CHAPTER SEVEN

Getting Ready to Bid

CHAPTER HIGHLIGHTS

Introduction

- School nutrition directors, as the *Trusted Advisors*, are responsible for fully understanding the purchasing process

Ethical Concerns

- Unethical practices include:
  - Providing one supplier's cost information to another supplier prior to supplier selection
  - Accepting gifts, cash, free trips, or entertainment
  - Showing preference to suppliers because of:
    - Pressure from management
    - A long-term business relationship
    - Political connections

The Regulatory Environment

- A realistic goal for the *Trusted Advisor* is to understand the basic purpose of local, state, and federal laws related to equipment purchasing, and to know where to go for additional information when necessary
- Antitrust legislation includes:
  - The Sherman Act of 1890
  - The Clayton Act of 1914
  - The Federal Trade Commission Act of 1914
  - The Robinson-Patman Act of 1936
- A written procurement plan is an important part of the documentation needed during purchasing

Specifications

- Contain a detailed description of the equipment
- Specifications should be:
  - Simple, but exact
  - Easily identifiable with common terms
  - Reasonable
  - Capable of being met by several bidders
  - Clear and understandable
- Types of specifications include:
  - Qualified product list
  - Performance specifications
  - Brand specifications

CHAPTER HIGHLIGHTS *(continued)*

- Items to include:
  - General description
  - Utility requirements
  - Plumbing requirements
  - Mechanical requirements
  - Size or capacity requirements
  - Freight and delivery specifications
  - Installation requirements
  - Special instructions
- Pitfalls of writing specifications include:
  - Using old specifications
  - Letting salespeople write the specifications
  - Poor coordination of electrical and mechanical requirements
  - Accepting an inferior substitution
  - Not specifying a high enough quality level

Critical Path Planning

- Describes a plan set up to time the movement of supplies and equipment to coincide with the needs of the school nutrition program

Analysis of the Market and Evaluation of Vendors

- Market analysis will determine names of vendors, their location, types of equipment sold by the vendors, and their history of sales to the school
- Vendors will be reviewed for:
  - Equipment/product lines
  - Physical facilities
  - Delivery
  - Financial history
  - Service levels
  - Accounting practices
  - Performance at and following pre-bid conferences
  - Manufacturing quality standards

The Purchase System

- Requires two basic decision:
  - Appropriate purchase method
  - The pricing method
- Four purchase procedures are RFQ, IFB, RFP, and noncompetitive negotiation
- The small purchase procedure may be used for simple purchases that do not exceed the allowable dollar amount

CHAPTER HIGHLIGHTS *(continued)*

- The two basic pricing methods for purchasing equipment are line item awards or bottom-line awards

The Bid Document

- Is the statement of the terms and conditions of equipment purchase and is a legally binding contract

Getting Ready to Bid

Introduction

The actual purchasing process is very critical to ensuring that the school nutrition program receives the equipment that they need and desire. Everything begins with the menu and the determination of what products are necessary for the menu. Once these have been determined, purchasing the equipment is a multi-step process that school nutrition directors, as the *Trusted Advisors*, should fully understand in order to obtain the equipment they want. The steps in the purchasing process are the following:

- Plan menus
- Determine products necessary to produce menus
- Estimate the quantities of products needed
- Determine type of equipment needed to produce the products
- Determine product movement policies in order to determine size of equipment needed
- Develop the critical path plan
- Develop equipment specifications
- Document the purchasing process
- Analyze the market and evaluate vendors
- Determine the purchasing system
- Issue request for prices
- Evaluate responses
- Make vendor selection
- Place orders
- Receive the equipment
- Install the equipment
- Train nutrition assistants in the use of equipment
- Prepare meals

This process is similar to the steps used in purchasing food products. It is more complicated in that it includes knowledge about equipment and how it is used to prepare the food. In addition, school nutrition directors should understand how to avoid unethical situations, the regulatory environment, specifications, critical path planning, the market and vendors in the market, the purchase system in schools, and the bid document. Learning as much as possible about school foodservice equipment and fully understanding the needs of their school nutrition program is a key responsibility of the school nutrition director, as the *Trusted Advisor.*

Ethical Concerns

It pays to be a savvy consumer because not everyone in the industry maintains ethical standards. In spite of the federal regulation's efforts to foster substantial competition among a significant number of companies, price-fixing and bid-rigging still occur. A working knowledge of the law will help avoid these practices. The amount of money spent and the need for open competition make it essential that the school nutrition director, as the *Trusted Advisor*, adheres to the highest ethical standards. Whenever school nutrition directors feel that there is a question related to ethics, they should understand that taxpayers expect ethical behavior from public sector employees. There are numerous ethical concerns regarding the bidding process that should be addressed by all involved

in the purchasing process. The following ethical concerns represent an overview of actions that should be avoided:

- Giving the intent and appearance of unethical or compromising practice in relationships, actions, and communications
- Providing one supplier's cost information to another supplier prior to supplier selection
- Accepting gifts, cash, loans, credit, free trips, or entertainment from a supplier
- Showing preference to suppliers because of pressure from administration, long-term business relationship, and/or political connections
- Obtaining proprietary information from one supplier and sharing it with a competing supplier
- Maintaining any personal business or professional activity that would create a conflict between personal interests and the interests of the employer
- Allowing personality to enter into purchasing decisions

The Regulatory Environment

The regulatory environment is a crucial, but complex area involving numerous laws. A realistic goal is to understand the basic purpose of local, state, and federal laws related to equipment purchasing, and to know where to go for additional information when necessary.

State laws must be followed in purchasing equipment for schools. State agencies can direct school nutrition directors to the specifics of their state laws. The federal regulations for school purchasing are given in Volume 7, Code of Federal Regulations. School nutrition directors should following these regulations for both food and equipment purchasing. Examples of the regulations include:

- Comply with federal, state, and local laws and regulations
- Maintain a contract administration system which ensures that contractors perform in accordance with the terms, conditions, and specifications of their contracts, or purchase orders
- Maintain a written code of standards of conduct governing the performance of employees engaged in the award and administration of contracts
- Review procurements to avoid purchase of unnecessary or duplicative items
- Consolidate or break out procurements for more economical purchasing
- Analyze lease versus purchase alternatives (including state or local intergovernmental agreements for common goods and services) to determine the most economical approach, when appropriate
- Make awards only to responsible contractors, including a review of contractor integrity, compliance with public policy, record of past performance, and financial and technical resources
- Conduct procurements in a manner that prohibits the use of statutorily or administratively imposed in-state or local geographical preferences in the evaluation of bids or proposals
- Write selection procedures for procurement transactions that will:
  - Not unduly restrict competition
  - Identify all bidder requirements
  - Ensure that all pre-qualified lists of persons, firms, or products which are used in acquiring goods and services are current

- Include enough qualified sources to ensure maximum open and free competition
- Avoid precluding potential bidders from qualifying during the solicitation period
- Conduct all procurement transactions in a manner providing full and open competition and avoid practices, such as:
  - Placing unreasonable requirements on firms to qualify to do business
  - Requiring unnecessary experience and excessive bonding
  - Using non-competitive pricing practices between firms or between affiliated companies
  - Giving noncompetitive awards to consultants that are on retainer contracts
  - Allowing organizational conflicts of interest
  - Specifying only a brand name product instead of allowing an "equal" product to be offered
  - Performing any arbitrary action in the procurement process
- Respond in accordance with good administrative practice and sound business judgment, for the settlement of all contractual and administrative issues arising out of procurements, such as source evaluation, protests, disputes, and claims
- Maintain appropriate documentation, such as:
  - Rationale for the method of procurement
  - Selection of contract type
  - Contractor selection/rejection
  - The basis for the contract price

Antitrust legislation has been enacted on the federal and state levels. The antitrust laws include the Sherman Act of 1890; the Clayton Act of 1914; the Federal Trade Commission Act of 1914; and the Robinson-Patman Act of 1936, an amendment to the Clayton Act. These are summarized in the table below. When these laws are effectively and responsibly enforced, they can save school districts millions of dollars a year in illegal overcharges. Violations of antitrust laws often result in higher prices for inferior products and services. For complete information on the regulations, visit http://www.nara.gov

Federal Antitrust Legislation*		
Legislation	Date	Essence of Legislation
Sherman Act	1890	This Act outlaws all contracts, combinations, and conspiracies that unreasonably restrain interstate trade. This includes agreements among competitors to fix prices, rig bids, and allocate consumers. The Sherman Act also makes it a crime to monopolize any part of interstate commerce. An unlawful monopoly is when only one firm provides a product or service and it has become the only supplier, not because its product or service is superior to others but by conduct that suppresses competition. The Act is not violated simply because one firm's vigorous competition and lower prices take sales from its less efficient competitors. Sherman Act violations are punished as criminal felonies.

Clayton Act	1914	This Act is a civil statute which carries no criminal penalties. It prohibits mergers or acquisitions that are likely to lessen competition. A key provision of the Clayton Act authorizes private parties to sue for triple damages when they have been harmed by violations of either the Sherman or Clayton Acts.
Federal Trade Commission (FTC) Act	1914	This Act prohibits unfair methods of competition in interstate commerce, but carries no criminal penalties. Even if a particular practice does not violate the Sherman, Clayton or Robinson-Patman Act, it may still violate the FTC Act. The FTC Act is used to prevent violations of both the specific antitrust laws and the public policy expressed in those laws.
Robinson-Patman Act	1936	This Act prohibits certain discriminatory prices, services, and allowances in dealings between merchants. Under certain circumstances, the Act prohibits a seller from granting lower prices to favored buyers, whether the price discrimination is instigated by the seller or forced upon the seller by the buyers. The Act does not make all price discrimination illegal. Certain defenses are provided (discounts to meet competitor's lower prices, for example). The Act imposes criminal sanctions for certain practices and for sales at unreasonably low prices if the purpose is to destroy competition.

* *Taken from A Guide for Purchasing Foodservice Equipment, NFSMI, The University of Mississippi, 1998.*

Indictments have alerted school purchasers to the importance of the antitrust laws. Price-fixing and bid-rigging conspiracies are, by their nature, secret and therefore difficult to detect. Law enforcement officials rely on complaints and information from consumers and competitors to identify violations.

Price-fixing and bid-rigging schemes generally occur where there is inadequate competition. More sellers mean more competition and usually better prices. School purchasers should be alert to the warning signs of price-fixing and bid-rigging, as noted below. The legal staff for the school district should be consulted if any of the following warning signals are observed:

- Evidence that two sellers of similar products have agreed to price their products a certain way, to sell only a certain amount of their product, or to sell only in certain areas or to certain customers
- Large price changes involving more than one seller of similar products of different brands, particularly if the price changes are of equal amount and occur at the same time
- A seller stating, "We can't sell to you; according to our agreement, so-and-so (the seller's competitor) is the only firm that can sell to you"
- Fewer competitors than normal submitting bids on a project or product
- Competitors submitting identical bids
- The same company consistently coming in as the low bidder and getting contracts for a certain service or a particular area
- Bidders appearing to win bids on a fixed rotation

- An unusual and unexplainable large dollar difference between the winning bid and all other bids
- The same bidder coming in substantially higher on some bids than on others, with no logical cost reason to explain the difference

The Procurement Plan and the Need for Documentation

School nutrition directors, as *Trusted Advisors*, understand the importance of a written procurement plan as a part of the documentation required during equipment purchasing. The procurement plan details the procedures of the school/school district in regards to the purchase of food or equipment in compliance with local, state, and federal regulations. In addition to the need for documentation, the procurement plan is also important because it helps to clarify the procurement practices for everyone involved in the equipment purchase. The procurement plan will generally include:

- Procedures for determining when formal purchasing procedures are required
- Formal purchasing procedures, such as:
  - Invitation for Sealed Bid (IFB)
  - Request for Proposal (RFP)
- Small purchase procedures
- Emergency purchase procedures
- Responsibilities and process used for all purchases
- Record keeping and documentation
- Code of conduct
- Conflict resolution
- Public access to procurement information

Specifications

The specification is a statement that contains a detailed description or enumerates particulars of a piece of equipment. The importance of writing precise and detailed specifications becomes overwhelmingly clear if one has ever thought they were purchasing one size or type or quality of equipment and ended up with a piece of equipment that was very different than what was expected. A specification will include all the technical details and requirements that the purchaser has in mind for a particular piece of equipment. The specification will:

- Clarify what is wanted for a particular piece of equipment
- Describe to the distributor and manufacturer about what is wanted for a particular piece of equipment
- Identify for those receiving the particular piece of equipment what should be delivered

There is no magic guideline for the proper length of a specification. Specifications will vary from a few lines for a "known" piece of equipment that one wants to buy by model number from a particular manufacturer to numerous pages for more generically written specifications which are detailed so that many manufacturers may bid on the equipment. More generically written specifications will usually result in lower equipment prices.

