

APPENDIX E DESIGN DOCUMENTS

1. Design Analysis. A two-part written document in which the design team identifies all project requirements and clarifies how the proposed facility design satisfies those requirements. The first part, the Basis for Design, discusses applicable criteria, stated user needs, design, and construction considerations by discipline. The second part, Studies and Calculations, provides all appropriate supporting calculations. Any changes to the basis for design or supporting calculations shall be added to the design analysis and identified as being additions to the original document.
2. Drawings. The designer has the responsibility to show all information necessary to completely describe the project on the drawings. The final, original drawings submitted by the designer will be used for the reproduction of bidding and construction documents. The final, original drawings, generally, will also become the record as-built documents.
3. Specifications. Standardized guide specifications are issued by USACE for use in the technical provisions of construction contract specifications. They require tailoring to meet the requirements for a specific project. The tailored guide specifications are submitted by the designer, along with any required locally prepared technical specifications, and the special provisions (front-end) with the final design. Specifications will normally include descriptions of technical requirements for materials, products, or services, as well as criteria for determining whether these technical requirements are met.
4. Construction Cost Estimates. Cost estimates are made for the purpose of budgeting and programming, evaluating bids, and serving as guides in conducting negotiations and in establishing a schedule of payments. Cost estimates should be as accurate as possible, based on the latest design data and site information available, and reflect the current fair market value of the local area.
5. Submittal Register (ENG Form 4288). This form is included within the construction specifications. It lists, by technical specification section, all equipment and construction materials for which shop drawings, test reports, descriptive data, or other submittal information from the contractor will be required.
6. Engineering Considerations and Instructions to Field Personnel. This report is used to transmit special design concepts, assumptions, and instructions on how to construct unique design details to field personnel. The report also establishes a basis for communication and coordination between design and construction personnel.
7. Color Boards. The color board depicts all comprehensive interior design and structural exterior and interior design materials and finishes. The color board should coordinate samples with the finish, color, and graphics schedules of the facility contract documents. Material and finish should be labelled with specific color names. Pattern samples must be large enough to show the full pattern, color, and texture.

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8. Comprehensive Interior Desire (CID) Package (Military). The CID includes selecting and developing interior building finishings for an integrated visual and functional design theme which reflects the interior atmosphere desired by the user.

9. Environmental Documents. The designers provide an environmental permit matrix, completed applications, and any other required documents for all permits, licenses, and/or authorizations required for construction/operation of the facility.

10. DD Form 1354 Data Sheets (Military). The data sheets contain a summary of project information to be used in completing the official DD Form 1354 upon completion of construction and transfer of the facility to the owner agency. The designers should utilize the design analysis, cost estimate quantities, and costs in completing the majority of information on the data sheets.