

## Quality Based Selection of Engineering and Surveying Services

Federal law, Alabama Code and the Alabama Board of Licensure for Professional Engineers and Professional Land Surveyors (Board) require the use of Quality Based Selection (QBS) procedures for the selection of engineers and surveyors for work. Exercise of professional judgment is a key element in the successful practice of these professions, and bidding on work may restrict factors like the time available for job research, thoughtful approaches to job tasks, and consideration of the long term effects of a design or a survey. All of these work against the best interests of the owner.

The general intent of QBS is to select a highly-qualified individual or firm because that will produce highly successful results. An important distinction of this process is that price does not become a consideration until the qualifications have been reviewed and have been found highly-qualified or determined to be the most-qualified when several firms or individuals are considered. The cost of retaining that firm or individual is a factor only if the owner finds the cost unreasonable. Although the specifics of the QBS process may change from agency to agency or state to state, there are three common elements:

- (1) Submittal of qualifications to perform the engineering or surveying desired by a client;
- (2) Evaluation of submittals and selection of the most-qualified firm(s) or individuals; and
- (3) Negotiation of price, with the possibility of rejection by the owner, who then negotiates with the next most-qualified firm or individual.

The remainder of this document overviews the Federal process, State agency process, and the Board Rules that apply to both government and private work. It also summarizes some of the advantages of QBS as noted in recent research, and offers examples.

**Federal Agency Process** – The Brooks Act, Public Law 92-582, describes the Federal government process for selection of architects and engineers, using Quality Based Selection (QBS). The process has seven steps, which are simplified below to illustrate some of the primary considerations:

- a) Firms are encouraged to submit a statement of qualifications and performance data.
- b) The agency head determines the three highest-qualified firms.
- c) The agency head enters negotiations with the highest-qualified firm. If the agency head and firm are unable to agree on a fair and equitable price for services, the agency head ceases talks with that firm and moves to the second most-qualified firm. If negotiations with the second most-qualified firm are not successful, the agency head ceases talks and moves to the third most-qualified.

These steps clearly meet the general description of QBS.

**Alabama Agency Process** - The Alabama Competitive Bid Law (Code of Alabama 1975, section 41-16-21) governs the selection of engineers and surveyors for State government projects. The Code exempts engineering and other stated professional services from the State Bid Law and specifies a QBS type of selection process.

*Section 3 (a) ...the competitive bidding requirements of this article shall not apply to: ...contracts for the securing of services of... engineers or other individuals possessing a high degree of professional skill where the personality of the individual plays a decisive part;*

*Section 4 ... the procurement of professional services by any agency, department, board, bureau, commission, authority, public corporation, or instrumentality of the State of Alabama shall be conducted through the following selection process:*

*(3) Professional services of architects, landscape architects, engineers, land surveyors, geoscience, and other similar professionals shall be procured in accordance with competitive, qualification-based selection policies and procedures. Selection shall be based on factors to be developed by the procuring state entity...*

*Notice of need for professional services shall be widely disseminated to the professional community in a full and open manner. Procuring state entities shall evaluate such professionals that respond to the notice of need based on such state entity's qualification-based selection process criteria. Any such procuring state entity shall then make a good faith effort to negotiate a contract for professional services from the selected professional after first discussing and refining the scope of services for the project with such professional.*

#### **Alabama Board of Licensure for Professional Engineers and Professional Land Surveyors**

The Board's Administrative Code includes several rules of professional conduct (Code of Ethics, Rule 330-X-14, last amended January 2011) that directly address QBS and bidding on work. Two examples follow:

*330-X-14.05 Practice. (Canon IV) The engineer or land surveyor shall endeavor to build a practice and professional reputation on the merit of his or her services as follows:*

*(f) The engineer or land surveyor shall not participate in procurement practices (bid submittals) which do not first determine the qualifications of the engineer or land surveyor prior to entering into fee negotiations for services being sought. An engineer or land surveyor having submitted a statement of qualification and performance data, and having first been judged as the qualified individual or firm to provide the services required for the proposed project, may proceed to negotiate a contract with a client and establish compensation or fees for the required services.*

