

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01 33 16.00 29

DESIGN AFTER AWARD

PART 1 GENERAL

1.1 SUMMARY

- 1.1.1 Fast Tracking
- 1.1.2 INTEGRATED DESIGN
- 1.1.3 DESIGNER OF RECORD
- 1.2 REFERENCES
- 1.3 SUBMITTALS
- 1.4 SUBMITTALS FOR DESIGN QUALITY CONTROL PLAN

PART 2 PRODUCTS

PART 3 EXECUTION

3.1 PRE-WORK ACTIVITIES & CONFERENCES

- 3.1.1 Design Quality Control Plan
- 3.1.2 Post Award Conference
- 3.1.3 Initial Design Conference
- 3.1.4 Design Schedule
- 3.1.5 Pre-Construction Conference
- 3.2 STAGES OF DESIGN SUBMITTALS AND OVER THE SHOULDER PROGRESS REVIEWS
  - 3.2.1 Interim Design Submittals
  - 3.2.2 Over-the-Shoulder Progress Reviews
  - 3.2.3 Final Design Submissions
  - 3.2.4 Design Complete Submittals
  - 3.2.5 Holiday Periods for Government Review or Actions
  - 3.2.6 Late Submittals and Reviews
- 3.3 DESIGN CONFIGURATION MANAGEMENT
  - 3.3.1 Procedures
  - 3.3.2 Tracking Design Review Comments
  - 3.3.3 Design and Code Checklists
- 3.4 INTERIM DESIGN REVIEWS AND CONFERENCES
  - 3.4.1 General
  - 3.4.2 Procedures
  - 3.4.3 Conference Documentation
- 3.5 INTERIM DESIGN REQUIREMENTS
  - 3.5.1 Drawings
  - 3.5.2 Design Analyses
  - 3.5.3 Engineering Considerations and Instructions Report (ECI)
  - 3.5.4 Specifications
  - 3.5.5 Interim Building Design Contents
- 3.6 FINAL DESIGN REVIEWS AND CONFERENCES
- 3.7 FINAL DESIGN REQUIREMENTS
  - 3.7.1 Drawings
  - 3.7.2 Design Analyses

- 3.7.3 Specifications
- 3.7.4 Submittal Register
- 3.7.5 Preparation of DD Form 1354 (Transfer of Real Property)
- 3.7.6 Acceptance and Release for Construction
- 3.8 DESIGN COMPLETE CONSTRUCTION DOCUMENT REQUIREMENTS
- 3.9 Design Document Control
- 3.10 SUBMITTAL DISTRIBUTION, MEDIA AND QUANTITIES
  - 3.10.1 Submittal Distribution and Quantities
  - 3.10.2 Electronic Design Submittals
  - 3.10.3 Mailing of Design Submittals
- 3.11 AS-BUILT DOCUMENTS

-- End of Section Table of Contents --

SECTION 01 33 16.00 29

DESIGN AFTER AWARD

PART 1 GENERAL

1.1 SUMMARY

The information contained in this section applies to the design required after award. After award, the Contractor will develop the accepted proposal into the completed design, as described herein.

1.1.1 Fast Tracking

The Contractor may elect to fast track the design and construction that is, proceed with construction of parts of the sitework and facilities prior to completion of the overall design. To facilitate fast tracking, the Contractor may elect to divide the design into no more than two (2) design packages per major facility type. Designate how it will package the design, consistent with its overall plan for permitting (where applicable) and construction of the project. See Sections 01 33 00 SUBMITTAL PROCEDURES and 01 32 01.00 10 PROJECT SCHEDULE for requirements for identifying and scheduling the design packaging plan in the submittal register and project schedule. See also Sections 01 10 00 STATEMENT OF WORK and 01 57 20.01 29 ENVIRONMENTAL PROTECTION for any specified permit requirements. If early procurement of long-lead item construction materials or installed equipment, prior to completion of the associated design package, is necessary to facilitate the project schedule, also identify those long-lead items and how it will assure design integrity of the associated design package to meet the contract requirements (The Contract consists of the Solicitation requirements and the accepted proposal). Once the Government is satisfied that the long-lead items meet the contract requirements, the Contracting Officer will allow the Contractor to procure the items at its own risk.

If the contractor elects to divide the design into design packages, the divided design package content shall remain consistent from the Interim submittal through the Design Complete submittal. It is not acceptable to reconfigure design packages after initial submittal to the Government for review. Divided design packages shall not be combined with each other except for the Consolidated Design Complete package to be submitted 14 days following the Final Design Review Conference for the last design package.

