SECTION 11400

FOOD SERVICE EQUIPMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes food service equipment indicated on Drawings and schedules.

B. Owner-Furnished Equipment: Where indicated, Owner will furnish equipment items.

C. Related Sections include the following:
1. Division 5 Section "Metal Fabrications" for equipment supports.
2. Division 6 Section "Interior Architectural Woodwork" for wood casework and plastic-laminate substrates.
3. Refer to Division 15 Sections for supply and exhaust fans; exhaust ductwork; service roughing-ins; drain traps; atmospheric vents; valves, pipes, and fittings; fire-extinguishing systems; and other materials required to complete food service equipment installation.
4. Refer to Division 16 Sections for connections to fire alarm systems, wiring, disconnects, and other electrical materials required to complete food service equipment installation.

1.3 DEFINITIONS

A. Terminology Standard: Refer to NSF 2, "Food Equipment" or other applicable NSF standards for definitions of food service equipment and installation terms not otherwise defined in this Section or in other referenced standards.

1.4 SUBMITTALS

A. Product Data: For each type of food service equipment indicated. Include manufacturer's model number and accessories and requirements for access and maintenance clearances, water and drainage, power or fuel, and service-connections including roughing-in dimensions.

B. Shop Drawings: For food service equipment not manufactured as standard production and catalog items by manufacturers. Include plans, elevations, sections, roughing-in dimensions, fabrication details, service requirements, and attachments to other work.
1. Wiring Diagrams: Details of wiring for power, signal, and control systems and differentiating between manufacturer-installed and field-installed wiring.
2. Piping Diagrams: Details of piping systems and differentiating between manufacturer-installed and field-installed piping.

C. Coordination Drawings: For locations of food service equipment and service utilities. Key equipment with item numbers and descriptions indicated in Contract Documents. Include plans and elevations of equipment, access- and maintenance-clearance requirements, details of concrete or masonry bases and floor depressions, and service-utility characteristics.

D. Samples for Initial Selection: Manufacturer's color charts showing the full range of colors available for exposed products with color finishes.

E. Samples for Verification: Of each type of exposed finish required, minimum 4-inch- (100-mm-) square or 6-inch- (150-mm-) long sections of linear shapes and of same thickness and material indicated for work. Where finishes involve normal color and texture variations, include Sample sets showing the full range of variations expected.

F. Product Certificates: Signed by manufacturers of refrigeration systems or their authorized agents certifying that systems furnished comply with requirements and will maintain operating temperatures indicated in the areas or equipment that they will serve.

G. Maintenance Data: Operation, maintenance, and parts data for food service equipment to include in the maintenance manuals specified in Division 1. Include a product schedule as follows:
   1. Product Schedule: For each food service equipment item, include item number and description indicated in Contract Documents, manufacturer's name and model number, and authorized service agencies' addresses and telephone numbers.

1.5 QUALITY ASSURANCE

A. Installer Qualifications: Engage an experienced installer to perform work of this Section who has specialized in installing food service equipment, who has completed installations similar in design and extent to that indicated for this Project, and who has a record of successful in-service performance.

B. Manufacturer Qualifications: Engage a firm experienced in manufacturing food service equipment similar to that indicated for this Project and with a record of successful in-service performance.

C. Source Limitations: Obtain each type of food service equipment through one source from a single manufacturer.

D. Product Options: Drawings indicate food service equipment based on the specific products indicated. Other manufacturers' equipment with equal size and performance characteristics may be considered. Refer to Division 1 Section "Substitutions."

E. Regulatory Requirements: Comply with the following National Fire Protection Association (NFPA) codes:
   1. NFPA 17, "Dry Chemical Extinguishing Systems."
   2. NFPA 17A, "Wet Chemical Extinguishing Systems."
   3. NFPA 54, "National Fuel Gas Code."
   4. NFPA 70, "National Electrical Code."
   5. NFPA 96, "Ventilation Control and Fire Protection of Commercial Cooking Operations."

F. Listing and Labeling: Provide electrically operated equipment or components specified in this Section that are listed and labeled.
   1. The Terms "Listed" and "Labeled": As defined in the National Electrical Code, Article 100.
   2. Listing and Labeling Agency Qualifications: A "Nationally Recognized Testing Laboratory" (NRTL) as defined in OSHA Regulation 1910.7.

