JBCGS SECTION 01 33 16

DESIGN AFTER AWARD
06/15

PART 1 GENERAL

1.1 DESIGN RESPONSIBILITY

The Contractor shall furnish and be responsible for a complete set of design documents as called for hereinafter. Design shall be completed by Design Professionals (Architects and Engineers), registered and licensed in good standing in the State of South Carolina.

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES, except as modified herein:

SD-01 Preconstruction Submittals

Preliminary (35%) Design Submittal; G

Intermediate (65%) Design Submittal; G

Pre-Final (95%) Design Submittal; G

Final (100%) Design Submittal; G

Final (100%) Design Submittal; G

Structural Interior Design (SID) Submittal; G

Permits; G

Design Review Meeting Minutes

1.3 DESIGN SUBMITTALS

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

Items of work shall be submitted in complete packages as outlined in the following paragraphs. Partial design submissions of various portions of the project will not be allowed.

1.3.1 PRELIMINARY (35%) DESIGN SUBMITTAL

The Preliminary (35%) Design Submittal is a narrative with design analysis and drawings presenting the design and containing sufficient information to permit the reviewer to clearly understand the functional and technical approach the designer is following to complete the project.

As a minimum, the narrative shall discuss the civil, site engineering and architectural requirements; construction materials and finishes; structural and foundation system; communications systems; power and electrical systems; force protection; sustainable design and development features most favorable for this project; and plumbing and HVAC systems. Items or details which cannot adequately be described in narrative form should be graphically shown on fold-out drawings, sketches, tabulations, and/or photographs bound in a brochure or notebook. An estimate of time and phasing will also be included in the submittal. In addition, an index of the anticipated guide specifications to be utilized for the design shall be included. Design will be stopped for this review phase unless stated otherwise by specific instructions and the installation has approval authority for concept design(s) shown in this submittal.

1.3.2 INTERMEDIATE (65%) DESIGN SUBMITTAL

The Intermediate (65%) Design Submittal will represent design progress halfway from concept acceptance to the final design phase. The intent is to check progress and layouts per customer and reviewers comments. Design effort toward final design will stop at this submittal until receipt of comments. Prior to submitting the finished preliminary design, the AE shall ensure that the design has been thoroughly checked and coordinated between various design specialties. The submittal will include a tabulation recapitulating the total utility system loads - electrical, steam, gas, sanitary sewer, water, etc. - giving the point of connection into the existing utility systems. Any unusual utility system aspects of the project, especially those requiring resolution prior to final design, will be commented upon. The average annual energy use per square foot of net floor area shall be calculated and stated in BTU per square foot.

1.3.3 PRE-FINAL (95%) DESIGN SUBMITTAL

The Pre-Final (95%) Design Submittal includes copies of bid documents (Completed Drawings, Specifications, and supporting documentation) ready to construct with all design work complete. Prior to submission the AE shall make a thorough check of plans, specifications, and all other required data to eliminate errors, inconsistencies, and for coordination between

architectural, structural, mechanical, and other applicable phases of the work. Final reproducible specifications shall be completely proofed and corrected to eliminate typographical errors, misspelled words, etc. Copies of internal design quality control checklists shall be included with the submittal. After the Pre-Final submittal review is complete, the review comments will be furnished to the AE by the Government. Notice to proceed on final design will be by separate letter signed by the Contracting Officer upon the Contractor's resolution of any comments generated during the review of the Pre-Final Design Submittal.

1.3.4 FINAL (100%) DESIGN SUBMITTAL

The Final (100%) Design Submittal includes copies of Completed Drawings, Specifications, and supporting documentation ready to construct with all design work complete and all comments incorporated. Drawings and specifications shall be signed and sealed and marked as FINAL SUBMITTALS.

1.3.5 STRUCTURAL INTERIOR DESIGN (SID) SUBMITTAL

The Structural Interior Design includes selection, specification and installation of all the building related finishes, materials and colors. All SID materials, finishes and colors shall be reviewed by the Government for compliance with the RFP. All SID submittals will run concurrent with the Architectural design submittals.

1.3.5.1 SID PREDEFINITION CONFERENCE

The Contractor shall lead an on-site predefinition conference at attended by Government personnel. The purpose of the predefinition conference is to present and discuss the SID color scheme for the project. Actual exterior and interior materials, finishes and colors are to be provided for review and comment. The Contractor may provide colored exterior elevations/perspectives of the SID color scheme to assist in the discussion of the SID. At the end of the predefinition conference, the Government will decide the necessary adjustments needed to the SID and this information will be used by the Contractor to further develop the project.

1.3.6 PERMITS

Prior to start of construction, the Contractor is responsible for identifying and obtaining all necessary permits and licenses required by the design.