It is important for school nutrition directors operating as *Trusted Advisors* to understand the terms that manufacturers use in writing specifications. The difference between an option and an accessory is one example. An option is a variance from the standard production model and will

increase the purchase price. A desired option must be specified in the specification. An option may not be added later. An accessory is also a variance, but may be purchased at a later date. As a more specific example, an extra depth convection oven is an option; however cooking racks are an accessory. In addition, the words "shall, will, should, and may" have different meanings:

- Shall is used to express a binding requirement, in others words, this refers to a requirement
- Will is used to express a declaration of purpose on the part of the purchaser or to express a future tense
- Should or may are used to express a non-mandatory provision

A specification should be developed to identify minimum requirements, allow for a competitive bid, and provide for an equitable award at the lowest possible cost. To assure that the specification meets these criteria, the following may be used as a checklist. When writing a specification, keep it:

- Simple, but exact
- Easily identifiable with common terms used in the marketplace
- Reasonable as unnecessary precision is expensive and restrictive
- Capable of being met by several bidders for the sake of competition
- Clear and understandable

Equipment specifications may seem to be written in another language, but a great deal of information is available to assist with the development process. Information may be obtained from:

- Manufacturers' catalogs which are now typically available on-line at the manufacturers' Web site
- Sales literature
- Equipment testing laboratories
- Manufacturers' representatives and dealer salespeople
- Trade journals
- World wide web

Manufacturers' specification sheets or "cut sheets" are the means by which manufacturers describe their equipment and document important engineering information. The Foodservice Consultant Society International (FCSI) and the North American Food Equipment Manufacturing (NAFEM) associations have developed recommended guidelines for these catalog specification sheets which manufacturers typically use to format their specifications. In addition, manufacturers comply with Construction Specifications International (CSI) which is a system of cataloging bid specifications in the construction industry. Manufacturers' specification sheets provide detailed information on a front and back page. The front page gives product information that includes:

- Equipment type
- Model number
- Capacity
- Description of construction materials and finishes
- Construction and design characteristics
- Performance characteristics
- Description of controls
- List of standard features
- Description of safety features
- List of optional features available at extra cost
- Laboratory certification and approval symbols (UL, NSF, CSA, AGA)

- Special notes regarding any geographic limitation like altitude, humidity, temperature
- CSI section number
- Date printed

The back page provides detailed engineering information which includes:

- Model number
- Drawings to scale in English and metric dimensions
- Plan view, elevation/sections views
- Location of utility connections on plan and elevations
- Computerized Assisted Design (CAD) symbols
- Dimensions – interior, exterior, service, ventilation, air circulation, and clearances
- Net and shipment (crated) weights
- Crated dimensions – door clearances for building access
- Data concerning utilities – gas, steam, water, electric, and ventilation
- Miscellaneous information – variations, accessories, options, availability of colors, and finishes
- Date printed/written
- Manufacturer's address, phone number, and fax number

Once equipment information has been gathered, the next step is to write specifications. This is an important responsibility and is the hardest function in the purchasing process. It is wise to utilize members of the project team and others to help provide and collect information for the development of the school nutrition program's specifications. Such a group might consist of the:

- Local school nutrition program personnel
- Architect
- Board members/other administrators
- Foodservice consultant
- Manufacturer's representatives
- Equipment dealers
- Service agencies
- Other professional colleagues

It is the school nutrition director's responsibility as a *Trusted Advisor* to analyze and develop the information to create the school nutrition program's unique and final specifications. The federal regulations clearly state that the school nutrition director must develop the actual specifications used in the invitation for bid (IFB).

Types of Specifications

There are several types of specifications which will be needed at one time or another. Specifications take many forms, each having specific respective benefits. Listed below are the various types.

Qualified Product List

A qualified products list (QPL) identifies various brands that have met specific criteria. Bidding is limited to those manufacturers whose products are on the list. The purpose of this type of specification is to determine, in advance, those products that meet the established criteria. The evaluation of these bids is greatly simplified. Awards may only be made for products on the QPL. A bidder who submits a bid for a product not on the QPL is not responsive, i.e. does not follow bidding requirements. Any questions from manufacturers whose products are evaluated as unacceptable can be handled before the bids are issued. Developing a QPL is time consuming, but the benefits at the time of bidding are worth the effort.

When using a QPL, the specifications should state that the products on the QPL have been tested and have met the stated specifications. In addition, when a QPL is adopted, manufacturers that are affected should be notified and told all requirements necessary for their items of equipment to qualify for the list. The QPL should be updated frequently.

Design Specifications

Design specifications detail the characteristics that an item must possess to meet the school nutrition program's specific requirements. Some specifications are so detailed that they also may describe how the product is to be manufactured. Design specifications are not as applicable for purchasing items designed by a manufacturer. The tendency to specify equipment with exact characteristics can be too restrictive and cost prohibitive. This is the case when dealing with patented products. For items that are neither patented nor custom made, a modified design specification can meet the criteria of a good specification by describing only essential features. This allows bidders more flexibility when establishing their bid prices.

Performance Specifications

Performance specifications describe the performance requirements that a product has to meet. The end result becomes the priority consideration. The manufacturer is given latitude in how the requirement is to be accomplished. Performance specifications encourage innovation and ingenuity. Tests or criteria are developed to measure an item's ability to perform as required. One example of a performance specification might be that an oven must be able to bake a certain volume of rolls, evenly brown on all racks, in a specified number of minutes. Specifications can include both design and performance features used as prerequisites in developing a qualified products list. One reason why writing foodservice equipment specifications is so challenging is that there are so many different types of equipment, each requiring different parts to the specification.

Brand Specifications

Brand name specifications cite a brand name, a model number, and other descriptions that identify a specific product of a manufacturer. Brand names should be used as an example of the desired quality level but not used to restrict the bid only to those brands. It is understood that items equaling or surpassing the quality level are also acceptable. It is better to use more than one brand name if possible. It is essential to include specific information that clearly identifies the level of quality and performance expected. It is appropriate to name the salient characteristics to be used in determining bid responsiveness. Brand names alone generally do not constitute adequate specifications because:

- Objectivity may be lessened in the process of awarding the bid
- Equality of opportunity among bidders may be reduced
- Competition may be eliminated

Items to Include in a Specification

General Description

Begin with the commonly used name and quantity required for the item. Include the type, size, style, and model. Any additional information regarding the types of materials that the equipment is to be made from (stainless steel, for example) should be included if other alternatives are possible. A description of the desired quality or grade is vital in the specification and should include what inspections and performance tests will be done on the equipment. Certification requirements (such as UL, NSF, international, etc.) should also be listed.

Drawings or diagrams may also be necessary, particularly for custom pieces of equipment. Keep in mind, however, that whenever standard pieces of equipment are available they should be purchased as they will be less expensive than custom. At times though, the utility of a custom piece of equipment may make the equipment worth the added price.

If a decision has already been made that a specific piece of equipment from a particular manufacturer is the one that is needed, then the name of the desired manufacturer, and the manufacturer's model number for the item will need to be listed.

Some buyers will use the phrase, "or prior approved alternate that meets or exceeds the specifications in capacity, utilities and benefits." Other buyers feel so strongly that the potential for a misunderstanding of the terms "meets or exceeds" is so great that they make it a policy to never use this statement. If such a statement is used or is required by one's school district to allow for competitive bidding, details of the requirements and exceptions should be specified. The example below developed by the Federal Department of Justice, Bureau of Prisons may be considered and/or modified.

> The bidder must state clearly in the bid any exceptions or deviations to these specifications and shall submit for evaluation evidence that the exception or deviation is equal or superior to the specifications. Requests for deviations after award has been made will be denied. Should the equipment furnished under the specification be found not to comply with the specification at the time of final inspection, the contractor shall be notified and given ten days in which to bring the equipment into full compliance. Payment will therefore be withheld even though the equipment may of necessity be put into operation until compliance is achieved.

If one is not specifying a particular equipment model, the description of the piece of equipment is critical. Useful information can be obtained from manufacturer's specification sheets (also called cut sheets), but one should be careful of what is chosen from the manufacturer's cut sheets for the school nutrition program's equipment specification. Cut sheets will list standard features for every model number. In this case, there is no need to list features that are standard since the model number includes those features. One can simply write "with all standard features" after the model number.

Then, the add-on "accessories" or "extra features" are selected. Cut sheets should be read carefully as manufacturers do not always include as standard what one might think would be a "standard feature." After selecting the "extras", detailed descriptions should be given for those extras, such as colors, sizes, and finishes.

Example:
One (1) each convection oven; ABC Range Company Model Number I 23-456-A or approved alternate that meets or exceeds the specifications in capacity, utilities and benefits. Provide with all standard features and the following:

a. Four (4) 25" high stainless steel legs with adjustable stainless steel feet
b. Stainless steel left and right sides
c. Oven control package "E"

Utility Requirements

Electrical requirements are an essential part of the specification. This information appears on the manufacturer's literature. Specifications should list the voltage, cycles (60 cycle current is standard in the U.S.), and phase, as well as the electrical load. The electrical load will be in Amperes (Amps), Watts, Kilowatts, or Horsepower. It is important to make certain when selecting voltages that the area of the school where the item will be used has that voltage and phase available for use.

Example:
Electrical Requirements: 120 volt 60 cycle single phase @ 6.0 Amps

Any steam requirements will also need to be listed in the specification. This information will appear in the manufacturer's literature. The literature will list the sizes of the connections and the steam pressure required. Steam pressure is shown in pounds per square inch (psi). Special pressure reducing valves (PRV) and water condensate valves may also be required and should be specified. Building steam should be checked to make sure that it is potable (approved to be sanitary) if the equipment's steam will be contacting food and that there is an ample supply of steam to meet operational requirements. It is best to consult with experts before attempting to write specifications for direct connected steam equipment.

Plumbing Requirements

Plumbing requirements are also needed for equipment specifications and are again listed in the manufacturer's literature. The specification should include any hot water, cold water, drain(s), or gas requirements for the item. The gas consumption of the equipment should be listed as well as the gas connection size. The consumption will be shown on the literature as Btu/HR. Again, the area of the school where the item will be used should be checked to make certain that it has the water, drains, and/or gas available for use.

Example:
Plumbing Requirements: 3/4" Gas @ 60,000 Btu/HR

Mechanical Requirements

Mechanical requirements of equipment are those requiring ductwork connections for the purpose of venting. This would include equipment items like dishwasher condensate hoods or cooking equipment exhaust hoods. The duct connection size will appear on the specification along with

the suggested air to be exhausted or supplied to the equipment. The exhaust or supply will be noted as cubic feet per minute (CFM) and static pressure (SP). Static pressure is the amount of air resistance the equipment has and will be noted in inches, i.e., 10" x 30" duct connection for 3,200 CFM @ 3/4" S.P. It is advisable to consult with experts before attempting to write specifications for equipment with mechanical requirements. Ductwork and fans will require other contractors to be involved. Any special instructions to the bidders should also be included, such as "Deliver, uncrate and set in place ready for the final connections by others".

