

A GUIDE TO PROPER SELECTION PROCEDURES



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MISSOURI PROCUREMENT

Traditionally, the selection of Engineers has been based on experience and qualifications. The Qualifications-Based Selection (QBS) process assures a professional client-agent relationship where the Engineer acts and speaks for the client in dealings with regulatory agencies, contractors, manufacturers and suppliers. The introduction of price into the selection process tends to reduce the relationship to that of buyer-vendor, wherein the two parties become economic adversaries.

In 1972, Public Law 92-582, the "Brooks Law" was enacted to preserve professionalism in Federal Procurement. This law mandates selection of Engineers, Architects and Land Surveyors on the basis of experience and competence, through the QBS process. In 1983, a similar "Mini-Brooks Law" was enacted by the Missouri Legislature. In 2007, the Missouri Legislature modified this procurement law to specify that state agencies and political subdivisions must use QBS.

MISSOURI LAW (RSMo 1984 Sections 8.285 thru 8.291)

8.285. Policy on contracts for architectural engineering, land surveying services. -- It shall be the policy of the state of Missouri and political subdivisions of the state of Missouri to negotiate contracts for architectural, engineering and land surveying services on the basis of demonstrated competence and qualifications for the type of services required and at fair and reasonable prices.

8.287. Definitions. -- As used in sections 8.285 to 8.291 unless the context specifically requires otherwise:

- (1) "**Agency**" means each agency of the state and each agency of a political subdivision thereof authorized to contract for architectural, engineering and land surveying services;
- (2) "**Architectural services**" means any service as defined in section 327.091, RSMo;
- (3) "**Engineering services**" means any service as defined in section 327.181, RSMo;
- (4) "**Firm**" means any individual, firm, partnership, corporation, association or other legal entity permitted by law to practice the profession of architecture, engineering or land surveying and provide said services;
- (5) "**Land surveying services**" means any service as defined in section 327.272, RSMo;
- (6) "**Project**" means any capitol improvement project or any study, plan, survey or program activity of a state agency or political subdivision thereof, including development of new or existing programs.

8.289. Agencies using services to be furnished statement of firm's qualifications and performance data. -- Present provisions of law notwithstanding, in the procurement of architectural, engineering or land surveying services, each agency which utilizes architectural, engineering or land surveying services shall encourage firms engaged in the lawful practice of their professions to annually submit a statement of qualifications and performance data to the agency. Whenever a project requiring architectural, engineering or land surveying services is proposed for an agency of the state or political subdivision thereof, the agency shall evaluate current statements of qualifications and performance data of firms on file together with those that may be submitted by other

firms regarding the proposed project. In evaluating the qualifications of each firm the agency shall use the following criteria:

- (1) The specialized experience and technical competence of the firm with respect to the type of services required;
- (2) The capacity and capability of the firm to perform the work in question, including specialized services, within the time limitations fixed for the completion of the project;
- (3) The past record of performance of the firm with respect to such factors as control of costs, quality of work, and ability to meet schedules;
- (4) The firm's proximity to and familiarity with the area in which the project is located.

8.291. Negotiation for contract -- not applicable, for certain political subdivisions. --

1. The agency shall list three highly qualified firms. The agency shall then select the firm considered best qualified and capable of performing the desired work and negotiate a contract for the project with the firm selected.
2. For a basis for negotiations the agency shall prepare a written description of the scope of the proposed services.
3. If the agency is unable to negotiate a satisfactory contract with the firm selected, negotiations with that firm shall be terminated. The agency shall then undertake negotiations with another of the qualified firms selected. If there is a failing of accord with the second firm, negotiations with such firm shall be terminated. The agency shall then undertake negotiations with the third qualified firm.
4. If the agency is unable to negotiate a contract with any of the selected firms, the agency shall re-evaluate the necessary architectural, engineering or land surveying services, including the scope and reasonable fee requirements, again compile a list of qualified firms and proceed in accordance with the provisions of sections 8.285 to 8.291.
5. The provisions of sections 8.285 to 8.291 shall not apply to any political subdivision which adopts a qualification-based selection procedure commensurate with state policy for the procurement of architectural, engineering and land surveying services.

