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Name: Estimate Preparation for Major Capital Construction

Projects

Policy Number: 3-5006

Origin: Facilities Management

Approved: May 24, 2006

Issuing Authority: Vice President, Finance & Administration

Responsibility: Senior Director, Facilities Management

Revision Date(s): June 1, 2015 Effective Date: June 1, 2015

Policy:

Estimates for major capital construction projects budget preparation outlined below where the estimated value of the project is \$2,000,000 or more or as directed by the Vice President Finance & Administration.

Estimate Preparation

The Vice President Finance & Administration and the Senior Director, Facilities Management shall approve the estimate for all major capital projects. Estimates shall be prepared using the Class C, B, or A method depending on the Project Approval Stage as per the following procedure.

Class C - Square foot estimate based on schematic design drawings which indicates the sizes and areas of the predominant different types of spaces and the overall facility. This method provides an accuracy of +-20%.

Class B – System Estimate (30% contract drawings complete) based on the sizes of spaces and the definition of systems and elements used for the building. This method provides an accuracy of + - 15%.

Class A – Unit price estimate (contract drawings complete) based on detailed information that is available from the construction tender drawings, specification and site visits. This method provides an accuracy of +- 10%.

Procedures:

 Project Development / Five Year Plan Project Development – This is considered the Project Development stage when projects are submitted for preliminary approval. Normally only the concept is defined with concept floor plans or a broad scope statement. An approved location shall be identified per the space policy and Campus Master Plan. Estimates for renovations or new constructions shall be prepared for this stage of a project using a Class C budget. This shall consist of

- use the SMU Project Cost estimate Excel Spreadsheet to develop the cost estimate
- calculate the construction cost estimate using current known \$ per square foot construction values for each type of space.
- include allowances for unknown costs such as environmental, underground utilities, infrastructure upgrades for the project and landscaping if required.
- if this is an infrastructure project the estimate shall be developed based on suppliers per unit budget costs.
- include as a minimum costs consulting fees at 10% of the construction estimate including taxes, estimating fees of 2% of the construction estimate, environmental hazardous assessment and monitoring consulting fees, furniture estimate, building permit cost, miscellaneous printing costs, legal and insurance costs, HST of 5% of all costs and a contingency of 20% of all other costs including HST.
- 2. Project Implementation The project has now received approval to precede based on development stage estimate. A Class B estimate shall be prepared by a professional cost estimator using system and material concept drawings and floor plans developed by the design consultant. This will require a clear definition of the scope of the project. The process shall consist of
 - all changes to the initial scope of the project shall be noted and estimated separately.
 - the design consultant shall obtain the sign off of the tender floor plans and scope of the project by the appropriate end user.
 - use the SMU Project Cost estimate Excel Spreadsheet to develop the cost estimate.
 - the estimate shall consist of a detailed cost estimate for each specification division based on estimates from contractors and suppliers, recent project unit rates and allowance for general conditions including profit and overhead of 15%.
 - include allowances for defined and probable costs such as environmental, underground utilities, infrastructure upgrades for the project and landscaping if required.
 - if this is an infrastructure project the estimate shall be developed based on contractors, suppliers or recent project per unit costs.
 - include as a minimum consulting fees at 10% of the construction estimate
 or as proposed, commissioning fees of 2% of the construction estimate,
 environmental hazardous and monitoring consulting fees, furniture
 estimate, building permit cost, miscellaneous printing costs, legal and
 insurance costs, HST of 5% of all costs and a contingency of 15% of all
 other costs including HST.
- 3. **Project Construction** The Project has now been tendered is ready to proceed to construction stage budget. A Class A estimate shall be prepared by updating the Class B estimate using tender prices and knowledge of the project. The process shall consist of

- finalize the scope of the project. All changes to the scope of the project shall require approval by the Vice President Finance & Administration.
- the design consultant shall have obtained a sign off of the tender floor plans and scope of the project prior to tendering the project.
- use the SMU Project Cost estimate Excel Spreadsheet to develop the cost estimate
- update the Class B estimate using the tender prices.
- review and add as required allowances for unknown hidden un-quantified probable costs such as environmental, underground utilities, infrastructure upgrades for the project and landscaping.
- the estimate shall also include consulting fees at 10% of the construction estimate or as proposed, commissioning fees of 2% of the construction estimate, environmental hazardous assessment and monitoring fees, furniture estimate, building permit cost, miscellaneous printing costs, legal and insurance costs, HST of 5% of all costs and a contingency of 10% of all other costs including HST.