Qualifications Based Selection

**Owners Manual** 

Process for the Selection of Design Professionals by Public Owners

ACEC

American Council of Engineering Companies of Massachusetts

Updated 2/20/2024

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### **Summary of QBS Benefits**

- Facilitates selection of the most qualified firm;
- Avoids a forced marriage to a consultant with the lowest bid;
- Allows designs to be completed in the most competent and cost-effective manner;
- Maximizes creativity and professional judgment;
- Provides a detailed explanation of the scope along with fee justification prior to commitment;
- Allows the scope and fee to be tailored to meet all project objectives; and
- Is the established procurement practice adopted by the federal government and many agencies and communities in Massachusetts.

Numerous national and local professional organizations support the use of qualifications-based procedures for the selection of engineering and architectural firms, including:

•		(APWA)
•	National Society of Professional Engineers	(NSPE)
٠	American Society of Civil Engineers	(ASCE)
٠	American Institute of Architects	(AIA)
٠	American Council of Engineering Companies	(ACEC)
•	National Society of Professional Surveyors	(NSPS)

The American Council of Engineering Companies of Massachusetts (ACEC/MA) would be pleased to provide more information about implementing Qualifications Based Selections (QBS) for consultants in your community. Please give us your name and address by completing the form below and mailing or "faxing" it to:



American Council of Engineering Companies of Massachusetts

ACEC/Massachusetts The Engineering Center One Walnut Street, Boston, MA 02108-3616 Fax: 617/227-6783, Web: www.engineers.org, Email: acecma@engineers.org

Please provide Qualifications Based Selection information to:

Name	Title
Address	
City/Town	Zip
Phone	Fax
Web Site	Email

### INTRODUCTION AND APPLICABLE LAW

Currently in the United States there are 34 states that by law require the procurement of professional design services through the process known as Qualifications Based Selection or QBS. In addition, the federal government has for many years applied QBS Procedures under requirement of the "Brooks Bill." Massachusetts has a statute known as the Designer Selection Law (Section 38A 1/2, et. seq., Chapter 7 of the Massachusetts General Laws), which applies to procurement of designers for "vertical" projects, e.g., buildings. Communities, state agencies, and authorities must hire architects and building engineers professionals on the basis of qualifications rather than lowest bid. Under the Designer Selection Law, price of services <u>cannot</u> be a consideration in the selection until the top ranked firm begins negotiations of with the contracting authority.

At present, there is no law in Massachusetts governing the procurement of engineers for "horizontal" (e.g. roads, sewer, etc.) project study, design and, and construction phase services. However, procurement of these services are specifically exempted from the Uniform Procurement Act (Chapter 30B of the Massachusetts General Laws), so communities have chosen the Qualifications Based Selection principles of the Designer Selection Law as a guide for procurement of horizontal as well as vertical services. The attached document is being supplied to governmental organizations to provide clarification of Qualifications Based Selection as a method of procuring design professional services.

QBS is a method of procurement in which the owner of a project, whether a municipality, state agency, or special district, selects a design professional firm or individual for studies, design and, and/or construction phase services, based on <u>capability and experience</u> rather than on the basis of lowest bid to provide these services. In the document that follows, the American Consulting Engineers Council of Massachusetts (ACEC/MA) outlines a methodology, which assists project owners in developing a selection process procedure. Under the QBS procedures, project advocates will be able to procure the best qualified firm or individual for the project and have the security of knowing that the selected firm is competent to perform the project work; comprehends the complexities of the project; understands the specific needs and issues confronting the owner; and will be the best choice to provide the most cost-effective long-term solution. In turn this reduces the likelihood of cost overruns, change orders and delays, and increases the likelihood of client satisfaction.

This guidance document is intended to assist those public entities that have not adopted QBS to aid in understanding and developing such a system as the preferred method of procurement.

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### **QUALIFICATIONS-BASED SELECTION (QBS) PROCESS**

QBS is a fair and rational procedure which facilitates the selection of a design professional. The selection is based on qualifications and competence in relation to the scope and needs of the particular project. QBS is no "magical" process. Instead, QBS enhances communications between the owner and the firms under consideration, and results in the selection of a firm, which is not only qualified but compatible as well.

