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b. District Commanders will develop Implementation Guidelines for their District and forward appropriate appendixes using distribution scheme as listed below.

FOR THE COMMANDER:



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Chief, Information Management Office

- 3 Appendixes
- App A - Implementation Guidelines
Honolulu District
- App B - (Reserved for JED)
- App C - (Reserved for FED)

DISTRIBUTION: (LIST 88-1)
B and C

APPENDIX A

Quality Control (QC) and Quality Assurance (QA)
for Architect-Engineer (A-E) Designs
Implementation Guidelines
Honolulu District

1. Applicability. For selected complex and/or high dollar value projects, as determined by the Chiefs of Technical Engineering, Military and Family Housing/Hospital Branches, A-E's will be required to have a quality control program. This requirement will be identified in the Commerce Business Daily (CBD) announcement and will be used as an element in the A-E preselection/selection process.

2. A-E Quality Control Plan.

a. General. The A-E's QC plan will include provisions for project manager and design team system, written project program, design budget and time schedule, project scheduling and control, and checking procedures. The provisions should be similar to those found in the "Guidelines for Development of Architect/Engineer Quality Control Manual", published by the National Society of Professional Engineers. The A-E should tailor the guidelines to suit the project, the Government's requirements and his operations.

b. A-E Selection. Each A-E will indicate in Standard Form 255, Architect-Engineer and Related Services Questionnaire for Specific Project, the firm's intention to submit a QC plan. The selected A-E will be required to submit past performance of QC plans in other projects, any other related QC information and a detailed project QC plan for approval.

c. Ten percent Design Review. At approximately 10% design, the A-E will submit documents for the government to review. (Submittals for medical facilities will follow TM 5-838-2) Submittal documents need not be formal. Freehand sketches with hand written notes that explain the design intent is sufficient. As a minimum, the following information is required:

(1) A schematic site plan showing the location and orientation of each building, access roads, principle utilities and paved areas. Identify site information such as topography, landscaping, views, adjacent land uses, noise sources, climatic conditions, set back requirements, etc. Provide flow diagrams showing pedestrian and vehicular circulation.

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(2) Schematic floor plans showing all rooms, corridors and other spaces. Include typical furniture and equipment layouts if critical to design. Identify principle dimensions and both the proposed and authorized gross square footage. Provide diagrams and matrices showing circulation patterns, functional relationships and spatial adjacency.

(3) Preliminary exterior elevations or building sections showing architectural mass, scale, materials and structural systems.

(4) Provide notes on the advantages and disadvantages of different design schemes.

d. Independent Review. As required by PODR 1110-345-1, all documents at concept and final design will be completely checked by persons other than those preparing the material. All design submittals will be as complete, well coordinated and error free as possible. Design calculations will be checked as required by ER 1110-345-700. Checkers will initial the drawings (at final design submittal), computation sheets, etc., as having been checked. The drawings will be stamped and signed by a registered professional architect or engineer.

e. Certificate of Compliance. At concept and final design, completed work shall be transmitted by a letter signed by a principal of the firm certifying that: (1) all cost estimates, design analysis, drawings and specifications and other documents have been coordinated and are complete and correct, and (2) the project has been managed in accordance with the A-E's QC plan.

3. HED's Quality Assurance Plan. The following procedures will be accomplished by Government project engineers to monitor quality assurance.

a. Require the A-E to promptly report in writing any change of key personnel.

b. Provide A-E's with construction feedback information to include: (Information is available in CEPOD-ED-T, Technical Engineering Branch.)

(1) Engineering Improvement Recommendation System (EIRS) bulletins.

(2) Design checklists

(3) Lessons learned reports, such as post-completion inspection memorandums.

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PODR 1110-1-5

(4) Value engineering proposals.

c. Coordinate and involve the Corps Technical and Mandatory Centers of Expertise as required.

d. On projects involving new or complicated designs, consider TDY travel by the A-E, project engineer and technical reviewer to projects of similar scope, constructed at other locations. Expertise will enhance and improve future designs and prevent repeat deficiencies.

e. Invite Technical Engineering Branch (TEB) reviewers to important meetings.

f. Encourage A-E's to visit or call TEB to discuss project concerns and review comments.

g. Require a 10% design submittal.

h. Collect certificates of compliance from A-E's at concept and final design as required by Paragraph 2d above.

i. Coordinate biddability, constructibility and operability review in accordance with PODR 415-1-16.

j. Pursue A-E liability actions in accordance with PODR 1110-1-4.

k. Coordinate field inspection by review and design personnel of projects under construction in accordance with PODR 1110-1-2.

l. Negotiate and manage A-E involvement during construction.

m. Expedite problem solving during construction by consulting TEB and/or the A-E verbally, followed by any necessary written documentation.

n. Complete A-E performance evaluation and inform A-E of their rating. CEPOD-ED-MR will maintain this information file for future A-E preselection/selection.

o. Encourage A-E's to attend post completion inspections and to provide input in the final report.