

2.3 Management of the Project

# 2.3.1 Management of the Project

Introduction

Project Organization

In-house Teams

Role of the Project Manager

Client-Architect Agreements

Project Cost Control

Coordinating Engineers and Other Consultants

Communications

Scheduling the Project

Project Closeout

Project Evaluation

Record Drawings

Archiving

Firm Database

Promotional Documentation

Use of the “Checklist for the Management of the Architectural Project”

References

Appendix — Characteristics of an Effective Project Manager

**Checklist for the Management of the Architectural Project**

# Management of the Project

## Introduction

Effective management of the project is an essential element of good professional practice.

This chapter describes the role of the project manager (also called a project architect or design team leader) — the person in an architect’s office who directs and administers an architectural project. Sometimes the project manager may be the principal or partner-in-charge or they may report to the principal or partner-in-charge.

This chapter does **not** cover:

- *project management* as a separate professional service or form of delivery;
- *construction management* as a form of project delivery.

These topics are discussed in Chapter 2.3.2, *Types of Construction Project Delivery*.

The project manager may be a senior architect or other individual (preferably an architect) with experience in the practice of architecture and management.

Refer to “Appendix — Characteristics of an Effective Project Manager” at the end of this chapter.

Refer also to the standards of the Project Management Institute which provide a structured methodology for project management at [www.pmi.org](http://www.pmi.org)

## Project Organization

Good project management means:

- selecting and managing people, including in-house staff and outside consultants;

- ensuring continuous and effective communications;
- delegating tasks appropriately;
- arranging and managing meetings;
- controlling and managing design changes;
- managing time effectively;
- scheduling, estimating, and project control.

## In-house Teams

For small projects, project managers may carry out several of the tasks themselves. For large and complex projects, several people participate in the same task. The project manager must identify the manpower and skills required, and must also constantly direct and motivate the in-house team. The composition of the team is the key factor in achieving both architectural and financial objectives.

The team may include the project manager and several architects, intern architects and technicians. More complex projects or very specialized services (such as acoustics, vertical transportation systems, architectural conservation, and wind studies) often require hiring outside experts.

## Role of the Project Manager

The project manager is a leader responsible for:

- ensuring that the project proceeds through successive stages from program approval to project implementation;
- keeping the project on time and within budget;
- managing the progress of the project by:
  - directing an internal team;
  - directing and coordinating the contribution of engineers and other consultants;
  - achieving the firm’s financial objectives;
- providing proper project closeout.

## Client-Architect Agreements

The project manager should review the client-architect agreement before starting work.

It is preferable to use either the *Canadian Standard Form of Contract Between Client and Architect: RAIC Document Six* or the *Canadian Standard Form of Agreement Between Client and Architect — Abbreviated Version: RAIC Document Seven*, because:

- these agreements are widely recognized and accepted;
- the architect's and the client's responsibilities are clearly defined;
- they clearly identify the scope of work by distinguishing between Basic Services and Additional Services.

The prudent project manager will review the terms of the agreement, to fully understand the scope and limitations of the consulting services to be provided. This should forestall later misunderstandings or unreasonable expectations. The project manager should identify when any increase in fees as a result of additional services is warranted and then consult with the principal or partner-in-charge and assist in any adjustment to fees.

Refer to Chapter 2.1.9, *Risk Management and Professional Liability*, for more detail on client-architect agreements.

## Project Cost Control

Generally, at the beginning of a project, the client will prepare an overall project budget. The project manager's goal is to:

- manage the results of the design team;
- administer the design and construction of the best possible project within the available funds;
- achieve the firm's financial objectives (profit margin) for the project.

Refer to Chapter 2.3.3, *Cost Planning and Control*, for information on planning and controlling costs for a specific project. Refer to Chapter 2.1.4, *Financial Management*, for controlling costs within the architectural office.

## Coordinating Engineers and Other Consultants

Usually the "design team" has already been selected when the commission is awarded. Refer to Chapter 1.2.3, *Consultants*, regarding the role of consultants and agreements with consultants. Refer to Chapter 2.1.9, *Risk Management and Professional Liability*, for issues to consider when assembling the design team.

The project manager is responsible for:

- providing engineers and consultants with all information promptly and clearly in order to optimize their participation;
- ensuring that their designs and specifications are properly coordinated;
- maintaining morale as well as ensuring the respect and recognition of all consultants.

## Communications

Managing communications throughout the entire project is crucial to its success. Good communications require the efficient and effective management of:

- meetings;
- telephone communications;
- electronic and paper messages such as correspondence, memos, E-mail;
- record-keeping, such as meeting minutes, notes, project files, and other documentation.

