

# **Construction Document Front End Specifications**

For

# Manatee County Government Detention Facility WA#41 Laundry

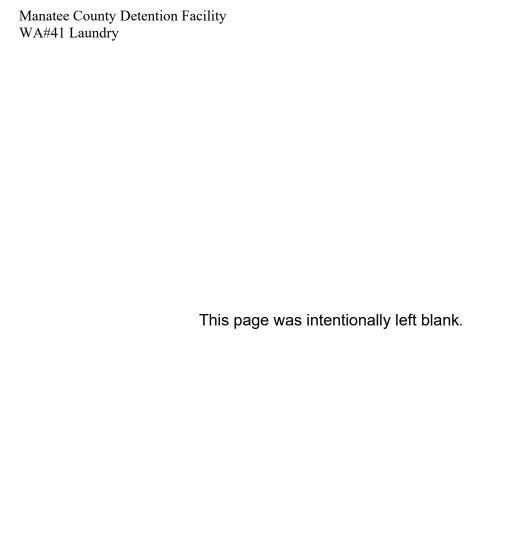
Manatee County Government Bradenton, Florida

Issue Date: CD Set October 21, 2015

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ATP ENGINEERING SOUTH, P.L. 5227 Office Park Blvd. Bradenton, FL 34203 941-751-6485 FL# 8908

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#### Note:

Technical Specifications are on the Plans. Models and installation requirements may vary. The equipment used for the drawings were: Huebsch Gas Dryer 120lb, Speed Queen Gas Dryer 120lb, and Huebsch Washers 100 lb Galaxy 200/400. Equivalent products may be approved by the Owner's Representative.

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#### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Specification Sections, apply to this Section.

#### 1.2 WORK COVERED BY CONTRACT DOCUMENTS

- A. Project Identification:
  - 1. Project Location: Manatee County Detention Facility: 14470 Harlee Road, Palmetto, FL 34221
  - 2. Owner: Manatee County Government
  - 3. Owner's Representative: Mr. David Thompson and Mr. Tom Roberts, 1112 Manatee Ave. W., Bradenton, FL 34206. Phone: 941-748-4501
- B. Owner's Representative Identification: The Contract Documents, for the Jail Laundry Project WA#41, were prepared by ATP Owner's Representativeing South, 5227 Office Park Blvd., Bradenton, FL 34203 (941-751-6485). All project documents shall be transmitted and distributed by the Manatee County Purchasing Department.
- C. Identification: The Contract Documents, for the Jail Laundry Project, were prepared for the project by ATP Owner's Representativeing South.

The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by the one shall be as binding as if required by all. Performance by the Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the intended results. Dimensions shall be figures rather than determined by scale or rule. In the event of a conflict or inconsistency among the Contract Documents, or between the Contract Documents and applicable codes, the Contractor shall provide the greatest quantity, largest degree of safety, highest quality or most stringent material or work.

- D. The Work consists of the removal/demolition and replacement of existing washers and dryers at the Manatee County Detention Facility.
  - The washer and dryer removal, new installation, sequencing and coordination, and miscellaneous work. This shall include all required repairs that are caused by the removal and installation of the new systems. This portion of work shall be completed in accordance with plans and specifications by ATP Owner's Representativeing South.
  - Construction materials and processes are to be performed to have minimum impact on the environment, using recycled materials to the greatest extent practicable, recycling construction waste material where possible and disposing of non-recyclable waste in an environmentally friendly manner.

#### CONTRACT

- E. Bidder Qualifications:
- a. Bidder shall be a General Contractor with the ability to obtain contractors and subcontractors having the minimum of 3 years of experience of renovations of similar type facilities. References shall be supplied to the purchasing department with the bid documents. Contractors shall meet all purchasing requirement for bonding, insurance, and security access for this facility. All individuals shall be cleared with the County prior to access to the facility.
- F. Project will be constructed under a general construction contract.
- 1. Please provide a price breakdown for the base price: The Manatee County Jail Laundry Project.

Hours of Operation at the Jail: 3pm to 10pm Monday through Friday. All equipment and tools should be inventoried on an entry and exit basis daily. The County shall provide a radio to keep the Contractor connected to the Jail personnel. The Manatee County Sheriff has the right to stop work at anytime for any reason. The restrooms in the laundry area shall be used for the bathroom facilities. The Contractor shall clean and maintain the restrooms that are used by the Contractor on a daily basis. The contractor shall have no interaction with the inmates.

#### SCOPE:

The scope of this section of the Contract Documents is to further define the items included in each Bid Item in the Bid Form section of the Contract Documents. Payment will be made based on the specified items included in the description in this section for each bid item. All contract prices included in the Bid Form section will be full compensation for all shop drawings, working drawings, labor, materials, tools, equipment and incidentals necessary to complete the construction as shown on the Drawings and/or as specified in the Contract Documents to be performed under this Contract. Actual quantities of each item bid on a unit price basis will be determined upon completion of the construction in the manner set up for each item in this section of the Specifications. Payment for all items listed in the Bid Form will constitute full compensation for all work shown and/or specified to be performed under this Contract.

#### **GENERAL**

All contract lump sum prices included in the Bid Proposal section will be full compensation for all labor, equipment, and incidental to the Manatee County Jail Laundry Project as specified in the Contract Documents under this contract.

#### **WORK OUTSIDE AUTHORIZED LIMITS**

No payment will be made for work constructed outside the authorized limits of work.

#### **LUMP SUM PAYMENT**

Where payment for items are shown to be paid for on a lump sum basis, no separate payment will be made for any item of work required to complete the lump sum items.

Lump sum contracts shall be complete, tested and fully operable prior to request for final payment. Contractor may be required to provide a break-down of the lump sum totals.

