



Canada's Capital University

<b>Policy Name:</b>	<b>Capital Planning Policy/Process</b>
<b>Originating/Responsible Department:</b>	<b>Vice-President (Finance &amp; Administration)</b>
<b>Approval Authority:</b>	<b>Senior Management Committee</b>
<b>Date of Original Policy:</b>	<b>October 2018</b>
<b>Last Updated:</b>	<b>February 2019</b>
<b>Mandatory Revision Date:</b>	<b>February 2024</b>
<b>Contact:</b>	<b>AVP (Facilities Management &amp; Planning)</b>

## Executive Summary

The capital planning process begins with the development and adoption of a *Capital Plan* in coordination with the overall *Campus Master Plan*. The Capital Plan sets out the major *Capital Projects* to which the University has assigned a priority. Once the Capital Plan is developed, the University will begin the governance review and approval process starting with the Strategic Integrated Planning Committee (SIPC). This process includes the prioritization of projects brought forward and the identification of funding sources, and oversight from the *Finance* and *Building Program committees*, as well as appropriate approval by the *Board of Governors*. A *Capital Proposal Form* is prepared to initiate the project and is approved by the Presidents Advisory Group (PAG) and the Building program and Finance Committees. Throughout the governance process, Project Planning Reports are prepared to ensure cost and design control as well as to capture input from users. Finally, once costs have been identified a Project Implementation Report is prepared and presented to the Board of Governors for approval. Once the project is ready to proceed, a *Project Implementation Plan* is prepared and submitted to Board committees for review and approval to proceed. Subsequent *Project Status Reports* are provided regularly to Board committees, and a *Project Conclusion Report* is prepared at the end of each project.

The Campus Master Plan which will guide the University in establishing, among many things, fundamental design principles. In keeping with the plan, the University's building and landscape design will follow the following general principles:

- Carleton is set within an established urban environment and its campus development must fall within the parameters of the existing context and the development plans of the City of Ottawa
- Campus development should maintain architectural and visual coherence
- Sustainable practices should be incorporated in the design and construction of new projects

- Structures, open space and areas of historic significance should be preserved and enhanced, and integration of new development, renovations and additions must be sustained
- All buildings should be identifiable as University facilities and contribute to the quality and coherence of the campus.

## **Purpose**

The development and maintenance of a modern university campus is a never ending challenge.

Given the interest of prospective faculty and student in working, studying, and dreaming in an inspirational and creative physical environment, the University's commitment to design must be consistent with (and indeed, a core component of) the highest of academic aspirations. The standards for design excellence should be no less exacting than those that are set in the academic sphere as campus design has a profound impact on the character and quality of human interactions within the University community.

For Carleton's campus, the challenges are: to effectively integrate the new with the existing structures; to achieve interconnectivity with intelligent green landscaping; to be cognizant of the existing cultural landscape; and to ensure new landmark buildings incorporate quality designs and materials that will serve to systematically strengthen and further enrich overall campus environment.

The University's development of its physical assets should be guided by a best practices approach to facility and infrastructure planning, design and construction. Accordingly, this policy defines the norms for carrying out such an approach, specifies the framework within which individual projects can evolve, and establishes approval and reporting requirements.

This policy must be viewed as a living document to be updated at regular intervals in reflection of necessary changes to, and/or the refinement of, existing procedures as appropriate.

## **1. General Planning Matters**

The Campus Plan addresses the location and size of buildings and general uses. The University's approach to planning is to set the parameters, policies and directions for the Physical development of the campus-its buildings, landscapes, movement systems and general infrastructure.

### **1.1 Campus Master Plan**

The University will undertake a review of the Master Plan on a 5-year cycle. The planning process will be chaired by the Vice-President (Finance and Administration), and will involve extensive community input from students, faculty, staff, the city of Ottawa, NCC, RVCA and the surrounding neighbourhood. After the review process is completed and changes approved by Senior Management, the revised Master Plan will be submitted to the Building Program

Committee of the Board for review and recommendation to the Board. The Master Plan may designate certain sites as priority locations for academic, administrative or ancillary, activities or projects. Such plan also addresses the type and quality of the public spaces on each campus, the parameters for individual buildings and growth opportunities.

## **1.2 Capital Plan**

As part of the University's strategic and operational planning process, Carleton will prepare a Capital Plan, which set out the priority and strategic importance of major capital projects. Such plan covers multi-year periods and will be updated, as required, to reflect progress made and new or altered priorities. The Capital Plan includes all capital projects valued at \$5M or greater, which are expected to be in planning and or implementation stage during the period covered by the Plan. The Capital Plan provides provisional estimates of overall costs and sources of funds and is the responsibility of Facilities Management and Planning.

## **1.3 Infrastructure Renewal Program**

Subject to approval by the Board, the University may adopt, from time to time, infrastructure renewal programs to address maintenance or update requirement of buildings systems and other campus assets. Each year, a number of projects will be undertaken that are identified within the Infrastructure Renewal Program. Such program will highlight multi-year priorities and will be updated, at appropriate intervals, to reflect progress made and new or altered priorities.