The purpose of this act is to insure that the State and its political subdivisions receive the most competent professional service available, based on demonstrated qualifications for the type of services required. Price clearly is an important factor in the selection process, but it becomes a consideration only after the most qualified firm has been selected. These procedures are essential in dealing with projects which involve the health and safety of the citizens and expenditure of public funds.

IMPLEMENTING THE LAW

The law is very specific. Its application can be simple or as comprehensive as the particular project or your agency requires. Many agencies have developed excellent formal procedures which totally conform to the purpose and intent of the law. There can be provisions for: 1) simplified procedures on small projects, 2) continuing services from preliminary studies to final design, and 3) repeat services by the same firm on similar projects.

This guide is intended also to assist those agencies which may seldom use Engineering Services or are not familiar with the Qualifications-Based Selection process. In this case, your Agency may choose not to develop a formal procedure and simply proceed in accordance with the law. The QBS procedure may be applied to small projects by reviewing qualification data on file and making a selection. For larger projects, letters of interest, more detailed qualifications for the project in question, or personal interviews may be appropriate.

OBTAINING A SELECTION BASE

Engineering firms should be providing statements of qualifications for your files on an annual basis. In absence of sufficient qualified firms for specific projects, inquiries may be made to other agencies known to have completed similar projects. ACEC/MO would be pleased to provide a directory of our members, which outlines the specialties of each firm.

Requests for qualifications can also be advertised in newspapers or trade journals. This approach however, usually results in an over reaction by large numbers of distant or questionably qualified firms. Most Agencies find some type of *prequalification*, either by knowledge, recommendation or formal applications to be a preferable approach.

THE SELECTION COMMITTEE

It is desirable that the selection committee be comprised of at least three members. Preferably, at least one of the members should be an experienced public works official and one member should be the individual responsible for the project. Many times City Councils or County Commissions serve as the selection committee and are advised by their public works staff.

It is also appropriate, particularly on large projects, for one elected official to serve as a member or observer of the selection committee and process. This provides a direct liaison to the Council or Board which must approve the committee recommendation.

REQUESTING LETTERS OF INTEREST

Requests for qualifications (RFQ) or request for proposals (RFP) should clearly describe the project or assignment and the agencies expectations for the required services. For small projects keep the description simple and request the response to be brief and concise. A request for no more than one or two page letter plus a brochure, if none is on file, should be adequate.

For larger projects, it is entirely in order to request comprehensive responses which outline the firms approach to the project, qualifications of project personnel and experience on similar projects. Be prepared to spend considerable time in reviewing these responses.

Be sure to allow 2-4 weeks for response and check references. Not just the ones provided, but also other clients whose projects were offered in the experience record.

INTERVIEWS

After RFQs and RFPs are received, a selection can be made, particularly for small projects. But, separate personal or telephone interviews can be very helpful if the Agency is unfamiliar with the selection process.

Three to five firms are selected for interview. Each should be scheduled for a 30 to 45 minute period, with 15 minute breaks between. A portion of the time should be allowed for the firms presentation and a portion reserved for questions.

It is usually desirable to outline the points that are desired to be covered. Keep the interviews on schedule. Again allow adequate time for selected firms to prepare for the interview.

RATING OF FIRMS

Prior to selection from qualification data or on the basis of interviews, it is very desirable to establish a rating procedure. A value should be given to various items of consideration. Each of the selection committee members should rate the competitors individually, then compare notes for the final selection.

A sample evaluation sheet is enclosed. This form lists the items of consideration under Missouri Law, with provision for other items which may be applicable to the specific criteria. Completion of this form by all members of the committee serves as excellent documentation for the qualifications-based selection process and justification for selection.

NEGOTIATIONS

After the most qualified firm is selected, a scope of the engineers services is prepared. This may be done by your agency, or by the engineer for your review. Review this scope of services carefully with the engineer to make sure you understand what services will be provided and what items are your responsibilities.