Payment shall be made for the items listed on the Bid Form on the basis of the work actually performed, completed, and accepted by the Owner's Representative. Such work includes but is not limited to the furnishing of all necessary labor, materials, equipment, transportation, clean up, restoration of disturbed areas, all other appurtenances to complete the construction and installation of the work as shown on the drawings, as described in the specifications, and as directed by the Owner's Representative. Measurement and Payment for Lump Sum bid items will be based on a percentage of completion, as approved by the Owner and

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recommended by the Owner's Representative, on a monthly basis for the Lump Sum bid items listed on the Bid Form of the Contract Documents. Partial payments will be based on the breakdown of the Bid Item in accordance with the Schedule of Values submitted by the Contractor and approved by the Owner's Representative. Payment shall also include full compensation for project photographs, as-built record drawings, project signs, rubbish and spoil removal, repair, replacement or relocation of all signs, walls, and any and all other items required to complete the project in accordance with Contract Documents.

No separate payment will be made for the following items and the cost of such work shall be included in the applicable pay items of work. Final payments shall not be requested by the Contractor or made by the Owner until as-built (record) drawings have been submitted and approved by the Owner's Representative.

- 1. Shop Drawings, Working Drawings.
- 2. Cleanup and miscellaneous work.
- 3. Testing and placing system in operation.
- 4. Any material and equipment required to be installed and utilized for the tests.
- 5. Pipe, structures, pavement replacement, asphalt and shell driveways and/or appurtenances included within the limits of lump sum work, unless otherwise shown.
- 6. Maintaining the existing quality of service during construction.
- 7. Appurtenant work as required for a complete and operable system.
- 8. As-built Record Drawings.

Bid Item#1 Selective Demolition Washer #1 (1 EA)

The contractor shall selectively remove and demolish of the old washers.

Bid Item#2 Selective Demolition Washer #2 (1 EA)

The contractor shall selectively remove and demolish of the old washers.

Bid Item#3 Selective Demolition Washer #3 (1 EA)

The contractor shall selectively remove and demolish of the old washers.

Bid Item#4 Selective Demolition Washer #4 (1 EA)

The contractor shall selectively remove and demolish of the old washers.

Bid Item#5 Selective Demolition Washer #5 (1 EA)

The contractor shall selectively remove and demolish of the old washers.

Bid Item#6 Selective Demolition Dryers #1 (1 EA)

The contractor shall selectively remove and demolish of the old dryers.

Bid Item#7 Selective Demolition Dryers #2 (1 EA)

The contractor shall selectively remove and demolish of the old dryers.

Bid Item#8 Selective Demolition Dryers #3 (1 EA)

The contractor shall selectively remove and demolish of the old dryers.

Bid Item#9 Selective Demolition Dryers #4 (1 EA)

The contractor shall selectively remove and demolish of the old dryers.

Bid Item#10 Selective Demolition Dryers #5 (1 EA)

The contractor shall selectively remove and demolish of the old dryers.

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#### Bid Item#11 Washer #1 (1 EA)

The provision of the washers and the provision of any other items and accessories required for the installation of the units. The contractor shall provide and install any metal panels for the installation of the washers per the drawings. Delivery, complete installation, operational, and all inclusive to make a fully functional unit.

#### Bid Item#12 Washer #2 (1 EA)

The provision of the washers and the provision of any other items and accessories required for the installation of the units. The contractor shall provide and install any metal panels for the installation of the washers per the drawings. Delivery, complete installation, operational, and all inclusive to make a fully functional unit.

#### Bid Item#13 Washer #3 (1 EA)

The provision of the washers and the provision of any other items and accessories required for the installation of the units. The contractor shall provide and install any metal panels for the installation of the washers per the drawings. Delivery, complete installation, operational, and all inclusive to make a fully functional unit.

#### Bid Item#14 Washer #4 (1 EA)

The provision of the washers and the provision of any other items and accessories required for the installation of the units. The contractor shall provide and install any metal panels for the installation of the washers per the drawings. Delivery, complete installation, operational, and all inclusive to make a fully functional unit.

#### Bid Item#15 Washer #5 (1 EA)

The provision of the washers and the provision of any other items and accessories required for the installation of the units. The contractor shall provide and install any metal panels for the installation of the washers per the drawings. Delivery, complete installation, operational, and all inclusive to make a fully functional unit.

#### Bid Item#16 Dryers #1(1 EA)

The provision of the dryers and the provision of any other items and accessories required for the installation of the units. The contractor shall provide and install any metal panels for the installation of the dryers per the drawings. Delivery, complete installation, operational, and all inclusive to make a fully functional unit.

#### Bid Item#17 Dryers #2(1 EA)

The provision of the dryers and the provision of any other items and accessories required for the installation of the units. The contractor shall provide and install any metal panels for the installation of the dryers per the drawings. Delivery, complete installation, operational, and all inclusive to make a fully functional unit.

# Bid Item#18 Dryers #3(1 EA)

The provision of the dryers and the provision of any other items and accessories required for the installation of the units. The contractor shall provide and install any metal panels for the installation of the dryers per the drawings. Delivery, complete installation, operational, and all inclusive to make a fully functional unit.

#### Bid Item#19 Dryers #4(1 EA)

The provision of the dryers and the provision of any other items and accessories required for the installation of the units. The contractor shall provide and install any metal panels for the installation of the dryers per the drawings. Delivery, complete installation, operational, and all inclusive to make a fully functional unit.

Bid Item#20 Dryers #5(1 EA)

The provision of the dryers and the provision of any other items and accessories required for the installation of the units. The contractor shall provide and install any metal panels for the installation of the dryers per the drawings. Delivery, complete installation, operational, and all inclusive to make a fully functional unit.

Contingency: (1 LS)

Payment for all work under this Bid Item shall be made only at the County's discretion. This Bid Item shall not exceed 10% of the Bidders Total Base Bid. The Bidder shall calculate and enter a dollar amount for this Bid Item.

