

# 11 40 00 – Foodservice Equipment

## DIVISION 11 - Equipment



### STATEMENT OF PURPOSE & BACKGROUND

- Guidelines for selection and specification of proven foodservice equipment
- Revision history of section:
  - 12/18/2018 (date of adoption)
  - 10/28/2022 (updated equipment call-outs and references)
  - 12/27/2023 (*fire suppression clarification*)

### OUTLINE SPECIFICATION

- See the Specification Section that follows this cover sheet and incorporate into the Project Manual.

## 11 40 00

### FOODSERVICE EQUIPMENT

#### PART 1 GENERAL

##### 1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

##### 1.02 SUMMARY

- A. Section includes: Fabricated Equipment; Food waste machines; Cooking Equipment; Self-contained refrigeration equipment; Walk-in refrigeration equipment; Powered food-preparation equipment; Warewashing equipment; Serving equipment and (when specified) Utility Distribution equipment.
- B. Owner-Furnished Equipment: Where indicated, Owner will furnish equipment for installation by Contractor.
- C. For Self-Service Foodservice Equipment, Comply with Americans with Disabilities Act; and Architectural Barriers Act Accessibility Guidelines (36 CFR, Part 1191: ADAABAAG) and the ADAABAAG child anthropometrics.
- D. Related Sections:
  - 1. Divisions 22, and 23 for exhaust ductwork; service rough-ins; drain traps; atmospheric vents; valves, pipes, and fittings; fire-exhausting systems; and other materials required to complete the foodservice equipment installation.
  - 2. Division 21 Sections for connections to fire-alarm systems, wiring, disconnect switches, and other electrical materials required to complete the foodservice equipment installation.
    - a. Services and connections required for the operation of equipment furnished in this Contract shall be the responsibility of the respective Division 22 and 26 contractors who shall extend utility lines from rough-in locations to connection points on the equipment and make the necessary final connections.
    - b. All mechanical runs, including all shut off valves, traps, piping and final connections of food service equipment to building services unless otherwise specified.
    - c. Any work noted on the Bidding Documents as being by the General Contractor.
- E. The work consists of providing all labor, equipment, appliances and materials, and in performing all operation in connection with the execution of the Work as stated or as represented in the drawings of the Food Service Equipment Contract Documents, including that which is reasonably referred to provide the following work.
  - 1. The fabrication, delivery, unloading, uncrating, handling, assembly, setting in place ready for final connection by mechanical and electrical trades, and leveling of equipment, all in accordance with the Owner's schedule and Item Specifications.

2. The coordination of all mechanical and electrical rough-ins, galvanized and masonry bases, depressed areas, wall openings and other special conditions as required, to accommodate equipment in the Contract, with other contractors on the project.
3. The cutting of holes in equipment to accommodated pipes, drains, electrical conduit and outlets as required for this installation.
4. Removal of debris from the project site, associated with the uncrating of the equipment and general Installation process, as dictated by the on-site Safety requirements.

F. Definitions:

1. Exposed: All surfaces visible including surfaces behind cabinet doors when the doors are open.
2. Food Service Equipment Contractor (FSEC): The person or organization identified as such in the Agreement. The term "Food Service Equipment Contractor" or "FSEC" means the Food Service Equipment Contractor or their authorized representative.
3. Fabricated Equipment: Equipment that is not a standard catalog item and must be constructed by the FSEC or authorized Subcontractor at his shop or on the job site to conform to the Contract Documents; custom built equipment.
4. Manufactured Equipment: Equipment generally offered as a catalog item by a manufacturer including standard items requiring minor modifications.
5. Standard Equipment: Manufactured equipment.

### 1.03 SUBMITTALS

- A. Upon award of the contract, furnish to the Project Team the following submissions for approval:
- B. Equipment Shop Drawings
  1. Dimensioned floor plan at scale 1/4" = 1' - 0" (or larger) with equipment numbered and identified on a schedule on the same sheet if possible.
  2. The FSEC is to REVIEW the drawings, provided as Construction Documents by Consultant, "Make Corrections/Adjustments" of any changes that are required, and return to Consultant for adjustments and Final submittal by the FSEC. If the FSEC has provided "Equal" manufacturers and any "alternate" manufacturers, approved during the bid process, the FSEC shall indicate this information on a "reviewed" set of drawings for Consultant to adjust.
  3. Include details illustrating standard and special methods of construction.
  4. Where fabricated equipment adjoins other fabricated or standard equipment, show partial plans and elevations to illustrate the condition at the junction of the two items.
  5. Equipment installed on, or built into fixtures, shall be shown on elevation and section drawings of the fixture, and dotted in plans.
  6. Show fabricated equipment in plan, elevation and end view at scale of 3/4" = 1' - 0" or larger. Show section details at a scale of 1 - 1/2" = 1'-0" or larger.
  7. Drawing sheets shall match the contract Drawings in size and border.
  8. Dimensions specified for fabricated equipment are subject to any adjustments required by field dimensions and the accommodation of understructure components. All measurements shall be taken from finished structural members. Circle all such dimensional changes on initial and subsequent submissions.

9. Tables, sinks and counters shall be 3'-0" high in all kitchen areas and 2'-10" high in cafeteria areas unless noted otherwise. Height of splashes shall be 6" unless noted otherwise.
  10. Shelves over fabricated equipment in the preparation and cooking areas shall be 4'-4" high from the flat surface of shelf to finished floor unless noted otherwise.
  11. Dimensions specified shall be left-to-right by front to back.
  12. Each shop drawing provided by a subcontractor or manufacture shall have the FSEC stamp and signature indicating it has been checked by him for: Content of Item Specifications; drawing size and scale; field dimensions; compatibility with other equipment; and coordination with other trades and service.
  13. Submission: Submit to the Project Team two (2) reproducible sets with sufficient space for notations and review stamp. Mail or deliver prints in roll form (not folded). Incorporate on original Shop Drawings any corrections noted by the consultant and/or Architect and resubmit two (2) new sets of drawings for review. Repeat until all corrections are satisfactorily incorporated. After final review, furnish copies as needed (not to exceed six (6) sets) by the various trades and the Owner.
  14. The Contractor is responsible for the accuracy of all the submittals. Review of rough-in drawings, equipment brochures, and manufacturers shop drawings is for design and concept only and does not relieve the Contractor of the responsibility for compliance with design drawings, details and specifications, nor does it relieve them of the responsibility of verification of field dimensions, or utilities with equipment requirements, conformance with regulations and coordination with building conditions.
- C. Rough-in and Sleeve Drawing:
1. Dimensioned rough-in and sleeve drawings are provided by Consultant for Review and Comment by the FSEC. These drawings, at 1/4" scale or larger, identify all utility requirements and show exact locations and heights of all utility rough-ins, service sleeves and conduit penetrating the floors and walls through which the electrical and mechanical service lines are extended, including: Sleeve and conduit for Beverage systems, Refrigeration lines, Fire protection systems; and all Exhaust Hood requirements when specified to include CFM and duct sizes; All per code requirements. It is the responsibility of the FSEC to Review these drawings, provide any changes required, based on equipment selected and provided as part of the Contract, and Submit this information back to Consultant for correction and Submission. Include all field interconnections for food service equipment to be completed by the Trades that are not a part of the FSEC's work. Stub out of walls wherever possible. Verify existing building conditions. Submit electrical rough-in drawing on a separate sheet from mechanical rough-in for Contract items, convenience outlets, sink wastes, floor drains and other utility requirements in the food service areas including, Existing, Owner furnished, and Future Equipment indicated on the Food Service Equipment contract Drawings. Refer to the architectural, electrical, and mechanical drawings for the preparation of this submission to verify the manner in which the utility mains and branches enter the food service area. Verify that the correct utility services are available for equipment ordered.
  2. All in-slab rough-in penetrations and sleeve dimensions shall be located from column center lines and exterior walls.
  3. Each shop drawing or rough-in drawing provided by a subcontractor or manufacture shall have the FSEC stamp and signature indicating it has been checked by him for: Content of Item Specifications; Conformance to General

Conditions and Technical Specifications; Drawing size and scale; Field dimensions; compatibility with other equipment; And coordination with other trades and services.

4. Include wiring and connection diagrams for all electrically operated equipment where one or more items are interconnected by the FSEC.
  5. Submission: Within thirty (30) days from award of contract, submit to the Project Team two (2) re-produce able drawings with sufficient space for notations and review stamp. Mail or deliver prints in roll form (not folded). Incorporate on original Shop Drawings any corrections noted by the Consultant and/or architect and resubmit two (2) new sets for review. Repeat until all corrections are satisfactorily incorporated. After final review, furnish copies as needed (not to exceed six (6) by the various trades and Owner.
- D. Building Details
1. Drawing shall indicate the location and finished dimensions of all bases, depressions, curbs, special height walls and wall opening relative to the installation of the food service equipment. Scale should be 1/4" = 1'0".
- E. Equipment Brochure Samples
1. Submit two brochures for review prior to procurement of equipment. Forward corrected Brochures to those parties designated by the Owner. This Brochure shall include:
    - a. A typewritten index sheet for each item with item number and description of equipment to include: Model number, quantity, all optional features, special construction and installation requirements and all utility service requirements; this includes existing equipment to be reused.
    - b. The manufacturer's catalog sheets with descriptive data and capacities.
    - c. Arrange sheets in proper sequence; mark item number and quantity of units required. Where catalog sheets illustrate additional equipment, which is not being supplied, such equipment and data shall be marked out. Where equipment of the same manufacturer and model is being provided with different item number designations, one group of required catalog sheets per Brochure may be supplied under the initial item designation. A typewritten sheet shall be included in the appropriate numerical order in the Brochure with a reference to the location of catalog sheets (e.g., Item #10, Food Warmer: Refer to Item #1).
- F. Operation and Maintenance Manuals
1. Submit a parts list and operating and maintenance instructions bound into a manual, for all items of standard equipment.
  2. The submission shall include the following:
    - a. Parts catalog.
    - b. Operating and Maintenance Instructions.
    - c. Address and phone number of the local service agency that the FSEC has retained to service the equipment under the guaranteed requirements and a list of the equipment items for which they are responsible.
  3. The Manual shall contain a Table of Contents.
  4. Submission: Submit two (2) copies of the Manual to the Architect or Consultant, for approval, not later than the date set for installation inspection. The Contractor shall make all required revisions and additions and issue a total of Two (2) manuals to the Owner.

