



**US Army Corps  
of Engineers®**

## **Enterprise Standard (ES)- 07052 Instructions for Parametric Design (Code3)**

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**1.0 Purpose.** The purpose of these instructions is to provide parametric design policy and guidance for Army Military Construction (MILCON) projects when Code 3 design directives are released. Code 3 design directives are intended to accelerate early execution of project design, provide better definition of customer requirements, improve customer involvement, and implement the use of parametric estimating, with a minimal expenditure of Planning and Design (P&D) funds. In addition, these instructions are to define and develop the scope, site and cost requirements of a project. This will be done in sufficient detail to assure the Office of the Secretary of Defense (OSD) and the Congress that the Army has an executable project.

**2.0 Applicability.** These instructions apply to U.S. Army Corps of Engineers (USACE) Major Subordinate Commands (MSC), Districts, and technical centers, Centers of Standardization (COS), and other USACE field offices having Army Military Construction (MILCON) responsibilities. They are intended to be used by USACE for the Army MILCON projects in support of Army installations, as appropriate, when Code 3 design directives are released. Design directives authorize various stages of project design, indicate project scope and cost, and provide special instructions for the design of the project. A Code 3 design directive authorizes parametric design, which is 15 percent of the total design effort.

### **3.0 References.**

Project DD Form 1391, Military Construction Project Data.

Installation Real Property Master Plan.

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Approved Installation Design Guide ( if available)

Department of the Army (DA) standards, when applicable.

Technical Instructions (TI), Design Criteria, latest edition, and the criteria documents referenced therein.

Corps of Engineers Cost Engineering Instructions and Regulations

Engineering Regulations, ER 1110-3-1300, Military Programs Cost Engineering

AR 420-1, Army Facilities Management, Chapter 4 - Army Military Construction and Non-appropriated-Funded Construction Program Development and Execution.

[http://www.apd.army.mil/pdf/AR420\\_1.pdf](http://www.apd.army.mil/pdf/AR420_1.pdf)

Title 10 U.S.C. Sec. 2807(b), Architectural and Engineering Services and Construction Design. Defense Federal Acquisition Regulation Supplement 236.601

ER 5-1-11, U.S. Army Corps of Engineers (USACE) Business Process

Programming, Administration, and Execution System (PAX) Newsletters 3.2.1 (DoD Area Cost Factors and 3.2.2 (Unit Cost for Army Facilities, Military Construction).

<http://usace.army.mil/caei/Pages/ArticleHome.aspx>

Appendix 4 to Annex N (MILITARY CONSTRUCTION (MILCON)) TO OPORD 2011-49 (FY2011 MILITARY PROGRAMS DELIVERY)

<https://kme.usace.army.mil/mp/OPORD/default.aspx>

TMA DD1391 Cost Estimating Guidance for Medical Projects (June 2009)

DA PAM 420-1-2, Army Military Construction and Nonappropriated-Funded Construction Program Development and Execution

PDRI ECB for Army MILCON (ECB #2009-25, issued 7 Oct 2009)

DASA Memo on Sustainable Design and Development Policy Update, dated 8 Jul 2010

#### **4.0 Related Procedures.**

None

**5.0 Definitions.** See [Glossary](#) for definitions and acronyms. See Appendix A for additional information.

## 6.0 Responsibilities.

### ACSIM

- Facilitate timely release of Code 0 to Code 9 directives through CAPCES updates.
- Provide P&D funding for PDR and ENG3086 development.
- Establish milestones for deliverables.
- Provide the USACE Instructions for Parametric Design (Code3) guidance to IMCOM and Army Commands
- Facilitate/coordinate with facility proponents, approval of scope changes via PDR process and ensure 1391's are corrected to reflect changes.
- Provide final list of projects receiving code 3s to HQUSACE
- Participate in periodic teleconferences.

### HQIMCOM/IMCOM Regions

- Provide written documentation of an approved site
- Ensure that the Installation completes project siting, site approvals, pre-construction environmental surveys-PESs, AT, SDD, environmental, NEPA, UXO, cultural issues, real estate utilities, IS, economic analysis and other show-stopper issues that need to be addressed.
- Validate scope requirements during PCs and all subsequent design Charrettes.
- Coordinate/participate in scope discrepancy issues.
- Participate in periodic teleconferences.
- Notify ACSIM and coordinate 1391 changes identified during Parametric Design Process.

### INSTALLATION

- Responsible for project siting, PESs, AT, SDD, environmental, NEPA, UXO, cultural issues, real estate utilities, IS, economic analysis and other show-stopper issues that need to be addressed.
- Participate in the Parametric Design Charrette at the Installation.
- Review PDRs.
- For significant scope differences with the 1391, Garrison Commander approval is required. Significant is defined as anything greater than or less than 10% of original scope for non-standard facility types.
- Participate in periodic teleconferences, as necessary.

