Subject: Design Execution

References:

(a) NAVFAC Notice 7040.5, Naval Facilities Engineering Command (NAVFAC) Products and Services, 20 Oct 15
(b) ECB 2010-03, 11010_19, Design Engineering Competency, 9 November 2009
(c) ECB 2006-04, 11010_04, Capital Improvements Categories of Work Classification
(d) NAVFAC Capital Improvements Acquisition Strategy
(e) Department of the Navy Planning and Funding Analysis by Project Services Group, 18 January 2016
(f) NAVFAC INSTRUCTION 3354.1, Naval Facilities Engineering Command Work Induction System, 12 June 2008

1. Purpose

Provide overall NAVFAC policy and guidance on execution of design deliverables as defined in reference (a), product and service E2 -Design/Engineering Documents, resulting in growth and sustainment in engineering competencies as required by reference (b).

2. Background

Capital Improvements Business Line (CI) is responsible for preparing and reviewing design documents for Category I and II projects, as defined by reference (c), for the Navy and Marine Corps and other Defense Agencies. These products and services referred to as E-Line are accomplished by either In-House (IH) design engineers or Architectural Engineering (AE) firms. Design documents are executed either by Design-Bid-Build (DBB or full plans and specifications) or Design-Build (DB or performance based requirements) acquisition methods. Execution of IH designs and oversight of AE designs are performed by Project Technical Teams at Echelon IV and Echelon III, and within the Project Management & Engineering Branches (PMEBs) of the Public Works Departments (PWDs). The Project Teams must have the skill level in each engineering and architectural discipline (i.e. structural, mechanical, electrical, fire protection, interior design, cost estimating, etc.) to be able to execute project requirements on schedule and within budget. Reference (b) requires CI’s designers to perform IH designs on a continual basis to develop and maintain a level of core competency and high level performance which allows CI to efficiently and effectively deliver designs.

3. Applicability

This ECB is effective immediately and applies to all CI projects executed at Echelon III
(Atlantic & Pacific) and Echelon IV. PMEBs are the only office within the PWD that will produce design documents defined as an E2 Product and Service, which is delivered by CI and tracked in eProjects.

4. Policy

A. The following is guidance on execution of design deliverables required per this ECB.

1. All MILCON projects shall be executed by Design Engineers at Echelon III or Echelon IV (IPT/Core) presently. The Assistant Operations Officers (AOPs) and CI may consider exceptions for MILCON Unspecified Minor Construction (UMC) projects.

2. Non-MILCON projects with an Estimated Construction Cost (ECC)* over $10M shall be executed by Echelon III or Echelon IV (IPT/Core).

   NOTE (*): ECC is defined as the estimated maximum value of the Construction Contract at award (i.e., Project Cost less SIOH (supervision, inspection and overhead), Contingency, Post Construction Award Services (PCAS), and any other fees and/or costs that the PM identifies which are part of the total project cost but not part of the construction contract).

3. Non-MILCON projects with an ECC between $5M and $10M shall be discussed between the PWD and Echelon IV (IPT/Core) at work induction and project initiation to determine the best execution and acquisition strategy and whether the work will be executed at the IPT/Core or in the PWD to ensure alignment with reference (b), (d), and (e).

4. Non-MILCON projects with an ECC less than $5M shall be executed by the PWD, contingent upon their capabilities and capacity constraints. Specific projects that cannot be executed at the PWD due to current capabilities or capacity shall be discussed with the Echelon IV IPT/Core, and Echelon III if applicable, for potential reach-back execution.

5. In accordance with reference (d), decisions on acquisition strategy and the office that will execute the design shall be vetted by CI leadership in concert with OPS at the component, considering impacts on schedule and resourcing. Further guidance on process and policy, each design office at each component shall prepare their Acquisition Strategy in alignment with reference (d) and BMS B-1.1.

6. Design offices should be resourced to execute their annualized steady-state workload (i.e. annualized, historical multi-year average) with the proper mix of strategies to include at least the minimum required IH DBB levels per reference (b). Spikes or surge in workload should be addressed by the proper outsourcing
strategies (DB or AE efforts), while a temporary drop or reduction in workload should be addressed by executing more projects IH.

