

26 DEC 1996

MEMORANDUM FOR SEE DISTRIBUTION

FROM: HQ AETC/CE
266 F Street West
Randolph AFB TX 78150-4321

SUBJECT: AETC Design/Construction Process Requirements (Various Topics)

1. We're providing revised design and construction information to immediately implement on all AETC construction programs in the following areas:

- Project planning
- Architectural renderings
- Project color boards
- Comprehensive Interior Design (CID)
- Prewired Work Stations (PWS)
- Field finish panels

2. We draw your attention specifically to changes we're directing in project planning. All Military Construction Program (MILCON), nonappropriated fund (NAF), and designated Operations & Maintenance (O&M) construction projects will now require a Project Planning Document Charrette (PPDC). These projects are typically over \$500K in cost and are either new construction, an addition to an existing facility, or a combination of major exterior/interior renovation/rehabilitation. There are two main features of the PPDC: (a) validated scope and costs, and (b) an architectural perspective. This planning document will be used to establish corporate "buy-in" at the wing and command levels on project scope, costs, and architectural compatibility.

3. More specific details are provided in the attachments. Our POCs for these policy items are Mr. Rick Enrico, HQ AETC/CECT, at DSN 487-2786 or commercial (210) 652-2786, and Mr. Rick Kendrick, HQ AETC/CECF, at DSN 487-2143 or commercial (210) 652-2143. Please call them for your specific questions and issues.

SIGNED

DAVID M. CANNAN, Col, USAF
The Civil Engineer

Attachments:

1. Distribution List
2. SOW for Rendering

cc:

HQ AETC/IGISM/CEP/CER/SVC

OPG
232

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CECF/Kendrick/72143/6 May 96/VR/P:CECF/Kendrick/rendpoj.doc Spelling Verified _____
Retyped for editing changes/CECT/Castilla/jsp/12 Sep 96
Retyped for editing changes/CEC/August/73991/jsp/20 Sep 96
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Retyped/CEC/da/14 Nov 96/P:CECF/Kendrick/rendpoj.doc: Prior Coord Remains Valid & Attached
Retyped/CECF/VR/18 Nov 96/P: CECF/Kendrick/rendpoj.doc
RWTN: Gilbert/9 Dec/p....cecf/kendrick/renproj1.doc
RWTN & Reorganized/CE/Col Gilbert/76326/jcw/23 Dec 96/p/cec/cecf/kendrick/rendpoj2doc
EVIDENCE OF PRIOR COORDINATION REMAINS VALID AND IS ATTACHED.

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AETC Design/Construction Process Requirements

PROJECT PLANNING DOCUMENT CHARRETTE (PPDC)

1. All Military Construction Program (MILCON), nonappropriated fund (NAF), and designated Operations & Maintenance (O&M) construction projects now require a PPDC. These projects are typically over \$500K in cost and are either new construction, an addition to an existing facility, or a combination of major exterior/interior renovation/rehabilitation. There are two main features of the PPDC: validated scope and costs, and an architectural perspective.
2. Project Scope and Cost: The PPDC supports the project programming and design phases so facility board (FB) members and MAJCOM engineers can confirm project scope and cost. The on-site PPDC identifies and validates our customers' functional project requirements. One of the end results of the PPDC should be project "buy-in" by senior user/wing leadership to lock in requirements and the project's programmed amount (PA). The PA should be validated using the Air Force's Parametric Cost Engineering System (PACES). Submit the PACES PA to the Command within three weeks after the PPDC. This parametric estimating system will provide an adequate PA to be used on the base's draft DD Form 1391. The end product of the PPDC is the Project Planning Document (PPD).
3. Architectural Perspective: The PPDC should provide sufficient conceptual architectural design work to produce colored perspective sketches of the proposed facility. Each MILCON, NAF and designated O&M construction project now require a concept architectural sketch/perspective prior to final design. The sketches will supplement normal plans and elevations used for briefing, informing, and educating our senior leadership about the project to ensure their "buy-in" at an earlier time frame than previously accomplished. These initial sketch perspectives can either be freehand or CADD produced and colored in any quick media (pencil, felt tip marker, pastels, etc.) in which the designer is proficient. Ensure the colors closely match the base's architectural compatibility plan/program. Sketches should be sufficiently detailed to indicate the building's main entry design, roof material, and fenestration. We encourage multiple concepts or schemes (minimum of two), as available time permits, with a perspective sketch for each concept. Sketches should be reproducible, so multiple copies can be left with the customers (note that on-base color copiers may not be available to the architect-engineer [A-E]). Allow the designer sufficient time (up to two weeks after the PPDC) to brief the customer and Support Group/Wing Commanders.
4. If you are unsure whether a specific project requires a PPDC, contact the HQ AETC/CEC project manager (PM) of the base involved. For NAF projects, our HQ AETC/CEC PM will coordinate with and provide copies of concept sketches to HQ AETC/SVP.

