

Coordinate with Exhibit 43 - Utility Service Initiation And Termination Form

Revisions to this section should complement the following general conditions paragraph; 3.3 labor and materials - 3.3.1 unless otherwise provided in the contract, contractor shall provide and pay for all labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and final completion of the work, whether temporary or permanent and whether or not incorporated or to be incorporated in the work.

SECTION 01 51 00 TEMPORARY UTILITIES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section describes provision of temporary utilities and includes administrative and procedural requirements.

1.2 REQUIREMENTS

- A. Refer to applicable requirements specified in Division 22 Plumbing, and in Division 26 Electrical, Division 27 Telecommunications and Division 33 Utilities.

For Mini or Brief Form Contracts, select option "B".

For Long Form Contracts with work in existing buildings, option "B" may be selected.

For Long Form Contracts requiring siting of temporary trailers or major construction, option "C" shall be selected.

- B. University will furnish, at no cost to Contractor, utilities used during the course of construction and commissioning; including gas, water, electricity, chilled water, **[and] steam[, and data service]** until that portion of the work is accepted by the University through Beneficial Occupancy or Substantial Completion. Contractor shall install and maintain services during the Work. Contractor shall provide and pay for the monthly usage for telephone **[and data]** service. If the University's Representative determines, that the Contractor is not making reasonable efforts to conserve energy and water, it may terminate its permission for free access and impose partial or full charges for such services it provides to the Contractor effective from the date such determination is provided to the Contractor in writing.

-- OR --

- C. Contractor shall provide, maintain and pay the University for the monthly usage of all utilities used during the course of construction and commissioning; including gas, water, electricity, chilled water, steam, and telephone and data service until that portion of the work is accepted by the University through Beneficial Occupancy or Substantial Completion. Payment in full for all temporary utilities shall be a condition precedent to issuance of the Notice of Substantial Completion.
- D. University does not guarantee amounts of utilities available from existing University's sources, nor will the University be responsible for interruptions in service.
- E. Contractor shall coordinate with the University's Representative prior to making any temporary utility connections.
- F. Contractor shall submit to University's Representative for approval a small scale drawing detailing proposed points of connections, materials proposed for use and routes for temporary utilities. Contractor shall not proceed with connections, modifications or extension of utilities without written approval by the University's Representative.
- G. Maintain and operate systems in conformance with industry standard, applicable codes and manufacturer guidelines to provide continuous service.
- H. Contractor shall be responsible for costs for connection, modification or extension and disconnection of all temporary utilities; e.g. gas, water, power and telephone.

- I. Temporary materials may be new or used, but shall be adequate for the required purposes. Their use and methods of installation shall not create unsafe conditions or violate requirements of Applicable Codes and Standards.
- J. Submit Utility Service Initiation and Termination Form located in the Exhibits to initiate request for temporary or final utilities service. Submit a dedicated form for each utility and for each request to University's Representative. Submit the form 14 days prior to the requested utility service start date.
- K. Utility charges that are delinquent for more than 60 days shall be deducted from the Contractor's Application for Payment.

1.3 REQUIREMENTS OF REGULATORY AGENCIES

- A. Install and use temporary utilities in accordance with the following:
 - 1. California Electrical Code.
 - 2. Federal, State, and local codes and regulations.
 - 3. University Utility provider requirements.

1.4 SUBMITTALS

- A. Contractor shall make all submittals in accordance with Section 01 33 23 Shop Drawings, Product Data and Samples.
- B. Small scale drawing detailing points of connections, materials proposed for use and routes for temporary utilities.
- C. Utility Service Initiation and Termination Form located in the Exhibits, one for each utility service, to request temporary or final utility service. Submit the form 14 days prior to the requested utility service start date.

1.5 PROJECT PERMANENT UTILITIES USED DURING CONSTRUCTION

- A. Coordinate with University's Representative for inspection of work prior to requesting permanent utilities. Contractor shall correct all deficiencies before the related utility is energized.
- B. Provide proof of calibration for permanent meters prior to activating permanent utility services. The calibration date shall not exceed 6 months prior to installation.
- C. Pay University for monthly usage of all permanent utilities used during construction and commissioning including gas, water, electricity, chilled water, steam, telephone and data.

1.6 ACTIVATING UTILITIES

- A. For all utilities except telephone and data, request activation using Utility Service Initiation and Termination Form located in the Exhibits.
- B. Refer to the temporary telephone and data services in this specification for the related requirements.