The Contractor may proceed with the construction work included in a separate design package after the Government has reviewed the final (100%) design submission for that package, review comments have been addressed and resolved to the Government's satisfaction and the Contracting Officer (or the Administrative Contracting Officer) has agreed that the design package may be released for construction. The Government and the Contractor shall use the DrChecks Design Review and Checking System to initiate, respond to, resolve and track Government design compliance review comments.

1.1.2 INTEGRATED DESIGN

To the maximum extent permitted for this project, use a collaborative,

integrated design process for all stages of project delivery with comprehensive performance goals for siting, energy, water, materials and indoor environmental quality and ensures incorporation of these goals. Consider all stages of the building lifecycle, including deconstruction.

### 1.1.3 DESIGNER OF RECORD

Identify, for approval, the Designer of Record ("DOR") that will be responsible for each area of design. One DOR may be responsible for more than one area. Listed, Professional Registered, DOR(s) shall account for all areas of design disciplines. The DOR's shall stamp, sign, and date each design drawing and other design deliverables under their responsible discipline at the Design Complete stage (see contract clause Registration of Designers). If the deliverables are not ready for release for construction, identify them as "preliminary" or "not for release for construction" or by using some other appropriate designation. The DOR(s) shall also be responsible for maintaining the integrity of the design and for compliance with the contract requirements through construction and documentation of the as-built condition by coordination, review and approval of extensions of design, material, equipment and other construction submittals, review and approval or disapproval of requested deviations to the accepted design or to the contract, coordination with the Government of the above activities, and by performing other typical professional designer responsibilities.

The Designers of Record shall be licensed in the State of Alaska or shall have at least 5 years of design experience in Climate Zone 8 as defined by ANSI/ASHRAE Standard 169 climate zone map for the United States. The Geotechnical Engineer of record may be a licensed Civil Engineer with a minimum of 5 years design experience in geotechnical engineering in the previously identified climate zone.

Designers of Record shall coordinate and respond to comments directly in Dr. Checks and shall be present at review conferences.

### 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.

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI/ASHRAE Standard 169 climate zone map for the United States

### 1.3 SUBMITTALS

Each submittal includes an associated approval level designation as defined in the following table:

Approval Level Designation	Definition
G	Government approval
no designation	for information only
D	Designer of Record approval

Approval Level Designation	Definition
C	Government Conformance Review of Design
R	Designer of Record Approval and Government Conformance Review
A	Designer of Record Approval and Government Approval

When used, a designation following the approval level designation identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Design Schedule;

Design Quality Control Plan; G

Submittal Register; G

SD-05 Design Data

Interim Design Submittals; R

Final Design Submittals; R

Design Complete Submittals; C

SD-11 Closeout Submittals

DD Form 1354; A

1.4 SUBMITTALS FOR DESIGN QUALITY CONTROL PLAN

Develop and utilize appropriate discipline-specific checklists during the design and quality control of each submittal. Submit these completed checklists with each design submittal, as applicable, as part of the project documentation. DQC plans will be submitted to the Alaska Engineering District Design Branch for review.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

3.1 PRE-WORK ACTIVITIES & CONFERENCES

3.1.1 Design Quality Control Plan

Submit for Government acceptance, a Design Quality Control Plan in accordance with Section 01 45 04.00 29 CONTRACTOR QUALITY CONTROL before design may proceed.

Government acceptance of the Contractor's plan is required prior to the start of design and construction. Acceptance is conditional and will be predicated on satisfactory performance during the design and construction. The Government reserves the right to require the Contractor to make changes in his CQC Plan and operations including removal of personnel, as necessary, to obtain the quality specified.

The Contractor shall ensure that all design documents submitted after award, including all drawings and calculations, are reviewed by a competent engineer/architect in each required discipline who is independent from and not associated with the design. The independent reviewer may or may not be a member of the organization having done the original design.

A copy of all review comments from the Independent Technical Reviewer, with Designer of Record's notations of action taken, shall be submitted with each design submittal.

### 3.1.2 Post Award Conference

The government will conduct a post award contract administration conference at the project site, as soon as possible after contract award. This will be coordinated with issuance of the contract notice to proceed (NTP). The Contractor and major sub-contractor representatives shall participate. Government representatives will include USACE project delivery team members, facility users, facility command representatives, and installation representatives. The Government will provide a meeting place, and meeting time to participants prior to the meeting.