The owner should involve the services of the design professional as early as possible in the planning of the project. The design professional can take the owner's available information and ideas to create workable plans with options, which then allows the owner to make sound decisions on what should be implemented.

The sooner the design professional is selected, the sooner the professional will become a vital member of the project team. With adequate and proper planning early in the project, expensive mistakes and duplication of efforts can be reduced. One of the most beneficial aspects of QBS is the joint development of the Scope of Services during the negotiation process. Owners should consider the QBS process as an educational experience; they can learn from the firms submitting information and especially from those being interviewed. Even after selection, the owner will continue to collaborate with the design professional to refine scope and fees during the negotiation process, prior to a contractual commitment being made.

### THE QBS PROCESS

In most instances, the QBS process will include all or part of the following steps, and variations of this process are detailed in the following sections:

- 1. The owner identifies the general scope of work.
- 2. The selection time frame is established.
- 3. A request for statements of qualification is published.
- 4. Statements of qualification are received and evaluated.
- 5. All firms are informed of their rating and ranking.
- 6. A short-list of firms to be interviewed (if interviews are necessary) may be determined.
- 7. A tour of the site and/or facility may be arranged for the short-listed firms.
- 8. Interviews are conducted and the firms ranked for selection.
- 9. Negotiations are conducted relative to scope, services, fee and payment schedules. If an agreement cannot be reached with the top ranked firm, those negotiations are ended and negotiations begin with the second ranked firm, and so on down the list until agreement is reached.
- 10. A contract for the scope of work is executed.
- 11. All firms involved receive post-selection communications.

### **IDENTIFYING THE GENERAL SCOPE OF WORK**

To begin the selection process, the public owner must briefly identify the general scope and the particular needs of the project. Just as the owner needs information about the qualification and competence of the design professional firms, the firms need to know the broad project requirements. A properly defined and communicated scope of work saves time, money, and effort for both the owner and design professionals. The firm has information upon which to base a decision to pursue the project and is able to tailor its statements of qualifications directly to the project requirements, providing the owner with a more uniform basis for evaluating the responses.

If requested, ACEC/MA will provide an independent Community Outreach Representative who, on a voluntary basis, can assist in formulating the scope of work or recommend prior facility studies to determine a more specific scope.

Items normally included in a preliminary statement of the scope of work for a public project are:

- A. Owner's name
- B. Project name or identification
- C. Project location
- D. Contact person (clearly identified as the only person to contact for information on the project), mailing address, telephone and, and fax number, as appropriate
- E. Description of any other projects in process or planned for the same site or time frame, which may affect the scope of work
- F. Description of completed studies, survey and, and/or preliminary feasibility work relevant to the project and available to the firms which will be responding
- G. Requirements for further feasibility studies or program planning prior to design and construction, if appropriate
- H. Project outline, including intended size, function, capacity and, and other general anticipated requirements (e.g., renovation, modernization, demolition, additions, new construction, energy, land use, and site selection considerations)
- I. Anticipated time frame, including completion of design work, beginning of construction and planned project completion date
- J. Description of design professional selection process
- K. Additional or unique requirements/considerations

As appropriate, other items may be added to provide general guidance to the interested firms and meet the needs of the owner. All services the owner wishes the design professional to provide, including feasibility studies, program development, design, construction coordination and, and budget development, must be specifically identified.

### **SELECTION TIME FRAME**

To keep the process of selecting a design professional advancing smoothly, owners should establish a time frame for completion of the selection process. Establishing the time frame communicates requirements with the firms and prevents misunderstandings and last minute "surprises" which might delay the process.

The time frame for each public project will differ, depending upon the nature of the project, the concerns of the owner and other factors. Since selecting the right firm is key to the success of the project, sufficient time should be allowed for the proper planning and administration at each step of the selection process. **Depending upon the status of the owner's project, adjustments can be made to accommodate the owner's needs.** 

A sample "Schedule of Activities" is provided on the following pages.

