

QUALIFICATIONS-BASED SELECTION

QBS: A Guide for Selecting an Architect, Engineer, or Land Surveyor

For Public Owners

Qualifications Based Selection is endorsed by those organizations responsible for purchasing hundreds of millions of dollars in services in Iowa annually!

The following organizations concur with the findings of the American Public Works Association (as stated in the APWA publication ‘Selection and Use of Engineers’) that the “public’s best interest is served when governmental agencies select architects, engineers, and related professional technical consultants for projects and studies through Qualification Based Selection (QBS) procedures. Basing selection on qualifications and competence (rather than price) fosters greater creativity, flexibility, and minimizes the potential for disputes and litigation.”

These organizations have endorsed this publication:

- The American Institute of Architects, Iowa Chapter
- The Iowa Department of Transportation
- The American Council of Engineering Companies of Iowa
- The Iowa Engineering Society
- The Iowa Section American Public Works Association
- The Society of Land Surveyors of Iowa
- The Iowa Section of the American Society of Civil Engineers
- The Iowa County Engineers Association

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What is QBS?

Qualifications-Based Selection (QBS) is an objective, flexible procedure for obtaining architectural, engineering, land surveying, and other related professional design services for public projects. It assists the owner in the selection process if the owner does not already have a

QBS assists the owner in the selection process if the owner does not already have a professional design consultant.

The QBS process is helpful to frequent users of design services as well as one-time users with little or no past experience in working with design professionals. QBS provides owners with a selection process that is straightforward and easy to implement, is objective and fair, can be well documented, and is open to public scrutiny.

The QBS process recognizes that design professionals play a critical role in the public building process. The quality of the services provided by the architect, engineer or land surveyor is the single most important factor in determining the overall construction costs and life-cycle costs of a building.

As the first steps in the construction process, pre-design and design dictate everything that follows: the size and layout of the facility; its aesthetic character and relationship to its surroundings; the type of construction materials; capacity of mechanical and electrical systems; and other factors. It is unfortunate but true, that not even the best contractor using the finest materials can overcome the affects of poor design.

Professional design services represent only a small percentage of the construction budget, and a smaller percentage of tile life-cycle, so it is in the best interest of the taxpayer to ensure that the most qualified firms are selected for public projects.

This manual will tell you, in detail, how to select and retain an architect or professional engineer using the QBS process.

Why Use Qualifications Based Selection?

Every construction project is unique, with its own technical challenges. Yet, at the outset of most projects, the owner often does not fully grasp the complexities of the project nor the variety of design services that will be required in order to transform the generalized concept into reality.

In the construction process, the architect, engineer or land surveyor serves as the agent of the owner, representing the owner's interests in day-to-day dealing with governmental agencies, contractors, suppliers, equipment manufacturers, and others providing services and regulatory reviews and approvals of the project. For this reason it is vital that the owner and architect/engineer/land surveyor share a professional relationship characterized by trust, respect and effective communication.

Qualifications-Based Selection fosters this type of relationship by bringing the owner and design professional together as a team, enabling them to define the project scope in detail and agree upon the services that will be required to make the project a reality. No wonder, then, that QBS is the most widely endorsed method for selecting professional design consultants.

Since 1972, all agencies of the federal government have been required to use the QBS procedure for selecting design professionals. This traditional, qualification-based approach to procuring architectural, engineering and land surveying services on publicly funded projects was codified into law (P.O. 92-582) in 1972 by the U.S. congress. The law requires that architects and engineers be selected for all federal government projects on the basis of qualifications, subject to negotiation of fair and reasonable compensation. Nearly forty states now mandate the use of a similar procedure.

In recommending the use of Qualification-Based Selection by state and local governments, the American Bar Association says.

“The principal reasons supporting this selection procedure for architect, engineer and land surveying services are the lack of a definitive scope of work for such services at the time the selection is made, and the importance of selecting the best qualified firm. In general, the architect, engineer or land surveyor is engaged to represent the (states) interest and is, therefore, in a different relationship with the (state) from that normally existing in a buyer-seller situation. For these reasons, the qualifications, competence, and availability of the most qualified architect, engineer or land surveyor firms is considered initially, and price negotiated later.”

