## University of Alberta Students' Union STUDENTS' COUNCIL LATE ADDITIONS

### Tuesday January 24, 2012 Council Chambers 2-1 University Hall

### LATE ADDITIONS (SC 2011-18)

- 2011-18/1 SPEAKER'S BUSINESS
- 2011-18/2 PRESENTATIONS
- 2011-18/3 EXECUTIVE COMMITTEE REPORT
- 2011-18/4 BOARD AND COMMITTEE REPORTS
- 2011-18/5 QUESTION PERIOD
- 2011-18/6 BOARD AND COMMITTEE BUSINESS
- 2011-18/7 GENERAL ORDERS
- 2011-18/7d LE/CSORBA MOVE TO approve the Business Students' Association proposal to create a Faculty Association Membership Fee.

Please see document LA 11-18.01

- **2011-18/7e CHEEMA/SUMAR MOVE THAT** Students' Council appoint two (2) members of Students' Council to the Budget and Finance Committee.
- 2011-18/8 INFORMATION ITEMS
- 2011-18/8g GAC- Summary report to Council
  - Please see document LA 11-18.02
- 2011-18/8h NUA Meeting minutes

Please see document LA 11-18.03

2011-18/8i NUA FAMF Proposal

Please see document LA 11-18.04

2011-18/8j Rory Tighe, President- Report

Please see document LA 11-18.05

LATE ADDITIONS SC 11-18

TUESDAY JANUARY 24, 2012

2011-18/8k Andy Cheema, VP Operations and Finance- Report

Please see document LA 11-18.06

2011-18/8I Audit Committee- Report

Please see document LA 11-18.07

**2011-18/8m** SUB - feasibility study – updated

Please see online document http://www.su.ualberta.ca/governance/council/orderpapers/

## **Business Students Association** Levy Package Proposal



**Kimberley Menard** President **Clint Peter** VP Events/Acting VP Finance **FAMF Renewal Statement** 



January 15, 2011

# Proposal for the renewal of our Faculty Association Membership Fee (herein, "the Fee") for the Business Students' Association (herein, the "BSA") which serves as the Faculty Association for the University of Alberta School of Business (herein, the "School of Business").

**Purpose:** The membership fee is proposed based on the following rationale:

The BSA has progressed as a Faculty Association to the point where the organization is currently offering significant academic support and growth opportunities for its members therefore, the fee will be used for two purposes. Firstly, the BSA sees the importance of the other business clubs and their ability to provide students with learning opportunities outside of the classroom. Our clubs provide a wide variety of topics for business students to focus on and as a result a large portion of the fee is used to support these clubs. Secondly, the BSA strives to help the School of Business be represented in positive light to other business schools. As a result, the remainder of the fee is set up in the form of a conference fund that allows students to access financial support to go on conferences and represent our school.

**Amount and Timeline:** The amount of the Fee shall remain unchanged at \$7.50 per student per semester for all Business Students starting in Fall 2011 and continuing until the maximum of 4 years have elapsed.

**Scope:** A Business student is anyone enrolled in the School of Business and is a member of the BSA as per the BSA Bylaws. The Fee shall apply to all undergraduate students, both full-time and part-time, in the School of Business. This does not include any semester for which the student is placed in a work term as part of the School's Cooperative Education Program.

**Allocation:** The money received from the Fee will be prioritized for disbursement based on several criteria, ranked as followed:

- 1. Academic benefit
- 2. Maximizing benefit for the greatest number of individuals
- 3. Proven financial need
- 4. Promotion of the School of Business and its Departments

Once the fee is collected it is placed in an account that is separate from the BSA's operating account and will only be used for these two purposes.

**Eligibility:** Any member of the BSA, as dictated by its Bylaws, is eligible to receive moneys from the fund. Business clubs, including departmental and non-departmental, as well as Faculty sponsored conferences and events are also eligible to receive funding.

**Refund mechanism:** The Fee, or any individual's portion of it, may be refunded upon student request. Refunds will only be provided for the semester in which they are currently enrolled. The student will be required to complete a form by stating that they have received a refund and all refunds will be tracked in order to ensure that double refunds are not granted. All forms will be



maintained in a locked filing cabinet for a period of at least one year. Refunds may only be granted with signed approval of the Fund Administrator and the BSA President.

**Management:** All funds are to be managed by the Fund Administrator, known as the Student Activity Fund Director, will be responsible for tracking all disbursements, refunds and requests for funds. The Fund Administrator, the BSA President and the VP Finance will serve as the sole signatories on the fund's bank account. The Fund Administrator will be selected by the same process the other directors of the BSA are selected which is through an application process with the final decision coming from the BSA Executive. Requests for funds will be handled by the Fund Administrator and all disbursements will require approval of the BSA Executive Committee as outlined under the Association's bylaws.

The BSA thanks you for your time and commitment regarding the BSA Fee. If you require any additional information with regards to the BSA Faculty Association Membership Fee, please contact the writer, Clint Peter, at (780) 281-0217 or cpeter@ualberta.ca.

| Anticipated Payments from FAMF Account (2011/2012)<br>Conference Fund<br>Club Payments<br>Total Dispersement | Cheques in from SU (2011)                       | Payments from FAMF Account (2010/2011)<br>Conference Fund<br>Club Payments<br>Total Dispersement | FAMF cheque from SU (2010) | Business Students' Association FAMF Dispersal | DISBURSEMENTS |  |
|--|---|--|----------------------------|---|---------------|--|
| \$ 16,000.00<br>\$ 9,500.00<br><b>\$ 25,500.00</b>   | \$25,122.41<br>\$2,716.15<br><b>\$27,838.56</b> | \$20,956.89<br>\$9,000.00<br><b>\$29,956.89</b>  | \$ 27,547.50               | B<br>FAMF Dispersal                           |               |  |
| 40 students<br>\$500/club  |   | 42 students<br>\$500/club  |                            | BUSINESS STUDENTS ASSOCIATION                 |               |  |



# QUESTIONS, COMMENTS OR SUGGESTIONS?

# **BUSINESS STUDENT LEVY** TOWN HALL MEETING

# Invite to Levy Town Hall Sent to All Undergraduate Business Students

From: Business Undergrad <ugradbus@business.ualberta.ca> Subject: Business Student Levy Town Hall - December 5th Date: November29, 2011 11:18:59 AM MST To: Undisclosed recipients:;

### **Business Student Levy Town Hall**

Monday December 5th 4:00pm BUS 1-9

As some of you may be aware, the Business Faculty has in place a small student levy that comes through from your tuition. It is \$7.50/semester per business student and it is up for renewal this year.

This town hall will give you a chance to show your support or voice any questions you may have in regards to the levy.

### What is the levy used for?

- The levy is used to send business students to conferences.

- The levy is used as allocated funding for all business clubs with the exception of the BSA

### Does the BSA use the levy in their budget?

- The student levy is not used in the BSA Operating budget. The funds are kept separate to be used for the conference fund and student clubs.

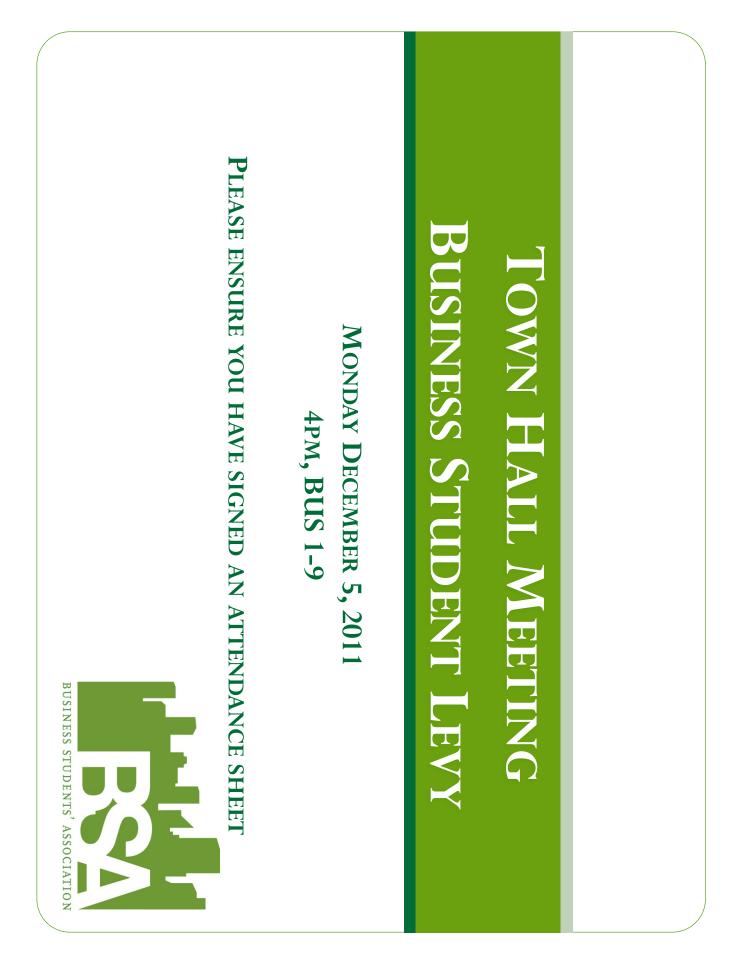
### Why we need you!

We need your support to renew the levy. This levy is imperative for student clubs to be able to provide the amazing services they do to our faculty and allows students to go to world-class business conferences, they might otherwise not be able to.

We look forward to seeing everyone on Monday!

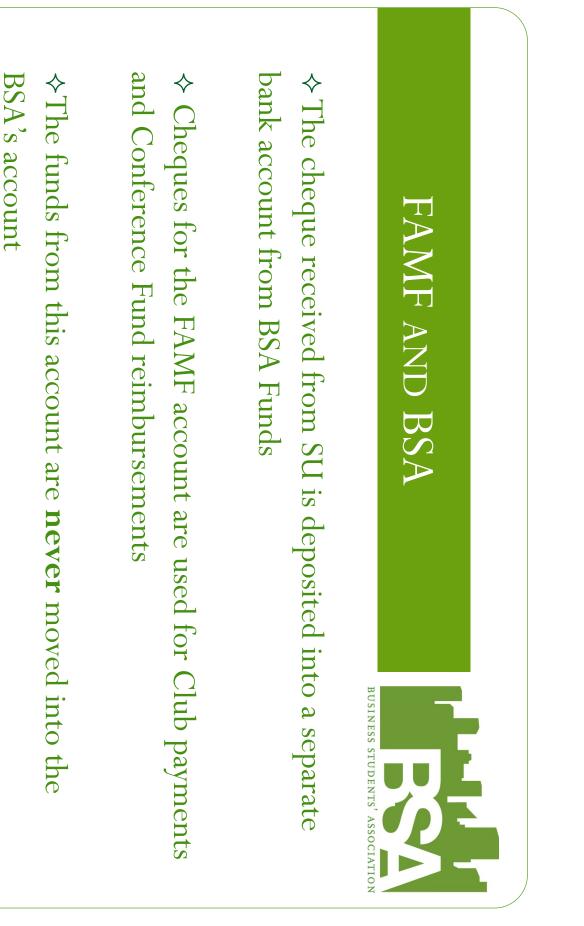
Kim Menard, BSA President

# Presentation Used at Levy Town Hall



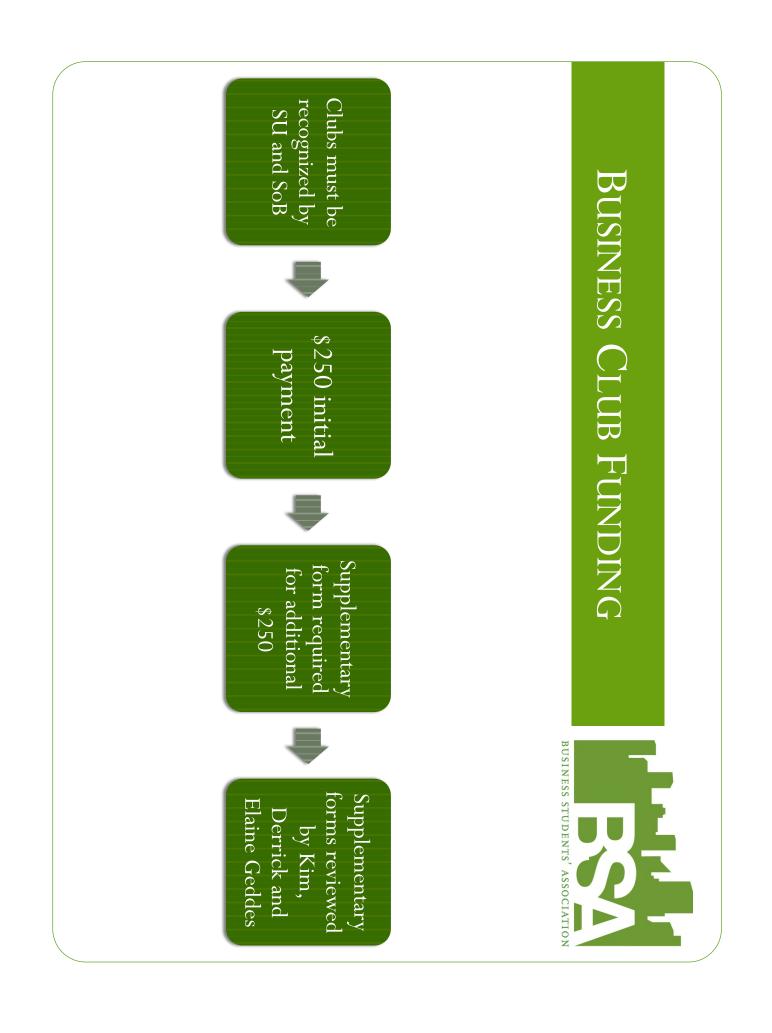
| PROCESS OF COLLECTION  |   |
|--|---|
| Fall Term 2011   | BUSINESS STUDENTS   |
| Undergraduate<br>Faculty of Business, Bachelor of Commerce<br>Business Economics & Law-Maj, StrategicMgmt&Organization-Min | University of Alberta<br>4th Year<br>Full-Time, On Campus |
| Instruction  |   |
| SMO 404 LEC A1 INTERPERSONAL COMM & TEAM MGMT  |   |
| BUEC 342 LEC A2 INTRO TO INT'L BUSINESS  |   |
| 311 LEC A2   |   |
| Tuition Waiver   |   |
| Instruction Total  |   |
| Cosss  |   |
| Regn & Transcript Fee  | 4.0.776   |
| SU Membership Fees   | \$36.04   |
| SU Dedicated Fees  | \$38.84   |
| SU Dental Plan Walver  | \$-107.34   |
| SU Health Plan   |   |
|  |   |
| SU Health Plan Walver  |   |
| SU Health Plan Waiver<br>Athletics & Rec   |   |
| SU Health Plan Waiver<br>Athletics & Rec<br>Health Services<br>U-Pass  |   |

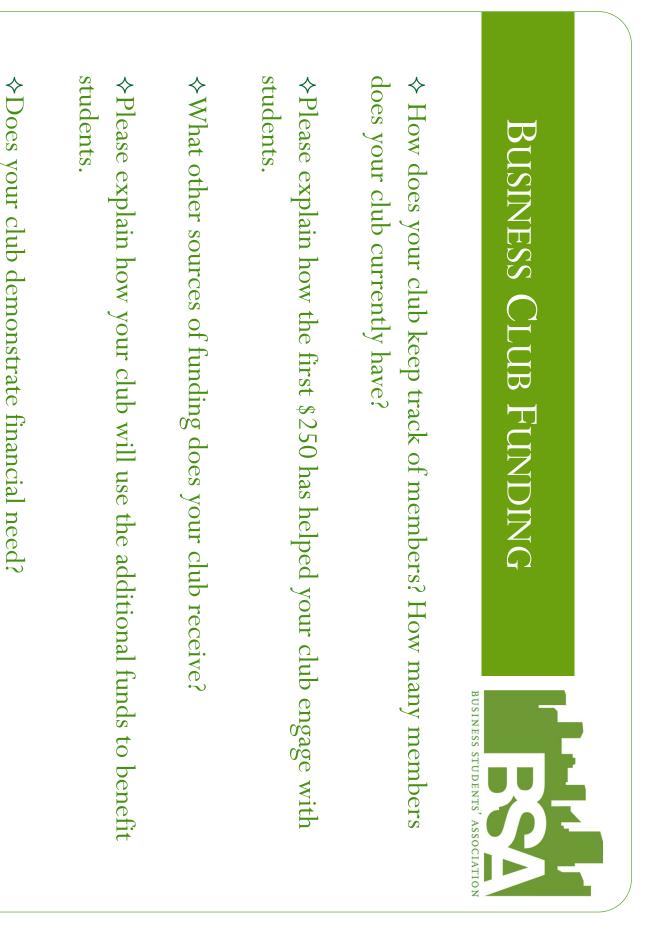
| $\#$ of eligible students as per registrar $\pm$ any adjustments from previous year | ♦ SU Cheque is determined by: | <ul> <li>April</li> <li>April</li> <li>The BSA provides financials for the past year's disbursement and SU releases the cheque upon verification</li> </ul> | <ul> <li>♦ September/January</li> <li>♦ \$7.50 per semester collected through</li> </ul> | PROCESS OF COLLECTION          |  |
|---|-------------------------------|---|--|--------------------------------|--|
| ny adjustments from previous year   |                               | the past year's disbursement<br>verification  | hrough your SU fees  | BUSINESS STUDENTS' ASSOCIATION |  |



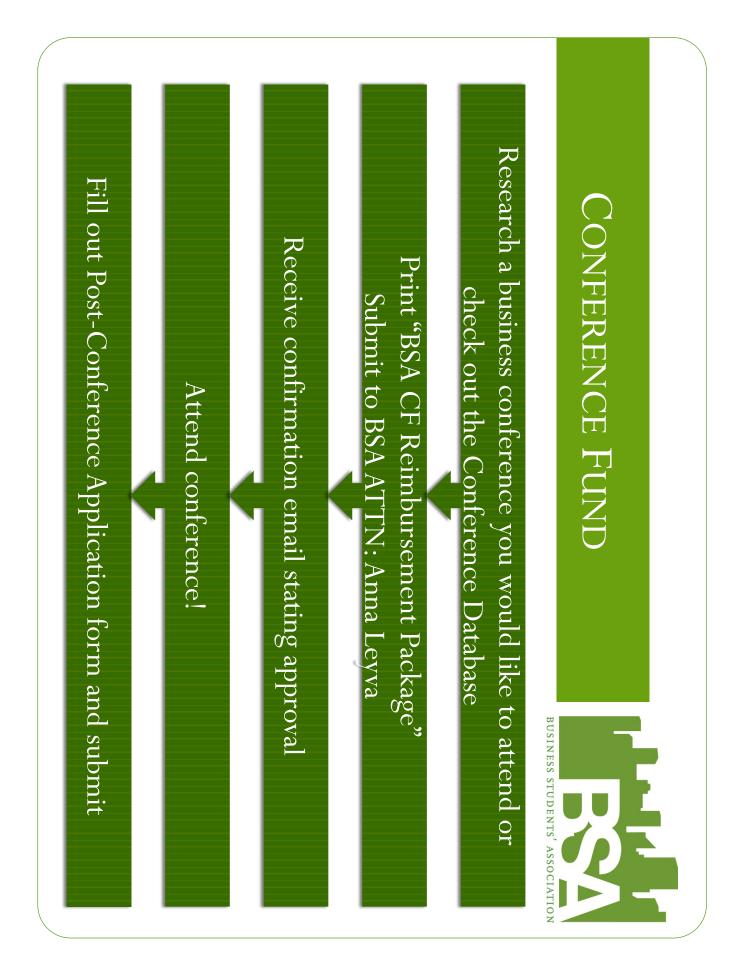
 $\Rightarrow$  Any remaining money rolls over to next year







| ♦ Not available for U of A hosted conferences | Delegate fee<br>Travel expenses<br>Accommodation | ♦ The following expenses are approved for rei<br>\$400: |                                | Conference Fund |  |
|---|--|---|--------------------------------|-----------------|--|
| onferences (eg. RMBS, EDGE)                   | 100%<br>up to 50%<br>up to 50%                   | ved for reimbursement up to                             | BUSINESS STUDENTS' ASSOCIATION |                 |  |



| Anticipated Payments from FAMF Account (2011/2012)<br>Conference Fund<br>Club Payments<br>Total Dispersement | Cheques in from SU (2011)                       | Payments from FAMF Account (2010/2011)<br>Conference Fund<br>Club Payments<br>Total Dispersement | FAMF cheque from SU (2010) | Business Students' Association FAMF Dispersal | DISBURSEMENTS |  |
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| 40 students<br>\$500/club  |   | 42 students<br>\$500/club  |                            | BUSINESS STUDENTS ASSOCIATION                 |               |  |



# QUESTIONS, COMMENTS OR SUGGESTIONS?

# **BUSINESS STUDENT LEVY** TOWN HALL MEETING

Sign In Sheets from Levy Town Hall

| NAME<br>(FIRST AND LAST) | FACULTY  |  |
|--------------------------|----------|--|
| Kimberley Menard         | Business |  |
| Derrick stielow          | Business |  |
| Giselle General          | Businpss |  |
| Ami Price-Gagnon         | Business |  |
| Mark Mowbrey             | Business |  |
| Carly Bauer              | Business |  |
| Taryn Klymyk             | Business |  |
| Hanif Fazal              | Bus      |  |
| Joel wegner              | 13us     |  |
| Brett Joraller           | BIZ      |  |
| Lance Chung              | BUS      |  |
| Evished Chegan:          | Bus      |  |
| Alex Sin                 | Bus      |  |
| Reetika Prasad           | Bus      |  |
| Victor us Entous         | K; BUS   |  |
| Brad Klaus               | Bus      |  |
| France Brodett           | Bus      |  |
| Rayna Larson             | BUS      |  |
| Stepheny Chai            | Bus      |  |
| Cindy Lee                | BUS      |  |

| NAME<br>(FIRST AND LAST) | FACULTY   |  |
|--------------------------|-----------|--|
| N isha Patel             | Business  |  |
| AidanMeloII              | Business  |  |
| Paul Kan                 | Business  |  |
| Harry Hutki              | Business  |  |
| Josh Le                  | Business  |  |
| BITKLEY DOII             | Dusiness  |  |
| Mehalt Malhotra          | Business  |  |
| Aveny Daugela            | BUS       |  |
| Vaige Goverfie           | Bus       |  |
| KURT BUBAN               | BUS       |  |
| Kara Davis               | Bus       |  |
| Edward Gats              | Ensines 5 |  |
| Sagha Velisyeus          | Bes       |  |
| Annie Nguyen             | Bus       |  |
| Mike Nunton              | Bus       |  |
| San Turner               | BUS       |  |
| Katie O'Shea             | Bus       |  |
| Scott Jela               | Bus       |  |
| Anne Leyre               | Bus       |  |
| Michelle Chin            | Bus       |  |

| NAME<br>(FIRST AND LAST) | FACULTY  |   |
|--------------------------|----------|---|
| Julian Ng                | BUS      |   |
| Erin Iverson             | BUSINESS |   |
| Aaron Marchadaur         | Business |   |
| Casey Fillatre           | BUS      |   |
| Jereny Lam               | Bus      |   |
| Kiling Miao              | BUS.     |   |
| Adam Dangleyk            | Bus      |   |
| Kyle Parrotton           | Busness  |   |
| Daniel Heberstort        | Business |   |
| Jessa Au                 | Bus      |   |
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| Nathan Petersen          | "        |   |
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**Conference Fund Application Package** 



### BSA Conference Fund 2011-2012 Reimbursement Rules Waiver

### I understand that...

- 1. The BSA Conference Fund can only be used to reimburse conference related expenses.
- 2. Students can access the BSA Conference Fund once a school year and that only the following expenses will be approved (to a maximum of **\$400** per University of Alberta business student, per school year):
  - ≻ Delegate Fee 100 %

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- > Travel Expenses (if **not** included in Delegate Fee)
  - Flight/Bus Tickets Up to 50%
- > Accommodation (if **not** included in Delegate Fee)
  - Hotel/Motel/Hostel Up to 50%
- 3. Conferences hosted by the University of Alberta will not be eligible for reimbursement (i.e.: RMBS).
- 4. The maximum number of students that will be reimbursed per conference is five. Funds are limited so students are encouraged to apply early.
- 5. Inappropriate or unprofessional delegate behaviour gives the BSA the right to revoke reimbursement (refer to Pledge and Code of Conduct, page 2).
- 6. Approved expenses will only be reimbursed if accompanied by respective receipts that clearly list student name and expense amount.
- 7. In order to receive reimbursement, students must submit the post-conference form along with approved expense receipts to the BSA office (2<sup>nd</sup> floor, Business Building), within 14 days of conference return date.

I have read and am in accordance with all of the statements above.

| Name: | Date: |
|-------|-------|
|       |       |



### BSA Conference Fund 2010/2011 Pledge and Code of Conduct

Students attending a BSA Approved Event, Conference or Conference using funding obtained from SAF, BSA Conference Fund, BSA hereinafter "BSA Approved Event" are required to meet all of the standards of this agreement and are bound by the provisions of the University of Alberta Code of Student Behaviour in its entirety.

This Pledge and Code of Conduct applies to all students attending a BSA Approved Event, regardless of their home institution, and applies to any BSA Conference, lodgings, restaurant, or any other venue that is attended by the student.

Students are asked to refer to the entire Code of Student Behaviour at: <u>http://www.uofaweb.ualberta.ca/gfcpolicymanual/content.cfm?ID\_page=37633#38305</u>

Please read all of the following pages and initial every page. You will be held responsible for knowing the expectations and terms of the following pages. These are all excerpts from the General Faculties Council (GFC) Policy Manual – section 30. Code of Student Behaviour combined with the expectations set forth by the BSA 2010-2011 Executive.

