

SECTION 01 33 10.05 20

DESIGN SUBMITTAL PROCEDURES
09/14

PART 1 GENERAL

1.1 SUMMARY

This section includes requirements for Contractor-originated design documents and design submittals.

1.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only. The latest version of the publication at time of issuance of the Phase II solicitation documents shall be used.

U.S. DEPARTMENT OF DEFENSE (DOD)

FC 1-300-09N	(2014) Navy and Marine Corps Design Procedures
UFC 1-200-01	(2013) General Building Requirements
UFC 1-300-08	(2009, with Change 2) Criteria for Transfer and Acceptance of DoD Real Property

1.3 UFC 1-200-02

UFC 1-200-01 requires compliance with UFC 1-200-02, "High Performance and Sustainable Building Requirements". UFC 1-200-02 replaces and cancels UFC 4-030-01, Sustainable Development and UFC 3-400-01, Energy Conservation.

1.4 UFC 3-600-10N AND UFC 3-800-10N

UFC 3-600-10N and UFC 3-800-10N are only available on the NAVFAC Design-Build Website under the Design Guidance link:

http://www.wbdg.org/ndbm/design_guidance.php. These Draft UFCs are applicable as final documents for Navy projects.

1.5 GENERAL DESIGN REQUIREMENTS

Contractor-originated design documents shall provide a project design that complies with the Request For Proposal (RFP), FC 1-300-09N, UFC 1-200-01, the Core UFCs, and other UFC's listed above.

1.6 SUBMITTALS

Submit design submittals, including shop drawings used as design drawings, to the Government for approval. The use of a "G" following a submittal indicates that a Government approval action is required. Submit the following in accordance with this section and Section 01 33 00.05 20 CONSTRUCTION SUBMITTAL PROCEDURES.

The use of an "S" following a submittal indicates separate submittal is required as part of federally mandated sustainability requirements. Refer to Section 01 33 29.05 20 SUSTAINABILITY REPORTING FOR DESIGN-BUILD for "S" submittal requirements.

SD-01 Preconstruction Submittals

Consolidated RFP Documents; G

Submittal Register; G

SD-04 Samples

Final framed rendering and copies; G

SD-05 Design Data

Design Drawings; G

Specifications; G

Design Analysis; G

Design Submittals; G

Sustainability Notebook; G, S

Project Rendering; G

Facility Recognition Plaque; G

SD-11 Closeout Submittals

Record Documents; G

Final Sustainability Notebook; G, S

DD Form 1354; G

1.7 DESIGN QUALITY CONTROL

1.7.1 Contractor Reviewing and Certifying Authority

The QC organization is responsible for reviewing and certifying that design submittals are in compliance with the contract requirements.

1.7.2 Government Approving Authority

The Contracting Officer is the approving authority for design submittals.

1.7.3 Designer of Record Certifying Authority

The Designer of Record (DOR), as registered and defined in FC 1-300-09N, is the design certifying authority. The DOR accepts responsibility for design of work in each respective design discipline, by stamping and approving final construction drawings submitted to the Government approval authority.

1.7.4 Contractor Construction Actions

Upon submission of sealed and signed design documents certified by the DOR, Design Quality Control (DQC) Manager and the Quality Control (QC) Managers, the Contractor may proceed with material and equipment purchases, fabrication and construction of any elements covered by that submittal, except as specified in the following paragraph.

1.7.4.1 Exception to Contractor Construction Actions

The Government will approve the following final submittals before the Contractor shall be allowed to proceed with construction:

a. Any design submittal that includes or will be impacted by a design change to the contract. Final Government approval of the design change is required before construction can begin on the work included in that design submittal.

1.7.5 Contractor's Responsibilities

- a. Designate a lead licensed architect or engineer to be in responsible charge to coordinate the design effort of the entire project. This lead architect or engineer shall coordinate all design segments of the project to assure consistency of design between design disciplines.
- b. With the Designer or Record, verify site information provided in the RFP. In addition, provide additional field investigations and verification of existing site conditions as may be required to support the development of design and construction of the project.
- c. Indicate on the transmittal form accompanying submittal which design submittals are being submitted as shop drawings.
- d. Advise Contracting Officer of variations, as required by paragraph "Variations."
- e. Provide an updated, cumulative [submittal register](#) with each design package that identifies the design and construction submittals required by that design package and previous submittals.
- f. Refer to Section [01 33 29.05 20](#), SUSTAINABILITY REPORTING FOR DESIGN-BUILD for Contractor's responsibilities for Guiding Principle Validation and Third Party Certification.