### HQUSACE

- RIT issues Design Directives to the GD and COS in a timely manner upon CAPCES release, report and track status of staggered submission of PDRs and ENG3086, participate in periodic teleconferences and ensure all issues resolved and milestones are met.
- Develop and update guidance on the PDR and ENG3086.
- Coordinate with ACSIM and IMCOM on PDR and ENG3086 issues (scope, site, etc).
- Brief the status of the PDR/ENG3086 at the DMR and to ACSIM.

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- Provide training as required on Parametric Process.
- Develop and publish (CECW-CE) in a timely manner appropriate facilities unit pricing guide and area cost factors in order to complete validation in a timely manner as directed by ACSIM.
- Confirm final acquisition strategies for each project.
- Ensure availability of products to Army team.
- Participate in the periodic teleconferences.
- Convene AAR as appropriate.

### **HNC (Program Management Execution Agent)**

- Provide timely review of PDR and recommendation to HQUSACE (CEMP-IS)
- Return incomplete submittals without review.
- Facilitate and coordinate PDR scope discrepancy resolution.
- Review draft ENG3086, coordinate with GD and approve final ENG3086 in coordination with HQUSACE. Briefs (by exception) projects with outstanding scope or cost issues at periodic teleconferences with HQUSACE/ACSIM/IMCOM.
- Notify HQUSACE, RIT, MSC and COS of approved ENG3086.
- Lead/Setup/Participate in the periodic PDR/3086 teleconference.
- Maintain and distribute other reports on PDR and 3086 status as requested.
- Run official weekly report and post on PDRS website (days to be determined by CEMP-IS as part of PDR/3086 battle rhythm).
- Adjust ENG3086's to incorporate final unit pricing, acquisition strategy, area cost factors, and escalation factors. Notify the Geographic District and MSC of 3086s that are revised.
- Prioritize reviews and ensure quality assurance processes are followed.
- Provide yearly program statistics.
- Ensure adequate resources are available to complete the mission.

### **MSC**

- Ensure all GD PDR and ENG3086 milestones are met and instructions are followed.
- Ensure that latest Parametric Design (code 3) Instructions and any other related supplemental instructions are distributed to the GD.
- Review project list, develop and track status of staggered submission of PDR and ENG3086 as per code 3 directives.
- Late starts/adds, projects with issues, etc. are to be completed per design directives and ENG3086 validated no later than 1 Nov or as per HQUSACE instructions..
- Ensure that adequate resources are available in the AOR to assist GD as necessary to meet timelines
- Upward reporting of any issues that impact milestone completion.
- Participate in the periodic teleconferences.
- Contact RIT/HQUSACE PID/E&C to help resolve show stopper issues.
- Facilitate training for Geographic Districts on the PDR/ENG3086 process.
- Gather/share Lessons Learned within their AOR, publish in their QMS and submit via the USACE Lessons Learned System.

## **GEOGRAPHIC DISTRICT (GD)**

- Responsible for scheduling, leading and vetting the final acquisition strategy for execution of the Code 3 Directive (PDR/ENG3086 completion).
- Overall responsibility for the development and completion of the PDR and ENG3086 in accordance with code 3 directives and guidance instructions.
- Manage the technical team (A/E or in-house team).
- Be proactive in engaging the COS and Installation and ensuring their participation in the Parametric Design process.
- Coordinate with the COS to ensure that scope validation occurs in a timely manner.
- Coordinate with the Installation to ensure that IMCOM site approval is complete.
- Immediately notify HNC, MSC, HQUSACE (RIT and CEMP-IS) once a scope discrepancy is identified. Per Appendix xxxx, provide all necessary information as required in the scope discrepancy document.
- Submit complete PDR in accordance with code 3 directives and guidance instructions.
- Responsible for providing final copy of PDR to Installation.
- When PM realizes there are not enough resources/time to execute all of their PDRs, be proactive and ask for help from the MSC at the earliest possible time. Therefore, the MSC is aware and can engage to deploy resources across their AOR.
- Rather than submitting PDR with "show stopper" issues, PM will not hesitate to notify and call MSC/RIT/HQUSACE for guidance to resolve these issues.
- As the design/technical agent, District PM shall advise:
  - ✓ Customer/Installation that it cannot move sites w/out the approval in writing from the IMCOM per AR 420-1. Appendix F, Authority for Approval of Changes. Per ACSIM, changes in site after Planning Charrette constitute user requested change.
  - ✓ Customer/Installation that the ENG3086 process is not the avenue for adding more scope than had been approved in the planning/design charrette or PDR and District shall comply with process as well.
  - ✓ Customer/Installation that "new" scope (not shown on the DD1391) proposed for addition and associated ROM estimate must be submitted, coordinated and approved ahead of time through their regional IMCOM for endorsement to ACSIM before inclusion in the PDR. {see Installation requirements in para. 4.3}
- Ensure that quality control processes are followed.
- Conduct the Parametric Design charrette and coordinate with Installation POCs to obtain required engineering data/information required for the PDR.
- Based on PDR approved by HQUSACE, prepare the draft and final ENG3086 using the latest PAX pricing guide and or instructions from HQUSACE.
- Submit draft ENG3086s to HNC. Final ENG3086 submission to the PAX system must be not later than two weeks before validation date or as directed by HQUSACE.
- Utilize Lessons Learned/After Action Reports to improve performance.

