Temporary Food Court (TFC) – the West Seating Area will be a spacious venue that overlooks Inner Circle Road and the south campus. This area is to accommodate seating for about 200 people with a variety of furniture types (fixed and loose, high and low, hard and soft seating) and a selection of activity zones (group and individual work, active and quiet zones) as defined by the millwork and furniture layout. A microwave station and waste/recycling receptacles shall also be provided.

The space should be open, inviting, and vibrant, cohesively incorporating food service kiosks and lounge seating space while still creating an intimate spatial experience.

Stand-Alone Food Service Kiosks

Two stand along food service outlets/kiosks are envisioned as part of this project. At the present time these are Booster Juice and Subway. While the two brands may change in the future, it is important to provide two outlets outside of the main serving area. During low activity times, the main area will be closed while the small outlets will continue to operate.

Subway

The area identified in this section relates to that occupied by the service and support counters up to the front service interface. This area does not include the area occupied by the customers in the queue leading to the service interface.

Nationally branded, limited service, custom-made sandwich and salad kiosk plus grab-and-go packaged items will be accommodated. (For design purposes only, UTM has shown an existing brand, Subway.)

The area will enable not only custom sandwiches and made-to-order salads, but also baked goods and pre-packaged food items.

The server/front service counter is comprised of:

- A front service counter;
- A continuous support counter along the rear of the kiosk, including hand washing sink;
- Staff circulation area located between the front service counter and the back counter.

The layout will enable customers to form a line at the service interface, place their order, select items from self-serve displays or select food items that require a degree of customization and make their purchase at one of two point of sale devices (cash registers) located at the front service counter.

Booster Juice

The area identified in this section relates to the area occupied by the service and support counters up to the front service interface. This area does not include the area occupied by the customers in the queue leading to the service interface.

This area of the stand-alone *Booster Juice* kiosk will accommodate: nationally-branded, limited service smoothie and freshly-squeezed juice kiosk plus grab-and-go packaged items. (For design purposes only, UTM has shown an existing brand, Booster Juice).

The area will merchandise ready for sale food and beverage items including:

- Smoothies and freshly squeezed blend of fruit juices, made-to-order;

- Packaged protein, energy, and snack bars;
- Merchandise.

The server/front service counter is comprised of:
- A front service counter;
- A continuous support counter along the rear of the kiosk, including hand washing sink;
- A staff circulation area located between the front service counter and the back counter.

The layout will enable customers to form a line at the service interface, place their order, select items from self-serve displays or select beverage items that will require a degree of customization, and make their purchase at one of two point of sale devices (cash registers) located at the front service counter.

Non-Assignable Space

Included in the renovation project are non-assignable elements that are not specifically described in the Space Program, but will be part of the Architect's responsibility for the renovation design.

Non-assignable spaces include: washrooms, corridors, stairs, electrical and telecommunication closets, mechanical rooms and shafts, etc. These aspects of the program are not included in the above summary of program spaces. All of the building's assignable and non-assignable areas are to be accommodated within the building gross-up factor described in the space program.

The brown tiled flooring of the existing communication stair next to the Tim Hortons kiosk will be removed and replaced with new porcelain tile. The extent of stair tile replacement will begin one floor below the main floor and shall finish one floor above the main floor.

The Davis Building services large numbers of students, given the presence of the Meeting Place and the number of large lecture halls. With the increase in occupancy within the revitalized Meeting Place, consideration will need to be given to the current number of washrooms available and determine whether this number satisfies current building codes.

b) Building Considerations

<u>Standards of Construction:</u>

UTM's recently constructed buildings (and those under construction) have moved away considerably, architecturally (both exteriors and interiors), from basic, functional forms that are evident in earlier structures, such as the existing William G. Davis Building and the former North Building. The North Building Reconstruction Phase B (currently under construction), Deerfield Hall, the Innovation Complex, the Instructional Centre, the Terrance Donnelly Health Sciences Complex, and the Hazel McCallion Academic Learning Centre can be considered as not only architectural benchmarks, but also as representative of the general standards of construction quality expected for the Meeting Place Revitalization project.

For planning and costing purposes, it was assumed that the Meeting Place Revitalization project will be of a quality similar to that found in the interior design and finishes of the Innovation Complex, Deerfield Hall and the Instructional Centre.

