SECTION 114103 - STAINLESS STEEL PAN AND TROUGH DRAIN SYSTEM

1. GENERAL
   * + 1. RELATED WORK SPECIFIED ELSEWHERE
          1. Grouting: Section 036000.
          2. Chemical-Resistant Tiling: Section 093500.
          3. Brick Flooring: Section 096313.
          4. Food Service Equipment: Section 114000.
       2. SUBMITTALS
          1. Submittals for this section are subject to the re-evaluation fee identified in Article 4 of the General Conditions.
          2. Manufacturer’s installation instructions shall be provided along with product data.
          3. Submittals shall be provided in the order in which they are specified and tabbed (for combined submittals).
          4. Waiver of Submittals: The “Waiver of Certain Submittal Requirements” in Section 013300 does not apply to this Section.
          5. Submittals Package: Submit the shop drawings, product data, and samples specified below at the same time as a package.
          6. Shop Drawings: Include all items associated with the stainless-steel pan and trough drain system.

Preparation to ensure total fill during and after grouting. Submit method of grout installation to fill all cavities and voids throughout the underside of the stainless-steel pan and trough drain system (i.e., drill additional holes in the stainless-steel pan system on the outer perimeter to allow air to escape when grouting).

Provide drawing (s) field verifying existing conditions. Develop a precise detail of existing field conditions consisting of elevations at the pan system, perimeter, and adjacent areas of the pan system. Determine and provide a fixed elevation for the stainless-steel pan and trough drain system. Show elevations for pitch of stainless-steel pan to trough drain. Show total pitch of the pan from utility enclosure to trough drain. Include elevations for drainage piping within the trough drain. Show pitch to drains within the trough drain. Show elevations for proper drainage from pan trough edge to the adjacent floor drains in the brick floor system.

Shop drawings and requested information must be approved prior to fabrication or start of any work. Notify OGS Director’s Representative of any discrepancies.

Field verification must be scheduled and performed in the presence of the OGS Director’s Representative.

* + - * 1. Product Data: Catalog sheets, specifications, and installation instructions for each material specified.

Manufacturer’s product data as necessary to suit the requirements of the Contract Documents. Manufacturer’s details are not to be used for the Work of this contract.

Unless approved otherwise in writing by the Director, the requirements of the Contract Documents take precedence over the approved manufacturer’s specifications and details.

Any materials, installation procedures, or details not included in the Contract Documents must be approved by the Director.

Manufacturer’s Warranty Sample: Submit a sample copy of the manufacturer’s 5-year materials warranty.

* + - * 1. Quality Control Submittals:

Manufacturer’s System Certification:

Submit a letter certifying that the manufacturer has been actively marketing the submitted system for a minimum of 3 years.

Submit the names and addresses of 10 previous similar projects. Include the type and size of each project, and name and telephone number of a contact person at the project location.

Applicator’s Certification:

Submit a letter certifying that the applicator has been actively installing these systems for the past 5 years.

Submit the names and addresses of 5 previous similar projects. Include the type and size of each project, the manufacturer’s name, and the telephone number of a contact person at the project location.

Submit a letter certifying that the supervisor or foreman and the workers applying the system have at least 3 years’ experience in the application of similar systems.

* + - * 1. Contract Closeout Submittals:

Manufacturer’s Warranty: Upon acceptance of the completed Work of this Section, furnish the manufacturer’s written 5-year materials warranty.

* + - 1. QUALITY ASSURANCE
         1. Manufacturer’s Qualifications:

The manufacturer must have been actively marketing the submitted system in the United States for a minimum of 3 years.

* + - * 1. Applicator’s Qualifications:

The system applicator must have been actively installing these systems for the past 5 years.

The system applicator must have previously installed and completed a minimum of 5 similar projects of comparable scope and complexity to the Work of this Section.

The person supervising the Work of this Section and the workers installing the system shall have had at least 3 years of experience in the application of similar systems.

* + - * 1. Pre-installation Conference: Before this Work is scheduled to commence, a conference will be called by the Director’s Representative at the site for the purpose of reviewing the Drawings and the Specifications and resolving all questions. The conference shall be attended by the Contractor, the installer and the onsite field supervisor.

1. PRODUCTS
   * + 1. STAINLESS STEEL PAN AND DRAINAGE SYSTEM
          1. Manufacturer: IMC/Teddy Food Service Equipment, P.O. Box 206, Copiague, New York 11726-0206, Phone No.: 800-221-5644, Fax: 631-789-3633.
          2. Features:

Overall Dimensions: As dimensioned on Construction Drawings and verified in the field.