QBS is the most commonly used means of selecting design service for public contracts.

How Qualifications Based Selection Works

The QBS process usually involves the following steps:

1. The owner prepares a preliminary scope of work — that is, the owner describes the project to be built or the problem to be solved.
2. The owner invites design professionals to submit statements of qualifications for the project at hand.
3. Statements of qualifications are evaluated, and several firms are selected, or, “short-listed” for further consideration.
4. The firms are then interviewed and ranked according to a scoring system.

5. The top-ranked firm is notified of its selection for the project, and the owner and selected firm open discussions leading to agreement on a final scope of services and a contract between the two parties.

These steps are described in detail in the pages that follow.

① Developing the Preliminary Scope of Work

To begin the selection process, the public owner should prepare a written description of the project. Just as the owner needs information about the experience and qualifications of the design professional firms, the firms need to know the project requirements and goals.

When the scope of work is properly written and communicated, it saves time, money, and effort for both the owner and the design professional. A well defined scope of work helps the design firms decide if they are capable and qualified to perform the work, and allows them to tailor their statements of qualifications directly to the project requirements; and provides the owner with a uniform basis for evaluating the responses.

ELEMENTS OF THE PRELIMINARY SCOPE OF WORK

The following are the basic elements that, whenever possible, are to be included in a preliminary scope of work:

- Project name or identification and planned location.
- Project outline, including the intended size, function, and occupancy; and other general requirements, e.g., renovation, demolition, additions, new construction, energy, land use, and site selection considerations.
- Estimated construction budget and anticipated funding sources.
- Description of completed feasibility studies, surveys, or other preliminary information that is relevant to the project and available for review.

- Anticipated project schedule, including completion of design work, beginning of construction, and planned completion date.
- Unique requirements or restrictions such as zoning or environmental problems
- Specific services to be provided, such as feasibility studies, program development, design, construction observation or management, budget development.

A model of a preliminary project scope of work is included in the back of this manual as **Appendix A**.

② Requesting Statements of Qualifications

After the owner has prepared a preliminary scope of work, the next step in the QBS process is to invite firms to submit professional resumes, or statements of qualifications.

At this point, the owner must decide whether the invitation will be open to all interested firms, or whether this information will be solicited from a more select group of firms.

Some government agencies are required to advertise their intent to contract for design services and to permit all interested firms to submit a statement of qualifications. Other agencies maintain files on professional design firms and offer their projects only to these firms.

An easy way of identifying firms that would be interested and qualified for your project is to obtain directories of Iowa firms.

An easy way of identifying firms that would be interested and qualified for your project is to obtain directories of Iowa firms — architectural firms from the Iowa Chapter of the American Institute of Architects, engineering firms from the Consulting Engineers Council of Iowa, and surveying firms from the Society of Land Surveyors of Iowa.

CONTENTS OF THE INVITATION TO SUBMIT QUALIFICATIONS

Whether the invitation to submit statements of qualifications takes the form of a public advertisement or a letter or memorandum sent to a limited number of firms, it should include the following:

- The preliminary scope of work for the project.
- The project owner's name and the name, address and phone number of the owner's project representative.
- A list of information each firm should include in its statement of qualifications, such as name of the firm, brief history of firm, services to be provided by firm, services provided by consultants, background on key personnel, experience on relevant projects designed by the firm, projects underway, etc.
- The deadline for submitting statements of qualifications.
- A request for references.

See **Appendix B** for a model of an invitation to submit statements of qualifications.

③ Evaluating the Statements of Qualifications and Developing a Short List

The ultimate goal of this evaluation is to narrow the field of qualified firms to a "short list." The number of firms to be short-listed usually relates to the size and complexity of the project. Each firm should be evaluated on factors of importance to the owners. These may include experience, expertise of its key professional staff, its physical equipment and facilities, and references.

This evaluation can be conducted by one individual or a committee appointed by the owner. (Governmental agencies often have specific rules or policies regarding the make-up of selection committees.)

The most important consideration is that the person or persons performing the evaluation are fair and competent and have the authority to make an intelligent selection decision.

