# PART 1 - GENERAL

### 1.01 RELATED DOCUMENTS

- A. Provisions, requirements, instructions and attachments in the Vendor's Agreement with the University of Texas MD Anderson Cancer Center.
- B. The University of Texas MD Anderson Cancer Center Master Construction Specifications Divisions 20, 22 and 26 are directly applicable to this Section, and this Section is directly applicable to them. Current specifications are available on the Internet at http://www2.mdanderson.org/depts/cpm/standards/specs.html

## 1.02 SUMMARY

- A. This specification section includes minimum requirements for the installation of water supply and electrical services for countertop coffee dispensing equipment.
- B. Provide all materials and work required for a complete, operable, code compliant installation that is acceptable to the Owner and authorities having jurisdiction.
- C. Provide all plumbing services and specialties required for connection to the Facility's potable water system to properly serve equipment; including but not limited to piping, supports, isolation valves, backflow preventers, pressure regulating valves, water hammer arrestors, strainers, pressure gauges, etc.
- D. Provide all electrical services and specialties required to connect to the Facility's electrical system; including but not limited to wiring, conduit, supports, switches, outlets, breakers, etc.

### 1.03 REFERENCE STANDARDS

- A. The latest published edition of a reference shall be applicable to this Project unless identified by a specific edition date.
- B. All reference amendments adopted prior to the effective date of this Contract shall be applicable to this Project.
- C. All materials, installation and workmanship shall comply with the applicable requirements and standards addressed within the following references:
  - 1. 2009 Edition of the International Plumbing Code.
  - 2. ANSI/NSF Standard 61 Drinking Water System Components Health Effects.
  - 3. Texas Health & Safety Code Chapter 341 Minimum Standards Of Sanitation And Health Protection Measures
  - 4. Underwriters Laboratories Listings.
  - 5. 2008 Edition of the National Electric Code

## 1.04 QUALITY ASSURANCE

- 1. The Equipment Vendor's name and contact information shall be permanently attached to the coffee dispenser.
- 2. Provide a maintenance tag/sticker on each unit that shall be signed and dated each time maintenance is performed. Maintenance information shall identify water filter replacement date.
- 3. All materials shall be new, undamaged, and free of rust.
- 4. Installer Qualifications: Company shall have minimum three years documented experience specializing in performing the work of this section.
  - a. Installation of plumbing components shall be performed by individuals licensed by the Texas State Board of Plumbing Examiners as a Journeyman or Master Plumber. Installation may be performed by Apprentice Plumbers provided they are registered with the Texas State Board of Plumbing examiners and under direct supervision of a licensed plumber.
  - b. All installers of water treatment equipment must meet the qualifications and be licensed according to the State of Texas.
  - c. Installation of electrical components shall be performed by individuals who possess valid City of Houston and State of Texas Electrical licenses for their skill level.

## 1.05 VENDOR PRE-PURCHASING EFFORTS

- A. Coordinate with Owner and obtain scheduling approval for site visits, installation times, utility outages and installation inspections.
- B. Visit the site to verify availability, adequacy and location of utility services and determine all installation requirements.
- C. Coordinate with Owner for approval of all proposed materials, utility connection locations, pipe and wiring routing, installation procedures and scheduling prior to start of work.

# 1.06 OWNER'S CONTACT INFORMATION

- A. North Campus Main Building
  - 1. Patient Care Areas
    - a. All installation efforts within Patient Care areas of the North Campus Main Building shall be closely coordinated with the Building Care & Operations Support Services Group:
      - 1) Location: North Campus Main Building Lutheran Pavilion Basement, Room PB.3013
      - 2) Address: 1515 Holcombe Blvd, Houston TX 77030-4009
      - 3) Phone: 713-792-2664

- 4) Email: Submittals & Inspection Request: To: Amanda D. Jenkins - <u>adjenkins@mdanderson.org</u> Copy: Frank Rickman - <u>frickman@mdanderson.org</u> Copy: Janet L. Johnson - <u>janjohns@mdanderson.org</u>
- 2. Research and Education Areas
  - a. All installation efforts within Research and Education areas of the North Campus Main Building shall be closely coordinated with the Research and Education Building Operations and Maintenance Group:
    - 1) Location: North Campus Main Building Clinical Research Building, Room T9.3930
    - 2) Address: 1515 Holcombe Blvd, Houston TX 77030-4009
    - 3) Phone: 713-563-9368
    - 4) Email: Submittals & Inspection Request: To: Samir S. Patel – <u>sspatel1@mdanderson.org</u>
- B. All requests for Owner Facilities support shall be made a minimum of forty eight (48) hours in advance.

# 1.07 SUBMITTALS

- A. Product Data:
  - 1. Submit descriptive data for all proposed plumbing and electrical materials to be installed and obtain approval from the Owner, prior to installation.
  - 2. Product Data shall include sufficient information to identify Code and Standards compliance, component material composition, service sizes, finishes and connection requirements.
- B. Record Documents:
  - 1. Provide full written description of warranties.
  - 2. Provide one copy of the final approved Service Agreement to the Facility Operations Personnel.
  - 3. Provide equipment maintenance schedule.
- C. Operation and Maintenance Data:
  - 1. Include all operating instructions related to installed components.
  - 2. Provide manufacturer's maintenance recommendations for the installed equipment.

### 1.08 DELIVERY, STORAGE AND HANDLING

A. Protect installed products and associated materials during progression of the installation to prevent damage, rust, etc. Remove foreign substances, dirt and debris as work progresses.