The post award conference shall include determination and introduction of contact persons, their authorities, contract administration requirements, discussion of expected project progress processes, and coordination of subsequent meetings for quality control (see Section 01 45 04.00 29 CONTRACTOR QUALITY CONTROL), and the initial design conference (see below)

The government will introduce Government project delivery team members, facility users, facility command representatives, and installation representatives. The DB Contractor shall introduce designers, major subcontractors, and other needed staff. Expectations and duties of each person shall be defined for all participants. A meeting roster shall be developed and distributed by the government with complete contact information including name, office, project role, phone, mailing and physical address, and email address.

### 3.1.3 Initial Design Conference

The initial design conference may be scheduled and conducted in conjunction with the post award conference. Any design work conducted after award and prior to this conference should be limited to site and is discouraged for other items. All Designers of Record shall participate in the conference. The Purpose of the meeting is to introduce everyone, present the final accepted design to stakeholders and to make sure any needs of the contractor has are assigned and due dates established as well as who will get the information. The DB Contractor shall conduct the initial design conference.

### 3.1.4 Design Schedule

One week prior to the post award conference, provide the design schedule for Government review and concurrence. Design schedule shall be complete

and include all document submittal dates, review periods and review conferences. Additionally, present the design schedule at the post award conference.

Changes to the Government concurred design schedule requires a minimum of two weeks notice prior to the document submittal date. Design Schedule shall be in a simple table format to include design submittal date, review period start/end date, review conference date. Schedule shall clearly identify the number of packages (i.e. site/utilities, etc.) being proposed withit assoiated dates and shall clearly identify each stage (i.e. interim, final, design complete). or example:

\* Allow a minimum of 3 days between end of review period to review conference for DrChecks comments to be evaluated.

### 3.1.5 Pre-Construction Conference

Before starting construction activities, the Contractor and Government will jointly conduct a pre- construction administrative conference to discuss any outstanding requirements and to review local installation requirements for start of construction. It is possible there will be multiple Pre-Construction Conferences based on the content of the design packages selected by the Contractor. The Government will provide minutes of this meeting to all participants.

### 3.2 STAGES OF DESIGN SUBMITTALS AND OVER THE SHOULDER PROGRESS REVIEWS

The stages of design submittals described below define Government expectations with respect to process and content. The Contractor shall determine how to best plan and execute the design and review process for this project, within the parameters listed below. As a minimum, the Government expects to see at least one interim design submittal, at least one final design submittal before construction of a design package may proceed and at least one Design Complete submittal that documents the accepted design. The Contractor may sub-divide the design into separate packages for each stage of design and may proceed with construction of a package after the Government accepts the final design for that package. See discussion on waivers to submission of one or more intermediate design packages where the parties partner during the design process. Design Submittal content shall include the items identified in Appendix G, Design Submittal Directory and Subdirectory File Arrangement.

Design submittals shall be submitted under a 4025 and must follow the requirements in Section 01 33 00.

Each design submittal shall clearly identify upfront proposed deviations, if any, from the RFP and/or the final accepted proposal. For proposed deviations, the submittal shall identify the paragraph reference in the RFP and/or Final Accepted Proposal and shall include the reason for the proposed deviation. Any deviation not clearly identified upfront with the 4025 and that are inadvertently accepted by the Government are subject to rejection.

#### 3.2.1 Interim Design Submittals

The Contractor may submit either a single interim design for review, representing a complete package with all design disciplines, or split the

interim design into smaller, individual design packages as it deems necessary for fast-track construction purposes. As required in Section 01 32 01.00 10 PROJECT SCHEDULE, the Contractor shall schedule its design and construction packaging plan to meet the contract completion period. This submission is the Government's primary opportunity to review the design for conformance to the solicitation and to the accepted contract proposal and to the Building Codes at a point where required revisions may be still made, while minimizing lost design effort to keep the design on track with the contract requirements. The requirements for the interim design review submittals and review conferences are described hereinafter. This is not necessarily a hold point for the design process; the Contractor may designate the interim design submittal(s) as a snapshot and proceed with design development at its own risk. See below for a waiver, where the parties establish an effective over-the-shoulder progress review procedure through the partnering process that would eliminate the need for or expedite a formal intermediate design review on one or more individual design packages.

