

SECTION 01 10 12

DESIGN AFTER AWARD

1 DESIGN RESPONSIBILITY

The Contractor shall furnish and be responsible for a complete set of design documents as called for in specification section 01 10 10 DESIGN REQUIREMENTS and as called for hereinafter. Information provided below is intended to supplement the Hurlburt Field 2014 General Design Guidelines for Facility Development, Construction, and Renovation.

2 DESIGN SUBMITTALS

The Contractor shall submit its design in different phases to the Government for review. The number and requirements of each design submittal are listed below. The number and contents of the design submittals shall be reflected in the Contractor's progress charts. All comments for each submittal shall have been annotated and incorporated into the subsequent design before approval is granted.

2.1 TECHNICAL SPECIFICATIONS

Utilize Hurlburt Field Master Specifications (HFMS). When Hurlburt Specifications are unavailable, Unified Facilities Guide Specifications (UFGS) in the SpecsIntact format shall be used. Utilize complete project specifications to cover the full scope of work. Delete references to materials that are not allowed or that are not intended to be provided. Government standards will not be referenced in the specifications; instead, provide any specific requirement of the standard in the specification as applicable.

2.2 STANDARD DESIGN SUBMITTALS

Items of work shall be submitted in three complete packages at the 50%, 100% Un-Reviewed, and Final Reviewed design stages as outlined in the following paragraphs. Partial design submissions of various portions of the project will not be accepted. The Contractor shall prepare the drawings and specifications in such a manner and level of completeness that the BCE could construct the facility without any additional assistance from the Contractor or designers (drawings shall be complete).

2.3 FAST-TRACKING AND DESIGN SUBMITTALS

The Contractor may at his/her option, "fast track" the design and construction of site work, exterior utilities, building foundations and primary steel structure. These items shall be designed to a 100% unreviewed level of completion and submitted with the 50% Design Submittal with Fast Track work clearly labeled. A Final Submittal shall be provided for Fast-Track items for review and approval by the Government, so that a Partial Notice To Proceed (NTP) can be issued to the Contractor for that portion of the work. Fast Track submittal shall include the same deliverables for standard design submittals.

2.4 PERMITTING

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Hurlburt Field, Florida

The Contractor is responsible for identifying and obtaining all necessary permits, approvals and licenses prior to the start of construction.

## 2.5 FIRE PROTECTION ENGINEER QUALIFICATIONS AND REQUIREMENT

A Fire Protection Engineer (FPE) meeting the qualifications required by UFC 3-600-01 shall be responsible for but not limited to the design engineering, preparation of the construction documents, construction phase inspection and acceptance testing of the fire suppression and automatic detection systems, mass notification systems. FPE shall also be involved with the building code and life safety code analysis. FPE shall provide certifications in writing that the design is in compliance with UFC 3-600-01 and all applicable criteria. A qualified fire protection engineer is an integral part of the design team, and must be involved in every aspect of the design as it relates to fire protection.

As a minimum, the FPE shall be responsible for the following during the construction phase; material submittal review, shop drawing review, and participation in construction as necessary.

Refer to other portions of this specifications and RFP for additional requirements and criteria.

## 2.6 SUSTAINABLE DESIGN AND FEDERAL ENERGY MANDATES COMPLIANCE

Provide documentation to demonstrate compliance with the various federal mandates for sustainability and energy/water use reduction. Narratives shall be provided in the Design Analysis.

The project will not be registered with the USGBC (GBCI) as the Government has determined the project will not meet all Minimum Program Requirements (MPR) therefore cannot be pursue formal certification with the USGBC (GBCI). However, the Contractor shall utilize Sustainable Design based principles in the design and construction of this project to achieve increased energy conservation and reduced operational costs through the use of energy efficient materials, components and systems. Materials containing recycled content shall be utilized wherever possible.

## 3 GOVERNMENT APPROVED SUBMITTALS

The approval of submittals by the Contracting Officer shall not be construed as a complete check, but will indicate only that the design is in conformance with the contract requirements. Approval will not relieve the Contractor of the responsibility for any error which may exist, as the Contractor is responsible for the design and construction of all work.

## 4 DESIGN SCHEDULE

Within 7 days after Notice to Proceed, the Contractor shall submit, for approval, a complete design schedule with all submittals and review times indicated by calendar dates. Any additional changes which the Contractor may wish to make to number or composition of design submittals shall be made 30 days prior to the expected submittal date. The Contractor shall allow 7 days for the Government review period if submittal dates are met. If a scheduled design submittal date is not met without notifying the Contracting officer in

writing one (1) week in advance. If a submittal date is not going to be met, the Contractor shall notify the Contracting Officer, in writing, one (1) week prior to the scheduled submittal date. Review meetings for each design submittal shall occur immediately following the government review period.