Once a scope of services has been agreed upon, request a formal proposal outlining the agreed work, a schedule for completion and requested compensation. Don't be reluctant to require a detailed estimate of manhours and costs related to the requested compensation.

If possible, have an idea of your project budget and an estimate of engineering costs prior to receipt of the engineers formal proposal. (See DETERMINING FAIR AND REASONABLE PRICES insert.)

DEVELOPING A CONTRACT

After agreeing on a price that is fair and equitable to both parties, a contract should be consummated. If you have your own contract form, tailor it to the project in question for your engineers review. If not, request your engineer to present his proposal in the form of a proposed contract.

Contracts may take the form of a one or two page letter with an acceptance statement for the client on small assignments. For major projects, a more comprehensive document is warranted.

Make sure the contract covers the scope of services, a time schedule for completion, and a schedule and basis of compensation. For major projects it is appropriate to include provisions for required insurance coverage, ownership of documents, provisions for cancellation and changes, and other applicable provisions.

SAMPLE RATING FORM

Agency GOOD CITY		Point Value					
Project 97TH ST. WIDENING & VIADUCT		<i>FIRMS</i>		<i>HENNINGTON ENGRS.</i>		<i>9:00 KANSAS CITY</i>	
By <u>Ron Stewart</u> Date <u>2/23/87</u>		<i>J.B. McINTOSH</i>		<i>10:00 GOOD CITY</i>		<i>FOXWORTH ASSOCIATES</i>	
CRITERIA ITEM		<i>11:00 SPRINGFIELD</i>					
1. The specialized experience and technical competence of the firm with respect to the services required. EXPER. WITH MAJOR BRIDGES	30	<u>Excellent</u> _____ _____	<u>Locks exper.</u> <u>record with</u> <u>bridges</u> _____ _____	<u>Good</u> _____ _____	_____ _____	_____ _____	_____ _____
2. The capacity and capability to perform the work in question, including specialized services, within schedule.	25	<u>Adequate</u> _____ _____	<u>Would need</u> <u>help</u> _____ _____	<u>More staff</u> <u>than req'd.</u> _____ _____	_____ _____	_____ _____	_____ _____
3. The past record of performance with respect to control of costs, quality of work and ability to meet schedules. REFERENCES	25	<u>Good</u> _____ _____	<u>Excellent</u> _____ _____	<u>Excellent</u> _____ _____	_____ _____	_____ _____	_____ _____
4. The firm's proximity to and familiarity with the area of the project. USE OF LOCAL SURVEY AND SOIL FIRMS	20	<u>130 Mi.</u> <u>Does own</u> <u>surv. & soils</u> _____ _____	<u>In town</u> <u>Does own</u> <u>surv. & soils</u> _____ _____	<u>100 Mi.</u> <u>Would hire</u> <u>local</u> _____ _____	_____ _____	_____ _____	_____ _____
TOTAL POINTS	100	<u>#2</u> _____ _____	<u>#3</u> _____ _____	<u>#1</u> _____ _____	_____ _____	_____ _____	_____ _____

PROFESSIONAL SERVICES
EVALUATION SHEET

ACEC/MO and MSPE's professional engineers are ready to serve you. Should you ever have a question regarding professional consulting services, don't hesitate to contact our offices. You will be assisted, or referred to uninvolved Professionals who can provide confidential advice regarding any questions related to the practice of engineering.

As a public official, you must become involved in seeking the design services of Consulting Engineers. Your first reaction probably is to obtain price quotes and go with the lowest bidder. After all, isn't that how you procure copy paper or that new dump truck?

However, in bidding design services, how do you know the low bidder fully understands the requirements of your project? The design work could end up costing much more when you discover additional services are required. Or worse, the project may be completed without all the design services needed, resulting in greatly increased construction costs. Engineering design services fees are only 1-2% of the lifetime project cost yet impact the other 98% of the construction and lifetime maintenance costs.

Look at it another way, when you have major surgery you don't send out bid requests to medical professionals. Or, if you're being sued, you don't select the lowest priced legal professional to defend you. In both cases you select on competence and reputation. Consulting engineers are design professionals with specialized experience and qualifications, who should be selected using the same process. You need to adopt a qualifications-based selection process that will obtain the best firm or individual for your unique project.