I, \_\_\_\_\_\_, have read and understand the Code of Student Behaviour as outlined in the GFC Policy manual and the additional Code and discipline set by this document. I agree to all of the conditions set both in the Code of Student Behaviour and this document. I am fully aware that any breach of disciplinary measure that results in monetary loss will be my own responsibility to repay in full. I am also aware that a breach could result in my expulsion from the delegation. I understand that delegate fees are non-refundable and will not be returned in the event of an expulsion from the delegation.

I, \_\_\_\_\_\_, pledge that I will at all times while attending the BSA Approved Event, or while in transit to and from the BSA Approved Event, or in any activity related to or sponsored by the BSA Approved Event, conduct myself at all times in a professional manner,, obeying all the terms of this document, showing courtesy and respect for all other delegates, speakers, sponsors, Faculty members, Faculty staff and guests, or any other person associated with the event in any way. I further pledge not to participate in any activity that could result in harm, whether physical, legal or in reputation, to the BSA Approved Event or the University of Alberta School of Business.

| Date:                             | Date:                                  |
|-----------------------------------|--|
| Print Name:                       | Print Name:                            |
| Signature:                        | Witness Signature:                     |
| *** THE FOLLOWING 4 PAGES MUST BI | E INITIALED IN BOTTOM RIGHT CORNER *** |



These excerpts are chosen based on their relevance and are provided to simplify the Code, not abolish parts of it. Students that agree to the BSA Code of Conduct are agreeing to all parts of the Code and the disciplinary measures as outlined below.

Editorial changes that have been made to the Code in the following excerpts are there only to provide direct application to the BSA Approved Event. Students are bound by BOTH the discipline outlined in the Code of Student Behaviour AND by the discipline outlined in this document.

### 30.3.4 Inappropriate Behaviour towards Members of the BSA Conference Community 30.3.4(1) Disruption

**30.3.4(1) a** No Student shall disrupt a Class in such a way that interferes with the normal process of the session or the learning of other Students.

**30.3.4(1) b** No Student shall, by action, words, written material, or by any means whatsoever, obstruct University Activities or University-related Functions.

**30.3.4(1) c** No Student shall use words that incite others to behaviour that is inappropriate to members of the University Community, whether or not in connection with a demonstration, rally or picketing.

### **30.3.4(2)** Discrimination

**30.3.4(2) a** No Student shall discriminate against any person or class of persons while participating in University Activities or University-related Functions.

**30.3.4(2) b** "Discrimination' is any act or omission based on race, religious beliefs, colour, gender, physical disability, mental disability, marital status, age, ancestry, place of origin, family status, source of income, sexual orientation or political belief when that act or omission results in loss of or limit on opportunities to work or to fully participate in campus life or which offends the dignity of the person. Discrimination draws distinctions between individuals based on irrelevant personal characteristics that result in disadvantage to some individuals that are not imposed on others. Discrimination may be one incident or a series of incidents. It may affect individuals or groups. It may take the form of denying an individual or group rights or privileges to which they are entitled." See also the University of Alberta Discrimination and Harassment Policy § 44 GFC Policy Manual.

### **30.3.4(3)** Dissemination of Malicious Material

No Student shall disseminate or cause to be disseminated malicious or defamatory material or engage in activity which creates a social or academic climate that hinders or prevents the full participation of another person or group in the life of the University.

### 30.3.4(4) Retaliation

No Student shall retaliate against any Complainant who has reported the Student for an offence under the Code or against any other person who has provided information, served as a witness or acted in an official capacity in a discipline process. (EXEC 07 JAN 2008)

### **30.3.4(5)** Unfounded Allegations

No Student shall make any complaint against any other member of the University Community or cause any steps to be taken concerning any other member of the University Community unless the Student believes, on reasonable grounds, that the other member of the University Community has committed an offence under this Code or engaged in conduct warranting a complaint.

### 30.3.4(6) Violations of Safety or Dignity

**30.3.4(6) a** No Student shall have sexual or physical contact with another person without that person's consent.

**30.3.4(6) b** No Student shall physically abuse another person, threaten any other person with physical abuse or cause any other person to fear physical abuse.

Page 1 of 4 \_\_\_\_\_ init.



**30.3.4(6) c** No Student shall create a condition which endangers or potentially endangers or threatens the health, safety or well being of other persons.

**30.3.4(6) d** No Student shall harass or sexually harass another person.

**30.3.4(6) d. i** "Harassment' is conduct or comment that is intimidating, threatening, demeaning, or abusive and may be accompanied by direct or implied threats to grade(s), status, or job. Harassment can occur between people of differing authority or between people of similar authority. Harassment may be directed at an individual or at a group. Harassment has the impact of creating a work or study environment that is hostile and limits individuals in their pursuit of education, research, or work goals. The behaviour that constitutes Harassment may be physical or psychological in nature. It may be one incident or a series of incidents. It may affect individuals or groups. It may take the form of denying an individual or a group rights or privileges to which they are entitled." See also the University of Alberta Discrimination and Harassment Policy § 44 GFC Policy Manual.

**30.3.4(6) d. ii** "Sexual Harassment" is defined as unsolicited, unwanted sexual advances; requests for or offers of sexual favours; unsolicited, unwanted verbal or physical conduct of a sexual nature; and unsolicited, unwanted written, oral or visual material of a sexual nature.

**30.3.4(6) e** No Student shall use words which threaten violence or physical abuse to any group or individual whether or not the group or individual thus threatened knows of such threatening words and whether or not the words are employed in connection with a demonstration, rally or picketing.

### 30.3.5 Inappropriate Use of University Property and Resources

### **30.3.5(1)** Damage to Property

**30.3.5(1) a** No Student shall possess, misappropriate, convert, destroy or otherwise damage University property or the property of any other member of the University Community.

**30.3.5(1)** No Student shall deface the inside or outside of any building or property of the University.

**30.3.5(1) c** No Student shall, without authority, make, alter, use, receive, or possess University supplies or documents.

**30.3.5(2)** Unauthorized Use of Facilities, Equipment, Materials, Services or Resources

30.3.5(2) a No Student shall use any facility, equipment, material, service or resource contrary to express instructions or without proper authority. See 30.9 [Appendix 2 – Regulations Pertaining to Special Events, the Use of University Resources and the Provision of Alcohol].

**30.3.5(2) b** No Student shall enter or remain in any University building, facility, room, or office, without the proper authority, contrary to express instructions or with intent to damage, destroy, convert or misappropriate University property.

**30.3.5(2) c** No Student shall obtain any University equipment, material, service or resource by fraudulent means or by providing false information.

**30.3.5(2) d** No Student shall use any University computer or computer related facility without proper authorization or in contravention of the conditions for use of University computer or computer related Facilities.

**30.3.5(2) e** No Student shall introduce any Malicious Code on any University computer or use any University computer to develop, modify, mutate, disseminate, propagate or release any Malicious Code.

### 30.3.6 Other Offences

### **30.3.6(1)** Alcohol Provision and Consumption

**30.3.6(1) a** No Student shall consume or serve alcohol on University property other than in licensed premises, at a University function with a valid permit issued by Ancillary Services or in accordance with regulations pertaining to University residences.



**30.3.6(1) b** No Student shall violate the regulations regarding alcohol use set forth in 30.9 [Appendix 2 - Regulations Pertaining to Special Events, the Use of University Resources and the Provision of Alcohol]. **30.3.6(1) c** No Student shall violate Alberta Gaming and Liquor Board regulations regarding the use of alcohol on campus. These regulations must be posted at any function serving alcohol on campus.

### **30.3.6(2)** Illegal Use of Drugs

**30.3.6(2) b** No student shall use/distribute or have in their possession any quantity of illegal substance. If at any point of the conference a student falls under the above category they will be dealt with immediately and expelled from the conference. They will be expected to pay their way back home.

### 30.3.6(3) Identification

No Student shall refuse to provide identification upon request by a University Official or employee acting in the course of that person's duties, provided the University Official or employee has reason to believe the Student is committing, has committed or is about to commit an offence.

### **30.3.6(4)** Misrepresentation of Facts

No Student shall misrepresent pertinent facts to any member of the University community for the purpose of obtaining academic or other advantage. See also 30.3.2(2) b, c, d and e.

### **30.3.6(5)** Participation in an Offence

No Student shall counsel or encourage or knowingly aid or assist, directly or indirectly, another person in the commission of any offence under this Code.

### 30.8.1 Responsibilities and Benefits

**30.8.1(1)** In registering with the University a Student Group accepts the following responsibilities:

**30.8.1(1) a** to abide by the laws of the land and the Code,

**30.8.1(1) b** to uphold the good name of the University,

**30.8.1(1) c** to live up to the group's stated purpose, which shall not be in contradiction to the University's purpose statement as stated in 30.1 of this Code,

**30.8.1(1) d** to be responsible for members' conduct when members are representing the group, and therefore the University, on and off-campus,

**30.8.1(1) e** to obey Alberta Liquor Control Board regulations

Along with the Code of Conduct, students agree to maintain proper behaviour that would be deemed no less than "professional" at all times. In the event a student either breaches one of these guidelines or engages in behaviour that is deemed "unprofessional" by venue staff, conference organizers, the Executive Committee, members of the Faculty, sponsors and professional representatives at any event or any person in support of the delegation the following disciplinary actions will be taken:

- in the event the breach takes place prior to the actual conference the delegation member will:

   be brought before the Executive Committee, (2) be evaluated on the breach and the extent of damage the breach caused. Damage includes, but is not limited to: reputation of a person, place or thing, physical damage of a person, place or thing, mental anguish suffered. (3) the damage will dictate the consequences. Consequences include but are not limited to: expulsion from the conference, writing a letter of apology to all parties affected, monetary reimbursement for damage, or any other disciplinary measure that the Executive Committee sees fit.
- 2. in the event the breach takes place at the conference the delegation member will: (1) be immediately removed from the completion, (2) be brought before the Executive Committee to plead for reinstatement (3) be evaluated on the breach and the extent of the damage the breach caused. Damage includes, but is not limited to: reputation of a person, place or thing, physical damage of a person, place or thing, mental anguish suffered. (4) the damage will dictate the consequences. Consequences include, but are not limited to: removal from entire conference, where delegation member is responsible for their own transportation and accommodations. They

Page 3 of 4 \_\_\_\_\_ init.



**2-06 Business Building | U of A | Edmonton, AB T6G 2R6 | 780.492.2454 | hello@bsaonline.ca | www.bsaonline.ca** will not be permitted on any form of transportation and accommodations. They will not be permitted to attend any BSA Approved Event. They will be considered out of the conference completely and will be removed from any venue should they arrive. Additional possible consequences include: ban from all social activities for remainder of conference, formal apology letters, monetary reimbursement for damage, or any other disciplinary measure that the Executive Committee sees fit.

**NOTE:** Students that are in attendance of a BSA Approved Event are considered ambassadors of the BSA Approved Event of Alberta, the delegation sponsors and the University of Alberta. Any behaviour considered un-fit of either the BSA Approved Event will result in disciplinary measures.



# BSA Pre-Conference Application Form 2011-2012

### PERSONAL INFORMATION

Name (Last, First): Mailing Address: City: Province: Postal Code: Phone: Email: Year of Program: Declared Major: GPA from last completed semester as a full-time student:

### **CONFERENCE INFORMATION**

Conference Name: Location: Start Date: End Date: Where did you hear about it?: Have you attended this conference before as an Undergraduate student at the University of Alberta?:

### FUNDING INFORMATION

| Delegate Fee:                             |            |
|---|------------|
| Does Delegate Fee include accommodations? |            |
| Other Expense Description:                | Amount: \$ |
| Other Expense Description:                | Amount: \$ |
| Other Expense Description:                | Amount: \$ |
| Total Expense: \$                         |            |

Will you be receiving any other funding from any other source for this event? (If yes, how much and from where?)



### GENERAL INTEREST INFORMATION (MAX. 200 WORDS FOR EACH QUESTION):

- 1. In the space provided below, please explain in detail what you will learn from this event, why you would like to attend this event, how it relates to your major, and how this experience will add to your personal development.
- 2. What makes you a good ambassador for the BSA / University of Alberta School of Business? Why do you think you should be chosen to receive the conference fund and how do you plan to contribute back to the BSA?

3. Please describe the leadership roles you have taken and/or the contributions you have made to the university/greater community. If applicable, what other conferences or conferences have you attended?

### This application must be signed. Please print and hand in completed application package to the BSA office with the following, ATTN ANNA LEYVA.

I HEREBY CERTIFY that the information contained in this application package is complete and correct in all respects. I authorize the Business Students' Association (BSA) to confirm information contained in this application package as necessary. I further authorize the BSA to report my name, program, and conferences attended in various public relations, presentations, and announcements to promote the BSA Conference Fund. Furthermore, I promise to complete all relevant Post Conference activities or risk losing the fund. The personal information requested on this form is collected under the authority of the Universities Act and Section 33 (c) of the Alberta Freedom of Information and Protection of Privacy Act for the purpose of determining eligibility for the BSA's Conference Fund bursaries.

Questions? Contact Anna Leyva, SAF Director, at *wheresmymoney@bsaonline.ca* or Andrew Purschke, VP Finance.

| Signature: | Date: |
|------------|-------|
|            |       |



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### BSA Post-Conference Application Form 2010/2011

#### PERSONAL INFORMATION

Name (Last, First):

Year of Program:

Declared Major:

#### **CONFERENCE INFORMATION**

Conference Name:

Location:

Start Date:

End Date:

#### FUNDING INFORMATION

| Delegate Fee:                         |            |
|---------------------------------------|------------|
| Does this fee include accommodations? |            |
| Other Expense Description:            | Amount: \$ |
| Other Expense Description:            | Amount: \$ |
| Other Expense Description:            | Amount: \$ |
| Total Expense: \$                     |            |

#### **CONFERENCE COMMENTS**

1. What did you like best about the conference?

2. What aspect of the conference could be improved?



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3. What did you learn from the conference? Did any aspects tie into you coursework or work experience?

4. Would you recommend this conference to future Business students? Why or why not?

To receive reimbursement, please attach all receipts that you wish to be reimbursed for and submit to Anna Leyva, BSA Conference Director, via the BSA Office (2<sup>nd</sup> floor, Business Building).

### **Business Club Application Form for Additional Funding**



Business Students' Association 2-06 Business Building University of Alberta

Club Name:

President/Chair Name(s):

Date of Application:

How does your club keep track of members? How many members does your club currently have?

In September, each club was given \$250 from the BSA. Please explain how this funding helped your club engage with students?

What other sources of funding does your club receive?

To receive the additional \$250 in funding, please explain how your club will use these funds to benefit students. (i.e. enhance an existing event, develop a new event). Please be specific with expenses, expected attendees, etc. Attach additional page if necessary.

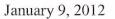
Does your club demonstrate financial need? Without these funds, will your club be unable to run the previously described event?

**FAMF Dispursements** 

#### **Business Students' Association FAMF Dispersal**

| FAMF cheque from SU (2010)                         |              |             |  |  |  |  |  |
|--|--------------|-------------|--|--|--|--|--|
|  | \$ 27,547.50 |             |  |  |  |  |  |
| Payments from FAMF Account (2010/2011)             |              |             |  |  |  |  |  |
| Conference Fund                                    | \$ 20,956.89 | 42 students |  |  |  |  |  |
| Club Payments                                      | \$ 9,000.00  | \$500/club  |  |  |  |  |  |
| Total Dispersement                                 | \$ 29,956.89 |             |  |  |  |  |  |
|  |              |             |  |  |  |  |  |
| Cheques in from SU (2011)                          |              |             |  |  |  |  |  |
|  | \$ 25,122.41 |             |  |  |  |  |  |
|  | \$ 2,716.15  |             |  |  |  |  |  |
|  | \$ 27,838.56 |             |  |  |  |  |  |
|  |              |             |  |  |  |  |  |
| Anticipated Payments from FAMF Account (2011/2012) |              |             |  |  |  |  |  |
| Conference Fund                                    | \$ 16,000.00 | 40 students |  |  |  |  |  |
| Club Payments                                      | \$ 9,500.00  | \$500/club  |  |  |  |  |  |
| Total Dispersement                                 | \$ 25,500.00 |             |  |  |  |  |  |

**Faculty Letter of Support** 





OFFICE OF THE ASSOCIATE DEAN (UNDERGRADUATE PROGRAMS)

To Whom it may Concern

#### Re: Business Students' Association Renewal of Faculty Association Membership Fee

I have been advised by the Business Students' Association that they are seeking a renewal of their Faculty Association Membership Fee. I have been shown the documentation in support of this proposal that outlines the purpose of the fee, the uses to which it will be put and the process for allocating the funds. I am confident that the Business Students' Association has put together a good proposal for renewal that addresses the major areas of concern with any such fee.

The Business Students' Association is recognized by the Alberta School of Business as the representative of Business students and one of our major assets. The BSA works to keep Business students involved with the School both academically and socially by sponsoring major events and providing financial support for students to attend events in other universities. We are pleased to support their application for a renewal of the Faculty Association Membership Fee as this will help them continue the excellent work they have been doing until now.

Please let me know if there is any further information I can provide.

Yours truly,

Sperie

Elaine F. Geddes, Associate Dean, Undergraduate Programs Alberta School of Business

### **BSA FAMF Bylaws**

Please note that the BSA is working on reorganizing our constitution therefore the numbering of these bylaws will be updated in the upcoming months; however, the content will remain unchanged. If Students' Union or the Audit Committee wishes a copy of the finalized constitution including these bylaws, we would be happy to include it with our financial submission at the end of this academic school year.

#### Business Student Activities Fund Bylaws Alberta School of Business, University of Alberta

#### 1.0 **Definitions**

- 1.1 The Business Student Activities Fund, hereby referred to as BSAF, is a fund set apart from the Business Students' Associations, hereby referred to as BSA, normal operating accounts
- 1.2 The BSAF account is used to distribute Faculty Association Membership Fee, FAMF, funds back to Business students and Business Clubs
- 1.3 The BSAF director is chosen to administer the funds of this account and this is to be their sole task on the BSA
- 1.4 The Student Levy or FAMF is collected on the Business faculties behalf by the Students Union in September and January
- 1.5 The Conference Fund is a source of funding to send Business Students to approved Business conferences not hosted by the Alberta School of Business and is governed by the BSAF director
- 1.6 These bylaws govern the BSAF account and BSAF director

#### 2.0 Amount

2.1 The amount of the Fee shall be \$7.50 per student per semester for all Business students

2.2 The levy or FAMF will be collected on behalf of the BSA by Students Union 3.0 **Lifetime** 

- 3.1 The term of the FAMF is four years, barring any event that would dictate otherwise. Such events include an opposing referendum that adheres to Students Union guideline, the ceasing of the BSA as a Faculty Association, or a clear misuse of funds as determined by Students Union or the School of Business.
- 3.2 Any increases to the amount shall be enacted only upon a referendum that adheres to Students' Union bylaws. To prevent successive increases and referendums, no referendum shall be held within three years of the current referendum passing.

#### 4.0 **Scope**

4.1 The FAMF shall apply to all undergraduate students, both full-time and part-time, in the School of Business. This does not include any semester for which the student is placed in a work term as part of the School's Cooperative Education Program.

#### 5.0 Allocation

- 5.1 The moneys received from the fee will be placed in a separate account from the BSA's normal operating expenses.
- 5.2 The BSAF director will review all applications for funding requests from this account and the VP Finance or President will approve decisions.
- 5.3 The funds in this account will be disbursed in the following order:
  - 1. An initial, equal amount payable to all Students' Union and School of Business approved Business Clubs to support their club's initiatives. The amount is to be determined by the governing year's Executive and BSAF director.

- 2. A second installment of funding set aside to be available for all Students' Union and School of Business approved Business Clubs to support their club's initiatives upon the successful review of a supplementary funding application. This application is to be approved by the BSAF director, VP Finance and President and may be submitted at any point during the academic school year. The amount available is to be equal for all clubs and is to be determined by the governing year's Executive and BSAF director.
- 3. The remaining funds shall become available for the Conference Fund through an appropriate application process and review by the BSAF director.
- 5.4 Any surplus from the fee year to year will carry over into the next year and be used as part of that year's BSAF allocations.

#### 6.0 Eligibility

- 6.1 Any member of the Business Students' Association, as dictated by its Bylaws, is eligible to receive money from the Conference Fund excluding members of the governing BSA Executive.
- 6.2 All Students Union and School of Business approved Business Clubs are eligible for an initial amount of funding and, upon successful submission and approval of supplementary form, additional funding.

#### 7.0 Refund Mechanism

7.1 The Fee is available for individual opt-out. The Fee, or any individual's portion of it, may be refunded upon student request. Refunds will only be provided for the semester in which they are currently enrolled. The student will be required to give the BSA confirmation, in writing, that they have received a refund and all refunds will be tracked by the VP Finance to ensure double refunds are not granted. All forms will be retained for a minimum of one year. Refunds must be approved by the BSAF director and President.

#### 8.0 Management

- 8.1 The funds are to be managed by the BSAF director, who will be responsible for tracking all disbursements, refunds and requests for funds. The BSAF director and BSA President will serve as the sole signatories on the fund's bank account. The BSAF director will be selected through the interview process by the BSA Executive and their sole task will be to manage the BSAF account. All decisions made by the BSAF director must be approved by the BSA Executive before disbursements are given.
- 8.2 The BSAF director is responsible for overlooking applications from Business Clubs for the second installment of funding and all applications made by students for the Conference Fund.

#### 9.0 Financial Oversight

9.1 The BSAF director will compile a statement of disbursements at year-end for the BSAF account. The BSA Executive will approve these statements and compile a report for Students Union indicating how moneys have

been spent in accordance with the requirements of Students' Union bylaws.



### COMMITTEE MEETING SUMMARY REPORT TO COUNCIL

Date: Insert date Time: Insert meeting start time

2011 – 2012 MEETING #

| Motions |   |         |  |  |
|---------|---|---------|--|--|
| 1.      | SUMAR moved that the meeting be called to order.  | CARRIED |  |  |
| 1.      | Sommer moved that the meeting be called to order.   | 4/0/0   |  |  |
| 2       | 2. HAMILTON-MCGREGOR amended agenda to include discussion of the Access Fund selection process. | CARRIED |  |  |
| Z. [    |   | 4/0/0   |  |  |
| 3.      | S. SUMAR moved that the meeting be adjourned.   | CARRIED |  |  |
| 5.      | Somme moved that the meeting be dujourned.  | 4/0/0   |  |  |
| 1       |   | CARRIED |  |  |
| т.      |   | 0/0/0   |  |  |

NUA General Meeting Minutes Monday, January 16, 2012 Page 1

### MINUTES OF THE NUA GENERAL MEETING

Monday, January 16, 2012; 1730 ECHA 2-135

#### Attendance:

Rachel World- President Kylie Jo Harris- VP Administration Emma Heinrichs- VP Academic Ashley Deschambault- VP Finance Sarah Colvin- VP Student Life Iris Wong- VP External Crystal Witred- 1st year rep Shawn Ireland- 1<sup>st</sup> year rep Brianne Kidner- 2<sup>nd</sup> Year rep Ambereen Weerahandi- 2<sup>nd</sup> year rep Felicia Haji- 3<sup>rd</sup> year rep Braelene Brown- 3<sup>rd</sup> year rep Justine Dawson- 4<sup>th</sup> year rep Lisa Dollansky- 4<sup>th</sup> year rep Ross Ballantyne- Global Health Rep Eric Bellinger- SU Councilor Maggie Danko- GFC Councilor Andrew McCutchen- CNSA OD Eric Dang- CNSA AD Katelyn Zaremba- Bilingual Rep Sharon Duval- Camrose Rep Guest: Sara Muldoon- 1st year bilingual program

Meeting called to order at : 1732

Approval of Previous Meetings Minutes: Motion put forth by Sarah, Second Emma, 13 for 0 opposed

Approval of Agenda: Motion put forth by Sarah, Second Emma, 13 for, 0 opposed

#### President Update- Rachel

- FAMF proposal for next 4 years was submitted but Eric Bellinger has volunteered to help improve it before it is presented to SU council next Tuesday January 24<sup>th</sup> at 1800, people are invited to attend.

NUA General Meeting Minutes Monday, January 16, 2012 Page 2

- Maggie Danko informed the group that the CNSA fees will be increasing from \$5 for full time students to \$10 in the next year to double the amount currently, therefore it may be beneficial to increase the amount of FAMF required from the students
- Motion to amend the application for FAMF to a one year term rather than a four year term put forth by Andrew, Second by Lisa 13 for, 0 opposed
- Every student in the NUA will be responsible for getting signature
- Motion to increase fees from \$7.50 to \$12.50 put forth by Andrew, Seconded by Lisa Dollansky 12 for, 1 opposed
- Constitution revision due by March 1st- Chairperson Kylie, committee: Maggie, Lisa, Eric B., Maggie.

#### VP Academic - Emma

- SU update: Dodgeball record game Feb 3, 2012, need 5000 people
- Lobbying training would there be interest? 4 people have shown interest
- Student faculty mixer- Date to be determined
- Possibility to implement events binder- reflection on events etc for future council

#### VP Administration - Kylie

- Office Hour Rules and Updates
  - New cash box
  - Cleaning and keeping tidy
  - Phone messages
  - Coverage and 6W2
  - o Printer

Motion to discontinue having a phone for the NUA put forth by Kylie, second Emma, 13 for, 0 opposed

- Microwaves being donated by SU- need to come up with a solution for keeping microwaves clean.