## 5 PROGRESS CHARTS

See General Requirements Specification.

## 6 STRUCTURAL INTERIOR DESIGN (SID) AND FURNITURE, FIXTURES AND EQUIPMENT (FFE)

a. An SID color scheme suggested for this project is outlined in Section 01 10 10. The SID includes confirmation of contractors interpretation of selections, substitution should any items be discontinued, specification and installation of all the building related finishes, materials and colors. All SID materials, finishes and colors shall be reviewed by the Government for compliance with the RFP.

b. FFE is government provided and government installed (GFGI). Contractor will be required to coordinate supporting electrical, data, structural, and any other services required for the various elements of the FFE.

## 7 STAGES AND CONTENTS OF DESIGN SUBMITTALS

### 7.1 50% DESIGN SUBMITTAL

#### 7.1.1 Civil

7.1.2 Existing Topographical Conditions: The Contractor shall be responsible for verifying existing conditions, performing utility locates on the site and accomplishing complete as-built surveys.

7.1.3 Geotechnical Investigation and Design: The Contractor shall be responsible for verifying subsurface conditions on site. Provide Geotechnical Report, narrative, and supporting documentation in accordance with specification Section 01 10 10.

#### 7.1.4 Paving, Grading and Drainage

a. Provide drawings, narrative and supporting documentation in accordance with specification Section 01 10 10.

b. Provide HFMS supporting work in this category.

c. Include an analysis showing the required size of all components of the stormwater system. The design narrative for stormwater system shall include calculations for stormwater runoff, flows, pipe sizes, and capacities. The narrative shall discuss the anticipated treatment volume required for the project area.

d. Provide a list of all permits that are required to be obtained and any associated fees. Submit draft permit applications as part of the submittal process. Permits shall be obtained prior to start of construction and/or installing or operating any new or modified equipment or processes.

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e. The Contractor shall determine when Hurlburt specific permits are required, such as AF103 Work Clearance Request, communications, and/or security.

7.1.5 Underground Utilities

a. The Contractor shall field verify and provide surveying as necessary to locate utility items prior to initiating demolition work.

b. Provide drawings, narrative and supporting documentation.

c. Provide HFMS supporting work in this category.

d. Drawings shall show, in plan, the anticipated water distribution systems and layout. Standard details shall also be included.

e. The Contractor is encouraged to include manufacturer's catalog cuts and descriptive information in the submittal. (Manufacturer's trade names are allowable on the drawings and in the specifications.)

7.1.6 Landscape: Provide drawings, narrative, and HFMS specifications supporting work in this category.

7.1.7 Architectural Design

a. Provide drawings, design analysis, and supporting documentation.

b. Provide HFMS specifications supporting work in this category.

c. Provide detail drawings (Sections, Elevations, etc.) of Building, Windows, Doors, Roof, Walls, Partitions, Shelving and Cabinets, and Door Thresholds.

d. Provide Building Code, Life Safety and Fire Protection Analysis in accordance with UFC 3-600-01.

7.1.8 Structural

a. Provide drawings, narrative, and design analysis to include calculations and supporting documentation.

b. Design analysis shall include calculations showing the design wind uplift pressure for the roof system and analysis of the lateral load restraining system.

c. Provide HFMS specifications supporting work in this category.

7.1.9 Plumbing

a. List all references used in the design including Government design documents and industry standards.

b. Provide justifications and brief descriptions of the types of plumbing fixtures, piping materials and equipment proposed for use.

c. Provide detailed calculations for the sizing of the following applicable systems:

Domestic cold water piping  
Domestic hot water piping  
Waste and Vent  
Water heating system

d. Provide pipe layouts and risers for each plumbing system listed above. Included equipment and fixture schedules with description, capacities, locations, connection sizes, and other information as required.

e. The design analysis, submitted for review shall consist of the following:

- (1) Design Narrative to include applicable design assumptions, sizing methods chosen, and why.
- (2) Design Calculations.
- (3) Drawings.
- (4) Catalog cuts of equipment such as water heaters, and plumbing fixtures.

f. Drawings shall be complete with legends, floor plans, schedules, details, and riser diagrams. Drawings shall indicate locations and general arrangement of plumbing fixtures and major equipment, and shall show all water, waste and vent piping routing. All pipe sizes (hot, cold, hot water return, waste, and vent) shall be indicated. Equipment and fixture schedules shall include descriptions, capacities, locations, connection sizes and other information as required.

g. Prepare detailed calculations for systems such as sizing of domestic hot water heater and piping.

h. Provide HFMS specifications supporting work in this category.

