



**ASSOCIATION OF PROFESSIONAL ENGINEERS OF BELIZE**



**RECOMMENDATIONS FOR SCOPE AND FEES FOR PROFESSIONAL  
ENGINEERING AND ARCHITECTURAL SERVICES**

**Prepared by the Joint Committee for Buildings and Structures**

**October 2005**

## **FOREWORD**

**The Association of Professional Engineers of Belize (APEB) and the Association of Professional Architects of Belize (APAB) have been charged by law to regulate the engineering and architectural professions respectively in Belize. As a part of this regulation, these associations seek to ensure that world-class standards of professional practice are maintained in Belize. In order to ensure that this objective is met, the Joint Committee for Buildings and Structures recommends first and foremost that professionals be required to adhere to specific levels of service to their clients, as detailed in this document. Furthermore, the Committee recommends that professionals be compensated at a level that will ensure their continuing ability to make the necessary investments in training, education, personnel, and the various tools of professional practice, in order to be able to maintain a high level of service to clients. To this end, recommendations for compensation of professionals in the engineering and architectural fields are provided in this document. These recommendations are presented as ranges in order to accommodate the fact that each project or situation is unique, and to give professionals and their clients the flexibility to negotiate specific arrangements. This also ensures that competition will not be eliminated from the market for professional engineering and architectural services.**

**FEE SCHEDULE RECOMMENDATIONS FOR ARCHITECTURAL AND ENGINEERING SERVICES  
FOR BUILDING CONSTRUCTION PROJECTS – BASIC SERVICES**

**1. SCOPE OF CONSULTANT'S BASIC SERVICES**

**1.1 CONCEPTUAL DESIGN PHASE**

This phase of works shall include the following:

- 1.1.1 Review the program ideas of the Client to ascertain the requirements of the project and arrive at a mutual understanding of such requirements with the Client.
- 1.1.2 Provide a preliminary evaluation of the Client's program, schedule and construction budget requirements.
- 1.1.3 Review with the Client alternative approaches to design and construction of the project.
- 1.1.4 Based on the mutually agreed-upon program, schedule and construction budget requirements, prepare for approval by the Client, Schematic Design Documents consisting of preliminary drawings illustrating the project.
- 1.1.5 Prepare and submit to the Client a preliminary estimate of Construction cost based on current area, volume or other unit costs.

**1.2 DESIGN DEVELOPMENT PHASE (may be incorporated in the Construction Document phase)**

- 1.2.1 Based on the approved Schematic Design Documents and any adjustments authorized by the Client in the program, schedule or construction budget, prepare Design Development Documents consisting of drawings and other documents to fix and describe the size and character of the project as to architectural, structural, mechanical and electrical systems, materials and such other elements as may be appropriate.
- 1.2.2 Advise the Client of any adjustments to the preliminary estimate of Construction Cost.

**1.3 CONSTRUCTION DOCUMENTS PHASE**

- 1.3.1 Based on the approved Design Development Documents or Schematic Design Documents and any further adjustments in the scope or quality of the project or in the construction budget authorized by the Client prepare Construction Documents consisting of Detailed Drawings and Specifications, setting forth in detail the requirements for the construction of the project.

- 1.3.2 Assist the Client in the preparation of the necessary bidding information, bidding forms, the Conditions of the contract, and the form of Agreement between the Owner and the Contractor. Bidding documents may be in the form as approved between the Client and Consultant.
- 1.3.3 Advise the Client of any adjustments to previous preliminary estimates of construction cost indicated by changes in requirements or general market conditions.
- 1.3.4 The Consultant shall assist the Client in connection with the Client's responsibility for filing documents required for the approval of governmental authorities having jurisdiction over the project.

#### **1.4 BIDDING OR NEGOTIATION PHASE**

- 1.4.1 The Consultant, following the Client's approval of the Construction Documents and of the latest preliminary estimate of construction cost, shall assist the Client in obtaining bids or negotiated proposals and assist in awarding and preparing contracts for construction.

#### **1.5 CONSTRUCTION PHASE – ADMINISTRATION OF THE CONSTRUCTION CONTRACT**

- 1.5.1 The Design Consultant shall be engaged by the Client during the construction phase, at least in a nominal capacity to address discrepancy issues and to identify and recommend rectification measures for calculation, drawing or design errors. Alternatively, if a Consultant other than the Design Consultant is engaged for the construction phase without the nominal engagement of the Design Consultant as noted above, then that new Consultant shall assume those responsibilities, unless otherwise agreed between the relevant parties in writing. The Consultant responsible for the construction phase is therefore responsible to review the document to ensure that the designs are generally in accordance with relevant accepted standards.
- 1.5.2 The Consultant's responsibility to provide Basic Services for the Construction Phase commences with the award of the Contract for Construction and terminates at the issue of the final Certificate for Payment or 60 days after the date of Substantial Completion of the Work, whichever is earlier, and unless otherwise agreed in writing.
- 1.5.3 Duties, responsibilities and limitations of authority of the Consultant shall not be restricted, modified or extended without written agreement of the Client and Consultant.
- 1.5.4 The Consultant shall visit the site at intervals appropriate to the stage of construction or as otherwise agreed by the Client and Consultant to become generally familiar with the progress and quality of the Work completed and to determine as far as

practical if the Work is being performed in a manner indicating that the Work when completed will be in general accordance with the Contract Documents. However, the Consultant shall not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of every aspect of the Works. On the basis of on-site observations, the Consultant shall keep the Client informed of the progress and quality of the Work, and shall endeavor to guard the Client against defects and deficiencies in the Work. More extensive site representation may be required and agreed upon base on the size and complexity of the project. Such fees may be treated as additional works.