FEDERAL AND STATE QBS LAW

In 1972, Public Law 92-582, the "Brooks Law" was enacted to preserve professionalism in Federal Procurement. This law mandates selection of Engineers, Architects and Land Surveyors on the basis of competence and experience, through the Qualifications-Based Selection (QBS) process. In 1983, a similar "Mini-Brooks Law" was enacted by the Missouri Legislature and is contained in Missouri Law, RSMo Sections 8.285 thru 9.291. It is mandatory on all Agencies of the State of Missouri and Political Subdivisions of the state.

THE PROPER SELECTION PROCESS

In the Qualifications-Based Selection process, a number of firms (3 to 5) experienced in the type of design work needed are invited to present brochures, letters of interest, qualifications booklets for specific projects or to appear for separate personal interviews. The Agencies selection committee then considers the following criteria to determine the most qualified firm for their project.

- The Specialized Experience and Qualifications of the Firm
- The Capacity and Capability of the Firm to meet the Project Schedule
- The Past Record of Performance of the Firm (References)
- The Firms Proximity to and Knowledge of the Project Area

Once the most qualified firm is selected, price becomes an important factor. The Agency and the Consulting Engineer meet to discuss the expectations of the client for the project, to develop a scope of the engineers services, and to define the responsibilities of the agency. Then, and only then, can the engineer develop a detailed manhour and fee estimate to determine a fair and reasonable price for the services. Should the agency and the engineer not be able to agree on price, the agency is free to undertake negotiations with the second, then the third most qualified firms.

Note: The purpose of the prescribed selection process is to assure that all agencies receive the most competent professional services available. Rely heavily on your experienced or professional public works officials for advice. Resist the temptation to yield to self-interest political pressure. These procedures are essential in dealing with projects which involve the health and safety of the citizens and the expenditure of public funds.

ADDITIONAL INFORMATION ON PROCUREMENT

More detailed information on procurement of professional services, by the Qualifications-Based Selection process is available on request from the following sources.

American Bar Association (ABA)

Phone 800/285-2221

321 North Clark Street, Chicago, IL 60654-7598 - Website: <http://www.abanet.org/dch/committee.cfm?com=PC500500>

- Model Procurement Code for State and Local Governments - A/E Selection

American Council of Engineering Companies (ACEC)

Phone 202/347-7474

1015 Fifteenth St., N.W., Washington, D.C. 20005 - Website: www.acec.org/advocacy/qbs.cfm

- Bidding is Not the Solution - Case Studies in Bidding
- How to Use Qualifications Based Selection

American Council of Engineering Companies of Missouri (ACEC/MO)

Phone 573/634-4080

200 E. McCarty Street, Suite 201, Jefferson City, MO 65101 - Website: www.acecmo.org

- Membership Directory with Descriptions of the Specialties of each Member Firm
- Professional Services Evaluation Sheet
- QBS Workbook - A Step-by-Step Process for Selecting Design Professional Services
- Quality Checklist - Recommendations and Checklists for Ensuring Quality Infrastructure Projects
- Sample RFQ for Newspaper

American Public Works Association (APWA)

Phone 202/408-9541

1401 K Street, NW, 11th Floor, Washington, D.C. 20005 - Website: www.apwa.net

- APWA Red Book of Qualifications Based-Selection Guidelines for Public Agencies (Cost - \$15/\$20)

American Society of Civil Engineers (ASCE)

Phone 800/548-2723

1801 Alexander Bell Drive, Reston, Virginia 20191-4400 - Website: www.asce.org

- Manual 45 - How to Work Effectively with Consulting Engineers (Cost - \$32/\$24)

Professional Engineers in Private Practice (PEPP)

Phone 703/684-2800

A Division of the National Society of Professional Engineers

1420 King Street, Alexandria, Virginia 22314 -

Website: www.nspe.org/GovernmentRelations/TakeAction/IssueBriefs/ib_qbs.html

- NSPE Issue Brief

American Council of Engineering Companies of Missouri is ready to serve you. Our member firms strive to improve their practice and their service to clients. All endorse the fair competition afforded by the Qualifications-Based Selection process.