1.7.6 QC Organization Responsibilities

- a. Both the CA and the QC Manager must certify design submittals for compliance with the contract documents. The DOR stamp on drawings indicates approval from the DOR.
- b. QC organization shall certify submittals forwarded by the Designer of Record (DOR) to the Contracting Officer with the following certifying statement:

"I hereby certify that the (equipment) (material) (article) shown and marked in this submittal is that proposed to be incorporated with Contract Number (insert contract number here), is in compliance with the contract documents, and is submitted for Government approval.

Certified by Design Quality Control (DQC) Manager
_____, Date _____

Certified by QC Manager _____,
Date _____"

- c. Sign certifying statement. The persons signing certifying statements shall be the QC organization members designated in the approved QC plan. The signatures shall be in original ink. Stamped signatures are not acceptable.
- d. Update submittal register as submittal actions occur and maintain the submittal register at project site until final approval of all work by Contracting Officer.
- e. Retain a copy of approved submittals at project site.

1.7.7 Government Responsibilities

The Government will:

- a. Note date on which submittal was received from QC manager, on each submittal.
- b. Perform a quality assurance (QA) review of submittals. Government will notify Contractor when comments for that design package are posted and ready for Contractor evaluation and resolution.
- c. Upon submittal of final design package and resolution of comments by the Contractor, the Government will sign final design package, when approved, and return electronic copy of signed design documents to the Contractor.

1.7.7.1 Actions Possible

Submittals will be returned with one of the following notations:

- a. Submittals may be marked "approved."
- b. Submittals marked "not reviewed" will indicate submittal has been previously reviewed and approved, is not required, does not have evidence of being reviewed and certified by Contractor, or is not complete. Submittal will be returned with an explanation of the reason it is not reviewed. Resubmit submittals returned for lack of review by Contractor or for being incomplete, with appropriate action, coordination, or change.
- c. Submittals marked "revise and resubmit" or "disapproved" indicate submittal is incomplete or does not comply with design concept or requirements of the contract documents and shall be resubmitted with appropriate changes. If work has been started on the unacceptable portion of the design submittal, the Contractor shall propose corrective action. No further work shall proceed until the issue is resolved in a manner satisfactory to the Government.

1.8 DESIGN DOCUMENTS

Provide design documents that include design analysis, design drawings, and design specifications, reports, and submittal register in accordance with FC 1-300-09N, Submittal Procedures.

The Contractor is encouraged to make product, material, and system selections during the project design and indicate these choices on the design documents. Accomplish this by submitting design drawings and specifications that include proprietary submittal information such as manufacturers name, product names, model numbers, product data, manufactures information, provided optional features, appropriate connections, fabrication, layout, and product specific drawings. Adherence to RFP submittal requirements and provision of DOR approved construction submittal information on the design submittals - eliminates the need for follow-on traditional construction submittals after the final design is approved.

The Contractor is required to submit proprietary information to describe the construction submittal information in the design documents for all products, materials, and systems submittals listed below:

- a. All building enclosure components.
- b. All roof components.
- c. Major mechanical and electrical equipment such as chillers, transformers, generators, and substations.
- d. Interior finishes.

Refer to 01 33 00.05 20, CONSTRUCTION SUBMITTAL PROCEDURES for requirements pertaining to Contractor proposed design changes or variations.

1.9 DESIGN DRAWINGS

Prepare, organize, and present design drawings in accordance with the requirements of FC 1-300-09N, Design Procedures.

Submit all CADD files for the final drawings on CD-ROM or DVD disks in AutoCAD 2010 format. Drawing files shall be full files, uncompressed and unzipped.

1.9.1 Design Drawings Used as Shop Drawings

Design drawings may be prepared more like shop drawings to minimize construction submittals after final design is approved. If the Contractor chooses or is required to include the construction submittal information on the design documents, indicate proprietary information on the design drawings as necessary to describe the products, materials, or systems that are to be used on the project. Construction submittal information included directly in the design drawings must be approved by the DOR. All design documents must be professionally signed in accordance with FC 1-300-09N, Design Procedures.

1.9.2 Drawing Format For Design Drawings Used as Shop Drawings

The Contractor-originated drawings will be used as the basis for the record drawings. Shop drawings included as design documents shall comply with the same drawing requirements such as drawing form, sheet size, layering, lettering, and title block used in design drawings.

1.9.3 Identification of Design Drawings Used as Shop Drawings

The Contractor's transmittal letter and submittal register shall indicate which design drawings are being submitted as shop drawings.

1.9.4 Naval Facilities (NAVFAC) Engineering Command Drawing Numbers

Number the final Contractor-originated design drawings consecutively with NAVFAC drawing numbers. Determine the total number of sheets required for the complete set of drawings before requesting the NAVFAC drawing numbers from the Contracting Officer.

