
USACE / NAVFAC / AFCEA UFGS-01331 (August 2004)

Preparing Activity: NAVFAC Superseding
UFGS-01331N (April 2004)
Use in lieu of UFGS 01330
Use in conjunction with
UFGS 01332

UNIFIED FACILITIES GUIDE SPECIFICATIONS

References are in agreement with UMRL dated 25 June 2004

Latest change indicated by CHG tags

SECTION 01331

DESIGN SUBMITTAL PROCEDURES 08/04

NOTE: This guide specification covers the requirements for Navy for the contractor-originated design documents including design drawings and specifications for design-build.

Comments and suggestions on this guide specification are welcome and should be directed to the technical proponent of the specification. A listing of technical proponents, including their organization designation and telephone number, is on the Internet.

Recommended changes to a UFGS should be submitted as a Criteria Change Request (CCR).

Use of electronic communication is encouraged.

Brackets are used in the text to indicate designer choices or locations where text must be supplied by the designer.

NOTE This section is used in conjunction with the Unified Facilities Guide Specifications (UFGS) and the Performance Technical Specification (PTS).

This specification section shall be used in conjunction with UFGS section 01332 CONSTRUCTION SUBMITTAL PROCEDURES and both 01331 and 01332 together replace UFGS section 01330 SUBMITTAL PROCEDURES in design-build projects.

NOTE: This Section 01331 DESIGN SUBMITTAL PROCEDURES is written with the following assumptions:

1. Contractor's-originated Design Documents will be reviewed by NAVFAC EFD, with input from Activity, Contracting Officer, and RFP Architect/Engineer (if other than the NAVFAC EFD).
2. Review meetings with the Contractor shall be arranged by Contracting Officer. Refer to Section 01006, "Post Award Meetings."
3. Contractor and EFD/EFA shall sign Finalized Contract Documents electronically.
4. There are three options for reporting the sustainable design features of a project. The first option is sustainable validation of projects below the sustainable monetary threshold or outside the scope of the LEED Rating System. The second option is self certification by the Contractor with acceptance by the Contracting Officer using the LEED Rating System as a measuring tool. The third option is a certified award from US Green Building Council using the LEED Rating System and documentation requirements.
5. If Contractor originated design submittals are formatted correctly and contain all appropriate information, the design submittals can serve the dual purpose of design and construction documents. These dual purpose submittals are identified on the Contractor's Submittal Transmittal Form.
6. The Government shall supply all available environmental information and existing conditions to allow the Contractor to proceed with the work. The RFP shall contain all Hazardous/Contaminated Materials work, Archeological Sensitive Areas, and Historical information necessary for inclusion into the Contractor-originated drawings.

PART 1 GENERAL

1.1 SUMMARY

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

1.2 REFERENCES

NOTE: Issue (date) of references included in project specifications need not be more current than provided by the latest guide specification. Use of SpecsIntact automated reference checking is recommended for projects based on older guide specifications.

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.

AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING
ENGINEERS (ASHRAE)

ASHRAE 90.1 (2001; various Errata) Energy Standard for
Buildings Except Low-Rise Residential
Buildings

U. S. GREEN BUILDING COUNCIL

USGBC LEED GBRS (Nov 2002) LEED Green Building Rating
System, Version 2.1

USGBC LEED RG (June 2001) LEED Reference Guide, Version
2.0

U.S. DEPARTMENT OF DEFENSE (DOD)

UFC 1-300-09N (2003) Design Procedures

UFC 1-300-10N (2003) Electronic Design Deliverables

UFC 3-100-10N DGAIDR (2003) Unified Facilities Criteria-
Design: General Architectural and
Interiors Requirements

UFC 3-200-10N DGCGLR (2003) Unified Facilities Criteria -
Design: General Civil, Geotechnical
Landscape Requirements

UFC 3-300-10N DGSR (2003) Unified Facilities Criteria -
Design: General Structural Requirements

UFC 3-400-10N DGMR (2003) Unified Facilities Criteria -
Design: General Mechanical Requirements

UFC 3-500-10N DGER (2003) Unified Facilities Criteria -
Design: General Electrical Requirements

UFC 3-600-10N DGFPR (2003) Unified Facilities Criteria -
Design: General Fire Protection
Requirements

UFC 3-800-10N DGEVR (2003) Unified Facilities Criteria -
Design: General Environmental Requirements

1.3 DEFINITIONS

1.3.1 Contractor-originated design documents

Documents which include but are not limited to design drawings, project specifications, design analysis, basis of design, and calculations specifically prepared by the Contractor to incorporate pre-award Contractor proposals accepted by the Contracting Officer and to meet the requirements contained within this RFP.

