

**Civil Engineering**

**CRITERIA AND STANDARDS FOR AIR NATIONAL GUARD  
CONSTRUCTION**

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This instruction modifies the guidance provided by the 32 series of Air Force publications that concern the Air National Guard (ANG), especially AFI 32-1023, *Design and Construction Standards and Execution of Facility Construction Projects* and AFI 32-1032, *Planning and Programming Real Property Maintenance Projects Using Appropriated Funds (APF)*. This instruction formulates specific operational and procedural policy guidance to implement execution of installations and facilities programs of NGB/CF under the authority of AFPD 32-10, *Installations and Facilities*. This instruction and referenced documents prescribe the procedures and reports necessary in assisting the ANG Base Civil Engineers (BCE) and the U.S. Property and Fiscal Officers (USPFO) in the design and construction of Military Construction Projects (MCP), Minor Construction (MC) and Real Property Maintenance (RPM) projects.

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## Chapter 1

### POLICIES AND PROCEDURES

**1.1. General Information.** This chapter will govern over AFI 32-1023. The Chief, National Guard Bureau (CNGB) is responsible for the design and construction of Air National Guard (ANG) facilities as directed by AFPD 32-10. Under authority of 10 USC 18233 (c), the CNGB has delegated managing design and construction of MCP and RPM projects for the Air National Guard to the Director, Civil Engineer Directorate (ANG/CE).

**1.2. Purpose.** This Air National Guard Instruction (ANGI) provides direction to the Air National Guard Civil Engineer Directorate (ANG/CE), State Military Departments, Base Civil Engineers (BCEs), and design and construction agents concerned with the design and construction of ANG facilities. Policies, procedures and criteria outlined in this instruction apply to all ANG construction, whether entirely or partially federally funded. It also applies to the construction of replacement facilities for the Air National Guard that are totally funded by outside parties.

**1.3. Applicability of Criteria and Standards.** These criteria apply to all new construction, reconstruction, rehabilitation, alteration, modification, and maintenance and repair of existing facilities constructed with Military Construction Program (MCP) and Real Property Maintenance (RPM) funds, Base Relocation and Closure (BRAC) and other sources of funds. The criteria will not be used solely as a basis for advancing standards of existing facilities, except where necessary to achieve a minimal acceptable level of safety, quality and performance.

**1.4. Design and Construction Agents.** The CNGB, through the ANG/CE, is responsible to the Secretary of the Air Force, the Secretary of Defense, and the U.S. Congress for properly managing construction programs and for economically using funds appropriated for such construction. Under authority of DOD Directive 4270.5, *Military Construction Responsibilities*, paragraph D.1.d, the CNGB selects the U.S. Property and Fiscal Officer (USPFO) in each state and territory as the construction agent for ANG projects, except when facilities are to be constructed on Army, Navy, or Marine Corps activities. Facilities to be constructed on Army, Navy, or Marine Corps activities shall be designed and constructed by the host Military Department construction agent. Construction agent responsibilities are the design and construction execution responsibilities associated with military construction program facilities.

## Chapter 2

### PROJECT CRITERIA

**2.1. General.** This chapter will govern over AFI 32-1023. Project criteria is generally developed by the Base Civil Engineer (BCE) as the result of a request for project documentation by ANG/CEC. Air National Guard design criteria are defined in the Air National Guard Design Policy (currently ANGETL 97-1), other ANG Engineering Technical Letters (ANGETL) and other publications issued from time to time by ANG/CE. Project documentation preparation (currently defined in ANGETL 93-6) will usually consist of a project book (PB) or a statement of work (SOW), an estimate of A-E fees, a draft Commerce Business Daily (CBD) announcement, a DD Form 1391, *Military Construction Project Data*, a real estate appendix, an installation restoration program (IRP) appendix, an approved base master plan, an asbestos appendix, and an underground storage tank (UST) appendix. This chapter provides basic design criteria and directions for preparing PBs and SOWs.

**2.2. Project Requirements.** A PB or SOW shall be prepared for all projects. When using A-E design services, the PB or SOW will provide the contracting officer with a concise and accurate description of the project requirements to be used in the A-E contract as the technical provisions. The PB or SOW will form the basis upon which an A-E firm is to prepare its design of the project. The PB or SOW must be a complete and accurate description of user functions and requirements. The ANG relies on the PB or SOW and the A-E's professionalism for the design of a complete and usable facility.

**2.3. Project Book.** The purpose of the PB is to furnish all information the A-E will need to design the project. The PB shall have an 8 1/2 by 11 inch format. Any prints or drawings will be folded as near as possible to 8 1/2 by 11 inches and inserted in the PB. No artwork or special graphics are required to enhance the appearance of the PB. The accuracy, completeness and quality of the information contained in the PB are more important than the appearance of the PB. The PB shall consist of a cover sheet and Tabs A, B, C, D, and additional tabs as determined appropriate for each project. The air commander, BCE, the using organization, environmental manager, fire chief, security chief, safety officer, and communications chief, will sign the cover sheet. Design criteria in all manuals and Technical Orders (TOs) should be restated in the PB or otherwise specifically referenced. A copy of applicable portions of referenced manuals and TOs should be attached to the PB. The PB tabs will include:

2.3.1. Tab A. This tab provides a description of the proposed facility. It contains both a general overview of the work to be performed at the facility and a description of the special requirements of each room or area in the facility. Every effort should be made to avoid including design directive statements, not otherwise required by design criteria or policy. Paragraphs required in Tab A are described as follows:

2.3.1.1. Project Number (PN) and Title. Use the identical number and title that were used in the letter requesting the PB. Provide a brief overview of the functions performed at the facility.

2.3.1.2. Scope. Use the same scope that was used in the letter requesting the PB.

2.3.1.3. Maximum Construction Cost. This cost will be provided in the Design Instruction and shall be furnished to the A-E at the Criteria Review Conference (CRC).

2.3.1.4. ANG Definitives. These will be provided only when the applicable definitive accurately and completely describes the proposed facility.

2.3.1.5. Floor Plan. Provide existing floor plan for alteration projects.

2.3.1.6. Number of Occupants. Provide the number of male, female, total weekday and unit training assembly (UTA) occupants of the facility. These numbers are used to adequately size the lavatories and parking lots.

2.3.1.7. Hours of Operation. Provide weekday, weekend (UTA) and night hours. These hours are useful to a mechanical engineer to provide a design energy budget calculation when required.