## 1.04 QUALITY ASSURANCE

### A. Design Criteria:

1. The FSEC represents and warrants that he has satisfied himself as to the existing openings and accesses to the food service area through which his equipment shall be required to pass, and that he is cognizant of the fact that his equipment shall be delivered in sections sized to conform to these existing limitations.
2. All materials and equipment furnished under this Contract shall be new unless otherwise specified, and that all work shall be of good quality, free from faults and defects in materials and workmanship. Work not conforming to these standards shall be considered defective. Any defects, which appear within one (1) year following final acceptance of the Work, shall be corrected.
3. Perform all work to the highest quality by skilled, experienced craftsmen of the respective trades involved.
4. Fabricate all sheet metal items by one manufacturer acceptable to the Owner and Consultant.
5. Fabricate all wood/millwork items by one manufacturer acceptable to the Owner and Consultant.
6. The Contractor is responsible for the prompt ordering including orders by his sub-contractors. Substitution of items will not be allowed or approved, for the sake of expediency, when prompt ordering would have allowed adequate time for delivery, fabrication and installation. In instances where the tardiness in purchasing contributes to a delay that might affect the scheduled completion date, it will be the responsibility of the Contractor to assume all related costs involved in taking all feasible measures to accommodate the production, delivery and installation of such items.
7. The contractor is responsible for coordinating all phases of his work with the various trade contractors on the project, in a professional and amicable manner, to ensure a complete understanding of responsibilities, scheduling and installation phases, and to avoid delays, interruptions and disagreements.
8. These drawings and specifications are for the assistance and guidance of the FSEC. Accuracy of these drawings is not guaranteed, and existing building conditions will influence exact dimensions, locations, and levels. Deviations from these conditions, to meet structural conditions, will be made without expense to the Owner. Further, these drawings and specifications are based on architectural plans which may have been changed or modified since the issuance to consultant.

### B. Errors, Omissions & Ambiguities:

1. Report any errors, omissions or ambiguities found in the drawings and specifications to consultant for clarification and resolution before bids are submitted. Consultant will issue a clarification Addendum as required.
2. No allowances will be made in favor of the FSEC for errors, omissions and ambiguities reported after the Award of Contract.
3. In the event of a conflict between documents the following will govern:
  - a. The most recent issued documents will take precedence over previously issued documents.
  - b. Conflicts within the contract documents and subsequent interpretation shall be made observing this order: Code requirements take precedence overstated requirements elsewhere in the documents; More stringent requirements take precedence over less stringent requirements; and the

Greater Quantity and Greater Quality take precedence over the lesser of the same.

- C. Requirements of Regulatory Agencies: All work and materials will be provided in accordance with the latest rules of the governing State and Local Health Departments, the current National Sanitation Foundation Standards, and all other Authorities having jurisdiction with this project.
1. Regulations, including Mechanical, Electrical, Building, and all other applicable codes having Jurisdiction will be followed, which includes, but is not limited to, the following agencies:
    - a. National Sanitation Foundation (NSF)
    - b. Underwriters Laboratory (UL) Electrical equipment and UL300 for Fire Systems
    - c. American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRE)
    - d. American Gas Association (AGA)
    - e. American Society of Mechanical Engineers (ASME)
    - f. National Electrical Code (NEC)
    - g. National Fire Protection Association (NFPA)
    - h. American Society of Tested Materials (ASTM)
    - i. Occupational Safety and Health Agency (OSHA)
    - j. International Conference of Building Officials (ICBO)
    - k. ADAABAAG (Americans with Disabilities Act and Architectural Barriers Act Accessibility Guidelines 36-CFR, Part 1191 (US Code, Title 25, Section 2005)
  2. National Sanitation Foundation requirements: Completed units and installation shall meet NSF requirements. The NSF label shall be affixed to an interior panel directly adjacent to door.
  3. Underwriters' Laboratory Requirements: Complete units and installation, including refrigeration systems, shall be approved by Underwriters' Laboratories.
  4. No extra charge will be paid for furnishing items required by the regulations, as set forth in this section or in the General Conditions of this specification, but not specified or shown on the drawings.
  5. Rulings and interpretations of the enforcing agencies shall be considered a part of the regulations.
  6. Comply with all laws, ordinances, rules, orders and regulations relating to the performance of the work, the protection of adjacent property, and the maintenance of passageways, guard fences and other protective facilities.
  7. Test and regulate all equipment in the presence of the Owner and appropriate inspectors if required, proving it to be operating properly, and provide instruction in the use of any item requested.

## **1.05 PRODUCT DELIVERY, STORAGE AND HANDLING**

- A. Delivery of Materials and Equipment
1. Schedule delivery and installation work to afford a minimum of inconvenience to, or interference with, the normal and continuous use by the Owner and/or Construction Manager of existing buildings, facilities, services and utilities, and areas in which the work will be performed. Provisions for the storage of any equipment item at the jobsite, before the commencement of installation, will only be made by the Construction Manager/GC. Under no circumstances will an agent

- of the Owner, Architectural Trade, CM or GC be asked to sign for equipment or services at the job site that are the responsibility of the FSEC.
2. Pack equipment to properly protect it from damage. Mark equipment with a number corresponding to the number assigned in the Specification.
- B. Storage and Handling
1. When applicable, existing equipment, which is to be salvaged and reused as indicated in the plans, shall be disconnected by the proper trade contractor and the FSEC shall set this existing equipment in place, and it shall be connected by the proper trade contractor. The items which are not to be reused shall be disconnected by the proper trades and disposed of as determined by the Owner/Owner's Representative.

## **1.06 ALTERNATIVES AND ALLOWANCES**

- A. Each bidder represents that his bid is based upon the materials and equipment described in the Bidding Documents and as follows:
1. The specified products used in the design of the project establish minimum standards of function, dimension, appearance, and quality in which substitutes must meet to be considered acceptable.
  2. No substitution will be considered in the base bid unless written request has been submitted to the Architect or consultant for approval at least ten (10) days prior to the date for receipt of the bids.
  3. Substitutions will be considered upon written request submitted along with and attached to the Bid Form. Each request shall include a complete description of the proposed substitute, including drawings, cuts, performance test data and any other data or information necessary for complete evaluation. This shall not relieve the Bidder from bidding on the items as specified in the Base Bid.
  4. Each Bidder, in submitting his request for substitution, agrees that if his proposed material, product or equipment is approved and subsequently used in the Work, he shall assume all costs incurred for additional work including all work and changes performed under other contracts.
  5. The approval or rejection of a proposed substitution is vested in the Architect or Consultant whose decision shall be final and binding. The determination may or may not express the reason for the decision. Substitutions will be approved by Addendum. No information or approval will be made in any other manner.
  6. Once a contract has been awarded, substitutions may be considered during a Value Engineering period if the Owner has requested such information.

## **1.07 WARRANTY/CORRECTION PERIOD**

- A. Warranty: Equipment furnished under this contract shall be guaranteed for a period of one (1) calendar year from date of substantial completion of project. Any parts requiring replacement due to damage during installation or defective material or workmanship during this period shall be promptly replaced with new parts without cost to the Owner. Replacement parts and repairs shall be guaranteed for a period of one (1) calendar year from date of replacement or repair. The single exception to the responsibility of providing warranty is existing equipment that has been relocated and/or Owner furnished equipment that has been used or put into service prior to the final installation.
- B. Refrigeration compressors: Shall have the manufacturer's extended five (5) year warranty.



- C. Refrigeration compressors: When specified, shall have a twelve (12) month service contract providing parts replacements and 24 hours per day, seven (7) days per week, local service, and maintenance, starting from date of acceptance by Owner.
- D. Equipment: Shall be serviced within a reasonable time under the guarantee by a competent local service agency. When the complete breakdown of a piece of equipment occurs, service shall be performed within 24 hours of the request. If the service agency is unable to or does not make the necessary repairs or replacements promptly, the Owner will have the necessary repairs and replacements made and charge the FSEC.

**1.08 QUALIFICATIONS**

- A. Qualifications: The Foodservice Equipment Contractor must be capable of purchasing all equipment and materials as required by the Specifications, and perform all services required in a timely manner, and as dictated by the Construction Schedule. The FSEC project manager must have a minimum of (ten) 10 years experience in the Construction Industry performing similar tasks.

**PART 2 - PRODUCTS**

**2.01 MATERIALS**

- A. Stainless steel (s/s): Type, 302 extra low carbon, not-magnetic, austenitic 18% chrome, 8% nickel, corrosion resistant alloy steel, #4 finish. Sheets shall be flat, or first grade and free of all buckles and surface imperfections.
- B. Galvanized iron (GI): Armco iron or an approved grade copper bearing steel.
- C. Gauges: Sheet iron and sheet metal shall be U.S. Standard Gauge and finished equipment gauge thickness shall not vary more than 5% plus or minus from thickness indicated below:

1.	Gauge	<u>Thickness</u>	<u>Gauge</u>	<u>Thickness</u>
	#10	0.1406	#16	0.0625
	#12	0.1094	#18	0.050
	#14	0.0781	#20	0.0375

- 2. Unless otherwise specified, no material lighter than #20 gauge shall be incorporated in the Work.
- D. Stainless steel pipe and tubing: Seamless or welded, or gauge specified and of gauge specified and of true roundness. Seamless tubing shall be thoroughly and correctly annealed, ground smooth and polished. Welded tubing shall be thoroughly heat treated and properly quenched to eliminate precipitation, drawn true to size and roundness and polished to match stainless steel sheets.
- E. Framing: Structural sheet members consisting of angles, bands, bars, and channels, shall be ductile in quality, free of hard spots, runs, checks cracks and other surface defects. They shall be smooth, galvanized by the hot dip method with all surplus removed, and free of runs, blisters, excess spelter and uncoated spots or patches.
- F. White metal castings: Corrosion-resistant metal containing not less than 30% nickel; rough ground, polished and buffed to bright luster; free from pit marks, runs, checks, burrs, and other imperfections. In lieu of white metal castings, stainless die-stamped or cast shall be acceptable.
- G. Millwork Construction: Fabricate per AWI Premium Grade Standards; factory assemble all parts and pre-finish; fabricate with flush type fronts overlapping ends; finish panel edges to match exterior surfaces; fabricate base cabinet, ends and dividers

of 3/4" seven ply plywood with corner joints between frame members fully lock jointed, glued and screwed; dado and glue cabinet backs into sides and bottom; dado and glue hardwood edges on all shelves; scribe all countertops and backsplashes of laminate plastic unless otherwise indicated; secure countertops to base cabinet from underside.