1.3.7 GOVERNMENT APPROVAL

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

1.3.8 INCOMPLETE SUBMITTALS

Provide complete submittals in accordance with “STAGES AND CONTENTS OF DESIGN SUBMITTALS” below for each design submittal. Incomplete submittals will be rejected and will not be reviewed by the Government. Government review period shall be provided in accordance with “DESIGN SCHEDULE” below and will begin only upon the receipt of a complete design submittal package.

1.3.9 DESIGN ANALYSIS

1.3.9.1 MEDIA AND FORMAT

The design analysis shall be presented on 8-1/2" x 11" paper except that larger sheets may be used when required for graphs or other special calculation forms. All sheets shall be reproducible form. The material may be typewritten, hand lettered, handwritten, or a combination thereof, provided it is legible. Side margins shall be 1-inch minimum to permit side binding and head-to-head printing. Bottom margins shall be 1 1/4 inches, with page numbers centered 1-inch from the bottom.

1.3.9.2 ORGANIZATION

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

1.3.9.3 DESIGN CALCULATIONS

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

1.3.10 DRAWINGS

All drawings shall be Computer-Aided Design and Drafting (CADD). Drawings shall be provided in Autdesk ACAD (.dwg) format and Adobe Acrobat (.pdf)

format. Drawings shall be provided in release year, as directed, to be compatible with the Government's current version. The Contractor shall prepare the drawings in such a manner that the Government could construct the facility without any additional assistance from the Contractor. Drawings shall be complete. Unnecessary work such as duplicate views, notes and lettering, and repetition of details shall not be permitted. Standard details not applicable to the project shall not be shown. Details of standard products or items which are adequately covered by specifications shall not be included on the drawings. Drawings shall be detailed such that conformance with the RFP can be checked and to the extent that shop drawings can be checked. Shop drawings shall not be used as design drawings. The Contractor shall use standard Joint Base Charleston title blocks and borders on all drawings at all submittal stages. Standard drawing sheet formats and title blocks, and file and drawing CADD file names will be furnished to the Contractor by the Government. The Contractor shall incorporate the drawing, file, and contract numbers on individual drawing sheets at the earliest submittal.

All half size drawings shall be 11" x 17" blue/black lines or plots.

Building drawings shall consist of 1/8" scale minimum floor plans. Elevations shall be drawn to a 1/8" scale minimum. The scale of other visual information shall be as required. Building wall sections shall be drawn at a minimum of 1/4" scale. The site and exterior utility drawings shall use a minimum scale of 1" = 30' unless otherwise indicated. Minimum text size on half size drawings is 1/8".

1.3.11 SPECIFICATIONS

The Contractor shall submit marked-up specifications at the 65% submittal, and final specifications at the 95% and 100% submittals. All marked-out or redlined text shall be deleted and all inserted text shall be typed at the 95% and 100% submittals. The specifications shall be detailed enough such that another product meeting the specification could be substituted and it would not adversely impact the project.

1.3.11.1 TECHNICAL SPECIFICATIONS

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

These UFGS Specifications are available on the Internet at:

http://www.wbdg.org/ccb/

Operations and maintenance (O&M) portions of UFGS shall be edited by the respective Designers of Record in the design phase. O&M requirements in the UFGS shall not be edited out. Submittals, operating procedures, schematics, as-built drawings, manuals, software, and computer hardware required in the UFGS for system operation incorporated in the design phase are critical to the operation of the new facility on completion.

1.3.12 SUBMITTAL REGISTER

The Contractor shall develop submittal requirements required during

construction as part of the design phase of the contract. This shall be done by the Contractor's Designer of Record by producing a Contractor Submittal Register at each submittal during design. A submittal register shall be prepared for each section of the specifications for the submittal requirements of that section. The Contractor's Designer of Record shall be responsible for listing all required submittals necessary to insure the project requirements are complied with. The Register shall identify submittal items such as shop drawings, manufacturer's literature, certificates of compliance, material samples, guarantees, test results, etc. that the Contractor shall submit for review and/or approval action during the life of the construction contract. See specifications Section 01 33 00 SUBMITTAL PROCEDURES for submittal and submittal register definitions and procedures.

1.3.13 DATING MATERIALS

All design materials submitted shall be dated in an appropriate location. Whenever items are corrected or later resubmitted, they will show a revised date in order to differentiate later material from the original submittal.

1.3.14 QUANTITY OF SUBMITTAL ITEMS

The documents which the Contractor shall submit to the Government for each submittal are listed and generally described in the "SUBMITTAL DISTRIBUTION" chart below.

1.3.14.1 SUBMITTAL DISTRIBUTION

The contractor shall provide the following submittal items to reviewers in the quantities indicated. Submittal shall be submitted using JB CHS Transmittal Form 4025.