Size or Capacity Requirements

Equipment size or capacity should be considered carefully. Information is often available from manufacturers, but their data generally will not include loading or unloading time. In addition, equipment capacity is a complex issue. For example, a mixing bowl may hold 20 quarts, but when 12 quarts of liquid are being whipped in the bowl, more capacity is needed. In fact, a 20 quart bowl would be needed for whipping 5 quarts of cream. It is therefore best to consider manufacturers' estimates as guidance only.

Equipment size needs should be calculated using a "recipe" method including information about the number of portions required, the size of the portions, the equipment capacity, and time constraints. The following steps may be used in this computation:

1. Select the representative menus and list the equipment to be used
2. Determine the number to be served and the portion size
3. Multiply the number of portions times the portion size
4. Determine peak serving demands and the portions (weight or volume) needed at that time
5. Determine batch cooking times and the quantity per cooking cycle per piece of equipment, compile information on quantities and time required for processing the food item in the equipment (the equipment load capacity)
6. Divide equipment load capacity into the number of servings to get the batch size
7. Calculate the size and number of pieces of equipment needed to produce the quantity of food required to meet the maximum demand

Freight and Delivery Specifications

Freight and delivery requirements should be given as specifically as possible, including who will pay for the delivery and installation. If this is not done, then the company delivering the equipment could simply "dump" the piece of equipment at the back door. This would be the worst possible situation, however, it could occur. One example of a better description of the delivery expectation may be "set in position designed on the plan and anchored to the floor". In addition, delivery requirements may include the start-up needs, such as:

- Adjustment
- Initial oiling, if necessary
- Demonstration
- Clean up at the time of delivery as there can be huge crates or wooden boxes from the packaging
- Specific date(s) and time for delivery
- Early arrival storage and who will pay for the storage
- Late arrival issues and potential costs incurred

Freight charges and ownership of the equipment until the time it arrives at the school also needs to be detailed and understood before a purchase decision is made. One foodservice operation described a situation where they purchased an oven which was delivered to the back loading dock of the facility where it was to be installed. Unfortunately, the oven was stolen from the back dock before the oven could be installed. Therefore, consider the ownership issue in this example. This highlights the importance of knowing when ownership occurs. Terms used in contracts that detail where the ownership of the equipment might change hands and who will pay for the freight charges are described as:

- Free (or freight) on Board (F.O.B.) Origin – the ownership changes at the manufacturer/factory to the school/purchaser
- F.O.B. Destination – the ownership does not change until the equipment is delivered to the school foodservice
- Freight prepaid – seller pays the freight
- Freight collect and allowed – buyer (school district) pays the freight charges, but deducts charges from the seller's invoice for goods

To avoid unnecessary headaches, it is recommended that equipment be shipped to the dealer location. In that way, responsibility is placed on the dealer to receive the equipment, check it, and then deliver it to the school site at the defined date and time. If delivery is made directly to the school, facilities must be adequate to receive the equipment from the truck and there must be adequate personnel to unload the equipment. If there is a loading dock, it should be specified that the delivery is made on a truck with a lift gate. Often with new construction or an extensive renovation project, the general contractor receives the equipment.

Installation Requirements

The installation requirements that should be included in the equipment specification may be different for each piece of equipment in the bid. It is important to make sure the details of this part of the process are included in the bid. To avoid any misunderstanding, it is essential to make certain that the responsibilities for the various aspects of the installation process are clearly defined.

No matter who is responsible for installing the equipment, it is a good practice to request installation manual(s) from manufacturers before writing the specifications. The detailed information in the manual verifies the requirements, confirms the fit, promotes fair bidding, and enables the school nutrition director, contractor, or architect to make a preliminary review.

Installation requirements for new construction and renovation projects are fairly standard and usually are coordinated by the general contractor. Replacing or adding new equipment, however, may present unexpected obstacles that need to be considered, prior to purchase. Coordination of the installation of replacement or new equipment purchases will typically be the responsibility of the school nutrition director or designee. If the successful bidder is to assume the responsibility for any aspect of the installation process, detailed requirements should be included in the specification. The following list of questions is helpful in identifying the bidder requirements for installation.

- Who will install the equipment
- Who will pay for the installation
- Are installation charges included in the price of the equipment or will there be additional charges
- Who will receive, uncrate, and set the equipment in place

- Who will remove crates and other debris
- Who will make final utility connections
- Who will remove the existing equipment
- Who will relocate old equipment to a new location
- Who will disconnect the utilities from the existing equipment (water, electric, gas, steam, drains, and ventilation)
- Who will apply for permits, if required
- Who will install, replace, or adjust fire protection for the equipment
- Will there be obstructions in moving equipment into the facility and how will these be handled (doorways, 90° turns, stairs, etc.)

The installation requirements written in a specification will depend on the needs of the school nutrition program and the piece of equipment being purchased. Generally, equipment installation in a specification is listed as:

- Counter-mounted equipment on 4" legs, sealed to counter, or portable
- Floor-mounted equipment on 6" legs, casters, or sealed to floor
- Equipment not on casters or not portable shall be sealed to the wall and/or adjoining equipment, or spaced to facilitate cleaning
- Portable equipment and equipment installed on casters shall be installed with flexible utility lines and/or quick-disconnected couplings

In addition, the specifications should state that the equipment must be installed so as to permit all exposed areas of the equipment and adjacent surfaces to be accessible for cleaning. If an item of equipment is not portable, is not installed on casters, or is not otherwise easily moved, the specification should state that it shall be (1) sealed to adjoining surfaces with an approved sealant or metal flashing, or (2) provided with sufficient space between and behind the equipment to allow easy access. Recommended spacing requirements for food equipment include the following:

- Provided access is available from both ends of the equipment and the equipment length is 4' or less, the equipment shall be spaced at least 6" from walls
- Provided access is available from both ends of the equipment and the equipment length is over 4' but less than 8', the equipment shall be spaced at least 12" from walls and other equipment
- A minimum of 6" of space shall be provided between items of equipment to allow access for cleaning
- Additional space may be required for large equipment when 6" is not adequate to provide access for cleaning
- When the distance between the top of a walk-in cooler/freezer or canopy hood and the ceiling is 24" or less, an approved enclosure shall be required
- Obstruction of the access opening between and/or behind equipment by a chase or rigid utility connection may require additional spacing

Special Instructions

Standard bidding procedures may be included in the specification so that bidders will be aware of procedural requirements. Bidding procedures are discussed in more detail in Chapter Eight. In case of bidder questions regarding these procedures, contact information for the author of the specifications may also be included.

Sometimes, qualifications of the bidder may also be requested. This may be particularly important for smaller or unknown dealers.When the school district buys directly from the manufacturer, the following questions should first be asked. Answers will probably come from school maintenance staff, school nutrition managers, and the equipment salesperson.

- Who will track down late or missing equipment
- Who will schedule the delivery and who will receive the equipment
- Who is responsible if the equipment arrives damaged
- Does the voltage and phase match the electrical service at the school
- Is the equipment properly fused
- If it is "plug-in" equipment, does the plug shape match the plug available
- Are the gas lines in the right location and are they adequate
- Will gas, water, or steam pressure regulators be required
- Are water filters or line strainers required
- Does the equipment meet the state and local plumbing, electrical, mechanical, fire and health codes
- Who will uncrate the equipment and set it in place
- Will the equipment fit through the doors or openings at the school
- Will special lifting equipment be required to get the equipment in the building
- Is there proper clearance between equipment items as some controls are heat sensitive and must have "breathing" clearance to operate properly
- Can the equipment be serviced after it has been set in place
- Who will service the equipment and how far away are they
- Is any service included in price
- Are spare parts available in case of a break-down
- Are special tools required to accomplish the installation
- Who will calibrate the thermostats or controls
- Does the equipment require special lubrication before operation
- Will the new equipment require a fire protection system
- Who will initiate the warranty
- Are there hidden packing materials that must be removed before hook-up
- Who will clean and sanitize the equipment before initial usage
- Who will install "loose" parts or accessories such as vacuum breakers, solenoid valves, water flow controls and starters
- Who will demonstrate the proper operation and maintenance of the equipment

Specification Reminders

The most common errors in equipment purchasing are likely to be those where some part of the equipment needed is not detailed enough or is left out of the specification. The following reminders may help to minimize such problems from occurring:

- Quantities needed of each piece of equipment
- Required delivery dates (specify a range of dates)
- Provision for on-site adjustments by equipment supplier
- Required on-site demonstrations or training
- Seals of approval required on equipment (UL, NSF, AGA, etc.)
- Sizes and capacities of each piece of equipment
- Warranty requirements (minimum of one year)

- Heavy duty (not restaurant weight) equipment specified
- Availability of replacement parts for the life of the equipment
- Service needs, including parts (for example, all equipment shall be available within a reasonable distance from installation site in order to assure repair and restoration of operation within 48 hours after the manufacturer's designated service agency has been notified of breakdown)
- Special features are specified, finishes and options.
- Electrical requirements such as voltage, cord sets, and amperage
- Water, gas, and waste requirements
- Operational and parts manual are provided (it is recommended that one copy go to the school with the equipment and that two additional copies of the manual go to the district school nutrition office)
- Consistent standards – make sure all models specified are indeed equal
- Avoidance of fabricated equipment if a standard piece of equipment can serve the same purpose
- Avoidance of painted finishes when possible
- Stainless steel is the material of choice for most equipment (14 gauge for sinks, table tops, shelves, 16 gauge for side and top panels of equipment)
- Choice of simplest equipment possible to get the job done
- Locking casters, when possible, allow easy cleaning and movement for repair and service
- HVAC equipment shop drawings indicate exhaust requirements, make-up air requirements to hood and heat given off by refrigeration equipment
- Plumbing equipment shop drawings indicate gas flow rate, inlet gas pressure, drain sizes, and water pressure requirements

Pitfalls of Writing Specifications

Because the preparation of school nutrition program equipment specifications can be a daunting task, it is important to understand what can go wrong if this important task is not correctly performed. There are five problems or pitfalls which sometimes occur in school nutrition programs.

- Using old specifications
  - A common approach is to find old specification or guidelines from previous projects and use these as a "reference." This is a good place to begin, but confirm equipment needs before using "as-is". No school nutrition program is like any other and equipment can become obsolete. The best that old specifications can do is offer a rough guideline of what should be covered.
- Letting salespeople write the specifications
  - Salespeople are a great source for equipment information. After all, who knows equipment better than they do? But remember, their job is to sell equipment. They do not release the architect or school nutrition director from making comparisons and gathering information on the best equipment available to do the job needed. Similarly, although there is useful information on the manufacturer Web sites, the Web sites are also intended to market the products for sell.
- Poor coordination of electrical and mechanical requirements
  - Equipment has been bought and paid for that could not be installed because it was gas and the kitchen was all-electric. In addition, equipment has been purchased that could not be used because the plumbing lines were too small. Be careful about

coordinating electrical and mechanical requirements of the equipment on the project. This is especially true for renovations and additions. Also, when equipment is being provided directly by a vender with no contractor involved, the structural supports or load capacity of the structure should be verified by a registered structural engineer.

- Accepting an inferior substitution
  - When using proprietary specifications, the equipment specified should all be equal in terms of features provided and quality of fabrication. This is a difficult thing to assess. Every manufacturer makes a slightly different piece of equipment. The least expensive piece of equipment will be provided, so do not specify it unless it truly is what is needed. Make sure the description of the equipment provided in the specification is complete because it will be far less difficult to determine whether an offered substitute is really equal in all aspects. Remember, the architect and school nutrition director have the final say as to whether equipment offered "as equal" meets the criteria because they have established the specifications.
- Not specifying a high enough quality level
  - Specify the highest quality the budget will allow. Always specify heavy duty not restaurant weight equipment. Restaurant weight equipment is only one step above home appliance weight. Always seek the best quality equipment the school nutrition program can afford.