# SCHEDULE OF ACTIVITIES

The following schedule is typical of the QBS process:

Owner		Project
Date	_ 1)	Identification of needs is finalized by the owner. A scope of work in general terms is developed.
Date	2)	Request for statements of qualification is published.
Date	3)	Statement of qualification due. (Allow a minimum of 10 days for the firms to submit their materials; however, 14 days or more is advisable.) NOTE: Before the next action date, references should be reviewed.
Date	4)	Development of a short list of firms (3-5) selected for subsequent interviews, if appropriate. Selection should be based on qualifications, references and, and compatibility with the owner's project.
Date	5)	Mail sent to short-listed firms advising them of the date for interviews and preinterview tour or tours of site and/or facilities, along with criteria to be reviewed during the interview, when appropriate.
	6)	Mail sent to all firms, excluding short-listed firms, informing them of firms to be interviewed and expressing appreciation for their interest.
Date	7)	Tour or tours of facilities atand (time) (location)
Date	8)	Interviews scheduled for short-listed firms to be held at the time and location as previously communicated. The best firm for the project is to be selected based on qualifications.
Date	- 9)	Contract with selected firm is then negotiated and implemented.
Date	10)	Mail sent to all firms interviewed informing them of the results of the interviews and expressing appreciation for their involvement.
Date	11)	Post-selection requirements. Public hearings, etc.

### **REQUEST FOR STATEMENT OF QUALIFICATIONS**

The *Request for Statement of Qualifications* should be published in the Central Register and at least once in a newspaper of general circulation in the area from which the notice emanates. (Local laws or regulations may control the publication requirements and should be reviewed.) In addition, the *Request for Statement of Qualifications* is normally sent to those firms, which have signified, in writing, an interest in submitting qualifications for a particular category of professional services.

At a minimum, the *Statement of Qualifications* should indicate the following:

- General scope
- Date of *Statement of Qualifications* receipt
- Contact name and telephone number
- Type of selection
- Number of copies required
- Relative weight to be given to evaluation factors

More complex and generally larger projects may require additional data, which should be included in the request for *Statement of Qualifications* or made available upon request for firms responding to the request for *Statement of Qualifications*:

- A more detailed scope of work
- Possible technical approach
- Limitations on late receipt of *Statement of Qualifications*
- Regulations concerning minority programs
- Definitions of interpretation of documents and publication of addendum
- Time schedule for projects
- Funding availability
- Selection process and weighted categories of interest
- Contract requirements including liability/indemnity agreement
- Limitations on statements of qualification content

A copy of a typical request for *Statement of Qualifications* is included.

### **REQUEST FOR STATEMENT OF QUALIFICATIONS**

The \_\_\_\_\_\_, MA, invites *Statement of Qualifications* for engineering services from qualified firms for the survey, design and, and construction assistance for the following project:

(DESCRIBE SCOPE OF SERVICES REQUIRED) (For example: length, any structures, location, budget, schedule, and any special requirements)

Statements of qualifications received after the time deadline for submission will not be considered.

Professional liability insurance in the amount of \$ will be required.

 The selection of an Engineer will be made no later than (date)

 Project will be ready for bidding within (#)

 days of that date.

Evaluation of responding firms will be based on the following criteria:

- 1. Professional background and caliber of previous experience of key persons within your firm and of each of your consultants to be assigned to this project. Please identify their precise role in accomplishing the work.
- 2. Do you propose to use the services of specialty consultant(s)? If so, please indicate name, address and, and previous affiliations.
- 3. Recent experience on similar projects. Please detail type of project; your time schedule for accomplishing the respective phases of basic services; construction change order number, value and, and reason; your construction cost estimate vs. bid; and names and telephone numbers of persons representing the owner and general contractor for each of five similar projects your firm has accomplished in the past five years. Indicate the individuals on your staff who had responsibility for each project and whether these people are still with your firm.
- 4. Capacity and capability of the firm to perform the work on schedule.
- 5. Firm's familiarity with the area of the project.
- 6. Location where work on this project is to be accomplished.

Please furnish (#) copies of your	submittal to	by
o'clock (date)	A maximum of three	(3) firms will be selected for personal
interview. You will be notified by (date)	of the r	result of the initial screening process. If
you are selected for interview, you will be	e expected to present your approach	h to the project at that interview.

### **RECEIPT AND EVALUATION OF STATEMENTS OF QUALIFICATIONS**

\*\*\*\*\*

**IMPORTANT:** The selection committee should document its proceedings and decisions, in the event questions arise about any decisions made.

\*\*\*\*\*

The owner should formally establish a policy that *Statements of Qualification* received after the deadline will not be considered.