### **COS** {applicable for standard facility types and Major MILCON renovation}

- Responsible for validating and providing quantified scope (i.e. PN, sq. ft., etc) and date in the PAX system for MILCON standard facility types.

- If the COS cannot concur with the project scope, provide an explanation for the non-concurrence.
- Participate in scope discrepancy meetings and periodic teleconferences as necessary.
- Identify a Primary POC for PDRs at each COS, post contact info to COS website.
- As a member of PDT, provide recommendation for the acquisition strategy of standard design facilities.
- Maintain COS website to reflect latest approved standards.

## **ISEC**

- Participate as part of the Project Delivery Team.
- Participate in all Design Charrettes.
- Participate in all PDR/ENG 3086 Reviews.
- Participate in scope discrepancy meetings.
- Provide validation and certification of all TAB F IT costs.
- Provide continual up-to-date IT costs.
- Coordinate IT costs with the site DOIM.
- Participate in teleconference calls.

## **7.0 Procedures.**

**7.1 The Parametric Design (Code 3) Process.** The process begins when USACE receives a Code 3 release from OACSIM and ends upon validation of the Parametric Design Cost Estimate (ENG Form 3086). A sample Code 3 Design Directive is included in Appendix F.

**7.1.1 Project Delivery Team (PDT).** When a Code 3 Parametric design directive is received by the Geographic District, a PDT will be established with a designated team leader and representatives from all of the engineering disciplines, architectural, cost engineering, and COS representatives (as required for new and major MILCON renovation of standard facility types), in accordance with ER 5-1-11, U.S. Army Corps of Engineers (USACE) Business Process. The Installation will be involved throughout the Parametric Design (Code 3) Process and included as a member of the PDT. Whenever practical, the same design entity (in-house personnel or an A-E firm) will be encouraged to do the complete design of a project, including both the Code 3 design and final design. This approach maintains continuous design responsibility, and reduces design cost and time.

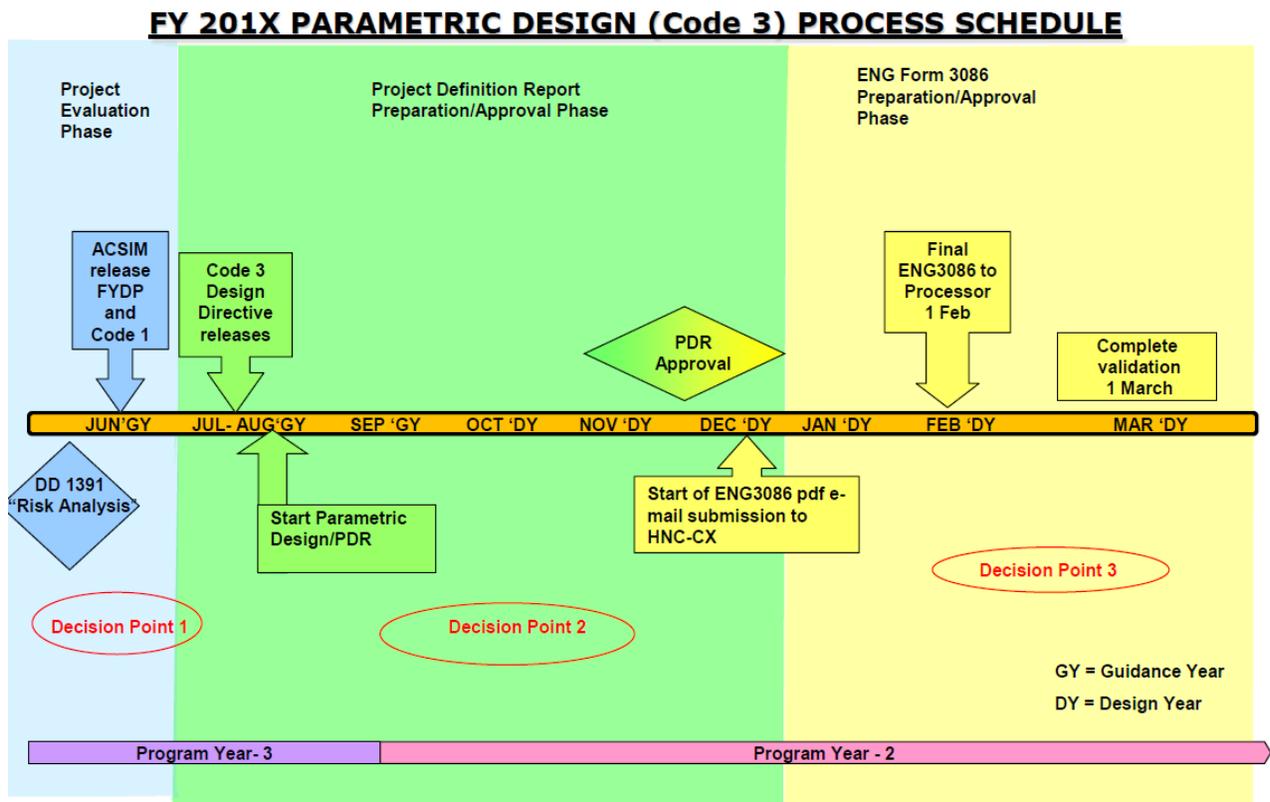
**7.1.2 The Installation.** When a Code 3 design directive is received by the design agency, the Installation will be immediately notified by the Geographic District Project Manager. The design agency will ensure that the Installation is involved at every stage of project development. Installation input is critical to validate accurate project requirements that can be translated into quality project definitions.