2.3.1.8. Space Title, Function and Special Requirements. This paragraph and all subsequent paragraphs are used to describe each space in the facility. List each space, with title and description, starting on a separate page. Space titles will reflect room function. Provide a brief functional description of each space. Subparagraphs (a) through (h) for each space are used to list special space or technical requirements the A-E would not otherwise be expected to know. If the requirements of a space are of standard construction or are defined in Tab D, ANG Design Policy, state No Special Requirement (NSR). The subparagraphs are:

2.3.1.8.1. Architectural. Examples are special wall, floor or ceiling treatment; special ceiling height; special fenestration; special door types or sizes; security requirements; daily and UTA room occupancy numbers.

2.3.1.8.2. Structural. Examples are special floor loadings, vaults (include class), hoists, lifts.

2.3.1.8.3. Mechanical. List requirements for design temperature and humidity; special plumbing, heating, ventilation, air conditioning; compressed air; stripping or cleaning vats; exhaust hoods or fans; eye wash, floor drains; and oil-water separators, neutralizers, process tanks, dust collectors and hazardous wastes.

2.3.1.8.4. Electrical. Examples are special lighting and power requirements, special grounding, lightning protection, hazardous area classification, special security requirements, stand-by power and ground fault interrupters.

2.3.1.8.5. Communications. Examples are prewiring for telephone, intercom, public address, data automation and CCTV requirements. Include all requirements for limiting compromising emanations (TEMPEST).

2.3.1.8.6. Fire Protection. All areas shall receive fire detection as provided by Tab D, ANG Design Policy. Examples are to identify only those spaces (rooms) to receive fire suppression as required by Tab D.

2.3.1.8.7. Equipment. Examples are to identify equipment that is government-furnished (GFE), such as lathes or table saws, that a designer must consider when sizing a space (room) and providing appropriate utilities

2.3.1.8.8. Technical Order (TO). Refer to specific TOs so that proper research can be done by the A-E.

2.3.2. Tab B. This tab provides a description of the project site. It contains information on all exterior work items needed to provide a complete and usable facility. Each paragraph of Tab B is described as follows:

2.3.2.1. Project Number (PN) and Title. Use the same number and title that were used in the letter requesting the PB. Provide a brief summary of the major exterior work items needed that are described in further detail in subsequent paragraphs, such as access roads, parking lots and fencing.

2.3.2.2. Location of Project. Describe the location of the facility on the installation and any special relationship the facility may have with other facilities. Refer to the plan attached to the PB that shows the location of the facility on the installation and indicates the construction haul route and staging area. The proposed location of the facility must be in conformance with the approved master plan. Any other location must be supported with an approval letter from ANG/CE.

2.3.2.3. Site Plan. Describe the project site area. Refer to the plan attached to the PB that outlines the property area to be used for the project site. The outlined area will define the area to be considered for a topographic survey. Identify existing site features such as whether the site is treed or cleared, has buildings to be demolished, or has pavements. Indicate the availability of existing soil boring data that may be useful to the design. Include a narrative of the requirements that a design must provide to accommodate pedestrian and vehicle traffic, privately owned vehicle and organic parking, fencing, area lighting, storage areas, etc.

2.3.2.4. Utility Plans. Describe what is known about each of the existing utilities needed to service the facility. Refer to the simple utility plan attached to the PB that shows the facility site plan and the location of all existing utilities including water, sanitary sewer, storm drain, gas, electric and communication lines, and fire hydrants. Coordinate with the ANG installation communications officer to determine how communications cable will be provided to the building site.

2.3.2.5. Architectural Treatment. Describe the architectural treatment and types of construction of surrounding existing permanent facilities. New facilities shall harmonize and be compatible with existing permanent construction. Include base policy statement on color scheme or other architectural policy, if such policy exists.

2.3.2.6. Special Siting Criteria. Describe the constraints on locating the facility in the vicinity of adjacent structures, base property lines, runways, taxiways, aircraft parking facilities, Quantity-Distance (QD) requirements, security requirements of fences, gates, etc. Refer to the Air Force Manual or Air Force Instruction paragraphs attached to the PB that provide the special siting criteria for the design.

2.3.2.7. Environmental Requirements. Describe environmental and permit requirements. Require the A-E to prepare permit applications for BCE's signature by completion of Type B, Contract Documents Development Meeting.

2.3.3. Tab C. This tab provides the attachment of the Air National Guard Design Objectives and Procedures. It includes a complete description of each phase of the design, submittal requirements and responsibilities for the design review process. It also provides formats for ANG facility design data, a design and construction schedule, review comments, and CRC addendum items as well as submittal checklists. This tab is formulated by ANG/CEC and periodically updated as an ANGETL.

2.3.4. Tab D. This tab provides for the attachment of Air National Guard Design Policy. It contains design guidance affecting various aspects of an A-E's design. Design policy is also formulated by ANG/CEC and periodically updated and issued as an ANGETL.

2.3.5. Other Tabs. Other tabs may be used if warranted and approved by ANG/CEC to adequately describe the requirements of a project.

**2.4. Statements of Work.** A statement of work is required for those MCP projects that do not require a PB and for RPM projects above local project review authority. SOWs will include the same information provided in Tab B. Tab C, revised as required, and Tab D will be included as part of the SOW when appropriate. ANG/CEC has standard SOWs available for airfield paving projects, aircraft arresting system projects, hush house projects and roof investigation and repair projects.

**2.5. Areas of Responsibility.** The development of a satisfactory PB or SOW requires the effort and coordination of the support organizations (fire chief, environmental manager, bio-environmental technician, chief of security police, chief of safety, operations, maintenance, etc.), the BCE and the ANG/CE. Coordination with the airport authority is also required on certain projects located on joint-use municipal airports having an effect on commercial aviation. The BCE is responsible for preparing the PB or SOW based on information provided by all organizations and agencies concerned. The BCE may use A-E services to develop the PB or SOW when specifically authorized by ANG/CEC. The BCE should impress

upon all parties concerned that the PB or SOW is the appropriate vehicle for describing all project requirements.

2.5.1. The using organization must supply complete functional descriptions and accurate planning criteria for PBs or SOWs including all applicable regulations, instructions, and TOs. The using organization shall be the primary information source for Tab A.

2.5.2. The BCE must augment the using organization's requirements with all available information concerning the site, existing utilities, paving, buildings and any other conditions that will affect the design. The BCE is the primary source of information for Tab B.

2.5.3. The air commander, BCE, the using organization, environmental manager, fire chief, security chief, safety officer and communications chief, shall sign the PB or SOW. Those ANG units which are tenants on bases of the Air Force, Army, Navy or other government agency shall obtain, and attach to the PB or SOW, a statement from the host that the project siting is in accordance with their master plan.