1. See Section 12 35 00 Educational Casework and Countertops for general casework standards.

H. Millwork Construction Materials:

1. Plastic laminate surfaces to be 1/16" Type I general purpose, Grade 10, solid color high pressure plastic laminate with matte finish complying with Formica, Nevamar, or WilsonArt; colors and pattern as selected by Architect; sand back of sheets for bonding with adhesive. Backing Sheets: .020" thick, Type V, Grade 91 plastic laminate; coordinate color and pattern direction with project design details.
2. Adhesive: Adhesive for plastic laminate to be Formica 100 or 150, apply laminate edges and trim at a bevel. Core material: Plastic laminate countertop construction to be minimum 3/4" thick mat formed particle board, Novoply, or spruce faced veneer core plywood.
3. Wood for Frames and Counter Edges: Solid choice white pine free from knots and defects.
4. Adjustable Shelving: Shelf thickness minimum 3/4"; surface mounted shelf standard Knappe-Vogt KNV 255ZC pilaster, with KNV 239ZC shelf clips.
5. Core Material: Medex medium density fiberboard; conform to ANSI A208.2.3.3.4, as manufactured by Medite Corp. or equal; Marine Plywood may be used in certain applications if specified.
6. Hardware: Hinges by Amerock, Blum or Grass; 176 degree opening capability; handles by Hafele, color as selected by Project design.

## 2.02 FINISHING

- A. Stainless steel: Polish to a #4 commercial finish where exposed, #2B where unexposed. The grain of polishing shall run in the same direction where possible.
- B. Paint: Not acceptable on this project.
- C. Undercoating: Spray with a sound deadening material under sink bowls only.

## 2.03 CUSTOM FABRICATION STANDARDS

- A. Qualifications: Minimum (Ten) 10 years experience in similar work; produce custom fabricated equipment at one shop. The following companies are Pre-Approved: ACS, Two Rivers Enterprises; LSV Metals.
- B. Authorized Equipment Fabricators: The companies that are approved custom stainless steel equipment fabricators must have been in business for at least 10 years, are certified NSF and UL fabricators and have produced equipment of a similar nature as the equipment specified and designed; request for substitutions can be made per Article 1.6.
- C. Draintables/Worktables
  1. Unless otherwise specified, tables shall be formed of 14 ga. s/s and shall be pitched to drainage areas at approximately 1/4" per lineal foot with a maximum pitch of 1". As its lowest point, table shall be approximately 34" from finished floor. In general, all free edges shall be the standing rolled type as described below.
  2. Standing rolled edges shall be turned up at 90 degrees and rolled outward and downward 180 degrees on a minimum 1-1/2" outside diameter. Outside corners

- shall be rounded on a 2" radius. The top of the roll, unless otherwise specified, shall be 37" from finished floor, and 3" maximum from the draintable.
3. Worktables. Form of 14 ga. stainless steel. Edges shall be rolled down 180 degrees on a 1 1/2" minimum diameter.
  4. Backsplashes formed of the same piece as the top. Form the top of the return on a 45-degree angle and shall have a 1" return unless otherwise detailed and/or specified. The splashes may be secured to wall with either metal "Z" clips or with screw fasteners. If screw fasteners are used, the heads shall be ground off and the surface grained and polished. In either case, splash shall be sealed at top to wall with clear silicone sealant as previously described. Rolled edges abutting splashes shall be continuously welded thereto, and the ends of splashes shall be closed by such welding.
  5. Reinforcing shall be welded to the underside of all tabletops in the form of stainless-steel hat sections or channels around the entire outer perimeter with cross members on 24" maximum centers. All ends shall be welded closed.
  6. Legs shall be 1-5/8" O.D. 16 ga. s/s seamless drawn tubing and shall be fitted at the top to round, fully enclosed s/s gussets, equal to Component Hardware Model No. 1020-0206-1283. Weld gussets to the underside of reinforcing members of tabletop.
  7. Crossrails. All legs shall be connected by crossrails of the same material and finish continuously welded to the legs, except where specifically omitted to accommodate undrcounter equipment of fixed shelving. Unless otherwise noted, mount corrals at 10" on center from the finished floor.
  8. Feet shall be insert "bullet" type, s/s, equal to Component Hardware Model No. 1010-0802-1144. Where feet are specified pinned to the floor, pins shall be stainless steel.
  9. Elevated shelves. Unless otherwise specified, shelves shall be formed of 16 ga. s/s and shall have squared-down free edges as previously described for work countertops. Edges abutting walls or other fixtures shall be turned up 2" minimum and crimped back slightly to form a tight fit. Free ends of all shelves shall be closed. They shall be mounted as detailed on drawings above work surface. Weld s/s rigidity and close all ends. Wall shelves shall be supported on 12 ga. s/s cantilever brackets tack welded to reinforcing members and rigidly secured to the wall on 4' - 0" centers, maximum.
  10. Undershelves shall be formed of 16 ga. s/s sheets. Shelves shall have free edges turned down 90 degrees, and back 1/2" on an obtuse angle, notched around legs, and continuously welded thereto. Edges abutting walls or other fixtures, on both fixed and removable shelves, shall be turned up a minimum of 2" hemmed back. Reinforce the underside of all shelves with galvanized steel members as required for rigidity.
  11. Drawers. Drawer front shall be formed of a single thickness of 14 ga. s/s turned outward at the top 12" at 90 degrees, and outward and downward 1" at 45 degrees to form an integral pull. Weld front to a 16 ga. stainless steel cradle which shall suit and be fitted with a drawer insert. Drawer shall be fitted with full extension, roller-bearing drawer slides, Component Hardware #S26 S/S Series, secured to cradle and to an 18 ga. s/s housing welded to counter body. Slides shall be mounted so that drawer is self closing when empty; Component Hardware complete drawer assembly models S90-0015 and S90-0020 are acceptable.
  12. Sinks. Unless otherwise specified, sinks shall be formed of 14 ga. s/s, fully coved, and continuously welded, ground and polished. Pitch sink bottoms to

drain openings, which shall be die formed and depressed below the sink bottom. Continuously weld sinks to draintables or fixture tops, where specified. The specified sink depth shall be measured from adjoining work surface. Multiple compartment sinks shall be constructed from one large sink. Weld in double wall partitions, 1" separation between partitions, to form fully coved sinks.

D. Quality Control:

1. Construction: Include necessary reinforcing, bracing, welding, and proper number and spacing of uprights and cross members for adequate strength. Wherever standard sheet sizes will permit, the tops of tables, shelves, exterior panels of cabinet type fixtures, doors and drainboards shall be constructed of a single sheet of metal. Except where required to be removable, flat surfaces shall be secured to vertical and horizontal bracing members by welding or other approved means to eliminate buckle, warp, rattle, and wobble. Equipment not braced in a rigid manner and subject to rattle or wobble will be unacceptable, and additional bracing shall be added where required.
2. Pipe Slots: Provided through all undershelves to accommodate necessary utility service lines; slots shall be of proper size and shall be neatly made with turned up ferrule edges on all sides to eliminate cutting or defacing of equipment. Cabinet bases shall be provided with an inner panel duct at ends or rear of cabinet to allow vertical pipe space to conceal vertical piping.
3. Bolts, screws, and nuts: Unacceptable on exposed surfaces; where required, they shall be of concealed type and similar composition as the metal to which they are applied. Bolts, screws, nuts, and washers shall be steel except where brass or stainless steel is fastened; they shall be of brass or stainless steel respectively. Where dissimilar metals are fastened, bolts, screws, nuts, and washers shall be steel except where brass or stainless steel is fastened, they shall be of brass or stainless steel respectively. Where dissimilar metals are fastened, bolts, screws, nuts, and washers shall be of highest-grade metal. The spacing and extent of bolts and screws shall be to ensure suitable fastening and prevent bulging of the metals fastened. Where bolt or screw threads on the interior of fixtures are visible or may come in contact with hands or wiping cloths, they shall be capped with a stainless-steel lock washer. Where screw threads are not visible or readily accessible, they may be capped with a standard lock washer and steel nut threaded to prevent rusting or corroding. Wherever bolts or screws are welded to the underside of trim or tops, the reverse side of the weld shall be neatly finished, uniform with the adjoining surface of the trim or the top. Depressions at these points are not acceptable.
4. Fabricated mobile equipment: Shall have Colson, Component Hardware, Jarvis or approved equal caster with locks on wheel and swivel movement when locking swivel casters are specified.
5. Rivets: Unacceptable as a method of fastening in any location on fabricated equipment.
6. Trim is not an acceptable substitute for accuracy and neatness. Where trim is required and accepted by the Owner in lieu of rejection of equipment, the trim shall be provided at no cost to the Owner.
7. Equipment that rests on masonry bases shall be set level into a bed of silicone rubber silicone.
8. Equipment that butts or is adjacent to a wall shall be neatly sealed to the wall with silicone rubber sealant. Equipment in wall openings, recesses or abutting a wall that cannot be easily sealed with silicone shall be trimmed with stainless

steel or other material acceptable to the Architect. Exposed fasteners are not acceptable.

