

U.S. Department
of Transportation

United States
Coast Guard



Commanding Officer
U. S. Coast Guard Facilities Design
And Construction Center, Atlantic

5505 Robin Hood Rd., Suite K
Norfolk, Va. 23513
Staff Symbol: c
Phone: (757)852-3400
Fax:
Email:

11000
P&M072
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MEMORANDUM

From: Dale Walker, CAPT
CG FDCC LANT

To: Distribution

Subj: AC&I SHORE CONSTRUCTION PROCESS GUIDE

Ref: (a) (a) Shore Facilities Project Development Manual (SFPDM), COMDTINST M
11010.14

1. I am pleased to provide a revised version of our Acquisition Construction & Improvement (AC&I) Shore Construction Process Guide. This guide has been developed to provide planners, designers, and users in the field with an overview of the lengthy AC&I process.
2. The guide explains the project development process and provides timetables for project milestones from the planning through the construction completion stages. A general explanation of the AC&I budget process is also provided.
3. If you have any questions or comments about the guide, please contact CDR Stan Douglas (Director of Planning) at the number above. The guide is also available on the FDCCLANT website at <http://www.uscg.mil/mlclant/fdcclant> under Planning.

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Enclosures: (1) AC&I Shore Construction Process Guide

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THE AC&I SHORE CONSTRUCTION PROCESS



**Facilities Design and Construction Center (Atlantic)
5505 Robin Hood Road, Suite K
Norfolk, VA 23513-2400**

(757) 852-3400

FOREWARD

AC&I Shore Construction is a lengthy and complex process. To the non-civil engineer who has not been involved with the system in the past, it can be overwhelming and frustrating. Our hope is to reduce some of the confusion and anxiety by providing you this brief summary of the process.

The current procedures have developed through years of experiences (and mistakes). Everyone, including the Civil Engineering community, wishes the time required to plan, design and construct a project was shorter. However, some of the constraints are beyond the Coast Guard's control and the basic process will not change radically. The driving force in the scheduling of an AC&I project is the need to finalize the project's scope and budget nearly two years before the project's desired construction year, since this is when the Coast Guard must submit its budget request.

This document will attempt to give you an overview of the current procedures, and hopefully *demytify* the process. The procedures discussed here are those currently promulgated in the Shore Facilities Project Development Manual (COMDTINST M11010.14) and other directives. Because these procedures are revised periodically, and the typical AC&I project requires five or more years to complete, few if any projects will follow this process from start to finish exactly as stated here. Every project is unique and the process may differ slightly for each project. However, this outlines the basic framework for a typical project.

We at FDCC LANT, plus our partners at the CEUs, MLCLANT (s) and COMDT (G-SEC) are all here to see that your projects make their way through this rigorous process. If you have any questions or suggestions, please let us know. When a project is under development at FDCC LANT it is assigned to a Project Manager in either the Planning, Design or Construction Teams depending on the project phase. This Project Manager is responsible for answering your questions. If you need to know who the Project Manager is, or have any questions/comments on this document, please call the Director of Planning at (757) 852-3481.

We look forward to working with you on your project. Thanks.

