



## AMENDMENT OF SOLICITATION/CONTRACT (AGREEMENT)

### SECTION I

Instructions to Offerors --- Amendment of Solicitation. The following instructions apply unless specified otherwise in an AAFES letter accompanying this amendment.

a. Offerors must acknowledge receipt of this amendment prior to the hour and date specified for receipt of proposals in the original solicitation, or the hour and date specified in this amendment if such has been amended. Offeror must acknowledge by one of the following means:

(1) By signing and returning all except one copy of this amendment;

(2) By acknowledging receipt of this amendment on each copy of the proposal submitted;

(3) By separate letter or telegram which includes a reference to the solicitation and amendment number.

b. Proposals must be based upon and refer to the solicitation as amended. Unless an acknowledgment of this amendment is received by the Contracting Officer before the hour and date specified for receipt of proposals, Offeror=s proposal may be considered nonresponsive.

c. If you desire to revise a proposal previously submitted, such revision must be received prior to the hour and date specified for receipt of proposals inclosed in a sealed envelope addressed to the issuing office, with the name and address of offeror and the solicitation number on the face of the envelope. Telegraphic proposals will not be considered unless authorized by the solicitation; however, proposals may be modified by telegraphic notice provided such notice is received prior to the time set for receipt of proposals. Telegraphic modifications should not reveal the amount of the original or of the revised proposal.

### SECTION II

Instructions to Contractor --- Amendment of Contract.

Unless otherwise instructed, all except one copy of this Amendment are to be executed by a person authorized to bind the firm contractually and returned to the Contracting Officer. The effective date will be the date the amendment is signed in block 6 by the Contracting Officer or the date(s) indicated in block 4, whichever is later.

## SECTION 01010

### SUMMARY OF THE WORK

#### PART 1 GENERAL

##### 1.01 STATEMENT OF WORK

- A. Scope: The work covered by these construction documents consists of furnishing all supervision, labor, equipment, materials, and appliances necessary to perform all operations required to install, alter, construct and complete the work, all in accordance with these specifications and the applicable drawings, and subject to the terms and conditions of the contract.
- B. Location: The work to be performed is located at Hurlburt Field, Florida.
- C. Principal Features: The work to be performed in connection with this project includes, but is not limited to the following:
  - 1. Taco Bell Remodel with the following elements:
    - a. Replacement of selected interior finishes in the major spaces.
    - b. Upgraded lighting.
    - c. Updated HVAC systems.
    - d. Equipment replacement.
    - e. All other work shown on the drawings and/or miscellaneous incidental work not shown that may be required to complete the project.

##### 1.02 DRAWINGS AND SPECIFICATIONS

- A. After Contract award, and for construction purposes only, the General Contractor (GC) will be provided with a record set of drawings and specifications and a reproducible set of drawings and specifications. Additional copies will be the responsibility of the General Contractor.

##### 1.03 SUBSTITUTIONS

- A. The materials, products and equipment described in the Bidding Documents establish a standard of required function, dimension, appearance and quality to be met by any proposed substitution.
- B. No substitution will be considered prior to receipt of Bids unless written request for approval has been received by the Contracting Officer or designated representative not less than 10 days prior to the solicitation due date. Such requests shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitution including drawings, performance and test data and other information necessary for an evaluation. A statement setting forth changes in other materials, equipment or other portions of the Work, including changes in the work of other contracts that incorporation of the proposed substitution would require, shall be included. The burden of proof of the merit of the proposed substitution is upon the proposer. The Contracting Officer or designated representative's decision of approval or disapproval of a proposed substitution shall be final.
- C. If the Contracting Officer or designated representative approves a proposed substitution prior to receipt of Bids, such approval will be set forth in an Addendum. Bidders shall not rely upon approvals made in any other manner.
- D. No substitutions will be considered after the Contract award unless specifically provided for in the Contract Documents.

##### 1.04 LAYING OUT WORK

- A. Dimensions and elevations indicated in layout of work shall be verified by the GC.

Discrepancies between drawings, specifications, and existing conditions shall be referred to the Contracting Officer or designated representative in writing for adjustment before work affected is performed. Failure to make such notifications shall place responsibility upon the GC to carry out work in satisfactory, workmanlike manner without extra costs.

- B. The GC shall be held responsible for the location and elevation of all the construction contemplated by the Construction Documents.
- C. Prior to commencing work, the GC shall carefully compare and check Architectural, Structural, Mechanical and Electrical drawings each with the other, that in any way affect the locations and elevations of the work to be executed by him, and should any discrepancy be found, he shall immediately report the same to the Contracting Officer or designated representative for verification and adjustment. Any duplication of work made necessary by failure or neglect on the GC's part to comply with this function shall be done at his sole expense.
- D. The drawings accompanying these specifications indicate generally the design and arrangement of all apparatus, fixtures, accessories, etc., necessary to complete the work required. The exact location or arrangement of equipment shall be established by shop drawings and is subject to minor changes necessitated by field conditions which shall be made as required without additional cost to AAFES. Measurements shall be verified by actual observations at the construction site, and the GC shall be responsible for all work fitting into place in a satisfactory and workmanlike manner meeting the approval of the Contracting Officer or designated representative.

#### **1.05 HAUL ROUTE AND PROJECT ACCESS AND BORROW SITES**

- A. Project access shall be as designated by the Installation. Contractor shall use the Gates designated by the Installation. Haul routes and waste area shall be designated by the Installation. Contractor shall assume that there are no borrow or waste sites available in the Installation.

#### **1.06 EXISTING OVERHEAD OR UNDERGROUND WORK**

- A. All existing overhead and underground work may not be indicated on drawings. Proposers shall make their own investigations of the site prior to submitting their proposals, and shall fully inform themselves regarding all pertinent conditions, including the work being performed under separate contracts for Remediation and Demolition by the Base.
- B. Carefully check the site where this project is to be placed and observe all existing overhead wires and equipment. All such work shall be protected, as required, whether or not shown on the drawings.
- C. Attention is directed to the existence of pipe and other underground utility improvements which occur at the site. These include storm sewer, sanitary sewer, water, electrical, telephone, and fiber optic communications lines. All reasonable precautions shall be taken to preserve and protect all such improvements, whether or not shown on the drawings. Contact line locators and Base engineering for information on site utilities. An excavation permit, issued by the Installation, is required prior to the Contractor commencing any excavation work. Obtain all required permits from Federal and State agencies having jurisdiction. Include time required to obtain these permits in scheduling activities on site. No extra time will be granted after the Notice to Proceed is issued for obtaining permits.
- D. Locations of existing overhead and underground lines shown on the drawings are based on the best available sources, but are to be regarded as approximate only. Exercise extreme care in locating and identifying these lines before beginning any work in adjacent areas.

## **1.07 GAS SERVICE**

- A. No gas service is required as part of this project.

## **1.08 INTERRUPTION OF EXISTING UTILITIES SERVICES**

- A. The GC shall perform the work under this Contract with a minimum of outage time for all utilities. Interruption of service shall be coordinated with the appropriate Utility. In some cases, the GC may be required to perform the work while the existing utility is in service. The existing utilities services may be interrupted only when approved by the Base. When it is necessary to interrupt the existing utilities, the GC shall notify the Base Civil Engineering Office in writing at least 14 days in advance of the time he desires the existing service to be interrupted. The interruption time shall be kept to a minimum. The amount of time requested by the GC for interruption of existing utility services shall be as approved by the Base Civil Engineering Office. All interruptions of existing utilities shall be coordinated by the GC through the Base Civil Engineering Office.

## **1.09 EXCAVATION**

- A. No excavation work is required.

## **1.10 SAFETY REQUIREMENTS**

- A. Standards: Maintain project in accordance with the following safety and insurance standards:
  - 1. The Corps of Engineers Safety and Health Requirements Manual, EM 385-1-1, dated October 1992, as referred to in the General Provisions, paragraph 31, "ACCIDENT PREVENTION".
- B. O.S.H.A. (OSHA) Standards:
  - 1. The General Contractor (GC) will be expected to comply with OSHA Standards. The OSHA Standards are subject to change and such changes may affect the GC in his performance under the contract. It is the GC's responsibility to know such changes and effective dates of changes.
- C. Hazards Control:
  - 1. All hazardous waste generated by this construction activity defined by the Resource Conservation and Recovery Act shall remain the property of the Contractor or his subcontractors, and must be stored, transported, and disposed of in accordance with the requirements of all applicable laws and regulations.
  - 2. Removal or disposal of toxic materials or asbestos is not included in this contract. If the Contractor encounters such materials, he shall stop work and notify the Contracting Officer or designated representative immediately.
- D. Submittals: The General Contractor shall provide a Safety Plan and a Job Hazard Analysis for the Contracting Officer or designated representative's review prior to beginning construction activities.

## **1.11 WELDING**

- A. Prior to commencing any welding, the GC shall obtain a welding permit from the Base Fire Department. Also permits are required for all "chop saw" work with metals.

## **1.12 BARRICADES AND WARNING DEVICES**

- A. The GC shall provide and maintain barricades and lighting devices, in accordance with manual for uniform traffic control devices in the Alabama Department of Transportation Manual, current Edition, at all points of excavation and construction within perimeter of construction site. Conform to all OSHA requirements for personnel safety.

### **1.13 PROTECTION FOR OPEN FLAME DEVICES**

- A. When open flame and/or spark producing devices, i.e., acetylene oxygen welding equipment, electric arc welding, etc., are employed for job accomplishment, the following procedures are mandatory:
- B. Inspect all surroundings and equipment to insure that combustible substances are not present in any area where contact of metal at a temperature above the flashpoint of any compound is possible.
- C. Insure that no open containers or spills of combustible substances are present.
- D. Insure that ignition is not possible by conduction, convection, radiation, or dispersion of molten metal.
- E. Proper protection equipment and practices will be used, i.e., fire-resistant blankets, wetting or surrounding area, removal of combustible materials where practicable, earth filled backing, portable fire extinguishers of proper type on hand.
- F. When open flame devices are to be used, a permit is required and notification to the Base Fire Department is required.

### **1.14 FIRE PROTECTION**

- A. The GC shall at all times maintain good housekeeping practices to reduce the risk of the fire damage. All scrap materials, rubbish, and trash shall be removed daily from in and about the building and shall not be permitted to be scattered on adjacent property.
- B. Suitable storage space shall be provided outside the immediate building area for storing flammable materials and paints; no storage will be permitted in the building. Excess flammable liquids being used inside the building shall be kept in closed metal containers and removed from the building when not in use.
- C. A fire extinguisher shall be available at each location where cutting and welding is being performed. Where electric or gas welding or cutting is done, interposed shields of incombustible material shall be used to protect against fire damage due to sparks and hot metal. When temporary heating devices are used, a watchman shall be present to cover periods when other workman are not on the premises.
- D. The GC shall provide fire extinguishers in accordance with the recommendations of NFPA Nos. 10 and 241. However, a minimum of four fire extinguishers shall be available for the building during the construction period.
- E. Fire Codes: The GC shall obey all requirements of the national fire codes, installation fire regulations, and the UFC 3-600-01 manual as they relate to his work on this project.

### **1.15 WORK BY OTHERS**

- A. Work Not Included: Except for such auxiliary work as is shown or specified or is necessary as a part of the construction, the following work is not included in the Contract:
  - 1. Any work shown, but marked "NOT IN CONTRACT" (NIC).
  - 2. Any work indicated to be furnished and installed by AAFES (AF/Al).
  - 3. Any work indicated to be furnished and installed by the AAFES Vendors or Concessionaires.
  - 4. All work of demolition and remediation of hazardous materials.

### **1.16 AAFES-FURNISHED AND AAFES-INSTALLED EQUIPMENT (AF/AI)**

- A. Attention is called to the GENERAL PROVISIONS concerning work by others under separate Contract. The following items will be furnished and installed by AAFES under separate contracts during the GC's performance period:
  - 1. Flat Screen Monitors.
  - 2. Cash registers, Point of Sale counters (Electrical service by GC)
  - 3. Smallware Package.
  - 4. Walk-in freezers and coolers: existing to remain.
  - 5. Signage designated as "AF/AI"
  - 6. EXPO Thermal Printer
- B. At the Contracting Officer or designated representative's option, additional equipment will be furnished and/or installed.

