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Guidelines for Writing Effective Bid Specifications

1. Introduction

Specifications are one of the most important elements of the purchasing process. The preparation of good specifications is probably the most difficult function in the process. Inadequate or poorly written specifications are the cause of many bidder challenges and can considerably delay the purchasing process. This information is designed to define specifications and assist University of South Alabama (USA) personnel by providing guidelines to good specification writing.

Specifications must be provided via email to the USA Purchasing Manager in either Microsoft Word or Excel format for all non-Public Works projects. Included with your bid request should be any applicable pictures, diagrams, and/or illustration as well as a list of potential bidders (include company name and email address) you would like to directly solicit.

The Purchasing Manager has final responsibility for specifications issued as part of formal Request for Sealed Bids. The specification may originate with a USA department, an outside consultant, another governmental entity, or a professional society or association, however, USA Purchasing will review the specifications for suitability and competitiveness. Some departments have the view that they are authorized to spend to the limits of their budgets and should be able to buy whatever product or service they prefer. However, the Purchasing Department's view is to conserve public funds and to refrain from buying a more costly product or service or larger quantity than is actually needed. USA Purchasing is obligated to try to obtain both product and price competition.

2. Definition of Bid Specification

The term "specification" refers to a description of the characteristics of a commodity or service required or desired. Specifically, it is defined as the explicit requirements furnished with a solicitation upon which a purchase order or contract is to be based.

Specifications set forth the characteristics of the property and services to be purchased so as to enable the vendor to determine and understand that which is to be supplied. This information may be in the form of a description of the physical, functional, or performance characteristics, a reference brand name or both. It may include a description of any requirement for inspecting, testing, or preparing a material, equipment, supplies, or service for delivery. Specifications may be incorporated by reference and/or through attachment to the solicitation.

3. Why Use Bid Specifications

Bid specifications are written so as to not restrict bidding but to encourage open competition. The goal is to invite maximum reasonable competition. The degree to which



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specifications are open and unrestrictive directly affects the type and extent of the competition desired.

Specifications provide for quality control, that is, they assure that the quality of an item is suited to its intended use and eliminates unnecessary features or frills.

Specifications are public records; they serve to keep the purchasing open by allowing the public to see exactly what is being purchased. Specifications are used during the evaluation of bids to determine whether or not bids are responsive.

Some of the difficulty in preparing specifications stems from the fact that the State can seldom dictate the *exact* characteristics of the products it wants. The bid requirements usually not sufficient to justify a special or name brand product. Consequently, specifications are developed around a manufacturer's product specifications. If the specification did not have to satisfy state statutes requiring competitive bidding, the task would be much easier. The immense variety of items purchased by the State further complicates specification writing. Products are improved, new products are introduced, and the needs of the public change. Consequently, the function of preparing and updating specifications must be an ongoing one.

4. Specification Sources

There are many available sources that can be of assistance to you when you are developing your specifications. Here are suggestions for gathering specification information:

- Collect as much information as possible from the end user as to the function and performance of the requested product. Use their expertise and knowledge.
- Collect product information from the industry (brochures, catalogs, specs, etc.). Many manufacturers list their catalogs and product specifications on the internet.
- Look for standards and test information from professional societies where available.

5. Types of Specifications

There are several different types of specifications to address the thing being purchased in a number of ways. The great variety of goods and services bought by the State necessitates the use of all of the following types of specifications:

5.1 Standard

Where items that have similar usage are needed frequently or repetitively, standard specifications are developed. This establishes performance and quality levels, reduces the variety of things bought, simplifies inventories, allows for large volume contracts to



be developed, and eliminates duplicative specification writing. Most statewide contracts use standard specifications to describe products required.

The standard specification details the characteristics that the item must possess without naming a brand or model.

5.2 Non-Standard

Most purchases use non-standard or have no standard specifications developed for the item or service required and are used on a one time basis. A non-standard specification can be anything from a simple brand-name-or-equal description to a statement of work for professional or construction/renovation services.

5.3 Brand Name

Brand name specifications cite a brand name, model number, or some other designation that identifies a specific product of a manufacturer. Brand name specifications are not the preferred method, but they can have a legitimate use in public bid solicitation activities. An example might be when a particular brand name item must be purchased in order to be compatible with existing equipment. The most restrictive type of specification, they have the effect of limiting bidding to a single product and are only used when only one product will meet an intended need.

5.4 Brand Name "or Equal"

In the absence of standard specifications, it is allowable to use manufacturers' brand or model designations as a standard. Brand names are used to indicate general performance and quality levels. Unless otherwise noted, it is understood that other brands or models will be accepted on an "or equal" basis.

To aid in communicating the desired quality level to bidders, an effort should be made to use brand name designations that are known throughout the industry or have specifications that are readily available. If a bidder does not know which of his products is comparable to the designated brand names, he cannot bid intelligently and may not bid at all. Bidders customarily know their competition and can usually tell without too much difficulty which of their brands or models will be considered equal. Still, the bidder cannot be sure which features of the item will be considered crucial in making the award. In addition to the brand name, the specifications should name the minimum salient characteristics to be used in comparing brands and making the award.