7. Each IPT/Core and PWD of the FEC has unique challenges resulting in varying levels of capabilities, capacities, and competencies. The capabilities, capacities and competencies must be factored into project execution decisions to ensure projects are executed in accordance with reference (b) and (d), BMS processes and with proper Quality Assurance (QA) and Quality Control (QC).

8. FEC CI shall actively engage in decision making regarding execution and acquisition strategies during project planning and work induction process**, as described in reference (f).
   i. Scoping documents and DD1391s must include all required documentation as required by the applicable BMS process and program.
   ii. Adequate funds, including the specific fund source/obligation and timely availability of funds must be provided to initiate the design.

NOTE (**): In accordance with reference (e), the Requirements Branch (AM lead) must properly induct and categorize all projects and align projects whether requirements are developed by AM, CI, PW, or EV.

9. Per reference (e), a PWD should be capable of delivering the full range of P&S. Exceptions for projects that cannot be executed in accordance with this policy are typically due to specific PWD organizational constructs, capability, capacity constraints and/or the level of acquisition warrants.
   i. At PWDs without sufficient annualized workload to resource a design office with the full complement of disciplines, the design work should default to the Echelon IV (IPT/Core) for projects that require design disciplines not resourced. Single discipline projects where the design discipline is resourced and capable may be done at the PWD.
   ii. Where PWDs have robust capacity and the ability to take on non-MILCON projects above the threshold and to execute them within the required timelines, without impacting delivery of existing work, discussions between PWD and Echelon IV (IPT/Core) CI should always be an option to make the most efficient use of the onboard resources.
   iii. FECs are accountable to ensure proper engineering oversight occurs including through reach-back support when necessary.

10. Shifting work between the Echelon IV PWD & IPT/Core does not require shifting resources/personnel between offices if the project shifts are a short term solution (i.e. surge work in one office creates short term capacity issues).

11. At FECs where execution of MILCON projects are centralized at the Echelon III Command, dollar thresholds significantly less than $5M - 10M may be used to differentiate work between the PWD and Echelon IV (CI Core). This is because the CI Core in those locations (i.e. EURAFSWA, HAWAII, FAR EAST,
MARIANAS) focus on the Special Projects and other centrally managed programs. For example, at EURAFSWA workload less than $500K defaults to the PWD; all workload over the $500K limit is executed by Echelon IV (CI Core).

12. Discussions can always occur if there is a project that makes sense to shift the execution team either due to local expertise or capacity.

B. NAVFAC does not have a preset acquisition strategy (either DB or DBB); however, in accordance with reference (d), each project shall be assessed and assigned with an appropriate acquisition strategy.

1. For MILCONs there are ten facility types Standard RFP templates, developed by CIBL, which are highly encouraged to be used for IH DB projects. The Standard RFP templates are maintained on the Whole Building Design Guide, http://www.wbdg.org/ndbm/model_rfps.php. All other facility types are evaluated on the specific project details to determine whether a DB or DBB strategy is merited.

2. The amount of IH design executed within a specific office, i.e. Echelon IV (IPT/Core), PWD, and the selection guidelines for DBB vice DB and IH vice AE, must be based on and aligned with reference (b) and reference (d). There is no, one size fits all approach and the Acquisition Strategy Plans shall evaluate each project that is inducted to determine the best delivery method. When developing Acquisition Plans, each FEC should consider the following factors: time of year, customer/client, type of funding, mission requirements, expected execution date, complexity, staffing (CIBL & Acquisition), available contracting tools (AE, MACCs, and 8A), other workload, etc.

5. Points of Contact

This document has been coordinated with NAVFAC Headquarters (CIBL), NAVFAC Operations (OPS), with involvement from all NAVFAC Facilities Engineering Commands (FECs) Design Product Line Coordinators (CI4s) as well as other key personnel.

For further guidance and/or instructions, please contact Ms. Deepika Cheriathundam, P.E., 202-685-9173, within the Chief Engineer’s Office.

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