### **1.17 AAFES FURNISHED-CONTRACTOR INSTALLED ITEMS (AF/CI)**

- A. AAFES shall furnish and install certain items/equipment as indicated on the plans. AAFES furnished items will be received at the job site by a representative of the local exchange. The G.C. will provide power to all units and final hook-up of power at all required locations.
- B. The GC shall construct all openings, furnish and install required sleeves, and furnish and install all reinforcing miscellaneous supports, angles, plates, anchors, and bolts, cover plates and fitments necessary to secure AAFES-furnished equipment in place.
- C. The GC shall include in the Construction Schedule, dates for which the AAFES-furnished items will be required on the site. AAFES requires these dates within 15 days of award of contract.
- D. If the GC subsequently requests a change to the delivery date, the Contracting Officer or designated representative will use his reasonable best efforts to effect the change. Any request must be made at least thirty (30) days in advance of the scheduled delivery date, and must be in writing. Failure to provide this notice, or if provided, inability of the Contracting Officer or designated representative to effect the change for any reason shall not constitute a basis for a claim under the Contract to store, protect, and install the AF/CI equipment.

### **1.18 LINING OF JOINTS IN FINISHED MATERIALS**

- A. It shall be the responsibility of the GC to make certain in the installation of jointed floor, wall, and ceiling materials that:
  - 1. The joints line through in a straight line and in both directions wherever possible.
  - 2. The joints relate to all openings and breaks in the structure and are symmetrically placed wherever possible. This includes heating registers, light fixtures, paneling, equipment, etc.
  - 3. If, because of the non-related sizes of the various materials and locations of openings, etc., it is not possible to accomplish the above, the GC shall meet the Contracting Officer or designated representative to determine the most satisfactory arrangement. The GC shall establish center lines for all trades.

### **1.19 INTEGRATING EXISTING WORK**

- A. All existing streets, adjacent buildings, and other improvements shall be protected from damage.
- B. The GC's operations shall be confined to the immediate vicinity of the new work and shall not in any way interfere with or obstruct the ingress or egress to and from street or adjacent property.

- C. If new work is to be connected to existing work, special care shall be exercised not to disturb or damage the existing work more than necessary. All damaged work shall be replaced, repaired, and restored to its original condition at no cost to AAFES.

#### **1.20 HEADROOM UNDER PIPES**

- A. All horizontal runs of plumbing and heating pipes and/or electrical conduit suspended from ceilings shall provide for a maximum headroom clearance, but in no case shall this clearance be less than 6'-9" without written consent from the Contracting Officer or designated representative. Where piping or conduit is left exposed within a room, it shall be true to plumb or horizontal and parallel to the walls. Where possible, uniform margins are to be maintained between parallel lines and/or adjacent wall, floor, or ceiling surfaces.

#### **1.21 PATCHING GOVERNMENT-OWNED FACILITIES**

- A. Government-owned structures, facilities, streets, curbs, walks, etc., that are damaged or removed due to required excavations or other construction work, shall be patched, repaired or replaced by the GC, to the satisfaction of the Contracting Officer or designated representative and the Base Civil Engineer Office. All utility lines on under streets shall be jacked and bored, not trenched.

#### **1.22 LOCATION OF EQUIPMENT AND PIPING**

- A. Drawings showing location of equipment, piping, ductwork, etc., are diagrammatic and job conditions shall not always permit their installation in the location shown. When this situation occurs, it shall be brought to the Contracting Officer or designated representative's attention immediately and the new location determined in a joint conference. Installation in and between framing members may be required. The GC will be held responsible for any additional cost of installation in a new location. Items relocated without the approval of the Contracting Officer or designated representative may require relocation. The GC shall remove and relocate such items at his own expense if so directed by the Contracting Officer or designated representative.

#### **1.23 OVERLOADING**

- A. The GC shall be responsible for not overloading any part or parts of structures beyond their safe calculated carrying capacities during construction by placing of materials, equipment, tools, machinery, or any other item thereon. No loads shall be placed on floors or roofs before they have attained their permanent and safe strength.

#### **1.24 STANDARDS**

- A. Any materials specified by reference to the number, symbol, or title of a specific standard such as Commercial Standard, a Federal Specification, a trade association standard, or other national standard, shall comply with the requirements in the latest revision thereof, and any amendment or supplement thereto, in effect on the date of invitation for proposals, except as limited to type, class or grade, or modified in such reference, and except as otherwise indicated.
- B. The standard referred to, except as modified in the specifications, shall have full force and effect as though printed in these specifications. These standards are not furnished to bidders for the reason that the manufacturers and trades involved are assumed to be familiar with their requirements.
  - 1. Where Federal Specifications are referred to as a measure of quality and standard, they refer to Federal Specifications established by the Procurement Division of the United States Government and are available from the Superintendent of Documents,

U.S. Government Printing Office.

2. Where Federal Specification numbers are used, they refer to the latest edition including amendment thereto.
3. Where Commercial Standards are referred to as a measure of quality, standard, and method of fabrication, they refer to Commercial Standards, and method of fabrication, they refer to Commercial Standards issued by the U.S. Department of Commerce.
4. Where ASTM Serial Numbers are used, they refer to the latest tentative specifications, standards specifications, standards methods, or standard method of testing issued by the American Society for Testing and Materials.

#### **1.25 CERTIFICATE OF CONFORMANCE**

- A. Except where tests and/or inspections in connection with structural materials are specified or required by applicable laws, rules and regulations, manufacturer's certificate covering conformance with the requirements of the above mentioned Federal Specifications and Commercial Standards may be acceptable in lieu of test for such items. Such certificates shall be furnished to the Contracting Officer or designated representative for all items so specified.

#### **1.26 OCCUPANCY BY AAFES**

- A. AAFES shall reserve the right and privilege of partial occupancy during and prior to the absolute completion of the total work. Access shall be allowed at all times to AAFES and its own Contractors in the endeavor.

#### **1.27 AAFES CONTRACTS**

- A. The GC's attention is called to General Provision titled, "Other Contracts", and provision titled "Final Inspection and Acceptance", paragraph referring to "use and possession prior to completion", the AAFES plans to install equipment in the following areas as noted below prior to completion date:

<u>DESCRIPTION</u>	<u>DAYS PRIOR TO CONTRACT COMPLETION DATE</u>
AAFES Start Installation of Retail Fixtures	15 Days

#### **1.28 TESTS AND REPORTS**

- A. **NOT USED.**

#### **1.29 GUARANTEE AND EXTENDED GUARANTEE**

- A. Upon completion of project, prior to final payment, guarantees required by technical division of specifications shall be properly executed in quadruplicate by subcontractors and submitted to the Contracting Officer or designated representative. Delivery of guarantees shall not relieve the GC from any obligation assumed under the Contract.
- B. Submit guarantee covering entire project for one year. In addition, where separate guarantees for certain portions of work are for longer periods, the GC's guarantee shall be extended to cover such longer periods. Copies of the guarantees shall be inserted into the Maintenance Manuals. In cases where the manufacturer's standard commercial warranty (i.e., roofing systems, mechanical components, hardware, etc.) is longer than one year, standard commercial warranty period shall be provided.
- C. Guarantee shall become valid and operative upon acceptance by AAFES.

#### **1.30 REFERENCES**

- A. All references to the word "Government" in the specifications shall mean Army and Air

Force Exchange Service (AAFES), except guarantees which shall be "Government".

- B. Wherever the term "Not in Mechanical Contract" (NIMC) or the term "Not in Electrical Contract" (NIEC) is used in the specifications and on the drawings, it shall be interpreted to mean that the work is not a part of the particular sub-trade BUT IS INCLUDED under some other trade of the Contract. Wherever the term "Not in Contract" (NIC) is used, it shall be interpreted to mean that the item of work is not a part of the Contract, except as may be otherwise noted.
- C. Definitions:
  - 1. Vendor: Person or persons selling any material item.
  - 2. Installation: Military facility where the project is being built.
  - 3. Concessionaire: Person who is directly responsible for operation of the concessions.
  - 4. Architect-Engineer: That person or firm responsible for preparing the contract drawings and specifications.
  - 5. AAFES or Exchange: Army and Air Force Exchange Service.
  - 6. Inspection Agency: AAFES, Project Manager.
  - 7. Installation/Facility Engineers: Responsible installation engineer.

### **1.31 SUBMISSION OF PHOTOGRAPHS**

- A. The GC shall submit to the Contracting Officer or designated representative photographs taken on or about the first of every month, showing the general conditions of work as viewed from the north, south, east, west. Photographs (digital) must accompany each Application for Payment. Each picture shall be identified by date of exposure, project title, description of content, and AAFES Project Number.

### **1.32 NORMAL ACTIVITIES AND ENVIRONMENTAL CONDITIONS FOR HURLBURT FIELD, FLORIDA.**

- A. Hurlburt Field does not allow burning. Do not burn anything on site.
- B. At times force protection and national security requirements may mean that the Contractor will not be able to access the Post or that access will be delayed. These are normal activities for Redstone Arsenal and the Contractor shall expect that construction activities may be impacted as a result of Redstone Arsenal normal activities.

### **1.33 INFORMATION PROCEDURES DURING CONSTRUCTION (RFI's)**

- A. It is recognized that technical questions will arise during the course of the construction of this project. Contractor shall endeavor to handle these questions in a logical and consistent manner. The preferred method is with RFI's e-mailed to the A/E for action.

### **1.34 POSTING OF ADDENDA AND CHANGE ORDERS**

- A. Contractor shall post all addenda, field orders, and change orders in the Contract drawings and specifications such that they are available for reference at all times on the project site.

### **1.35 PRICE CHANGES IN MATERIALS AND EQUIPMENT SUBSEQUENT TO BIDDING**

- A. Due to rapidly changing costs of many building systems, components, and products made with steel in particular, Contractors are experiencing price changes between time of bidding and time for placing orders. In order to minimize these cost increases and prevent change orders for these price increases the Contractor shall place orders for all systems, materials, and equipment in the project at the earliest possible time. His base bid price is to include what he projects his escalating costs will be. No allowance for increases to the Contract Award Amount will be allowed for systems, materials, and equipment not ordered in a timely fashion. Credit will be allowed for stored materials provided they are identified specifically for use in this project and are stored on site or in a bonded warehouse. AAFES reserves the right to verify all stored materials.

**PART 2 PRODUCTS – NOT USED**

**PART 3 EXECUTION – NOT USED**

**END OF SECTION**

## SECTION 01045

### CUTTING AND PATCHING

#### PART 1 GENERAL

##### 1.01 DESCRIPTION

- A. Related Requirements Specified Elsewhere:
  - 1. Summary of the Work: Section 01010.
  - 2. Mechanical: Division 15.
  - 3. Electrical: Division 16.
- B. Execute cutting (including excavating), fitting or patching, or work required to:
  - 1. Uncover work to provide for installation of ill-timed work.
  - 2. Remove and replace defective work.
  - 3. Remove and replace work not conforming to requirements of Contract Documents.
  - 4. Remove samples of installed work as specified for testing.
- C. In addition to contract requirements, upon written instruction of the Contracting Officer or designated representative:
  - 1. Uncover work to provide for Contracting Officer or designated representative's observation of covered work.
  - 2. Remove samples of installed materials for testing.
  - 3. Remove work to provide for alteration of existing work.
- D. Do not endanger any work by cutting or altering work or any part of it.
- E. Do not cut or alter work of another contractor without written consent of the Contracting Officer or designated representative.