Building Characteristics and Massing:

Floor to floor Heights

Although the majority of this project's program involves the renovation of floor areas within, and adjacent to, the existing Meeting Place in the Davis Building, the proposal does include the construction of new space over the existing roof between the Meeting Place and the RAWC, the enclosure and expansion of the northeast terrace, the provision of a new exterior terrace to the south of the Meeting Place, and a new main entrance to the Davis Building (off the Inner Circle Road).

The planning intent is not to alter any existing floor elevations and any new construction will have matching floor elevations; the existing second floor elevation of the Davis Building is 126.52 metres. To minimize the amount of ramping that might be required at the new main entrance, it is proposed that the approach portion of the Inner Circle Road (from Outer Circle Road) be raised by approximately 0.5 metres at the building's front courtyard to match the road and curb elevations that exist west of the fire route curb cut for the Kaneff Centre/Innovation Complex. Any design associated with the new main entrance, front court yard and south terrace should not only be distinctive, (clearly an architectural destination) but also not detract from or overpower the existing Davis Building south elevation.

Structural Complexity and Built Form

For planning and costing purposes, it was assumed that the new construction associated with this project will have the same structural complexity and a similar or compatible built form to the Innovation Complex. However, the developed design must be appropriate for the specific site conditions for each of the new construction areas and renovation zones.

Material Selection

The existing portion of the Davis Building under consideration and the Meeting Place in particular, have received little or no improvements to architectural finishes in recent years; much of the material finishes are the original, or replaced to match the original, since the Davis Building was completed in the early 1970's. UTM anticipates that this project will lead to the development of a major architectural and interior design statement that warrants being the main or ceremonial entrance to not only the Davis Building, but also the campus.

Notwithstanding the desire for a strong architectural design, the materials and finishes must be carefully selected in recognition of the heavy pedestrian traffic and intensive use that the revitalized Meeting Place and surrounds will be subjected to on a daily basis throughout the whole year.

Key Building Components and Systems:

To ensure a consistent level of standard is met, the University of Toronto has established design standards intended to facilitate the planning, design, and implementation of new construction and renovation projects. They were developed over time with the objective of providing the design professional with information as a guideline in the creation of proven, insightful and consistent design applications. Due to the architectural vintage of many buildings at the St. George Campus, UTM has tailored these standards establishing their own guiding principles to suit the building components and systems that specifically relate to their campus. In addition, UTM has mechanical and electrical building systems and infrastructure that are different from the St. George Campus.

Mechanical / Electrical and Data

UTM will not specifically proscribe the mechanical and electrical systems that must be used in the design and construction of the building systems that will be needed to support the renovated and new construction areas because the design team will be required to replace and update the existing infrastructure to meet UTM's and the City of Mississauga's requirements for LEED® Silver certification. UTM is willing to consider innovative approaches to achieve or exceed these criteria.

However, for planning and costing purposes, it was assumed that the existing heating, ventilating, air conditioning, exhaust, electrical and data design for this portion of the Davis Building will meet or exceed the system upgrades that have been, or are currently being undertaken in the rest of the Davis Building.

All utilities will be properly metered and all building systems monitored and/or controlled through Facilities Management & Planning's building automation system (BAS). UTM's Facilities Management and Planning has prepared specification and standards for architectural design, mechanical and electrical design, building automation systems and data (IT) equipment/infrastructure.

Accessibility

The University is committed to equitable access to all of the building's facilities by the whole campus community. A Universal Design Consultant is typically retained early in the design process to ensure that the consultant's recommendations are being incorporated into the built project.

To address the broad diversity of people who will use the facilities, the signage system will be designed to assist individuals with accessibility needs in identifying spaces (e.g. Braille, high contrast) and wayfinding. Attention will be given to the layout of the space and the materials used and the Access*Ability* Resource Centre will be consulted throughout the design process.

An amendment to the Ontario Building Code (2012) related to Accessibility was filed on December 27, 2013 (Ontario Regulation 368/13). Effective for applications submitted after January 1, 2015, the requirements will be more stringent and impact the following areas relevant to this project: barrier-free path of travel; visual fire safety devices, washrooms, and seating in assembly spaces.

