

**SECTION 01 5000****TEMPORARY FACILITIES AND CONTROLS****PART 1 - GENERAL****1.01 SECTION REQUIREMENTS**

- A. Use Charges: Installation and removal of and use charges for temporary facilities shall be included in the Contract Sum unless otherwise indicated.
- B. Water and Electric Power: Available from University's existing system without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.
  - 1. Connections to potable water shall be through a backflow device. A backflow preventer will be provided and certified by University's staff when required at no cost to Contractor.
  - 2. When the contract requires a water meter it shall be rented from Irvine Ranch Water District (IRWD).
  - 3. Backflow devices or water meters shall not be relocated during the project without approval by the University's Representative.
- C. Fence Plan: Submit site plan with construction fence around project, location of gates and fire access gates, for approval by State Fire Marshal and Orange County Fire Authority (OCFA). Show location of any existing fire hydrants. Submittal shall include fence plans for any off project site lay down area if applicable.
- D. Storm Water Pollution Prevention Plan (SWPPP): Prepare the SWPPP if applicable in accordance with the General Permit to discharge storm water associated with construction activity. The SWPPP shall be prepared by an individual knowledgeable about storm water pollution prevention methods and requirements. The SWPPP shall be implemented prior to commencement of construction activities and shall include but not be limited to: the construction site, lay down area, remote contractor parking site and the temporary trailer facilities. SWPPP shall include any off project site lay down area if applicable.
- E. Moisture-Protection Plan: Describe procedures and controls for protecting materials and construction from water absorption and damage.
- F. Dust- and HVAC-Control Plan: Submit coordination drawing and narrative that indicates the dust- and HVAC-control measures proposed for use, proposed locations, and proposed time frame for their operation. Identify further options if proposed measures are later determined to be inadequate.
- G. Traffic Control Plan: Submit traffic control plan for vehicular, pedestrian and bicycle traffic around the project construction site. Show locations of barricades, lights, and signage. These traffic control plans shall be prepared by persons knowledgeable about the fundamental principles of temporary traffic controls and the work activities performed. The design, selection, and placement of traffic control devices for the traffic control plan

shall be based on engineering judgment and in accordance with Part 6 of the California Manual on Uniform Traffic Control Devices for Streets and Highways.

- H. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with California Electric Code.
- I. Accessible Temporary Egress: Comply with applicable provisions in ICC A117.1.

## **PART 2 - PRODUCTS**

### **2.01 MATERIALS**

- A. Chain-Link Fencing: Minimum 2-inch, 0.148-inch- thick, galvanized-steel, portable chain-link fabric fencing; minimum 6 feet high with galvanized-steel pipe posts minimum 2<sup>3</sup>/<sub>8</sub>-inch, outside diameter, line posts and 2<sup>7</sup>/<sub>8</sub>-inch, outside diameter corner and pull posts, with 1<sup>5</sup>/<sub>8</sub>-inch, outside diameter, top and bottom rails. Provide concrete or galvanized steel bases for supporting posts.
- B. Polyethylene Sheet: Provide reinforced, fire-resistive sheet, 10 mils minimum thickness, with flame-spread rating of 15 or less in accordance with ASTM E84.
- C. Dust Control Adhesive-Surface Walk-off Mats: Provide mats minimum 36 x 60 inches.

### **2.02 TEMPORARY FACILITIES**

- A. Provide, if required by Contractor, field offices, storage and fabrication sheds, and other support facilities as necessary for construction operations. Store combustible materials apart from building.

### **2.03 EQUIPMENT**

- A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.
  - 1. Provide hand-carried, portable UL rated, Class "A" fire extinguishers for temporary offices and similar spaces. In other locations, provide hand-carried, portable, UL rated, class "ABC" dry chemical extinguishers, or a combination of extinguishers.
  - 2. Comply with NFPA 10 and CFC Article 87 for classification, extinguishing agent and size required by location and class of fire exposure.
  - 3. Locate fire extinguishers in field offices, storage sheds, tool houses, other temporary buildings, and throughout the Site. In the area under construction, provide at least one fire extinguisher for each 2500 square feet of building floor area. Locate fire extinguishers so that a person never has to walk more than 50 feet to obtain one.
- B. HVAC Equipment: Unless University authorizes use of permanent HVAC system, provide vented, self-contained, liquid-propane-gas or fuel-oil heaters with individual space thermostatic control.
  - 1. Use of gasoline-burning space heaters, open-flame heaters, or salamander-type heating units is prohibited.