**7.1.3 Code 3 Design Charrette.** A meeting will be held with the Installation, Geographical District Project Manager, and the PDT at the project site to discuss and develop the following items for inclusion into the Project Definition Report:

- 7.1.3.1 Project scope requirements.
- 7.1.3.2. Site and other contributing data.
- 7.1.3.3. Project acquisition strategy, costs and schedule.

7.1.4. **Project Definition Package.** Once all the project data has been gathered, project scope validation has been finalized and PDR approved by HQUSACE (CEMP-IS), a parametric design cost estimate (ENG Form 3086) will be completed and submitted for approval. The Project Definition Package will consist of the following products: a Project Definition Report (PDR) and a parametric design cost estimate (ENG Form 3086). These products shall be submitted in accordance with the process schedule shown below.

7.1.5. **The Parametric Design Process Schedule.** The notional Parametric Design Process Schedule shown below is framed by three key decision points. Various milestones are to be accomplished within each decision point are shown below. Specific instructions on preparation of the products can be found in the Project Definition Package (section 7.2) of these instructions.



7.1.5.1. **Program Release/Project Evaluation (Decision Point 1).** The first phase of the process begins with the release of the finalized Future Year Defense Plan (FYDP) by OACSIM in June/July timeframe of the Guidance Year (GY). OACSIM may release a code 1 directive to HQUSACE at this point. In collaboration with the Installations, the Code 1 directive authorizes the geographic district to begin site investigation work, prescribed pre-design effort, and

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selection/negotiation (not award) of an architect engineer contract. Issues that could impede the start of the parametric design process may include substantially incomplete DD Form 1391s, lack of project site approval, or other significant issues. The code 1 instructions may stipulate that District coordinate with Installations to ensure scope in the DD Form 1391 is correct prior to start of parametric design. If revisions are needed to the DD Form 1391, HQUSACE will provide instructions on the specific course of action to undertake. At this same time, the geographic districts or other assigned geographic district shall be reviewing the FYDP to ascertain and prepare for the upcoming workload. This phase ends with the issuance of a Code 3 Directive release to the geographic district. The intent of this phase is to have the Code 3 directive released no later than 1 July of the GY.

**7.1.5.2. Project Definition Report Preparation (Decision Point 2).** The second phase of the process begins once the Code 3 design directive is released. OACSIM updates CAPCES and notifies HQUSACE Regional Integration Teams (RIT) to issue the Code 3 design directive to their geographical district. During this phase, the geographic district is responsible for preparation of the Project Definition Report (PDR) using the web-based tool called Project Definition Report System (PDRS). This phase includes the geographic district's execution of a parametric design with a focus on validation of project scope, criteria compliance, and validation or development of all other information required for completion of a parametric design cost estimate (ENG Form 3086). One of the requirements of this phase includes review and validation of the project scope by the applicable Center of Standardization (COS) for new and major MILCON renovation of standard design facilities or the geographic district for non-standard design facilities. The geographic district is responsible for ensuring that COS scope validation through the PAX DD1391 Processor is obtained and included in the PDR. Any scope discrepancy shall be forwarded for resolution as soon as it is identified. A change in scope is defined as changing the facilities and or their associated quantities, as shown on the approved DD 1391 for any feature of work that is/will be included as a Primary Facility line item. If the scope change is predicated solely on compliance with a current standard design, then evidence of the COS Concurrence in the PAX system and PDR, is all that is required. Any changes to scope that are not solely predicated on compliance with a current standard design, to include non standard facilities, shall be documented and processed for approval in accordance with the Scope Discrepancy Notification Process described as follows:

If the change in scope, from the approved 1391, is predicated on anything other than compliance with a current standard design, the Scope Discrepancy Notification Process outlined in Attachment B must be followed. Notification by the District shall include supporting justification and authority for the recommended scope change via submission of the Scope Discrepancy Notification Form (included as Attachment B). This document must be submitted for scope changes for either standard or non-standard facilities. HQUSACE will provide feedback to the geographic district, and COS for issues involving standard design facilities, regarding the ACSIM approved scope.