#### VP External – Iris

- Problem with Above and beyond,
- Looking into other companies

#### VP Finance- Ashley

- Question of getting a credit card Make up a form to secure signing authority.
- Waiting for money back from loan of CNSA

#### VP Student Life - Sarah

- Brianne taking over ski trip organization
- Need to fill 18 more seats by Thursday January 19<sup>th</sup> or we pay penalties
- Ideas to promote: talk to more friends, talk to physical education, set up a booth in sub
- Serena from pharmacy asked if we want to sell tickets for the black light graffiti party, motion to not accept to sell tickets for her event set by Emma second by Sarah Colvin, approval 12 for, 0 opposed

CNSA Update- Andrew No Update Global Health Rep- Ross No Update Interdisciplinary Rep-N/A Grad UpdateNUA General Meeting Minutes Monday, January 16, 2012 Page 3 N/A Next Council Meeting: Tentatively: Feb 2, 2012

Adjournment at: 1900

Faculty of Nursing, University of Alberta January 5, 2012

#### **1.0 Mission Statement**

1.1 The purpose of the Faculty Association Membership Fee is to financially assist the activities of the Nursing Undergraduate Association (NUA) at the University of Alberta.

#### 2.0 Definitions

2.1 The Nursing Students Activities Fund (NSAF) is a fund created to manage then monies received from a student levy applied to the undergraduate nursing student population at the University of Alberta

2.2 The Nursing Students Activities Fund Committee (NSAFC) is a committee that administers the NSAF and will be a subcommittee of the NUA made up of the VP Finance, President and one other Executive Member.

2.3 These bylaws govern the NSAF and NSAFC.

#### 3.0 Amount

3.1 The amount of the Fee shall be \$7.50 per student per year for both full-time and parttime undergraduate nursing students.

#### 4.0 Lifetime

4.1 The fee, as currently proposed, will be collected for four years, barring any event that would dictate otherwise. Such events include an opposing referendum that adheres to Students' Union guidelines, the ceasing of the NUA to be a Faculty Association, or a clear misuse of funds as determined by the Students' Union or the Faculty of Nursing. 4.2 Any increases to the amount shall be enacted only upon a referendum that adheres to Students' Union bylaws. In order to prevent successive increases and referendums, no referendum shall be held within three years of the current referendum passing. Decreases in the amount can be made at any point, however, a decision to renew the levy to its previously approved amount will require a new referendum.

#### 5.0 Scope

5.1 The Fee shall apply to all undergraduate students, both full-time and part-time, in the Faculty of Nursing. This includes students who decide to accelerate their program in order to graduate in December instead of April.

#### 6.0 Allocation

6.1 The monies received from the Fee will be prioritized for disbursement based on several criteria, ranked as follows:

- 1. Academic benefit
- 2. Maximizing benefit for the greatest number of individuals
- 3. Proven financial need
- 4. Promotion of the Faculty of Nursing and its programs

6.2 Any surplus from the Fee will be retained in a separate bank account and will have the following uses:

a) Act as an account buffer up to a maximum of \$10,000

b) Disbursed in future years with the criteria set above.

#### 7.0 Eligibility

7.1 Any member of the NUA, as dictated by its Bylaws, is eligible to receive services and monies from the fund.

#### 8.0 Dates of Collection

8.1 The Fee will begin to be collected on April 15 of each year beginning in 2012, and will cease to be collected on March 15 of the following year until the next date of renewal.

#### 9.0 Refund Mechanism

9.1 All nursing undergraduate students are given the option of "opting out" of the NSAF fee.

9.2 The Fee, or any individual's portion of it, may be refunded upon student request. The student will be required to complete a form stating that they have received a refund and all refunds will be tracked in order to ensure that double refunds are not granted. All forms will be maintained in the locked filing cabinet for a period of at least one year. Refunds may only be granted with signed approval of the Fund Administrator and the NUA President.

9.3 The ability for a refund from this fee will be advertised within the undergraduate nursing student population through posters, word of mouth and classroom speeches to ensure students are aware of such a refund mechanism.

#### **10.0 Management**

10.1 All funds are to be managed by the Fund Administrator, who will be responsible for tracking all disbursements, refunds, and request for funds. The Fund Administrator and the NUA President will serve as the sole signatories on the fund's bank account. The Fund Administrator will be VP Finance of NUA. Requests for funds will be handled by the Fund Administrator and all disbursements will require approval of the NUA Executive Committee as outlined in the NUA's bylaws.

#### 11.0 Financial Oversight

11.1 The NUA will require financial statements from the NUA executive that uses funding, indicating the anticipated expenditures to be made with the allotted funds. The NUA will also require annual reports indicating how the funds that were delegated to a certain VP position were spent by February 15 of each year, and then will compile the reports for the Students' Council by March 15 of each year, indicating how the monies have been spent. The NUA will report to Students' Council as required by Bylaw 8451 and fully comply with any other legislation adopted by Students' Council with respect to financial oversight. The NUA will also open its books to Students' Council or delegated bodies for inspection under reasonable terms of access with respect to the fee.

#### 12.0 Consultation and Endorsement of Fee

12.1 FAMF renewal was discussed with the executive of the NUA at a council meeting on June 27, 2011, a motion was made to approve renewal of FAMF and the 2011-12 budget was passed.

12.2 At a general meeting on October 17, 2011, FAMF renewal and the distribution of money was discussed with all 23 students at the meeting. When approving the budget from the previous year, a motion to approve the distribution of FAMF was passed.

| Nursing Undergraduate Assoc<br>Membership Fee Allocation  |   | Appendix A |                      |
|---|---|------------|----------------------|
| Revenue:  | \$9,525.00  | 100%       | \$7.50 1270 students |
| Proposed Distribution:  |   |            |                      |
| CNSA (Canadian Nursing<br>Students' Association)<br>Membership*<br>Student Emergency Fund<br>Conferences<br>NUA executive Meetings<br>Faculty/Student Mixer<br>Intramurals<br>Office Supplies<br>Advertising and Promotions | \$6,487.48<br>\$858.20<br>\$667.70<br>\$411.48<br>\$257.17<br>\$428.63<br>\$228.60<br>\$185.74<br>\$9,525 |            |                      |

\*Memberships are \$5.00 per student.



January 23, 2012 To: Students' Council Re: Report to Council

Hello Council,

My apologies for the late report. It has been a crazy week. I have spent almost all of my time over the past two weeks on two issues: MNIFs and the Fall Reading Week.

#### **MNIFs**

I have been meeting with the University's Administration, the Graduate Students' Association, the University Governance administrators and individual Board Members on the issue of Mandatory Non-Instructional Fees. The Administration and I will be presenting opposing proposals at a series of meetings over the next month concerning the regulation of these fees. My proposal would require that student approval be sought as part of the approval process of new fees, whereas the Administrations proposal would focus more on committee consultation. The discussion will be going to the Academic Planning Committee on January 25, the Board Finance and Property Committee on January 31, and the Board of Governors on February 10.

#### Sustainability Assessment

We have recently finished the Sustainability Assessment and posted it on the website at <a href="http://www.su.ualberta.ca/about/sustainability/">http://www.su.ualberta.ca/about/sustainability/</a>. The website includes both the full audit which is over 100 pages and the management response which shows where the SU will put resources towards sustainability over the next few years.

#### Fall Reading Week

I have been presenting the Fall Reading Week proposal to University committees over the past week and will continue to do so this week. There is undoubtedly both supporters and their opposite on committees and it has been very useful hearing everyone out. After this week we will look at all of the issues that have been brought up and determine a final action plan of what to do. Regardless of what happens the institution is recognizing that student wellness needs to be of a higher priority than has been in the case in the recent past, and that is a win.

If you have any further questions, suggestions, or concerns, please do not hesitate to follow-up with me, either in person at SUB 2-900, by phone at 780-492-4236, or by email at <u>president@su.ualberta.ca</u>.



January 23, 2012 To: Students' Council Re: Report to Council

Hello Council,

Below are the highlights since my last report.

#### **Capital Project Planning**

The feasibility study has been completed, reviewed by the SUB Planning Steering Committee and has been distributed to Council by email. The study will be presented to Students' Council to highlight salient details. The presentation will also include a discussion of the financial implications of such a renovation, given a funding model composed of fee and operating revenues. The Bylaw Committee has produced a possible referendum question, and I look forward to Council's decision on whether to ask students if this is something they would like to support.

Our latest payment to DIALOG was for \$986.51.

#### **Access Fund Appeals Committee**

The Vice President (Student Life) and I sat on the Access Fund Appeals Committee for this round. The appeal volume was the highest I've seen yet, but it was nothing we couldn't handle. The program, overall, remains within budget this year.

#### **Grant Allocation Committee**

GAC met last Wednesday and discussed a number of topics. A change to Access Fund policy on student loan requirements was proposed and will be discussed further at a future meeting. The process for selecting members of the Awards Adjudication Committee was reviewed and discussed. The allocation of awards to financial need and non- financial need applicants was discussed, in light of a low financial need applicant volume. This will be addressed this year by maintaining an even allocation of awards to both categories of students, but should be reviewed before the next awards cycle.

#### **SUB Rental Operations**

One of our building tenants – SUBphoto – is coming up to the end of its lease later this year. We have had an initial conversation with the owner to discuss the possibility of extending their stay in the building. We will likely enter into negotiations and see how that turns out. A final decision would ultimately need to be ratified by the Executive Committee, as per Operating Policy.

#### Miscellaneous

I selected PHIL 125: Practical Logic as my sole course this semester. Although not quite the "perfect class," (it's a little dry) I have always wanted to invest in some formal logic. As a 100-level night class, it shouldn't encroach on my schedule as much as my class last semester.

Should you have any questions, comments or concerns, feel free to get in touch at 780-492-4236 or <u>vp.finance@su.ualberta.ca</u>. If you wish to discuss any topics in depth, I would welcome the opportunity to meet in person.



Office of the VICE PRESIDENT (OPERATIONS & FINANCE)

Cheers,

Andy Cheema

TO: Students' Council, University of Alberta Students' UnionFROM: Su Su Liang, Chair, Audit CommitteeDATE: January 23, 2012RE: Report on Audit Committee's Activities – Meeting of January 16, 2012

Dear Council,

The Audit Committee met on January 16, 2012.

The Audit Committee reviewed the September to October, October to November, and November to December credit card statements and was satisfied with most of the packages. Audit Committee was concerned about a number of missing receipts which were not properly reported, the inclusion of improper proof of transaction, a transaction that Audit Committee believes perhaps should not have been charged to Students' Union credit card, and a speeding ticket. A request has been sent to the Senior Manager of Finance to look into these concerns, and the chair will relay management's response to Audit Committee at the next meeting.

The Audit Committee has begin discussion for the process of auditor selection, and is generally satisfied with the performance of KPMG, the Students' Union's External Auditor.

The Audit Committee reviewed financial documents from the AUCSJ, and the ESA. The documents were unacceptable due to several deficiencies. The Student Governance Advisor and the associations have been contacted regarding the deficiencies.

The Audit Committee has set its Winter 2012 trimester schedule as follows: January 30, 2012 at 4:00PM, February 13, 2012 at 3:00PM, February 27, 2012 at 3:00PM, March 12, 2012 at 3:00PM, March 26, 2012 at 3:00PM, April 9, 2012 at 3:00PM.

Yours Faithfully,

Su Su Liang Chair, Audit Committee

# **DIALOG**<sup>M</sup>





## 

#### **Executive Summarv**

The University of Alberta Students' Union is the student society that represents the University's undergraduate students. With an annual budget of approximately \$10,000,000 and hundreds of paid and volunteer staff, the Students' Union serves as an advocate for students and provides a variety of services to its members. The Students' Union building is heavily used and sees over 20,000 visitors on an average term weekdav.

The Students' Union is committed to ensuring the active renewal and evolution of its space to meet the needs of students. In order to do so, they have renovated and expanded the building several times, most recently in 2002. The last renovation focused on enclosing the open courtyards and expanding student spaces on the Main Floor including a new food court, lounge and study areas-making it one of the most successful and well used student amenity spaces on campus.

To expand upon this success, the Students' Union commissioned this feasibility study. The objective was to create a design that would achieve goals based on their *Strategic Plan 2011-2014* as follows:

- Reinforce the role of the Students' Union Building as a primary centre of undergraduate activity engaging students in the full spectrum of social and service activities;
- Realign space within the Students' Union Building to better accommodate those services that serve undergraduate student needs; and;
- Reorganize the building's internal circulation to make way finding easier and enhance the building's overall image.

#### Strategic Goal 2

Establish an environment that promotes student spirit and involvement, and maximizes students' sense of ownership of the Students' Union and their university experience.

#### Strategic Goal 5

Support the educational and university experience of students by providing relevant programs and services.

The Project team consists of the Students' Union project Steering Committee; Russell Steffes Management Inc. the Students' Union Project Manager; DIALOG, the project architecture and engineering consultants; and Tuner and Townsend Inc., the project cost consultants. The Students' Union steering committee includes:

Marc Dumouchel - General Manager

Margriet Tilroe - West Senior Manager, Facilities and Operations Andv Cheema - Vice President, Finance and Operations. Student Counselors

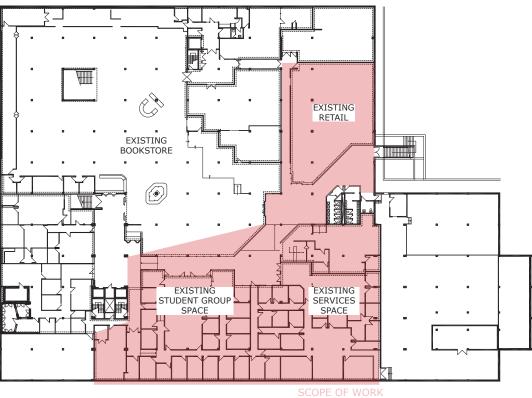
The team undertook a process of consultation with various client groups in order to solicit input for the design and better understand strategic goals. Design options and precedent images developed were further reviewed with client groups to gather feedback and refine the proposed design. The design concept adds a large glazed volume to the exterior of the South Façade which accomplishes a variety of objectives. The design respects the integrity of the 1967 Architecture while updating it with a contemporary image, an open, daylit basement interior space, reorganized and open basement floorplate promoting better circulation, wayfinding and improved student experience. Innovative mechanical systems make use of the glazed volume to achieve energy efficient passive solar heating and cooling.

Turner and Townsend provided a preliminary, order of magnitude, construction cost estimate based on the preliminary drawings and engineering reports prepared by DIALOG.

These construction costs were further vetted and supplemented with information provided by the project manager, Russell Steffes, to establish the total cost of the project. The total construction cost is estimated to be \$8,556,000. The estimated project cost, which includes, the construction cost as well as furnishings, fixtures, equipment and fees, is \$10,340,615.

In order to proceed forward, confirmation of funding support for the proposed budget will be required to initiate detailed design development and construction/contract documents in preparation for a stipulated bid tender or other procurement method as determined appropriate by the team. Through the process of the technical investigation and development required in this process, budget and scope will be refined to meet approved funding limits.

Once the project is approved to proceed, a critical path schedule will be developed to provide targets and milestones to focus the efforts and decision making of the team. It is expected that the scale of construction will require approximately 14 months to construct and commission. If approval to proceed is given by March of 2012, it is anticipate that the building could potentially be ready for occupancy by late 2013, early 2014. The potential for phasing, timing construction to minimize heating and hoarding costs and discovery of unforeseen conditions are factors that will require consideration when developing the final schedule and moving the project forward.





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#### Background

The Students' Union Building, constructed with Students' Union funds in 1967, continues to be one of the main student social and services hubs on campus. The building has been renovated and expanded first in 1993 and then in 2002 to serve the needs of an expanding undergraduate population. The undergraduate population continues to grow, with full time enrolment from 24,912 in 2002 and 29,100 in 2010 (footnote University of Alberta summary of statistics Academic Year 2010/ 2011). Further growth is expected in the future.

In contrast to a vibrant, animated and attractive Main Floor, SUB's Lower Floor is characterized by circuitous circulation and a rabbit's warren of unattractive, cramped and under utilized spaces. The Students' Union determined that the Lower Floor Level would be better utilized and attract more student use if it could be made more functional and attractive.

The Students' Union also operates a number of businesses, manages various targeted trust funds, hosts a wide variety of entertainment and educational events, and runs the Students' Union Building.

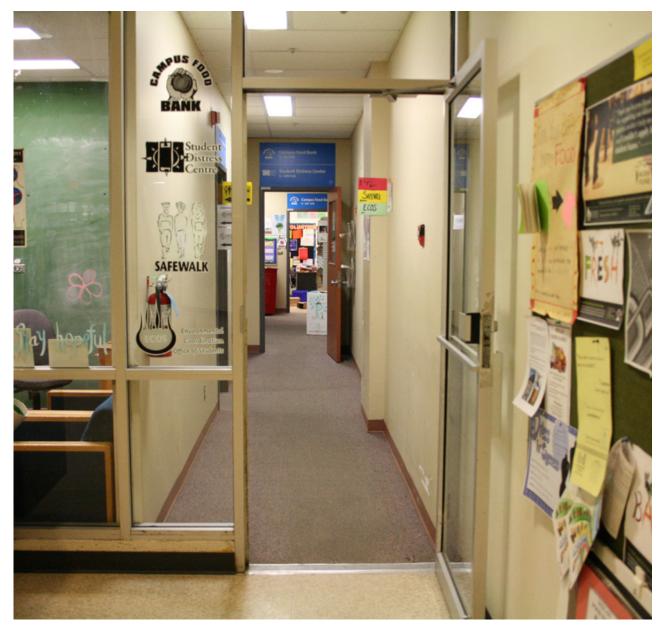
#### **Project Methodology**

The project terms of reference established a methodology that fostered student group involvement and feedback. Meetings were convened with stakeholders to establish priorities and confirm requirements. DIALOG initiated the design process by providing the Students' Union with precedent images that reflected stakeholder priorities. Regular design review meetings were held with the Steering Committee to confirm direction and provide feedback. Presentations were made to specific stakeholder groups and the Students' Union to solicit feedback and confirm overall support for the project.

DIALOG's architectural and engineering teams reviewed existing drawings, toured the building and met with the University's maintenance staff to familiarize themselves with the existing systems. The design recommendations provided in this report are based on the information gathered in this process and the proposed design solution.

In order to proceed forward, confirmation of funding support for the proposed budget will be required to proceed with detailed design development and construction / contract documents in preparation for a stipulated bid tender or other procurement method as determined appropriate by the team. Through the process of the technical investigation and refinement required in this process, budget and scope will be refined to meet approved funding limits.

Once the project is approved to proceed, a critical path schedule will be developed to provide targets and milestones to focus and measure the efforts and decision making of the team. It is expected that the scale of construction will require approximately 14 months to construct and commission. If approval to proceed is given by March of 2012, it is expected that the building could potentially be ready for occupancy by late 2013, early 2014. The potential for phasing, timing construction to minimize heating and hoarding costs and discovery of unforeseen conditions are factors that will require consideration when developing the final schedule and moving the project forward.



SUB - EXISTING STUDENT GROUP SERVICES IN THE LOWER LEVEL

#### SUB RENOVATION + ADDITION FEASIBILITY STUDY







## **DIALOG**<sup>M</sup>

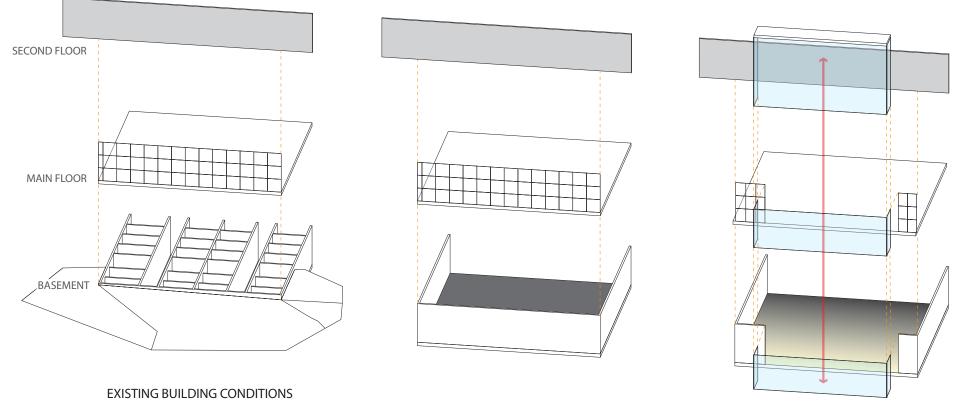
#### **Design Priorities**

During preliminary discussions with the Steering Committee and Student stakeholder groups the following priorities were expressed:

- Expansion of student lounge space and student group space in the lower level.
- Redevelopment of the lower level to make it a more attractive space that would engage students and foster a greater sense of student involvement. Natural light, connectivity to the Main Floor, visual exposure and direct access to 89th Avenue were seen as key factors to successfully animating the lower level space.

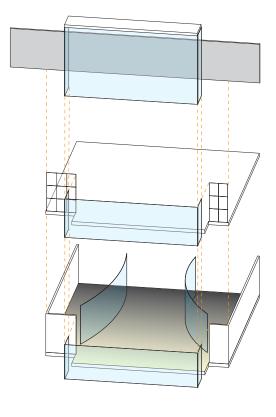
#### **Preliminary Design**

DIALOG proposed the addition of a glazed atrium to the south side of the Students Union Building. The atrium is located between mechanical service spaces and extends 42 metres from east to west and is 4.5 metres wide. Both the Main Floor and the Lower Level open onto this atrium to provide a visual connection between the floors. On the Main Floor, the exterior glazing is replaced with a glazed handrail. On the lower level portions of the exterior foundation wall between the structural columns are removed to open this level to the Atrium. At the atrium, the Main Floor assembly is sculpted to reduce its apparent thickness when seen from the atrium and 89th Ave. Beside the main entrance, a spiral stair provides direct access between the floors.



- EXCAVATE SOIL IN FRONT OF BASEMENT - REMOVE EXISTING PARTITIONS

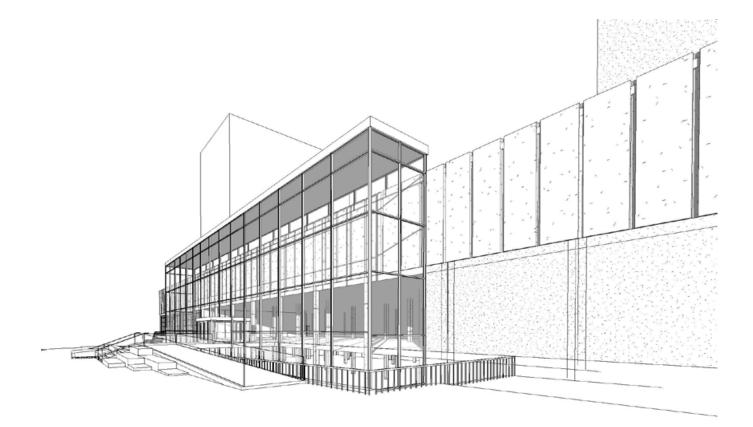
REMOVE EXTERIOR WALLS
 ADD 3 STOREY GLASS BOX
 CIRCULATION BETWEEN
 BASEMENT + SECOND FLOORS

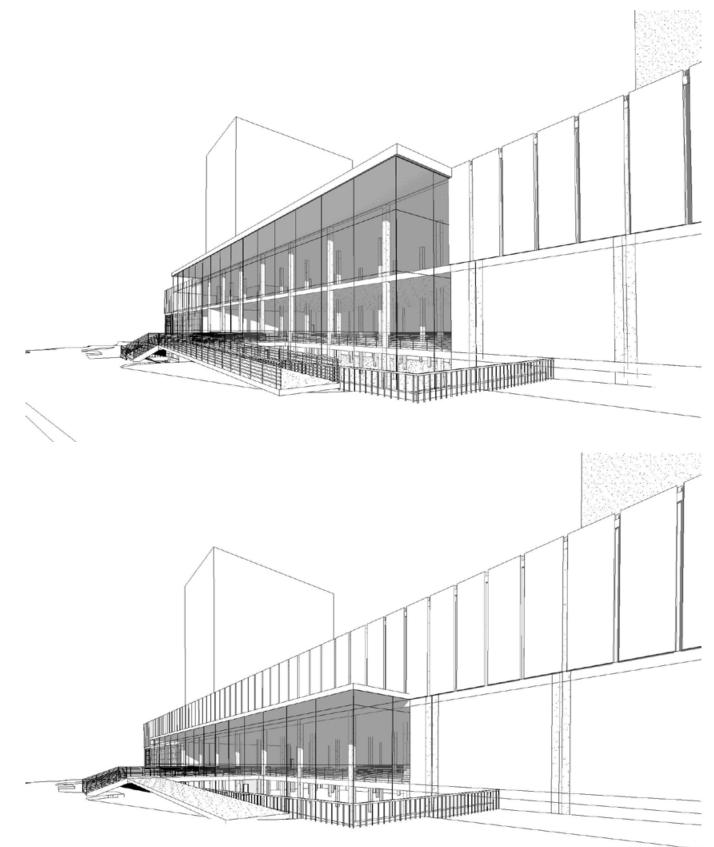


- ADD TRANSPARENT BASEMENT PARTITIONS

#### **Atrium Options**

Three options were considered for the height of the atrium, a single storey addition; a two storey addition aligning with the existing parapet height; and a two storey addition that extends approximately 2 metres higher than the existing parapet. The third option was selected to minimize the impact on the building's original Modern Architectural character especially when viewed from within. It also acts as a solar chimney in the summer to reduce the cooling load during the summer months. Triple glazed spider glass is proposed for the glazed atrium.