In addition to projects included in the Infrastructure Renewal Program, the University may submit to the Board special projects (exceeding \$5 million) that address extraordinary and/or urgent needs to support the infrastructure of the University. Such projects will normally include major and/or innovative types of utility infrastructure and include appropriate justification

## **2. Planning Principles**

Campus master plans, capital plans, as well as infrastructure renewal programs will be developed and implemented within the context of principles that express the University's commitment to the orderly and responsible development and use of its assets. Such principles extend to the development of individual projects that are integral to the academic mission of the University. All projects should stand as examples of high-quality design, incorporating an appropriate level of functionality and responsibility towards the environment. Furthermore, each individual project needs to follow the principles of the comprehensive Campus Master Plan of the University. These *Planning Principles*, as set out in Appendix A, constitute the enduring interests of the University and are to be considered in all aspects of planning.

Operating within the framework of the Campus Master Plan, it will be necessary at various times to strike working groups with the specific objective to explore the independent needs and interactions between faculties, divisions and units in advance of establishing *Project Committees* for new capital projects. Working groups will be established by the Vice-President (Finance and Administration), or designate, in consultation with the divisions (Faculties, etc.) and will report to the Vice-President (Finance and Administration), or designate. The results of these working

groups will serve to more sharply define the terms of reference that are formally established with the formation of the project committee for each new capital project. Working groups will also be struck, as needed, to identify collective space requirements in support of academic and administrative programs. The use of working groups is intended to facilitate the planning process and provide an opportunity for divisions to investigate greater integration and the sharing of facilities with academic collaborators across the University.

Residences and all other major use facilities of a non-academic nature, including student services, athletics and recreation, child-care, parking, etc., will conform to the same procedural requirements (outlined below) for capital projects initiated in support of the academic program and administrative requirements of the University. The essential differences being the particular financial arrangements made to address funding of capital costs, i.e. a long-term mortgage normally carried by the ancillary in the case of new residential construction.

### **3. Overview of Project Approvals, Planning Process and Reporting Requirements (\$5M and Over)**

**Note:** For projects in the \$50K to under \$5M range, a separate process is outlined in Appendices F.

A brief summary of project approvals, planning process and reporting requirements, as outlined in Sections 4 and 5, follows to clarify the elements of the Capital Planning Process Policy. Please see Section 3.1 – Figure 1 for a diagram of the components of this process and the sequence of events within the University governance structure.

The Building Program and Finance committees oversee the full life cycle of major capital projects, infrastructure renewal program, departmental / faculty projects or projects arising from dedicated government funding and valued at \$5M or greater. All proposals for new projects at or over \$5M will be brought forward to the Building Program and Finance committees for consideration on an as required basis. All proposals defining the need, proposed site and design/construction strategy will be submitted using the *Capital Proposal Form* document attached in Appendix E.

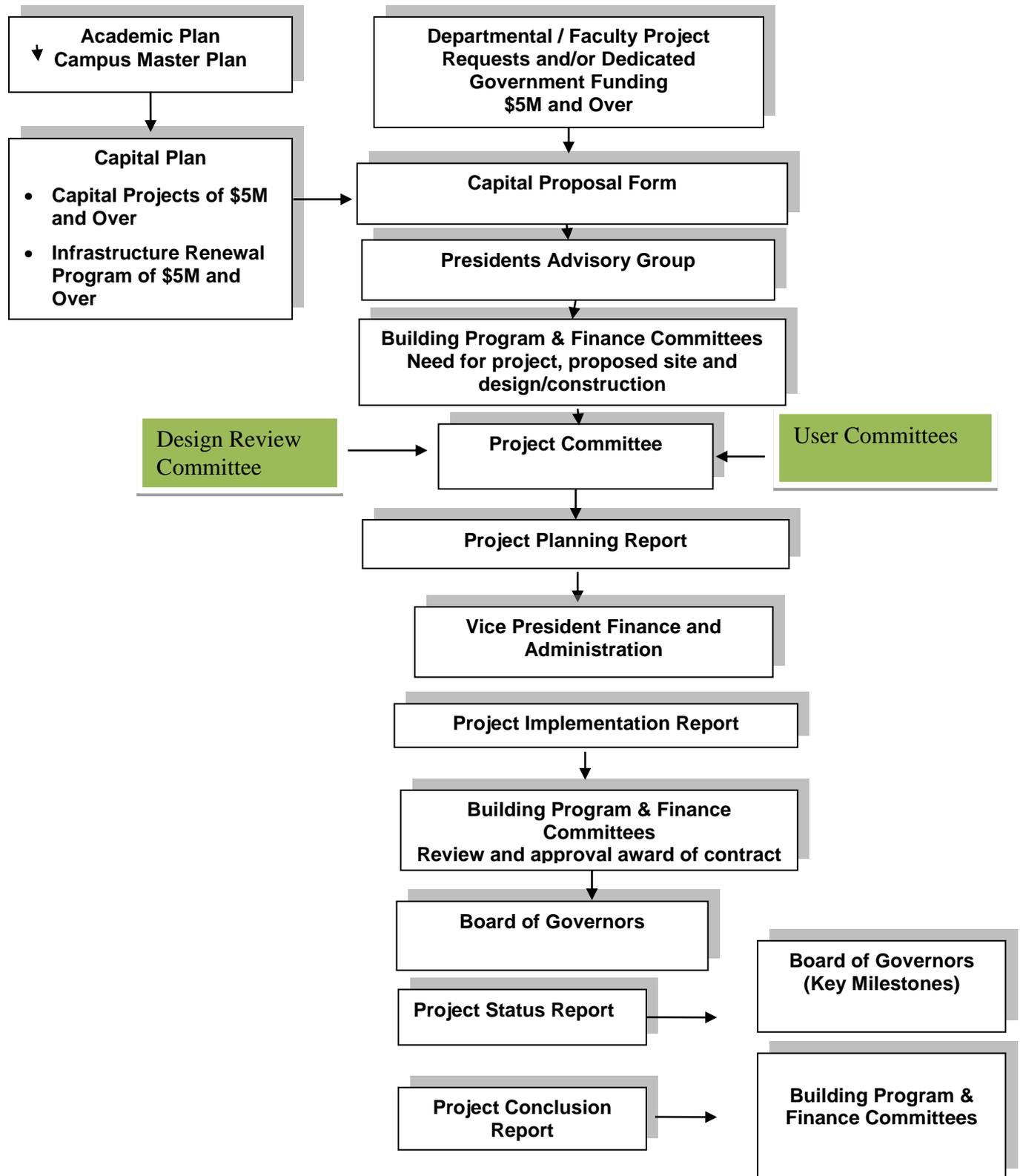
Upon approval by the Building Program and Finance committees, a Project Committee will be established and will prepare the first comprehensive cost estimate of the project while Financial Services will identify the sources of funding. Once the preliminary design, estimate and schedule have been reviewed and approved by the Building Program and Finance Committees, an updated Capital Proposal Form (Preliminary Design) will be prepared and forwarded to the Board for review.