#### 1.3 SUMMARY OF PROJECT COORDINATION

- A. This Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
  - 1. General project coordination procedures.
  - 2. Coordination Drawings.
  - 3. Administrative and supervisory personnel.
  - 4. Project meetings.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
  - 1. Section "Construction Progress Documentation" for preparing and submitting the Contractor's Construction Schedule.
  - 2. Section "Execution Requirements" for procedures for coordinating general installation and field-Owner's Representativeing services, including establishment of benchmarks and control points.
  - Section "Closeout Procedures" for coordinating Contract closeout.

#### 1.4 COORDINATION

- A. Coordination: Coordinate construction operations included in various Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections, that depend on each other for proper installation, connection, and operation.
  - 1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
  - 2. Coordinate installation of different components with other contractors to ensure maximum accessibility for required maintenance, service, and repair.
  - 3. Make adequate provisions to accommodate items scheduled for later installation.
- B. If necessary, prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
  - 1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors to avoid

conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:

- 1. Preparation of Contractor's Construction Schedule.
- 2. Preparation of the Schedule of Values.
- 3. Installation and removal of temporary facilities and controls.
- 4. Delivery and processing of submittals.
- 5. Progress meetings.
- 6. Preinstallation conferences.
- Project closeout activities.
- D, County Project Manager: The County Project Manager( denoted in all specifications as Project Manager) shall review all items on schedule and perform the interface activities with the end users, Scheduled outages, equipment replacements, construction demolition in public access areas, and review all contract items for final approval.

#### 1.5 SUBMITTALS

- A. Coordination Drawings: Prepare Coordination Drawings if limited space availability necessitates maximum utilization of space for efficient installation of different components or if coordination is required for installation of products and materials fabricated by separate entities.
  - 1. Indicate relationship of components shown on separate Shop Drawings.
  - 2. Indicate required installation sequences.
  - 3. Refer to Section "Basic Mechanical Materials and Methods" and Section "Basic Electrical Materials and Methods" for specific Coordination Drawing requirements for mechanical and electrical installations.
- B. Staff Names: Within 15 days of starting construction operations, submit a list of principal staff assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities; list addresses and telephone numbers, including home and office telephone numbers. Provide names, addresses, and telephone numbers of individuals assigned as standbys in the absence of individuals assigned to Project.

#### 1.6 ADMINISTRATIVE AND SUPERVISORY PERSONNEL

- A. General: In addition to Project superintendent, provide other administrative and supervisory personnel as required for proper performance of the Work.
  - 1. Include special personnel required for coordination of operations with other contractors.

#### 1.7 PROJECT MEETINGS

 General: Schedule and conduct meetings and conferences at Project site, unless otherwise indicated.

- 1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner, Project Manager, and Owner's Representative of scheduled meeting dates and times.
- Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
- 3. Minutes: Record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and Owner's Representative, within 3 days of the meeting.
- B. Preconstruction Conference: Schedule a preconstruction conference before starting construction, at a time convenient to Owner and Owner's Representative, but no later than 15 days after execution of the Agreement. Hold the conference at Project site or another convenient location. Conduct the meeting to review responsibilities and personnel assignments.
  - Attendees: Authorized representatives of Owner, County Project Manager, Owner's Representative, and their consultants; Contractor and its superintendent; major subcontractors; manufacturers; suppliers; and other concerned parties shall attend the conference. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
  - 2. Agenda: Discuss items of significance that could affect progress, including the following:
    - a. Tentative construction schedule.
    - b. Phasing.
    - c. Critical work sequencing.
    - d. Designation of responsible personnel.
    - e. Procedures for processing field decisions and Change Orders.
    - f. Procedures for processing Applications for Payment.
    - g. Distribution of the Contract Documents.
    - h. Submittal procedures.
    - i. Preparation of Record Documents.
    - j. Use of the premises.
    - k. Responsibility for temporary facilities and controls.
    - I. Parking availability.
    - m. Office, work, and storage areas.
    - n. Equipment deliveries and priorities.
    - o. First aid.
    - p. Security.
    - q. Progress cleaning.
    - r. Working hours.
- C. Preinstallation Conferences: Conduct a preinstallation conference at Project site before each construction activity that requires coordination with other construction.
  - 1. Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise Owner's Representative of scheduled meeting dates.
  - 2. Agenda: Review progress of other construction activities and preparations for the particular activity under consideration, including requirements for the following:
    - a. Contract Documents.
    - b. Options.

- c. Related Change Orders.
- d. Purchases.
- e. Deliveries.
- f. Submittals.
- g. Review of mockups.
- h. Possible conflicts.
- i. Compatibility problems.
- j. Time schedules.
- k. Weather limitations.
- I. Manufacturer's written recommendations.
- m. Warranty requirements.
- n. Compatibility of materials.
- o. Acceptability of substrates.
- p. Temporary facilities and controls.
- q. Space and access limitations.
- r. Regulations of authorities having jurisdiction.
- s. Testing and inspecting requirements.
- t. Required performance results.
- u. Protection of construction and personnel.
- 3. Record significant conference discussions, agreements, and disagreements.
- 4. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.
- D. Progress Meetings: Conduct progress meetings at regular intervals. Coordinate dates of meetings with preparation of payment requests.
  - Attendees: In addition to representatives of Owner, County Project Manager, and Owner's Representative, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
  - 2. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
    - a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's Construction Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
    - b. Review present and future needs of each entity present, including the following:
      - 1) Interface requirements.
      - 2) Sequence of operations.
      - 3) Status of submittals.
      - 4) Status of recycling and waste disposal.
      - 5) Deliveries.
      - 6) Off-site fabrication.
      - 7) Access.
      - 8) Site utilization.