G. AGA Certification: Provide gas-burning appliances certified by the American Gas Association (AGA).

H. ASME Compliance: Fabricate and label steam-generating and closed steam-heating equipment to comply with ASME Boiler and Pressure Vessel Code.ASHRAE Compliance: Provide mechanical refrigeration systems complying with the American Society of Heating, Refrigerating and Air-Conditioning Engineers' ASHRAE 15, "Safety Code for Mechanical Refrigeration."

I. NSF Standards: Comply with applicable NSF International (NSF) standards and criteria and provide NSF Certification Mark on each equipment item, unless otherwise indicated.

J. ANSI Standards: Comply with applicable ANSI standards for electric-powered and gas-burning appliances; for piping to compressed-gas cylinders; and for plumbing fittings, including vacuum breakers and air gaps, to prevent siphonage in water piping.

K. SMACNA Standard: Where applicable, fabricate food service equipment to comply with the Sheet Metal and Air Conditioning Contractors National Association's (SMACNA) "Kitchen Equipment Fabrication Guidelines," unless otherwise indicated.

L. Seismic Restraints: Provide seismic restraints for food service equipment according to the Sheet Metal and Air Conditioning Contractors National Association's (SMACNA) "Kitchen Equipment Fabrication Guidelines," appendix 1, "Guidelines for Seismic Restraints of Kitchen Equipment," unless otherwise indicated.

M. Preinstallation Conference: Conduct conference at Project site to comply with requirements of Division 1 Section "Project Meetings."

N. Preinstallation Conference: Conduct conference at Project site to comply with requirements of Division 1 Section "Project Meetings." Review methods and procedures related to food service equipment including, but not limited to, the following:
   1. Review access requirements for equipment delivery.
   2. Review equipment storage and security requirements.
   3. Inspect and discuss condition of substrate and other preparatory work performed by other trades.
   4. Review structural loading limitations.
   5. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Deliver food service equipment as factory-assembled units with protective crating and covering.

B. Store food service equipment in original protective crating and covering and in a dry location.

1.7 PROJECT CONDITIONS

A. Field Measurements: Verify dimensions of food service equipment installation areas by field measurements before equipment fabrication and indicate measurements on Shop Drawings and Coordination Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
   1. Established Dimensions: Where field measurements cannot be made without delaying the Work, establish required dimensions and proceed with fabricating equipment without field measurements. Coordinate construction to ensure actual dimensions correspond to established dimensions.

1.8 COORDINATION

A. Coordinate equipment layout and installation with other work, including light fixtures, HVAC equipment, and fire-suppression system components.

B. Coordinate location and requirements of service-utility connections. Coordinate size, location, and requirements of concrete bases, positive slopes to drains, floor depressions, and insulated floors. Concrete, reinforcement, and formwork requirements are specified in Division 3 Section "Cast-in-Place Concrete."

C. Coordinate installation of roof curbs, equipment supports, and roof penetrations. These items are specified in Division 7 Section "Roof Accessories."

1.9 WARRANTY

A. General Warranty: The special warranty specified in this Article shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by the Contractor under requirements of the Contract Documents.

B. Refrigeration Compressor Warranty: Submit a written warranty signed by manufacturer agreeing to repair or replace compressors that fail in materials or workmanship within the specified warranty period. Failures include, but are not limited to, the following:
   1. Breakage.
   2. Faulty operation.

C. Warranty Period: 5 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Stainless-Steel Sheet, Strip, Plate, and Flat Bar: ASTM A 666, Type 304, stretcher leveled, and in finish specified in "Stainless-Steel Finishes" Article.

B. Stainless-Steel Tube: ASTM A 554, Grade MT-304, and in finish specified in "Stainless-Steel Finishes" Article.

C. Zinc-Coated Steel Sheet: ASTM A 653, G115 (ASTM A 653M, Z350) coating designation; commercial quality; cold rolled; stretcher leveled; and chemically treated.

D. Zinc-Coated Steel Shapes: ASTM A 36 (ASTM A 36M), zinc-coated according to ASTM A 123 requirements.

E. Plastic Laminate: Complying with NEMA LD 3 and NSF 35 requirements; NSF certified for end-use application indicated; 0.050 inch (1.27 mm) thick for horizontal and vertical surfaces and 0.042 inch (1.07 mm) thick for post-formed surfaces; smooth texture; and easily cleanable.
   1. Color: As selected by Architect from manufacturer's full range of colors.

