#### **PART 1 - GENERAL**

1.1 This Section includes the requirements of the temporary facilities and controls required on the Project.

## A. Temporary utilities:

- 1. The temporary utilities include providing electrical service, lighting, heating, cooling and ventilation, telephone, water, and sanitary facilities for the Project.
- 2. The Temporary facilities may include the use of existing system as applicable.
- 3. The Contractor shall be responsible for installation, operation, and maintenance throughout the Project period and removal of the systems at the end of the Project.
- B. The Contractor shall install, remove, and replace temporary construction barricades as required as part of the Work in accordance with the contract documents.
- C. The Contractor shall be responsible for the for control of dust on the Project site as well as temporary erosion and pollution controls.

#### 1.2 TEMPORARY UTILITY SERVICE REQUIREMENTS

# The Contractor shall provide all the temporary utilities including the following services:

- A. Electrical: Power Source: Current Owner approved Electrical Service provider, Oncor Electric Delivery.
- B. Provide temporary lighting for field offices, storage facilities, shops, Work areas, circulation areas for personnel and other construction areas.
- C. Provide heating, ventilation and cooling:
  - Maintain temperature, humidity, and ventilation in enclosed areas to provide ambient conditions for storage, preparation, and Work; to cure installed materials, to prevent condensation, and to prevent accumulations of dust, fumes and gases.
  - 2. During non-working hours, maintain temperature in enclosed areas at a minimum of 50 degrees F or higher as specified in the individual Sections.
- D. Arrange with local telephone service companies to provide and install direct line service to field offices.
- E. Provide water acceptable for use in its intended purpose.
  - 1. Potable water may be obtained from the Owner's existing service water facilities. Obtain water at locations approved by Owner's Authorized Representative (OAR).
  - 2. Provide the meter(s) required to record amount of water used.
  - 3. Complete and submit the Water Request Form included in Section 01 50 00.01.
- F. Provide all utilities and associated facilities at time of Mobilization.

#### 1.3 TEMPORARY UTILITY DISTRIBUTION

- A. Provide weatherproof distribution boxes with required outlets, fused switches and equipment grounds.
- B. Provide wiring, connections, and protection for temporary lighting.
- C. Provide wiring, connections, and protection for temporary and permanent equipment for environmental control, for temporary use of electrically operated equipment, and for testing.
- D. Provide valve controlled outlets located so that water is available under adequate pressure by means of hoses.

## 1.4 USE OF EXISTING SYSTEMS

- A. The Contractor may use the existing mechanical and electrical systems temporarily and shall coordinate such use with the OAR for terms and conditions for use of systems in Owner occupied areas.
- B. The Contractor shall monitor utilities usage to prevent any interference with Owner's normal requirements and notify the OAR of any abnormal usage (volume, pressure, or duration).

#### 1.5 USE OF PERMANENT SYSTEMS

- A. If the Contractor wishes to use any Owner permanent system, the Contractor shall obtain written authorization from the Owner for such use and establishing the start of warranty and conditions of use for:
  - 1. Completed systems with all utility connections and safety devices installed and operational.
  - 2. Completed systems that operate using automatic controls as required by the Contract Documents.
  - 3. Filters and other protective devices for the equipment are in place and operational.
- B. Submit an Indoor Air Quality Plan to the OAR for review and approval to ensure the use of any Owner permanent system will not negatively impact the Owner's use of the facility. The Contractor shall monitor the continuously monitor conditions to ensure air and water system cleanliness throughout the construction period.
- C. Use of Fire Hydrants:

No person shall open, turn off, interfere with, attach any pipe or hose to or connect anything with any fire hydrant, stop valve, or stop cock, or tap any water main belonging to the Owner, unless authorized to do so by the Central Utilities Plant coordinated through the OAR and have an approved Water Request Form on file.

#### 1.6 COST OF TEMPORARY FACILITIES

- A. The Contractor shall pay for the cost of the following:
  - 3. Permits and inspections unless otherwise provided for in the Contract.
  - 4. Installation of temporary utilities, materials, operation, maintenance and removal.

- 5. Energy consumed until beneficial occupancy unless provided for in Contract.
- 6. Fuel consumed by portable units.
- 7. Water used throughout the Contract.

NOTE: Water will be billed to Contractor at the rate of \$ X.XX per 1,000 gallons used.

- B. The Owner will pay the cost for the following:
  - 1. Fuel consumed in use of existing systems, except for fuel consumed by portable units.
  - 2. Temporary easements required across property outside the Owner's property.

#### 1.7 VENDING MACHINES

- A. The Owner has exclusive vending contracts in place within the Airport for food, snacks and beverages that pay a substantial sum of money to the Owner on an annual basis. If the Contractor desires to place vending machines on their Project site, the Contractor shall coordinate all requests for placement of vending machines with the Airport Concessions Department through the OAR.
- B. Prior to submitting an application to add any other vending source, the Contractor shall first receive a turndown in writing from the primary vending source(s). After receiving a turndown, the Contractor may ask for approval to place other vendor's equipment on the Project site.
- C. No vending equipment may be set-up on the Project site or elsewhere on the Airport prior to receiving the Airport Concessions Department's written approval from the OAR.