##### 1.02 SUBMITTALS

- A. Prior to cutting which affects structural safety of project, submit written notice to the Contracting Officer or designated representative, requesting consent to proceed with cutting, including:
  - 1. Identification of project.
  - 2. Description of affected work.
  - 3. Necessity for cutting.
  - 4. Affect on other work, on structural integrity of project.
  - 5. Description of proposed work. Designate:
    - a. Scope of cutting and patching.
    - b. Trades to execute work.
    - c. Products proposed to be used.
    - d. Extent of refinishing.
  - 6. Photographs of affected work.
- B. Submit written notice to the Contracting Officer or designated representative designating time-work will be uncovered to provide for observation.

#### PART 2 PRODUCTS

##### 2.01 MATERIALS

- A. Materials for replacement of work removed: Comply with specifications for type of work to be done.

#### PART 3 EXECUTION

##### 3.01 INSPECTION

- A. Inspect existing conditions of work including elements subject to movement or damage during:
  - 1. Cutting and patching.

2. Excavating and backfilling.

B. After uncovering work, inspect conditions affecting installation of new products.

### **3.02 PREPARATION, PRIOR TO CUTTING**

A. Provide shoring, bracing and support as required to maintain structural integrity of the project.

### **3.03 PERFORMANCE**

A. Execute fitting and adjustment of products to provide finished installation to comply with specified tolerances and finishes.

B. Execute cutting and demolition by methods which will prevent damage to other work and will provide proper surfaces to receive installation of repairs and new work.

C. Restore work which has been cut or removed; install new products to provide complete work in accordance with requirements of Contract Documents.

D. Refinish entire surfaces as necessary to provide an even finish.

1. Continuous surfaces: To nearest intersections.

2. Assembly: entire refinishing.

**END OF SECTION**

## SECTION 01220

### PROGRESS MEETINGS

#### PART 1 - GENERAL

##### 1.01 RELATED REQUIREMENTS SPECIFIED ELSEWHERE

- A. Summary of the Work: Section 01010.
- B. Submittals: Section 01300.
- C. Project Record Documents: Section 01720.

##### 1.02 PROGRESS MEETINGS - GENERAL CONTRACTOR'S (GC) RESPONSIBILITY

- A. Prepare agendas.
- B. Make physical arrangements for meetings.
- C. Preside at meetings.
- D. Project Manager will record minutes; including significant proceedings and decisions.
- E. Distribute copies of minutes to participants, within four (4) days after meetings.
- F. Furnish four (4) copies of minutes of Contracting Officer or designated representative.

##### 1.03 ATTENDANCE

- A. The Contracting Officer or designated representative or will attend meetings to ascertain that work is expedited consistent with construction schedule and with Contract Documents.

##### 1.04 PRE-CONSTRUCTION MEETING

- A. Date schedule by the Contracting Officer or designated representative.
- B. Attendance:
  - 1. AAFES Representative.
  - 2. Contracting Officer or designated representative and his consultants.
    - a. Representatives of Governmental or other Regulatory Agencies. This includes representatives of Hurlburt Field.
    - b. General Contractor and his major subcontractors.
- C. Minimum Agenda:
  - 1. Distribute and discuss:
    - a. List of major subcontractors.
    - b. Tentative Construction Schedule.
    - c. Critical work sequencing.
    - d. Designation of responsible personnel.
    - e. Processing of field decisions and Change Orders.
    - f. Adequacy of distribution of Contract Documents.
    - g. Submittal of shop drawings, project data and samples.
    - h. Procedures for maintaining Record Documents.
    - i. Use of premises:
      - 1) Office and storage areas.
      - 2) AAFES requirements.
    - j. Major equipment deliveries and priorities.
    - k. Safety and first aid procedures.
    - l. Security procedures.
    - m. Housekeeping procedures.

## **1.05 PROGRESS MEETINGS**

- A. Schedule meetings as determined by the GC and Contracting Officer or designated representative.
- B. Hold called meetings as progress of work dictates (minimum 1 every month).
- C. Location of Meetings: Job Site or as directed in notice.
- D. Attendance:
  - 1. Contracting Officer or designated representative.
  - 2. Subcontractors as pertinent to agenda.
  - 3. Safety Representative.
  - 4. Representative of Base "CIVIL ENGINEERING OFFICE" at Hurlburt Field).
  - 5. Minimum Agenda.
    - a. Review, approve minutes of previous meeting.
    - b. Review, work progress since last meeting.
    - c. Note field observations, problems, and decisions.
    - d. Identify problems which impede planned progress.
    - e. Review off-site fabrication problems.
    - f. Develop corrective measures and procedures to regain planned schedule.
    - g. Revise Construction Schedule as indicated.
    - h. Plan progress during next work period.
    - i. Review submittal schedules, expedite as required to maintain schedule.
    - j. Maintain quality and work standards.
    - k. Review changes proposed by AAFES for:
      - 1) Affect on Construction Schedule.
      - 2) Affect on completion date.
    - l. Complete other current business.

**END OF SECTION**

## SECTION 01300

### SUBMITTALS

#### PART 1 - GENERAL

##### 1.01 GENERAL

- A. Submit, to the Contracting Officer or designated representative, shop drawings, project data, and samples required by specification sections.
  - 1. Exclusive of submittals for exterior submittals, Contractor at his option may elect to make a written statement saying that an item being considered for use on the project meets the Contract requirements and is named specifically and completely identified in lieu of making a formal shop drawing submittal. Use AAFES form 4450-48 for all submittals. A submittal identifying the material or system being proposed, shall be made from each item so named in lieu of a formal submittal
- B. Submit, to the Base copies of all submittals involving exterior materials. Base has approval authority over all exterior materials. Make the submittals to Base directly at same time as submittals to Contracting Officer or designated representative. Procurement and/or installation of all such materials without written approval by the Base is at the Contractor's risk and if such materials are rejected by the Base all costs associated with said materials shall be borne by the G.C.
- C. Related Requirements Specified Elsewhere:
  - 1. General Provisions and Amendments.
  - 2. Section 01720 - Project Record and Closeout Documents.
- D. Prepare and submit with the Construction Schedule a separate schedule listing dates for submission and dates to review shop drawings, project data, and samples that will be needed for each product.
- E. By approving and submitting Shop Drawings, Product Data, Samples and similar submittals, the Contractor represents that the Contractor has determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.
  - 1. Contractor shall coordinate voltages and other requirements of equipment supplied with requirements of the Work and of the Contract Documents.

##### 1.02 SHOP DRAWINGS

- A. Definition: Original drawings, prepared by the general contractor (GC), subcontractor, supplier, or distributor which illustrate some portion of the work; showing fabrication, layout, setting or erection details and coordination with work by others.
  - 1. Prepared by a qualified detailer.
  - 2. Identify details by reference to sheet and detail numbers shown on Contract Drawings.
  - 3. Minimum Sheet Size: 8-1/2 inches by 11 inches
  - 4. Reproductions for Submittals: Opaque diazo or xerox prints

##### 1.03 PRODUCT DATA

- A. Manufacturer's Standard Schematic Drawings:
  - 1. Modify drawings to delete information which is not applicable to project.
  - 2. Supplement standard information to provide additional information applicable to project.
- B. Manufacturer's catalogue sheets, brochures, diagrams, schedules, performance charts, illustrations and other standard descriptive data.

1. Clearly mark each copy to identify pertinent materials, products, or models.
  2. Show dimensions and clearances required.
  3. Show performance characteristics and capacities.
- C. Asbestos-Free Product/Material: Prior to the approval of the product/material to be used, the manufacturer/supplier shall provide written certifications that the product/material contains no asbestos. These certifications are mandatory before approval will be issued. Submittals furnished without asbestos-free certification will be returned to the Contractor with no action taken until such certification is provided.
- D. Lead-Free Paint: Manufacturers/suppliers of paint shall provide written certifications that the products submitted contain no lead. These certifications are mandatory before approval will be issued. Submittals furnished without lead-free certification will be returned to the Contractor with no action taken until such certification is provided.

#### **1.04 SAMPLES**

- A. Physical examples to illustrate materials, equipment or workmanship, and to establish standards by which completed work is judged.
- B. Office Samples: Of sufficient size and quantity to clearly illustrate:
1. Functional characteristics of product or material, with integrally related parts and attachments.
  2. Full range of color samples.
  3. After review, samples may be used in construction of project unless otherwise noted.

#### **1.05 CONTRACTOR RESPONSIBILITIES**

- A. See: General Conditions and Amendments.
- B. The GC is responsible for the timely submittal of all complete and coordinated shop drawings and samples. No allowance will be made for time lost due to delinquent or incomplete submittals by the GC.
- C. SPECIAL NOTE: All submittals requiring color selection/coordination for exterior materials shall be submitted at the same time.
- D. SUBMITTAL SCHEDULE: The Contractor shall provide a submittal schedule listing submittal requirements for each section of the specifications. List shall indicate what Contractor is to submit to the Contracting Officer or designated representative for approval and/or concurrence.

#### **1.06 SUBMISSION REQUIREMENTS**

- A. Schedule submissions at least 14 days before dates reviewed submittals will be needed, but in no case will submittals be made beyond 60 days after award of contract except by permission of Contracting Officer or designated representative.
- B. Submit number of copies of shop drawings, project data, and samples which GC requires for distribution plus two (2) copies which will be retained by the Contracting Officer's Representative. Also, submit one copy of each exterior material submittal directly to the Base concurrently with submittal to the Contracting Officer or designated representative.
- C. Submit number of samples specified in each specifications section or as required by the Contracting Officer or designated representative.
- D. Accompany submittals with transmittal letter, in duplicate, containing:
1. Date.
  2. Project title and number.
  3. GC's name and address.
  4. The number of each shop drawing, project data, and sample submitted.

5. Notification of deviations from Contract Documents. If no specific mention of such deviation is made, the GC will not be relieved of the responsibility for completing the work in full accordance with the Contract Documents even though such drawings are approved by the Contracting Officer or designated representative.
  6. Other pertinent data.
- E. Submittals shall include:
1. Date and revision dates.
  2. Project title and number.
  3. The name of:
    - a. Architect/Engineer
    - b. Contractor
    - c. Subcontractor
    - d. Supplier
    - e. Manufacturer
    - f. Separate detailer when pertinent
  4. Identification of product or material.
  5. Relation to adjacent structure or materials.
  6. Field dimensions, clearly identified as such.
  7. Specification section number.
  8. Applicable standards, such as ASTM number of Federal Specifications.
  9. Identification of deviations from Contract Documents.
  10. GC's stamp, initialed or signed, certifying to review of submittal, verification of field measurements, and compliance with Contract Documents.

#### **1.07 RESUBMISSION REQUIREMENTS**

- A. Shop Drawings:
1. Revise initial drawings as required and resubmit as specified for initial submittal.
  2. Indicate on drawings any changes which have been made other than those requested by the Contracting Officer or designated representative.
- B. Project Data and Samples:
1. Submit new data and samples as required for initial submittal.

#### **PART 2 PRODUCTS – NOT USED**

#### **PART 3 EXECUTION – NOT USED**

**END OF SECTION**

## SECTION 01400

### QUALITY CONTROL

#### PART 1 - GENERAL

##### 1.01 REQUIREMENTS INCLUDED

- A. The General Contractor shall establish a quality control system to perform sufficient inspection and tests of all items of work, including that of his subcontractor(s) to insure conformation to applicable specifications and drawings with respect to the materials, workmanship, construction, finish and functional performance. General Contractor is responsible for the quality of his work and the work of all his subcontractors. Tests of materials and/or special inspections will be made, when required by these specifications, by applicable law, rules and regulations in accordance with respective Sections of the specifications. Where required, the General Contractor shall employ and pay for the services of an independent agency to perform specific services and testing. Examples of such services are test and balance for HVAC, etc.
- B. General Contractor shall arrange and pay for all services and testing which are not specifically indicated to be provided by AAFES. All testing laboratories used shall be approved by the Government.
- C. If a material is not required to be field tested, the Contracting Officer or designated representative may require the supplier to furnish with each delivery of such material, a certificate bearing legal signature of said supplier, stating that such material complies with specification requirements.
- D. If any work or material requiring tests and inspections is executed, enclosed or covered before tests and inspections are made, or test reports distributed, the General Contractor shall, at his own expense, uncover such part of this work or material and keep it uncovered until such tests and inspections have been made and test reports distributed. If work or material so tested and inspected shall not be found to conform to the requirements of the Construction Documents, it shall be deemed and construed to be defective materials or faulty workmanship and the General Contractor, at his own expense, shall replace work or material removed and repair all work disturbed thereby.
- E. The Testing Agency shall report results of all tests in writing simultaneously to the following:
  - 1. Contracting Officer: 3 copies
  - 2. Site Inspector: 1 copy
  - 3. General Contractor: 1 copy
  - 4. Architect/Engineer: 1 copy
- F. Reports shall state that tests were made under responsible charge of a Testing Engineer, holding a license to operate in the state where the project is being constructed, and that material or materials were tested in accordance with provisions of these specifications, and that material and/or materials tested, passed or failed to pass such requirements.