F. Plywood and Lumber: Provide plywood and lumber as specified in Division 6 Section "Interior Architectural Woodwork."

G. Sealant: ASTM C 920; Type S, Grade NS, Class 25, Use NT. Provide elastomeric sealant NSF certified for end-use application indicated. Provide sealant that, when cured and washed, meets requirements of Food and Drug Administration's 21 CFR, Section 177.2600 for use in areas that come in contact with food.
   1. Color: As selected by Architect from manufacturer's full range of colors.
   2. Backer Rod: Closed-cell polyethylene, in diameter larger than joint width.

H. Tempered Glass: ASTM C 1048, Kind FT (fully tempered), Condition A (uncoated surfaces), Type I (transparent), Class 1 (clear), Quality q3 (glazing select). Provide products complying with ANSI Z97.1, manufactured by horizontal (roller-hearth) process, and 6 mm thick, unless otherwise indicated. Provide exposed safety edges, if any, seamed before tempering.

I. Plastic: Except for plastic laminate, provide plastic materials and components complying with NSF 51.

J. Sound Dampening: NSF-certified, nonabsorbent, hard-drying, sound-deadening coating. Provide coating compounded for permanent adhesion to metal in 1/8-inch (3-mm) thickness that does not chip, flake, or blister.

K. Gaskets: NSF certified for end-use application indicated; of resilient rubber, neoprene, or PVC that is nontoxic, stable, odorless, nonabsorbent, and unaffected by exposure to foods and cleaning compounds.

2.2 ACCESSORIES

A. Cabinet Hardware: Provide NSF-certified, stainless-steel hardware for equipment items as indicated.

B. Casters: NSF-certified, standard-duty, stainless-steel, swivel stem casters with 5-inch- (125-mm-) diameter wheels, polyurethane tires with 1-inch (25-mm) tread width, and 200-lb (90-kg) load capacity per caster. Provide brakes on 2 casters per unit.

2.3 FABRICATION, GENERAL

A. Fabricate food service equipment according to NSF 2 requirements. Factory assemble equipment to greatest extent possible.

B. Plastic-Laminate and Wood Casework: Fabricate according to requirements specified in Division 6 Section "Interior Architectural Woodwork."

C. Welding: Use welding rod of same composition as metal being welded. Use methods that minimize distortion and develop strength and corrosion resistance of base metal. Provide ductile welds free of mechanical imperfections such as gas holes, pits, or cracks.
   1. Welded Butt Joints: Provide full-penetration welds for full-joint length. Make joints flat, continuous, and homogenous with sheet metal without relying on straps under seams, filling in with solder, or spot welding.
   2. Grind exposed welded joints flush with adjoining material and polish to match adjoining surfaces.
   3. Where fasteners are welded to underside of equipment, finish reverse side of weld smooth and undepressed.
   4. Coat unexposed stainless-steel welded joints with suitable metallic-based paint to prevent corrosion.
   5. After zinc-coated steel is welded, clean welds and abraded areas and apply SSPC-Paint 20, high-zinc-dust-content, galvanizing repair paint to comply with ASTM A 780.

D. Fabricate field-assembled equipment prepared for field-joining methods indicated. For metal butt joints, comply with referenced SMACNA standard, unless otherwise indicated.

E. Where stainless steel is joined to a dissimilar metal, use stainless-steel welding material or fastening devices.

F. Form metal with break bends that are not flaky, scaly, or cracked in appearance; where breaks mar uniform surface appearance of material, remove marks by grinding, polishing, and finishing.

G. Sheared Metal Edges: Finish free of burrs, fins, and irregular projections.

H. Provide surfaces in food zone, as defined in NSF 2, free from exposed fasteners.Cap exposed fastener threads, including those inside cabinets, with stainless-steel lock washers and stainless-steel cap (acorn) nuts.

I. Provide pipe slots on equipment with turned-up edges and sized to accommodate service and utility lines and mechanical connections.

J. Provide enclosures, including panels, housings, and skirts, to conceal service lines, operating components, and mechanical and electrical devices including those inside cabinets, unless otherwise indicated.

K. Seismic Restraints: Fabricate to comply with referenced SMACNA standard, unless otherwise indicated.

2.4 STAINLESS-STEEL EQUIPMENT

A. Edges and Backsplashes: Provide equipment edges and backsplashes indicated complying with referenced SMACNA standard, unless otherwise indicated.

B. Apply sound dampening to underside of metal work surfaces, including sinks and similar units. Provide coating with smooth surface and hold coating 1 inch (25 mm) back from open edges for cleaning.