1.3.2 Soft Metric

Soft metric is the converted inch-pound dimension to a nominal metric dimension. Soft metric is expressed in metric units of measure and is rounded to the nearest millimeter (mm) value which is closest to the dimensional tolerances of the materials dimensioned.

1.4 GENERAL DOCUMENTATION REQUIREMENTS

NOTE: Confirm the use of soft metric or inch-pound measures with Project Manager. If metric units of measure are used include section 01415, "Metric Measurements". If inch-pound units of measure are used provide a justification for not using metric units of measure in the Project Folder.

Contractor-originated design documents shall represent a project design that complies with the Request For Proposal (RFP), UFC 1-300-09N, UFC 1-300-10N, and the architectural and engineering discipline UFC's design guidance listed below. Provide design documentation in the English language and utilize [soft metric][inch-pound] measures and dimensions.

- a. UFC 3-100-10N DGAIDR
- b. UFC 3-200-10N DGCGLR
- c. UFC 3-300-10N DGSR
- d. UFC 3-400-10N DGMR
- e. UFC 3-500-10N DGER
- f. UFC 3-600-10N DGFPR
- g. UFC 3-800-10N DGEVR

1.4.1 RFP Drawings and Sketches

Designs and information shown on the RFP drawings or sketches are conceptual and may contain a combination of performance and prescriptive requirements for use in preparing the design documents.

1.4.2 RFP Specifications

Use the specifications furnished with the RFP to develop the design documents. The RFP specifications contain requirements for materials, products, systems, and criteria for verifying compliance in the form of performance and prescriptive requirements. References quoted in performance specifications shall be understood to be the dated version of the reference in effect as of the contract award date. The Division 01 Specification Sections included in RFP Part 2 shall remain part of the contract without change unless the Contracting Officer issues a contract modification.

1.5 SUBMITTALS

NOTE: Submittals must be limited to those necessary for adequate quality control. The importance of an item in the project should be one of the primary factors in determining if a submittal for the item should be required.

An "A" following a submittal item indicates that the submittal requires Government acceptance. A "G" following a Division 01 Specification Sections submittal item indicates that the submittal requires Government approval. Discuss any proposed modifications to the Division 01 Submittal acceptance or approval with the Project Manager. Some Performance Technical Specifications or Referenced Unified Facilities Guide Specifications submittals are already marked with a "G". Only delete an existing "G" if the submittal items are not complex and can be reviewed through the Contractor's Quality Control system. Only add a "G" submittal item in the Performance Technical Specifications or Referenced Unified Facilities Guide Specifications if the submittal is sufficiently important to require either Government approval in Division 01 or Contractor's Designer of Record Approval in the rest of the RFP.

Government approval is required for the submittal with a "G" designation and Government acceptance is required for submittals with an "A" designation See Section 01332 CONSTRUCTION SUBMITTAL PROCEDURES for Submittal Identification (SD-XX) definitions and requirements.

SD-01 Preconstruction Submittals

Submittal Register; A

SD-05 Design Data

Design Drawings; A

SPECIFICATIONS; A

DESIGN ANALYSIS; A

Design Submittal; A

Sustainable Design; A

SD-07 Certificates

LEED GBRS (LEED Green Building Rating System); A

NOTE: Include bracketed option for LEED Certificates if the project will be submitted to the USGBC for certificate award.

[LEED Certification Registration Application; A]

[LEED Certificate; A]

SD-11 Closeout Submittals

RECORD DOCUMENTS; G

1.6 DESIGN QUALITY CONTROL

Provide a Design Quality Control (DQC) Manager who is responsible for overall management of the design. Refer to Section 01450N DESIGN AND CONSTRUCTION QUALITY CONTROL for further requirements. The Design Quality Control Manager shall sign and certify all Design Submittals.

1.6.1 Reviewing, Certifying, Approving and Accepting Authority

The QC organization shall be responsible for reviewing and certifying that submittals are in compliance with the contract requirements. The Contracting Officer is the accepting authority for all design submittals that are indicated with a notation "A" following the submittal and the approving authority for all design submittals with a notation "G". The Government accepts design submittals and approves construction submittals. These Government accepted or approved design submittals are listed in this specification section.