1.7 REMOVAL AND RECONDITIONING

- A. Request University to disconnect services and develop final billing using Utility Service Initiation and Termination Form located in the Exhibits. University requires a 5-day written notice prior to the date of the referenced utility disconnect request. Verbal requests for disconnects will not be accepted.
- B. At the conclusion of the work, remove all temporary services installed as a requirement of these Contract Documents and return the temporary meters to University. Restore temporary utilities to their original condition at the completion of Work.
- C. Legally and properly dispose of all debris resulting from removal and reconditioning operations.

If metering and recharge for utilities during the contract was not selected as listed in Paragraph 1.C, delete requirements listed below in paragraphs 1.8 & 1.9. Retain title and insert (NOT USED)

1.8 TEMPORARY ELECTRICITY AND WATER METERING

- A. University will provide temporary water and electricity metering for temporary services. Contractor shall coordinate exact meter location with University's Representative prior to proceeding with work and provide adequate accessible location for University to install these meters.
- B. The electrical meter will be housed in an approved NEMA 3 enclosure. Contractor shall provide an accessible location for this meter adjacent to the Contractor's main breaker. Contractor shall complete the necessary related work including conduit and provide two one-inch knockouts in their main breaker panel to allow University to extend and connect the meter to the breaker.
- C. The water meter will be located adjacent to the Contractor's approved reduced pressure backflow preventer. Contractor shall complete the necessary related work including piping and disinfection.

1.9 UTILITY RATES

- A. Electricity, natural gas, water, steam and chilled water may be taken from University's systems in such quantities and at such times as they are available. If this is done, provide all equipment, including, connections, transformers, and other materials necessary for extending the utility lines to where they will be used. Coordinate the installation with the University's Representative.
- B. If construction power, natural gas, water, chilled water, steam, or other related utilities are not available, Contractor shall be required to provide supplemental equipment such as generators to accommodate the construction needs.

Project Manager to contact Brenda Scalzi with FO&M Utility Group at (530) 754-5224 for current rates

- C. Pay for electricity and natural gas used at the current PG&E rate. Utilities Rate charges for fiscal year 2013 - 14 are:
 - 1. Electricity \$0.0779/kwh
 - 2. Gas \$0.987/therm
- D. Pay for the following utilities at the current University rate. Utilities Rate charges for fiscal year 2012 are:
 - 1. Chilled Water \$0.1064/ton
 - 2. Steam \$12.77/klb
 - 3. Water \$1.66/ccf
 - 4. Sewer \$2.47/ccf
- E. Utility rates are subject to change at any time through the campus rate setting process.
- F. Contractor will be billed on a monthly basis via the University accounting system. Payments shall be made monthly and account paid in full before final University payment to Contractor is made.

1.10 TEMPORARY FIRE PROTECTION

- A. Contractor shall conform to all applicable codes, standards, regulations and the following rules, and instructions of the University of California Davis Fire Department (UCDFD).
- B. Assign a qualified person with authority to maintain fire protection equipment, institute fire prevention measures, be a liaison with the University of California Davis Fire Prevention Bureau (UCDFPB) and direct the prompt removal of combustible and waste materials from the Project site. Prior to start of Work, the Project Superintendent and the Contractor's Safety Officer shall meet with the University's Representative and UCDFD Assistant Fire Marshal assigned to the Project for a mandatory safety meeting.
- C. No burning shall be done on Project site.
- D. Provide and maintain fire protection equipment including extinguishers, fire hoses, and other equipment as necessary for proper fire protection during the course of the Work

Use fire protection equipment only for extinguishing fires.

- E. Locate fire extinguishers in field offices, storage sheds, tool houses, other temporary buildings, and throughout the Project site. In the area under construction [demolition] [and abatement] provide at least 1 multi-purpose dry chemical fire extinguisher for each 5,000-square feet of building floor area. Locate fire extinguishers so that a person never has to walk more than 75 feet to obtain one.]
- F. Fire extinguisher minimum size shall be 4A:20BC (10 pound ABC).
- G. Call 9-1-1 and pull fire alarm box when applicable, for any emergency. Report the exact location (building name and street intersection) and nature of the emergency. If using a cellular phone dial (530) 752-1234 for an emergency located on University property. Contractor is responsible for and will be billed for fire response charges (actual cost of personnel and equipment) for any false alarm.
- H. Refer to Section 01 41 00 Regulatory Requirements for permits required.
- I. Vehicles and materials stored on Project site must not obstruct, block, damage or render useless any fire hydrants, fire department connection, fire alarm box or fire access roadway. Any necessary road closures or disruption to utilities shall be requested through the University's Representative.
- J. Once accepted by the Fire Marshal, do not tamper with or work on any fire alarm or fire protection system without first gaining authorization from the UCDFD. System shutdown requests shall require a minimum of 72-hours advance notice. Call (530) 752-1236 for any such requests.