- 9) Temporary facilities and controls.
- 10) Work hours.
- 11) Hazards and risks.
- 12) Progress cleaning.
- 13) Quality and work standards.
- 14) Change Orders.
- 15) Documentation of information for payment requests.
- Reporting: Distribute minutes of the meeting to each party present and to parties
  who should have been present. Include a brief summary, in narrative form, of
  progress since the previous meeting and report.
  - a. Schedule Updating: Revise Contractor's Construction Schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.
- 4. Coordination Meetings: Conduct coordination meetings at regular intervals

Project coordination meetings are in addition to specific meetings held for other purposes, such as progress meetings and preinstallation conferences.

b. Safety meetings: The contractor shall provide to the Owner's representative/ County Project Manager a copy of in-house written safety policies. Copies of weekly safety meetings shall be retained on site for periodic review.

#### 1.8 REPAIR AND PROTECTION

- A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
  - 1. Provide materials and comply with installation requirements specified in other Sections of these Specifications. Restore patched areas and extend restoration into adjoining areas in a manner that eliminates evidence of patching.
  - 2. Comply with the Contract Document requirements for Section "Cutting and Patching."
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

### PART 2 - SUMMARY FOR TEMPORARY FACILITIES AND CONTROLS

- A. This Section includes requirements for temporary facilities and controls, including temporary utilities, support facilities, and security and protection facilities. Coordinate all temporary, security, and support facilities and use with Project Manager prior to start of any work.
- B. Temporary utilities include, but are not limited to, the following:
  - 1. Sewers and drainage.
  - 2. Water service and distribution.

- 3. Sanitary facilities. Restrooms are located in the laundry facilities.
- 4. Heating and cooling facilities.
- Ventilation.
- 6. Electric power service.
- 7. Lighting.
- 8. Telephone service.
- C. Support facilities include, but are not limited to, the following:
  - 1. Dewatering facilities and drains.
  - 2. Project identification and temporary signs.
  - 3. Waste disposal facilities.
  - 4. Field offices.
  - 5. Storage and fabrication sheds.
  - 6. Lifts and hoists.
  - 7. Temporary stairs.
  - 8. Construction aids and miscellaneous services and facilities.
  - 9. Cranes, scaffolding, and support structures.
- D. Security and protection facilities include, but are not limited to, the following:
  - 1. Environmental protection.
  - 2. Stormwater control.
  - 3. Pest control.
  - 4. Site enclosure fence.
  - 5. Security enclosure and lockup.
  - 6. Barricades, warning signs, and lights.
  - 7. Temporary enclosures.
  - 8. Fire protection.
- E. Related Sections include the following:
  - 1. Section "Submittal Procedures" for procedures for submitting copies of implementation and termination schedule and utility reports.
  - 2. Section "Execution Requirements" for progress cleaning requirements.

#### 2.2 USE CHARGES

- A. Water Service: Use water from Owner's existing water system without metering and without payment of use charges.
- B. Electric Power Service: Use electric power from Owner's existing system without metering and without payment of use charges.

#### 2.3 QUALITY ASSURANCE

- A. Standards: Comply with ANSI A10.6, NECA's "Temporary Electrical Facilities," and NFPA 241.
  - 1. Trade Jurisdictions: Assigned responsibilities for installation and operation of temporary utilities are not intended to interfere with trade regulations and union jurisdictions.
  - 2. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.

B. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.

#### 2.4 PROJECT CONDITIONS

- A. Conditions of Use: The following conditions apply to use of temporary services and facilities by all parties engaged in the Work:
  - 1. Keep temporary services and facilities clean and neat.
  - 2. Relocate temporary services and facilities as required by progress of the Work.
  - 3. Coordinate use of the facilities with the Project Manager prior to the start of the project work.

#### PART 3 - PRODUCTS

#### 3.1 MATERIALS

A. General: Provide new materials. Undamaged, previously used materials in serviceable condition may be used if approved by the Owner's Representative. Provide materials suitable for use intended.

#### 3.2 EQUIPMENT

- A. General: Provide equipment suitable for use intended.
- B. Field Offices, if needed: Prefabricated with lockable entrances, operable windows, and serviceable finishes; heated and air conditioned; on foundations adequate for normal loading.
- C. Fire Extinguishers: Hand carried, portable, UL rated. Provide class and extinguishing agent as indicated or a combination of extinguishers of NFPA-recommended classes for exposures.
  - 1. Comply with NFPA 10 and NFPA 241 for classification, extinguishing agent, and size required by location and class of fire exposure.
- D. Use jail facilities in designated area.
  - Toilets: The Facility Personnel will specify the location of toilets that will need to be used.

#### 3.3 SUPPORT FACILITIES INSTALLATION

- A. General: Comply with the following:
  - 1. Locate field offices, storage sheds, sanitary facilities, and other temporary construction and support facilities for easy access.
  - 2. Provide incombustible construction for offices, shops, and sheds located within construction area or within 30 feet (9 m) of building lines. Comply with NFPA 241.

- 3. Maintain support facilities until near Substantial Completion. Remove before Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to Owner.
- B. Project Identification and Temporary Signs: Prepare Project identification and other signs in sizes indicated. Install signs where indicated to inform public and persons seeking entrance to Project. Do not permit installation of unauthorized signs.
  - 1. Engage an experienced sign painter to apply graphics for Project identification signs. Comply with details indicated.
  - Prepare temporary signs to provide directional information to construction personnel and visitors.
  - Construct signs of exterior-type Grade B-B high-density concrete form overlay plywood in sizes and thicknesses indicated. Support on posts or framing of preservative-treated wood or steel.
  - 4. Paint sign panel and applied graphics with exterior-grade alkyd gloss enamel over exterior primer.
- C. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Containerize and clearly label hazardous, dangerous, or unsanitary waste materials separately from other waste. Comply with Section "Execution Requirements" for progress cleaning requirements.
  - 1. If required by authorities having jurisdiction, provide separate containers, clearly labeled, for each type of waste material to be deposited.
- D. Storage and Fabrication Sheds: Provide sheds sized, furnished, and equipped to accommodate materials and equipment involved, including temporary utility services. Sheds may be open shelters or fully enclosed spaces within building or elsewhere onsite.
  - Construct framing, sheathing, and siding using fire-retardant-treated lumber and plywood.
  - Paint exposed lumber and plywood with exterior-grade acrylic-latex emulsion over exterior primer.
- E. Lifts and Hoists: Provide facilities for hoisting materials and personnel. Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.