9. Name plates affixed to fabricated equipment are acceptable as required by the Inspecting jurisdictions.
  10. Welding shall be by the heliarc method and shall be with a welding rod of the same composition as sheets or parts welded. Welds shall be complete welds, strong and ductile, with excess metal ground off and joints finished smooth to match adjoining surfaces. Welds shall be free of mechanical imperfections such as gas holes, pits, runs and cracks, and shall have the same color as adjoining sheet surfaces. Joints on tops and exposed cabinet faces (at operator's side) shall be continuously welded so that the fixtures appear as one (1) piece construction. Butt welds made by spot welding straps under seams, filling in the void with solder and finished by grinding are not acceptable.
  11. Spot welds: Shall have a maximum spacing between welds of 3". Tack welds shall have at least 1/4" length of welding material at a maximum spacing of 4". Welds at the ends of channel battens shall not exceed 2" centers.
  12. Galvanized iron: Not acceptable in any exposed areas for this project.
  13. Butt joints and contact joints: Shall be close fitting and shall not require trim. Wherever break bends occur, they shall be free of undue surface marks and, where such breaks mar the uniform surface appearance of the material, all such marks shall be removed by grinding, polishing, and finishing. Sheared edges shall be free of burrs or irregular projections and shall be finished to eliminate danger of cutting or laceration. Overlapping materials are not acceptable where miters occur.
  14. Grain of polishing: Shall run in the same direction on all horizontal and on all vertical surfaces on each individual item of fabricated equipment. Where table or sink tops join at right angles, the finish shall terminate in a mitered edge. Where sinks and adjacent drainboards are equipped with backsplash, the grain of polishing shall be consistent in direction throughout the length of the backsplash and sink compartment.
- E. Serving Counters - See Contract document drawings.
- F. Built-in and Counter-Mounted Equipment
1. Built-in equipment shall be installed in fixtures according to the most sanitary methods recommended by the various manufacturers. Equipment built into base cabinet shall be fitted neatly and tightly into accurately sized openings and fitted with trim strips is required to eliminate crevices. All elements, controls, fittings, etc., shall be wired and/or piped within the counter to an accessible junction point. All receptacles, switches, valves, and fittings required for the specified equipment mounted in, on or adjacent to counter (except wall-mounted receptacles) shall be furnished and installed by the Contractor. Every effort shall be made to conceal electrical cords, wiring, piping, and fittings within base cabinet of fixture, tubular stanchions, etc., Weld s/s ferrules, no less than 3/4" high, to countertops to accommodated cords, wiring and/or piping. Chases, raceways, etc., shall be furnished in counters for all service utility lines to obviate unnecessary cutting and patching of shelves or counter bodies. The lines shall be easily accessible for servicing but protected and separated from working areas.

## 2.04 REFRIGERATION

- A. Walk-in Refrigerator and Freezer Construction: Comply with US Energy Bill H.R.6 - Section 312– Energy Independence Act and Energy Star requirements.
1. Size per plan; 89-inch minimum interior height; coordinate shelving sizes with walk-in dimension.
  2. Wall and Ceiling Panels: 4" or 5" thick modular design with three cam-lock devices per panel; foamed- in place CFC reduced insulation, UL Classified according to ASTM E-84 (UL 723) and UBC 52.3 with a flame spread of 25 or less and an R factor of 32 or more.
    - a. Exterior finishes: S/S, Pebbled Aluminum, white pebbled aluminum or per item specification.
    - b. Interior finishes: Pebbled Aluminum, white pebbled aluminum, white smooth aluminum or per item specification.
  3. Floor: Per item Specification:
    - a. Built-in floor, mount in pit; Depth of pit per details; vapor barrier, concrete and finished floor material provided by other contractors, coordinate recess depth with other trades to provide a threshold, at the doors, flush with the finished floor material.
    - b. Ramp-in floor, mount on concrete floor; see details.
  4. Door: In fitting, flush with exterior panels; door swing per plan; minimum R-25 for Coolers, R-32 for Freezer section.
    - a. Vision Panel: When specified, approximately 200 sq. inches of vision area, heated glass; double pane for coolers, triple pane for freezers.
    - b. Hinges: Spring Hinges, two or three per item specification.
    - c. Handle: Standard Manufacturers handle with key lock and padlock capability.
    - d. Door Closer: Standard factory closure to automatically close door firmly within 1 inch of full closure on all doors.
    - e. Strip Curtains: Provide See-Thru Strip Curtains to comply with Energy Independence Act; provide by Manufacturer of box or equal by Aleco, CCI-Cool Curtain, or Kason.
    - f. Kickplate: Aluminum Treadbrite kickplate approximately 36" high on each side of door.
    - g. S/S Coved Base: Provide 6" high 18 ga. at exposed interior and exterior of Box.
  5. Thermometer: Digital Thermometer with alarm and light monitor; KB Modularm model 75LC flush j-box mounted; designed to turn off lights in box; with model 75LC Communicator with 75LC Wireless remote Module; equal by Weiss is acceptable. Provide Startup instruction with installation.
  6. Pressure Relief Port: Provide heated port on freezer compartment.
  7. Lights: Per item Specification and an efficacy of 40 Lumens per watt or less and may be used in conjunction with a timer or device (see #5 Thermometer) that turns off lights within 15 minutes of when the walk-in is not occupied by personnel:
    - a. LED light assembly in 48" length, Kason model1810L21248LB or Component Hardware model LED48x6218W, or equal; provide bulbs for a working system.
  8. Enclosure Panels: Provide closure panels of the same material as the walls; install without the use of exposed fasteners; Provide S/S coved base at exposed exterior and all interior areas.

9. Exterior Bumpers: Provide Stainless Steel channel bumpers at exposed wall areas
  10. Penetrations: Seal all penetrations with a similar colored material to the panel.
  11. Installation: Installation of the walk-in shall be provided by a qualified installer.
- B. Refrigeration Systems-Standard: Copeland scroll condensing units by Cold Zone, RDT, or equal, and a Larkin, Russell, or KE2 Therm evaporator Coil with R448A, R447A or R134A refrigerant; comply with Energy Independence Act requirements.
1. Air Cooled condensing unit: mount on Building Roof or as indicated on the Drawings; medium and low temperature scroll condensing units with electric demand defrost system, factory installed to work with master controller on coil.
  2. Evaporator: Forced convection style, match to the condensing unit for a working system; run coil drain lines inside box in a neat manner; minimize line runs and plumb per current Codes.
  3. Refrigeration Lines: Run lines above ceiling between the refrigeration system components.
  4. Refrigeration Controls: Master Controller for each System; Liquid line solenoid valve; Master Controller System on Coils to include Controller Board and LED readout; 3 solid state temperature sensors; electric expansion valve; pressure transducer and 24-volt transformers; system must be designed for -20 degree operating conditions; include headmaster control, crankcase heater, suction accumulator and receiver sized for system pump down.
  5. System Operation: Complete system capable of maintaining the interior temperatures specified:
    - a. Refrigerator: 35 degrees
    - b. Freezer: -10 degrees
  6. Installation: Installation performed by a qualified Refrigeration Contractor or Sheet Metal Contractor; Roof Curb and Pitch Pocket by other trades.

## 2.05 EXHAUST HOOD

- A. Exhaust Hood fabrication:
1. Construction: Fully welded; all 18 gauge Type 304 stainless steel per Article 2.02, para. B stainless steel; #4 finish including exposed rear; exterior corners fully welded, ground and polished; length and depth per plan; provide duct collar; conceal plumbing and wiring.
  2. Exhaust and Supply Requirements: Design for use and function at project engineered volume.
  3. Code Compliance: See Article 1.4.
  4. Duct Temperature Sensor: heat activated; Underwriters Laboratories listed; microswitch on duct collar for inter-wiring by Division 23 to shut down exhaust fan when micro-switch is activated.
  5. Lights: Prewire in conduit to junction box on top of exhaust hood; provide lights per item specification.
    - a. Recessed LED vapor proof fixtures; tempered glass diffuser with one piece S/S face frame; UL and NSF; bulbs provided by FSEC, providing at least 50-foot candles of light at work surfaces.
  6. Design: See item specification for designs required for this project.
    - a. Filter Hoods: Underwriters Laboratory classified stainless steel self-draining removable; built-in recessed stainless steel grease cup; one cartridge removal tool per project.
  7. Hood Installation:

- a. Mounting: Height as shown, not to exceed 7'-0" above finished floor; free from vibration and distortion; coordinate with ceiling construction and ceiling heights; provide stainless steel hanger brackets, mounting angles and steel hanger rods. It is the responsibility of the FSEC to coordinate Ceiling mounting conditions with the ceiling Contractor, so the adjoining Ceiling Grid is not installed with penetrating Fasteners.
- b. Trim: Conceal fasten 18-gauge stainless steel trim or enclosure panels from top of hood to ceiling.
- c. Interconnections: Make all plumbing and electrical interconnections between adjacent Sections, ready for singular final electrical and plumbing connections by respective trades.

## **2.06 FIRE SYSTEMS - FOR REFERENCE ONLY**

- A. Fire Protection Systems to include: *(For use only where food is cooked, not at all preparation areas, verify use for appropriate application.)*
  - 1. General: Build into exhaust hood at time of fabrication; run piping and conduit unexposed except nozzle drops; include piping and cable, tees and elbows, nozzles, and components for fuel shut-off; provide protection for exhaust hood plenum, duct collar, cooking surfaces, grease filters, and floor protection, if required; terminals for inter-wiring to building alarm system and shut-off for electrical appliances by Division 26.
  - 2. Code Compliance: See Article 1.4; comply with NFPA 13, 17 and 96, local codes and Underwriters Laboratory 300; submit shop drawings to code authorities and secure approval prior to system fabrication.
  - 3. Systems: Ansul R-102 or approved equal; see item specification for system required for this project.
    - a. Wet Chemical: Automatic and remote manual actuation; stainless steel control cabinet; cable and conduit; manual reset relay when applicable; installation and certification by factory trained personnel; mount control cabinets at the ceiling where shown on plan without exposed piping and conduit; minimum of one remote flush mounted manual pull station per system; coordinate location with local fire authorities and Division 21.
  - 4. Piping: Schedule 40, standard weight, hot-dipped galvanized steel pipe; dipped galvanized iron standard weight fittings; chrome plate exposed piping; no exposed threads.
  - 5. Gas Shut-off Valve: Automatic mechanically or electrically activated per item specification installed by Division 22.

## **2.07 ELECTRICAL**

- A. Electrical components and connections to include:
  - 1. Electrical shall be completely wired internally where electrical services are required. The work shall be done in the Contractor's shop or at his expense at the job site by the Electrical contractor. Electrical outlets and receptacles mounted on or in fabricated equipment shall be furnished and installed by the FSEC who shall run all lines to a suitable terminal box (sub-panel, starter or disconnect switch if so specified) with all wires neatly tagged showing item number, voltage characteristics and load information.
  - 2. All plug-in equipment shall have neoprene cords furnished and installed by the FSEC. The FSEC shall coordinate his work with the Electrical Contractor so that



the receptacles provided will match specified plugs installed as part of the plug-in equipment. Changes in cords and plugs required in the field due to lack of coordination will be the FSEC's responsibility. Modify the length of cords furnished with the equipment to a suitable or appropriate length.