Critical Path Planning

Critical path planning is a term used to describe a plan that is developed to time the movement of supplies and equipment to coincide with the needs of the school nutrition program. Critical path planning begins with the "end in mind". In other words, the critical path plan is based on the calendar date upon which the school will need to be in operation with the equipment. When this date has been selected, the tasks that need to be accomplished by this date can also be set up in the proper sequence and time frame so that the critical path can be followed to meet the school's goal. Examples of tasks that might be scheduled in the critical path include:

- Menu planning to know your production needs
- Development of the product list and descriptions
- Determination of the type of equipment needed to produce the products
- Estimation of quantities needed and product movement policies in order to determine the size of equipment needed
- Equipment research
- Development of equipment list and specifications
- Notification of purchasing department to schedule pre-bid conference with interested bidders/vendors
- Scheduling of pre-bid conference by purchasing department
- Mailing of draft equipment list to vendors
- Pre-bid conference
- Screening from pre-bid conference
- Draft instructions and equipment list to purchasing department
- Draft documents to be mailed to potential vendors
- Final pre-bid conference
- Modification of equipment list, if needed

- Transmit revised equipment list to purchasing department
- Issuing of price requests by purchasing department or school district designee, following state purchasing laws
- Bid opening by school district designee

Critical path planning allows the school nutrition director and the school purchaser to keep the process organized and within guidelines established by state purchasing laws . Purchasing is not part of the daily routine, so it is easy to forget a task at the appropriate time. Critical path planning is also essential because delays in one area can result in additional delays in others, resulting in a much later completion date. Critical times must be realistic for accomplishing the task. Bidders, for example, must be able to deliver and install equipment within the dates established by the specification. The construction schedule should help determine appropriate dates. Even so, it is best to allow a minimum of three weeks from complete installation of equipment until the first day of meal service. The bottom line is to be ready for the unexpected. This includes having an alternate plan for preparing and serving meals if construction is delayed.

Analysis of the Market and Evaluation of Vendors

School nutrition directors should analyze the market and evaluate the vendors. First, the school nutrition director will need to determine who manufactures, sells, ships, delivers, and installs the equipment to be purchased. Information that needs to be gathered will include:

- Names of vendors
- Vendors' warehouse location
- Types of equipment sold by the vendors
- Vendors' history of sales to the school/school district

Careful evaluation is critical if a district needs to disqualify a vendor and should be done using pre-determined vendor criteria. Review of vendors is typically based on:

- Equipment/product lines
- Physical facilities
- Delivery
- Financial history
- Service levels
- Accounting practices
- Performance at and following pre-bid conferences
- Manufacturing quality standards

Effective communication with vendors is essential. Pre-bid conferences, for example, may help to eliminate confusion for both parties and prevent mistakes later. In addition, sending a school/school district profile to all vendors will help improve communication with vendors and help vendors know how to work with the school. The profile should be short and easy-to-read. The profile offers:

- Contact information
- Statistics about the district
- School nutrition program information (breakfast, lunch, catering, summer food programs, supplemental sales)
- Food production and delivery requirements
- Request for prices

- Facts about how equipment will be evaluated
- Sales call policy
- Special requirements for equipment.

The Purchase System

Federal and state procurement regulations/laws should be considered for all decision making about equipment purchases. Equipment purchasing for the school nutrition program will require two basic decisions: 1) the appropriate purchase method and 2) the pricing mechanism.
When schools are deciding on the appropriate purchase method, there are four basic purchase procedures. They are:

- Small purchase procedure or request for quotation (RFQ)
- Competitive sealed bids (IFB)
- Request for proposals (RFP) competitive proposals
- Noncompetitive negotiation

Purchase Methods

Small Purchase Procedure or Request for Quotation (RFQ)

The small purchase procedure is used for simple and informal purchases that do not exceed the allowable dollar amount. Small schools also use this method but, though allowed, it does not yield the most cost effective pricing. Small purchase prices often are quoted over the phone or by a sales person. The purchaser must record the price quoted and maintain open and free competition when using the small purchase method.

Invitation for Sealed Bid (IFB)

Sealed bids are the standard when the only variable is the price of a product being purchased. Because the award goes to the lowest responsible bidder who meets the terms and conditions, an IFB requires clear, concise specifications. Bids are accepted or rejected on a pass/fail basis. No negotiation of price or terms is permitted. An IFB is normally used to acquire products and non-technical services.

Most school districts have standard contract language for sealed bids. This standard language is often called the boilerplate. The usual sections of a sealed bid document are:

- Section I – Transmittal page and signature page.
  - The Certification Statement related to debarment or suspension should be included in this section. If this statement is not available, it may be obtained from the State Agency.
- Section II – Standard terms and conditions, such as:
  - Correction of mistakes
  - Collusion
  - Unit price prevailing
  - Adherence to specifications

- Section III – Special instructions, such as:
  - Extensions
  - Brands approved
  - How to offer alternate brands or substitutions
  - Responsibility criteria set at minimums for elements critical to successful bidder performance
  - How to demonstrate bidder compliance with criteria
- Section IV – Specifications and pricing information form, to include:
  - Specifications for equipment to be purchased
  - Pricing information form developed by the school nutrition district staff, that contains:
    - Equipment item name that corresponds with the specification (completed by the school nutrition program)
    - Quantity to be purchased (completed by the school nutrition program)
    - Space for the bidder to insert:
      - Unit price
      - Extended price
      - Contact information for the party who will be responsible for the equipment start-up
      - Contact information for the party who will be responsible for the equipment use and care demonstrations
      - Contact information for the factory authorized service agent who is authorized by the equipment manufacturer to service the equipment during the warranty period
- Section V – Billing address and delivery locations
- Section VI – Potential bidders

Request for Proposal (RFP)

A request for proposal is the standard method when purchasing the product or service requires evaluating several subjective criteria along with the price and is commonly used for purchasing equipment or for equipment maintenance contracts. An RFP allows evaluation of other variables besides cost. To develop a request for proposal, variables should be identified and assigned a point value relative to their worth. Budget/cost is a critical variable that should get more than 50% of the total points.

A two-step process is recommended to evaluate responses to an RFP. The first step is negotiating variables in the technical proposals. The second step is negotiating the price. The RFP instructions should indicate how proposals are selected for negotiation. Because the budget/cost portion of the RFP evaluation is objective, it is an appropriate way to select vendors for negotiation. The instructions might read, "The two vendors offering the lowest budget/cost proposals will be selected for negotiations." An example of RFP criteria for an equipment maintenance contract is shown below.

Selection Criteria	Maximum points	Points for this response
Years company has been in foodservice equipment maintenance business	10	
Years experience of technical staff	5	
Brands of equipment owned by school district compared to bidder's factory authorized service	10	
Time required to get parts for equipment not covered by factory authorized service	5	
Response time on emergency calls	10	
Membership in Commercial Food Equipment Service Association, Inc. (CFESA)	5	
Budget – routine maintenance bottom line	20	
Budget – hourly rate for emergency service	15	
Budget – percentage discount off manufacturer's list price for replacement parts	20	
Total Points	100	

An RFP selection committee should be used to evaluate proposals. Each individual on the committee should score their responses separately and the scores are then averaged. Alternatively, another approach would be to rank RFP panel scores or discard the high and low score to negate the effect of a panel member who gives very high or very low scores.

Negotiation begins with the two vendors who offered the most favorable budget/cost proposal. The school district might undertake negotiation when the response for one of the selection criteria was unacceptable, for example, the proposed response time for emergency calls was too long. The two vendors are then allowed to offer revised budget/cost proposals, and evaluation of the proposals is then completed. Further information is provided on RFP and the complete purchase system in *First Choice, A Purchasing Systems Manual for School Foodservice* by NFSMI.

Noncompetitive Negotiation

Noncompetitive negotiation can be used only when one of the following conditions occurs:

- After conducting a request for prices, competition is deemed inadequate, such as when only one bidder responds to an IFB
- An emergency exists where a competitive procurement method would take too long
- The federal grantor agency (USDA) authorizes noncompetitive negotiation

Pricing Methods

School nutrition directors will also need to determine the most appropriate pricing method for the equipment items being purchased and indicate the selected pricing method in the IFB/RFP documents. If the pricing method changes, it is important for a new IFB/RFP must be issued. There are two basic pricing methods for purchasing equipment:

- Line item awards – the price offered on each product is considered independently. This allows potential vendors to pick and choose items on which to offer a price
- Bottom-line awards (also called all-or-nothing awards) – the prices offered on products are considered as a group. This method requires a price quote on all items, but is attractive to vendors because it guarantees an increased size of award. Products may also be grouped for bottom-line awards. The distributors available in the specific market influence how products are grouped.

Small Equipment Considerations

School districts generally use bottom-line awards when they purchase equipment for a new school. When districts purchase small equipment on a bottom-line bid award, they can receive one delivery and complete this task for the year. This is often the most cost effective way for a school or school district to purchase small equipment. Placing orders for small equipment throughout the school year lowers the volume of any one order, thereby increasing the cost. Sealed bid methods may be used with a request for firm prices for a one-or two-week period in order to decrease school paper work and the vendor's risk of cost increases.

State contracts may also often be available for certain items and they should be used when they are available. Finally, purchasing cooperatives are used by some schools, particularly small school districts to obtain cost savings when buying small equipment.

The Bid Document

Once all decisions have been made for equipment specifications, critical path needs, and the purchase system, the bid document is completed. The bid document is the statement of the terms and conditions of the equipment needed for the purchase and is a legally binding contract. It is important to have the school board attorney review and approve this document prior to bidding. It is also recommended to involve the state agency representative overseeing the school nutrition program. Bid documents will include detailed information about the bidding procedure, general instructions for such areas as correction of mistakes, pricing, terms, payment schedule, billing, delivery, guarantees, defaults and delays, bidder qualifications, and required documentation, as well as special instructions for that piece of equipment. An example is provided at the end of this chapter which also includes general boilerplate information.

SUMMARY

Once the bid document is finished, the school nutrition director, as the *Trusted Advisor*, and the planning team have completed the extremely valuable and perhaps most difficult steps of equipment purchasing. The next steps which complete the process are covered in the next chapter and include handling bids, placing orders, receiving, installation, and nutrition assistant training. Although this first half of the process may seem difficult and lengthy, the benefits of well-written procurement plans, specifications, and bid documents make the second half of the equipment purchasing process easier and more effective.

The school nutrition director's purchasing responsibilities as part of the planning team vary with the size of the school and its procurement needs. One responsibility of the school nutrition program director is to have a general knowledge of legal aspects of purchasing and seek out the advice of the school system's legal staff on matters related to procurement purchases. In addition, the school nutrition director should be aware of community and political issues and demonstrate compliance with federal, state, and local regulations. School nutrition directors must also be fiscally responsible. Most importantly, the school nutrition director, as the *Trusted Advisor*, plays a key role in gathering information about foodservice equipment and in determining the needs of the school nutrition program. This detailed information is essential in the writing of the specifications. Numerous other decisions are required, such as the type of purchasing method and the pricing mechanism.

Documentation is an important part of the procurement process and should be done from the beginning of the process to the end by the school nutrition director. Record keeping includes keeping copies of the documents issued to solicit price bids; the public announcement soliciting bidders; responses from vendors; the cost analysis; and signed award documents.

Finally, school nutrition directors are charged with providing maximum open and free competition. It is important to be a savvy consumer because not everyone in the industry maintains ethical standards. Price-fixing and bid-rigging are illegal and should be guarded against. Other ethical concerns regarding the bidding process are numerous and are the responsibility of all persons involved in the purchasing process, including the school nutrition director.

Solicitation/Invitation for Bid

(Taken from *A Guide for Purchasing Foodservice Equipment*, NFSMI, The University of Mississippi, 1998.)

It is the purpose and intent of this invitation to secure bids on the items specified on the sheets attached. Your written bid must be submitted in a sealed envelope to _____ (BOARD OF EDUCATION), _____ (NAME OF PERSON TO RECEIVE BIDS), _____ (ADDRESS). _____ (BOARD OF EDUCATION) reserves the right to reject any and all bids, in whole or in part and/or to accept the bids that in its judgment will be in the best interest of the program. No bid will be allowed to be withdrawn for any reason after _____ (DATE).