1.9.5 Seals and Signatures on Documents

All final Contractor-originated design drawings shall be signed, dated, and bear the seal of the registered architect or the registered engineer of the respective discipline in accordance with [FC 1-300-09N](#). This seal shall be the seal of the Designer of Record for that drawing, and who is professionally registered for work in that discipline. A principal or authorized licensed or certified employee shall electronically sign and date final drawings and cover sheet, in accordance with [FC 1-300-09N](#). The design drawing coversheets shall be sealed and signed by the lead licensed architect or engineer of the project design team. Indicate the Contractor's company name and address on the drawing coversheets of each design submittal. Application of the electronic seal and signature accepts responsibility for the work shown thereon.

1.9.6 Units of Measure

Utilize [English Inch-Pound](#) units of measure on the design documents.

1.10 SPECIFICATIONS

Provide a Contractor-originated design specification that in conjunction with the drawings, demonstrates compliance with requirements of the RFP. The specified products, materials, systems, and equipment that are approved by the DOR; submitted to the Government by the Contractor; and reviewed by the Contracting Officer shall be used to construct the project. UFGS sections contained in RFP Part 2 shall become a part of the Contractor-originated Division 01 specification without modification. Specification Sections contained in RFP Part 5 shall become a part of the Contractor-originated specification without modification.

1.10.1 Specifications Components and Format

The Contractor shall prepare design specifications that include a UFGS specification for each product, material, or system on the project. If the Contractor chooses or is required above to combine design and construction submittal information on the design documents, provide a UFGS specification and also proprietary information such as catalog cuts and manufacturers data that demonstrates compliance with the RFP. Organize the specifications using Construction Specification Institute (CSI) Masterformat™ unless the Contracting Officer requires a Unifomat organization. Navy's use of system specifications takes precedence over CSI Masterformat component breakdown and related component specifications. Provide project specifications to include the following:

- a. Provide the specification cover sheet with the professional seal and signature of the lead licensed architect or engineer of the project design team. Indicate the Contractor's company name and address on the specification coversheet.
- b. Table of contents for entire specification.
- c. Individual UFGS specification sections for each product, material, and system required by the RFP. Edit UFGS sections in accordance with RFP Part 4, PTS Section Z-10, Design Submittals.
- d. If proprietary information is provided or required, include a coversheets for the product, material, or system information that is being proprietarily specified. This information is to follow the related UFGS specification.
- e. If proprietary information is provided or required, include highlighted and annotated Catalog Cuts, Manufacturer's Product Data, Tests, Certificates, Manufactures information and letters for each product, material, or system that is being proprietary specified.
- f. Coordinated submittal register for all products, materials and systems with each design submittal. Provide a cumulative register that identifies the design and construction submittals required by each design package along with previous design submittals. The DOR shall assist in developing the submittal register by determining which submittal items are required to be approved by the DOR. Complete all fields in the final submittal register in order to obtain Government approval of the final design. Submittal register to include separate but simultaneous delivery and approval of design or data required to fulfill sustainability requirements by Section 01 33 29.05 20 SUSTAINABILITY REPORTING FOR DESIGN-BUILD.

1.10.2 Specifications Section Source Priority

Choose UFGS sections that describe the products, materials, and systems that are used on the project. Use current UFGS sections that are available on the Whole Building Design Guide website (available at this website: http://www.wbdg.org/references/pa_dod.php) and give priority to the Unified Tri-Service UFGS sections (no spec number suffix) and UFGS that are prepared by NAVFAC (.00 20 suffix). Only use a UFGS section prepared by another DoD Component (.00 10, and .00 30 suffix), if an applicable NAVFAC prepared specification section does not exist. Do not use Army (.00 10 suffix) and NASA (.00 40 suffix) electrical and mechanical specifications. If no applicable UFGS technical specification exists to meet your project requirements, consult with the NAVFAC Component for guidance and create a new UFGS specification in accordance with UFC 1-300-02, Unified Facilities Guide Specifications (UFGS) Format Standard.

1.10.3 Fire Protection Specifications

Specifications pertaining to spray-applied fire proofing and fire stopping, exterior fire alarm reporting systems, interior fire alarm and detection systems, and fire suppression systems, including fire pumps and standpipe systems shall be either prepared by, or reviewed and approved by the Fire Protection DOR.

1.10.4 Identification of Manufacturer's Product Data Used with Specifications

Provide complete and legible catalog cut sheets, product data, installation instructions, operation and maintenance instructions, warranty, and certifications for products and equipment for which final material and equipment choices have been made. Indicate, by prominent notation, each product that is being submitted including optional manufacturer's features, and indicate where the product data shows compliance with the RFP.

1.10.5 Specification Software

Submit the final specification source files in either MS Word or SpecsIntact.