C. Tables: Fabricate with reinforced tops, legs, and reinforced undershelves or cross bracing to comply with referenced SMACNA standard, unless otherwise indicated, and as follows:
   1. Tops: Minimum 0.0781-inch- (1.984-mm-) thick stainless steel, unless otherwise indicated.
   2. Legs: 1-5/8 inch (41.3 mm) OD, minimum 0.0625-inch- (1.588-mm-) thick stainless steel with stainless-steel gusset and adjustable insert bullet-type feet with minimum adjustment of 1 inch (25 mm) up or down without exposing threads, unless otherwise indicated.
   3. Undershelves: Minimum 0.625-inch- (1.588-mm-) thick stainless steel, unless otherwise indicated.
   4. Top and Undershelf Reinforcement: Provide minimum 0.0781-inch- (1.984-mm-) thick, stainless-steel reinforcing, unless otherwise indicated.
   5. Cross Bracing: 1-1/4 inch (31.75 mm) OD, minimum 0.0625-inch- (1.588-mm-) thick stainless steel, unless otherwise indicated.

D. Sinks: Fabricate of minimum 0.0781-inch- (1.984-mm-) thick stainless steel with fully welded, 1-piece construction. Construct 2 sides and bottom of sink compartment from 1 stainless-steel sheet with ends welded integral and without overlapping joints or open spaces between compartments. Provide double-wall partitions between compartments with 1/2-inch- (13-mm-) radius rounded tops that are welded integral with sink body. Cove horizontal, vertical, and interior corners with 3/4-inch (19-mm) radius. Pitch and crease sinks to waste for drainage without pooling. Seat wastes in die-stamped depressions without solder, rivets, or welding.

1. Wastes: 2-inch (50-mm) nickel-plated bronze, rotary-handle waste assembly with stainless-steel strainer plate and nickel-plated brass, connected overflow.
2. Drainboards: Minimum 0.0781-inch- (1.984-mm-) thick stainless steel, pitched to sink at 1/8 inch/12 inches (3 mm/300 mm) of length. Reinforce drainboards with minimum 0.0781-inch- (1.984-mm-) thick stainless steel, unless otherwise indicated.
3. Legs: 1-5/8 inch (41.3 mm) OD, minimum 0.0625-inch- (1.588-mm-) thick stainless steel with stainless-steel gusset welded to 0.1094-inch- (2.779-mm-) thick, stainless-steel support plate. Provide adjustable insert bullet-type feet with minimum adjustment of 1 inch (25 mm) up or down without exposing threads, unless otherwise indicated.
4. Drainboard Braces: 1 inch (25 mm) OD, minimum 0.0625-inch- (1.588-mm-) thick stainless steel, unless otherwise indicated.
5. Cross Bracing: 1-1/4 inch (31.75 mm) OD, minimum 0.0625-inch- (1.588-mm-) thick stainless steel, unless otherwise indicated.

E. Wall Shelves and Overshelves: Fabricate to comply with referenced SMACNA standard, unless otherwise indicated, and with minimum 0.0625-inch- (1.588-mm-) thick, stainless-steel shelf tops.

F. Drawers: Provide lift-out type, 1-piece, die-stamped drawer pan fabricated from 0.050-inch- (1.27-mm-) thick stainless steel with inside corners radiused. Support drawer pan with 0.0625-inch- (1.588-mm-) thick, stainless-steel channel frame welded to drawer front. Provide 1-inch- (25-mm) thick, double-wall front fabricated from 0.0625-inch- (1.588-mm-) thick stainless steel and with integral recessed pull. Fill void in drawer front with semirigid fiberglass sound dampening. Mount drawers on NSF-certified, full-extension, stainless-steel drawer slides that have minimum 100-lb (45-kg) load capacity per pair, ball-bearing rollers, and positive stop. Mount drawer slides for self-closing on drawer housing as indicated.

2.5 EXHAUST HOOD FABRICATION

A. General: Fabricate hoods indicated from minimum 0.050-inch- (1.27-mm-) thick stainless steel, unless otherwise indicated. Comply with NFPA 96 and requirements of authorities having jurisdiction.
1. Refer to Division 15 Sections for duct, fan, damper, and fire-extinguishing system requirements.

B. Grease Removal: Provide removable, stainless-steel, baffle-type grease filters with spring-loaded fastening. Provide minimum 0.0781-inch- (1.984-mm-) thick, stainless-steel filter frame and removable collection basins or troughs.

C. Light Fixtures: Provide NSF-certified fixtures with lamps, vapor-tight sealed lenses, and wiring in stainless-steel conduit on hood exterior.