#### 7.1.10 Fire Suppression System:

a. The Contractor shall perform a fire protection design analysis in accordance with UFC 3-600-01. The Contractor shall provide the services of a qualified fire protection engineer who shall be an integral part of the design team and shall be involved in all aspects of the design as it relates to fire protection, in accordance with UFC 3-600-01.

b. The Fire Protection Engineer qualifications shall be submitted to and approved by the Contracting Officer certifying that the design engineer is a registered fire protection engineer or a registered professional engineer with a fire protection background and at least four years' experience in fire protection/detection design.

c. Certificates shall be furnished to certify that the sprinkler system designed for the buildings in this project complies with the material and fabrication requirements of this specification.

d. The design analysis shall consist of the design narrative, design calculations, and drawings.

e. The design narrative shall include all references used in the design including Government design documents and industry standards. The design narrative shall also include a description of each fire suppression system in the building.

f. A current water flow and pressure test shall be witnessed by the Fire Protection Engineer no more than 30 days prior to the date of this submittal. The design analysis shall indicate the date of the test, location of the test (which hydrants were tested), and all static pressure, residual pressure, and water flow data collected. This data shall be the basis of the Fire Protection Engineer's calculations.

g. Calculations shall be in compliance with UFC 3-600-01 (and NFPA 13 as referenced in UFC 3-600-01) and shall be adequate to determine whether fire pumps and/or storage tanks are required. Calculations shall also indicate all assumptions and shall show the size of each water riser serving the building.

h. Drawings shall not be smaller than the scale used for architectural floor plans. Drawings shall provide the information required by NFPA 13, UFC 3-600-01 and any additional requirements as stated in the design criteria. The drawings shall be submitted to the Contracting Officer for review.

i. Drawings shall detail method of attaching waterproofing membranes to sleeves passing through walls or floors that are subject to a static head of water.

j. Maintain fire resistive integrity as tested per ASTM E 814.

k. Locate or detail the following items on the contract drawings as applicable:

- (1) Control valve locations.
- (2) Type of sprinkler heads to be used.
- (3) Required flagged pipe or mechanical grooved coupling connection locations and symbols.
- (4) Wall and floor pipe penetration locations and details.
- (5) Post indicator valve location.
- (6) Pipe runs requiring freeze protection location and length to be protected.
- (7) Fire department connections and water flow indicators locations and symbols.
- (8) Mounting location for local water flow alarm facilities.
- (9) Point of interconnection between alarm signal circuit and source of power will be indicated on the appropriate riser diagram.

l. Submit HFMS technical specifications supporting work in this category.

#### 7.1.11 Heating, Ventilating and Air Conditioning (HVAC)

a. Provide a 50% HVAC design review package to include the following items:

- (1) 50% Design Analysis: The Design Analysis shall include the following items:
  - (a) Detailed calculations for the following: heating loads, cooling loads, piping, ductwork, equipment sizing, etc. Computer calculations shall include print out of input and output data.
  - (b) Equipment selection: Equipment selection shall be based on manufacturers whose equipment meets project requirements for each item. The design analysis shall include catalog cuts of all major equipment

(e.g., air handlers, coils, chillers, condensing units, boilers, pumps, fans, unit heaters, etc.) manufacturer, model number, dimensions, capacities, and electrical requirements. The project design is not complete until the designer is assured that there is sufficient physical space in areas where equipment is to be located to install and to maintain the selected equipment.

(c) Include any other information or calculations to verify that the design complies with applicable criteria codes or standards and is satisfactory for intended purposes.

(d) Explanatory notes shall be included in the design analysis covering all rationale for design which would not be obvious to an engineer reviewing the analysis. Methods of air conditioning and controls for air conditioning systems shall generally be confined to those in common use in the industry.

(e) Specifications: HFMS specifications shall be submitted.

(2) 50% Drawings: The drawings should include, but not be limited to, the following items as applicable:

(a) Show all ductwork and piping, with sizes and flow rates, where necessary for balancing purposes. Show all ductwork and piping sizes. Indicate the ductwork pressures in accordance with SMACNA standards. Include all accessories and appurtenances.

(b) Show elementary ladder diagrams and temperature control schematics indicating remote sensors, panel mounted controllers, and thermostats.