UTM subscribes to the belief that all members of the UTM community and all visitors to the campus should be able to readily enter the campus, its buildings and facilities without any hindrances or encumbrances. Everyone must be able to access and enjoy all that the revitalized Meeting Place will have to offer. This includes, but is not limited to, barrier free access to seating areas, service counters, entries, washrooms, water/bottle-filling stations, etc.

Personal Safety and Security

The design of the Revitalized Meeting Place must allow students, faculty, staff and visitors access as required throughout the day as allowed, safely and easily. At the same time, the design must be sensitive to the needs of those whose activities or facilities require security after hours. Limited areas of the Meeting Place could be operational throughout the week for 24 hours a day.

A detailed security plan will need to be developed for each room, zone or floor area, and factored into the design of any new construction and reconstruction of existing space to ensure that accessibility, security and functional objectives are all met simultaneously. Specific security requirements have been identified in the room data sheets that have been prepared to describe the requirements of individual rooms or areas.

Building & Room Access Systems

Currently, most of UTM's older buildings have exterior doors that are manually unlocked (either standard lock sets or panic bars) in the mornings and locked down at night by Campus Police. Interior facilities that are regularly accessed by students, faculty and staff (such as, classrooms, study rooms, lounges, etc.) are unlocked and locked in the same manner. UTM has transitioned to a new hard key system that provides greater control of security to academic and administrative space by users. The new Medeco system has been included in recently completed renovations and new buildings, and has been retrofitted in buildings throughout the campus where and when appropriate.

Recently, new buildings and major renovations have installed electronically controlled exterior doors that can be operated either through a soft key (card), locally programmed or network driven systems. The current direction of building access has been to use centrally programmed and monitored card readers.

Individual rooms (e.g. classrooms or student study areas) can also be unlocked or secured with similar systems. The particular system or mix of systems will need to be developed in conjunction with Campus Police, Facilities Management & Planning, the building occupants and other campus agencies. Card readers may be requested by departments for controlled access after normal hours of operation. Any electronic security system will need to have hard key override for use by police and emergency responders. UTM maintenance and custodial staff will either be programmed into the security system or will log out appropriate soft or hard keys when required.

Non-public areas, for example, mechanical/electrical areas, custodial rooms and telecommunication closets, will require standard Medeco lock sets or card access as per UTM's specifications and standards.

CCTV & Related Security Systems

UTM currently has closed circuit security cameras (CCTV) within critical areas of its buildings and throughout the campus. Wherever there are concerns of personal safety or the security of specific equipment, cameras are strategically located to provide suitable coverage; these cameras are connected to Campus Police monitors and recording servers in the William G. Davis Building. New cameras may be needed in any new construction or exterior alterations, or existing cameras may need to be relocated and additional units placed in renovated space to ensure suitable coverage. These alterations and additions to the CCTV system may require enhancements to the existing hardware (equipment, infrastructure) and software of the monitoring and recording system.

The number of cameras that will be needed in this project will depend on the design and layout of new construction and renovation areas. As this project includes the major redevelopment of the Davis Building's main entrance and fore court, as well as the walkway between the Parking Decks and the Inner Circle Road, a number of exterior cameras will be required. As with interior cameras, the number will depend on the main entrance and landscape designs. For planning purposes, the total project cost (TPC) estimate includes an adjusted allowance based on the projected cost of the same system that is currently being installed in the North Building Reconstruction Phase B project.

UTM currently has emergency call stations located throughout the campus grounds and in some building locations; these stations are located in convenient locations (for example, readily visible in pedestrian travel routes or building entrances). For planning purposes, it was assumed that at least one emergency call centre be included in the Revitalized Meeting Place in a location that is readily seen and accessed (but not subject to accidental activation). Current security standards require that the activation of an emergency call station will direct nearby cameras to pan and zoom to the call station.

As with all recently completed buildings on campus, public address (PA) systems for emergency communication and notification have been included in the budget. The PA system will cover the main hallways and any high occupancy locations.

Servicing (including garbage and recycling, deliveries)

The Davis Building has UTM's main shipping and receiving facilities in its lowermost level (Level 0) that is accessed by vehicles from the Outer Circle Road (opposite Parking Deck 1). This facility also handles all of the waste management requirements for the building's occupants and activities. The main dock also accommodates the receiving and waste management functions of UTM's main commissariat (food services) operations. Access to the main dock is either via the building's only freight elevator or a semi-public corridor that serves the rest of this basement level.