3. The FSEC shall install and interconnect, when necessary, all electrical controls, switches or other units furnished separately.
4. Electrically heated and refrigerated equipment and/or components, such as food warmers, heat lamps and cold pans, shall be internally wired to a thermostatic control or on/off switch and on/off red indicator light, both mounted in view.
5. Conduit: Rigid steel; zinc coated where unexposed and chrome plated where exposed; conceal wherever possible.
6. Motor driven appliances or electrical heating units shall have suitable control switch or starter, furnished by the FSEC, or proper type and in accordance with local and Underwriters' codes whenever such equipment is not built. FSEC to provide exposed fused disconnect at all motors larger than 1/2 hp or per code requirements; all other line switches, fittings, and connections, when not an integral part of the equipment will be furnished and installed by the Electrical Contractor, unless otherwise specified.
7. Equipment included in the Work shall be wired, wound, or constructed to conform with the characteristics of electrical and other services at the Project premises.
8. Furnish wiring and connection diagrams with electrically operated machines and for all electrically wired fabricated equipment.
9. Equipment shall be rigid and free from objectionable vibration and noise.
10. Motors: Drip-proof, splash proof or totally enclosed type, having a continuous duty cycle and ball bearings except small motors which may have sleeve bearings; windings impregnated to resist moisture; appropriately enclose when located where subject to deposits of dust, lint, water, or other matter; mount on vibration elimination pads. Horsepower requirements on driven equipment shall be determined by the manufacturer based on normal operation of the equipment at maximum capacity.
11. Cover plates: Electrical outlets, receptacles and switches shall match the material and finish of the equipment to which they are fastened when finished as a part of the equipment.
12. Outlets and receptacles: Where indicated shall be deck-mounted on fabricated equipment, shall be National Electrical horizontal design grounded type service fittings Type 803GC and 904C; recessed single or duplex receptacles indicated as 120 volt and mounted in equipment splashes and aprons shall be grounded; Hubbell #5251 and #5252 or approved equal unless noted otherwise; when shown, provide receptacles in a Cast Aluminum housing, Component Hardware models R58-1010, for single receptacle or R58-1020 for back-to-back receptacles; provide s/s cover plates.
13. Fluorescent light fixtures where specified or detailed as part of counters, walk-in refrigeration, cases or fixtures, ballasts and lamps or light fixtures shall be provided and installed. Provide warm white lamps unless otherwise specified. Where lights are over food storage or preparation, install a non-breakable sleeve over the lamp.
14. Electrically operated equipment shall be approved by Underwriters' Laboratories (UL) and shall comply with National Electric Code, Standards of National Electrical and Electronics Engineers and National Board of Fire Underwriters.

## 2.08 PLUMBING

- A. Plumbing components and connections to include:
1. Water inlets: Locate above the positive water level to prevent siphoning of liquids into the water system. Wherever conditions require a submerged inlet, place a suitable check valve and vacuum breaker on the fixture to prevent siphoning. Where exposed, piping and fittings shall be chrome plated.
  2. Faucets: T&S Faucets as specified; non-splash aerators.
  3. Wastes: Component Hardware Encore D53-7200 Series, or equal, rotary handles; overflows when indicated on plans; removable crumb cup drain basket.
  4. Provide suitable pipe slots and/or do all drillings, punching and cutting of equipment required to provide access for mechanical connections and/or runs. Such work, when performed at the job site, shall be of the same quality as similar work performed in the shop.
  5. Water filters: Furnish, if specified, for all coffee urns, soda systems, ice machines, and steam boilers, a properly sized 3M or as Specified equal filter for installation under Division 22.
  6. Horizontal piping lines: Run at the highest possible elevation and not less than 6" above floor; run through equipment so piping does not obstruct storage space.
  7. Exposed piping shall not show tool marks or more than one thread at the fitting.
  8. Plumbing guards: Provide 16-gauge stainless steel guards where lines are extended into an aisle or other circulation area and vulnerable to damage; guards shall be at least 48" high or as required.

## PART 3 - EXECUTION

### 3.01 INSTALLATION

- A. Equipment installation shall conform to current Standards and Revisions established by the National Sanitation Foundation, Ann Arbor, Michigan, and to prevailing local codes and regulations.
- B. Provide a competent service representative during installation and on the first day of operation. The representative shall be well informed as to all phases of the Work. Put into proper operating condition all equipment and instruct the Owner's employees in the proper use and maintenance schedule to be followed thereafter. Copies of all instructional, operational and maintenance manuals or charts for equipment shall be furnished to the owner unless permanently fastened to the equipment to the satisfaction of the Owner.
- C. Qualification of installers: Minimum 5 years experience in this and similar work, including field welding.
- D. Sealing: Seal equipment against walls or other fixed equipment with silicone sealant, 1/4" maximum width.
- E. Trim: Material to match equipment surface; trim equipment in wall openings, recesses, or abutting a wall that cannot be effectively sealed with silicone; exposed fasteners are not acceptable.
- F. Cutting and Patching: Cut and/or drill tops, backs or other elements for service access, outlets, fixtures, and fittings; cut and patch foodservice equipment as required for equipment installation or service.
- G. Protection: Protect equipment from damage until final cleaning and Owner acceptance.
- H. Schedule: Comply with project construction schedule; notify the Owners representative at least 30 days in advance (in writing) if schedule cannot be met.

- I. Damage and/or Loss: Replace or repair items that are lost or damaged prior to owner acceptance.

### **3.02 FIELD MEASUREMENTS**

- A. Dimensions shown on Contract Documents are approximate and as accurate as can be determined at this time. Field dimension all measurements at the building conditions. Where obstructions occur, equipment shall be neatly scribed, fitted to and around the obstruction, resulting in a sanitary homogeneous fixture. Actual sizes specified herein.

### **3.03 PREPARATION OF SURFACES**

- A. Assume the expense and coordinate cutting and patching of walls, partitions, ceilings, and floors necessary to receive equipment caused by incorrect finished equipment dimensions, or by failure to coordinate with other trades.

### **3.04 FIELD QUALITY CONTROL**

- A. Maintain at the site of the Work one (1) copy of the Plans, Specifications and Shop Drawings and at all times give the Owner and representatives of the Owner access thereto.
- B. The FSEC shall have an experienced field representative on the site to coordinate with other trades and assist the trades in establishing proper rough-in locations as shown on the rough-in plan. Check all rough-in connections once installed to ensure that the equipment service connections are as close to rough-in locations as possible.

### **3.05 ADJUSTMENT AND CLEANING/DEMONSTRATION AND TESTING**

- A. Protect motors, pumps, electrical control centers, heating elements and all similar items, which are a part of the Work, from dirt, grime, plaster and water during all phases of construction. Protection shall be to the satisfaction of the Owner.
- B. Clean and polish all equipment prior to the inspection and acceptance of the Work by the Owner.
- C. Demonstration: Schedule times with the owner's representative to provide instruction on the maintenance and use of each item; demonstrate operation to appropriate inspectors if required; verify that copies of instruction, operational maintenance manuals have been provided in a timely manner to the operator.
- D. Testing: Test, regulate and put into proper operating condition; calibrate controls, including thermostats; coordinate dishmachine testing with detergent supplier.

### **3.06 DAMAGE AND/OR LOSS**

- A. All responsibilities shall rest with the FSEC for any damage or loss to the Work incurred prior to Owner acceptance. Items that are lost or damaged shall immediately be replaced or repaired to a new condition at the FSEC's expense to the complete satisfaction of the Owner.

### 3.07 FOODSERVICE EQUIPMENT

#### AA. IMPLEMENTATION REQUIREMENTS AT ALL SCHOOLS:

1. It is the intent of the SPPS District to accommodate equipment that can be utilized in future expansion. To that end; the Design Team should include utility rough-ins for Combi-Oven Steamers at all locations. This includes provisions for Floor Sinks, water connections to accommodate filtered and non-filtered connections, along with electrical connections.

#### A. COOKING EQUIPMENT - ELEMENTARY SCHOOLS

1. CONVECTION OVEN, 2 SECTION  
Blodgett DFG100-ES Double.
  - a. Features: Gas Double Convection Oven; standard depth; solid state controls with 60 min. timer; Stainless steel front, sides and top; Stainless steel doors with windows; solid state controls with pulse-plus feature at each deck.
  - b. Special Features: Provide simultaneous opening chain driven doors; 5" casters, two with brakes; manifold ovens to one point connection; provide Two Quick disconnect gas hose, Dormont or equal, model 1675 KIT 2-S48; provide six total additional shelf racks; 5-year warranty.
  - c. Electrical: 120V, 1 phase, cords & plugs.
2. CONVECTION OVEN, 1 SECTION / COMBI OVEN, 1 SEC.  
Blodgett, MODEL DFG-100-ES-DOUBLE; stacked on top of a Combi Oven.
  - a. Features: Stainless steel top, front and sides; angle iron frame; simultaneous door operation; dual pane thermal glass windows in doors; five chrome plated racks per section; porcelain interior liner; two speed fan motor; two oven lights; Solid State manual controls; draft diverter; stacking kit.
  - b. Accessories: Provide a 48" Quick Disconnect Gas Hose, Dormont 1675-KIT-S 48, or approved equal.
  - c. Electrical: 120V, 1 phase, cord and plug.
3. STEAMER – STACKED  
Accu-Temp, model N61201D-DBL.
  - a. Features: Double stacked on S/S mobile stand; connectionless gas boilerless Convection Steamer; 6 12"x20"x2 1/2" pans per section.
  - b. Special Features: Casters with brakes; optional drain pans; provide two Quick disconnect gas hose, Dormont or equal, model 1675 KIT 2-S48.
  - c. Electrical: 120V, 1 phase, cords and plugs.
4. COMBINATION OVEN / STEAMER,  
Alto-Shaam, model CPT7-20G boilerless combi-oven steamer.
  - a. Features: Each convection oven/steamer with electronic programmable controls; high efficiency power burner heating system; fully insulated cooking compartment; five speed auto-reversing convection fan; oven light; digital controls for temperature time and probe settings; retractable hand shower for compartment cleaning; seven 18"x26" sheet pans or fourteen 12"x20" steam table pan capacity; natural gas consumption.
  - b. Special Features/Accessories: Provide 5" casters with brakes; stacking kit; one quick disconnect gas hose, Dormont 1675 kit S48 or equal; two 60" quick disconnect poly coated water hoses as required; automatic tablet-based cleaning

system; extended one year warranty; removable quick disconnect core temperature probe.