Prices bid shall be firm (or escalating) for the period between _____ (DATE) and _____ (DATE) and shall include all charges for packing and transporting to the individual centers at the addresses on the attached sheet. Prices will not include Federal Excise Tax or State Sales Tax.

In the event that the successful bidder(s) are unable to perform as required, the successful bidder(s) shall be responsible for the securing of items or services from an alternate vendor and pay that vendor any additional costs involved in supplying the items.

The successful bidder or bidders must:

1. Comply with all "Equal Employment Opportunity" regulations _____ (specify), and complete the certification regarding debarment, suspension.
2. Meet regulations relating to energy efficiency which are contained in the State Energy Conservation Plan _____ (specify)
3. Allow access by duly authorized representatives of the School Food Authority, State Agency, United School Food Authority States Department of Agriculture or Comptroller General to any books, documents, papers and records which are directly pertinent to this contract.
4. Maintain all required records for three years after final payment and after all other pending matters are closed. (Some states require a longer period of retention.)

In the event that the successful bidder(s) are unable to furnish the brand which was indicated in their bid, delivery may not be made until the _____ (TITLE OF PERSON(S)) has been contacted and an alternate approved.

All items shall be subject to inspection after arrival at the destination. If any items are found to be defective or otherwise not in conformity with the specification, such items will be rejected. It will be the responsibility of the vendor to defray any cost involved in the delivery and return of rejected articles.

The successful bidder(s) shall be paid in payments or in full, upon submission if an itemized invoices with the prices stipulated herein for the items delivered and accepted.
Any discounts are to be noted on the bid sheets and reflected on the invoices. Invoices should be sent to _____ (NAME) at _____ (ADDRESS).

If any potential bidder is in doubt as to the true meaning of this Invitation for Bid, he/she may submit a request for an interpretation to _____ (NAME) _____ (ADDRESS)
_____ (TELEPHONE NUMBER).

Any interpretation will be made by addendum and a copy mailed to each person receiving an Invitation for Bid. The Board of Education will not be responsible for any other explanation or interpretation of such documents which anyone presumes to make on behalf of the Board of Education.

Vendors shall not submit a bid for the contract if a conflict of interest, real or apparent, would be involved. Conflicts of interest arise when any of the following has a financial or other interest in the firm:

a. An employee, officer, or agent of _____ (BOARD OF EDUCATION)
b. Any member of the immediate family of the above named persons
c. The partner of any of the above named persons
d. Any officer, employee or agent of the vendor prepared specifications, work orders, bid or contract provisions for this acquisition

Attachment: Certification of Debarment/Suspension (Federal Form Number _____)

SUBMITTED BY_____ TITLE _____
COMPANY NAME _____ DATE _____
ADDRESS _____
TELEPHONE NUMBER _____

Request for Quotations

It is the purpose of _____ (BOARD OF EDUCATION) to secure quotes for the items specified on the attached sheets. Quotes will be taken on _____ of each _____ (DAY OF WEEK) _____ (WEEKLY, BIWEEKLY, MONTHLY, ETC.) at _____ (TIME OF DAY) _____ (ADDRESS).

The Board of Education reserves the right to reject any and all quotes in whole, or in part, and/or to accept the quotations that in its judgment will be in the best interest of the school nutrition program.

Prices quoted shall include charges for transporting any or all items in varying quantities to _____ (EACH SCHOOL, CENTRAL WAREHOUSE, ETC.)

Prices quoted will not include Federal Excise Tax or Sales Tax. Any discounts to be given must be specifically stated on the quotation sheet.

Response to the quotations will be given orally with a written confirmation upon request.

Any proposed alternates to the specifications listed must be approved by _____ (TITLE OF PERSON(S)) five days prior to the quotation.

An example of the alternate may be required to establish quality.

All items will be inspected upon arrival. If any articles are found defective or otherwise not in conformity with the specifications, the sponsor shall have the right reject such items. It will be the responsibility of the vendor to defray any cost involved in the delivery and return of rejected items.

Invoices should be sent to _____ (DISTRICT SCHOOL NUTRITION OFFICE, ETC.)

All quotations are firm for the period of _____ (DATE).

SUBMITTED BY _____
COMPANY NAME _____
ADDRESS _____
TELEPHONE NUMBER _____
SIGNATURE _____
TITLE _____
DATE _____

CONTRACT SECTION I - INVITATION FOR BID

TO: Date Issued: _____

ATTENTION: BID DEPARTMENT Bid Number _____

TELEPHONE: _____

Items:	Foodservice Equipment as indicated in Section IV
Type of Contract:	BOTTOM LINE FOR ONE TIME DELIVERY
Delivery Date:	
Bid Opening:	DATE: _____ TIME: _____
Mail Bids to:	Hand deliver all sections or mail to: _____ _____ _____ NOTE: ENVELOPE SHOULD BE SEALED AND PLAINLY MARKED IN ACCORDANCE WITH GENERAL INSTRUCTIONS.
Contacts:	If you have any questions concerning this invitation for bid, Please phone _____ _____

I, we, propose to furnish and deliver the items as listed according to your specifications and quantities at the indicated prices.

This Bid consists of INVITATION, GENERAL AND SPECIAL INSTRUCTIONS, AND SPECIFICATIONS. We understand that a company officer's signature is required, and unless this has been done, our "bid" will be considered incomplete and rejected therefore.

I, we, the undersigned, do hereby understand and accept the instructions and conditions under which this quotation is being submitted.

Addenda: The undersigned hereby acknowledges receipt of Addenda No. _____ and the incorporation of same in the proposal.

COMPANY NAME _____

ADDRESS _____

CITY/STATE/ZIP _____

TELEPHONE NUMBER _____

FAX NUMBER _____

SIGNATURE _____

TITLE _____

CERTIFICATE OF RESPONSIBILITY NO. _____

DATE _____

II GENERAL INSTRUCTIONS

Sealed, written bids will be received by the _____ (SCHOOL DISTRICT) at the time and place specified on the Invitation for Bid. Neither dating of bid form nor placing in mail by this date will meet requirements. Bid must be received on or before date and time stated. The _____ (SCHOOL DISTRICT) reserves the right to reject any and all bids and to waive any and all formalities. While it is the intention of the _____ (SCHOOL DISTRICT) to purchase all items listed, the right is reserved to omit any item necessary to bring the total cost within budget provisions.

1. ***Correction of Mistakes:*** All entries must be in ink or typewritten. No erasures or corrective fluid permitted. Mistakes may be crossed out and correction inserted adjacent. Corrections must be initialed in ink by person signing bid.

2. ***Signature on Invitation Required:*** "Invitation for Bid" shall be signed with the firm or corporate name and by an officer.

3. ***Return Instructions:*** Bidders must use the Bid form without alterations. Bids must be submitted sealed in an envelope, with the address of the school district on the outside of the envelope, company name and bid number, and bid opening date as they appear on the invitation. Pages on which there are no items to complete may be detached, and only those pages which contain entries or signature need be returned. Unsealed bids will be deemed unresponsive and rejected.

4. ***Pricing:*** Unit price will prevail in case of conflict between unit and total price. Unit price shall include total for equipment plus all accessories as per specifications.

5. ***Terms:*** All items listed are to be charged to the _____ (SCHOOL NAME AND COMPLETE ADDRESS). Invoice date to be determined by the date of delivery unless otherwise agreed.

6. ***Payment Schedule:*** Three options: Board of Trustees should indicate by an "X" the option chosen.
   - ☐ A. The school district will issue separate purchase orders for each item and will make payment within 10 working days following the next regularly scheduled Board meeting after delivery.
   - ☐ B. The school district will issue separate purchase orders by building location and will make payment within 10 working days following the next regularly scheduled Board meeting after installation.
   - ☐ C. The school district will issue one purchase order for the entire amount of this bid and will make payment within 10 working days following the next regularly scheduled Board meeting after all work covered by purchase order is completed.

7. ***Do Not Combine Items:*** Bid on each item separately. Prices must be stated in units specified herein. Each item must be considered separately and not in combination with other items.

8. ***Delivery Prepaid:*** It is understood that the bidder agrees to deliver prepaid to location as indicated in specification. All costs for delivery, drayage or freight for the packing or unpacking of said articles are to be borne by the bidder.

9. Complying with Specifications: All materials furnished must be subject to inspection and approval by the school district after delivery. The right is reserved to reject and return at the risk and expense of the dealer such portion of any shipment which may be defective or fail to comply with specifications without invalidating the remainder of the order. If rejected, it will be held for disposition at the expense and risk of the dealer. Dealers will be requested to replace that defective portion of an order according to the specifications without additional cost to the _____ (SCHOOL DISTRICT).

10. Guarantee: Each bidder, by presenting a bid under these specifications, binds himself to make positive that all goods are fully up to the standards set by the specifications. Should it be discovered within a reasonable period of time from date of contract that such goods or services are up to standard, _____ (SCHOOL DISTRICT) shall have the right to have such goods or services replaced by others conforming to the standard requirements and the entire expense shall be borne by the bidder.

11. Correctness of Bids: Bids shall be verified before submission, as quotations cannot be withdrawn after public opening. No bid can be corrected after being opened. The _____ (SCHOOL DISTRICT) will not be responsible for errors or omissions on bids.

12. Delivery Schedule: The successful bidder shall deliver the articles named in the specifications by delivery date as specified on the Invitation for Bid. Upon failure of the successful bidder to deliver all of the items ordered within the time set or allowed, the successful bidder will be considered in default.

13. Default and Delays: In case of default of the successful bidder, the _____ (SCHOOL DISTRICT) reserves the right to terminate the purchase order or contract and to purchase similar supplies, services, furniture, furnishing, or equipment on the open market. The bidder will be charged with any cost occasioned by the _____ (SCHOOL DISTRICT) whether said cost is same as originally accepted or in excess of the original contract.

14. Bidder Qualifications: Before any contract can be awarded, a bidder must be deemed qualified, in the judgment of school district officials, to perform as required, herein. A bid will be rejected if a bidder fails to meet any one of the following qualifications or supply any of the required documentation.

A. Product Line:
The bidder must demonstrate that it can provide all of the items on the bid list within the time frames specified in the Invitation for Bid.

Required Documentation:

1. The bidder must submit written documentation, such as inventory records, identifying the items that are to be delivered within (insert days for example: seven (7) working days) of bid award that are currently in inventory. Bidder must submit a signed statement certifying these items are not subject to prior sale.
2. For all other items, bidder must submit written documentation from the manufacturer, on manufacturer letterhead, that items will be delivered to bidder within (insert days; for example: twenty (20) working days) of bidder's order.

B. Financial Ability To Perform:
The bidder must demonstrate to school district officials that he/she has the financial ability to supply items to the school district as required.

Required Documentation:

1. Bidder must supply letters from all manufacturers/suppliers that will be used by bidder to service the contract that the bidder is in good standing with the manufacturer/supplier. Letters must be on the manufacturer's/supplier's letterhead and signed by an authorized representative of the manufacturer/supplier and dated after the date of publication of this Invitation for Bid.

C. Reliability:
The bidder must demonstrate a record of successful prior service. For bidders with less than one year of experience, the bidder must demonstrate the ability to perform.

Required Documentation:

1. All bidders must complete the Attachment _____ to the bid by listing all contracts exceeding (enter dollar amount for example: $25,000 in aggregate during the past three (3) years) and that the bidder is in default or has not defaulted on the contract. Bidder will not meet the standard if bidder has been determined to be in default on any public entity contract exceeding $25,000 in aggregate within the last three (3) years by a court of competent jurisdiction or recognized administrative appeal or hearings board, whether or not monetary damages were awarded. Bidder will not meet the standard if the bidder has defaulted on more than one nonpublic contract valued at more than $15,000 during the past year.
2. Bidders with more than one year of experience must supply letters of satisfactory performance for contracts completed within the last twelve (12) months that are equal to or greater in value than the bidder's price for this invitation from 50 percent of the customers of such contracts, but not more than five (5) public entity customers and not more than five (5), commercial customers. These letters must be on the public entity's or commercial customer's letterhead and signed by the contracting official or designated representative.
3. Bidders with less than one year of experience must supply letters of satisfactory performance from all public entity's customers and letters from fifty (50) percent, but no more than five (5), commercial customers. These letters must be on the public entity's or commercial customer's letterhead and signed by the contracting official or designated representative.