Pan: 12 ga Type 304 stainless steel with all corners fully coved and top finished with corners filled in, welded, ground, and polished. Slope to trough. Provide #3 Standard Polish finish.

Trough Drain: 14 gage Type 304 stainless steel with all corners fully coved and top finished with corners filled in, welded, ground and polished. Trough to slope to drains. Provide #3 Standard Polish finish.

Drain shall have a non-removable 2-inch-high perforated stainless-steel standpipe over outlet, with a top plug removable only with special tool.

Each Trough to be prefabricated in shop as single unit.

Floor Drain: Perforated stainless-steel pipe threaded to accept stainless steel plug (A.O. Smith Fig. 9975T). Seal pipe to trough bottom with continuous weld.

Stainless steel cross bar grating constructed of 1” x 3/16” Type 304 stainless steel cross bars spaced ¾” from inside to inside with ½” stainless steel rods spaced as shown on construction drawings. Modular grate sections shall have one removable grate at each end of each side of trough requiring remaining grates to be slid to end for removable.

Secure end grate with stainless steel vandal-resistant fasteners. Fasteners shall be Allen or Torx head, both with center post.

Hold down clips: 1” wide by 1/8” thick, 3 inches long with ½” bend at end (on the sides of the trough) and 1” wide by 1” wide by 1/8” thick on the bottom of the trough both sides of the bottom. Weld to trough drain spaced at 1’-0” O.C.

Floor Drain: Perforated stainless-steel pipe threaded to accept stainless steel plug (Jay R. Smith Manufacturing Company Fig. 9975T). Seal pipe to trough bottom with continuous weld.

Pan bottom to be reinforced with 2” 12 gage stainless steel ‘Z’ furring at each kettle leg welded to bottom of pan with 2” welds 6” O.C.) The ‘z’ at the rear leg shall be 1’-0” long centered below the leg and the ‘z’ at the front legs shall be 2’-0’ long centered below both legs.

Equipment plinth located under equipment Foodservice Equipment leg, complete with tamper proof anchor bolt, securing equipment to floor pan.

1. EXECUTION
   * + 1. INSTALLATION
          1. Contractor is to verify conditions of the existing structural concrete slab below pan area. Verify that floor drains will clear beams below. If pan needs to be adjusted to clear beams, Contractor is to coordinate these adjustments with the pan fabricator prior to fabrication.
          2. Install stainless steel pan, trough drain and utility enclosure in the presence of the Director’s Representative.
          3. Contractor to verify all access and clearances into kitchen area for delivery of equipment. Provide the equipment in sections where required for access. Complete all field welds as required. All joints shall be ground smooth and flush, free of pits and warping of materials. Corners are to maintain either the intended radius or 90° joint. All edges are to be ground smoothen and even, free from burs and defects.
          4. Field verify final elevations of the stainless-steel trough drain system, including drain elevations and utility enclosure.
          5. Develop check list prior to installation consisting or required elevations, method of grout installation, support and fastening.
          6. Conduct first delivery inspection of the stainless-steel pan and trough drain system including utility enclosure in the presence of the Director’s Representative.
          7. Coordinate with the Plumbing contractor to locate all trough drains and floor drains, including size of cut-outs in trough drain area plus areas of existing structural concrete slab in brick/quarry tile floor system.
          8. Set stainless steel pan and trough system in place. Weld trough drains together as per connection detail.
          9. Inspection and water flow test to be performed on the stainless-steel pan and trough drain system to be conducted in the presence of the Director’s Representative. Entire system is to provide unobstructed water flow to trough drain and drains without any ponding of water.

Revise this item by deleting and inserting test to meet project specific requirements.

* + - * 1. Waterproof membrane to be installed over entire kitchen area as indicated on Drawings. Membrane shall be extended over drainage flange all around perimeter of trough pan system. After membrane dries, install continuous 3” wide clamp over waterproof membrane and fasten down with 3/8-16 nuts as detailed. Provide water cut-off mastic between membrane and clamp.
      1. FIELD QUALITY CONTROL
         1. Set all food service equipment at locations indicated and leveled before and after final connections by others. Cut all openings in equipment, where required to make mechanical connections.
         2. System Acceptance Test:

Preparation: Notify the Director’s Representative at least 3 working days prior to the testing, to allow coordination to have a Facility Representative witness the testing.

Test all systems and items provided in this section.

Submit a typewritten report of the test results which are to be signed by the contractor and the Director’s Representative.

* + - * 1. Training: Train facility personnel on the operation and maintenance of the Food Service equipment for a minimum of two (4) hour sessions at the end of each phase of work.

END OF SECTION 114103