Vendors who represent other brands or models as "or equal" which clearly do not meet this standard of quality or use, may be dropped from the bid list. It is the responsibility of the bidder to furnish with the original bid or proposal submission sufficient data to determine if the goods or services offered conform to the bid specifications.

The University reserves the right to determine equivalency.

5.5 Detailed Design-type or Custom-made

Design specifications set the requirements for the item to be purchased by detailing the



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characteristics that the item must possess. These specifications are used to determine how a product is to be fabricated or constructed and is primarily used where a structure or product has to be specially made to meet a unique requirement. Design specifications have precise characteristics that can limit competition and generally do not accommodate rapidly changing technology. Their use is limited.

6. How to Develop Specifications

Consideration should be given to suitability and to overall cost effectiveness in addition to acceptability and initial price. Specifications by their nature, set limits and thereby eliminate or restrict items that are outside the boundaries drawn. Specifications should be written to encourage, not discourage, competition consistent with seeking overall economy for the purpose intended. The function of specifications is to provide a basis for obtaining a commodity or service that will satisfy a particular need at an economical cost. A good specification should do these things:

- Identify minimum requirements.
- Allow for a competitive bid.
- List reproducible test methods to be used in testing for compliance with specifications.
- Provide for an equitable award at the lowest possible cost.

To provide a common basis for bidding, specifications should set out the essential characteristics of the item being purchased, so that all bidders know exactly what is wanted. If an essential requirement is left out of the specification, an award may be made for a product that does not meet the needs of the purchaser. The suitability of the product may not become apparent until much later. Situations such as these are seldom resolved to anyone's satisfaction and can be a waste of Alabama taxpayers money. If such an omission is discovered in time, the bid should be canceled, specifications corrected, and new bids solicited. Avoid over-specifying or underspecifying. Items should be able to perform as necessary without unessential frills. **Requiring unnecessary features can result in specifications so restrictive that they can defeat competition and increase the cost of the item.** Remember that all purchasing activities are subject to public and vendor scrutiny.

If a specification allows both an equal opportunity to bid and objectivity of selection by the bidder, then the specification is serving its intent. A straightforward and fair evaluation based on good specifications will persuade vendors to bid.

7. Suggested Boilerplate

The following information is presented as a basic outline for specifications. Sections may be added or deleted as required by the product specification being developed.

7.1 Scope, Classification, or Description

The first words or lines of a specification should be a general description, classification, or scope of the product desired and the intended or desired use of the item.



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7.2 List of Requirements

These requirements should identify measurable physical, functional, and quality characteristics that meet the requirements. This may include a detailed list of characteristics, such as: sizes, physical dimensions, weights, percent and type of ingredients, types and grades of materials, standard of workmanship, or basic design.

The text should be clear, simple language, free of vague terms or those subject to variation in interpretation. The use of abbreviations should be restricted to those in common usage and not subject to possible misunderstanding

7.2.1 Measurements

All terms relating to measurements (gauge, capacity, volume, etc.) should be used in accordance with established precedent and trade practice. Review the document and make every effort to replace words with numbers or use words and numbers in combination (one (1) two (2)). Whenever you use numbers instead of words, communication is truly enhanced. All measuring and testing equipment is designed to provide specific numerical answers.

7.2.2 Figures and Tables

Figures, illustrations, graphs, etc. can often describe the item more clearly and accurately than text. They should be used as much as possible.

7.2.3 Group Terms

Group terms are designations with established precedent and trade practice, such as: type, grade, class, and composition. These terms are defined as follows:

- Type: Implies design, model, shape, etc. of commodities.
- Grade: Implies quality of a commodity.
- Class: Implies mechanical or other characteristics that are not in quality of grade.
- Composition: Implies chemical differences in commodities.
- Other: Other terms such as: style, color, form, weight, size, etc., are also used as group terms.

7.2.4 Shall, May, Should, or Will?

Use “shall” to express a requirement binding on the contractor or the purchaser.

Never use “may” or “should” to express required provisions.

Use “will” to express future requirements or when certain conditions are met.

7.3 Definition of Terms

The necessity for definition of terms can usually be avoided with good specifications. However, in those cases where proper interpretation is necessary or agreement as to definition of terms is a key part of the specifications, such definitions should be included.



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7.4 Sampling, Inspection, and Test Procedures

When samples are required, it should be clearly identified as a requirement in the specifications. All samples and test results should be retained for delivery compliance of products ordered. When possible, a test inspection plan should be developed and included in the specification.

8. Checking Your Specifications

To assure that your specifications meet the above criteria, use the following checklist:

- Specifications should be clear and accurate, yet simple. They should NOT be so specific that a loophole eliminates competition and allows a bidder to take advantage of the purchaser.
- Specifications should be understandable to both the bidder and the purchaser.
- Specifications should be as flexible as possible. Inflexible specifications defeat the competitive bid process.
- Specifications should be legible and concise.
- Specifications should be capable of being checked. Specifications that are written in such a way that a product or service offered cannot be checked as meeting specifications is of little value and results in confusion.
- The specification should be as fair to the bidder as possible and allow for competitive bidding by several bidders.