**2.6. Project Book Review and Approval.** The various divisions within ANG/CE, along with other functional directorates, will jointly review PBs or SOWs for MCP projects. ANG/CEC will approve PBs or SOWs for MCP projects and master plans. A PB or SOW requiring major corrections shall be reaccomplished and resubmitted. PB or SOW requiring only minor corrections will be approved, and corrections shall be incorporated into the PB or SOW by the BCE.

### Chapter 3

#### DESIGN AUTHORIZATION

**3.1. General.** This chapter will govern over AFI 32-1023. ANG/CEP (programming) approves, validates, and programs projects for each construction program and releases their projects for design to ANG/CEC (engineering). ANG/CEC (engineering) authorizes design of a project to the construction agent (normally the USPFO or other agent per paragraph 1.4). Authorization to design a project is required prior to beginning procurement of A-E services to design a project as follows:

3.1.1. For USPFO approved RPM projects, the BCE may start design with in-house resources after the project is validated by the Facilities Board (FB). Authorization to use A-E services to design RPM projects is covered in Chapter 4. For NGB approved projects, design may proceed upon receipt of Design Instruction (DI).

3.1.2. For MCP projects, ANG/CE will approve a project book and issue a design authorization before the investigation and design can be started. The design authorization is usually in the form of a DI.

3.1.3. Once a DI has been issued for a project, the project must be reported on the MCP or RPM Monthly Status Report for the duration of the project. (See current ANGETL, SUBJECT: Design and Construction Reports.)

**3.2. Design Instruction.** A DI for a project is issued by ANG/CEC to the USPFO or other construction agent. The following information is usually included in the DI:

3.2.1. Authority to procure A-E services.

3.2.2. Location, scope and maximum construction cost of the project.

3.2.3. Program execution milestones to ensure Office of the Secretary of Defense (OSD) and congressional obligations are met for the fiscal year in which the project is planned for construction.

3.2.4. For MCP projects, confirmation that design funds (P313) have been concurrently issued to the base comptroller in an amount that would be more than adequate to cover the initial contract obligation of the A-E contract (which is usually Type A services). In the event that the Corps of Engineers or Navy are the design agent, funds will be issued to their Headquarters Comptroller. Additional funding for the balance of design services will be issued upon receipt of the A-E Negotiation Report.

3.2.5. An approved PB or SOW is not required to begin the process of selecting a design A-E.

**3.3. Basis for Design.** DD Forms 1391 will be the foundation of the basis for design. The basis for design shall be the approved project book or approved statement of work.

## Chapter 4

### ARCHITECT-ENGINEER (A-E) SERVICES

**4.1. General.** This chapter will govern over AFI 32-1023. Authority for use of A-E services is determined on an individual project basis. The authority to use A-E services for most large ANG projects will be provided in the DI. ANG/CEC will issue the DIs for MCP and RPM (above the USPFO approving authority) (to include Master Plan) projects. Portions of this chapter may not be applicable where A-E services are procured by the US Army Corps of Engineers, the Naval Facilities Engineering Command or other design and construction agents. Procedures for selection of A-E firms are described in the Federal Acquisition Regulation (FAR), FAR supplements, NGFAR Supplement (in Part 36.6) and the current ANGETL on A-E Selection.

#### **4.2. Types of A-E Services.**

4.2.1. Type A. Services include advance planning studies as well as field surveys and investigations required to obtain data essential to the performance of Type B services that are not available from government resources. These surveys and investigations may include topographical surveys, soil borings, soil analyses, chemical and mechanical surveys and investigations, determination of utility locations and capacities and similar fact-finding investigations, technical studies, concept cost estimates, or concept development studies.

4.2.2. Type B. Services provide production of complete designs, including preliminary and final plans, outline and final specifications, design analyses, and preliminary and final cost estimates.

4.2.3. Type C. Provides construction inspection, testing, shop drawing review and management services.

#### **4.3. Authorizations for A-E Services.**

4.3.1. For MCP projects the authorization for A-E services is in the design instruction. P313 design funds are used.

4.3.2. For RPM projects the following apply:

4.3.2.1. ANGI 32-1032, *Civil Engineering Programming Policies and Procedures*, defines project approval authorities. The BCE shall determine whether to use in-house resources or to use A-E services for the following: (a) Advance planning studies; (b) or to investigate, design and inspect USPFO-approved projects. The USPFO will provide contract support for the use of these A-E services. Funds designated for the RPM program are used for A-E services for advance planning studies and RPM project investigation, design and inspection.

4.3.2.2. Using A-E services for all RPM projects or studies other than those referenced in paragraph 4.3.2.1 must be reviewed and approved by ANG/CE. To obtain this authorization, the BCE must send ANG/CE a request for using A-E services with a statement of work and an estimate of A-E fees.

**4.4. Special Approval of Selection.** Selection of an A-E firm for a contract with total A-E fees estimated to exceed \$500,000 must be approved by ANG/CE prior to contracting action by the USPFO. (See current ANGETL, Subject: Architect-Engineer Selection Process)

**4.5. A-E Indefinite Delivery Services.** Air National Guard installations that have a BCE position are authorized to have an active A-E indefinite delivery service contract at all times. Contracts may be established for one base year plus an additional 1-year option period. Contracts with up to four additional option years require approval of the Office of the Principal Assistant Responsible for Contracting (NGB-AQ). Where work load dictates, installations may have more than one A-E Indefinite Delivery contract, preferably overlapping. The contract shall support geographically separated units under a BCE's purview but may also support units not under a BCE's purview. When more than one A-E IDIQ contract is active/available, the BCE shall document by written memo to the contracting officer which A-E Indefinite Delivery/Indefinite Quantity (IDIQ) contractor is ranked #1 for a particular requirement. Among the considerations to be addressed in the memo are: 1) that the requirement is within scope of the IDIQ contract, 2) that the most technically qualified IDIQ contractor is being chosen, 3) the volume of work the IDIQ contractor has, i.e., does the contractor have the capacity for this requirement, and 4) that the independent government estimate addresses travel cost for firm not near work site. Architect-Engineer selection authority is delegated to the BCE. Contracts for A-E Services shall be issued by the USPFO. Dollar

thresholds and maximum dollar amounts per delivery order are established in the FAR and NGFAR Supplement. Current amounts are \$300,000 per delivery order and \$1,500,000 total each year.