##### 1.02 CONTRACTOR'S RESPONSIBILITIES

- A. Cooperate with the Contracting Officer or designated representative and laboratory personnel and provide access to work and to manufacturer's operations. Provide samples of materials to be tested, in required quantities. Furnish casual labor and facilities required to provide access to work to be tested; to obtain and handle samples at the site; to facilitate inspections and tests; and for Laboratory's exclusive use for storage and curing of test samples. Notify Laboratory sufficiently in advance of operations to allow for its assignment of personnel and scheduling of tests.

- B. The use of AFFES' or General Contractor's independent testing services shall in no way relieve the General Contractor of his responsibility to furnish materials and construction in full compliance with the plans and specifications.
- C. The General Contractor shall coordinate with both AAFES and his own testing laboratories so that the work will be inspected and tested according to contract requirements. This coordination includes notification of when tests should be taken, easy access to the work, and general cooperation in every way to insure proper control of the work.
- D. Upon completion of the project the General Contractor shall submit a signed certificate stating tests for this work were made in accordance with provisions of these specifications and, further, all such tests and reports made were reported as required. This certificate shall list all tests and dates when work was completed.

### **1.03 RELATED REQUIREMENTS**

- A. Required Submittals: Section 01300.
- B. Related requirements and tests specified in Sections 2 through 16.

**END OF SECTION**

## SECTION 01500

### TEMPORARY FACILITIES AND CONTROLS

#### PART 1 - GENERAL

##### 1.01 RELATED WORK SPECIFIED ELSEWHERE

- A. Cleaning: Section 01710
- B. Plumbing: Section 15400
- C. Electrical: Section 16000.
- D. All temporary facilities and controls must comply with NFPA 241 and EM-385-1-1 and UFC 3-600-1, section 1-7.

##### 1.02 ELECTRICAL SYSTEM

- A. Furnish and install temporary electric power service for construction needs throughout the construction period.
  - 1. Electric Services: Provide a complete temporary electric service including all secondary wiring, supports, switches, over-current protection, metering, receptacles, etc., required for a 120/208-volt, 3-phase, 4-wire, 200 amp service for the construction of the building. The electrical contractor shall be responsible to furnish all fused cutouts, transformers, primary and secondary conductors, disconnects, and miscellaneous hardware.
  - 2. Power center for miscellaneous tools and equipment used in construction work.
    - a. Provide 120 volt and 208 volt receptacles for use by all trades. Each outlet shall have a circuit breaker. Outlets shall be located so that no extensions are more than 100 feet long. All outlets shall be grounded.
    - b. Users shall provide grounded, Underwriters' Laboratories approved extension cords from power center to point of operations.
  - 3. Power for temporary light.
    - a. Provide and maintain a temporary lighting system with guarded lighting sockets and lamps throughout the building to provide temporary lighting to satisfy construction requirements, in such areas and at such times that day lighting is inadequate. Provide at least 0.7 watts of incandescent lighting per square foot and maintain a socket voltage of at least 100 volts. Use at least 100-watt lamps. In any event, the lighting intensity shall no be less than five (5) foot-candles in the vicinity of work and traffic areas.
- B. Capacity
  - 1. Adequate electrical service for construction use by all trades during construction period.
  - 2. Unusually heavy loads, such as welding, and other equipment with special power requirements, will not be connected to the system.
- C. Maintain strict supervision of use of temporary services.
  - 1. Enforce conformance with applicable standards.
  - 2. Enforce safe practices.
  - 3. Prevent abuse of services.
  - 4. Use of temporary electrical service for resistance heating is not permitted.
- D. The temporary electrical service for construction shall comply with the latest editions of the Occupational Safety and Health Standards and the National Electric Code, NFPA-70.
- E. **AAFES may authorize use of existing power.**

### 1.03 WATER SERVICE

- A. Water shall be furnished from existing water supply (hose bibb, if available) outside the building on expansion projects and as an extension of the permanent service on new construction.
- B. Maintain strict supervision of use of existing services.
  - 1. Enforce conformance with applicable codes and standards.
  - 2. Enforce sanitary practices.
  - 3. Prevent abuse of services.
  - 4. Prevent wasteful use of water.
  - 5. Protect system from freezing.
- C. AAFES may authorize use of existing water source.**

### 1.04 TELEPHONE/COMMUNICATIONS

- A. General Contractor to provide phone communication.

### 1.05 TOILET FACILITIES

- A. Furnish and install adequate portable chemical toilets.
- B. Provide maintenance service to keep the toilet clean and sanitary.
- C. AAFES may provide access to existing facilities. The General Contractor will maintain cleanliness of existing facilities.**

### 1.06 HEAT AND VENTILATION

- A. Furnish and install temporary heat and ventilation in enclosed new construction areas throughout the construction period to facilitate progress of work, protect work against dampness and cold, prevent moisture condensation on surfaces, and provide suitable ambient temperatures and humidity levels for installation and curing of materials with the following requirements:
  - 1. Twenty-four (24) hours a day during placing, setting, and curing of cementitious materials with a temperature as required by the specification section for each product (minimum temperature: 40°F).
  - 2. Twenty-four (24) hours a day, seven days prior to, and during, placing of interior finishes; woodwork, resilient floors, painting and finishing: as required by specification section for each product.
  - 3. Twenty-four (24) hours a day after application of finishes, and until substantial completion: minimum 65°F, 18°C.
  - 4. As required in the specifications for each product for storage of materials.
- B. Ventilation Required
  - 1. General: Prevent hazardous accumulations of dust, fumes, mists, vapors or gases in areas occupied during construction.
    - a. Provide local exhaust ventilation to prevent harmful dispersal of hazardous substances into atmosphere of occupied areas.
    - b. Dispose of exhaust materials in manner that will not result in harmful exposure to persons.
    - c. Ventilate storage spaces containing hazardous or volatile materials.
  - 2. Provide adequate ventilation for:
    - a. Curing installed materials.
    - b. Dispersal of humidity.
    - c. Ventilation of temporary sanitary facilities.
  - 3. Duration of operations:
    - a. For personnel:

- 1) At all times when the General Contractor's personnel and/or AAFES employees or customers occupy an area and are subject to hazardous accumulation of harmful elements.
  - 2) Continue operation of ventilation and exhaust system for time after cessation of work process to assure removal of harmful elements.
- b. For curing installed materials: as required by specification Section for respective materials.
- c. For humidity dispersal: as needed to provide suitable ambient conditions for work.
- d. Use of permanent heating and ventilating equipment:
  - 1) The General Contractor shall take precautions as required to prevent damage to the equipment. All filters must be in place.
  - 2) The General Contractor shall be responsible for maintaining clean filters in all equipment and shall install new filters when the Government takes occupancy of the building.
- e. Beneficial Occupancy: During the period of beneficial occupancy by AAFES, the HVAC systems must be operating under the design and performance standards of the completed permanent design requirements.
- f. The General Contractor shall maintain strict supervision of operation of all equipment used for temporary heating and ventilating as follows:
  - 1) Enforce conformance with applicable codes and standards.
  - 2) Enforce safe practices.
  - 3) Prevent abuse of services.
  - 4) Prevent damage to finishes.

#### **1.07 COSTS OF TEMPORARY UTILITIES (Water and electric power)**

- A. The General Contractor shall pay all costs involved with the installation, use, maintenance and removal of temporary utilities.
- B. The General Contractor shall pay all costs involved with the installation, and maintenance of all permanent building systems until occupancy by AAFES.
- C. The General Contractor will be responsible for installation of temporary meters prior to commencing work. Cost for use of utilities will be paid for by the General Contractor. Use of utilities shall be in accordance with General Provisions titled "Availability and use of Utility Services". Fire hydrants will not be used to obtain water for this project. Electricity will not be used for electric resistance heating.
- D. AAFES may request compensation for utilities consumed.**

#### **1.08 TEMPORARY CONSTRUCTION, EQUIPMENT AND PROTECTION**

- A. Provide, maintain and remove upon completion of the work, all temporary rigging, scaffolding, hoisting equipment, ladders to roof, barricades around openings, and all other temporary work as required to complete all work of the Contract. The General Contractor shall coordinate the use and furnishing of scaffolds with his subcontractors.
- B. Provide, maintain and remove upon completion of the work, or sooner if authorized by the Contracting Officer or designated representative, all fences, barricades, lights, shoring, pedestrian walkways, and other protective structures or devices necessary for the safety of workmen, AAFES employees, equipment, the public, and property.
- C. All temporary construction and equipment shall conform to all regulations, ordinances, laws and other requirements of the authorities having jurisdiction, including insurance companies, with regard to safety precautions, operation and fire hazard.
- D. Pumping: Provide and maintain pumping facilities, including power, for keeping the site,

excavations and structures free of accumulations of water at all times, whether from underground seepage, rainfall, drainage or broken lines.

- E. Unauthorized Entry: Maintain provision for closing and locking the building as soon as possible. Existing structures to be expanded must remain secure. When exterior work is in process such as concrete finish work, bituminous paving and landscaping work, the General Contractor shall maintain a night watchman on the premises until such time that the work cannot be harmed or damaged.
- F. Damage or Theft: Protect the work and material to be used on the project, from damages or loss due to the elements, theft, vandalism, malicious mischief, or other causes. The General Contractor shall be held responsible for such damages, or loss, which he shall remedy at his expense.
- G. Temporary Walls, Closures, Security Enclosures and Barricades: Provide and maintain all barricades or enclosures shown on the drawings and described in Section 01010 required to protect the work in progress from outside elements, dust, interior construction dust and noise, and other disturbances as a result of work under this Contract. Such protection shall be positive, shall meet the approval of the Contracting Officer or designated representative, and shall be maintained for the duration of the construction period or as required to provide for the protection as specified.

#### **1.09 PROJECT BULLETIN BOARD**

- A. The General Contractor shall furnish, install, and maintain, during the life of the project, a weathertight bulletin board approximately 3 feet high by 5 feet wide, having not less than two hinged or sliding glass doors with provisions for locking. The bulletin board shall be mounted where and as approved by the Contracting Officer or designated representative, in a prominent place accessible to all employees of the General Contractor and subcontractors, and to applicants for employment. The bulletin board shall remain the property of the General Contractor and shall be removed by him upon completion of the Contract work. The following information which will be furnished by the government to the General Contractor (except safety posters) shall be posted on the bulletin board and shall be maintained by the General Contractor in easily, readable condition at all times for the duration of the Contract:
  - 1. The Equal Employment Opportunity Post and Notice of Non-discrimination of Employment (Standard Form 38).
  - 2. Wage Rate Information Poster (Form SOL 155), with the contract schedule of minimum rates as required by the Davis-Bacon Act.
  - 3. Safety posters.

**END OF SECTION**



## SECTION 01520

### CONSTRUCTION PROGRESS SCHEDULE

#### PART 1 - GENERAL

##### 1.01 GENERAL

- A. The construction progress schedule shall be prepared by the General Contractor and shall consist of a bar chart utilizing Critical Path Method (CPM) scheduling. In preparing this construction progress schedule, the scheduling of construction shall be the responsibility of the General Contractor and shall be developed in accordance with the phasing plan shown on the construction drawings. The requirement for the schedule is included to assure adequate planning and execution of the work and to assist the Contracting Officer or designated representative in evaluating progress of the work.
- B. Provide projected construction schedules for entire work, updated monthly.