CIVIL ENGINEERING RESPONSIBILITIES

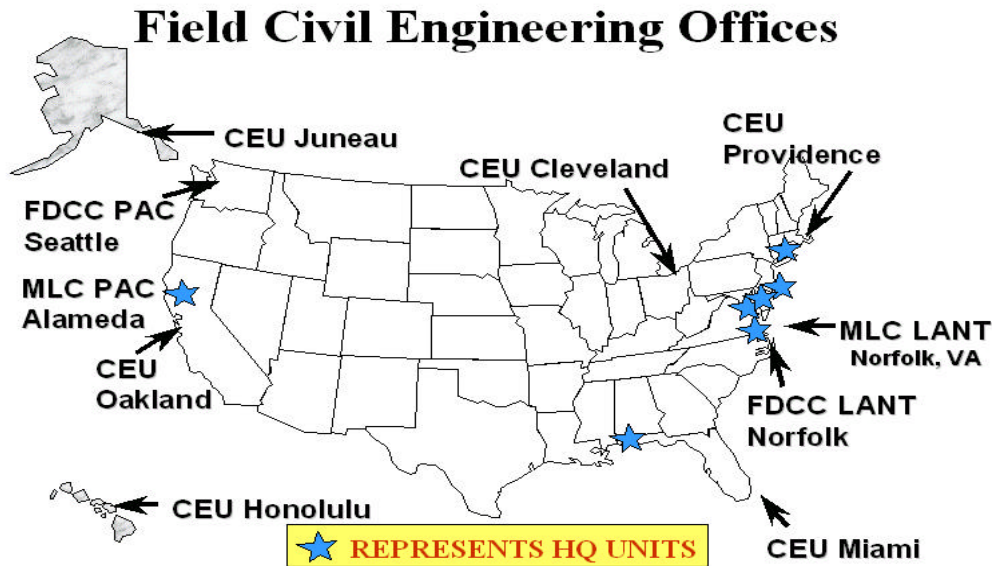


Figure 1

Civil engineering program support for Coast Guard units is coordinated by the Civil Engineering Division at Headquarters in Washington, D.C. (i.e., COMDT (G-SEC)). Responsibilities are delegated to the Civil Engineering Divisions of the Maintenance and Logistics Commands (MLC(s)). MLC PAC is located in Alameda, CA and MLC LANT is located in Norfolk, VA. Each MLC further delegates duties to one Facilities Design and Construction Center (FDCC) and several Civil Engineering Units (CEU) under its control.

The largest number of shore construction projects qualifies for either AFC43 or Environmental Compliance and restoration (EC&R) funding. These are typically rehab or repair, and environmental projects, respectively. The six CEUs are responsible for the design and construction of these projects for units within their areas of responsibility. Units request these types of projects by submitting Shore Station Maintenance Requests (SSMRs) to their CEU, and the projects are prioritized periodically at Planned Obligation Program (POP) Boards. This document does not cover these types of projects.

Acquisition, Construction and Improvement (AC&I) projects in shore construction are generally those in which more than \$500K in improvements will be made to a facility. The two FDCCs are responsible for these projects. They are located in Norfolk, VA and Seattle, WA and are responsible for the Atlantic and Pacific Areas, respectively. This document outlines how AC&I projects are handled within the Atlantic Area by FDCC LANT.

As always, there are exceptions to the rules and occasionally a minor AC&I project will be accomplished by a CEU to balance workloads.

OVERVIEW

AC&I projects fall into the following four categories: **Major AC&I** (greater than \$1500K), **Minor AC&I** (less than \$1500K but greater than \$500K), **Family Housing** (any amount), and **CGES** (any amount). Major AC&I projects appear as individual line items in the Coast Guard's budget request and receive the most scrutiny. Minor AC&I projects are lumped together into one line on the budget request and the same is true for Housing projects. Finally, while CGES projects follow the same AC&I planning process, they are not part of the Coast Guard's budget request and are approved and funded by the CGES Trust Board. The typical AC&I project requires three years to plan, two years to obtain funding and complete the design, plus another 1-2 years to construct.

Three years are generally required for the planning of an AC&I project. Through the preparation, review, and approval of the Planning Proposal and Project Proposal Report (Parts A and B), the budget and scope of the project are defined. First, operational or support needs are defined, and broad issues such as reorganization, consolidation, relocation or leasing commercial spaces are often considered. As alternatives are analyzed and selected, the project eventually reaches a preliminary (10-15%) design stage. At this point the budget and scope are defined sufficiently to be submitted in the Coast Guard's budget request. This is a crucial milestone in the process. If the preliminary design stage is not completed by the required due date, then COMDT will defer the project a fiscal year until it is complete so an accurate budget request can be prepared.

During the following two years, the project must withstand intense scrutiny as the Coast Guard's budget works its way through the Department of Transportation (OST Stage), Office of Management and Budget (OMB Stage), Congress (Congressional Stage), and is finally signed into law by the President (OP Stage). This two-year period is usually sufficient for FDCC to complete the design for the project and obtain construction permits. COMDT is usually reluctant to change the project scope and/or budget during the design phase since the Coast Guard already placed its credibility on the line when it submitted its budget to DOT. This is why it is critical that all issues are resolved and the scope firmly established in the planning phase.