### 3.2.2 Over-the-Shoulder Progress Reviews

To facilitate a streamlined design-build process, the Government and the Contractor may agree to one-on-one reviewer or small group reviews, electronically, on-line (if available within the Contractor's standard design practices) or at the Contractor's design offices or other agreed location, when practicable to the parties. The Government and Contractor will coordinate such reviews to minimize or eliminate disruptions to the design process. Any data required for these reviews shall normally be provided in electronic format, rather than in hard copy. If the Government and Contractor establish and implement an effective, mutually agreeable partnering procedure for regular (e.g., weekly) over-the-shoulder review procedures that allow the Government reviewers the opportunity to keep fully informed of the progress, contents, design intent, design documentation, etc. of the design package, the Government will agree to waive or to expedite the formal intermediate design review period for that package. The Contractor shall still be required to submit the required intermediate design documentation, however the parties may agree to how that material will be provided, in lieu of a formal consolidated submission of the package. It should be noted that Government funding is extremely limited for non-local travel by design reviewers, so the maximum use of virtual teaming methods must be used. Some possible examples include electronic file sharing, interactive software with on-line or telephonic conferencing, televideo conferencing, etc. The Government must still perform its Code and Contract conformance reviews, so the Contractor is encouraged to partner with the reviewers to find ways to facilitate this process and to facilitate meeting or bettering the design-build schedule. The Contractor shall maintain a fully functional configuration management system as described herein to track design revisions, regardless of whether or not there is a need for a formal intermediate design review. The formal intermediate review procedures shall form the contractual basis for the official schedule, in the event that the partnering process determines that the formal intermediate review process to be best suited for efficient project execution. However, the Government pledges to support and promote the partnering process to work with the Contractor to find ways to better the design schedule.

### 3.2.3 Final Design Submissions

This submittal is required for each design package prior to Government acceptance of that design package for construction. The requirements for



the final design submittal review conferences and the Government's acceptance for start of construction are described herein after.

#### 3.2.4 Design Complete Submittals

After the final design submission and review conference for a design package, revise the design package to incorporate the comments generated and resolved in the final review conferences, perform and document a back-check review and submit the final, design complete documents, which shall represent released for construction documents. The requirements for the design complete submittals are described hereinafter.

#### 3.2.5 Holiday Periods for Government Review or Actions

Do not schedule meetings, Government reviews or responses during the last two weeks of December or other designated Government Holidays (including Friday after Thanksgiving). Exclude such dates and periods from any durations specified herein for Government actions.

#### 3.2.6 Late Submittals and Reviews

If the Contractor cannot meet its scheduled submittal date for a design package, it must revise the proposed submittal date and notify the government in writing, at least one (1) week prior to the submittal, in order to accommodate the Government reviewers' other scheduled activities. If a design submittal is over one (1) day late in accordance with the latest revised design schedule, or if notification of a proposed design schedule change is less than seven (7) days from the anticipated design submission receipt date, the Government review period may be extended up to seven (7) days due to reviewers' schedule conflicts. If the Government is late in meeting its review commitment and the delay increases the Contractor's cost or delays completion of the project, the Suspension of Work and Defaults clauses provide the respective remedy or relief for the delay.

### 3.3 DESIGN CONFIGURATION MANAGEMENT

#### 3.3.1 Procedures

Develop and maintain effective, acceptable design configuration management (DCM) procedures to control and track all revisions to the design documents after the Interim Design Submission through submission of the As-Built documents. During the design process, this will facilitate and help streamline the design and review schedule. After the final design is accepted, this process provides control of and documents revisions to the accepted design (See Special Contract Requirement: Deviating From the Accepted Design). The system shall include appropriate authorities and concurrences to authorize revisions, including documentation as to why the revision must be made. Include the DCM procedures in the Design Quality Control Plan. The DCM data shall be available to the Government reviewers at all times. The Contractor may use its own internal system with interactive Government concurrences, where necessary or may use the Government's "DrChecks Design Review and Checking System" (see below and Attachment C).

#### 3.3.2 Tracking Design Review Comments

Although the Contractor may use its own internal system for overall design configuration management, the Government and the Contractor shall use the

DrChecks Design Review and Checking System to initiate, respond to, resolve and track Government design compliance review comments. This system may be useful for other data which needs to be interactive or otherwise available for shared use and retrieval. See Attachment C for details on how to establish an account and set-up the DrChecks system for use on the project.

### 3.3.3 Design and Code Checklists

Develop and complete various discipline-specific checklists to be used during the design and quality control of each submittal. Submit these completed checklists with each design submittal, as applicable, as part of the project documentation. See Section 01 45 04.00 29 Contractor Quality Control, Attachment D for a Sample Fire Protection and Life Safety Code review checklist.