#### 3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

A. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction in ways and by methods that comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects. Avoid using tools and equipment that produce harmful noise. Restrict use of noisemaking tools and equipment to hours that will minimize complaints from persons or firms near Project site.

#### PART 4 - SUMMARY OF PRODUCTS

- A. This Section includes the following administrative and procedural requirements: selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; product substitutions; and comparable products.
- B. Related Sections include the following:
  - 1. Section "References" for applicable industry standards for products specified.
  - 2. Section "Closeout Procedures" for submitting warranties for contract closeout.
  - 3. Sections for specific requirements for warranties on products and installations specified to be warranted.

#### 4.2 DEFINITIONS

- A. Products: Items purchased for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
  - 1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation, shown or listed in manufacturer's published product literature, that is current as of date of the Contract Documents.
  - 2. New Products: Items that have not previously been incorporated into another project or facility, except that products consisting of recycled-content materials are allowed, unless explicitly stated otherwise. Products salvaged or recycled from other projects are not considered new products.
  - Comparable Product: Product that is demonstrated and approved through submittal process, or where indicated as a product substitution, to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.
- B. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.
- C. Basis-of-Design Product Specification: Where a specific manufacturer's product is named and accompanied by the words "basis of design," including make or model number or other designation, to establish the significant qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics for purposes of evaluating comparable products of other named manufacturers.
- D. Manufacturer's Warranty: Preprinted written warranty published by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
- E. Special Warranty: Written warranty required by or incorporated into the Contract Documents, either to extend time limit provided by manufacturer's warranty or to provide more rights for Owner.

#### 4.3 SUBMITTALS

- A. Product List: Submit a list, in tabular from, showing specified products. Include generic names of products required. Include manufacturer's name and proprietary product names for each product.
  - 1. Coordinate product list with Contractor's Construction Schedule and the Submittals Schedule.
  - 2. Form: Tabulate information for each product under the following column headings:
    - a. Specification Section number and title.
    - b. Generic name used in the Contract Documents.
    - c. Proprietary name, model number, and similar designations.
    - d. Manufacturer's name and address.
    - e. Supplier's name and address.
    - f. Installer's name and address.
    - g. Projected delivery date or time span of delivery period.
    - h. Identification of items that require early submittal approval for scheduled delivery date.
  - Completed List: Within 30 days after date of commencement of the Work, submit 3 copies of completed product list. Include a written explanation for omissions of data and for variations from Contract requirements.
  - 4. Owner's Representative's Action: Owner's Representative will respond in writing to Contractor within 15 days of receipt of completed product list. Owner's Representative's response will include a list of unacceptable product selections and a brief explanation of reasons for this action. Owner's Representative's response, or lack of response, does not constitute a waiver of requirement that products comply with the Contract Documents.
- B. Substitution Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
  - 1. Substitution Request Form: Use CSI Form 13.1A.
  - 2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
    - Statement indicating why specified material or product cannot be provided.
    - b. VOC content, recycled content and additional sustainable product requirements specified.
    - c. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by Owner and separate contractors, that will be necessary to accommodate proposed substitution.
    - d. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
    - e. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
    - f. Samples, where applicable or requested.
    - g. List of similar installations for completed projects with project names and addresses and names and addresses of Owner's Representatives and owners
    - h. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.

- i. Research/evaluation reports evidencing compliance with building code in effect for Project, from a model code organization acceptable to authorities having jurisdiction.
- j. Detailed comparison of Contractor's Construction Schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating lack of availability or delays in delivery.
- Cost information, including a proposal of change, if any, in the Contract Sum.
- I. Contractor's certification that proposed substitution complies with requirements in the Contract Documents and is appropriate for applications indicated.
- m. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
- n. If the substitution requires additional or changes in electrical, mechanical, structural, plumbing, fire protection, and or Owner's Representativeural elements, the contractor is responsible for all modifications at their cost.
- 3. Owner's Representative's Action: If necessary, Owner's Representative will request additional information or documentation for evaluation within one week of receipt of a request for substitution. Owner's Representative will notify Contractor through Construction Manager of acceptance or rejection of proposed substitution within 15 days of receipt of request, or 7 days of receipt of additional information or documentation, whichever is later.
  - a. Form of Acceptance: Change Order.
  - b. Use product specified if Owner's Representative cannot make a decision on use of a proposed substitution within time allocated.
- C. Basis-of-Design Product Specification Submittal: Comply with requirements in Section "Submittal Procedures." Show compliance with requirements.

#### 4.4 QUALITY ASSURANCE

- A. Provide products with energy efficient designs and with materials complying with environmental protection considerations.
- B. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, product selected shall be compatible with products previously selected, even if previously selected products were also options. Comparable or equal products shall be evaluated as substitutions.

## 4.5 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturer's written instructions.
  - 1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.

- Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
- 3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
- 4. Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.
- 5. Store products to allow for inspection and measurement of quantity or counting of units.
- 6. Store materials in a manner that will not endanger Project structure.
- 7. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
- 8. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
- 9. Protect stored products from damage.
- B. Storage: Provide a secure location and enclosure at Project site for storage of materials and equipment by Owner's construction forces. Coordinate location with Owner

#### 4.6 PRODUCT WARRANTIES

- A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents. The product shall have a minimum of a 3 year warranty.
- B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution. Submit a draft for approval before final execution.
  - 1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
  - 2. Specified Form: Forms are included with the Specifications. Prepare a written document using appropriate form properly executed.
- C. Submittal Time: Comply with requirements in Section "Closeout Procedures."

#### PART 5 - PRODUCTS AND PRODUCT SUBMITTALS

#### 5.1 PRODUCT OPTIONS

- A. General Product Requirements: Provide products that comply with the Contract Documents, that are undamaged, and unless otherwise indicated, that are new at time of installation.
  - 1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.