1.11 TEMPORARY HEAT AND VENTILATION

- A. Provide temporary heat and ventilation as required to maintain adequate environmental conditions to meet specified minimum conditions for installation of materials; and to protect equipment, materials, and finishes from damage due to temperature or humidity. The use of temporary heating appliances will require a Hazardous Conditions Permit as specified in Section 01 41 00 Regulatory Requirements.
- B. Provide adequate forced ventilation of enclosed areas to cure installed materials, to prevent excessive humidity, and to prevent hazardous accumulations of dust, fumes, vapors, or gases.
- C. Permanent HVAC System: If University authorizes use of permanent HVAC system for temporary use during construction, provide filter with Minimum Efficiency Rating Value (MERV) 13 at each exhaust or return air grille in system and remove at end of construction.

1.12 TEMPORARY SANITARY FACILITIES

- A. Contractor shall provide at the Project site, portable chemical toilets. Type, location and maintenance of temporary toilets are subject to inspection and approval of the University's Representative.
- B. Permanent toilet facilities within an existing building shall not be used without written authorization of the University.

--- OR ---

- C. Existing sanitary facilities may be used during construction. Maintain daily in clean and sanitary condition.

1.13 TEMPORARY TELEPHONE AND DATA SERVICE

Edit make project specific. the next 2 paragraphs are for small projects that don't require a site trailer and phone service on campus

- A. Contractor shall have telephone facilities available at Contractor's business office for the duration of the Contract where Contractor and Contractor's Superintendent may be contacted.
- B. Contractor shall provide a cellular telephone at all times for effective University's Representative's communication with the Contractor.

--OR--

C. Provide direct line telephone service at the Project site for the use of personnel and employees.
Minimum service required:

1. One direct-line telephone in Contractor's field office.
2. One direct-line telephone in the field office of University's Representative.
3. Other telephones as required

D. Procedures for Requesting Telephone and Data Service on Campus

1. The University owns and operates a telephone system and a high speed Campus Wide Area Network (WAN). All telephone, FAX lines and connections to the WAN are provided through the University Communications Resources Department (CR). All lines permit long-distance and local dialing access. Telephone lines include the following features:
 - a. Three-way conference calling, code-activated hold, and last number redial. Fax and modem lines include data protection features.
 - b. Contractor may choose and supply any single line or key system telephone equipment to utilize the lines. Contractor is responsible for activation of key systems. Communications Resources can bring lines to a demarcation point for the Contractor to facilitate access to their key system.
2. Communications Resources' personnel may be available to install any necessary internal wiring. All costs shall be paid by Contractor.
3. University requires a written request for service at least 30 days prior to the desired activation date. Contractor's written request shall include the billing address, the location of the Project trailer, on site contact names and phone numbers, any need for internal wiring, and the number and type of lines to have installed.
4. Disconnection of Services at project completion
 - a. Communications Resources requires a 5-day written notice prior to the date of disconnect of telephone service.
 - b. At the conclusion of the Work, any external wiring installed by the Contractor shall be removed by the Contractor.
 - c. Verbal requests for disconnects will not be accepted by Communications Resources' personnel. Service will continue and Contractor shall be responsible for all costs until written notice to disconnect has been received by Communications Resources.
5. Direct questions about these procedures or request for an estimate of costs, to Communications Resources' Customer Services Representative at (530) 752-4603.

Coordinate use of 1.14 Temporary Water with Section 03 31 30 Disinfection of Domestic Water Piping

1.14 TEMPORARY WATER

- A. Comply with Section 33 13 00 Disinfection of Domestic Water Piping requirements prior to activation.
- B. If water is obtained from a campus fire hydrant, the hydrant valve shall not be used as a control valve. Use hydrant wrench; do not use pipe wrench. Contractor shall provide all valving necessary to control the flow of water.
- C. A reduced pressure backflow preventer shall be used at any connection to University's system, including fire hydrant.
- D. Install according to California Administrative Code, Title 17, Section 7603(c), and test immediately after installation by a certified tester in accordance with Title 17, CAC, Section 7605(d).
- E. Install piping with taps located so that water is available throughout the Project site by the use of hoses. Protect piping and fittings against freezing.
- F. Provide water for human consumption in accordance with the regulatory requirements for potable water.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

PROJECT TITLE
CONTRACT TITLE
UNIVERSITY OF CALIFORNIA, DAVIS
CITY, CALIFORNIA

PROJECT NO: 0000000

END OF SECTION 01 51 00