Should you ever have a question regarding professional consulting services, don't hesitate to contact our President & CEO. You will be assisted, or referred to uninvolved Professionals who can provide confidential advice regarding any questions related to the practice of engineering.

The consultant managing your professional services must be both a professional and a businessman in providing those services. A consultant not only provides highly technical engineering and acts as his client's agent, but is also a businessman and must recover all costs and earn a fair profit to remain in operation. The common law of business balance prohibits paying a little, and getting a lot. The purpose of this publication is to explain how your engineer charges, so that you will be fully informed when you enter into negotiations to establish a fair and reasonable price for professional services.

METHODS OF CONTRACTING (or Types of Agreements)

Lump sum contracts are best for both the owner and consultant when the scope of the engineer's services are well defined so a realistic fee may be developed, negotiated and agreed upon. A schedule of payments for various phases of the project development should be a part of the lump sum contract.

Cost reimbursable contracts are more desirable when the scope of work cannot be well defined. These contracts may take the form of Direct and Overhead Costs plus a Fixed Fee, Salaries times a Multiplier (2.8 to 3.1) plus expenses, or Standard Billing Rates plus expenses. Cost based contracts should have an agreed target cost, subject to periodic evaluation, which may contain a contingency for unexpected costs. Percentage of Construction Cost, Retainers, Per Diem and other systems of reimbursement are also used, depending on the client and engineers preference. Cost reimbursable contracts are more management intensive than Lump Sum contracts.

THE CONSULTANTS COSTS

Of the costs included in lump sum contracts, the most obvious costs are direct labor and expenses incurred in developing designs and plans, or in the observation of construction. A secondary, but very real cost, is overhead. This is usually expressed as a percentage of direct salary costs. Overhead items may include:

DIRECT SALARY OVERHEAD

Federal FICA
Employment Taxes
Holidays
Vacations
Sick Leave
Retirement or Incentives
Group Insurance
Unemployment Benefits

GENERAL OVERHEAD

Administrative Salaries
Steno and Bookkeeping
Continuing Education
Business Development
Office Supplies
Automobile Expenses
Legal and Accounting
Interest Expense
Rent and Utilities
Business Taxes
Travel Expenses
General and Liability Insurance
Telephone and Communications
Dues and Subscriptions
Depreciation
Unbillable Computer Costs

Total overhead may be expected to vary from 140% to 175%, depending on individual firm policy on time charges. Specialty firms may have slightly higher overhead due to specialized equipment.

FEES (Including Profit)

In addition to direct and overhead costs, your consultant must charge a fee to cover return on capital investment, professional expertise, risk management and other non-reimbursed costs. The requested fee will vary from 15% or more on small projects to 10% on extremely large projects. An administrative charge of 5% to 15% may occur on expenses of subcontracts to cover the costs of additional liability insurance and the responsibilities for arranging and integrating these services into the total project.

REASONABLE BILLING RATES (2008 Levels)

Summarized below are general ranges of hourly billing rates (Including Overhead and Profit) deemed to be reasonable. Be cautioned that billing rates of individual firms are not directly comparable, because of variations in individual experience and policies on time charges. For the latest industry fee and billing surveys, go to www.zweigwhite.com or www.psmj.com.

Principals and Partners	\$150-\$175	Technicians	\$50-\$90
Project Managers	\$105-\$145	Survey Party (1-2-3 Mbrs.)	\$70-\$125-\$160
Project/Design Engineers	\$70-\$105	Administrative	\$40-\$55

Agency _____ Project _____ By _____ Date _____ CRITERIA ITEM	Point Value FIRMS					
1. The specialized experience and technical competence of the firm with respect to the services required.						
2. The capacity and capability to perform the work in question, including specialized services, within schedule.						
3. The past record of performance with respect to control of costs, quality of work and ability to meet schedules.						
4. The firm's proximity to and familiarity with the area of the project.						
TOTAL POINTS						

Three Firms Minimum per State Law