### SUB RENOVATION + ADDITION FEASIBILITY STUDY

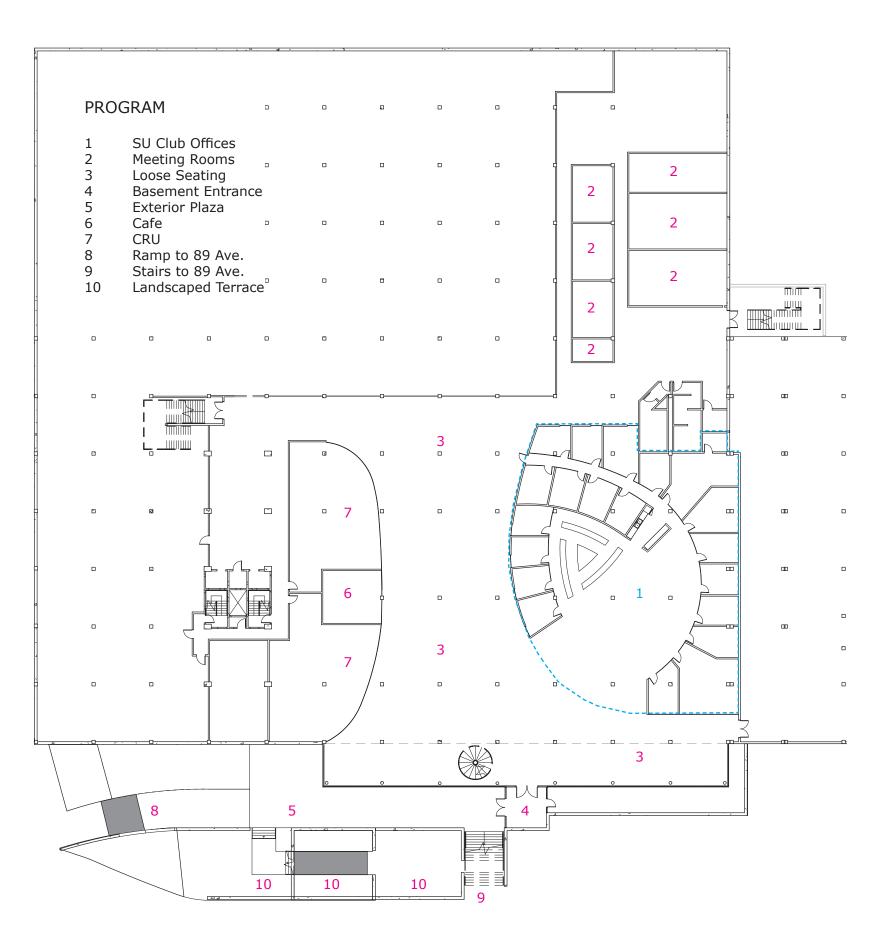
# DIALOG

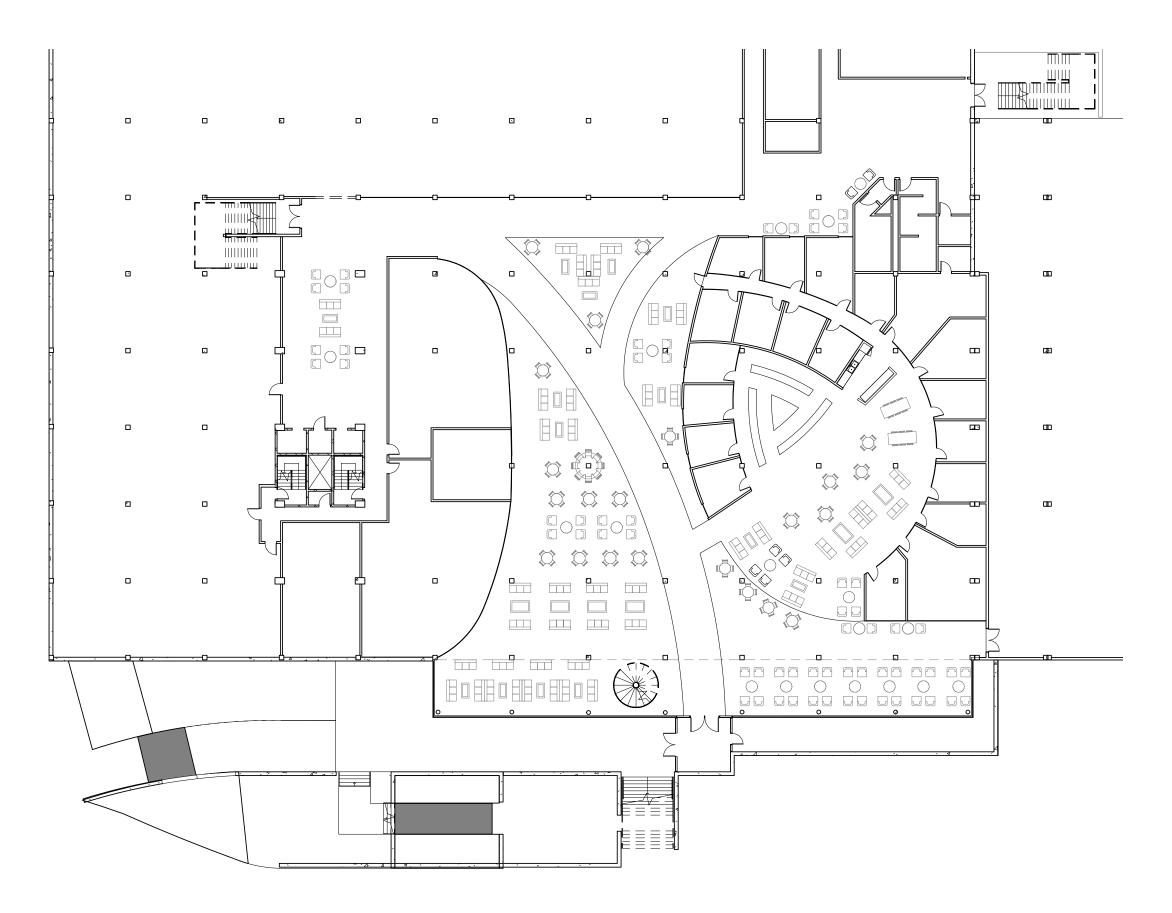
#### **Plan Development**

A landscaped forecourt is provided along the perimeter of the atrium. This forecourt allows for direct access from 89th Avenue to the Lower Level, improves its visibility from the street and improves daylight penetration into the lower level. West of the main entrance, where 89th Ave slopes downward, a series of landscaped terraces is provided to take advantage of this slope and soften the transition to the lower level. These terraces and the forecourt provide outdoor student social and gathering space. We understand that the development of the forecourt and its extent into 89th Ave is subject to further review by the University of Alberta.

The Lower Floor is developed to accommodate service and retail functions. A summary schedule of accommodation developed by the Student' Union Steering Committee in conjunction with the stakeholder group, is provided on the accompanying drawing.

Functions within the lower level are organized around a "T" shaped circulation pattern established by the Lower Level exterior entrance and the two primary stairs on the east and west side of the building. The area occupied by the existing bookstore is reduced in area and shifted to the north to provide for a larger student area and simplified circulation. A large student lounge is located on the centre circulation space and extends into the atrium to create a highly visible animated, and vibrant environment. This space is flanked by student group spaces and service offices on the east and student-oriented retail spaces on the west.

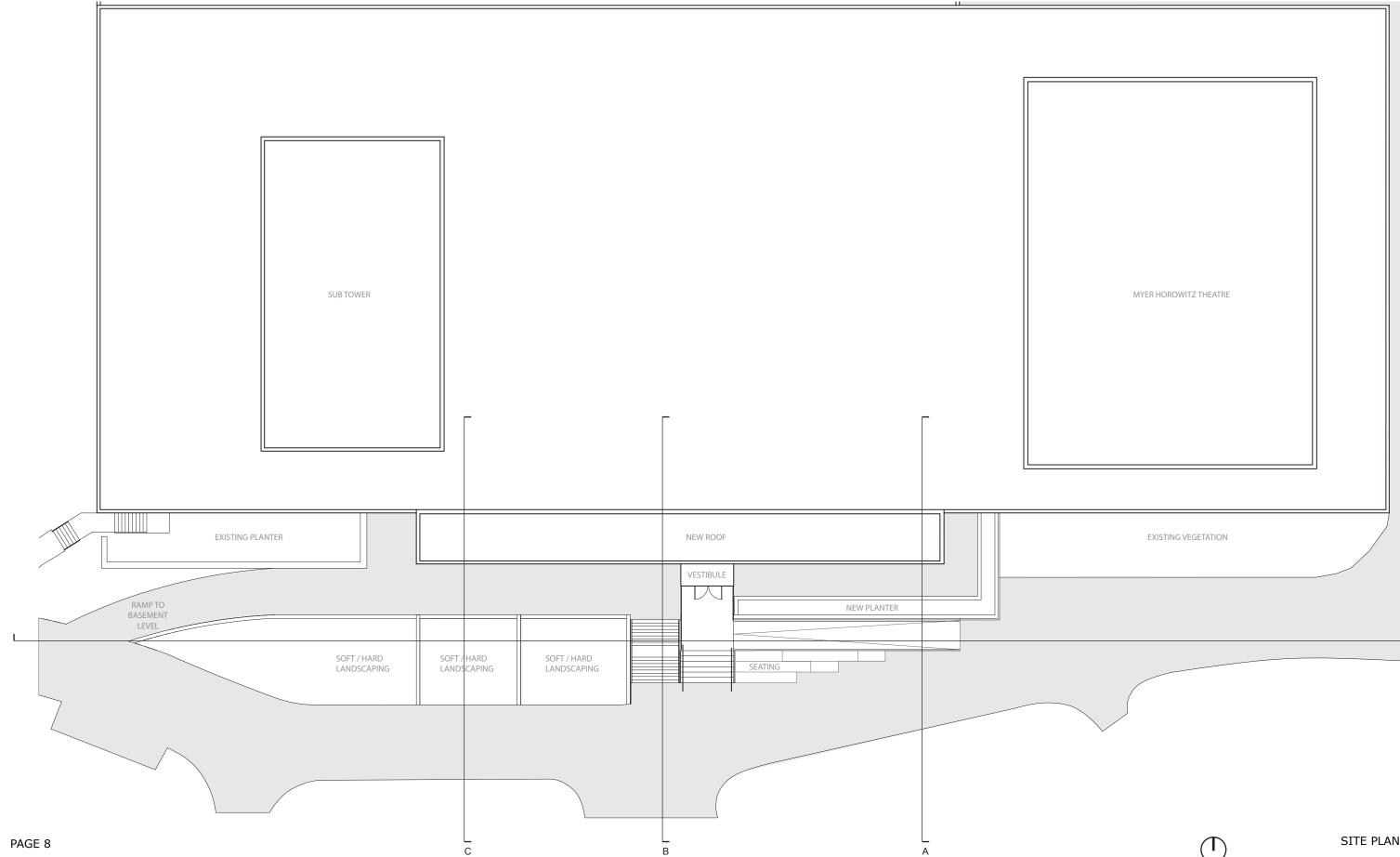


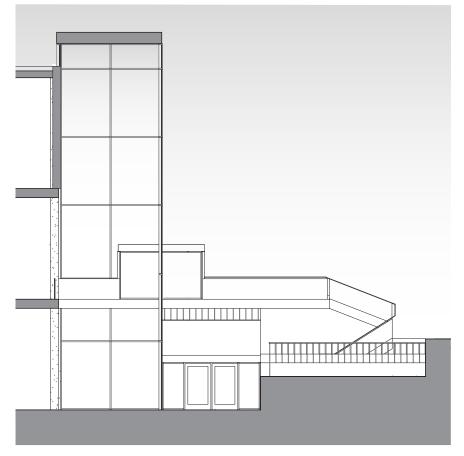




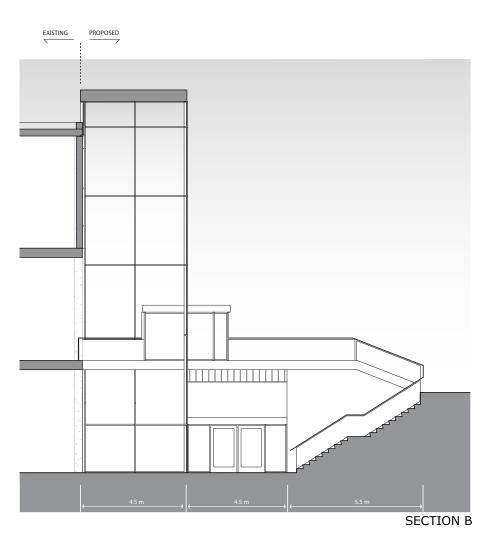
#### RENOVATION + ADDITION FEASIBILITY STUDY

## **DIALOG**<sup>M</sup>

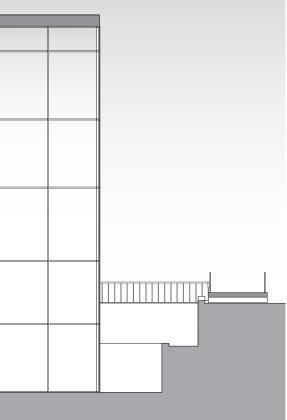












SECTION A

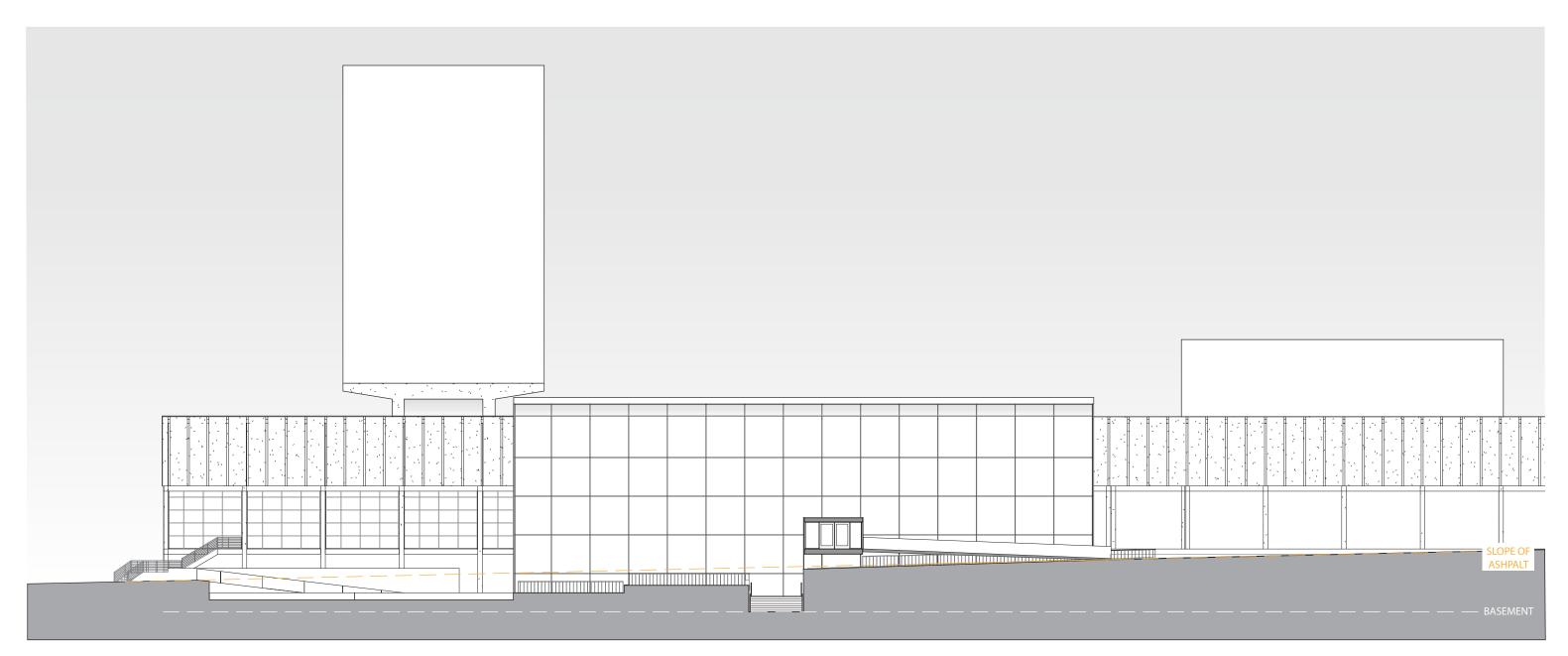
## **DIALOG**<sup>™</sup>

#### **Building Code Review**

The purpose of this building code review is to determine what additional measures, if any must be taken to accommodate the proposed design within the existing building. This review is based on the understanding that the renovations undertaken in 1993 and 2002 significantly upgraded the fire and life safety measures. In those renovations, a new exit stair compliant to current standards was added to the east side of the facility. The existing open stair, north of the existing elevator core, that serves the Lower Level, Main and Second Floors was separated from the remainder of the floor areas it serves and an exit corridor to the exterior was established.

When the existing light wells were roofed over in 2002 what had been an exterior area became interior space. These spaces are now classified as interconnected floor spaces under the terms of the building code. Interconnected floor spaces that only connect two floors do not require any onerous measures, particularly as the existing glass windows provides for a smoke separation.

With this design, however, three floors become interconnected: the Lower Floor, the Main Floor and the Second Floor. Three storey interconnected floors require more stringent and costly measures including: mechanically vented smoke control systems, the creation of areas of protection or additional exists from all floor areas. In the case of the Students' Union building the least costly approach is to provide new sprinkler lines with individual sprinkler heads at each second floor window in the existing light wells. The Authority having Jurisdiction may accept the introduction of the sprinklers along or may require that the existing aluminum windows be replaced with new windows in fire rated steel frames. With this approach, only the lower two floors would be classified as interconnected, thereby avoiding the stringent requirements.



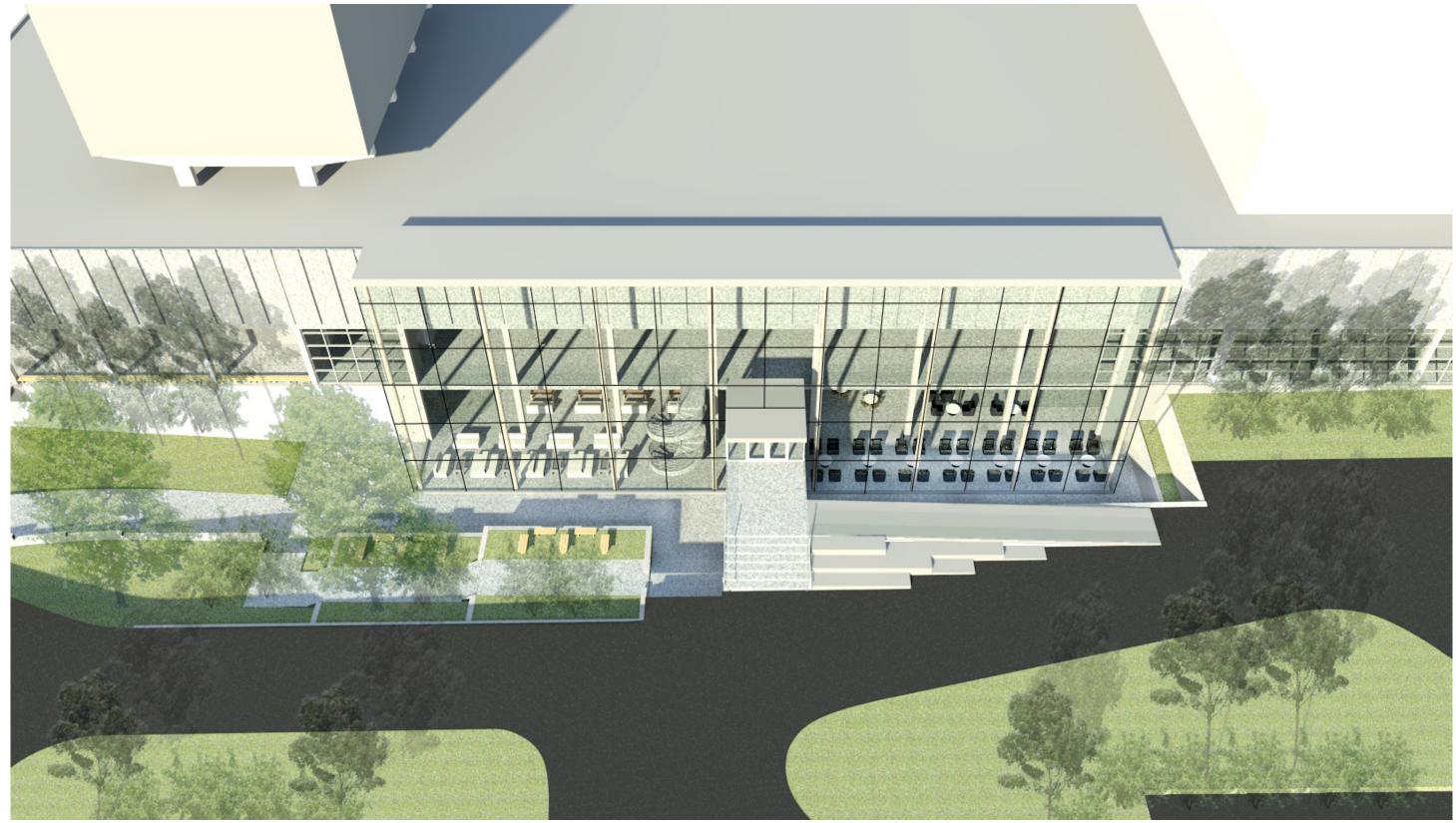
#### SECTION 1



NORTH-EAST PERSPECTIVE



# **DIALOG**<sup>M</sup>



AERIAL PERSPECTIVE



NORTH PERSPECTIVE

## SUB RENOVATION + ADDITION FEASIBILITY STUDY





BASEMENT PERSPECTIVE NORTH VIEW FROM EXTERIOR ENTRANCE



BASEMENT PERSPECTIVE SOUTH VIEW FROM BOOKSTORE



# **DIALOG**<sup>m</sup>



BASEMENT PERSPECTIVE SOFT SEATING BEHIND CURTAIN WALL



BASEMENT PERSPECTIVE SU CLUB LOOSE SEATING





#### **PROJECT BUDGET**

An order of magnitude construction cost estimate developed by Turner and Townsend is based on the preliminary design concepts and engineering systems developed by DIALOG. These concepts were communicated through the exchange of drawing materials, outline specifications and information gathered in team meetings.

A detailed breakdown and description of the costs included can be found in Appendix A in the form of Turner & Townsend's cost report. The project soft costs were arrived at based on input from the Project Management consultant, Russell Steffes based on historical data and experience.

Substantial contingencies are included to cover risks that may be experienced by way of market escalation, hazardous material discovery during demolition, soil contamination or concealed conditions that cannot otherwise be discovered without invasive inspections and testing. Based on the information gathered to date, we believe these contingencies should be adequate.

#### ORDER OF MAGNITUDE PROJECT BUDGET SUMMARY

CONSTRUCTION ESTIMATE (Turner & Townsend Report) VESTIBULE ALLOWANCE (Turner & Townsend Report) SPIRAL STAIR ALLOWANCE DESIGN ALLOWANCE (Turner & Townsend Report) ESCALATION ALLOWANCE (Turner & Townsend Report) HAZMAT ABATEMENT ALLOWANCE CONSTRUCTION CONTINGENCY (Turner & Townsend Report)

#### TOTAL CONSTRUCTION COST

FF&E (FURNISHINGS, FIXTURES, EQUIPMENT)

AUDIO/VISUAL EQUIPMENT

SIGNAGE AND GRAPHICS

SOLAR CONTROL BLINDS

DESIGN CONSULTANT FEES

PROJECT MANAGEMENT FEES

TOTAL PROJECT COST



\$7,065,000 \$65,000 \$75,000 \$707,000 \$141,000 \$150,000 \$353,000

#### \$8,556,000

\$370,000 \$125,000 \$35,000 \$125,000 \$761,280 \$368,335

\$10,340,615



SUB – Renovation and Expansion Concept **Systems Review – Structural** 8 December 2011

#### STRUCTURAL SYSTEMS

#### **Introduction / Scope**

This report is prepared as part of the feasibility and cost study for the proposed refurbishment and expansion of the Student Union Building at the U of A. The scope of this report is to comment on the feasibility of the architectural intent for the expansion and to provide input on the options for structural systems required to realize this intent. This report is based solely on the latest architectural drawings and renderings of the proposed expansion and on record base building structural drawings prepared by B. W. Brooker Engineering Ltd., dated September, 1965. No inspections of the existing building have been performed. Information on subsequent refurbishments and renovations is limited but has been reviewed where available.

Notably, refurbishment structural drawings prepared by Read Jones Christofferson Ltd. dated September, 2001 have been reviewed. Main floor infill works between grids B and F have been noted. It is anticipated that these infill areas will have no impact on the structural modifications envisaged for the proposed expansion.

The proposed addition at the south end of the existing building involves demolition and alteration of the existing structural systems along this face. Strengthening works are required to the existing concrete framing to accommodate the proposed openings and additional imposed loads. The addition structure will consist of a 3-storey high clear-span steel frame supporting a light-weight steel deck roof. An approximately 4m high retaining wall is required along the site boundary at the south side to accommodate proposed grading.

The existing building consists of a 2 storey concrete frame on a single level basement. The framing system at the main, second and roof levels consist primarily of concrete joists spanning between concrete girders. The girders are supported by concrete columns and, in less frequent cases, by concrete shear walls and foundation walls. Building columns are typically on a 6.1m x 6.1m grid and are supported by concrete piles below basement level. Foundation walls are also supported on concrete piles. It is not clear from the drawings what type of concrete pile construction was used. The basement floor consists of a concrete slab on grade of varying thicknesses ranging from 125mm to 150mm.

Stability for the building is provided by the concrete shear walls which typically form stair and elevator core walls for the building. Perimeter foundation walls could also form part of this system which will need to be investigated as the design progresses.