##### 1.02 RELATED SECTIONS

- A. Summary of The Work: Section 01010.
- B. Progress Meetings: Section 01220.
- C. Submittals: Section 01300.

##### 1.03 SCOPE

- A. The General Contractor shall prepare a Construction Progress Schedule to serve as a guide in managing the construction progress. Reference General Provisions clause titled, "Schedule and Progress".
- B. Schedule format shall be prepared utilizing the Critical Path Method (CPM) such as to enable the Contracting Officer or designated representative to evaluate the reasonableness of the proposal schedule, and to determine if the actual construction is on schedule.

##### 1.04 CONSTRUCTION PROGRESS SCHEDULE

- A. The schedule consists of keeping a record of the time allotted for each activity and the actual progress of the activity.
- B. Activities shall be listed vertically and shall include the units of work required for the project.
- C. All activities of AAFES which affect progress and Contract required dates for completion shall be shown. Include activities for AAFES - furnished/AAFES - installed items.
- D. The selection and number of activities shall be subject to the Contracting Officer or designated representative's approval.
- E. Activities listed will be the same as those used for progress payments.

##### 1.05 A SCALE OF TIME

- A. A scale of time, from date of the beginning of the Contract work to the date of completion of the Contract work, shall be indicated horizontally on the chart. The units of time indicated shall be calendar days.

##### 1.06 ACTIVITY TIMES

- A. Activity shall be indicated in the form of scaled time bars. The bars shall indicate the following:
  - 1. The schedule of time allotted for the activity.

2. The actual progress of the activity including the actual time of the activity start, the time spent to date or to the finish of the activity.

### **1.07 SUBMISSION AND APPROVAL**

- A. Submission and approval of the construction progress schedule shall be as follows:
  1. A preliminary bar chart defining the General Contractor's planned operations during the first thirty (30) calendar days after notice-to-proceed will be submitted within ten (10) days. The General Contractor's general approach for the balance of the project shall be indicated. Cost of activities expected to be completed or partially completed before submission and approval of the complete bar chart could be included.

### **1.08 THE COMPLETE CPM BAR CHART**

- A. The complete CPM bar chart shall be submitted within thirty (30) calendar days after receipt of notice-to-proceed. The chart shall incorporate critical path method (CPM) scheduling with the following minimum features:
  1. Illustrate order and interdependence of activities and sequence of work; how start of a given activity depends on completion of preceding activities, and how completion of the activity may restrain start of subsequent activities.
  2. Tabulate each activity using calendar dates, and identify for each activity:
    - a. Preceding and following event numbers.
    - b. Activity description.
    - c. Estimated duration of activity.
    - d. Earliest start date.
    - e. Earliest finish date.
    - f. Actual start date.
    - g. Actual finish date.
    - h. Latest start date.
    - i. Latest finish date.
    - j. Total and free float; float time shall accrue to AAFES and to AAFES' benefit.
    - k. Monetary value of activity, keyed to Schedule of Values.
    - l. Percentage of activity completed.
    - m. Responsibility.
- B. Analysis Program: Capable of compiling monetary value of completed and partially completed activities, accepting revised completion dates, and recomputation of all dates and float.

### **1.09 GENERAL CONTRACTOR**

- A. The General Contractor shall submit at intervals of thirty (30) calendar days a copy of the complete CPM bar chart schedule with the current activity progress clearly indicated. Cost of each activity completed and each partially completed shall be included.
- B. The General Contractor shall also submit a narrative report with the updated CPM bar chart, including a description of problem areas (current and anticipated), delaying factors and their impact, and an explanation of corrective actions taken or proposed.
- C. The General Contractor shall participate in joint review and evaluation of schedule with Contracting Officer's Representative at each submittal.
- D. After review, revise as necessary as result of review, and resubmit within 10 days.

**1.10 DISTRIBUTION OF SCHEDULE**

- A. Distribute copies of updated schedules to Contractor's project site file, to Subcontractors, suppliers, Contracting Officer, Contracting Officer's Representatives, and other concerned parties.
- B. Instruct recipients to promptly report, in writing, problems anticipated by projections shown in schedules.

**PART 2 PRODUCTS – NOT USED**

**PART 3 EXECUTION – NOT USED**

**END OF SECTION**

## **SECTION 01585**

### **PROJECT SIGNS**

#### **PART 1 GENERAL**

##### **1.01 SECTION INCLUDES**

- A. Project identification sign.

##### **1.02 QUALITY ASSURANCE**

- A. Design sign and structure accommodate interior placement.
- B. Sign Painter: Experienced as a professional sign painter for minimum three years.
- C. Finishes, Painting: Adequate to withstand weathering, fading, and chipping for duration of construction.

##### **1.03 SUBMITTALS**

- A. See Section 01300 - Submittals for submittal procedures.
- B. Attached sign exemplars are current proposed templates from AAFES. Obtain most recent sign template from AFFES prior to producing sign layout.
- C. Shop Drawing: Show content, layout, lettering, color, structure, sizes and grades of members.

#### **PART 2 PRODUCTS**

##### **2.01 SIGN MATERIALS**

- A. Structure and Framing: New, wood, structurally adequate.
- B. Sign Surfaces: Interior grade plywood with medium density overlay, minimum 1/4 inch thick, standard large sizes to minimize joints.
- C. Rough Hardware: Galvanized.
- D. Paint and Primers: Exterior quality, two coats, colors as selected.
- E. Lettering: Exterior quality paint, colors as selected.

##### **2.02 PROJECT IDENTIFICATION SIGN**

- A. One painted sign of construction, design, and content shown on Attachment "A", location designated by AAFES
- B. Graphic Design, Colors, Style of Lettering: Designated by Contracting Officer's Representative.

#### **PART 3 EXECUTION**

##### **3.01 INSTALLATION**

- A. Install project identification sign within 10 days after date fixed by Notice to Proceed.
- B. Erect at designated location.
- C. Install sign surface plumb and level, with butt joints. Anchor securely.
- D. Paint exposed surfaces of sign, supports, and framing.

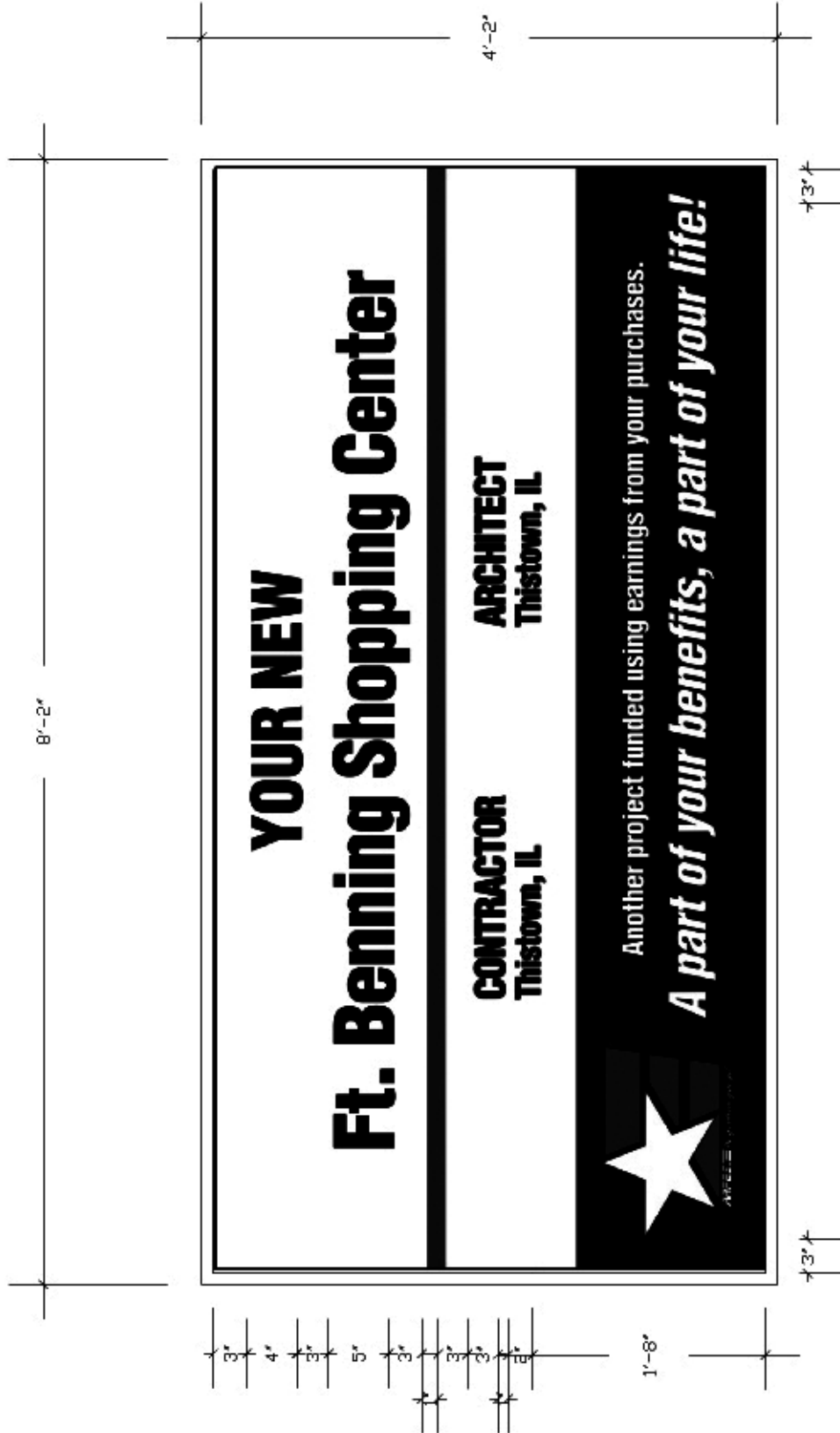
### **3.02 MAINTENANCE**

- A. Maintain signs and supports clean, repair deterioration and damage.

### **3.03 REMOVAL**

- A. Remove signs, framing, supports, and foundations at completion of Project and restore the area.





**S2 - Alternate Sign without rendering of project**

## SECTION 01600

### PRODUCT REQUIREMENTS

#### PART 1 GENERAL

##### 1.01 SECTION INCLUDES

- A. Transportation, handling, storage and protection.
- B. Product option requirements.
- C. Substitution limitations and procedures.
- D. Procedures for AAFES-supplied products.
- E. Spare parts and maintenance materials.

##### 1.02 RELATED SECTIONS

- A. Section 01400 - Quality Control: Product quality monitoring.

##### 1.03 REFERENCES

- A. 16 CFR 260 - Guides for the Use of Environmental Marketing Claims; Federal Trade Commission; current edition.
- B. GreenSeal GC-03 - Anti-Corrosive Paints; Green Seal, Inc.; 1997.
- C. GreenSeal GS-11 - Architectural Paints; Green Seal, Inc.; 1993.
- D. GreenSeal GS-36 - Commercial Adhesives; Green Seal, Inc.; 2000.
- E. NFPA 70 - National Electrical Code; National Fire Protection Association; 2008.
- F. SCAQMD 1113 - South Coast Air Quality Management District Rule No.1113, Architectural Coatings; current edition; [www.aqmd.gov](http://www.aqmd.gov).
- G. SCAQMD 1168 - South Coast Air Quality Management District Rule No.1168; current edition; [www.aqmd.gov](http://www.aqmd.gov).

##### 1.04 SUBMITTALS

- A. Proposed Products List: Submit list of major products proposed for use, with name of manufacturer, trade name, and model number of each product.
  - 1. Submit within 15 days after date of Agreement.
  - 2. For products specified only by reference standards, list applicable reference standards.
- B. Product Data Submittals: Submit manufacturer's standard published data. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- C. Shop Drawing Submittals: Prepared specifically for this Project; indicate utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- D. Sample Submittals: Illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
  - 1. For selection from standard finishes, submit samples of the full range of the manufacturer's standard colors, textures, and patterns.