Refer also to Chapter 2.1.6, *Communications*.

## Scheduling the Project

Project schedules are planning tools that help project managers and teams organize various defined tasks in order to meet deadlines or dates which may be set out in an agreed-upon schedule or in the contract. In addition, schedules help to monitor tasks until the project is complete. Although many different scheduling techniques are available for many types of projects, the project manager must select a method which can be adapted to the scale and complexity of the work.

Simple bar charts and milestone charts are usually appropriate for scheduling architectural projects. However, for complex projects with many teams and tasks, refer to the scheduling techniques outlined in "Appendix — Project Management" in Chapter 2.3.2, *Types of Construction Project Delivery*.

## Project Closeout

### Project Evaluation

The firm should assess whether the project has achieved its financial and professional objectives. This might include an external evaluation with the client. The project manager should analyze the project and, if the objectives were not met, determine why and suggest corrective action for future projects.

### Record Drawings

If engaged for this service, the project manager will oversee the preparation of CAD record drawings for the client based on the contractor's "mark-ups" which show changes made to the construction documents. Also, the project manager should return to the client any documentation, such as construction drawings and specifications, which was provided as reference for the design of renovations or additions to an existing building.

### Archiving

Project documents, including all electronic communications and record drawings, should be kept and filed so that they may be readily and quickly retrieved if they are needed for other projects or must be consulted in the event of a claim.

### Firm Database

The project manager should extract any information which could be used to develop a database for future work, such as the preparation of construction cost estimates, or for re-usable construction details or specifications.

### Promotional Documentation

Based on some of the project documents (such as sketches, perspectives, plans, and photographs) and data, project managers should prepare a "project record" or "project data sheet" that can be added to the firm's portfolio for future use. This record should highlight the project's special features and main challenges, as well as demonstrate the architect's contribution to its success. Refer also to Chapter 2.1.3, *Public Relations and Marketing*.

## Use of the "Checklist for the Management of the Architectural Project"

A "Checklist for the Management of the Architectural Project" has been provided at the end of this chapter. The checklist is based on the Ontario Association of Architects former Practice Bulletin Number 67, *Architect's Project Progress Record*. The document has been reformatted, references to provincial terms have been modified, and minor editorial improvements have been included.

**Although the design and management of architectural projects are not necessarily linear nor quantifiable, this checklist can assist the architect in scheduling and recording the status of principal tasks during the course of a project.**

---

## References

The American Institute of Architects (AIA) and David S. Haviland. Washington, D.C.: The AIA Press.

*Managing Architectural Projects: Three Case Studies*. 1981.

*Managing Architectural Projects: The Effective Project Manager*. 1981.

*Managing Architectural Projects: The Project Management Manual*. 1984.

Demkin, Joseph A., executive editor. *The Architect's Handbook of Professional Practice*. The American Institute of Architects. Hoboken, New Jersey: John Wiley & Sons, Inc. 2008.

Project Management Institute. *A Guide to the Project Management Body of Knowledge –Third Edition*. Project Management Institute, 2004.

[www.pmi.org](http://www.pmi.org)

## Appendix — Characteristics of an Effective Project Manager

Whether a principal or an employee, the effective project manager:

- attacks aggressively every problem on design projects;
- is organized: plans, organizes, directs, and controls the entire project;
- is enthusiastic about achieving high design standards, budget control, and schedule performance for the client;
- delegates well;
- communicates well with each person on the team and with the client and other people outside the firm;
- motivates the staff to perform so that project goals are met;
- has the ability to modify a project so that it can meet a client's changing goals;
- is results-oriented, keeping the final outcome of the project in mind at all times and achieving every goal that has been established;
- knows that it takes an entire architectural design team to accomplish the greatest possible results on a project and gives proper credit to the design team;
- listens well to both team members and others involved in a project in order to interpret clearly their objectives and opinions;
- can convince clients and team members of the right way for the project to proceed and can persuade others in a pleasing and nonbelligerent manner;
- always has a conscious sense of time: knows exactly how much time it takes to accomplish a task and how much time is left to accomplish remaining tasks;
- is capable of managing multiple projects without letting the requirements or details of any one project fall through the cracks;
- knows where to find the answers for all technical problems and can converse intelligently with clients, internal team members, and external building officials and consultants about any aspect of the project.

(reprinted with permission from PSMJ Resources, Inc.)



# Checklist for the Management of the Architectural Project

## Tasks for each phase of the project

### I Pre-agreement Phase

Upon receipt of notification from a prospective client, undertake the following tasks prior to a submission or execution of an agreement.