- c. Electrical: 120V, 1 phase, SO cord with restraining device for hard wire installation.
5. **MICROWAVE OVEN**  
Panasonic, model NE 2180.
  - a. Features: Microwave / Steamer functions; 3 stage cooking; 5 power levels; 8 programmable memory pads; removable center shelf; top and bottom energy feed; unit to accommodate 12" x 20" steam table pans.
  - b. Accessories: MOBILE EQUIPMENT STAND: Custom Fabricate per plan, elevation and details measuring approximately 2'-6" x 2'-6" x 36" high; 14 ga. S/S construction; 1 5/8" S/S legs and crossrails; s/s bottom shelf; 5" dia. Heavy duty casters, all with brakes; coordinate with item #12.
  - c. Electrical: 208V, 1 phase, cord and plug.

## **B. COOKING EQUIPMENT - MIDDLE & HIGH SCHOOLS**

1. **COMBINATION OVEN / STEAMER**  
Alto-Shaam, model CPT7-20G/CTP7-20G, stacked, boilerless combi-oven steamer.
  - a. Features: Each convection oven/steamer with electronic programmable controls; high efficiency power burner heating system; fully insulated cooking compartment; five speed auto-reversing convection fan; oven light; digital controls for temperature time and probe settings; retractable hand shower for compartment cleaning; seven 18"x26" sheet pans or fourteen 12"x20" steam table pan capacity; natural gas consumption.
  - b. Special Features/Accessories: Provide 5" casters with brakes; stacking kit; two quick disconnect gas hoses, Dormont 1675 kit S48 or equal; four 60" quick disconnect poly coated water hoses as required; automatic tablet-based cleaning system; extended one year warranty; removable quick disconnect core temperature probe.
  - c. Electrical: 120V, 1 phase, SO cord with restraining device for hard wire installation.
2. **STEAMER – STACKED**  
Accu-Temp, model N61201D-DBL.
  - a. Features: Double stacked on S/S mobile stand; connectionless gas boilerless Convection Steamer; 6 12"x20"x2 1/2" pans per section.
  - b. Special Features: Casters with brakes; optional drain pans; provide two Quick disconnect gas hose, Dormont or equal, model 1675 KIT 2-S48.
  - c. Electrical: 120V, 1 phase, cords and plugs.
3. **WATER FILTER**  
3M model HF295-CL with HF 18-S with pre-filter.
  - a. Features: One pre-filter, two carbon-block cartridges, and one scale stick; dual cartridge design; pressure gauge.
  - b. Accessories: One set of replacement cartridges and scale stick.
  - c. Installation: Install on wall in a rigid manner accessible for replacement of cartridges.
4. **TILTING SKILLET**  
Market Forge, Model 40P-STGL.
  - a. Features: Natural gas, 40 gallon capacity tilting fry pan; power tilt with manual override; stainless steel pan; electronic thermostat; electric spark ignition; spring assisted cover; high limit safety switch; food strainer for pouring spout; hot and cold water fill faucet with swing spout and mixing valve; faucet bracket; 2"

tangent draw-off, position per plan and elevation; gas pressure regulator; open base design with four S/S legs and leveling feet; manufacturer must provide shop drawing showing tangent location; secure unit to floor.

- b. Accessories: PT1, power tilt override; Chicago / T&S double pantry faucet and mounting bracket; #316 S/S pan liner with gallon markings; 2" tangent draw-off; pan support and drain pan assembly; slide out drain drawer assembly.
- c. Electrical: 120V, 1 phase; cord and plug.

5. FLOOR TROUGH W/ GRATE

Custom fabricate per plan and details. Measurements to be verified on plans.

- a. Features: S/S custom floor trough, dimension per plan; S/S waste outlet at rear with removable perforated S/S basket; built-in pitch towards waste; S/S grating with 1" bar spacing.
- b. Installation: Coordinate location of waste outlets with Division 22; furnish trough assembly to Division 22 for installation; trough must be flush with finished floor; proper location of the trough is the responsibility of the FSEC.

**C. CUSTOM FABRICATED EQUIPMENT - ALL SCHOOLS**

1. WORKTABLE WITH 2 SINKS

Custom fabricate per plan, elevation and details. Measurements to be verified on plans.

- a. Features: 14 ga. S/S top; 1 5/8" S/S legs and crossrails; 8" high backsplash; 16 ga. S/S welded undershelf; two 20" x 24" x 10" deep sinks; one lever waste, two Vollrath model 52100 Cutting Board Racks.
- b. Special Features: One 20" x 20" x 5" drawer with removable S/S insert, mounted as shown; drawer assembly from Component Hardware Group, model S90-0020-N is acceptable; weld disposer collar into sink as shown.
- c. Faucet with spray rinse: T&S, model B-0133-B-ADF 8 B.
  - A. Features: Pre-rinse unit, spring action design, 8" splash mount; Jet Spray valve with 1.07 gal./ min. spray; wall bracket; one model ADF Add-a-faucet with 8" spout. Install on table, as shown on plans.

2. WORKTABLE WITH SINK

Custom fabricate per plan, elevation and details. Measurements to be verified on plans.

- a. Features: 14 ga. S/S top; 18 ga S/S cabinet base; 16 ga. S/S adjustable undershelf where shown; one 20" x 16" x 10" deep sink with Chicago model 540-LD-GN8AEABCP; one 16" x 12" x 6" sink for hand washing, with Chicago model 631 faucet with wrist handles.
- b. Special Features: Six 15" x 20" x 5" drawers with removable S/S insert, mounted as shown; drawer assembly from Component Hardware Group, model S90-0015-N is acceptable.
- c. Electrical: Provide two convenience outlets in cabinet base as shown; pre-wire to junction box; 120V, 1 phase.

3. SOILED DISHTABLE

Custom fabricate per plan, elevation and details. Measurements to be verified on plans.

- a. Features: 14 ga. S/S top and channel bracing, 16 ga. S/S undershelf; 1 5/8" S/S legs and crossrails; S/S integral sink with one water spray nozzle in 21" x 21" x 8" deep sink with removable rack guide; weld disposer collar into sink; scupper drain with removable basket.

- b. Special Features: Weld disposer ring into sink as required, provide a disposer control bracket; coordinate tray drop area with wall construction; coordinate sill with shutter door details.
  - c. Faucet: T&S, model B-0133-B.
    - A. Features: Pre-rinse unit, spring action design, 8" splash mount; Jet Spray valve with 1.48 gal./min. spray; wall bracket.
    - B. Install on soiled dishtable, as shown on plans.
- 4. CLEAN DISHTABLE  
 Custom fabricate per plan and details. Measurements to be verified on plans but must be able to accommodate a minimum of 4 dish racks.
  - a. Features: 14 ga. S/S construction; S/S channel underbracing; 1 5/8" OD S/S legs and crossrails.
  - b. Special Features: Mount rack limit switch, supplied with dishmachine, at end of table in a rigid manner; removable roller sections per details.
- 5. S/S UTILITY CHASE  
 Custom fabricate per plan and details. Measurements to be verified on plans.
  - a. Features: 18 ga. S/S removable utility covers constructed in not more than 48" removable sections; 14 ga. S/S mounting brackets; construct per detail, and coordinate with S/S insulated panels and utility requirements.
- 6. STAINLESS STEEL WALL PANELS  
 Custom Fabricate, 18 ga. S/S, construct to accommodate rough-ins; no exposed fasteners; mount on wall the full length of walls at the exhaust hood; seal at top of finished floor base and at hood; coordinate with codes on Insulation requirements.
- 7. WALL SHELF  
 Custom fabricate per plan, elevation and details. Measurements to be verified on plans. 16 ga. S/S construction.

#### **D. FAUCETS - SEE SECTION 2.08**

#### **E. SHELVING / STORAGE / HOLDING EQUIPMENT - ALL SCHOOLS**

- 1. PAN STORAGE SHELVING  
 Metro Industries, MetroMax Q shelving.
  - a. Features: Five tier high shelving unit, MetroMax polymer open grid design shelves, size as shown on plan; 84" MetroMax high posts; 5" dia. swivel casters, delete donut bumpers.
  - b. Installation: Verify that units fit within the building walls; mount bottom shelf at 10 inches above floor.
- 2. COOLER/FREEZER SHELVING  
 Metro Industries, MetroMax Q shelving.
  - a. Features: Four tier high shelving unit, MetroMax polymer open grid design shelves, size as shown on plan; 63" MetroMax high posts; 5" dia. swivel casters, delete donut bumpers.
  - b. Installation: Verify that units fit within the Walk-in walls; mount bottom shelf at 10 inches above floor.
- 3. DRY STORAGE SHELVING  
 Metro Industries, MetroMax Q shelving.
  - a. Features: Five tier high shelving unit, MetroMax polymer open grid design shelves, size as shown on plan; 84" MetroMax high posts; 5" dia. swivel casters, delete donut bumpers.

- b. Installation: Verify that units fit within the building walls; mount bottom shelf at 10 inches above floor.
- 4. DUNNAGE RACKS  
New Age Model 2000 Series, or equal by Kelmax.
  - a. Features: High Tensile Aluminum construction; heli-arc, all welded construction; Model number per size as indicated on the Drawings.
- 5. MOBILE PAN RACK  
New Age Model 1331 or equal by Kelmax, Cres-Cor or Piper.
  - a. Features: Aluminum construction; 20 angle ledge pan slides; pan spacing on 3" centers; perimeter bumper, 5" dia. swivel casters.

## **F. SINKS - ALL SCHOOLS**

- 1. HAND SINK  
Krowne Metal, model HS-20 (delete faucet), or equal by Advance Tabco or John Boos Co.
  - a. Features: S/S construction, 17"x15" overall dimension; splash mount faucet as specified.
  - b. Special Features: H-100 Chrome P trap assembly; H-110 side support brackets, two per unit; S/S splash guard as required on units.
  - c. Faucet: T&S, splash mounted faucet, wrist blade handles.
- 2. 3-COMPARTMENT POT WASH SINK  
Custom fabricate per plan and details. Measurements to be verified on plans.
  - a. Features: S/S construction, 1-5/8" S/S legs, three 20" x 26 1/2" x 12" sink bowls to accommodate sheet pans.
  - b. Accessories: Punch holes in splash for two faucets; include T&S faucet with 12" spout; three twist handle wastes with overflows; coordinate with grease trap location.