**4.6. Use of A-E Indefinite Delivery Services.**

4.6.1. Contract conditions for A-E indefinite delivery services are under the purview of NGB-AQ .

4.6.2. The BCE is authorized to use A-E indefinite delivery services for projects (and advance planning studies) within USPFO approval authority. The BCE is also authorized to use A-E services for projects within local project review authority, and, when specifically authorized by ANG/CE, for developing PBs for projects above local project review authority. The A-E Indefinite Delivery service contract may also be used for the design of MCP funded projects. Where projected workloads exist, A-E IDIQ contracts should be established for a geographic area (i.e., state, multiple states or bases in geographic proximity).

4.6.3. For projects above local project review authority, the BCE shall forward a PB or SOW and an estimate of A-E fees for Types A, B, C and reproduction services to ANG/CE for review and approval. If the BCE does not have sufficient funds to cover the entire delivery order, a request should be made for the additional funds needed. The full amount of the delivery order on an AF Form 9 shall be provided to the contracting officer prior to the award of the delivery order.

4.6.4. Funds to support the minimum guaranteed fee, and delivery orders for all RPM projects within USPFO project approval authority, shall be taken from the project number ending with 998 for USPFO-approved class Maintenance and Repair (M&R) projects. ANG/CE will provide funds for the design of each NGB approved project under its own project number. P313, P341, and P321 funds shall be used to support delivery orders for MCP projects.

**4.7. A-E Statement of Work:**

4.7.1. For MCP projects:

4.7.1.1. A SOW is required to identify project requirements for projects such as site preparations, power check pads and pavement projects where a PB is not the appropriate format.

4.7.1.2. A PB is the SOW for building type projects.

4.7.2. For RPM projects, a SOW is required unless a PB is specifically requested.

**4.8. Government Cost Estimate.** The BCE must prepare, sign and date a detailed cost estimate of A-E services and submit it to the contracting officer. The estimate shall be prepared on the current National Guard Bureau format supplied by the contracting officer. The estimate of A-E fees for projects or advance planning studies will be subject to approval by the same authority approving the SOW.

**4.9. Commerce Business Daily (CBD) Synopsis.** The CBD synopsis is a critical event. The CBD serves as the solicitation for A-E contract services. As such it must identify to the public what A-E services are needed. The BCE must provide to the contracting officer a brief general statement of all key elements to publish in the CBD for those elements to be included in the resultant A-E service contract. These key elements include:

4.9.1. Project title and a brief description of major facility features or project components sufficient to convey the span of A-E special disciplines/skills that may be required. Do not use military abbreviations. (For an A-E IDIQ solicitation, list the typical types of projects expected to be accomplished.)

4.9.2. Location of project site. (For an A-E IDIQ solicitation, list the base or bases or geographic area to which the solicitation would apply.)

4.9.3. Project construction cost estimate in which the contracting officer will publish the cost range of the intended project. (For an A-E IDIQ solicitation, list task order funding limitations and number of option years.)

4.9.4. Types of A-E services required, such as, investigative Type A, design Type B, and construction surveillance Type C.

4.9.5. Tailor A-E selection criteria in accordance with the current FAR and DFAR. Provide within the context of the professional qualifications rating criteria, the A-E special disciplines considered important to the project and list them in the order of importance they will be given in the A-E selection process.

**4.10. Conditions Applicable to Firm Fixed Price A-E Contracts.** The following conditions are applicable:

4.10.1. Funding for A-E services for MCP and RPM projects above USPFO approval authority will be approved by ANG/CEC and will be provided through comptroller channels.

4.10.2. For MCP projects, the cost of Type B services shall be broken down into two phases; Pre-final Submittal and Final Submittal. Unless specifically instructed otherwise, the government has an option to

continue the design at the completion of Type A services or the Type B Pre-final phase. Fees to be negotiated shall be based on level of effort by the A-E firm.

4.10.3. Code and Criteria reviews will be included as an option. Current ANGETL on Design Objectives and Procedures specifies details.

4.10.4. The option for the A-E to perform construction supervision and inspection (Type C) services shall not be exercised until the pertinent construction contract has been awarded.

**4.11. Funding A-E Services:** (This section applicable when USPFO is Design Construction Agent)

4.11.1. MCP Projects. Design instructions authorize the procurement of A-E services for MCP projects and address design funding (P313 funding) to support the BCE's estimate of the A-E fee for the basic contract requirement without design options. When A-E fee negotiations have been completed for each type of work required (meaning Types A, B and/or C services), an Architect-Engineer Negotiation Report, as shown in current ANGETL, Subject: Design and Construction Reports, shall be submitted to ANG/CE.

Additional design funding needed to effect the award of the A-E contract or IDIQ task order will be issued to the appropriate comptroller office for the BCE to furnish to the contracting officer on an AF Form 9. Full funding of Types A and B services are normally provided following ANG/CE receipt of a Negotiation Report. Where full funding of contract options was not provided prior to contract award, the BCE must notify ANG/CE of need for design funding of contract options approximately 30 days prior to the anticipated issue of the contract option Notice to Proceed (NTP). Funds for Type C A-E services are provided with the construction funds. Funding documentation for contracting action will be done according to Army FAR Supplement 1.602-2.

4.11.2. RPM Projects. Design funds for RPM projects within USPFO project approval authority shall be taken from the project number ending with 998 for USPFO-approved class M&R project funds. Design funds for each project above USPFO approval authority will be provided under its own project number. A-E Negotiation Report, as shown in current ANGETL, Subject: Design and Construction Reports, shall be used. In the situation when only Type A services are funded, the BCE should request funds for Type B contract option services approximately 30 days prior to the anticipated issue of the contract option notice to proceed (NTP). Funds for Type C A-E services (normally negotiated for airfield pavement type projects) are provided with the construction funds. Funding documentation for contracting action will be done in accordance with Army FAR Supplement 1.602-2.

4.11.3. Type C Services. Type C services are funded using project construction funds.

**4.12. Changes to A-E Contracts.** Requests for changes to A-E contracts shall be sent to ANG/CE for approval along with justification and an estimate of additional A-E fees. When approved, notification of either a funding action or a reservation of funds will be sent along with the approval to change the A-E's contract. The contracting officer may not issue a change order unless he has in his/her possession a funded AF Form 9. However, the USPFO may approve changes to A-E contracts or delivery orders for projects remaining within RPM local project review authority.

**4.13. Contracts over \$25,000.** For each contract over \$25,000, the contracting officer is required by FAR 36.604 to prepare an A-E performance evaluation report. Ordinarily, the evaluating official should be the person responsible for monitoring contract performance. The BCE is relied upon to provide contracting officer support to this end. DFARS 236.604 requires a separate report by the contracting officer after the actual construction of the project. The evaluation official should be the person most familiar with the A-E's performance.