It is up to the owner to ensure that the selection committee is composed of competent individuals able to make an intelligent selection decision based on factual information, and that the members of the selection committee evaluate each proposal.

The number of firms to be included on the short list (and possibly subsequently interviewed, if necessary) may vary depending on the size and scope of the project. Three-to-five firms are generally sufficient. For the smaller project, three firms should be short listed, with interviews if appropriate.

A generic "Statement of Qualifications Evaluation" form and summary follow.

Reference should be checked during the interim between the time the statements of qualification are received and the selection committee meets to develop a short list.

A suggested form for "The Reference Check" is included. The owner is encouraged to check references other than those listed by the design professional.

### STATEMENTS OF QUALIFICATIONS EVALUATIONS

Questions may be added or deleted as appropriate for your situation. SUGGESTION: Possible points should be highest for those items of the most importance to the owner.

Owner	
Contact Person	
Project Description	
Firm	
Address	
Phone	_Fax
Web Site	E-mail

- 1. Professional background and caliber of previous experience of each person of the firm and of each of the consultants to be assigned to this project.
- 2. Capacity and capability of the firm to perform the work, including any specialized services, within the time schedule.
- 3. Past record of performance on contracts with government agencies or private industry with respect to such factors as control of costs, quality of work and, and ability to meet schedules.
- 4. Proximity to or familiarity with the area in which the project is located.
- 5. The amount of design work that will be produced by a Massachusetts business within this state.
- 6. Reputation for personal and professional integrity and competence.
- 7. Other criteria, excluding cost, desire by the owner.

### GRAND TOTAL

Name of Reviewer

Possible Points	Awarded Points	Comments

## STATEMENTS OF QUALIFICATIONS EVALUATION SUMMARY

To be used by the review group person in charge to compile the evaluation results of all statements of qualification submitted to narrow the number of firms down to the number desired for a short list. NOTE: enter the grand total for each firm's qualifications from their respective evaluation sheet for comparative purpose in selecting the three, four, or five most qualified firms to be interviewed.

Firms	1	2	3	4	5	6	7	8	9	10
Reviewer 1										
Reviewer 2										
Reviewer 3										
Reviewer										
Reviewer										
GRAND TOTALS										

# THE REFERENCE CHECK

OwnerProject	Description					-
Firm	on	which the ref	erence che	ck is being con	ducted.	
Reference Information						
Owner	Project Refe	rence				
Address	Person Conta	acted				
	Phone					
Based on references provided in firm's proposal	or through netw	vorking with o	other owner	rs who have wo	orked with the	e firm.
SAMPLE QUESTIONS TO BE ASKED: 1. What was your project?						
2. When was it complete?						
3. Did the firm above do the work?						
<ol> <li>What did they do for you? Design work, construction phase services, studies, other (specify)</li> </ol>	4	5	4	3	2	1
5. Who was the staff person assigned to work with you on this project? Were you satisfied with his/her work?	Good	Excellent	Good	Average	Fair	Poor
6. Was the project started on schedule?						
7. Was the project completed as planned?						
8. Were the budget, cost control and, and financial administration within the planned controls and limitations?						
9. Did the firm and (you) the owner work well as a team on the project?						
10. Did the firm's personnel work well with the committee/board's staff and on all of the project's specific requirements?						
11. What is your overall evaluation of the firm based on your experience?						
12.Other question(s) GRAND TOTALS						

### ESTABLISHING A SHORT LIST

Based upon the evaluation and ranking of the *Statement of Qualifications* and subsequent reference check, the owner should establish a short list of three to five firms to be interviewed for the specific project. Since all the firms submitting *Statement of Qualifications* have made a commitment of the time and expense in pursuing the project, the owner should contact ALL the firms, not just those selected for the short list. A personal letter to each proposer is more professional and will tend to preserve relations better with losing proposers. The letter (or memo) sent to those firms who did not make the short list should express appreciation and identify the firms being invited for further consideration.

The size and complexity of the project will determine whether interviews should be made in person or by telephone.