- 2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
- 3. Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
- 4. Where products are accompanied by the term "as selected," Owner's Representative will make selection.
- 5. Where products are accompanied by the term "match sample," sample to be matched is Owner's Representative's.
- 6. Descriptive, performance, and reference standard requirements in the Specifications establish "salient characteristics" of products.
- 7. Or Equal: Where products are specified by name and accompanied by the term "or equal" or "or approved equal" or "or approved," comply with provisions in "Comparable Products" Article to obtain approval for use of an unnamed product.
- B. Product Selection Procedures: Procedures for product selection include the following:
  - 1. Product: Where Specification paragraphs or subparagraphs titled "Product" name a single product and manufacturer, provide the product named.
    - a. Substitutions may be considered, unless otherwise indicated.
  - Manufacturer/Source: Where Specification paragraphs or subparagraphs titled "Manufacturer" or "Source" name single manufacturers or sources, provide a product by the manufacturer or from the source named that complies with requirements.
    - a. Substitutions may be considered, unless otherwise indicated.
  - 3. Products: Where Specification paragraphs or subparagraphs titled "Products" introduce a list of names of both products and manufacturers, provide one of the products listed that complies with requirements.
    - a. Substitutions may be considered, unless otherwise indicated.
  - 4. Manufacturers: Where Specification paragraphs or subparagraphs titled "Manufacturers" introduce a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements.
    - a. Substitutions may be considered, unless otherwise indicated.
  - 5. Basis-of-Design Products: Where Specification paragraphs or subparagraphs titled "Basis-of-Design Products" are included and also introduce or refer to a list of manufacturers' names, provide either the specified product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with provisions in "Comparable Products" Article to obtain approval for use of an unnamed product.
    - a. Substitutions may be considered, unless otherwise indicated.
  - 6. Visual Matching Specification: Where Specifications require matching an established Sample, select a product (and manufacturer) that complies with requirements and matches Owner's Representative's sample. Owner's Representative's decision will be final on whether a proposed product matches satisfactorily.

- a. If no product available within specified category matches satisfactorily and complies with other specified requirements, comply with provisions of the Contract Documents on "substitutions" for selection of a matching product.
- 7. Visual Selection Specification: Where Specifications include the phrase "as selected from manufacturer's colors, patterns, textures" or a similar phrase, select a product (and manufacturer) that complies with other specified requirements.
  - a. Standard Range: Where Specifications include the phrase "standard range of colors, patterns, textures" or similar phrase, Owner's Representative will select color, pattern, or texture from manufacturer's product line that does not include premium items.
  - b. Full Range: Where Specifications include the phrase "full range of colors, patterns, textures" or similar phrase, Owner's Representative will select color, pattern, or texture from manufacturer's product line that includes both standard and premium items.
- 8. Allowances: Refer to individual Specification Sections and "Allowance" provisions in the section for allowances that control product selection and for procedures required for processing such selections.

#### 5.2 PRODUCT SUBSTITUTIONS

- A. Timing: Owner's Representative will consider requests for substitution if received within 15 business days after commencement of the Work. Requests received after that time may be considered or rejected at discretion of Owner's Representative.
- B. Conditions: Owner's Representative will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Owner's Representative will return requests without action, except to record noncompliance with these requirements:
  - Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Owner's Representative for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.
  - Requested substitution does not require extensive revisions to the Contract Documents.
  - 3. Requested substitution is consistent with the Contract Documents and will produce indicated results.
  - 4. Substitution request is fully documented and properly submitted.
  - 5. Requested substitution will not adversely affect Contractor's Construction Schedule.
  - Requested substitution has received necessary approvals of authorities having jurisdiction.
  - 7. Requested substitution is compatible with other portions of the Work.
  - 8. Requested substitution has been coordinated with other portions of the Work.
  - 9. Requested substitution provides specified warranty.
  - 10. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and

consistent, is compatible with other products, and is acceptable to all contractors involved.

#### 5.3 COMPARABLE PRODUCTS

- A. Where products or manufacturers are specified by name, submit the following, in addition to other required submittals, to obtain approval of an unnamed product:
  - Evidence that the proposed product does not require extensive revisions to the Contract Documents, that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work
  - Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
  - 3. Evidence that proposed product provides specified warranty.
  - List of similar installations for completed projects with project names and addresses and names and addresses of Owner's Representatives and owners, if requested.
  - 5. Samples, if requested.

## B. This Section includes the following:

- 1. Demolition and removal of selected portions of a building or structure.
- 2. Repair procedures for selective demolition operations.
- 3. Coordinate all work with the County Project Manager prior to start of work. The facility is occupied at all times. Night work is required to establish areas of work due to noise and dirt generation in the spaces. Area isolation and temporary facilities shall be required to prevent migration of any dust or dirt moving into the computer room areas in operation.

# C. Related Sections include the following:

- 1. Section "Summary" for use of the premises and phasing requirements.
- 2. Section "Work Restrictions" for restrictions on use of the premises due to Owner or tenant occupancy.
- 3. Section "Temporary Facilities and Controls" for temporary construction and environmental-protection measures for selective demolition operations.
- 4. Section "Cutting and Patching" for cutting and patching procedures for selective demolition operations.

#### 5.4 SUBMITTALS

- A. Qualification Data: For firms and persons specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names and addresses of Owner's Representatives and owners, and other information specified.
- B. Proposed Dust-Control and Noise-Control Measures: Submit statement or drawing that indicates the measures proposed for use, proposed locations, and proposed time frame

for their operation. Identify options if proposed measures are later determined to be inadequate.