The proposed project does not include any physical changes to the existing dock facilities. However, the proposed type and number of food outlets in the Revitalized Meeting Place will have to be examined carefully to ensure that additional demands (deliveries and waste) to the main dock do not exceed its existing operational capacity.

As the Revitalized Meeting Place will have almost double the seating capacity of the existing Meeting Place, a significant number of waste and recycling stations located conveniently throughout all of the areas included in the proposed project scope will be needed.

UTM's longer term capital project and expansion plans include expansion and enhancement of the existing loading dock and stores area. This work will be done at a later date and it will be part of another project.

Acoustics

The acoustical quality of the built environment is important in new construction and renovations. In public areas and crush space for large classrooms, it is critical that the noise created in these spaces is not unduly transmitted throughout the space itself and into adjacent areas.

The acoustic characteristics of gathering spaces, such as the main seating area in the Revitalized Meeting Place, must be able to ensure that individuals using or passing through the area are not unduly assailed with an uncomfortable din of noise, and that users can enjoy conversations without the need to talk above the ambient background noise. Depending on the design that is developed for each area, passive and/or active sound treatments or systems will need to be incorporated to ensure that any noise or sound generation within the area is kept to an acceptable level and does not spill out to adjacent spaces.

Signage and Recognition

This project will need to provide all necessary signage (both interior and exterior) associated with the revitalization program for the Meeting Place.

Interior signage includes not only those signs mandated by the Ontario Building Code, but also function identifications, room names and numbers (including existing and new stairs, elevators, mechanical/electrical/telecommunication rooms), and interior wayfinding (both applied and digital).

With the food service element of this project being a very prominent aspect of the design, there will be a need for the design of the main food server area to incorporate both passive (permanent and temporary) and digital signage. The main Meeting Place seating area will also occasionally require the set up and display of signage for specific student and campus related activities.

Exterior signage includes building identification, street and road signage for pedestrian and vehicular wayfinding, and other site specific signage (e.g. parking, loading dock instructions, etc.). There will also be a need at the main entrance for the design to accommodate temporary signage (such as, large banners).

UTM has specifications and standards for both interior and exterior signage that the design team will be required to implement on this revitalization project.

Sustainability Design and Energy Conservation (LEED):

The University of Toronto has a long commitment to environmental sustainability across the academic and administrative operations of the institution. The University has been guided by an Environmental Protection Policy since 1994. This policy outlines the University's commitment to minimizing negative impacts on the environment, conservation and wise use of natural resources, including environmental concerns in planning. The policy also commits the University to meeting and where possible, exceeding, environmental standards, regulations, and guidelines.

UTM's banner for growth - *Grow Smart, Grow Green* - balances campus development with environmental sensitivity and responsibility. The tri-campus Sustainability Board and its sub-committees review energy, capital projects and funding models for sustainable initiatives and the University of Toronto continues to make strides in the area of sustainability.

The most intriguing of new buildings on the campus are held to a rigorous set of university design standards, including environmentally sustainable measures. This project will follow the lead of earlier projects at UTM: the Hazel McCallion Academic Learning Centre (HMALC), the Instructional Centre, the Terrence Donnelly Health Science Complex, Deerfield Hall, the Innovation Centre, and the third floor renovation of the Davis Building have all achieved or awaiting LEED® Silver. North Building Reconstruction Phase B, currently under construction has been designed to LEED® Silver as a minimum goal. UTM required that all new buildings and major renovations be designed and built to a minimum LEED® Silver certification before the City of Mississauga adopted the same requirement for new buildings as part of its Green Development Standards.

As the Meeting Place Revitalization project will be a significant capital project that involves the upgrade of associated mechanical/electrical infrastructure, the current undertaking will be designed and constructed to meet LEED® NC certification at a Silver rating, or better.

For the aforementioned building projects, the sustainable design strategies that have been considered were:

- Low maintenance native plantings
- Water-efficient fixtures and combined water fountains/bottle-filling stations
- Durable, local materials with renewable and/or recycled content
- Energy efficient equipment and fixtures
- Energy efficient lighting and controls, coordinated with natural light where appropriate
- Zoned HVAC control wherever beneficial and desirable
- Optimal energy efficiency for reduced operating cost and emissions
- Provision of recycling depots for source-separation of waste throughout the building to meet the needs of the University's recycling and waste reduction programs and vehicular access to these sites
- Roof areas suited to the incorporation of solar thermal water collectors and photovoltaic collectors if opportunities for such installations become available.