<b>1. Determine if other architects are or were involved with the project.</b> If "yes," comply with provincial association requirements. Address issues pertaining to copyright, credits, liability.		
<b>2. Assign project number.</b>		
<b>3. Determine scope and type of project.</b>		
<b>4. Verify ability to provide professional services, including professional liability insurance requirements and licensing.</b>		
<b>5. Determine if the client is financially sound.</b>		
<b>6. Make preliminary assessment of project viability:</b>		
• special considerations		
• financing		
• economics		
• social or community groups		
• zoning/development approval		
• environmental impact		
• heritage designation		
• Sustainable targets		
• other		
<b>7. Determine required professional services.</b>		
<b>8. Determine type of professional services agreement:</b>		
• Standard Form of Agreement (Document Six)		
• Abbreviated Version of Agreement (Document Seven)		
• client's contract		
• identify special provisions which may require input of legal counsel or professional liability insurers		
<b>9. Ascertain method of construction contract.</b>		
.1 Traditional Bid Process:		
• single bid package		
• multiple bid packages (how many?)		
• direct selection by the client		
• invited bidders		
• open bidding		
.2 Construction Management		
.3 Design-Build		
.4 other		

Pre-agreement	Schematic Design	Design Development	Construction Documents	Bidding and Negotiation	Contract Administration	Post-construction
---------------	------------------	--------------------	------------------------	-------------------------	-------------------------	-------------------

<b>10. Review the client's budget and resources.</b>		
<b>Determine if budget includes:</b>		
<b>A. General</b>		
• land or site acquisition		
• demolition		
• renovation		
• real estate fees		
• legal fees and/or title search		
• legal survey		
• environmental audit		
• environmental remediation		
• financing		
• property taxes, levies, etc.		
• project management fees		
• professional fees (architecture and engineering)		
• permits		
• estimated construction costs:		
• off-site utilities		
• on-site utilities		
• demolition		
• base building		
• tenant improvements		
• furniture/equipment		
• landscaping		
• items purchased by the client		
• allowances:		
• artwork		
• hardware		
• interior finishes (e.g., carpet)		
• exterior finishes (e.g., brick)		
• landscaping		
• service connection costs		
• other		
<b>B. Authorities Having Jurisdiction</b>		
• official plan amendment		
• zoning or land use amendment		
• bylaw variance or development appeal		
• site plan agreement		
• demolition permit		
• construction permit(s)		
• municipal/regional fees (utility connections, park levies)		
• other		
<b>C. Consultants' Fees</b>		
• planning		
• civil engineering		
• architecture		
• structural		
• mechanical		
• electrical		
• landscape architecture		
• interior design		
• cost consultant or quantity surveyor		
• other		
<b>D. Special Consultants' Fees</b>		
• acoustical		
• architectural conservation		
• arborist		
• art		
• building code		
• building envelope		
• commissioning		
• construction management		
• energy		
• environmental contaminate		
• food service		
• furniture/equipment		
• geotechnical		
• hardware		
• marketing		
• security		

Pre-agreement	Schematic Design	Design Development	Construction Documents	Bidding and Negotiation	Contract Administration	Post-construction
---------------	------------------	--------------------	------------------------	-------------------------	-------------------------	-------------------

<b>D. Special Consultants' Fees (continued)</b>		
• seismic		
• signage — graphics		
• special lighting		
• surveyor		
• sustainability		
• traffic		
• wind/snow studies		
• other		
<b>E. Miscellaneous costs</b>		
• contingency		
• inspection and testing:		
• soil		
• concrete		
• steel		
• roofing		
• asphalt paving		
• building audit (condominiums)		
• other		
• adjacent building damage survey		
• geotechnical report/inspection		
• models/professional renderings		
• full-size mock-ups		
• inflation		
• financing costs		
• client disbursements		
• consultant disbursements		
• other		
<b>F. Insurance</b>		
• excess professional liability		
• property damage		
• builder's risk insurance		
• other		
<b>11. Determine the client's requirements for:</b>		
• approvals		
• CADD		
• unit of measurement (imperial/metric)		
• language translation		
• other		
<b>12. Determine whether project budget, project time schedule, and project program are compatible.</b>		
<b>13. Organize teams (structural, mechanical, electrical, and special consultants).</b>		
Negotiate tentative compensation in accordance with basis of services determined above.		
Verify consultants' abilities to meet the client's requirements:		
• time schedule		
• liability insurance		
• licensing requirements		
• construction cost estimates		
• other		
<b>14. Prepare project estimate in accordance with agreement:</b>		
• internal office budgets		
• production schedules		
• personnel		
<b>15. Determine fee (refer to Form 2.2, Fee Calculation Sheet, in Chapter 2.2).</b>		
<b>16. Prepare and forward interim Letter of Agreement.</b>		
<b>17. Prepare client-architect agreement and forward to the client for review.</b>		
Direct legal counsel and professional liability insurer (as appropriate) to review any modifications or specific provisions required by the client.		
<b>18. Review final agreement with own legal counsel and professional liability insurer (if necessary). Approve any modifications made by the client, or renegotiate.</b>		
<b>19. Verify authority of party signing for the client (required for public agency, institutional, and corporate clients).</b>		
<b>20. Execute the agreement.</b>		
<b>21. Prepare project directory (refer to Form 1.5, Project Team Directory, in Chapter 2.4).</b>		