## 3.4 INTERIM DESIGN REVIEWS AND CONFERENCES

### 3.4.1 General

At least one interim design submittal, review and review conference is required for each design package (except that, per paragraph 3.2.1, the Contractor may skip the interim design submission and proceed directly to final design on the sitework and utilities package). The DB Contractor may include additional interim design conferences or over-the-shoulder reviews, as needed, to assure continued government concurrence with the design work. Include the interim submittal review periods and conferences in the project schedule and indicate what part of the design work is at what percentage of completion. The required interim design conferences shall be held when interim design requirements are reached as described below. See also Paragraph: Over-the-Shoulder Progress Reviews for a waiver to the formal interim design review.

### 3.4.2 Procedures

After receipt of an Interim Design submission, allow the Government fourteen (14) calendar days after receipt of the submission to review and comment on the interim design submittal. The calendar days allocated for Government review will commence the day following the receipt date of the submittal documents at the last office required to receive the submittals. For smaller design packages, especially those that involve only one or a few separate design disciplines, the parties may agree on a shorter review period or alternative review methods (e.g., over-the-shoulder or electronic file sharing), through the partnering process. For each interim design review submittal, the COR will furnish, to the Contractor, a single consolidated, validated listing of all comments from the various design sections and from other concerned agencies involved in the review process using the DrChecks Design Review and Checking System. The review will be for conformance with the technical requirements of the solicitation and the Contractor's RFP proposal. If the Contractor disagrees technically with any comment or comments and does not intend to comply with the comment, he/she must clearly outline, with ample justification, the reasons for noncompliance within two (2) days after receipt of these comments in order that the comment can be resolved. Furnish disposition of all comments, in writing, through DrChecks.

The Contractor is cautioned that if it believes the action required by any comment exceeds the requirements of this contract, that it should take no action and notify the COR in writing immediately. The Interim Review conference will be held for each design submittal at the installation.

Bring the personnel that developed the design submittal to the review conference. The conference will take place the week after the receipt of the comments by the Contractor. For smaller fast-track packages that involve only a few reviewers, the parties may agree to alternative conferencing methods, such as teleconferencing, or televideo, where available, as determined through Partnering.

### 3.4.3 Conference Documentation

In order to facilitate and accelerate the Government code and contract conformance reviews, identify, track resolution of and maintain all comments and action items generated during the design process and make this available to the designers and reviewers prior to the Interim and subsequent design reviews.

The DB Contractor shall prepare meeting minutes and enter final resolution of all comments into DrChecks. The contractor shall provide meeting minutes within 2 days of meeting or conference. Copies of comments, annotated with comment action agreed on, will be made available to all parties before the conference adjourns. Unresolved problems will be resolved by immediate follow-on action at the end of conferences. Incorporate valid comments. The Government reserves the right to reject design document submittals if comments are significant. Participants shall determine if any comments are critical enough to require further design development prior to government concurrence. Participants shall also determine how to proceed in order to obtain government concurrence with the design work presented.

## 3.5 INTERIM DESIGN REQUIREMENTS

Interim design deliverables shall include drawings, specifications, and design analysis for the part of design that the Contractor considers ready for review.

### 3.5.1 Drawings

Include comments from any previous design conferences incorporated into the documents to provide an interim design for the "part" submitted.

### 3.5.2 Design Analyses

The designers of record shall prepare and present design analyses with calculations necessary to substantiate and support all design documents submitted. Address design substantiation required by the applicable codes and references and pay particular attention to the following listed items:

For parts including structural work, include structural calculations. Identify all loads to be used for design. Describe the method of providing lateral stability for the structural system to meet seismic and wind load requirements. Include sufficient calculations to verify the adequacy of the method. Provide calculations for all principal roof, floor, and foundation members and bracing and secondary members. Provide complete seismic analyses for all building structural, mechanical, electrical, architectural, and building features as dictated by the seismic zone for which the facility is being constructed. Computer generated calculations must identify the program name, source, and version. Provide input data, including loads, loading diagrams, node diagrams, and adequate documentation to illustrate the design. The schematic models used for input

must show, as a minimum, nodes/joints, element/members, materials/properties, and all loadings, induced settlements/deflections, etc., and a list of load combinations. Include an output listing for maximum/minimum stresses/forces and deflections for each element and the reactions for each loading case and combination. Fully coordinate and integrate the overall structural design between two different or interfacing construction types, such as modular and stick-built or multistory, stacked modular construction. Provide substantiation of structural, consolidation/settlement analysis, etc., as applicable, through the interfaces.

(a) List all criteria codes, documents and design conditions used.

(b) List any required permits and registrations for construction of items of special mechanical systems and equipment.