## Chapter 5

### BASE REVIEW AND CRITERIA REVIEW CONFERENCES

**5.1. Base Review Conference.** This chapter will govern over AFI 32-1023. The Base Review Conference (BRC) is held prior to the CRC with the government design team. The ANG/CE Project Manager normally conducts it after the project documentation has been approved by ANG/CE for MCP projects. A BRC is not normally held for RPM projects

**5.2. Purpose of the Base Review Conference:**

- 5.2.1. To resolve any perceived conflicts with the approved project book and finalize the project book or statement of work.
- 5.2.2. To clarify and agree on design objectives before the CRC.
- 5.2.3. To provide a forum to brief the design process to users, contracting and management.
- 5.2.4. To provide an opportunity to review design procedures and milestones.
- 5.2.5. To establish a foundation among government design management team members for effective communications and coordination throughout the design process.

**5.3. Criteria Review Conference.** The Criteria Review Conference (CRC) is a meeting conducted with the selected A-E firm, the contracting officer, the BCE and the user. It will be held prior to the fee negotiation and contract award. The purpose of the CRC is to clarify for the A-E firm the design criteria that is depicted in the SOW or PB. The CRC is not a forum to change the project criteria. It will be conducted by either the BCE or contracting officer as mutually agreed upon. CRCs for Master Plans will normally be conducted by ANG/CE.

5.3.1. CRCs shall be held on all MCP projects, master plan contracts, and designated RPM projects, unless specifically waived by ANG/CEC. Additionally, it will be done on designated RPM projects.

5.3.2. The PB or SOW must be approved by ANG/CE before a CRC is scheduled.

5.3.3. Scheduling the CRC will be as mutually agreed upon by the contracting officer and BCE, but is held not earlier than two weeks following the BRC. This will permit any PB changes to be forwarded to the selected A-E firm in advance of the CRC.

**5.4. Objectives.** The objectives of a CRC are:

5.4.1. To review the PB or SOW criteria in sufficient detail for the A-E to prepare a fee proposal for doing the project. The government estimate of the A-E fee may be adjusted based on information learned from the CRC.

5.4.2. To understand project scope and construction cost limitations and contract provisions in detail with emphasis on special requirements, limitations and operating parameters that may not be obvious.

5.4.3. To clarify special technical and functional requirements contained in the PB or SOW.

5.4.4. To explore peculiarities of the site and local conditions in order to take full advantage of the background and experience of those familiar with the site and locality.

5.4.5. To establish professional relationships and good lines of communication between the A-E, contracting officer, BCE, and base personnel. The conference also permits discussion of design review and approval procedures and their impact on the timely performance of work.

5.4.6. To record minutes that may revise the PB or SOW and become a part of the design criteria and the A-E contract. The minutes are the responsibility of the BCE. Distribution of minutes shall include the Project Manager at ANG/CE.

## Chapter 6

### DESIGN AND REVIEW CYCLES

**6.1. Purpose of Design Documents.** This chapter will govern over AFI 32-1023. The end product of good design documents is to provide for the construction of a complete and usable facility that satisfies the identified requirements in the PB or SOW, conforms to codes and ANG design criteria, and provides a low maintenance, energy efficient facility that can be constructed within the maximum construction cost limitation. This chapter applies to A-E design regardless of the method or type of funding.

**6.2. Typical Design Cycle.** The milestones and requirements, which are listed in more detail in Air National Guard Design Objectives and Procedures, for accomplishing the design of most projects, include the following:

6.2.1. Investigative Services (Type A). The A-E shall conduct necessary surveys, soil borings, soils analyses, environmental analyses and other fact finding investigations such as determining permitting requirements, clarifying user requirements, economic feasibility studies, etc.

6.2.1.1. Concept Proposal Meeting. The Design Working Group (DWG) meets with the A-E to select from several conceptual schemes, a single scheme to investigate further. At this time three alternative single line site sketches and single line floor plan sketches will be produced, as well as confirmation that the project scope has not been exceeded and an updated project design schedule has been accomplished.

6.2.1.2. Concept Development Meeting. The A-E meets with the DWG to review presentations about the selected concept, review conceptual presentations and analyses of alternative systems for the building, present permit requirements, a construction cost estimate, a black and white perspective sketch and an updated schedule of meetings and submittals.

6.2.1.3. Type A (Concept) Submittal. Submitted within 7 days of Concept Development Meeting as prescribed by Tab C, ANG Design Objectives and Procedures. A-E services will stop until approved by ANG/CEC and the USPFO issues a NTP to proceed for Type B services.

#### 6.2.2. Design Services (Type B).

6.2.2.1. Contract Documents Development Meeting. This is the approximate midpoint of design. The A-E shall meet with the DWG for an "onboard" progress evaluation to review completion to date in each discipline area. The phase also includes draft specifications tailored to the specific project, engineering calculations, a detailed construction cost estimate, design narratives and permit applications prepared for the BCE's signature.

6.2.2.2. Type B Pre-final Submittal. This design phase requires submission of working drawings, specifications and construction cost estimates, each carried to 100 percent level of completion in all disciplines of work. Also included will be documentation evaluating the facility's annual energy consumption per Air National Guard Design Policy, section, "Energy Budgets".

6.2.2.3. Type B Final Submittal. This design phase provides for the incorporation of all review comments on the prefinal design services and requires submission of final working drawings, specifications and construction cost estimates, 100 percent complete and ready to advertise for construction.

6.2.3. Code and Criteria Review. Will be performed only upon approval of ANG/CEC. See paragraph 4.9.3.

**6.3. Design Review Responsibilities.** The BCE has the ultimate responsibility for reviewing each design submittal and for ensuring that appropriate coordination has been effected. To facilitate this process, a DWG shall be established for the life of the project. It shall consist of the BCE (Chairperson), representatives of the user and other base personnel as appropriate. The DWG shall work with the A-E's design team and provide guidance throughout the design procedure. ANG/CEC is responsible for the approval or disapproval of each design submittal and base review comments.

#### 6.3.1. Design Review for MCP:

6.3.1.1. The A-E is responsible for the completeness and technical adequacy of all project designs. However, the BCE, assisted by the DWG is responsible for reviewing all designs to ensure the facility can support the assigned mission and for constructability and maintainability. Design criteria changes or PB requirement changes will be addressed at the BRC, not as a part of the design review process.