Pre-agreement	Schematic Design	Design Development	Construction Documents	Bidding and Negotiation	Contract Administration	Post-construction
---------------	------------------	--------------------	------------------------	-------------------------	-------------------------	-------------------

## II Schematic Design Phase

### Part A — Tasks prior to starting the schematic design phase

<b>1. Obtain name of the client’s authorized representative.</b>		
<b>2. Obtain the client’s project brief.</b> Confirm the client’s space needs and other program requirements.		
<b>3. Establish project filing system.</b>		
<b>4. Assign personnel to the project:</b>		
• project architect		
• designer		
• technical staff		
• other		
<b>5. Assemble and review all applicable requirements of Authorities Having Jurisdiction (e.g., site plan control, applicable zoning or land use, and code requirements).</b> Review with Authorities (refer to Chapter 1.2.4).		
<b>6. Establish project schedule, including completion dates for each phase of project.</b> Advise the client, staff, and all consultants.		
<b>7. Finalize Consultant Agreements</b> <b>Negotiate, prepare, and execute consultant agreements. When required, obtain the client’s approval of consultants:</b>		
• structural		
• mechanical		
• electrical		
• other		
Request and receive from each consultant proof of professional liability insurance coverage:		
• structural		
• mechanical		
• electrical		
• other		
Request and receive from each consultant proof of professional liability insurance coverage:		
• structural		
• mechanical		
• electrical		
• other		
<b>8. Distribute copies of pertinent portions of client-architect agreement to staff and consultants who require copies.</b>		
<b>9. Distribute copies of pertinent portions of consultant agreements to staff members who require copies.</b>		
<b>10. Confirm unit of measurement:</b>		
• imperial		
• metric		
<b>11. Obtain, from the client, the following surveys:</b>		
• legal		
• topographical		
• other		
Assist the client in securing surveys when necessary. Advise the client to obtain adjacent building condition survey when necessary.		
<b>12. Obtain the consultants’ requirements for investigation and testing necessary for proper execution of their work and request approval from the client.</b> Assist the client in securing proposals for this work.		

Pre-agreement	Schematic Design	Design Development	Construction Documents	Bidding and Negotiation	Contract Administration	Post-construction
---------------	------------------	--------------------	------------------------	-------------------------	-------------------------	-------------------

**Part A — Tasks prior to starting the schematic design phase (continued)**

<b>13. Instruct consultants to review site information and report:</b>		
• structural		
• mechanical		
• electrical		
• civil		
• other		
<b>14. Instruct appropriate staff members and other consultants to review site information and examine site.</b>		
Instruct appropriate staff and consultants to review and record existing conditions for existing building.		
<b>15. Determine preliminary space requirements (area and volume) using the client’s functional program.</b>		
<b>16. Prepare functional program, if part of architectural services.</b>		
<b>17. Review functional program with the client to determine if construction budget and program are compatible.</b>		
<b>18. Obtain the client’s written authority to proceed.</b>		

**Part B — Tasks to be started after completion of Part A**

<b>1. Initiate project brief.</b>		
<b>2. Review all assembled data, including program, budget, requirements of Authorities Having Jurisdiction, site data, and special requirements.</b>		
<b>3. Prepare functional space diagrams.</b>		
<b>4. Provide consultants with pertinent program data and functional space requirements.</b>		
<b>5. Receive and review results of all investigations and tests, including geotechnical reports and analyses.</b>		
Request additional information, if necessary.		
Forward final information to appropriate consultant(s).		
<b>6. Confer with consultants to determine systems to be used in the project.</b>		
Obtain analyses of comparative systems, with recommendations.		
Obtain space and location requirements for selected systems, after review and acceptance by the client.		
<b>7. Prepare schematic design documents in compliance with applicable codes, including:</b>		
• site plan		
• principal floor plans		
• building sections		
• general descriptive views (elevations)		
• illustrative sketches, models or renderings		
• other		
<b>8. Identify all documents with project number and date, and name of the practice.</b>		
<b>9. Calculate areas and volumes.</b>		
Analyze plan efficiency and applicable net-to-gross ratios.		
<b>10. Update project brief to include system and equipment descriptions.</b>		
<b>11. Obtain from each consultant an estimate of construction cost for their system or components:</b>		
• structural		
• mechanical		
• electrical		
• civil		
• other		
<b>12. Prepare written estimate of construction cost based on all available data. Include appropriate contingencies.</b>		
<b>13. Submit schematic design documents, including drawings, project brief, calculations, and estimate of construction costs to the client.</b>		
<b>14. Obtain the client’s written authorization to proceed to design development phase, and funding agency approval where applicable.</b>		