Documents to 628th CES	**35%**	**65%**	**95%**	**100% Final**
Basis of Design/Design Narrative	E	E	E	E, HC (1)
Engineering Reports	E	E	E	E, HC (1)
Design Calculations	E	E	E	E, HC (1)
ACM/LBP Survey/Report	E	0	0	E
Drawings (Size 11 x 17 @ ½ size)	E, HC (2)	E, HC (2)	E, HC (2)	E, HC (2)
Drawings- full size	E	E	E	E, HC (1)
Specifications – Covers & Binders	E	E	E	E, HC (1)
Specifications – Pages (8-1/2" x 11")	E	E	E	E, HC (1)
Contractor Annotated Government Comments	E	E	E	E
Ozone Depleting Substances (ODS) Memo	E	0	0	E
Submittal Register 4288R	E	E	E	E
All submittal documents to 628th Contracting Squadron	E	E	E	E
Entire Package on CD ROM	HC (1)	HC (1)	HC (1)	HC (1)

[2] "E" means that the contractor will be given a request via DOD Safe to transmit submittal document electronically to the PM and Contract Specialist. "HC" means the contractor provides a hard copy of the submittal document in quantities indicated.

1.4 DESIGN SCHEDULE

Within 3 calendar days after Notice to Proceed, the Contractor shall submit, for approval, a complete design schedule with all submittals and review times indicated by specific calendar dates. The schedule shall be updated monthly with copies furnished to the Contracting Officer. No progress payments will be made without an approved schedule. Any additional changes which the Contractor may wish to make to number or composition of design submittals shall be made 21 calendar days prior to the expected submittal date. The Contractor shall allow twenty-one (21) calendar days for the Government review period if submittal dates are met. If a scheduled design submittal date is not met without notifying the Contracting officer in writing one (1) week in advance of the scheduled submittal date, 21 calendar days shall be allowed for the Government review period. See Paragraph: "SUBMITTAL REVIEWS".

1.5. MAILING OF SUBMITTALS

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

1.5.1 ADDRESSES FOR SUBMITTAL DISTRIBUTION

Joint Base Charleston - Engineering:

a. For Projects at Joint Base Charleston (Weapons Station)

William T Dorsey
Joint Base Charleston – Weapons Station
3110 W. Old Tom Road, Building 909,
Goose Creek, SC 29445

Joint Base Charleston - Contracting:

628 CONS/PKB
101 E. Hill Boulevard
Charleston AFB SC 29404

1.6 SUBMITTAL REVIEWS

For each design review submittal, the Contractor will be furnished comments from Government personnel involved in the review process. The review will be for conformance with the technical requirements of the solicitation. The Government will take twenty-one (21) days to review and comment on each design submittal. The last two weeks of the calendar year shall not be considered when scheduling review times or meeting times. If the Contractor disagrees technically with any comment or comments and does not intend to comply with the comment, he shall clearly outline, with ample justification, the reasons for noncompliance within five (5) days after receipt of these comments in order that the comment can be resolved. The disposition of all comments shall be furnished in writing within 5 working days after the review meeting. The Contractor is cautioned in that if he believes the action required by any comment exceeds the requirements of this contract that he should take no action and notify the Contracting Officer’s Representative (COR) in writing immediately.

Review conferences will be held for each design submittal on Joint base Charleston. The Contractor shall bring the personnel that developed the design submittal to the review conference. These conferences will take place the week after the twenty-one (21) day review period. The Contractor shall be responsible for writing and distributing Minutes on each submittal review meeting within seven (7) calendar days of the meeting. Time for design submittal reviews and conferences will be included in the Contractor's schedule. Distribution shall be to each office listed under paragraph 1.5.1, ADDRESSES FOR SUBMITTAL DISTRIBUTION

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

If the Government requests a design change after the approved Final Design Submittal drawings and specifications have been submitted, then this shall be considered a change and proper payment will be made by the Government.

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

1.7 DESIGNER OF RECORD

The Contractor shall identify and have on his staff a Designer of Record to develop submittal requirements during design and be responsible for each submittal identified in the Contractor Submittal Register. A Designer of Record may be responsible for more than one submittal. All areas of work shall be accounted for by a listed Designer of Record. Designer of Record shall approve all submittals they are responsible for prior to submittal to the Government.

1.8 Order of Precedence

The contract consists of the solicitation, the approved proposal, and the final design. In the event of conflict or inconsistency between any of the below described portions of the conformed contract, precedence must 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).

c. Within Part 3- Project Program Requirements Section 5.0 ROOM REQUIREMENTS provides detailed requirements on a room by room basis that further defines requirements that are in addition to the ENGINEERING SYSTEMS REQUIREMENTS SECTION.

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

--END OF SECTION --