For the overall process to be successful, it is critical that all scoping and related issues be thoroughly defined and resolved during the Project Definition Report preparation phase. This includes changes to siting as well. Resolution of these issues *prior* to beginning the preparation of the parametric design cost estimate is critical to meet the timeframes required by OACSIM for the

MILCON budget book finalization. This phase (Project Definition Report) must be completed within 120 days of receipt of the design release by ACSIM. When Code 3 design directives are received after 30 September of the Guidance Year, special instructions will be provided in the directive to include guidance for completion of PDR and ENG Form 3086. This phase ends with the completion of the PDR quality assurance reviews by HNC and PDR approval by HQUSACE (CEMP-IS). HNC will notify the geographic district Project Manager of PDR review completion as quickly as possible, but not later than two weeks of submission. It shall be noted that the geographic district Project Manager must immediately notify his/her cost engineer to ensure that the ENG Form 3086 includes any approved changes or corrections and that selected acquisition strategy has been fully vetted within the District.

**7.1.5.3. Parametric Design Cost Estimate (ENG Form 3086) Preparation and Approval (Decision Point 3).** The focus of this third phase is the preparation of a realistic parametric design cost estimate (ENG Form 3086). The review, analysis and collection of additional data required for parametric design cost estimate preparation should generally start upon receipt of code 3 design directive. As such, the District PM and cost engineer should closely collaborate so as not to delay validation. Upon receipt of the notification of PDR approval by HQUSACE (CEMP-IS), the final ENG Form 3086 must be submitted to HNC CX for validation not later than 1 February of Design Year. Although USACE has 60 days to prepare, review and validate ENG3086 after PDR approval, every District must strive and ensure that all of their ENG Form 3086s are in the 3086 processor by 1 February. To facilitate this process, District cost engineer has to submit via e-mail a pdf copy of their on-going ENG3086 efforts to HNC CX so it can be annotated for corrections before finally uploading the ENG Form 3086 into the processor. Ongoing cost issues, if any, will be resolved through periodic teleconferences, as necessary with ACSIM/IMCOM, ISEC, HQUSACE, MSC and Districts. The HNC CX will complete validation of the ENG Form 3086 using the official PAX newsletter values by 01 March.

**7.2 Project Definition Package.** The package is intended to provide the information required to support the programming and budget process in advance of the budget lock for the upcoming MILCON program. The scope and cost validations completed as part of this process is the last opportunity to ensure that each project has the correct scope and programmed amount (PA), and to put the Army in a posture to ensure successful program execution.

**7.2.1. Products.** The package will consist of the following products: 1) Project Definition Report (PDR) and 2) parametric design cost estimate (ENG Form 3086). These products shall be clear, concise, and provide the required information in accordance with the format contained herein.

**7.2.1.1 Project Definition Report (PDR).** The intent of the PDR is three fold. First is to demonstrate compliance with AR 420-1 to perform the project definition services as applicable in response to a Code 3 design release. Second is to validate that the project requirements and required coordination included in the DD Form 1391 are accurate and valid. If these items are not included in the DD Form 1391, they must be addressed as part of the PDR document. Third is to provide the cost engineers with a validated scope and adequate project details to ensure their ability to prepare a realistic parametric design cost estimate. The PDR shall be prepared using Project Definition Report System (PDRS) that is available at <https://rfpwizard.cecer.army.mil/pdrs> (*Instructions for using PDRS will be*

*e-mailed separately and posted in the QMS site*). It should be noted that projects developed by a Planning Charrette and/or covered by a Department of the Army standard design, likely have a great deal of information that can be validated and utilized in preparation of this report. If such documentation already is included in the approved DD Form 1391 or a standard design, it may be referenced in the report. It is not necessary to include or repeat the entire standard design requirements as part of the PDR. Only those items required to convey a clear understanding need to be included in their entirety, all other materials may be addressed by reference. Once HNC CX completes the PDR reviews as part of the quality assurance process and HQUSACE (CEMP-IS) approves the PDR, District/PDT cost engineer can then complete the parametric design cost estimate (ENG Form 3086).