D. Exhaust-Duct Collars: Minimum 0.0625-inch- (1.588-mm-) thick stainless steel.

2.6 STAINLESS-STEEL FINISHES

A. General: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations relative to applying and designating finishes.
1. Remove or blend tool and die marks and stretch lines into finish.
2. Grind and polish surfaces to produce uniform, directional textured, polished finish indicated, free of cross scratches. Run grain with long dimension of each piece.

B. Concealed Surfaces: No. 2B finish (bright, cold-rolled, unpolished finish).

C. Exposed Surfaces: No. 4 finish (bright, directional polish).

D. When polishing is completed, passivate and rinse surfaces. Remove embedded foreign matter and leave surfaces chemically clean.

E. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipment.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas and conditions, with Installer present, for compliance with requirements for installation tolerances, service-utility connections, and other conditions affecting installation and performance of food service equipment. Do not proceed with installation until unsatisfactory conditions have been corrected.

B. Examine roughing-in for piping, mechanical, and electrical systems to verify actual locations of connections before installation.

3.2 INSTALLATION, GENERAL

A. Install food service equipment level and plumb, according to manufacturer's written instructions, original design, and referenced standards.

B. Complete equipment field assembly, where required, using methods indicated.
   1. Provide closed butt and contact joints that do not require a filler.
   2. Grind field welds on stainless-steel equipment smooth, and polish to match adjacent finish. Comply with welding requirements in "Fabrication, General" Article.

C. Install equipment with access and maintenance clearances according to manufacturer's written instructions and requirements of authorities having jurisdiction.

D. Provide cutouts in equipment, neatly formed, where required to run service lines through equipment to make final connections.

E. Except for mobile and adjustable-leg equipment, securely anchor and attach items and accessories to walls, floors, or bases with stainless-steel fasteners, unless otherwise indicated.

F. Install cabinets and similar equipment on concrete or masonry bases in a bed of sealant.

~~G. Install hoods to comply with NFPA 96 requirements and to remain free from vibration when operating.~~

H. Install seismic restraints according to referenced SMACNA standard.

I. Install trim strips and similar items requiring fasteners in a bed of sealant. Fasten with stainless-steel fasteners at 48 inches (1200 mm) o.c. maximum.

J. Install sealant in joints between equipment and abutting surfaces with continuous joint backing, unless otherwise indicated. Provide airtight, watertight, vermin-proof, sanitary joints.

K. Existing Equipment: Remove and reinstall existing equipment as per installation instructions ready for final connections by division 15 and 16.

3.3 PROTECTING

A. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and Installer, that ensure food service equipment is without damage or deterioration at the time of Substantial Completion.

3.4 COMMISSIONING

A. Startup Services: Engage factory-authorized service representatives to perform startup services and to demonstrate and train Owner's maintenance personnel as specified below.
   1. Coordinate food service equipment startup with service-utility testing, balancing, and adjustments. Do not operate steam lines before they have been cleaned and sanitized.
   2. Remove protective coverings and clean and sanitize equipment, both inside and out, and relamp equipment with integral lighting. Where applicable, comply with manufacturer's written cleaning instructions.

3. Test each equipment item for proper operation. Repair or replace equipment that is defective in operation, including units that operate below required capacity or that operate with excessive noise or vibration.
4. Test refrigeration equipment's ability to maintain specified operating temperature under heavy-use conditions. Repair or replace equipment that does not maintain specified operating temperature.
5. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
6. Test motors and rotating equipment for proper rotation and lubricate moving parts according to manufacturer's written instructions.
7. Test water, drain, gas, steam, oil, refrigerant, and liquid-carrying components for leaks. Repair or replace leaking components.
8. Train Owner's maintenance personnel on procedures and schedules related to startup and shutdown, troubleshooting, servicing, and preventive maintenance for each food service equipment item.
9. Review data in the operation and maintenance manuals. Refer to Division 1 Section "Contract Closeout."
10. ~~Review data in the operation and maintenance manuals. Refer to Division 1 Section "Operation and Maintenance Data."~~

Schedule training with Owner, through Architect, with at least 7 days' advance notice.

Main Kitchen Area

The General Contractor and Subcontractor shall refer to the Kitchen Equipment Schedule and the provisions of this Section to determine the extend of ventilation, plumbing, and electrical work required for connection of all equipment items so noted. Utility connections to all equipment are to be furnished under the General Contractor, regardless of the party furnishing the equipment.