(c) Show layout and details of the final version of all HVAC systems. The location, arrangement, capacity, and space requirements of all equipment shall be indicated. Selected zones of air distribution shall be sufficiently completed to indicate the solution of the design for the remainder of the system and the precautions taken to coordinate the design with the architectural, structural, and electrical phases of construction. Equipment room layouts shall be sufficiently complete to show piping and duct layouts and access for maintenance. Since equipment rooms represent the most congested areas for both equipment and piping, the following guidelines should be followed when drawings are being prepared.

- (i) Pipe fittings and accessory details shall be shown.
- (ii) All duct and fittings in congested areas and mechanical rooms shall be drawn to scale using double-line layouts.
- (iii) All equipment shall be outlined to scale, and maintenance or removal space shall be indicated by dashed lines.
- (iv) Removal and replacement space must be considered for the largest and heaviest equipment when a drawing is made.
- (v) In other HVAC plans, sections, and details, these same guidelines shall apply.

(d) The final form of all equipment schedules shall be shown with preliminary equipment data filled in.

#### 7.1.12 Electrical Systems

a. Interior Electrical System

(1) Narrative: In narrative, address the following to allow verification that the design complies with the requirements of the project. The design analysis shall include all calculations required to support design decisions at this stage of design.

(a) Indicate electrical characteristics (voltage, phases, and number of wires) for the electrical system.

(b) Provide a description of lighting systems(s) to be used for all areas, referencing calculations. Also, include tabulation showing the following:

(i) Rooms name and number.

(ii) Lighting intensity for each room. State the basis for selection such as I.E.S., etc.

(iii) Identify the type of fixture by manufacturers catalog cut.

(c) State the type of wiring system to be used, such as insulated conductors installed in rigid or intermediate metal conduit, insulated conductors installed in electrical metallic tubing, etc. and location of proposed use.

(d) Describe any special areas of design, such as equipment, receptacles, handicap requirements, seismic requirements, etc.

(e) Describe the lightning protection system to be installed.

(f) Describe the type of grounding system planned.

(g) Describe the basic characteristics of panel boards, and other major pieces of electrical equipment being provided. Short circuit and voltage drop calculations at all equipment with protective devices included shall be provided. Indicate equipment interrupting ratings and short circuit withstand ratings based on these calculations.

(h) Describe the electrical metering equipment to be provided. If no new metering is being provided describe as such.

(i) Provide a statement that no duct or liquid piping shall pass over and/or through any electrical space and/or room as defined by the National Electrical Code Article 110.

(j) Provide HFMS specifications supporting work in this category.

(2) Drawings: In drawings, provide the following to allow verification that the design complies with the requirements of the project. Some detailed checks will be made. Complete and independent checking of the design shall be accomplished by the Contractor. The Contractor is fully responsible for the design. The design shall be complete and accurate. It shall be thoroughly checked for errors and conflicts (both within and between disciplines).

(a) The power riser or one-line diagram shall be essentially complete except for finalization of conduit and wire sizes.



(b) Panel boards, and all other utilization equipment shall be located on the floor plans. Schedules for applicable equipment shall be provided. The schedules shall include all pertinent information to fully describe the equipment. Elevations for free standing equipment shall be provided but need not be entirely finalized. Details of the layouts for electrical room and closets shall be shown.

(c) Branch circuits, lighting fixtures, receptacles, and switches, shall be shown with number of conductors indicated.

(d) A completed fixture schedule shall be included on the drawings.

b. Exterior Electrical Distribution System:

(1) Narrative: In narrative, address the following to allow verification that the design complies with the requirements of the project. The design analysis shall include all calculations required to support design decisions this stage of design.

(a) Clearly describe the electrical distribution system and state the changes to be made to the existing system to accommodate this project.

(b) Indicate existing transformer location and characteristics.

(c) State the type of conductor and location of proposed use and provide a justification for its use.

(d) Include a statement describing the criteria used for the exterior design such as primary and secondary voltage drop. Describe the physical characteristics of circuits. Provide the short circuit current available at the site and state the source of this value.

(e) Describe all exterior lighting. Provide types of fixture, and proposed intensities. IES point to point calculations shall be submitted to support the selected lighting system.

(f) Provide HFMS specifications supporting work in this category.

(2) Drawings. In drawings, provide the following to allow verification that the design complies with the requirements of the project. Some detailed checks will be made. Complete and independent checking of the design shall be accomplished by the Contractor. The Contractor is fully responsible for the design. The design shall be complete and accurate. It shall be thoroughly checked for errors and conflicts (both within and between disciplines). The electronic systems drawing information may be placed on the electrical drawings or on separate electronic systems drawings.