Once the design is completed and the project is funded, 1-2 years are required to contract and construct the new facility, depending on the magnitude of the work involved and any sequencing necessary to minimize disrupting current operations.

The following pages will further define each of these stages. Figures 2 & 3 are also provided as a summary of the due dates for the various AC&I documents. It is adapted from the standard timeline published in Chapter 1 of the Shore Facilities Project Development Manual (SFPDM).

AC&I SHORE CONSTRUCTION TIMELINE

MAJOR AC&I and HOUSING

FY Program	PP Approved	PPR(A) Submitted	PPR(A) Approved	PPR(B) Submitted	PPR(B) Approved	Design Complete	Constr Award	Constr Complete	Warranty Expires
FY01	01 Oct 97	01 Jan 99	01 Feb 99	01 Dec 99	01 Jan 00	01 Dec 00	01 Apr 01	01 Jul 02	01 Jul 03
FY02	01 Oct 98	01 Jan 00	01 Feb 00	01 Dec 00	01 Jan 01	01 Dec 01	01 Apr 02	01 Jul 03	01 Jul 04
FY03	01 Oct 99	01 Oct 00	01 Dec 00	01 Dec 01	01 Jan 02	01 Dec 02	01 Apr 03	01 Jul 04	01 Jul 05
FY04	01 Oct 00	01 Oct 01	01 Dec 01	01 Dec 02	01 Jan 03	01 Dec 03	01 Apr 04	01 Jul 05	01 Jul 06
FY05	01 Oct 01	01 Oct 02	01 Dec 02	01 Dec 03	01 Jan 04	01 Dec 04	01 Apr 05	01 Jul 06	01 Jul 07
FY06	01 Oct 02	01 Oct 03	01 Dec 03	01 Dec 04	01 Jan 05	01 Dec 05	01 Apr 06	01 Jul 07	01 Jul 08

Requests for PP waivers specifically to meet a funding year timeline will not be approved.

MINOR AC&I

FY Program	PP Approved	PPR(A) Submitted	PPR(A) Approved	PPR(B) Submitted	PPR(B) Approved	Design Complete	Constr Award	Constr Complete	Warranty Expires
FY01	01 Oct 98	01 Sep 99	01 Nov 99	01 May 00	01 Jun 00	01 Dec 00	01 Apr 01	01 Apr 02	01 Apr 03
FY02	01 Oct 99	01 Sep 00	01 Nov 00	01 May 01	01 Jun 01	01 Dec 01	01 Apr 02	01 Apr 03	01 Apr 04
FY03	01 Oct 00	01 Sep 01	01 Nov 01	01 May 02	01 Jun 02	01 Dec 02	01 Apr 03	01 Apr 04	01 Apr 05
FY04	01 Oct 01	01 Sep 02	01 Nov 02	01 May 03	01 Jun 03	01 Dec 03	01 Apr 04	01 Apr 05	01 Apr 06
FY05	01 Oct 02	01 Sep 03	01 Nov 03	01 May 04	01 Jun 04	01 Dec 04	01 Apr 05	01 Apr 06	01 Apr 07
FY06	01 Oct 03	01 Sep 04	01 Nov 04	01 May 05	01 Jun 05	01 Dec 05	01 Apr 06	01 Apr 07	01 Apr 08

Requests for PP waivers specifically to meet a funding year timeline will not be approved.