D. Accounting Practices:
Responsible bidder shall possess the experience and ability to perform the necessary service for a complete and workmanlike installation of foodservice equipment.

Required Documentation:

1. Identification of the personnel by name and title who is to coordinate with other trades the proper equipment installation, including years of experience, technical and manufacturer training courses and certification received within the last three years.

2. Copies of warranty service authorization on manufacturer letterhead or via manufacturer certificates. Warranty authorizations/certificates must be currently valid. Authorizations or certificates which do not identify bidder's current eligibility are not acceptable.

Bidder must include dimensioned mechanical/electrical rough-in drawing. Bidder must provide on-site demonstration of equipment operation, service, and maintenance within (insert days) after completion of installation.

15. Standard Contract Conditions

A. This contract shall be governed in all respects as to validity, construction, capacity, performance, or otherwise, by the laws of the State.
B. Contractors providing services under this Invitation to Bid herein assure the school district that they are conforming to the provisions of the Civil Rights Act of 1964, as amended.
C. State Sales and Use Tax Certificate of Exemption form will be issued upon request. Sales tax shall be included in prices where applicable.
D. Deliveries against this contract must be free of excise or transportation taxes, except when a tax is part of a price and school districts are not exempt from such levies. Excise tax exemption registration number may be used when required.
E. Contractor shall comply with applicable Federal, State, and local laws and regulations pertaining to wages, hours and conditions of employment. In connection with contractor's performance of work under this Agreement, contractor agrees not to discriminate against any employee(s) or applicant(s) for employment because of age, race, religious creed, sex, national origin or handicap.
F. Modifications, additions or changes to the terms and conditions of the Invitation to Bid may be a cause for rejection of a bid. Bidders are requested to submit all bids on the school district's official forms. Bids submitted on company forms may be rejected.
G. The contractor agrees to retain all books, records and other documents relative to this agreement for three (3) years after final payment. The district, its authorized agents, and/or State/Federal representatives shall have full access to and the right to examine any of said materials during said period.
H. By his signature on the face of this document, a bidder certified that his bid is made without prior understanding, agreement, or connection with any corporation, firm or person submitting a bid for the same materials, supplies or equipment, and is in all respects fair and without collusion or fraud. The bidder certified that he understands that collusive bidding is a violation of Federal law and can result in fines, prison sentences, civil damage awards. He further agrees to abide by all conditions of this bid and certifies that he is authorized to sign this bid for the bidder.
I. Prohibition against conflicts of interest, gratuities, and kickbacks.

"Any employee or any official of the school district, elective or appointive, who shall take, receive or offer to take or receive, either directly or indirectly, any rebate, percentage of contract, money or other things of value, as an inducement or intended inducement, in the procurement of business, or the giving of business, for, or to, or from, any person, partnership, firm or corporation, offering, bidding for, or in open market seeking to makes sales to the school district shall be deemed guilty of a felony and upon conviction, such person or persons shall be subject to punishment or a fine in accord with State and/or Federal laws."

16. Fiscal Funding: If the purchase orders for the items covered by this proposal have not been issued by June 30 of the current fiscal year, it should be understood that purchases in the next fiscal year are conditional on receipt of Federal and/or State funds. In the event of the discontinuance or a decrease in Federal and/or State funds, the Board of Trustees reserves the right to decrease the quantities and/or delete items.

III. SPECIAL INSTRUCTIONS

1. Start-Up: The bidder shall indicate in the Section IV Pricing Information Form (developed by the school nutrition district staff) the name of company, agent, address, and phone number of the party responsible for checking operation of equipment after final installation. If installation by party other than bidder, the school district shall be responsible for notifying specified agent that equipment is ready for start-up inspection. All start-up inspections should be completed within 10 working days of notification. Failure to provide this information will be considered reason for rejection of bid. A written report of results of start-up check shall be provided to the school district by agent listed in the Section IV Pricing Information Form.

2. Demonstration: All equipment with moveable parts shall be demonstrated to school district staff responsible for operation and care of equipment. Bidder shall indicate in the Section IV Pricing Information Form the name of company, agent, address, and phone number of party responsible for demonstration. If the agent is not an employee of the bidder, a letter shall be attached indicating willingness to provide demonstration. The school district shall be responsible for notifying agent that equipment has been installed and start-up check has been completed. Demonstration shall be provided within 10 working days of notification. Demonstration shall be conducted at a time agreeable to the school district at the site of actual equipment installation. Failure to provide this information will be considered reason for rejection of bid.

3. Dealer Warranty: In addition to the manufacturers' warranty the successful bidder shall guarantee for a period of one (1) year all items and equipment furnished under this bid. The warranty shall begin on the date the owner has accepted the start-up report or the owner has notified the successful bidder that start-up is complete. The conditions of the warranty shall be as follows:

A. Non-Refrigerated Equipment
   1. Start-up and calibration
   2. All parts that are integral with the equipment when purchased and all loose parts furnished with the equipment
   3. All labor and mileage
   4. If at any time during the warranty period, the equipment fails to function due to problems not related to the equipment, the dealer will charge the owner for the service call
   5. Any parts or function of the equipment that fails to perform due to misuse or abuse voids the warranty and the dealer will charge the owner; owner must perform routine cleaning procedures

B. Refrigerated Equipment
   1. All of the above, plus: five (5) year compressor warranty.

4. Factory Authorized Service Agents: The bidder shall indicate in the Section IV Pricing Information Form the name, address, and phone number of a factory authorized service agency for each item specified. The factory authorized service agency shall be located within 250 miles of installation site. Providing this information is in addition to the dealer service required in No.3 above. A written statement from the manufacturer shall be attached to the bid indicating that this agent "is authorized to service its equipment. Factory authorized service agents shall abide by the code of ethics of the Commercial Food Equipment Service Association (CFESA). Failure to provide this information will be considered reason for rejection of bid.

5. Codes: All equipment must be constructed and installed in accordance with the National Sanitation Foundation International Code. All equipment must be listed and approved, where applicable, for UL, AGA, and ASME requirements and all other requirements as specified by local building codes, plumbing codes, fire codes, and all other state and local codes. All foodservice equipment must bear the applicable seals.

6. Manuals: The Board of Trustees shall be provided three (3) copies of use/care manuals and illustrated parts list for all equipment with moveable parts. These manuals shall be provided within 10 days of installation.

7. Removal of Existing Equipment: Two options – _____ (SCHOOL DISTRICT) should indicate by an "X" the option chosen.

☐ A. Successful bidder will be responsible for disconnecting existing equipment as follows:

_____

In addition, successful bidder shall disconnect and reconnect any existing equipment which must be temporarily moved for installation of new equipment.

☐ B. Board of Trustees will be responsible for disconnection and removal of existing equipment prior to scheduled installation date for new equipment.

8. Assembly: All equipment is to be uncrated, assembled, set in place, and made ready for final connections. All debris accumulated with the delivery of equipment shall be removed. Foodservice equipment is to be cleaned and turned over in first class condition.

9. Installation: Two options – _____ (SCHOOL DISTRICT) should indicate by an "X" the option chosen.

☐ A. Bidder shall be responsible for all electrical, gas, and plumbing connections. All installations shall be completed by an appropriate professional. _____ (SCHOOL DISTRICT) will provide appropriate utilities within six feet of installation location.

☐ B. _____ (SCHOOL DISTRICT) will be responsible for all electrical, gas and plumbing connections.

10. Pre-Approved Brand: If bidder bids an "or equal" brand, proof of equality must be submitted 10 days prior to bid opening. Any and all variances in construction, design, performance, and accessories from the item specified must be submitted in writing to contact person listed in "Invitation for Bid." This information shall be submitted in addition to manufacturer's cut sheet. Failure to obtain prior approval will result in rejection of bid. Addenda shall be issued by _____ (SCHOOL DISTRICT) to all pre-qualified bidders stating specification number, item name, and alternate brand and model number approved. This addendum shall be issued five days prior to bid opening.

11. Specifications: Written description in the specification will prevail in case of conflict between written description and model number.

12. Alternate Bids: Bidders shall submit only one (1) bid per item specified.

13. On-site Visits and Field Measurements: Three options – _____ (SCHOOL DISTRICT) should indicate by an "X" the option chosen.

- ☐ A. When an on-site visit is indicated in specifications, bidder shall complete on-site visit prior to date of bid opening. Bidder shall attach to bid a signed statement from the contact person listed in "Invitation for Bid" affirming that on-site visit was complete.
- ☐ B. The successful bidder shall be responsible for taking all field dimensions which affect the equipment and installation thereof. At the time of taking field measurements, the successful bidder shall report to the contact person named in "Invitation for Bid" any conditions which will prevent him/her from the execution of his/her work as outlined in specifications and installation instructions.
- ☐ C. The school district assures the successful bidder that equipment can be delivered to installation site with no changes to existing entrances. The school district assumes full responsibility for any cost associated with removal and replacement of framing on entrances in order to deliver and set in place equipment, and the cost of additional mileage and labor as a result of failure of the Board of Trustees to meet the requirements of this paragraph.

14. Customer Fabricated Equipment: Equipment shall be fabricated by a foodservice equipment fabricator who has the plan, personnel, and engineering facilities to properly design, detail, and manufacture high quality equipment. The bidder shall, by his signature on "Invitation for Bid", indicate the equipment is to be fabricated by bidder personnel. If fabrication is to be subcontracted, bidder shall attach to bid submittal letter giving name and address of fabrication subcontractor.

Successful bidder shall submit shop drawings for custom fabricated equipment. Drawings shall be at a minimum 1/8" scale and include a plan view and front, rear, and side elevations. All drawing shall be fully dimensioned and all parts labeled as to materials and methods of construction. Shop drawings shall be approved by contact person listed on "Invitation for Bid" prior to start of fabrication.

Boilerplate

(Taken from A *Guide for Purchasing Foodservice Equipment*, NFSMI, The University of Mississippi, 1998.)

PART 1 GENERAL

1.01 Related Documents

A. Drawings, bidding requirements, contract forms and condition of the contract, including the Instructions to Bidders, General Conditions, Supplementary Conditions, and Division-01 Specification Sections, apply to work of this section.

1.02 Scope of Work

A. Provide all work as specified in this section and indicated on Contract Drawings.
B. All referenced manufacturer's requirements and specifications, and nationally recognized and accepted standards, and specifications shall be the latest addition unless specified otherwise and shall be used as they are applicable for products and craftsmanship incorporated in the Contract Drawings and this section only.

1.03 Quality Assurance

A. Quality shall mean the meticulous attention to the detail of installation and workmanship necessary for the assemblage of products in the highest grade of excellence by skilled craftsmen of the trade.
B. Equipment manufactured and fabricated shall be new, of the highest quality, perfect, and without flaws. To the extent available and practicable, standard stock models have been specified. This contractor shall provide the latest model at time of delivery.
C. All equipment shall be provided with accessories (gauges, safety valves, thermostats, etc.) as required by and installed in full compliance with the current rules and regulations of the local and state health authorities in which the project is located.
D. Utility connections have been set for the equipment indicated and specified. If manufacturers require additional or different utility services and connections, these additional or different utility service and connections shall be provided, paid for, and completely coordinated under this section.

1.04 Codes

A. All codes, regulations, interpretations, and rulings of enforcing agencies which govern any part of the work of this section shall be considered a part of the governing regulations. No extra charge will be paid for the providing of items or furnishing work which is required by the regulations even though such may not be specifically called for on the drawings or in the specifications. Should a conflict occur between these codes and equipment specified, the code takes precedence. Notification of the code variance shall be made to the architect.