UTM recognizes that some of the above strategies are not directly applicable to interior renovations, but many of them have been entrenched into UTM's design standards, specifications and policies.

Other Project Considerations:

UTM has recently completed an update of the Facility Condition Assessments of all of its buildings. At the time of writing this report, UTM has also completed a survey of all buildings that is needed to update reports on asbestos-containing materials in each building; final reports are expected early in 2017. This project will be required to address any issues (hazardous materials, deferred maintenance, etc.) that have been identified as outstanding or of concern. The project will require additional investigation to confirm the existence of any hazardous materials and ensure that the appropriate protocols and procedures are defined and implemented.

As noted earlier, the project will undertake the renewal of all pertinent mechanical, electrical and telecommunications equipment, infrastructure and systems to meet current UTM standards and specifications. These changes will not only affect the immediate project areas, but also the adjacent Davis Building spaces that currently share these same systems.

The design must not only bring the building's systems up-to-date, but needs to ensure that the activities in the main food servery and preparation areas have suitable systems (especially HVAC) to accommodate potential sources of odors, steam and heat, and to deal with any potentially hazardous activities.

The boundaries of this project within and outside the Davis Building will need to be altered to meet the specific requirements of construction activities throughout the project. This flexible boundary is necessary to minimize the impact of pedestrian traffic through and around the project areas, and pedestrian and vehicular traffic in those areas of new construction outside the building itself.

Although the project schedule that appears later in this report assumes that the design and construction contracts will be issued on the basis of continuous progression of construction activities, the reality is that some staging of activities in project areas will need to occur to minimize some of the secondary effects associated with the project and to ensure that pedestrian traffic through the Davis Building and to surrounding operations are minimally impacted during construction.

The earlier feasibility study recommended that a construction staging area (for materials and trailers) be established beside and partially within the service area to the building's loading dock. The amount of space and on-going activities will have to be carefully coordinated with Facilities Management & Planning to ensure that normal dock and waste management activities are not compromised, and that other contractors working in the Davis Building do not lose access to the loading dock.

c) Site Considerations

Campus Planning:

Campus planning at UTM has evolved with enrolment growth and has been guided by key principles established in the Campus Master Plan of 2000 and updated in 2011. Seven major buildings have been added to the inventory at UTM since 2000; with two more under construction. Their siting and massing follows the planning principles set out in that document. The 2011 Campus Master Plan (update) builds on the 2000 Master Plan by taking into account the growth as it has actually transpired since the earlier plan was published.

http://www.utm.utoronto.ca/facilities/campus-master-plan

Part of the proposed new construction will fall within Sites 5 and 6 of the South Campus sector. Consistent with the Campus Master Plan, the new construction within Site 5 shall include a double-height entry vestibule – a landmark element visible from other parts of the campus – as well as enhanced landscape improvements seamlessly integrating a new barrier-free ramp system along the south façade of the Davis Building.

The new construction of Site 6 shall include an outdoor patio area along the south façade of the Davis Building, an extension of the South Seating Area. The walkway path connecting Inner Circle Road to Outer Circle Road shall be regraded and redesigned to meet current AODA standards, as well extend the planting and hardscape concept from Site 5, creating a cohesive and integrated design from east to west, unifying the Davis Building and the adjacent Recreation, Athletics and Wellness Centre (RAWC). Any anticipated future development as outlined in the Campus Master Plan shall not prohibited by this new construction.

The entrance to the Davis Building, at the Meeting Place, is considered the front door to the campus. The main Davis Building entrance opens into the Meeting Place from the main public transit and car drop-off location on campus. The entrance to the RAWC is from Parking Lots 4 and 8 – the largest parking lot area on campus.

d) Campus Infrastructure Considerations

The proposed renovation is consistent with not only the Campus Master Plan, but also with the availability of existing infrastructure and utilities required to support the expanded services of the new Meeting Place and serving area.

The existing commissary kitchen will remain in its current location. It would be cost- and space-prohibitive to relocate and integrate the existing kitchen into the area on the main floor.