1.6.2 Contractor's Responsibilities

- a. Coordinate between the Designer of Record and the Construction Sub Contractors to determine which design drawings will also serve as shop drawing. Indicate on the transmittal form accompanying submittal which design submittals are being submitted as shop drawings.
- b. Determine and verify field measurements, materials, field construction criteria; review each submittal; and check and coordinate each submittal with requirements of the work and contract documents.
- c. Transmit submittals to QC organization in accordance with schedule on approved Submittal Register, to prevent delays in the work, delays to government, or delays to separate contractors.
- d. Advise Contracting Officer of variations, as required by paragraph entitled "Variations."
- e. Correct and resubmit submittal as directed by Contracting Officer. When resubmitting disapproved transmittals or transmittals noted for resubmittal, the Contractor shall provide copy of that previously submitted transmittal including all reviewer comments for use by Contracting Officer. Indicate in writing or on resubmitted submittal, revisions not requested by Contracting Officer on previous submissions.
- f. Complete work that must be accomplished as basis of a submittal in time to allow submittal to occur as scheduled.
- g. Ensure no work has begun until submittals for that work have been returned as "approved," or "accepted."

1.6.3 QC Organization Responsibilities

- a. Both the DQC and the QC Manager must certify design submittals for

compliance with the RFP.

b. Note date on which submittal was received from Contractor on each submittal.

c. Review each submittal, and check and coordinate each submittal with requirements of work and contract documents.

d. Review submittals for conformance with project design concepts and compliance with contract documents.

e. Act on submittals, determining appropriate action based on QC organization's review of submittal. Forward submittal to Government with certifying statement or return submittal marked "not reviewed" or "revise and resubmit" as appropriate. The QC organization's review of submittal determines appropriate action.

f. Ensure that material is clearly legible.

g. Design submittals that include construction submittal information require a stamp on each cover sheet of each design submittal with QC certifying statement. Submittals in bound volume or on one sheet printed on two sides may be stamped on the front of the first sheet only.

QC organization shall certify submittals forwarded to 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 [____], is in compliance with the RFP, can be installed in the allocated spaces, and is submitted for Government acceptance.

Certified by Design Quality Control Manager _____, Date _____

Certified by QC Manager _____, Date _____

h. 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.

i. Update submittal register as submittal actions occur and maintain the submittal register at project site until final acceptance of all work by Contracting Officer.

j. Retain a copy of approved or accepted submittals at project site.

1.6.4 Government's Responsibilities

The Government will:

a. Note date on which submittal was received from QC manager, on each submittal.

b. Review submittals for acceptance or approval within scheduling

period specified and only for conformance with project design concepts and compliance with contract documents.

c. Identify returned submittals with one of the actions defined in paragraph entitled "Actions Possible" and with markings appropriate for action indicated.

1.6.5 Actions Possible

Submittals will be returned with one of the following notations:

a. Submittals marked "not reviewed" will indicate submittal has been previously reviewed and accepted or approved, is not required, does not have evidence of being reviewed and certified by Contractor, or is not complete. A submittal marked "not reviewed" 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.

b. Submittals marked "acceptable", or "approved" authorize Contractor to proceed with work covered.

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. No work shall proceed for this item until re-submittal is accepted or approved.

1.7 DESIGN DRAWINGS

Contractor-originated drawings shall clearly depict the technical design of the facility. Design drawings shall be complete, accurate, and explicit enough to show compliance with the RFP requirements and to permit construction. Where the Contractor utilizes the drawings furnished with this RFP in the preparation of the Contractor-originated drawings, make new electronic files from the RFP drawings. Provide new drawing title blocks, in compliance with UFC 1-300-09N/UFC 1-300-10N.

Provide a text file listing the following information for all Contractor-originated drawings:

- a. CAD file name
- b. CAD reference name
- c. Sheet no.
- d. DWG no.
- e. NAVFAC no.
- f. Sheet title

1.7.1 Shop Drawings Included as Design Drawings

To streamline the process, the Contractor may prepare design drawings that are more like shop drawings so that after final design acceptance the construction submittals are minimized. Therefore, the Contractor is encouraged to prepare and submit with the design drawings, appropriate

connection, fabrication, layout, and product specific drawings.