A sample tally sheet such as is normally used in the evaluation of the statements of qualifications is included as **Appendix C**. Frequently, an owner will attach more importance to certain firm qualifications than others. This form should be tailored to meet those concerns simply by assigning a higher arithmetic weight to those factors that are of greatest concern to the owner. It benefits the client if the design professional knows what is important to the client. Therefore, it is beneficial to share the weighted tally sheet with the design professional.

Before meeting to perform evaluations, the owner should check the references of each firm under consideration. This check should not be limited to the references supplied by the firms. A model form to aid in the checking of references is included as **Appendix D**.

ARRIVING AT THE SHORT LIST

Based upon the evaluation of the statements of qualifications and reference checks, the public owner can establish a short list of firms for further consideration. Because all firms that submit a statement of qualifications make a significant commitment of time and expense in pursuing the project, as a courtesy, the owner should notify the firms not selected for further consideration, as well as those who were short-listed.

A model of a memo of thanks to firms not selected for further consideration is included as **Appendix E**.

④ Evaluating and Ranking the Short-Listed Firms

The interviews of the short-listed firms give the public owner an opportunity to compare the firms' different approaches to the design process as well as their interpretations and understanding of the specific project requirements. Almost as important, they provide an insight into

each firm's management style and communications abilities. For this reason, it is imperative that the professional personnel to be assigned to the project team, as well as key consultants, be present at the interview. It is also essential for the project users to be involved in the interview process. Direct interaction between owner/user and the design professional is essential for the development of a design that truly meets the owner's needs.

The size of the project may determine the number of representatives a design professional has at an interview.

PRE-INTERVIEW TOURS OF THE PROJECT SITE

The size and complexity of the project should determine the necessity of a tour. Providing interested firms with a group tour of the project site is optional, but can be one of the most important parts of the selection process. A tour of the project site gives the firms the opportunity to obtain first-hand information about the proposed project and helps them to prepare for the interviews.

(Note: In order to avoid proprietary, or inconsistent information, it may be desirable that the architect, engineer or surveyor be directed to talk only with the owner's representative.)

A model memo to short-listed firms, outlining interview and tour arrangements and setting out evaluation criteria to be utilized, is included as **Appendix F**.

INTERVIEW ROOM SET-UP

The physical set-up for the interview should be comfortable, with good acoustics and ample room. 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 if available. Most firms will bring their own equipment to present their information. Since equipment set-up time may cause some delays in the interviewing process, two rooms should be used if possible. While one firm is being interviewed in the first room, another firm can set up for its presentation in the second room, thereby facilitating the process and ensuring that important interview time is not spent checking equipment.

SOME INTERVIEWING GUIDELINES

The following are suggested guidelines for setting up and conducting the interviews:

- Allow approximately 45 minutes for each interview and 15 minutes between interviews. This should allow ample time for presentations and a question-and-answer period, and for committee members to discuss the presentations among themselves before beginning the next interview.

If the fee proposed is more than the owner has budgeted, the two work together to modify the scope of services, so that the owner is fully aware of limitations or problems that might result.

- Schedule all interviews on the same day. This permits the committee to compare all of the interviewed firms while the information is fresh in their minds and ensures consistent interview scoring.
- Most interviews are held in a closed session. If ordinances or regulations require that the interviews be conducted publicly, the firms should be notified of this.
- While it is appropriate to question firms about how they would approach the design of a project, owners should not ask for an actual design solution during this interview.

Appropriate and responsive designs require considerably more interaction between the owner and designer than is possible during the selection phase. If either the owner or the design professional comes to the interview with a preconceived design solution, considerable time and energy will have been expended to get to this point. This may inhibit further creativity and prevent other, perhaps better, solutions from being explored.

RANKING & EVALUATION PROCESS

After all short-listed firms have been interviewed, and if possible, at the conclusion of each interview day, each firm should be evaluated by the owner or members of the selection committee.

The form used to evaluate and rank the short-listed firms should enumerate the

various criteria that are of importance to the owner, and a maximum numeric value should be assessed to each criteria. A model evaluation form is included as **Appendix G**.