1.11 DESIGN ANALYSIS

Prepare, organize, and present design analysis in accordance with the requirements of [FC 1-300-09N](#). The design analysis shall be a presentation of facts to demonstrate the concept of the project is fully understood and the design is based on sound engineering principles. Provide design analyses for each discipline and include the following:

a. Basis of design that includes:

- (1) An introductory description of the project concepts that addresses the salient points of the design;
- (2) An orderly and comprehensive documentation of criteria and rationale for system selection; and
- (3) The identification of any necessary licenses and permits that are anticipated to be required as a part of the design and/or construction process. The "Permits Record of Decision" (PROD) form provided shall be used for recording permits.

b. Code and criteria search shall identify all applicable codes and criteria and highlight specific requirements within these codes and criteria for critical issues in the facility design.

c. Calculations as specified and as needed to support this design.

d. [Sustainability Notebook](#): Analysis and calculations relative to sustainable design requirements. Refer to Section [01 33 29.05 20](#), SUSTAINABILITY REPORTING FOR DESIGN-BUILD and [FC 1-300-09N](#) for requirements.

e. Draft and Final NAVFAC Sustainable and Energy Data Record Card (NSEDRC) that documents the energy usage and sustainable features of the building. Refer to Record Documents paragraphs in this section for requirements.

f. Provide an exterior enclosure vapor pressure analysis, hygrothermal analysis, and written/graphic descriptions for each unique wall and roof assembly used as part of exterior enclosure barriers.

g. Section titled "Antiterrorism" that documents the antiterrorism features

h. Fall Protection Analysis

- i. Draft and Interim DD Form 1354 that document the real property assets of the project. Refer to Record Documents paragraphs in this section for requirements.

1.11.1 Basis of Design Format

The basis of design for each design discipline shall include a cover page indicating the project title and locations, contract number, table of contents, tabbed separations for quick reference, and bound in separate volumes for each design discipline.

1.11.2 Design Calculations

Place the signature and seal of the designer responsible for the work on the cover page of the calculations for the respective design discipline.

1.11.3 Fall Protection Analysis

Eliminate fall hazards in the facility or if not feasible provide control measures to protect personnel conducting maintenance work after completion of the project. Identify fall hazards in the Basis of Design with the Design Development and Prefinal submittals. The analysis shall describe how fall hazards are considered, eliminated, prevented or controlled to prevent maintenance personnel from exposure to fall hazards while performing work at heights. Refer to RFP Part 2, Section 01 35 26.05 20, GOVERNMENT SAFETY REQUIREMENTS FOR DESIGN-BUILD for fall hazard protection requirements.

1.12 PROJECT RENDERING

Provide a full color photo-realistic architectural rendering of the primary facade or facades of the facility. Depict the final, approved facility design and accurately illustrate the proposed final constructed facility including but not limited to, massing, fenestration pattern, material selections, colors, textures, landscaping, paving, and to the extent directed - the surrounding context.

Renderings created using traditional casein painted techniques or computer generated renderings are acceptable. Develop computer generated renderings using a current rendering engine suitable to produce photo-realistic images. Renderings created solely in BIM or CADD authoring software are not acceptable.

Renderings shall include realistic advanced lighting characteristics (natural and/or synthetic) and true ambient lighting and shading characteristics. Provide images that are sharp in detail and resolution through proper anti-aliasing techniques. Material maps shall be comprised of advanced techniques and practices to ensure materials are an exact representation of the facility product/finish selections.

1.12.1 Preliminary Rendering Planning

Provide planning PDF drawings of the facility to exhibit the proposed rendering appearance. Submit not less than 3 alternative views for review and approval to determine the most advantageous view. The Preliminary

rendering submittal shall display the following characteristics of the final rendering;

- a. Selection of primary facade(s)
- b. Point of view (aerial, eye-level, elevated, etc.)
- c. Close-up or wide angle
- d. Extent of surrounding context

Adjust view and resubmit if an alternative to the submitted views is required for the rendering planning approval. Submit rendering planning submittal during the Preliminary Design Submittal.

1.12.2 Prefinal Rendering

Submit three (3) hard copies of the prefinal rendering to indicate compliance with planning decisions, establish level of detail and rendering elements to be employed such as people, cars, vegetation/trees. Indicate proposed colors, textures, foreground and background. Use processes and printing equipment that will be used on the final rendering. Submit Prefinal rendering submittal for approval with the Prefinal Design Submittal.