- C. Schedule of Selective Demolition Activities: Indicate the following:
  - 1. Detailed sequence of selective demolition and removal work, with starting and ending dates for each activity. Ensure Owner's on-site operations are uninterrupted.
  - 2. Interruption of utility services.
  - 3. Coordination for shutoff, capping, and continuation of utility services.
  - Use of elevator and stairs.
  - 5. Locations of temporary partitions and means of egress.
  - 6. Coordination of Owner's continuing occupancy of portions of existing building and of Owner's partial occupancy of completed Work.

#### 5.5 PROJECT CONDITIONS

- A. Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted. Provide not less than 72 hours' notice to Owner of activities that will affect Owner's operations.
- B. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities.
  - 1. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from authorities having jurisdiction.
- C. Owner assumes no responsibility for condition of areas to be selectively demolished.
  - 1. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
- D. Hazardous Materials: It is not expected that hazardous materials will be encountered in the Work.
  - 1. Hazardous materials will be removed by Owner before start of the Work.
  - 2. If materials suspected of containing hazardous materials are encountered, do not disturb; immediately notify Owner's Representative and Owner. Hazardous materials will be removed by Owner under a separate contract.
- E. Hazardous Materials: Hazardous materials are present in building to be selectively demolished. A report on the presence of hazardous materials is on file for review and use. Examine report to become aware of locations where hazardous materials are present.
  - Hazardous material remediation is specified elsewhere in the Contract Documents.
  - 2. Do not disturb hazardous materials or items suspected of containing hazardous materials except under procedures specified elsewhere in the Contract Documents.
- F. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.

Maintain fire-protection facilities in service during selective demolition operations.

#### PART 6 - EXECUTION

#### 6.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped.
- B. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
- C. When unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure the nature and extent of conflict. Promptly submit a written report to Owner's Representative.
- D. Engage a professional Owner's Representative to survey condition of building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of structure or adjacent structures during selective demolition operations.
- E. Perform surveys as the Work progresses to detect hazards resulting from selective demolition activities.

#### 6.2 UTILITY AND BUILDING SERVICES

- A. Existing Utilities: Maintain services indicated to remain and protect them against damage during selective demolition operations.
- B. Do not interrupt existing utilities and building services serving occupied or operating facilities unless authorized in writing by Owner and authorities having jurisdiction. Provide temporary services during interruptions to existing utilities, as acceptable to Owner and to authorities having jurisdiction.
  - 1. Provide at least 72 hours' notice to Owner if shutdown of service is required during changeover.
- C. Utility and Building Services Requirements: Locate, identify, disconnect, and seal or cap off indicated utilities serving areas to be selectively demolished.
  - 1. Owner will arrange to shut off indicated utilities/building service when requested by Contractor.
  - 2. Arrange to shut off indicated utilities with utility companies and facility personnel.

#### 6.3 PREPARATION

A. Dangerous Materials: Drain, purge, or otherwise remove, collect, and dispose of chemicals, gases, explosives, acids, flammables, or other dangerous materials before proceeding with selective demolition operations. If the contractor encounters any dangerous or hazardous material, then they should contact property management immediately.

- B. Pest Control: Contact the Owner's representative and property management and they will provide a pest control service, if necessary. Property Management Contact: Mr. Tom Roberts, 941-748-4501.
- C. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
  - Do not close or obstruct streets, walks, walkways, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by governing regulations.

#### 6.4 SELECTIVE DEMOLITION

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:
  - Proceed with selective demolition systematically, from higher to lower level.
     Complete selective demolition operations above each floor or tier before disturbing supporting members on the next lower level.
  - Neatly cut openings and holes plumb, square, and true to dimensions required.
    Use cutting methods least likely to damage construction to remain or adjoining
    construction. Use hand tools or small power tools designed for sawing or
    grinding, not hammering and chopping, to minimize disturbance of adjacent
    surfaces. Temporarily cover openings to remain.
  - 3. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
  - 4. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain portable fire-suppression devices during flame-cutting operations.
  - 5. Maintain adequate ventilation when using cutting torches.
  - 6. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
  - 7. Remove structural framing members and lower to ground by method suitable to avoid free fall and to prevent ground impact or dust generation.
  - 8. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
  - 9. Dispose of demolished items and materials promptly.
  - 10. Return elements of construction and surfaces that are to remain to condition existing before selective demolition operations began.
- B. Existing Facilities: Comply with County Project Manager's requirements for using and protecting elevators, stairs, walkways, loading docks, building entries, and other building facilities during selective demolition operations.
  - 1. Remove residual adhesive and prepare substrate for new floor coverings by one of the methods recommended by RFCI.

#### 6.5 DISPOSAL OF DEMOLISHED MATERIALS

- A. General: Promptly recycle or dispose of demolished materials. Do not allow demolished materials to accumulate on-site- remove all items at the end of each shift.
- B. Burning: Do not burn demolished materials.
- C. Disposal: Transport demolished materials and legally dispose of them.

#### PART 7 - SUMMARY FOR CLOSEOUT DOCUMENTS

- A. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
  - 1. Inspection procedures.
  - 2. Project Record Documents.
  - 3. Operation and maintenance manuals.
  - 4. Warranties.
  - 5. Instruction of Owner's personnel.
  - 6. Final cleaning.
- B. Related Sections include the following:
  - 1. Section "Payment Procedures" for requirements for Applications for Payment for Substantial and Final Completion.
  - 2. Sections for specific closeout requirements for products

#### PART 8 - SUBSTANTIAL COMPLETION SUMMARY

- A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete in request.
  - 1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
  - 2. Advise Owner of pending insurance changeover requirements.
  - 3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
  - 4. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
  - 5. Prepare and submit Project Record Documents, operation and maintenance manuals, Final Completion construction photographs, damage or settlement surveys, property surveys, and similar final record information.
  - 6. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
  - 7. Complete startup testing of systems.
  - 8. Submit test/adjust/balance records.
  - 9. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.

- Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
- B. Inspection: Submit a written request for inspection for Substantial Completion. On receipt of request, Owner's Representative will either proceed with inspection or notify Contractor of unfulfilled requirements. Owner's Representative will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Owner's Representative, that must be completed or corrected before certificate will be issued.
  - 1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
  - 2. Results of completed inspection will form the basis of requirements for Final Completion.

#### 8.2 FINAL COMPLETION

- A. Preliminary Procedures: Before requesting final inspection for determining date of Final Completion, complete the following:
  - 1. Submit a final Application for Payment according to Section "Payment Procedures."
  - Submit certified copy of Owners Representative's and Project Manager's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by the Project Manager. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
  - 3. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
  - 4. Submit pest-control final inspection report and warranty.
  - 5. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.
- B. Inspection: Submit a written request for final inspection for acceptance. On receipt of request, Owner's Representative will either proceed with inspection or notify Contractor of unfulfilled requirements. Owner's Representative will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued. "Work list" type observations shall not occur. If the process becomes multiple "work list" observations, the contractor shall pay the Owner's Representative for multiple observations.
  - 1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

# 8.3 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Preparation: Submit three copies of list. Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.
  - 1. Organize list of spaces in sequential order, starting with exterior areas first and proceeding from lowest floor to highest floor.

- 2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.
- 3. Include the following information at the top of each page:
  - a. Project name.
  - b. Date.
  - c. Name of Owner's Representative and Project Manager.
  - d. Name of Contractor.
  - e. Page number.

#### 8.4 PROJECT RECORD DOCUMENTS

- A. General: Do not use Project Record Documents for construction purposes. Protect Project Record Documents from deterioration and loss. Provide access to Project Record Documents for Owner's Representative's reference during normal working hours.
- B. Record Drawings: Maintain and submit one set of blue- or black-line white prints of Contract Drawings and Shop Drawings.
  - 1. Mark Record Prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to prepare the marked-up Record Prints.
    - a. Give particular attention to information on concealed elements that cannot be readily identified and recorded later.
    - b. Accurately record information in an understandable drawing technique.
    - c. Record data as soon as possible after obtaining it. Record and check the markup before enclosing concealed installations.
    - Mark Contract Drawings or Shop Drawings, whichever is most capable of showing actual physical conditions, completely and accurately. Where Shop Drawings are marked, show cross-reference on Contract Drawings.
  - 2. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at the same location.
  - 3. Mark important additional information that was either shown schematically or omitted from original Drawings.
  - 4. Note Construction Change Directive numbers, Change Order numbers, alternate numbers, and similar identification where applicable.
  - Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location. Organize into manageable sets; bind each set with durable paper cover sheets. Include identification on cover sheets.
- C. Record Specifications: Submit one copy of Project's Specifications, including addenda and contract modifications. Mark copy to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.
  - 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.

- 2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
- 3. Note related Change Orders, Record Drawings, and Product Data, where applicable.
- D. Record Product Data: Submit one copy of each Product Data submittal. Mark one set to indicate the actual product installation where installation varies substantially from that indicated in Product Data.
  - 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
  - 2. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
  - 3. Note related Change Orders, Record Drawings, and Record Specifications, where applicable.
- E. Miscellaneous Record Submittals: Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.

#### 8.5 OPERATION AND MAINTENANCE MANUALS

- A. Assemble a complete set of operation and maintenance data indicating the operation and maintenance of each system, subsystem, and piece of equipment not part of a system. Provide a copy of all operation and maintenance manuals in PDF format to the Owner's Representative on a CD or DVD disc. Include operation and maintenance data required in individual Specification Sections and as follows:
  - 1. Operation Data:
    - a. Operating procedures, including startup, and shutdown.
  - 2. Maintenance Data:
    - a. Manufacturer's information, including list of spare parts.
    - b. Name, address, and telephone number of Installer or supplier.
    - c. Maintenance procedures.
    - d. Maintenance and service schedules for preventive and routine maintenance.
    - e. Maintenance record forms.
    - f. Sources of spare parts and maintenance materials.
    - g. Copies of maintenance service agreements.
    - h. Copies of warranties and bonds.
- B. Organize operation and maintenance manuals into suitable sets of manageable size. Bind and index data in heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, with pocket inside the covers to receive folded oversized sheets. Identify each binder on front and spine with the printed title "OPERATION AND MAINTENANCE MANUAL," Project name, and subject matter of contents.

#### 8.6 WARRANTIES

- A. Submittal Time: Submit written warranties on request of Owner's Representative for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated.
- B. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.
  - 1. Bind warranties and bonds in heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch (115-by-280-mm) paper.
  - 2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
  - 3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.
- C. Provide additional copies of each warranty to include in operation and maintenance manuals.
- D. Project shall have a warranty for three years after the final complete written acceptance of the Owner's representative.

#### PART 9 - PRODUCTS

#### 9.1 MATERIALS

A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

#### PART 10 - EXECUTION

#### 10.1 DEMONSTRATION AND TRAINING

- A. Instruction: Instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.
  - 1. Provide instructors experienced in operation and maintenance procedures. Incorporate nontoxic cleaning methods and sustainable maintenance.
  - 2. Provide instruction at mutually agreed-on times. For equipment that requires seasonal operation, provide similar instruction at the start of each season.
  - 3. Schedule training with Owner, through Owner's Representative with at least seven days' advance notice.
  - 4. Coordinate instructors, including providing notification of dates, times, length of instruction, and course content.

#### 10.2 FINAL CLEANING

- A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
  - 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:
    - a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
    - b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
    - c. Remove tools, construction equipment, machinery, and surplus material from Project site.
    - d. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
    - e. Remove debris and surface dust from limited access spaces.
    - f. Sweep concrete floors broom clean in unoccupied spaces.
    - g. Remove labels that are not permanent.
    - h. Leave Project clean and ready for occupancy.
- C. Comply with safety and environmental standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from Project site and dispose of lawfully. Use non-toxic and low-VOC cleaning products to the extent possible while complying with manufacturer's recommendations.

**END OF FRONT END**