Upon the recommendation by the Building Program and Finance committees, Project Committee will be established and will prepare the comprehensive cost estimate of the project (project Planning Report) while Financial Services will identify sources of funding. Once the project Planning has been reviewed, a Project Implementation Report will be prepared and brought to the Board of Governors for approval. The selection of consultants (architects, planners, etc.) will be the Project Committees responsibility.

Throughout this continuing process, User Groups will be consulted and independent advice on the design elements of the project and its integration into the campus environment will be sought from the *Design Review Committee*.

In the event costs have increased from the approved / tendered price to beyond the lesser of \$500,000 or 15% of the project cost, the project will be resubmitted for Board approval. Should the Board of Governors not approve additional resources as a result of the change, the Project Committee will recommend a course of action to Senior Management.





**3.1 – Figure 1:**  
**Project Approvals, Planning Process and Reporting Requirements (\$5M and Over)**  
 (See Appendix F for Project Approvals, Planning Process and Reporting Requirements for Projects From \$50K to \$5M )

## **4. Projects: Authority to Plan and Implement**

Projects can originate through capital plans, infrastructure renewal programs and as a result of new dedicated government funding or departmental / faculty initiatives.

### **4.1 Capital Projects**

The authority to plan and implement capital projects is delegated by the Board of Governors to the President (or designate), subject to:

#### **4.1.1**

Building Program and Finance committees' approval of the Capital Proposal Form for separate Capital Projects and Infrastructure Renewal Programs with a projected cost of \$5M or greater.

- All major Capital Proposal Documents are to be reviewed and approved by the Building Program and Finance committees'.
- All completed capital projects over \$5 million shall be reported annually to the Board of Governors through the VP (Finance and Administration) or delegate.
- For each project identified in approved Project Planning Report, Board of Governors approval of the associated Project Implementation Report is required.

#### **4.1.2**

The exercise of this authority is meant to:

- Ensure that proposed changes to land use and the selection of sites for the construction of facilities supports the effective physical development of the campus
- Consider any matter that is deemed to pertain to the physical infrastructure of the campus and make recommendations it considers to be appropriate and financially prudent to preserve the integrity of the physical infrastructure
- Review annual reports regarding deferred maintenance and make such recommendations as deemed appropriate

### **4.2 Infrastructure Renewal Programs**

Each year, a list of infrastructure renewal programs will be forwarded through the Building Program and Finance committees and the Board for information. All government funded infrastructure renewal programs greater than \$5M shall be reported annually to the Board through the Building Program and Finance committees.

For infrastructure renewal programs with a projected cost greater than \$5M, the development of a Capital Proposal Form consistent with the approval process for capital projects is required. Similarly, the approval of the Board is required to proceed with the implementation of the program. Infrastructure renewal programs will take into consideration the size and complexity of the projects - see Appendices B and D.

#### **4.3 Departmental / Faculty Capital Project Requests and Projects Arising from Dedicated Government Funding**

See Section 3 for the appropriate guidelines, based on whether the project is valued at under \$5M or \$5M and greater.

### **5. Projects Planning and Implementation Requirements (\$5M and Over)**

#### **5.1 Project Committee**

For each project requiring Board approval, the Vice-President (Finance and Administration) or his/her delegate shall establish a Project Committee. The Project Committee shall be formed at the onset of project planning and continue to exist until the completion of the project. This will ensure functional continuity throughout the life of the project as the Project Committee will include a core membership representative of the interests of the project users, the staff responsible for space and facilities planning, and the staff responsible for liaising with design consultants and contractors.