FINISHED ARCHITECTURAL RENDERINGS

1. In general, all new construction projects will have professionally accomplished architectural renderings. If a rendering requirement is waived because of cost, the base may submit its justification for the rendering to HQ AETC/CEC for reconsideration.
2. Final renderings will be commissioned only for public information and announcement purposes. They are not to be used for the "buy-in" process by senior leadership -- that is now the function of the quick-sketch perspective during PPDCs. Start actions to produce a final rendering after approval of the PPDC sketch perspective and selection/approval of exterior and interior materials of structural interior design (SID). Typically, this should occur at approximately the 50% design stage after SID takes place,

structural interior design (SID). Typically, this should occur at approximately the 50% design stage after SID takes place, and normally take approximately 60 days. A typical Statement of Work (SOW) for renderings has been developed (Atch 2).

3. Architectural models (whether massing, study, preliminary or final) are seldom produced for Air Force projects due to their inherently high costs and lengthy acquisition time. If a requirement for a model is identified and approved by HQ AETC/CE, identify the cost in the design budget.

PROJECT COLOR BOARDS (DESIGN AND CONSTRUCTION)

1. The Air Force's design agent (DA) or their A-Es produce and submit color board submittals for both exterior materials selection and SID as part of the normal design process. When specified (see paragraph 1d), comprehensive interior design (CID) color boards are also required during design. The color board submittals will be submitted only in 8 1/2- x 11-inch loose-leaf binder format for ease and safety of shipping, storing, and updating. Multiple binders may be necessary for each set. One set will be made available to HQ AETC/CECI, one to the base, and a minimum of one for the construction agent's (CA) Area Office (for future comparison with the construction contractor's color boards).

2. HQ AETC/CECI will review and provide final approval of all SID and CID color boards through the PM. HQ AETC/CEC will coordinate comments and approvals on NAF projects with HQ AETC/SVP. Color boards shall be completed and distributed by the 50% design stage for review/approval, whether or not a formal intermediate (60%) design submission is planned.

3. Construction contractor color boards submittals shall be provided to HQ AETC/CECI for review/approval and conformance with approved design.

COMPREHENSIVE INTERIOR DESIGN (CID)

HQ AETC/CEC will determine the requirement for CID on a case-by-case basis based upon the project type and its level of importance or interest. Any projects programmed and funded to receive prewired work stations will receive a CID. When a requirement is determined during preparation for the PPDC and approved by HQ AETC/CEC, the CID requirement will be identified to the DA by field Design Instruction (DI). The DI will be initiated only after approval of the DA's fee proposal for CID.

PREWIRED WORK STATIONS (PWSS)

1. The Office of the Secretary of Defense recently changed policy and reversed the Air Force's funding source of PWSSs from MILCON to O&M. PWSSs will now be procured (purchased/installed) with O&M funds. PWSSs will be structured in the MILCON contract as a high-priority option item since these O&M funds may be from the FY after the MILCON FY. However, with proper advance planning, the PWSSs should be funded with O&M funds from the same FY as the MILCON. This policy also applies to the O&M program.