Pre-agreement	Schematic Design	Design Development	Construction Documents	Bidding and Negotiation	Contract Administration	Post-construction
---------------	------------------	--------------------	------------------------	-------------------------	-------------------------	-------------------

### III Design Development Phase

#### Part A — Tasks prior to starting the design development phase

1. Review schematic design checklist to ensure phase completion and that all required data have been obtained.						
2. Have the client provide any additional requirements and confirm in writing.						
3. Assist the client in obtaining models, perspectives or professional renderings when requested.						
4. Review program and verify compliance.						
5. Review schematic documents for compliance with all applicable codes and regulations.						
6. Select additional consultants, if required, and establish contractual relationship. Obtain the client's written approval as required.						
7. Review all other data received from the client, consultants, etc. Request additional data if necessary.						
8. Obtain the client's standards and requirements, if any, for drawings and for other material. Check against requirements of Authorities Having Jurisdiction.						
9. Develop and forward to consultants, or alternatively obtain from consultants, a list of specialized systems required, such as:						
• cable TV						
• clock						
• closed circuit TV						
• compressed air						
• electronic or communication systems						
• energy management system						
• fire suppression systems						
• gas						
• intercom						
• lighting						
• lightning protection						
• oxygen						
• photovoltaic						
• pneumatic tube						
• remote control operations						
• security						
• steam						
• telephone						
• vacuum						
• voice communication						
• waste recycling and storage						
• other						
Obtain the client's approval of list and notify consultants of approval or revisions.						
10. Define occupancy load for each area and forward to consultants.						
11. Instruct the structural consultant to investigate and confirm in writing a review of applicable codes and regulations.						
12. Instruct the mechanical and electrical consultants to:						
• contact utility companies and public authorities regarding all services, and receive written approval for all service connections;						
• investigate and confirm in writing their review of all applicable public and utility regulations;						
• review architectural and structural schematic drawings to establish adequate provision for specialized systems;						
• prepare estimates of operating costs with recommendations.						
13. Review the consultants' estimates of operating costs and forward to the client. Obtain the client's approval of selected energy source.						
Pre-agreement	Schematic Design	<b>Design Development</b>	Construction Documents	Bidding and Negotiation	Contract Administration	Post-construction

**Part B** — *Tasks during the design development phase*

<b>1. Prepare site plan indicating building location(s) and site improvements.</b>		
<b>2. Prepare all other necessary drawings:</b>		
• plans		
• elevations		
• sections		
• schedules		
• other		
<b>3. Prepare area calculations (net and gross) and volume calculations, including site coverage and density, as defined in zoning/land use regulations.</b>		
<b>4. Prepare preliminary or outline specifications:</b>		
• architectural		
• structural		
• mechanical		
• electrical		
• civil		
<b>5. Instruct consultants to prepare layouts and drawings as required to illustrate and describe their portion of project:</b>		
• architectural		
• structural		
• mechanical		
• electrical		
• civil		
<b>6. Obtain detailed cost estimate, if specifically authorized by the client as part of architectural services:</b>		
• architectural		
• structural		
• mechanical		
• electrical		
• civil		
<b>7. Direct each consultant to prepare an estimate of construction cost for their discipline:</b>		
• architectural		
• structural		
• mechanical		
• electrical		
• civil		
<b>8. Update estimate of construction cost.</b>		
<b>9. Submit design development documents, including drawings, outline specifications, and updated estimate of construction cost to the client.</b>		
<b>10. Have the client confirm type of construction contract required.</b>		
<b>11. Obtain the client's written approval of design development documents.</b>		
Revise as required.		
<b>12. Obtain the client's written authorization to proceed to construction documents phase.</b>		
Verify, where applicable, that all authorities and agencies have given authorization to proceed.		