6.3.1.2. ANG/CEC is responsible for reviewing the criteria aspects of the design and for ensuring that the design criteria, functional requirements, cost and scope limitations established by ANG/CE are fulfilled.

6.3.1.3. Where an ANG unit is a tenant on a reserve or active duty base, the host command may review design documents for criteria that can affect the services they provide the ANG. Since the ANG is responsible for operation and maintenance of its own facilities, any design comments submitted on the facility will be considered and approved or disapproved by ANG/CEC. When other government agencies are the design and construction agent, they shall obtain coordination of data concerning base responsibilities from the ANG BCE, not the host BCE.

6.3.1.4. The ANG installation or state, ANG/CEC and other interested agencies, such as local airport authorities or local code officials, shall review design submittals. The state or base shall forward their comments to ANG/CEC. ANG/CEC will consolidate acceptable base comments and acceptable comments of other agencies into their comments and forward them to the contracting officer. ANG/CEC is the final authority on all technical and functional criteria.

6.3.1.5. Environmental Control. The BCE and Installation Environmental Manager will assure that approved permits are obtained prior to advertising for construction.

6.3.2. Design Review for RPM: The A-E is responsible for the completeness and technical adequacy of their project designs. ANG/CEC is responsible for reviewing the criteria aspects of the design and for assuring

that the design criteria, functional requirements, cost and scope limitations established by ANG/CE are fulfilled. Local Project Review Authority for RPM project designs is hereby delegated to each USPFO up to the following current specified limits.

Minor Construction	\$100,000
Repair	\$300,000
Maintenance	\$300,000

This authority may be re-delegated by the USPFO to the BCE at ANG installations. For projects above USPFO project review authority, the BCE must submit plans, specifications, cost estimates, base review comments and design analyses to ANG/CEC for review and approval.

## Chapter 7

### CONSTRUCTION MANAGEMENT

**7.1. General.** This chapter will govern over AFI 32-1023. This chapter defines the responsibilities and actions required by ANG/CE and the BCE for construction management. Details are provided for the typical project when the USPFO acts as Design Construction Agent. When either the Naval Facilities Engineering Command or the U.S. Army Corps of Engineers acts as Design Construction Agent, similar details will be used but adjusted accordingly.

**7.2. Initial Procedures for Project Bid Authorization and Advertisement:**

7.2.1. ANG/CE will authorize advertisement of projects above USPFO approval authority by a letter or message. Within 15 days of the receipt of the authorization to advertise, the contracting officer shall advise ANG/CEC (Project Manager) of the scheduled bid opening date and anticipated award date. Changes must be updated until an award is made. See current ANGETL, Subject: Design and Construction Reports.

7.2.2. The BCE shall provide the contracting officer with a certified funding document, a statement of reservation of funds confirmed by the Director of Financial Management/Comptroller (ANG/FM) as required by Army FAR Supplement 1.602-2, or an authorization for advance advertisement, with the following attachments:

7.2.2.1. Two copies of the completed plans and specifications. The contracting officer shall notify the A-E (or other agency) of total number of sets required for advertising.

7.2.2.2. One copy of all authorization and approval documents.

7.2.2.3. A detailed government cost estimate, dated, signed and marked "FOR OFFICIAL USE ONLY".

7.2.2.4. An estimate of liquidated damages, if required. Computations for liquidated damages are required.

7.2.2.5. Recommended performance time.

7.2.2.6. Recommended bid schedule (unit price contracts) and additive bid items.

7.2.2.7. Recommendations on availability of utilities and if charges are required.

7.2.3. The contracting officer is authorized to charge bidders a reasonable price for bidding documents.

**7.3. Construction Funding.** RPM funds issued by ANG/FM under a project number ending in 998 shall be used for class M&R and MC projects. The following procedures shall be used for funds for all projects above the USPFO approval authority:

7.3.1. Within 2 working days after the bid opening or successful negotiation, the contracting officer shall send the Bid Opening/Negotiations Report, to ANG/CEC. See current ANGETL, Subject: Design and Construction Reports.

7.3.2. For funded projects, the funded amounts will be adjusted by ANG/CEC to the responsive, responsible low bid, the amount of Type C services, and any other project cost as listed in the bid opening report. If an MCP project, contingency funds will also be added.

7.3.3. Projects which were advertised based on a statement of reservation of funds confirmed by ANG/FM will be funded to their award amount which are at or below the CWE less the cost of any Type C services. Awarding projects that exceed the CWE and/or funds reserved will be at the approval of ANG/CE to provide the necessary additional funding. MCP projects will also have contingency funds included.

**7.4. Preconstruction Conference.** The conference shall be conducted by the Contracting Officer (CO) and shall include representatives of the contractor, the A-E, the user, various base offices and the BCE. The preconstruction conference should include:

7.4.1. Assurance that appropriate coordination has been effected between the A-E, the contractor, the BCE and the CO to ensure a smooth job progression. Any organization directly affected by the project should be represented. For example, the user, base security, safety office, fire service, flight operations, and maintenance should be represented.

7.4.2. Assurance that work areas and access routes that will be used by contractor personnel and equipment are clearly defined and understood by all concerned.

7.4.3. Assurance that any security clearance and identification requirements of the contract have been or will be met.

7.4.4. Assurance of compliance with regulations governing the provision of utilities from government sources to contractor facilities.

7.4.5. Issue the NTP if contractor has provided all required items (i.e., performance bonds and payments bonds) and the government is prepared for the contractor to start work.

7.4.6. Assure that AF Form 3064, *Contract Progress Schedule*, is understood and that it is the basis for determining the amount of progress payments. A computerized progress schedule, acceptable to the CO and BCE, may be used in lieu of AF Form 3064. Projects over \$1 million will incorporate the Critical Path Method construction schedule.

7.4.7. A statement of the availability of government-furnished items and contractor long lead time items.

7.4.8. Assurance that arrangements have been made by the contractor to store, protect and secure construction materials stockpiled for later use.

7.4.9. Complete minutes, including coverage of all final notices and agreements, shall be sent to all attendees. AF Form 3035, *Pre-performance Conference and Prefinal Payment Checklist*, will be accomplished, to include a sign-in sheet of all those attending. AF Form 3035 may be used as a guide for an agenda, tailored to fit local conditions.

**7.5. BCE Responsibilities for Construction Surveillance.** The BCE shall recommend to the contracting officer (CO) the individuals to be appointed as the Contracting Officer's Representatives (COR). The COR shall:

7.5.1. Accomplish the field inspection. An A-E firm under Type C services may support the COR which supplement this inspection.