2. PWSSs will be annotated on the DD Form 1391 as a non-add entry in Block 9 for equipment provided from other appropriations; and in Block 12b, listing the equipment as an O&M funded item. These items will be verified by HQ AETC/CER. During preparation of construction documentation, the bid schedule must be structured to identify a separate line item bid for obligating and auditing purposes. As excluded cost items, the PWSSs are retained as unit personal property and are not picked up on real property

records. The HQ AETC/CEC PM is responsible for ensuring the base requirements are identified to the AETC Council.

FIELD FINISH PANELS (FFPs)

FFPs are typically required of the contractor for approval of exterior building materials for matching materials and paint colors in historic structures or districts. Requirements for FFPs should be used sparingly and only to confirm design intent in meeting the base's architectural compatibility program for such specialty items as clay tile, mission tile, standing seam metal roofing color/pattern/blend, color/texture of wall stucco, brick or pre-cast concrete panels. This requirement needs to be identified by the base civil engineer to the HQ AETC/CEC PM who will direct the DA to include in the Requirements Document section of the PPD as part of the contract documentation. FFPs should be discussed by the DA or A-E in the first design submittal to confirm the requirement.

Finish Architectural Rendering Requirements

Type A Services: Finish Architectural Rendering(s) Requirements:

1. When required by an individual delivery order to this contract, the A-E shall provide, through the services of a professional architectural rendering firm normally engaged in such work and who has been in business for a minimum of three years, a matted and framed color rendering(s) along with the other deliverables which are specified below.

a. At 50% design submission phase, after selection and approval of the final concept design sketches from the design charrette and submittal, review and approval of the building's exterior colors/material finishes selections, the final architectural rendering process shall commence. The A-E shall provide the rendering firm with all necessary preliminary information, sketch perspectives, material selection, and site photographs prior to initiation of his work.

b. Within 14 calendar days, the A-E shall submit for approval a copy of the rendering firm's "rough" rendering layout along with three to five 8- x 10-inch color photographs of other final rendering samples, either from other projects or from the rendering firm's portfolio indicative of the technique to be used for the final rendering. If the rendering firm has published brochures or portfolios showing samples of work, it may be substituted for above required photo samples.

c. Deliverables: Within 45 calendar days from approval of proposed "rough" rendering layout, provide the following:

- (1) One colored original rendering; matted and framed.
- (2) Two copies full-size color photographic reproductions; matted, and framed.
- (3) Three copies full-size color photographic reproductions, unmounted.
- (4) Five copies of 35mm color slides.
- (5) One copy of 8- x 10-inch black and white photographic print with negative and written release by photographer for government publication use.

2. Rendering Specifications:

a. The two-point perspective should be taken from a slightly "birds-eye" view of the main building(s) showing the two predominant sides including the entry side of the building, indications of proposed landscaping, and existing (or proposed) surrounding building(s) to show the new facilities contextual setting. If parking or pedestrian circulation occurs at the predominant building elevation to be rendered, so indicate that circulation with vehicles, aircraft and/or people to give and illustrate scale. Be careful not to choose an angle so high that the rendering is dominated by the roof. For smaller facilities, a more eye-level perspective may be appropriate; however, the final selected perspective angle is at the discretion of the A-E in consultation with the rendering firm. It is highly recommended this decision is discussed in advance with the government architects involved in the project

b. Final framed rendering size shall be 24 x 36 inches overall, including matting and frame. Matting shall be a single layer in neutral color complementing the rendering. Use of thin matting is required to ensure the rendering does not pull away from glazing, thus producing a "fuzzy" image. Glazing shall consist of a non-reflective type optical acrylic material intended for such end use. Frame material shall be gloss black factory-baked enamel paint or anodized finish extruded aluminum 1 inch deep from wall to face. Provide complete frame with all necessary corner reinforcement, mat hold-down clips, and hanging hardware. Provide name placard mounted on matting in black Helvetica lettering with minimum information of project title, location, and name of A-E firm (exact wording will be provided by HQ AETC).

c. Renderings shall be packaged for common carrier commercial shipping by either the A-E firm, rendering firm, or matting/framing subcontractor as necessary to meet schedules. Addresses will be provided by the government for approximately three CONUS mailing locations. Loose color and black and white prints, slides, negatives, and one framed photo copy of the rendering shall be provided to HQ AETC/CEC.