Figure 2

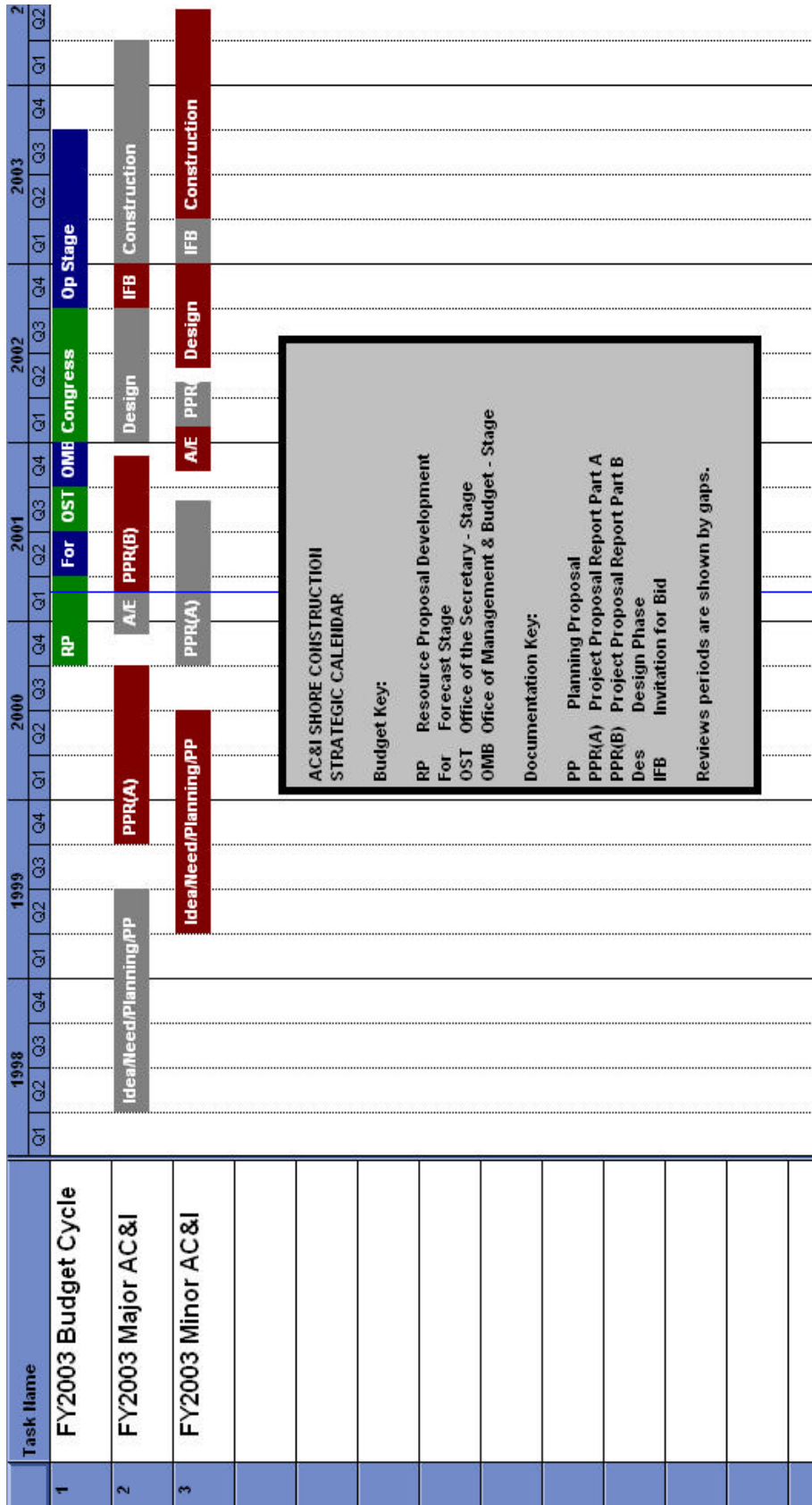


Figure 3

Shore Facilities Requirements List (SFRL)

The Shore Facilities Requirements List (**SFRL**) is the official prioritized listing of all AC&I projects. The first step in the planning of an AC&I project is the assignment of an SFRL number to the project and the listing of the project on the SFRL. This is accomplished by the submission of a **Problem Statement (PS)**.

The PS replaces the old AC&I Data Sheet. In the past, AC&I Data Sheets were used as an initial “marker” for the AC&I backlog with little project or cost information. The purpose of the PS is to provide better communications between the field and the Headquarters program managers. An approved PS represents an agreement among all interested parties that a legitimate problem exists and has sufficient merit to devote future resources for further planning. The PS now serves a more meaningful backlog “marker” for the SFRL. The form is typically prepared and submitted by the District (for District projects), Integrated Support Center (for ISC projects), or Headquarters unit (for Headquarters unit projects). It is then routed to MLC LANT (s) who endorses it and adds it to LANTAREA’s SFRL which includes all of the Area’s AC&I projects. It is then sent to COMDT (G-SEC) who obtains an endorsement from the Headquarters’ Planning Coordinator (HQPC), assigns the project an SFRL number, adds it to COMDT’s SFRL, and returns it to the originator. Each office reviewing the form also indicates its recommendation for the proposed funding year for the project. Generally, this will be no sooner than four years from the current fiscal year if no other AC&I documentation has been completed yet.