1.7.2 Drawing Format For Shop Drawings Included as Design 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.

1.7.3 Identification of Shop Drawings as Design Drawings

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

1.7.4 Drawing Standards

Prepare, organize, and present design drawings in accordance with the requirements of UFC 1-300-09N/UFC 1-300-10N.

**NOTE: Confirm with EFD/EFA Project Manager which
version of AutoCAD- should be included in the
bracketed option below.**

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

1.7.5 Naval Facilities (NAVFAC) Engineering Command Drawing Numbers

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

1.7.6 Seal on Documents

All final Contractor-originated design drawings shall be signed, dated, and bear the seal of a registered architect or a registered engineer. This seal shall be the seal of the Designer of Record for that drawing. For example, the seal on the structural design drawings shall be that of the Structural Engineer who actually prepared the design or directly supervised the preparation of the structural design. A principal or authorized licensed or certified employee shall electronically sign and date final drawings and cover sheet, in accordance with UFC 1-300-10N. Application of the electronic seal and signature indicates acceptance of responsibility for work shown thereon.

1.8 SPECIFICATIONS

Provide a Contractor-originated design specification that, in conjunction with the drawings, demonstrates compliance with materials, equipment, execution, and field quality control requirements of the RFP. The specified products, equipment, fixtures, devices, and systems submitted by the Contractor and accepted or approved by the Contracting Officer shall be used to construct the project.

Provide specification sections for all products and processes in this

project for Division 02 through 16, based on the performance and prescriptive technical requirements specified in this RFP. Prescriptive Technical Sections contained in this RFP shall become a part of the Contractor-originated specification exactly as stated in the RFP. Building codes, industry standards, product types, styles, classes, and other requirements identified in the RFP shall be incorporated into the project specification.

1.8.1 Specifications Format

Unless the use of a UFGS section is required, the Contractor may prepare design specifications that include manufacturer specific data and catalog cuts in lieu of prescriptive specifications so that after final design acceptance the construction submittals are minimized. For each design submittal, consolidate specifications and manufacturer's data sheets into one comprehensive manual. Organize the specifications using the Construction Specification Institute (CSI) 16-division format and identify each material or system with an individual specification section in accordance with CSI MasterFormat™. A prescriptive specification is required for all items for which the Contractor has not made final materials and equipment choices. The specifications shall be organized as follows:

- a. Provide complete specifications with a cover sheet, list of drawings, and table of contents. Bind all hard copies of the construction specifications and Manufacturer's Product Data [in three-ring "D" binders].
- b. Utilize CSI SectionFormat™, Part 1 - General; Part 2- Products; and Part 3-Execution for each specification section. These specifications, in combination with manufacturer's product data and the drawing information, shall provide sufficient information for the Contracting Officer's Review Team to confirm compliance with the RFP.
- c. Manufacturer's Product Data. Provide complete and legible catalog cut sheets, product data, installation instructions, operation and maintenance instructions, warranty, and certifications for all 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 where the product data indicates compliance with the RFP.

1.8.2 Identification of Manufacturer's Data as Specifications.

Manufacturer's data that is submitted to serve a dual purpose as a design specification and a construction submittal shall indicate this intent in the Contractor's transmittal letter.

1.8.3 Submittal Register

A submittal register that identifies all materials used in that design submittal shall accompany each design submittal. The submittal register shall be cumulative and on acceptance of the final design, the register shall have all the fields completed. Fill in all fields required by the Quality Control Manager and the Government during the construction phase of the contract.

Column (c): Lists specification section in which submittal is required.

Column (d): Lists each submittal description (SD No. and type, e.g. SD-04 Drawings) required in each specification section.

Column (e): Lists one principal paragraph in specification section where a material or product is specified. This listing is only to facilitate locating submitted requirements. Do not consider entries in column (e) as limiting project requirements.

Column (f): Indicate approving authority for each submittal. An RFP Part 2 "G" indicates approval by Contracting Officer; a blank indicates approval by QC manager. Indicate with a "G" all construction phase RFP Part 4 and Part 5 submittals to be reviewed by the Designer of Record.

1.8.4 Specification Word Processor Program

The Contractor shall use either MS Word or SpecsIntact to create the project specification.