- E. Indicate utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.

## **PART 2 PRODUCTS**

### **2.01 NEW PRODUCTS**

- A. Provide new products unless specifically required or permitted by the Contract Documents.
- B. Do not use products having any of the following characteristics:
  - 1. Made using or containing CFC's or HCFC's.
  - 2. Made of wood from newly cut old growth timber.
  - 3. Made using or containing asbestos.
- C. Where all other criteria are met, General Contractor shall give preference to products that:
  - 1. Are extracted, harvested, and/or manufactured closer to the location of the project.
  - 2. Have longer documented life span under normal use.
  - 3. Result in less construction waste.
  - 4. Are made of vegetable materials that are rapidly renewable.
- D. Urea-Formaldehyde Prohibition:
  - 1. Overall Project Requirement: Provide composite wood and agrifiber products having no added urea-formaldehyde resins.
    - a. Require each installer to certify compliance and submit product data showing product content.
  - 2. Specific Product Categories: Comply with limitations specified elsewhere.
- E. Adhesives and Joint Sealants:
  - 1. Definition: This provision applies to gunnable, trowelable, and liquid-applied adhesives, sealants, and sealant primers used anywhere on the interior of the building inside the weather barrier, including duct sealers.
  - 2. Provide only products having lower volatile organic compound (VOC) content than required by South Coast Air Quality Management District Rule No.1168.
    - a. Require each installer to certify compliance and submit product data showing product content.
  - 3. Specific Product Categories: Comply with limitations specified elsewhere.
- F. Aerosol Adhesives:
  - 1. Provide only products having lower volatile organic compound (VOC) content than required by GreenSeal GS-36.
    - a. Require each installer to certify compliance and submit product data showing product content.
  - 2. Specific Product Categories: Comply with limitations specified elsewhere.
- G. Paints and Coatings:
  - 1. Definition: This provision applies to paints and coatings used anywhere on the interior of the building inside the weatherproofing system and applied on-site.
  - 2. Architectural paints, coatings and primers applied to interior walls and ceilings: Do not exceed the VOC content limits established in Green Seal Standard GS-11.
  - 3. Anti-corrosive and anti-rust paints applied to interior ferrous metal substrates: Do not exceed VOC content limit of 250 g/L established in Green Seal Standard GC-03.
  - 4. Clear wood finishes, floor coatings, stains, and shellacs applied to interior elements: Do not exceed the VOC content limits established in SCAQMD Rule 1113.
    - a. Require each installer to certify compliance and submit product data showing product content.
  - 5. Specific Product Categories: Comply with limitations specified elsewhere.

- H. Flooring:
  - 1. Tile setting adhesives and grout must meet the requirements of SCAQMD Rule 1168.
    - a. Require each installer to certify compliance and submit product data showing product content.
  - 2. Specific Product Categories: Comply with limitations specified elsewhere.
- I. Provide interchangeable components of the same manufacture for components being replaced.
- J. Wiring Terminations: Provide terminal lugs to match branch circuit conductor quantities, sizes, and materials indicated. Size terminal lugs to NFPA 70, include lugs for terminal box.
- K. Cord and Plug: Provide minimum 6 foot cord and plug including grounding connector for connection to electric wiring system. Cord of longer length is specified in individual specification sections.

## **2.02 PRODUCT OPTIONS**

- A. Products Specified by Reference Standards or by Description Only: Use any product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Use a product of one of the manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.

## **2.03 SPARE PARTS AND MAINTENANCE PRODUCTS**

- A. Provide spare parts, maintenance, and extra products of types and in quantities specified in individual specification sections.
- B. Deliver to and place in location as directed; obtain receipt prior to final payment.

## **PART 3 EXECUTION**

### **3.01 SUBSTITUTION PROCEDURES**

- A. Section 01010 specifies time restrictions for submitting requests for substitutions during the bidding period.
- B. Substitutions may be considered when a product becomes unavailable through no fault of the General Contractor.
- C. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents.
- D. A request for substitution constitutes a representation that the submitter:
  - 1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
  - 2. Will provide the same warranty for the substitution as for the specified product.
  - 3. Will coordinate installation and make changes to other Work that may be required for the Work to be complete with no additional cost to AAFES.
  - 4. Waives claims for additional costs or time extension that may subsequently become apparent.
- E. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request, or when acceptance will require revision to the Contract Documents.

- F. Substitution Submittal Procedure:
1. Submit three copies of request for substitution for consideration. Limit each request to one proposed substitution.
  2. Submit shop drawings, product data, and certified test results attesting to the proposed product equivalence. Burden of proof is on proposer.
  3. The Contracting Officer or designated representative will notify Contractor in writing of decision to accept or reject request.

### **3.02 AAFES-SUPPLIED PRODUCTS**

- A. See Section 01010 - Summary of the Work for identification of AAFES-supplied products.
- B. AAFES Responsibilities:
1. Arrange for and deliver AAFES reviewed shop drawings, product data, and samples, to Contractor.
  2. Arrange and pay for product delivery to site.
  3. On delivery, inspect products jointly with General Contractor.
  4. Submit claims for transportation damage and replace damaged, defective, or deficient items.
  5. Arrange for manufacturers' warranties, inspections, and service.
- C. General Contractor's Responsibilities:
1. Review AAFES reviewed shop drawings, product data, and samples.
  2. Receive and unload products at site; inspect for completeness or damage jointly with AAFES.
  3. Handle, store, install and finish products.
  4. Repair or replace items damaged after receipt.

### **3.03 TRANSPORTATION AND HANDLING**

- A. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.
- B. Transport and handle products in accordance with manufacturer's instructions.
- C. Transport materials in covered trucks to prevent contamination of product and littering of surrounding areas.
- D. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.
- E. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.
- F. Arrange for the return of packing materials, such as wood pallets, where economically feasible.

### **3.04 STORAGE AND PROTECTION**

- A. Designate receiving/storage areas for incoming products so that they are delivered according to installation schedule and placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication.
- B. Store and protect products in accordance with manufacturers' instructions.
- C. Store with seals and labels intact and legible.
- D. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.
- E. For exterior storage of fabricated products, place on sloped supports above ground.

- F. Provide bonded off-site storage and protection when site does not permit on-site storage or protection.
- G. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- H. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.
- I. Prevent contact with material that may cause corrosion, discoloration, or staining.
- J. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- K. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

**END OF SECTION**

## SECTION 01710

### CLEANING

#### PART 1 - GENERAL

##### 1.01 DESCRIPTION

- A. Related Requirements Specified Elsewhere:
  - 1. Additional General Provisions.
  - 2. Summary of the Work: Section 01010.
  - 3. Cutting and Patching: Section 01045.
  - 4. Toilet Facilities: Section 01500
  - 5. Cleaning for Specific Products of Work: Specification Section for that work.
- B. Maintain premises and public properties free from accumulation of waste, debris, and rubbish caused by operations.
- C. At completion of work, remove waste materials, rubbish, tools, equipment, machinery and surplus materials, and clean all sight-exposed surfaces; leave project clean and ready for occupancy.

##### 1.02 SAFETY REQUIREMENTS

- A. Hazards Control:
  - 1. Store volatile wastes in covered metal containers and remove from premises daily.
  - 2. Prevent accumulation of wastes which create hazardous conditions.
  - 3. Provide adequate ventilation during use of volatile or noxious substances.
- B. Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws.
  - 1. Do not burn or bury rubbish and waste material on project site.
  - 2. Do not dispose of volatile wastes such as mineral spirits, oil, or paint thinner in storm or sanitary drains.
  - 3. Do not dispose of wastes into streams or waterways.

#### PART 2 - PRODUCTS

##### 2.01 MATERIALS

- A. Use only cleaning materials recommended by manufacturer of surface to be cleaned.
- B. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

#### PART 3 - EXECUTION

##### 3.01 DURING CONSTRUCTION

- A. Execute cleaning to ensure that building, grounds, and public properties are maintained free from accumulations of waste materials and rubbish.
- B. Wet down dry materials and rubbish to lay dust and prevent blowing dust. Execute work by methods to minimize raising dust from construction operations. Provide positive means to prevent air-borne dust from dispersing into atmosphere.
- C. Remove waste materials, debris, and rubbish from site and legally dispose of at public or private dumping areas off of Government property.
- D. Vacuum clean interior building areas when ready to receive finish painting.
- E. Handle materials in a controlled manner with as few handlings as possible; do not drop or throw materials from heights.

- F. Schedule cleaning operations so that dust and other contaminants resulting from cleaning process will not fall on wet, newly painted surfaces.

### **3.02 FINAL CLEANING**

- A. Employ experienced workmen or professional cleaners for final cleaning.
- B. In preparation for substantial completion or occupancy, conduct final inspection of sight-exposed interior and exterior surfaces and of concealed surfaces.
- C. Remove grease, dust, dirt, stains, labels, fingerprints, and other foreign materials from sight-exposed interior and exterior finished surfaces; polish surfaces so designated to shine finish.
- D. Repair, patch and touch-up marred surfaces to specified finish, to match adjacent surfaces.
- E. Broom clean paved surfaces; rake clean other surfaces of grounds.
- F. Replace air conditioning filters if units were operated during construction.
- G. Clean ducts, blowers and coils, if air conditioning units were operated without filters during construction.
- H. Maintain cleaning until project, or portion thereof, is occupied by AAFES.
- I. Clean out thoroughly all new waste lines to points of connection with main sewers by rodding and power flushing.

**END OF SECTION**

## SECTION 01720

### PROJECT RECORD AND CLOSEOUT DOCUMENTS

#### PART 1 - GENERAL

##### 1.01 DESCRIPTION

- A. Submittals: Section 01300.

##### 1.02 MAINTENANCE OF DOCUMENTS

- A. Maintain at job site, one copy of:
  - 1. Contract Drawings.
  - 2. Specifications.
  - 3. Addenda.
  - 4. Reviewed Shop Drawings.
  - 5. Change Orders.
  - 6. Other Modifications to Contract.
  - 7. Field Test Records.
- B. Store documents in field office apart from documents used for construction.
- C. Provide files and racks for storage of documents.
- D. File documents in accordance with Project Filing Format of Uniform Construction Index.
- E. Maintain documents in clean, dry legible condition.
- F. Do not use record documents for construction purposes.
- G. Make documents available at all times for inspection by the Contracting Officer or designated representative.

##### 1.03 MARKING DEVICES

- A. Provide red colored pencils for all markings.

##### 1.04 RECORDING

- A. Label each document "PROJECT RECORD" in 2-inch high printed letters.
- B. Keep record documents current.
- C. Do not permanently conceal any work until required information has been recorded.
- D. Contract Drawings: Legibly mark to record actual construction.
  - 1. Depths of various elements of foundation in relation to first floor level.
  - 2. Horizontal and vertical location of underground utilities and appurtenances referenced to permanent surface improvements.
  - 3. Location of internal utilities and appurtenances concealed in construction referenced to visible and accessible features of structure.
  - 4. Field changes of dimension and detail.
  - 5. Changes made by Change Order or Field Order.
  - 6. Details not on original contract drawings.
- E. Specification and Addenda: Legibly mark each Section to record:
  - 1. Changes made by Change Order or Field Order.
  - 2. Other matters not originally specified.

##### 1.05 SUBMITTAL

- A. At the final inspection of the project, deliver record documents to the Contracting Officer or

designated representative.

- B. Accompany submittal with transmittal letter, in duplicate, containing:
1. Date.
  2. Project title and number.
  3. General contractor's (GC) name and address.
  4. Title and number of each record document.
  5. Certification that each document as submitted is complete and accurate.
  6. Signature of General Contractor, or his authorized representative.