Twice a year the status of the projects on the SFRL are reviewed and priorities are updated. Each spring and fall, COMDT (G-SEC) requests LANTAREA update the SFRL. MLCA (s), who manages the list for the Area, asks each District and Support Center (in consultation with its servicing CEU) and Headquarters unit to update and prioritize its projects. MLCA (s) then updates and prioritizes LANTAREA’s SFRL based on this input, and forwards it to COMDT. Finally, COMDT (G-SEC) combines LANTAREA’s priorities with PACAREA’s priorities, to obtain COMDT’s prioritized SFRL, which is then published to the field.

COMDT’s prioritized SFRL is extremely important since it establishes the order for which MLC, CEUs and FDCC follow, in determining which AC&I planning documents are prepared first.

PLANNING PROPOSAL (PP)

The Planning Proposal (**PP**) is the first major planning document prepared for an AC&I project. PPs document an operational or support need and discuss alternative operational solutions for the proposed shore facility project. The PP is required for all AC&I projects.

The PP identifies the operational requirements for the facility. It includes an economic analysis of various alternatives based on life cycle costs over a 20-year period. Alternatives may include status quo, rehab existing facility, construct new facility,

relocate facility, lease new facility, contract for services, or other wide-ranging possibilities. A preferred alternative is listed along with the reasons for the preference.

PPs are jointly prepared by servicing CEUs, IPT, and District Planning Officers (for District projects), Integrated Support Centers (for ISC projects), or Headquarter units (for Headquarters unit projects). Once the PP is completed, it is signed and submitted by the District Commander (for District units), MLC (m) (for ISCs), or Headquarter unit CO's (for Headquarter units). The PP is submitted to COMDT (G-CPP), via LANTAREA, who coordinates its review by all affected program and support managers at the Headquarters level to validate the planning factors submitted, to add any program level input necessary for complete evaluation, and to validate the preferred alternative solution. COMDT (G-CPP) then forwards comments to COMDT (G-CCS) who approves/disapproves the PP's preferred alternative in a letter, along with any comments.

PROJECT PROPOSAL REPORT – PART A (PPR(A))

The Project Proposal Report – Part A (**PPR(A)**) documents the facility requirements necessary to meet the operational or support needs approved in the PP. When approved, the PPR(A) is the development program used to direct the designer. The purpose of the document is to fix the project scope and cost so that the project may be included in the Coast Guard's budget request.

The PPR(A) consists of the following major items:

- A summary of all engineering alternatives analyzed.
- A discussion and justification for any deviations from the approved PP.
- A Space Allocations List (**SAL**) containing a detailed listing of all required spaces and their recommended sizes.
- Site development showing existing conditions, based on completed topographic, hydrographic, soils, utilities, and site environmental assessments.
- Schematic floor plans.
- Major building elevations and section cuts.
- An identification of waterfront requirements.
- A discussion of the site location restraints and utilities availability.
- A preliminary cost estimate of all associated costs with a 20% contingency factor.
- An identification of the electronics requirements prepared by MLC LANT (t).
- Environmental documentation consisting of a Categorical Exclusion (**CATEX**), Environmental Assessment (**EA**) and Finding of No Significant Impact (**FONSI**), or an Environmental Impact Statement (**EIS**) depending on the level of impact.
- Site Evaluation Report (**SER**) prepared by the servicing CEU, and approved by the Office of the Secretary of Transportation (**OST**), if real property acquisition is required.

The PPR(B) consists of the following major items:

- An area tabulation comparison to the PPR(A).
- A description of the proposed engineering subsystems.
- A description of the materials proposed for the exterior envelope and major interior finishes.

- A Safety and Occupational Health Analysis (**SOHA**) prepared by MLCLANT (kse) listing the safety and occupational health requirements for the design.
- A discussion and justification for any deviations from the approved PPR(A).
- A target energy budget.
- A cost estimate with a 10% contingency factor.
- If property acquisition is required, negotiations must be satisfactorily completed with the owner, and an option executed to guarantee the Coast Guard may purchase the property when the PPR(B) is approved.