### 3.5.3 Engineering Considerations and Instructions Report (ECI)

The Designers of Records shall prepare an Engineering Considerations and Instructions for Field Personnel Report. The purpose of the ECI is to inform field personnel of critical quality control issues that must be addressed during construction. The ECI should also highlight important elements of the design and provide a better understanding of the project's intended function. The report shall be in accordance with Appendix G of ER 1110-2-1150 and shall include content from each Designer of Record.

### 3.5.4 Specifications

Specifications shall utilize the Unified Facility Guide Specifications (UFGS using MASTERFORMAT 2004 numbering system). The UFGS are available through the "Whole Building Design Guide" website, using a websearch engine. Manufacturers' product specifications, utilizing CSI's Manu-Spec, three part format may also be used in conjunction with the UFGS. The designers of record shall edit and expand the appropriate Specifications to insure that all project design requirements, current code requirements, and regulatory requirements are met. Specifications shall clearly identify, where appropriate, specific products chosen to meet the contract requirements (i.e., manufacturers' brand names and model numbers or similar product information). Note that the UFGS are NOT written for Design-Build and must be edited appropriately. For instance, they assume that the Government will approve most submittals, whereas in Design-Build, the Designer of Record has that action, unless this Solicitation requires Government approval for specific submittals. The Designer of Record should also note that some UFGS sections might either prescribe requirements exceeding the Government's own design standards in applicable references or contain requirements that should be selected where appropriately required by the applicable references. At any rate, where the UFGS are consistent with other major, well known master commercial guide specifications, then generally retain such requirements, as good practices.

Only manufacturers' product specification or product data related to long-lead items may be submitted during the design after award phase with design packages; all other product data shall be submitted during the construction phase. Pre-construction submittals and plans may not be submitted as part of a design package. Pre-construction submittals and plans shall be submitted individually on an ENG Form 4025. Manufacturers' product specifications and product data provided shall be tabbed and organized in accordance with the corresponding specification section. Provide a list or table of contents

clearly identifying all manufacturers' product specifications and product data included in each design package.

Submittal register shall be provided with the Interim design package.

### 3.5.5 Interim Building Design Contents

The following list represents what the Government considers should be included in the overall completed design for a facility or project. It is not intended to limit the contractor from providing different or additional information as needed to support the design presented, including the require design analyses discussed above. As the Contractor develops individual design packages and submits them for Interim review, include as much of the applicable information for an individual design package as is developed at the Interim design level for review purposes. These pieces shall be developed as the design progresses toward the design complete stage.

#### Architectural

- (a) Design Narrative

#### Structural Systems. Include:

- (a) Drawings showing principal members for roof framing plans as applicable

### 3.6 FINAL DESIGN REVIEWS AND CONFERENCES

A final design review and review conference will be held upon completion of final design at the project installation, or - where equipment is available - by video teleconference or a combination thereof, for any design package to receive Government acceptance to allow release of the design package for construction. For smaller separate design packages, the parties may agree on alternative reviews and conferences (e.g., conference calls and electronic file sharing, etc.) through the Partnering process. Include the final design conference in the project schedule and shall indicate what part of the design work is at 100% completion. The final design conference will be held after the Government has had fourteen (14) calendar days after receipt of the submission to review the final design package and supporting data. For smaller packages, especially those involving only one or a few design disciplines the parties may agree on a shorter period.

### 3.7 FINAL DESIGN REQUIREMENTS

Final design deliverables for a design package shall consist of 100% complete drawings, specifications, submittal register and design analyses for Government review and acceptance. The 100% design submission shall consist of drawings, specifications, updated design analyses and any permits required by the contract for each package submitted. In order to expedite the final design review, prior to the conference, ensure that the design configuration management data and all review comment resolutions are up-to-date. Include the 100% SID and 100% FF&E binders for government approval. The Contractor shall have performed independent technical reviews (ITR's) and back-checks of previous comment resolutions, as required by Section 01 45 04.00 29 CONTRACTOR QUALITY CONTROL, including providing documentation thereof. Use DrChecks or other acceptable comment tracking system during the ITR and submit the results with each final design package

### 3.7.1 Drawings

Submit drawings complete with all contract requirements incorporated into the documents to provide a 100% design for each package submitted.

#### a. CADD Drawings

Prepare all drawings with the Computer-Aided Design and Drafting (CADD)/Computer-Aided Design (CAD) system, organized and easily referenced electronically, presenting complete construction information.