The membership of the Project Committee must comprise the senior representative(s) of the user(s), normally the Dean(s), Chair(s) or equivalent (or delegates) with recognition of multi-unit participation, i.e. Faculty and/or Department, and the AVP Facilities Management and Planning (or delegate). *A representative from each of these constituencies will constitute a working executive committee. The Project Committee will be chaired by the AVP Facilities Management and Planning. Project Committees will include faculty and staff, and may include student representation.*

In cases of large, complex or sensitive projects additional core members may be required including a Project Manager, whose role will be to ensure the project moves forward efficiently and that the differing responsibilities of core members of the group are harmonized. The total membership of the Project Committee, its terms of reference and the designation of its Chair are subject to the approval of the Vice-President (Finance and Administration), or designate, and will be reported for information to the Building Program and Finance committees.

#### **5.2 Project Planning Report**

Project Planning Reports are prepared for all individual capital projects and infrastructure renewal projects for which project committees are established. The intent of the Project Planning Report is to initiate the fundamental understanding of what the project will entail. Items such as: total project costs, secondary effects, site approval, environmental considerations,

operating costs, space inventory, space utilisation analysis and space programs are items considered in the report. The Project Planning Report provides a very detailed analysis of the project with the intent being that the majority of the design issues are contemplated and resolved early on in the project life cycle and that the users have a sound knowledge of project requirements, thereby allowing the project to proceed smoothly in the implementation phase.

The Project Planning Report typically will address the types of matters listed in Appendix B and all other matters that require administrative attention or Board approval prior to a project moving into an implementation phase. The Project Planning Report constitutes, in the first instance, advice to the Vice-President (Finance and Administration) who is responsible for conveying it to the appropriate governing bodies together with a report on any modifications made to the report and on the project's conformity with the University's overall physical planning interests as expressed by the planning principles set out in Appendix A. Furthermore, concise reference to the quality standards anticipated for the particular project with respect to existing and or equivalent facilities should be included in the report to facilitate and clarify the objectives of the project, e.g. exceptionally durable materials, architecturally significant exterior components, unique landscaping elements, etc. Identification of such standards is important for costing purposes.

The Project Planning Report must include provisional estimates of the cost of the project, the potential sources of revenue, cost escalation, the details of a projected cash flow analysis with respect to both revenues and expenditures, and the operating costs.

The Project Planning Report constitutes the parameters within which further planning and implementation of the project shall take place and the preparation of the Project Planning Report requires the hiring of the prime consultant for the project.

Review and approval of funding for the project by the Finance Committee requires a project implementation report, which will normally be presented once approval of the project planning report has been received by the Building Program Committee.

### **5.2.1 Fast Tracking**

On occasion, “fast tracking” of a project may be required as a result of schedules, emergencies, or conditions of funding/finance. In this case, the Building Program and Finance committees’ approval of the Capital Proposal Form can be sought without the receipt of tenders. In such cases, approval will be conditional on tenders coming-in as planned.

In cases where the total project budget is less than \$5 million and when time is of the essence, final approval may be sought from the President based on the Project Planning Report.

At this point, selection of the consultant (architect, landscape architect, planners, other) will commence and the Project Committee will formalize the content of the proposal tender.

In very rare cases such as emergencies or disaster recovery situations, projects can be approved in principle by the Board, but will normally require confirmation of the source(s) of funds.

### **5.3 Project Implementation Report**

Project implementation reports are required for all individual capital projects and infrastructural renewal projects with values of \$5M or greater in order to proceed to the implementation stage. The purpose of the Project Implementation Report is to provide a summary of the key characteristics and issues of the project for review by the Board. The report will capture any significant matters arising subsequent to the Project Planning Report that may change the project scope. The report also addresses cost and schedule, but more importantly includes a recommendation on whether or not to move forward with the project.

When the design has proceeded to a point where a project can be tendered and a total project cost determined (after consultation with the Project Committee and the Design Review Committee), the AVP Facilities Management and Planning prepares a Project Implementation Report for review by the Building Program and Finance committees. The Project Implementation Report shall include comments on any changes from the approved Project Planning Report in line with the overall Planning Principles shown in Appendix A. The Project Implementation Report will also address the following: design variances, other approvals required, the proposed total project cost, the sources of funding, the timing of projected expenditures, the projected cash flow and the required financing and escalation costs. A representative template of the Project Implementation Report can be found in Appendix D.

In considering approval of the project for implementation, the Building Program and Finance committees will assess the extent to which the project is within its approved parameters, its cost effectiveness, and the extent to which full funding is committed or obtainable, and whether there are any significant outstanding and unresolved issues with respect to the project. If satisfied with the Project Implementation Report, the Building Program and Finance committees will forward their recommendation to the Board of Governors for review and approval.

### **5.4 Project Status Report**

A Project Status Report will be provided to the Board at appropriate milestones for all capital projects and infrastructure renewal projects.

### **5.5 Project Conclusion Report**

At the completion of a capital or infrastructure renewal project, a Project Conclusion Report is prepared. The purpose of the report is to bring closure to the project and to provide useful feedback on all procedures as well as the final costs of the project. All Project Conclusion Reports are to be reviewed by the Vice-President (Finance and Administration). A summary of Project Conclusion Reports will be provided to the Board at the close of each project.