For all AC&I projects except Minor AC&I, the PPR(A) is prepared by the unit who will be designing the project (usually FDCC LANT). For Minor AC&I projects the PPR(A) is sometimes prepared by the servicing CEU. The FDCC usually holds a PPR(A) Kick-Off meeting at the project site when starting the PPR(A) with all involved parties encouraged to attend. FDCCLANT conducts or coordinates a detailed site investigation, typically including topographic, hydrographic and geologic surveys to clearly identify all existing conditions, and the site survey information is used to develop the conceptual PPR(A) package. As the PPR(A) develops, drafts are distributed as appropriate by email or via FDCCLANT's website, and comments solicited. It is FDCCLANT's goal that the completed PPR(A) is a consensus among all involved parties, and approval is a mere formality. When the PPR(A) is completed, FDCC forwards it to COMDT (G-SEC) for approval, via MLCA(s), the District Commander (for District projects), MLC(m) (for Support Center projects), or the Headquarters unit CO (for Headquarters unit projects). COMDT (G-SEC) is the approving official and will generally approve the PPR(A) in a letter, stipulating any conditions of the approval. The completed PPR(A) firmly establishes the scope and budget and is difficult to change once the project enters to budget process. FDCC then usually conducts a PPR(A) Presentation at the unit to reiterate the contents of the PPR(A) and answer questions.

ARCHITECTURAL/ENGINEERING (A/E) CONTRACT AWARD

Because of limited design personnel, the majority of AC&I Shore projects are designed by contracting with private Architectural/Engineering firms or through a Design-Build process with construction contractors. In engineering design, FDCC generally prepares contracts with the approved PPR(A) (10-15% design) as the initial design task for the A/E to develop the PPRB (35% design). Tasking to complete all subsequent designs and the Final Design (100% design) are also assigned to the A/E.

Engineering support service work is issued to A/Es through Indefinite Delivery Contracts (IDIQ). This contracting process is based on selecting the *best-qualified* A/E firm, rather than the *lowest bidder* and the contract is in place for a 2 to 5 year period. This type of procurement allows us to quickly task A/Es with design work, avoiding a lengthy task selection process for each job. The initial process for selecting IDIQ A/Es begins with announcement, or **synopsizing**, in the Government Wide Point of Entry (**GPE**). All interested A/E firms submit their qualifications/experience on standard forms referred to as **254s** and **255s**. The FDCC reviews these to narrow the list to 3-4 firms, a process called **shortlisting**. The FDCC then interviews the *short-listed* firms and makes the final selection. At the same time the FDCC is selecting the A/E firm, it finalizes the A/E Scope of Services (**SOS**). Task orders for design work are then issued to the selected A/E firm along with a Request for Proposal (**RFP**) for proposed design fee breakdown.

The FDCC reviews the proposal and negotiates with the A/E until a fair and reasonable fee is obtained. Survey and Design (**S&D**) funds are then requested from COMDT (G-SEC) for the design. Once the funds are received, the A/E task is awarded and the Notice to Proceed (**NTP**) is issued.

The Design/ Build process relies on the design being developed by the construction contractor in lieu of a private A/E firm. In this process, a 10% conceptual design is developed with in-house design staff. This conceptual design is presented to Coast Guard personnel and once approved forms the Scope of Work for construction contracting. Construction contracting can be provided via a low bid or a negotiated process. Once award is made final the construction contractor develops plans, with approval construction begins.

PROJECT PROPOSAL REPORT – PART B (PPR(B))

The Project Proposal Report – Part B (**PPR(B)**) is a design package (35% design stage) for the selected design alternative (not required for a Design/Build project).