Drawings shall be complete. The Contractor is encouraged to utilize graphics, views, notes, and details which make the drawings easier to review or to construct but is also encouraged to keep such materials to those that are necessary.

Provide detail drawings that illustrate conformance with the contract.

The design documents shall be in compliance with the latest version of the A/E/C CAD Standard, available at <https://cadbim.usace.army.mil/CAD>. Use the approved Alaska District Corps of Engineers title blocks and borders on all drawings with the appropriate firm name included within the title block area.

CAD System. All CAD files shall be fully compatible with AutoCAD 2018 format. Save all design CAD files as AutoCAD 2018 format files.

#### b. Electronic Drawing Files

In addition to the native CAD design files, provide separate electronic drawing files in Portable Document Format (PDF) for each project drawing.

Each drawing file (both CAD and PDF) shall represent one complete drawing from the drawing set, to include the date, submittal phase, and border. Fonts that are not allowable by the A/E/C CAD Standard are not acceptable in delivered CAD files. All displayed graphic elements on all levels of the drawing files shall be part of the project drawing image. The drawing files shall not contain any graphic element that is not part of the drawing image.

c. Drawing Index. Provide an index of drawing sheets in CAD as part of the drawing set, and an electronic list in Microsoft Excel of all drawings on the CD. Include the electronic file name, the sheet reference number, the sheet number, and the sheet title, containing the data for each drawing.

d. Hard Copies. Plot submitted hard copy drawings directly from the "electronic drawing files" and copy for quantities and sizes indicated in the distribution list at the end of this specification

section. The Designers of Record shall stamp, sign and date original hard copy sheets as Released For Construction, and provide copies for distribution from this set.

### 3.7.2 Design Analyses

The designers of record shall update, finalize and present design analyses with calculations necessary to substantiate and support all design documents submitted.

The responsible DOR shall stamp, sign and date the design analysis. Identify the software used where, applicable (name, version, vendor). Generally, provide design analyses, individually, in an original (file copy) and one copy for the assigned government reviewer.

### 3.7.3 Specifications

Specifications shall be 100% complete and in final form.

### 3.7.4 Submittal Register

Prepare and update the Submittal Register and submit it with the 100% design specifications (see Specification Section 01 33 00, SUBMITTAL PROCEDURES) with each design package. Include the required submittals for each specification section in a design package in the submittal register.

### 3.7.5 Preparation of DD Form 1354 (Transfer of Real Property)

This form itemizes the types, quantities and costs of various equipment and systems that comprise the project, for the purpose of transferring the new construction project from the Corps Construction Division to the Installation's inventory of real property. The Government will furnish the DB Contractor's design manager a DD Form 1354 checklist to use to produce a draft Form 1354. The contractor shall complete this electronic DD 1354 and submit it to the Government. Submit the completed checklist and prepared draft Form DD 1354 with the 100% design in the Design Analysis. The Corps will use these documents to complete the final DD 1354 upon completion of construction. DD 1354 shall be prepared per the latest version of UFC 1-300-08, Criteria for Transfer and Acceptance of Military Real Property.

### 3.7.6 Acceptance and Release for Construction

At the conclusion of the Final Design Review (after resolutions to the comments have been agreed upon between DOR and Government reviewers), the Contracting Officer or the ACO will accept the Final Design Submission for the design package in writing and allow construction to start for that design package. The Government may withhold acceptance until all major corrections have been made or if the final design submission requires so many corrections, even though minor, that it isn't considered acceptably complete.

Government review and acceptance of design submittals is for contract conformance only and shall not relieve the Contractor from

responsibility to fully adhere to the requirements of the contract, including the Contractor's accepted contract proposal, or limit the Contractor's responsibility of design as prescribed under Special Contract Requirement: "Responsibility of the Contractor for Design" or limit the Government's rights under the terms of the contract. The Government reserves the right to rescind inadvertent acceptance of design submittals containing contract deviations not separately and expressly identified in the submittal for Government consideration and approval.

### 3.8 DESIGN COMPLETE CONSTRUCTION DOCUMENT REQUIREMENTS

After the Final Design Submission and Review Conference and after Government acceptance of the Final Design submission, revise the design documents for the design package to incorporate the comments generated and resolved in the final review conference, perform and document a back-check review and submit the final, design complete documents. Label the final design complete documents "FOR CONSTRUCTION" or use similar language. In addition to the final drawings and specifications, the following deliverables are required for distribution and field use. The deliverable includes all documentation and supporting design analysis in final form, as well as the final review comments, disposition and the back-check. As part of the quality assurance process, the Government may perform a back-check of the released for construction documentation. Promptly correct any errors or omissions found during the Government back-check. The Government may withhold retainage from progress payments for work or materials associated with a final design package until this submittal has been received and the Government determines that it is complete.