1.05 Standards

A. Unless otherwise called for, comply with the following standards as applicable to the manufacturer, fabrication, and installation of the work in this section.
   1. NSFI Standards: Comply with National Sanitation Foundation International (NSFI) standards and criteria, and provide NSFI certification mark on each manufactured item and on items of custom fabricated work.

2. UL Standards: For electrical components and assemblies, provide either UL labeled products or, where no labeling service is available, "recognized markings" to indicate listing in the UL "recognized component index".
3. UL Standards: For exhaust system and fire control.
4. AGA Approval: For all gas fired equipment.
5. NFPA Standards: Comply with NFPA No. 96 for exhaust systems.
6. ASME Code: Comply with ASME Boiler Code requirements for steam generating equipment, kettles, and steamers.
7. National Electrical Code: Comply with N.E.C. for electrical wiring and devices included with foodservice equipment.
8. State and local codes and requirements.

1 .06 Related Work by Separate Contractors

A. Concrete platforms, bases, depressions, and openings in the walls.
B. All waste water, vents, gas, ducts, heating, ventilation, and air conditioning, steam, and condensate return lines, also the final connection to the foodservice equipment herein contained.
C. Conduit, wiring, breakers, and connections to the foodservice equipment herein contained.

1.07 Submittals

A. Within thirty (30) days after award of contract (before equipment is purchased) this contractor shall submit five (5) brochures of approval.
   1. One (1) piece of manufacturer's literature on each item contained in these specifications.
   2. One (1) separate type written sheet on each item containing model numbers, specifications, accessory numbers, sizes, mechanical, and electrical connections. All the items specified herein and arranged in numerical order.
   3. Provide the name and phone number of the authorized service agent for each piece of equipment.
B. In addition to brochures, this contractor SHALL also submit manufacturer's detailed shop drawings for all built-to specification equipment, (i.e., exhaust hoods, walk-ins, dishwashers, etc.).
   1. Submittal shall be a reverse reading paper sepia and two (2) sets of bluelines or five (5) sets of bluelines.
   2. Submittal shall show details of sections at minimum 1 ½" = l' -0", and plan and elevation at minimum ¾" = 1'=0".
   3. Submittal shall include complete specification of all hardware, materials, and quality of workmanship.
C. This contractor SHALL NOT redraw and submit equipment layout, mechanical, electrical, duct, depression, fabrication, or any other engineering drawings already detailed in these contract drawings in order to submit any revisions to fabrication details. Fabrication drawings shall be submitted as follows:
   1. One (1) reverse reading sepia and two (2) sets of bluelines or five (5) sets of bluelines.
   2. Each submittal using this format shall have title block, sheet numbers, logos, and dates replaced with equipment manufacturer's title block information.
   3. Revisions shall be made to these sepias with complete specifications attached for all substitutions.

1.08 Nameplates

A. Nameplates shall be provided on each "buy-out" product identifying the product manufacturer, model number, serial number, and other identifying information for use in warranties and securing replacement parts.
B. The nameplates may be on the back or bottom of small and portable equipment but on heavy, permanently installed equipment, the nameplate shall be visible without searching. Electrical equipment shall have plates giving electrical characteristics.
C. Nameplates shall fit snugly against the surface of the equipment, shall be no larger than necessary, shall be free of rough edges, and shall be attached in such a manner that it will not interfere with the sanitation of the equipment.

PART 2 - PRODUCTS

2.01 Mechanical Appurtenances Under This Section of the Specifications

A. Except as noted, otherwise specified, all faucets and hose bibbs shall be as manufacturer by the T & S Brass & Bronze Company, Fisher Faucets, or Chicago Faucets. Deck type faucets shall be model no. B-201 with lock down feature, back splash type faucets shall be model no. B-231-CC. Both faucets shall have a 12" swing spout and a model B-199 aerator. NOTE: above model numbers refer to T & S, others must match.
B. Where standard faucets are specified in this section, said faucets shall conform to paragraph A above unless otherwise noted.
C. Provide rotary handle, quick opening wastes with 4" long tailpieces and connected rear overflows on each sink compartment unless otherwise specified.
D. All equipment operation valves shall be installed at the job in an accessible location for the operator of the equipment.
E. Provide vacuum breakers with foodservice equipment where required by governing regulations, including locations where water outlets are equipped for hose attachment.
F. A shut-off valve shall be provided and installed by general contractor in the water supply connection to sinks, ice makers, and other pieces of equipment. Where two (2) or more units are connected to a single line and running to a common waste drain or floor drain, an accessible c1eanout plug at the inlet of the line and/or at each 90° turn shall be provided by the general contractor.
G. Where exposed or semi-exposed, provide bright chrome-plated brass or polished stainless steel hardware. Provide copper or brass where not exposed.
H. Pressure vessels shall be inspected by the State Boiler Inspector, and shall receive his/her approval before use. All vessels shall have a pressure relief valve, a pressure reducing valve, temperature, and pressure gauge and shall have the temperature maintained by an automatic thermostat. All steam lines shall be properly insulated to meet or exceed ASHRAE 90-80 requirements and any local code requirements.
I. Verify type, BTU/Hr, specific gravity, and pressure of gas to be used for all gas appliances.
J. Provide as part of this section of these specifications, gas pressure regulator valves and disconnect hoses for all gas operated appliances.

2.02 Electrical Appurtenances Under This Section of the Specifications

A. The contractor shall verify that the voltage on the job corresponds with the equipment drawings and specifications before ordering any electrical equipment. All equipment shall be grounded.

B. Motors 1/3 h.p. and less shall be 120/60/1, a.c.
C. Except where noted otherwise, motors ½ h.p. and over shall be wired for 208/60/3, a.c. Motors shall have thrust type bearings so motors can operate in vertical position, shall be totally enclosed, 55° rise above 40° ambient, continuous duty. Motors shall have low torque starting current characteristics, with NEMA frames.
D. Plugs for 120/60/1 shall be Hubbell, Arrowhart, or P&S safety grip type.
E. Plugs for 208/60/1 or 3 or above, shall match the receptacles specified under Division 16.
F. Receptacles for equipment specified shall be Hubbell, Arrowhart, or P&S grounding type, three pole receptacles to receive plugs called for previously. Units shall be mounted in type "FS" box enclosures with stainless steel face plates and boxes where receptacles are exposed.
G. Thermostats not otherwise specified under individual items shall be as manufactured by Fulton, Powers, or Robert Shaw and shall be provided at all bain maries, coffee urns, dishwashers, hot food tables, counters, and heated cabinets.
H. Controls, thermostats, starters, switches, and contractors furnished under this section of the specifications shall conform to the following:
    1. Units which are an integral part of equipment shall be factory installed. Units which are to be separately mounted other than on equipment structure shall be installed on the job site under Division 16 of these specifications.
    2. Starters for 120/60/1 shall be manual tumbler type, having thermal overload protection, with interchangeable heater elements.
    3. Magnetic starters for 208/60/3 shall be size 1, line voltage type with three thermal overload relays for normal operation by automatic control or 120/60/1 phase push button station. Enclosure shall have overload reset and 120 volt control circuit.
    4. All motors for remote control shall have magnetic starters regardless of horsepower or rating.
    5. Cords and plugs for portable items shall be three wire or four wire type "S" as specified, all rubber cord with one leg grounded to the framework of the equipment. All wiring in or between foodservice equipment shall be run in Sealtite conduit.
I. Lights which are integral parts of equipment such as incandescent lights under protector guards, lights under hoods, etc., shall be provided with bulbs.

2.03 Ventilation Appurtenances Under This Section of the Specifications

A. Coordinate with Division 1500. The hoods and ventilation systems and work by the fabricators of these exhaust systems shall comply with:
    1. Recommendations of the National Fire Protection Association in NFPA No. 96 "Vapor Removal From Cooking Equipment, 1984".
    2. National Sanitation Foundation International recommendations Standard No.2 for foodservice equipment.
    3. Underwriters Laboratories Standard for safety, file 192 "Grease Extractors for Exhaust Ducts UL 710, and file number E34091." Report on component industrial control equipment auxiliary devices.
    4. State and local codes and requirements.

2.04 Fabrication Standards

A. Stainless steel:
   1. Unless specified otherwise, stainless steel shall be USS (U.S. Standard) AISI type 302/304, 18-8 chromium/nickel with a maximum of .08 content of carbon; hardest workable temper, no. 4 directional polish. Stainless steel sheet shall be stretched, leveled, and cold rolled.
   2. Stainless steel tubing and pipe shall be true round unless specified otherwise, seamless, or welded to appear seamless. Welded tubing shall be properly heat treated and quenched, to prevent carbide precipitation.

B. Galvanized steel:
   1. Sheet: ASTM A 526, except ASTM A 527 for extensive forming: ASTM A 525, G90 zinc coating, chemical treatment.
   2. Pipe: ASTM A 53 or ASTM A 120, welded or seamless.
   3. Structural members: ASTM A 124 hot-dipped zinc coating, applied after fabrication.
   4. Where painted finish is indicated, provide mill phosphatized treatment in lieu of chemical treatment.

C. Steel:
   1. Sheet: ASTM A 569 hot rolled carbon steel.
   2. Structural members: hot rolled or cold formed carbon steel.

D. Aluminum:
   1. Sheeting, plating, and extrusions, as indicated, ASTM B 209/B 221; alloy, temper and finish as determined by manufacturer/ fabricator, except 0.40 mil natural anodized finish on exposed work unless another finish is indicated or specified.

E. Sound Deadening:
   1. Underside of metal work surfaces, including tables, drainboards, countertops, sink, and similar units shall have a coating of sound deadening material comprising of a heavy bodied resinous coating filled with granulated cork or other resilient product and compounded for permanent, non-flaking adhesion to metal in a thick coating. The coating shall end 3" from edges which are open for cleaning. Finish with aluminum lacquer.

F. Jointing Products:
   1. Gasket: solid or hollow, but not cellular neoprene or polyvinyl chloride; light gray, minimum of 4 Shore A hardness, self adhesive or prepared for either adhesive application or mechanical anchorage.
   2. Sealant: One part or two part, polyurethane or silicone based, liquid elastomeric sealant, non-solvent release type, mildew resistant, Shore A hardness or 30, except 45 if subject to traffic.

G. Paint and Coatings:
   1. Provide the types of painting and coating materials which, after drying or curing, are suitable for use in conjunction with foodservice, and which are durable, non-toxic, non-dusting, non-flaking, heat resistant, mildew resistant, and comply with governing regulations for foodservice.
   2. Pre-treatment: SSPC-PT2 or PT2, or Federal Specifications TT-C-490 as is best suited for the metal being treated and the paint or coating to be applied.
   3. Primer: Shall be the best suited for the metal to be primed and the paint or coating to be applied and shall be suitable for baking.

H. Field joints shall be located for practical construction and consistent with sizes convenient for shipping and accessibility into the building. All field joints in top shall be carefully sheared with sharp edges removed so they can be tightly butted and drawn together to leave a hairline joint. They shall be constructed as follows:
   1. Two (2) channels shall be welded to the underside of the top of the same material and gauge as called for in top specifications. Channels are 1½" x l" x 1½". One shall set back from the edge; the other shall extend beyond the edge to form a flat surface for aligning the meeting piece.
   2. The underside of the top that overlaps the one (1) channel shall be provided with stud bolts on 2½" centers, and the top surface of the channel shall be perforated to receive same.
   3. The abutting vertical members of the channels shall be perforated and provided with 5/16" bolts on 4" centers. When the bolts in the channel and the studs are drawn tightly, both vertical and horizontal tension shall be provided to hold the top secure and level.
   4. Joints shall be welded, ground smooth, and polished.
   5. A die-formed end capping of the same material as the table top shall be applied to the exterior of the turned up edge on dish tables, sink drainboards, or other fixtures with raised rims to conceal the ends of the channels.