7.5.2. Observe contractor operations for securing a complete project in full compliance with the performance requirements of the drawings and specifications.

7.5.3. Make periodic daily inspections of the work and assure that the contractor is properly accomplishing construction and inspection of the work as required by the contract.

7.5.4. Complete inspection report forms as directed by the contracting officer.

7.5.5. Evaluate all material, equipment and shop drawing submissions for compliance with the plans and specifications. Maintain a shop drawing log that shall show the date each drawing is received, reviewed, approved and dispatched. AF Form 3000, *Material Approval Submittal*, shall be used to coordinate the review and approval of shop drawings and other technical data. If Type C services are authorized, the A-E may provide much of the technical input.

7.5.6. During construction, report contractor progress on AF Form 3065, *Contract Progress Report*, (or similar form agreed to at the pre-construction conference), to the contracting officer. Document all contractor delays, including those delays caused by the government. The contracting officer shall determine the frequency of the reports (i.e., weekly, monthly) depending upon the complexity of the project.

7.5.7. Refer any question regarding contract interpretation to the contracting officer for resolution. The BCE and/or the COR shall not allow changes to the contract without approval of the contracting officer.

7.5.8. Confer periodically with the contractor on construction progress.

7.5.9. Prepare technical input or review A-E input for all change orders. For change orders involving changes in scope or cost, the BCE shall provide a written request and justification of the desired contract change. This normally shall be provided using AF Form 9, *Request for Purchase*, defining requested changes and providing an itemized cost estimate.

- 7.5.10. Review each request for progress payment and submit it to the contracting officer for approval. Upon receipt of the contractor's invoice or payment request, the COR shall annotate it with date of receipt.
- 7.5.11. Provide the contracting officer with a "punch list" of discrepancies noted during prefinal inspection. After discrepancies have been corrected, a final acceptance inspection shall be made with the contracting officer present.
- 7.5.12. Prepare a performance evaluation report as required by FAR 36.201 and DFARS 236.201.

**7.6. Inspector's Diary:**

- 7.6.1. The government's project inspector shall maintain a bound inspector's construction diary, AF Form 1477, *Construction Inspection Record*. The inspector's diary is a log of project construction events and is an essential part of contract management. It should provide an accurate account of the details of the project. The entries must be complete, accurate and timely. At times, the diary alone can substantiate or disallow a claim for delay if events are recorded promptly and accurately. Disputes with the contractor, in many cases, are settled by the fact that instructions to or requests of the contractor were recorded.
- 7.6.2. Entries must be made in ink since they serve as a legal progress report of the project. Entries made immediately after observation preclude omissions, provide up-to-date records, and constitute good management practice. The diary shall be turned over to the contracting officer who shall keep it as part of the contract file. The diary is bound and pages prenumbered to suit the construction period, beginning with the day the NTP is issued. Each day of the construction period (including weekends and holidays) must be accounted for, even if the entry simply states "No activity today."
- 7.6.3. The diary shall normally record the following information:
- 7.6.3.1. Date, time and inspector's name.
  - 7.6.3.2. Weather and outside factors affecting progress.
  - 7.6.3.3. Number of workers observed per craft.
  - 7.6.3.4. Contractor equipment on site.
  - 7.6.3.5. Significant progress noted or milestones reached.
  - 7.6.3.6. Unauthorized or poor quality work.
  - 7.6.3.7. Questions raised or decisions reached. Names of parties involved.
  - 7.6.3.8. Job-related accidents and circumstances.
  - 7.6.3.9. Hazardous conditions or practices.
- 7.6.4. All of the above items should be addressed each day. The inspector shall sign each daily inspection entry.
- 7.6.5. On days when no work is accomplished, a brief statement as to why no work was performed, such as "no work scheduled" or "no work due to weather" will suffice.

**7.7. Contract Modification.** A contract modification is one required to correct a design omission, deficiency, user requested change or an unforeseen site condition or other adjustment. It is not a change in design scope. Any modification, which deals with A-E errors and omissions, requires a review by the BCE and/or ANG/CE to affirm the error or omission prior to modification by the contracting officer. Contract modifications may contain one or more change orders. Approval of individual change orders for projects remaining within USPF0 approval authority is delegated to the BCE. Individual change orders (total of credits and debits) for projects above USPF0 approval authority, will be approved as follows:

- 7.7.1. Change Orders up to \$10,000. Approval of individual change orders not to exceed \$10,000, except for changes in space/function, is delegated to the BCE. This approval is not an authority to exceed current O&M regulatory and statutory funding thresholds. On MCP projects, contingency funds will be spent for these changes, or requested from ANG/CE if contingency funds are exhausted. Contingency funds will be used for the unforeseen event that occurs during construction, not as a vehicle for after-the-fact design changes that result from inadequate initial planning. The authority for local approval to \$10,000 may be withdrawn by ANG/CE if contingency funds are exhausted. Funds for changes to RPM projects must be requested from ANG/CE if not available on base.
- 7.7.2. Change Orders over \$10,000. Functional or technical approval from ANG/CE is required for any change order over \$10,000. **NOTE:** Contract modifications containing more than one change order do not require approval as long as each individual change is less than \$10,000. A current MCP and RPM Monthly Status Report reflecting the requested change is normally required before a change order will be approved. An interim construction status report (Part 4 only, for the project requiring a change) shall be submitted if

the change order approval is required prior to the submission of the next Monthly Status Report. ANG/CE will process the request, authorize accomplishment of the change order and coordinate funding. Upon receipt of funds, the BCE shall prepare an AF Form 9, *Request for Purchase*, and forward it through the comptroller to the contracting officer. Change orders that are required to prevent a work stoppage may be approved by ANG/CE via telephone or electronically. The forwarding of funds will also be coordinated by telephone. In the case of telephonic approval by ANG/CE, documentation must be forwarded by fax or email.

**7.8. Construction Status Reporting.** A monthly reporting of construction status is required for all MCP projects and RPM projects above local project review authority. Monthly Status Report is described in current ANGETL, Subject: Design and Construction Reports. The BCE shall also submit a monthly report of the accrued construction expenditures for each project involving MCP or MC work to the local FM in accordance with the ANG Real Property General Ledger Account Policy/Procedures Pamphlet.

**7.9. Transfer and Acceptance Procedures.** Transfer and acceptance of new construction is the responsibility of the USPFO or other construction agent.