### **5.6 Design Review Committee**

The Terms of Reference of the Design Review Committee are detailed in Appendix C. It is in the University's interest that each project which has an exterior design component or public area be

reviewed from a design perspective by a Committee established for this purpose. In making this provision, the University will seek to obtain a level of advice commensurate with its desire to build in ways which provide outstanding examples of the work the design profession can contribute to a university environment.

## **5.7 Project Implementation**

Project implementation is the responsibility of the AVP Facilities Management Planning, subject to the parameters established through the approval of the Project Planning Report and in consultation with the Project Committee, the Design Review Committee, and other relevant bodies.

### **5.7.1 Project Consultants**

Project consultants can be retained under each of the following scenarios:

- Planners, architects, landscape architects and other consultants may be retained, and site preparation work authorized, for any project approved as part of a Capital Plan. The cost of this activity is to be included as part of the project costs. Such consultants may also be retained for projects not approved as part of a Capital Plan, but only with the approval of the Vice-President (Finance and Administration), or designate, and with secured funding and costs not to exceed \$250,000. Expenditures in excess of \$250,000 for such purposes will require approval of the Finance Committee.
- The authority to appoint architects and other consultants is delegated to the AVP Facilities Management and Planning (or designate), acting after receiving advice from the Project Committee. In the case of projects not requiring Project Planning Reports, authority to appoint architects and other consultants is delegated to the AVP Facilities Management and Planning (or designate), subject to confirmation of project funding.

### **5.7.2 Board of Governors**

Except as outlined in Section 5.7.1 above, no contract for the implementation of a project for which a Project Planning Report is required (i.e. over \$5M), may be signed before approval of the project by the Board. This approval of the Board normally will be given on the basis of a Project Implementation Report, outlined in Section 5.3 above. The Project Committee can recommend an expenditure to hire consultants and architects in order to advance the project to the implementation stage up to \$250,000.

Repeat requests for partial funding can be made to the Board and must be accompanied by a detailed report of all expenditures authorized by previous allocations to advance the project to the implementation stage.

### **5.7.3 Project Cost Increases**

Increases in the cost of projects with approved Project Planning Reports may be authorized by the Vice-President (Finance and Administration) up to a total of the lesser of \$500,000 or 10% of

the total project cost. In the event costs have increased from the approved / tendered price to beyond the lesser of \$500,000 or 10% of the project cost, the project is required to be presented to the Finance Committee for approval.

#### **5.7.4 Changes in Scope**

Irrespective of cost issues, a re-submission to the Board is required to secure approval when significant changes in scope have been introduced.

### **Appendix A: Planning Principles**

To ensure excellence in campus planning and design, directives that guide the University towards a systematic and comprehensive approach for evaluating design alternatives for buildings and grounds are necessary.

The Planning Principles that guide the University in various development proposals related to campus planning, building design, site planning and landscaped open space are loosely categorized below. These principles address accessibility, safety and environmental issues. In addition, it is important to refer to the Master Plan to delineate those issues that are campus specific, notably parking, etc.

#### **A.1 Campus Planning**

##### **A.1.1**

It should be recognized that the University is set within an established urban environment and that campus development must fall within the parameters of the existing context and the development plans of the City of Ottawa.

##### **A.1.2**

The development capacity of Carleton University property should be fully realized, while respecting the integrity of the campus to support the University's academic endeavours.

##### **A.1.3**

The use of transit should be encouraged while co-operating with the City of Ottawa in new endeavours to examine and rationalize parking.

##### **A.1.4**

The architectural and visual coherence of the campus should be sustained and enhanced by campus development.

##### **A.1.5**

Structures and outdoor spaces of historical, architectural, or environmental significance should be preserved.

##### **A.1.6**

The University's heritage and traditions should be enhanced and emphasized.

#### **A.1.7**

Unified academic communities should be planned with a fundamental framework of social and environmental amenities (e.g. child care, food services, recycling facilities, etc.).

#### **A.1.8**

The expansion of campus-wide service networks, such as utilities and communications, should be integral to campus planning.

#### **A.1.9**

The University campus and global environment should be maintained and enhanced.

### **A.2 Site Planning**

#### **A.2.1**

Structures, open space, and areas of historic significance should be preserved and enhanced and an appropriate integration of new development, renovations, or additions must be ensured.

#### **A.2.2**

A system of continuous pedestrian routes throughout the campus should be established which provide safe and convenient access to all University facilities, including convenient access for the physically disabled.

#### **A.2.3**

The grouping of buildings with related use and technical support facilities should be encouraged.

#### **A.2.4**

Aesthetic aspects of public areas should be enhanced.

#### **A.2.5**

Personal safety considerations must be paramount in building and landscape design.

### **A.3 Landscaped Outdoor Open Space**

#### **A.3.1**

Designated funding for landscape improvements are required to be included within total building project budgets in accordance with the University's budget guidelines.

#### **A.3.2**

Priority should be given to landscape improvements on the Carleton Campus.

#### **A.3.3**

Existing University open space, gardens and treed areas of significance should be respected and enhanced when planning new development, renovations and additions to adjacent buildings.

#### **A.3.4**

Optimal microclimatic conditions should be promoted through site and building design. Specifically, design must take into account that peak use of each campus occurs in fall and winter.

#### **A.3.5**

Streetscapes should be identifiable through distinctive paving, lighting, signage, and outdoor furnishings.