The PPR(B) is prepared by the unit who will be designing the project (usually FDCC LANT). In the majority of cases, FDCC awards a contract to a professional A/E firm for the preparation of the design. The A/E conducts a site investigation, typically including topographic, hydrographic and geologic surveys to validate all existing conditions determined in the PPR(A). The A/E firm then submits the **First 35% Design** to FDCC for its review. The A/E then refines this, sends the **Second 35% Design** to all involved parties, and conducts a Customer Design Review (**CDR**) at the District office or unit. The CDR is the final opportunity for the customer to comment on the scope and design of the project. Once comments are received, the A/E submits the **Final 35% Design** and FDCC completes the PPR(B) which finalizes the scope and budget established in the PPR(A) and the project continues through the budget process. Unless there are major scope or budget changes in the PPR(B), FDCC forwards the PPR(B) to COMDT (G-SEC) for approval. If there are major changes in the document, it must be routed via the District Commander (for District projects), MLC(m) (for Support Center projects), or the Headquarters unit CO (for Headquarters unit projects) who submits it to COMDT (G-SEC). Once approved, COMDT continues to support the project in the Coast Guard's budget request based on priority.

FINAL DESIGN

Once the project scope and budget are set by the PPR(B) approval, FDCC moves to execution of the Final Design. This consists of the preparation of the 100% design drawings, specifications and estimate to be used in the bid documents for the actual construction. Customer reviews are not required in this stage since the scope and budget were already finalized by the PPR(B).

The FDCC will generally use the same A/E firm for the Final Design, who prepared the Schematic (i.e., 10%) Design. Generally, the A/E's contract for the 10% Design includes an option for preparation of the Final Design to avoid having to select a new A/E. S&D funds are then requested from COMDT (G-SEC) to execute the option. Once these are received, the NTP is issued. The A/E then prepares a 35% Design. FDCC reviews this to ensure the design is still within the scope and budget of the approved PPR(B). An information copy is provided to COMDT (G-SEC) and is referred to as the Design

Development Submittal (**DDS**). The A/E then submits a 60% design that FDCC typically uses to submit permit applications to various agencies for their approval of the construction. Finally, the A/E will submit the 100% design drawings, specifications and estimate to be used in the bid documents.

CONTRACTING & CONSTRUCTION

Upon completion of the design, receipt of permits and a funded budget, FDCC requests permission from COMDT (G-SEC) to advertise the project. This permission is referred to as **IFB Authority** or **Authority to Negotiate**, as applicable. When authority is received, FDCC advertises in the Government Point of Entry (GPE) the date that bid packages or **competitive** proposals will be available for downloading at our website: <http://www.uscg.mil/mlclant/fdcclant/contracts.html> or by compact disc in certain circumstances. Prospective bidders or offerors submit their bid or proposal by the due date established in the announcement. Other **non-competitive** methods are also used, which are sole source procurements involving one offeror and are not advertised in the above-mentioned manner. An example of this type of procurement would be sole source Design/Build, projects set-aside under the 8(a) program, GSA Design/Build or IDIQ task orders issued under existing IDIQ/IDC contracts. Once bids are evaluated and a low bidder is determined or the proposal is negotiated to determine a fair and reasonable price, FDCC request funds to award the contract. Upon receipt of funds the contract is awarded. The effective date of the award is the Notice to Proceed and the contract completion date is reflected in the award document. The contractor then submits performance and payment bonds for approval, as assurance from a bonding company that they will complete the construction and pay all subcontractors and suppliers. When the bonds are approved, FDCC holds a Preconstruction Conference (**PRECON**) at the project site with all involved parties. Failure to reach substantial completion by the Contract Completion Date (**CCD**) will result in the charge of liquidated damages against the contractor for each day he is late. The FDCC provides construction inspection, by various individuals including the Construction Project Manager, Construction Representative, or a contract inspector from an A/E firm.

Awarding the construction contract typically takes 3-4 months from receipt of IFB Authority. Construction time varies from project to project but is specified in the contract. It is important to note however, that starting with projects funded in FY02, construction funds expire at the end of three fiscal years. For example, the funds on a FY02 project will expire on 30 September 2004. This means all construction and outfitting must be completed by this date.

CLOSING

FDCC LANT has a professional staff of 11 military and 49 civilians who are all anxious to work on your AC&I projects. Currently, we are actively involved with approximately 70 projects totaling nearly \$200M serving the 40 states east of the Rocky Mountains, plus the Commonwealth of Puerto Rico.

We hope this overview has provided you with an understanding of the AC&I Shore Construction process. If you have questions, please ask. FDCC's Project Managers are here to serve you and answer your questions.

Thanks for the opportunity to serve you!