#### **Foundations and Basement Level Alterations**

The proposed addition provides an expansion to the existing basement level and requires the removal of the existing foundation wall. Strengthening of the existing wall will be required above the new openings to create a beam along this edge. Strengthening will likely be in the form of steel plates or channels bolted through the existing concrete wall above the new opening locations. Retained beams will be in the order of 600mm - 750mm deep. Superficial cracking may result from this change of structural systems however these cracks will be an aesthetic issue and not structural.

350mm x 350mm pilasters are currently located from basement to main level below the perimeter building columns on the south face and will be retained to transfer the loads down to the piled foundations. Due to the removal of the restraint previously provided by the foundation wall and due to the increased load to these pilasters, strengthening of these columns may be required. Steel plates or channels are again anticipated as the method of column strengthening if deemed required. It is expected that the existing foundations will see no significant increase in load as a result of the proposed addition.

#### **Existing Building Structural Systems**

Based on previous experience with buildings near the proposed site, the foundation system for the steel columns and perimeter grade beams of the addition is envisaged as belled concrete piles. A geotechnical investigation and report will be required to confirm the ground conditions and give recommendations regarding foundations and retaining structures.

Barring any unforeseen conditions from the geotechnical investigation, the basement floor in the new atrium space will be a 125mm thick slab on grade that will tie into the existing building. It is anticipated that the existing slab on grade will be broken out locally to facilitate demolition of the foundation wall, and reinstated as part of the new slab.

#### Superstructure

The superstructure for the addition will consist of steel columns spanning 3 storeys supporting a lightweight roof system. Due to the long unsupported height of the new steel columns, a robust section will be required to resist the gravity and wind loads on these columns. A non-exhaustive list of options for these columns include:

- Steel Column: A wide flange section or hollow structural section (circular, square or rectangular). This option will likely required a 350mm-400mm deep section for the anticipated spans.
- Steel Truss Column: A steel truss column constructed with smaller steel wide flange or hollow sections. This type of column will yield smaller individual section sizes and provide a more transparent and potentially more aesthetically pleasing column. Various web steel arrangements are also possible (vierendeel, warren etc.). Although steel tonnage is likely reduced with this option, fabrication costs are greatly increased. This option will likely require a 750mm 900mm depth.
- Bow-String Truss Column: A bow string truss column would consist of a steel column (wide flange or hollow section) reinforced with a tensioned cable chord. Costs associated with fabrication and erection for these trusses will be quite high. This option will likely require a 750mm - 900mm depth, with a front column depth of 250mm -300mm.

Horizontal steel beam braces at either the main or second floor level tying the steel columns back to the existing structure could help reduce the effective length, and therefore depth, of the columns. This option, however, would impede the open space and may not be desirable architecturally.

A girt system will be required to span between the steel columns to provide support to the glass wall. The extent and size of these girt members will depend on the span capacity of the glass system. A preliminary section size based on a 9m column spacing yields roughly a 250mm deep hollow rectangular section.

The roof structure is anticipated as a lightweight steel deck roof supported by wide flange members. A likely overall "structural depth" at this level is in the order of 250mm to 300mm. The steel deck will act as a diaphragm and form part of the lateral load resisting system for the addition.

The link between the main floor and the road at the south of the building is planned as a bridge structure spanning approximately 9m over the basement level and through the glass facade. The structure is anticipated as concrete on steel deck floor supported by wide flange steel beams. The overall structural depth will be approximately 500mm.

The lateral stability of the addition will ultimately be provided by the existing lateral load resisting system. Localised loads from the addition will be transferred to the existing structure via concentrically braced frames and sway frames. The type and extent of these frames will depend on the selected column type, architectural constraints, and a more thorough assessment of the existing structural system.

#### Landscaping - Retaining Walls

In order to accommodate the final grading arrangement at the site, retaining walls are required along the south perimeter of the building. These retaining walls will effectively replace the existing foundation walls in separating the road grade from the basement level. Depending on the geotechnical recommendations, soil conditions, and wall location with respect to the site boundary, various retaining system options are available.

A traditional concrete retaining wall system would consist of a vertical reinforced concrete wall designed to cantilever from the base structure. The base structure would either consist of a continuous concrete "heel" embedded below the retained soil or, alternatively in this specific case, a toe formed as part of the courtyard slab spanning to the building perimeter columns. The latter option requires less excavation and is thus preferable. Wall thicknesses will likely vary from 300mm - 500mm at the base of the wall, depending on height of soil retained, which varies along the length. A requirement for piled foundations below this wall is likely, but is dependent on geotechnical recommendations.

An alternative system, space permitting, is to use soil stabilization behind the line of the retaining structure with horizontal reinforcement layers (commonly called reinforced earth retaining walls). This option requires a significant over-excavation behind the line of the retaining wall. Soil is then replaced between layers of horizontal reinforcement, e.g. steel mesh or woven "geotextile fabric, essentially anchoring the soil using its own mass. The wall can then be faced with a concrete panel, brick or other non-loadbearing cladding system.

## SUB RENOVATION + ADDITION FEASIBILITY STUDY

# **DIALOG**<sup>M</sup>

SUB – Renovation and Expansion Concept **Conceptual Design Report – Mechanical** 8 December 2011

#### **MECHANICAL SYSTEMS**

#### Summary

This section outlines the Mechanical Design for the new U of A Students' Union Building (SUB). Estimates of mechanical systems have been based on preliminary architectural layouts of the new atrium and revised basement areas. System capacities will be finalized with detailed heating and cooling load calculations through the design development phase and in conjunction with the details of the atrium envelope construction to be developed by the architectural team.

This review is based on a visual walkthrough on October 2, 2011 and on November 4, 2011, as well as discussions with University of Alberta operation and maintenance staff.

#### 1.1.1 Code and Code-Referenced Standards

The following are applicable codes, and standards that are referenced by those codes. The requirements of these codes and standards will be met by the mechanical design.

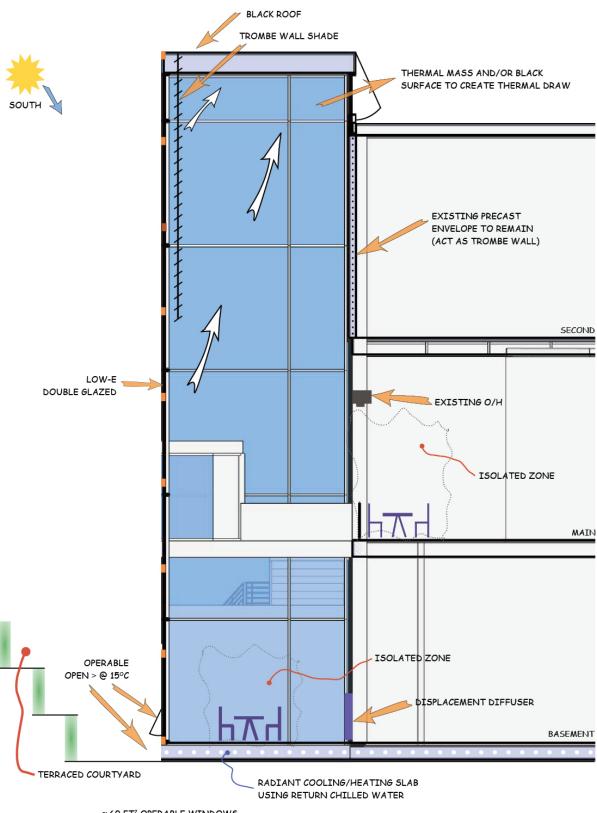
- Alberta Building Code 2006
- Alberta Fire Code 2006
- ANSI/ASHRAE 62.1- 2010; Ventilation for Acceptable Indoor Air Quality
- NFPA 10-07; Standard for Portable Fire Extinguishers
- NFPA 13-07; Standard for the Installation of Sprinkler Systems
- NFPA 14-03; Standard for the Installation of Standpipe and Hose Systems

#### Standards and Guidelines

The following publications are accepted standards and guidelines of good engineering practice. These recommendations contained in these standards will generally be adhered to in the mechanical design.

• ANSI/ASHRAE 55-1982 Thermal Environmental Conditions for Human Occupancy.

#### MIXED MODE VENT - PROPOSED DESIGN



≈ 60 FT2 OPERABLE WINDOWS

## DIALOG

#### **Design Criteria and Standards**

Heating and cooling load calculations are based on the 2006 Alberta Building Code and ASHRAE Handbook of Fundamentals.

The design conditions for the spaces within the main floor and basement will be:

- Winter: Outdoor Temp: -34°C DB; Elevation: 645 m Indoor Temp: 20°C to 22°C DB Indoor Humidity: 30% RH at –20°C or above Indoor Humidity: 20% RH at temps lower than -20°C
- Outdoor Temp: 28°C DB/19°C WB; Elevation: 645 m Summer: Indoor Temp: 22°C to 24°C DB Indoor Humidity: 50% RH

Outdoor Air: Outdoor air requirements for ventilation will be based on the most stringent requirements of ASHRAE 62.1 - 2010

The design conditions for the proposed Atrium will be:

Outdoor Temp: -34°C DB; Elevation: 645 m Winter: Indoor Temp: 20°C to 22°C DB Indoor Humidity: 30% RH at –20°C or above Indoor Humidity: 20% RH at temps lower than -20°C

Summer: Outdoor Temp: 28°C DB/19°C WB; Elevation: 645 m Indoor Temp: 23°C to 27°C DB Indoor Humidity: 50% RH

Outdoor Air: Outdoor air requirements for ventilation will be based on the most stringent requirements of ASHRAE 62.1 – 2010

The atrium will be designed with a combination of natural ventilation, solar shading, and radiant cooling to achieve thermal comfort. Thermal comfort is dependent on more than just air temperature, since total air velocity and the radiant effect can provide equivalent thermal comfort, ie. a fan on a warm day, a gas fired radiant heater on a cold day. Therefore, a thermal comfort model will be completed to compare air velocity, air temperature, and mean radiant temperature to establish comfort conditions.

#### **Plumbing Revisions**

#### **Domestic Water**

Existing domestic water will be modified to suit revised plumbing fixture location in the revised basement layout.

#### Storm Drainage

The atrium addition will add to net roof area of the Students' Union Building. The intent is to shed rain water back to the existing roof, local roof drains and leaders will have to be verified for available capacity during the design phase. Storm drainage from the new well created by the atrium should be controlled by surface runoff to the existing lower grade.

It is assumed that the existing basement has weeping tile, new weeping tile will be extended around the new perimeter atrium.

#### **Sanitary Drainage**

Existing under-slab sanitary drainage will be modified to suit revised plumbing fixture locations in the revised basement layout.

#### **Central Heating System**

#### **Primary Source**

Existing steam to hot water heat exchangers provide hot water for radiation, force flows, and unit heaters. The level of this conceptual report did not verify if the existing heat exchangers have sufficient additional capacity, therefore an allowance should be provided for a new steam to hot water heat exchanger to serve the Atrium heating system.

Dual-circuit radiant panels are proposed above the seating areas along the main floor overlooking the atrium. These radiant panels will provide additional thermal comfort to offset the mean radiant effect of a large glazed area discussed below. These radiant panels will be connected to the existing heating piping along the main floor area, since part of the existing envelope will be displaced by the new Atrium.

Hot water radiant tubing is proposed for the new Atrium slab on grade at the basement level. This new system will require a dedicated mixing loop and pumping to provide a lower supply water temperature for the radiant floor. The new Atrium slab will also require below grade insulation to allow the radiant heating to operate efficiently. This radiant heating will provide a local comfort zone at the basement level and will greatly increase the comfort in the seating areas.

#### Trombe Wall

The proposed architectural Atrium retains part of the existing pre-cast envelope contained within the Atrium space. This pre-cast envelope is constructed of pre-cast concrete with significant thermal mass. Incorporation of this pre-cast element leads to its' use as a partial Trombe wall. A Trombe wall is designed to capture solar energy during the winter months by utilizing thermal mass heated by the sun. Solar shading is configured at the Trombe wall to shade the wall during the summer and allow winter sun to heat the wall during the winter. The solar energy captured is released gradually due to the thermal mass, reducing the energy use of the space.

The Trombe wall exists already, so the only requirement is provision of a summer/winter solar shade using either a fixed angle or operable shades.

#### **Vestibule Heating**

#### **Heating Comfort Analysis**

The University of Alberta's Student Union Building Atrium proposes the use of spider joints with minimum double-glazing low-e glazing. The use of triple-glazing is also being investigated from to reduce heat losses and to further increase thermal comfort. Triple glazing provides increased thermal resistance and most importantly a higher interior surface temperature.

A large area of glazing with relatively low thermal resistance (R-3.3 for a double-glazed atrium) results in a low mean radiant temperature as well as radiant temperature asymmetry during cold winter temperatures. The occupants will feel uncomfortable due to the cool glazing surface temperatures. Typically, the air temperature in the atrium will increase to compensate, resulting in additional energy use.

Studies have shown radiant floor heating systems may improve the thermal comfort by increasing the mean radiant temperature. In this report, this argument has been modelled using the IES Virtual Environment program, and the impact of radiant floor heating on occupants' thermal comfort is presented.

A local vestibule heater will be provided to offset infiltration heating loads through the new entry vestibule.

# DIALOG

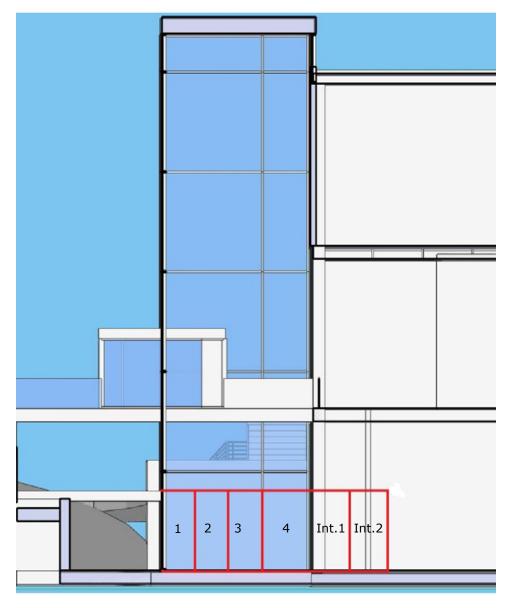


Figure 2: Schematic side view of the atrium and different zones

The bottom zone of the atrium is considered as the occupied space for comfort analysis (2 m high). This zone is divided into 4 sub-zones named 1 to 4 from left to right respectively (zone 1 being the space adjacent to the glazing). Zones 1 to 3 are each 1 m wide, and zone 4 is about 1.4 m wide. The interior space next to the atrium is also included in the comfort analysis as it has a large view factor to the glazing area and the thermal comfort within this area might be affected by employing a radiant floor heating system. Interior zones 1 and 2 are each 1 m wide.

#### Results:

There are 6 main parameters affecting the thermal comfort: air temperature, relative humidity, clothing level, metabolic rate, air speed and mean radiant temperature. Thermal comfort is a qualitative factor; however, it is usually quantified and presented as Percent People Dissatisfied (PPD) that is a function of above-mentioned parameters. Based on ASHRAE standard 55, the design needs to provide the space with a comfortable indoor condition that keeps the PPD below 20%. Figure 2 shows the PPD in each zone in a typical winter day (Jan 4) without employing a radiant floor heating system.

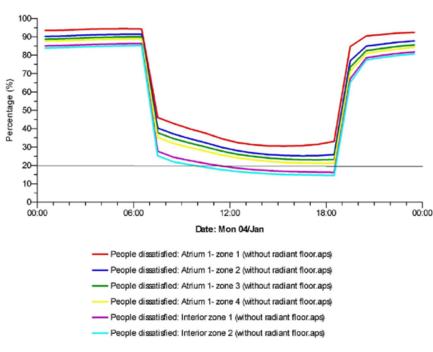


Figure 3: Percent People Dissatisfied (PPD) without radiant floor heating

As shown in Figure 3, the PPD level in the atrium space is above the 20% limit line for the entire day for a standard air temperature of 21°C. The interior zones fall below 20% PPD in afternoon hours when solar radiation heats up the glazing. On average, PPD in the atrium space is "uncomfortable" (above the standard limit) for 56% of occupied hours

(7am-7pm, Mon-Fri) in January and February. As mentioned before, such thermal discomfort is mainly caused by low mean radiant temperature (MRT) in the space. Figure 4 shows the MRT in the atrium zones.

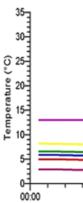
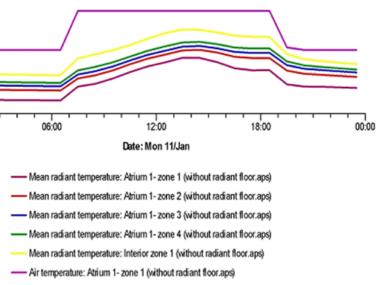
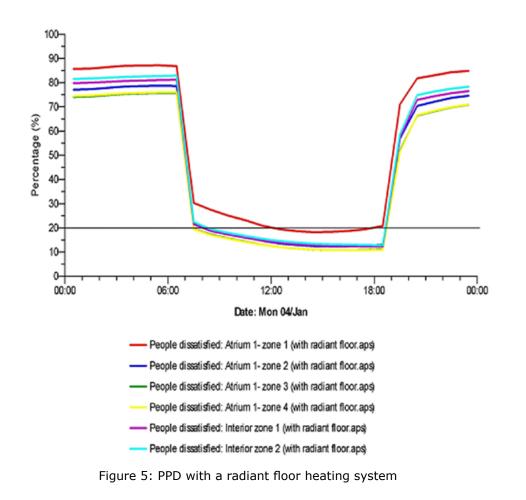


Figure 4: Mean Radiant Temperature (MRT) in the atrium space without radiant floor heating

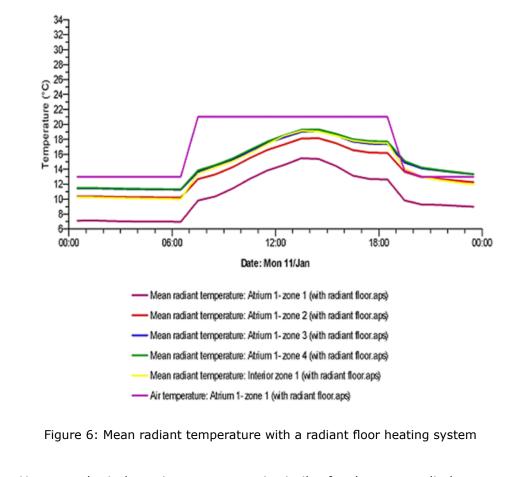
As shown in the figure, the indoor temperature is maintained at 21°C during the occupied hours. However, the mean radiant temperature (that is weighted average temperature of all surrounding surfaces) is significantly lower than the room temperature due to the impact of a large-low surface temperature glazing area.

In order to increase mean radiant temperature (and consequently thermal comfort), a radiant floor heating system is proposed. The surface temperature is maintained at or below 29°C to meet both comfort requirements and loads. Figure 5 presents the IES results on PPD of the atrium when a radiant floor heating system is employed.





Comparing the results presented in Figure 5 against Figure 2, a significant impact of radiant floor heating on occupants' thermal comfort is observed. For the typical day of January 4th, the radiant system provides a comfortable space (PPD of below 20%) at all zones except for the morning hours at the zone very adjacent to the glazing (Zone 1). On average, PPD in the atrium space is above the standard limit for only 9% of the occupied hours (7am-7pm, Mon-Fri) in January and February (56% without radiant heating). Improved thermal comfort in the space is due to increased mean radiant temperature with the proposed radiant system (shown in Figure 6).



However the indoor air temperature is similar for the two studied cases, the space is considerably more comfortable with radiant floor heating. On average, the occupied section of the atrium and the interior zones (shown in Figure 2) are considered as "uncomfortable" for 56% of occupied hours in January and February without employing a radiant floor heating system. However, a radiant floor heating system provides comfortable condition for more than 90% of occupied hours in January and February.

In addition to improved thermal comfort, the floor heating system has the advantage of operating as a floor cooling system in summer. Radiant floor cooling systems have a very high performance in spaces where significant direct solar radiation strikes the floor (such as atriums).

#### **Cooling System**

#### **Building Distribution**

Chilled water for the U of A Students' Union Building (SUB) is supplied by the University of Alberta Central Plant. There is sufficient capacity in the chilled water system to accommodate the new loads.

It is intended that minimal cooling systems be added to support the new Atrium space. A new cooling loop connected to the existing return chilled water will supply the radiant slab (in cooling mode) and the dual circuit radiant panels. This chilled water supply will be controlled above dew-point temperature to prevent condensation. New pumps and a mixing station will be required to supply the warmer chilled water to these radiant elements. Using return chilled water for this service will also widen the temperature differential back to the University of Alberta cooling plant, which is desirable for load matching of chillers.

Chilled water will be supplied to the radiant floor slab through a switchover manifold that will switch from heating to cooling function in the summer. The radiant cooling slab will have substantial capacity where direct sunlight strikes the slab; this effect will be modelled by a daylighting analysis in future design. Chilled water will be supplied to the dual circuit radiant cooling panels in the summer, control offset will be provided to ensure simultaneous heating and cooling does not occur.

#### Ventilation System

#### Air Supply – General Description

The existing curling supply unit has sufficient air volume for the revised basement space layout including the expanded footprint of the Atrium. This unit has a capacity of approximately 10,800 l/s (23,000 cfm) which is adequate for the proposed load. The intent is to limit the additional air volume required to serve the Atrium by utilizing natural ventilation and radiant cooling panels. It is also intended that the proposed glazing has a shading coefficient in the 0.4 range while maintaining a visual transmittance of 70% or better. Solar control methods such as shading devices and fritting of the glazing, will also be explored to reduce solar heat gain. The outdoor air volume capability of the existing curling unit is also adequate for the proposed ventilation load.

## **RENOVATION + ADDITION** FEASIBILITY STUDY

# **DIALOG**<sup>™</sup>

Operable windows or motorized opening dampers will be provided at the low level at the courtyard and on the upper level of the Atrium. The Trombe wall shade will be configured to absorb solar energy near the top of the Atrium, which will assist in creating a natural thermal plume through the space. The radiant cooling will provide an isolated zone of comfort at areas adjacent to the Atrium.

The following is a description of the Natural Ventilation modelling performed for the proposed Atrium:

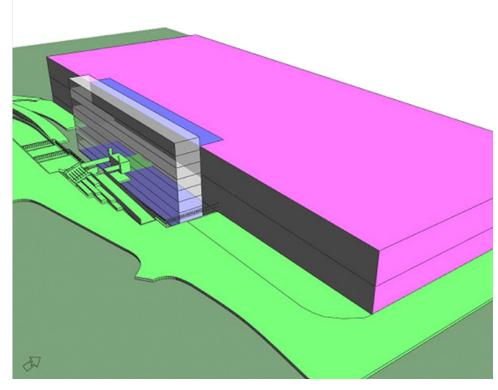


Figure 7: Natural Ventilation Model

Two openings are considered, one at the top (facing north) and the other one at the bottom of the atrium (facing south). The IES program is used to determine the impact of opening area on annual cooling energy use (Figure 8) and the variation of air temperature along a vertical plane in the atrium (Figure 9).

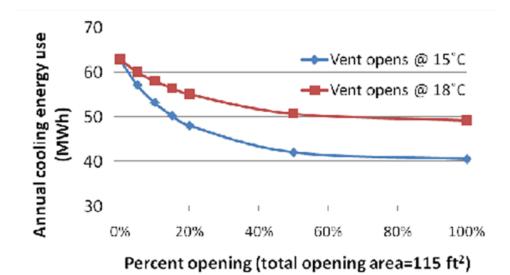


Figure 8: Impact of the opening area on annual cooling energy use

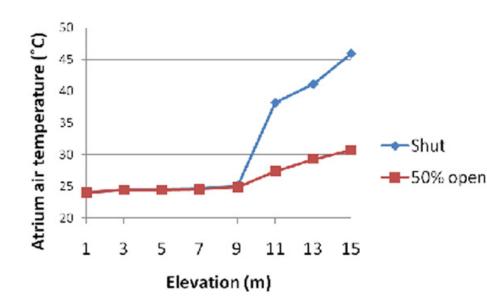


Figure 9: Air temperature profile along a vertical plane in the atrium (outdoor temperature at 28.3°C on August 9 at 5 pm)

Figure 9 shows the peak cooling load breakdown by space. It should be noted that the building is occupied from 7am till 7 pm, Monday to Saturday with 10 W/m2 lighting load, 10 W/m2 equipment load and 10 people/100 m2. Infiltration rate is assumed to be 0.3 ACH..

It is also intended to supply ventilation air from the existing air handling unit through displacement diffusers located along the new Atrium basement space. Warmer air will be supplied at approximately 17-18°C along the occupied area to provide ventilation by displacement. A fan powered box or fan coil will mix cooler primary air with return air from the space to provide warmer air. This displacement air will provide primary ventilation for the space when natural ventilation is not operable. The displacement air will be shut-off when in natural ventilation mode.

#### **Air Supply Equipment**

The existing air handling unit previously serving the curling rink was recently upgraded with a new cooling coil in 2008. This unit is a simple built up unit with a steam heating coil, chilled water cooling coil, and roll filters. The system is currently a combination of variable volume and constant volume, with variable volume boxes installed but no variable volume capability on the supply fan.

It is recommended that the supply fan motor be replaced and retrofitted with a variable speed drive to provide true variable speed control. Currently the fan rides the fan curve when boxes throttle back, severely limiting energy savings opportunities. It is also recommended that the unit be refurbished during construction including possible fan replacement, new steam coil, new filter section, and possible air handling unit panel repair.