EXISTING EQUIPMENT WHICH IS SCHEDULED FOR REUSE: Kitchen equipment items currently owned by Mobridge High School are noted on the Schedule and in the Division as “EXISTING”.

All existing equipment is assumed to be in good working condition when taken out of service. The FSEC shall bring to the attention of the consultant any conditions that would render the existing equipment unsuitable for reuse. It shall be the responsibility of the FSEC to furnish a Final Rough In Plan to all utility contractors, and to coordinate the final connection of both new and existing items.

Item No. 1 - Disposer (EXISTING)
Unit is an existing disposer and is to be relocated per plan by the FSEC. FSEC to verify utilities prior to rough-in.

Item No. 2 - Three Compartment Sink w/PreRinse (EXISTING)

Unit is an existing three compartment sink and is to be relocated to the new location per plan by the FSEC. FSEC to verify utilities prior to rough-in. Existing Unit to be refurbished with the following items.

3 ea	Fisher Model 22438 DrainKing Waste Valve, flat strainer, overflow body.
1 ea	Fisher Model 34932 Faucet, 8" C.C. backsplash mount, 16" swing spout, with lever handles, includes EZ-Install adapter, POP packaging.
1 ea	Fisher Model 2210-WB Pre-Rinse Assembly, wall-mounted mixing valve, 8" adjustable centers, with spring action flexible gooseneck, with spray head (1.15 gallons per minute @ 60 PSI), with wall bracket.

Item No. 4 - Work Table (EXISTING)
Unit is an existing 30"X72" stainless steel work table and is to be relocated per plan by the FSEC.

Item No. 3 - Work Table, 132" Long (1 REQ'D)

Advance Tabco Model SS-3611

Work Table, 36" wide top, without splash, 132" long, with adjustable undershelf, s/s frame & shelf, 14 gauge, type 304 stainless steel top, s/s bullet feet.

1 ea TA-34B Top cut-out over 36" length (per cut-out)
1 ea TA-48 12" x 12" cut out for plumbing in back panel or undershelf.
1 ea TA-11D-2 Double Sink Welded Into Table Top, 20" X 20" X 12"
1 ea K-50OMIT To Delete Faucet.
1 ea K-55 Gooseneck Faucet, deck mounted, large 8-1/2" spout, 4" O.C.
2 ea K-5 Drain, twist operated, 2" IPS.
2 ea K-4 Support Bracket, for lever drains on sinks.
2 ea SS-2015 Deluxe Drawer, 20" x 15" x 5", stainless steel, with drawer slides.

Item No. 5 - Ingredient Bins (EXISTING - 5 REQ'D)

Unit is existing and is to be relocated per plan by the FSEC.

Item No. 6 - Work Table (EXISTING)

Unit is an existing 30"X60" stainless steel work table with a pot and pan rack. This unit is to be relocated per plan by the FSEC.

Item No. 7 - Work Table (EXISTING)

Unit is an existing 30"X60" stainless steel work table. This unit is to be relocated to the new location per the plan by the FSEC.

Item No. 8 - Mixer (EXISTING)

Unit is an existing Hobart 60 Quart mixer and is to be relocated per plan by the FSEC. FSEC to field verify utilities prior to rough-in.

Item No. 9 - Slicer (EXISTING)

Unit is an existing Hobart slicer and is to be relocated per plan by the FSEC. FSEC to field verify utilities prior to rough-in.

Item No. 10 - Slicer Stand (EXISTING)

Unit is an existing slicer stand and is to be relocated to the new location per the plan by the FSEC.

Item No. 11 - Work Table, 60" Long (1 REQ'D)

Advance Tabco Model KMS-305

Work Table, 30" wide top, with splash at rear only, 60" long, with adjustable undershelf, s/s frame & shelf, 16 gauge, type 304 stainless steel top, 5" backsplash, s/s bullet feet.

Item No. 12 - Wall Cabinet (EXISTING)

Unit is an existing 16"X60" stainless steel enclosed wall cabinet. This unit is to be relocated to the new location per the plan by the FSEC.

Item No. 13 - Mobile Heated Cabinet (EXISTING) (5 REQ'D)

Unit is an existing mobile heated cabinet This unit is to be relocated per the plan by the FSEC.

Item No. 14 - Stainless Steel Countertop

Custom Stainless steel countertop 144" long and 36" deep and with a 5" backsplash. Unit to be attached to the wall with clearance underneath for mobile heated cabinets. Mount countertop on wall 43" above the finished floor. Verify height of cabinets.