The existing mechanical and electrical infrastructure of the portion of the building to be renovated is largely original. Furthermore, the increased intensity of the space will require significant improvements to the Mechanical and Electrical systems of the building. The feasibility study identified and costed all systems that need to be upgraded to support the new Meeting Place.

Sewer and storm water management needs will be handled through existing infrastructure and the campus storm water pond. The proposed renovation does not impact the overall building envelope: the two proposed additions will be built on areas that are currently made of non-permeable materials (poured concrete).

Logistics of food deliveries and waste disposal will be facilitated via existing elevators. Several options and layouts were investigated that considered new, additional elevators. Unfortunately, is not practical to install new food lifts/food service dedicated elevators; the proposed layout was designed to function efficiently while being supported only by the existing elevators.

Information & Instructional Technology Services anticipates a large increase in the demand for wireless connectivity in the new Meeting Place driven by the increased number of users (1000 in total requiring approximately 30 WAPs). Currently, all data needs of the Meeting Place, as well as of a large portion of the 3rd floor area, are served by two crowded communication closets located within the renovation area (DV2122M, DV2084A). It is therefore proposed to create two new communication closets that will be sufficiently sized for the anticipated demands and that conform to UTM Construction Standards. These two rooms have to be strategically located to cover the needs of the renovated meeting place and the next proposed Davis Building renovation project, the Student Services Plaza.

Furthermore, this project includes construction of a redundant fiber link from the Outer Circle Road. This element will complete UTM's inter-building master plan and provide an urgently needed redundant link to one of the largest and most demanding buildings on campus. Installation of conduits will be done cost effectively while working on the exterior portion of the project, creating improvements to the pedestrian path and while creating the exterior terrace on the west side of the W.G. Davis Building.

This project will have three areas of new construction to enhance the potential of the Meeting Place. Pedestrian pathways and bicycle parking will be considered during the design of these elements.

- The building main entry – this area will be fully redeveloped including new seating area/terrace, walkway from outer circle road, grade changes of the inner circle road, and accessibility improvements to existing pedestrian pathways;
- The east terraces enclosure will create a space that is useable all year round replacing the isolated, underutilized, concrete area on that side of the building;
- The enclosure of a small green roof located between the RAWC and the W.G. Davis Building will allow provision of additional servery space with required new HVAC systems while leaving the remainder of the space relatively open with unobstructed view of windows.

Servicing and fire access to the building will not be affected by the project. No plans or provisions were made in that regard.

This project will border on the future Student Services Plaza project. In fact, part of the seating area of the new Meeting Place will be constructed as part of that future project. Preliminary space analysis and Space Program for a Student Services Plaza have been completed to ensure that the two projects work well, creating a seamless and natural transition between the two spaces.

e) Secondary Effects

This project will have significant operational rather than financial secondary effects.

Once construction starts, the main area of the Meeting place, currently accommodating over 400 seats, will be taken out of service. Furthermore, the Subway and Booster Juice kiosks will also be closed. Those two outlets and limited seating capacity will be relocated to Spigel Hall. Spigel Hall will not be renovated and the size of the space will accommodate a small fraction of lost seating (40 if the one of the food kiosks are relocated; 90 if only seating is provided).

The meeting place is the main living room of the campus and also a gateway for many arrivals. Both of these functions will be disrupted and cannot be replaced. The construction will be carefully staged to ensure that the main pedestrian connections are maintained and all fire exit requirements satisfied.

As noted earlier, the proposed project anticipates changes to the grading and elevation of the Inner Circle Road, as well as the reconstruction of the main W.G. Davis Building entrance. This work will create disruptions to Mississauga and Brampton bus service, result in the loss of short term parking currently located in front of the Davis Building, and disrupt access to the Student Centre. The bus stops will be relocated to other locations on campus. This has been done in the past during other construction activities and the City will be engaged in developing detailed solutions. While the short term parking spaces will be lost during the construction period, the number of accessible parking spots will be maintained as per City of Mississauga requirements. Access to the Student Centre will be provided by reversing traffic flow of the end portion of inner circle road. This adjustment will also allow access to several fire routes in the heart of the campus.