## **G. PREPARATION / SUPPORT EQUIPMENT - ALL SCHOOLS**

- 1. HOT FOOD CABINET - PASS THRU  
Alto Shaam, Model 1200UP-PT-HD.
  - a. Features: Stainless steel exterior, stainless interior; digital thermometer; self-closing S/S half-height doors, hinged per plan; four swivel casters, all with brakes; universal slides to accommodate sheet pans and steam table pans.
  - b. Electrical: 208V, 1 phase; cord and plug.
- 2. MIXING BOWL W/ STAND  
Vollrath, model 79802 80 qt. S/S mixing bowl with S/S mobile stand.
- 3. CAN OPENER  
Edlund, model 270, or equal.
  - a. Features: S/S construction; NSF listed; can locking feature.
  - b. Electrical: 120V, 1 phase; cord and plug.
- 4. HOT FOOD CABINET - PASS THRU and REACH-IN (Per Plan)  
Alto Shaam, Model 1200UP-PT-HD and 1200UP-HD.
  - a. Features: Stainless steel exterior, stainless interior; digital thermometer; self-closing S/S half-height doors, hinged per plan; four swivel casters, all with brakes; universal slides to accommodate sheet pans and steam table pans.
  - b. Electrical: 208V, 1 phase; cord and plug.
- 5. DISPOSER W/ CONTROL  
In-Sink-Erator, model SS-200-#7, with CC-202-LD.



- a. Features: Stainless steel housing, 2 HP motor, magnetic starter with push button on-off control, time delay relay, flow control valve, line disconnect; #6 disposer collar for welding into sink.
  - b. Accessories: T&S model B-0455 vacuum breaker assembly; support leg.
  - c. Electrical: 208V, 3 phase.
- 6. **HOT WATER DISPENSER**  
Bunn, model H10X-80.
  - a. Features: S/S construction; dispenses up to 24 gal. of boiling water per hour; spigot faucet.
  - b. Electrical: 208V, 1 phase, provide cord and plug.
- 7. **FOOD PROCESSOR**  
Robot Coupe, Model CL 50.
  - a. Features: Vegetable Prep machine with two separate hoppers; direct drive motor; S/S cutting blade; Auto safety shutoff when lid is lifted.
  - b. Attachments: Standard two disc package, plus provide six additional cutting discs: Slicing - 14mm (28068), Cooked Potatoes 4mm (27244); Julienne - 4x4mm (28052); Dicing - 8x8mm (28111), 14x14mm (28113), 20x20mm (28114); Dice Cleaning Kit; disc holder (107812) rack.
  - c. Electrical: 120V, 1 phase, cord and plug.
- 8. **SLICER**  
Hobart Model HS6-1.
  - a. Features: Aluminum/stainless steel construction; single speed manual operation; top-mounted knife sharpener; 13" stainless steel knife; positive traction grooved belt drive; adjustable index mechanism; 1/2 HP motor; close to stop; home position start; manual operation.
  - b. Electrical: 120V, 1 phase, cord and plug.
- 9. **20 QUART MIXER**  
Hobart, model. HL-200, 20 qt. mixer.
  - a. Features: Gear driven, high torque transmission; three fixed speeds plus stir speed; side mounted dial controls; #12 attachment hub; safety interlock bowl guard and bowl lift.
  - b. Standard Accessories: 20 qt. S/S bowl; Flat Beater; S/S Wire Whip; Spiral Dough Hook.
  - c. Electrical: 120V, 1 phase; cord and plug.
- 10. **UTILITY CART**  
Lakeside, model 511, and model 544.
  - a. Features: Stainless Steel shelves, three shelf design, integral push handle; NSF Listed.
  - b. Accessories: 5" diameter polyurethane casters, all swivel.

## **H. WORKTABLES / STANDS**

- 1. **MOBILE SLICER STAND**  
Piper Industries, model MX-29-TSS; or approved equal Custom Fabricate.
  - a. Features: S/S construction; top with marine edge construction; S/S welded undershelf; S/S pan slides welded on 4 ½" centers for sheet pan storage; 4" casters, two with brakes.
- 2. **MOBILE TABLE W/ DRAWER**  
Custom fabricate per plan, elevation and details. Measurements to be verified on plans.

- a. Features: 14 ga. S/S construction; 1 5/8" S/S legs and crossrails; S/S bottom shelf; 5" dia.
  - b. Heavy duty casters, all with brakes; One 20" x 20" x 5" deep drawer assembly from Component Hardware Group, model S90-0020-N, mount per plans.
3. EQUIPMENT STAND (Hot Water Dispenser)  
Custom Fabricate per plan, elevation and details measuring 30" long x 30" wide x 24" high.
- a. Features: 14 ga. S/S construction; 1 5/8" S/S legs and feet; s/s bottom shelf.
4. MOBILE MIXER STAND  
Piper Industries, model MX-29-TSS, or approved equal.
- a. Features: S/S construction; top with marine edge construction; S/S welded undershelf; 4" casters, two with brakes.
  - b. Accessories: MX-52-R Accessory Rack.

## I. REFRIGERATION

1. WALK-IN COOLER/FREEZER  
Norlake, or equal by Kolpak, or Thermalrite.
- a. Features: Size and shape as shown on plan; constructed and equipped per Article 2.4; US Energy Independence Act 2007; KB Modularm digital thermometer with alarm; coordinate LED light fixtures in cooler and Freezer; provide vision panel in doors; S/S coved base on exposed exterior and interior; three door hinges.
  - b. Finishes: Stainless Steel exposed exterior, white pebble aluminum interior and white smooth aluminum interior ceiling; unexposed exterior per mfg. standards.
  - c. Floor: Integral floor recessed into pit per details; see plans.
  - d. Trim: Provide trim as required to close off spaces between walk-in and building walls; provide trim to match walk-in adjoining surface; coordinate with finished floor material; 1/8" aluminum diamond tread plate on entire exposed front of walk-in complex, height to match height of tread plate on doors.
  - e. Electrical: 120V, 1 phase, lights and heaters; 3-way light switching.
2. COOLER REFRIGERATION SYSTEM  
Copelametic, or equal, Copeland hermetic or scroll compressor and Heatcraft, Norlake, RDT, Cold Zone or equal components; pre-wire to a Disconnect at exterior of Enclosure.
- a. Features: Properly sized outdoor, air-cooled refrigeration system; install on building roof in location as indicated on the Engineer's drawings; coordinate roof curb and refrigeration pitch pocket locations, per Detail; coordinate with the other trades; install system per Article 2.4; demand defrost.
  - b. Electrical: 120V, 1 phase – Coil – inside Walk-in 208V, 3 phase – Condenser
3. FREEZER REFRIGERATION SYSTEM  
Copelametic, or equal, Copeland hermetic or scroll compressor and Heatcraft, Norlake, RDT, Cold Zone or equal components; pre-wire to a Disconnect at exterior of Enclosure.
- a. Features: Properly sized outdoor, air-cooled refrigeration system; install on building roof in location as indicated on the Engineer's drawings, coordinate roof curb and refrigeration pitch pocket locations, per Detail; coordinate with the other trades; install system per Article 2.4; demand defrost.
  - b. Electrical: 208V, 1 phase - Coil – inside walk-in 208V, 3 phase – Condenser

4. REFRIGERATOR, PASS-THRU  
Traulsen, model RHT132WPUT-HHS.
  - a. Features: Stainless steel exterior, stainless interior; digital thermometer; self-closing S/S half-height doors, hinged per plan; four swivel casters, all with brakes; 12 sets of universal slides to accommodate sheet pans and steam table pans.
  - b. Electrical: 120V, 1 phase; cord and plug.
5. MOBILE MILK REFRIGERATOR  
Beverage Air, Model ST34NS.
  - a. Features: Dual access, cold wall milk cooler designed to hold eight cases of milk; external thermometer, cylinder lock; casters, all with brakes.
  - b. Optional Accessories: S/S interior; Corner Bumpers; exterior graphics package per District requirements.
  - c. Electrical: 120V, 1 phase, cord and plug.

## **J. EXHAUST HOOD**

1. EXHAUST HOOD  
AquaMatic, model ND6630-2-F, or approved equal.
  - a. Features: Filter type hood; no fire damper; stainless steel construction; filter removal tool; recessed LED light fixtures per article 2.07; provide side capture panels for reduced air volumes; duct thermistor sensor at each exhaust duct collar per Code; remote control panel keypad; control cabinet at end of hood.
  - b. Exhaust requirements: The Project was designed based on the exhaust volume of air indicated on the engineers' drawings; hood must comply with Code authority requirements to properly ventilate the equipment beneath it and be compatible with the building ventilation system.
  - c. Installation: Mount bottom edge of hood at approximately 6'-8" above finished floor; coordinate installation with Ceiling Contractor to assure that the ceiling grid is not attached to the Exhaust Hood. Any penetrations in the Hood will negate UL Listings.
  - d. Electrical: 120V, 1 phase.
2. STAINLESS STEEL WALL PANELS  
Custom Fabricate, 18 ga. S/S, construct to accommodate rough-ins; no exposed fasteners; mount on wall the full length of walls at the Exhaust Hood; seal at top of finished floor base and at hood; coordinate with Codes on Insulation requirements.