Item No. 15 -Convection Steamer - FUTURE (1 REQ'D)

Cleveland Range Inc. Model (2) 22CET33

SteamChef™ 3 Convection Steamers, electric, Boiler-Free, double stacked, on UNISTAND25 equipment stand, (3) full size pan capacity per compartment, SureCook controls, automatic drain & water level controls, KleanShield™ interior, std treated & tap water connection, mounting spacer, 4" adjustable legs, 9kw per cavity.

1 ea	One year limited warranty, standard.
1 ea	Model 2081 208 volts, 60-hz, 1-ph, 45 amps.
1 ea	Model MCS 60 minute electro-mechanical timer, standard on units.
1 ea	Model 9797-21 Kleensteam® II, Water Filter Assembly, for floor model steamers, includes (1) CV cartridge, (1) AR-10 filter cartridge, dip tube & ScaleKleen 2.2-lb packet, wall-mounting bracket & gauge assembly.

Item No. 16 -Convection Oven - FUTURE (1 REQ'D)

Blodgett Oven Model DFG100 DOUBLE

Convection Oven, gas, double-deck, standard depth, solid state manual controls, 2-speed fans, (5) racks & (11) positions, interior light, simultaneous operated doors with glass, s/s front, sides & top, 6" s/s legs, flue connector, 55,000 BTU each.

1 ea	(2) Two year parts, (1) one year labor and (5) five year door parts warranty, std.
1 ea	Natural gas.

Item No. 17 - Convection Oven (EXISTING)

Unit is an existing Blodgett convection oven and is to be plan by the FSEC. FSEC to field verify utilities prior to rough-in.

Item No. 18 - Braising Pan (EXISTING)

Unit is an existing Groen Braising Pan and is to be relocated to the new location per the plan by the FSEC. FSEC to field verify utilities prior to rough-in.

Item No. 18A - Floor Trough (1 REQ'D)

Advance Tabco Model FTG-1824

Floor Trough, 18"W, 24"L, 4"D, 14 gauge 304 s/s, includes s/s subway grating constructed from 3/16" x 1" bars, removable s/s strainer basket, 4" O.D. waste pipe 3"L, pitched towards waste.

Item No. 19 - Steam Kettle (EXISTING)

Unit is an existing Groen steam kettle and is to be relocated to the new location per the plan by the FSEC. FSEC to field verify utilities prior to rough-in.

Item No. 19A - Floor Trough (1 REQ'D)

Advance Tabco Model FTG-1224

Floor Trough, 12"W, 24"L, 4"D, 14 gauge 304 s/s, includes s/s subway grating constructed from 3/16" x 1" bars, removable s/s strainer basket, 4" O.D. waste pipe 3"L, pitched towards waste.

Item No. 20 – Exhaust Hood

Unit shall be furnished and installed by the HVAC Contractor and in not part of the FSEC.

Item No. 21 - Heater/Proofer (1 REQ'D)

Unit is an existing Epco heater proofer and is to be relocated per plan by the FSEC. FSEC to field verify utilities prior to rough-in.

Item No. 22 - Microwave (EXISTING)

Unit is an existing Aman microwave and is to be relocated per plan by the FSEC. FSEC to field verify utilities prior to rough-in.

Item No. 23 - Work Table, 60" Long (1 REQ'D)

Advance Tabco Model KMS-305

Work Table, 30" wide top, with splash at rear only, 60" long, with adjustable undershelf, s/s frame & shelf, 16 gauge, type 304 stainless steel top, 5" backsplash, s/s bullet feet.

Item No. 24 - Work Table, 48" Long (1 REQ'D)

Advance Tabco Model KMS-304

Work Table, 30" wide top, with splash at rear only, 48" long, with adjustable undershelf, s/s frame & shelf, 16 gauge, type 304 stainless steel top, 5" backsplash, s/s bullet feet.

Item No. 25 - Reach In Cooler (EXISTING)

Unit is an existing McCall reach in cooler and is to be relocated per plan by the FSEC. FSEC to field verify utilities prior to rough-in.

Item No. 26 - Tray Cart (EXISTING)

Unit is an existing tray cart and is to be relocated per plan by the FSEC.

Item No. 27 - Solid Top Utility Unit (EXISTING)

Unit is an existing Duke solid top utility unit and is to be relocated per plan by FSEC. FSEC to field verify utilites prior to rough in.

Item No. 28 - Hot Food Serving Counter (EXISTING)

Unit is an existing Duke hot food serving counter and is to be relocated per plan by the FSEC. FSEC to field verify utilities prior to rough-in.