## 1.06 PROJECT CLOSEOUT

- A. Maintenance Manual:
1. The General Contractor shall provide operation and maintenance manuals to be used for training, operation, and maintenance of each piece of operating equipment. All material shall be clearly identified, including its location on the project. Sheets shall be 8-1/2 inches x 11 inches, except pull-out sheets may be neatly folded to 8-1/2 inches x 11 inches. Manuals shall be properly indexed, bound in plastic covered, 3-ring, loose-leaf binder with title of project lettered on front and hinge back, and shall contain:
    - a. Name, address and trade of all subcontractors.
    - b. Complete maintenance instructions; name, address and number of installing General Contractor, manufacturer's local representative, for each piece of operative equipment.
    - c. Narrative consisting of instructions for equipment and systems to include:
      - 1) Description of system and intent.
      - 2) Start-up procedures.
      - 3) Emergency procedures.
      - 4) Shut-down procedures.
      - 5) Maintenance instructions.
      - 6) Training attendance rosters.
      - 7) Warranties.
      - 8) Valve chart.
    - d. Catalogue data on plumbing fixtures, valves, water heaters, heating and cooling equipment, temperature control, fan, electrical panels, service entrance equipment and light fixtures.
    - e. Instruction for use in training and operation and maintenance of each item of operating equipment.
    - f. Manufacturer's name, type, color designation for ceramic tile, resilient floors, windows, doors, brick, concrete block, paint, roofing and other materials.
  2. Submit six copies of all Maintenance Manuals and all other close-out materials, prior to request for substantial completion inspection. These items shall be organized in 3-ring binders.
  3. Operation and Maintenance Instructions: The General Contractor shall provide at his own expense competent manufacturer's representatives to completely check out all mechanical and electrical systems and items covered by the drawings and specifications. This requirement shall be scheduled just prior to and during the initial start-up and before requesting the final inspection. After all systems are functioning properly, the representatives shall instruct maintenance personnel of the Installation and the Exchange in the proper operation and maintenance of each item. In addition to instructions given at the project, the Installation personnel shall be given a one-day classroom instruction course on operation and maintenance of the systems. A roster of those attending with name, organization and telephone number shall be furnished.
  4. Posted Operating Instructions: All major items of mechanical equipment shall have posted in a convenient and appropriate location operating instructions consisting of typewritten description of system operation, including necessary diagrams keyed to valve and piping identification systems.

5. Preparation of DD Form 1354, "Transfer and Acceptance of Military Real Property." At the conclusion of the project, the General Contractor will compile and furnish to the Contracting Officer or designated representative all costs and quantity data of materials and systems furnished and installed. A list of items for which the costs and quantity data is required will be furnished to the General Contractor. Such information will be returned to the Contracting Officer or designated representative within 10 days from the receipt of the list. It is suggested that this information be provided and updated as the work progresses.
  6. Record Drawings: Upon completion of the work, one print of each of the drawings accompanying this specification shall be neatly and clearly marked in red pencil to show variations between the construction actually provided and that indicated or specified in the Contract Documents, and delivered to the Project Manager. Where a choice of materials and/or methods is permitted or where variations in the scope or character of the work are permitted, drawings shall define the construction actually provided. The representation of such variations shall conform to standard drafting practice and shall include supplementary notes, legends and details which may be necessary for legibility and clear portrayal of the as-built construction. The record drawings shall indicate, in addition, the actual location of all sub-surface utility lines, average depth below the surface and other appurtenances.
  7. No Asbestos Statement: Upon completion of the work, the General Contractor and all of his sub-contractors shall provide a written statement that no asbestos-containing material/product was used in the building construction.
  8. No Lead Paint Statement: Upon completion of the work, the General Contractor and his painting sub-contractor shall provide a written statement that no paint containing lead was used in the building construction.
- B. All project closeout documents not previously submitted will be given to the Contracting Officer at the Beneficial Occupancy Date inspection.
- C. Contractor shall provide all information required for filling out Form 1354 (Real Property) as instructed by the Contracting Officer. Copies of this form are available from the Contracting Officer.

**END OF SECTION**

## SECTION 01732

### WASTE MANAGEMENT

#### PART 1 GENERAL

##### 1.01 WASTE MANAGEMENT REQUIREMENTS

- A. AAFES requires that this project generate the least amount of trash and waste possible.
- B. Employ processes that ensure the generation of as little waste as possible due to error, poor planning, breakage, mishandling, contamination, or other factors.
- C. Minimize trash/waste disposal in landfills; reuse, salvage, or recycle as much waste as economically feasible.
- D. Contractor shall submit periodic Waste Disposal Reports; all landfill disposal, incineration, recycling, salvage, and reuse must be reported regardless of to whom the cost or savings accrues; use the same units of measure on all reports.
- E. Contractor shall develop and follow a Waste Management Plan designed to implement these requirements.
- F. Methods of trash/waste disposal that are not acceptable are:
  - 1. Burning on the project site.
  - 2. Burying on the project site.
  - 3. Dumping or burying on other property, public or private.
  - 4. Other illegal dumping or burying.
- G. Regulatory Requirements: General Contractor is responsible for knowing and complying with regulatory requirements, including but not limited to Federal, State and local requirements, pertaining to legal disposal of all construction and demolition waste materials.

##### 1.02 RELATED REQUIREMENTS

- A. Section 01300 - Submittals: Additional submittal requirements.
- B. Section 01500 - Temporary Facilities and Controls: Additional requirements related to trash/waste collection and removal facilities and services.
- C. Section 01600 - Product Requirements: Waste prevention requirements related to delivery, storage, and handling.

##### 1.03 DEFINITIONS

- A. Clean: Untreated and unpainted; not contaminated with oils, solvents, caulk, or the like.
- B. Construction and Demolition Waste: Solid wastes typically including building materials, packaging, trash, debris, and rubble resulting from construction, remodeling, repair and demolition operations.
- C. Hazardous: Exhibiting the characteristics of hazardous substances, i.e., ignitibility, corrosivity, toxicity or reactivity.
- D. Nonhazardous: Exhibiting none of the characteristics of hazardous substances, i.e., ignitibility, corrosivity, toxicity, or reactivity.
- E. Nontoxic: Neither immediately poisonous to humans nor poisonous after a long period of exposure.

- F. Recyclable: The ability of a product or material to be recovered at the end of its life cycle and remanufactured into a new product for reuse by others.
- G. Recycle: To remove a waste material from the project site to another site for remanufacture into a new product for reuse by others.
- H. Recycling: The process of sorting, cleansing, treating and reconstituting solid waste and other discarded materials for the purpose of using the altered form. Recycling does not include burning, incinerating, or thermally destroying waste.
- I. Return: To give back reusable items or unused products to vendors for credit.
- J. Reuse: To reuse a construction waste material in some manner on the project site.
- K. Salvage: To remove a waste material from the project site to another site for resale or reuse by others.
- L. Sediment: Soil and other debris that has been eroded and transported by storm or well production run-off water.
- M. Source Separation: The act of keeping different types of waste materials separate beginning from the first time they become waste.
- N. Toxic: Poisonous to humans either immediately or after a long period of exposure.
- O. Trash: Any product or material unable to be reused, returned, recycled, or salvaged.
- P. Waste: Extra material or material that has reached the end of its useful life in its intended use. Waste includes salvageable, returnable, recyclable, and reusable material.

#### **1.04 SUBMITTALS**

- A. See Section 01300 - Submittals, for submittal procedures.
- B. Submit Waste Management Plan within 10 calendar days after receipt of Notice to Proceed, or prior to any trash or waste removal, whichever occurs sooner; submit projection of all trash and waste that will require disposal and alternatives to landfilling.
- C. Waste Management Plan: Include the following information:
  1. Analysis of the trash and waste projected to be generated during the entire project construction cycle, including types and quantities.
  2. Landfill Options: The name, address, and telephone number of the landfill(s) where trash/waste will be disposed of, the applicable landfill tipping fee(s), and the projected cost of disposing of all project trash/waste in the landfill(s).
  3. Landfill Alternatives: List all waste materials that will be diverted from landfills by reuse, salvage, or recycling.
    - a. List each material proposed to be salvaged, reused, or recycled.
    - b. List the local market for each material.
    - c. State the estimated net cost, versus landfill disposal.
  4. Meetings: Describe regular meetings to be held to address waste prevention, reduction, recycling, salvage, reuse, and disposal.
  5. Materials Handling Procedures: Describe the means by which materials to be diverted from landfills will be protected from contamination and prepared for acceptance by designated facilities; include separation procedures for recyclables, storage, and packaging.
  6. Transportation: Identify the destination and means of transportation of materials to be recycled; i.e. whether materials will be site-separated and self-hauled to designated centers, or whether mixed materials will be collected by a waste hauler.

7. Recycling Incentives: Describe procedures required to obtain credits, rebates, or similar incentives.
- D. Waste Disposal Reports: Submit at specified intervals, with details of quantities of trash and waste, means of disposal or reuse, and costs; show both totals to date and since last report.
1. Submit updated Report with each Application for Progress Payment; failure to submit Report will delay payment.
  2. Submit Report on a form acceptable to Owner.
  3. Landfill Disposal: Include the following information:
    - a. Identification of material.
    - b. Amount, in tons or cubic yards, of trash/waste material from the project disposed of in landfills.
    - c. State the identity of landfills, total amount of tipping fees paid to landfill, and total disposal cost.
    - d. Include manifests, weight tickets, receipts, and invoices as evidence of quantity and cost.
  4. Incinerator Disposal: Include the following information:
    - a. Identification of material.
    - b. Amount, in tons or cubic yards, of trash/waste material from the project delivered to incinerators.
    - c. State the identity of incinerators, total amount of fees paid to incinerator, and total disposal cost.
    - d. Include manifests, weight tickets, receipts, and invoices as evidence of quantity and cost.
  5. Recycled and Salvaged Materials: Include the following information for each:
    - a. Identification of material, including those retrieved by installer for use on other projects.
    - b. Amount, in tons or cubic yards, date removed from the project site, and receiving party.
    - c. Transportation cost, amount paid or received for the material, and the net total cost or savings of salvage or recycling each material.
    - d. Include manifests, weight tickets, receipts, and invoices as evidence of quantity and cost.
    - e. Certification by receiving party that materials will not be disposed of in landfills or by incineration.
  6. Material Reused on Project: Include the following information for each:
    - a. Identification of material and how it was used in the project.
    - b. Amount, in tons or cubic yards.
    - c. Include weight tickets as evidence of quantity.
  7. Other Disposal Methods: Include information similar to that described above, as appropriate to disposal method.
- E. Recycling Incentive Programs:
1. Where revenue accrues to General Contractor, submit copies of documentation required to qualify for incentive.
  2. Where revenue accrues to AAFES, submit any additional documentation required by AAFES in addition to information provided in periodic Waste Disposal Report.

## **PART 2 PRODUCTS**

### **2.01 PRODUCT SUBSTITUTIONS**

- A. See Section 01600 - Product Requirements, for substitution submission procedures.
- B. For each proposed product substitution, submit the following information in addition to requirements specified in Section 01600:

1. Relative amount of waste produced, compared to specified product.
2. Cost savings on waste disposal, compared to specified product, to be deducted from the Contract Sum.
3. Proposed disposal method for waste product.
4. Markets for recycled waste product.

## **PART 3 EXECUTION**

### **3.01 WASTE MANAGEMENT PROCEDURES**

- A. See Section 01300 for additional requirements for project meetings, reports, submittal procedures, and project documentation.
- B. See Section 01500 for additional requirements related to trash/waste collection and removal facilities and services.
- C. See Section 01600 for waste prevention requirements related to delivery, storage, and handling.