If interviews are scheduled, the firms selected for interviews will need information on the following:

- 1. The date, place, and time for the interviews.
- 2. The date for a tour or tours, when appropriate, of the site/facilities. The tour provides the firms with an important firsthand look at the owner's needs and allows for a further exchange of information about the project. Tours are recommended for all but the simplest and most straightforward projects.
- 3. A list of project issues, the project criteria, and an explanation of the scoring and selection process. By providing the selection scoring criteria and specific areas of owner concern, the interviewing committee will achieve the best possible system for making a fair selection.
- 4. Any feasibility studies, project program, or other background information. This information should be submitted or available to ALL firms being considered, either with the letter to the short-listed firms or distributed to each firm during the prearranged tour.

Samples of a memo and scoring sheets to be sent to short-listed firms are included.

The memo and scoring and ranking sheets should be tailored to meet the owner's criteria and specific project requirements.

#### MEMO - SHORT-LISTED FIRMS TO BE INTERVIEWED/ TOURS OF FACILITIES/AND CRITERIA

#### TO: (LIST ALPHABETICAL ORDER ALL FIRMS YOU WISH TO INTERVIEW)

FROM:

Owner

Individual

Title

Project

#### RE: INTERVIEW SCHEDULE AND REQUIREMENTS

The firms listed above have been short-listed and will be interviewed for the (<u>engineering/architectural/etc.</u>) services relative to work necessary to implement this (<u>specify project study/design/etc.</u>)

Attached to this memo are the following:

1) An interview Score Sheet that will be used by the (interviewing group or individual) during the interview session.

2) Evaluation form for use by the person in charge to compile the evaluation scores.

3) Copies of (name of studies or reports) compiled by (name of group) for your information and review.

Each firm will be allowed 45 minutes to present their *Statement of Qualifications* and to answer questions. The interviewers will schedule 15 minutes between interviewers for informal discussion of information presented during the preceding interview. At the completion of the interviews, the interviewers will rank the firms interviewed in accordance with their determination of which firm is most competent and compatible to do the work. The first-ranked firm will then enter into negotiations for a contract to provide the necessary design services. If contract terms cannot be reached, the firm ranked second will be invited in for contract negotiations.

Interviews will be held on \_\_\_\_\_\_.

The location is	(name of building)	at	(address	

The order and time of interviews are:

Firm A	(time)	
Firm B	(time)	
Firm C	(time)	
Firm D	(time)	

Firm E <u>(time)</u>.

A tour of the site and/or facility will be arranged for <u>(date)</u>. Please have your firm's representative make arrangements with the owner's representative for a time on this date.

### **TOUR OF THE SITE/FACILITY**

In most major or complex projects, a tour of a project site or facility will be one of the most important parts of the selection process. These tours provide interested professional design firms with the opportunity to obtain first-hand information on the proposed project and have their questions answered.

Tours work best when handled one-on-one, with the owner's representative meeting with the representative of one firm. A group tour with all interested firms meeting for review of the site and/or facility can also be effective, but discussion under these conditions may be somewhat limited.

### **INTERVIEWING THE SHORT-LISTED FIRMS**

The interviews of the short-listed firms give the owner the opportunity to compare the firms' creative approaches to the process, as well as their interpretations and understanding of the project requirements. The owner should not expect project details at this time. The requirements for each project, simple or complex, can be quite involved. The professional will not be sufficiently aware of the owner's needs and requirements to be able to produce a meaningful design solution or financial information.

All interviews should be designed to allow for the evaluation of the personal styles of each firm's management and key personnel assigned to the project. The selection committee should evaluate how well they match up with the pre-identified criteria.

Present at the interview should be the key representative from the firm's management team plus key personnel who would be assigned to the project.

Direct interaction between the owner/user and the professional is important for the development of a project that truly meets the owner's and user's needs.

### INTERVIEWING

### **INTERVIEWING SETUP**

The room for the interview should be comfortable, have good acoustics, and be large enough to accommodate the number of people expected.

A separate area should be provided for firms waiting to be interviewed.

Equipment such as blackboards, flip charts, and audio-visual screens will be useful in most situations, if available. Most firms will bring any equipment they need for their presentation.

