

SECTION 01500
CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

PART 1 GENERAL

1.1 SECTION INCLUDES:

- A. Temporary Utilities: Electricity, lighting, heat, ventilation, telephone, water, and sanitary.
- B. Temporary Controls: Barriers, enclosures and fencing, protection of the Work, and water control.
- C. Construction Facilities: Access roads, parking, progress cleaning, project signage, and temporary buildings.

1.2 REGULATORY REQUIREMENTS

- A. Conform to all applicable codes, standards and requirements.
 - 1. Florida Building Code.
 - 2. Florida Fire Prevention Code.
 - 3. OSHA standards.
 - 4. State Requirements for Educational Facilities.
 - 5. District requirements.
 - 6. Other related or referenced codes and standards listed in items 1 thru 5 above.

1.3 TEMPORARY ELECTRICITY

- A. Cost: By Contractor, provide and pay for power service required from utility source.
- B. Provide temporary electric feeder from existing building electrical service at location as directed. Do not disrupt Owner's use of service.
- C. Complement existing power service capacity and characteristics as required.
- D. Provide power outlets for construction operations, with branch wiring and distribution boxes located as required. Provide flexible power cords as required to comply with OSHA standards.
- E. Provide main service disconnect and overcurrent protection at convenient location.
- F. May use permanent convenience receptacles during construction as long as the use does not trip circuit breakers in the building or otherwise interferes with Owner's use of service.

1.4 TEMPORARY LIGHTING FOR CONSTRUCTION PURPOSES

- A. Provide and maintain lighting for construction operations to achieve a minimum lighting level of 2-Watt/sq ft.
- B. Provide and maintain 1-Watt/sq ft security lighting to exterior staging and storage areas after dark.
- C. Provide branch wiring from power source to distribution boxes with lighting conductors, pigtails, and lamps as required.
- D. Maintain lighting and provide routine repairs.
- E. May use permanent building lighting during construction.

1.5 TEMPORARY HEATING

- A. Provide and pay for heating devices and heat as needed to maintain specified conditions for construction operations.
- B. Prior to operation of permanent equipment for temporary heating purposes, verify the installation is approved for operation; equipment is lubricated and filters in place. Provide and pay for operation, maintenance and regular replacement of filters and worn or consumed parts.

- C. Maintain minimum ambient temperature of 50°F in areas where construction is in progress, unless indicated otherwise in product sections.

1.6 TEMPORARY COOLING

- A. Provide and pay for cooling devices and cooling as needed to maintain specified conditions for construction operations.
- B. Prior to operation of permanent equipment for temporary cooling purposes, verify the installation is approved for operation; equipment is lubricated and filters in place. Provide and pay for operation, maintenance, and regular replacement of filters and worn or consumed parts.
- C. Maintain maximum ambient temperature of 80°F in areas where construction is in progress, unless indicated otherwise in specifications.
- D. Unless indicated otherwise in specifications, in areas where construction is in progress, maintain maximum relative humidity of 60%, or as dry as possible, to prevent the formation of mold.

1.7 TEMPORARY VENTILATION

- A. Ventilate enclosed areas to achieve curing of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.
- B. Utilize existing ventilation equipment. Extend and supplement equipment with temporary fan units as required to maintain clean air for construction operations.

1.8 TELEPHONE SERVICE

- A. Provide, maintain, and pay for telephone service, including long distance, to Contractor's field office at time of project mobilization and continue until Final Completion. Coordinate phone service installation with the Florida Tech Information Technology Telecommunications office.

1.9 INTERNET SERVICE

- A. Provide, maintain and pay for internet service via a dedicated telephone line (DSL service) or cable to field office at time of mobilization. Coordinate internet service installation with the Florida Tech Information Technology Telecommunications office.

1.10 TEMPORARY WATER SERVICE

- A. Provide, maintain and pay for suitable quality water service required.
- B. Extend branch piping with outlets located so water is available by hoses with threaded connections.

1.11 TEMPORARY SANITARY FACILITIES

- A. Provide, maintain and pay for required sanitary facilities and enclosures for start of project mobilization through the end of project. Do not use any existing facilities.
- B. At end of construction, return facilities to same or better condition as originally found.

1.12 BARRIERS

- A. Provide barriers to prevent unauthorized entry to construction areas, to allow for Owner's use of site, and to protect existing facilities and adjacent properties from damage from construction operations and demolition.
- B. Provide barricades and covered walkways required by governing authorities for public rights-of-way and for public access to existing building.

- C. Provide protection for plants designated to remain. Replace damaged plants.
- D. Protect non-owned vehicular traffic, stored materials, site, and structures from damage.
- E. As a minimum, provide, install and maintain barriers in accordance with OSHA requirements.

1.13 FENCING

- A. Construction: Commercial grade chain link fence or Solid wood fence as designated on drawings.
- B. Provide 6' high fence around construction site; equip with vehicular and pedestrian gates with locks.

1.14 WATER CONTROL

- A. Grade site to drain and keep excavations free of water. Provide, operate, and maintain pumping equipment as necessary.
- B. Protect site from ponding or running water with water barriers as required to prevent soil erosion.
- C. Implement and administer the Construction Site Erosion and Sedimentation Control Plan as well as, the Construction Stormwater Pollution Prevention Plan (SWPPP).