Pre-agreement	Schematic Design	<b>Design Development</b>	Construction Documents	Bidding and Negotiation	Contract Administration	Post-construction
---------------	------------------	---------------------------	------------------------	-------------------------	-------------------------	-------------------

## IV Construction Documents Phase

### Part A — Tasks prior to starting the construction documents phase

<b>1. Review checklist for previous phase to ensure completion.</b> Review program and verify compliance.		
<b>2. Review design development documents for compliance with applicable codes and regulations.</b>		
<b>3. Select additional consultants, if required, and establish contractual relationships.</b> Obtain the client's approval as required.		
<b>4. Determine scope of drawings, including selection of software, schedule of required drawings, sequence of drawings, information to appear on each sheet, scale, and sheet size, etc.</b> Review requirements of the client and authorities.		
<b>5. Determine method of production drawing set.</b> Determine drawing requirements for type of construction procurement (bid, multiple bid, Design-Build).		
<b>6. Develop title block format and layering system.</b> Check the client's requirements.		
<b>7. Establish check set review schedule with client, consultants, and authorities.</b>		

### Part B — Tasks during the construction documents phase

<b>1. Prepare final specifications and drawings to include plans (including site plan and landscaping), elevations, sections, details, notes, dimensions, and schedules, and require all consultants to do the same.</b>		
<b>2. Arrange for preparation of finish hardware schedule, if required.</b>		
<b>3. Identify components requiring alternate prices.</b>		
<b>4. Determine acceptable alternatives to specified materials or systems.</b>		
<b>5. Identify components requiring unit prices.</b>		
<b>6. Determine required cash allowances:</b> <ul style="list-style-type: none"> <li>• testing allowance</li> <li>• contingency</li> <li>• utility connections</li> <li>• other</li> </ul>		
<b>7. Prepare colour and finish schedules.</b>		
<b>8. Prepare testing and quality control program budgets, and assist the client in selection of testing agencies.</b> Determine if these costs are to be included in the construction contract.		
<b>9. Obtain the client's instructions regarding application and payment of necessary permits such as building, etc.</b>		
<b>10. Obtain the client's instructions regarding insurance and bonds.</b>		
<b>11. Obtain the client's instructions regarding construction contracts and bidding procedures.</b>		
<b>12. Obtain the client's requirements for phased occupancy or other special requirements.</b>		
<b>13. Determine items or work to be furnished by the client, or not to be included in the construction contract.</b>		
<b>14. Review, with the client, the schedule for delivery and installation of client-furnished materials.</b>		
<b>15. Review bid period in project schedule.</b> Determine time, date of bid closing, and place of bid receipt.		
<b>16. Prepare and assemble specifications concurrently with preparation of drawings. Include:</b> <ul style="list-style-type: none"> <li>• notice to bidders</li> <li>• advertisement or invitation to bid</li> <li>• instructions to bidders</li> <li>• bid form</li> <li>• construction contract</li> <li>• General Conditions</li> <li>• Supplementary Conditions</li> <li>• cash allowances</li> <li>• other</li> </ul>		

Pre-agreement	Schematic Design	Design Development	Construction Documents	Bidding and Negotiation	Contract Administration	Post-construction
---------------	------------------	--------------------	------------------------	-------------------------	-------------------------	-------------------

**Part B — Tasks during the construction documents phase (continued)**

<b>17. Submit copies of General Conditions and Supplementary Conditions for the client’s review or obtain the client’s specific contract requirements.</b>		
<b>18. Assist the client’s legal counsel or representative, if necessary, with review of:</b>		
• General Conditions		
• Supplementary Conditions		
• form of construction contract		
<b>19. Check completed documents for coordination, compliance with program, accuracy, and cross-coordination with consultants’ work.</b>		
Direct the consultants to carry out required coordination:		
• architectural		
• structural		
• mechanical		
• electrical		
• other		
<b>20. Revise documents as required after check and instruct consultants to do the same:</b>		
• architectural		
• structural		
• mechanical		
• electrical		
• other		
<b>21. Prepare final calculations of net and gross area, and volume.</b>		
<b>22. Obtain from each consultant further update of estimate of construction cost:</b>		
• architectural		
• structural		
• mechanical		
• electrical		
• other		
<b>23. Prepare final estimate of construction cost.</b>		
<b>24. Submit drawings, specifications, estimate of construction cost, and building calculations and analyses to the client for review.</b>		
Obtain the client’s written approval.		
Revise as required.		
<b>25. Review list of potential contractors with the client.</b>		
<b>26. Obtain qualification statements, if required, from interested bidders and review.</b>		
Obtain assistance from consultants if separate prime contracts are to be awarded.		
<b>27. Stamp documents for intended purposes (e.g., bid, building permit, construction).</b>		
Affix the architect’s seal and signature and date on documents.		
Ensure that consultants seal, sign, and date documents:		
• architectural		
• structural		
• mechanical		
• electrical		
<b>28. Assist the client in filing documents for approvals and permits.</b>		
<b>29. Obtain the client’s written authorization to proceed to bidding or negotiation phase.</b>		