(a) All of the exterior electrical design drawings shall be completed with all conductors (underground) with all pertinent component details. Details shall include but are not limited to duct banks, transformer location, transformer data (kV A, impedance, voltage, phase, etc.), conductor type and size, etc.

(b) Show removals and relocations, if any.

c. Interior Electronic Systems:

(1) Narrative: In narrative, address the following to allow verification that the design complies with the requirements of the project. The design analysis shall include all calculations required to support design decisions at this stage of design.

(a) Provide a descriptive narrative for all the electronic systems that are required for the project.

Telecommunication/Data Systems  
Fire Detection and Alarm System  
Mass Notification Systems  
Audio/Visual rough-in only System  
Public Address System  
Cable TV Systems

(b) Provide HFMS specifications supporting work in this category.

(2) Drawings: In drawings, provide the following to allow verification that the design complies with the requirements of the project. Some detailed checks will be made. Complete and independent checking of the design shall be accomplished by the Contractor. The Contractor is fully responsible for the design. The design shall be complete and accurate. It shall be thoroughly checked for errors and conflicts (both within and between disciplines). The electronic systems drawing information may be placed on the electrical drawings or on separate electronic systems drawings.

(a) Provide riser diagrams for all electronic systems. Riser shall show the location of the various components and interconnections with other systems.

(b) Show location of all devices and equipment for electronic system on floor plans. Show location of devices to be interconnected.

(c) Provide details of communications outlets, telephone backboard arrangement, and other pertinent items required by criteria.

(d) Identify telecommunications rooms and provide equipment rack and cable tray locations, electrical outlets, horizontal cable tray and/or conduit pathways, and location of all communications faceplates.

d. Exterior Electronic Systems:

(1) Narrative: In narrative, address the following to allow verification that the design complies with the requirements of the project. The design analysis shall include all calculations required to support design decisions at this stage of design.

(a) Describe the extent of the exterior work including all fiber and copper rework and new work, as well as conduit ductbanks.

(b) Provide HFMS specifications supporting work in this category.

(2) Drawings: In drawings, provide the following to allow verification that the design complies with the requirements of the project. Some detailed checks will be made. Complete and independent checking of the design shall be accomplished by the Contractor. The Contractor is fully responsible for the design. The design shall be complete and accurate. It shall be thoroughly checked for errors and conflicts (both within and between disciplines). The electronic systems drawing information may be placed on the electrical drawings or on separate electronic systems drawings.

#### 7.1.13 Anti-terrorism/Force Protection

Provide design analysis narrative and supporting documentation discussing methods of incorporating requirements of UFC 4-010-01 into project. Antiterrorism/Force Protection requirements shall be included in applicable disciplines' drawings, design analysis and calculations to a level allowing verification that the design complies with related UFCs and the requirements of Hurlburt Field 2014 General Design Guidelines for Facility Development, Construction, and Renovation.

#### 7.2 100% UN-REVIEWED DESIGN SUBMITTAL

With the exception of completing minor details, this submittal could be used for construction. All coordination efforts among design disciplines will be incorporated into this submittal. All comments from previous review shall be incorporated.

##### 7.2.1 Civil

##### 7.2.2 Paving, Grading, and Drainage.

Provide drawings, final specifications, narrative, annotated comments, and supporting documentation revised to comply with comments resulting from the 50% design submittal. Include copies of all required permit applications.

##### 7.2.3 Underground Utilities

Provide drawings, final specifications, narrative, annotated comments, and supporting documentation revised to comply with comments resulting from 50% design submittal.

##### 7.2.4 Landscape Work

Provide drawings, final specifications, narrative, annotated comments, and supporting documentation revised to comply with comments resulting from 50% design submittal.

##### 7.2.5 Architectural Design

Provide drawings, final specifications, narrative, annotated comments, and supporting documentation revised to comply with comments resulting from 50% submittal.

##### 7.2.6 Structural Interior Design

Provide drawings, final specifications, narrative, annotated comments, supporting documentation, and color boards revised to comply with comments resulting from the 50% submittal.

#### 7.2.7 Structural

Provide drawings, final specifications, narrative, design analysis with complete calculations and supporting documentation revised to comply with comments resulting from 50% submittal.

#### 7.2.8 Fire Protection

Provide drawings, final specifications, narrative, design analysis with complete calculations and supporting documentation revised to comply with comments resulting from 50% submittal.

#### 7.2.9 Plumbing

The final plumbing design review package shall be submitted by the Contractor for Government review to include the final design analysis, specifications, annotated comments, and drawings of the plumbing systems showing the completed designs revised to comply with comments resulting from 50% submittal.