Recently published guidance on Sustainable Design, to include Environmental and Energy Performance and Low Impact Development must be incorporated into military construction projects, starting with the FY 13 construction program. The latest Engineering and Construction Bulletin (ECB No. 2011-1, subject: High Performance Energy and Sustainability Policy) shall be consulted during this phase of design and be integrated during preparation of the parametric design documents. Multiple initiatives are in progress to examine specific impacts of these mandates on project scope and costs. The results of these investigations will not be available until later in the program cycle or 1 March 2011. Until these investigations are completed, reviewed and impact parameters are identified and further guidance can be distributed, the following guidelines shall be utilized in incorporating SDD features into the PDR's for the FY 13 projects:

- a. Changes to facility sizes solely to incorporate SDD features (i.e. increase the building envelope) will not be requested until addition guidance resulting from the on-going investigations is disseminated. The submission of PDR's should not be delayed awaiting this guidance. Once developed, the implementing guidance addressing SDD will include the process for adjustments to projects with PDR's that were already approved.
- b. SDD features, to include, Environmental and Energy Performance and Low Impact Development should be examined at the Design Charrette and a discussion of potentially implementable features included in the PDR.
- c. Incorporation of Low Impact Development features identified for implementation may be incorporated through adjustments to the Storm Drainage or Site Development subsections of the Supporting Facilities section of the 1391. Recommend that Districts investigate the potential use and adoption of the Navy's LID Scope and Cost Workbook at code 3 to facilitate District efforts with respect to LID.
- d. If individual SDD features can be identified based on valid designs and compliant life cycle cost analysis, then such changes will be detailed and submitted for adjudication by ACSIM, HQIMCOM and HQUSACE following the Scope Discrepancy Approval process. These features should not be included in the PDR until an Approved Scope Discrepancy is obtained.

Incorporating these principles into the design of the FY13 projects is imperative for successful execution. This measured approach to incorporate the sustainable features will allow for program level adjustments as the actual impacts to construction are further defined.

**7.2.1.2. Parametric Design Cost Estimate (ENG Form 3086).** The parametric design cost estimate (ENG Form 3086), will be prepared utilizing the scope from the PDR approved by HQUSACE (CEMP-IS). The ENG Form 3086 will be prepared using the latest version of the PC-COST estimating software and uploaded/submitted electronically to the ENG 3086 Module of the 1391 Processor. In preparing this estimate, the following listed items must be considered.

**7.2.1.2.1. Unit Prices.** Unit prices will be based on the draft PAX Newsletter 3.2.2 (in effect as of 1 Dec of the DY). Any unit cost exceeding the Draft Unit Cost is to include a detailed explanation and justification in the “Explanation of Data Development” section of the ENG Form 3086. The Draft PAX Newsletter will be provided by HQUSACE to District Cost Engineers. The PAX Newsletter unit costs now include the cost of achieving LEED v3 Certified Level and normal AT/FP costs.

**7.2.1.2.2. Area Cost Factors.** Area Cost Factors (ACF) utilized in preparing the ENG Form 3086 must be in accordance with current PAX Newsletter 3.2.1 (in effect as of 1 Dec of the DY). This PAX Newsletter may be found at the following web-link. <http://usace.army.mil/caei/Pages/ArticleHome.aspx>

**7.2.1.2.3. Anti Terrorism Measure:**

**a. For Buildings Listed in PAX 3.2.2 Which are Commonly Built:** Starting with the FY2012 projects, the automatic 2 to 2.5% of the cost of Primary Facilities will NOT be added to the ENG3086 or DD1391 for Antiterrorism/Force Protection Measures (CATCD 88041) when just the Minimum AT/FP standards are required AND threat-specific required Minimum Set-back (Stand-off) Distances are achieved. The Primary facility unit costs in the DRAFT PAX Newsletter 3.2.2 now incorporate the normal Antiterrorism Measures costs. When buildings are 3 or more stories high or the required minimum stand-off distance is not available; add an Antiterrorism Measures line item cost, not to exceed **1.5%** of the Primary Facility cost, for each building for progressive collapse or minimum standoff distance. If the Antiterrorism Measures costs exceed **1.5%**, a detailed AT/FP cost break-out must be provided along with a justification for higher cost in the Data Development Block. The detailed cost and justification must be coordinated and approved by the Omaha District.

**b. For Buildings Listed in PAX 3.2.2 But Not Commonly Built:** The Antiterrorism Measures costs will be shown on a separate line item with a sub-line for each building as was done in previous years. If the Antiterrorism Measures costs exceed **2.0%** of the building cost, District must provide a detailed AT/FP cost

break-out along with a justification for higher cost in the Data Development Block. The detailed cost and justification must be coordinated and approved by the Omaha District.

**c. For Buildings Not Listed in PAX 3.2.2:** The Antiterrorism Measures costs will be shown on a separate line item with a sub-line for each building as was done in previous years. If the Antiterrorism Measures costs exceed 2.0% of the building cost, District must provide a detailed AT/FP cost break-out along with a justification for higher cost in the Data Development Block. The detailed cost and justification must be coordinated and approved by the Omaha District.