7.9.1. The BCE shall assure formalized documentary evidence of the transfer of accountability to the Air National Guard is received by assuring that the contractor (if specified in Section C of the construction contract) or BCE representative (if not specified in Section C of the contract) prepares a DD Form 1354, *Transfer and Acceptance of Military Real Property*. The BCE or contract administrator shall not authorize final payment to the contractor until the DD Form 1354 has been completed, reviewed and accepted if the contractor preparation is specified in Section C of the contract. The Real Property Specialist should provide input on the review and acceptance of the DD Form 1354. The BCE will assure that the DD Form 1354 is presented to the state USPFO for signature. The BCE shall assure the form is completed according to AFI 32-9005, *Real Property Accounting and Reporting*, and appropriate ANG directives given to the installation's real property management office. The BCE must assure DD Form 1354 is completed in sufficient detail for establishing real property management office. The BCE must assure the DD Form 1354 is completed in sufficient detail for establishing real property records and shall be accompanied by a complete listing of installed equipment.

7.9.2. When the ANG has another agency perform construction agent responsibilities; i.e., Navy and/or Army; that agency shall prepare and sign the DD Form 1354 and then the USPFO shall sign the form accepting the transfer of accountability.

**7.10. Job Order Contracting (JOC).** JOC is an IDIQ construction contract that is used to reduce the total lead time for accomplishing real property maintenance and repair and minor construction projects.

7.10.1. Each ANG installation having a BCE is authorized to have JOC contract(s), obtained through the USPFO of the state.

7.10.2. ANG installations that can utilize Simplified Acquisition for Base Engineer Requirements (SABER) contracts at active Air Force bases are authorized to "piggy back" on those contracts. This normally would be done only where limited work is required or there are unique circumstances.

7.10.3. Contracts are initiated by a request to the USPFO from the BCE. Initial funding comes from local sources or, upon request, from ANG/CEC. Detailed guidance may be found in the Job Order Contracting (JOC) Guide published by NGB-AQ.

7.10.4. NGB-AQ has primary technical responsibility for the procedural rules governing JOC contracts. Procedures are published by NGB-AQ supplementing the Federal Acquisition Regulation. Point of contact is the local USPFO.

**7.11. Task Order Contracting (TOC).** TOC is an evolutionary follow-on Job Order Contracting. It is a multiple award contract and embodies competition for each proposed delivery order, as opposed to negotiations with the JOC process. It may be used in support of construction, repair and real property maintenance. Maximum dollar amount for delivery order threshold is established by the requirement and is very flexible. Minimum size delivery order currently is established at \$2,500. The USPFO is designated as the ombudsman for TOC contracts. As with JOC, the USPFO is the point of contact. It is particularly suitable for installations with a larger budget and number of projects. Authority must be obtained from NGB-AQ to enter into a TOC.

**7.12. Partnering.** The "Partnering" concept of construction management is a voluntary method of construction management when the stakeholders (government, contractor, consultants) enter into an

agreement to conduct business in a manner that embodies mutual respect, trust and commitment to a quality, on budget, final product. It has a basic tenant of moving from an adversarial relationship to one of a cooperative solving of problems. Successful use of partnering normally results in fewer claims, change orders, and a more timely meeting of schedules. ANG/CE supports the philosophy of the partnering concept and encourages its use where desired, recognizing that significant preparation must be made in conjunction with the USPFO, the BCE and the contractor for the program to succeed.

**PAUL A. WEAVER, JR.**  
**Major General, USAF**  
**Director, Air National Guard**

**OFFICIAL**

**DEBORAH GILMORE**  
**Chief**  
**Administrative Services**

**Attachment**  
**1. Glossary of References and Supporting**  
**Information**

**Attachment 1**

**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION**

***References***

DoDD 4270.5	<i>Military Construction Responsibilities</i>
DD Form 1354	<i>Transfer and Acceptance of Military Real Property</i>
DD Form 1391	<i>Military Construction Project Data</i>
AFPD 32-10	<i>Installations and Facilities</i>
AFI 32-1023	<i>Design and Construction Standards and Execution of Facility Construction Projects</i>
AFI 32-1032	<i>Planning and Programming Real Property Maintenance Projects Using Appropriated Funds (APF)</i>
AFI 32-9005	<i>Real Property Accounting and Reporting</i>
AF Form 9	<i>Request for Purchase</i>
AF Form 3000	<i>Material Approval Submittal</i>
AF Form 3035	<i>Preperformance Conference and Prefinal Payment Checklist</i>
AF Form 3064	<i>Contract Progress Schedule</i>
AF Form 3065	<i>Contract Progress Report</i>

***Abbreviations and Acronyms***

- A-E** – Architect-Engineer
- AF** – Air Force
- AFI** – Air Force Instruction
- ANG** – Air National Guard
- ANGETL** – Air National Guard Engineering Technical Letter
- ANGI** – Air National Guard Instruction
- APF** – Appropriated Funds
- AQ** – Acquisition
- BCE** – Base Civil Engineer
- BRAC** – Base Relocation and Closure
- BRC** – Base Review Conference
- CBD** – Commerce Business Daily
- CE** – Civil Engineer
- CEC** – Engineering Division
- CNGB** – Chief, National Guard Bureau
- CO** – Contracting Officer
- COR** – Contracting Officer’s Representative
- CRC** – Criteria Review Conference
- CWE** – Cost Working Estimate
- DFAR** – Defense Federal Acquisition Regulations
- DI** – Design Instruction
- DOD** – Department of Defense
- DWG** – Design Working Group
- FAR** – Federal Acquisition Regulation
- FB** – Facilities Board
- FM** – Financial Management
- GFE** – Government Furnished Equipment
- IDIQ** – Indefinite Delivery/Indefinite Quantity

**IRP** -- Installation Restoration Program  
**JOC** – Job Order Contract  
**MC** – Minor Construction  
**MCP** – Military Construction Program  
**M&R** – Maintenance & Repair  
**NG** – National Guard  
**NGB** – National Guard Bureau  
**NGFAR** – National Guard Federal Acquisition  
Regulation  
**NSR** – No Special Requirement  
**NTP** – Notice to Proceed  
**OSD** – Office of the Secretary of Defense  
**PB** – Project Book  
**PN** – Project Number  
**QD** – Quality Distance  
**RPM** – Real Property Maintenance  
**SABER** – Simplified Acquisition for Base Engineer Requirements  
**SOW** – Statement of Work  
**TAG** – The Adjutant General  
**TO** – Technical Orders  
**TOC** – Task Order Contract  
**U.S.** – United States  
**USPFO** – United States Property & Fiscal Officer  
**UST** – Underground Storage Tank  
**UTA** – Unit Training Assembly