#### 7.2.10 Heating, Ventilating and Air Conditioning (HVAC)

The final HVAC design review package shall be submitted by the Contractor for Government review to include the final design analysis, specifications, annotated comments, and drawings of the HVAC systems showing the completed designs revised to comply with comments resulting from 50% design submittal. All ductwork shall be double-lined.

#### 7.2.11 Electrical Systems

##### a. Interior Electrical Systems

a) The final design review package revised to incorporate 50% review comments shall be submitted by the Contractor for Government review to include the final design analysis, specifications, annotated comments, and drawings showing the completed designs.

(a) The drawings shall be thoroughly checked for discrepancies, for compatibility between drawing and specifications, and for compatibility between disciplines.

(b) Completed short circuit calculations and a coordination analysis with time current curves and arc flash data for the entire electrical system shall be provided. All equipment shall be identified by manufacturer's name and catalog number.

(c) Complete voltage drop calculations shall be provided. The voltage drop calculations shall use the same single line diagram as the short circuit calculations and shall show drops at the same locations as short circuit currents are shown.

(d) Lighting calculations (lumen method for interior and point-to-point for exterior) shall be provided for all rooms and spaces and all exterior locations requiring illumination.

(e) All details shall be completed at this stage. Congested areas where there can be interferences with various systems shall be thoroughly detailed by expanded scale drawings.

b. Exterior Electrical Distribution System:

The final design review package revised to incorporate 50% review comments shall be submitted by the Contractor for Government review to include the final design analysis, final specifications, annotated comments, and drawings showing the completed designs.

c. Interior Electronic Systems:

The final design review package revised to incorporate 50% review comments shall be submitted by the Contractor for Government review to include the final design analysis, final specifications, annotated comments, and drawings showing the completed designs.

d. Exterior Electronic Systems:

The final design review package revised to incorporate 50% review comments shall be submitted by the Contractor for Government review to include the final design analysis, final specifications, annotated comments, and drawings showing the completed designs.

7.2.12 Antiterrorism/Force Protection:

Applicable disciplines' drawings, design analysis, and calculations shall be revised to comply with comments resulting from 50% submittal.

7.3 FINAL SUBMITTAL

Drawings, specifications, and design analysis shall be sufficiently complete in detail for construction of the project. All review comments made on the previous submittals shall be incorporated.

8 QUANTITY OF SUBMITTAL ITEMS

The documents which the Contractor shall submit to the Government for each submittal are listed and generally described below.

9 MAILING OF SUBMITTALS

All submittals to the Government during design shall be mailed using overnight mailing service. The addresses to where each copy shall be mailed are listed below. Each submittal shall have a transmittal letter accompanying it which indicates the date, design percentage, type of submittal, list of items submitted, transmittal number and point of contact with telephone number.

RECIPIENT AND MAILING ADDRESSES FOR SUBMITTAL DISTRIBUTION

DESIGN/BUILD FTEV 16-1066 CONSTRUCT TRAINING FACILITY, 2 CWSS  
Hurlburt Field, Florida

1 SOCES/CENM  
Attn: Paul Kendrick  
415 Independence Rd Bldg 90053  
Hurlburt Field, Florida 32544  
Phone: 850-844-4550

SUBMITTAL DISTRIBUTION LIST

The following table lists the number of copies of design submittal requirements for this project.

SUBMITTAL ITEMS	RECIPIENT COPIES	REMARKS
50% DESIGN SUBMITTAL		b
DESIGN ANALYSIS	2	
SPECIFICATIONS	2	
DRAWINGS	2	c
SID BINDER	1	
PERMIT APPLICATIONS	1	
ELECTRONIC COPY OF ALL SUBMITTAL DELIVERABLES	2	a
100% Un-Reviewed DESIGN SUBMITTAL		b
DESIGN ANALYSIS	2	
SPECIFICATIONS	2	
DRAWINGS	2	c
SID BINDER	0	
PERMIT DOCUMENTATION	1	
ANNOTATED REVIEW COMMENTS	2	
ELECTRONIC COPY OF ALL SUBMITTAL DELIVERABLES	2	a
FINAL DESIGN SUBMITTAL		b
DESIGN ANALYSIS	3	
SPECIFICATIONS	3	
DRAWINGS	3	c, d
SID BINDER	1	
PERMIT DOCUMENTATION	1	
ANNOTATED REVIEW COMMENTS	3	
ELECTRONIC COPY OF ALL SUBMITTAL DELIVERABLES	2	a