## \*\*Interviews should be held in closed session\*\*

### **GUIDELINES FOR INTERVIEWS**

- 1. Interview only those firms short-listed. All interviewed firms should have an equal opportunity to prepare their presentation based on the same information.
- 2. Schedule 45 minutes for each presentation and 15 minutes between interviews. This will allow ample time for the presentation and question and answer period, and for the selection committee members to discuss the presentation among themselves before beginning the next interview.
- 3. Schedule all the interviews on the same day so the committee can compare all the firms while the information is still fresh in their minds. This will ensure consistent interview scoring.
- 4. The evaluation criteria for the interview scoring system should be sent to all firms in advance as an attachment to the memo, giving interview and tour information.
- 5. While it is appropriate to question firms about how they would approach the project, owners should not ask for an actual solution during the interview. Appropriate and responsive designs require considerably more interaction between the owner and professional than is possible during the selection phase. If either the owner or the professional brings a preconceived design solution to the interview, considerable time and energy will have to be spent to get beyond this point, or the existence of it may stop further creativity and prevent other, perhaps better solutions from being explored.

Let all firms know when the selection decision will be made and when they will receive communication regarding their status. If possible, the decision should be the same day the interviews are conducted. (Why so soon?? Is this ever done? I've never seen it.)

### **RANKING OF INTERVIEWED FIRMS**

The evaluation form, which includes a weight and a score for each criteria/question, is a useful instrument for evaluating, ranking and, and ultimately selecting a compatible and qualified firm. Each interviewer should evaluate all firms separately during the firm's presentation.

The chair of the selection committee will compile the individual score sheets when all the interviews have been concluded. This system provides a documented record of the selection process as support for the committee's actions, which is important.

The selection committee should take time to achieve the ranking and selection by consensus rather than just by majority vote.

A sample evaluation/ranking system is included. Other versions may be developed, based on the complexity of the project and the sophistication of the owner.

After the interviews and ranking are completed, a memo should be prepared and mailed to all firms who participated in the interview process. The memo should list in alphabetical order all interviewed firms and the order in which the committee ranked them. It is customary for owners to provide this information as a courtesy to the firms.

### THE INTERVIEW: ISSUES AND SCORE SHEETS

Owner

Project

(Firms invited to interview for the captioned project should be prepared to speak to the following issues during the course of the interview. Questions can be expanded as appropriate.)

# CATEGORIES POSSIBLE POINTS POINTS AWARDED 1) Grasp of Project Requirements (Owner may evaluate firm's analysis, preparation and, and level of interest.) 2) Design Approach/Methodology (Owner may evaluate firm or individual's creativity and problem solving ability.) 3) Key Personnel and Roles (Owner may evaluate personal qualifications and professional skills of key individuals.) 4) Pertinent Experience, Firm (Owner may evaluate related projects presented as previous work of the firm.) 5) Pertinent Experience, Individual (Owner may evaluate related projects presented as previous work by the key personnel.) 6) Consultant/In-House Resources (Owner may evaluate firm's abilities and importance of consultant or in-house support services.) 7) Technical Project Management (Owner may evaluate firm's abilities related to technical functions such as project cost controls, construction observation, time scheduled, etc.) 8) Responsiveness to Owner's Concerns (Owner may evaluate firm's ability to form successful working relationships and communications with the owner.) 9) Other Relevant Issues (Owner may evaluate importance of other relevant issues presented by the firm.) 10) Reference Check **GRAND TOTAL** INTERVIEWER

FIRM

### **GROUP INTERVIEW EVALUATION FORM**

(For use by the person in charge of the interviews to compile all scores of engineering firms participating in the interview process.)

NOTE: Enter the grand total for each firm as recorded by each interview on the interview score sheet. After all entries are made and totaled, divide the combined group total for each firm by he maximum possible score.

### **Combined Group Totals**

	Firm A	Firm B	Firm C	Firm D	Firm E
Interview 1					
Interview 2					
Interview 3					
Interview 4					
Interview 5					
GRAND TOTALS					

Divided by number of interviewers

**Average Score** 

### **NEGOTIATION OF SCOPE AND COMPENSATION**

As soon as possible after selecting a preferred firm, the owner should begin detailed negotiations with the selected firm. Should agreement on the scope of services and compensation not be reached, negotiations with the first ranked firm must be terminated and the owner should initiate negotiations with the second-ranked firm.

It is not overly difficult to reach agreement on compensation, if there have been detailed discussions of the scope of services. Those services for which the effect is readily estimated may be included under the basic fee. Services of a more indeterminate nature--such as surveys, soil borings and, and investigations, regulatory agency permits, construction observation, materials testing, and special administrative procedures--should be included under special services with caps, of a reasonable amount, on these efforts.