If one individual is conducting the evaluations, he or she ranks the firms highest to lowest according to their total scores. When a committee is involved, the chairman should collect the evaluation sheets from the members of the committee. Each firm's scores are then tallied and averaged, and firms are then ranked from the highest average score to the lowest. A model tally sheet for the final evaluation is included as **Appendix H**. This system provides a documented record of the selection process as support for the selection committee's actions. It is recommended that the selection committee members take the time to achieve the ranking and selection by consensus rather than just by majority vote.

Once the most highly ranked firm has been identified, the firm should be notified of its selection and discussions initiated that will produce the final scope of services and the contract between the owner and the design professional.

After the interviews and rankings are completed, a memo should be sent to all firms that were interviewed. The memo may include all firms interviewed, but should list at least the top two firms in the order they were ranked by the committee. A model post-interview memo is included as **Appendix I**.

You may be contacted by some of the firms to discuss their proposal. It is perfectly acceptable to debrief them on their proposal, but not other firms'.

⑤ Developing the Scope of Services

As soon as possible after selection, the owner should begin negotiations with the selected firm. A detailed and comprehensive scope of services should be developed jointly by the owner and the selected firm. This is often accomplished through one or more meetings, and becomes the foundation of the contract between the two parties.

When the detailed scope of services is agreed upon, the selected firm is in a position to develop and submit a detailed proposal to the owner. If the fee proposed is more than the owner budgeted, the two work together to modify the scope of services, so that the owner is fully aware of limitations or problems that might result. Such a working relationship greatly enhances the odds for a successful project.

If an agreement on the scope of services and compensation cannot be reached, negotiations with the first-ranked firm should be terminated, and the owner should initiate talks with the second-ranked firm. However, it is not normally difficult to reach an agreement, since the QBS process facilitates an early understanding of the project scope and requirements through the progression of steps involved in the selection.

Given the important nature of the services and the opportunity of misunderstanding, the owner and the design firm should enter into a written contract. The parties may wish to use the standard forms of agreement that have been developed by: The American Institute of Architects (AIA) for architectural services, or by the Engineers Joint Contract Documents Committee (EJCDC) for engineering services. The AIA documents and the EJCDC documents are widely used, time tested, and designed to coordinate the needs of owners, architects, engineers, surveyors and contractors. There are "short form" agreements which may be suitable for small jobs.

ESTABLISHING FEES FOR PROFESSIONAL SERVICES

Owners may want to ask the firm representatives how they arrive at the fees for their professional services. However, specific fee amounts are resolved later, during detailed discussions with the firm selected, after there is a comprehensive and mutual understanding of the actual scope of services to be performed. This ensures that the owner's requirements for the project are taken into account in the development of the scope of work, rather than having the scope and fee developed solely by the design firm. This is an area

where good and open communication is essential to avoid misunderstandings at a later date.

Compensation for architectural, engineering or land surveying services is calculated and established by a variety of methods:

Stipulated Sum or Fixed Fee is commonly used when all of the project aims and required services are well-defined and can be mutually agreed upon during negotiation.

Percentage of Construction Cost is used when the parties agree that compensation should relate directly to the cost of construction.

Professional Fee Plus Expenses establishes a fee to cover non-reimbursable expenses, plus compensation for services rendered based on a multiple of direct personnel expense. The fee does not change regardless of variations on cost.

Multiple of Direct Personnel Expense bases compensation upon all direct payroll costs (salaries, benefits, payroll taxes, social security contributions) times a multiplier which compensates for overhead, profit and direct non-salary expenses (travel, communications, supplies). Usually a maximum fee or "not-to-exceed" amount is agreed upon.

The design firm should submit its proposal for compensation to the owner to initiate the negotiations. The method of determining compensation can be a part of these negotiations. The best method of compensation may vary from project to project. No one method is necessarily better than others.

⑥ Some Final Words About Qualifications- Based Selection

The significant feature of the QBS method is the selection of design professionals on the basis of qualifications and competence, with fee negotiations undertaken with the firm deemed most qualified.