1.9 DESIGN ANALYSIS

The design analyses 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 address 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. Section titled "Sustainable Design" that addresses sustainable concepts and LEED Rating Analysis Report [prepared by a LEED Accredited Professional recognized by the U.S. Green Building Council.]

e. Section titled "Antiterrorism/Force Protection" section that documents the force protection features incorporated into the project. This section shall address the following:

- (1) [Site Work, identifying building setback;]
- (2) [Parking and Roadway design considerations;]
- (3) [Building Layout;]
- (4) [Superstructure;]

- (5) [Mail Rooms;]
- (6) [Mechanical and Utility Systems;]
- (7) [Other Antiterrorism/Force Protection features incorporated into the project and their benefits.]

1.9.1 Basis of Design Format

**NOTE: Edit paragraph below to add or delete listings
of disciplines that require design analyses.**

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. Multiple volumes for individual disciplines, appropriately numbered, may be provided when needed. Organize as follows:

- [a. Architectural]
- [b. Civil;]
- [c. Environmental;]
- [d. Structural;]
- [e. Mechanical - HVAC;]
- [f. Mechanical - Plumbing;]
- [g. Electrical;]
- [h. Fire Protection;]

1.9.2 Design Calculations Format

Calculations for each design discipline shall include a cover page, a table of contents, a summary of criteria, the project title and location, and contract number. Calculation pages shall be legible and photo-ready. Cite criteria from which calculations, rationale, and formulas are extracted by publication number, title, edition and page number. The cover page of calculations shall also include the names of the persons originating and checking the calculations. In addition, place the signature and seal of the designer responsible for the work on the cover page of the calculations for the respective design discipline. Identify computer programs by name, source and version. Provide conceptual models used for computer input.

1.9.2.1 Instructions for Calculating Project Areas

In order to verify that the designed building gross area does not exceed the project requirements, calculate the gross area of the designed building based the calculation requirements in UFC 1-300-09N.

Document the gross area calculation on all submittals using a diagrammatic sketch and calculation format given as examples in UFC 1-300-09N. This UFC

covers most conditions that would likely be encountered. When doubt arises about a gross area calculation, contact the Contracting Officer for resolution.

1.9.3 Sustainable Design

NOTE: There are three options for reporting the sustainable design features of a project. The options are sustainable validation, self-certification and USGBC certification. Choose one of these options and delete the other two.

NOTE: Utilize and edit the first bracketed sentence if you are using self-certification or USGBC certification reporting. Delete the first bracketed sentence if you are using sustainable validation reporting.

[The minimum sustainable design goal for the project is to meet LEED [certified level (26 points)][____].] The design effort shall seek out integrated design solutions that provide the best value for the facility, and do not increase the overall cost of the project beyond the available budget. The Contractor shall provide documentation as required and coordinate the sustainable features of the design to assure they are properly installed during construction.

Information and resources on sustainable design principles and guidelines are explained in the "Whole Building Design Guide" that can be found at www.wbdg.org and in the Air Force Environmentally Responsible Facilities Guide, at www.afcee.brooks.af.mil/green.

[1.9.3.1 Sustainable Validation

NOTE: Utilize sustainable validation for projects that are below the sustainable monetary threshold of \$750,000 and/or outside the scope of the LEED Rating System. If sustainable validation reporting is used, delete the bracketed paragraphs for self-certification and USGBC certification.

Provide a design that incorporates sustainable techniques and materials to the greatest extent possible. This project is not intended to meet a minimum number of LEED Rating System points but is required to employ sustainable strategies to meet as many points as are applicable to the project and monetarily feasible. The analysis report shall include the following:

- a. Provide a completed LEED Project Checklist indicating all LEED USGBC Prerequisites and Credits that are applicable to the project.
- b. Description of how each applicable Prerequisite and Credit and other sustainable features and strategies will be achieved.

] [1.9.3.2 LEED Rating Analysis Report -Self-Certification

NOTE: NAVFAC has endorsed the use of the LEED rating analysis as the primary measurement tool for sustainable design. Use one of the following two paragraphs for all projects within the scope of the LEED Rating System and greater than \$750,000 in cost.

Note: Use the following bracketed paragraph to utilize LEED as a benchmark for Self-Certification of sustainable design. If Self-Certification is used, delete the bracketed paragraphs for Sustainable Validation and USGBC Certification.