Item No. 29 - Cold Food Serving Counter (1 REQ'D)

Unit is an existing Duke cold food serving counter and is to be relocated per plan by the FSEC. FSEC to field verify utilities prior to rough-in.

Item No. 30 - Milk Cooler (1 REQ'D)

Nor-Lake Model AR122WVS/0

Open Front Milk Cooler, 49" W, drop front, 12 case capacity, heavy duty floor racks, thermometer, white enamel exterior, galvanized interior, locking swivel casters, 1/5 hp, 115v/60/1, UL, C-UL, UL Sanitation & MEA Listed.

1 ea	Two year refrigerant leak limited warranty.
1 ea	Five year construction limited warranty.

Item No. 31 - Walk In Cooler/Freezer (1 REQ'D)

Walk in Cooler/Freezer to be expanded as per drawing. Walk in Cooler/Freezer to be expanded from original size to the new size 17'- 4" to 17'-4" and to meet all specifications and codes for existing and new panels. New refrigeration will be required to accommodate new Walk in Cooler/Freezer. FSEC to verify existing panels or Walk in Cooler/Freezer.

Item No. 32 - Dishtable, Clean (1 REQ'D)

Advance Tabco Model DTC-K70-84L

Korner Clean Dishtable, ell-shaped, right-to-left, 10-1/2" backsplash, 3" rolled front & side rims, stainless steel legs, with crossrails, 83" long, 16/304 stainless steel.

1 ea	Model K-508 Special sizing charge, (per sink/table)
1 ea	Model US-30-84 Work Table Undershelf, 18 gauge 430 stainless steel, 30" wide, 7 feet long.

Item No. 33 - Dishwasher, Door Type (1 REQ'D)

Champion Model D-HB-E(70)

Dishwasher, door type, high temperature w/built-in 70° rise electric booster, straight thru design, 55 racks/hour cap., door safety switch, auto-fill, s/s front & side panels, s/s construction, electric tank heat.

1 ea	One year limited warranty, std.
1 ea	208v/60/3, 51.0 amps.
1 ea	Drain water tempering kit
1 ea	Vent fan control switch.

Item No. 34 - Dishtable, Soiled (1 REQ'D)

Advance Tabco Model DTS-K70-144R

Korner-Soil Dishtable, ell-shaped, right-to-left, 10-1/2" backsplash, with pre-rinse sink, stainless steel legs, with crossrails, 143" long, 16/304 stainless steel.

1 ea	Model K-508 Special sizing charge, (per sink/table)
1 ea	Model DTA-76 Move pre-rinse sink to conform to dish machine requirements, specify dish machine
1 ft	Model DTA-84 Simple Pass-Thru, (minimum 3 ft.) (per linear foot)
1 ea	Model TA-1 Modify pass-thru shelf to accommodate roll-down door.

Item No. 35 - Custom Stainless Steel Tray Slide (1 REQ'D)

Custom Stainless steel tray slide 17'-4" long and 12" wide. Fabricate as per plan and

install with construction adhesive with no exposed fasteners. Verify length with General Contractor.

Item No. 36 - Disposer (1 REQ'D)

InSinkErator Model SS-125

Disposer, basic unit only, 1 1/4 HP motor, s/s construction, includes mounting gasket.

1 ea	1 yr. parts & labor warranty from date of installation (std)
1 ea	-26, 208v, 3 ph.
1 ea	Model CC202D-3 Control center - CC202 208-240v/3ph.
1 ea	Model #5 MOUNT #5 sink flange mounting assembly, for 3-1/2" to 4" opening.
1 ea	Model SYPHON STD Syphon breaker 1/2"
1 ea	Model SOLENOID115 Solenoid valve 1/2", 115v.
1 ea	Model DEJAMWRENCH Dejamming wrench, fits 6-5/8" opening only

Item No. 37 - Sink, Hand (2 REQ'D)

Advance Tabco Model 7-PS-60

Hand Sink, wall model, 14" wide x 10" front-to-back x 5" deep bowl, 20 gauge stainless steel construction, with splash mounted faucet, basket drain, wall bracket.

Item No. 38 – Pot Filler Faucet (1 REQ'D)

Fisher 5440

Pot filler faucet, plash-mounted 8” C.C. w/vacuum breaker, 72” long flexible hose, hook nozzle, wall hook, ¾” inlet.

Item No. 39 – Condensate Hood

Unit shall be furnished and installed by the HVAC Contractor and in not part of the FSEC.