## **PART 2-PRODUCTS**

## 2.1 MATERIALS FOR TEMPORARY FACILITIES

# The Contractor shall provide the following:

- A. New or used materials which are adequate to the intended purpose.
- B. All devices and equipment shall meet Underwriter's Laboratory (UL) requirements.
- C. Telephone Equipment: Products of the local service company or specialty devices compatible with service company requirements.
- D. Drinking water dispensers of the size and number sufficient to service the Contractor and Owner's staff. The number and locations of dispensers will be approved by the OAR.
- E. Water meter(s) as shown on the Plans which remote reading indicators can be added as a standard option and be equal to those manufactured by Hersey Products, Inc. Only water meter(s) designed to be installed on fire hydrants will be approved for such use.
- F. Backflow preventer on all temporary construction water services with a line sized backflow preventer equal to Beeco Model 6-C as shown on the Plans. The Contractor shall install a test valve for facilitating a backflow prevention test.

Section: 01 50 00

G. Enclosed portable toilet facilities, self-contained units, secluded from public view meeting the requirements of State and local health regulations and ordinances.

#### **PART 3 – EXECUTION**

#### 3.1 TEMPORARY FACILITIES INSTALLATION

The Contractor shall provide the services and facilities as follows:

- A. Install initial services and facilities at time of Mobilization.
- B. Modify and extend systems as work progresses.
- C. Size piping to supply construction needs.
- D. Disinfect piping used for drinking water.
- E. Test backflow preventer assembly in conformance with Airport Construction and Fire Prevention Standards Resolution (Section 312.9 of the Plumbing Code).

#### 3.2 OPERATION AND MAINTENANCE

- A. The Contractor shall operate and maintain the temporary systems to provide continuous service throughout the Project and promptly replace worn or defective parts.
- B. Permanent heating, ventilation and cooling:
  - Clean or replace filters and install filters in duct extensions as necessary to maintain the work areas and finished areas in a condition meeting the requirements of the Contract.
  - 4. Prior to operation of permanent equipment, the Contractor shall verify that controls and safety devices are complete, equipment has been tested, and inspection made by authorities and approved for operation.
  - 5. Place zones of permanent HVAC system in operation sequentially as work progresses.
  - 6. Install temporary filters in air handling units and ducts, replace as necessary to prevent dust in equipment and ducts, to avoid contaminates in work of finished areas as set forth in the approved Indoor Air Quality Plan.
- C. Clean sanitary facilities twice per week and maintain in a sanitary condition. Provide all supplies such as toilet paper, paper towels, and soap in suitable dispensers.
- D. Dispose of water or sewage in a satisfactory manner so that no nuisance is created and so that the Work under construction will be adequately protected.

#### 3.3 DUST CONTROL

- A. The Contractor shall provide positive methods and apply dust control materials to minimize raising dust from construction operations and provide positive means to prevent air-borne dust from dispersing into atmosphere.
- B. The Contractor shall maintain dust control measures including, but not limited to, watering down materials to prevent blowing dust/materials and taking necessary actions to abate any nuisance related to excessive dust caused or brought about by the Work to the satisfaction of the OAR.

#### 3.4 EROSION CONTROL

- A. The Contractor shall plan and execute construction and earthwork by methods to control surface drainage from cuts and fills, and from borrow and waste disposal areas, to prevent erosion and sedimentation.
- B. Hold areas of bare soil exposed at one time to a minimum. Provide temporary control measures such as berms, dikes, and drains.
- C. Construct fills and waste areas by selective placement to eliminate surface silts or clays, which will erode.
- D. Periodically examine earthwork to detect any evidence of erosion, apply corrective measures as required by pollution control in accordance with Section 01 57 13.

#### 3.5 POLLUTION CONTROL

- A. The Contractor shall provide methods, means and facilities required to prevent contamination of soil, water or atmosphere by discharge of noxious substances from construction operations.
- B. Perform emergency measures required to contain any spillage and to remove contaminated soil or liquids. Excavate and dispose of contaminated earth offsite and replace with suitable compacted fill and topsoil.
- C. Prevent harmful substances from entering public waters and the disposal of wastes, effluence, chemicals or other substances adjacent to streams or in sanitary or storm sewers.
- D. Provide systems for control of atmospheric pollutants and prevent toxic concentrations of chemicals and harmful dispersal of pollutants into atmosphere.
- E. Comply with the Storm Water Pollution Prevention Plan (SWPPP) included in the Plans.

#### 3.6 WASTE DISPOSAL

The Contractor shall dispose of waste throughout the Project in accordance with Section 01 74 19.

# 3.7 REMOVAL OF TEMPORARY FACILITIES AND CONTROLS

The Contractor shall perform the following:

- A. Remove the temporary materials and equipment at Substantial Completion of the Project.
- B. Restore existing and permanent equipment when used for temporary service to original condition at Substantial Completion.
- C. Remove any temporary underground installations to a depth of two (2) feet and grade site as indicated in the Plans.
- D. Replace temporary filters with new, clean, reusable filters at Substantial Completion.
- E. Remove each water meter at Substantial Completion and leave the water valve in place when the temporary service has been supplied through a water main. Install coat valve and piping remaining with coal tar coating system in accordance with

# **TEMPORARY FACILITIES AND CONTROLS**

Section: 01 50 00

NAPCA (National Association of Pipe Coating Applicators) TF-2, TF-3, TG-2 or TG-3 specifications.

F. Remove portable toilets when no longer required for the Contractor or Owner's staff.

# PART 4 MEASUREMENT AND PAYMENT

Not Used.

- END OF SECTION -