Provide an analysis of the US Green Building Council's "Leadership in Energy and Environmental Design" (LEED) criteria as it applies to the design of this project and include updated information with each design submittal. When estimating energy savings, use ASHRAE 90.1 as the baseline. The Navy endorses the principles of sustainable design contained in the USGBC LEED GBRS (and USGBC LEED RG) and will utilize this system as a means of measuring the degree of implementation of sustainable principles. The analysis report shall include the following:

- a. Provide a completed LEED Project Checklist indicating all LEED USGBC Prerequisites and Credits to be implemented into the facility design and the total anticipated LEED GBRS score for the project;
- b. Description of how each anticipated LEED Prerequisite and Credit point will be achieved;
- c. Version of LEED being used for the analysis; and

NOTE: The project should use the services of a LEED Accredited Designer unless they are not available in the geographic region of the project.

Sustainable Verification Statements signed by the [LEED Accredited Professional] [Designer of Record] stating that the above three items provide an accurate estimate of the LEED GBRS rating that the U.S. Green Building Council would assign to the project design. Provide a statement at the following submissions:

- 1.) Preliminary Statement in the first Basis of Design submission.
- 2.) Progress Statement at each design submittal. Deviations from previously reported LEED rating score shall be documented, highlighted, and submitted with the design submittal for Government Acceptance.

] [1.9.3.3 LEED Rating Analysis Report - USGBC Certification

NOTE: Use the following bracketed paragraph to obtain a LEED certified award. If USGBC certified reporting is required, delete the optional

**paragraphs for Sustainable Validation and
Self-Certification.**

Provide copies of the LEED Certification Registration Application and the complete LEED support documentation to the U.S. Green Building Council (USGBC) to obtain the minimum certificate level specified herein. Provide the following information for the basis of design:

- a. Provide a completed LEED Project Checklist indicating all LEED GBRS Prerequisites and Credits to be implemented into the facility design and total LEED GBRS score for the project.
- b. Description of how each LEED Prerequisite and Credit will be achieved.
- c. List of Architects or Engineers from Contractor's Design Team and who on the team is responsible for implementing each Prerequisite and Credit into the facility design.
- d. Identify the Design Team's LEED Accredited Professionals as recognized by the U.S. Green Building Council.
- e. Submit LEED Certification Registration Application and complete LEED Certification Documentation to USGBC for certification. After LEED award is obtained, provide 5 color copies of the LEED Certification to the Contracting Officer. Mat and frame the original LEED Certification document and mount in a prominent location in the facility.

] 1.9.3.4 Sustainable Designer

**NOTE: The project should use the services of a
LEED Accredited Designer unless they are not
available in the geographic region of the project.**

The design team shall include at least one LEED Accredited Professional as recognized by U.S. Green Building Council. The LEED Accredited Professional shall have an active role in the design of the facility and be responsible for implementation and documentation of sustainable strategies and materials in the project.

] 1.9.3.5 EPA Designated Products

Use products that meet or exceed the minimum requirements of this RFP and the EPA guideline standards for recovered content to the maximum practicable extent in the performance of the contract. See www.epa.gov/cpg/products.htm for a list of EPA designated products and a list of manufacturers and suppliers of EPA designated products.

1.10 RECORD DOCUMENTS

The Quality Control Manager shall deliver the marked-up As-Built drawings to the Contractor's Designer of Record who shall incorporate all as-built modifications.

The as-built modifications shall be accomplished by electronic drafting methods on the Contractor-originated CADD.DWG design drawings to create a complete set of record drawings. 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 Record electronic files shall have a "RD" added to the end of the file name just before the ". DWG" file extension. An example of properly arranged Record drawing file name is 02222.A-101RD.DWG. The RFP reference or definitive drawings are not required for inclusion in the Record set of drawings.

NOTE: Confirm with the EFD/EFA Project Manager
which electronic format is used for Record Drawings.
If used by the EFD/EFA, add the requirement for .TIF
in the next two paragraphs. If Mylar drawings are
required by the activity, add a requirement to
provide D-size Mylar drawing originals made from the
updated CAD CD-ROM disk.

After all as-built conditions are recorded on the CADD.DWG files, produce a PDF [and .TIF] file of each individual record drawing in conformance with UFC 1-300-09N/UFC 1-300-10N. Generate pdf drawing files using a pdf page size that corresponds to the original document sheet size and a pdf print resolution that results in clear detail of all drawing features. Electronic signatures are not required on Record drawings.