1.12.3 Final Rendering

Provide the final rendering submission that complies with the following requirements:

- a. The rendering shall be a full vignette and fully developed. Finished size shall be 18 by 24 inches.
- b. Provide eight (8) final original color renderings of each building (two for NAVFAC Washington, two for MCB Quantico FEAD, two for MCB Quantico PW, and two for MCESG), and two (2) sets of the digital master images on DVD media. Original and reproductions shall be mounted on acid free heavy illustration board and double-matted with complimentary colored, acid free mat boards. Frame rendering(s) with contemporary polished metal frames and single strength, non-glare glass. Print the Project name, location, Architect/Engineer firm's name on the matting. On the back of the renderings and reproductions, indicated the project name, the location, the contract number, and the date of reproduction.
- c. Match the exterior color scheme approved for the facility.
- d. Provide photo-realistic quality rendering elements such as people, cars, vegetation/trees, etc.
- e. Provide digitally reproductions of the rendering using a minimum 600 dpi resolution for print reproduction on 24 by 36 inch stock with no loss of fidelity, quality or detail from the master image.
- f. Provide each set of digital master images in both TIF and JPEG formats. Save JPEG images using the highest quality setting (minimum compression). Provide the following as a minimum;
 - (1) One set including the unit insignia(s) for the tenant activity, the service insignia (Marine Corps), the name of the facility, name of

installation, and the names of the contractor and design professional.

- (2) One set including the image only, without any identifying information other than that which may be depicted as a part of the building signage within the rendering.

- g. Submit the final rendering for approval 30 days after the Final Design Submittal approval. Ship the rendering, the digital copies and the digital files in resilient packaging to ensure damage free delivery. Deliver to the Contracting Officer.

1.13 FACILITY RECOGNITION PLAQUE

Provide a facility recognition plaque for this facility in accordance with FC 1-300-09N, Design Procedures.

1.14 RECORD DOCUMENTS

1.14.1 Record Drawings

The as-built modifications shall be accomplished by electronic drafting methods on the Contractor-originated .DWG design drawings to create a complete set of record drawings. In addition to the requirements of FAC 5252.236-9310, RECORD DRAWINGS, survey the horizontal and vertical location of all provided underground utilities to within 0.1 feet relative to the station datum. All pipe utilities shall be surveyed at each fitting and every 100 LF of run length. Electrical and communication ductbank, direct buried conduit, and direct buried conductor shall be surveyed every 100 LF and at each change of direction. Record locations and elevations on the Record Drawings.

- a. For each record drawing, provide CADD drawing identical to signed Contractor-originated.PDF drawings, that incorporates modifications to the as-built conditions. In addition, copy initials and dates from the Contracting Officer approved .PDF documents to the title block of the record CADD.DWG drawings. The RFP reference or definitive drawings are not required for inclusion in the record set of drawings.
- b. After all as-built conditions are recorded on the CADD.DWG files, produce a PDF file of each individual record drawing in conformance with FC 1-300-09N. Electronic signatures are not required on record drawings.
- c. Provide a searchable electronic copy of the photo documentation used in the QC Daily Reports. Refer to Section 01 45 00.05 20, DESIGN AND CONSTRUCTION QUALITY CONTROL.

1.14.2 Source Documents

Provide the specifications, design analysis, reports, surveys, calculations, and any other contracted documents on the CD-ROM or DVD disk with the record drawings.

1.14.3 DD Form 1354

Prepare a Draft and Interim DD Form 1354, TRANSFER AND ACCEPTANCE OF MILITARY REAL PROPERTY, in accordance with [UFC 1-300-08](#). All assets must be broken out by construction categories that are found in the DD Form 1391 and the "Category Codes for Military Real Property" from NAVFAC P-72. Use Navy specific Facility Catcodes from the NAVFAC P-72, which are available from the Contracting Officer. Coordinate the identification of appropriate asset construction categories with the Contracting Officer and the Real Property Accounting Officer.

- a. Draft DD Form 1354. DOR shall determine applicable real property assets broken out by construction categories and submit a "Draft DD Form 1354" for Government approval as a part of the Design Analysis included with the Prefinal Design submittal. "Draft DD Form 1354" must include all quantities and units of measure, but does not require cost breakdown. Download the current blank editable DD Form 1354 in ADOBE (PDF) from the following website:
<http://www.dtic.mil/whs/directives/infomgt/forms/eforms/dd1354.pdf>

- b. Interim DD Form 1354. Contractor shall coordinate with the DOR and update the Draft DD Form 1354 submission to include any additional assets, improvements, or alterations that occurred during construction. Use the Draft DD Form 1354 and the Section [01 20 00.05 20](#), PRICE AND PAYMENT PROCEDURES to identify costs. Submit Interim DD Form 1354 to the Government for approval 60 days prior to the Beneficial Occupancy Date (BOD). If modifications to the Interim DD Form 1354 are required by the Government, the corrected version must be submitted prior to the BOD.

Submit the completed Checklist for Form DD1354 of Government-Furnished and Contractor-Furnished/Contractor Installed items. Attach this list to the Interim DD Form 1354. Instructions for completing the form and a blank checklist may be obtained from [UFC 1-300-08, CRITERIA FOR TRANSFER AND ACCEPTANCE OF DoD REAL PROPERTY](#). The Contractor shall complete DD Form 1354 to the satisfaction of the MCB Quantico Asset Management Section. The Final DD Form 1354 will be prepared by MCB Quantico Real Property Accountability Officer (RPAO) at final project closeout after all outstanding issues have been resolved.