### **A.4. Property and Land Use**

#### **A.4.1**

The use of Facilities of all kinds should aim to promote the University's academic goals. All University lands should be regarded as resources to serve the University's overall mission.

#### **A.4.2**

No buildings or campus areas should be irrevocably assigned to or controlled by a particular division or department.

#### **A.4.3**

Capital improvements and the use of existing space should be coordinated to ensure the most effective use of all resources. The secondary ramifications of every major capital project should be identified as part of the planning for the project.

#### **A.4.4**

Building renovation and adaptation should be given equal consideration with building replacement in order to maximize use of the existing space inventory and to preserve sites for development.

#### **A.4.5**

Where possible and desirable, the University should plan multiple use facilities.

#### **A.4.6**

The periphery of the campus should be planned in a consultative fashion so as to reflect the plans of both adjacent communities. Regulatory agencies (NCC, RVCA) and the University.

#### **A.4.7**

Faculties and departments that have close functional or disciplinary relationships should be grouped whenever possible.

#### **A.4.8**

Surface parking should be replaced wherever possible by parking structures.

#### **A.4.9**

The university should retain oversight of design and quality when leasing land to a third party.

## **A.5 Considerations for Building Design**

### **A.5.1**

All buildings should be identifiable as University facilities and contribute to the quality and coherence of the campus.

### **A.5.2**

On the perimeter of the campus, the buildings should convey the identity of the University as well as ensuring appropriate integration with the adjacent communities, or regulatory agencies.

### **A.5.3**

Each building project should be developed as part of an integrated whole, consisting of built space, open space, and functional inter-relationships.

### **A.5.4**

The gross area of each building should be minimized to reduce capital and operating costs while fulfilling program requirements according to a system of objective space standards (Council of Ontario Universities' Space Classification Codes).

### **A.5.5**

Building design should make efficient use of each building site taking into account the limited availability of undeveloped campus lands.

### **A.5.6**

Building design should take into account impact on micro-climatic conditions.

### **A.5.7**

Facilities that do not require surface locations should be built below grade when possible.

### **A.5.8**

Infill should be considered to capitalize on unused space or where it can preserve and reinforce the historical, aesthetic or functional attributes of existing buildings.

### **A.5.9**

Accessibility must be considered in building design.

### **A.5.10**

Building design should provide flexibility to facilitate changes in use and improvements in technical support facilities.

### **A.5.11**

All building projects should consider the principles described above in order to improve adjacent existing facilities whenever possible.

**A.5.12**

When making decisions about designs, processes and products that influence resource use and other environmental impact, alternative methods that result in good environmental practices should be considered.

**A.5.13**

All buildings are to be designed according to principles of Green Globes or equivalent in order to minimize energy and materials demand, interior pollution and the impact on the environment.

## **Appendix B: Project Planning Report Template**

- I. Membership of Project Committee
- II. Terms of Reference
- III. Background Information
  - history
  - previous approvals/reference documents
- IV. Statement of Academic Plan
- V. Space Program
  - overview of existing space
  - nominal space allocation required by Academic Plan or other initiatives
  - summary of space utilization analyses
  - tabular listing of renovated and new space
  - special facilities
- VI. Functional Plan
  - description of relationships between activities
  - functional space allocation diagram
- VII. Environmental Impact
  - energy/water use
  - open space
  - materials
- VIII. Special Considerations
  - standards of construction and quality
  - landscape requirements
  - accessibility and personal safety
  - computing and communications
  - environmental issues
  - hazardous waste disposal
  - campus planning issues
- IX. Resource Implications

- site service relocates
- infrastructure upgrades in the sector
- construction costs
- other costs (secondary effects, construction contingency, demolition)
- permits and insurance
- professional fees
- landscaping
- computer and telephone terminations
- furniture and equipment
- miscellaneous costs (signage, security, other)
- donor recognition
- moving and staging
- commissioning
- financing costs
- total project cost estimate

X. Operating Life Cycle Costs (TCO)

X1. Other Related Costs

XII. Funding Sources and Cash Flow Analysis

XIII. Schedule

XIV. Recommendations

APPENDICES:

1. Space Inventory
2. Utilization Analyses
3. Equipment/Furnishings
4. Computing
5. Total Project Cost (TPC) Estimate (see B.1 – Table 1)
6. Room Specification Sheets

**Notes:**

1. This template is specific to capital projects. Items IV and V and elements of item IX are not directly applicable to infrastructure renewal projects and should be identified as N/A.
2. A detailed Construction Cost Estimate will be systematically updated for all capital projects, beginning with the initial design cycle and continuing through to completion. This information will be maintained for internal use by the office of the AVP Facilities Management and Planning and available to the Building Program and Finance committees.

## B.1 – Table 1: Total Project Cost Estimate (TPC)

Column 1 will be completed with the Project Planning Report.

Columns 1 to 5 will be included in the Project Implementation Report.