- B. Protect all materials before and after installation from exposure to rain, freezing temperatures and direct sunlight.
- 1.09 WARRANTY / SERVICE
  - A. Maintain all installed equipment, materials and specialties for proper operation and replace when required, for the duration of the Agreement.
  - B. Coffee dispensers with in-place catch pan reservoirs shall be monitored and cleaned each time maintenance is performed to prevent water from overflowing or creating an infection control issue.
  - C. Replace water filters serving coffee dispensers at intervals specified within the Agreement or at more frequent intervals when Vendor determines that a filter should be replaced to insure required water quality.

# PART 2 - PRODUCTS

- 2.01 GENERAL
  - A. All products and materials shall meet or exceed all applicable referenced standards, federal, state and local requirements, and conform to codes and ordinances of authorities having jurisdiction.
  - B. All products and materials shall meet or exceed equipment manufacturer's utility service requirements and recommendations.
  - C. Components of the same type shall be product of one manufacturer.

# 2.02 PLUMBING SERVICES

- A. Refer to Owner's Master Construction Specifications for all required pipe, fittings, line shut-off valves, plumbing specialties, supports, accessories and procedures that are not addressed within this specification.
- B. Pressure ratings of plumbing piping and specialties shall be suitable for the anticipated system pressures in which they are installed.
- C. All materials within domestic water distribution systems that may come in contact with the potable water delivered shall comply with ANSI/NSF Standard 61.
- D. All brass and bronze plumbing specialties within domestic water distribution systems that may come in contact with the potable water delivered shall have no more than 15% zinc content.
- E. In-Line Water Supply Stops:
  - Quarter-Turn chrome plated brass straight pattern, compression x compression connections, 125 cold water pressure rated, IAPMO listed, NSF/ANSI 61 compliant: Manufactured by NIBCO series 7140 or Owner approved equal by Apollo, Chicago Faucets or McGuire.
- F. Backflow Preventers:

- Dual Check Valves designed for use under continuous pressure, with 316 stainless steel body, Atmospheric port, Rated maximum pressure 150 psi and working temperature 33 to 130 degrees F., Certified to ANSI/NSF Standard 18, Tested and certified under ASSE Standard 1022, Sizes 1/4" and 3/8": Manufactured by Watts Regulator Series SD-3 or approved equal by Apollo.
- G. Connections to existing fixture water supply risers shall be made using brass compression end tees. Self-tapping saddle valves will not be allowed.
- H. Water Supply Piping:
  - Type "L" soft copper tubing shall be provided for the final supply connection to the coffee dispenser to allow moving the equipment for servicing and cleaning. Plastic tubing will <u>not</u> be allowed.
    - a. <u>NOTE</u>: Soft copper tubing shall not be installed above ceilings, within walls nor exposed on walls or ceilings within finished rooms.
  - 2. Fittings and piping shall be brass or copper and, wherever exposed, shall be polished chrome plated.
  - 3. Provide tight fitting chrome plated brass stainless steel escutcheons wherever pipes pass exposed through casework, floors, walls and ceilings.
  - 4. Provide an accessible in-line supply stop for each coffee dispenser.
  - 5. Provide an accessible in-line backflow preventer immediately downstream of the supply stop for each coffee dispenser.
- I. Water Filters:
  - 1. Provide each coffee dispenser with an independent in-line water filter.
  - 2. Water filters shall be manufactured by Grainger model # 5pt30, United Refrigeration model # 4613y8 or Owner approved equal.

# 2.03 ELECTRICAL SERVICES

- A. Refer to Owner's Master Construction Specifications for all required electrical wiring, switches, breakers, supports, accessories and procedures that are not addressed within this specification.
- B. All products and materials shall meet or exceed equipment manufacturers utility service requirements and recommendations.
- C. The coffee dispenser power cord shall not plug into a non-GFI outlet.
- D. The coffee dispenser power cord shall not plug into an outlet on a circuit that has not been verified to have non-overloading capacity during operation of all connected and potentially connected devices.

# **PART 3 - EXECUTION**

### 3.01 PREPARATION

A. Coordinate cutting/drilling casework, countertops and partitions with Owner prior to work.

## 3.02 INSTALLATION

- A. Installation shall meet or exceed all applicable federal, state and local requirements, referenced standards and conform to codes and ordinances of authorities having jurisdiction.
- B. Installation shall comply with manufacturer's published instructions.
- C. Install components firmly fixed, level and plumb.
- D. Installed coffee dispenser with sufficient, unobstructed space above, adjacent and behind to permit cleaning and to allow for proper ventilation.

### 3.03 TESTING AND INSPECTION

- A. Test all installed components and coordinate with Owner for an inspection of the completed installation prior to allowing use.
- B. Adjust stops or valves for intended water flow rate to equipment without splashing, noise or overflow.
- C. After equipment and utility services have been installed and activated, test equipment and associated utility service components for proper operation. Replace malfunctioning equipment and components, then retest. Repeat procedure until all components operate properly.
- D. Complete a Facilities Inspection Request form forty eight (48) hours prior to desired inspection date. Inspection Requests may be completed by phone, by delivering a hard copy or by email. Refer to Paragraph 1.06 of this specification for contact information.

### 3.04 PERFORMANCE AND OPERATION DEMONSTRATION

- A. After successful testing and inspection, demonstrate the performace and instruct the Owner proper operation and usage of the installed equipment and associated components.
- B. Notify the Owner 48 hours in advance of the demonstration.

# END OF SECTION 01 64 34