*Should the engineer or land surveyor be unable to negotiate a satisfactory contract with the client for any reason, the engineer or land surveyor shall withdraw from further consideration for the engineering or land surveying services. Another engineer or land surveyor may then be selected for negotiations of a contract for the services on the stated project.*

**330-X-14-.06 Ethics. (Canon V)** *The engineer or land surveyor shall contribute to the maintenance, integrity, independence and competency of the engineering or land surveying profession as follows:*

*(a) The engineer or land surveyor shall not:*

*14. Participate in procurement procedures for engineering or land surveying services either by providing bids or in requesting bids from other professional engineers or land surveyors where bidding is the primary consideration.*

## **Research Confirms the Value of QBS**

The basis for the Brooks Act is that ensuring sufficient time for professional judgment is essential for successful practice of certain professions, including engineering and surveying. Research has consistently backed this up. A good example is a recently published report by research specialists in the fields of construction management and public policy (Chinowsky and Kingsley, 2011). A survey administered by the researchers found that using QBS to hire the most-qualified professional design service provider at a reasonable price gives the best chance for completing a project on time and on budget. Data shows that there are fewer change orders and time extensions on QBS projects. Project owners preferred using QBS on projects with higher risk factors or higher design complexity. The survey showed that 93 percent of owners rated the success of their QBS projects as high or very high. There were other positive findings, including that QBS provides a better method for changes in project scope, can address emerging social issues, encourages innovation, and protects intellectual property.

## **QBS in Alabama Practice**

QBS is the law for engineers and surveyors in Alabama, but sometimes owners do not understand that and request a price up front. The following list contains several ideas that might assist engineering and surveying professionals in following QBS processes during the process of acquiring work. Note that these are only examples, and that each licensed engineer or surveyor bears the responsibility for selecting appropriate QBS procedures while responding to clients.

- When owners request price information for professional services upfront, explain that failure to follow QBS procedures could place you at risk of losing your license. You may wish to provide the owner a copy of this QBS Board Opinion document, or refer the owner to this document on the Board's website.
- Include a statement in your firm's marketing brochure, indicating that the firm follows Quality Based Selection procedures while negotiating with clients for engineering and surveying work. Refer potential clients to this QBS Board Opinion document on the Board's website.)
- When responding in writing to a request for proposals for engineering or surveying work, explain that QBS procedures are required by Board Rule 330-X-14-.05 Practice and 330-X-

14-.06 Ethics. These rules allow the submission of statements of qualifications to perform the work, but do not allow the providing of cost information until after being judged as the most-qualified to provide the services required for the proposed project.

- When responding to telephone calls that request cost information for engineering or surveying work, explain QBS procedures and Board requirements using the same (or similar) wording as for responding to a written request for proposals (above).

## **Summary**

This document has overviewed provisions of Quality Based Selection procedures found in federal and Alabama law, and in the Rules and Regulations of the Alabama State Board of Licensure for Professional Engineers and Land Surveyors. It has presented the general principles of QBS, and illustrated that its effectiveness has been demonstrated through research. Above all, it clearly states the duty of licensed engineers and surveyors to follow QBS procedures.

## **References**

Brooks Act: Federal Government Selection of Architects and Engineers, Public Law 92-582, 92nd Congress, H.R. 12807, October 27, 1972

Chinowsky, Paul S. and Kingsley, Gordon A., Analysis of Issues Pertaining to Qualifications-Based Selection, American Council of Engineering Companies, Washington, D.C. and American Public Works Association, Chicago, IL, 2011

State of Alabama Administrative Code, Rules of Professional Conduct, Rule 330-X-14, last amended January 2011

State of Alabama Law Regulating Practice of Engineering and Land Surveying, Code of Alabama 1975, Title 34, Chapter 11, Last Amended – August 1, 2009

**Adopted on December 8, 2011**