Remarks:

a) Electronic copies shall be on a single DVD disc. Each deliverable shall be a single .pdf document bookmarked for each title indexed and/or major elements of the document. These electronic file copies are in addition to that required for the final drawings, specifications and design analysis specified elsewhere in this specification section.

b) If Contractor elects to Fast Track the work, the quantity of design deliverables for Fast Track design submittals shall be provided as indicated in this distribution list.

c) Half size (11" x 17")

d) Full size (22" x 34")

## 10 SUBMITTAL REVIEWS

For each design review submittal, the Contractor will be furnished comments from Government personnel. The review will be for conformance with the technical requirements of the solicitation. The Government will take seven (7) days to review and comment on each design submittal including the Final design submittal. The last two weeks of the calendar year shall not be considered when scheduling review times or meeting times. If the Contractor disagrees technically with any comment or comments and does not intend to comply with the comment, the Contractor shall clearly outline, with ample justification, the reasons for noncompliance within three (3) days after receipt of these comments in order that the comment can be resolved. The disposition of all comments shall be furnished in writing within five (5) working days after the review meeting. The Contractor is cautioned in that if the Contractor believes the action required by any comment exceeds the requirements of this contract that the Contractor should take no action and notify the Contracting Officer in writing immediately.

Review conferences will be held for each design submittal at Hurlburt Field, FL. The Contractor shall bring the designer of record and other personnel that developed the design submittal to the review conference. These conferences will take place the week after the seven (7) day review period. The Contractor shall be responsible for writing and distributing Minutes on each submittal review meeting within seven (7) calendar days of the meeting. Time for design submittal reviews and conferences will be included in the Contractor's schedule. Distribution shall be to the offices shown under paragraph 9, Mailing of Submittals.

If a design submittal is over one (1) day late in accordance with the latest design schedule and the Contractor has not given the Contracting Officer a one (1) week written notice that the submittal will be late, the Government review period will be extended seven (7) days. The review conference will be held the week after the extended review period.

During the design review process, comments will be made on the design submittals that will change the drawings and specifications. The Government will make no additional payments to the Contractor for the incorporation of comments. Review comments are considered part of the design/build process.

If a design submittal is not of the quality level required for the stage of design submitted, the Government has the right to return the submittal to the Contractor so the design quality can be increased, and request resubmittal. The review time will begin when the submittal received is of the quality level required for the stage of design submitted by the Government. Returned incomplete submittals will not be the basis of a claim by the Contractor for additional time or money.

## 11 DESIGN ANALYSIS

11.1 Media and Format. The design analysis shall be presented on 8-1/2" x 11" paper except that larger sheets may be used when required for graphs or other special calculation forms. All sheets (including oversized sheets, and hand calculations) shall be submitted in Adobe PDF format. The original material may be computer generated, typewritten, hand lettered, handwritten, or a combination thereof, provided it is legible. Side margins shall be 1-inch

minimum to permit side binding and head to head printing. Bottom margins shall be 1-1/4 inches, with page numbers centered 1-inch from the bottom.

11.2 Organization. The several parts and sheets of the design analysis shall be given a sequential binding number and bound under a cover indicating the name of the facility and project number, if applicable. The title page shall carry the designation of the submittal being made. The complete design analysis presented for final review with the final drawings and specifications shall carry the designation "FINAL DESIGN ANALYSIS" on the title page.

11.3 Design Calculations. Design calculations are a part of the design analysis. When they are voluminous, they shall be bound separately from the narrative part of the design analysis. The design calculations shall be presented in a clean and legible form incorporating a title page and index for each volume. A table of contents, which shall be an index of the indices, shall be furnished when there is more than one volume. The source of loading conditions, supplementary sketches, graphs, formulae, and references shall be identified. Assumptions and conclusions shall be explained. Calculation sheets shall carry the names or initials of the computer and the checker and the dates of calculations and checking. No portion of the calculations shall be computed and checked by the same person.

11.4 Automatic Data Processing Systems (ADPS): When ADPS are used to perform design calculations, the design analysis shall include descriptions of the computer programs used and copies of the ADPS input data and output summaries. When the computer output is large, it may be divided into volumes at logical division points. Each set of computer printouts shall be preceded by an index and by a description of the computation performed. If several sets of computations are submitted, they shall be accompanied by a general table of contents in addition to the individual indices. Preparation of the descriptions which must accompany each set of ADPS printouts shall include the following:

- a. Explain the design method, including assumptions, theories, and formulae.
- b. Include applicable diagrams, adequately identified.
- c. State exactly the computation performed by the computer.
- d. Provide all necessary explanations of the computer printout format, symbols, and abbreviations.
- e. Use adequate and consistent notation.
- f. Provide sufficient information to permit manual checks of the results.