<b>Items</b>	<b>Project Planning Report</b>	<b>Concept Design</b>	<b>Design Devel't</b>	<b>Drawings @ 90%</b>	<b>Tender</b>	<b>Project 100% complete</b>
<b>Construction Cost Estimate (B.2 - Table 2)</b>						
Construction Contingency						
<b>Total Construction Costs, plus taxes</b>						
Site service relocates						
Infrastructure upgrades in sector						
Secondary Effects						
Demolition						
Landscaping						
Permits & Insurance						
Professional Fees						
Computer wiring & Telephone Terminations, Security, Life safety functions						
Moving & Staging						

Furnishings & Equipment						
Miscellaneous Costs (signage, security)						
Commissioning						
Donor recognition						
Finance Costs						
<b>Total Project Cost Estimate.</b>						
<b>GST included</b>						
<b>10% Contingency to be added</b>						

## B.2 – Table 2: Construction Cost Estimate

A Construction Cost Estimate will be systematically updated for all Capital Projects, beginning with the initial design cycle and continuing through to completion.

This information will be maintained for internal use by the office of the AVP Facilities Management and Planning and available to the Building Program and Finance committees.

Items	Project Planning Report	Concept Design	Design Devel't	Drawings @ 90%	Tender	Project 100% complete
<b>A. EXTERIORS</b>						
<b>A.1 SUBSTRUCTURE</b>  A.1.1 Foundation  A.1.2 Basement Excavation						
<b>A.2 STRUCTURE</b>  A.2.1 Lowest Floor Constr.  A.2.2 Upper Floor Constr.  A.2.3 Roof Construction						
<b>A.3 EXTERIOR ENCLOSURE</b>  A.3.1 Walls Below Grade  A.3.2 Walls Above Grade  A.3.3 Windows & Entrance  A.3.4 Roof Covering  A.3.5 Projections						

<b>B. INTERIORS</b>						
<b>B.1 PARTITIONS &amp; DOORS</b>						
B.1.1 Partitions						
B.1.2 Doors						
<b>B.2 FINISHES</b>						
B.2.1 Floor Finishes						
B.2.2 Ceiling Finishes						
B.2.3 Wall Finishes						
<b>B.3 FITTING &amp; EQUIPMENT</b>						
B.3.1 Fitting & Fixtures						
B.3.2 Equipment						
B.3.3 Conveying Systems						
<b>C. SERVICES</b>						
<b>C.1 MECHANICAL</b>						
C.1.1 Plumbing & Drainage						
C.1.2 Fire Protection						
C.1.3 HVAC						
C.1.4 Controls						
<b>C.2 ELECTRICAL</b>						
C.2.1 Services & Distribution						
C.2.2 Lighting,						

Devices, Heating C.2.3 Systems & Ancillaries						
<b>NET BUILDING COST</b> (Excluding site)						
<b>D. SITE &amp; ANCILLARY WORK</b>						
<b>D.1 SITE WORK</b> D.1.1 Site Development D.1.2 Mechanical Site Services D.1.3 Electrical Site Services						
<b>D.2 ANCILLARY WORK</b> D.2.1 Demolition D.2.2 Alterations						
<b>NET BUILDING COSTS</b> (Including site)						
<b>Z. GENERAL REQUIREMENTS &amp; ALLOWANCES</b>						
<b>Z.1 GENERAL REQUIREMENTS</b> Z.1.1 General Requirements Z.1.2 Fee						
<b>Z.2 ALLOWANCES</b> Z.2.1 Design Allowance Z.2.2 Escalation Allowance						

<b>TOTAL CONSTRUCTION ESTIMATE (Inc. Allowances)</b>						
<b>Gross Floor Area (GFA)</b>						

## **Appendix C: Design review Committee**

### **C.1 Terms of Reference**

The Design Review Committee advises on the development of the campus-built form environment in order to enable the implementation of the University's commitment to a level of excellence in this area comparable to that established for its academic activities. The Committee uses high standards in discharging its duties with respect to architect selection, design review and the interplay of design issues with other planning concerns. All projects are assessed with respect to approved Campus Master Plans, which will also be reviewed from time to time by the Design review Committee.

The Committee's mandate includes:

#### **C.1.1.**

Providing advice on Campus Master Plans, the University's Planning Principles, and physical planning and building design.

#### **C.1.2.**

Reviewing and making recommendations on design concepts for building and landscape projects. Matters under review should include the extent to which overall campus planning and design objectives are met, design excellence is achieved and environmental and heritage issues are addressed. The Committee focuses primarily on the overall integrity of the basic design, rather than on design details.<sup>6</sup>

#### **C.1.3.**

Being available for consultation, on an as needed basis, by administrative officers responsible for campus planning and design.

#### **C.1.4.**

Reporting to the Board on its activities, on a basis to be established by the Board

### **C.2 Composition**

The Design Review Committee will represents a coalition of design expertise, university governance, and Facilities Management. Additional members may be recruited, as needed, to

further strengthen particular campus representation when campus specific capital projects are tabled for review.

The Committee will be chaired by the AVP Facilities Management and Planning (or designate). Members may be appointed by the Vice-President (Finance and Administration) because of their expertise and qualifications in design and related fields.

### **C.3 Method of Operation**

The Design Review Committee will normally meet as needed. To accommodate campus specific reviews of capital plans, meetings will be held on campus specific to the agenda items under review. This will also allow the Committee to be fully informed of site-specific conditions, as these relate to the project.

The Committee will discharge its functions, at the discretion of the Chair, either in full committee or in panels, subject to the following:

#### **C.3.1.**

The discharge of the functions set out in Section C.1.1 above require consultation with the full Committee.