[illegible]

Appendix A *See page 2*

Preliminary Scope of Service *(Model Form)*

Name of Project: _____

Project Owner: _____

Project Location: _____

Contact Person: _____

Address: _____

Phone: _____

Project Description: _____

Estimated Construction Budget: _____

Source of Financing: _____

Project Schedule:

Planned Date of Design Start-up: _____

Planned Date of Construction Start-up: _____

Planned Date of Completion: _____

Site Requirements or Restrictions: _____

Professional Services Required: _____

Attachments:

Feasibility Studies

Land Surveys

Other Information

Appendix B *See page 3*

Invitation to Submit a Statement of Professional Qualifications *(Model Form)*

TO: (List all firms alphabetically)

FROM: (Project Owner)
(Owner's Representative and Title)

SUBJECT: Invitation to Submit Statement of Professional Qualifications

Your firm is invited to submit its statement of professional qualifications to become eligible for an interview that could lead to a design commission for our project. Attached is a list of information that should be included in your Statement of Qualifications (See Appendix B continued), along with a preliminary scope of work for the project.

It is our intention to review the Statements of Qualifications and select (number) firms for further consideration.

Your Statement of Qualifications should be delivered to the following address no later than 5 p.m. on (date). Statements received after this deadline will not be considered.

Statements of Qualification should be transmitted to:

Name _____

Title _____

Address _____

Appendix B *continued*

LIST OF INFORMATION TO BE INCLUDED IN THE STATEMENT OF QUALIFICATIONS

Your Statement of Qualification should include the following information:

1. Firm name, address, and brief history.
2. Services to be provided by your firm.
3. Services to be provided by outside consultants.
4. Related experience to include:
 - a. Projects of a relevant nature, with date of completion.
 - b. Projects of a relevant scope, with date of completion.
 - c. Examples of project budgeting and cost estimating procedures with results.
5. You may include a maximum of one page of additional information not included above if you feel it may be useful and applicable to this selection process.

NOTE: Any questions regarding the qualification process and project must be directed **ONLY** to:

Name _____

Title _____

Address _____

Phone _____

OPTIONAL:

1. Include project name, owner's representative and telephone number, and construction dollar amount for each example. Include at least one, but no more than five, slides of each project, submitted in 8-1/2 x 11 transparent sleeves with project identification and firm identification on each slide.
2. Qualifications of key personnel to be assigned to this project. (Note that key personnel may be requested to attend an interview.)
3. All specific questions regarding this project will be answered during the (date) preinterview meeting and tour for (names) to be interviewed, or thereafter by (person).

Appendix C *See page 4*

Evaluation Form for Statements of Qualifications (Model Form)

Name of Project: _____

Name of Design Firm: _____

Name of Evaluator: _____

CRITERIA	RATING	WEIGHT	SCORE
I. Firm & Individual Qualifications			
■ Services to be provided by firm	X		=
■ Qualifications and experience of principals & key technical personnel	X		=
II. Experience Considerations			
■ Specific project type experience	X		=
■ Similar to project type (complexity, size, etc.)	X		=
III. Ability to Perform Work			
■ Availability of staff	X		=
■ Projects in progress	X		=
■ Other considerations	X		=
■ Services to be provided by outside consultants	X		=
IV. References			
■ Quality of design	X		=
■ Ability to meet schedules/deadlines	X		=
■ Ability to control costs/meet budgets	X		=
■ Communication/cooperation	X		=
Total Score			=

Rating Key: 1 = Poor
2 = Fair
3 = Good
4 = Excellent
5 = Superior

Appendix D *See page 4*

Design Firm Reference Check *(Model Form)*

Name of Design Firm _____

Project Referenced _____

Owner _____ Person Contacted _____

Address _____ Telephone _____

1. When was your project completed? _____

2. What services did the firm provide? (design, construction observation, etc.) _____

3. Name of firm's representative you worked with most closely _____

	Poor (1 pt)	Fair (2 pts)	Good (3 pts)	Excellent (4 pts)	Superior (5 pts)
4. Overall, how would you evaluate the quality of work performed by the firm?					
5. How would you rate the firm's performance in terms of meeting schedules and deadlines?					
6. How would you rate the firm's performance in terms of controlling design costs and meeting budgets?					
7. How would you rate the firm's overall attitude and ability to communicate and work cooperatively?					