### **3.02 WASTE MANAGEMENT PLAN IMPLEMENTATION**

- A. **Manager:** Designate an on-site person or persons responsible for instructing workers and overseeing and documenting results of the Waste Management Plan.
- B. **Communication:** Distribute copies of the Waste Management Plan to job site foreman, each subcontractor, AAFES, and Contracting Officer or designated representative.
- C. **Instruction:** Provide on-site instruction of appropriate separation, handling, and recycling, salvage, reuse, and return methods to be used by all parties at the appropriate stages of the project.
- D. **Meetings:** Discuss trash/waste management goals and issues at project meetings.
  1. Pre-bid meeting.
  2. Pre-construction meeting.
  3. Regular job-site meetings.
- E. **Facilities:** Provide specific facilities for separation and storage of materials for recycling, salvage, reuse, return, and trash disposal, for use by all contractors and installers.
  1. As a minimum, provide:
    - a. Separate area for storage of materials to be reused on-site, such as wood cut-offs for blocking.
    - b. Separate dumpsters for each category of recyclable.
    - c. Recycling bins at worker lunch area.
  2. Provide containers as required.
  3. Provide temporary enclosures around piles of separated materials to be recycled or salvaged.
  4. Provide materials for barriers and enclosures that are nonhazardous, recyclable, or reusable to the maximum extent possible; reuse project construction waste materials if possible.
  5. Locate enclosures out of the way of construction traffic.
  6. Provide adequate space for pick-up and delivery and convenience to subcontractors.
  7. If an enclosed area is not provided, clearly lay out and label a specific area on-site.
  8. Keep recycling and trash/waste bin areas neat and clean and clearly marked in order to avoid contamination of materials.
- F. **Hazardous Wastes:** Separate, store, and dispose of hazardous wastes according to applicable regulations.

- G. Recycling: Separate, store, protect, and handle at the site identified recyclable waste products in order to prevent contamination of materials and to maximize recyclability of identified materials. Arrange for timely pickups from the site or deliveries to recycling facility in order to prevent contamination of recyclable materials.
- H. Reuse of Materials On-Site: Set aside, sort, and protect separated products in preparation for reuse.
- I. Salvage: Set aside, sort, and protect products to be salvaged for reuse off-site.

**END OF SECTION**

## SECTION 01734

### INDOOR AIR QUALITY

#### PART 1 GENERAL

##### 1.01 SECTION INCLUDES

- A. Construction procedures to promote adequate indoor air quality after construction.

##### 1.02 PROJECT GOALS

- A. Dust and Airborne Particulates: Prevent deposition of dust and other particulates in HVAC ducts and equipment.
  - 1. Cleaning of ductwork is not contemplated under this Contract.
  - 2. Contractor shall bear the cost of cleaning required due to failure to protect ducts and equipment from construction dust.
- B. Airborne Contaminants: Procedures and products have been specified to minimize indoor air pollutants.
  - 1. Furnish products meeting the specifications.
  - 2. Avoid construction practices that could result in contamination of installed products leading to indoor air pollution.
  - 3. Change air filters regularly.
- C. Ventilation: HVAC system has been designed to achieve the minimum requirements for ventilation specified in ASHRAE 62.1.

##### 1.03 RELATED SECTIONS

- A. Section 01400 - Quality Requirements

##### 1.04 REFERENCES

- A. ASHRAE Std 52.2 - Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size; 2007.
- B. ASHRAE Std 62.1 - Ventilation For Acceptable Indoor Air Quality; 2007 (errata 2008).
- C. SMACNA (OCC) - IAQ Guideline for Occupied Buildings Under Construction; 1995.

##### 1.05 DEFINITIONS

- A. Adsorptive Materials: Gypsum board, acoustical ceiling tile and panels, carpet and carpet tile, fabrics, fibrous insulation, and other similar products.
- B. Contaminants: Gases, vapors, regulated pollutants, airborne mold and mildew, and the like, as specified.
- C. Particulates: Dust, dirt, and other airborne solid matter.
- D. Wet Work: Concrete, plaster, coatings, and other products that emit water vapor or volatile organic compounds during installation, drying, or curing.

##### 1.06 SUBMITTALS

- A. See Section 01300 - Submittals, for submittal procedures.
- B. Indoor Air Quality Management Plan: Describe in detail measures to be taken to promote adequate indoor air quality upon completion; use SMACNA IAQ Guidelines for Occupied Buildings Under Construction as a guide.
  - 1. Submit not less than 60 days before enclosure of building.
  - 2. Identify potential sources of odor and dust.

3. Identify construction activities likely to produce odor or dust.
  4. Identify areas of project potentially affected, especially occupied areas.
  5. Evaluate potential problems by severity and describe methods of control.
  6. Describe construction ventilation to be provided, including type and duration of ventilation, use of permanent HVAC systems, types of filters and schedule for replacement of filters.
  7. Describe cleaning and dust control procedures.
  8. Describe coordination with commissioning procedures.
- C. Interior Finishes Installation Schedule: Identify each interior finish that either generates odors, moisture, or vapors or is susceptible to adsorption of odors and vapors, and indicate air handling zone, sequence of application, and curing times.
- D. Duct and Terminal Unit Inspection Report.

## **PART 2 PRODUCTS**

### **2.01 MATERIALS**

- A. Low VOC Materials: See other sections for specific requirements for materials with low VOC content.
- B. Auxiliary Air Filters: MERV of 8, minimum, when tested in accordance with ASHRAE 52.2.

## **PART 3 EXECUTION**

### **3.01 CONSTRUCTION PROCEDURES**

- A. Prevent the absorption of moisture and humidity by adsorptive materials by:
1. Sequencing the delivery of such materials so that they are not present in the building until wet work is completed and dry.
  2. Delivery and storage of such materials in fully sealed moisture-impermeable packaging.
  3. Provide sufficient ventilation for drying within reasonable time frame.
- B. Begin construction ventilation when building is substantially enclosed.
- C. If extremely dusty or dirty work must be conducted inside the building, shut down HVAC systems for the duration; remove dust and dirt completely before restarting systems.
- D. HVAC equipment and ductwork **may NOT** be used for ventilation during construction:
1. Provide temporary ventilation equivalent to 1.5 air changes per hour, minimum.
  2. Exhaust directly to outside.
  3. Seal HVAC air inlets and outlets immediately after duct installation.
- E. Do not store construction materials or waste in mechanical or electrical rooms.
- F. Prior to use of return air ductwork without intake filters clean up and remove dust and debris generated by construction activities.
1. Inspect duct intakes, return air grilles, and terminal units for dust.
  2. Clean plenum spaces, including top sides of lay-in ceilings, outsides of ducts, tops of pipes and conduit.
  3. Clean tops of doors and frames.
  4. Clean mechanical and electrical rooms, including tops of pipes, ducts, and conduit, equipment, and supports.
  5. Clean return plenums of air handling units.
  6. Remove intake filters last, after cleaning is complete.
  7. Change air filters regularly.
- G. Do not perform dusty or dirty work after starting use of return air ducts without intake filters.

- H. Use other relevant recommendations of SMACNA IAQ Guideline for Occupied Buildings Under Construction for avoiding unnecessary contamination due to construction procedures.

**END OF SECTION**

## SECTION 01820

### DEMONSTRATION AND TRAINING

#### PART 1 GENERAL

##### 1.01 SUMMARY

- A. Training of Owner personnel in care, cleaning, maintenance, and repair is required for:
  - 1. Roofing, waterproofing, and other weather-exposed or moisture protection products.
  - 2. Finishes, including flooring, wall finishes, ceiling finishes.
  - 3. Fixtures and fittings.
  - 4. Items specified in individual product Sections.

##### 1.02 RELATED REQUIREMENTS

- A. Section 01720 - Project Record and Closeout Documents: Operation and maintenance manuals.
- B. Other Specification Sections: Additional requirements for demonstration and training.

##### 1.03 SUBMITTALS

- A. See Section 01300 - Submittals, for submittal procedures; except:
  - 1. Make all submittals specified in this section, and elsewhere where indicated for commissioning purposes, directly to the Commissioning Authority.
  - 2. Submit one copy to the Commissioning Authority, not to be returned.
  - 3. Make commissioning submittals on time schedule specified by Commissioning Authority.
  - 4. Submittals indicated as "Draft" are intended for the use of the Commissioning Authority in preparation of overall Training Plan; submit in editable electronic format, Microsoft Word 2003 preferred.
- B. Draft Training Plans: AAFES will designate personnel to be trained; tailor training to needs and skill-level of attendees.
  - 1. Submit to Contracting Officer or designated representative for transmittal to AAFES.
  - 2. Submit to Commissioning Authority for review and inclusion in overall training plan.
  - 3. Submit not less than four weeks prior to start of training.
  - 4. Revise and resubmit until acceptable.
  - 5. Provide an overall schedule showing all training sessions.
  - 6. Include at least the following for each training session:
    - a. Identification, date, time, and duration.
    - b. Description of products and/or systems to be covered.
    - c. Name of firm and person conducting training; include qualifications.
    - d. Intended audience, such as job description.
    - e. Objectives of training and suggested methods of ensuring adequate training.
    - f. Methods to be used, such as classroom lecture, live demonstrations, hands-on, etc.
    - g. Media to be used, such as slides, hand-outs, etc.
    - h. Training equipment required, such as projector, projection screen, etc., to be provided by Contractor.
- C. Training Manuals: Provide training manual for each attendee; allow for minimum of two attendees per training session.
  - 1. Include applicable portion of O&M manuals.
  - 2. Include copies of all hand-outs, slides, overheads, video presentations, etc., that are not included in O&M manuals.
  - 3. Provide one extra copy of each training manual to be included with operation and maintenance data.

- D. Training Reports:
  1. Identification of each training session, date, time, and duration.
  2. Sign-in sheet showing names and job titles of attendees.
  3. List of attendee questions and written answers given, including copies of and references to supporting documentation required for clarification; include answers to questions that could not be answered in original training session.
  4. Include Commissioning Authority's formal acceptance of training session.
- E. Video Recordings: Submit digital video recording of each demonstration and training session for Owner's subsequent use.
  1. Format: DVD Disc.
  2. Label each disc and container with session identification and date.

#### **1.04 QUALITY ASSURANCE**

- A. Instructor Qualifications: Familiar with design, operation, maintenance and troubleshooting of the relevant products and systems.
  1. Provide as instructors the most qualified trainer of those contractors and/or installers who actually supplied and installed the systems and equipment.
  2. Where a single person is not familiar with all aspects, provide specialists with necessary qualifications.

### **PART 2 PRODUCTS - NOT USED**

### **PART 3 EXECUTION**

#### **3.01 TRAINING - GENERAL**

- A. Commissioning Authority will prepare the Training Plan based on draft plans submitted.
- B. Conduct training on-site unless otherwise indicated.
- C. AAFES will provide classroom and seating at no cost to General Contractor.
- D. Do not start training until Functional Testing is complete, unless otherwise specified or approved by the Commissioning Authority.
- E. Provide training in minimum two hour segments.
- F. The Commissioning Authority is responsible for determining that the training was satisfactorily completed and will provide approval forms.
- G. Training schedule will be subject to availability of AAFES personnel to be trained; re-schedule training sessions as required by AAFES; once schedule has been approved by AAFES failure to conduct sessions according to schedule will be cause for AAFES to charge the General Contractor for personnel "show-up" time.
- H. Review of Facility Policy on Operation and Maintenance Data: During training discuss:
  1. The location of the O&M manuals and procedures for use and preservation; backup copies.
  2. Typical contents and organization of all manuals, including explanatory information, system narratives, and product specific information.
  3. Typical uses of the O&M manuals.
- I. Product- and System-Specific Training:
  1. Review the applicable O&M manuals.
  2. For systems, provide an overview of system operation, design parameters and constraints, and operational strategies.
  3. Review instructions for proper operation in all modes, including start-up, shut-down, seasonal changeover and emergency procedures, and for maintenance, including preventative maintenance.

4. Provide hands-on training on all operational modes possible and preventive maintenance.
  5. Emphasize safe and proper operating requirements; discuss relevant health and safety issues and emergency procedures.
  6. Discuss common troubleshooting problems and solutions.
  7. Discuss any peculiarities of equipment installation or operation.
  8. Discuss warranties and guarantees, including procedures necessary to avoid voiding coverage.
  9. Review recommended tools and spare parts inventory suggestions of manufacturers.
  10. Review spare parts and tools required to be furnished by the General Contractor.
  11. Review spare parts suppliers and sources and procurement procedures.
- J. Be prepared to answer questions raised by training attendees; if unable to answer during training session, provide written response within three days.

**END OF SECTION**