## **Appendix D: Project Implementation Report Template**

- I. Executive Summary
- II. Terms of Reference
- III. Project Overview
  - Relevant Elements of the Project Committee Report
  - Changes from the Project Committee Report
- IV. Project Summary
  - Build and Site Overview
  - Design Review Committee Input
- V. Resources Implications
  - Construction Cost Estimate (Update on the Project Planning Report)
  - Project Cost Estimate (Update of the Project Planning Report)
  - Total Cost of Ownership
  - Schedule to Completion
  - Funding Sources and Cash Flow Analysis

VI. Table 1: Total Project Cost Estimates (TPC) through the Development Cycle of the Project

VI. Recommendations

## Appendix E: Capital Proposal Form

---

**Project Name:**

**Department:**

**Last Updated:**

**Author:**

**Project Manager(s):**

**Executive Sponsor:**

---

### Project Business Case

#### Project Overview

[Replace this text with a description of what is involved in executing the project. Use list items if appropriate.]

- [Task/Process/Change]
- [Task/Process/Change]
- [Task/Process/Change]

#### Issue/Opportunity

[Replace this text with a description of the background context of the project and why it is necessary.]

- [Issue/Opportunity]
- [Issue/Opportunity]
- [Issue/Opportunity]

#### Project Goal

[Replace this text with a description of the value expected to be gained through this project implementation and how the environment will be improved.]

- [Value/Goal]
- [Value/Goal]
- [Value/Goal]
- [Value/Goal]

## Project Duration Estimates

Project Milestone	Date Estimate	Confidence Level
Project Start Date	[mm/dd/yy]	[High/Medium/Low]
Milestone 1	[mm/dd/yy]	[High/Medium/Low]
Milestone 2	[mm/dd/yy]	[High/Medium/Low]
Milestone <i>n</i>	[mm/dd/yy]	[High/Medium/Low]
Project End Date	[mm/dd/yy]	[High/Medium/Low]

## Project Conditions

Project Assumptions
[Replace this text with an outline of all known assumptions that apply to this project.] <ul style="list-style-type: none"><li>• [Assumption]</li><li>• [Assumption]</li></ul>
Project Risks
[Replace this text with an outline of all known risks that apply to this project.] <ul style="list-style-type: none"><li>• [Risk]</li><li>• [Risk]</li></ul>
Project Constraints
[Replace this text with an outline of all known constraints that apply to this project.] <ul style="list-style-type: none"><li>• [Constraint]</li><li>• [Constraint]</li></ul>
Environmental Considerations
[Replace this text with an outline of how environmental issues are being addressed.] <ul style="list-style-type: none"><li>• [Issue]</li><li>• [Issue]</li></ul>

## Project Financing

Project Costs
---------------

Replace this text with a summary of the cost analysis. Attach an appendix spreadsheet of that details the budget for the projects that includes the timing/milestones and major expenditures.]

### **Project Funding**

[Replace this text with a summary of the funding. Attach an appendix spreadsheet that defines the sources of funds and timing of receipt of funds (present value). Include all financing costs such as debt and bridge financing.]

### **Project Operating Impact**

[Replace this text with a summary of the operating impact. Attach an appendix spreadsheet that shows the operating impact for 10 years. Impact should include revenues, costs and financing implications.]

### **Financial Assumptions**

[Replace this text with all key assumptions that apply to the financing of the project.]

- [Assumption]
- [Assumption]

**Financial Resources Signoff:**

## **Project Critical Success Factors (Key Performance Indicators)**

### **Project Critical Success Factors**

[Replace this text with an outline of all known critical success indicators that apply to this project.]

- [Indicator]
- [Indicator]

## **APPROVALS**

Project Manager: \_\_\_\_\_ Date: \_\_\_\_\_

[Name]  
[Title]

Executive Sponsor: \_\_\_\_\_ Date: \_\_\_\_\_

[Name]  
[Title]

AVP Facilities  
Management

Planning: \_\_\_\_\_ Date: \_\_\_\_\_  
[Name]

Vice-President  
Finance & Adm.: \_\_\_\_\_ Date: \_\_\_\_\_  
[Name]

President: \_\_\_\_\_ Date: \_\_\_\_\_  
[Name]  
[Title]

## **Appendix F: Changes in Use / Renovations (Under \$5M)**

### **Preamble**

The University is constantly evolving and changing, often quickly, to meet the needs of students, faculty and staff. As departments carry out their responsibilities with respect to the University's academic programs and the activities which support those programs, they frequently identify requirements with respect to space:

- need for additional space
- need for alterations/renovations to:
  - reorganize existing space
  - convert space to other use

All space at the University is subject to changes in configuration and usage and no unit on campus has a proprietary right to any space. The authority to plan and implement all capital projects is delegated to the President (or designate), subject to:

1. Board of Governors approval of Project Planning Reports for individual capital projects with a projected cost of \$5M or greater.
2. All completed capital projects between \$1 and \$5M shall be reported annually to the Board of Governors through the Building Program and Finance committees. Projects under \$5M in value do not require Project Planning Reports.

(All projects with costs of \$5M or greater will be subject to the Capital Priorities and Planning Process Policy.)