**d. Support Facilities AT/FP Costs:** The Antiterrorism Measures Support Facilities costs will be shown under the Antiterrorism Measures Category as was done in previous years. If the Antiterrorism Measures Support Facilities costs exceed 2.0% of the total Support Facilities cost, District must provide a detailed AT/FP cost break-out along with a justification for higher cost in the Data Development Block. The detailed cost and justification must be coordinated and approved by the Omaha District.

**7.2.1.2.4. Sustainable Design and Development, LEED, Energy Policy, and Executive Order:** The ENG Form 3086 cost estimates shall include scope and costs associated with achieving SDD, EAct05, EISA07, EO13423, EO13514 and minimum LEED Silver certification starting with FY13 MCA program. If the cost for achieving compliance of this section is undetermined at time of code 3 design, it will be programmed at 2 percent of primary facility cost (as before). However, if costs are provided based on valid designs and compliant life cycle cost analysis, then such costs will be detailed in the ENG3086 for adjudication by ACSIM, HQIMCOM and HQUSACE. The latest Engineering and Construction Bulletin (ECB No. 2011-1, subject: High Performance Energy and Sustainability Policy) shall be consulted during this phase of design. All LEED checklist submissions must follow LEED version 3.0 (if a LEED checklist based on earlier versions was included in the approved DD Form 1391 and was registered with LEED v2.2, then no additional update is needed; cut-off date for use of LEED v2.2 was July 2009). If specific sustainability features are known at this stage of design, a LEED checklist with detailed costs shall be included as part of the ENG Form 3086 submission. SDD costs in excess of the maximum 2% must be thoroughly described, justified and costed as part of this submission.

**7.2.1.2.5. ENG Form 3086 Review.** All ENG Form 3086s are required to be reviewed and certified by the District Chief of Cost Engineering before submission in accordance with ER 1110-3-1300, 26 Aug 99, Military Programs Cost Engineering. Architect-Engineer (A-E) prepared cost estimates must be reviewed for accuracy and completeness by the District Chief of Cost Engineering before using cost data for the ENG Form 3086 input. In addition, District Chief of Cost Engineering must immediately notify his/her leadership and chain of command regarding issues that will prevent his/her office from meeting the final ENG form 3086 submission by 1 February. The Data Development Block shall contain a statement that the District Cost Chief Engineer has reviewed and certified

the ENG 3086 for accuracy and completeness. A sample ENG Form 3086 is included at Appendix D. District Chief of Cost Engineering

**7.2.2. ENG Form 3086 Issue Resolution.** The ENG Form 3086 cost estimate can be initiated based on current DD Form 1391 or data from planning or design charrettes. However, final ENG Form 3086 submission must be based on PDR as approved by HQUSACE (CEMP-IS). It is critical that the cost engineer review the approved PDR scope before finalizing the ENG3086 estimate. If the HNC CX receives an ENG Form 3086 with a scope that is different from the approved PDR, the District Cost Engineer can expect HNC CX to return the ENG Form 3086 for correction and revision. Final ENG Form 3086 must be submitted in the PAX system by 1 February or as directed by HQUSACE.

**7.2.3. Package Schedule.** The PDR shall be prepared and approved within 120 days from code 3 release by ACSIM or as directed by HQUSACE. Scope, and other cost related issues, shall be resolved and validated as part of the design development process and not left for resolution by the District Cost Engineer during the ENG Form 3086 development. The final ENG Form 3086 must be submitted to HNC CX by 1 February or as directed by HQUSACE.

**7.3 Project Definition Report Submittal.** The PDR shall be uploaded using Project Definition Report System (PDRS) that is available at: <https://rfpwizard.cecer.army.mil/pdrs>. (*PDRS instructions will follow via e-mail and posted in QMS.*) All completed PDRs (full blown PDR or PDR-lite) must be in PDRS not later than 15 Jan 2011. The PDR will be checked for completeness and for previous concurrence of ACSIM, IMCOM, and USACE, of any scope deviations as noted earlier in these instructions. Notification of completion of review by HNC CX will be as soon as possible but not later than 2 weeks of submission. HNC CX will respond to the submission to the Geographic District and recommendation to HQUSACE (CEMP-IS) with an e-mail noting that “This PDR is complete and will serve as the basis for the Parametric Design Cost Estimate (ENG Form 3086)”. If the PDR is incomplete and has unresolved scope issues, HNC CX will respond to the submission with an e-mail noting that “This Project Definition Package is incomplete or requires revision before it can be utilized as the basis for the Parametric Design Cost Estimate (ENG Form 3086)”.