I. Where plumbing is required to pass through an enclosed base of a table or counter, such piping shall be enclosed in a suitable pipe chase with easily removable access panels. These access panels shall be slightly recessed and removable without tools.

J. Where plumbing and supply piping pass through shelves on open base tables, the pipe chases and shelves shall be neatly punched, die-stamped to include knockouts elevated around opening. Flange up for knockouts shall be ½" minimum.

K. Provide all scribe and filler strips, etc. for items recessed or furred. Provide and install escutcheons or panels to completely seal around all openings where pipe, ductwork, or conduit penetrate walls or bottoms of equipment units.

L. Pipe legs supporting equipment, tops, and sinks shall be constructed of 1 5/8" O.D., 16 gauge seamless stainless steel tubing. Furnish each leg with a stainless steel fully enclosed round gusset and an adjustable stainless steel bullet type foot (adjustment being internal). Furnish crossrails between all pipe legs. Cross rails shall be 1 5/8" O.D. of same material as pipe legs and welded to the legs.

M. Tops of work surfaces shall be of 14 gauge stainless steel with a 2" turndown on all exposed sides. Where the top is adjacent to a wall or high adjoining equipment, it shall have a turnup on a ¾" radius of 8 ¾", a 1¼" turn back on 45 degree angle, a 1" horizontal turn back and a ½" turndown toward the floor. Close all ends of backsplashes. Tops shall be constructed as follows:
   1. Fabricate metal work surfaces by forming and welding to provide seamless construction, using welding rods, matching sheet metal, grinding and polishing.
   2. In forming the sheeting, remove burrs from sheared edges of metal work, ease the corners, and smooth to eliminate cutting hazard. Bend sheets of metal at not less than the minimum radius required to avoid grain separation in the metal. Maintain flat, smooth surfaces without damage to finish.
   3. Welds shall be strong, ductile, with excess metal ground off and finished smooth, and polished to match adjacent surface. Welds shall be free of imperfections such as pits, runs, splatters, cracks, etc., and shall have the same color as adjacent sheet surfaces.

4. Field joints may be provided in the top only where necessary and these shall be constructed as hereinbefore specified.

N. Reinforce work surfaces 30" o.c. maximum, both ways with galvanized or stainless steel concealed structural members. Reinforce edges which are not self-reinforced by formed edges. Reinforce metal at locations of hardware, anchorages, cutouts, and accessory attachments, wherever metal is less than 14 gauge or requires mortised application. Conceal reinforcements to the greatest extent possible.

O. Where fasteners are permitted, provide Phillips head, flat, or oval head machine screws. Cap threads with acorn nuts unless fully concealed in unaccessible construction; and provide nuts and lockwashers unless metal for tapping is at least 12 gauge. Match fastener head finish with finish of metal fastened.

P. Where components of fabricated metal work are indicated to be galvanized, and involved welding or machining of metal heavier than 16 gauge, complete the fabrication and provide hot-dip galvanizing of each component after fabrication. Comply with ASTM A123.

Q. Sink Construction:

1. Sinks shall be of 14 gauge stainless steel, all welded construction, with a formed continuous top edge. Drainboards shall be built as an integral part of the sink and have the same top edge and backsplash. Repolish all backsplashes and top to have grain running in the same direction.
2. Where adjacent to a wall, the rear of the sink shall be provided with a backsplash identical to that specified under Paragraph M above.
3. Except where otherwise noted, each sink shall be fitted with a 2" rotary type waste with a chrome plated strainer and a connected rear overflow.
4. Where sinks are set side by side, the cross partitions shall be double wall with air space between them. All interior corners, including the partitions, shall be coved on a minimum of 5/8" radius. Multiple sinks shall be provided with continuous seamless front.
5. Faucets shall be furnished for each sink compartment unless specified differently at multiple sink compartments.

R. Drawer Standards:

1. All drawers shall have a removable drawer pan stamped in one (1) piece with all corners coved. The drawer pans shall be a minimum of 20" x 20" x 5" deep and be constructed of 20 gauge stainless steel.
2. All drawers shall be enclosed on both sides, rear, and bottom with 18 gauge stainless steel, and welded to form one (1) piece vermin proof unit.
3. Provide a double pan, 16 gauge stainless steel drawer face with integral pull for each drawer.
4. When drawers are in a tier of three (3), the bottom drawer shall occupy the balance of the available height with the upper drawers both being 5" deep.
5. All drawers shall be self closing and operate on sanitary antifriction type steel runners with nylon ball bearing rollers.
6. Provide all drawers with padlock hasps as shown on drawings. Padlocks shall be furnished by owner.

S. Cabinet Standards:
   1. Fixtures with enclosed cabinet type bodies shall be constructed of 18 gauge stainless steel. Interior walls shall be of 18 gauge stainless steel. Vertical style channels shall be welded. Access panels shall be lift out type, giving access to chase ways and shall be of minimum 18 gauge stainless steel.
   2. All shelving inside equipment shall be of minimum 18 gauge stainless steel. In specifying number of shelves, the bottom shall be considered as one. All bottom shelves extend forward, turndown flush with the front facing of the cabinet. All interior shelves shall have a 1 ½" turnup at rear and ends with edges beveled and made to hug the interior of the cabinet body. All welding shall be ground smooth and polished.
   3. All sliding doors shall be full height, formed pan shaped with flush facing front and back, braced internally to prevent twisting and shall have sound proofing material internally applied. Exterior faces of door shall be of 18 gauge stainless steel and interior faces of door shall be of 20 gauge stainless steel. Doors to operate on nylon or stainless steel ball bearing rollers running in concealed overhead tracks and having concealed stainless steel guide pins in the sill at the bottom. Doors shall lift out and have a drop at the end of the closing run to hold them closed.
   4. Hinged doors shall be double pan construction. Exterior shall be of 16 gauge stainless steel and interior of 18 gauge stainless steel. Doors shall be flush mounted without overlap. One side of the door shall have a ¼" diameter pin at the top and bottom with nylon bushing to fit into the cabinet body and pivot the door. Provide door with a recessed pull on the exterior and a friction catch on the interior. Door shall have sound deafening material applied to the interior.

T. Abutting joint between equipment items and between items of equipment and wall where less than 3/8" shall be sealed with silicone sealant. Where greater than 3/8", joints shall be filled with stainless steel trim strips.

U. Electrical outlets into items shall be furnished as complete assembly of box, block, plate, and be ready for wiring. Plates shall be stainless steel. Provide a chase way for the conduit and wiring in cabinet base fixtures.

V. Where threads of bolts and screws on the inside of fixtures come in contact with wiping cloth, they shall be capped with a lock washer and acorn nut. Wherever bolts are welded to the underside of trim or tops, the reverse side of the welds shall be polished. Depressions at these points will not be acceptable.

W. Each piece of equipment shall bear a name plate which shall be fastened to the equipment. Each piece of electrical equipment shall bear a plate showing complete electrical characteristics which shall comply in all particulars with the current available at the building.

X. On the tables not adjacent to wall with electric or plumbing connections necessary for operation, provide two (2) flange type feet and bolt to the floor with non-rusting screws and floor anchors.

2.05 Walk-in Refrigerator and Freezer Standards

A. All interior and exterior surfaces, except the floor and ceiling, shall be of .042" thick stucco embossed aluminum unless otherwise specified. All interior ceilings shall be mill baked white polyester finish on galvanized steel.

B. Walls, floors, and ceiling shall be 4" thick unless specified otherwise and insulated with urethane insulation having a "K" factor of 0.13 and capable of holding temperature as low as minus 40 degrees at a 4" wall thickness.

C. Doors:

1. Doors shall have a clear door opening of 34" x 78" high. Doors shall be located in 46" or 69" wide panels. Doors shall be constructed of stainless steel on interior and exterior with tempered glass observation window in coolers to meet or exceed OSHA requirements.
2. Doors shall be offset type having two (2) heavy duty hinges, pull handle, a cylinder lock, a door closer, and safety handle on the interior. All hardware shall have a satin aluminum finish or chrome plated.
    a. Provide on the sides and top, a thermal plastic gasket easily removable. At the bottom edge of the door, furnish an adjustable rubber wiper gasket. Gasket shall be resistant to oil, fats, water, and sunlight.
    b. Doors shall be insulated with 4" of urethane as specified for the walls.
    c. Construction of the door panels shall be identical to that of the walls, and shall include a heavy U-channel type reinforced steel frame around the entire perimeter of the door opening to prevent rocking and twisting. Furnish installed in the frame, an antisweat heater wire, completely encircling the door opening.
    d. Doors to have 3/16" aluminum diamond tread plate on each side, to be 36" high off of floor.
    e. Aisles to have non-skid strips.
3. Adjacent to the opening side of door, approximately 5'-0" above the floor, furnish a heavy duty chrome plated, 5" diameter dial thermometer or a digital readout minimum ½" high. Thermometer shall be flush with the wall and have a recalibration feature.
4. Adjacent to the thermometer, mount a light switch with bull's eye. Switch shall be prewired to lights mounted in the ceiling of the walk-in and to the "J" box on top of the walk-in. Lights shall be wire protected, vapor proof, globe type with 150 watt bulbs. Lighting within walk-ins shall be a minimum of 25 foot candles on an even and equal basis.
5. In the ceiling of each walk-in freezer, furnish an air vent release.
6. Each section of the walls, ceiling, and floor shall have a tongue and groove, urethane edge. Panels shall be joined together by Rotoloc joint fasteners built into the edges of the box. Install on both sides of the tongue, a twin pressure sensitive gasket. Fasteners shall operate by means of a hex wrench. Provide a full compliment of snap in covers for lock holes.

H. All interior corners shall be coved.

2.06 Errors and Omissions

A. It shall be the responsibility of the foodservice equipment bidders to inform the architect of any discrepancies found within these documents to include: written specifications, drawings, or schedules, to allow an opportunity for the consultant to prepare an addendum to correct such discrepancies. Bidding on a known discrepancy with the intention of equipment substitution or price gouging through change orders will not be tolerated.

B. Written itemized specifications shall take precedence.

Sample Fabricated Equipment Specification

ITEM NO. XX - POT WASHING SINK: 1 REQUIRED

a. Fabricate and furnish one ea. pot sink with two drain boards. Requires ½" CW, ½" HW, 2" waste. Bowls to be 26 ½" x 24" x 14" deep. Overall size and shape as shown on plan.

b. Sink constructed entirely of 14 gauge type 18-8 stainless steel with all vertical corners coved on a ¼" radius. The front, bottom, and back to be formed of one sheet with front and back having a ¾" roll. Partitions to be double wall and fully welded in place. Splash to be 8" high with 2 ½" return (10 ½" overall). Ends closed and welded. 1" diameter holes punched in splash for faucet. Two (2) ea. faucets to be Fisher, model no. 3253, heavy duty splash type with 12" swing spout. Supply three each lever handle waste, 2" brass with removable strainer, and rear connected overflow. Each compartment to have die-stamped star in sink bottom for drainage. Sink to be mounted on 1 5/8" O.D. 16 gauge stainless steel legs attached to fully enclosed stainless steel gussets welded to bottom of sink. Each leg to have an adjustable stainless steel bullet foot. To be 14" depth at partitions. Drainboards to be same material and finish as sink with back splash a continuation of sink splash. Front and end rims to be approximately 3" high terminating in a 180° roll on a ¾" radius. The drainboard is to be constructed with a pitch to drain into the sink. Back splash and front rim are not to be pitched, but to continue level. Drainboards to be supported on 1 5/8" O.D. 16 gauge stainless steel legs attached to fully enclosed stainless steel gussets welded to stainless steel channel reinforcing on underside of drainboard. Each leg to have an adjustable stainless steel bullet foot.

c. Splash mounted pot rack to be constructed of 2" x ¼" thick stainless steel flat bar fully welded to 1 5/8" O.D. 16 gauge stainless steel legs, extended thru splash, and secured to sink frame. Unit to be supplied complete with double pointed, sliding pot hooks at 6" on center.

d. Refer to fabrication drawings for details.