Coordinate with Section [01 20 00.05 20](#), PRICE AND PAYMENT PROCEDURES for construction categories and associated category codes. The Contractor's Earned Value Report shall allocate the total cost of construction to the appropriate category codes.

When documenting demolition work, the DD Form 1354 shall list the quantitative data associated with this work as a negative value to show the cost should be deleted from the Navy asset data store. Coordinate with the Installation Real Property POC to assist in determining the negative value for demolition work.

PART 2 PRODUCTS

2.1 [CONSOLIDATED RFP DOCUMENTS](#)

Within four weeks after contract award, provide three electronic and hard copies of consolidated RFP documents incorporating the Contractor's Proposal and all RFP amendments and revisions that are contained in the contract award. Identify the changes to the RFP with the "Red-lining" or "Track Changes" feature of SpecsIntact or MS Word to highlight the pre-award modifications to the contract. Identify the amendment source at each

addition and deletion by annotation, such as footnote or reference in parenthesis.

2.2 DESIGN SUBMITTALS

Complete the Contractor-originated design submittals as defined by this contract, and coordinate with the approved design network analysis schedule.

Refer to Section 01 33 29.05 20, SUSTAINABILITY REPORTING FOR DESIGN-BUILD for sustainable design submittals.

2.2.1 Design Submittal Packages

The Government prefers to review for Quality Assurance (QA) as few submittal packages as possible. Site and Building Design Submittal Packages are required, however Critical Path Design Submittals are acceptable if they are substantiated as having an impact to the critical path in the Government approved Network Analysis Schedule. A Critical Path submittal shall include all design analyses, drawings, specifications and product data required to fully describe the project element for Government review.

Examples of project elements that may be submitted as Critical Path Design Submittal Packages are: Master Plan Design, Demolition Design, Foundation Design, Structural Design, Building Enclosure Design, Remaining Work Design, Furniture/Equipment Design, long lead items, or any other construction activity or project element that can be organized into a submittal package that can be reviewed and approved by the Government without being contingent upon subsequent design submittals.

2.2.1.1 Site Design

The Site Design typically includes the following components:

- a. Master Site Plan
- b. Demolition
- c. Site work including Environmental
- d. Geotechnical

2.2.1.2 Building Design

The Building Design typically includes the following components:

- a. Foundation
- b. Structural
- c. Building Enclosures
- d. Remaining Work
- e. Furniture/Equipment

2.2.1.3 Furnishings, Fixtures, and Equipment (FF&E), Engineering Systems, and Installed Equipment (IE)

The Contractor shall include FF&E in the design process and in the drawings and specifications, taking full responsibility to ensure the FF&E, ES, and IE can be installed as planned without conflicts and rework. In order to facilitate this close coordination, the Contractor shall supply electronic design documents upon Government request at any point in design and construction, including key as-built information that could impact equipment installation once construction has begun including but not limited to deviations in column size and spacing, fire pull box locations, and switches or outlets. In addition, the Contractor shall request information from the Government that is required to complete the FF&E, ES, and IE drawings and ensure design and installation is fully coordinated.

The Contractor shall anticipate frequent exchange of design information related to FF&E, ES, and IE throughout design and construction. Including but not limited to product layouts, system and equipment updates, and the requirement to update the FF&E, ES, IE, and architectural, electrical, and communication drawings to ensure FF&E, ES, and IE can be installed, operated, and tested as planned.

2.2.2 Required Design Submittals

Provide the following Design Submittal packages. Provide comprehensive, multi-discipline design packages that include design documentation for project elements, fully developed to the design stage indicated, and in accordance with [FC 1-300-09N](#), except where specified otherwise.

- a. Concept Design presented at the Concept Design Workshop: GOVERNMENT PROGRESS QA. 28 calendar day Government review time after final Concept Design Report submitted. Refer to Section 01 31 19.05 20 Post Award Meetings, section 1.3.5 Concept Design Workshop (CDW).
- b. Design Development (50%-60%) (in progress)) - GOVERNMENT PROGRESS QA. 28 calendar day Government review time. (50%-60%) Contractor must allow changes to the plans up to and including, at minimum, the 50%-60% (2nd) submission, without additional cost to the Government. And the 50%-60% (2nd) submission shall at minimum include civil, architectural floor plans, plumbing, electrical, communications, and fire protection plans and specs.
- c. Prefinal (100%) Design - GOVERNMENT PROGRESS QA. 28 calendar day Government review time. Contractor must allow changes to the plans up to and including, at minimum, the 100% (2nd to 3rd) submission, without additional cost to the Government. And the 100% (2nd to 3rd) submission shall at minimum include civil, architectural floor plans, plumbing, electrical, communications, and fire protection plans and specs.
- d. Final Design - Government QA. 28 calendar day Government review time for submittals requiring Government approval prior to construction.