**7.3.1. Parametric Design Cost Estimate (ENG Form 3086) Submittal.** Based on approved PDR, the District cost engineer will upload and submit the cost estimate into the ENG Form 3086 Module of the DD Form 1391 Processor. When the estimate is ready for submission, a “Notice of Submission” e-mail will be sent to the designated ACSIM, IMCOM, HQUSACE, Major Subordinate Command (MSC), HQUSACE RIT and HNC CX points of contact. The e-mail will include the statement, “The ENG Form 3086 has been reviewed and certified by the District Chief Cost Engineer and submitted on (indicate the date of submission)”. In addition, a completed Tab B Template shall be submitted along with the “Notice of Submission” e-mail.

**7.3.2. Points of Contact.** The following are the designated Points of Contact for the Parametric Design (Code 3) Process:

#### 7.3.2.1. ACSIM: (MCA Program)

Primary: Mr. Alan Terpolilli; e-mail: [alan.terpolilli@conus.army.mil](mailto:alan.terpolilli@conus.army.mil)

Alternate: Ms. Wendy Schmidt; e-mail: [wendy.schmidt@conus.army.mil](mailto:wendy.schmidt@conus.army.mil)

#### 7.3.2.2. HQIMCOM:

Mr. Michael Stygar; e-mail: [michael.stygar@us.army.mil](mailto:michael.stygar@us.army.mil)

Alternate1: Mr. Richard Ladzinski; e-mail: [rich.ladd@us.army.mil](mailto:rich.ladd@us.army.mil)

Alternate2: Mr. Rod Thompson; e-mail: [rod.thompson@us.army.mil](mailto:rod.thompson@us.army.mil)

#### 7.3.2.3. IMCOM Regional Offices:

Northeast Region: Ms. Jean Hecimovich; e-mail: [jean.m.hecimovich@us.army.mil](mailto:jean.m.hecimovich@us.army.mil)

Southeast Region: Mr Rick Sinclair; e-mail: [richard.sinclair@us.army.mil](mailto:richard.sinclair@us.army.mil)

West Region: Mr. Josef Hallatschek; e-mail: [josef.hallatschek@us.army.mil](mailto:josef.hallatschek@us.army.mil)

Pacific Region: Mr. Jonathan Wung; e-mail: [jonathan.wung@us.army.mil](mailto:jonathan.wung@us.army.mil)

Europe Region: Mr. Sean McDonald; e-mail: [sean.david.mcdonald@us.army.mil](mailto:sean.david.mcdonald@us.army.mil)

Korea Region: Mr. Bonsok Escobar; e-mail: [bonsok.l.escobar@us.army.mil](mailto:bonsok.l.escobar@us.army.mil)

#### 7.3.2.4. HQUSACE:

Ms. Ana M. Ortega; e-mail: [ana.m.ortega@usace.army.mil](mailto:ana.m.ortega@usace.army.mil)

Mr. Ami Ghosh; phone; e-mail: [amitava.ghosh@usace.army.mil](mailto:amitava.ghosh@usace.army.mil)

Mr. Al Young; e-mail: [albert.young@usace.army.mil](mailto:albert.young@usace.army.mil)

Mr. Nelson P. Rulona; e-mail: [nelson.p.rulona@usace.army.mil](mailto:nelson.p.rulona@usace.army.mil)

#### 7.3.2.5. HQUSACE Regional Integration Team (RIT) PMs

LRD-RIT: Mr. Carlos Muniz; e-mail: [carlos.muniz@usace.army.mil](mailto:carlos.muniz@usace.army.mil)

NAD-RIT: Mr. Fritz Kroesen; e-mail: [frederick.j.kroesen@usace.army.mil](mailto:frederick.j.kroesen@usace.army.mil)

NWD-RIT: Mr. Whit Scully; e-mail: [whitney.scully@usace.army.mil](mailto:whitney.scully@usace.army.mil)

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Mr. Steven Robinson; e-mail: [steven.e.robinson@usace.army.mil](mailto:steven.e.robinson@usace.army.mil)

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TAD-RIT: Ms. Manal Ezzat; e-mail: [Manal.S.Ezzat@usace.army.mil](mailto:Manal.S.Ezzat@usace.army.mil)

Ms. Sheila Gray; e-mail: [Sheila.A.Gray@usace.army.mil](mailto:Sheila.A.Gray@usace.army.mil)



M Measurement  
LR Local Requirements (location and disposition of records)

P Paper

**Measurement: DMR and CMR metric**

## **9.0 Attachments.**

[Appendix A – Acronyms and Abbreviations](#)

[Appendix B – Scope Discrepancy Guidance](#) (see PDRS instructions)

[Appendix C – Planning and Design Data \(Tab B\) Templates](#)

[Appendix D – Sample ENG Form 3086](#)

[Appendix E – Project Definition Report Format and Instructions](#)

[Appendix F – Design Directive, Code 3 Sample](#)

[Appendix G – PDR-lite Process Instructions](#)

[Appendix H – PDR-lite Template](#)

## **10.0 Flow Chart.**

NA