1.15 EXTERIOR ENCLOSURES

- A. Provide temporary weather-tight closure of exterior openings to accommodate acceptable working conditions and protection for Products, to allow for temporary heating and maintenance of required ambient temperatures identified in individual specification sections, and to prevent entry of unauthorized persons. Provide access doors with self-closing hardware and locks.

1.16 INTERIOR ENCLOSURES

- A. Provide temporary partitions and ceilings as indicated to separate the work areas from Owner occupied areas, to prevent penetration of dust and moisture into Owner occupied areas, and to prevent damage to existing materials and equipment.
- B. Construction: Framing shall be metal stud and gypsum board with reinforced polyethylene sheet materials with closed joints and sealed edges at intersections with existing surfaces:
 - 1. STC rating of 35 in accordance with ASTM E90
 - 2. Maximum flame spread rating of 25 in accordance with ASTM E84.

1.17 PROTECTION OF INSTALLED WORK

- A. Protect completed work and provide special protection as specified in other specification sections.
- B. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- C. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
- D. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- E. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- F. Prohibit traffic from landscaped areas.

1.18 SECURITY

- A. Provide security and facilities to protect Work, and existing facilities, and Owner's operations from unauthorized entry, vandalism, or theft.
- B. Coordinate with Florida Tech Security Department (321-674-8111).

1.19 ACCESS ROADS

- A. Construct and maintain temporary roads accessing public thoroughfares to serve construction area.
- B. Extend and relocate, as required to provide detours necessary for unimpeded traffic flow.
- C. Provide and maintain access to fire hydrants, free of obstructions.
- D. Provide means of removing mud from vehicle wheels before entering streets.
- E. Only use designated existing on-site roads for construction traffic.

1.20 PARKING

- A. Arrange for temporary surface parking areas to accommodate construction personnel.
- B. When site space is not adequate, provide additional off-site parking.
- C. Do not allow vehicle parking on existing pavement.
- D. Designate two parking spaces for the Owner.

1.21 PROGRESS CLEANING AND WASTE REMOVAL

- A. Maintain site in a clean and orderly condition free of waste materials, debris, and rubbish.
- B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
- C. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
- D. Collect and remove waste materials, debris, and rubbish from site daily and properly dispose of accumulated trash off-site.
- E. No open free-fall chutes permitted, terminate closed chutes into appropriate containers with lids.
- F. When required, comply with LEED requirements added elsewhere to the Construction Documents.

1.22 PROJECT IDENTIFICATION

- A. Provide 8' w x 4' h project sign of exterior grade plywood and wood frame construction, painted, with exhibit lettering by professional sign painter or die cut vinyl, self-adhesive letters and self-adhesive Florida Tech logo, to Owner's design and colors.
- B. Provide permanent and temporary free standing exterior signs that shall comply with Florida Building Code (FBC) Chapter 16, and windload factors in FBC Table 1606.
- C. Erect on site at location indicated.
- D. All other signs require Owner's permission except those required by law.

1.23 FIELD OFFICES AND SHEDS

- A. Office: Weather-tight, with lighting, electrical outlets, heating, cooling and ventilating equipment, and equipped with sturdy furniture, drawing rack and drawing display table.
- B. Provide space for Project meetings, with table and chairs to accommodate 10 persons.
- C. When noted in the Contract Documents, provide a separate and private field office for Owner representatives in a stand-alone unit with the following utilities and furnishings:
 - 1. Electrical services
 - 2. Permanent lighting
 - 3. Heating, Ventilating and Air Conditioning
 - 4. Potable water service
 - 5. Chilled bottled water service
 - 6. Toilet facilities with hand sink and sanitary hook-up
 - 7. Parking - two reserved locations at field office
 - 8. Waste removal

9. Access stairs conforming to codes
10. Secure field office to comply with codes
11. Telephones (2) with answering machines
12. Copy machine (1)
13. Internet Service
14. Furniture
 - a. Desks (2), 3' x 5' each
 - b. Office chairs (2)
 - c. Side chairs (2)
 - d. File cabinet, legal, four drawer (1)
 - e. Folding chairs (6)
 - f. Plan table, 3' x 8', (1)
 - g. Work table, 3' x 6', (1)
- D. Locate offices and sheds a minimum distance of 30' from existing and new structures.
- E. Design field offices and sheds and tied down to resist hurricane force wind loads.

1.24 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary utilities, equipment, facilities, and materials, prior to Substantial Completion inspection.
- B. Remove underground installations to a minimum depth of 2'. Grade site as indicated.
- C. Clean and repair damage caused by installation or use of temporary work.
- D. Restore existing and permanent facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.

1.25 TEMPORARY LIFE SAFETY CONTROLS

- A. Maintain any existing fire alarm, fire protection, and emergency lighting systems for the duration of the project.

PART 2 PRODUCTS

2.1 Not Used.

PART 3 EXECUTION

3.1 Not Used.

END OF SECTION