The Design Complete Construction Documents shall be submitted 30 days after the Final Design Review Conference. The purpose for these 30 days between the Final Design Review Conference and submission of the Design Complete Construction Documents is for the Contractor and their Designer of Records to resolve remaining open and pending DrChecks comments prior to submittal of the Design Complete Construction Documents.

If the Contractor elects to sub-divide the design into separate packages, Design Complete Construction Documents shall be submitted 30 days after each Final Design Review Conference associated with each separate package.

Consolidated Design Complete Documents incorporating all packages/disciplines shall be submitted 30 days following the last Final Design Review Conference for all the packages.

### 3.9 Design Document Control

Some projects require Contractor and its subcontractors to maintain control of documents related to the secure working area; coordinate with Contracting Officer Requirements.

### 3.10 SUBMITTAL DISTRIBUTION, MEDIA AND QUANTITIES

Full Size drawings are only required to be submitted at the Design Complete stage.

Provide printed label on each CD/DVD, indicating the contract number, unique project number, project title, location, submittal stage, contractor's name, and date.

Distribution of design documents will be as follows:



Commander, U.S. Army Engineer District, Alaska District:

U.S. Army Corps of Engineers - Alaska District  
 Attn: CEPOA-PM-M-A, Colby Thurston  
 2204 3rd Street  
 Elmendorf AFB, AK 99506-1518

FOR USPS

U.S. Army Corps of Engineers, Construction Area Office:  
 U.S. Army Corps of Engineers  
 Northern Area Office  
 Attn: Andrew Posma  
 Alaska Area Office - North  
 Attn: Andrew Posma  
 P.O. Box 35066  
 Fort Wainwright, AK 99703-0066

FOR FEDEX or UPS

U.S. Army Engineer District Alaska  
 Alaska Area Office-North  
 BLDG 4511 8th Street  
 Fort Wainwright AK, 99703-0066

3.10.1 Submittal Distribution and Quantities

General: The documents which the Contractor shall submit to the Government for each submittal are listed and generally described in preceding paragraphs in this Section. Provide copies of each design submittal and design substantiation as follows

Activity and Address	Drawing Size (Full Size) 22"x34" Full Sets/	Design Analyses & Specs Full Sets/	Drawing Size (Half Size) 11"x17" Full Sets/	Non-BIM Data CD-ROM or DVD as Necessary (PDF& .dwg)
Commander, U.S.Army Engineer District Alaska District	0	4	4	2
Installation	0	6	6	2

Activity and Address	Drawing Size (Full Size) 22"x34" Full Sets/	Design Analyses & Specs Full Sets/	Drawing Size (Half Size) 11"x17" Full Sets/	Non-BIM Data CD-ROM or DVD as Necessary (PDF&.dwg)
U.S.Army Corps of Engineers Construction Area Office	2	3	3	1

### 3.10.2 Electronic Design Submittals

Electronic design submittals will be acceptable as an alternative to the paper copies listed in the Table above, provided hardcopies of drawings are provided as indicated in table above and two (2) full sets, three (3) Half-size hard-copies of all design documents (including but not limited to DA, specs, product data, etc) and 1(one) DVD copy are provided to the Construction Area Office for record purposes at each submittal. Where the contract requires the Contractor to submit documents to permitting authorities, still provide those authorities paper copies (or in an alternate format where required by the authority)

Electronic submittals shall follow the provisions in Attachment G, DESIGN SUBMITTAL DIRECTORY AND SUBDIRECTORY FILE ARRANGEMENT.

### 3.10.3 Mailing of Design Submittals

Mail all design submittals to the Government during design and construction, using an overnight mailing service. The Government will furnish the Contractor addresses where each copy shall be mailed to after award of the contract (or individual task order if this is an indefinite delivery/indefinite quantity, task order contract). Assemble drawing sheets, specs, design analyses, etc. into individual sets; do not combine duplicate pages from individual sets so that the government has to assemble a set.

Each design submittal shall have a transmittal letter a list of any deviations from RFP or Final Accepted Proposal accompanying it indicating the date, design percentage, type of submittal, list of items submitted, transmittal number and point of contact with telephone number.

### 3.11 AS-BUILT DOCUMENTS

Provide as-built drawings and specifications in accordance with Section 01 78 00, CLOSEOUT SUBMITTALS.