- 1.5.6 Based on the Consultant's observations and evaluations of the Contractor's Applications for Payment, the Consultant shall review and certify the amounts due the Contractor.
- 1.5.7 The Consultant's certification for payment shall constitute a representation to the Client, based on the Consultant's observations at the site and on the data comprising the Contractor's Application for Payment, that, to the best of the Consultant's knowledge, information and belief, the Work has progressed to the point indicated and the quality of work is in general accordance with the Contract Documents.
- 1.5.8 The Consultant shall prepare Change Orders and Construction Change Directives, with supporting documentation and data if deemed necessary by the Consultant.

## 2 FEES FOR PROFESSIONAL SERVICES

### 2.1 DESIGN PHASE

The basic Consultation fees for tasks as described above should fall between the following ranges based on the level of complexity and extent of responsibility placed on the Consultant. The lower ranges represents minimum recommended charges while the higher range represents maximum recommended charges.

#### Preferred Option - (Percentage of Construction Cost)

1. Conceptual Design	1% - 2% of construction cost
2. Design Development and Construction Documents	1.70% - 4% of construction cost
3. Bidding or Negotiation	<u>.3% - .5% Construction Cost</u>
<b>Total</b>	<b><u>3% - 6.5% of construction cost</u></b>
<b>CONSTRUCTION PHASE</b>	2.5% - 5.5% of construction cost
<b>TOTAL BASIC SERVICES (preferred option)</b>	<b>5.5% TO 12% of construction cost</b>

**Alternative Option (Hourly rates)**

This approach may be based on pre-determined hourly estimates for tasks or may be based on actual time spent for various tasks by various personnel. The actual charge rates may be adjusted within the ranges shown based on complexity of task and responsibility of the Consultant.

	<b>LIMITED ENGAGEMENT (LESS THAN 40 HOURS)</b>	<b>CONTINUOUS ENGAGEMENT (OVER 40 HOURS)</b>
<b>A</b> Principal or Specialist	\$150.00 - \$250.00	\$135.00 - \$250.00
<b>B</b> Registered Senior Engineer/Architect	\$125.00 - \$200.00	\$110.00 - \$200.00
Registered Engineer/Architect	\$100.00 - \$140.00	\$75.00 - \$140.00
Non-Registered Engineer/Architect (with Engineering or Architectural degree)	\$75.00 - \$100.00	\$60.00 - \$100.00

- Notes:
- a) A specialist shall be a Senior Architect or Senior Engineer with a first degree in Architecture or Engineering and an advanced degree specializing in a particular area of Architecture and Engineering. A Specialist must have at least 8 years of engineering experience in the relevant area of specialty. Specialist rates apply to works done in that specialty field only.
  - b) Senior Engineer or Senior Architect shall have more than 12 years experience as a practicing Architect or Engineer or at least 8 years as a registered Architect or Engineer.
  - c) A principal shall be considered to be a Senior Architect or Senior Engineer who is the lead Architect or lead Engineer of the engaged firm.
  - d) The fees noted above for both options do not include sales tax or direct expenses. Direct expenses shall include mileage or direct transportation costs, costs of meals, printing of drawings, etc. such expenses shall be made clear in the fee proposal.
  - e) The lower ranges of fees are considered as absolute minimum.
  - f) Fees noted above do not apply to Sub-Consultants.

**3 DEFINITIONS**

3.1 The Consultant’s Basic Services shall consist of those items as described below. Any other services specifically required by the Client or deemed necessary by the Consultant shall be treated as additional services.

**3.2 CONSTRUCTION COST**

3.2.1 The Construction Cost shall be the total actual construction cost or estimated cost of all aspects of the project designed or specified by the Consultant.

3.2.2 The Construction Cost shall include the cost at current market rates for labor and materials furnished by the Client and equipment designed, specified, selected or specially provided for by the Consultant, plus a reasonable allowance for the Contractor's overhead and profit. In addition, a reasonable allowance for contingencies shall be included for market conditions at the time of bidding and for changes in the Works during construction.

## **4 MISCELLANEOUS NOTES**

### **4.1 USE OF CONSULTANT'S DRAWINGS, SPECIFICATIONS AND OTHER DOCUMENTS**

The Drawings, Specifications and other documents prepared by the Consultant for a particular project are instruments of the Consultant's service for use solely with respect to the project and, unless otherwise provided, the Consultant shall be deemed the author of the documents and shall retain all common law, statutory and other reserved rights, including the copyright. The Client shall be permitted to retain copies, including reproducible copies of the Consultant's Drawings, Specifications and other documents for information and reference in connection with the Client use and occupancy of the project. The Consultant's Drawings, Specifications or other documents shall not be used by the Client or others on other project, for additions to this project, or for completion of this project by others, unless by agreement in writing and with appropriate compensation to the Consultant.

### **4.2 PROJECT SIGN**

It is recommended that all building construction projects being supervised by a professional architect or engineer, or an architectural or engineering firm, be equipped with a project sign clearly stating the name of the supervising firm and the engineer or architect of record. In this manner the professional and his or her firm publicly takes responsibility for their role in the project, and the general public is made aware of the involvement of a professional in the project.