Provide four copies of the Record files in AUTOCADD .DWG [, TIF,] and .PDF formats on CD-ROM disks. Mark CD-ROM Disk with Project Name, Construction Contract Number, Project Number, Specification Number, and Record Drawing date.

In addition to the drawings provide the specifications, design analysis, reports, surveys, calculations, and any other contracted documents on the CD-ROM disk.

PART 2 PRODUCTS

[2.1 CONFORMED CONTRACT DOCUMENTS

NOTE: If EFD/EFA desires to have the contractor
provide a conformed copy of the RFP documents that
includes amendments and revisions made prior to
award select the following bracket paragraph.

Within [_] [two weeks] after contract award provide [_] copies of a conformed RFP document reflecting all amendments. Identify the changes with the "Red-Lining" or "Change Tracking" feature of SpecsIntact or MS Word to highlight the modifications to the contract.

Submit the specification with the "Redlining/Change" indicated at the 100% submittal and submit the specification with the changes incorporated, without redlines showing, at the final Design Submittal.

]2.2 DESIGN SUBMITTALS

Complete the Contractor-originated design submittals as defined by this RFP, and coordinate with the accepted design network analysis schedule. There are two categories of Design Submittal Packages; Required Design Packages and Critical Path Design Submittals. Refer to UFC 1-300-09N for technical content and further description of the Design-Build Submittal packages.

2.2.1 Design Submittal Packages

The Government prefers to review as few submittal packages as possible. Submit Required Design Packages, however Critical Path Design Submittals are acceptable if they are substantiated as having an impact to the critical path in the Contractor's Accepted 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, the Foundation Design, the 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 accepted by the Government without being contingent upon subsequent design submittals.

The design submittal(s) shall be accepted prior to commencement of material/equipment purchase, fabrication or construction of any element covered by that submittal. Design acceptance will be by written notification from the Contracting Officer.

2.2.1.1 Site Design

The Site Design typically includes the following components:

NOTE: Utilize Demolition for large demolition projects or renovation/modernization projects that will include lead paint/asbestos/ or other hazardous/contaminated material removal.

NOTE: Utilize the Master Site Plan when multiple buildings or large-scale site development is required.

- [a. Master Site Plan]
- b. Demolition
- c. Site work [, Environmental,] and Civil
- 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

NOTE: The Furniture/Equipment design by the Contractor requires the EFD/EFA Project Manager to arrange the proper funding source to allow the Contractor to purchase from GSA.

- f. Furniture/Equipment

2.2.2 Required Design Submittals and Government Review Durations

The following Design Submittals are required, comprehensive, multi-discipline design packages and shall include Design Drawings, Design Analysis, Specifications, and Calculations for all project elements fully developed to the design stage indicated. Include in the Network Analysis Schedule, the Government review time indicated below.

- [a. Concept Design, - [14] [_____] calendar day Government review.]
- [b. Design Development, [50-60 percent,] [in-progress,] [over the shoulder review,] - [14] [_____] calendar day Government review.]
- c. 100 percent Design, - [28] [_____] calendar day Government review.
- d. Final Design, - [14] [_____] calendar day Government Review.

2.2.3 Critical Path Design Submittals and Government Review Durations

Critical Path Design Submittals shall include Design Drawings, Design Analysis, Specifications, and Calculations for the project elements involved. Include in the Network Analysis Schedule, the Government review time indicated below.

- a. 100 percent Design, - [21] [_____] calendar day Government review.
- b. Final Design, - [14] [_____] calendar day Government Review.

2.2.4 DURATION OF REVIEW REQUIREMENTS

The Government review time begins when the EFD/EFA marks the submittal received and ends when the Contractor is notified of the review completion.

If a Government review of a design submittal requires a resubmittal for conformance to the RFP, the review time of the resubmittal shall be the same as the review time duration for the original submittal.

2.2.5 Final Design Submittals

When all review comments have been resolved for either Required or Critical Path Design Submittals, submit for final acceptance and signatures. The quantities of paper copies for revised submittals shall be the same as specified for each design submittal. In addition, submit two electronic copies of the Contractor-originated, signed drawings and specifications, assembled and bookmarked in .PDF format on CD-ROM disk to the [Contracting Officer] [EFD/EFA Project Manager].

Provide electronic professional seals and signatures on the .PDF drawings and specifications using the signature process required in UFC 1-300-10N.