2. Heating Units: Listed and labeled for type of fuel being consumed, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
3. Permanent HVAC System: If University authorizes use of permanent HVAC system for temporary use during construction, provide filter with MERV of 8 at each return-air grille in Work area and remove at end of construction.

### **PART 3 - EXECUTION**

#### **3.01 TEMPORARY UTILITY INSTALLATION**

- A. General: Install temporary service or connect to existing service.
  1. Arrange with University's Representative for time when service can be interrupted, if necessary, to make connections for temporary services.
- B. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking-water fixtures. Comply with California regulations and health codes for type, number, location, operation, and maintenance of fixtures and facilities.
  1. Toilets: Use of University's existing toilet facilities will be permitted, as long as facilities are cleaned and maintained in a condition acceptable to University. At Substantial Completion, restore these facilities to condition existing before initial use.
- C. Heating and Cooling: Provide temporary heating and cooling if required for curing or drying of completed installations or for protecting installed construction from adverse effects of low temperatures or high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed.
- D. Ventilation
  1. Enclosed areas shall be ventilated by Contractor to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, and gasses.
  2. Existing ventilation equipment shall be used where possible and extended and supplemented with temporary fan units or other equipment as required to maintain clean air for construction operations.
  3. When hazardous materials are encountered, specialized ventilation shall be furnished so as to not contaminate the existing system.
- E. Electric Power Service: Provide electric power service and distribution system of sufficient size, capacity, and power characteristics required for construction operations. Connect temporary service to University's power source where directed.
- F. Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.
- G. Telephone Service: Provide superintendent with cellular telephone.

#### **3.02 SUPPORT FACILITIES INSTALLATION**

- A. Project Signs: Install project identification and other signs in locations only if approved by University's Representative to inform the public and persons seeking entrance to Project.

- B. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of Section 01 7419, "Construction Waste Management and Disposal".
- C. Temporary Elevator Use: Use of University's existing elevators will be permitted, provided elevators are cleaned and maintained in a condition acceptable to University's Representative. Provide protective coverings, barriers, devices, signs, or other procedures to protect elevator car and entrance doors and frame. At Substantial Completion, restore elevator cab and hall call buttons to condition existing before initial use.

### **3.03 SECURITY AND PROTECTION FACILITIES INSTALLATION**

- A. Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
- B. Storm Water Control: Comply with SWRCB and apply Best Management Practices (BMPs). Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of storm water from heavy rains. These provisions are also required at off project site lay down areas.
- C. Tree and Plant Protection: Install temporary fencing located outside the drip line of trees to protect vegetation from damage from construction operations. Protect tree root systems from damage, flooding, and erosion.
- D. If required, furnish and install site enclosure fence in a manner that will prevent people and animals from easily entering site except by entrance gates.
- E. Barricades, Warning Signs, and Lights: Comply with requirements of University for erecting structurally adequate barricades, including warning signs and lighting.
- F. Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary watertight enclosure for building exterior.
- G. Provide floor-to-ceiling dustproof partitions to limit dust and dirt migration and to separate areas occupied by University and tenants from fumes and noise.
- H. Install and maintain temporary fire-protection facilities. Comply with NFPA 241.

### **3.04 MOISTURE AND MOLD CONTROL**

- A. Before installation of weather barriers, protect materials from water damage and keep porous and organic materials from coming into prolonged contact with concrete.
  - 1. Protect stored and installed material from flowing or standing water.
  - 2. Remove standing water from decks.
  - 3. Keep deck openings covered or dammed.
- B. After installation of weather barriers but before full enclosure and conditioning of building, protect as follows:

1. Do not load or install drywall or porous materials into partially enclosed building.
2. Discard water-damaged material.
3. Do not install material that is wet.
4. Discard, replace, or clean stored or installed material that begins to grow mold.
5. Perform work in a sequence that allows any wet materials adequate time to dry before enclosing the material in drywall or other interior finishes.

**3.05 OPERATION, TERMINATION, AND REMOVAL**

- A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- B. Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion.
- C. At Substantial Completion, repair, renovate, and clean permanent facilities used during construction period.

**END OF SECTION**