Pre-agreement	Schematic Design	Design Development	Construction Documents	Bidding and Negotiation	Contract Administration	Post-construction
---------------	------------------	--------------------	------------------------	-------------------------	-------------------------	-------------------

## V Bidding and Negotiation Phase

### Part A — Tasks during the bidding and negotiation phase

<b>1. For open bidding:</b>		
Assist the client in publishing the advertisement for bids. If separate contracts are to be awarded, separate advertisements may be necessary.		
Obtain qualification statements from interested bidders and review.		
<b>2. For invited bidding:</b>		
Notify selected bidders.		
<b>3. For direct selection:</b>		
Assist the client in selection as requested.		
<b>4. Determine number of sets of bid documents required and order same.</b>		
Review client-architect agreement for agreed-upon number of sets (if applicable).		
<b>5. Distribute documents to bidders and obtain deposits.</b>		
<b>6. Issue documents to local construction association for viewing.</b>		
<b>7. Hold pre-bid meeting and site tour as required.</b>		
<b>8. Record all bid document inquiries.</b>		
<b>9. Prepare and issue addenda as necessary. Ensure that the bidders have a reasonable amount of time to review prior to bid closing.</b>		
<b>10. Return deposit to bidders who withdraw upon satisfactory return of bid documents.</b>		
<b>11. Return deposit to disqualified bidders upon satisfactory return of bid documents.</b>		
<b>12. Receive, open, tabulate, and analyze bids as per procedure established with the client. Obtain assistance of consultants as required.</b>		
<b>13. Advise the client on selection of alternatives, separate prices.</b>		
Review bids and analysis with the client.		
Obtain the client's instructions.		
<b>14. Notify successful bidder of acceptance and basis of acceptance.</b>		
<b>15. Update project directory.</b>		
<b>16. Assist the client in issuing letter of intent if contract cannot be executed immediately.</b>		
<b>17. Notify unsuccessful bidders and obtain return of bid documents.</b>		
<b>18. Return unsuccessful bidders' deposit upon satisfactory return of bid documents. (Retain bid deposit of lowest bidders until contract signing.)</b>		
<b>19. Request and receive submission of post-bid information:</b>		
• performance bond		
• labour and material payment bond		
• insurance certificates		
• workers compensation		
• other		
<b>20. Prepare or assist the client's legal counsel in preparation of construction contract. If separate contracts are awarded, obtain assistance of consultants as required.</b>		
<b>21. Assist the client and contractor in execution of the construction contract.</b>		

Pre-agreement	Schematic Design	Design Development	Construction Documents	<b>Bidding and Negotiation</b>	Contract Administration	Post-construction
---------------	------------------	--------------------	------------------------	--------------------------------	-------------------------	-------------------

## VI Contract Administration Phase

### Part A — Tasks to be completed prior to start of construction and after execution of contract(s)

1. <b>Hold pre-construction meeting with client and contractor to clarify special requirements and contract administration procedures</b>		
2. <b>Request, from the contractor, all bonds and insurance policies required in contract documents.</b> Forward documents to the client for analysis and acceptance by experts. Advise the client to obtain legal confirmation.		
3. <b>Advise the client to file copies of property insurance policies with the contractor, where applicable.</b>		
4. <b>Request the client to purchase special insurance (hazard, etc.) as part of property insurance policy, as appropriate.</b>		
5. <b>Remind the contractor to secure and pay for all required permits as specified in contract documents.</b>		
6. <b>Obtain and review the contractor's construction schedule.</b>		
7. <b>Obtain and review the contractor's schedule of required shop drawings and samples.</b>		
8. <b>Obtain and review the contractor's schedule of values.</b>		
9. <b>Furnish the contractor with required copies of contract documents.</b>		
10. <b>Assist the client, or direct the consultants to assist with applications for gas, water, electricity, telephone, and other services, as required.</b>		