2.2.3 Critical Path Design Submittals

Provide Critical Path Design Submittals that include design documents for the project elements involved. Include and provide full documentation that would normally have been provided in earlier submittal stages, such as Design Development Phase.

- a. 100 percent (Prefinal) Design - GOVERNMENT PROGRESS QA. 28 calendar day Government review time. Contractor must allow changes to the plans

up to and including, at minimum, the 100% (2nd to 3rd) submission, without additional cost to the Government. And the 100% (2nd to 3rd) submission shall at minimum include civil, architectural floor plans, plumbing, electrical, communications, and fire protection plans and specs.

- b. Final Design - Government QA. 21 calendar day Government review time for submittals requiring Government approval prior to construction.

2.2.4 Review Copies of Design Submittal Packages

- a. Provide bound copies of each design submittal package for review to the following reviewers. Addresses for mailing will be furnished at the PAK meeting.

- (1) 8 paper copies to the NAVFAC component and 1 electronic copy of the Final submittals.
- (2) 2 paper copies to the Activity.
- (3) 8 paper copies to the Activity Public Works Officer (PWO) and 1 electronic copy of the Final submittals.

- b. Provide the same quantities of copies for resubmittals, as required for each design submittal.

2.2.5 Design Submittal Review Schedule

Use the time frames for Government submittal review identified in the RFP. For construction scheduling purposes add additional time to the identified minimum review time periods to allow for the following scheduling conditions:

1. Submittals received after noon will be logged in on the following business day.
2. The following dates will NOT be included (by the Contractor) in the "calendar day" Government review times: all Federal holidays; 23 - 28 Nov 2016; 19 Dec 2016 thru 3 Jan 2017 inclusive. It is permissible for the Contractor to make submissions available for Government review; however, these dates will be considered non-working days for Government personnel in reviewing design submittals and attending design related meetings.
3. Postpone delivery if Government personnel to receive the submittal are unavailable. Assure in advance of the submittal delivery it can be received.
4. Postpone delivery when heightened security restricts access to the Base. Coordinate heightened security requirements in advance with the CM.
5. Period of review for a resubmittal is the same as the initial submittal. Review time for resubmittals caused by non-conformance, do not result in a change in contract duration or cost.

2.2.6 Distribution of Approved Final Design Drawings and Specification to Government Representatives

Submit within 14 calendar days of receiving the Government Approved Final Design Documents, which includes any Critical Path Final Design Document Packages, electronic and hardcopy(s) of these final documents to Government representatives for use during the construction of the project. If Critical Path Submittal Packages are used, provide coversheets and index to identify each sheet and how this Critical Path Submittal Package fits into the overall project. Provide the number and type of copies of the final design documents to the following Government representatives. Addresses for mailing will be furnished at the PAK meeting.

- a. Two electronic and two hard copies to the Project Manager
- b. Two electronic and two hard copies to the Design Manager
- c. One electronic and one hard copy to the Construction Manager
- d. One electronic and one hard copy to the Contracting Officer
- e. One electronic and one hard copy to the Public Works Officer

2.3 IDENTIFICATION OF DESIGN SUBMITTALS

Provide a title sheet to clearly identify each submittal, the completion status, and the date. The title sheet shall use the standard format indicated in the FC 1-300-09N for title sheets. The title sheet shall be unique to a particular design submittal. Submit the project title sheet with design status and date for the design submittals.

2.3.1 Critical Path Submittal Title Sheet

Identify Critical Path submittals as such and include a title sheet indicating the type of critical path submittal, the level of completion of the individual drawings, and which drawings are approved for construction.

2.3.2 Construction Document Validation

All CAD design documents used to construct the facility must bear a visible and legible AutoCAD generated plotstamp in the lower right hand margin of each drawing. The plotstamp information on the jobsite construction documents must match the plotstamp information contained on the following development stages of the design documents:

- a. The Final Critical Path Submittal or the Final Design Submittal professionally signed by the DOR and submitted for Government approval.
- b. The Final Critical Path Submittal or the Final Design Submittal drawings that have approved by the Government. This development stage may be combined with "c." below, if issued at the same time.
- c. The Final Critical Path or Final Design drawings that have been included in the contract by modification.
- d. The Final Critical Path or Final Design drawings which include subsequent revisions to the design documents that have been included in the contract by modifications.

Issue new drawings for construction which bear the current plotstamp once a new development stage of the design documents has been accomplished. Design documents which do not bear a plotstamp that matches the corresponding plotstamp exhibited on the design documents described above, shall not be used for the construction of the project. The plotstamp must bear the date and time of the plot, at a minimum. Maintain a plotstamp record at the jobsite that lists the applicable plotstamp information for each drawing through each stage of development described above.