Currently, the Temporary Food Court is closed during the December and April exam sessions to provide additional exam seating. This practice will cease when the re-construction of the Meeting Place starts. This loss of capacity will be ameliorated by renovating large classrooms to have continuous work surfaces and by the opening of the North Building Reconstruction Phase B, (September 2018) which will have a large number of classrooms.

f) Schedule

The project schedule is as follows:

- Design Development — August, 2017
- Construction Documents — December, 2017
- Governing Council Approval — October 26, 2017
- Tender and Award Completion — February, 2018
- Construction Start — March, 2018
- Substantial Completion — June 2019
- Full operational occupancy — August 2019

The schedule assumes all municipal approvals may be achieved within the timelines.

IV. Resource Implications

a) Total Project Cost Estimate

The total project cost for the W.G. Davis Building Renovation – Phase 2 (Meeting Place) project includes 1,922 net assignable square metres (nasm) or 2,814 gross square meters (gsm) of renovated space and 568 net assignable square metres (nasm) or 804 gross square metres (gsm) of new construction, totalling 2,490 net assignable square metres (nasm) or 3,618 gross square metres (gsm). This project is expected to proceed under a traditional design-bid-build process and is projected to be completed before the start of the fall term in 2019.

A Class ‘D’ construction cost estimate (Order of Magnitude) was prepared by the Altus Group, a member of the consultancy team led by Moriyama & Teshima Architects retained by UTM to undertake a comprehensive Feasibility Study and to prepare a schematic design, to inform the total project cost for the project.

The total estimated cost (TPC) includes estimates or allowances for:

- construction costs
- construction & project contingencies
- all applicable taxes
- hazardous waste removal
  - decommissioning of hazardous substances
  - disposal costs for hazardous materials\
  - release of area (hazardous materials) for unrestricted re-use
- site service relocates and extensions
- infrastructure upgrades in the sector
- secondary effects
- demolition

- landscaping (soft & hard)
- permits, fees and insurance
- professional fees; architects, engineers, miscellaneous consultants (i.e. LEED, code compliance, etc.) & project management
- telecommunications equipment, infrastructure, terminations & software (for voice, data, digital signage & audio-video systems)
- security system equipment, infrastructure, terminations, licensing & software
- moving and staging
- fixed & loose furniture, furnishings and equipment (including food services equipment)
- signage for Ontario Building Code compliance, room identification, building & campus wayfinding
- miscellaneous costs such as donor recognition, ceremonies, etc.
- commissioning & training
- escalation & financing charges (if applicable)

b) Operating Costs

Although the William G. Davis Building is one of the campus' older structures, the proposed project will meet the UTM's current design and construction standards. For the renovated areas, Facilities Management & Planning expect that the operating costs for the affected space will not change (worst case) and will likely decrease slightly (best case).

Estimated operating cost are based on the Terrence Donnelly Health Science Complex that has similar finishes and building systems as those expected to be provided in the Meeting Place additions. In 2014, the Health Science Complex had direct and indirect operating costs of $260.88 per net assignable square metre of building space. With published inflation rates since 2014, this unit cost is equivalent to $277.45/NASM in 2017 dollars. If the same rate of inflation is experienced in the next two years (to 2019), then the unit operating cost is projected to be $289.19 per net assignable square metre. At that rate, the Meeting Place additions will have an annual operating cost of $193,179 when the projected is completed in 2019; provisions will be made for these additional operating costs in UTM's five-year operating budget.

In addition to the above operating costs that capture overall needs of the building from Utilities, Caretaking, Engineering, Property Management, Grounds, Facilities Management & Planning, Health & Safety, Stores, Police, and Computing Services, UTM anticipates increased caretaking cost of an additional 1 FTE to account for increased utilization of space and high frequency of cleaning associated with a dining facility.

Provision has been made for these additional operating costs in UTM's five-year operating budget.

c) Funding Sources

The W.G. Davis Building Renovation – Phase 2 (Meeting Place) project will be funded by UTM Capital Reserves derived from Operating and a contribution from the Food Service Ancillary.

Provision for the cost of the project has been included in UTM's multi-year Capital Plan and accordingly, will not jeopardize the availability of further Capital Reserves for (at least) two other major, high-priority capital projects currently in the planning stages.

V. APPENDICES:

1. Existing Space Inventory
2. Space Utilization and Requirement Analysis
3. Equipment/Furnishings schedules (on request)
4. Room Specification Sheets (on request)
   - New construction
   - Renovation (include assumptions regarding reuse of furniture and equipment)
5. Total Project Cost Estimate (on request to limited distribution)