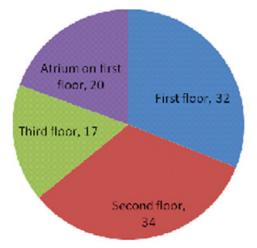


Figure 10: Peak cooling load breakdown by vertical area of Atrium numbers in kW (total cooling load: 103 kW)

#### Humidification

Direct injection steam humidifiers are installed in the air handling unit, this will be retained.

#### **Fire Protection and Life Safety Protection**

Sprinkler coverage will be required at the top of the atrium, new sprinkler heads will be installed at high level. Sprinklers within the basement will be adjusted as required to suit the new layout.

Hand held extinguishers will be provided throughout in compliance with NFPA 10 and local authorities.

All ducts and piping passing through a fire separation will be provided with fire stopping in accordance with the building code. Any ducts passing through a fire-rated wall will provided with an approved fire damper.

#### **Control Systems**

#### General

An extension of direct digital control (DDC) building management and controls system (BMCS) will control and monitor all mechanical equipment and will provide zone HVAC control. It is intended that the existing air handling unit, the terminal boxes in the zone, and new radiant cooling and heating equipment be upgraded to DDC control.

Space temperature control will be provided through terminal controllers, electronic room temperature sensors, and electronic reheat and heating control valves.

Standalone remote control panels will operate and monitor major mechanical equipment.

All field devices including valve and damper actuators, room temperature controllers, and HVAC system and equipment control and monitoring devices will be electronic.



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# 

SUB – Renovation and Expansion Concept Systems Review – Electrical 8 December 2011

#### **ELECTRICAL SYSTEMS**

#### Summary

This review assesses the capabilities of the existing electrical systems to facilitate the concept proposed to expand and renovate the Student Union Building on the University of Alberta Campus. The review covers power, communications (data, voice, audio/visual), fire alarm, security and lighting. It is based on visual walk-throughs on the 2nd of October 2011 and the 8th of November 2011 and a review of drawings.

Generally the electrical systems are in good condition; consistent with what is normally expected based on the equipment's age and type of facility.

#### Power

#### **Normal Power**

The Student Union Building receives its power through the utility corridor from a dual primary feed. There is a high voltage substation located within the basement of the facility, adjacent to the mechanical room, where the 13.8kV utility power is transformed

to 347/600V power for use within the building. The service is sized at 1500kVA. 600V to 120/208V transformers are located in local electrical rooms throughout the facility, with distribution panels within the same rooms. Some of the equipment was upgraded or replaced through previous renovations. Panels that are original to the building are typically fully utilized and at the end of their service life.

There is sufficient capacity within the system to handle the upgrades required for the proposed expansion and renovation. New branch panels are recommended for all service revisions and changes, since the local branch panels are fully utilized, with no

spares or spaces, and are typically original to the building. The new branch panels will be located in the existing mechanical/electrical room space, or in the existing transformer room behind the elevators.

Power distribution to new receptacles and equipment will be coordinated with through the design process.

Connections required for the new mechanical equipment will be determined through the design process. Since many of the CDPs were upgraded and replaced in the early 2000's, additional breakers will be added to the CDPs as required, and an MCC will be added for the new equipment.

#### **Emergency Power**

There is a small, 30kVA 208V emergency generator located within the mechanical room, serving the life safety needs of the Student Union Building, including emergency egress lighting and the fire alarm panel. The small number of additional emergency lighting required for the expansion should be able to be served through this generator, particularly due to the energy management upgrade done in 2009/2010 which reduced the power draw of all of the lighting, including emergency lighting, in the facility.

emergency power system.

#### Lighting

This proposed renovation is typically in areas where the original fixtures were relamped and reballasted. As such, new fixtures will be required to suit the new space. New fixtures will also be required in the expansion area.

Normal power on the campus utility is a reliable power supply. The U of A utilities department has not recorded an outage of longer than two minutes for the past 3 years, and they have a robust maintenance program that is designed to reduce frequency and

duration of outages. As such, the probability of losing normal power is low, and the generator is considered sufficient for the existing building and proposed expansion. No mechanical equipment will be added to the

The lighting in the Student Union Building is typically 347V, operated with low voltage lighting controls through local switching. The lighting fixtures are typically original to the building, but they were upgraded for energy efficiency in 2009/2010, using T8 linear

fluorescent lamps with instant start ballasts. There is a mixture of fixture types, suited to the spaces, including multi-lamp round fixtures in the bookstore area, and 1'X4' fixtures in other areas. Some new fixtures were added in the 2009/2010 lighting upgrade, as well, utilizing T8 fluorescent lamps with instant start ballasts, or compact fluorescent lamps, depending on the fixture type.

Lighting will be designed to suit the space, and will consist of pendant fixtures with ceramic metal halide or fluorescent lamping, linear fluorescent fixtures, indirect ceramic metal halide fixtures and/or LED fixtures, as appropriate. Lighting will be added to the

low voltage lighting control system, through a new low voltage relay panel tied to the overall system.

In areas with intermittent occupancy, vacancy sensors will be installed to turn the lighting off when the space is unoccupied. The sensors will be designed for manual on/automatic off operation.

#### **Day Lighting**

The expansion to the facility will enable the expansion to be fully day-lit, along with a portion of the renovation. Glare control may be required, depending on the uses of the space. Providing there are no other obstructions, it is expected that a zone up to 8m deep into the floor space will be day-lit, in addition to the new atrium. This brings daylight in past the first row of columns.

To facilitate day lighting and reduce electric lighting power consumption, photosensors will be installed to turn lights on and off as appropriate, and dimming ballasts will be used where dimming is more appropriate than on/off sequencing.

#### **Low Tension Systems**

#### **Fire Alarm System**

The existing fire alarm system for the Student Union Building is a Notifier system employing pull stations, sprinkler monitoring devices, fire detectors and audible and visual signaling devices, and is suitable for the building expansion. The system consists of a control panel located in the main mechanical room, with annunciator panels at the fire fighter entrances, complete with phones to call the University Control Centre.

The fire alarm syste m is able to be expanded into the expansion area, and reconfigured to suit the new arrangements. The main panel locations will remain unchanged.

#### **Security System**

CCTV, access control and other security measures will need to be designed for the specifics of the open access environment with U of A security. Cameras may desired for specific areas.

#### **Data and Telephone**

The existing data closet is located between the elevators, on a rack mounted above head height. A proper analysis of the data and telephone cables was unable to be completed, due to this location, and it is beyond the scope of this review to confirm end-to-end integrity of the cabling. Data and telephone will be expanded and relocated to suit the expansion and renovation. Due to the location of the existing data closet, it would be appropriate to locate a new data closet within the expansion and renovation area.

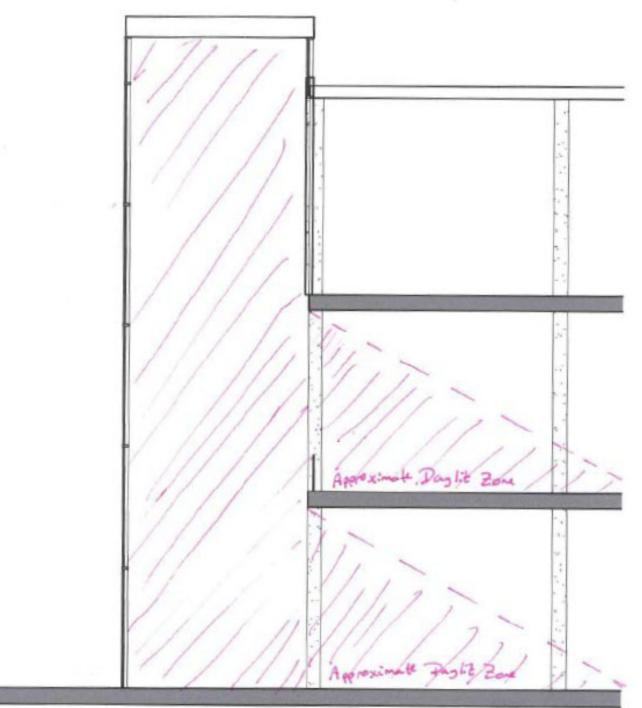


Figure 1 – Sketch of Approximate Daylight Zone (in Elevation)







# Appendix A Cost Report

### Report

On Order of Magnitude Construction Costs

## ALBERTA





Students Union, Edmonton For Students Union, University of Alberta



5<sup>th</sup> January 2012 ref no. 20179

Students Union, University of Alberta C/O Mr Russell Steffes 10558 – 115<sup>th</sup> Street Edmonton Alberta T5H 3K6

#### For the attention of Mr Russell Steffes,

Dear Russell,

## STUDENTS UNION, UNIVERSITY OF ALBERTA, EDMONTON, AB ORDER OF MAGNITUDE COST ESTIMATE

We enclose our Order of Magnitude estimate for the above-noted project, based on the documentation provided to us, listed in Section 5 of this report.

Please refer to our Executive Summary, Section 1, for specific qualifications and assumptions associated with this cost report.

We trust this meets with your approval. Should you have any questions please do not hesitate to contact us.

Yours Sincerely

6

Mark Hutchinson Director Turner & Townsend e: mark.hutchinson@turntown.com

cc.

Mr Brandon Billsten - Turner & Townsend

#### Turner & Townsend

10180-101 St Suite 1150 Manulife Place Edmonton Alberta T5J 3S4

t: +1 (780) 643 0134
e: brandon.billsten@turntown.com
w: turnerandtownsend.com





For Students Union, University of Alberta Students Union, Edmonton

#### Contents

- 1 EXECUTIVE SUMMARY
- 2 ESTIMATE SUMMARY
- 3 ELEMENTAL COST SUMMARY
- 4 AREA SUMMARY
- 5 DOCUMENTATION

| Rev | Originator                       | Approved  | Date           |
|-----|----------------------------------|---|----------------|
| 0   | Mark Hutchinson                  | Mark Hutchinson   | 5/January/2012 |
|     |                                  |   |                |
|     |                                  |   |                |
|     | eserved January 12. This documen | rner & Townsend cm2r Inc<br>t is expressly provided to and soleh<br>om, referred to, used by or distribut |                |

prior consent of Turner & Townsend who accept no liability of whatsoever nature for any use by any other party.

DOCUMENT1

#### 1 EXECUTIVE SUMMARY

#### 1.1 Introduction

Turner and Townsend is retained to provide an Order of Magnitude Estimate for Student Union, University of Alberta, Edmonton, including this report. The Estimate is for the "hard" Construction Cost component of the project only and does not include for any project soft costs.

#### **1.2 Procurement and Schedule**

The Construction Cost Estimate includes all direct construction costs and contractor's overhead and profit. It assumes the project will be procured on a **Stipulated Lump sum basis**, and that bids will be received from a <u>minimum</u> of five pre-qualified general/fit-out contractors. We also assume that the project will be completed in a reasonable time frame and have not included any premiums required for "fast-tracking" the project, working out-with regular hours or allowances for restricted construction access.

#### 1.3 Risk Assessment

Post-Contract Contingency (i.e. for Change Orders which may arise during construction) has been included in our cost report.

#### 1.4 Level of Documentation

The estimate is based on the drawings and information provided as listed in Section 5 of this report and supplemented by discussions with Dialog. It reflects current December 2011 rates and present market/local conditions.

The estimate includes an Estimating/Design Contingency Allowance to account for increases in cost as a result of design development through to 100% complete documentation.

#### 1.5 Market Conditions

The estimate is based on normal competitive conditions and is intended to fall within a range of bids received from a number of competitive contractors. Adverse local and global market conditions, proprietary specifications, single-sourcing of materials and equipment, or lack of bidders may cause bids to vary from reasonable estimates based on normal competitive conditions.

Contingency is included in our estimate to allow for construction price escalation to the anticipated start date, which we have forecast as Summer 2012. We recommend this be reviewed prior to construction start.





For Students Union, University of Alberta Students Union, Edmonton

#### 1.6 Assumptions/Exclusions

Please refer to our detailed elemental back-up for specific assumptions.

#### 1.7 Limitation of Scope

Turner & Townsend is not currently retained to prepare further Estimates/Cost Plans as design progresses. We do however, recommend further Cost Estimates are produced as the design evolves and the specifications are solidified to maintain budget certainty ahead of tendering. If we are retained beyond this Order of Magnitude estimate we can prepare detailed estimates at given design milestones (Design Development, Working Drawings and PreTender stages). In addition to further estimates we can also assist with Value Engineering and Life Cycle payback analysis should these be required.

#### 2 ESTIMATE SUMMARY







#### Estimate Summary of Students Union, University of Alberta, Edmonton Construction Costs

|   | Item                                      | GFA (m²) | \$/m²   | Total Cost  |
|---|---|----------|---------|-------------|
| 1 | Construction Costs                        | 2,122    | \$3,329 | \$7,065,000 |
| 2 | Estimating Allowance (Design Contingency) |          | 10%     | \$707,000   |
| 3 | Escalation Allowance                      |          | 2%      | \$141,000   |
| 4 | Construction Allowance (Change Orders)    |          | 5%      | \$353,000   |
| 5 | Estimate Total                            | 2,122    | \$3,895 | \$8,266,000 |

| 6 | Cost Option – Allowance for Furniture       |  | \$370,000 |
|---|---|--|-----------|
| 7 | Cost Option – Allowance for Entry Vestibule |  | \$65,000  |

#### **Qualifications;**

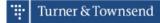
- 1. The Cost Estimate includes all direct construction costs, contractors overhead and profit and assumes the project will be procured on a competitive basis with tenders received from not less than 5 contractors
- 2. We have included an Estimating Allowance which accounts for increases in costs as a result of the design development process.
- 3. The Cost Estimate is priced in current market conditions and reflects present market conditions with an Escalation adjustment of 2% to take pricing to Summer 2012.
- 4. Lack of tendering competition, proprietary specifications and lack of design information clarity can all lead to tenders varying from reasonable estimates based on normal competitive conditions.
- 5. Cost Option for Furniture above is indicative only at this time as further detailing needs to take place before accurate costing exercises can by conducted. The items making up the value are located in section B31 of our estimate noted as NIC.
- 6. Cost Option for the entry vestibule above is indicative only at this time as further detailing needs to take place before accurate costing exercise can by conducted.
- 7. We have assumed all the existing concrete retaining walls, grading and planting will be removed and replaced with new to suit the design.

- 8. We have assumed the new CRU and Café spaces will be shelled only (enclosing partitions, drywall ceiling and terminated services) with fit out by the commercial vendor.
- 9. We have assumed the concrete entrance stairs and suspended slab will be left in place.
- 10. We have excluded the Spiral stair shown in A108 as this conflicts with the scope of work parameters.
- 11. Assumed new atrium glazed elevation will be washed and maintained from ground level.
- 12. Main switchboard is adequate and no work is required
- 13. Emergency system is adequate and no work is required
- 14. Add new circuit breakers to existing normal and emergency distribution panels
- 15. New normal and emergency panels, transformers and feeders as required
- 16. Feeder and disconnect switch only to shell spaces
- 17. Wiring to Mechanical equipment as required
- 18. New energy efficient lighting throughout with central control, local switches and occupancy sensors
- 19. Local branch devices and power connections as required
- 20. Existing fire alarm system extended to suit
- 21. Existing security system extended to suit
- 22. Communications outlets and wiring to suit
- 23. Existing PA system extended to suit
- 24. Empty conduit only for Audio Visual system where indicated
- 25. Refer to our detailed estimate breakdown in Section 3 for further information.

#### Exclusions;

- 1. GST
- 2. Soft Cost (Professional Fees, Financing Costs, Permitting Costs, Development Costs, etc)
- ground)
- 4. Premiums associated with Single Sourcing
- 5. Phasing Premiums
- 6. Signage and Graphics
- 7. Work to the CRU spaces and Kitchen Equipment costs
- 8. Flat Screen TV Equipment and Installation
- 9. Furnishing and Fittings beyond those specifically annotated in the Estimate
- 10. Blinds to the new glazed extension elevation
- 11. Working outwith normal working hours
- 12. Communication Active Hardware
- 13. Audio Visual Equipment, Devices and Wiring
- 14. Lightning Protection
- 15. Emergency back-up power

making the difference



3. Removal of contaminated materials (including Asbestos in the building and hydrocarbons in the



### 3 ELEMENTAL COST SUMMARY

|   |              | OF MAGNIT             | UDE ESTIMA             | TE                    |                               |   |      |
|---|--------------|-----------------------|------------------------|-----------------------|-------------------------------|---|------|
|   | EI           | emental Cost          | t Summary              |                       | Cat:                          |   |      |
| Project: University Of Alberta - Stude                      | ents Union   |                       |                        |                       | File:                         | MAH-OoM-0                               |      |
| Location: Edmonton, AB                                      |              |                       |                        |                       | Date:                         | Jan 5, 2012                             |      |
| Owner/Client: University Of Alberta                         |              |                       |                        |                       | roject Number:                | 20179                                   |      |
| Architect: DIALOG   | Ratio        | <b>F</b> I            | Flam and al            |                       | ss Floor Area:                | 2,122                                   | m2   |
| Element   | to GFA       | Elemental<br>Quantity | Elemental<br>Unit Rate | Elemental<br>Amount   | Cost/m2                       | Amount                                  |      |
| A SHELL   |              | Quantity)             |                        | 7                     |                               |   |      |
| A1 SUBSTRUCTURE   |              |                       |                        |                       | \$96.61                       |   |      |
| A11 Foundation  | 1.00         | 2,122 m2              | \$43.83                | \$93,000              | \$43.83                       |   |      |
| A12 Basement Excavation                                     | 0.90         | 1,915 m3              | \$58.49                | \$112,000             | \$52.78                       | \$205,000                               | 2%   |
| A2 STRUCTURE  |              |                       |                        |                       | \$165.41                      |   |      |
| A21 Lowest Floor Construction                               | 1.00         | 2,122 m2              | \$60.79                | \$129,000             | \$60.79                       |   |      |
| A22 Upper Floor Construction                                | 0.00         | 0 m2                  | \$0.00                 | \$0                   | \$0.00                        | 4351 000                                | 40/  |
| A23 Roof Construction A3 EXTERIOR ENCLOSURE                 | 1.00         | 2,122 m2              | \$104.62               | \$222,000             | \$104.62<br><b>\$1,596.61</b> | \$351,000                               | 4%   |
| A31 Walls Below Grade                                       | 0.00         | 0 m2                  | \$0.00                 | \$0                   | \$1, <b>590.01</b><br>\$0.00  |   |      |
| A32 Walls Above Grade                                       | 0.00         | 0 m2                  | \$0.00                 | \$0<br>\$0            | \$0.00                        |   |      |
| A33 Windows & Entrances                                     | 0.50         | 1,055 m2              | \$3,160.74             | \$3,333,000           | \$1,570.69                    |   |      |
| A34 Roof Covering   | 0.12         | 256 m2                | \$214.84               | \$55,000              | \$25.92                       |   |      |
| A35 Projections   | 0.00         | 0 m2                  | \$0.00                 | \$0                   | \$0.00                        | \$3,388,000                             | 41%  |
| B INTERIORS   |              |                       |                        |                       |                               |   |      |
| <b>B1 PARTITIONS &amp; DOORS</b>                            |              |                       |                        |                       | \$153.16                      |   |      |
| B11 Partitions  | 0.75         | 1,589 m2              | \$159.89               | \$254,000             | \$119.70                      |   |      |
| B12 Doors   | 0.01         | 25 No                 | \$2,840.00             | \$71,000              | \$33.46                       | \$325,000                               | 4%   |
| B2 FINISHES   | 1.00         | 2 1 2 2               | 401.00                 | #105 000              | \$178.13                      |   |      |
| B21 Floor Finishes  | 1.00         | 2,122 m2              | \$91.89                | \$195,000             | \$91.89                       |   |      |
| B22 Ceiling Finishes<br>B23 Wall Finishes                   | 1.00<br>1.25 | 2,122 m2<br>2,642 m2  | \$68.33<br>\$14.38     | \$145,000<br>\$38,000 | \$68.33<br>\$17.91            | \$378,000                               | 5%   |
| B3 FITTINGS & EQUIPMENT                                     | 1.25         | 2,042 1112            | \$14.50                | \$30,000              | \$10.84                       | \$378,000                               | 3-70 |
| B31 Fittings & Fixtures                                     | 1.00         | 2,122 m2              | \$10.84                | \$23,000              | \$10.84                       |   |      |
| B32 Equipment   | 0.00         | 0 m2                  | \$0.00                 | \$0                   | \$0.00                        |   |      |
| B33 Conveying Systems                                       | 0.00         | 0 stp                 | \$0.00                 | \$0                   | \$0.00                        | \$23,000                                | 0%   |
| C SERVICES  |              |                       |                        |                       |                               |   | 1    |
| C1 MECHANICAL   |              |                       |                        |                       | \$296.42                      |   |      |
| C11 Plumbing & Drainage                                     | 1.00         | 2,122 m2              | \$13.20                | \$28,000              | \$13.20                       |   |      |
| C12 Fire Protection   | 1.00         | 2,122 m2              | \$28.75                | \$61,000              | \$28.75                       |   |      |
| C13 H.V.A.C.  | 1.00         | 2,122 m2              | \$227.62               | \$483,000             | \$227.62                      | +                                       |      |
| C14 Controls C2 ELECTRICAL                                  | 1.00         | 2,122 m2              | \$26.86                | \$57,000              | \$26.86<br><b>\$244.58</b>    | \$629,000                               | 8%   |
| C21 Service & Distribution                                  | 1.00         | 2,122 m2              | \$59.85                | \$127,000             | \$59.85                       |   |      |
| C22 Lighting, Devices & Heating                             | 1.00         | 2,122 m2              | \$108.86               | \$231,000             | \$108.86                      |   |      |
| C23 Systems & Ancillaries                                   | 1.00         | 2,122 m2              | \$75.87                | \$161,000             | \$75.87                       | \$519,000                               | 6%   |
| NET BUILDING COST (Excluding Site)                          |              | ,                     |                        | 1 1 1 1 1 1 1         | \$2,741.75                    | \$5,818,000                             | 70%  |
| D SITE & ANCILLARY WORK                                     |              |                       |                        |                       |                               | 1 - / /                                 |      |
| D1 SITE WORK  |              |                       |                        |                       | \$139.49                      |   |      |
| D11 Site Development  | 0.40         | 850 m2                | \$309.41               | \$263,000             | \$123.94                      |   |      |
| D12 Mechanical Site Services                                | 0.40         | 850 m2                | \$23.53                | \$20,000              | \$9.43                        |   |      |
| D13 Electrical Site Services                                | 0.40         | 850 m2                | \$15.29                | \$13,000              | \$6.13                        | \$296,000                               | 4%   |
| D2 ANCILLARY WORK   | 0.00         | 1.000 000             | \$57.34                | #107.000              | \$65.03                       |   |      |
| D21 Demolition<br>D22 Alterations                           | 0.88<br>1.00 | 1,866 m2              | \$57.34<br>\$14.61     | \$107,000<br>\$31,000 | \$50.42                       | ¢128.000                                | 2%   |
|   | 1.00         | 2,122 m2              | \$14.01                | \$31,000              | \$14.61                       | \$138,000                               | 2%   |
| NET BUILDING COST (Including Site)                          |              |                       |                        |                       | \$2,946.28                    | \$6,252,000                             | 1    |
| Z GENERAL REQUIREMENTS & ALLOWA<br>Z1 GEN. REQ. & FEE 13.09 |              |                       |                        |                       | \$383.13                      |   |      |
| Z11 General Requirements 10.09                              |              |                       |                        | \$625,000             | \$294.53                      |   |      |
| Z12 Fee 3.0°  |              |                       |                        | \$188,000             | \$88.60                       | \$813,000                               | 10%  |
| TOTAL CONSTRUCTION ESTIMATE (Exclu                          |              | vances)               |                        | +==0,000              | 700.00                        | \$7,065,000                             | 85%  |
| Z2 ALLOWANCES 17.09   | -            | ,                     |                        | 1                     | \$565.98                      | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |      |
| Z21 Estimating Allowance 10.0                               |              |                       |                        | \$707,000             | \$333.18                      |   |      |
| Z22 Escalation Allowance 2.00                               |              |                       |                        | \$141,000             | \$66.45                       |   |      |
| Z23 Construction Allowance 5.00                             |              |                       |                        | \$353,000             | \$166.35                      | \$1,201,000                             | 15%  |
| GOOD & SERVICES TAX 0.00                                    |              | EXCLUDED              |                        | \$0                   | \$0.00                        | \$0                                     | 0%   |
| TOTAL CONSTRUCTION ESTIMATE (Inclu                          | iding Allov  | vances)               |                        |                       |                               | \$8,266,000                             | 100% |
|   |              |                       |                        |                       |                               | Cost/m2                                 |      |
| GFA 2,122 m2  | _            |                       |                        |                       |                               | \$3,895                                 |      |
| Refurb         1,866 m2           New Build         256 m2  |              |                       |                        |                       |                               |   |      |
| New Build 256 m2  |              |                       |                        |                       |                               |   |      |

making the difference

# SUB RENOVATION + ADDITION FEASIBILITY STUDY

### Turner & Townsend

#### ORDER OF MAGNITUDE ESTIMATE

| Project: University Of Alberta - Students Union<br>Location: Edmonton, AB<br>Owner/Client: University Of Alberta<br>Architect: DIALOG |       | G        | Date:  | MAH-OoM-0<br>Jan 5, 2012<br>nber: 20179<br>ea: 2122 m2 |
|---|-------|----------|--------|--|
| Description   | Trade | Quantity | Rate   | Amount   |
|   | _     |          |        |  |
| A1 SUBSTRUCTURE   | ]     |          |        |  |
| A11 Foundations   |       |          |        |  |
| Exteral Wall Strip Footings (1000mm x 450mm)  |       | 55 m     |        |  |
| Concrete  |       | 25 m3    | 160.00 | 3,960  |
| Formwork  |       | 25 m2    | 150.00 | 3,713  |
| Reinforcement   |       | 2,351 kg | 1.50   | 3,527  |
| Basement Vestibule Strip Footings (650mm x 350mm)   |       | 8 m      |        |  |
| Concrete  |       | 2 m3     | 160.00 | 291  |
| Formwork  |       | 7 m2     | 150.00 | 1,008  |
| Reinforcement   |       | 146 kg   | 1.50   | 218  |
| Footings to landscape retaining walls (800mm x  |       |          |        |  |
| 450mm)  |       | 142 m    |        |  |
| Concrete  |       | 51 m3    | 160.00 | 8,179  |
| Formwork  |       | 128 m2   | 150.00 | 19,170   |
| Reinforcement   |       | 4,090 kg | 1.50   | 6,134  |
| trip Footings beneath Stairs (1200mm x 450mm)   |       | 14 m     |        |  |
| Concrete  |       | 8 m3     | 160.00 | 1,210  |
| Formwork  |       | 30 m2    | 150.00 | 4,500  |
| Reinforcement   |       | 605 kg   | 1.50   | 907  |
| Allowance for foundation 'kicker' walls   |       | 55 m     |        |  |
| Concrete  |       | 7 m3     | 160.00 | 1,056  |
| Formwork  |       | 110 m2   | 150.00 | 16,500   |
| Reinforcement   |       | 627 kg   | 1.50   | 941  |
| Waterproofing   |       | 22 m2    | 80.00  | 1,760  |
| Insulation  |       | 22 m2    | 20.00  | 440  |
| llowance for foundation 'kicker' walls - entrance   |       | 8 m      |        |  |
| Concrete  |       | 1 m3     | 160.00 | 154  |
| Formwork  |       | 16 m2    | 150.00 | 2,400  |
| Reinforcement   |       | 77 kg    | 1.50   | 115  |
| Waterproofing   |       | 3 m2     | 80.00  | 256  |
| Insulation  |       | 3 m2     | 20.00  | 64   |
| Allowance for Excavation to above from reduced level  |       | 85 m3    | 40.00  | 3,410  |
| Perimeter Drainage  |       | 218 m    | 60.00  | 13,080   |
| TOTAL A11 Foundations   |       | 2,122 m2 | 43.82  | 92,993   |