PART 3 EXECUTION

3.1 CONTRACTOR'S RESOLUTION OF COMMENTS

Provide written responses to all written comments by the Government. Resubmittal of an unacceptable design submittal shall be a complete package that includes all the required, specified components of that design submittal. When required by the Government, Contractor resubmittal of design package, due to nonconformance to the contract, is not a delay in the contract.

3.2 DESIGN CHANGE AND VARIATIONS

A design change is when the design is revised from what was reviewed by the Government during any phase of the design process prior to Government approval of the Final Design. A variation is any portion of the design that differs from the requirements of the solicitation, accepted proposal, or final design after Government approval of the Final Design. Design changes and variations require Government approval and only variations that are advantageous to the Government will be considered. Refer to Section 01 33 00.05 20, CONSTRUCTION SUBMITTAL PROCEDURES for further explanation and requirements of design change and variation.

The Contractor shall immediately notify the Government of all potential design changes and variations via a Request for Information (RFI) to the Contracting Officer. Design changes or variations that the Contractor asserts will require a contract modification to adjust the cost/price or schedule shall not be incorporated in the design during any phase of the design process without prior documented approval from the Contracting Officer. Contractors will not receive compensation for any unauthorized design changes or variations which have been included in the Government approved Final Design. Include the following information in the design change and variation RFIs:

- a. Indicate the RFP Parts, sections, and paragraphs affected by this design change or variation,
- b. The scope of work of the design change or variation,
- c. The reason for the proposed change,
- d. Explanations of how the variation is advantageous to the Government.
- d. Indicate which upcoming design submittal will be affected by the subject design change,

- e. Explanation of contract cost/price and schedule impacts or provide an affirmative statement indicating that the design change or variation will not have an impact on the contract cost/price or schedule.
- f. Coordination measures proposed to incorporate the design change or variation into the construction.
- g. Upon request by the Contracting Officer, submit a cost proposal prepared using the Uniformat Work Breakdown Structure for all design changes and variations that have cost or schedule impacts. Submit a proposal that provides cost breakdown of each Uniformat system or subsystem that is applicable to the design change or variation. Utilize the units of measure indicated in the Uniformat Structure at the NAVFAC DB RFP website, <http://www.wbdg.org/ndbm/uniformat.php>.

3.3 THE CONTRACT AND ORDER OF PRECEDENCE

3.3.1 Contract Components

The contract consists of the solicitation, the approved proposal, and the final design.

3.3.2 Order of Precedence

NFAS Clause 5252.236-9312. In the event of conflict or inconsistency between any of the below described portions of the conformed contract, precedence shall be given in the following order:

- a. Any portions of the proposal or final design that exceed the requirements of the solicitation.
 - (1) Any portion of the proposal that exceeds the final design.
 - (2) Any portion of the final design that exceeds the proposal.
 - (3) Where portions within either the proposal or the final design conflict, the portion that most exceeds the requirements of the solicitation has precedence.
- b. The requirements of the solicitation, in descending order of precedence:
 - (1) Standard Form 1442, Price Schedule, and Davis Bacon Wage Rates.
 - (2) Part 1 - Contract Clauses.
 - (3) Part 2 - General Requirements.
 - (4) Part 3 - Project Program Requirements.
 - (5) Part 6 - Attachments (excluding Concept Drawings).
 - (6) Part 5 - Prescriptive Specifications exclusive of performance specifications.
 - (7) Part 4 - Performance Specifications exclusive of prescriptive specifications.
 - (8) Part 6 - Attachments (Concept Drawings).

3.3.2.1 Government Review or Approval

Government review or approval of any portion of the proposal or final design shall not relieve the Contractor from responsibility for errors or omissions with respect thereto.

3.4 MODEL UNIT

Prior to placement of material orders for components of the BEQ living suites and the installation of those components throughout the project, the Contractor shall complete the construction of the components of the model unit, and gain the approval of the Contracting Officer for the materials and workmanship therein.

3.4.1 Model Unit Description

The model unit shall be made up of enough living suites to show all of the different levels of completion required below.

3.4.2 Model Unit Requirements

The construction of the model unit shall adhere to the following requirements:

- a. Materials provided in model unit shall be those actually approved in submittals. The QC Manager and Organization must be in place to approve and process submittals in accordance with Sections 01 33 10.05 20 DESIGN SUBMITTAL PROCEDURES and 01 33 00.05 20 CONSTRUCTION SUBMITTAL PROCEDURES.
- b. The Contractor shall provide all temporary utilities and climate control necessary to construct, inspect, approve, and maintain the model unit.
- c. The completed model unit shall be exhibited for approval. Upon completion, the model unit shall be available to the Government for a period of fifteen (15) working days for inspection after notification is received by Contracting Officer.

-- End of Section --