The selected firm should be requested to prepare a detailed fee estimate predicated on the agreed upon, detailed scope of services as the basis of compensation negotiations.

As an integral part of the scope discussions, the requirements, and format of the proposed written contract must be discussed. The owner and design professional may wish to use the standard forms of agreement used by professional societies.

### **CONTRACT EXECUTION**

The agreement resulting from the negotiation must be reduced to written form, including detailed scope of work, compensation for both basic services and any special services, schedules of payment as well as schedule of performance and required public meetings.

The agreement between the owner and design professional must ensure that both parties have the same expectations and understanding of the project requirements. Legal counsel may be needed in final formulation of the agreement and its subsequent approval by the governing body.

### THE ROLE OF THE COMMUNITY OUTREACH REPRESENTATIVE

Through its Community Outreach Services, ACEC/MA offers at No Cost To The Community, independent advice on matters related to the procurement of engineering services and the negotiation of contracts with engineering firms.

Your ACEC/MA Community Outreach Representative will be an experienced volunteer from the professional staff of an ACEC/MA member firm, which will not be associated with your project. For more information on the Community Outreach Representative, call ACEC/MA at The Engineering Center at 617-227-5551.

### The QBS public owner assistance program is available:

- 1. Out of concern for the misunderstanding that owners often have about how to select design professionals.
- 2. To help the owner select the professional firm that is the best qualified to perform the owner's project.
- 3. To help the owner become a more informed consumer.
- 4. To help the owner develop and use an objective selection method.

- 5. To help the owner's selection of a design professional progress in a timely and equitable manner.
- 6. To help the owner develop the right tools for selecting a qualified firm for the project.
- 7. To help the owner obtain the most cost-effective and appropriate project.

The Community Outreach Service is provided by referral through ACEC/MA. Through the referral process, a volunteer ACEC/MA Community Outreach Representative will be assigned to meet with you and work with you on matters associated with selecting a consulting engineer.

The Community Outreach Representative will not make recommendations regarding the selection of a particular firm, participate in any negotiations or, or review or make comment on the work of another engineer or consultant.

### **METHODS OF COMPENSATION**

Your selected design professional is both a professional and a businessperson providing design services. A consultant not only provides highly technical services and acts as his client's agent, but must also record all costs and earn a fair profit to remain in business. The purpose of this section is to explain how your design professional charges, so you will be fully informed when you enter into negotiations to establish a fair and reasonable price for professional services.

### **OVERHEAD**

The most obvious costs are direct labor and expenses incurred in development of designs and plans or in the observation of construction. A secondary, but very real cost, is overhead. This cost is usually expressed as a percentage of direct labor. Overhead items may include the following:

### **Direct Salary Overhead**

Federal FICA Employment taxes Holidays Vacations Sick leave Retirement or incentives Group insurance Unemployment benefits

#### **General Overhead**

Administrative salaries Stenography and bookkeeping Continuing education Business development Office supplies Legal and accounting Interest expense Rent and utilities Business Taxes General and Liability Insurance Telephone and Communications Dues and Subscriptions Depreciation

### **COST PLUS**

In addition to direct and overhead cost, your design professional must charge a fee to cover return of capital investment, risk management, and other non-reimbursed costs. The requested net fee may vary depending upon the difficulty of the project.

### LUMP SUM

Lump sum arrangements are usually best when the scope of the services is well defined. A schedule of payments for various phases of the project's development should be a part of the lump sum agreement.

### TIME AND MATERIALS

Cost-based arrangements are more desirable when the scope of particular services is less well defined. These may take the form of direct and overhead costs plus a fixed fee, salaries times a multiplier plus expenses, or standard billing rates plus expenses. Cost-based arrangements should have a maximum agreed-upon limit, which may contain a contingency for unexpected costs.

### **OTHER METHODS**

Percentage of construction cost, retainers, per diem or, or other systems of reimbursement may also be used.

After the most qualified firm has been selected and a detailed scope of services has been agreed upon, a detailed labor and fee estimate should be prepared for price negotiations.

### **QBS - PUTTING QUALITY FIRST**