Project: University Of Alberta - Students Union Location: Edmonton, AB Owner/Client: University Of Alberta Architect: DIALOG

| unt               | Description   | Trad |
|-------------------|---|------|
|                   |   |      |
|                   | A12 Basement Excavation   |      |
|                   | Mass excavation, dispose off site - allow   |      |
| 960<br>713        | Extra over for undocumented conditions, rock removal and grubbing up other foundations and the like |      |
| 527               | Allowance for Backfill incl placing   |      |
| 201               | Allow for slope protection during excavation  |      |
| 291<br>008<br>218 | Allow for partial shoring   |      |
| 210               | Allowance for dewatering  |      |
| 179               | Allowance for Vibration monitoring to existing bldgs  |      |
| 170               |   |      |
| 134               | TOTAL A12 Basement Excavation   |      |
| 210               | TOTAL A1 SUBSTRUCTURE   |      |
| 210<br>500        |   |      |
| 907               |   |      |
| 056               |   |      |
| 500               |   |      |
| 941               |   |      |
| 760               |   |      |
| 440               |   |      |
| 154               |   |      |
| 400               |   |      |
| 115<br>256        |   |      |
| 64                |   |      |
| -                 |   |      |

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| File: MAH-OoM-0           |
|---------------------------|
| Date: Jan 5, 2012         |
| Project Number: 20179     |
| Gross Floor Area: 2122 m2 |

| de | Quantity | Rate    | Amount  |
|----|----------|---------|---------|
|    |          |         |         |
|    |          |         |         |
| +  | 1,915 m3 | 30.00   | 57,450  |
|    |          |         |         |
|    | 1 sum    | 5745.00 | 5,745   |
|    | 999 m3   | 40.00   | 39,960  |
|    | 1 sum    | 3000.00 | 3,000   |
|    | 1 sum    | 3500.00 | 3,500   |
|    | 1 sum    | 1000.00 | 1,000   |
|    | 1 sum    | 1500.00 | 1,500   |
|    |          |         |         |
|    | 1,915 m3 | 58.57   | 112,155 |
|    |          |         | 205,148 |

| Project: University Of Alberta - Students Union<br>Location: Edmonton, AB<br>Owner/Client: University Of Alberta<br>Architect: DIALOG   |        | (                                   | Date<br>Project N                 | e: MAH-OoM-0<br>e: Jan 5, 2012<br>umber: 20179<br>Area: 2122 m2 | Project: University Of Alberta - Students Union<br>Location: Edmonton, AB<br>Owner/Client: University Of Alberta<br>Architect: DIALOG |
|---|--------|-------------------------------------|-----------------------------------|---|---|
| Description   | Trade  | Quantity                            | Rate                              | Amount  | Description   |
| A2 STRUCTURE  | ]      |                                     |                                   |   | A3 EXTERIOR ENCLOSURE   |
| A21 Lowest Floor Construction   |        |                                     |                                   |   |   |
| Allow for 150mm concrete, over 200 stone drainage<br>course with mesh reinforcement, incl formwork<br>Allow for structural fill<br>Cut, patch and make good existing floor slab<br>Make connection to existing floor slab | +<br>+ | 256 m2<br>64 m3<br>1,866 m2<br>46 m | 46.00<br>40.00<br>27.00<br>225.00 | 11,776<br>2,560<br>50,382<br>10,350                             | A31 Walls Below Grade<br>TOTAL A31 Walls Below Grade  |
| Allow for topping to above concrete bed, including cast in insulation for radiant flooring  |        | 256 m2                              | 55.00                             | 14,080  | A32 Walls Above Grade   |
| Allow for 150mm concrete as above to basement level Allow for structural fill   |        | 512 m2<br>128 m3                    | 46.00<br>40.00                    | 23,552<br>5,120   | TOTAL A32 Walls Above Grade   |
| Allowance for forming ramps, steps, stairs and like   |        | 1 sum                               | 11500.00                          | 11,500  | A33 Windows & Entrances   |
| TOTAL A21 Lowest Floor Construction   |        | 2,122 m2                            | 60.94                             | 129,320   | Curtain wall to new Glazed Façade and basement entry vestibule based on Pilkington triple glazed spider connection system             |
| A22 Upper Floor Construction  |        |                                     |                                   |   | Square hollow section columns to new triple glazed façade assume 8nr  |
| TOTAL A22 Upper Floor Construction  |        |                                     |                                   | 0   | Allowance for new main entry vestibule - NIC  |
|   |        |                                     |                                   |   | Allowance for frameless glazed double doors   |
| A23 Roof Construction   |        |                                     |                                   |   | Allowance for framless glazed single door   |
| Allow for connection of new structure/make good   |        | 46 m                                | 400.00                            | 18,400  |   |
| Allow for metal roof structure over new atrium  | +      | 256 m2                              | 360.00                            | 92,160  | TOTAL A33 Windows & Entrances   |
| Square hollow section columns to new triple glazed façade assume 8nr  |        | 8,448 kg                            | 12.00                             | 101,376   |   |
| Allow for flashing detailing and accessories  |        | 1 sum                               | 10000.00                          | 10,000  | A34 Roof Covering   |
| no work to existing roof other than noted above   | +      | 1,866 m2                            | 0.00                              |   | Allow for 2 ply SBS membrane covering with high albedo reflective coating   |
| TOTAL A23 Roof Construction   |        | 2,122 m2                            | 104.59                            | 221,936   | TOTAL A34 Roof Covering   |
| TOTAL A2 STRUCTURE  |        |                                     |                                   | 351,256   | A35 Projections   |

**TOTAL A35 Projections** 

## SUB RENOVATION + ADDITION FEASIBILITY STUDY

## Turner & Townsend

| File: MAH-OoM-0           |
|---------------------------|
| Date: Jan 5, 2012         |
| Project Number: 20179     |
| Gross Floor Area: 2122 m2 |

| Quantity Rate Amount |
|----------------------|
|----------------------|

Trade

| 0 |  |
|---|--|
|   |  |

0

|   | 1,055 m2 | 3161.19 | 3,333,475 |
|---|----------|---------|-----------|
|   | 1 leaf   | 2650.00 | 2,650     |
|   | 2 pair   | 4500.00 | 9,000     |
|   | 1 sum    | 0.00    | 0         |
|   | 8,448 kg | 12.50   | 105,600   |
| + | 1,055 m2 | 3050.00 | 3,216,225 |

+ 256 m2 215.28 55,112 256 m2 215.28 55,112

| Project: University Of Alberta - Students Union<br>Location: Edmonton, AB<br>Owner/Client: University Of Alberta<br>Architect: DIALOG |       | G        | Date<br>Project Nu | : MAH-OoM-0<br>: Jan 5, 2012<br>mber: 20179<br>rea: 2122 m2 | Project: University Of Alberta - S<br>Location: Edmonton, AB<br>Owner/Client: University Of Albo<br>Architect: DIALOG |
|---|-------|----------|--------------------|---|---|
| Description   | Trade | Quantity | Rate               | Amount  | Description   |
| TOTAL A3 EXTERIOR ENCLOSURE   |       |          |                    | 3,388,587   | <b>B1 PARTITIONS &amp; DOORS</b>  |
|   |       |          |                    |   | B11 Partitions  |
| TOTAL A SHELL   |       |          |                    | 3,944,991   | Drywall partitions  |

Students Union lberta

| escription | Trade |
|------------|-------|
|            |       |

16mm drywall board Metal Studs Batt Insulation 16mm drywall board

Allow for glazed partitions to Offices

Furring and boxing Rough Carpentry Sealing and Caulking

#### **TOTAL B11 Partitions**

#### B12 Doors

Allow for Solid Core Wood door, incl hardware, fitting

Allow for frameless glazed door incl hardware, fitting

Allow for Automatic Door Openers

#### TOTAL B12 Doors

**TOTAL B1 PARTITIONS & DOORS** 

## Turner & Townsend

#### File: MAH-OoM-0 Date: Jan 5, 2012 Project Number: 20179 Gross Floor Area: 2122 m2

| Quantity             | Rate   | Amount  |
|----------------------|--|---|
|                      |  |   |
|                      |  |   |
|                      |  |   |
| 1,319 m2<br>1,319 m2 | 18.00  | 23,735  |
| 1,319 m2             | 45.00  | 59,337  |
| 1,319 m2             | 18.00  | 22,416<br>23,735  |
| 270 m2               | 400.00   | 108,000   |
| 1 sum                | 6500.00  | 6,500   |
|                      |  | 7,500<br>3,000  |
| 2 00                 |  | 0,000   |
| 1,589 m2             | 160.03   | 254,223   |
|                      |  |   |
|                      |  |   |
| 4 no                 | 1500.00  | 6,000   |
| 21 no                | 2250.00  | 47,250  |
| 5 no                 | 3500.00  | 17,500  |
|                      |  |   |
| 25 no                | 2830.00  | 70,750  |
|                      |  | 324,973   |
|                      | 1,319 m2<br>1,319 m2<br>1,319 m2<br>1,319 m2<br>1,319 m2<br>270 m2<br>1 sum<br>1 sum<br>1 sum<br>1 sum<br><b>1,589 m2</b><br>4 no<br>21 no<br>5 no | 1,319 m2<br>1,319 m2 18.00<br>1,319 m2 45.00<br>1,319 m2 17.00<br>1,319 m2 18.00<br>270 m2 400.00<br>1 sum 6500.00<br>1 sum 7500.00<br>1 sum 3000.00<br><b>1,589 m2 160.03</b><br>4 no 1500.00<br>21 no 2250.00<br>5 no 3500.00 |

| Project: University Of Alberta - Students Union<br>Location: Edmonton, AB<br>Owner/Client: University Of Alberta<br>Architect: DIALOG |       | G        | Date:    | MAH-OoM-0<br>Jan 5, 2012<br>mber: 20179<br>ea: 2122 m2 |
|---|-------|----------|----------|--|
| Description   | Trade | Quantity | Rate     | Amount   |
| B2 FINISHES   | נ     |          |          |  |
| B21 Floor Finishes  |       |          |          |  |
| Allow porcelain tiled flooring, inc bases - type 1  | +     | 962 m2   | 140.00   | 134,680  |
| Allow porcelain tiled flooring, inc bases - type 2  | +     | 212 m2   | 140.00   | 29,680   |
| Allow for carpet to new Offices, inc bases  | +     | 617 m2   | 50.00    | 30,850   |
| Floor finish allowed to CRU - NIC   | +     | 331 m2   | 0.00     | 0  |
| TOTAL B21 Floor Finishes  |       | 2,122 m2 | 91.99    | 195,210  |
| B22 Ceiling Finishes  |       |          |          |  |
| ACT - Acoustic Ceiling Tile, with grid  | +     | 1,535 m2 | 60.00    | 92,100   |
| PGB - Painted Gypsum Board with grid to CRU   | +     | 331 m2   | 55.00    | 18,205   |
| PGB - Painted Gypsum Board with grid to Atrium soffit   | +     | 256 m2   | 107.64   | 27,556   |
| Allowance for feature ceiling area - NIC  |       | 1 sum    | 0.00     | 0  |
| Allowance for bulkheads   |       | 1 sum    | 7500.00  | 7,500  |
| TOTAL B22 Ceiling Finishes  |       | 2,122 m2 | 68.50    | 145,361  |
| B23 Wall Finishes   |       |          |          |  |
| Painting to drywall   | +     | 2,637 m2 | 8.60     | 22,680   |
| Allow for ceramic tiling to kitchen area  | +     | 5 m2     | 118.00   | 590  |
| Allowance for work to reveals of existing façade and exposed concrete   |       | 1 sum    | 15000.00 | 15,000   |
| Allowance for 'art features' - NIC  |       | 1 sum    | 0.00     | 0  |
| TOTAL B23 Wall Finishes   |       | 2,642 m2 | 14.48    | 38,270   |
| TOTAL B2 FINISHES   |       |          |          | 378,841  |

Project: University Of Alberta - Students Union Location: Edmonton, AB Owner/Client: University Of Alberta Architect: DIALOG

| C                | Pescription 1  |
|------------------|--|
| B                | 3 FITTINGS & EQUIPMENT   |
| B                | 31 Fittings & Fixtures   |
| R                | oom Furniture as per Drawing A108 room uses  |
| C<br>V<br>A<br>A | arge Meeting Rooms (rooms 27, 28, 29)<br>oat Hooks<br>/aste Recepticle - NIC<br>llow for large table - NIC<br>llow chairs for 50 people - NIC<br>llowance for credenza/storage unit - NIC  |
| C<br>V<br>A<br>A | mall Meeting Rooms (rooms 24, 25, 26)<br>oat Hooks<br>/aste Recepticle - NIC<br>llow for mid-sized table - NIC<br>llow chairs for 20 people - NIC<br>llowance for credenza/storage unit - NIC  |
| C<br>V<br>A<br>A | tudent Union Offices (rooms 1 through 19)<br>oat Hook<br>/aste Recepticle - NIC<br>llow for desk - NIC<br>llow chairs for 3 people/office - NIC<br>llowance for credenza/storage unit - NIC  |
|                  | urniture to circulation areas (274 seats as A108)<br>llow 60% soft furnished, bespoke design - NIC<br>llow 40% hard furnished catalogue design - NIC<br>llow for mixed tables to be designed - NIC<br>xtra over allowance for forming 3 large curved units to<br>irculation area - NIC<br>xtra over allowance for forming 3 large curved units<br>nd centre piece to offices - NIC |
| P<br>A           | itchen<br>lastic Laminate Countertop<br>llow for base cabinets<br>llow for wall cabinets   |
| A<br>w           | lillwork<br>llow for Office Reception desk, complete with chair and<br>vaste receptacle<br>llowance for Waste/Recycling stations   |
| A                | llowance for Communication Boards  |
|                  | llowance for automatic blinds to glazed feature<br>ntrance - NIC   |

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## SUB RENOVATION + ADDITION FEASIBILITY STUDY

| File: MAH-OoM-0           |
|---------------------------|
| Date: Jan 5, 2012         |
| Project Number: 20179     |
| Gross Floor Area: 2122 m2 |

| Trade | Quantity        | Rate               | Amount         |
|-------|-----------------|--------------------|----------------|
|       |                 |                    |                |
|       |                 |                    |                |
|       |                 |                    |                |
|       |                 |                    |                |
|       |                 |                    |                |
|       | 6 no<br>3 no    | 15.00<br>0.00      | 90<br>0        |
|       | 3 no<br>50 no   | 0.00<br>0.00       | 0<br>0         |
|       | 3 no            | 0.00               | 0              |
|       | 6 no            | 15.00              | 90             |
|       | 3 no            | 0.00               | 0              |
|       | 3 no<br>20 no   | 0.00<br>0.00       | 0<br>0         |
|       | 3 no            | 0.00               | 0              |
|       | 38 no           | 15.00              | 570            |
|       | 38 no<br>19 no  | $0.00 \\ 0.00$     | 0<br>0         |
|       | 57 no           | 0.00               | 0              |
|       | 19 no           | 0.00               | 0              |
|       | 164 no          | 0.00               | 0              |
|       | 110 no<br>36 no | 0.00<br>0.00       | 0<br>0         |
|       | 3 no            | 0.00               | 0              |
|       | 1 sum           | 0.00               | 0              |
|       |                 |                    |                |
|       | 6 m<br>6 m      | 495.00<br>500.00   | 2,970<br>3,000 |
|       | 6 m             | 350.00             | 2,100          |
|       |                 |                    |                |
|       | 1 sum<br>3 no   | 6500.00<br>2000.00 | 6,500<br>6,000 |
|       |                 |                    |                |
|       | 3 no            | 500.00             | 1,500          |
|       | 1 sum           | 0.00               | 0              |

| Project: University Of Alberta - Students Union<br>Location: Edmonton, AB<br>Owner/Client: University Of Alberta<br>Architect: DIALOG |       | Gi       | Date: | MAH-OoM-0<br>Jan 5, 2012<br>nber: 20179<br>ea: 2122 m2 | Proiect: University Of Alberta - Students Union<br>Location: Edmonton, AB<br>Owner/Client: University Of Alberta<br>Architect: DIALOG           |       |
|---|-------|----------|-------|--|---|-------|
| Description   | Trade | Quantity | Rate  | Amount   | Description   | Trade |
| TOTAL B31 Fittings & Fixtures   |       | 2,122 m2 | 10.75 | 22,820   | C1 MECHANICAL   |       |
| B32 Equipment   |       |          |       |  | C11 Plumbing & Drainage   |       |
| Kitchen Equipment - Not Included<br>Flat Screen TV Equipment - Not Included<br>Interior Signage - Not Included                        |       |          |       |  | Equipment<br>(Subtotal Equipment \$0)   |       |
| TOTAL B32 Equipment   |       |          |       | 0  | Piping<br>cold water<br>hot water<br>hot water recirculation<br>sanitary and vents<br>storm drainage- not required                              |       |
| B33 Conveying Systems   |       |          |       |  | connect to existing<br>trenching<br>(Subtotal Piping \$9,980)   |       |
| TOTAL B33 Conveying Systems   |       |          |       | 0  | Fixtures<br>double compartment sink<br>rough-in kitchenette<br>drinking fountains - allow   |       |
| TOTAL B3 FITTINGS & EQUIPMENT   |       |          |       | 22,820   | (Subtotal Fixtures \$5,250)   |       |
| TOTAL B INTERIORS   |       |          |       | 726,634  | Atrium Drainage<br>roof drain<br>storm drainage<br>connect to existing services<br>weeping tile drainage<br>(subtotal Atrium Drainage \$12,500) |       |
|   |       |          |       |  | TOTAL C11 Plumbing & Drainage   |       |
|   |       |          |       |  | C12 Fire Protection   |       |

#### **C12 Fire Protection**

Sprinkler

modify existing sprinkler coverage to suit new layout (Subtotal Sprinkler \$27,990)

Sprinkler to Atrium area new sprinkler coverage at high level window sprinkler heads zoned valve connect to existing (Subtotal Sprinkler to Atrium area \$31,020)

Standpipe System no works (subtotal Standpipe System \$0)

### Turner & Townsend

#### File: MAH-OoM-0 Date: Jan 5, 2012 Project Number: 20179 Gross Floor Area: 2122 m2

| Quantity               | Rate                         | Amount                  |
|------------------------|------------------------------|-------------------------|
|                        |                              |                         |
|                        |                              |                         |
|                        |                              |                         |
|                        |                              |                         |
| 20 m<br>20 m           | 72.00<br>72.00               | 1,440<br>1,440          |
| 20 m<br>20 m<br>40 m   | 65.00<br>85.00               | 1,440<br>1,300<br>3,400 |
| 0<br>1 sum             | 0.00 1500.00                 | 0<br>1,500              |
| 15 m                   | 60.00                        | 900                     |
| 1 no                   | 1000 00                      | 1 000                   |
| 1 no<br>1 sum<br>1 no  | 1000.00<br>750.00<br>3500.00 | 1,000<br>750<br>3,500   |
| 1 110                  | 5500100                      | 5,555                   |
| 2 no                   | 1000.00                      | 2,000                   |
| 1 sum<br>1 sum<br>40 m | 5000.00<br>1500.00<br>100.00 | 5,000<br>1,500<br>4,000 |
| 40 11                  | 100.00                       | 4,000                   |
| 2,122 m2               | 13.07                        | 27,730                  |
|                        |                              |                         |
|                        |                              |                         |
| 1,866 m2               | 15.00                        | 27,990                  |
|                        |                              |                         |
| 256 m2<br>45 no        | 45.00<br>350.00              | 11,520<br>15,750        |
| 1 no<br>1 sum          | 1250.00<br>2500.00           | 1,250<br>2,500          |
|                        |                              |                         |

| Project: University Of Alberta - Students Union<br>Location: Edmonton, AB<br>Owner/Client: University Of Alberta<br>Architect: DIALOG       |       | G                       | Date:                          | MAH-OoM-0<br>Jan 5, 2012<br>nber: 20179<br>ea: 2122 m2 |
|---|-------|-------------------------|--------------------------------|--|
| Description   | Trade | Quantity                | Rate                           | Amount   |
| Miscellaneous<br>fire extinguishers<br>(Subtotal Miscellaneous \$1,500)   |       | 1 sum                   | 1500.00                        | 1,500  |
| TOTAL C12 Fire Protection   |       | 2,122 m2                | 28.52                          | 60,510   |
| C13 HVAC  |       |                         |                                |  |
| Air Handling<br>Existing Air Handling unit - Basement supply - Add VFD<br>on fans, replace fans, new steam coil, new filtration             |       | 22.000 efter            | 4.00                           | 02.000   |
| section and repair AHU panel (23,000cfm)<br>Ventilation and exhaust fans:<br>smoke exhaust at Atrium area - not required<br>kitchenette fan |       | 23,000 cfm<br>1 no      | 4.00<br>0.00<br>1500.00        | 92,000<br>0  |
| miscellaneous fans<br>(Subtotal Air Handling \$96,500)  |       | 1 sum<br>1 sum          | 3000.00                        | 1,500<br>3,000   |
| Heating Plant<br>no work to existing  |       | 2                       | 2500.00                        | 7 000  |
| hot water circulation pumps<br>steam to hot water heat exchanger<br>miscellaneous relocation<br>(Subtotal Heating Plant \$27,000)           |       | 2 no<br>1 no<br>1 sum   | 3500.00<br>15000.00<br>5000.00 | 7,000<br>15,000<br>5,000                               |
| Cooling Plant<br>no work required to existing<br>chilled water pumps - VFD  |       | 2 no                    | 3500.00                        | 7,000  |
| miscellaneous relocation<br>(Subtotal Cooling Plant \$12,000)   |       | 1 sum                   | 5000.00                        | 5,000  |
| Miscellaneous<br>testing and balancing<br>selective demolitions   |       | 1 sum<br>1,866 m2       | 5000.00<br>20.00               | 5,000<br>37,320  |
| fuel oil system - NIC<br>(Subtotal Miscellaneous \$42,320)  |       | 1,000 112               | 20.00                          | 57,520   |
| Piping<br>hot water supply and return to perimeter radiation  |       | 100 m                   | 85.00                          | 8,500  |
| chilled water supply and return to perimeter radiation hot water supply and return to in-floor heating                                      |       | 100 m<br>180 m          | 85.00<br>85.00                 | 8,500<br>15,300  |
| chilled water supply and return to in-floor heating<br>connect to existing<br>(Subtotal Piping \$53,600)                                    |       | 180 m<br>4 no           | 85.00<br>1500.00               | 15,300<br>6,000  |
| Ductwork and Air Distribution<br>galvanized steel ductwork  |       | 8,300 kg                | 17.00                          | 141,100  |
| VAV boxes<br>fan powered box<br>diffusers, registers and grilles  |       | 30 no<br>2 no<br>134 no | 761.36<br>1500.00<br>150.00    | 22,841<br>3,000<br>20,100                              |
|   |       | 200                     |                                | _0,200   |

Project: University Of Alberta - Students Union Location: Edmonton, AB Owner/Client: University Of Alberta Architect: DIALOG

|   | otion   | Tra |
|---|---|-----|
| motorize  | ment air diffusers at radiant floor area<br>ed dampers<br>al Ductwork and Air Distribution \$196,291)   |     |
| in floor l<br>concrete<br>Architec<br>dual circ<br>force flo  | Devices<br>heating/cooling to Atrium area<br>e topping and insulation to above - see<br>tural measure<br>cuit radiant panels at Atrium<br>wheater at main vestibule<br>al Heating Devices \$55,720) |     |
| тс  | DTAL C13 HVAC   |     |
| C14 Co  | ntrols  |     |
| Air Hand<br>VAV box<br>perimete<br>in floor l<br>unit hea<br>pumps<br>heat exc<br>exhaust<br>interface<br>CO sens | er radiation<br>heating zone included circulators<br>aters / force flow heaters<br>changer<br>fans<br>e with existing<br>sors - NIC<br>er hardware, software and programming - use                  |     |
| тс  | OTAL C14 Controls   |     |
|   | C1 MECHANICAL   |     |