## **K. SERVING EQUIPMENT**

1. COOKS COUNTER  
Custom Fabricate per plan, elevation and details measuring approximately 10'-0" x 3'-0" x 36" high.
  - a. Features: 14 ga. S/S construction; 1 5/8" S/S legs and crossrails; s/s bottom shelf; 5" dia. Heavy duty casters, all with brakes; six 20" x 20" x 5" deep drawer assemblies from Component Hardware Group, 3 stacked on each side of table, model S90-0020-N, mount per plans; pass-thru Pan Liner shelf.
2. RECYCLING CABINET  
Custom Fabricate by Murphy Construction Services, Basic 3 hole model, 78" x 32". (763-783-2100)
  - a. Features: 16 ga. Stainless Steel top construction; stainless steel tube leg, open base design; 4" polyurethane casters with brakes; disposal opening colored

- rings of high density polyethylene; Single rail sign rack, centered on table with movable clip rails.
- b. Accessories: Provide three Rubbermaid Brute containers 32 gal. with dollies to fit underneath.
3. TRAY CART  
Piper Industries, model D16-23-Y5-WB-PB; or approved equal.
    - a. Features: S/S construction; 23" x 16" x 26" overall size; non-enclosed unit.
    - b. Accessories: 5" polyurethane swivel casters, two with brakes; Perimeter bumper.
  4. HOT / COLD CART  
Atlas, model BLU-4 MOD, modified.
    - a. Features: 16 ga. S/S top, stainless front, sides, and rear apron; plastic laminate color as selected by architect; build-in four hot/cold food wells as specified in item #72; hot well controls in apron; 5" non-marking casters, all with brakes.
    - b. Special Features: 34" serving height; cord wrap; cam-lock device to hold cart in line with adjacent carts; cord support under cabinet base; provide grommets hole in bottom shelf at operators right, to accommodate cords/caps; light switch.
    - c. Accessories: Sneeze Guard as specified below; secure to top in a rigid manner; 10" S/S flat trayslide mounted at 32".
    - d. Electrical: 120/208V, 1 phase, 20-amp cord and plug
  5. 4-WELL HOT / COLD PAN  
Low Temp Industries, model QSCHFP-4.
    - a. Features: Stainless steel construction; 4-well patented refrigerated / heated drop-in pan; removable divider bars; timed safety switch between hot / cold functions; self-contained condensing unit; accommodates 12" x 20" pans; standard depth model; NSF 7 approved; on/off switch, remote as shown per Elevation; provide shop drawing for approval; hugged edge.
    - b. Installation: Per Section; install into countertop per manufacturer's requirements and Article 2.01; coordinate adequate ventilation, service access, and support structure with counter fabricator.
    - c. Electrical: 208V, 1 phase; cord and plug.
  6. SNEEZE GUARD  
Atlas, model PRC-MOD 6x8, per plan, Elevation and Details.
    - a. Features: Length shown per plan; post locations per plan and Elevations; 1" S/S tubing, black finish; 1/4" tempered, glass panels on front and sides; provide shop drawing for approval prior to fabrication; construct per NSF requirements.
    - b. Installation: Mount to countertop in a rigid manner; secure as recommended by counter supplier.
  7. SELF-SERVE VEGETABLE CART  
Atlas, model BLU-4-MOD, modified.
    - a. Features: 16 ga. S/S top, stainless front, sides, and rear apron; plastic laminate color as selected by architect; coordinate installation of Hot/ Cold pan; controls in apron; 5" non-marking casters, all with brakes.
    - b. Special Features: 32" serving height; cord wrap; cam-lock device to hold cart in line with adjacent carts; cord support under cabinet base.
    - c. Accessories: Sneeze Guard as specified below; pre-wire electrical outlets and J-Boxes in cabinet to accommodate the power for items in adjacent carts through this counter; provide 120V outlet and 20 Amp cord and plug; provide grommets hole in bottom shelf at operators left, to accommodate cords/caps; light switch; 10" S/S flat trayslide mounted at 32".

- d. Electrical: 120/208V, 1 phase, 20-amp cord and plug.
- 8. 1-WELL HOT / COLD PAN  
Low Temp Industries, model QSCHFP-1.
  - a. Features: Stainless steel construction; 1-well patented refrigerated / heated drop-in pan; removable divider bars; timed safety switch between hot / cold functions; self-contained condensing unit; accommodates 12" x 20" pan; standard depth model; NSF 7 approved; on/off switch, remote as shown per Elevation; provide shop drawing for approval; hugged edge.
  - b. Installation: Per Section; install into countertop per manufacturer's requirements and Article 2.01; coordinate adequate ventilation, service access, and support structure with counter fabricator.
  - c. Electrical: 208V, 1 phase; cord and plug.
- 9. SNEEZE GUARD  
BSI, LLC, model XGuard-3915 with LED lights, per plan, Elevation and Details.
  - a. Features: Length shown per plan; post locations per plan and Elevations; 1" round S/S diameter tubing; black finish; 3/8" tempered, glass panels on brackets at top shelves; 3/8" tempered, rounded glass panels on brackets at vertical panels; 12" front glass panel and 14" top glass panel where shown; counter mount to counter framework; provide top grommet; provide shop drawing for approval prior to fabrication; construct per NSF requirements.
  - b. Installation: Mount thru countertop in a rigid manner; secure as recommended by Counter supplier.
  - c. Electrical: 120V, 1 phase, lights, wired through counter of Self Serve Vegetable Cart (verify with plans).
- 10. SALAD CART W/ SNEEZEGUARD  
Atlas, Model BL-BU-5-RM - Modified.
  - a. Features: Salad Bar, 77 1/2"L, 30 1/2"W, 32"H, 20ga stainless steel top, NSF-7 standards mechanical cold pan, 8" deep stainless-steel liner, 66 7/8" x 19 7/8" opening, 1" brass drain & plug, removable stainless steel grille on end, 20ga paint grip steel body, 4" dia. swivel casters, all with brakes; 2 ea TS-5 10" wide stainless trayslide on (3) stainless steel drop-down brackets, mounted 30" AFF, located on both sides; sliding doors with lock on one side.
  - b. Protector Shelf: #DS-BCDFT-MOD-5 -76" double-sided Self-service canopy with lights, flip-up breath guard on both sides, 1/4" clear acrylic guards, powder coat steel buffet shelf, Standard color powder coated shelf, Textured black, Standard color powder coated ends, LED light under canopy & wired to on/off switch in apron.
  - c. Special Features: Condensate evaporator with drain line routed to the condensate pan; Model DECAL Custom decal applied to all 4 sides, compressor compartment grill will remain stainless steel; Special body height: 32"; provide 5 AD plain adapters.
  - d. Electrical: 120V/ 1 phase, cord and plug.
- 11. SALAD CART W/ SNEEZEGUARD  
Atlas, Model BL-BU-5-RM - Modified.
  - a. Features: Salad Bar, 77 1/2"L, 30 1/2"W, 32"H, 20ga stainless steel top, NSF-7 standards mechanical cold pan, 8" deep stainless-steel liner, 66 7/8" x 19 7/8" opening, 1" brass drain & plug, removable stainless steel grille on end, 20ga paint grip steel body, 4" dia. swivel casters, all with brakes; 2 ea TS-5 10" wide stainless trayslide on (3) stainless steel drop-down brackets, mounted 30" AFF, located on both sides; sliding doors with lock on one side.

- b. Protector Shelf: #DS-BCDFT-MOD-5 -76" double-sided Self-service canopy with lights, flip-up breath guard on both sides, 1/4" clear acrylic guards, powder coat steel buffet shelf, Standard color powder coated shelf, Textured black, Standard color powder coated ends, LED light under canopy & wired to on/off switch in apron.
  - c. Special Features: Condensate evaporator with drain line routed to the condensate pan; Model DECAL Custom decal applied to all 4 sides, compressor compartment grill will remain stainless steel; Special body height: 34"; provide 5 AD plain adaptors.
  - d. Electrical: 120V/ 1 phase, cord and plug.
12. CASHIER CART  
Atlas, model BLU-2-BU-MOD, modified.
- a. Features: 16 ga. S/S top, stainless front and sides with plastic laminate color as selected by architect; 5" non-marking casters, all with brakes.
  - b. Special Features: 34" serving height; two S/S solid 10" wide trayslides, mounted at 30" AFF; grommets hole in top; cash drawer centered in cabinet.
13. CONDIMENT CART  
Atlas, model BLU- 4 -BU-MOD, modified.
- a. Features: 16 ga. S/S top, stainless front and sides with plastic laminate color as selected by architect; 5" non-marking casters, all with brakes;
  - b. Special Features: Hinged door with lock and key on one side, 32" serving height; two S/S solid 10" wide trayslides, mounted at 32".
  - c. Electrical: 120V/ 1 phase, cord and plug.

#### **L. WARE WASHING EQUIPMENT – ALL SCHOOLS (AS SPECIFIED)**

1. DISHMACHINE  
Hobart, model CL64eN.
- a. Features: Two tank conveyor dishwasher; 342 racks per hr; insulated hinged doors; s/s enclosure panels; microprocessor controls with low temperature and soiled water indicators; s/s frame construction, s/s feet; NAFEM Data Protocol compliant; conveyor dwell, vent fan and booster heater controls to operate exhaust fan through the dishmachine controls.
  - b. Special Features: Single Point Electrical Connection; electric tank heat; operation per plan; 3/4" brass pressure regulator; table limit switch; built-in booster heater; coordinate with incoming water temperature for booster heater size; five tray racks, two combination racks, two sheet pan racks, and two utensil racks.
  - c. Options: Higher than Standard Wash Chamber; drain water tempering kit; S/S Vent Hoods.
  - d. Electrical: 208V, 3phase.
2. DISHMACHINE  
Hobart, model CL-44eNRG.
- a. Features: Single tank conveyor dishwasher; 202 racks per hr; insulated hinged doors; s/s enclosure panels; microprocessor controls with low temperature and soiled water indicators; s/s frame construction, s/s feet; conveyor dwell, vent fan and booster heater controls to operate exhaust fan through the dishmachine controls.
  - b. Special Features: Single Point Electrical Connection; electric tank heat; operation per plan; 3/4" brass pressure regulator; table limit switch; built-in booster heater; coordinate with incoming water temperature for booster heater size; vent

- cowl; provide five tray racks, 2 sheet pan racks, two combination racks and two utensil racks; standard vent cowls.
- c. Options: Higher than Standard Wash Chamber; drain water tempering kit.
  - d. Electrical: 208V, 3phase.
3. VENT RISER  
Custom Fabricate per plan, elevation and details, measuring 4" x 16" x 48" inches high; 18 ga. S/S construction; Mount unit in a rigid manner; coordinate duct collar size and location with dishmachine; construct to fit inside dishmachine cowl opening.
4. FAUCET W/ SPRAY RINSE  
T&S, model B-0133-B-ADF 8B.
- a. Features: Pre-rinse unit, spring action design, 8" splash mount; Jet Spray valve with 1.07 gal./ min. spray; wall bracket; one model ADF Add-a-faucet with 12" spout.
  - b. Installation: Install on 3 Compartment Wash Sink, as shown on plans.
5. RACK DOLLIE  
Metro, Model D2020N, or approved equal.
- a. Features: Lightweight aluminum construction; designed to hold 20"x20" dish racks.

**END OF SECTION**