Upon securing signatures for the accepted submittal, the Contracting Officer will return the Contractor-originated .PDF drawings to the Contractor for the Contractor's printing, distribution, construction work and as-built effort.

2.2.6 Consolidated Submittals

The Required 100 percent Design and Final Design shall be a consolidated submittal. This submittal package shall be a consolidated multi-discipline design submittals that include all project elements and Critical Path Submittal Packages.

At the Required Final Submittal provide two electronic copies in .PDF format and two electronic copies in CADD.DWG format in accordance with UFC 1-300-09N/UFC 1-300-10N. In addition to the drawings provide the specifications, design analysis, reports, surveys, calculations, and any other contracted documents on the CD-ROM disk.

2.2.7 Review Copies of Design Submittal Packages

**NOTE: Add other addressees as directed by the
Project Manager.**

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

- a. [8] [_____] copies to the EFD/EFA [Project Manager] [Project Leader] [Project Design Engineer] [_____] .
- b. [4] [_____] copies to the Resident Officer in Charge of Construction (ROICC.)
- [c. [2] [_____] copies to the [Activity claimant] (not required for final design submittal).]
- [d. [2] [_____] copies to the Activity Public Works Officer (PWO) (not required for final design submittal.)]
- [e. [2] [_____] copies to the Government RFP preparing A/E.]

Quantities of copies for resubmittals shall be the same as specified for each design submittal.

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 UFC 1-300-09N/UFC 1-300-10N 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

Critical Path submittals shall be identified as such and shall include a title sheet indicating the type of critical path submittal, the status, and the date.

2.4 DESIGN SUBMITTAL REQUIREMENTS

Refer to the architectural and engineering discipline UFC's for design requirements for design submittals.

PART 3 EXECUTION

3.1 DESIGN REVIEW AND COMMENT RESOLUTION

NOTE: All Activity comments should be sent to the
EFD/EFA Project Manager for coordination and
consolidation. Forward the consolidated comment
back to the Contractor through the Contracting
Officer. EFD/EFA Project Manager shall contact the
Contracting Officer to establish the quickest
procedure for design submittal returns.

The Contracting Officer will evaluate the Contractors design submittals and provide comments.

3.2 CONTRACTOR'S RESOLUTION OF COMMENTS

Provide written responses to all written comments by the Government and proceed to the next required Design Submittal. When a design submittal is considered unacceptable to the Government, the Contractor will be advised and required to provide a resubmittal. Resubmittal shall include all the required components of that design submittal as specified. Government required resubmittal for conformance to the RFP is not a delay in the contract.

3.3 VARIATIONS

Variations from contract requirements require Government approval and will be considered where advantageous to the Government. Variations to the Accepted Final Design must be approved by the Designer of Record prior to submittal to the Government for approval of the Variation.

3.3.1 Consideration of Variations

Discussion with Contracting Officer prior to submission will help ensure functional and quality requirements are met and minimize rejections and resubmittals. When considering a variation to the Government Accepted Final Design, ensure the variation will be compatible with all furniture,

furnishing, material, equipment selections and other decisions made by the Government based on the Accepted Design.

3.3.2 Submission of Variations

Provide a written request to the Contracting Officer, with documentation of the nature and features of the variation and why the variation is desirable and beneficial to Government. Provide a cost-benefit analysis and submittals required for the item. Variations from the - Accepted Final Design will be reviewed by the DOR and warranted to be desirable, beneficial and compatible with the Designer's intent and operational requirements prior to forwarding to the Contracting Officer. Clearly mark the proposed variation in all documentation.

3.4 The Contract and Order of Precedence

3.4.1 Contract Components

The contract consists of the solicitation, the accepted proposal, and upon arrival, the final design.

3.4.2 Order of Precedence

In the event of a conflict or inconsistency between any of the requirements of the various portions of the contract, precedence shall be given in the following order:

- a. Any portions of the accepted proposal or approved final design that exceed the requirements of the solicitation.
- b. As between the approved final design and the accepted proposal:
 1. Any portion of the accepted proposal that exceeds the approved final design.
 2. Any portion of the approved final design that exceeds the accepted proposal.
- c. The requirements of the solicitation.
- d. Those portions of the accepted proposal or approved final design that meet but do not exceed the solicitation requirement.

3.4.3 Government Acceptance

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

-- End of Section --