Enter the ratings from questions 4-7 directly on Statement of Qualifications Evaluation Form, Part IV, "References," on Appendix C.

Appendix E *See page 4*

Memo to Firms Not Selected for Further Consideration *(Model Form)*

TO: (List in alphabetical order all firms not selected for further consideration)

FROM: (Project Owner's Representative)

SUBJECT: (Project Name)

We would like to thank you for submitting your Statement of Qualifications and expressing interest in our project.

After careful consideration of all interested firms, the (name of individual or group responsible for selection) has selected the following firms for further consideration for this project:

- 1) _____
- 2) _____
- 3) _____

While your firm was not selected for further consideration, we appreciate your interest in our project and the effort put forth in preparing and submitting your Statement of Qualifications.

XXX:xxx

Appendix F *See page 4*

Memo to Firms Selected for Interview *(Model Form)*

TO: (Name of firm selected for further consideration)

FROM: (Project Owner's Representative)

SUBJECT: (Project Name)

Your firm has been short-listed and will be interviewed for professional design services.

The other firms selected for further consideration are:

1) _____

2) _____

Before making the final selection, we would like to interview representatives of each of the short-listed firms. Each firm will be allowed (number) minutes to make its presentation and answer questions. The interview for your firm is scheduled for

(Time) on (Date) at (Location: Building, address, room #)

During the interview, your firm's representatives should plan to discuss its interpretation of the project requirements; various technical alternatives that might be considered; the key personnel who would be assigned to the project; the firm's experience with similar projects; outside consultants who would be made a part of the design team; project management and cost control techniques; and method of determining compensation for the required services.

Your interview team should consist of key members of the team for our project. Your team should consist of no more than (number) members.

OPTIONAL:

A list of the evaluation criteria to be utilized by the interview team is attached for your information.

We will offer each firm an opportunity to tour the project site before being interviewed. To arrange for a tour, please call (person) at (phone number) no later than (date).

OR

A preinterview meeting and tour of the site has been scheduled for (date) at (time).

All parties meet at (location).

Appendix G *See page 5*

Evaluation Form for Short-Listed Firms *(Model Form)*

Name of Project: _____

Name of Design Firm: _____

Name of Evaluator: _____

	Possible Points	Points Awarded
1. Grasp of Project Requirements Firm's analysis, interview preparation & level of interest.		
2. Design Approach/Methodology Technical alternatives, creativity, problem-solving ability.		
3. Project Management Proposed project schedule cost controls.		
4. Project Design Team Subconsultants who would be made part of project design team.		
5. Key Project Personnel Qualifications & experience of project manager, other key personnel.		
6. Responsiveness Compatibility between design professional and owner, general attitude and ability to communicate.		
7. Geographic Considerations Familiarity with locale and local government & regulatory agencies.		

Total

Appendix H *See page 5*

Final Evaluation Tally Sheet *(Model Form)*

	Firm A	Firm B	Firm C
Interviewer 1 _____	_____	_____	_____
Interviewer 2 _____	_____	_____	_____
Interviewer 3 _____	_____	_____	_____
Interviewer 4 _____	_____	_____	_____
Interviewer 5 _____	_____	_____	_____
Total Score	_____	_____	_____
Average Score	_____	_____	_____

Appendix I *See page 5*

Memo to Short-Listed Firms, Announcing Final Selection *(Model Form)*

TO: (List alphabetically all interviewed firms)

FROM: (Project Owner's Representative)

SUBJECT: (Project Name)

Following interviews with each of the firms that were short-listed for this project, the interviewers ranked the firms in the following order:

- 1) _____
- 2) _____

Throughout this process, it has been our objective to select the firm most qualified to provide the services we require. Accordingly, we have entered into contract negotiations with _____ (most highly ranked firm).

Please accept our most sincere thanks for the time and effort you have expended on our behalf. Perhaps we will have the opportunity to work together on another project in the future.

XXX:xxx