## 12 DRAWINGS

12.1 All drawings shall be Computer-Aided Design and Drafting (CADD) in AutoCad format. The Contractor shall prepare the drawings and specifications in such a manner and level of completeness that the Government could construct the facility without any additional assistance from the Contractor or designers (drawings shall be complete). Unnecessary work such as duplicate views, notes and lettering, and repetition of details shall not be permitted. Standard details not applicable to the project shall not be shown. Details of



standard products or items which are adequately covered by specifications shall not be included on the drawings. Drawings shall be detailed such that conformance with the RFP can be checked and to the extent that shop drawings can be checked. Shop drawings shall not be used as design drawings. The Contractor shall use standard Hurlburt Field title blocks and borders on all drawings at all submittal stages. Standard drawing sheet formats and title blocks, and file and drawing CADD file names will be furnished to the Contractor by the Government. The Contractor shall incorporate the drawing, file, and contract numbers on individual drawing sheets at the earliest submittal.

12.2 50% and 100% Un-Reviewed Submittals: Drawing submittals shall be half size (11" x 17") with black lines or plots.

12.3 Final Submittal: Drawing submittal shall be half size (11" x 17") with black lines or plots. The full size plots shall be furnished on 22-inch x 34-inch sheets.

The building drawings shall consist of 1/8-inch scale minimum floor plans. Elevations shall be drawn to a 1/8-inch scale minimum. The scale of other visual information shall be as required. Building wall sections shall be drawn at a minimum of 1/4-inch scale. The site and exterior utility drawings shall use a minimum scale of 1" = 30' unless otherwise indicated. Additionally, the overall site plan for this project shall be on one drawing sheet. Minimum text size on half size drawings is 1/8-inch. Refer to Hurlburt Field 2014 Design Guidelines for Facility Development, Construction, and Renovation for additional requirements.

### 13 SPECIFICATIONS

The Contractor shall submit marked-up specifications at the 50% submittal, and final form specifications at the 100% Un-Reviewed and Final submittals. The specifications shall be from Hurlburt Field Master Specifications and additional sections, if required, shall be from Unified Federal Guide Specifications (UFGS).

Modification to the HFMS or a new sections added from the UFGS shall be coordinated and submitted for review and approval prior to the 100% Un-Reviewed design submittal.

The specifications shall be detailed enough such that another product meeting the specification could be substituted and it would not adversely impact the project. All marked-out or redlined text shall be deleted and all inserted text shall be typed at the 100% Un-Reviewed and Final design submittals.

### 14 SUBMITTAL REGISTER

The Contractor shall develop submittal requirements required during construction as part of the design phase of the contract. This shall be done by the Contractor's Designers of Record by producing a Contractor Submittal Register at each submittal during design. A submittal register shall be prepared for each section of the specifications for the submittal requirements of that section. The Contractor's Designer of Record shall be responsible for listing all required submittals necessary to insure the project requirements are complied with. Submittals are required for all materials to be incorporated into the facility. The Register shall identify submittal items such as shop drawings, manufacturer's literature, certificates of compliance, material samples, guarantees, test results, etc. that the Contractor shall

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submit for review and/or approval action during the life of the construction contract. See Section: 01 33 00 SUBMITTAL PROCEDURES (DESIGN BUILD) for submittal and submittal register definitions and procedures.

#### 15 DESIGNER OF RECORD

The Contractor shall identify and have a Designer of Record to develop submittal requirements during design and be responsible for each submittal identified in the Contractor Submittal Register. A Designer of Record may be responsible for more than one submittal. All areas of work shall be accounted for by a listed Designer of Record. Designer of Record shall approve all submittals they are responsible for prior to submittal to the Government. The Government will accept submittals stamped "Approved" or "Approved as Noted". Submittals with wording indicating "reviewed" will not be accepted.

Submittals for Government-Furnished/Government-Installed systems or equipment shall be reviewed by the Contractor and appropriate Designer of Record for coordination and verification of required supporting construction scope of work.

#### 16 PROJECT KICK-OFF MEETING

A project kick-off meeting will be held at Hurlburt Field, FL that requires the Contractor, major subcontractors, and the design team designers of record to attend. The Contracting Officer, Contracting Officer Representative, Base CE, and Users will attend this meeting. The kick-off meeting will provide a forum for the Contractor and Government to discuss the requirements of the contract, project specific requirements and to discuss communication and contract protocols.

--End of Section--