# SUB RENOVATION + ADDITION FEASIBILITY STUDY

## Turner & Townsend

#### File: MAH-OoM-0 Date: Jan 5, 2012 Project Number: 20179 Gross Floor Area: 2122 m2

| е | Quantity       | Rate              | Amount          |
|---|----------------|-------------------|-----------------|
|   | 25 no<br>1 sum | 250.00<br>3000.00 | 6,250<br>3,000  |
|   | 256 m2         | 120.00            | 30,720          |
|   | 40 m<br>1 no   | 550.00<br>3000.00 | 22,000<br>3,000 |
|   | 2,122 m2       | 227.82            | 483,431         |
|   |                |                   |                 |

| $15000.00 \\ 761.36 \\ 750.00 \\ 2500.00 \\ 500.00 \\ 1500.00 \\ 1500.00 \\ 750.0$ | 15,000<br>22,841<br>1,500<br>5,000<br>500<br>6,000<br>1,500<br>1,500  |
|--|---|
| 750.00<br>3000.00  | 1,500<br>3,000  |
|  | 761.36<br>750.00<br>2500.00<br>500.00<br>1500.00<br>1500.00<br>750.00 |

2,122 m2 26.79 56,841

628,512

| Proiect: University Of Alberta - Students Union<br>Location: Edmonton, AB<br>Owner/Client: University Of Alberta<br>Architect: DIALOG | Date: Jan 5, 2012 Location: Edmonton, A |                                  | Proiect: University Of Alberta - Students Union<br>Location: Edmonton, AB<br>Owner/Client: University Of Alberta<br>Architect: DIALOG |                                     |   |
|---|---|----------------------------------|---|-------------------------------------|---|
| Description   | Trade                                   | Quantity                         | Rate  | Amount                              | Description Trade   |
| C2 ELECTRICAL   |   |                                  |   |                                     | (Subtotal Power \$42,000)   |
| C21 Service & Distribution  |   |                                  |   |                                     | Heating<br>by Mechanical<br>(Subtotal Heating \$0)  |
| Normal Power<br>Existing to remain<br>(Subtotal Normal Power \$0)   |   |                                  |   |                                     | TOTAL C22 Lighting, Devices & Heating   |
| Emergency Power   |   |                                  |   |                                     | C23 Systems & Ancillaries   |
| Existing to remain<br>(Subtotal Emergency Power \$0)  |   |                                  |   |                                     | Fire Alarm<br>Allowance to modify existing head end equipment   |
| Distribution<br>Allowance to modify existing and provide new panels,<br>feeders, etc - normal power                                   |   | 1 sum                            | 79000.00  | 79,000                              | including re-programming<br>Allowance to modify existing remote annunciator<br>Allowance for fire alarm devices, testing, verification,               |
| Allowance to modify existing and provide new panels,<br>feeders, etc - emergency power  |   | 1 sum                            | 10000.00  | 10,000                              | etc<br>(Subtotal Fire Alarm \$24,500)   |
| Allowance for feeders and disconnect switches in shell space  |   | 1 sum                            | 25000.00  | 25,000                              | Security  |
| Permits, inspections and job setup<br>(Subtotal Distribution \$119,000)   |   | 1 sum                            | 5000.00   | 5,000                               | Allowance to modify existing head end equipment<br>Allowance for new security devices and wiring<br>(Subtotal Security \$32,500)                      |
| Motor Wiring<br>Wire & connect Mechanical equipment<br>(Subtotal Motor Wiring \$8,000)  |   | 1 sum                            | 8000.00   | 8,000                               | Communication<br>Empty conduit to ceiling:<br>Telephone outlet<br>Data outlet   |
| TOTAL C21 Service & Distribution  |   | 2,122 m2                         | 59.85   | 127,000                             | Telephone/Data outlet<br>Cable TV outlet<br>Cabling   |
| C22 Lighting, Devices & Heating   |   |                                  |   |                                     | Plywood backboard<br>27mm emt conduit to retail units<br>Allowance for cable tray   |
| Lighting<br>Offices<br>Meeting rooms<br>Seating areas<br>Shell Space  |   | 1 sum<br>1 sum<br>1 sum<br>1 sum |   | 27,600<br>24,200<br>88,500<br>3,800 | Allowance for trunk conduit and cabling<br>Allowance for racks, patch panels, etc<br>Active hardware - by others<br>(Subtotal Communication \$63,180) |
| Exterior canopy light fitures c/w wiring<br>Dimming systems for:  |   | 4 no                             | 650.00  | 2,600                               | PA System   |
| small meeting rooms<br>large meeting rooms<br>Allowance for lighting controls including occupancy                                     |   | 3 no<br>3 no                     | 3000.00<br>4500.00  | 9,000<br>13,500                     | Head end equipment - assumed existing is adequate<br>Remove and relocate existing PA speakers to suit new<br>layout                                   |
| sensors, etc<br>(Subtotal Lighting \$189,200)   |   | 1 sum                            | 20000.00  | 20,000                              | New PA Speakers<br>Device wiring<br>(Subtotal Sound System \$8,850)   |
| Power<br>Offices<br>Meeting rooms<br>Seating areas  |   | 1 sum<br>1 sum<br>1 sum          | 10400.00<br>8100.00<br>17000.00   | 10,400<br>8,100<br>17,000           | Audio Visual system<br>Equipment, devices and wiring - by others<br>Empty conduit in meeting rooms - small  |
| Shell space<br>Miscellaneous power connection   |   | 1 sum<br>1 sum                   | 1500.00<br>5000.00  | 1,500<br>5,000                      | Empty conduit in meeting rooms - large<br>(Subtotal AV System \$12,000)   |

Trade

| File: MAH-OoM<br>Date: Jan 5, 20<br>Project Number: 201<br>Gross Floor Area: 2122 r |                     |                 |  |  |
|---|---------------------|-----------------|--|--|
| Quantity  | Rate                | Amount          |  |  |
|   |                     |                 |  |  |
| 2,122 m2  | 108.95              | 231,200         |  |  |
| 1 sum   | 7500.00             | 7,500           |  |  |
| 1 sum   | 1000.00             | 1,000           |  |  |
| 1 sum   | 16000.00            | 16,000          |  |  |
| 1 sum<br>1 sum  | 3500.00<br>29000.00 | 3,500<br>29,000 |  |  |
| 10 no   | 90.00               | 900             |  |  |
| 25 no<br>30 no  | 90.00<br>90.00      | 2,250<br>2,700  |  |  |
| 15 no<br>110 no   | 90.00<br>220.00     | 1,350<br>24,200 |  |  |
| 2 no  | 140.00              | 280             |  |  |
| 1 sum<br>1 sum  | 2500.00<br>10000.00 | 2,500<br>10,000 |  |  |
| 1 sum<br>1 sum  | 12000.00<br>7000.00 | 12,000<br>7,000 |  |  |
|   |                     |                 |  |  |
| 20 no   | 160.00              | 3,200           |  |  |
| 5 no<br>25 no   | 280.00<br>170.00    | 1,400<br>4,250  |  |  |
| 3 no  | 1500.00             | 4,500           |  |  |
| 3 no  | 2500.00             | 7,500           |  |  |

| Project: University Of Alberta - Students Union<br>Location: Edmonton, AB<br>Owner/Client: University Of Alberta<br>Architect: DIALOG         | File: MAH-OoM-0<br>Date: Jan 5, 2012<br>Project Number: 20179<br>Gross Floor Area: 2122 m2 |                |                     |                 |
|---|--|----------------|---------------------|-----------------|
| Description   | Trade  | Quantity       | Rate                | Amount          |
| Miscellaneous<br>Demolition and circuit continuity<br>Cutting and patching<br>Lightning protection - NIC<br>(Subtotal Miscellaneous \$20,000) |  | 1 sum<br>1 sum | 17000.00<br>3000.00 | 17,000<br>3,000 |
| TOTAL C23 Systems & Ancillaries   |  | 2,122 m2       | 75.89               | 161,030         |
| TOTAL C2 ELECTRICAL   |  |                |                     | 519,230         |
| TOTAL C SERVICES  |  |                |                     | 1,147,742       |
| NET BUILDING COST (EXCLUDING SITE)  |  |                | 5,819,367           |                 |

Project: University Of Alberta - Students Union Location: Edmonton, AB Owner/Client: University Of Alberta Architect: DIALOG

| Description   | Trade |
|---|-------|
|   |       |
| D1 SITE WORK  |       |
|   |       |
| D11 Site Development  |       |
| Allowance for landscaping retaining walls<br>Concrete<br>Formwork<br>Reinforcement<br>Waterproofing<br>Drainmat |       |
| Allowance for handrails/fall protection   |       |
| Allowance for new surfacing and base (400m2)  |       |
| Allowance for curbing to suit new layout  |       |
| Planter area to right of entry stair - assume concrete  |       |
| Allow for site furniture (garbage bins, benches and the like)   |       |
| Allowance for Bike Racks  |       |
| Allowance for planting medium   |       |
| Allowance for planting (450m2)  |       |

#### TOTAL D11 Site Development

#### D12 Mechanical Site Services

Natural gas - by utility allowance for miscellaneous service relocation and removal

#### **TOTAL D12 Mechanical Site Services**

#### **D13 Electrical Site Services**

Building Service
- existing to remain

## SUB RENOVATION + ADDITION FEASIBILITY STUDY

| File: MAH-OoM-0           |
|---------------------------|
| Date: Jan 5, 2012         |
| Project Number: 20179     |
| Gross Floor Area: 2122 m2 |

| 2 | Quantity   | Rate                                       | Amount   |
|---|--|--|--|
|   |  |  |  |
|   |  |  |  |
|   |  |  |  |
|   | 142 m<br>96 m3<br>639 m2<br>7,668 kg<br>320 m2<br>320 m2 | 160.00<br>150.00<br>1.50<br>80.00<br>70.00 | 15,336<br>95,850<br>11,502<br>25,560<br>22,365 |
|   | 122 m  | 320.00                                     | 39,040   |
|   | 1 sum  | 22000.00                                   | 22,000   |
|   | 1 sum  | 2500.00                                    | 2,500  |
|   |  |  |  |
|   | 1 no   | 8500.00                                    | 8,500  |
|   | 1 sum  | 3500.00                                    | 3,500  |
|   | 3 no   | 1000.00                                    | 3,000  |
|   | 1 sum  | 2250.00                                    | 2,250  |
|   | 1 sum  | 11250.00                                   | 11,250   |
| + | 850 m2<br><b>850 m2</b>                                  | 309.00                                     | 262,653  |
|   | 1 sum  | 20000.00                                   | 20,000   |
| + | 850 m2<br><b>850 m2</b>                                  | 23.53                                      | 20,000   |

| Project: University Of Alberta - Students Union<br>Location: Edmonton, AB<br>Owner/Client: University Of Alberta<br>Architect: DIALOG  |       | File: MAH-OoM-<br>Date: Jan 5, 201<br>Project Number: 2017<br>Gross Floor Area: 2122 m |                               |                          |  |
|--|-------|--|-------------------------------|--------------------------|--|
| Description  | Trade | Quantity   | Rate                          | Amount                   |  |
| (Subtotal Building Service \$0)  |       |  |                               |                          |  |
| Site, Lighting and Power<br>Wall recessed lighting fixture c/w wiring at ramp<br>Allowance for landscape lighting<br>Exterior lighting controls<br>(Subtotal Site Lighting and Power \$13,450) |       | 3 no<br>1 sum<br>1 sum   | 550.00<br>10000.00<br>1800.00 | 1,650<br>10,000<br>1,800 |  |
| TOTAL D13 Electrical Site Services   | +     | 850 m2<br><b>850 m2</b>  | 15.82                         | 13,450                   |  |
| TOTAL D1 SITE WORK   |       |  |                               | 296,103                  |  |

**Project: University Of Alberta - Students Union** Location: Edmonton, AB **Owner/Client: University Of Alberta** Architect: DIALOG

| Description   | Tr |
|---|----|
| D2 ANCILLARY WORK   |    |
| D21 Demolition  |    |
| <u>Internal</u><br>Allowance for the removal of existing suspended ceiling                  |    |
| Allowance for the removal of existing flooring, make  |    |
| good - dispose off site<br>Allowance for the safe disconnection and strip out of            |    |
| existing wiring and mechanical plant<br>Allowance for the removal of stud partition walling |    |
| including limited areas of glazed partition, make good -                                    |    |
| dispose off site<br>Allowance for the removal of existing doors and                         |    |
| surrounds, dispose off site   |    |

Allow for the removal of all associated M&E plant and equipment remaining (lights and fixtures, vents and fans, etc)

External Allow for careful removal of existing reinforced concrete facade and make good - dispose of site Allow for careful removal, including disconnection of existing lamp standards and make good - dispose off site

Allow for clearing site area and grubbing up existing kerbing - dispose off site

Allow for grubbing up existing trees store off site Allow for removal and disposal of existing picnic bench dispose off site

Allow for the removal of existing exterior glazing

system and make good - dispose off site Allow for the removal of existing glazed entry lobby and make good - dispose off site

Allow for the careful removal of existing concrete entrance canopy and make good - dispose off site

Allow for removal of existing concrete walkway/bridge structure, make good - dispose off site Allow for removal of existing concrete stairs and associated handrails, etc, to walkway/bridge, make good - dispose off site Allow for the removal of existing concrete access ramp -

grub up associated foundations, make good, dispose off site

Allow for the removal of existing concrete planter structures, make good - dispose off site Allow for the removal of existing concrete retaining walls below grade, make good and secure earth behind dispose off site

| File: MAH-OoM-0           |
|---------------------------|
| Date: Jan 5, 2012         |
| Project Number: 20179     |
| Gross Floor Area: 2122 m2 |

| rade |   | Quantity       | Rate               | Amount         |
|------|---|----------------|--------------------|----------------|
|      |   |                |                    |                |
|      |   |                |                    |                |
|      |   |                |                    |                |
|      |   |                |                    |                |
|      | + | 1,866 m2       | 2.50               | 4,665          |
|      |   | 1,866 m2       | 1.50               | 2,799          |
|      |   | 1,866 m2       | 3.25               | 6,065          |
|      |   | 612 m          | 7.50               | 4,590          |
|      |   | 71 no          | 14.09              | 1,000          |
|      |   | 71 110         | 14.09              | 1,000          |
|      |   | 1 sum          | 6500.00            | 6,500          |
|      |   |                |                    |                |
|      |   | 1 sum          | 18000.00           | 18,000         |
|      |   | 1 cum          | 1500.00            | 1 500          |
|      |   | 1 sum          | 1500.00            | 1,500          |
|      |   | 1 sum<br>1 sum | 2000.00<br>3500.00 | 2,000<br>3,500 |
|      |   | 1 sum          | 750.00             | 750            |
|      |   | 1 sum          | 7500.00            | 7,500          |
|      |   | 1 sum          | 2500.00            | 2,500          |
|      |   | 1 sum          | 8500.00            | 8,500          |
|      |   |                |                    |                |
|      |   | 1 sum          | 12500.00           | 12,500         |
|      |   | 1 sum          | 3500.00            | 3,500          |
|      |   |                |                    |                |
|      |   | 1 sum          | 5000.00            | 5,000          |
|      |   | 1 sum          | 3500.00            | 3,500          |
|      |   | 1 sum          | 10000.00           | 10,000         |
|      |   |                |                    | - / /          |

| Project: University Of Alberta - Students Union<br>Location: Edmonton, AB<br>Owner/Client: University Of Alberta<br>Architect: DIALOG | File: MAH-OoM-0<br>Date: Jan 5, 2012<br>Project Number: 20179<br>Gross Floor Area: 2122 m2 |                         |               | Project: University Of Albo<br>Location: Edmonton, AB<br>Owner/Client: University<br>Architect: DIALOG |                         |
|---|--|-------------------------|---------------|--|-------------------------|
| Description   | Trade  | Quantity                | Rate          | Amount   | Description             |
| Allow for the removal of existing asphalt surfacing,<br>make good - dispose off site  |  | 1 sum                   | 2500.00       | 2,500  | Z1 GENERAL REQUIREMEN   |
|   |  |                         |               |  | Z11 General Requirement |
| TOTAL D21 Demolition  |  | 1,866 m2                | 57.27         | 106,869  | General Requirements    |
| D22 Alterations   |  |                         |               |  | TOTAL Z11 General Requi |
| Allowance to clean existing façade retained indoors   |  | 1 sum                   | 4500.00       | 4,500  | Z12 Fee                 |
| Allow for 300mm slab poured, forming entrance bridge  |  | 13 m                    |               |  | Fee                     |
| Concrete  |  | 18 m3                   | 160.00        | 2,903  |                         |
| Formwork - including propping   |  | 23 m2                   | 250.00        | 5,760  | TOTAL Z12 Fee           |
| Reinforcement<br>Finish   |  | 1,724 kg<br>60 m2       | 1.50<br>15.00 | 2,586<br>907   |                         |
| FILISI  |  | 00 1112                 | 15.00         | 907  | TOTAL Z1 GENERAL REQU   |
| Allow for downstand beam to support entrance bridge   |  |                         |               |  |                         |
| (450mm x 850mm)   |  | 13 m                    |               |  |                         |
| Concrete  |  | 5 m3                    | 160.00        | 796  | TOTAL CONSTRUCTION ES   |
| Formwork - including propping   |  | 27 m2                   | 250.00        | 6,773  |                         |
| Reinforcement   |  | 472 kg                  | 1.50          | 709  |                         |
| Allowance for forming new reinforced concrete stair   |  |                         |               |  |                         |
| from grade to new bridge  |  | 1 sum                   | 4500.00       | 4,500  |                         |
|   |  |                         |               |  |                         |
| Cut, patch and make good existing floor slab  |  | 46 m2                   | 27.00         | 1,242  |                         |
| Allowance for Spiral Stair, complete with hand rail - NIC   |  | 1 sum                   | 0.00          | 0  |                         |
|   | +  | 2,122<br><b>2,122 0</b> | 14.46         | 20.676   |                         |
| TOTAL D22 Alterations   |  | 2,122 0                 | 14.40         | 30,676   |                         |
| TOTAL D2 ANCILLARY WORK   |  |                         |               | 137,545  |                         |
| TOTAL D SITE & ANCILLARY WORK   |  |                         |               | 433,648  |                         |
| NET BUILDING COST (INCLUDING SITE)  |  |                         |               | 6,253,015  |                         |

| Project: University Of Alberta - Students Union<br>Location: Edmonton, AB<br>Owner/Client: University Of Alberta<br>Architect: DIALOG |        |          | Date: | MAH-OoM-0<br>Jan 5, 2012<br>nber: 20179<br>ea: 2122 m2 |
|---|--------|----------|-------|--|
| Description   | Trade  | Quantity | Rate  | Amount   |
| Z1 GENERAL REQUIREMENTS & FEE   |        |          |       |  |
| Z11 General Requirements  |        |          |       |  |
| General Requirements  |        | ls       |       | 625,000  |
| TOTAL Z11 General Requirements  |        |          |       | 625,000  |
| Z12 Fee   |        |          |       |  |
| Fee   |        | ls       |       | 188,000  |
| TOTAL Z12 Fee   |        |          |       | 188,000  |
| TOTAL Z1 GENERAL REQUIREMENTS & FEE   |        |          |       | 813,000  |
| TOTAL CONSTRUCTION ESTIMATE EXCLUDING ALLO  | WANCES |          |       | 7,066,015  |
|   |        |          |       |  |
|   |        |          |       |  |
|   |        |          |       |  |
|   |        |          |       |  |

## SUB RENOVATION + ADDITION FEASIBILITY STUDY

| Project: Universitv Of Alberta - Students Union<br>Location: Edmonton, AB<br>Owner/Client: University Of Alberta<br>Architect: DIALOG |       |          | File: MAH-OoM-0<br>Date: Jan 5, 2012<br>Project Number: 20179<br>Gross Floor Area: 2122 m2 |           |  |
|---|-------|----------|--|-----------|--|
| Description   | Trade | Quantity | Rate   | Amount    |  |
| Z2 CONTINGENCIES  |       |          |  |           |  |
| Z21 Estimating Contingency  |       |          |  |           |  |
| Estimating Contingency  |       | ls       |  | 707,000   |  |
| TOTAL Z21 Estimating Contingency  |       |          |  | 707,000   |  |
| Z22 Escalation Contingency  |       |          |  |           |  |
| Escalation Contingency  |       | ls       |  | 141,000   |  |
| TOTAL Z22 Escalation Contingency  |       |          |  | 141,000   |  |
| Z23 Construction Contingency  |       |          |  |           |  |
| Construction Contingency  |       | ls       |  | 353,000   |  |
| Total Z23 Construction Contingency  |       |          |  | 353,000   |  |
| TOTAL Z2 CONTINGENCIES  |       |          |  | 1,201,000 |  |
| TOTAL Z GENERAL REQUIREMENTS & CONTINGEN  | ICIES |          |  | 2,014,000 |  |
| TOTAL BUILDING COST INCLUDING ALLOWANCES  | 5     |          |  | 8,267,015 |  |

#### For Students Union, University of Alberta Students Union, Edmonton

AREA SUMMARY

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Project: 20179 Jan 5, 2012

Students Union, University of Alberta



For Students Union, University of Alberta Students Union, Edmonton

AREA SUMMARY

|              |                | Enclosed (m2) |  | Void (m2) | GFA (m2)       |       |    |
|--------------|----------------|---------------|--|-----------|----------------|-------|----|
| Above Grade  | 1              |               |  |           |                |       |    |
| Ground I     | Floor          | 2,112         |  | 0         | 2,112          |       |    |
| Total        |                | 2,112         |  | 0         | 2,112          |       |    |
| Net          |                |               |  | G         | rossing Factor |       |    |
| Offices      |                | 617           |  | N         |                | 1,160 | 10 |
|              | athering areas | 212           |  |           | irculation     | 962   | 8  |
| CRU Spa      | ce             | 331           |  |           | ech & Elec     | 0     |    |
|              |                |               | 1,160                                    |           | alls & Shafts  | 0     |    |
| Circulation  |                |               |  |           | otal           | 2,122 | 18 |
| Circulatio   | on areas       | 962           | 962                                      |           |                |       |    |
| Mech & Elec  |                |               |  |           |                |       |    |
| N/A          |                | 0             | 0  |           |                |       |    |
| Walls & Shaf | ts             |               | J. J |           |                |       |    |
| N/A          |                | 0             | 0  |           |                |       |    |
| Total        |                |               | 2,122                                    |           |                |       |    |

#### 5 DOCUMENTATION

Area Summary 1 of 1





Ref: 20179 Date: Jan 5, 2012 Students Union, University of Alberta



|                      | Architectural  |                |               |  |  |  |  |
|----------------------|--|----------------|---------------|--|--|--|--|
| Provided b<br>Number | y: Dialog<br>Name  | Date           | Date Received |  |  |  |  |
| Number               |  |                |               |  |  |  |  |
| -                    | Sub Renovation + Addition Design Presentation - Aerial Perspective | Dec 5, 2011    | Dec 12, 2011  |  |  |  |  |
| -                    | Sub Renovation + Addition Design Presentation - Site Plan          | Dec 5, 2011    | Dec 12, 2011  |  |  |  |  |
| -                    | Sub Renovation + Addition Design Presentation - Basement Furniture | Li Dec 5, 2011 | Dec 12, 2011  |  |  |  |  |
| -                    | Sub Renovation + Addition Design Presentation - Section 1          | Dec 5, 2011    | Dec 12, 2011  |  |  |  |  |
| -                    | Sub Renovation + Addition Design Presentation - Section B          | Dec 5, 2011    | Dec 12, 2011  |  |  |  |  |
| -                    | Sub Renovation + Addition Design Presentation - Section C          | Dec 5, 2011    | Dec 12, 2011  |  |  |  |  |
| -                    | Sub Renovation + Addition Design Presentation - Section A          | Dec 5, 2011    | Dec 12, 2011  |  |  |  |  |
| -                    | Sub Renovation + Addition Design Presentation - Aerial Perspective | Dec 5, 2011    | Dec 12, 2011  |  |  |  |  |
| -                    | Sub Renovation + Addition Design Presentation - South Perspective  | Dec 5, 2011    | Dec 12, 2011  |  |  |  |  |
| -                    | Sub Renovation + Addition Design Presentation - Aerial Perspective | Dec 5, 2011    | Dec 12, 2011  |  |  |  |  |
| -                    | Preliminary Electrical Review                                      | Dec 8, 2012    | Dec 12, 2011  |  |  |  |  |
| -                    | Preliminary Mechanical Conceptual Design Report - Draft            | Dec 8, 2012    | Dec 12, 2011  |  |  |  |  |
| -                    | Preliminary Structural Feasibility Report                          | Dec 8, 2012    | Dec 12, 2011  |  |  |  |  |
| A107                 | SUB_BASEMENT-PERSPECTIVE   | Dec 15, 2011   | Dec 19, 2011  |  |  |  |  |
| A108                 | SUB_BASEMENT-PLAN_alternate  | Dec 15, 2011   | Dec 19, 2011  |  |  |  |  |
| -                    | SUB-existing_basement_plan   | -              | Dec 21, 2011  |  |  |  |  |
| -                    | SUB-existing_main_plan   | -              | Dec 21, 2011  |  |  |  |  |
| A110                 | 01257E_SUB-Basement-Revised  | Dec 21, 2011   | Dec 21, 2011  |  |  |  |  |