### Part B — Tasks during the contract administration phase

1. <b>Establish, with the contractor, requirements for testing and inspection of specific materials and work by inspection and testing companies.</b> Arrange for distribution of reports through proper channels for action if necessary.		
2. <b>Prepare colour and finish selections. (Note: this is sometimes done in Construction Documents phase.)</b> Obtain the client's approval. Issue to the contractor.		
3. <b>Review submitted shop drawings.</b> Instruct the consultants to review as appropriate.		
4. <b>Review submitted samples where applicable and comment accordingly.</b> Instruct the consultants to review as appropriate.		
5. <b>Maintain shop drawing and sample record (refer to Form 5.4, Log of Shop Drawings and Samples, in Chapter 2.4).</b>		
6. <b>Advise on interpretation of contract documents.</b> Issue supplemental details and instructions as required (refer to Form 3.2, Supplemental Instructions, in Chapter 2.4).		
7. <b>Attend site meetings.</b>		
8. <b>Make site visits to observe specific events as required.</b> Submit — to the client, to the contractor, and to Authorities Having Jurisdiction — all field review reports, including those of professional engineering consultants (refer to Form 3.1, Field Review Report, in Chapter 2.4). Issue written instructions to the contractor when applicable.		
9. <b>Advise on interpretation of contract documents and on contemplated changes.</b> Process and coordinate changes to contract after consultation with the client. Review contractor's submissions for changes in contract sum and time in conjunction with professional engineering consultants. Advise the client on validity of claims for extras. Issue Change Orders as required. Obtain the client's signature/approval. Copy appropriate authorities as applicable.		

Pre-agreement	Schematic Design	Design Development	Construction Documents	Bidding and Negotiation	<b>Contract Administration</b>	Post-construction
---------------	------------------	--------------------	------------------------	-------------------------	--------------------------------	-------------------

**Part C — Ongoing scheduled tasks during the contract administration phase**

1. Make periodic visits to site to determine whether construction is in general conformity with contract documents.		
2. Coordinate general reviews and other services of professional engineers and direct findings through proper channels for action or review.		
3. Obtain and review the contractor's updated progress schedule and advise the client of potential revisions to date of substantial performance (if required).		
4. Evaluate work performed and materials supplied in relation to the contractor's progress application.		
Issue appropriate Certificate for Payment covering the contractor's request.		

**Part D — Project take-over tasks**

1. Review prescribed procedures, e.g., specifications and other documentation.		
2. Arrange for appropriate personnel to attend demonstration(s) of systems, including take-over of applicable operating systems and instructions. Obtain appropriate record.		
3. Receive, from the contractor, application for Certificate of Substantial Performance and list of items to be completed or corrected.		
4. Carry out site visit for substantial performance.		
5. Review findings in relation to contract and provincial lien legislation. Certify substantial performance or notify the contractor if substantial performance not certified, and provide reasons.		
6. Obtain and review required documents for release of holdback monies. Issue Certificate for Payment for release of holdback.		
7. Assist the client in obtaining occupancy permit if required or requested.		
8. Obtain from the contractor: <ul style="list-style-type: none"> <li>• warranties</li> <li>• certificates of inspection</li> <li>• equipment manuals</li> <li>• workers compensation certificate</li> <li>• operating instructions</li> <li>• statutory declaration documents</li> <li>• keying schedules</li> <li>• maintenance stock</li> <li>• Record drawings</li> <li>• other specified items</li> </ul>		
9. Receive, from the contractor, application for statement of completion.		
10. Carry out site visit for completion.		
11. Review findings in relation to contract and provincial lien legislation. Issue: <ul style="list-style-type: none"> <li>• statement of completion or notify contractor if project not found to be complete</li> <li>• reasons</li> </ul>		
12. Issue Certificate for Payment of holdback for work based on the contractor's application for statement of completion.		
13. Receive the contractor's written notice that all work has been totally completed.		
14. Perform final visit to site. Issue site visit report.		
15. Receive, from the contractor, final application for payment.		
16. Issue final Certificate for Payment.		
17. Prepare CAD record drawings if required.		
18. Submit final invoices to the client.		
19. Advise professional liability insurer of project completion date, as required.		
20. Review reported defects during one-year warranty period. Notify the contractor of items requiring correction.		
21. Carry out review of reported defects or deficiencies prior to expiry of one-year warranty period. Notify the contractor of items requiring correction.		

Pre-agreement	Schematic Design	Design Development	Construction Documents	Bidding and Negotiation	Contract Administration	Post-construction
---------------	------------------	--------------------	------------------------	-------------------------	-------------------------	-------------------

## VII Post-construction Services

1. Assist the client in administering corrective action by the contractor where defects or deficiencies occur within extended warranty period.						
2. Prepare Project Data Sheets for marketing purposes (include photographs, client testimonials, etc.).						
Pre-agreement	Schematic Design	Design Development	Construction Documents	Bidding and Negotiation	Contract Administration	Post-construction